PARIC CORPORATION
77 Westport Plaza Drive
Suite 250
St. Louis, MO 63146

OWNER CHANGE ORDER 003

Project: 15051-Webster University Interdisciplinary Science Building
8274 Big Bend Blvd
Webster Groves, MO 63119

Initiation Date: 03-Jul-2017

Paric Job No.: 15051

To: Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Contract For: General Construction

Contract Date: 28-Mar-2016

You are directed to make the following changes in this contract:

- (CP-069) PCI-E-0087 25-May-2017, ASI#42 - Room 283 - Addition of Air and Vac Outlets	$3,420.00
- (CP-090) PCI-E-0089 10-Mar-2017, ASI#48 - Lab Equipment Revisions	-$33,707.88
- (CP-104) PCI-E-0092 19-Apr-2017, EAB Room 358 Wall	$12,385.82
- (CP-105) PCI-E-0101 30-May-2017, ASI#051 Mechanical equipment condensate drain connection to	$11,478.00
- (CP-112) PCI-E-0119 05-May-2017, RFI 498: Emergency Power for HVAC Control Panels	$859.00
- (CP-121) PCI-E-0136 23-Jun-2017, ASI #57 Casework revisions for aquarium and removal of rail	$605.20
- (CP-125) PCI-E-0116 30-May-2017, ASI 58: HWP-1 Feeder Change	-$689.00
- (CP-127) PCI-E-0112 21-Apr-2017, ASI 53 - Equipment revisions	$6,770.00
- (CP-131) PCI-E-0120 05-May-2017, Teaching kitchen oven change	$498.00
- (CP-132) PCI-E-0129 30-May-2017, ASI#62 Alternative for ASI#043/CP-070 3 way Valves	$1,976.00
- (CP-133) PCI-E-0140 23-Jun-2017, ASI#63 Video Wall Framing revisions	$2,360.34
- (CP-135) PCI-E-0141 05-May-2017, ASI#61 Revise Valve for Kitchen Dishwasher	$1,289.34
- (CP-141) PCI-E-0133 02-Jun-2017, Added Locks to Teaching Kitchen Casework	$2,938.00
- (CP-144) PCI-E-0135 23-May-2017, RFI #536 Wire Management Credit	-$2,696.00
- (CP-146) PCI-E-0124 23-May-2017, Accepted VE Items	-$25,007.00
- (CP-151) PCI-E-0127 26-May-2017, RFI#545 Additional Security Cabinet	$935.00
- (CP-156) PCI-E-0144 07-Jun-2017, Fabric Stain Treatment	$4,086.67

Signature of the contractor indicates his agreement herewith, including any adjustment in the contract Sum or Contract Time.

The Original Contract Sum was	$38,333,512.56
Net Change by previously authorized Change Orders	0.00
The Contract Sum prior to this Change order was	$38,333,512.56
The Contract Sum will be changed by this Change Order	-$12,498.51
The New Contract Sum including this Change order will be	$38,321,014.05
The Contract time will be unchanged by	0 Days
The Date of Substantial completion as of the Date of this Change order therefore is	06-Jul-2017

Authorized:

Cannon Design	Paric Corporation	Webster University
ARCHITECT	CONTRACTOR	OWNER
1100 Clark Avenue	77 Westport Plaza	470 East Lockwood Ave
St. Louis, MO 63102	Suite 250	St. Louis, MO 63119-3194
Address	St. Louis, MO 63146	Address
	Address	
By:_____	By:_____	By:_____

Date:_____ Date:_____ Date:_____

PARIC
EXPERIENCE. EXCELLENCE.

May 25, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-069 - ASI#42 - Room 283 - Addition of Air and Vac Outlets

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Three Thousand Four Hundred Twenty Dollars And Zero Cents $3,420.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0087 (ASI#42 - Room 283 Addition of Air and Vac outlets), Total $ 3,420.00

The owner contingency shall be used for this change proposal
Proposed Change Proposal Total: $3,420.00

If this change proposal meets with your approval, please sign and return this proposal for our records by May 25, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 5/25/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 25-MAY-17
Time: 08:58 AM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0087	ASI#42 - Room 283 Addition of Air and Vac outlets			3,420.00	09-MAR-17					3,420.00	3,420.00	

Vendor Name				Description		
Icon Mechanical Construction & Engineering, I	15051	15500.001 S	Mechanical Sub	3,260.00	ASI#42 - Room 283 Addition of Air and Vac outlets	Provide changes per ASI#42 and Icon proposal dated 5/5/17. Add $3,260
	15051	23150.005 M	Contractor Default Insurance (1.25%)	41.00	ASI#42 - Room 283 Addition of Air and Vac outlets	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	83.00	ASI#42 - Room 283 Addition of Air and Vac outlets	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	36.00	ASI#42 - Room 283 Addition of Air and Vac outlets	Risk Management

	Estimated Amount	Quoted Amount	Final Amount	Budgeted Amount	Billing Amount
Total For EXT	**0.00**	**0.00**	**3,420.00**	**3,420.00**	**3,420.00**
Grand Total:	**0.00**	**0.00**	**3,420.00**	**3,420.00**	**3,420.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	25-MAY-17
To Change Order:		Run Time:	08:58 AM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

icon Mechanical

1616 Cleveland Boulevard • Granite City, IL 62040

May 5, 2017

Paric Corporation
77 West Port Plaza #250
St. Louis, MO 63146

Attn: **Mr. Jason Szachnieski**
Project: **Webster University ISB**
Ref: **ASI – 42 Revised 2**

Dear Jason,
We are pleased to submit our change proposal associated with the Webster University ISB Project. The changes covered by this change order as follows:

Price for Above Listed Addendum: **$3,260**
The above price included:

- **Pipe Fitter Labor: 20hrs @ Contract Rate: $1,888**
- **Piping & Hanger Material: $600**
- **BIM/CAD Time: $150**
- **Gas Certification: $350**
- **Rental: $100**
- **OH&P: $172**

Thank you for giving us the opportunity to submit on this scope change. We wish you success and look forward to continued involvement. If there are any questions or if we can be of further assistance, please contact me.

Sincerely,
icon Mechanical
Alex Chambers

(618) 452-0035 • Fax (618) 452-0037

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No:
04561.01

Architect's ASI No: 042

Project:
Webster University
Interdisciplinary Science
Building

Date Issued: 12/19/2016

Contract Date:

Reason Code: 05 A/E Scope

Discipline Code: 11 Plumbing

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Sheets – A0204, A0614, P0202.A
<End of Drawing List>

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

1100 Clark Avenue
St. Louis, Missouri
63102
T 314.241.6250
F 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1 Demo-demolition
#2 Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4 Elevator
#5 Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div 1)
#9. HVAC
#10. Other
#11 Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

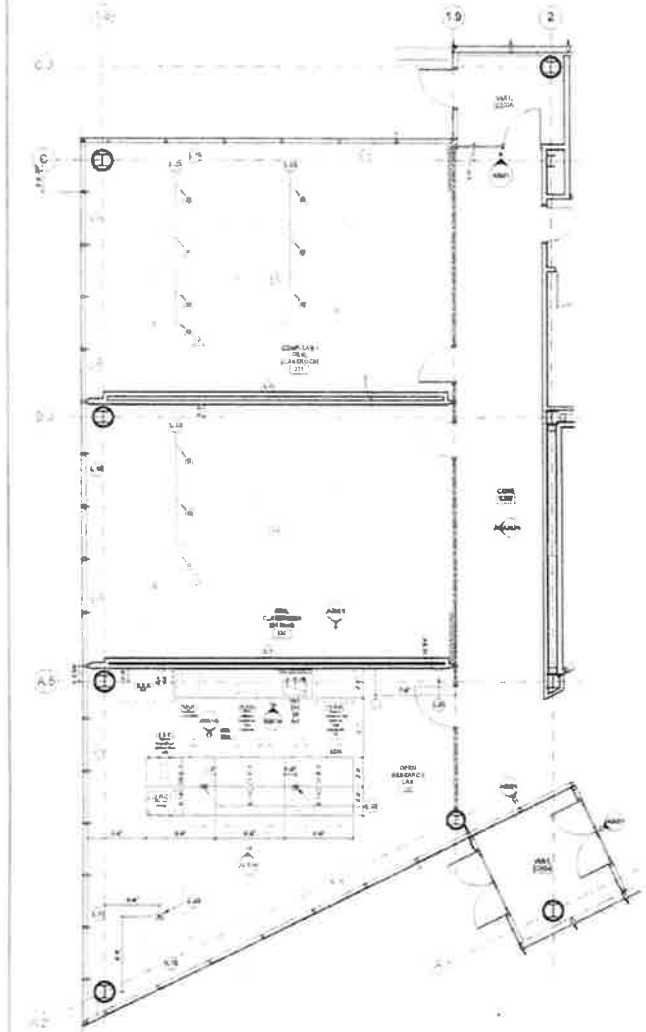
Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

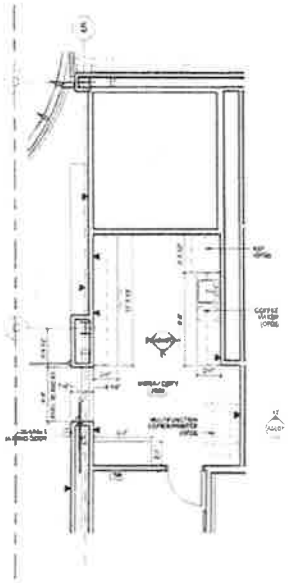
Microbio / Plant Research Lab 283:
Extended laboratory compressed air and laboratory vacuum piping to serve BSC Class 1 (08.30.02) on south wall, along column D

Issued by Architect:
Kelvin Patel, CannonDesign
Michael Whitworth, WES

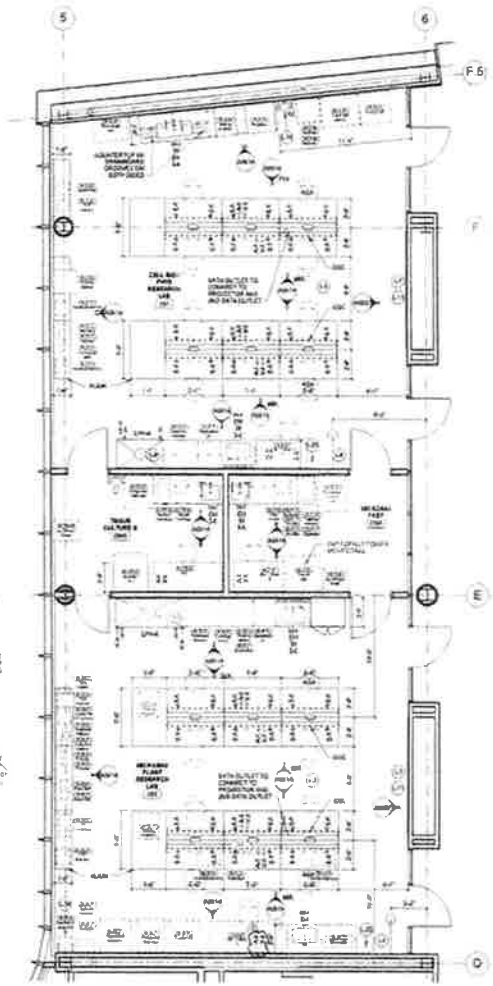
Accepted by Contractor:



3 LEVEL 02 - AREA B - WEST - CLASSROOMS



2 LEVEL 02 - AREA B - WORKROOM



1 LEVEL 02 - AREA A - WEST- BIO LABS

LAB KEYED NOTE LEGEND

LAB UTILITY LEGEND

LAB GENERAL NOTES

Webster UNIVERSITY

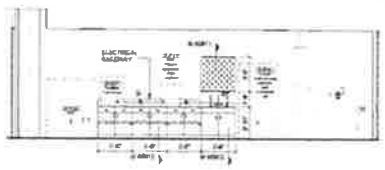
Webster University
Interdisciplinary Science Building

CANNONDESIGN

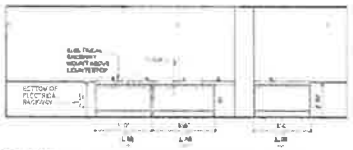
ENLARGED PLANS-LEVEL 02

A0204

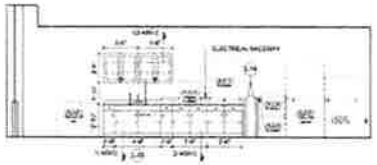
17 L02 OPEN RESEARCH LAB - TABLES - NORTH & SOUTH ELEVATION



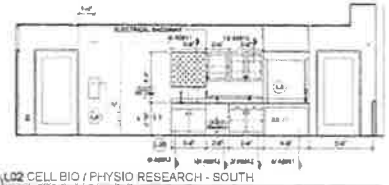
16 L02 OPEN RESEARCH LAB - NORTH



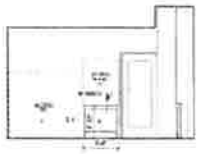
11 L02W CELL BIO AND PHYSICS RESEARCH - WEST



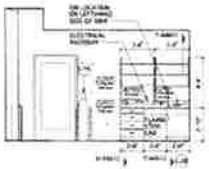
10 L02 CELL BIO AND PHYS RESEARCH - NORTH



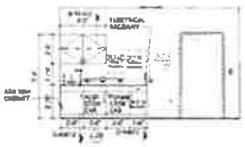
9 L02 CELL BIO / PHYSIO RESEARCH - SOUTH



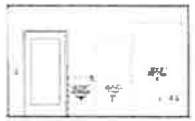
8 L02 TISSUE CULTURE - SOUTH



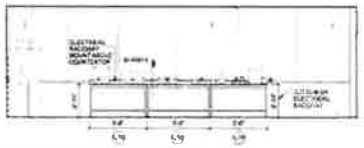
7 L02 TISSUE CULTURE - NORTH



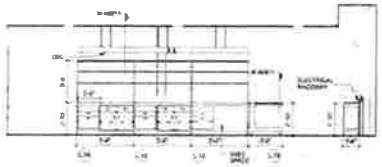
6 L02 MICROBIO PREP AND TC - NORTH



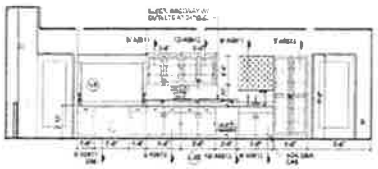
5 L02 MICROBIO PREP AND TC - SOUTH



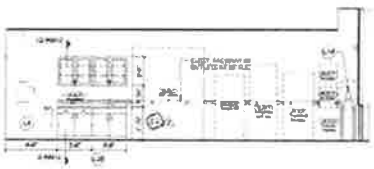
4 L02W MICRO / PLANT RESEARCH - WEST



3 L02W MICRO / PLANT BIO RESEARCH



2 L02 MICRO/ PLANT BIOLOGY RESEARCH - NORTH



1 L02 MICRO / PLANT BIO RESEARCH - SOUTH

LAB KEYED NOTE LEGEND

LAB UTILITY LEGEND

LAB GENERAL NOTES

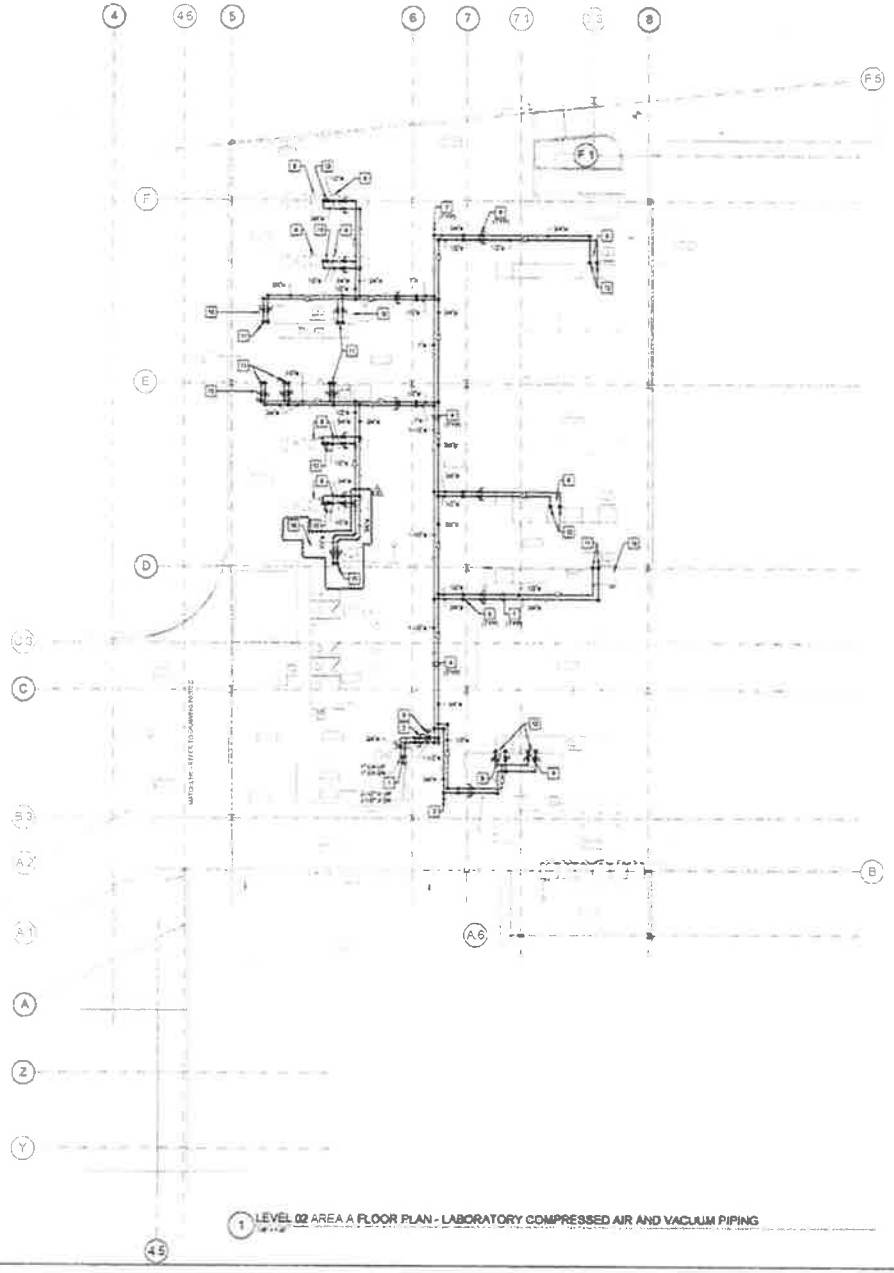
Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

INTERIOR LAB ELEVATIONS LEVEL 02

A0614



1 LEVEL 02 AREA A FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING

KEYNOTES (THIS SHEET ONLY)

1. BUILDING SERVICE HANGER FOR LABORATORY COMPRESSED AIR AND VACUUM COORDINATE INSTALLATION WITH BUILDING STRUCTURE AND OTHER SERVICES WITHIN CHASE
2. PROVIDE FLOOR ISOLATION VALVE AT EACH FLOOR LEVEL. LOCATE VALVES IN ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL AS REQUIRED
3. PROVIDE DIAGONAL BRACING
4. PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES WHICH TO ROUGH IN
5. DROP PIPING DOWN TO ALLOW STRUCTURAL STEEL MEMBER HOLD TIGHT TO BOTTOM OF STEEL
6. PROVIDE SHUT OFF VALVES AT THE ENTRY TO EACH ROOM
7. PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN
8. INSTALL SINGLE STAGE INLINE AIR PRESSURE REGULATOR SCHEDULE MODEL #-CENTER. IN INLET AND OUTLET ADJUSTABLE FROM 40 TO PSIG DELIVERY RANGE. PROVIDE WITH BODY, DIAPHRAGM, 2 TO 300 PSI PRESSURE GAUGE MOUNT ABOVE THE CEILING IN AN ACCESSIBLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT KNOB AND GAUGE. SET TO 80 PSIG
9. LABORATORY COMPRESSED AIR OUTLET AND VACUUM INLET SERVICE FITTING
10. LABORATORY FUME HOOD OR SAFETY CABINET. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE TYPE
11. EXTEND UP COMPRESSED AIR AND 30" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY FUME HOOD OR SAFETY CABINET SERVICE FITTINGS. VERIFY CONNECTION LOCATIONS AND REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED. PIPING TO BE CONCEALED AS MUCH AS POSSIBLE BEHIND THE EQUIPMENT OR BELOW THE COUNTERTOPS
12. EXTEND UP COMPRESSED AIR AND 30" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY SERVICE FITTINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND TYPE. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED
13. EXTEND UP COMPRESSED AIR AND 30" VACUUM DOWN INTO LABORATORY BENCH CABINETS AND SERVICE CHASES. ROUTE PIPING DOWN TO CABINETS UTILITY CHASE AND CONNECT TO BENCH TOP LABORATORY SERVICE FITTINGS. REFER TO THE ARCHITECTURAL PLAN FOR THE ON-WALL FIXTURE OF THE OVERHEAD SERVICE CABINETS AND SERVICE FITTINGS. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS. COORDINATE INSTALL AND ROUTING OF PIPING WITH OTHER TRADES UTILIZING THE UTILITY CHASE

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T 314 241 5000
F 314 241 2300

William Tao & Associates, Inc
Structural Engineer
North Meadows Blvd, Suite 100
St. Louis, MO 63043
314-878-7600

David Mason & Associates, Inc
Mechanical & Civil Engineer
800 South Vandeventer Avenue
St. Louis, MO 63110
314 534 1283

P Sign Group
Technology
3100 S Hanley Rd, Suite 102
St. Louis, MO 63143
314 961 2558

Kuhlmann Lowrie, Inc
Environmental Graphics & Signage
1400 Pershing Ave
St. Louis, MO 63130
314 726 8818

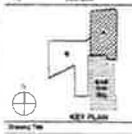
BWA Architects
Architects
4701 Laclede Ave
St. Louis, MO 63108
314 652 2600

Spellman, Brady & Company
Interior Designer
6051 Maryland Avenue, Suite 301
St. Louis, MO 63105
314 580 3070

SWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314 644 3701

Webb Engineering Services, Inc
Plumbing & Fire Protection
1400 S 3rd Street, Suite 201
St. Louis, MO 63104
314 588 8825

No.	Description	Date
1	AD - 001	19 DEC 2014
2	ADDENDUM 2-1	20 MAY 2015
3	ADDENDUM 2-2	15 MAY 2015
4	ISSUED FOR CONSTRUCTION (IFC)	21 MAY 2015



KEY PLAN

Drawing Title

LEVEL 02 AREA A FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING

PROJECT NO. 13-007.01 Drawn by

P0202.A

March 10, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-090 - ASI#48 - Lab Equipment Revisions

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the deducted sum of Negative Thirty-Three Thousand Seven Hundred Seven Dollars And Negative Eighty-Eight Cents (-$33,707.88).

This change will impact the scheduled completion date by 0 days.

- PCI-E-0089 (ASI#48 - Lab Equipment Revisions), Total $ -33,707.88

The owner contingency shall be used for this change proposal.
Proposed Change Proposal Total: -$33,707.88

If this change proposal meets with your approval, please sign and return this proposal for our records by March 17, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/5/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Date: 10-MAR-17
Time: 07:29 AM

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0089	ASI#48 - Lab Equipment Revisions			-33,707.88	10-MAR-17					-33,707.88	-33,707.88	

Vendor Name				Description			
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	-316.00	ASI#48 - Lab Equipment Revisions	Provide ASI#48 changes per GECO proposal dated 2/7/17. Deduct $(316)	
Carroll Seating Company, Inc.	15051	12350.002 S	Manufactured Casework - Labs	-32,012.84	ASI#48 - Lab Equipment Revisions	Credit glasswashers - these are now OFOI instead of CFCI per Carroll change order CO103669 dated 10/12/16. Deduct $(32,012.84)	
Carroll Seating Company, Inc.	15051	12350.002 S	Manufactured Casework - Labs	500.00	ASI#48 - Lab Equipment Revisions	Additional base cabinet in Room 289B - Add $500	
Carroll Seating Company, Inc.	15051	12350.002 S	Manufactured Casework - Labs	-302.04	ASI#48 - Lab Equipment Revisions	Mobile tables on Casters in Room 131 will be OFOI now. Credit 4 hours @ $75.51 = $(302.04)	
PARIC	15051	23100.001 M	Risk Management (1.1%)	-353.00	ASI#48 - Lab Equipment Revisions	Risk Management	
PARIC	15051	23150.005 M	Contractor Default Insurance (1.25%)	-402.00	ASI#48 - Lab Equipment Revisions	Contractor Default Insurance	
PARIC	15051	23300.001 F	Fee (2.5%)	-822.00	ASI#48 - Lab Equipment Revisions	Contractor Fee	
Total For EXT		**0.00**	**0.00**	**-33,707.88**			**-33,707.88** **-33,707.88**
	Grand Total:	**0.00**	**0.00**	**-33,707.88**			**-33,707.88** **-33,707.88**

credit table ($300)
Add Base cabinet $800
& extend countertop

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	10-MAR-17
To Change Order:		Run Time:	07:29 AM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

E-0089
CP-90

GUARANTEE
ELECTRICAL CONSTRUCTION

3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ASI -048**
Date: 2/7/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

WEBSTER ISB
ASI - 048

Description of work

*** Delete (1) double duplex receptacle in cadaver lab workroom 183B.**
*** Delete power associated with intercom station.**
*** Relocate power for incubator and refrigerator.**
*** Delete (1) ceiling mounted duplex recepacle.**
*** Relocate aquarium receptacles.**

Base bid shall decrease by: $ 316.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within 30 days from the date of receipt.
We request a time extension of 20 days.
We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
#12 THHN BLACK	-530	-57.05	-3.98
#12/2C CU MC CABLE AL ARMOR	65	34.67	2.11
3/8" MC CABLE DC SS CONN	2	1.01	0.24
6M58 CABLE SUPPORT (MC minnie+7/16 flange clip p.53)	13	27.25	0.65
H23 SQ BOX MTG BRKT p.126	-2	-1.94	-0.15
4" SQ BOX 2 1/8"D COMB KO	-2	-4.16	-0.70
4" SQ 1G PLSTR RING 5/8" RISE	-1	-0.83	-0.20
4" SQ 2G PLSTR RING 5/8" RISE	-1	-1.06	-0.20
1G DUPLEX REC PLATE - PLASTIC IVY	-1	-0.26	-0.13
2G DUPLEX REC PLATE - PLASTIC IVY	-1	-0.73	-0.15
20A 125V DUPLEX REC - IVY (SG)	-3	-9.17	-1.13
Totals	**-461**	**-12.27**	**-3.62**

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN #	**ASI -048**
Date:	2/7/2017
Project Name:	WEBSTER GROVES ISB BUILDING
Project Number:	WEBSTER GROVES ISB BUILDING
Page Number:	2

Summary

General Materials	-12.27
Material Total	**-12.27**
LU 1 - F - ST - ELEC (6/1-3/1/16)* @$81.10/hr	-29.20
LU 1 - JW - ST - ELEC (6/1-3/1/16)* @$75.60/hr	-246.46
Subtotal	**-287.93**
Markup	-28.79
Subtotal	**-316.72**
Adjustment #1	0.72
Final Amount	**$-316.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____

I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: ASI -048
Final Amount:$-316.00
Name: _____
Date: _____
Signature: _____
Change Order #: _____

I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

CARROLL
SEATING • SCIENCES • SCHOOLS • SERVICE

2105 Lunt, Elk Grove Village, IL 60007
Phone: (847)434-0909 Fax: (847)434-0910

Change Order

CO Number	CO103669
Cust CO Number	
Date	10/12/2016

Customer Name: Paric Construction

Customer Address: 77 Westport Plaza Drive
Suite 250
St. Louis Missouri 63146

Project Name: Webster ISB - Laboratory Casework and Equipment Package

Project Number: CS404004

Change Order Name: Removal of Glasswash

Scope of Work:

Credit for (6) Labconco Glasswashers to be OFOI at $5,252.14 each and $500.00 for unloading for a total of $32,012.84

Change Order Estimate:

Change Item	Billing Change
Change Order Total:	**($32,012.84)**

Signatures:

I have reviewed and understand the information contained in this document and my signature indicates approval:

Customer _____ Date _____

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No:
04561.01

Architect's ASI No: 048

Project:
Webster University
Interdisciplinary Science
Building

Date Issued: 01/27/2017

Contract Date:

Reason Code: 06 Owner Scope

Discipline Code: 03 Electrical &
07 General Construction

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Drawings:

A0201, A0204, A0614, A1101, A1102, A1103, A1104
E0101.A, E0101.B, E0102.A, E0103.A

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

SHEET A0201 - ENLARGED PLANS-LEVEL 01

- Room 133B - Equipment revisions.
- Room 131 - Changed mobile tables from OFCI to OFOI.

SHEET A0204 - ENLARGED PLANS-LEVEL 02

- Room 289B – Casework & equipment location revised.

SHEET A0614 - INTERIOR LAB ELEVATIONS LEVEL 02

- Room 289B – Casework & equipment location revised.

SHEET A1101 - EQUIPMENT LIST LEVEL-01

- Room 133B - Equipment revisions.

SHEET A1102 - EQUIPMENT LIST LEVEL-02

- Room 283 and 291 - Changed 'Glasswasher' from CFCI to OFCI.

SHEET A1103 - EQUIPMENT LIST LEVEL-03

- Room 374A, 386, 389, and 391 - Changed 'Glasswasher' from CFCI to OFCI.
- Room 372B and 386 - Revised Autoclave model to 408v.

SHEET A1104 - EQUIPMENT LIST LEVEL-04

- Room 478 - Changed 'Glasswasher' from CFCI to OFCI.

SHEET E0101.A LEVEL 01 AREA A FLOOR PLAN – ELECTRICAL & AUXILIARY

- In Cadaver Lab Workroom 183B, delete Keyed Note E07 and associated quadruplex receptacle and circuit serving AV rack.

SHEET E0101.A LEVEL 01 AREA B FLOOR PLAN – ELECTRICAL & AUXILIARY

- In courtyard, delete power and final connection to wall mounted emergency intercom station and associated Keyed Note E11.

SHEET E0102.A LEVEL 02 AREA A FLOOR PLAN – ELECTRICAL & AUXILIARY

- In Tissue Culture B 289B, locate receptacle serving incubator at counter height, and receptacle serving refrigerator at 18" AFF.

SHEET E0103.A LEVEL 02 AREA A FLOOR PLAN – ELECTRICAL & AUXILIARY

CANNONDESIGN

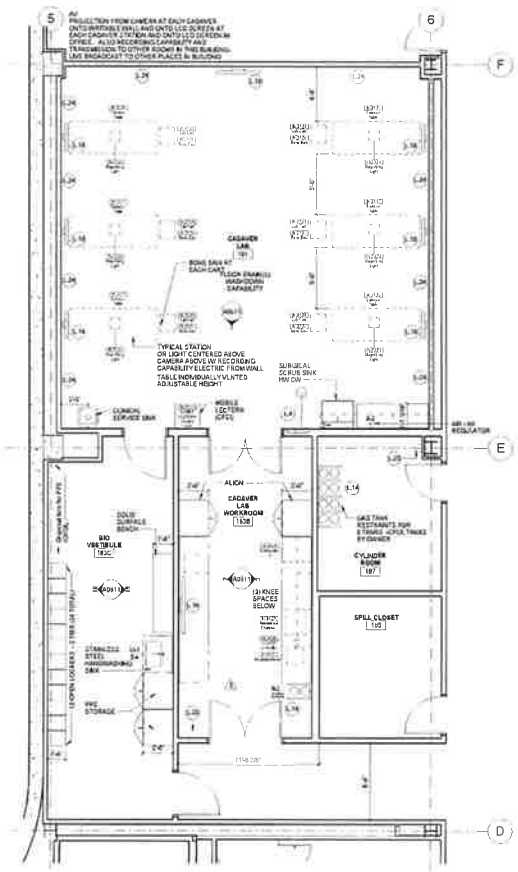
Architect's Supplemental Instructions

Page 3

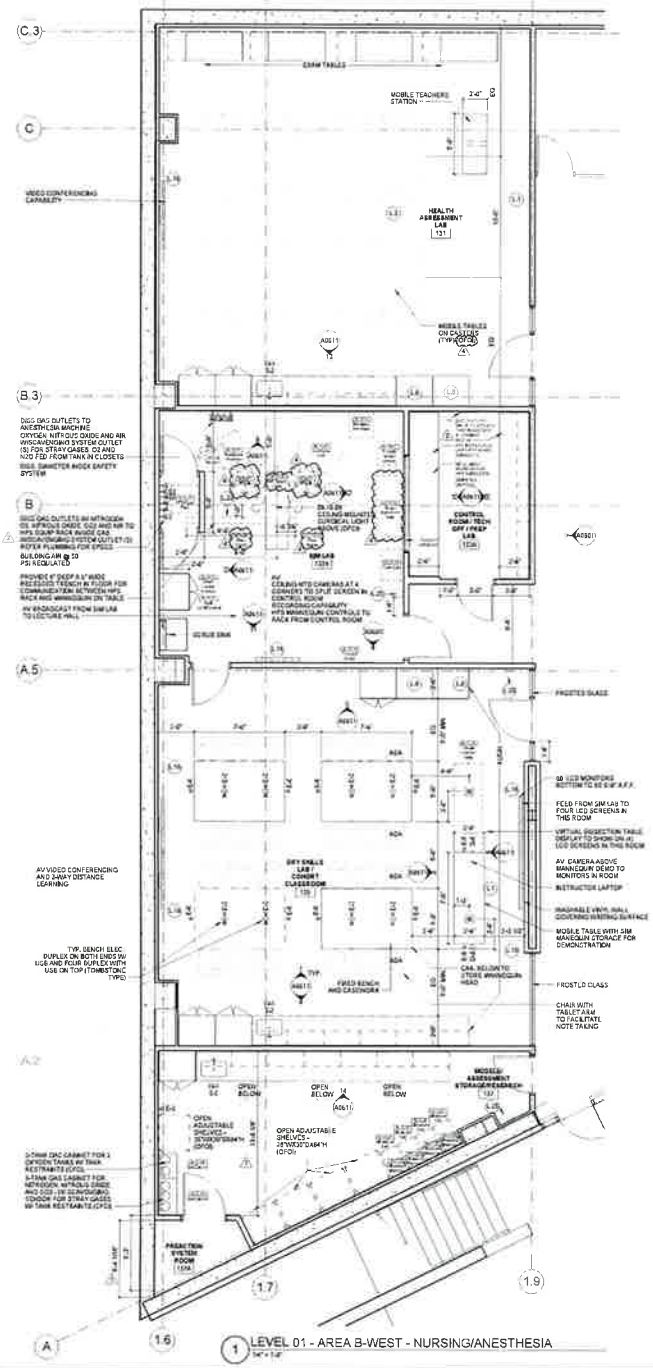
- In Organis Bio Lab 378, remove one ceiling mounted aquarium receptacle on circuit 3LL4-29 and associated branch circuit. Connect remaining two ceiling mounted receptacles to circuit 1SL1-29.
- In Organis Bio Lab 378 relocate wall mounted aquarium receptacles to north wall.

Issued by Architect: Kelvin Patel, CannonDesign;
Mark de la Fuente, William Tao & Associates, Inc.

Accepted by Contractor:



2 LEVEL 01 - AREA A - WEST - CADAVER LAB
1/4" = 1'-0"



1 LEVEL 01 - AREA B-WEST - NURSING/ANESTHESIA
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

L.1 WRITABLE AND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY GOGGLE WITH EYEWASH
L.5 115(1) CHEMICAL FUME HOOD (W) (STORAGE BELOW). TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK. TALL CABINET WITH OPEN CUBBIES FOR DOOR BAG STORAGE
L.9 113(1) CHEMICAL FUME HOOD (ACCESSIBLE) - WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 GAS BELOW WHITEBOARD
L.12 CAMERA FOR DAVITT INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (OFCI). CYLINDERS TO BE "OFCI"
L.15 RECESSED MOTORIZED ROLLER SHADE/BLACKOUT SHADES. WITH DOUBLE SHADES AT WEST CLASSROOM LEVEL (2) AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.18 LCD MONITOR
L.19 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL SHEET
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20 FIXED WOOD LABORATORY CASEWORK. 4-DR CABINETS. MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 9" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 SA MAX DRY ERASE FINISH (MBC)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
L.28 FOUNT EXHAUST (UNDRAFT) FOR SOLDERING. SEE DETAIL 5/ A0612

LAB UTILITY LEGEND

CW	WATER COLD	WATER COLD WATER FAUCET. DECK MOUNTED GOOSENECK
MIX	WATER COMBINAL	WATER COMBINAL MIXING FAUCET. DECK MOUNTED WITH VACUUM BREAKER. SEPARATED NOZZLE
DI	WATER DI WATER	WATER DI WATER FAUCET DECK MOUNTED
RWS	WATER RO COLD	WATER RO COLD WATER SUPPLY
RWR	WATER PROCESS COLD	WATER PROCESS COLD WATER RETURN
EW	WATER EYEWASH	WATER EYEWASH. DECK MOUNTED. AUTO FLOW. DRINKGOOSE
SH	WATER SHOWER	WATER SHOWER HOSE
G	GAS	FUME HOOD CONTROL
V	VAC	FUME HOOD CONTROL
V-1	VAC	WALL MOUNTED SINGLE SEPARATED OUTLET
V-2	VAC	TURRET BASE. SINGLE SEPARATED OUTLET
V-4	VAC	OUTLET FOR BASEMTT CABINET CONNECTIONS
V-C	VAC	QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A	AIR	FUME HOOD CONTROL
A-1	AIR	TURRET BASE. SINGLE SEPARATED OUTLET
A-2	AIR	WALL MOUNTED SINGLE SEPARATED OUTLET
A-4	AIR	OUTLET FOR BASEMTT CABINET CONNECTIONS
A-C	AIR	QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N	NITROGEN	FUME HOOD CONTROL
E	ELEC	DUPLEX OUTLET (GFI) ON FUME HOOD
E-1	ELEC	COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2	ELEC	COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3	ELEC	WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5	ELEC	DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6	ELEC	DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D	DATA	DATA OUTLET
D-1	DATA	COUNTERTOP MOUNTED PEDESTAL (1) DATA OUTLETS
D-2	DATA	DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6	DATA	DATA OUTLET ON TABLE APRON
CS	SUP SINK	UPPER MODIFIED EPOXY SUP SINK (FIXED OVAL GROUPING)
S-1	SINK	UPPER MODIFIED EPOXY SINK. 22"L x 19"W x 10"D (GROUPING)
S-2	SINK	UPPER MODIFIED EPOXY HOA SINK 22"L x 17"W x 12"D (GROUPING)
S-3	SINK	STAINLESS STEEL SINK 20"L x 12"W x 10"D (GROUPING)
S-4	SINK	STAINLESS STEEL HOA SINK 20"L x 12"W x 10"D (GROUPING)
S-5	SINK	UPPER MODIFIED EPOXY HOA SINK 18"L x 17"W x 12"D (GROUPING)
S-6	SINK	UPPER MODIFIED EPOXY SINK. 36"L x 19"W x 10"D (GROUPING)
CLL		OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0612
PTD		PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH4 4'-0" WIDE CHEMICAL FUME HOOD
CFH6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO SAW FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 6" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EXPOSED BOTTOM EDGE FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 24" O.C. AND SHALL BE MOUNTED (MOD) 1" ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON ELEVATIONS INDICATES ADJUSTABLE SHELVING INSIDE CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL.
11. PROVIDE LOCK AND KEY HARDWARE & CIRCLE NOTE TO DRAWER OR DOOR HANDLE (S) SHOWN ON ARCHE NOTES.
12. REFER SHEETS A0610 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0611
14. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE SHEETS 1/A 2010 - LABORATORY CASEWORK FOR SPECIFICATIONS.
15. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XX.XX. SEE SHEETS A7.xx FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T 314 241 6000
F 314 241 2570

William Tao & Associates, Inc.
MEP/FP Engineer
7855 Manchester Road, Suite 125
St. Louis, MO 63143
314-644-1400

David Manion & Associates, Inc.
Structural & Civil Engineer
600 South Vandeventer Avenue
St. Louis, MO 63110
314 534 1803

Fath Group
Technology
3101 S. Hanley Rd Suite 100
St. Louis, MO 63143
314 991 2208

Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7630 Forsyth Ave
St. Louis, MO 63132
314 726-8616

KMA Architects
Architecture
9721 Lindbergh Road
St. Louis, MO 63124
314 863 2599

Spellman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314 862-0070

SWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314 962 2700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1420 S. 3rd Street, Suite 201
St. Louis, MO 63104
314 388-9600

No.	Description	Date
6	AB Update	27 JAN 2017
5	AB-A025	16 NOV 2016
3	AB-A023	03 NOV 2016
1	AB-A205	13 OCT 2016
-	ISSUED FOR CONSTRUCTION (BFC)	13 MAR 2016

Drawing Title

ENLARGED PLANS-LEVEL 01

Project No 04561.01 Checked by

A0201

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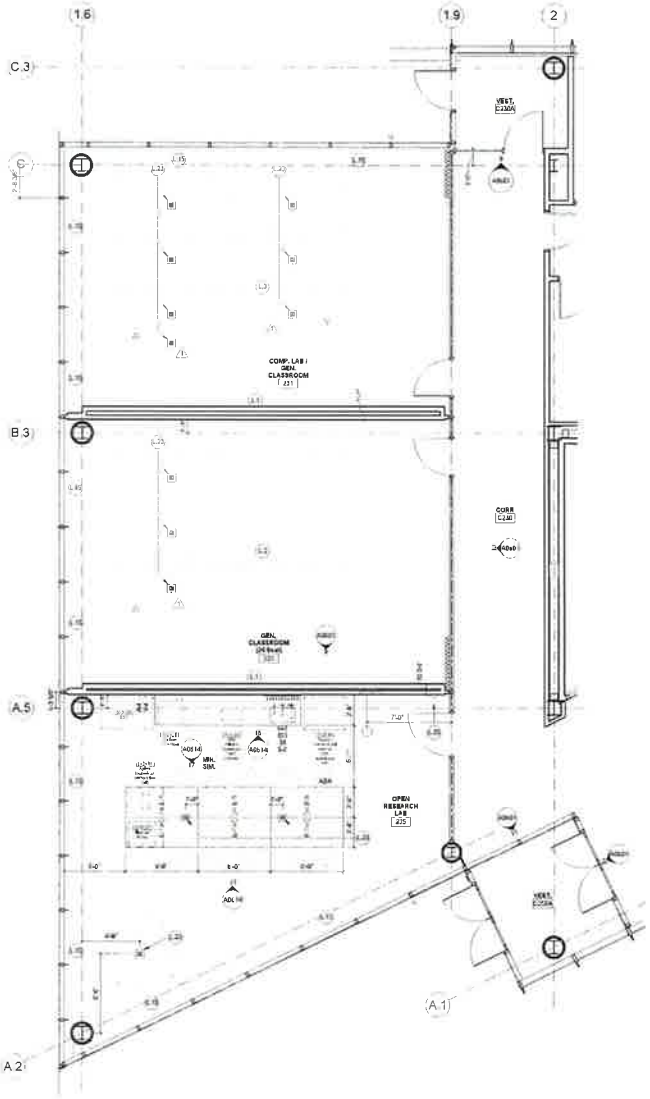
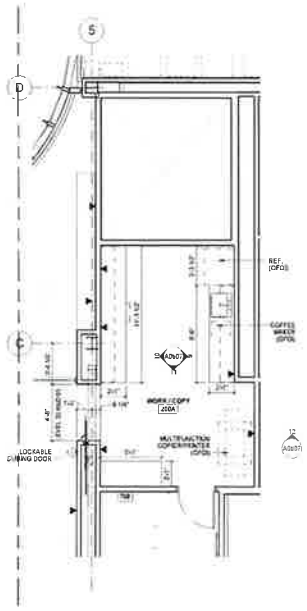
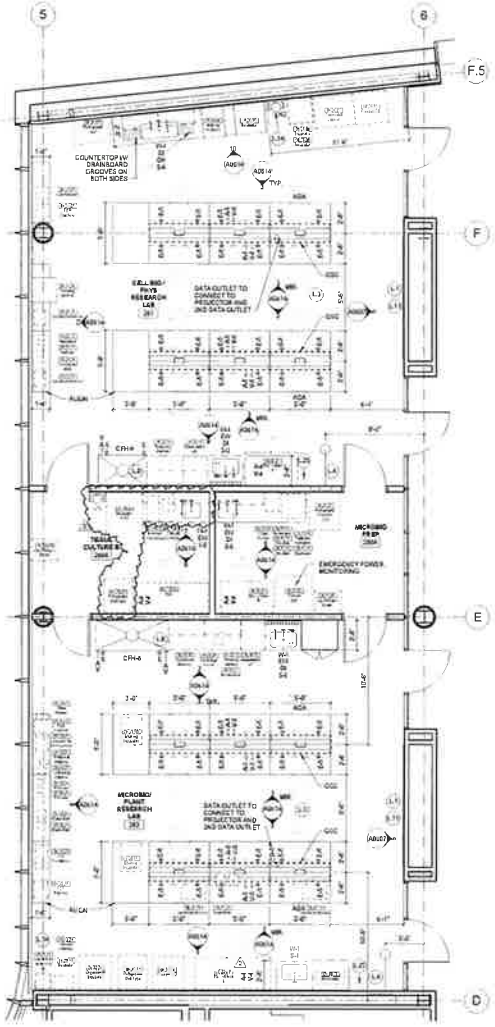


3 LEVEL 02 - AREA B - WEST - CLASSROOMS
1/4" = 1'-0"



2 LEVEL 02 - AREA B - WORKROOM
1/4" = 1'-0"



1 LEVEL 02 - AREA A - WEST- BIO LABS
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

L.1 WINTRAUL AND PROJECTABLE SURFACE DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 (1)213 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR EDOR BAG STORAGE
L.9 (1)213 CHEMICAL FUME HOOD- ACCESSIBLE - WITH MOBILE STORAGE BELOW. WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 CASE BELOW WHITEBOARD
L.12 CAMERA FOR DRYFE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (OFE). CYLINDERS TO BE (SFOF)
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 08/A013
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED.
L.20 FIBER WOOD LABORATORY CASEWORK. BASE CABINETS. MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 6" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 ON EGGS DRY TRADE FINISH (AWG-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT = 2'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
L.26 PORT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 9/A013

LAB UTILITY LEGEND

DW WATER COLD WATER FAUCET. DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE. VACUUM BREAKER
WL1 WATER GENERAL WORKS FAUCET. DECK MOUNTED WITH VACUUM BREAKER. SERRATED NOZZLE
DI WATER DISTILLATE FAUCETS DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
EW WATER EYEWASH. DECK MOUNTED. AUTO FLOW SWING DOWN
SH WATER SHOWER HOSE
C GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-1 VAC WALL MOUNTED. SINGLE SERRATED OUTLET
V-2 VAC TURRET BASE. SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE. SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED. SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUME HOOD CONTROL
E ELEC. DUPLEX OUTLET (EVS) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3 ELEC. WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CS EUP SINK UPPED MODIFIED EPOXY EUP SINK 6"x14"W OVAL (SINGRAL)
S-1 SINK UPPED MODIFIED EPOXY SINK (21"x15"W x10"D) (SINGRAL)
S-2 SINK UPPED MODIFIED EPOXY ADA SINK (21"x15"W x10"D) (SINGRAL)
S-3 SINK STAINLESS STEEL SINK (21"x15"W x10"D) (SINGRAL)
S-4 SINK STAINLESS STEEL ADA SINK (21"x15"W x10"D) (SINGRAL)
S-5 SINK UPPED MODIFIED EPOXY ADA SINK (21"x15"W x10"D) (SINGRAL)
S-6 SINK UPPED MODIFIED EPOXY SINK (21"x15"W x10"D) (SINGRAL)
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO CENTER FACE PARTITION OR COLUMN CENTERLINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 6" U.N.O. PROVIDE APRON OF SOLID WOOD WITH SADDO BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 8" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 24" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. SHADED LINES ON ELEVATIONS INDICATES ADJUSTABLE SHELVING INSIDE CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL.**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL.
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A601+ FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DIVISION 12 SECT. "LABORATORY CASEWORK" FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XXX. SEE SHEETS A710+ FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

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No.	Description	Date
1	ASI#001	27 JAN 2017
2	ASI#002	19 DEC 2016
3	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title:

ENLARGED PLANS-LEVEL 02

Project No: 04561.01 Checked by:

A0204

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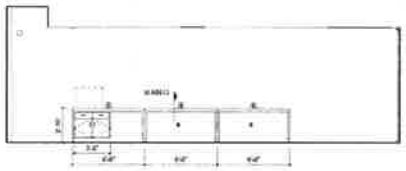
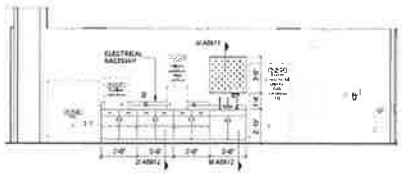
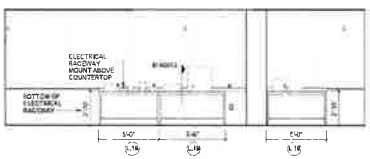


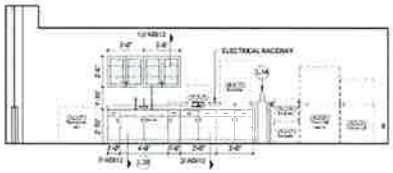
17 L02 OPEN RESEARCH LAB - TABLES - NORTH & SOUTH ELEVATION
1/4" = 1'-0"



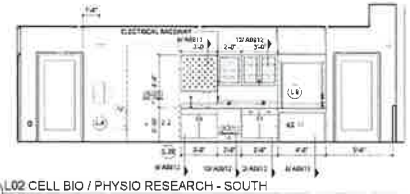
16 L02 OPEN RESEARCH LAB - NORTH
1/4" = 1'-0"



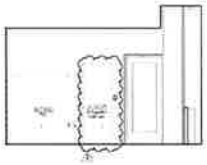
11 L02W CELL BIO AND PHYSICS RESEARCH - WEST
1/4" = 1'-0" REF 1 / A0204



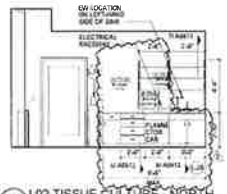
10 L02 CELL BIO AND PHYS RESEARCH - NORTH
1/4" = 1'-0"



9 L02 CELL BIO / PHYSIO RESEARCH - SOUTH
1/4" = 1'-0"

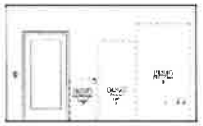


8 L02 TISSUE CULTURE - SOUTH
1/4" = 1'-0"

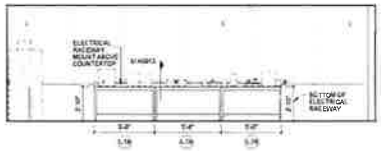


7 L02 TISSUE CULTURE - NORTH
1/4" = 1'-0"

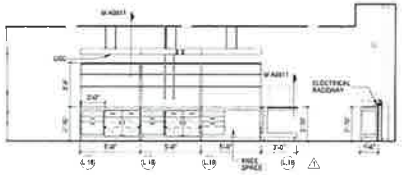
6 L02 MICROBIO PREP AND TC - NORTH
1/4" = 1'-0"



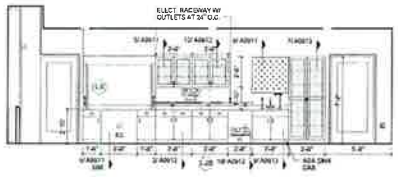
5 L02 MICROBIO PREP AND TC - SOUTH
1/4" = 1'-0"



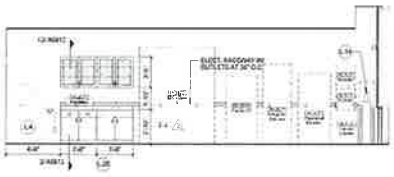
4 L02W MICRO / PLANT RESEARCH - WEST
1/4" = 1'-0" REF 1 / A0204



3 L02W MICRO / PLANT BIO RESEARCH
1/4" = 1'-0"



2 L02 MICRO/ PLANT BIOLOGY RESEARCH - NORTH
1/4" = 1'-0"



1 L02 MICRO / PLANT BIO RESEARCH - SOUTH
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

L.1 WASTEBAND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH.
L.5 10'(3) CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
L.7 WOOD LAB CASEWORK WEIRD/SUPE CAR
L.8 WOOD LAB CASEWORK TALL CABINET (WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.9 3' (2)(3) CHEMICAL FUME HOOD - ACCESSIBLE - (WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 CABS BELOW WHITEBOARD
L.12 CAMERA FOR GRYPS INTERVIEW
L.14 CAB (FUNGER STORAGE RACK (OFCI). ETUNDERS TO BE TEFOF.
L.15 RECESSED MOTORIZED ROLLER DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL BEAND LUCTURE WALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM SEE DETAIL 6/A0211
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP CABINETS SUSPENDED BELOW AS INDICATED
L.20 FIXED WOOD LABORATORY CASEWORK BASE CABINETS MODIFIED EPOXY COUNTERTOP WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 8' DEEP x 6' WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 09 6636 DRY ERASE FINISH (AWC-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913

LAB UTILITY LEGEND

CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH DERATED NOZZLE VACUUM BREAKER
W-1 WATER GENERAL MIXING FAUCET DECK MOUNTED WITH VACUUM BREAKER DERATED NOZZLE
DI WATER DRINKER FAUCET DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
EW WATER EYEWASH DECK MOUNTED AUTO LOW SWING DOWN
DH WATER DRENCH HOSE
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED SINGLE DERATED OUTLET
V-1 VAC TURRET BASE SINGLE DERATED OUTLET
V-4 VAC OUTLET FOR DERATED CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE SINGLE DERATED OUTLET
A-2 AIR WALL MOUNTED SINGLE DERATED OUTLET
A-4 AIR OUTLET FOR DERATED CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
E ELEC. SUPLER OUTLET (GFI) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL (1) SUPLEX ELECTRICAL OUTLET
E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL (2) SUPLEX ELECTRICAL OUTLET
E-3 ELEC. WALL MOUNTED (1) SUPLEX ELECTRICAL OUTLET
E-4 ELEC. SUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. SUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (1) DATA OUTLETS
D-4 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK W/ LUCITE DUAL (DROPIN)
S-1 SINK LIPPED MODIFIED EPOXY SINK 20"x15"x8"D (DROPIN)
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 20"x15"x8"D (DROPIN)
S-3 SINK STAINLESS STEEL SINK 20"x15"x8"D (DROPIN)
S-4 SINK STAINLESS STEEL ADA SINK 20"x15"x8"D (DROPIN)
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 14"x10"x8"D (DROPIN)
S-6 SINK LIPPED MODIFIED EPOXY SINK 20"x15"x8"D (DROPIN)
DSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/A0913
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND
CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GWB FACE, PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE
3. CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTER LINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH CASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL PLUMBEDCOD. TYPICAL. SIMILAR TO DETAIL**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0810 FOR LABORATORY CASEWORK / MILLWORK DETAILS
13. FOR TYPICAL MOUNTING HEIGHTS REF: MA0411
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK & LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DIVISION 12 2533 - LABORATORY CASEWORK FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - MX.XX.XX. SEE SHEETS A0110 FOR EQUIPMENT SCHEDULES
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION

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No	Description	Date
3	ASI-045	27 JAN 2017
2	ASI-042	19 DEC 2016
1	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

INTERIOR LAB ELEVATIONS LEVEL 02

Project No 04561.01 Checked by

A0614

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LAB EQUIPMENT SCHEDULE_LEVEL-1

Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Amps	New (N) / Existing (E)	Furnished & Installed by**	Remarks
1338 SIM LAB														
06.10.01	Anesthesia Machine	GE Datex/Ohmeda	Aespire	1	F	0"	2'-0"	2'-6"	4'-7"	120	15	N		Total dimensions include monitors on top. DISS: Diameter Index Safety System. [illegible]
06.10.02	Adult Defibrillator	Life Form	LF1026	1	S	0"	1'-0"	1'-6"	10"			E		https://www.simulab.com
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
06.10.04	Mayo Stand	[illegible]	[illegible]	2	F	0"	[illegible]	[illegible]	[illegible]			N		[illegible]
06.10.05	OR Patient Table	Venture Medical	Amsco 3080RC	1	F	0"	6'-4"	1'-10"	3'-6"	100-120	8	N		[illegible]
06.10.06	Surg- Instrument Table	Venture Medical	Blickman Howard 7935SS Instrument Table	1	F	0"	3'-0"	2'-0"	2'-10"			N		[illegible]
06.10.07	[illegible] Cart	[illegible]	[illegible]	1	F	0"	[illegible]	[illegible]	[illegible]			N		[illegible]
06.10.08	OR Lights	Medline	[illegible]	1	C	6'-6"	2'-6"	2'-6"	2'-6"			N	CFOI	
06.10.10	Crash Cart	Global	[illegible] 51072	1	F	0"	2'-0"	1'-6"	4'-6"			N		[illegible]
06.10.11	IV Pole	[illegible] Medical	[illegible]	2	F	0"	2'-0"	2'-0"	6'-10"			N		[illegible]
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]
06.10.15	Portable suction aspirator	[illegible]	[illegible]	1	F	0"	2'-0"	2'-0"	2'-0"			N		
06.10.16	Simulation Mannequin	CAE Healthcare	HPS-E10	1	F	0"	2'-0"	2'-0"	1'-11"	100-120	2.3	N		
06.10.17	HPS-Equip Rack	CAE Healthcare	HPS-E10	1	F	0"	2'-0"	2'-4"	3'-6 1/2"	100-220		N		20 AGO [illegible]
				14										
135 DRY SKILLS LAB / COHORT CLASSROOM														
06.07.24	Virtual Dissection Table	Anatomage		1	F	0"	2'-6"	7'-2"	2'-6"	100-240	10	N		[illegible]
				1										
137 MODELS/ASSESSMENT STORAGE/RESEARCH														
06.12.01	Ultrasound Cart			4	F	0"	1'-6 1/2"	2'-2"	2'-6"			N		
06.12.02	Ultrasound Machine	Sonosite	M-turbo	1	S	2'-6"	1'-4"	1'-2"	8"			E		[illegible]
06.12.03	Ultrasound Machine	Sonosite	M-turbo	2	S	2'-6"	1'-4"	1'-1"	8"	100-240	2	E		[illegible]
06.12.04	Gas Cabinet	Safety Equipment	7300	1	F	0"	2'-0"	1'-6"	5'-0"			N	CFOI	[illegible]
06.12.05	Gas Cabinet	Safety Equipment	7300	1	F	0"	3'-0"	1'-6"	6'-0"			N	CFOI	[illegible]
				10										
116 TEACHING KITCHEN														
18.15.01	6 Range Cooktop	Kitchenaid	KGCU467VSS	1	B	2'-10"	2'-11 1/2"	1'-9 1/8"	1'-2"			N	CFCI	Specification 113100
18.15.02	Double Wall Oven	GE	[illegible] (30in)	1	W	[illegible]	[illegible]	[illegible]	4'-3"	208	30	N	CFCI	Specification 113100
18.15.03	Hood (with controller system)	CaptiveAire	[illegible]	1	W	7'-6"	4'-6"	4'-6"	2'-6"			N	CFCI	Specification 114000
18.15.05	Refrigerator/Freezer combo	LG	[illegible]	1	F	0"	2'-11 3/8"	2'-11 3/8"	5'-9 3/8"			N	CFCI	Specification 113100
18.15.06	Icemaker	Hoshizaki	[illegible]	1	U	0"	1'-3"	1'-11 3/4"	2'-7 1/2"	115	3.4	N	CFCI	Specification 113100
18.15.08	Microwave	Sharp	[illegible]	1	B	1'-4"	2'-6"	1'-11 5/8"	1'-4"	120	15	N	CFCI	Specification 113100
18.15.10	Commercial Dishwasher	Miele	[illegible]	1	U	0"	2'-0"	2'-0"	2'-5 1/2"	208	43.2	N	CFCI	Specification 114000
18.15.13	Adjustable Camera			2	C	[illegible]	6"	6"	6"			N		there were 2 cameras. One pointed at the stove and one at the countertop. [illegible]
18.15.16	Electronic Mixing bowl	Kitchenaid	[illegible]	1	B	2'-10"	8 5/16"	1'-2 3/16"	1'-2"			N		standard
18.15.17	Blender	Vitamix	5200	1	B	2'-10"	7 1/16"	8 3/4"	1'-8 1/2"			N		standard
				11										
[illegible] CADAVER LAB WORKROOM														
06.04.02	Incubator Bench	ThermoScientific	Heracell CO2 with O2 control	1	B	2'-10"	1'-4"	1'-4"	10"			N		[illegible]
06.04.03	Anesthesia Chamber	Kent Scientific	SomnoSuite Small Animal Anesthesia System [illegible]	1	B	2'-10"	2'-1"	1'-6"	1'-6"			N		
06.04.04	Refrigerator u/c			1	U	0"	2'-0"	2'-4"	2'-8"			N		
06.04.05	CO2/N2 Controller	Biospherix	[illegible]	1	B	2'-10"	6"	6"	6"			N		
				4										
[illegible] CADAVER LAB														
06.03.01	Cadaver Table	Mortech Manufacturing	[illegible]	4	F	0"	2'-6"	7'-2"	4'-1"	*		N		[illegible]
06.03.02	Cadaver Table	Existing		2	F	0"	2'-6"	7'-2"	4'-1"			E		
06.03.03	Magnifying Light	Mortech Manufacturing	[illegible]	4	F	0"	16"	16"	5'-2"			N		[illegible]
06.03.04	Lab Cart	Carolina [illegible] Utility Storage Cart	[illegible]	4	F	0"	1'-2"	1'-10"	2'-10"			N		[illegible]
06.03.06	Bone Saw	Mortech	[illegible]	4	B	2'-10"	4"	1'-6"	1'-6"	115	4.5	N		[illegible]
06.03.07	Bone Saw			2	S	2'-10"	2"	1'-6"	1'-6"			E		
06.02.13	MOBILE LECTERN (Repl w Caster)			1		0"	2'-1"	2'-1"	3'-8"				CFOI	Casework
				25										

GENERAL NOTES:

1. ALL THE EQUIPMENT IS CFOI U.N.O

LEGEND:

*MOUNTING LOCATION:
B Benchtop
U Undercounter
F Floor
W Wall
C Ceiling
S Storage

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No	Description	Date
1	ADDEN	27 JAN 2017
-	ISSUED FOR CONSTRUCTION (BP3)	10 MAR 2016

Drawing Title
EQUIPMENT LIST
LEVEL-01

Project No 04581.01 Checked by

A1101

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LAB EQUIPMENT SCHEDULE_LEVEL-2

Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phone	Watts	Floor Drain	Potable Water	RI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks
2?? OPEN RESEARCH LAB																													
2?? CHEM STOCK ROOM																													
2?? MICROSCOPY ROOM																													
2?? ??? CLASSROOM																													
2?? MICROBE PLANT RESEARCH LAB																													
2?? PHYSICS LAB																													
2?? MICROBIO PREP																													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OFCI Spec. 115300. Lower spindle rack, upper standard rack, 10 and 32 pin inserts, bulk tube inserts, utensil basket

LAB EQUIPMENT SCHEDULE_LEVEL-2

Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phone	Watts	Floor Drain	Potable Water	RI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OFCI Spec. 115300. Lower spindle rack, upper standard rack, 10 and 32 pin inserts, bulk tube inserts, utensil basket

GENERAL NOTES:

[illegible]

LEGEND:

*** MOUNTING LOCATION:**
B Benchtop
U Undercounter
F Floor
W Wall
C Ceiling
S Storage

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1	ADDM	27 JAN 2017
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

Drawing Title

EQUIPMENT LIST LEVEL-02

Project No 04581.01 Checked by

A1102

LAB EQUIPMENT SCHEDULE_LEVEL-3

EQUIPMENT ITEM						DIMENSIONS				ELECTRICAL					PLUMBING								MECHANICAL					
Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Watts	Floor Drain	Potable Water	DI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N)/ Existing (E)	Existing Location	Furnished & Installed by**	Remarks
[illegible]				1	B	2'-10"	1'-3"	3'-4"	6"	115																			
[illegible]																													

LAB EQUIPMENT SCHEDULE_LEVEL-3

EQUIPMENT ITEM						DIMENSIONS				ELECTRICAL					PLUMBING								MECHANICAL					
Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Watts	Floor Drain	Potable Water	DI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N)/ Existing (E)	Existing Location	Furnished & Installed by**	Remarks
[illegible]																													

GENERAL NOTES:

1) ALL THE EQUIPMENT IS OFOI U.N.O.

LEGEND:

MOUNTING LOCATION:
B Benchtop
U Undercounter
F Floor
W Wall
C Ceiling
S Storage

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No	Description	Date
1	ASI-049	27 JAN 2017
	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

Drawing Title

EQUIPMENT LIST LEVEL-03

Project No. 0456.01 Checked by

A1103

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LAB EQUIPMENT SCHEDULE_LEVEL-4

Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Hz	Phase	Watts	Floor Drain	Potable Water	DI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N) / Existing (E)	Existing Location	Furnished & Installed By**	Remarks
473																													
CHEM LAB - GENERAL																													
08.15.32	Balance	Denver Instruments	TR-64	1	B	2'-10"	10"	1'-1"	1'-1"	115					112											E	16		
08.15.33	Balance	Fisher	ALF4050	1	B	2'-10"	9"	1'-1"	5"	115		0.1			13											E	16		
08.15.34	Balance	Denver Instruments	TR-4050	1	B	2'-10"	10"	1'-2"	4"	115		0.3			35											E	16		
08.15.35	Balance	Denver Instruments	PK-2016	1	B	2'-10"	10"	1'-4"	5"	115		0.1			21											E	16		
08.15.36	Balance	Fisher	ALF1202	1	B	2'-10"	1'-2"	9"	1'-1"	100		0.1			14											E	16		
08.15.37	Analytical Balance	Mettler	AG 245	1	B	2'-10"	18"	1'-1"	1'-1"	115		0.0			7											E	16		
08.15.38	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			16											N			
08.15.39A	Spectrophotometers	Thermo Fisher	Genesys 20	9	B	0"	1'-6"	1'-1"	7"	120																N			
08.15.39B	Spectrophotometers	Thermo Fisher	Genesys 20	4	B	0"	1'-6"	1'-2"	7"	120																E	16		
08.15.10	Drying Oven	Blue Line	OV-12A	1	B	2'-10"	2'-8"	2'-8"	1'-4"	115		6			690											E	16		
08.15.11	Pipetter	Mettler	MP220 and AQA8021	10	B	0"	1'-2"	1'-2"	6"	115		0.3			33											E	16		
08.15.12	Conductivity meter	Fisher	13017877	4	B	0"	6"	1'-6"	4"	9 DC																E	16		
08.15.13A	Hot plates	Fisher	PC 220	4	B	0"	6"	6"	4"	120		2.5			313											N			
08.15.13B	Hot plates	Fisher	PC 320	4	B	0"	6"	6"	4"	125		2.5			313											E	16		
08.15.14	Printer	HP	CP2025	1	B	2'-10"	1'-4"	1'-3"	1'-4"	120		6			720											E	16		
				44																									
471																													
LAB WASTE - CHEM																													
08.204.01	Flammable Liquid Storage Cabinet Vented	Justrite	894520	1	F	0"	3'-7"	1'-6"	5'-5"																	N			
08.204.02	Acid Storage Cabinet	Justrite	894522	1	F	0"	3'-7"	1'-6"	5'-5"																	N			
				2																									
479																													
CHEM LAB PREP																													
08.14.31	Refrigerator [illegible] Type	Lab Fridge [illegible]	LP-22HC	1	F	0"	2'-4 1/2"	2'-4 1/2"	6'-1 1/4"	115		4.1		1												N			
08.14.34	Glasswasher UC	Labconco	SteamScrubber (4178020)	1	F	0"	2'-6 1/8"	2'-3 5/8"	2'-6 7/8"	115		16				x	x	x								N		OFCI	Spec. 115VAC upper and lower spindle racks, [illegible]
08.14.35	Top Loading Balance	Ohaus	NV52	1	B	2'-10"	6"	10"	6"	115																N			
08.14.36	Analytical Balance	Mettler Toledo	AL54	1	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			16											N			
08.14.38	DI water			1	W	3'-6"	2'-8"	9"	2'-6"									x								N			
				5																									
488																													
CHEM LAB - ORGANIC																													
08.16.01	Analytical Balance	Mettler Toledo	AL54	8	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10											N			
				8																									
490																													
CHEM LAB - RESEARCH																													
08.27.20	Flamm-Storage UC (not in scope)			1		0"	3'-6"	2'-0"	2'-6"																				
08.27.21	Acid-Storage UC (not in scope)			1		0"	2'-6"	2'-0"	2'-6"																				
08.27.04	Photoreactor	Ace Glass	7836-20	1	B	2'-10"	2'-4"	1'-6"	3'-6"	120		3.8			456											E	16		NEEDS WATER SOURCE
08.27.05	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			16											N			
				5																									
486																													
CHEM LAB - ANALYT / INORGANIC																													
08.12.01	Analytical Balance	Mettler Toledo	AL54	4	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			16											N			
				4																									
488																													
CHEM INSTR. LAB																													
08.13.04	NMR	Nanalysis	NMR Ready 60e	1	B	2'-10"	1'-6"	1'-1"	1'-4"	100																N			
08.13.05	Spectrophotometer UV-Vis-NIR	Perkin Elmer	Lambda 750	1	B	2'-10"	3'-0"	4'-0"	11"	115																E	16		
08.13.06	Spectrophotometer FTIR	Perkin Elmer	Paragon 500	1	B	2'-10"	2'-6"	3'-0"	1'-6"	115																E	16		
08.13.07	Spectrophotometer UV/Vis	Perkin Elmer	Lambda Bio Rad 10	1	B	2'-10"	2'-1"	1'-10"	8"	115																E	16		
08.13.08	Fluorimeter	ISS	PC1	1	B	2'-10"	3'-6"	3'-6"	1'-6"	120																E	2004		associated with number 12 on 14
08.13.09	Micro-Oven	Thermo	CLG Classic	1	B	2'-10"	4'-6"	2'-6"	2'-6"	115														x		E	16		
08.13.10	FTIR-CPU	Dell		1	B	2'-10"	1'-6"	1'-7"	2'-2"	115					254											E	16		
08.13.11	UV/Vis/NIR CPU	Micron		1	B	2'-10"	1'	1'-6"	1'-6"	115					258											E	16		
08.13.12	Fluorimeter-CPU	Dell		1	B	2'-10"	1'	1'-6"	1'-6"	115					258											E	2004		runs number 8
08.13.13	Printer	hp	deskjet 842 C	1	B	2'-10"	1'-6"	1'-2"	9"	115		1			110											E	16		
08.13.14	Polarimetric accessories	Anaspec	00097	1	B	2'-10"	1'-2"	1'-6"	1'-2"	115														x		E	2004		exhausts number 8
08.13.15	HPLC	Sci-Pac Chrom	1400	1	B	2'-10"	1'-2"	1'-6"	1'-8"	115		20														E	16		
				12																									
491																													
CHEM LAB PHYSICAL																													
08.17.02	Analytical Balance	Mettler Toledo	AL54	3	B	2'-10"	9"	1'-1"	1'-4"	100		0.3			16											N			
				3																									

GENERAL NOTES:

1) ALL THE EQUIPMENT IS OFCI U.N.O.

LEGEND:

* **MOUNTING LOCATION:**
B: Benchtop
U: Undercounter
F: Floor
W: Wall
C: Ceiling
S: Storage

** **FURNISHED & INSTALLED BY:**
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1	ASI-048	27 JAN 2017
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

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EQUIPMENT LIST LEVEL-04

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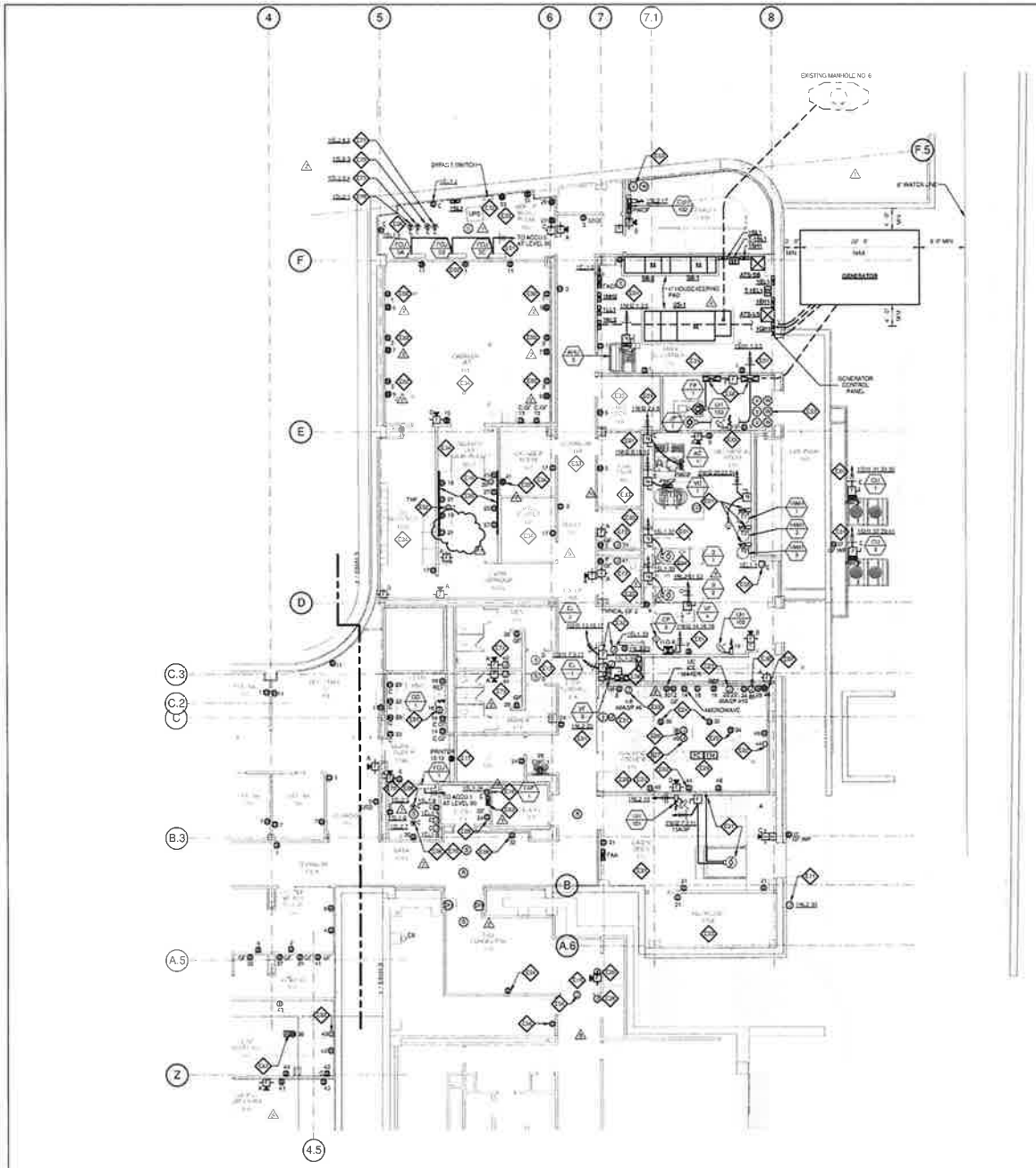

1 LEVEL 01 - AREA A - FLOOR PLAN - POWER AND AUXILLARY
1/4" = 1'-0"

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GENERAL NOTES:

A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH IN

B. ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C. ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX"

D. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E. PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI WIRE BRANCH CIRCUIT REQUIREMENTS

H. ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL "LNL" UNLESS NOTED OTHERWISE

◇ KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY. WIREMOLD AL4320 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLTE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E09 MOUNT RECEPTACLE IN ELEVATOR PIT. COORDINATE EXACT LOCATION WITH ELEVATOR CONTRACTOR

E10 UNDERCOUNT REFRIGERATOR. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL PLANS AND ELEVATIONS

E11 PROVIDE POWER AND FINAL CONNECTION TO WALL MOUNTED BLUE LIGHT EMERGENCY INTERCOM STATION

E13 PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU 1 & AHU 2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDACTOR LIGHT(S) IN CEILING BELOW

E17 PROVIDE NEMA 6-30R 30A 208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH IN

E18 PROVIDE POWER AND FINAL CONNECTION TO ELEVATOR SUMP PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH IN

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH IN

E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN

E21 PROVIDE POWER AND FINAL CONNECTION TO DOCK LEVELER AND CONTROLS PER MANUFACTURERS WRITTEN INSTRUCTIONS. COORDINATE CONTROL AND DISCONNECT LOCATION WITH DOCK LEVELER INSTALLER PRIOR TO INSTALLATION

E22 PROVIDE POWER AND FINAL CONNECTION TO DISH WASHER. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E23 PROVIDE POWER AND FINAL CONNECTION TO DOUBLE OVEN. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E24 RECEPTACLE MOUNTED IN COUNTER APRON. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION

E25 RECEPTACLE MOUNTED INSIDE CABINET FOR COMPUTER. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION

E26 PROVIDE POWER AND FINAL CONNECTION TO DROP IN COOK TOP. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E27 PROVIDE POWER AND FINAL CONNECTON TO ISLAND HOOD. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E28 REFER TO KITCHEN EQUIPMENT DRAWINGS FOR MOUNTING HEIGHTS OF ALL ELECTRICAL DEVICES IN THIS ROOM AND FOR POWER REQUIREMENTS PRIOR TO ROUGH IN

E29 PROVIDE FIRE ALARM MONITOR MODULE AND CONTROL MODULE CONNECTED TO FIRE ALARM SYSTEM AT HOOD. PROVIDE WIRING BETWEEN HOOD AND FIRE SUPPRESSION SYSTEM. REFER TO KITCHEN HOOD EXTINGUISHING SYSTEM WIRING DIAGRAM ON SHEET E0402

E30 PROVIDE POWER FOR HOOD FIRE PROTECTION SYSTEM. INTERCONNECT EXHAUST FANS AND MAKE UP AIR FANS TO MICRO SWITCH IN FIRE PROTECTION CABINET. REFER TO KITCHEN HOOD EXTINGUISHING SYSTEM WIRING DIAGRAM

E31 PROVIDE J BOX AND CONDUIT IN WALL FOR REMOTE MANUAL PULL STATION. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E32 PROVIDE POWER MODULE SWITCH FOR ELEVTOR AND A JUNCTION BOX WITH A 120V-20A CIRCUIT FOR CONNECTION OF ELEVATOR CONTROLS. PROVIDE ALL FINAL CONNECTIONS TO ELEVATOR CONTROLER AND ELEVATOR CAB PER MANUFACTURERS WRITTEN INSTRUCTIONS. REFER TO ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION

E33 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL "HLJ"

E34 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL "LLL"

E53 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR

E54 EXTEND CIRCUIT FROM EXISTING RECEPTACLES SERVING THIS AREA

E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR

E56 SEE ELEVATOR DETAIL ON SHEET E0402 FOR ADDITIONAL POWER & FIRE ALARM REQUIREMENTS

E58 FIRE PUMP CONTROLLER AND JOCKEY PUMP CONTROLLER SEE ONE LINE DIAGRAM FOR FEEDER INFORMATION

E63 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO RF648 FC WITH A BRASS FLANGED COVER CAT. NO. FRBTC85 NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG DATAVOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG A/V (SEC A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E70 PROVIDE NEMA L5-20R 20A 120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E71 PROVIDE NEMA L6-20R 30A 208V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E72 UPS AND EXTERNAL BYPASS SWITCH FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR. REFER TO TECHNOLOGY DRAWINGS AND ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION

E73 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER

E83 CONNECT WATER ALARM PANEL TO SAME RECEPTACLE SERVING SUMP PUMP

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No	Description	Date
10	ASI 047	27 JAN 2017
10	ASI 047	10 JAN 2017
8	RFI 363	13 JAN 2016
8	ASI 044	10 JAN 2017
7	ASI 032	10 NOV 2016
6	ASI 024	04 NOV 2016
5	ASI 031 Not accepted by owner	26 OCT 2016
4	RFI 283	20 OCT 2016
3	ASI 010	21 JULY 2016
2	ADDENDUM 2 2	15 APRIL 2016
1	ADDENDUM 2 1	11 MAR 2016
	ISSUED FOR CONSTRUCTION (SPK)	01 MAR 2016

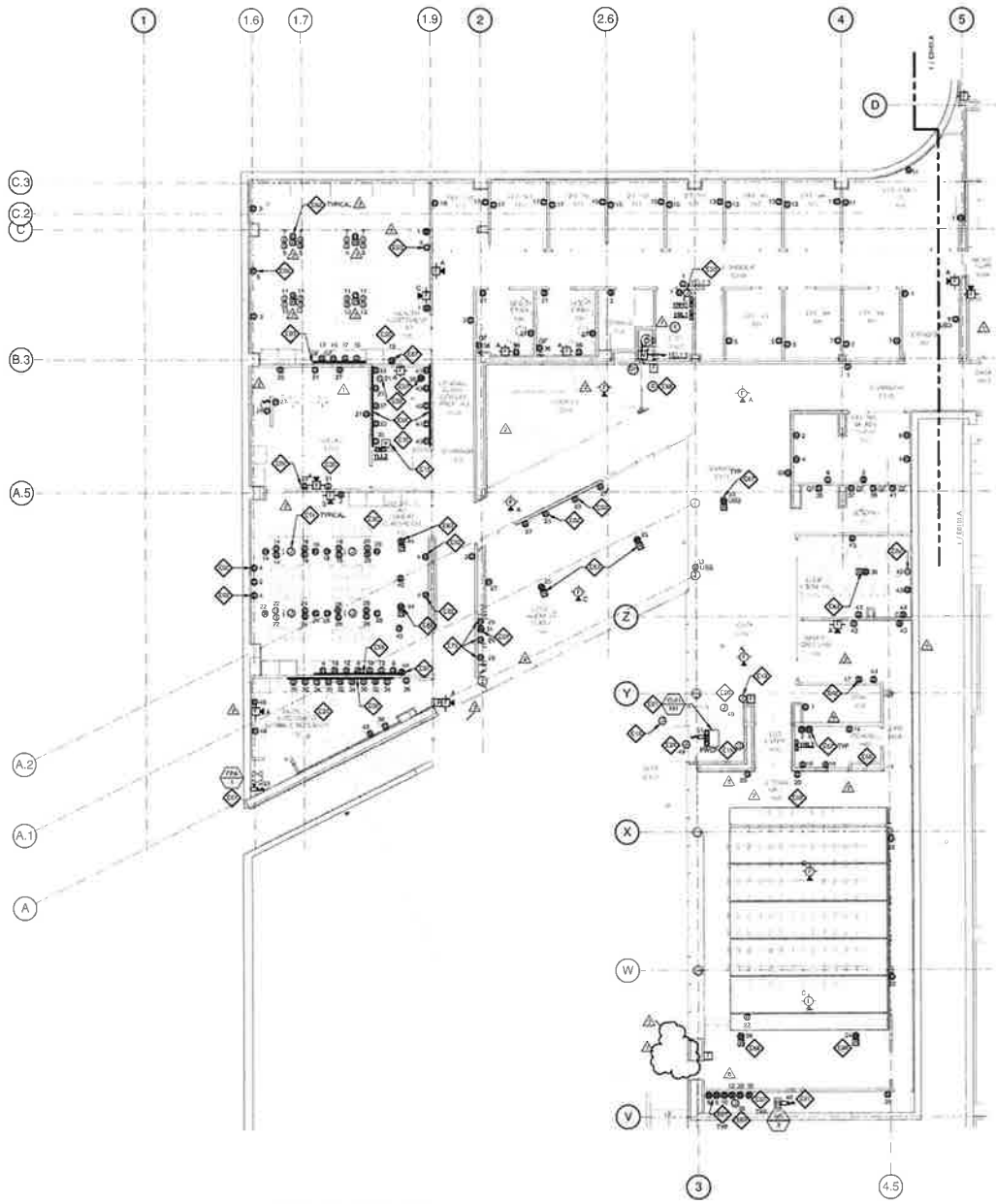
KEY PLAN

Drawing Title

LEVEL 01 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No 04561 01 Checked by

E0101.A



1 LEVEL 01 - AREA B - FLOOR PLAN - POWER AND AUXILLARY
1/8" = 1'-0"

GENERAL NOTES:

A DO NOT SCALE DRAWINGS REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH IN

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX"

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS COORDINATE COLOR AND FINISH WITH ARCHITECT CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210 4 MULTI WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH IN OF DATA, VOICE AND A/V

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 1NL1 UNLESS NOTED OTHERWISE

KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR, COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4322 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE PROVIDE ALL ACCESSORIES FOR A COMPLTE INSTALLATION REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH SEE DETAILS ON SHEET E402

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT, COORDINATE MOUNTING HEIGHT AND EXACT

E15 PROVIDE EMERGENCY POWER OFF (EPO) CONTACTOR AND ASSOCIATED CIRCUITS CONTACTOR SHALL DEACTIVATE POWER TO CONTACTOR AND ASSOCIATED CIRCUITS VERIFY WHICH RECEPTACLES IN SIM LAB SHALL BE CONTROLLED WITH OWNERS REPRESENTATIVE ALL RECEPTACLES AND COVER PLATES FED THROUGH CONTACTOR SHALL BE RED IN COLOR AND SHALL BE LABELED "NOT ON GENERATOR"

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH IN

E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN

E26 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1NL2

E30 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1NL3

E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL COORDINATE LOCATION WITH AUTOMATION CONTRACTOR

E57 PROVIDE POWER TO SUBWOOFER COORDINATE LOCATION WITH A/V DRAWINGS

E62 PROVIDE A 2HR FIRE CLASSIFIED 2 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT NO RFB25 FC WITH A BRASS FLANGED COVER CAT NO FPRTC6S NA THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A STANDARD DUPLEX RECEPTACLES, NEMA 5 20R THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E63 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT NO RFB45 FC WITH A BRASS FLANGED COVER CAT NO FPRTC6S NA THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE (1) GANG DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE) (3) GANG A/V (SEE A/V DRAWINGS FOR DEVICE TYPES) THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E66 PROVIDE A 2HR FIRE CLASSIFIED 6 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT NO EFB66 10STB5 FC WITH A BRASS FLUSH COVER CAT NO EFB66 10STB5 NA THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE (1) GANG DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE) (3) GANG A/V (SEE A/V DRAWINGS FOR DEVICE TYPES) THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E67 PROVIDE A 2HR FIRE CLASSIFIED 2 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT NO RFB25 FC WITH A BRASS FLANGED COVER CAT NO FPRTC6S NA THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLES WITH USB PORTS THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E68 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR

E70 PROVIDE NEMA L5 20R, 20A 120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E74 FEED FIXED FURNITURE FROM BELOW AND MAKE ALL FINAL CONNECTIONS TO RECEPTACLES

E75 RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO ARCHITECTURAL PLANS AND ELEVATIONS

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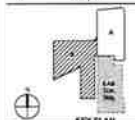
No	Description	Date
7	ASI 006	27 JAN 2017
6	ASI 005	16 NOV 2016
5	RFI 025	28 OCT 2016
4	A/V SBR	14 OCT 2016
3	ASI 001	14 OCT 2016
2	ADDENDUM # 2	19 APRIL 2016
1	ADDENDUM # 1	17 MAR 2016
	ISSUED FOR CONSTRUCTION (GPS)	01 MAR 2016



KEY PLAN

Drawing Title

LEVEL 01 AREA B FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No 04381.01 Checked by

E0101.B

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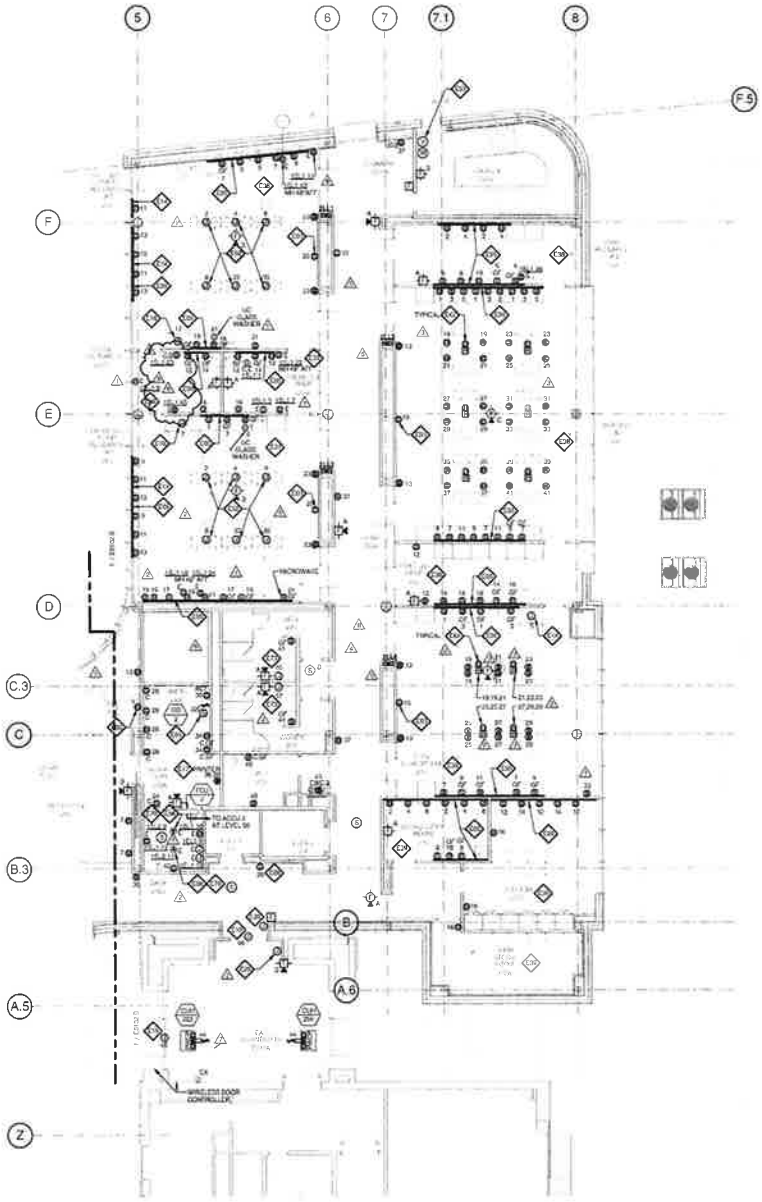

1 LEVEL 02 - AREA A - FLOOR PLAN - POWER AND AUXILLARY

GENERAL NOTES:

A DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH IN

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT EX

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH IN OF DATA, VOICE AND A/V

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 2NLI UNLESS NOTED OTHERWISE

◇ KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4220 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E14 SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN

E16 PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD

E17 PROVIDE NEMA 6-30R, 30A 208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH IN

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH IN

E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN

E36 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL1

E37 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL2

E38 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL3

E39 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL4

E52 PROVIDE POWER AND FINAL CONNECTIONS TO OVERHEAD SERVICE CARRIER. REFER TO LIGHTING PLANS FOR LIGHTING CIRCUITS. COORDINATE WITH ARCHITECTURAL PLANS AND ELEVATIONS

E53 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR

E62 PROVIDE A 2HR FIRE CLASSIFIED 2 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF825 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A STANDARD DUPLEX RECEPTACLES, NEMA 5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E63 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF845 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG DATAVOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E64 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF825 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (3) 20A STANDARD DUPLEX RECEPTACLES, NEMA 5-20R, (1) GANG BLANK. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E70 PROVIDE NEMA L5-20R, 20A 120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E73 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER

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No	Description	Date
9	ADD 048	27 JAN 2017
8	ADD 047	16 JAN 2017
7	ADD 044	10 JAN 2017
6	ADD 036	28 NOV 2016
5	ADD 030	28 NOV 2016
4	ADD 001 Not accepted by owner	04 OCT 2016
3	ADD 017	14 OCT 2016
2	ADDENDUM 2.2	15 APRIL 2016
1	ADDENDUM 2.1	11 MAR 2016
	ISSUED FOR CONSTRUCTION (CD)	01 MAR 2016

KEY PLAN

Drawing Title

LEVEL 02 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 3M.M1.01 Checked by

E0102.A

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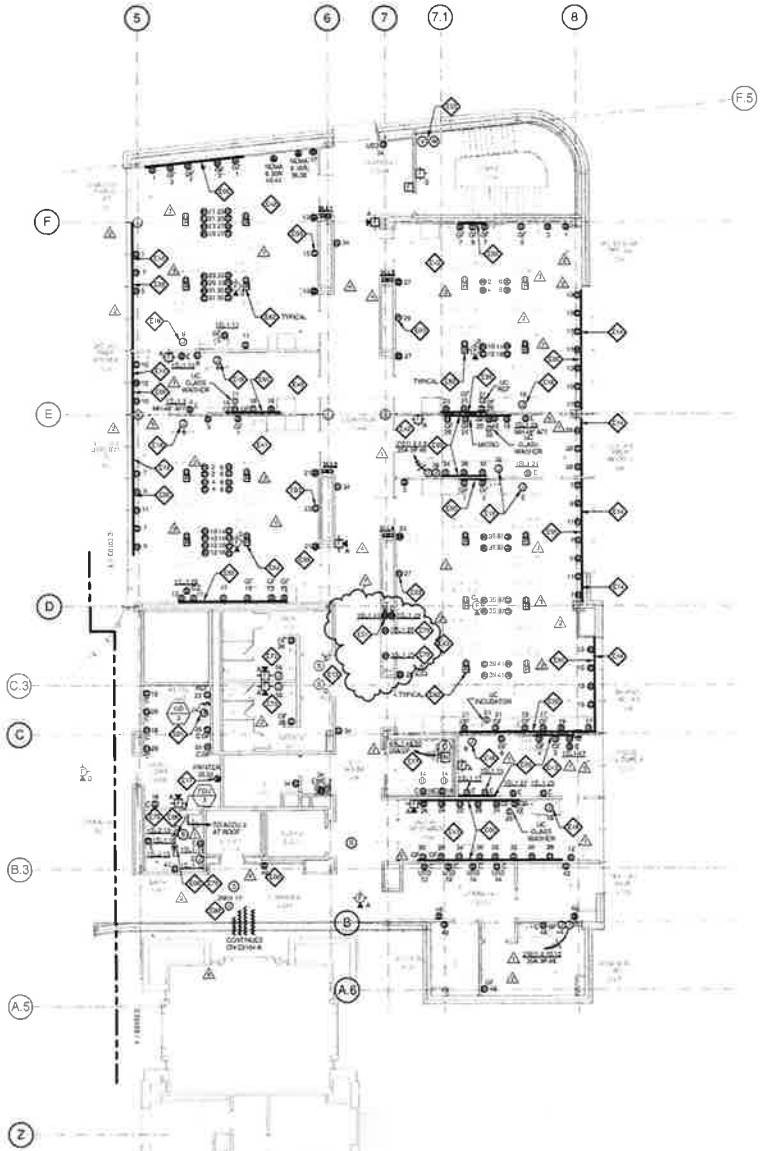


1 LEVEL 03 - AREA A - FLOOR PLAN - POWER AND AUXILLARY

GENERAL NOTES:

A DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH IN

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX"

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH IN OF DATA, VOICE AND A/V

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 3DL1 UNLESS NOTED OTHERWISE

◇ KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4920 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E13 PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU 1 & AHU 2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDICATOR LIGHT(S) IN CEILING BELOW

E14 SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN

E15 PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD

E17 PROVIDE NEMA 6-30R, 30A 208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH IN

E40 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL1

E41 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL2

E42 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL3

E43 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL4

E51 PROVIDE 20A GFCI QUAD RECEPTAGLE WITH AUDIBLE ALARM ON EMERGENCY CIRCUIT FOR FISH TANK. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND ELEVATIONS

E52 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR

E53 PROVIDE A 2HR FIRE CLASSIFIED 2 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB55 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A STANDARD DUPLEX RECEPTACLES. NEMA 5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E70 PROVIDE NEMA L5-20R, 20A 125V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E75 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER

E77 PROVIDE POWER TO EVAPORATOR COIL, LIGHTS, CONTROLS, ETC. FOR A COMPLETE INSTALLATION OF WALK IN COOLER

△ E79 PROVIDE 20A GFCI DUPLEX RECEPTACLE CEILING MOUNTED FOR POWER TO AQUARIUM LIGHTS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND ELEVATIONS △

E80 PROVIDE PIPE FREEZE PROTECTION OF COLD AND HOT WATER SUPPLY AND RETURN PIPING. REFER TO SHEET M0103 A, M0104 A, AND SECTION THROUGH EAB ATTIC ON SHEET M0203 FOR LENGTH OF PIPES. AND SPECIFICATION SECTION 238500 FOR ADDITIONAL INFORMATION

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Olive Avenue
St. Louis, Missouri 63102
T 314 241 6250
F 314 241 2570

William Tao & Associates, Inc.
MEP/FP Engineer
7350 Manchester Road, Ste 125
St. Louis, MO 63143
314 644 7800

David Mason & Associates, Inc.
Structural & Civil Engineer
100 South Vandeventer Avenue
St. Louis, MO 63119
314 644 1052

Faith Group
Technology
1101 S. Hanley Rd, Suite 100
St. Louis, MO 63143
314 991 9228

Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7400 Pershing Ave.
St. Louis, MO 63130
314 725 6818

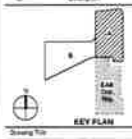
KWA Architects
Architecture
9721 Journey Road
St. Louis, MO 63124
314 962 2560

Spellman Brady & Company
Interior Designer
7425 Maryland Avenue, Suite 200
St. Louis, MO 63105
314 862 5070

BWT Design
Landscape Architecture
7722 Big Bend Blvd
St. Louis, MO 63119
314 504 0700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1655 S. 2nd Street, Suite 201
St. Louis, MO 63104
314 588 0660

No	Description	Date
7	ASI 008	27 JAN 2017
6	ASI 005	16 JAN 2017
5	ASI 004	30 NOV 2016
4	ASI 003	10 NOV 2016
3	ASI 002	14 OCT 2016
2	ADDENDUM # 2	13 APRIL 2016
1	ADDENDUM # 1	31 MAR 2016
	ISSUED FOR CONSTRUCTION (IFC)	01 MAR 2016



KEY PLAN

Drawing Title

LEVEL 03 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 04561.01 Checked by

E0103.A

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PARIC
EXPERIENCE. EXCELLENCE.

April 19, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-104 - EAB Room 358 Wall

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the additive sum of Twelve Thousand Three Hundred Eighty-Five Dollars And Eighty-Two Cents $12,385.82 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0092 (Room 358 Wall), Total $ 12,385.82

This change proposal will be charged against the $50k allowance for EAB finish work. Scope includes construction of a new partition infill at the North wall of Room 358 in front of the existing window. Includes demo of existing roller shades, demo of existing carpet as required for new partition, demo of existing base, installation of new 3 5/8" metal stud wall, painting of new wall, and additional electrical-A/V rough-in and receptacles.

Proposed Change Proposal Total: $12,385.82

If this change proposal meets with your approval, please sign and return this proposal for our records by April 30, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/15/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Date: 19-APR-17
Time: 09:36 AM

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0092	Room 358 Wall			12,385.82	14-MAR-17					12,385.82	12,385.82	

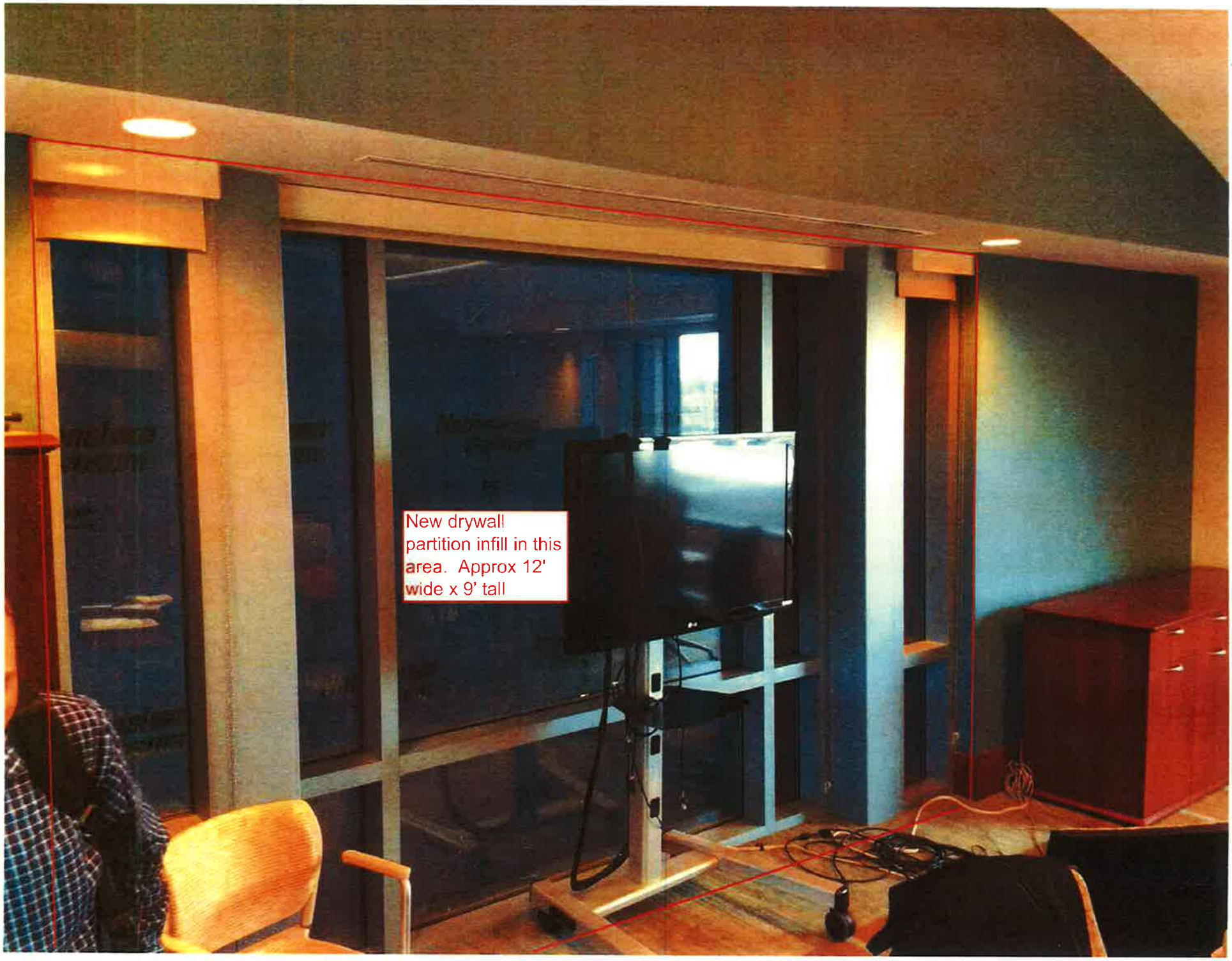
Vendor Name				Description			
Paric Corp - Self Perform	15051	09250.001 S	Drywall Sub	1,546.00	Room 358 Wall		Provide EAB Conference room wall per PSP COR#16. Add $1,546
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	8,911.00	Room 358 Wall		Provide recepacle and rough-in at East Academic Building Room 358 per GECO proposal dated 4/6/17.
Spectra Painting Co, LP	15051	09910.000 S	Painting Sub	365.00	Room 358 Wall		Provide paiting of Room 358 EAB wall per Spectra email quote dated 3/15/17
	15051	03359.914 L		604.08	Room 358 Wall		8 hours temporary protection @ $75.51/.hr = $604.08
	15051	03359.914 M		251.00	Room 358 Wall		Temporary protection material
	15051	01740.100 L		128.74	Room 358 Wall		2 hours cleanup at $64.37/hr = $128.74
	15051	23100.001 M	Risk Management (1.1%)	130.00	Room 358 Wall		Risk Management
	15051	23150.005 M	Contractor Default Insurance (1.25%)	148.00	Room 358 Wall		Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	302.00	Room 358 Wall		Contractor Fee
Total For EXT		**0.00**	**0.00**	**12,385.82**			**12,385.82** **12,385.82**
Grand Total:		**0.00**	**0.00**	**12,385.82**			**12,385.82** **12,385.82**

**** = Posted Change Item***

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	19-APR-17
To Change Order:		Run Time:	09:36 AM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Posted and Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		


New drywall partition infill in this area. Approx 12' wide x 9' tall

CP-104
E-0092

Webster ISB
PARIC SELF PERFORM
COR 16 - EAB Conference Room Wall
2/6/2017

	UNITS	RATE	TOTAL
Demo Roller Shades (1 MH)	1	$ 62.92	**$62.92**
Demo Carpet (1 MH)	1	$ 62.92	**$62.92**
Demo Existing Base (1 MH)	1	$ 62.92	**$62.92**
Frame 3-5/8" fur wall to cover window (3 MH's)	3	$ 62.92	**$188.76**
Hang and trim fur wall (2 MH's)	2	$ 62.92	**$125.84**
Tape fur wall (3 MH's)	3	$ 62.92	**$188.76**
Fix existing/install new base (3 MH's)	3	$ 62.92	**$188.76**
Distribution of material to room (2 MH)	2	$ 62.92	**$125.84**
Framing Material	1	$ 125.00	**$125.00**
Drywall/Taping Material	1	$ 70.00	**$70.00**
Base Material	1	$ 150.00	**$150.00**
		SUBTOTAL COR=	**$1,352**
		Small Tools and Consumables 4%=	**$54**
		10% OH&P=	**$141**
		SUBTOTAL =	**$1,546**

COR Clarifications

*COR is for the time and material to install fur wall in EAB conference room facing ISB.
*COR includes time and material to install wood base to match existing conference room walls.

GUARANTEE
ELECTRICAL CONSTRUCTION 3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **EAB 358 CONFERENCE WITH POKE TH**
Date: 4/6/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

WEBSTER ISB
EAB Conference Room 358 (Straight Time)

Description of work

Description of work (Straight Time)

*** Furnish and install (1) duplex receptacle on north wall for wall mounted T.V.**
*** Furnish and isntall (1) 8AV poke through device centered under the converence room table.**
*** Furnish and instlal (1) Chief Box to set behind the TV.**
*** Proposal based on utilizing the existing 120 volt ciruictry with in room 358 to feed the TV and Poke Thru Power.**
*** Furnish and install (1) 2" empty rough in for AV HDMI cable from the table to the wall the TV sets on.**
*** Furnish and install (1) 1" empty rough in for data from the table to the wall the TV sets on.**

*** Furnish and install (1) HDMI Cable. From the Floor Box to the Wall Mounted TV Chief Box.**
*** Furnish and isntall (1) RS232 Cable with Audio. From the Floor Box to the Wall Mounted TV Chieft Box.**
*** Furnish and install (1) RCA cable. From the Floor Box to the wall Mounted TV Chief Box.**
*** Furnish and install (1) Face Plate.**
*** Furnish and isntall (2) Cat 6 Data Drop Locations.**

Base bid shall increase by: $ 8,911.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.

We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
1" EMT CONDUIT	180	149.74	12.24
2" EMT CONDUIT	15	29.26	1.50

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **EAB 358 CONFERENCE WITH POKE TH**
Date: 4/6/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 2

Description	Qty	Total Mat.	Total Hrs.
1" EMT STL SS CONN	6	1.98	0.90
2" EMT STL SS CONN	2	2.90	0.62
1" EMT STL SS CPLG	18	6.67	1.26
2" EMT STL SS CPLG	4	6.36	0.56
2" EMT 90 DEG ELBOW	2	18.16	1.24
2" SPRING STL CONDUIT CLAMP W/ BOLT	2	2.38	0.34
2" PLASTIC BUSHING	2	1.71	0.66
#12/2C CU MC CABLE AL ARMOR	100	50.51	3.25
3/8" MC CABLE DC SS CONN	6	3.11	0.72
1/4-20 MACHINE SCREW ANCHOR (lead anchor)	5	1.65	1.00
1/4 PLATED T-ROD	14	6.23	1.92
1/4-20 HEX NUT - PLTD STL	6	0.09	0.20
#8x 3/4 P/H SELF-TAP SCREW	4	0.39	0.16
#10x 1 P/H SELF-TAP SCREW	2	0.23	0.08
6M58 CABLE SUPPORT (MC minnie+7/16 flange clip p.53)	14	29.35	0.70
459 SNAP-IN MC/AC METAL STUD CLIP	4	5.22	0.12
16M4I 1" CONDUIT/ROD CLIP	3	1.94	0.25
16M24 1" CONDUIT 1/4" FLNG	17	34.70	1.27
H23 SQ BOX MTG BRKT p.126	1	0.97	0.07
4" SQ BOX 2 1/8"D COMB KO	1	2.08	0.35
4" SQ 1G PLSTR RING 5/8" RISE	1	0.83	0.20
4 11/16" SQ BOX 2 1/8"D COMB KO	1	2.27	0.35
4 11/16" SQ BLANK COVER	1	3.58	0.09
2" FIELD CUT KNOCKOUT	2	0.02	1.70
1G DUPLEX REC PLATE - PLASTIC IVY	1	0.26	0.13
20A 125V DUP REC - COMPACT IVY (SG-SWO)	2	3.44	0.75
20A 125V DUPLEX REC - IVY (SG)	1	3.06	0.38
1" CORE DATA CONDUIT AND POWER CONDUIT	3	0.00	4.50
2" CORE HDMI CONDUIT	1	0.00	2.00
FIRE STOP 1" PENATRATION	10	189.50	2.50
FIRE STOP 2" PNEATRATION	1	20.24	0.25
8AT2BK 8" POKE THRU	1	665.28	2.00
CHIEF BACK BOX BEHIND TV	1	162.00	1.50
Totals	**434**	**1,406.07**	**45.75**

Summary

General Materials	1,406.07
Material Total	**1,406.07**
LU 1 - GF - ST - ELEC (6/1-3/1/16)*	198.31
LU 1 - F - ST - ELEC (6/1-3/1/16)*	371.44
LU 1 - JW - ST - ELEC (6/1-3/1/16)*	3,113.21
EXPENDABLES	28.12
SMALL TOOLS	110.49
Subtotal	**5,227.64**
Markup	522.76
Subtotal	**5,750.40**
SYSTEMS	2,636.55
CORE DRILL ST LOUIS 8" CORE	525.00

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN #	**EAB 358 CONFERENCE WITH POKE TH**
Date:	4/6/2017
Project Name:	WEBSTER GROVES ISB BUILDING
Project Number:	WEBSTER GROVES ISB BUILDING
Page Number:	3

Summary (Cont'd)

Subtotal	**8,911.95**
Adjustment #2	-0.95
Final Amount	**$8,911.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: EAB 358 CONFERENCE WITH POKE THRU DEVICE STR8 TIME
Final Amount:$8,911.00
Name: _____
Date: _____
Signature: _____
Change Order #: _____
I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

Szachnieski, Jason

From: etspectra@gmail.com on behalf of Eric Toon <erictoon@spectrapainting.com>
Sent: Wednesday, March 15, 2017 2:02 PM
To: Szachnieski, Jason
Subject: Re: Webster ISB - Room 358 Pricing

Price to paint scheduled walls and soffit at 3rd floor of the East Academic Building.

Labor and materials $365.00

On Wed, Mar 15, 2017 at 7:32 AM, Szachnieski, Jason <JRSzachnieski@paric.com> wrote:

Morning Eric,

I meant to send this photo to you a while back. This is the room we spoke about that is on the 3rd floor of the East Academic building at Webster. We need to build a new partition to close off the window so you don't see the backside of the sheathing for the ISB building. Could you please give me a price to re-paint the new partition and the adjoining light blue wall and white soffit? The window is in the center of the room so the other side is a mirror image. Let me know if you need any further info.

Thanks,
Jason

JASON SZACHNIESKI, PE, LEED® AP

SENIOR PROJECT MANAGER

Direct: 636-561-9608

Main: 636-561-9500

- - - - - -

77 Westport Plaza, Suite 250

St. Louis, MO 63146

- - - - - -

PARIC.COM

PARIC
EXPERIENCE. EXCELLENCE.

May 30, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-105 - ASI#051 Mechanical equipment condensate drain connection to

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Eleven Thousand Four Hundred Seventy-Eight Dollars And Zero Cents $11,478.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0101 (ASI 51 added condensate drawin line), Total $ 11,478.00

The owner contingency shall be utilized for this change proposal.
Proposed Change Proposal Total: $11,478.00

If this change proposal meets with your approval, please sign and return this proposal for our records by June 01, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/5/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 30-MAY-17
Time: 01:28 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0101	ASI 51 added condensate drawin line			11,478.00	31-MAR-17					11,478.00	11,478.00	

Vendor Name				Description		
Icon Mechanical Construction & Engineering, I	15051	15500.001 S	Mechanical Sub	8,821.00	ASI 51 added condensate drawin line	ASI 51 - coring two holes and installing 130 LF of drain line per ICON proposal dated 4/27/17. Add $8,821
DeLuca Plumbing LLC	15051	15400.001 S	Plumbing Sub	220.00	ASI 51 added condensate drawin line	ASI 51 Add one condensate connection point for mechanical contractor to dump condensate into acid system. Add $220.00
Kirberg Company	15051	07530.000 S	Single Ply Roofing Sub	1,900.00	ASI 51 added condensate drawin line	ASI 51 - flash two condensate line penetrations in EPDM per roofing system manufacturer's recomendations. Add $1900.00
	15051	23150.005 M	Contractor Default Insurance (1.25%)	137.00	ASI 51 added condensate drawin line	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	280.00	ASI 51 added condensate drawin line	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	120.00	ASI 51 added condensate drawin line	Risk Management
Total For EXT		**0.00**	**0.00**	**11,478.00**		**11,478.00** **11,478.00**
Grand Total:		**0.00**	**0.00**	**11,478.00**		**11,478.00** **11,478.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	30-MAY-17
To Change Order:		Run Time:	01:28 PM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

icon Mechanical

1616 Cleveland Boulevard • Granite City, IL 62040

April 27, 2017

Paric Corporation
77 West Port Plaza #250
St. Louis, MO 63146

Attn: **Mr. Jason Szachnieski**
Project: **Webster University ISB**
Ref: **ASI – 51 Revised**

Dear Jason,
We are pleased to submit our change proposal associated with the Webster University ISB Project. The changes covered by this change order as follows:

Price for Above Listed Addendum: **$8,821**
The above price included:

- **Pipe Fitter Labor: 60hrs includes 8hrs Core Drill @ Contract Rate: $5,664**
- **Material Cost 130ft plus fittings, etc.: $1,100**
- **Insulation Labor/Material Includes metal jacket for exterior: $1,200**
- **CAD @ $75: $337**
- **Lift Rental/Misc.: $220**
- **OH&P: $300**

Inclusions:

- **Two (2) Core Drills. Roof work by others.**
- **Routing above ceilings through/around other trades installed work, through walls, in-wall.**

Exclusions:

- **As outlined in original contract.**

Thank you for giving us the opportunity to submit on this scope change. We wish you success and look forward to continued involvement. If there are any questions or if we can be of further assistance, please contact me.

Sincerely,
icon Mechanical
Alex Chambers

(618) 452-0035 • Fax (618) 452-0037

COR # 27 Webster ISB

DeLuca Plumbing, L.L.C.
8465 Delport Drive
St. Louis MO 63114
TO:
PARIC

Scope: **ASI 51**

Added 1 Condensate Connection Point for Mechanical Contractor to dump condensate into Acid System

Clarifications **No Overtime**
No Patching
Final tie in by Mechanical - we will provide 3/4" CPVC Female Glue Connection

Date: 3/27/17

Labor	SHEET	HRS	RATE	TOTAL	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
Supervision		0.30	73.71	$ 22.11	
			73.71	$ -	
Labor - CPVC		2.00	73.71	$ 147.42	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
BIM			73.71	$ -	
Delivery			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
Labor Total Cost					$ 169.53

EQUIPMENT AND OPERATORS		RATE	TOTAL	
Total Equipment and Operator Cost		$ -		$ -

MATERIALS (and Units)	DATE	UNIT	QTY	RATE	TOTAL
					$ -
					$ -
CPVC			1	$ 30.88	$ 30.88
					$ -
					$ -
					$ -
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					$ -
					$ -
Total Material Costs					$ 30.88

Subtotal Contractor Costs		$ 200.41

Subcontractors			
Total Subcontractor			$ -

Subtotal Labor Material & Equipment Costs		$	200.41
Sub Contracted Costs		$	-
OH&P LABOR	10.00%	$	16.95
OH&P MATERIALS	10.00%	$	3.09
OH&P SUBS	5.00%	$	-
Total Subcontractor Cost		$	220.45

Total Price	$ 220

Price Quotation # B926744

FERGUSON - O'FALLON #1606

76 HUBBLE DRIVE
O FALLON, MO 63368-8694

Phone : 636-300-5300
Fax : 636-300-3335

Bid No.....: B926744
Bid Date...: 03/27/17
Quoted By: CES
Customer.: DELUCA PLUMBING LLC
WEBSTER UNIV SCIENCE BDG
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust Phone: 314-427-5551
Terms.....: NET 10TH PROX
Ship To.....: DELUCA PLUMBING LLC
WEBSTER UNIV SCIENCE BDG
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust PO#..: WEBSTER

Job Name.: WEBSTER UNIV. SCIENCE BDG

Item	Description	Quantity	Net Price	UM	Total
SLW015	1-1/2X10 FT CPVC LAB WST PIPE	1	6.098	FT	6.10
CP80STJG	1-1/2X1 CPVC S80 SXSXS TEE	1	21.697	EA	21.70
CP80SBGF	1X3/4 CPVC S80 SXS BUSH	1	3.080	EA	3.08

Subtotal:	$30.88
Inbound Freight:	$0.00
Tax:	$0.00
Order Total:	$30.88

KIRBERG
State-of-the-Art Roofing and More. Since 1920.

Kirberg Company
1400 South Third Street
St. Louis, Missouri 63104-4430

314.534.4444 Tel
314.534.2626 Fax
Kirberg.com

St. Louis, MO
Springfield, MO
Kansas City, KS

Change Order Request

For: Paric Corporation

Date: March 30, 2017

Attn: Devin Gates
ddgates@paric.com

From: Aaron Hammerstone
Project Manager
314.333.4710 Direct

Job#: 18160005 Request: ASI - 51

Job Location: 8274 Big Bend Blvd., Webster Groves, MO 63146

Project: Webster University Interdisciplinary Science Bldg. – ASI - 51

Per your request, we are pleased to submit a proposal for additional work at the Webster University Interdisciplinary Science Bldg.:

- Flash (2) condensate line penetrations in EPDM roof system per manufacturer's recommendations.

Total Add: $1,900.00

All terms and conditions of the contract remain the same. All changes made under this document are subject to the provisions of the original contract agreement.

Accepted by

Paric Corporation

Authorized Representative's Signature

Printed Name

Date

Submitted by

Kirberg Company

Authorized Representative's Signature

Name and Title

Date

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No: 04561.01

Architect's ASI No: 051

Project:
Webster University Interdisciplinary Science Building

Date Issued: 03/10/2017

Contract Date:

Reason Code: 06 Owner Scope

Discipline Code: 09&11 Mechanical & Plumbing

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Drawings:

Sheets M0104.A, M0105.A, P0114.A, P0404, & P0406

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

ASI-051 is being issue for the purpose of providing a mechanical equipment condensate drain connection to the plumbing waste system.

SHEET M0104.A – LEVEL 04 AREA A FLOOR PLAN – MECHANICAL

- Route drain line from HEF-1 on roof to acid neutralization tank in Room 488.
- Added notes M74 and M75.

SHEET M0105.A –ROOF PLAN – MECHANICAL

- Added drain lines down through roof from HEF-1.
- Added note M73.

SHEET P0114.A – LEVEL 04 AREA A FLOOR PLAN – PLUMBING WASTE AND VENT

- Added key note 24 to modify waste piping in Chem. Lab – Analyt./ Inorganic 488, at lab sink along column line 'E'.

SHEET P0404 - RISERS PLUMBING

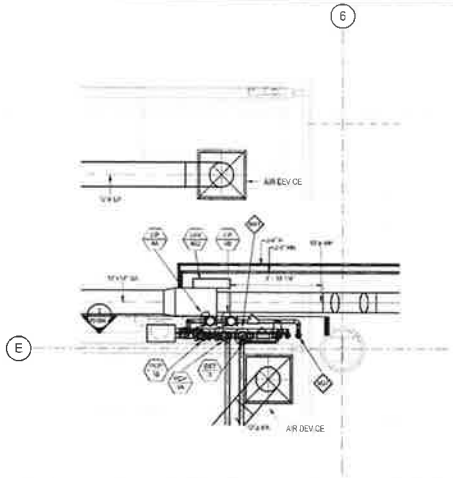
- Added riser diagram 3.

SHEET P0406 – RISERS PLUMBING

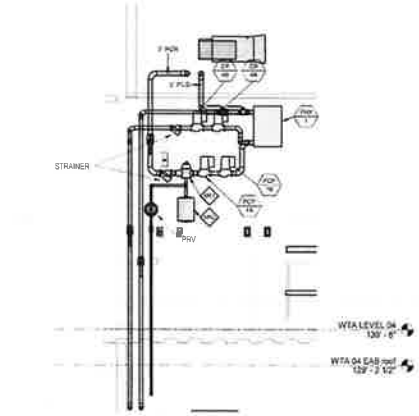
- Modified riser 3-4, added key note 25.

Issued by Architect: Mike Nolte, William Tao & Associates, Inc.
Michael Whitworth, Webb Engineering Services, Inc.

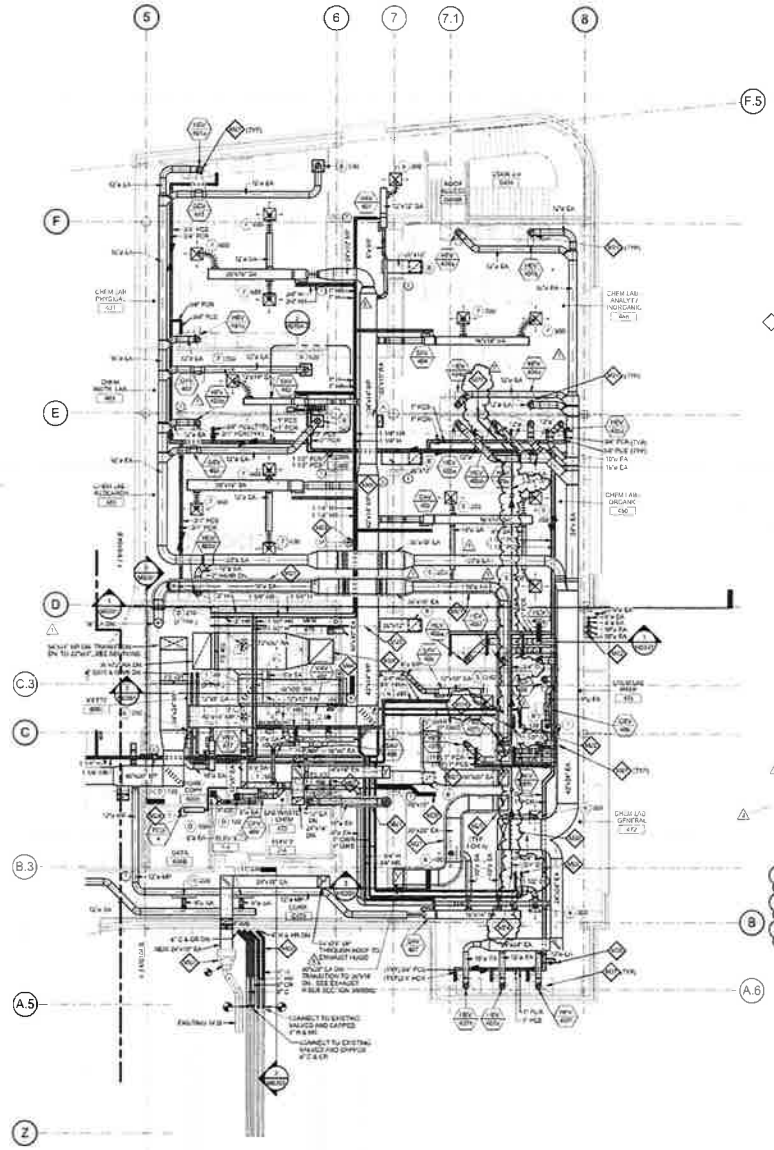
Accepted by Contractor:



2 PARTIAL LEVEL 04 - PROCESS CHILLED WATER PLAN



3 L04 - SECTION AT PROCESS CHILLED WATER SYSTEM



1 LEVEL 04 - AREA A - MECHANICAL PLAN

GENERAL NOTES:

A. Because of the limited space available to install all of the mechanical work coordination between the various trades is of the utmost importance. The contractor shall coordinate with all other trades prior to the fabrication and installation of any work. Refer to the authorized ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
B. All ductwork downstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
C. All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be continuous, externally insulated. All low pressure ductwork shall be lined. See specifications.
D. All indicated 90° rectangular ductwork shall be furnished with turning vanes having maximum r = 0.12. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Longer radius bends shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
E. Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
G. Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
H. Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be at Terminal Unit neck size or as indicated. See specifications.
I. All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
J. Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to refrigerant schedule.
K. Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control devices with architectural drawings before installation.
L. Schedule systems or equipment that service required for new construction with owner two weeks in advance. Some premium time work may be required.
M. Refer to piping details for final connections to equipment.
N. Provide ball valve shut-off valves in major piping branch lines. All connections to risers and each building wing A & B.

THE SEALS AND SIGNATURES APPLY ONLY TO THE DOCUMENT TO WHICH THEY ARE AFFIXED, AND EXPRESSLY EXCLUDE ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT.

KEYED NOTES

M18 BOILER AND DOMESTIC WATER HEATER FLUE UP THROUGH ROOF

M20 REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER. PROVIDE 3/4" DRAIN LINE, ROUTE WITH REFRIGERANT PIPING, AND TERMINATE DRAINS FROM FCU 2, 5A, 5B, AND 5C OVER FLOOR DRAIN IN LOWER LEVEL MECHANICAL ROOM. TERMINATE DRAINS FROM FCU 3 AND 4 OVER SERVICE SINK IN JANITORS CLOSET 375

M21 PROVIDE FIRE WRAP AROUND LAB EXHAUST DUCTWORK FROM RATED BIHASE PENETRATION TO ROOF

M22 GLYCOL WATER SUPPLY & RETURN PIPING UP THROUGH ROOF TO HEAT RECOVERY COILS PROVIDE ROOF PENETRATION CURB/SEAL

M23 EXHAUST DUCT UP THROUGH ROOF

M24 RELIEF AIR DUCT UP THRU ROOF TO RELIEF AIR FAN

M27 INSTALL HOOD EXHAUST VALVE IN VERTICAL POSITION NEAR HOOD. ELBOWS SHALL HAVE 1.5 DIAMETER RADIUS. USE 1.0 DIAMETER RADIUS ELBOWS ONLY WHERE NECESSARY

M28 BAS TEMPERATURE SENSOR TO MONITOR BATHROOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT

M37 1 1/2" G.I. & I.R. AND 3/4" WAS UP TO LEVEL 04

M38 PROVIDE ELBOW SOUND ATTENUATOR KINETICS MODEL 24KDES-PS (H x W)24x60 6(G6 60" WIDE BY 24" HIGH BY 60" LONG ELBOW CONFIGURATION 20,000 CFM AT 0.04" PD, DYNAMIC INSERTION LOSS (Hz/db) 63/4 125/7 250/13 500/18 1000/18 2000/18 4000/20 8000/16

M39 1" BACKPRESSURE REGULATING VALVE (6 GPM), FOR PROCESS CHILLED WATER MINIMUM PUMP FLOW

M41 2-INCH AIR SEPARATOR. SEE PIPING DIAGRAM

M42 DIAPHRAGM EXPANSION TANK. SEE PIPING DIAGRAM AND SCHEDULE

M44 AIRFLOW MEASURING STATION KELE MODEL KOAMS FURNISHED WITH INLET BELL FOR PLENUM APPLICATIONS LOCATED IN MINIMUM OA DUCT OR RETURN AIR INLET ON EACH FLOOR

M46 DUCT STATIC PRESSURE SENSOR

M50 PIPING DIFFERENTIAL PRESSURE SENSOR

M52 REMOVE EXISTING RELIEF LOUVER AND PORTION OF EXISTING DUCT. ROUTE NEW DUCT THROUGH EXISTING OPENING

M67 LOCATION FOR REFRIGERANT PIPING FOR COOLER. SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. PIPING SHALL BE INSTALLED PER COOLER SUPPLIERS REQUIREMENTS

M68 HWR AND CCR PIPING TO BE HEAT TRACED BY ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL PLANS. COORDINATE INSTALLATION OF PIPE INSULATION OVER HEAT TRACE WITH MECHANICAL CONTRACTOR. HEAT TRACE TO EXTEND 3'-0" BEYOND EACH BUILDING

M74 1 1/2" CONDENSATE DRAIN UP THROUGH ROOF. SEE SHEET M0105 FOR CONTINUATION. PROVIDE AIR GAP/INDIRECT CONNECTION AND TRANSITION FROM 1-1/2" TO 3/4" PIPE SIZE IN VERTICAL DROP INSIDE BUILDING BELOW ROOF

M75 ADJUST CONDENSATE DRAIN PIPING DOWN IN WALL. STUB OUT OF WALL AND CONNECT TO SINK TAILPIECE UPSTREAM OF ACID NEUTRALIZATION TANK. REFER TO PLUMBING PLANS AND DETAILS FOR ADDITIONAL CONNECTION INFORMATION. ALSO SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. COORDINATE INSTALLATION WITH ALL OTHER TRADES.

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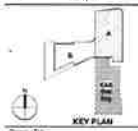
No	Description	Date
7	ASI #51	07 MAR 2017
6	ASI #50	13 JAN 2017
5	ASI #49	23 DEC 2016
2	ASI #31	04 NOV 2016
3	ASI #17	18 OCT 2016
4	ADDENDUM # 2	14 APRIL 2016
1	ADDENDUM # 1	17 MAR 2016
	ISSUED FOR CONSTRUCTION (BID)	01 MAR 2016



Drawing Title

LEVEL 04 AREA A FLOOR PLAN - MECHANICAL

Project No. 0406101 Checked by

M0104.A

GENERAL NOTES:

A. Because of the limited space available to install all of the mechanical work coordination between the various trades is of the utmost importance. The contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
B. Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
C. All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
D. All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
E. All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum c = 0.10. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
F. Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
G. Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
H. Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
I. All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
J. Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
K. Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
L. Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some prohibitive time work may be required.
M. Refer to piping details for final connections to equipment.
N. Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing, A & B.

KEYED NOTES

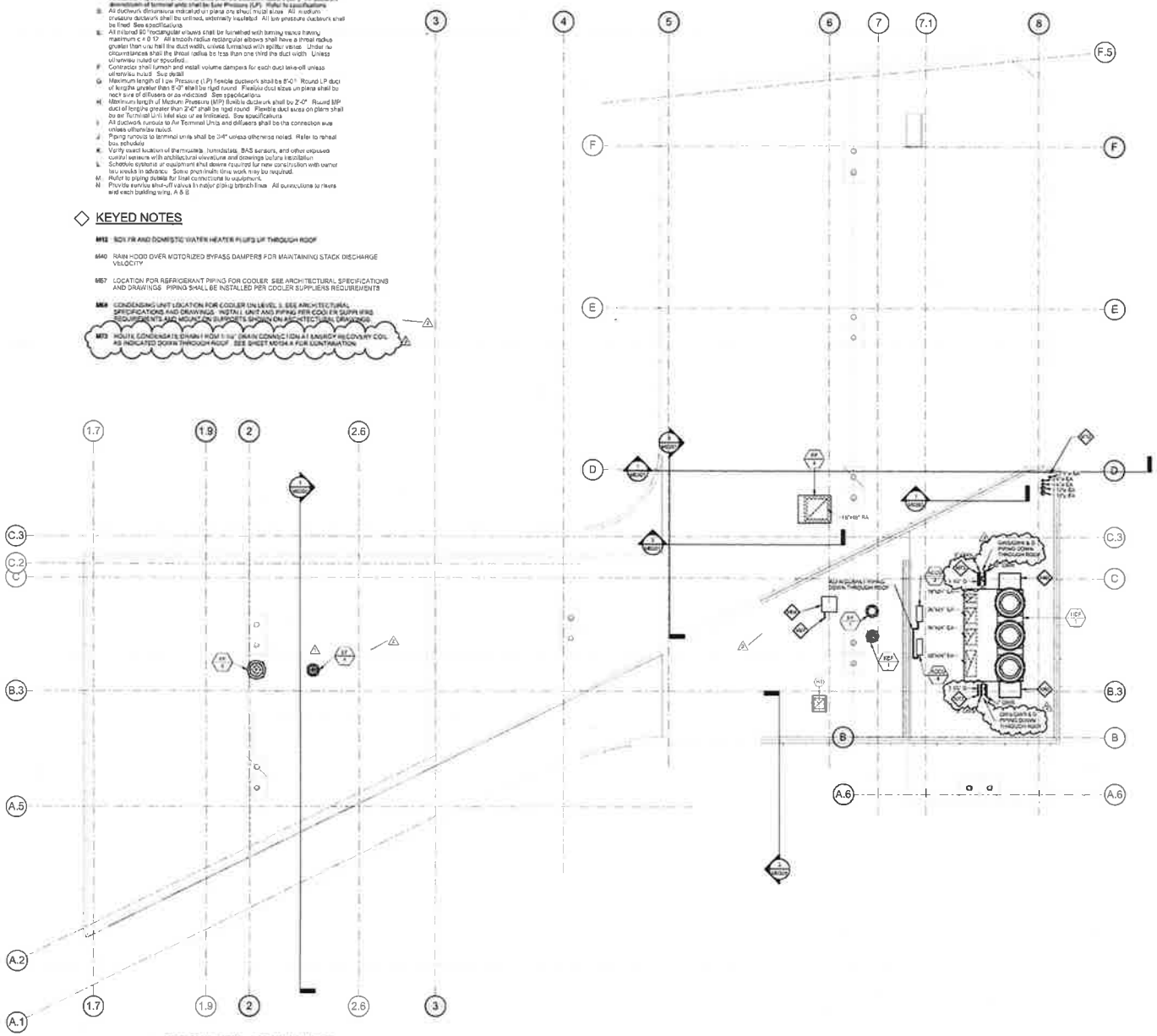
M12 SOLAR AND DOMESTIC WATER HEATER PLUFS UP THROUGH ROOF

M40 RAIN HOOD OVER MOTORIZED BYPASS DAMPERS FOR MAINTAINING STACK DISCHARGE VELOCITY

M57 LOCATION FOR REFRIGERANT PIPING FOR COOLER. SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. PIPING SHALL BE INSTALLED PER COOLER SUPPLIERS REQUIREMENTS

M58 CONDENSING UNIT LOCATION FOR COOLER ON LEVEL 3. SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. INSTALL UNIT AND PIPING PER COOLER SUPPLIERS REQUIREMENTS AND MOUNT ON SUPPORTS SHOWN ON ARCHITECTURAL DRAWINGS

M73 ROUTE CONDENSATE DRAIN FROM 1 1/2" DRAIN CONNECTION AT ENERGY RECOVERY COIL AS INDICATED DOWN THROUGH ROOF. SEE SHEET M0104 A FOR CONTINUATION



2 ROOF LEVEL - MECHANICAL

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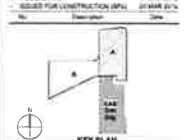
St. Louis, MO 63104
314 588 0600

No.	Description	Date
A	ABI-051	07 MAR 2017
B	ADDENDUM 2.2	19 APRIL 2016
C	ADDENDUM 2.1	[illegible]
D	ISSUED FOR CONSTRUCTION (BPM)	[illegible]



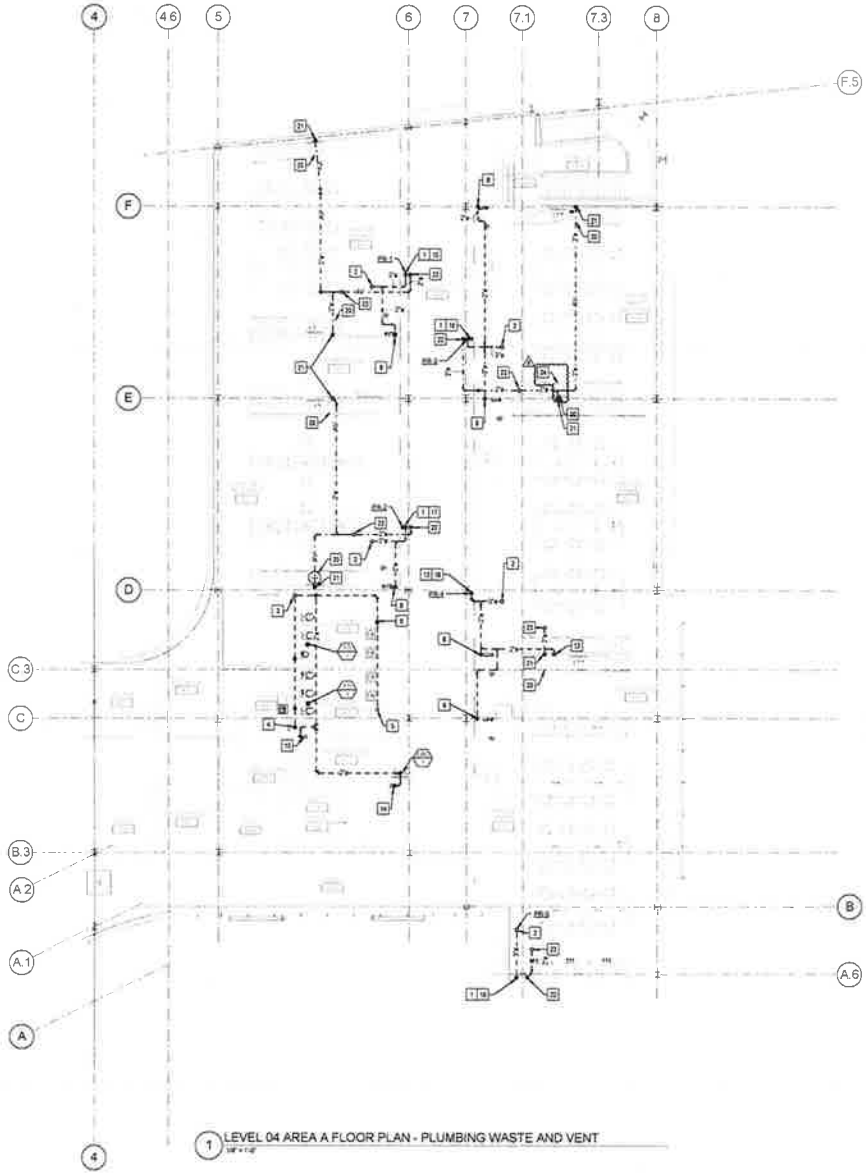
KEY PLAN

Drawing Title

ROOF PLAN - MECHANICAL

Project No. 04081.01 Checked by

M0105.A



1 LEVEL 04 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT

KEYED NOTES: (THIS SHEET ONLY)

1. 3" SANITARY WASTE DOWN AND 2" SANITARY VENT UP
2. 3 SANITARY VENT UP 3 VTR
3. 4" SANITARY VENT RISER EXTEND FULL SIZE THROUGH THE ROOF
4. 4" SANITARY WASTE DOWN, 4" SANITARY VENT UP, EXTEND IN CHASE FULL SIZE TO VENT STACK REFER TO DRAWING P0401 FOR RISER DIAGRAMS
5. 2" SANITARY WASTE DOWN, 2" SANITARY VENT UP, EXTEND IN CHASE FULL SIZE TO VENT STACK REFER TO DRAWING P0401 FOR RISER DIAGRAMS
6. 2" SANITARY VENT UP TO ABOVE THE CEILING EXTEND AS SHOWN
7. NOT USED
8. 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER
9. NOT USED
10. 3" SANITARY WASTE DOWN, 2" SANITARY VENT UP REFER TO DRAWING P0401 FOR WASTE AND VENT RISER
11. FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM LAB EQUIPMENT COORDINATE LOCATION WITH CASEWORK
12. 2" SANITARY VENT UP IN WALL
13. 2" SANITARY VENT UP FROM LEVEL 3 REFER TO DRAWING P113.A FOR OFF-SET AT LEVEL 3
14. 2" SANITARY WASTE DOWN 2" SANITARY VENT UP REFER TO DRAWING P0401 FOR WASTE AND VENT RISER
15. REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 1-3
16. REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 3-2
17. REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 2-4
18. REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-3
19. REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 6-3
20. 5-GALLON NEUTRALIZATION TANK WITH BLP-ON COVER, LOCATED BELOW THE COUNTERTOP REFER TO DRAWING P0404 DETAILS 1 AND 2 FOR P-PING DIAGRAM INSTALLATION
21. 2" ACID VENT DOWN IN WALL TO SERVE NEUTRALIZATION TANK
22. 2" ACID VENT RISER
23. 2" ACID VENT UP 3' AVTR
24. WASTE PIPING ON INLET SIDE OF NEUTRALIZATION TANK TO BE MODIFIED TO ACCEPT 3/4" CONDENSATE DRAIN BY MECHANICAL CONTRACTOR COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR REFER TO DETAIL 3 ON DRAWING P0404

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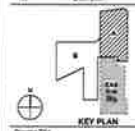
No	Description	Date
6	ASI - 051	08 MAR 2017
5	ASI - 025 Neumann on Taxes	08 SEP 2016
4	ASI - 014 (RFI-176)	31 JUL 2016
3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	18 APR 2016
1	ADDENDUM 2-1	11 MAR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	01 MAR 2016



KEY PLAN

Drawing Title

LEVEL 04 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT

Project No 04381.01 Checked by

P0114.A

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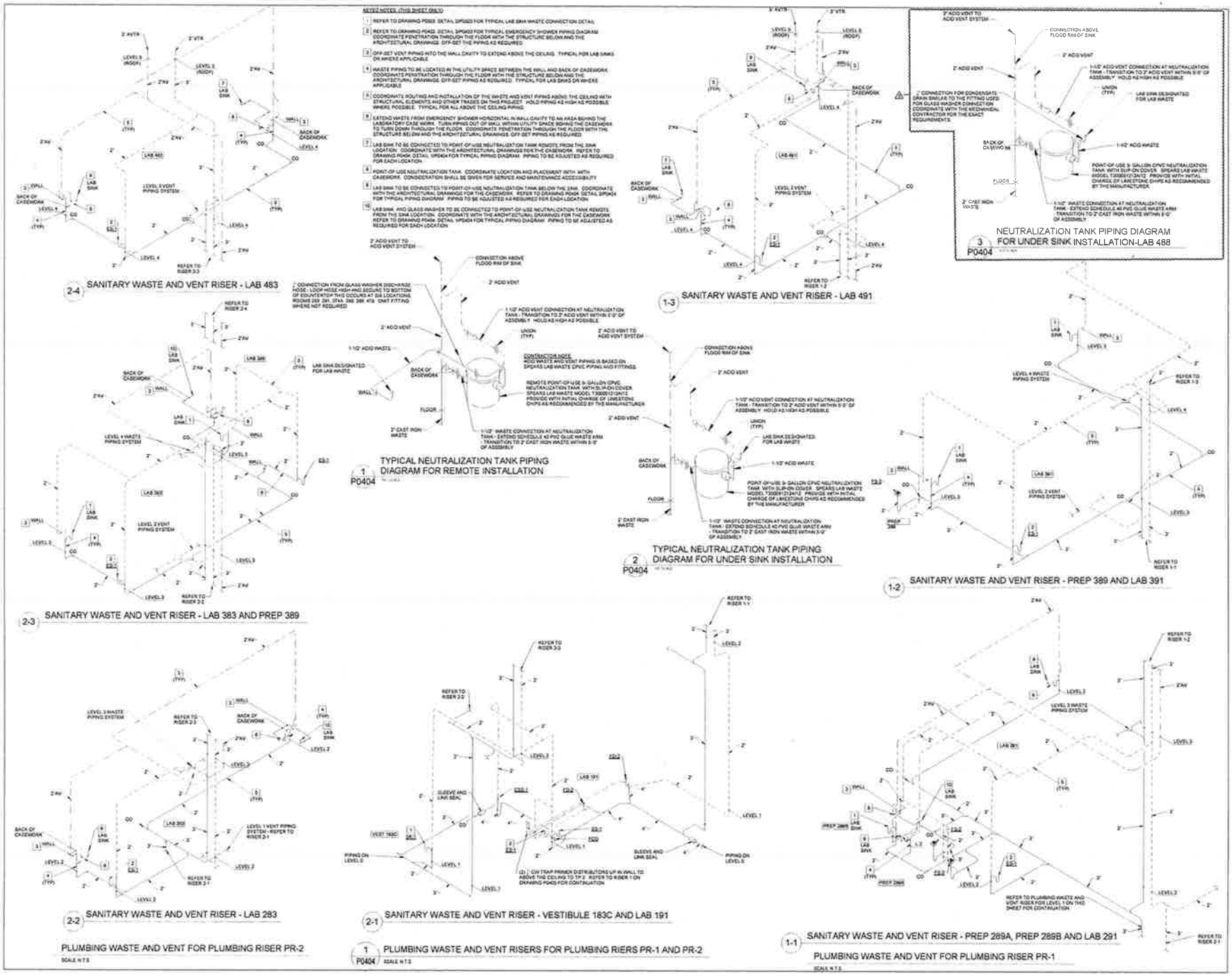

Webster UNIVERSITY

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Webb Engineering Services, Inc.
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314 588 0800

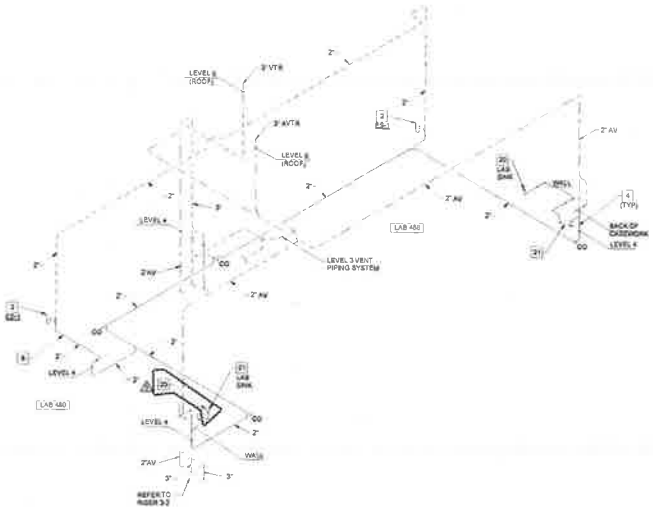
No	Description	Date
5	ASI-031	08 MAR 2017
4	ASI-033 (RFI 281,288,309 & 310)	03 NOV 2016
3	ASI-025 Neutralization Tanks	09 SEP 2016
2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
0	ISSUED FOR CONSTRUCTION (RFI)	01 MAR 2016

Drawing Title

RISERS - PLUMBING

Project No. 04061.01 Checked by

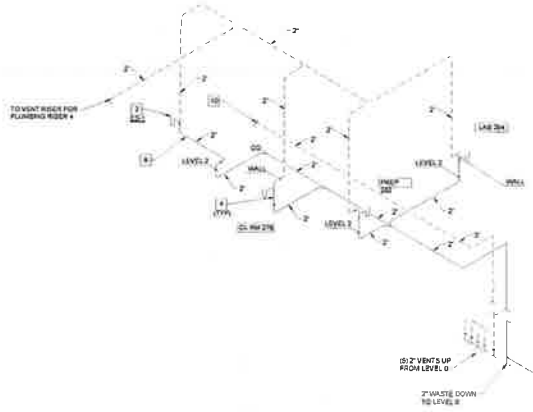
P0404



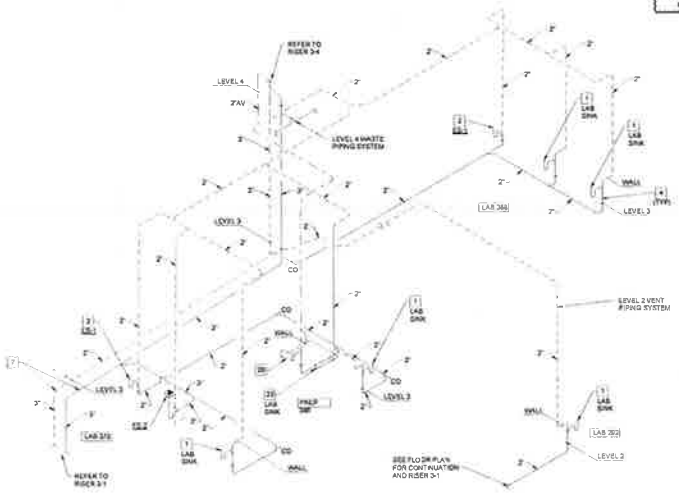
(3-4) SANITARY WASTE AND VENT RISER - LAB 480 AND LAB 488

KEYED NOTES - (THIS SHEET ONLY)

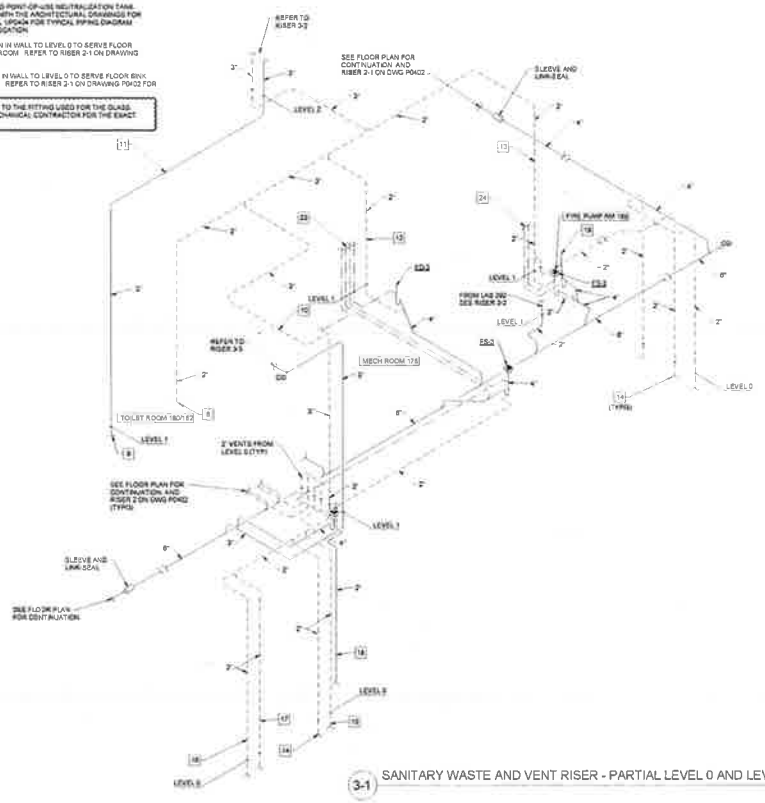
1. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR TYPICAL LAB SINK WASTE CONNECTION DETAIL
2. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR TYPICAL EMERGENCY SHOWER PIPING DIAGRAM. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS. OFF-SET THE PIPING AS REQUIRED
3. OFF-SET VENT PIPING INTO THE WALL CAVITY TO EXTEND ABOVE THE CEILING. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE
4. WASTE PIPING TO BE LOCATED IN THE UTILITY SPACE BETWEEN THE WALL AND BACK OF CASEWORK. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS. OFF-SET PIPING AS REQUIRED. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE
5. COORDINATE ROUTING AND INSTALLATION OF THE WASTE AND VENT PIPING ABOVE THE CEILING WITH STRUCTURAL ELEMENTS AND OTHER TRADES ON THIS PROJECT. HOLD PIPING AS HIGH AS POSSIBLE WHERE POSSIBLE. TYPICAL FOR ALL ABOVE THE CEILING PIPING
6. EXTEND WASTE FROM EMERGENCY SHOWER HORIZONTAL IN WALL CAVITY TO AN AREA BEHIND THE LABORATORY CASE WORK. TURN PIPING OUT OF WALL WITHIN UTILITY SPACE BEHIND THE CASEWORK TO TURN DOWN THROUGH THE FLOOR. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS. OFF SET PIPING AS REQUIRED
7. 3" WASTE AND 3" VENT TO BE OFF-SET AT LEVEL 2 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS
8. 2" VENT IN PLUMBING CHASE SERVING PLUMBING FIXTURE IN TOILET ROOMS 160 / 162
9. 3" WASTE DOWN TO LEVEL 0 IN PLUMBING CHASE OF TOILET ROOMS 160 / 162
10. 3" VENT EXTENDED HIGH IN SPACE
11. 3" WASTE TO BE OFF-SET AT LEVEL 1 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS
12. 2" VENT UP FROM LEVEL 0 SERVING FLOOR DRAINS IN MECHANICAL ROOM 178
13. 2" VENT UP FROM LEVEL 0 SERVING FLOOR SINK IN FIRE PUMP ROOM 188 AND FLOOR DRAINS ON LEVEL 0
14. 2" VENT FROM LEVEL 0 FLOOR DRAINS
15. 2" VENT FROM SUMP PUMP SP-3 ON LEVEL 0
16. 2" VENT FROM SUMP PUMPS SP-1 / SP-2 ON LEVEL 0
17. 2" VENT FROM SAND INTERCEPTOR ON LEVEL 0
18. 2" PUMP DISCHARGE FROM SUMP PUMP SP-3 ON LEVEL 0. TERMINATE INTO FLOOR SINK FS-3 ON LEVEL 1 AS AN INDIRECT WASTE
19. 4 INCH CAST IRON OPEN STANDPIPE DRAIN. STUB TOP OF PIPE TWO-FEET ABOVE FINISHED FLOOR. COORDINATE LOCATION WITH THE GENERAL CONTRACTOR AND FIRE SUPPRESSION CONTRACTOR
20. LAB SINK TO BE CONNECTED TO POINT-OF-USE NEUTRALIZATION TANK REMOTE FROM THE SINK LOCATION. COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR THE CASEWORK. REFER TO DRAWING P0404, DETAIL 1/P0404 FOR TYPICAL PIPING DIAGRAM. PIPING TO BE ADJUSTED AS REQUIRED FOR EACH LOCATION
21. POINT-OF-USE NEUTRALIZATION TANK. COORDINATE LOCATION AND PLACEMENT WITH WITH CASEWORK. CONSIDERATION SHALL BE GIVEN FOR SERVICE AND MAINTENANCE ACCESSIBILITY
22. LAB SINK AND GLASS WASHER TO BE CONNECTED TO POINT-OF-USE NEUTRALIZATION TANK REMOTE FROM THE SINK LOCATION. COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR THE CASEWORK. REFER TO DRAWING P0404, DETAIL 1/P0404 FOR TYPICAL PIPING DIAGRAM. PIPING TO BE ADJUSTED AS REQUIRED FOR EACH LOCATION
23. FOUR (4) 1/2" CWTRAP PRIMER DISTRIBUTORS DOWN IN WALL TO LEVEL 0 TO SERVE FLOOR DRAINS AND FLOOR SINKS IN LEVEL 1 MECHANICAL ROOM. REFER TO RISER 2-1 ON DRAWING P0402 FOR CONTINUATION
24. TWO (2) 1/2" CWTRAP PRIMER DISTRIBUTORS DOWN IN WALL TO LEVEL 0 TO SERVE FLOOR SINK AND STANDPIPE DRAIN IN LEVEL 1 FIRE PUMP ROOM. REFER TO RISER 2-1 ON DRAWING P0402 FOR CONTINUATION
25. 3/4" CONNECTION FOR CONDENSATE DRAIN SIMILAR TO THE FITTING USED FOR THE GLASS WASHER CONNECTION. COORDINATE WITH THE MECHANICAL CONTRACTOR FOR THE EXACT REQUIREMENTS



(3-3) SANITARY WASTE AND VENT RISER - CLASS ROOM 276 AND PREP 282



(3-2) SANITARY WASTE AND VENT RISER - LAB 292, LAB 378, PREP 386 AND LAB 388



(3-1) SANITARY WASTE AND VENT RISER - PARTIAL LEVEL 0 AND LEVEL 1

(1) PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISER PR-3
P0406 SCALE: N.T.S.

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T 314.241.8250
F 314.241.2570

William Tao & Associates, Inc
MEP/FP Engineer
7800 Manchester Road, Suite 125
St. Louis, MO 63143
314-484-7600

David Mason & Associates, Inc
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Faith Group
Technology
3101 S. Hanley Rd, Suite 130
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Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
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KWA Architects
Architecture
9721 Lindbergh Road
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Spellman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 200
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BWT Design
Landscape Architect
7720 Big Bend Blvd
St. Louis, MO 63119
314 644 3700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314 588 0003

No	Description	Date
5	ASI - 051	08 MAR 2017
4	ASI - 033 (RFI 281,288 309 & 310)	03 NOV 2016
3	ASI - 028 Neuroscience Twins	09 SEP 2016
2	ADDENDUM 2-4	04 MAY 2016
1	ADDENDUM 2-2	18 APR 2016
	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

Drawing Title

RISERS - PLUMBING

Project No: 04 661 01 Drawn by

P0406

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PARIC
EXPERIENCE. EXCELLENCE.

May 05, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-112 - RFI 498: Emergency Power for HVAC Control Panels

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the additive sum of Eight Hundred Fifty-Nine Dollars And Zero Cents $859.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0119 (RFI 498: Emergency Power for HVAC Control Panels), Total $ 859.00

Owner contingency will be used for this change proposal. The scope included supplying the power for the HVAC equipment in the Cadaver Lab from the emergency 1SL1 panel vs. the 1NL2 panel (an additional 40 LF).

Proposed Change Proposal Total: $859.00

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 5/25/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0119	RFI 498: Emergency Power for HVAC Control Panels			859.00	05-MAY-17					859.00	859.00	

Vendor Name					Description		
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	819.00	RFI 498: Emergency Power for HVAC Control Panels	Cost to run an additional 40 LF to feed the HVAC equipment in the cadaver lab from emergency panel 1LS1 vs. the original 1NL2 panel. Orignal quote for additional 70 LF = $1,436. 40/70 = 57% x $1,436 = $819.00 Total Change Order
	15051	23150.005 M	Contractor Default Insurance (1.25%)	10.00	RFI 498: Emergency Power for HVAC Control Panels	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	21.00	RFI 498: Emergency Power for HVAC Control Panels	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	9.00	RFI 498: Emergency Power for HVAC Control Panels	Risk Management

	Estimated Amount	Quoted Amount	Final Amount	Budgeted Amount	Billing Amount
Total For EXT	**0.00**	**0.00**	**859.00**	**859.00**	**859.00**
Grand Total:	**0.00**	**0.00**	**859.00**	**859.00**	**859.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	05-MAY-17
To Change Order:		Run Time:	01:01 PM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

GUARANTEE
ELECTRICAL CONSTRUCTION
3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ADDED FOR HVAC CONTROL POWER**
Date: 5/2/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

Webster ISB
Added Emergency Power for HVAC Control Panels RFI 498

Description of work

*** Provide (1) emergency 120 volt 20 amp circuit to a J- box located in cadaver lab room 191.**
*** Power fed out of panel 1SL1**

Base bid shall shall incresae by: ~~$ 1,436.00~~

40 LF / 70 LF = 57%
57% x $1,436 = $819.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.
We request a time extension of **2** days.
We will supply and install all materials, labor, and equipment.

~40 LF

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
3/4" EMT CONDUIT	70	33.61	5.21
3/4" EMT STL SS CONN	2	0.38	0.29
3/4" EMT STL SS CPLG	7	1.65	0.50
#10 THHN BLACK	231	39.05	2.43
#10 WIRE POWER TERM	3	0.03	0.66
1/4 PLATED T-ROD	3	1.33	0.41
1/4-20 HEX NUT - PLTD STL	2	0.03	0.07
1/4 FLAT WASHER - PLTD STL	2	0.03	0.02
812M24 1/2-3/4" CONDUIT 1/4" FLNG	9	15.37	0.68
4TI24 1/4" ROD 1/4" FLNG HNGR	1	1.38	0.06
4 11/16" SQ BOX 2 1/8"D COMB KO	1	2.27	0.35
4 11/16" SQ BLANK COVER	1	3.58	0.09
PENETRATE WALL	2	2.66	1.00
1" FIRE STOPPING	4	66.68	1.00

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ADDED FOR HVAC CONTROL POWER**
Date: 5/2/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 2

Description	Qty	Total Mat.	Total Hrs.
SHUT DOWN 1SL1 TIE IN	1	0.00	1.00
Totals	**339**	**168.06**	**13.76**

Summary

General Materials	168.06
Material Total	**168.06**
LU 1 - GF - ST - ELEC	59.75
LU 1 - JW - ST - ELEC	1,040.26
EXPENDABLES	5.04
SMALL TOOLS	33.00
Subtotal	**1,306.11**
Markup	130.61
Subtotal	**1,436.72**
Adjustment #1	-0.72
Final Amount	**$1,436.00**

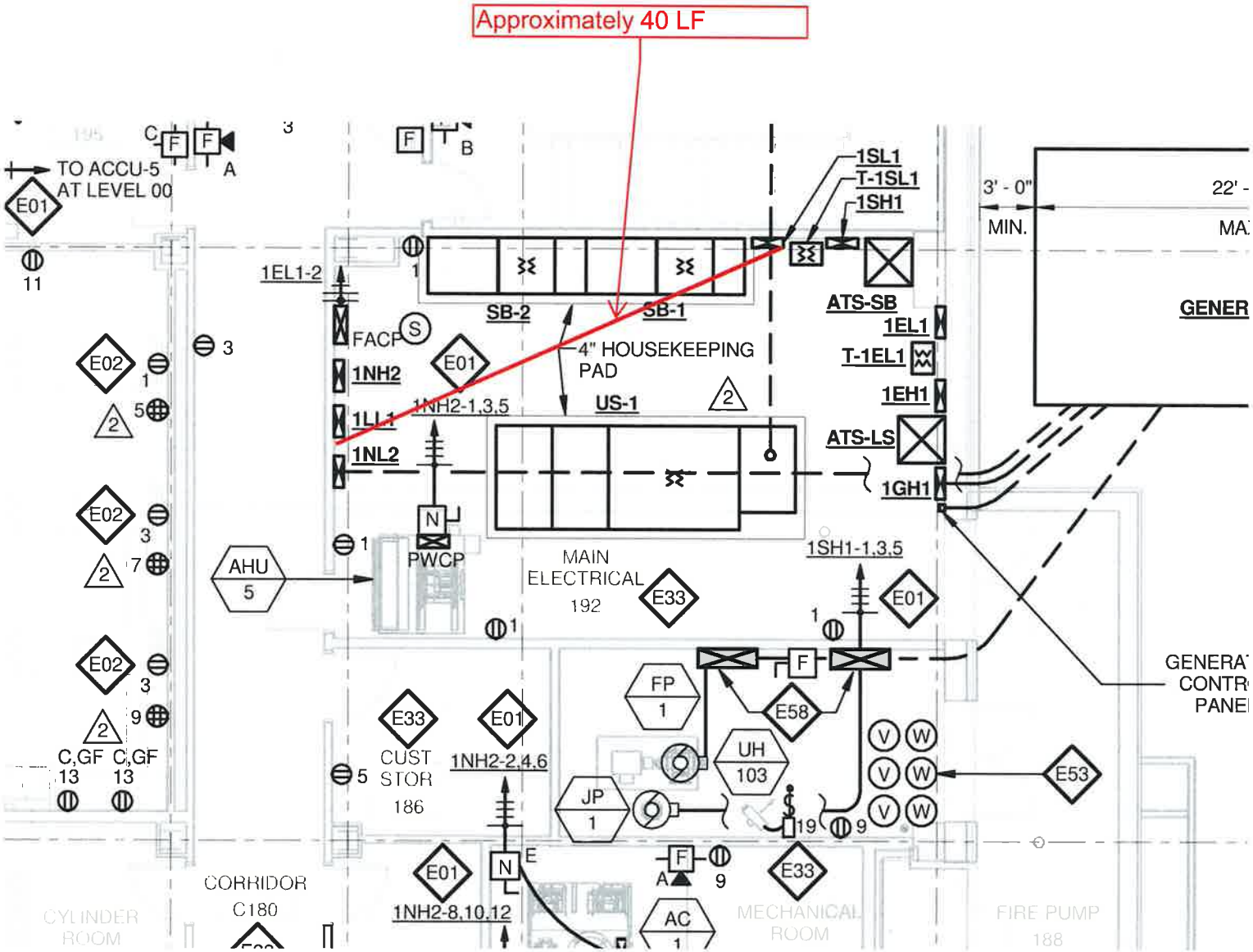
CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: ADDED FOR HVAC CONTROL POWER _____
Final Amount:$1,436.00 _____
Name: _____
Date: _____
Signature: _____
Change Order #: _____
I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL



Approximately 40 LF
TO ACCU-5
AT LEVEL 00
E01
11
1EL1-2
FACP
1NH2
1LL1
1NL2
SB-2
SB-1
4" HOUSEKEEPING
PAD
US-1
1NH2-1,3,5
PWCP
AHU
5
MAIN
ELECTRICAL
192
E33
1SL1
T-1SL1
1SH1
ATS-SB
1EL1
T-1EL1
1EH1
ATS-LS
1GH1
3' - 0"
MIN.
22' -
GENER
1SH1-1,3,5
E01
FP
1
E58
UH
103
JP
1
E53
GENERA
CONTR
PANE
C,GF
13
C,GF
13
CUST
STOR
186
1NH2-2,4,6
1NH2-8,10,12
AC
1
CORRIDOR
C180
CYLINDER
ROOM
MECHANICAL
ROOM
FIRE PUMP
188

PARIC
EXPERIENCE. EXCELLENCE.

PARIC CORPORATION
77 Westport Plaza Suite 250
St. Louis, MO 63146
TEL: 636-561-9500
FAX: 636-561-9501

REQUEST FOR INFORMATION

DATE: March 28, 2017 **NO.:** RFI-498

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Devin Gates

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Clarification for 120v power to BMS, VAV, and Phoenix power panels

Response Required By: April 04, 2017

Drawing / Spec Reference:

Information Requested:

Please provide clarification for 120V power that is needed for the BMS, VAV and Phoenix power panels in the attached Temperature Controls Submittal; Drawing 1.1 and 2.1 through 2.22. Currently there is not sufficient provisions shown to power these panels.

Provide emergency power to HEF-1 as indicated on Contract Documents including associated damper, pressure sensor, and controls. Refer to keyed notes for HEF-1 on Equipment Data Schedule sheet ME0003.

Response: Provide emergency power for supply and exhaust Phoenix airflow control valves and associated controls serving the Cadaver Lab areas. Connect Phoenix panel serving cadaver lab, to dedicated temperature control 120 volt, 20 amp circuit, from emergency panel 1SL1.

Connect all other Phoenix panels to nearest non-emergency 120 volt panel and document dedicated temperature control circuits on record drawings. Emergency power for supply and return Phoenix airflow control valves serving areas other than the Cadaver Lab area is not required.

ARCHITECT'S RESPONSE: Refer to 239500-3.9-J-2-e: " Emergency Mode Control" for additional information.

This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By: Mark de la Fuente, WTA Date: 4/13/17

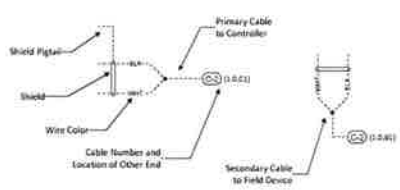
Tag Descriptions

AA	Remote Annunciator Module & Auto Dialer	IT	Current Transducer	PDT	Pressure Differential Transmitter	TY	Dew Pt /Enthaply/Wet Bulb Transducer
ALC	Automated Logic Controller	JT	BTU Meter	PS	Pressure Switch	V	Valve
ASA	Smoke Detector	JY	Power Meter	PT	Pressure Transmitter	VFD	Variable Frequency Drive
CR	Control Relay	KS	Electronic Timeclock	QT	Gas Transmitter	VT	Vibration Transmitter / Switch
ENC	Enclosure	LS	Level Switch	RK	Retrofit Kit	X	Unclassified
ES	Direct Current Power Supply	LT	Level Transmitter	RP	Relay Panel	XF	Transformer
FCV	Flow Control Valve / Damper Actuator	MS	Humidistat	SC	Satellite Controller	YKS	Position Transmitter
FE	Flow Element	MT	Humidity Transmitter	ST	Speed Transmitter	YL	Position Transmitter
FS	Flow Switch	MTE	Humidity Transmitter w/ Temperature Element	SUB	Subpanel	YS	Leak Detector
FT	Flow Transmitter	MTT	Humidity Transmitter w/ Temperature Transmitter	TE	Temperature Element	YSE	Emergency Stop
G	Generic Device	N	Accessories	TS	Temperature Switch	YY	Transducer
IP	Electro-Pneumatic Transducer	NY	Network Device	TSH	Temperature Switch High	ZC	Zone Controller
IS	Current Switch	P	Pressure Probe	TSL	Temperature Switch Low	ZS	Position Indicating Switch
ISE	Circuit Breaker	PDS	Pressure Differential Switch	TT	Temperature Transmitter	ZT	Position Transmitter

Common Abbreviation Descriptions

BLDG-DP	Building Differential Pressure	CT-O	Cooling Tower Output	HUM-O	Humidifier Output	RA-T	Return Air Temperature
BLR-A	Boiler Alarm	CWP-A	Condenser Water Pump Alarm	HWP-A	Hot Water Pump Alarm	RF-A	Return Fan Alarm
BLR-C	Boiler Command	CWP-C	Condenser Water Pump Command	HWP-C	Hot Water Pump Command	RF-C	Return Fan Command
BLR-O	Boiler Output	CWP-O	Condenser Water Pump Output	HWP-O	Hot Water Pump Output	RF-O	Return Fan Output
BYPVLV-O	Bypass Valve Output	CWP-S	Condenser Water Pump Status	HWP-S	Hot Water Pump Status	RF-S	Return Fan Status
CHLR-A	Chiller Alarm	CWR-T	Condenser Water Return Temperature	HWR-T	Hot Water ReturnTemperature	RH-C	Re-heat Command
CHLR-C	Chiller Command	CWS-T	Condenser Water Supply Temperature	HWS-DP	Hot Water System Differential Pressure	RH-O	Re-heat Output
CHLR-O	Chiller Output	DA-T	Discharge Air Temperature	HWS-F	Hot Water System Flow	SA-F	Supply Air Flow
CHWP-A	Chilled Water Pump Alarm	EA DMPR-O	Exhaust Air Damper Output	HWS-T	Hot Water Supply Temperature	SA-H	Supply Air Humidity
CHWP-C	Chilled Water Pump Command	ECON-O	Economizer Output	HWVLV-FDBK	Hot Water Valve Feedback	SA-SP	Supply Air Static Pressure
CHWP-O	Chilled Water Pump Output	EF-A	Exhaust Fan Alarm	HWVLV-O	Hot Water Valve Output	SASP-A	Supply Air Static Pressure Alarm
CHWP-S	Chilled Water Pump Status	EF-C	Exhaust Fan Command	LT-A	Low Temperature Alarm	SA-T	Supply Air Temperature
CHWR-T	Chilled Water ReturnTemperature	EF-O	Exhaust Fan Output	MA-T	Mixed Air Temperature	SF-A	Supply Fan Alarm
CHWS-DP	Chilled Water System Differential Pressure	EF-S	Exhaust Fan Status	OA DMPR-O	Outside Air Damper Output	SF-C	Supply Fan Command
CHWS-F	Chilled Water System Flow	ERW-A	Energy Wheel Alarm	OA-F	Outside Air Flow	SF-O	Supply Fan Output
CHWS-T	Chilled Water Supply Temperature	ERW-C	Energy Wheel Command	OA-H	Outside Air Humidity	SF-S	Supply Fan Status
CHWVLV-FDBK	Chilled Water Valve Feedback	ERW-O	Energy Wheel Output	OA-T	Outside Air Temperature	SMK-A	Smoke Alarm
CHWVLV-O	Chilled Water Valve Output	FLT-A	Filter Alarm	RA DMPR-O	Return Air Damper Output	ZN-CO2	Zone CO2
CLG-C	Cooling Command	FLT-DP	Filetr Differential Pressure	RA-CO2	Return Air CO2	ZN-H	Zone Humidity
CLG-O	Cooling Output	HTG-C	Heating Command	RA-F	Return Air Flow	ZN-T	Zone Temperature
CT-A	Cooling Tower Alarm	HTG-O	Heating Output	RA-H	Return Air Humidity		
CT-C	Cooling Tower Command	HUM-C	Humidifier Command	RASP-A	Return Air Static Pressure Alarm		

Legend



Ethernet (Cat 6 RJ45 Cable)

18/2 NS White (unless noted otherwise for 18/4, 18/6, etc)

22/2 SH Green ARC156/Modbus/BACNet MS/TP

14/2 SH Yel/Wht Power Wiring

18/4 SH Blue R Net Wiring

TE-#

Field Mounted Instrument
Note: Devices shown without an associated tag number identify reused devices

A — Low Voltage 24V DC Connection

24V H — Low Voltage 24V AC Connection

BT485 — Plug-In EOL Terminator & Bias Amplifier for ARC156 Network

DRAWING NO.: SYM.1

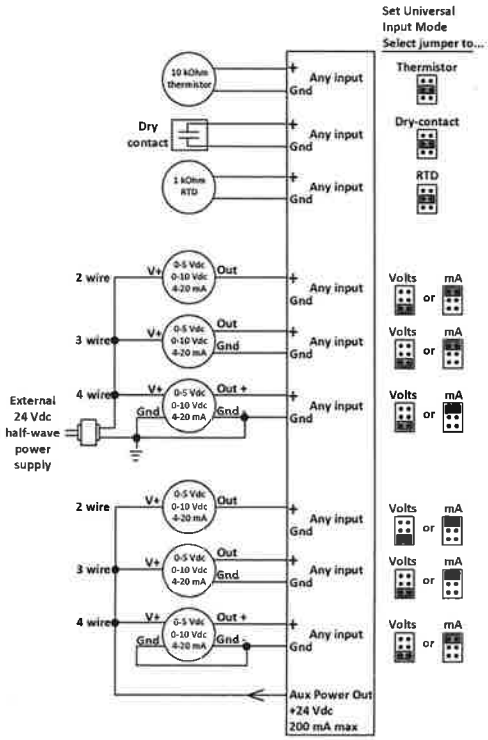
Input/Output Wiring Details & Specifications

Input Wiring Specifications

Input Wiring

Input	Maximum length	Minimum gauge	Shielding
0-5 Vdc 0-10 Vdc	1000 feet (305 meters)	See Cable Specification Chart	
0-20 mA	3000 feet (914 meters)	See Cable Specification Chart	
Thermistor Dry contact Pulse counter TLO	1000 feet (305 meters)	See Cable Specification Chart	
RTD	100 feet (30 meters)	See Cable Specification Chart	

Input Wiring Details



Output Wiring Specifications

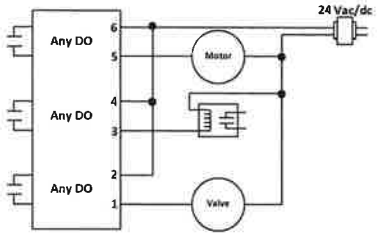
Output Wiring

To size output wiring, consider the following:

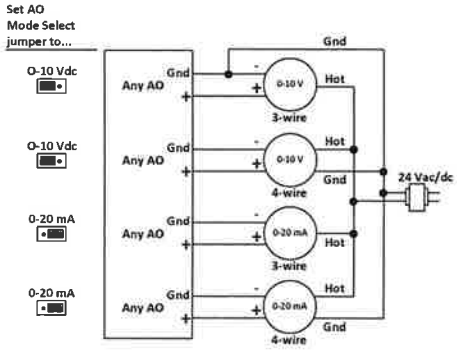
- Total loop distance from the power supply to the control module, and then to the controlled device

  NOTE Include the total distance of actual wire. For 2-conductor wires, this is twice the cable length
- Acceptable voltage drop in the wire from the control module to the controlled device
- Resistance (Ohms) of the chosen wire gauge
- Maximum current (Amps) the controlled device requires to operate

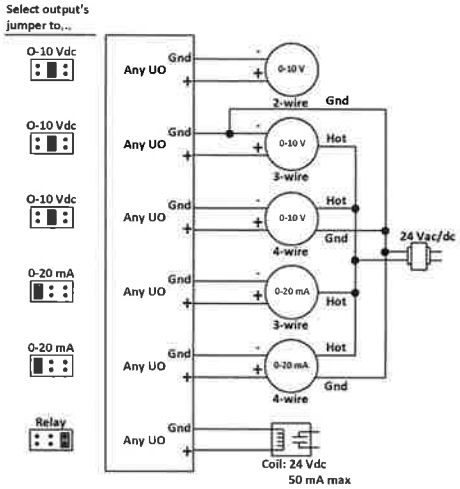
Digital Output Wiring Details



Analog Output Wiring Details

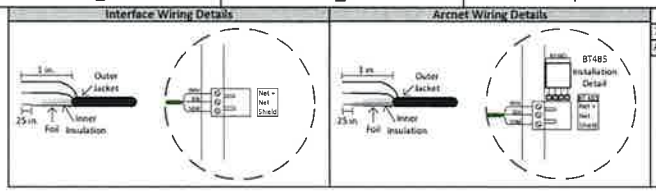


Universal Output Wiring Details



DRAWING NO.: WIRE.1

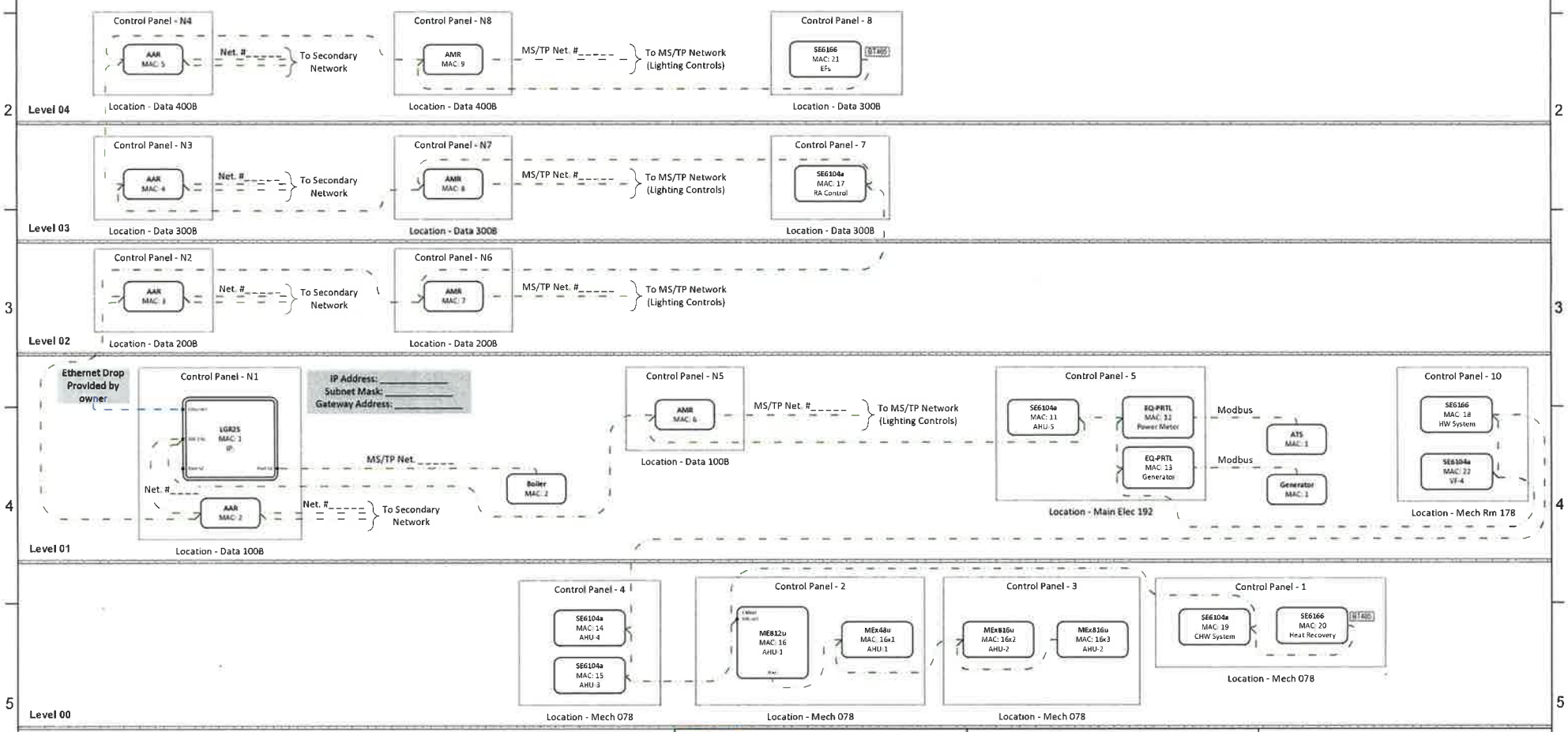
Primary ARCnet Network Riser



Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
ALC-12	ARCNET 156 Terminating and Biasing plug in board	Automated Logic	BT485	2

Notes:

1. The BMS Riser is intended only to provide an overview of the system architecture. DDC devices are not intended to be wired in exactly the order shown. Optimal wiring runs to be determined in field.
2. All devices are to be wired in a daisy chain configuration.



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: [1] Network Riser

DRAWING NAME: Primary ARCnet Network Riser

CONTRACT NO: WU-01-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 1.1

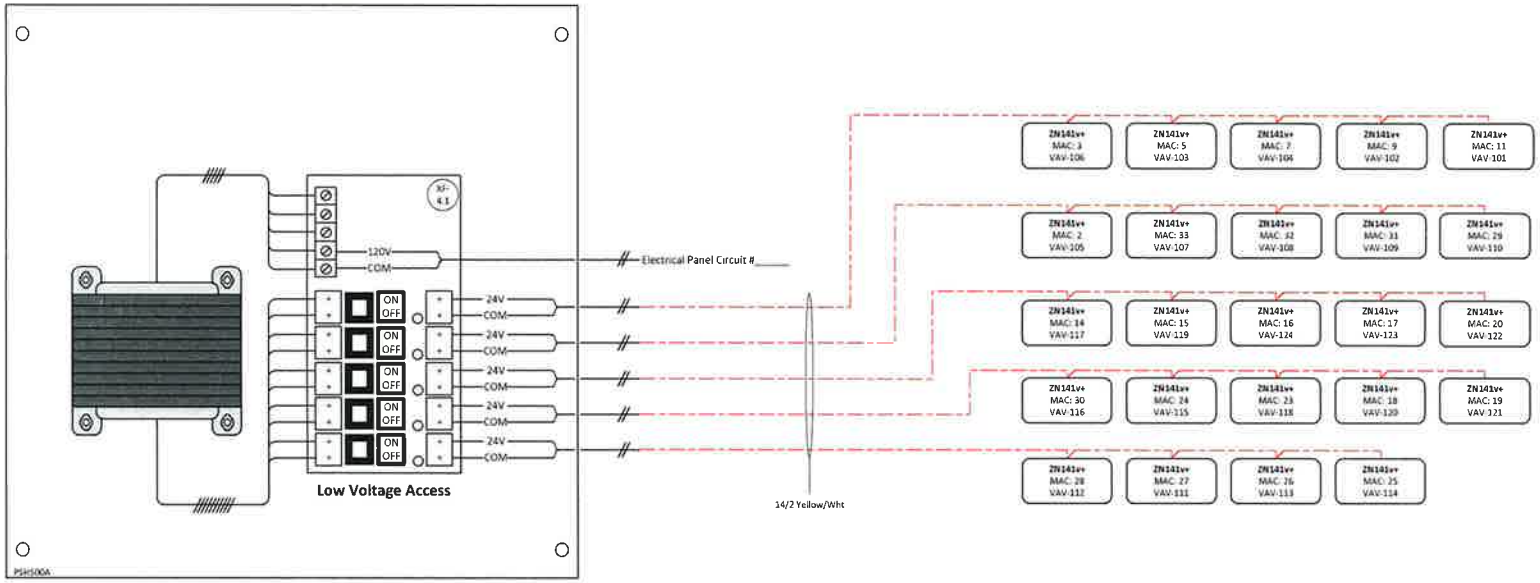
Level 01 24V Power Riser

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, Sr100VA Circuits	Functional Devices	PSH500A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer You can star the power cable Keep the maximum length from the transformer to VAV at 200' or less The maximum number of VAV's per circuit is 5 The wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Level 01 24V Power Riser

CONTRACT NO: WU-61-N | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.1

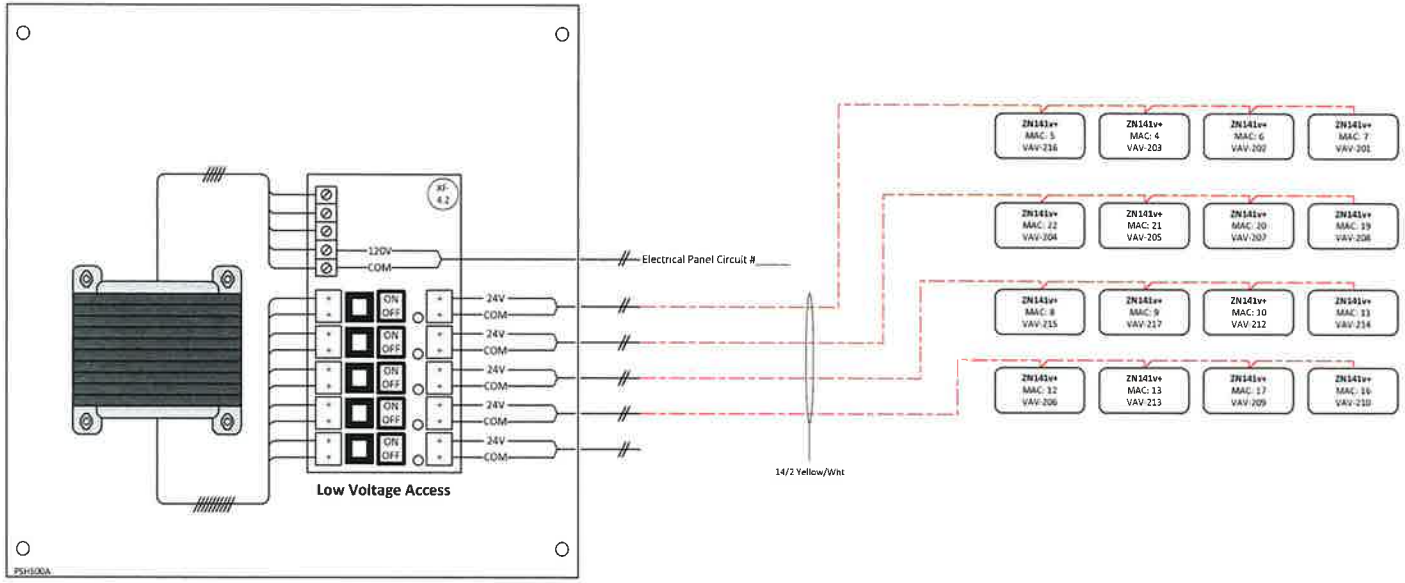
Level 02 24V Power Riser

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, Sr100VA Circuits	Functional Devices	PSH500A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer You can star the power cable Keep the maximum length from the transformer to VAV at 200' or less The maximum number of VAV's per circuit is 5 The wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Level 02 24V Power Riser

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.2

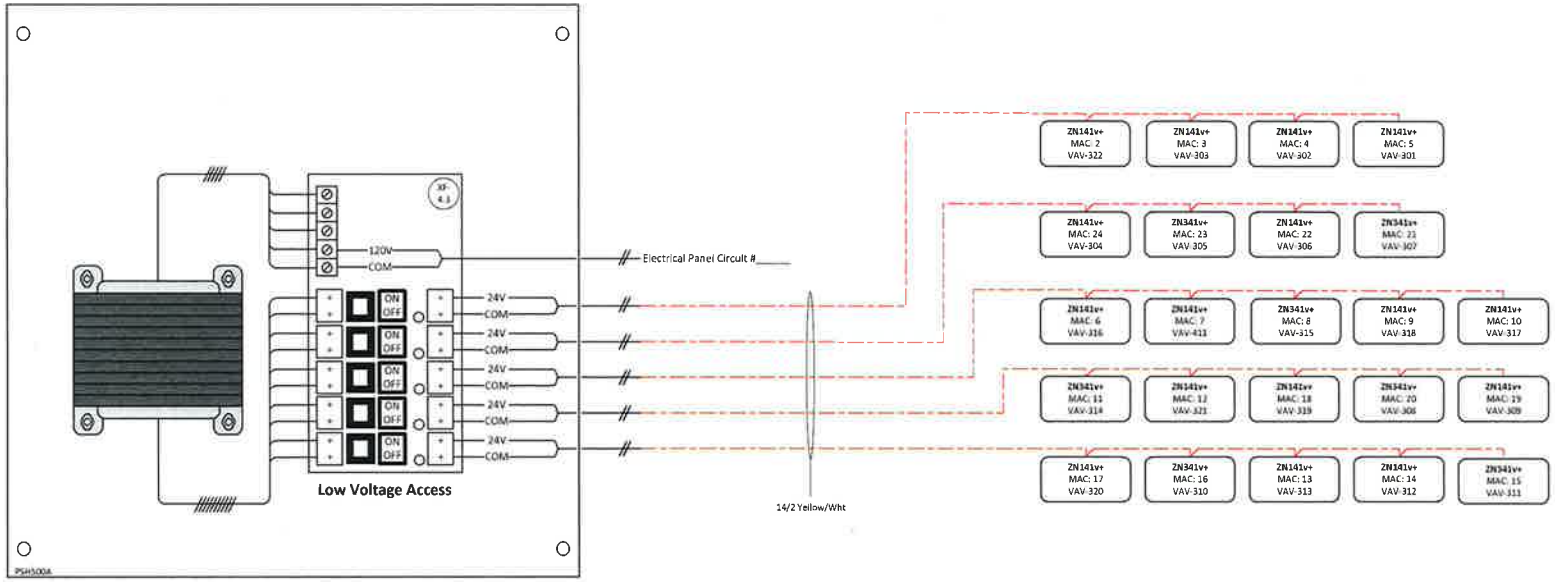
Level 03 24V Power Riser

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, Sz 100VA Circuits	Functional Devices	PSH500A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer You can star the power cable Keep the maximum length from the transformer to VAV at 200' or less The maximum number of VAV's per circuit is 5 The wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Level 03 24V Power Riser

CONTRACT NO: W041-14 | MEJV | DE: PL | PR: RV

DRAWING NO.: 2.3

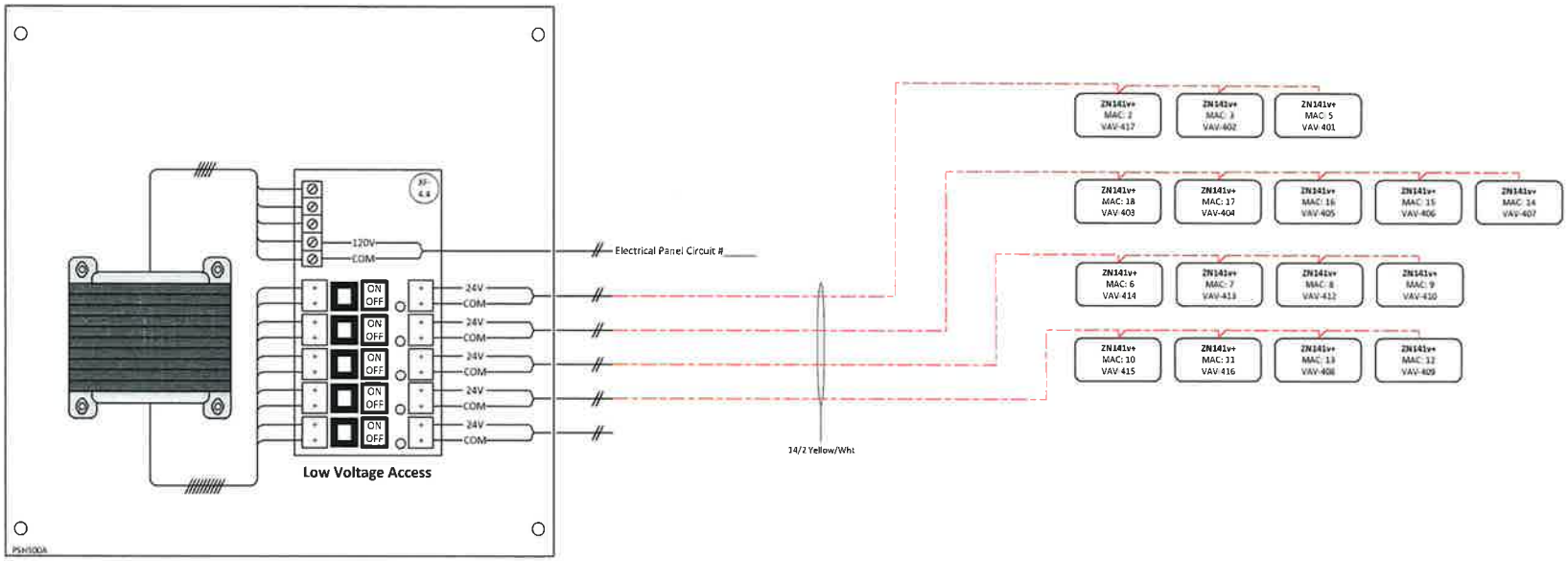
Level 04 24V Power Riser

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer You can star the power cable Keep the maximum length from the transformer to VAV at 200' or less The maximum number of VAV's per circuit is 5 The wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



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Webster University ISB - HVAC Controls
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Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Level 04 24V Power Riser

CONTRACT NO: WU-01-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.4

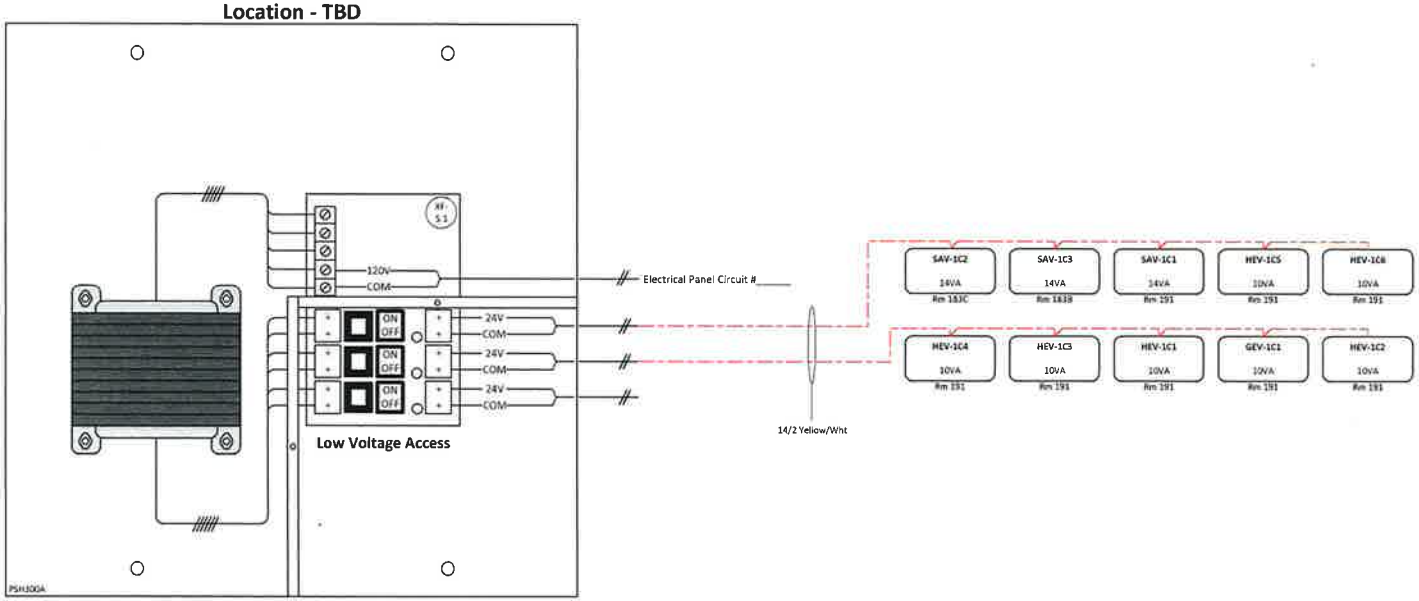
Phoenix Controls Level 01 24V Power Riser

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer The maximum VA per circuit is 90VA wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 01 24V Power Riser

CONTRACT NO: WU-61-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.5

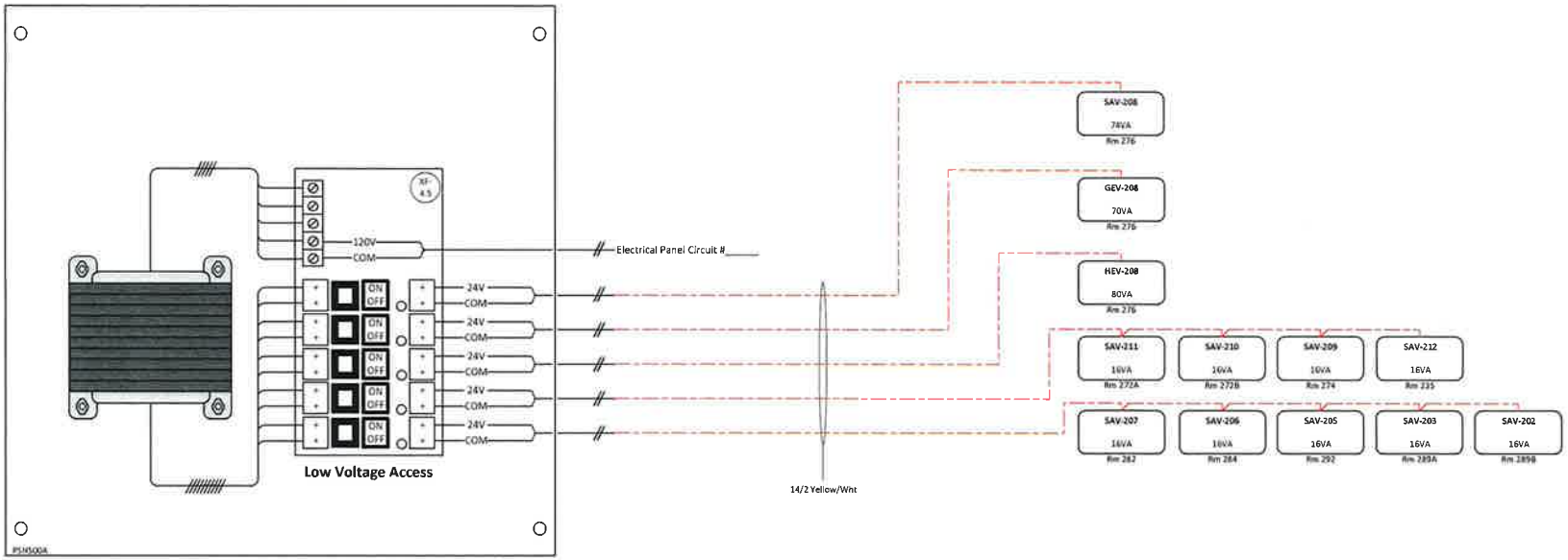
Phoenix Controls Level 02 24V Power Riser (1)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.5	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1 This power nser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 02 24V Power Riser (1)

CONTRACT NO: WU-01-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.6

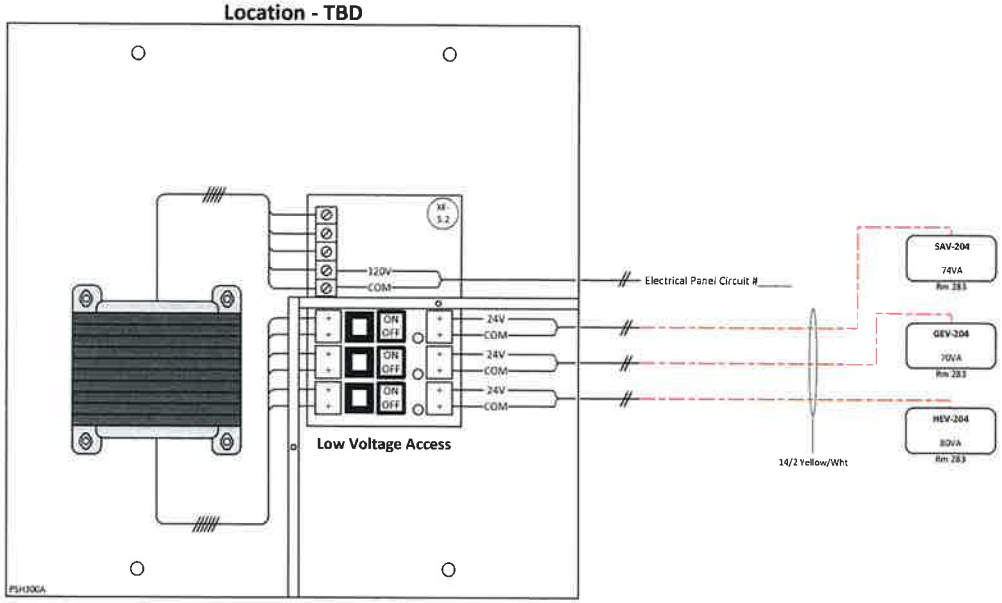
Phoenix Controls Level 02 24V Power Riser (2)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration it is best to run the power wiring the shortest distance possible to the transformer The maximum VA per circuit is 90VA wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 02 24V Power Riser (2)

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.7

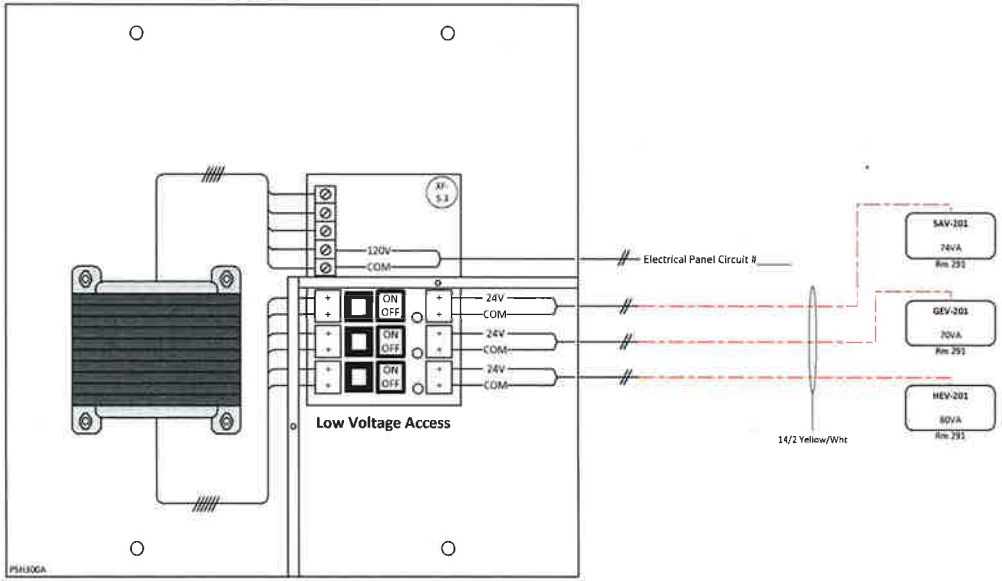
Phoenix Controls Level 02 24V Power Riser (3)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.3	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 02 24V Power Riser (3)

CONTRACT NO: WU-21-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.8

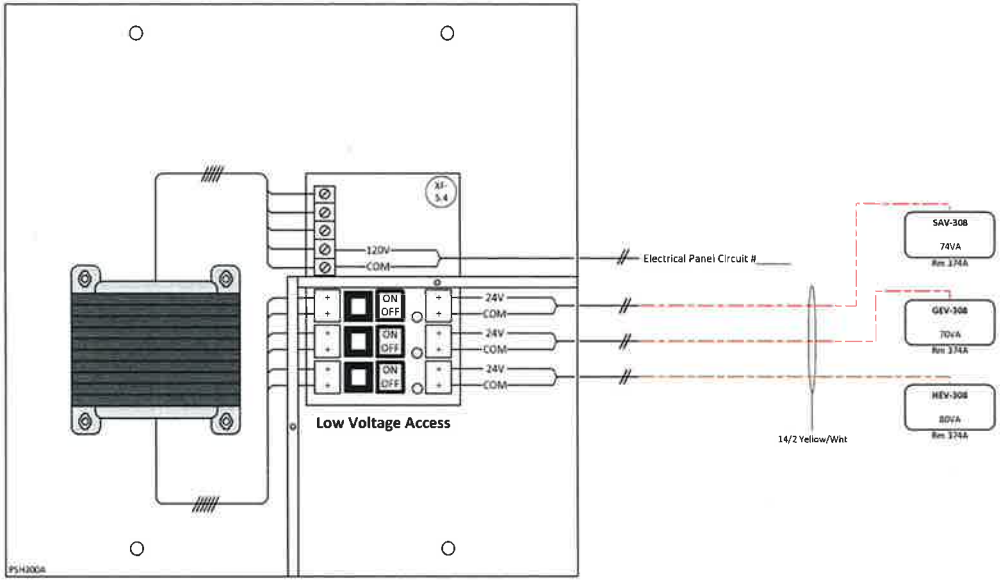
Phoenix Controls Level 03 24V Power Riser (1)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



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470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (1)

CONTRACT NO: WU41-14 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.9

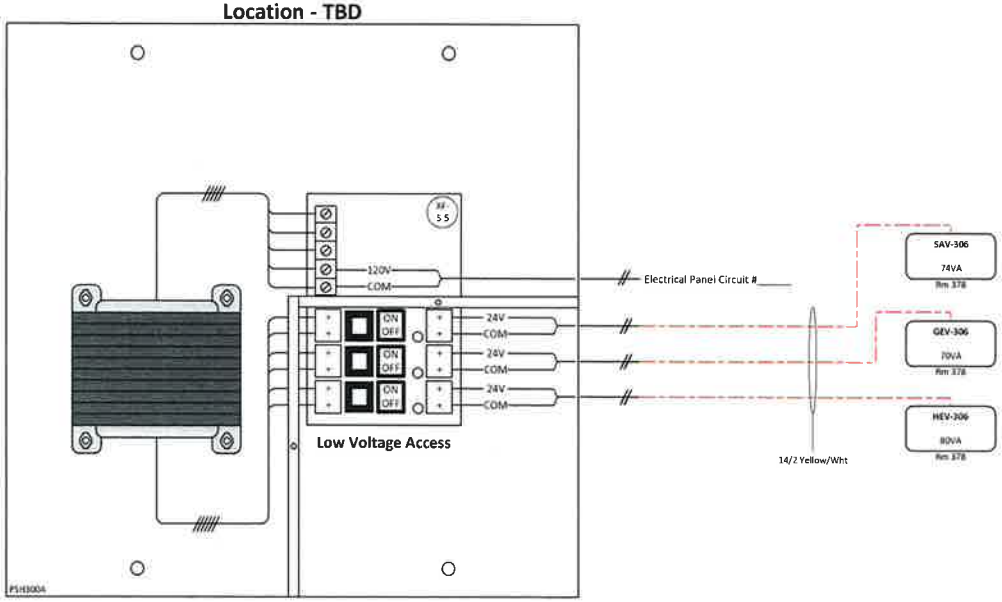
Phoenix Controls Level 03 24V Power Riser (2)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-S.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer The maximum VA per circuit is 90VA wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (2)

CONTRACT NO: WU-01-16 | S.E.J.V | DE: PL | PR: RV

DRAWING NO.: 2.10

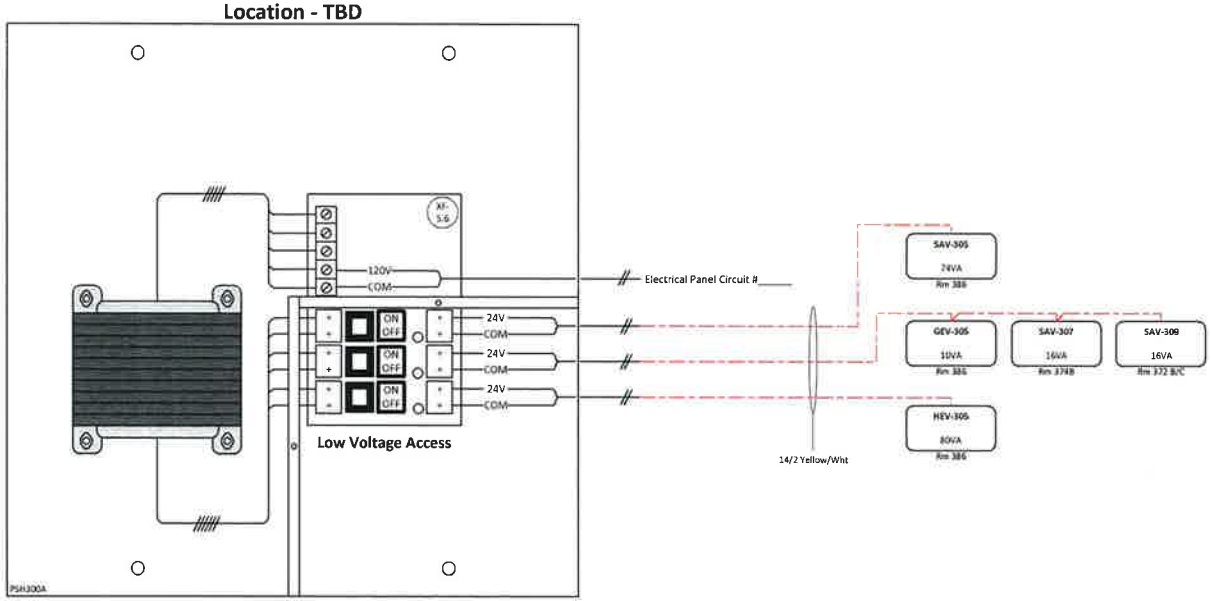
Phoenix Controls Level 03 24V Power Riser (3)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer The maximum VA per circuit is 90VA wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (3)

CONTRACT NO: WU-01-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.11

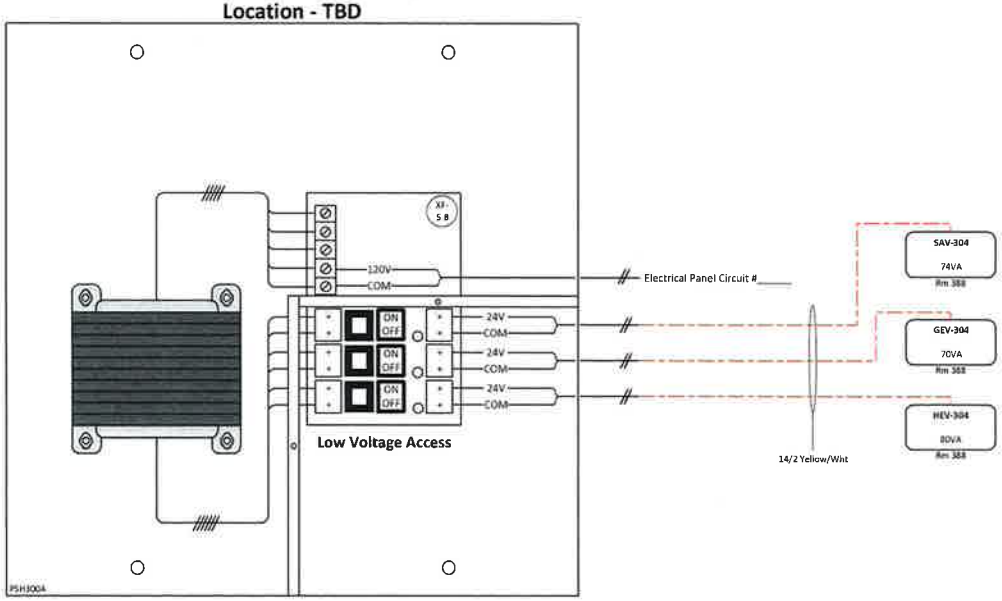
Phoenix Controls Level 03 24V Power Riser (4)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer The maximum VA per circuit is 90VA wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (4)

CONTRACT NO: WU-E1-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.12

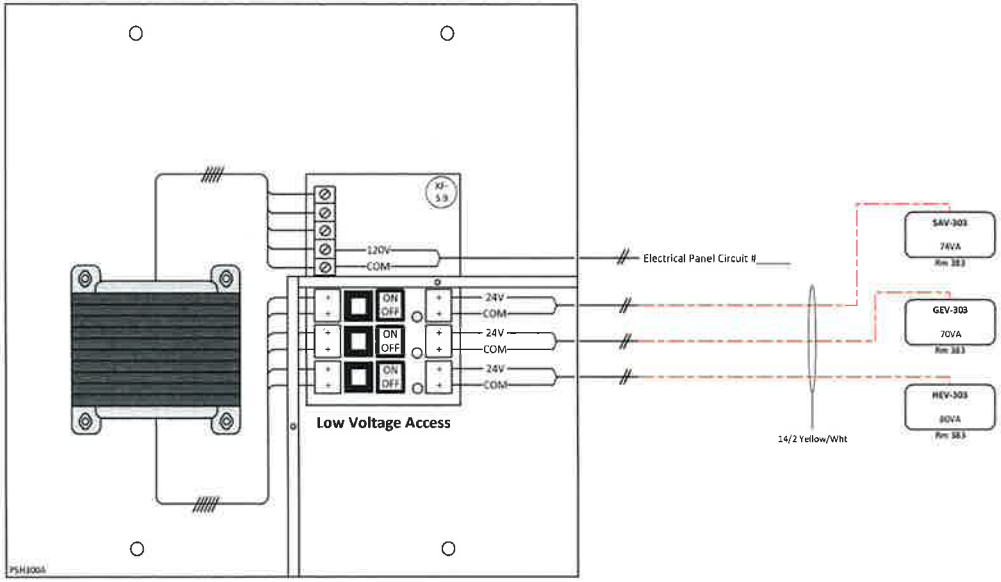
Phoenix Controls Level 03 24V Power Riser (5)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply. 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation.

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (5)

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.13

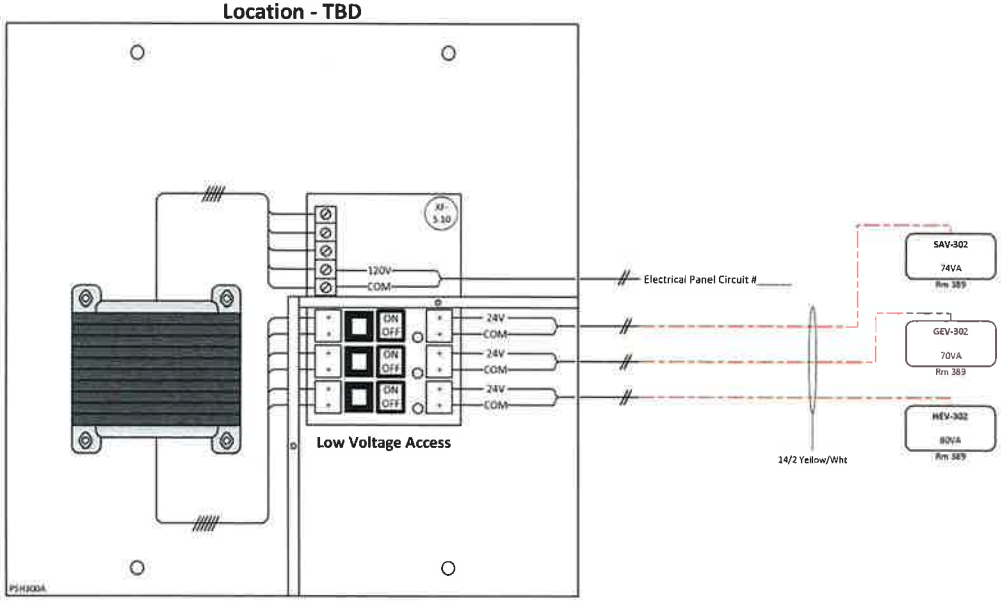
Phoenix Controls Level 03 24V Power Riser (6)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (6)

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.14

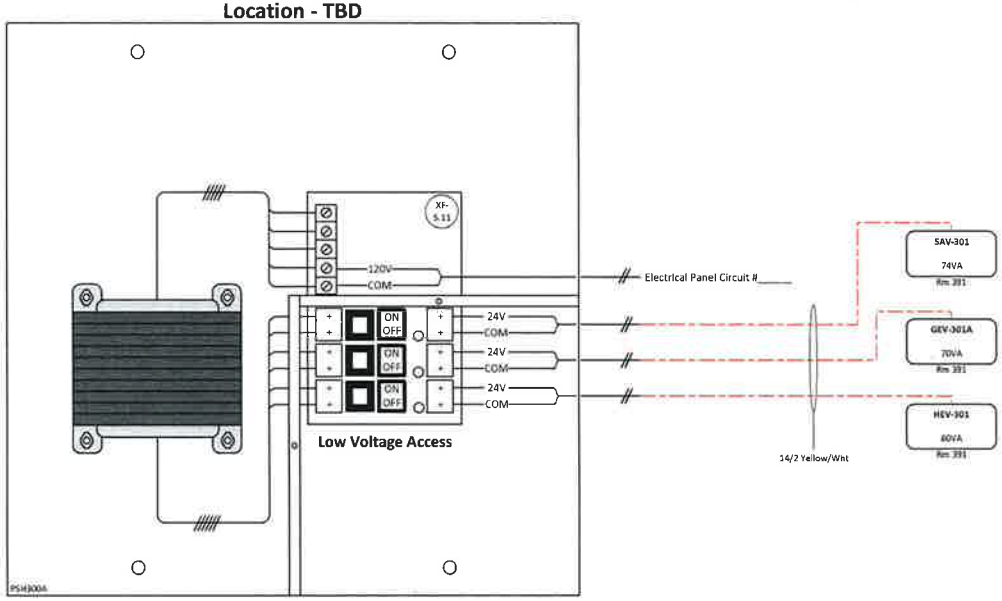
Phoenix Controls Level 03 24V Power Riser (7)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-5.#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 03 24V Power Riser (7)

CONTRACT NO: WU-21-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.15

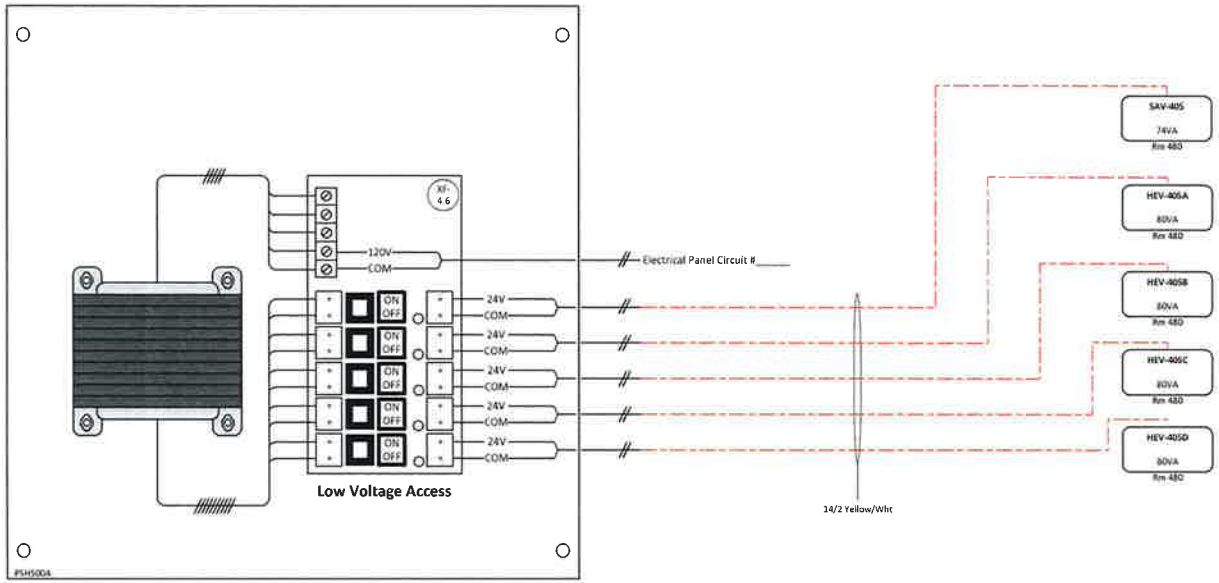
Phoenix Controls Level 04 24V Power Riser (1)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration It is best to run the power wiring the shortest distance possible to the transformer The maximum VA per circuit is 90VA wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (1)

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.16

Phoenix Controls Level 04 24V Power Riser (2)

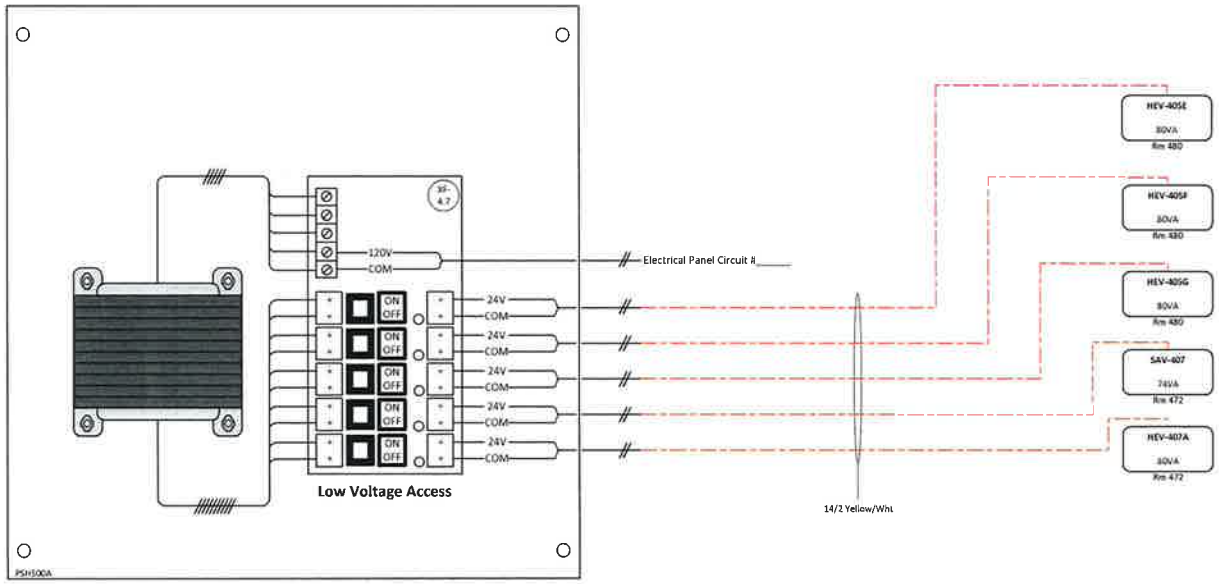
Instrument List

Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



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Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (2)

CONTRACT NO: WU-61-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.17

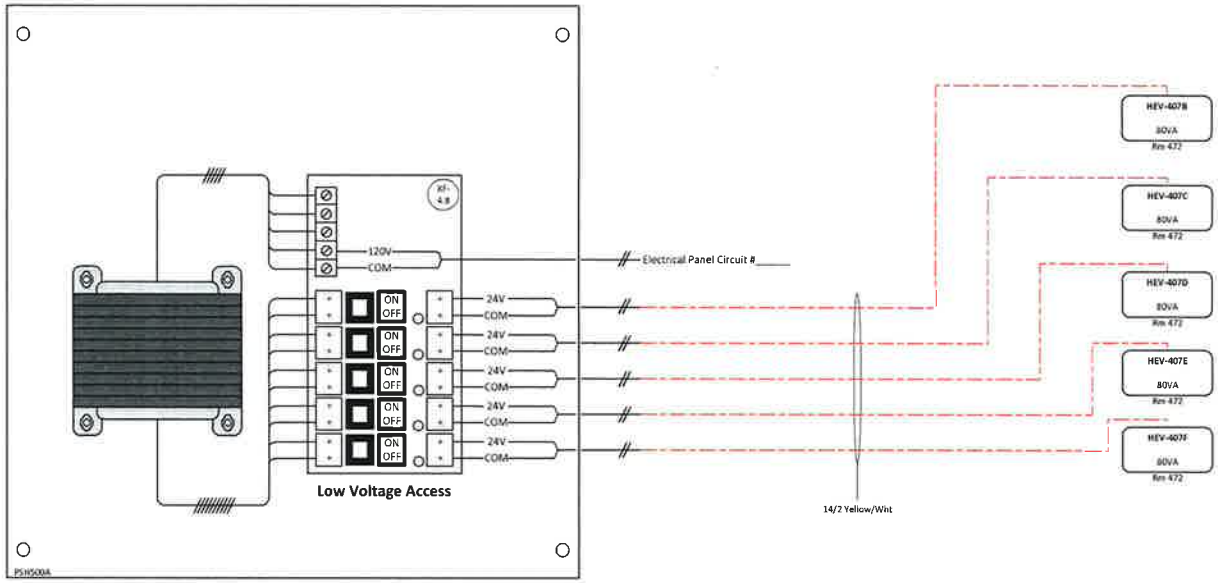
Phoenix Controls Level 04 24V Power Riser (3)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (3)

CONTRACT NO.: WU-01-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.18

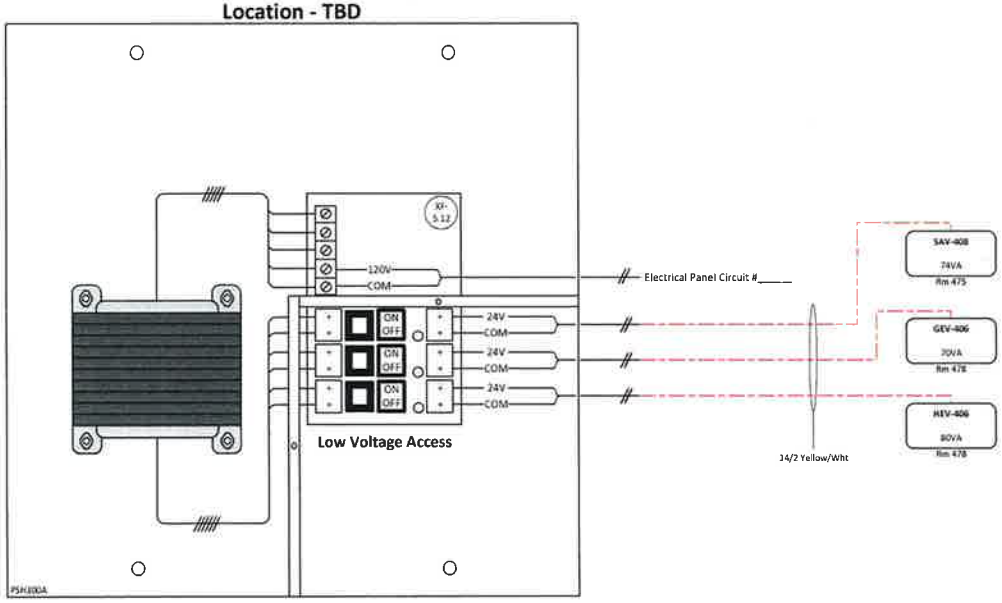
Phoenix Controls Level 04 24V Power Riser (4)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-S#	Enclosed 300VA Pwr Supply, 3x100VA Circuits	Functional Devices	PSH300A	1

Notes:

1 This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location - TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (4)

CONTRACT NO: WU-01-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.19

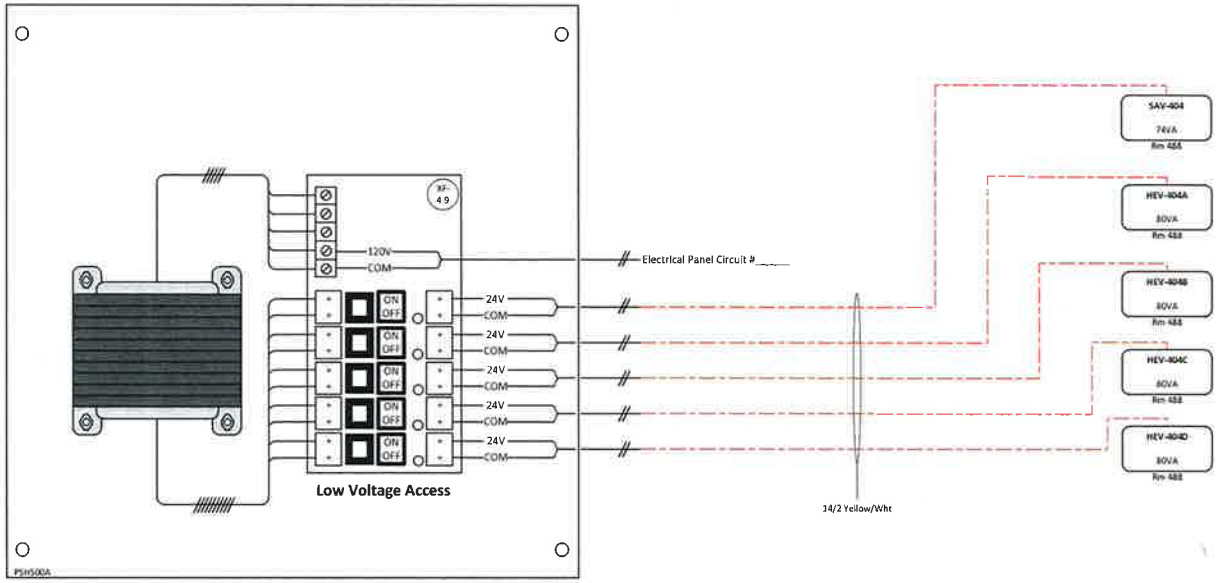
Phoenix Controls Level 04 24V Power Riser (5)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.9	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (5)

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.20

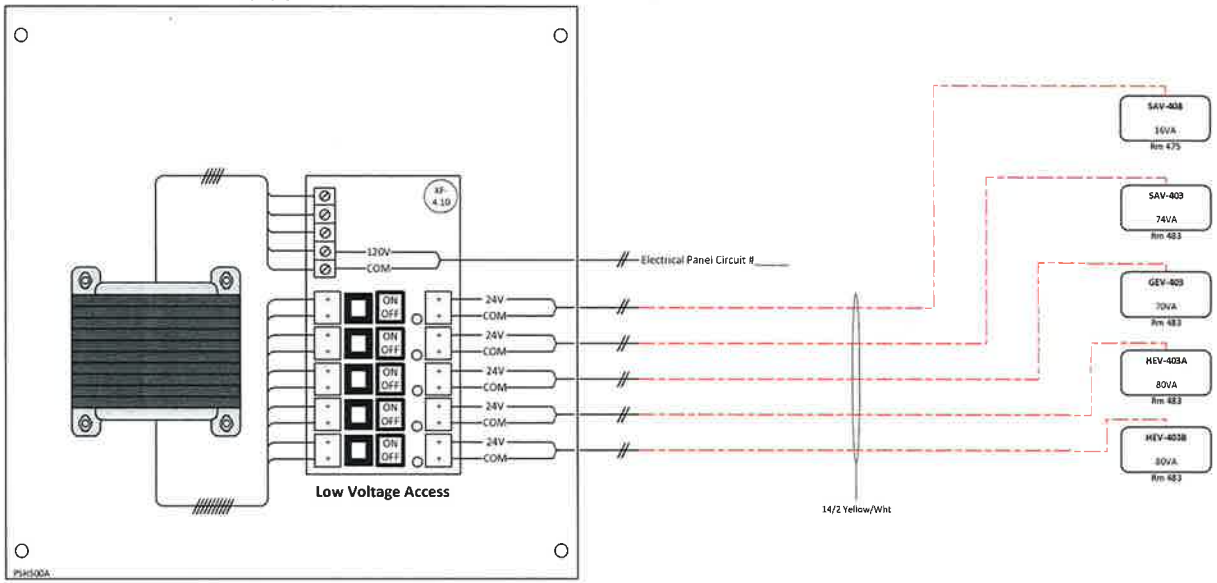
Phoenix Controls Level 04 24V Power Riser (6)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (6)

CONTRACT NO: WU-E1-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.21

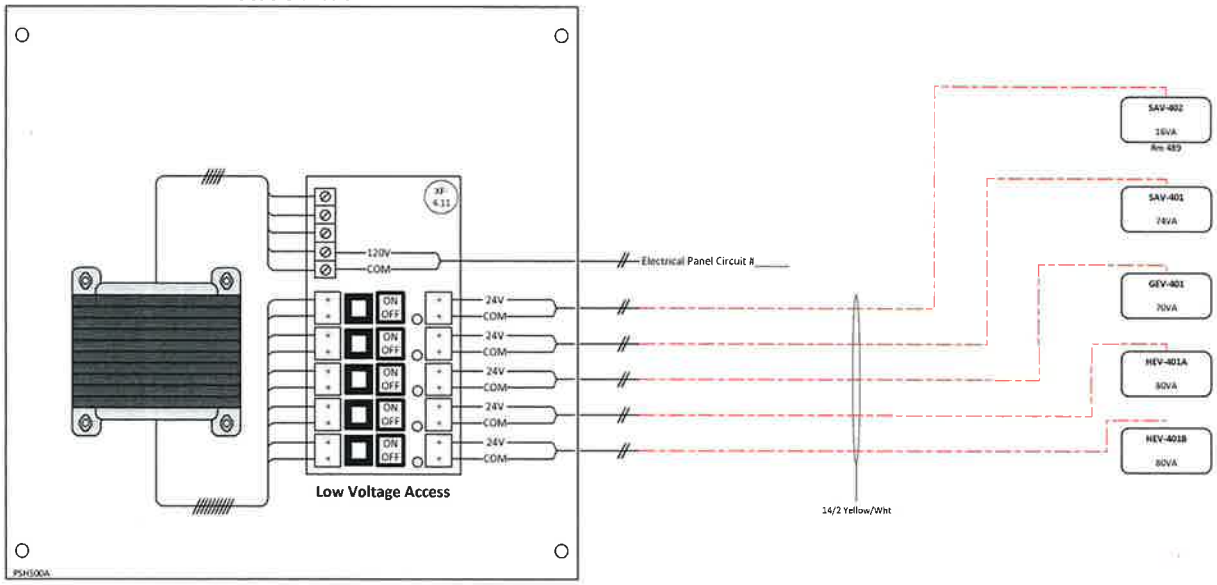
Phoenix Controls Level 04 24V Power Riser (7)

Instrument List				
Tag	Product Description	Manufacturer	Part Number	Quantity
XF-4.#	Enclosed 500VA Pwr Supply, 5x100VA Circuits	Functional Devices	PSH500A	1

Notes:

1. This power riser shows the wiring in a daisy chained configuration. It is best to run the power wiring the shortest distance possible to the transformer. The maximum VA per circuit is 90VA. wiring runs will need to documented for As-Built documentation

Power Distribution Panel - Wiring Detail
Location: TBD



Automatic Controls equipment systems, inc.

Webster University ISB - HVAC Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: (2) 24V Power Riser

DRAWING NAME: Phoenix Controls Level 04 24V Power Riser (7)

CONTRACT NO: WU-41-16 | SE: JV | DE: PL | PR: RV

DRAWING NO.: 2.22

June 23, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-121 - ASI #57 Casework revisions for aquarium and removal of rail

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Nine Hundred Sixty-Four Dollars And Eighty-Eight Cents $964.88 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0136 (ASI 57 - Casework revisions for aquarium and removed railing), Total $ 964.88

This change shall utilize owner's contingency.
Proposed Change Proposal Total: $964.88

If this change proposal meets with your approval, please sign and return this proposal for our records by June 23, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

_____

Date:_____
Craig A. Miller Sr
Webster University

Declined:

_____

Date:_____
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Date: 23-JUN-17
Time: 02:02 PM

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0136	ASI 57 - Casework revisions for aquarium and removed railing			964.88	02-JUN-17					964.88	964.88	

Vendor Name				Description			
Atlas Iron Works	15051	05131.107 S	Stairs & Misc Metals	-17,179.00	ASI 57 - Casework revisions for aquarium and removed railing	CAT #42 Deduct of $17,179 for ASI#57 to remove the rain garden handrails and add support steel at the umbilical trench.	
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	2,086.00	ASI 57 - Casework revisions for aquarium and removed railing	ASI 57 Relocated/reworked electrical device rough-ins, shade switch rough ins, telephone data rough-ins, and AV rough ins due to aquarium wall changes. Add $2086	
Paric Corp - Self Perform	15051	06200.001 S	Finish Carpentry Sub	16,811.00	ASI 57 - Casework revisions for aquarium and removed railing	COR 40 Reframe area, credit for labor, added casework/hardware, added labor, credit for sliding door labor, added emseal quiet joint, added 1/8" powder coated aluminum plate, added aluminum trim, extra taping, added labor to install plate and trim. Add $18,251	
KCI Construction	15051	03119.905 S	Site Concrete Walls	-345.00	ASI 57 - Casework revisions for aquarium and removed railing	ASI#57 / KCI COR #23 Deduct for 4 carpenter hours at $75/hr plus markup for deleting blockouts at West rain garden wall. Deduct $345.00	
NGG Ltd. Incorporated	15051	08400.000 S	Window / Glass Sub	-453.12	ASI 57 - Casework revisions for aquarium and removed railing	Credit for 3rd floor hallway window not required: Labor 4 hrs @ $88.28/hr = $353.12 Glass materail $100 TOTAL $453.12	
	15051	23100.001 M	Risk Management (1.1%)	10.00	ASI 57 - Casework revisions for aquarium and removed railing	Risk Management	
	15051	23150.005 M	Contractor Default Insurance (1.25%)	11.00	ASI 57 - Casework revisions for aquarium and removed railing	Contractor Default Insurance	
	15051	23300.001 F	Fee (2.5%)	24.00	ASI 57 - Casework revisions for aquarium and removed railing	Contractor Fee	
Total For EXT		**0.00**	**0.00**	**964.88**			**964.88** **964.88**
	Grand Total:	**0.00**	**0.00**	**964.88**			**964.88** **964.88**

PARIC
EXPERIENCE. EXCELLENCE.

June 09, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-121 - ASI #57 Casework revisions for aquarium and removal of rail

Revised

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Two Thousand Nine Hundred Fifty-One Dollars And Zero Cents $2,951.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0136 (ASI 57 - Casework revisions for aquarium and removed railing), Total $ 2,951.00

This change shall utilize owner's contingency.
Proposed Change Proposal Total: $2,951.00

If this change proposal meets with your approval, please sign and return this proposal for our records by June 15, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date:
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0136	ASI 57 - Casework revisions for aquarium and removed railing			2,951.00	02-JUN-17					2,951.00	2,951.00	

Vendor Name					Description		
Atlas Iron Works	15051	05131.109 S	Second Steel Erector	-17,179.00	ASI 57 - Casework revisions for aquarium and removed railing	CAT #42 Deduct of $17,179 for ASI#57 to remove the rain garden handrails and add support steel at the umbilical trench.	
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	2,086.00	ASI 57 - Casework revisions for aquarium and removed railing	ASI 57 Relocated/reworked electrical device rough-ins, shade switch rough ins, telephone data rough-ins, and AV rough ins due to aquarium wall changes. Add $2086	
Paric Corp - Self Perform	15051	06200.001 S	Finish Carpentry Sub	18,251.00	ASI 57 - Casework revisions for aquarium and removed railing	COR 40 Reframe area, credit for labor, added casework/hardware, added labor, credit for sliding door labor, added emseal quiet joint, added 1/8" powder coated aluminum plate, added aluminum trim, extra taping, added labor to install plate and trim. Add $18,251	
KCI Construction	15051	03119.905 S	Site Concrete Walls	-345.00	ASI 57 - Casework revisions for aquarium and removed railing	ASI#57 / KCI COR #23 Deduct for 4 carpenter hours at $75/hr plus markup for deleting blockouts at West rain garden wall. Deduct $345.00	
	15051	23100.001 M	Risk Management (1.1%)	31.00	ASI 57 - Casework revisions for aquarium and removed railing	Risk Management	
	15051	23150.005 M	Contractor Default Insurance (1.25%)	35.00	ASI 57 - Casework revisions for aquarium and removed railing	Contractor Default Insurance	
	15051	23300.001 F	Fee (2.5%)	72.00	ASI 57 - Casework revisions for aquarium and removed railing	Contractor Fee	
Total For EXT		**0.00**	**0.00**	**2,951.00**			**2,951.00** **2,951.00**
	Grand Total:	**0.00**	**0.00**	**2,951.00**			**2,951.00** **2,951.00**

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No:
04561.01

Architect's ASI No: 057

Project:
Webster University
Interdisciplinary Science
Building

Date Issued: 04/06/2017

Contract Date:

Reason Code: 06 Owner's Scope

Discipline Code: 07 7 General Construction (Architectural)

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Sheets:
A0103.A, A0205, A0509.A, A0509.B, A0607, A0703.A, A0802.

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

Description:

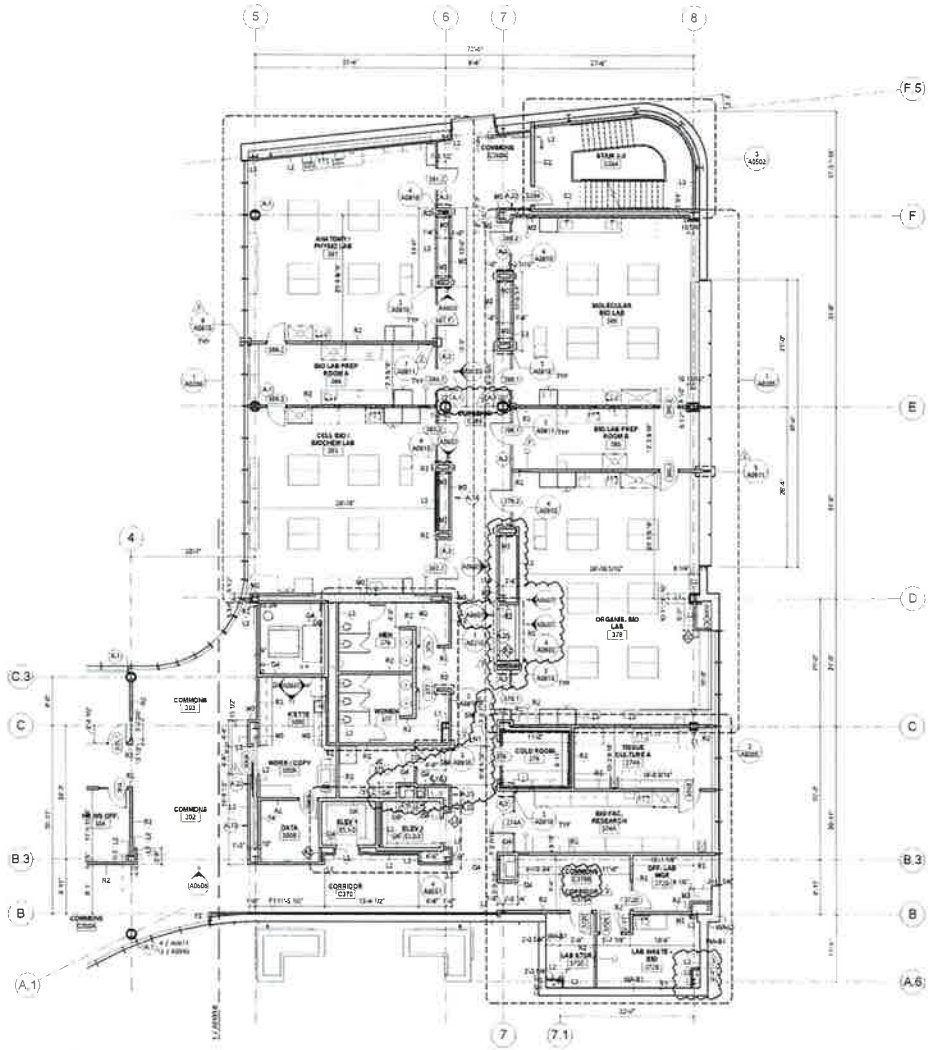
Casework revisions and Partition revisions for Aquarium in room 378.

Railings removed for west rain garden.

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

Issued by Architect: Kelvin Patel, CannonDesign;

Accepted by Contractor:



1 LEVEL 03 AREA A - NORTH FLOOR PLAN

KEYED NOTE LEGEND - PLAN

A.1 092700 CRG COLUMN COVER TO 3' ABOVE CEILING - 28" DIA TYP SEE DETAIL A6081 AND 3 3A6082

A.2 081218 INTERIOR GLAZING SYSTEM IGG-1 REFER TO TYPICAL INT ELEVATIONS 1 AND 2 ON SHEET A6603

A.3 081218 INTERIOR GLAZING SYSTEM IGC-2 SEE TYPICAL ELEVATION 5 AND 6 A6603

A.4 081218 INTERIOR GLAZING SYSTEM IGS-3 REFER TO INTERIOR ELEVATIONS

A.5 088613 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 18'-0" HIGH BASIS OF DESIGN VETROTECH CONTRAFLAMM STRUTTURA - WITH BUTT JOINTS AND PERIMETER FRAMING

A.6 088613 FIRE RATED GLAZING AND FRAME- 120 MIN FIRE RATED GLAZING 13'-0" HIGH X 5'-0" WIDE BASIS OF DESIGN VETROTECH CONTRAFLAMM WITH PERIMETER FRAMING

A.7 113318 LOADING DOCK LIFT - STATIONARY - 6 ft x 8' DELPHI 34" PIT

A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH

A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS

A.11 NEW CONCRETE STEPS TO MATCH EXISTING REMOVED FOR CONSTRUCTION

A.12 103366 BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL

A.13 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)

A.14 MARKERBOARD SURFACE

A.15 WOOD SCREEN W/ SOLID BUMPER

A.17 VIDEO WALL - 24 55" SCREENS

A.18 LCD SCREEN LOCATION (OFCI)

A.19 AIR PLENUM - INSULATED PLENUM CONSTRUCTION BY DIVISION 23

A.20 102200 CURTAIN LOCATION

A.21 104213 ADD CABINET LOCATION

A.22 10 4413 FEC WITH FIRE EXTINGUISHER

A.23 08 4423 SULL SASH LOCATION PROVIDE 1/4" TEMPERED CLEAR GLAZING AT INTERIOR FACE OF CURTAIN WALL MULLIONS FOR ACOUSTICAL SEPARATION

A.24 6" X 8" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER PROVIDE SOAND SIDE WATERPROOFING

A.25 BUILT IN SALT WATER FISH TANK LOCATION SIZE APPROX 7'-6" X 2'-4" X 2'-6" HIGH LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE SLIDING DOOR ON LAB SIDE FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT

A.26 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)

A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING GOOSENECK THIS AREA USE HORIZ GYP BD ENCLOSURE ON SHEET A1602

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T 314.241.6250
F 314.241.2579

Wilson Tao & Associates, Inc
MEP/FP Engineer
7855 Manchester Road Suite 125
St. Louis, MO 63143
314.894.7500

David Mason & Associates, Inc
Structural & Civil Engineer
900 South Vandeventer Avenue
St. Louis, MO 63110
314.534.1651

Faith Group
Technology
3101 S. Hanley Rd Suite 100
St. Louis, MO 63143
314.991.2229

Nuttmann Lazarb, Inc
Environmental Graphics & Signage
7400 Pershing Ave
St. Louis, MO 63130
314.725.8619

RWA Architects
Architects
9731 Lackman Road
St. Louis, MO 63124
314.842.2242

Spellman Brady & Company
Interior Designer
8251 Maryland Avenue Suite 300
St. Louis, MO 63105
314.862.0970

IDWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314.644.3700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street Suite 201
St. Louis, MO 63104
314.588.8600

No.	Description	Date
3	ADDENDUM 3-2	08 APR 2017
2	ADDENDUM 3-1	11 APR 2016
1	ADDENDUM 3-1	05 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

KEY PLAN

Drawing Title

LEVEL 03 AREA A FLOOR PLAN

Project No 04581.01 Checked by

A0103.A

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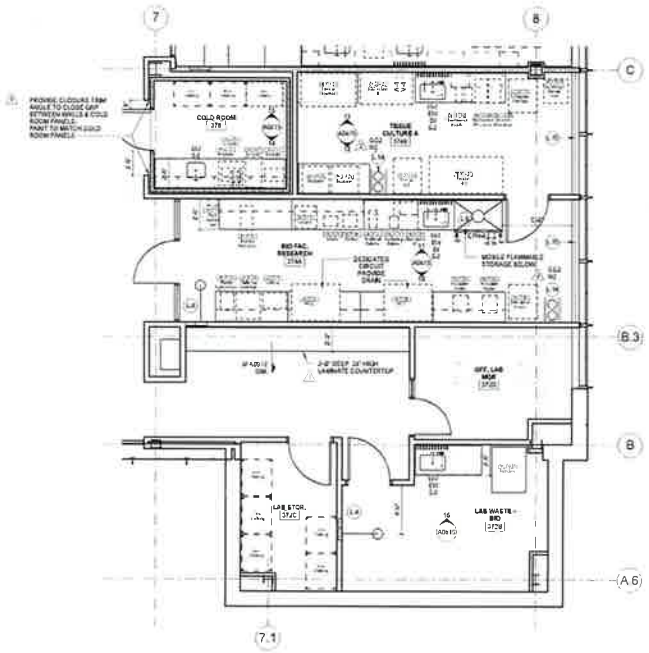
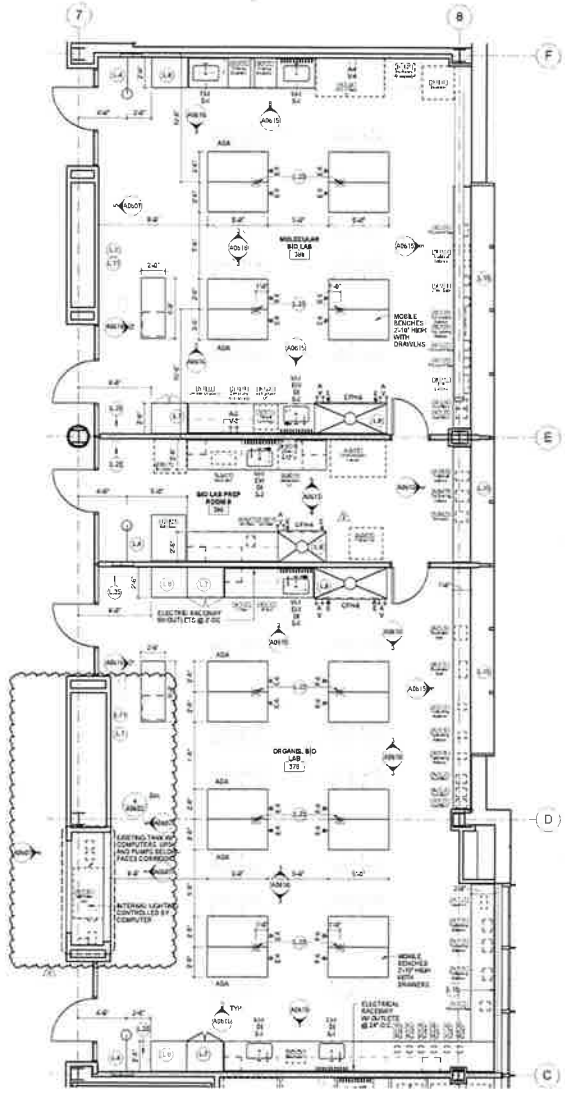


2 LEVEL 03 - BIOLOGY - EAST SIDE-S



1 LEVEL 03 - BIOLOGY - EAST SIDE-N

LAB KEYED NOTE LEGEND

L.1 WHITEBOARD AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH.
L.5 11'-0" CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 WOOD LAB CASEWORK MEDIOCRE CAB
L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK AND STORAGE
L.9 11'-0" CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 CABS SLIDING WHITBOARD
L.12 CAMERA FOR DRYPE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (OPEN) CYLINDERS TO BE OPEN
L.15 RECESSED MOTORIZED ROOM DARKENING/ BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOM LEVEL BEARD LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 9/A0410
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20 FIXED WOOD LABORATORY CASEWORK. BASE CABINETS MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 4" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 36 INCH DRY ERASE FINISH (WHITE)
L.25 PROVIDE SLIDE CAN FOR FIRE EXTINGUISHER. MOUNTING HEIGHT - 1'-6" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26 POINT EXHAUST (HOODED) FOR SOLDERING. SEE DETAIL 9/ A0410.

LAB UTILITY LEGEND

CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SEPARATE NOZZLE. VACUUM BREAKER
WL1 WATER GENERAL MIXING FAUCET DECK MOUNTED WITH VACUUM BREAKER. SEPARATE NOZZLE.
DI WATER SEPARATE FAUCET DECK MOUNTED.
PWS WATER PROCESS COLD WATER SUPPLY.
PWR WATER PROCESS COLD WATER RETURN.
EW WATER EYEWASH DECK MOUNTED. 4 WATER LOW SWING DOWN
DH WATER GROUND HOSE.
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-1 VAC WALL MOUNTED SINGLE SEPARATED OUTLET
V-2 VAC TURRET BASE SINGLE SEPARATED OUTLET
V-4 VAC OUTLET FOR BESAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE SINGLE SEPARATED OUTLET
A-3 AIR WALL MOUNTED SINGLE SEPARATED OUTLET
A-4 AIR OUTLET FOR BESAFETY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUME HOOD CONTROL
E ELEC DUPLEX OUTLET (ON) ON FUME HOOD
E-1 ELEC COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2 ELEC COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3 ELEC WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (1) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CC CUP SINK LIPPED MODIFIED EPOXY CUP SINK (FACTORY SINK, ORIGINAL)
S-1 SINK LIPPED MODIFIED EPOXY SINK 25"x15"WxW/D (ORIGINAL)
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"x15"WxW/D (ORIGINAL)
S-3 SINK STAINLESS STEEL SINK 25"x15"WxW/D
S-4 SINK STAINLESS STEEL ADA SINK 25"x15"WxW/D
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 14"x15"WxW/D (ORIGINAL)
S-6 SINK LIPPED MODIFIED EPOXY SINK 24"x15"WxW/D (ORIGINAL)
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/A0410
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO DWG FACE PARTITION ON COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRAINING RACKS WITH DRIP STOP TROUGHS ABOUT CONTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED HARDWARE TO HAVE OUTLETS AT 2-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING WOOD CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL, SIMILAR TO DETAIL.**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
11. PROVIDE LOCK AND KEY WHERE A CIRCLE INSERT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0610 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0611
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DIVISION 12 3553 - LABORATORY CASEWORK FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XX.XX. SEE SHEETS A1.1 / A1.2 FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN
1100 Clark Avenue
St. Louis, Missouri 63102
T 314.241.6250
F 314.241.2579

William Tao & Associates, Inc.
MEP/FP Engineer
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No.	Description	Date
2	AS-0057	06 APR 2017
1	AS-0053	24 FEB 2017
-	ADDENDUM 3.2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 APR 2016

Drawing Title

ENLARGED PLANS-LEVEL 03

Project No. 04561.01 Checked by

A0205

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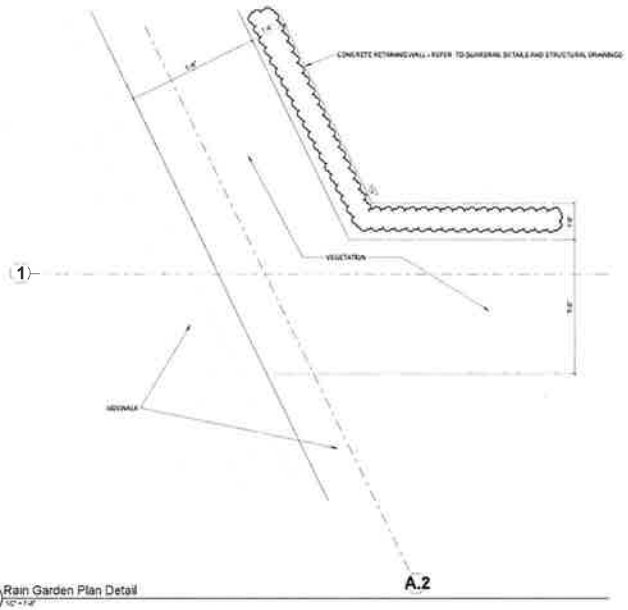
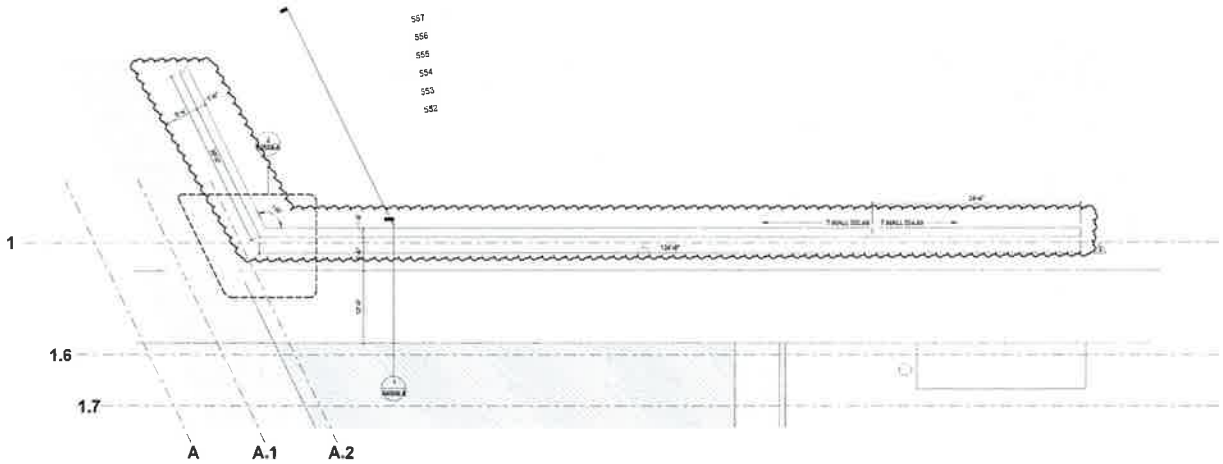


2 Rain Garden Plan Detail



1 RAIN GARDEN PLAN

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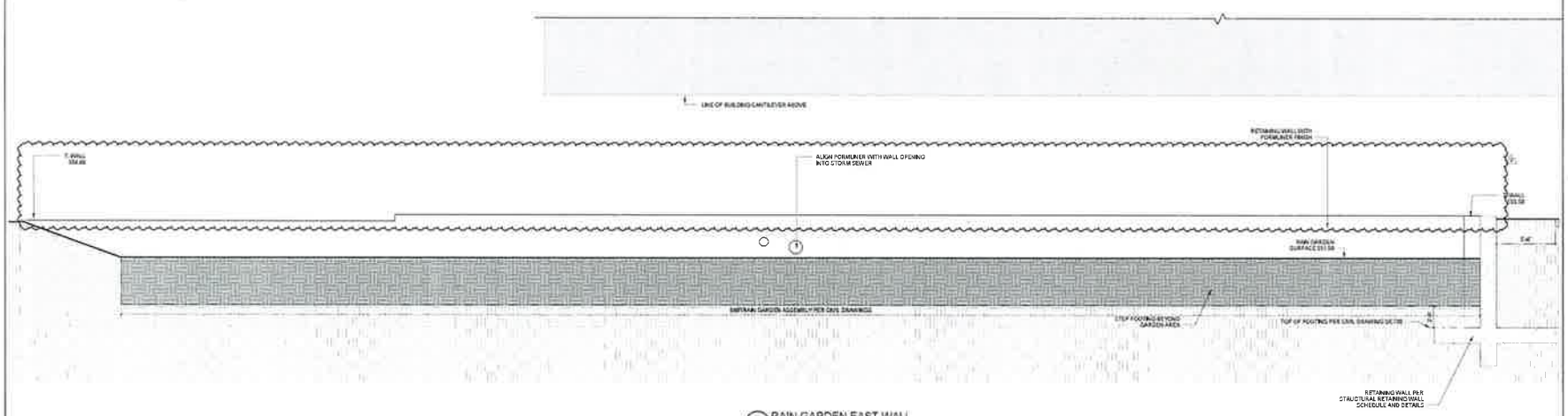
No	Description	Date
2	A04057	06 APR 2017
1	A04000	01 AUG 2016
-	ISSUED FOR CONSTRUCTION (SP1)	15 JAN 2016

Drawing Title

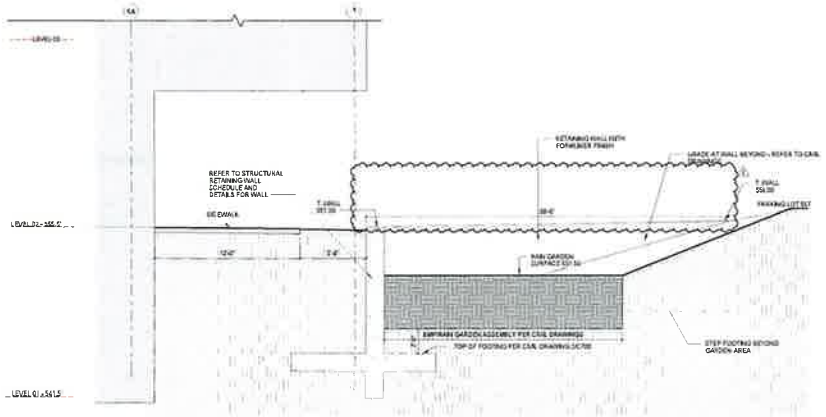
SITE WALLS - RAIN GARDEN

Project No. 04561.01 Checked by

A0509.A



2 RAIN GARDEN EAST WALL
1/8" = 1'-0"



1 RAIN GARDEN SOUTH WALL
1/8" = 1'-0"

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No	Description	Date
2	AS1007	06 APR 2017
1	AS1003	01 AUG 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016

Drawing Title

SITE WALLS - RAIN GARDEN

Project No: 04561.01 Checked by

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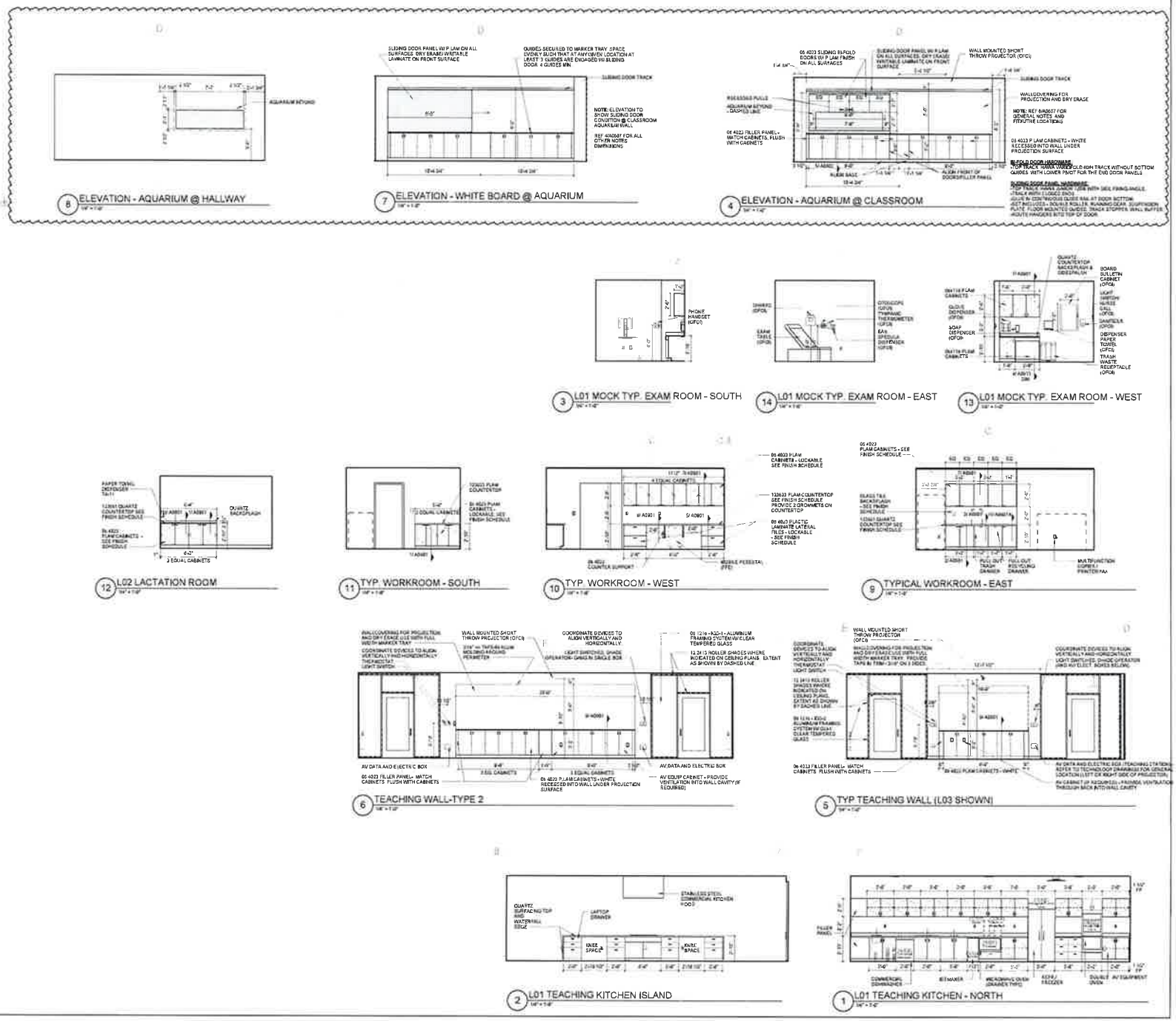

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No	Description	Date
1	ASI-007	05 APR 2017
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

INTERIOR ELEVATIONS

Project No 0498101 Checked by

A0607

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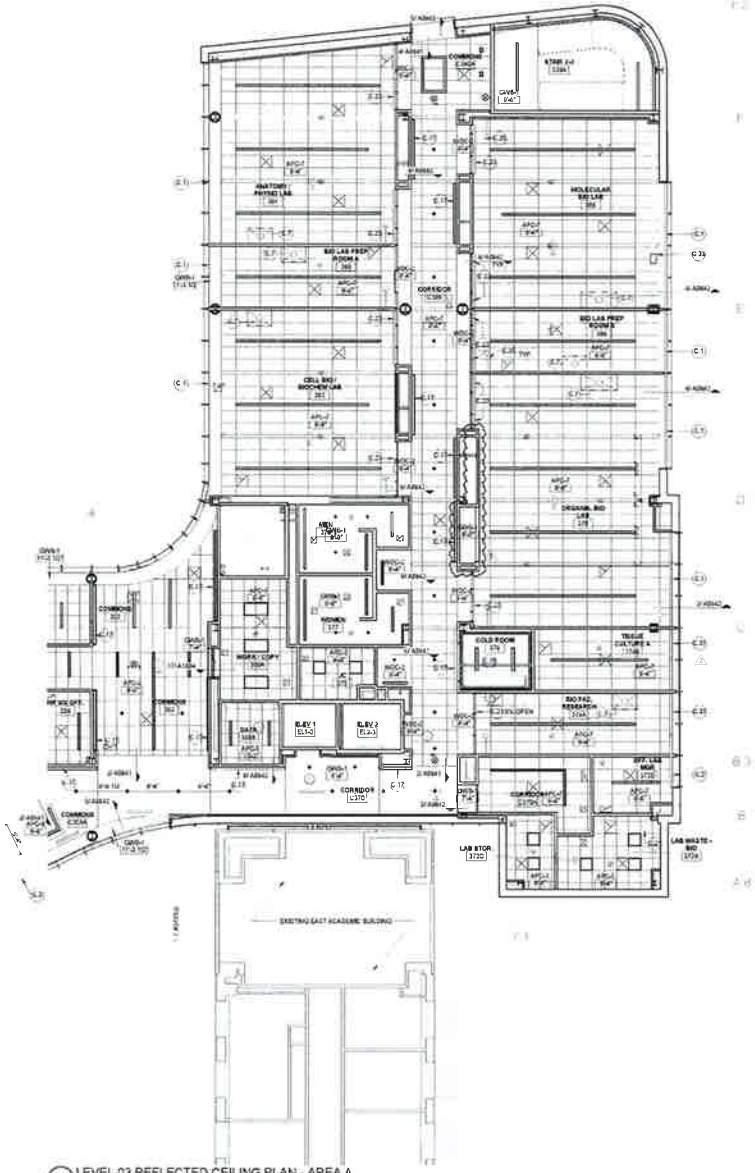

1 LEVEL 03 REFLECTED CEILING PLAN - AREA A

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

- E.1 122413 TYPE 1 SHADES MOTORIZED ROLLER SHADES IN COUNTLOUS RECESSED POCKET (GFGI)
- E.2 122413 TYPE 2 SHADES MOTORIZED DOUBLE ROLLER SHADES SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- E.3 122413 TYPE 3 SHADES MANUAL SHADES IN RECESSED POCKET
- E.4 122413 TYPE 4 SHADES VALLION MOUNTED SHADE IN CONTINOUS POCKET
- E.5 CEILING MOUNTING SUSPENSION FOR LCD SCREEN PROVIDE STEEL SUPPORT ABOVE CEILING
- E.6 CONVECT HOOD LOCATION - REFER TO FOOD DOUBLE DRAWINGS
- C.7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
- C.8 EXPOSED STRUCTURE
- C.9 GI2332 SIDE COILING DOOR TRACK
- C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING: 1" THICK ARMSTRONG OPTIMA PANELS FITTO GRID FOR WOOD GRILL CEILING
- C.11 ACOUSTICAL ISOLATION CEILING: 2 LAYERS 1/2" GYP BOARD CEILING ON SUSPENDED METAL FRAMING SUSPENSION SYSTEM TO BE ACOUSTICALLY ISOLATED FROM STRUCTURE BY SPRINGNEOPRENE ISOLATION HANGER - KINETIC NOISE CONTROL MODEL MUTA HANGER. PROVIDE CONTINOUS LAYER OF 3.5" FIBERGLASS ACOUSTIC BATTS REFER TO DETAIL 16 SHEET A0412
- C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
- C.13 RECESSED DRAPERY TRACK AND CURTAINS (OFCI) - PROVIDE BLOCKING
- C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET
- C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAILS SHEET A0381
- C.17 CONTINOUS COVE TYPE LIGHTING FIXTURE TAPES INTO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0842
- C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
- C.19 U5700 WET ALUM. BEAM ENCLOSURE
- C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND RIDERS ABOVE FOR SUPPORT
- C.21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
- C.22 REFER TO DETAIL 8A8452
- C.23 122413 TYPE 6 SHADES MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING, POCKET CONTINUOUS ACROSS OPENING
- C.24 INSULATED SOFFIT - SIMILAR TO WALL 04 SHEET A0400
- C.25 CEILING MOUNTED SURGICAL LIGHT - SEE EQUIPMENT LIST (OFCI) - PROVIDE STRUCTURAL STEEL SUPPORT TO DECK. 4 - 2X2X1/4" STEEL ANGLE HANGER WITH 4 - ANGLE RIDERS 2 X 2 X 1/4 AND MOUNTING PLATE PER MANUFACTURER. SEE DETAIL 5/A0814
- C.26 CONTROL JOINT LOCATION
- C.27 ABOVE CEILING WHERE INDICATED WITH DASHED LINE. PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND DUCTS DERIVING FLOOR GRILLES ON LEVEL ABOVE. REFER TO DETAIL SHEET A1002
- C.28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE. PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STANDPIPE RUN. REFER TO DETAIL SHEET A1002
- C.29 PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AT BOTTOM OF SHAFT. REFER TO DETAIL SHEET A1002
- C.30 122413 TYPE 7 SHADES MOTORIZED DOUBLE ROLLER SHADES SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- C.31 122413 TYPE 8 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET
- C.32 SPECIAL ACOUSTICAL SEPARATION CEILING. APPLY KINETICS NOISE CONTROL QUIET TILE CAC 51 TO TOP SIDE OF ACOUSTICAL PANELS. ISOLATE CEILING TILE FROM STRUCTURE ABOVE WITH KNC AP HANGERS.
- C.33 ROUND TRIM AROUND DIAGONAL BRACE PENETRATION THROUGH CEILING. +/- LINE 50" GAP ALL SIDES
- C.34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS.
- C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
- C.36 122413 TYPE 3 SHADES MANUAL SHADES - STEPPED WITH SLOPE IN CONT SLOPED OPENING
- C.37 122413 TYPE 8 SHADES DOUBLE MANUAL SHADES IN RECESSED POCKET

CEILING LEGEND

- APC-1 2 x 2 - ARMSTRONG OPTIMA TEGULAR 1" THICK IN 9/16" GRID
- APC-2 2 x 2 - ARMSTRONG ULTIMA TEGULAR IN 9/16" SILHOUETTE XL 1/8" GRID
- APC-2A 2 x 3 - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- APC-2B 2 x 2 - ARMSTRONG ULTIMA HEALTH ZONE TEGULAR 9/16" GRID
- APC-4 NOT USED
- APC-5 2' x 2' - ARMSTRONG FINE FISSURED IN 15/16" GRID
- APC-6 DIRECT ACOUSTICAL PLASTER BASIAPHON (48 MM) OVER 1 1/2" INSULATION OVER GYP BOARD
- APC-7 2' x 4' - ARMSTRONG ULTIMA TEGULAR IN 9/16" SILHOUETTE XL GRID W/ 6" PANEL INSERTS AS SHOWN
- APC-8 2' x 8' ARMSTRONG OPTIMA TEGULAR - 1" THICK NRC= .90 IN 9/16" SILHOUETTE XL 1/8" GRID MATCH APC-7 - EXCEPT. REF. 09C113 SPECIAL ACOUSTIC TREATMENT. APPLY SPECIAL ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS

- WBC-1 09 5438 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS @ 6 PER FOOT - MINI-WOOD GRILL 1.600 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
- WBC-2 06 4216 FLUSH WOOD PANEL SOFFIT - MATCH WVP-1
- WBC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL

- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

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No.	Description	Date
2	ASI#001	06 APR 2017
2	ASI#002	17 MAR 2017
1	ADDENDUM 3-2	10 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

KEY PLAN

Drawing Title

LEVEL 03 REFLECTED CEILING PLAN AREA A

Project No 04561.01 Checked by

A0703.A

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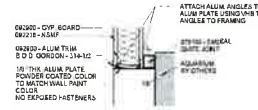
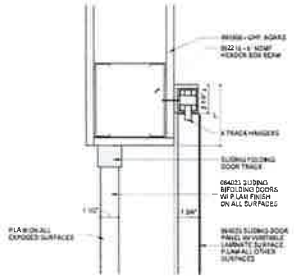
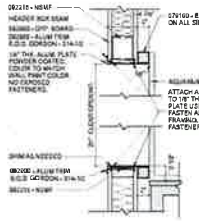


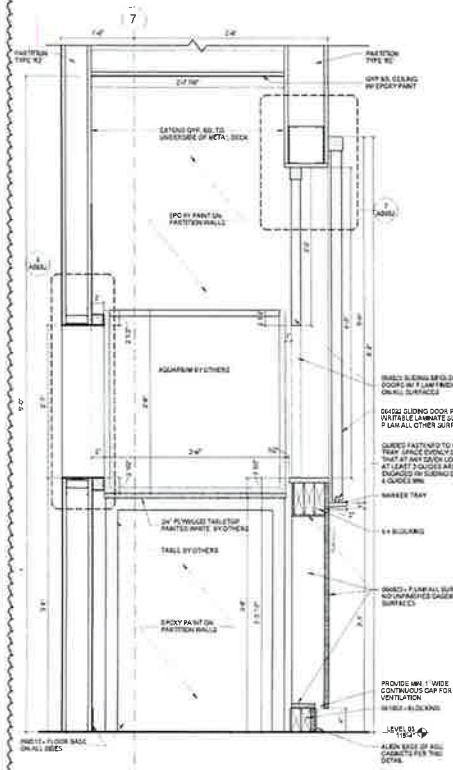
PLAN DETAIL @ AQUARIUM VIEWING OPENING JAMB
8 1 1/2" = 1'-0"



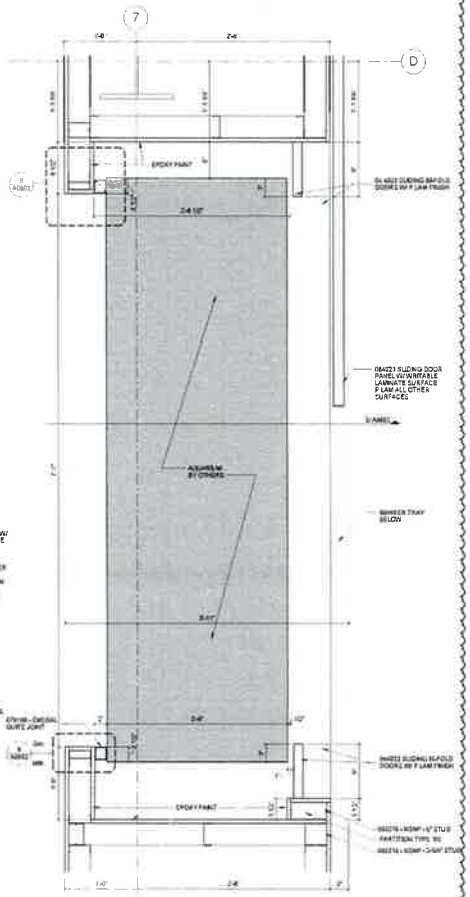
SECTION @ FISH TANK OPENING AND WHITEBOARD HEAD
7 3" = 1'-0"



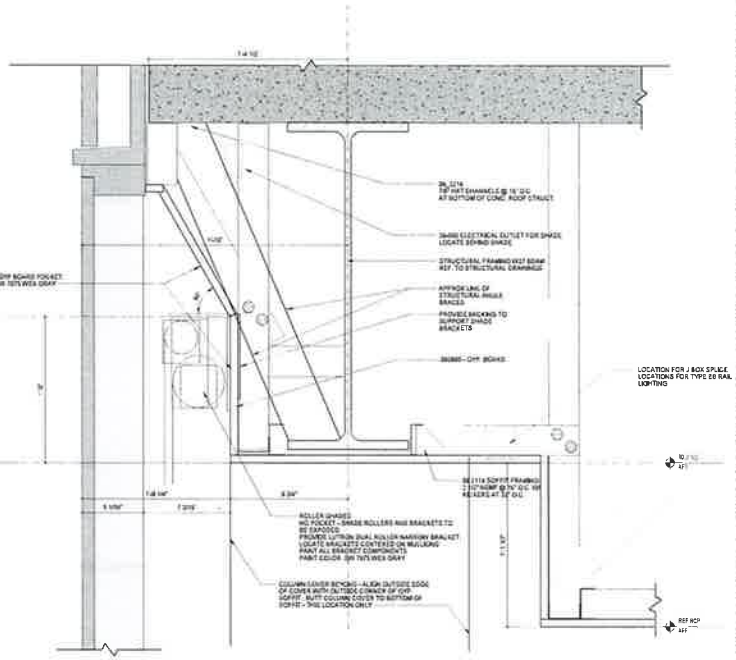
DETAIL OF FISH TANK @ CLEAR OPENING
6 1 1/2" = 1'-0"



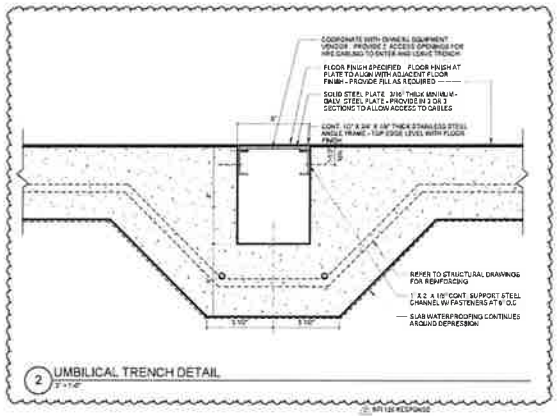
FISH TANK DETAIL SECTION
5 1 1/2" = 1'-0"



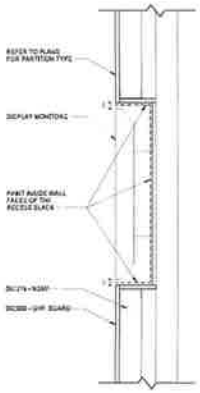
LEVEL 03 - FISH TANK PLAN DETAIL
4 1 1/2" = 1'-0"



RECESSED MOTORIZED SHADES @ CONFERENCE ROOM
3 3" = 1'-0"



UMBILICAL TRENCH DETAIL
2 3" = 1'-0"



MONITOR SCREEN RECESS
1 1 1/2" = 1'-0"

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2	ASI-057	06 APR 2017
1	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (SP2)	15 MAR 2016

Drawing Title

INTERIOR DETAILS

Project No. 04561.01 Checked by

A0802

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ATLAS IRON WORKS — EST. 1922

Fabrication ⋹ Installation ⋹ Structural Steel ⋹ Miscellaneous Iron ⋹ Mezzanines ⋹ Crane Runways

May 3, 2017

Jason Szachnieski
Paric Corporation
77 Westport Plaza
Suite 250
St. Louis, MO 63146

Re: Webster University Interdisciplinary Science Building
AIW #: A16013
CAT#42 – ASI #57

Jason,

We submit the lump sum deduct price of $17,179.00 to revise the miscellaneous steel per ASI #57 dated 4/6/17 received via email on 4/7/2017.

Revisions include removing the rain garden handrails (A0509.A) that were original added in ASI #03 (Atlas CAT#14). Detail 2/A0802 was added cutting a section thru the umbilical trench which added support steel and a closure plate.

Price includes a net change to material, drafting, shop labor, field labor, and project management. No sales tax has been included. Copies of our CAT#42 breakdown, take off sheets 1 and 3, and Big Boy's Steel Erection change order request have been enclosed for documentation.

This work has been incorporated in our shop drawings based on being reimbursed the above amount. Please issue a change order at your earliest convenience in the amount of ($17,179.00) so that our records may be brought up to date.

Respectfully submitted,
Atlas Iron Works

Jennifer Cowan
Sales Engineer

4020 Geraldine Avenue St. Louis, MO 63115 314-383-7200 800-401-9566 Fax 314-383-7202

www.atlasironworks.com e-mail: atlas@atlasironworks.com

PROJECT: _____ CONTRACT: A16013 PAGE: _____

_____ CAT: 42 DATE: _____

ASI # 57

ADDED					DELETED			
QUAN	SHAPE	LENGTH	WEIGHT	NOTES	QUAN	SHAPE	LENGTH	WEIGHT
				Umbilical Trench				
2	C1x2x'8	9'-0	32	2/ A0802				
2		0'-8						
40	3/16" ø tacon							
				No SS 4 per Steve e Park				
2	PL 3/16x8	3'-0	31	RFI # 215 8" wide				
3		1'-0	15					

PROJECT: Webster Univ.

CONTRACT: A16013

PAGE: 3/ from A16013 Cat #14 ASI #03

CAT: 42

ASI #57

DATE:

ADDED					DELETED			
QUAN	SHAPE	LENGTH	WEIGHT	NOTES	QUAN	SHAPE	LENGTH	WEIGHT
1	3" Ballnostrade			A0509.A				
	x 1½			Rain Garden				
	A0508.E							
	rake	22'-0	3'-6 tall					
		102'-0	3'-6 tall					
		32'-0	4'-1 tall					
62	PL 3/4 x 2	0'-8	211	anchors				
	Galv. &							
	Powder Coated							
		A36	26					
		Bl. PL	468					
		PL	279					
	156	237 LF	to be powdercoated					

		ATLAS IRON WORKS				
	CONTRACT #		A16013			
		CAT #	42			
			ASI#57			
	Quantity	UNIT	TOTAL			
MATERIAL						
Steel #	32	$0.55	$18			
PL #	-165	$0.86	($142)			
Bent PL #	0	$1.00	$0			
Bolts	0	$1.15	$0			
Shear Studs	0	$0.95	$0			
Exp. Anchor	0	$1.50	$0			
Tapcons	40	$1.00	$40			
			$0			
Shop Labor (MHS)	-20	$85.00	($1,700)			
Drafting (MHS)	8	$60.00	$480			
Project Eng. (MHS)	8	$70.00	$560			
Haul (loads)	0	450	$0	To/From Galv & Powder Coater		
Haul (loads)	1	150	$150	To jobsite		
SUBTOTAL			($594)			
	Overhead	0	$0			
	Subtotal		($594)			
	Profit	0	$0			
	Subtotal		($594)			
SS Handrial	$0					
Powder Coat	($1,560)	156 LF				
Misc Steel	($10,550)	DEDUCT				
Misc Steel	$0					
Galvanizing	$0	included in misc steel				
Erection	($4,475)	Big Boys				
Subtotal	($16,585)					
0%	$0					
Subtotal	($16,585)		($16,585)			
Material Amount	($12,194)					
Use Tax Rate %		Use Tax	$0			
		TOTAL	($17,179)			

Change Order Request #: 3946-0032
Date: 5/2/2017

BIG BOY'S STEEL ERECTION, INC.

11843 Missouri Bottom Road
Hazelwood, Missouri 63042
Phone: (314) 731-4157 Fax: (314) 731-3234

Change Order Request

Submitted to (Purchaser Name): Atlas Iron
Jennifer

Erection Of:

- [ ] Structural Steel
- [ ] Steel Joist
- [ ] Floor Deck
- [ ] Roof Deck
- [x] Miscellaneous
- [ ] Items on Attached Scope

Project Name: Webster U.- ISB

Address: Webster Groves, Missouri

CAT # 42

Submitted By: Rich Beckwith

Big Boy's Steel Erection, Inc. (BBSE) proposes to provide steel erection services for the above Project, for the price of

Deduct: Four Thousand Four Hundred Seventy-Five Dollars and no / 100 -$4,475.00

Special Requirements

Omit Rail Garden Rails (ASI # 57)

General Requirements

1 This quotation is based upon the following:

a. A rocked access road and a rocked and completed building pad will be provided for interior access for BBSE's crane, equipment, manpower, and truck deliveries.

b. The general or controlling contractor will maintain all requirements of OSHA Subpart "R".

c. TS bolts will be used for all connections, and shall be supplied by the Purchaser.

d. Purchaser shall provide for the use of temporary erection bolts when possible, and shall specify the location of such bolts.

e. The laws of the state of Missouri shall apply.

f. There shall be no retention from payment.

g. BBSE will not be liable for any liquidated or consequential damages of any type.

h. BBSE will maintain its standard insurance.

i. The Project site shall be ready for BBSE's work when Purchaser directs BBSE to proceed; "ready" shall mean BBSE reasonably determines that it can proceed with steel erection in a productive manner, per the AISC Code of Standard Practice. Purchaser shall be responsible for BBSE's direct costs of any delay caused by Purchaser or its separate contractors.

j. Temporary power will be provided for use by BBSE.

k. All floor and roof decking shall be bundled for BBSE per floor and bay in bundles no heavier than 4,000 pounds, per OSHA Subpart "R".

l. If requested by Purchaser, BBSE will furnish executed lien waivers upon BBSE's receipt of payment.

2 This quotation does not include: cutting, patching, or shoring of existing materials; testing or surveying costs; grout or grouting; field or touch-up painting; or, core drilling or holes for rail posts.

3 Unless otherwise provided in the project specifications, all payments are due within 45 days of invoice date. Late payments shall bear interest at 1½ % per month on all amounts due. Purchaser shall be liable for all attorney fees and other costs of collection.

4 Purchaser may accept this Quotation by returning a signed copy to BBSE or by directing BBSE to proceed thereon.

THIS QUOTATION IS ACCEPTED BY:

Name:

Title:

Company Name:

Date:

GUARANTEE
ELECTRICAL CONSTRUCTION
3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ASI - 057 RELOCATION OF ROUGH INS**
Date: 5/2/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

WEBSTER ISB
ASI - 057 RELOCATE/REWORK Rough-Ins

Description of work

*** Relocated/reworked electrical device rough ins, switch rough ins, shade switch rough ins, telephone data rough ins and AV rough ins due to the aquarium wall being removed and modified.**

Base Bid Shall Increase by: $ 2,086.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.
We request a time extension of **20** days.
We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
3/4" EMT CONDUIT (RELOCATE)	30	0.00	1.86
1" EMT CONDUIT (RELOCATE)	60	0.00	4.08
3/4" EMT SS CONN RELOCATE)	6	0.00	0.72
1" EMT COUP CONN (RELOCATE)	12	0.00	1.80
3/4" EMT 1-H STEEL STRAP (RELOCATE)	6	0.00	0.30
1" EMT 1-H STEEL STRAP (RELOCATE)	12	0.00	0.60
#12/2C CU MC CABLE AL ARMOR	60	15.02	1.95
3/8" MC CABLE DC SS CONN	8	3.20	0.96
#8x 3/4 P/H SELF-TAP SCREW	8	0.48	0.31
#10x 3/4 P/H SELF-TAP SCREW	36	6.12	1.40
459 SNAP-IN MC/AC METAL STUD CLIP (RELOCATE)	16	0.00	0.48
H23 SQ BOX MTG BRKT (RELOCATE)	13	0.00	0.97
4" SQ BOX 1 1/2"D COMB KO (RELOCATE)	9	0.00	3.15
4" SQ BOX 2 1/8"D COMB KO (RELOCATE)	4	0.00	1.40

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ASI - 057 RELOCATION OF ROUGH INS**
Date: 5/2/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 2

Description	Qty	Total Mat.	Total Hrs.
4" SQ 1G PLSTR RING 5/8" RISE (RELOCATE)	2	0.00	0.40
4" SQ 2G PLSTR RING 5/8" RISE (RELOCATE)	11	0.00	2.20
Totals	**293**	**24.82**	**22.58**

Summary

General Materials	24.82
Material Total	**24.82**
LU 1 - GF - ST - ELEC	97.86
LU 1 - F - ST - ELEC	183.29
LU 1 - JW - ST - ELEC	1,536.19
EXPENDABLES	0.50
SMALL TOOLS	54.52
Subtotal	**1,897.18**
Markup	189.72
Subtotal	**2,086.90**
Adjustment #1	-0.90
Final Amount	**$2,086.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: ASI - 057 RELOCATION OF ROUGH INS
Final Amount:$2,086.00
Name: _____
Date: _____
Signature: _____
Change Order #: _____
I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

Webster ISB
PARIC SELF PERFORM
COR 40 - ASI 57
5/16/2017

	UNITS	RATE	TOTAL
Re-frame area per updated ASI-57 drawings (24 MHs)	24	$ 62.92	$1,510.08
Credit for framing labor carried in BP3 drawings for this areas (4 MHs)	4	$ (62.92)	($251.68)
Added casework/hardware per ASI-57 drawing	1	$ 8,410.00	$8,410.00
Credit for sliding door price carried in BP3 drawings	1	$ (500.00)	($500.00)
Labor to install added casework/bi-fold doors/sliding door/hardware in ASI-57 (48 MHs)	48	$ 62.92	$3,020.16
Credit for sliding door labor carried in BP3 drawings (8 MHs)	8	$ (62.92)	($503.36)
Add (50) LF of SHG-0200 Emseal Quiet Joint per sheet A0802	50	$ 17.15	$857.50
Install Emseal Quiet Joints (2 MHs)	2	$ 62.92	$125.84
Added 1/8" powder coated alum plate (30 LF)	30	$ 20.00	$600.00
Added Gordon 314-1/2" aluminum trim (30 LF)	30	$ 5.50	$165.00
Extra taping required per invoice dated 5/9/17	1	$ 1,010.00	$1,010.00
Added Labor to install plate and trim (4 MHs)	4	$ 62.92	$251.68
		SUBTOTAL COR=	$14,695
		Small Tools and Consumables 4%=	$588
		10% OH&P=	$1,528
		SUBTOTAL =	**$16,811**

COR Clarifications

*COR is for added labor and material beyond what was carried in BP-3 per key note A.25 on the 3rd Floor Area A floor plan.

Webster ISB
PARIC SELF PERFORM
COR 40 - ASI 57
5/16/2017

	UNITS	RATE	TOTAL
Re-frame area per updated ASI-57 drawings (24 MHs)	24	$ 62.92	**$1,510.08**
Credit for labor carried in BP3 drawings for this areas (4 MHs)	4	$ (62.92)	**($251.68)**
Added casework/hardware per ASI-57 drawing	1	$ 8,410.00	**$8,410.00**
Credit for sliding door price carried in BP3 drawings	1	$ (500.00)	**($500.00)**
Labor to install added casework/bi-fold doors/sliding door/hardware in ASI-57 (64 MHs)	64	$ 62.92	**$4,026.88**
Credit for sliding door labor carried in BP3 drawings (4 MHs)	4	$ (62.92)	**($251.68)**
Add (50) LF of SHG-0200 Emseal Quiet Joint per sheet A0802	50	$ 17.15	**$857.50**
Install Emseal Quiet Joints (2 MHs)	2	$ 62.92	**$125.84**
Added 1/8" powder coated alum plate (30 LF)	30	$ 20.00	**$600.00**
Added Gordon 314-1/2" aluminum trim (30 LF)	30	$ 5.50	**$165.00**
Extra taping required per invoice dated 5/9/17	1	$ 1,010.00	**$1,010.00**
Added Labor to install plate and trim (4 MHs)	4	$ 62.92	**$251.68**
		SUBTOTAL COR=	**$15,954**
		Small Tools and Consumables 4%=	**$638**
		10% OH&P=	**$1,659**
		SUBTOTAL =	**$18,251**

Revised

COR Clarifications

*COR is for added labor and material beyond what was carried in BP-3 per key note A.25 on the 3rd Floor Area A floor plan.

ST. LOUIS WOODWORKS
500 Prospect Ave - St. Louis, MO 63110
Phone (314) 652-9663 - Fax (314) 652-7684

P.C.O. 4

Date: 5/9/17

To:
Company Name: FITZGERALD
Attention: JULIAN DAVIS
E-mail:
Job Name: WEBSTER U. SCIENCE
Architect: CANNON
Plan date: 3/15/16

ASI - 057

In reference to our original bid dated 3/14/17 *, we hereby agree to make the following changes:*

WEBSTER U. SCIENCE *C.O.#* *4* *5/9/17*

LINE	DESCRIPTION	AMOUNT
1	AQUARIUM-SLIDING DOORS WITH HARDWARE/ BI-FOLD P.LAM DOORS WITH	
	HARDWARE.... SLIDINGS DOORS TO HAVE DRY ERASE LAMINATE ON FACE	
note	HARDWARE LISTED:	4,875.00
	LABOR:	1,694.00
	MATERIALS:	1,731.00
	Delivery:	110.00
	Subtotal:	8,410.00
	Tax:	0.00
	Total:	**8,410.00**

The signing, dating, and returning of this change order is required before any work may be performed.

Submitted by: ***GARY LEEK***

Accepted by:

Date:

Original Contract Amount:	0.00
Previous Change Order(s):	0.00
This Change Order:	8,410.00
Revised Contract Amount:	**8,410.00**

TIDWELL BROTHER'S CONSTRUCTION LLC

671 Meier Rd
Old Monroe Mo 63369

Invoice

Phone #	636-262-2644
E-mail	rick.tidwell@tidwellbros.c...
Web Site	www.tidwellbros.com
Fax #	636-665-5111

Date	5/9/2017
Invoice #	858
Account #	
Terms	
Due Date	5/9/2017
Project	Webster

Bill To

Description	Qty	Rate	Amount
Repair patches around sprinkler heads in front of elevators Extra ticket Webster 001 10 man hrs @65.00 per hr 650.00 2 rolls of tape@2.50 ea 5.00 1 bucket of joint comp @9.99 9.99 Total 664.99	664.99	1.00	664.99
Taped finished aquarium on 3rd floor Extra ticket Webster 002 15 man hrs @65.00 per hr 975.00 1 roll mesh tape 2.50 1 roll of paper tape 2.50 3 boxes of joint compound @9.99 29.97 Total 1009.97	1,009.97	1.00	1,009.97
Overtime premium Extra ticket Webster003, webster004, Webster005 62 man hours @ 22.00 per hour Total 1364.00	1,364	1.00	1,364.00

Total	$3038.96

TIDWELL BROTHERS CONSTUCTION LLC
671 Meier Rd
Old Monroe, Mo 63146
Telephone 636-262-0366
Fax 636-665-5111
www.tbconstuctionllc.com

Tidwell Brothers Construction

1st Time

TIME & MATERIAL WORK ORDER / INVOICE

JOB NAME: Webster DATE: 5-8-17

JOB NUMBER: WORK ORDER NO:

WORK ORDER DESCRIPTION: Taped Filled + Finished Aquarium on 3rd Floor

1 Taper

15 hours

LABOR 0100000 L

DATE	NAME	# OF HOURS
	Tidwell	15
	TOTAL HOURS	

x $ ____ = $

MATERIALS 0200000 M / SUBCONTRACTORS

SUB / VENDOR NAME	MATERIAL PURCHASED / WORK PERFORMED	
	1 Roll paper Tape	$
		$
	1 Roll mesh tape	$
		$
	3 boxes Joint Comp.	$
		$

☐ RECEIPTS ATTACHED

TOTAL HAULING / COURIER

15% FEE ON MATERIALS / SUBCONTRACTORS $

TOTAL WORK ORDER $

For and in consideration of the execution of the work covered by this work order, you are authorized to charge our account, and we agree to pay, the sum of all labor, materials, subcontractor costs, overhead and fee.

COMPANY AUTHORIZING WORK:

SEND INVOICE TO:

AUTHORIZED REPRESENTATIVE SIGNATURE: Kirk Berkbrueger

ATTN:

webster 002

KCI Construction Company, Inc.
ST. LOUIS: 10815 Lake Bluff Drive | St. Louis, MO 63123
CAMDENTON: 5565 Old South 5 | Camdenton, MO 65020

O: 314.894.8888
F: 314.894.7418
www.kciconstruction.com

April 4, 2017

Mr. Jason Szachnieski
Paric Corporation
77 Westport Plaza, Suite 250
St. Louis, MO 63146

RE: Webster University – COR #023 - Delete Handrail Block outs for the Rain Garden Retaining Wall

Dear Mr. Szachnieski,

Below is a summary of the cost to delete the handrail block outs for the rain garden retaining wall as per your e-mail dated 4/3/17. At this time, we are only able to offer a credit to install the block outs as the block outs are already fabricated for the rain garden wall.

Delete (52) handrail block outs for the rain garden retaining wall

Carpenter – 4 hours @ $75.00 per hour	$ 300.00
Mark Up – 15%	$ 45.00
Total Credit	($ 345.00)

If you have any questions regarding this proposal, please contact me at your earliest convenience.

Sincerely,

Steve Teipe
Project Manager
314-200-3548

Enclosure

Cc: Stephen Ray, Paric
Devin Gates, Paric
File

PARIC
EXPERIENCE. EXCELLENCE.

May 30, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-125 - ASI 58: HWP-1 Feeder Change

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the deducted sum of Negative Six Hundred Eighty-Nine Dollars And Zero Cents (-$689.00).

This change will impact the scheduled completion date by 0 days.

- PCI-E-0116 (ASI 58: HWP-1 Feeder Change), Total $ -689.00

Owner contingency will be used for this change proposal. The scope includes the revision of the feeder location for circulating pump HWP-1 from panel 1NL2 to 1NH2 per ASI 58. The conduit had already been run for the original circuit and the new circuit must be fed from overhead.

Proposed Change Proposal Total: -$689.00

If this change proposal meets with your approval, please sign and return this proposal for our records by June 02, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/5/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 30-MAY-17
Time: 08:17 AM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0116	ASI 58: HWP-1 Feeder Change			-689.00	02-MAY-17					-689.00	-689.00	

Vendor Name					Description		
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	3,199.00	ASI 58: HWP-1 Feeder Change	Revise the feeder location for circulating pump HWP-1 from panel 1NL2 to 1NH2 pre ASI 58. The conduit had already been run for this circuit previously and now needs to run overhead.
DeLuca Plumbing LLC	15051	15400.001 S	Plumbing Sub	-3,856.00	ASI 58: HWP-1 Feeder Change	ASI#58 Alternate smaller hot water return pump per DeLuca COR#34 - Deduct $3,856
	15051	23100.001 M	Risk Management (1.1%)	-7.00	ASI 58: HWP-1 Feeder Change	Risk Management
	15051	23150.005 M	Contractor Default Insurance (1.25%)	-8.00	ASI 58: HWP-1 Feeder Change	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	-17.00	ASI 58: HWP-1 Feeder Change	Contractor Fee

	Estimated Amount	Quoted Amount	Final Amount	Budgeted Amount	Billing Amount
Total For EXT	**0.00**	**0.00**	**-689.00**	**-689.00**	**-689.00**
Grand Total:	**0.00**	**0.00**	**-689.00**	**-689.00**	**-689.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	30-MAY-17
To Change Order:		Run Time:	08:17 AM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

GUARANTEE
ELECTRICAL CONSTRUCTION 3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ASI - 058 CHANGED PUMP POWER.**
Date: 4/14/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

Webster ISB
ASI - 058 Voltage Change for HWP -1

Description of work

*** Pump HWP - 1 was Feeder was changed to be fed out of panel 1NL2 in liue of 1NH2. Conduit was already installed prior in the deck and a new conduit will ned to be fed overhead.**

Base bid shall increase by: $ 3,199.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.
We request a time extension of **20** days.
We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
3/4" EMT CONDUIT	95	45.62	8.84
3/4" EMT STL SS CONN	2	0.38	0.36
3/4" EMT STL SS CPLG	10	2.36	0.90
#12 THHN BLACK	90	9.49	0.68
1/4-20 MACHINE SCREW ANCHOR	1	0.33	0.30
1/4 PLATED T-ROD	34	15.13	6.99
1/4-20 HEX NUT - PLTD STL	11	0.16	0.54
812M4I 1/2-3/4" CONDUIT/ROD CLIP	11	5.44	1.36
PENETRATE WALL	2	2.66	3.00
FIRESTOP	4	75.80	1.00
Totals	**260**	**157.38**	**23.95**

Summary

General Materials 157.38

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN #	**ASI - 058 CHANGED PUMP POWER.**
Date:	4/14/2017
Project Name:	WEBSTER GROVES ISB BUILDING
Project Number:	WEBSTER GROVES ISB BUILDING
Page Number:	2

Summary (Cont'd)	
Material Total	**157.38**
LU 1 - GF - 1.5X - ELEC	136.68
LU 1 - F - 1.5X - ELEC	255.24
LU 1 - JW - 1.5X - ELEC	2,130.13
AS-BUILT DRAWINGS	150.00
EXPENDABLES	3.15
SMALL TOOLS	75.66
Subtotal	**2,908.24**
Markup	290.82
Subtotal	**3,199.06**
Adjustment #1	-0.06
Final Amount	**$3,199.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: ASI - 058 CHANGED PUMP POWER.
Final Amount:$3,199.00
Name: _____
Date: _____
Signature: _____
Change Order #: _____
I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

PARIC
EXPERIENCE. EXCELLENCE.

PARIC CORPORATION
77 Westport Plaza Suite 250
St. Louis, MO 63146
TEL: 636-561-9500
FAX: 636-561-9501

REQUEST FOR INFORMATION

DATE: March 06, 2017 **NO.:** RFI-472

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: HWP-1 Return pump clarifications

Response Required By: March 13, 2017

Drawing / Spec Reference:

Information Requested:

The attached HWP-1 was approved in 221119-003 and specified on P0601, however the plumbing contractor how believes this is the incorrect pump required for the domestic return. The pump has 3" pipe size flanges to connect to and the piping into and out of the pump is only 1" copper.

Please advise if this pump is correct as the plumbing contractor feels it is oversized for the application.

Response:

Please see ASI-058 issued April 7, 2017.

ARCHITECT'S RESPONSE:
This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By: Patrick Garner, WTA Date: 4/7/17

FERGUSON ENTERPRISES, INC.

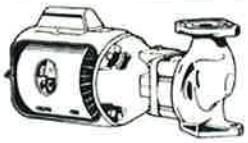
HWP-1 HOT WATER CIRCULATING PUMP

B105139LF	B&G	LF 1.5HP PDB40T CIRC PUMP 230/460V

Bell & Gossett
a xylem brand

SUBMITTAL
A-120H

JOB:	**REPRESENTATIVE:**	
UNIT TAG:	**ORDER NO.**	**DATE:**
ENGINEER:	**SUBMITTED BY:**	**DATE:**
CONTRACTOR:	**APPROVED BY:**	**DATE:**



Iron & Lead-Free† Bronze* Booster Pump

*Where potable water is supplied, use a lead-free† bronze pump.

DESCRIPTION

Bell & Gossett in-line three-piece booster pumps are designed for hydronic systems. Series 100 and HV are Listed with Underwriter's Laboratories.

CONSTRUCTION

Body: Cast Iron or Lead-Free† Bronze

Seal: Mechanical, Carbon on Ceramic

Shaft: Carbon Steel, Heat Treated

Pump and Motor Bearings:
- All except PD-38 and PD-40: Bronze Sleeve, Oil Lubricated
- PD-38 and PD-40: Ball Bearing, Permanently Lubricated

Coupler:
- All except PD38 and PD40: Flexible, Spring type
- PD38 and PD40: Flexible, sleeve type.

Motor: Bell & Gossett 1/12 hp thru 1-1/2 hp standard single and three phase drip-proof motors are Recognized under the Component Program of Underwriter's Laboratories, Inc. Bell & Gossett boosters with their respective Bell & Gossett manufactured standard 60 hertz single and three phase motors are Certified by CSA.

OPERATIONAL DATA

Maximum Working Pressure: 125 PSI (682 kPa)
Maximum Operating Temperature:
- Standard Seal: 225°F (107°C) continuous
- Special Seals: 250°F (121°C) continuous (consult local B&G Representative)

Maximum Motor RPM: 1750

IMPELLER:

PUMP MODEL NO.	IRON BODY	BRONZE BODY
Series 100® Pump	Polypropylene* or Lead-Free† Brass	Polypropylene* or Lead-Free† Brass
Series HV & 2	Phenolic* or Lead-Free† Brass	Phenolic* or Lead-Free† Brass
PR, 2-1/2, LD3	Steel, Zinc Plated or Lead-Free† Brass	Lead-Free† Brass
HD3, PD35, PD37	Steel, Zinc Plated or Lead-Free† Brass	Lead-Free† Brass
PD38 & PD40	Cast Iron or Lead-Free† Brass	Lead-Free† Brass

* System temperatures above 225 °F (107 °C) require a brass impeller.
† Contains less than 0.25% Lead content by weight on wetted surfaces.

SCHEDULE

MODEL NO.	FLANGE SIZE NPT INCHES	**STANDARD 60 CYCLE CHARACTERISTICS					TAGGING INFORMATION	QUANTITY			
								Iron Body		Bronze Body	
		HP	PH	VOLTAGE*	F.L. AMPS	RPM		STD	BI	BI	NFI
Series 100	3/4, 1, 1-1/4 & 1-1/2	1/12	1	115	1.75	1725					
Series PR	3/4, 1, 1-1/4 & 1-1/2	1/6	1	115	1.9	1725					-
Series HV	1, 1-1/4 & 1-1/2	1/6	1	115	1.9	1725					
2	2	1/6	1	115	1.9	1725					
2-1/2	2-1/2	1/4	1	115	3.0	1725					-
LD3	3	1/4	1	115	3.0	1725					-
HD3	3	1/3	1	115/230	4.2/2.1	1725					-
PD-35S	3	1/2	1	115/230	5.2/2.6	1725					-
PD-35T	3	1/2	3	208-230/460	1.8-1.7/.85	1750					-
PD-37S	3	3/4	1	115/230	7.0/3.5	1725					-
PD-37T	3	3/4	3	208-230/460	2.45-2.4/1.2	1750					-
PD-38S	3	1	1	115/230	9.8/4.5	1725					-
PD-38T	3	1	3	208-230/460	3.4-3.4/1.7	1725					-
PD-40S	3	1-1/2	1	115/230	18.0/9.0	1725					-
PD-40T	3	1-1/2	3	208-230/460	4.8-4.8/2.4	1725					-

**Motors with special electrical characteristics are available on request at additional cost.
*1 PH Motors: Built-in overload protection
3 PH Motors: Overload protection must be provided
Bell & Gossett Booster Pumps equipped with a drip-proof motor are recommended for indoor use only.

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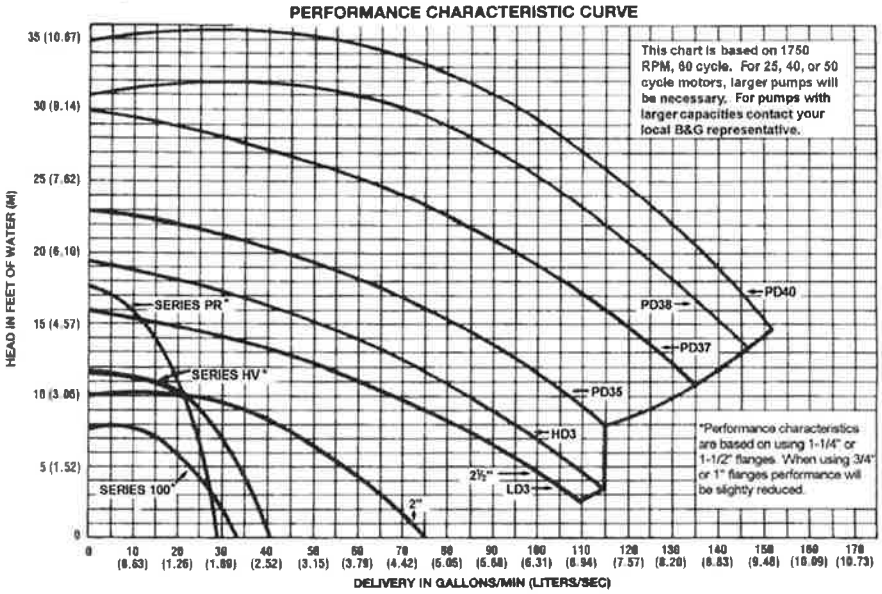
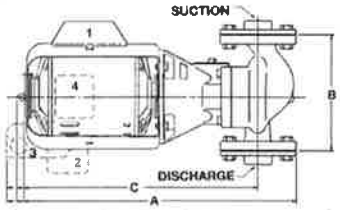
Iron & Bronze Booster Pump Submittal

A-120H



MODEL NO.	FLANGE SIZE NPT INCHES	DIMENSIONS IN INCHES (MM)			APPROX. SHPG. WT. LBS. (Kg)	
		A	B	C	IRON BODY	BRONZE BODY
Series 100	3/4, 1, 1-1/4 & 1-1/2	14-7/8 (378)	6-3/8 (162)	12-3/4 (324)	20 (9)	21 (10)
Series PR	3/4, 1, 1-1/4 & 1-1/2	15-1/4 (387)	8-1/2 (216)	12-3/4 (324)	30 (14)	32 (15)
Series HV	1, 1-1/4 & 1-1/2	15-3/8 (391)	8-1/2 (216)	13 (330)	28 (13)	30 (14)
2	2	16-5/8 (422)	8-1/2 (216)	14 (356)	36 (16)	39 (18)
2-1/2	2-1/2	17-1/4 (438)	10 (254)	14 (356)	54 (24)	58 (26)
LD3	3	17-1/4 (438)	10 (254)	14 (356)	53 (24)	57 (26)
HD3	3	17-1/2 (444)	10 (254)	14-1/4 (362)	55 (25)	59 (27)
PD-35S	3	20-1/4 (514)	12 (305)	16-7/8 (429)	75 (34)	80 (36)
PD-35T	3	20-1/4 (514)	12 (305)	16-7/8 (429)	75 (34)	80 (36)
PD-37S	3	20-1/4 (514)	12 (305)	16-7/8 (429)	75 (34)	80 (36)
PD-37T	3	20-1/4 (514)	12 (305)	16-7/8 (429)	75 (34)	80 (36)
PD-38S	3	22-11/16 (576)	14-1/2 (368)	18-15/16 (481)	128 (58)	138 (63)
PD-38T	3	23-15/16 (608)	14-1/2 (368)	20-3/16 (513)	125 (57)	135 (61)
PD-40S	3	24-3/4 (629)	14-1/2 (368)	21 (533)	130 (59)	140 (64)
PD-40T	3	21-7/8 (556)	14-1/2 (368)	18-1/8 (460)	127 (58)	137 (62)

Dimensions are subject to change.
Not to be used for construction purposes unless certified.



Electrical Box Arrangement for pumps with B&G Manufactured Motors

MODEL NO.	#1	#2	#3	#4
Series 100	115 & 230Volt 60Hz 1PH 110 & 220Volt 50Hz 1PH	–	–	–
Series HV, PR & 2	115 & 230Volt 60Hz 1PH 110 & 220Volt 50Hz 1PH	–	3PH	–
2-1/2", LD3 & HD3	–	1PH	–	–
PD35 & PD37	–	–	ALL	–
PD38 & PD40	–	–	–	ALL

TYPICAL SPECIFICATIONS

The Contractor shall furnish and install In-The-Line pumps as illustrated on the plans and in accordance with the following specifications:

1. The pumps shall be of the horizontal, oil-lubricated type. (Except PD-38, PD-40 are permanently lubricated) Specifically designed and guaranteed for quiet operation. Suitable for 125# (862 kPa) working pressure.
2. The pumps shall have a ground and polished steel shaft with a hardened integral thrust collar. The shaft shall be supported by two horizontal sleeve bearings designed to circulate oil. (Except PD-38, PD-40 are grease lubricated ball bearing design) The pumps are to be equipped with a mechanical seal with carbon seal face rotating against a ceramic seat. The motor shall be non-overloading at any point on pump curve.
3. The motor shall be of the drip-proof, sleeve-bearing, (Except PD-38, PD-40 are ball bearing) quiet operating, rubber-mounted construction. Motors shall have built-in thermal overload protectors. (Exception - PD models with 3-phase motors, see paragraph 4.)
4. For PD models with 3-phase motors, add the following: The Contractor shall furnish and install a magnetic starter for each booster pump with at least two thermal overload protectors. The starter shall be equipped with manual reset buttons.

All Units must be ITT Bell & Gossett Model No. _____, or approved equal with capacity of _____GPM at _____ft. head when directly driven through a self aligning flexible coupling by an oil lubricated motor, _____volts ____cycle___phase.

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone: (847)966-3700
Fax: (847)965-8379
www.xyleminc.com/brands/bellgossett

xylem
Let's Solve Water

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COR # 34 Webster ISB

DeLuca Plumbing, L.L.C.
8465 Delport Drive
St. Louis MO 63114
TO:
PARIC

Scope: **ASI 58**

Alternate smaller hot water return pump

Clarifications **No Drywall Patch**
No Pipe Insulation

Date: 5/25/17

Labor	SHEET	HRS	RATE	TOTAL
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
BIM			73.71	$ -
Delivery			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
			73.71	$ -
Labor Total Cost				$ -

EQUIPMENT AND OPERATORS		RATE	TOTAL
Total Equipment and Operator Cost		$ -	$ -

MATERIALS (and Units)	DATE	UNIT	QTY	RATE	TOTAL
					$ -
					$ -
Original Spec Pump			-1	$ 3,800.00	$ (3,800.00)
New Spec Pump			1	$ 295.00	$ 295.00
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
Total Material Costs					$ (3,505.00)

Subtotal Contractor Costs	$ (3,505.00)

Subcontractors	
Total Subcontractor	$ -

Subtotal Labor Material & Equipment Costs		$ (3,505.00)
Sub Contracted Costs		$ -
OH&P LABOR	10.00%	$ -
OH&P MATERIALS	10.00%	$ (350.50)
OH&P SUBS	5.00%	$ -
Total Subcontractor Cost		$ (3,855.50)

Total Price	$ (3,856)

-------- Forwarded Message --------
Subject:RE: ASI 58 HWP-1 pump
Date: Thu, 25 May 2017 18:05:26 +0000
From: Charles.Sutton@Ferguson.com
To:billp@delucaplbg.com

Price Quotation # B939435

FERGUSON - O'FALLON #1606
76 HUBBLE DRIVE
O FALLON, MO 63368-8694

Phone : 636-300-5300
Fax : 636-300-3335

Bid No.....: B939435
Bid Date...: 04/14/17
Quoted By: CES
Customer.: DELUCA PLUMBING LLC
WEBSTER UNIV SCIENCE BDG
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust Phone: 314-427-5551
Terms.....: NET 10TH PROX
Ship To.....: DELUCA PLUMBING LLC
WEBSTER UNIV SCIENCE BDG
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust PO#..: WEBSTER UNIV. SCIENC
Job Name.: WEBSTER UNIV. SCIENCE BDG

Item	Description	Quantity	Net Price	UM	Total
	HWP-1 PUMP (SPECIFIED)				

B105139LF	LF 1.5HP PDB40T CIRC PUMP 230/460V	1		EA	
	SUBTOTAL				3800.00
	HWP-1 PUMP (SUPPLIED)				

B103418LF	LF 1/25HP BRZ NBF25 CIRC PUMP 115V	1		EA	
B101011LF	LF 3/4 BRZ 100 BOOST FLG	1		PR	
	SUBTOTAL				295.00

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No: 04561.01

Architect's ASI No: 058

Project:
Webster University
Interdisciplinary Science
Building

Date Issued: 04/07/17

Contract Date:

Reason Code: 05 A/E Scope

Discipline Code: 03 Electrical
11 Plumbing

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Drawings:

Sheets: E0101.A, E0504, P0601

Manufacturers Cut Sheet:
Bell & Gossett – Submittal sheets 'A-127L' for model number NBF-25

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

ASI-058 is being issued for the purpose of providing a revised domestic hot water circulating pump selection and for updating the circuit serving HWP-1.

SHEET E0101.A – LEVEL 01 AREA A FLOOR PLAN – ELECTRICAL & AUXILIARY

- Remove 3-pole homerun circuit 1NH2-20, 22, 24 and disconnect switch to HWP-1.
- Add 1-pole homerun 1NL2-35 and disconnect switch for HWP-1.

SHEET E0504 – PANEL SCHEDULES

- Change 1NH2-20,22,24 15Amp circuit serving HWP-1 to 'Spare'
- Change 'Spare' 20Amp circuit 1NL2-35 to serve HWP-1 with 125Watt load.

SHEET P0601 – SCHEDULES – PLUMBING

- Revised domestic hot water circulating pump selection. Refer to drawing P0601 for the revised 'Plumbing Fixtures and Equipment Schedule.'

Issued by Architect: Daniel R Veile, William Tao & Associates, Inc.
Michael R. Whitworth, Webb Engineering Services, Inc.

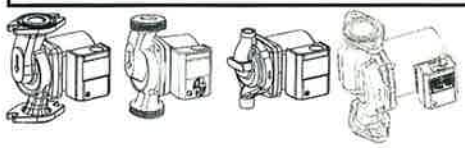
Accepted by Contractor:

Bell & Gossett
a xylem brand

SUBMITTAL

A-127L

JOB: ggg	**REPRESENTATIVE:** Blackmore and Glunt	
UNIT TAG:	**ORDER NO.**	**DATE:** 3/24/2017
ENGINEER:	**SUBMITTED BY:**	**DATE:**
CONTRACTOR:	**APPROVED BY:**	**DATE:**



Lead-Free† Bronze and Stainless Steel Bodied

System Lubricated Circulators

c UL us LISTED

DESCRIPTION

A series of in-line wet rotor circulation pumps designed specifically for quiet operation in open (potable) water systems. These pumps have lead-free† bronze or stainless steel bodies.

Automatic Timer and Aquastat accessories are available. (See Submittal A-128A for details).

CONSTRUCTION MATERIALS

Pump Body:
- NBF: Lead-Free† Bronze
- SSF: Stainless Steel

Bearings: Carbon

Impeller: Noryl
Shaft: Ceramic

†Contains less than 0.25% Lead content by weight on wetted surfaces.

OPERATING DATA

Maximum Working Pressure: 150 psi (10.3 Bar)
Minimum Operating Temperature: 40°F (5°C)

Maximum Operating Temperature
- NBF-25, NBF-33, NBF-36, NBF-45: 225°F (107°C)
- All Others: 230°F (110°C)

MODEL NUMBER	PART NUMBER	CONNECTION	APPROX. SHPG. WT. Lbs. (Kg)	STANDART 60 CYCLE 115 VOLT SINGLE PHASE			TAGGING INFORMATION	QUANTITY
				WATTS	F.L. AMPS	RPM		
NBF-8S/LW	103257LF	1/2" Sweat	9.0 (4.1)	39	0.38	2800		
NBF-9U/LW	103258LF	Union (See Following Page)	9.3 (4.2)	41	0.40	2800		
SSF-9U/LW	103360LF	Union (See Following Page)	9.3 (4.2)	41	0.40	2800		
NBF-10S/LW	103259LF	1/2" Sweat	9.0 (4.1)	52	0.46	2800		
NBF-12U/LW	103261LF	Union (See Following Page)	9.3 (4.2)	55	0.48	2800		
SSF-12U/LW	103361LF	Union (See Following Page)	9.3 (4.2)	55	0.48	2800		
NBF-12F/LW	103260LF	Flange 3/4, 1, 1-1/4, 1-1/2	9.5 (4.3)	55	0.48	2800		
SSF-12F/LW	103358LF	Flange 3/4, 1, 1-1/4, 1-1/2	9.5 (4.3)	55	0.48	2800		
NBF-18S	103316LF	1/2" Sweat	9.0 (4.1)	90	0.74	3000		
NBF-22U	103255LF	Union (See Following Page)	9.3 (4.2)	92	0.80	2940		
SSF-22U	103362LF	Union (See Following Page)	9.3 (4.2)	92	0.80	2940		
NBF-22	103252LF	Flange 3/4, 1, 1-1/4, 1-1/2	9.5 (4.3)	92	0.80	2940		
SSF-22	103357LF	Flange 3/4, 1, 1-1/4, 1-1/2	9.5 (4.3)	92	0.80	2940		
NBF-25*	103418LF	Flange 3/4, 1, 1-1/4, 1-1/2	10.4 (4.7)	125	1.10	2950		1
NBF-33	103351LF	Flange 3/4, 1, 1-1/4, 1-1/2	10.4 (4.7)	125	1.10	2950		
NBF-36*	103401LF	Flange 3/4, 1, 1-1/4, 1-1/2	13.1 (6.0)	270	2.30	3300		
NBF-45*	103405LF	Flange 1, 1-1/4, 1-1/2	14.5 (6.6)	270	2.30	3300		

*3-speed circulators

TYPICAL SPECIFICATIONS

The contractor shall furnish and install in-line circulating pumps as illustrated on the plans and in accordance with the following specifications:

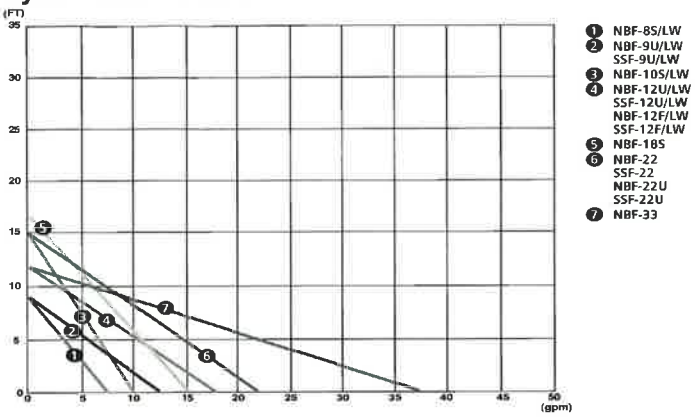
1. The pumps shall be of the horizontal system lubricated type specifically designed and guaranteed for quiet operation.
2. Pump to be suitable for _____°F (_____°C) [choose one: 225°F (107°C) for NBF-25, NBF-33, NBF-36, NBF-45 or 230°F (110°C) for all other circulators] operation at 150 psig (10.3 Bar) working pressure.
3. The pumps shall have a ceramic shaft supported by carbon bearings. Bearings are to be lubricated by the circulating fluid.
4. Pump body shall be lead-free bronze for NBF circulators or stainless steel for SSF circulators.
5. Motor stator to be isolated from circulating fluid through use of stainless steel can. Rotor to be sheathed in stainless steel.
6. Motors shall be non-overloading at any point on the pump curve. NBF-36 & NBF-45 to have built-in thermal protection. All other motors to have built-in impedance protection.
7. NBF-25 has an optional check valve.

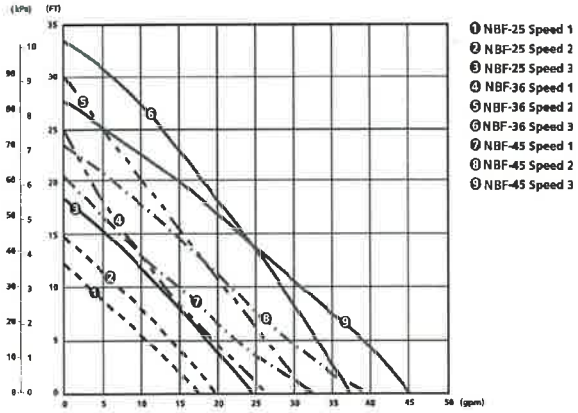
Pumps to have a capacity of _____GPM at _____ foot head when powered by 115 volt, 60 cycle single phase electrical supply.

All pumps are to be Xylem - Bell & Gossett Model _____.

xylem
Let's Solve Water

System Lubricated Circulators





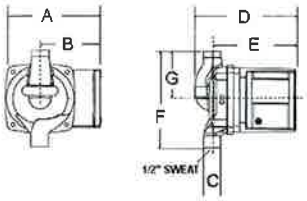
HALF UNION CONNECTIONS

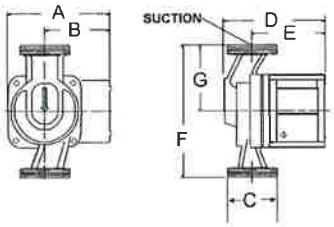
For NBF-9U/LW, NBF-12U/LW, NBF-22U, SSF-9U/LW, SSF-12U/LW, SSF-22U

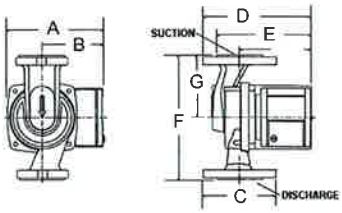
MODEL NUMBER	PART NUMBER	DESCRIPTION (SETS OF 2)
UC-1/2S	113203LF	1/2" Bronze Union Sweat
UC-3/4S	113201LF	3/4" Bronze Union Sweat
UC-3/4NPT	113202LF	3/4" Bronze Union NPT Female

Bronze Half Union (Sweat) UC-1/2S and UC-3/4S

Bronze Half Union (Threaded) UC-3/4NPT







MODEL	PART NUMBER	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)
NBF-8S/LW	103257LF	4-7/8 (124)	3-3/16 (81)	1/2 (13)	5-7/32 (132)	4-9/32 (109)	5 (127)	2-1/2 (63)
NBF-9U/LW	103258LF	4-7/8 (124)	3-3/16 (81)	1-1/4 (32)	5-1/16 (129)	3-11/16 (93)	6-1/8 (156)	3-1/16 (78)
SSF-9U/LW	103360LF	4-7/8 (124)	3-3/16 (81)	1-1/4 (32)	5-1/16 (129)	3-11/16 (93)	6-1/8 (156)	3-1/16 (78)
NBF-10S/LW	103259LF	4-7/8 (124)	3-3/16 (81)	1/2 (13)	5-7/32 (132)	4-9/32 (109)	5 (127)	2-1/2 (63)
NBF-12U/LW	103261LF	4-7/8 (124)	3-3/16 (81)	1-1/4 (32)	5-1/16 (129)	3-11/16 (93)	6-1/8 (156)	3-1/16 (81)
SSF-12U/LW	103361LF	4-7/8 (124)	3-3/16 (81)	1-1/4 (32)	5-1/16 (129)	3-11/16 (93)	6-1/8 (156)	3-1/16 (78)
NBF-12F/LW	103260LF	4-7/8 (124)	3-3/16 (81)	3-3/16 (81)	5-9/16 (141)	3-11/16 (93)	6-3/8 (162)	3-3/16 (82)
SSF-12F/LW	103358LF	4-7/8 (124)	3-3/16 (81)	3-3/16 (81)	5-9/16 (141)	3-11/16 (93)	6-3/8 (162)	3-3/16 (82)
NBF-18S	103316LF	4-7/8 (124)	3-3/16 (81)	1/2 (13)	5-7/32 (132)	4-9/32 (109)	5 (127)	2-1/2 (63)
NBF-22U	103255LF	4-7/8 (124)	3-3/16 (81)	1-1/4 (32)	5-1/16 (129)	3-11/16 (93)	6-1/8 (156)	3-1/16 (78)
SSF-22U	103362LF	4-7/8 (124)	3-3/16 (81)	1-1/4 (32)	5-1/16 (129)	3-11/16 (93)	6-1/8 (156)	3-1/16 (78)
NBF-22	103252LF	4-7/8 (124)	3-3/16 (81)	3-3/16 (81)	5-9/16 (141)	3-11/16 (93)	6-3/8 (162)	3-3/16 (82)
SSF-22	103357LF	4-7/8 (124)	3-3/16 (81)	3-3/16 (81)	5-9/16 (141)	3-11/16 (93)	6-3/8 (162)	3-3/16 (82)
NBF-25*	103418LF	5-1/8 (130)	3-3/16 (81)	3-3/16 (81)	6-3/16 (157)	4-7/8 (124)	6-3/8 (162)	2-1/2 (63)
NBF-33	103351LF	4-7/8 (124)	3-3/16 (81)	3-3/16 (81)	6-3/16 (157)	3-11/16 (94)	6-3/8 (162)	3-3/16 (82)
NBF-36*	103401LF	5-3/4 (146)	3-9/16 (91)	3-3/16 (81)	6-3/16 (157)	5-3/8 (137)	6-3/8 (162)	3-3/16 (82)
NBF-45*	103405LF	5-3/4 (146)	3-9/16 (91)	3-7/16 (87)	7-3/8 (187)	5-1/2 (140)	8-1/2 (216)	4-1/4 (108)

Dimensions are subject to change. Not to be used for construction purposes unless certified.
Companion Flanges Available in Sizes: 3/4", 1", 1-1/4", and 1-1/2"

* 3-speed circulators

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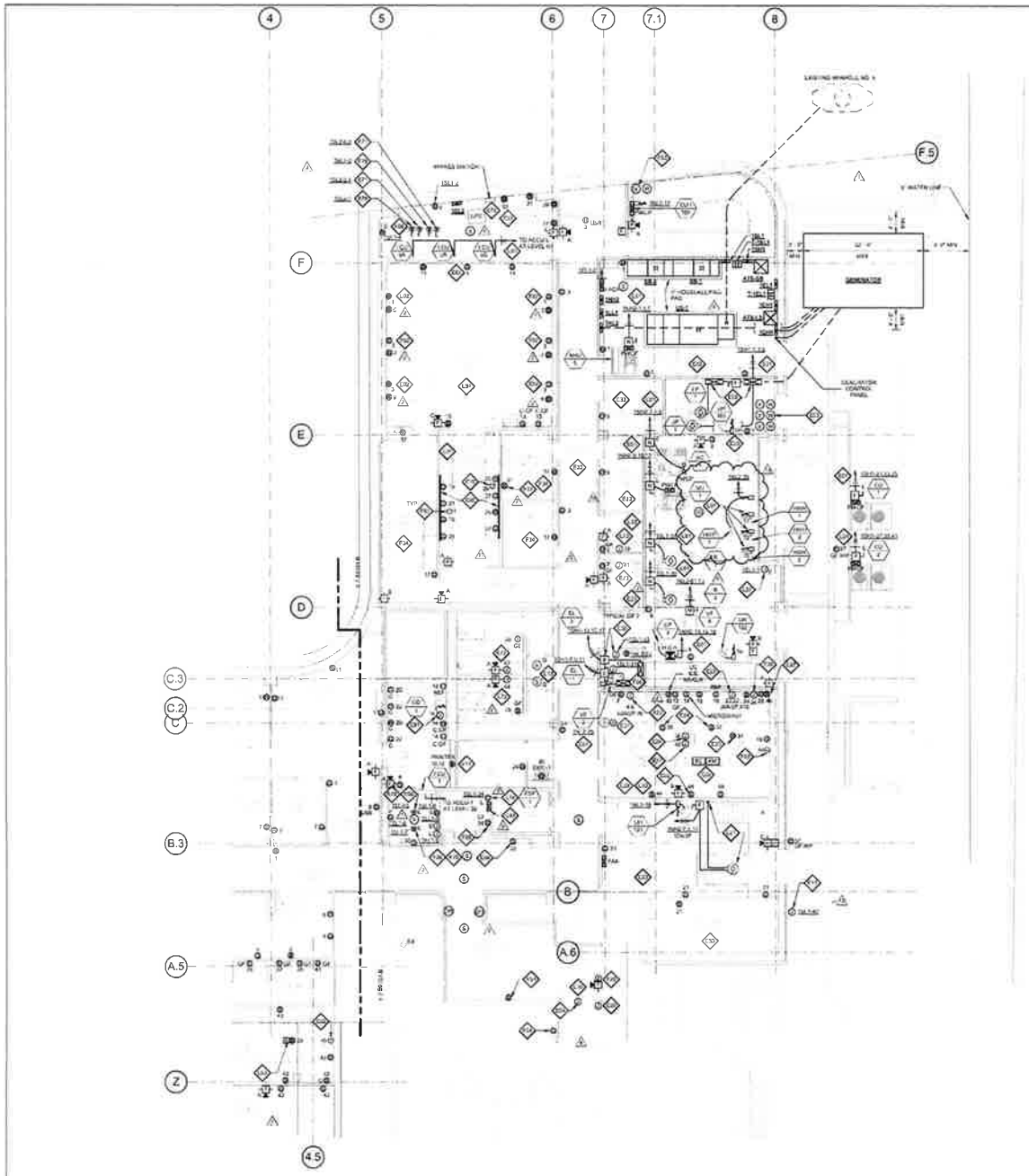

1 LEVEL 01 - AREA A - FLOOR PLAN - POWER AND AUXILLARY

GENERAL NOTES:

A DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX"

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OF DATA, VOICE AND AV

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 1NL1 UNLESS NOTED OTHERWISE

KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY WIREMOLD ALA420 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E09 MOUNT RECEPTACLE IN ELEVATOR PIT. COORDINATE EXACT LOCATION WITH ELEVATOR CONTRACTOR

E10 UNDERCOUNT REFRIGERATOR. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL PLANS AND ELEVATIONS

E11 PROVIDE POWER AND FINAL CONNECTION TO WALL MOUNTED BLUE LIGHT EMERGENCY INTERCOM STATION

E12 PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU-1 & AHU-2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDICATOR LIGHT(S) IN CEILING BELOW

E17 PROVIDE NEMA 5-20R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN

E18 PROVIDE POWER AND FINAL CONNECTION TO ELEVATOR SUMP PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH-IN

E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN

E21 PROVIDE POWER AND FINAL CONNECTION TO DOCK LEVELER AND CONTROLS PER MANUFACTURERS WRITTEN INSTRUCTIONS. COORDINATE CONTROL AND DISCONNECT LOCATION WITH DOCK LEVELER INSTALLER PRIOR TO INSTALLATION

E22 PROVIDE POWER AND FINAL CONNECTION TO DISH WASHER. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E23 PROVIDE POWER AND FINAL CONNECTION TO DOUBLE OVEN. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E24 RECEPTACLE MOUNTED IN COUNTER APRON. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION

E25 RECEPTACLE MOUNTED INSIDE CABINET FOR COMPUTER. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION

E26 PROVIDE POWER AND FINAL CONNECTION TO DROP IN COOK TOP. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E27 PROVIDE POWER AND FINAL CONNECTION TO ISLAND HOOD. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E28 REFER TO KITCHEN EQUIPMENT DRAWINGS FOR MOUNTING HEIGHTS OF ALL ELECTRICAL DEVICES IN THIS ROOM AND FOR POWER REQUIREMENTS PRIOR TO ROUGH-IN

E29 PROVIDE FIRE ALARM MONITOR MODULE AND CONTROL MODULE CONNECTED TO FIRE ALARM SYSTEM AT HOOD. PROVIDE WIRING BETWEEN HOOD AND FIRE SUPPRESSION SYSTEM. REFER TO KITCHEN HOOD EXTINGUISHING SYSTEM WIRING DIAGRAM ON SHEET E402

E30 PROVIDE POWER FOR HOOD FIRE PROTECTION SYSTEM. INTERCONNECT EXHAUST FANS AND MAKE-UP AIR FANS TO MICRO SWITCH IN FIRE PROTECTION CABINET. REFER TO KITCHEN HOOD EXTINGUISHING SYSTEM WIRING DIAGRAM

E31 PROVIDE J-BOX AND CONDUIT IN WALL FOR REMOTE MANUAL PULL STATION. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

E32 PROVIDE POWER MODULE SWITCH FOR ELEVTOR AND A JUNCTION BOX WITH A 120V/20A CIRCUIT FOR CONNECTION OF ELEVATOR CONTROLS. PROVIDE ALL FINAL CONNECTIONS TO ELEVATOR CONTROLER AND ELEVATOR CAB PER MANUFACTURERS WRITTEN INSTRUCTIONS. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION

E33 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1NL2

E34 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1LL1

E35 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR

E64 EXTEND CIRCUIT FROM EXISTING RECEPTACLES SERVING THIS AREA

E65 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR

E66 SEE ELEVATOR DETAIL ON SHEET E402 FOR ADDITIONAL POWER & FIRE ALARM REQUIREMENTS

E68 FIRE PUMP CONTROLLER AND JOCKEY PUMP CONTROLLER SEE LINE LINE DIAGRAM FOR FEEDER INFORMATION

E69 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB4SFC WITH A BRASS FLANGED COVER CAT. NO. FB3TCB3 NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE) (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E70 PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED POU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E71 PROVIDE NEMA L6-20R, 30A-208V TWIST LOCK RECEPTACLE FOR RACK MOUNTED POU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E72 UPS AND EXTERNAL BYPASS SWITCH FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR. REFER TO TECHNOLOGY DRAWINGS AND ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION

E73 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER

E83 CONNECT WATER ALARM PANEL TO SAME RECEPTACLE SERVING SUMP PUMP

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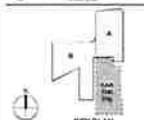
No.	Description	Date
19	ASI 056	07 APR 2017
18	ASI 043	03 APR 2017
17	ASI 038	27 JAN 2017
16	ASI 037	16 JAN 2017
14	ASI 033	12 JAN 2017
13	ASI 031	12 JAN 2017
12	ASI 030	12 JAN 2017
11	ASI 029	12 JAN 2017
10	ASI 028	12 JAN 2017
9	ASI 027	12 JAN 2017
8	ASI 026	12 JAN 2017
7	ASI 025	12 NOV 2016
6	ASI 024	08 NOV 2016
5	ASI 021 Note accepted by owner	28 OCT 2016
4	ASI 020	03 OCT 2016
3	ASI 019	21 JULY 2016
2	ADDENDUM 2.2	13 APRIL 2016
1	ADDENDUM 2.1	11 APRIL 2016
	ISSUED FOR CONSTRUCTION (IFC)	01 APR 2016



Drawing Title

LEVEL 01 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 0420.01 Checked by

E0101.A

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Panel: 1NL2

Panel: 1NL1

Panel: 1NH2

Location: MAIN ELECTRICAL 192
Supply From: US 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MLO
Mains Rating: 250 A
MCB Rating:

Panel: 1LL2

Panel: 1LL1

Location: MAIN ELECTRICAL 192
Supply From: SB 2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MLO
Mains Rating: 225 A
MCB Rating:

Panel: 1NL3

Location: CONTROL 1608
Supply From: SB 1
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

Panel: 2LL1

Panel: 2NL1

Panel: 2NH1

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No.	Description	Date
8	ASI 050	07 APR 2017
7	ASI 034	04 NOV 2016
3	ASI 010	21 JULY 2016
2	ADDENDUM 4	19 APRIL 2016
1	ADDENDUM 2	[illegible]
	ISSUED FOR CONSTRUCTION (BP3)	[illegible]

Drawing Title

PANEL SCHEDULES

Project No. 04001.01 Checked by

E0504

PLUMBING FIXTURES AND EQUIPMENT

WATER CLOSET WC-1 MEN'S / WOMEN'S TOILET ROOM	FIXTURE - AMERICAN STANDARD MODEL #3351 180 "AFWALL" VITREOUS CHINA WALL HUNG TOP STUD SIPHON JET FLUSH ACTION ELONGATED BOWL WATER CLOSET 1.6 GPF STANDARD MOUNTING HEIGHT FLUSH VALVE - SLOAN ROYAL MODEL 8111-1.6/1.1 (DUAL FLUSH) SENSOR OPERATED BATTERY POWERED FLUSH VALVE WITH MANUAL OVERRIDE BUTTONS RATED FOR 1.6/1.1 GPF WITH SCREWDRIVER STOP AND CHROME PLATED CAST BRASS WALL FLANGE WITH SET SCREW SEAT - OLSONITE MODEL #10-AM CC SS WITH DURAGUARD ANTIMICROBAL BUILT-IN SEAT PROTECTION AND STAINLESS STEEL HINGES ELONGATED HEAVY DUTY OPEN FRONT LESS COVER CARRIER - J.R. SMITH ADJUSTABLE WITH PROPER DRAIN FITTING ASSEMBLY TO BE COMPATABLE WITH FIXTURE AND APPLICATION
WATER CLOSET WC-2 ADA MEN'S / WOMEN'S TOILET ROOM & PRIVATE TOILET ROOMS	FIXTURE - AMERICAN STANDARD MODEL #3351 180 "AFWALL" VITREOUS CHINA WALL HUNG TOP STUD SIPHON JET FLUSH ACTION ELONGATED BOWL WATER CLOSET 1.6 GPF 18" AFF MOUNTING HEIGHT FOR ADA COMPLIANCE FLUSH VALVE - SLOAN ROYAL MODEL 8111-1.6/1.1 (DUAL FLUSH) SENSOR OPERATED BATTERY POWERED FLUSH VALVE WITH MANUAL OVERRIDE BUTTONS RATED FOR 1.6/1.1 GPF WITH SCREWDRIVER STOP AND CHROME PLATED CAST BRASS WALL FLANGE WITH SET SCREW SEAT - OLSONITE MODEL #10-AM CC SS WITH DURAGUARD ANTIMICROBAL BUILT-IN SEAT PROTECTION AND STAINLESS STEEL HINGES ELONGATED HEAVY DUTY OPEN FRONT LESS COVER CARRIER - J.R. SMITH ADJUSTABLE WITH PROPER DRAIN FITTING ASSEMBLY TO BE COMPATABLE WITH FIXTURE AND APPLICATION
URINAL UR-1 MEN'S TOILET ROOM ADA	FIXTURE - AMERICAN STANDARD MODEL 6590 005 "WASHBROOK" WASHOUT FLUSH ACTION TYPE TOP STUD WALL HUNG VITREOUS CHINA URINAL 0.5 GPF WITH WALL HANGER 2" OUTLET STANDARD MOUNTING HEIGHT FLUSHOMETER - SLOAN ROYAL MODEL 8186 05 SENSOR OPERATED BATTERY POWERED FLUSH VALVE WITH OVERRIDE BUTTON CHROME PLATED FLUSH VALVE WITH SCREW DRIVER ANGLE STOP WITH RESISTANT STOP CAP ADJUSTABLE TAILPIECE 3/4" HIGH BACK PRESSURE VACUUM BREAKER SPUD COUPLING AND FLANGE FOR TOP SPUD CARRIER - J.R. SMITH ADJUSTABLE WITH PROPER DRAIN FITTING ASSEMBLY TO BE COMPATABLE WITH FIXTURE AND APPLICATION
LAVATORY LAV-1 MEN'S / WOMEN'S TOILET ROOM ADA	FIXTURE - AMERICAN STANDARD MODEL 0497 221 "OVALYN" VITREOUS CHINA [illegible] UNDER COUNTER LAVATORY 4 INCH CENTERS FOR FAUCET WITH MOUNTING KIT FOR UNDER COUNTER INSTALLATION FAUCET - [illegible] DECK MOUNTED 4" CENTER SINGLE LEVER HOT AND COLD WATER CHROME PLATED FAUCET WITH [illegible] GPM FLOW RESTRICTOR DRAIN - 1 1/4" CHROME PLATED CAST BRASS PERFORATED GRID DRAIN TRAP - 1 1/4" X 1-1/2" CHROME PLATED 17 GAUGE CAST P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" NPS ANGLE WITH FLEXIBLE RISER LOOSE KEY 1/4 TURN STOPS AND WALL ESCUTCHEONS INSTALL TRUEBRO SERIES 102 MOLDED FOAM PLASTIC ADA COMPLIANT COVERS ON SUPPLIES, WASTE, WASTE ARM AND TRAP
LAVATORY LAV-2 PRIVATE TOILET ROOMS ADA	FIXTURE - AMERICAN STANDARD MODEL [illegible] "LUCERNE" VITREOUS CHINA 20 INCH X 18 INCH WALL HUNG LAVATORY 4 INCH CENTERS FOR FAUCET DRILLED FOR CONCEALED ARM CARRIER INSTALLATION MOUNT UNDERSIDE OF RIM AT 29 INCHES AFF FOR WHEELCHAIR ACCESS FAUCET - CHICAGO FAUCET MODEL [illegible] DECK MOUNTED 4" ON CENTER SINGLE LEVER HOT AND COLD WATER CHROME PLATED FAUCET WITH [illegible] GPM FLOW RESTRICTION DRAIN - 1 1/4" CHROME PLATED CAST BRASS PERFORATED GRID DRAIN TRAP - 1 1/4" X 1-1/2" CHROME PLATED 17 GAUGE CAST P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" NPS ANGLE WITH FLEXIBLE RISER LOOSE KEY 1/4 TURN STOPS AND WALL ESCUTCHEONS INSTALL TRUEBRO SERIES 102 MOLDED FOAM PLASTIC ADA COMPLIANT COVERS ON SUPPLIES, WASTE, WASTE ARM AND TRAP
CLINICAL SERVICE SINK (CSS-1) CADAVER LAB	FIXTURE - AMERICAN STANDARD WALL HUNG CLINICAL SERVICE SINK MODEL 9512 999 020 WITH THREE RIM GUARDS MODEL 7832512 075 FAUCET - AMERICAN STANDARD MODEL 8345 115 002 EXPOSED YOKE WALL MOUNT UTILITY FAUCET WITH BOTTOM FORK BRACE AND OFFSET SHANKS POLISHED CHROME FINISH CAST BRASS BODY METAL WRISTBLADE HANDLES WITH RED AND BLUE COLOR INDICATORS AND VANDAL RESISTANT SCREWS 1/4" TURN CERAMIC DISC VALVE CARTRIDGES BRASS SPOUT WITH BRACKET HOOK BOTTOM FORK BRACED TO WALL INTEGRAL SUPPLY STOPS OFFSET SHANKS WITH INTEGRAL CHECK VALVES 1/2" FEMALE INLETS WITH INLETS WITH ADJUSTABLE CENTERS FROM 8" TO 10" FLUSH VALVE - SLOAN 117 EXPOSED SERVICE SINK TOP STUD FLUSHOMETER RATED FOR 6.5 GPF HIGH CHLOROMINE RESISTANT PERMEX SYNTHETIC RUBBER DIAPHRAGM WITH LINEAR FILTERED BYPASS AND VORTEX CLEANSING ACTION ADA COMPLIANT METAL OSCILLATING NON HOLD OPEN HANDLE WITH TRIPLE SEAL HANDLE PACKING 1" I.P.S. SCREWDRIVER BAK-CHEK ANGLE STOP ADJUSTABLE TAILPIECE VACUUM BREAKER WITH FLUSH CONNECTION STUD COUPLING AND STUD FLANGE FOR 1 1/2" TOP STUD SWEAT SOLDER ADAPTOR WITH COVER TUBE AND CAST WALL FLANGE PROVIDE WITH J. R. SMITH CARRIER SERIES 0831Y(X) WITH FITTING SPECIFIC TO THE FIXTURE
SCRUB SINK SS-1 SIM LAB AND CADAVER LAB	FIXTURE - ELKAY MODEL #EWSF13020SACC SURGICAL SINGLE STATION SCRUB UP SINK WALL MOUNTED #16 GAUGE TYPE 304 (18/8) STAINLESS STEEL COVED CORNERS KEYED ACCESS DOOR WALL HANGER FULL LENGTH BACKSPLASH AND FULL EXPOSURE UNIT TO BE POLISHED TO A SATIN FINISH AND THE UNDERSIDE TO BE SOUND DEADENED FAUCET - ELKAY MODEL LKB721C SENSOR OPERATED DECK MOUNTED NON MIXING GOOSENECK FAUCET WITH ADJUSTABLE SENSOR EYES FAUCET TO BE CHROME PLATED SOLID BRASS CONSTRUCTION WITH 2.0 GPM LAMINAR FLOW CONTROL ASSEMBLY TO BE PROVIDED WITH MANUFACTURERS CONTROL MODULE AND POWER CABLES DUAL POWER OPTIONS AC PLUG IN OR 4-AA BATTERIES IN LINE FILTER WITH CLEAN OUT TRAP AND FLEXIBLE SUPPLY HOSE DRAIN - ELKAY #LK180 STAINLESS STEEL PERFORATED STRAINER GRID DRAIN WITH 1 1/2" O.D. X 4" STAINLESS STEEL TAILPIECE THERMOSTATIC MIXING VALVE - ELKAY MODEL LK723 POINT OF USE WATER TEMPERING VALVE COMPLYING WITH ASSE 1016 AND ASSE 1070 POSITIVE SHUTOFF OF HOT WATER WHEN COLD WATER SUPPLY IS LOST ROUGH BRONZE BODY AND CAP WITH REPLACEABLE CORROSION RESISTANT COMPONENTS SET POINT FACTORY PRESET AT 100 DEG F OUTLET TEMPERATURE RANGE 80 TO 120 DEG F INLETS / OUTLET CONNECTIONS 1/2" NPT TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
SINK SK-1 BREAKROOMS (TO BE FURNISHED AND INSTALLED WITH FIXTURE GD-1)	FIXTURE - ELKAY MODEL GLGR2521 GOURMET (CELEBRITY) SINGLE BOWL (21 x 15.25 x 5.25) TOP MOUNT STAINLESS STEEL SINK 18 GAUGE TYPE 304 CONSTRUCTION WITH SATIN POLISH FINISH AND FULLY UNDERCOATED TO DAMPEN SOUND SINK TO BE 4 HOLE PUNCHED FOR FAUCET AND SIDE SPRAY FAUCET - CHICAGO MODEL [illegible] MANUAL FAUCET WITH SIDE SPRAY CHROME PLATED FINISH 8" L TYPE SWING SPOUT [illegible] VANDAL PROOF [illegible] HANDLES 1/2" NPSM SUPPLY INLETS AND COUPLING NUT FOR 1/2" FLEXIBLE RISER WITH SPOUT AND 2.2 GPM VANDAL PROOF AERATOR OUTLET DRAIN - TO BE INSTALLED WITH GARBAGE DISPOSER GD-1 TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
GARBAGE DISPOSER GD-1	INSINKERATOR MODEL EVOLUTION COMPACT FOOD WASTE DISPOSER WITH MULTI GRIND AND SOUND SEAL TECHNOLOGIES 120 VOLT [illegible] MOTOR WITH STAINLESS STEEL GRIND COMPONENTS PERMANENTLY LUBRICATED UPPER AND LOWER BEARINGS AND MANUAL RESET OVERLOAD TO BE FURNISHED AND INSTALLED WITH FIXTURE SK-1
SINK SK-2 NURSING MOCK EXAM ROOMS LACT (275)	FIXTURE - ELKAY MODEL [illegible] SINGLE BOWL TOP MOUNT STAINLESS STEEL SINK 18 GAUGE TYPE 304 CONSTRUCTION WITH SATIN POLISH FINISH AND FULLY UNDERCOATED TO DAMPEN SOUND SINK TO BE 3 HOLE PUNCHED FOR FAUCET FAUCET - CHICAGO MODEL [illegible] MANUAL FAUCET CHROME PLATED FINISH RIGID GOOSENECK SPOUT WRIST BLADE HANDLES 1/2" NPSM SUPPLY INLETS AND COUPLING NUT FOR 1/2" FLEXIBLE RISER WITH SPOUT AND 2.2 GPM VANDAL PROOF LAMINAR OUTLET DRAIN - ELKAY [illegible] CHROME PLATE STAMPED BRASS DRAIN OUTLET FITTING WITH 3" CHROME PLATED STEEL PERFORATED GRID STRAINER TO INCLUDE [illegible] CHROME PLATED OFF SET TAILPIECE WITH CAST BRASS ELBOW TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
SINK SK-3 NURSING CLASSROOMS / LABS	FIXTURE - SINK TO BE INTEGRAL WITH COUNTERTOP CONTRACTOR TO FURNISH AND INSTALL FAUCET AND DRAIN ASSEMBLY UNDERCOATED TO DAMPEN SOUND SINK TO BE 3 HOLED PUNCHED FOR FAUCET FAUCET - CHICAGO MODEL 786-GN2BVBE3-2ABCP CHROME PLATED FINISH GOOSENECK SPOUT VANDAL PROOF WRIST BLADE HANDLES 1/2" NPSM SUPPLY INLETS AND COUPLING NUT FOR 1/2" FLEXIBLE RISER WITH SPOUT AND 2.2 GPM VANDAL PROOF AERATOR OUTLET DRAIN - ELKAY #LK 35 TYPE 304 STAINLESS STEEL BODY WITH REMOVABLE CONICAL BASKET STRAINER WITH METAL STEM AND RUBBER STOPPER POLISHED FINISH CHROME PLATED BRASS 1 1/2" x 4" TAILPIECE TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
MOP SINK MS-1	[illegible]
ELECTRIC WATER COOLER EWC-1	[illegible]
SUMP PUMP SP-1 / SP-2 LEVEL 0 MECHANICAL ROOM	[illegible]
SUMP PUMP CSP-1 / CSP-2 ELEVATOR PIT 1 AND 2	[illegible]
EMERGENCY EYE/FACE WASH EW-1 LABS AND RELATED SPACES	[illegible]
EMERGENCY SHOWER ES-1 LABS AND RELATED SPACES	[illegible]
THERMOSTATIC MIXING VALVE TMV-1 DOMESTIC HOT WATER SERVICE	[illegible]
THERMOSTATIC MIXING VALVE TMV-2 (TO BE FURNISHED AND INSTALLED WITH EMERGENCY SHOWERS - ES-1)	[illegible]
THERMOSTATIC MIXING VALVE TMV-3 (TO BE FURNISHED AND INSTALLED WITH EMERGENCY EYE WASH - EW-1)	[illegible]
HOSE STATION HS-1 CADAVER LAB	[illegible]
COFFEE MAKER OUTLET BOX CM-1	[illegible]
ICE MAKER OUTLET BOX IM-1	[illegible]
DISHWASHER OUTLET BOX DW-1	[illegible]
GREASE INTERCEPTOR GI-1	[illegible]
ELECTRONIC TRAP PRIMER TP-1	[illegible]

PLUMBING FIXTURES AND EQUIPMENT

DOMESTIC WATER HEATER HWH-1 DOMESTIC WTR SERVICE	[illegible]
EXPANSION TANK ET-1	WATTS SERIES DETA [illegible] ASME PRESSURIZED EXPANSION TANK PRE-CHARGED TO 40 PSI WITH FIXED BUTYL BLADDER PRESSURE CHARGE IS FIELD ADJUSTABLE TOP POSITION NPT STAINLESS STEEL [illegible] TANK TO BE CONSTRUCTED IN ACCORDANCE TO ASME SECTION VIII EXPANSION TANK TANK VOLUME 26.0 GALLONS TANK ACCEPTANCE 15.5 GALLONS
DOMESTIC HOT WATER CIRCULATING PUMP HWP-1	BELL & GOSSETT MODEL [illegible] LEAD FREE BRONZE BODY WITH [illegible] APPROXIMATE PUMP WEIGHT 10.4 LBS
BACKFLOW PREVENTER BFP-1 DOMESTIC WTR SERVICE	WATTS REGULATOR SERIES [illegible]
BACKFLOW PREVENTER BFP-2 MAKE-UP WATER SERVICE	WATTS REGULATOR SERIES LF009-QT-S REDUCED PRESSURE ZONE ASSEMBLY 0.75 INCH INLET AND OUTLET QUARTER TURN OPERATING VALVES BRONZE RELIEF VALVE BODY AND SEATS WITH BRONZE TEST COCKS STAINLESS STEEL TRIM MAXIMUM OPERATING PRESSURE 175 PSI TEMPERATURE RANGE 33°F TO 110°F CONTINUOUS ASSEMBLY TO INCLUDE BRONZE STRAINER MODEL 909AG-C AIR GAP FITTING AND RK-SAE-TC 8 SAE BRASS CAP O-RING AND TETHER FOR EACH TEST COCK VERIFY REQUIREMENTS PRIOR TO ORDERING AND INSTALLATION
BACKFLOW PREVENTER BFP-3 DEIONIZED WTR SERVICE	WATTS REGULATOR SERIES LF009-QT-S REDUCED PRESSURE ZONE ASSEMBLY 1 INCH INLET AND OUTLET QUARTER TURN OPERATING VALVES BRONZE RELIEF VALVE BODY AND SEATS WITH BRONZE TEST COCKS STAINLESS STEEL TRIM MAXIMUM OPERATING PRESSURE 175 PSI TEMPERATURE RANGE 33°F TO 110°F CONTINUOUS ASSEMBLY TO INCLUDE BRONZE STRAINER MODEL 909AG X AIR GAP FITTING AND RK-SAE-TC 8 SAE BRASS CAP O-RING AND TETHER FOR EACH TEST COCK VERIFY REQUIREMENTS PRIOR TO ORDERING AND INSTALLATION
BACKFLOW PREVENTER BFP-4 MAKE-UP WATER SERVICE	WATTS REGULATOR SERIES LF009-QT-SOT-S REDUCED PRESSURE ZONE ASSEMBLY 1 1/4 INCH INLET AND OUTLET QUARTER TURN OPERATING VALVES BRONZE RELIEF VALVE BODY AND SEATS WITH BRONZE TEST COCKS STAINLESS STEEL TRIM MAXIMUM OPERATING PRESSURE 175 PSI TEMPERATURE RANGE 33°F TO 110°F CONTINUOUS ASSEMBLY TO INCLUDE BRONZE STRAINER RK-SAE-TC 8 SAE BRASS CAP O-RING AND TETHER FOR EACH TEST COCK VERIFY REQUIREMENTS PRIOR TO ORDERING AND INSTALLATION
FLOOR DRAIN FD-1 PUBLIC SPACES AND AS INDICATED	JAY R SMITH MODEL [illegible] DUCO CAST IRON BODY CONSTRUCTION WITH ADJUSTABLE STRAINER HEAD NO HUB 4 INCH OUTLET 8 INCH ROUND NICKEL BRONZE STRAINER TOP WITH VANDAL PROOF SCREWS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
FLOOR DRAIN FD-2 CADAVER LAB	JAY R SMITH MODEL 2005Y-NB-B-U-P050 DUCO CAST IRON BODY CONSTRUCTION 4 INCH NO HUB OUTLET WITH ADJUSTABLE 8 INCH ROUND NICKEL BRONZE STRAINER HEAD TRAP PRIMER CONNECTION SEDIMENT BUCKET AND VANDAL PROOF SCREWS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN PROVIDE WITH J R SMITH SERIES 2692 04 QUAD CLOSE TRAP SEAL
FLOOR DRAIN FD-3 LEVEL 0 AND MECHANICAL AREAS	JAY R SMITH MODEL 2360Y-[illegible] P DUCO CAST IRON BODY CONSTRUCTION AND FLASHING COLLAR WITH ADJUSTABLE TOP GALVANIZED CAST IRON 11.5 INCH BAR GRATE AND DEEP SLOTTED SEDIMENT BUCKET AND TRAP PRIMER CONNECTION OUTLET TO ACCEPT NO-HUB CAST IRON PIPING PROVIDE ADJUSTABLE EXTENSION AND TRANSITION COLLAR AS REQUIRED VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN PROVIDE WITH J R SMITH SERIES 2692 04 QUAD CLOSE TRAP SEAL
SUMP PUMP SP-3 LEVEL 0 CONDENSATE DRAINS	WEIL PUMP CO INC MODEL 1411 SUBMERSIBLE SUMP PUMP RATED FOR 25 GPM @ 25 FT OF HEAD ASSEMBLY SHALL BE COMPLETE WITH HIGH WATER ALARM FLOAT AND SMART CONTROL SYSTEM WITH BUILT IN AUDIBLE AND VISUAL ALARM TO INDICATE WHEN PUMP IS NOT OPERATING DUE TO HIGH WATER CONDITIONS ASSEMBLY TO INCLUDE ALL NECESSARY AND REQUIRED FITTINGS VALVES ACCESSORIES PIPE HANGERS AND SUPPORTS AS REQUIRED FOR A COMPLETE SYSTEM COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR PROVIDE SUMP PIT AND COVER SIMILAR TO THAT USED FOR SUMP PUMP SP 1/SP 2
ROOF DRAIN RD-1	JAY R SMITH MODEL [illegible] LARGE GENERAL PURPOSE ROOF DRAIN DUCO CAST IRON BODY CONSTRUCTION WITH COMBINED FLASHING CLAMP AND GRAVEL STOP TO INCLUDE SUMP RECEIVER UNDER DECK CLAMP AND CAST IRON DOME STRAINER OUTLET TO ACCEPT NO-HUB CAST IRON PIPING SIZES AS INDICATED ON THE DRAWINGS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
ROOF DRAIN RD-2 GREEN ROOF	JAY R SMITH MODEL [illegible] GREEN ROOF MAIN AREA DRAIN WITH STANDPIPE DUCO CAST IRON BODY CONSTRUCTION FLASHING CLAMP AND STAINLESS STEEL PERFORATED GRAVEL STOP TO INCLUDE SUMP RECEIVER UNDER DECK CLAMP COORDINATE HEIGHT OF PERFORATED GRAVEL STOP AND STANDPIPE WITH DEPTH OF GREEN ROOF IN-FILL REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS OUTLET TO ACCEPT NO-HUB CAST IRON PIPING SIZES AS INDICATED ON THE DRAWINGS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
OVERFLOW ROOF DRAIN OD-1	JAY R SMITH MODEL 1070Y R C SP2-CID SPECIAL PURPOSE ROOF DRAIN DUCO CAST IRON BODY CONSTRUCTION WITH COMBINED FLASHING CLAMP AND GRAVEL STOP TO INCLUDE PVC STANDPIPE SUMP RECEIVER UNDER DECK CLAMP AND CAST IRON DOME STRAINER OUTLET TO ACCEPT NO-HUB CAST IRON PIPING SIZES AS INDICATED ON THE DRAWINGS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
DOWNSPOUT NOZZLE DN-1	JAY R SMITH MODEL 1775-U SPECIAL PURPOSE DOWNSPOUT COVER TYPE 304 STAINLESS STEEL CONSTRUCTION WITH SECURED HINGED PERFORATED COVER OUTLET TO ACCEPT NO-HUB CAST IRON PIPING SIZES AS INDICATED ON THE DRAWINGS ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN COORDINATE LOCATIONS AND ELEVATION WITH THE ARCHITECT
FLOOR SINK FS-1	JAY R SMITH MODEL 3161Y-O3-P-13 CAST IRON BODY FLOOR SINK WITH ACID RESISTANT COATED INTERIOR 10 INCH SUMP DEPTH SQUARE 12.5 INCH TOP NICKEL BRONZE RIM WITH 3/4 GRATE SEDIMENT BUCKET NO HUB 3" CONNECTION AND TRAP PRIMER CONNECTION VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
FLOOR SINK FS-2	JAY R SMITH MODEL 3461Y-O3-C-U-P-13 CAST IRON BODY FLOOR SINK WITH ACID RESISTANT COATED INTERIOR 10 INCH SUMP DEPTH SQUARE 12.5 INCH TOP NICKEL BRONZE RIM WITH 3/4 GRATE SEDIMENT BUCKET FLASHING CLAMP VANDAL PROOF SCREWS AND NO-HUB 3" CONNECTION AND TRAP PRIMER CONNECTION VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
FLOOR SINK FS-3	JAY R SMITH MODEL 3451Y-O4-C-P-13 CAST IRON BODY FLOOR SINK WITH ACID RESISTANT COATED INTERIOR 12 INCH SUMP DEPTH SQUARE 16 INCH SQUARE TOP ACID RESISTANT COATED CAST IRON 3/4 SEDIMENT BUCKET NO-HUB 4" CONNECTION VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN PROVIDE WITH J R SMITH SERIES 2692 04 QUAD CLOSE TRAP SEAL
FLOOR CLEANOUT FCO-1	
FLOOR CLEANOUT FCO-2	JAY R SMITH MODEL 4020-U ROUND CAST IRON BODY FLOOR CLEANOUT WITH TAPER THREAD BRONZE PLUG AND NICKEL BRONZE ADJUSTABLE HEAD WITH SCORIATED SOLID NICKEL BRONZE COVER AND VANDAL PROOF SCREWS COVER TO HAVE "CO" CAST IN TOP VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
WALL CLEANOUT EXPOSED WCO-1	JAY R SMITH MODEL 4512-Y CAST IRON BODY STACK CLEANOUT TEE TAPER THREAD WITH BRONZE PLUG NO-HUB PIPE CONNECTIONS ON BOTH ENDS FOR USE IN AREAS NON PUBLIC AREAS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
WALL CLEANOUT CONCEALED WCO-2	JAY R SMITH MODEL 4532-Y CAST IRON BODY STACK CLEANOUT TEE TAPER THREAD WITH BRONZE PLUG NO-HUB PIPE CONNECTIONS ON BOTH ENDS STAINLESS STEEL ROUND COVER WITH CENTER SCREW FOR USE IN AREAS PUBLIC AREAS VERIFY INSTALLATION REQUIREMENTS PRIOR TO ROUGH IN
WATER HAMMER ARRESTER WHA	J.R. SMITH SERIES 5000 HYDROTROL ENGINEERED WATER HAMMER ARRESTER LEAD FREE STAINLESS CONSTRUCTION PLUMBING CONTRACTOR TO SELECT UNIT FOR SPECIFIC APPLICATION AND FIXTURE UNIT RATINGS
WALL HYDRANT WH-1	J.R. SMITH SERIES [illegible] WALL RECESSED GUARDIAN PLUS DUAL CHECK QUARTER TURN NON FREEZE HYDRANT WITH AUTOMATIC DRAINING INTEGRAL VACUUM BREAKER INTEGRAL SERVICE SHUT-OFF VALVE DUAL CHECK VALVE AND STAINLESS STEEL BOX ASSEMBLY TO INCLUDE ADJUSTABLE WALL CLAMP CONTRACTOR TO SELECT LENGTH FOR WALL THICKNESS APPLICATION
LABORATORY SINK FAUCET AND DRAIN ASSEMBLY LF-1 LABS AND PREP ROOMS	FIXTURE - SINK IS INTEGRAL WITH COUNTERTOP CONTRACTOR IS TO FURNISH AND INSTALL FAUCET AND DRAIN ASSEMBLY FAUCET - CHICAGO FAUCET MODEL 930-317XKCP DECK MOUNTED SINGLE HOLE HOT AND COLD WATER MIXING FAUCET WITH VACUUM BREAKER [illegible] RIGID SWING SPOUT 4" VANDAL PROOF WRISTBLADE HANDLES FULL FLOW NOZZLE ATMOSPHERIC VACUUM BREAKER DRAIN - 1 1/2" ACID RESISTANT SINK STRAINER ASSEMBLY TRAP - 1 1/2" ACID RESISTANT P TRAP WITH AR WASTE ARM AND WALL FLANGE STOP & SUPPLY RISERS - 1/2" NPS ANGLE WITH FLEXIBLE RISER LOOSE KEY 1/4 TURN STOPS AND WALL ESCUTCHEONS
LABORATORY SINK FAUCET AND DRAIN ASSEMBLY LF-2 LABS	FIXTURE - SINK IS INTEGRAL WITH COUNTERTOP CONTRACTOR IS TO FURNISH AND INSTALL FAUCET AND DRAIN ASSEMBLY FAUCET - CHICAGO FAUCET MODEL 628-317XKCP DECK MOUNTED SINGLE HOLE COLD WATER FAUCET WITH VACUUM BREAKER [illegible] RIGID SWING SPOUT 4" VANDAL PROOF WRIST BLADE HANDLES FULL FLOW NOZZLE ATMOSPHERIC VACUUM BREAKER DRAIN - 1 1/2" ACID RESISTANT SINK STRAINER ASSEMBLY TRAP - 1 1/2" ACID RESISTANT P-TRAP WITH AR WASTE ARM AND WALL FLANGE STOP & SUPPLY RISERS - 1/2" NPS ANGLE WITH FLEXIBLE RISER LOOSE KEY 1/4 TURN STOPS AND WALL ESCUTCHEONS
LABORATORY DEIONIZED WATER FAUCET DI-1	FAUCET - CHICAGO FAUCET MODEL [illegible] DECK MOUNTED CHROME PLATED POLYPROPYLENE PURE WATER FAUCET WITH [illegible] POLYPROPYLENE MALE THREAD INLET COORDINATE LOCATION AND DRILLING OF COUNTERTOP WITH THE GENERAL CONTRACTOR PROVIDE TUBING AND FITTINGS AS REQUIRED FROM THE DEIONIZED WATER CONNECTION POINT
KITCHEN SINK KS-1 TEACHING KITCHEN	FIXTURE - ELKAY MODEL [illegible] CROSSTOWN SINGLE BOWL UNIVERSAL MOUNT STAINLESS STEEL SINK 18 GAUGE TYPE 304 CONSTRUCTION WITH SATIN POLISH FINISH REAR CENTER DRAIN AND FULLY UNDERCOATED TO DAMPEN SOUND SINK TO BE 4 HOLE PUNCHED FOR FAUCET FAUCET - CHICAGO MODEL [illegible] MANUAL FAUCET CHROME PLATED FINISH 5 1/4" RIGID GOOSENECK SPOUT [illegible] 8 INCH FIXED CENTERS WITH SIDE SPRAY 4 INCH VANDAL PROOF WRIST BLADE HANDLES 1/2" NPSM SUPPLY INLETS AND COUPLING NUT FOR 1/2" FLEXIBLE RISER WITH SPOUT AND 2.2 GPM VANDAL PROOF LAMINAR OUTLET DRAIN - ELKAY #LK-35 TYPE 304 STAINLESS STEEL BODY WITH REMOVABLE CONICAL BASKET STRAINER WITH METAL STEM AND RUBBER STOPPER POLISHED FINISH CHROME PLATED BRASS 1 1/2" x 4" TAILPIECE TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
KITCHEN SINK KS-2 TEACHING KITCHEN	FIXTURE - ELKAY MODEL [illegible] CROSSTOWN DOUBLE BOWL DUAL/UNIVERSAL MOUNT STAINLESS STEEL SINK 18 GAUGE TYPE 304 CONSTRUCTION WITH SATIN POLISH FINISH REAR CENTER DRAIN AND FULLY UNDERCOATED TO DAMPEN SOUND SINK TO BE 4 HOLE PUNCHED FOR FAUCET FAUCET - CHICAGO MODEL [illegible] MANUAL FAUCET CHROME PLATED FINISH 8" RIGID GOOSENECK SPOUT 4 INCH FIXED CENTERS WITH SIDE SPRAY 4 INCH VANDAL PROOF WRIST BLADE HANDLES 1/2" NPSM SUPPLY INLETS AND COUPLING NUT FOR 1/2" FLEXIBLE RISER WITH SPOUT AND 2.2 GPM VANDAL PROOF LAMINAR OUTLET DRAIN - ELKAY #LK-35 TYPE 304 STAINLESS STEEL BODY WITH REMOVABLE CONICAL BASKET STRAINER WITH METAL STEM AND RUBBER STOPPER POLISHED FINISH CHROME PLATED BRASS 1 1/2" x 4" TAILPIECE TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
KITCHEN SINK KS-3 TEACHING KITCHEN	FIXTURE - ELKAY MODEL [illegible] GOURMET (LUSTERTONE) SINGLE BOWL TOP UNIVERSAL MOUNT STAINLESS STEEL SINK 18 GAUGE TYPE 304 CONSTRUCTION WITH SATIN POLISH FINISH REAR CENTER DRAIN AND FULLY UNDERCOATED TO DAMPEN SOUND SINK TO BE 3 HOLE PUNCHED FOR FAUCET FAUCET - CHICAGO MODEL [illegible] MANUAL FAUCET CHROME PLATED FINISH 3-1/2 INCH RIGID GOOSENECK SPOUT 4 INCH FIXED CENTERS 4 INCH VANDAL PROOF WRIST BLADE HANDLES 1/2" NPSM SUPPLY INLETS AND COUPLING NUT FOR 1/2" FLEXIBLE RISER WITH SPOUT AND 2.2 GPM VANDAL PROOF LAMINAR OUTLET DRAIN - ELKAY #LK-35 TYPE 304 STAINLESS STEEL BODY WITH REMOVABLE CONICAL BASKET STRAINER WITH METAL STEM AND RUBBER STOPPER POLISHED FINISH CHROME PLATED BRASS 1 1/2" x 4" TAILPIECE TRAP - CHROME PLATED 17 GAUGE 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT PLUG AND WALL FLANGE SUPPLY RISERS - 1/2" ANGLE SUPPLIES FLEXIBLE RISERS WITH LOOSE KEY STOPS
PRESSURE REDUCING VALVES PRV-1 AND PRV-2	PRV-1 - WATTS SERIES ACV-115 AUTOMATIC CONTROL VALVE GLOBE PATTERN DUCTILE IRON BODY AND COVER NSF APPROVED FUSION BONDED EPOXY COATED AND LINED STAINLESS STEEL VALVE TRIM STAINLESS STEEL STEM NUT AND SPRING WITH BUNA-N ELASTOMERS ASSEMBLY TO BE RATED FOR 150# OPERATING PRESSURE FLANGED OR THREADED CONNECTIONS PROVIDE UNIONS FOR THREADED CONNECTIONS PRV-2 - WATTS SERIES LFZ23 HIGH CAPACITY WATER PRESSURE REDUCING VALVE LEAD FREE BRASS BODY CONSTRUCTION WITH STAINLESS STEEL SEAT SEAT GASKET AND O-RING OF BUNA-N DIAPHRAGM OF REINFORCED BUNA-N MANUFACTURER SHALL BE CONSULTED FOR REQUIRED SIZES BASED ON PROJECT CONDITIONS VALVES SHALL BE INSTALLED IN PARALLEL TO HANDLE WIDE RANGE OF FLOW CONDITIONS PRV-1 TO BE SET AT 10 PSI LOWER DELIVERY PRESSURE THAN PRV-2 VERIFY INLET PRESSURE AT THE TIME OF INSTALLATION OUTLET SHALL BE SET TO 60 PSI AT 150 GPM OUTLET PRESSURE MAY BE ADJUSTED FOR PROJECT CONDITIONS BOTH VALVE ASSEMBLIES SHALL BE BY THE SAME MANUFACTURER SIMILAR PRODUCTS MANUFACTURERED BY CAL-VAL OR WILKINS MAY BE CONSIDERED FOR APPROVAL
TRAP PRIMER TP-2 SUPPLY TYPE	PPP MODEL P1-500 AND P2-500 PRESSURE DROP ACTIVATED TRAP PRIMER PROVIDE MODEL DU-4/DU-U DISTRIBUTION UNIT AS REQUIRED CAP UNUSED DISTRIBUTOR LINES CONTRACTOR TO SELECT MODEL OF TRAP PRIMER ASSEMBLY BASED ON THE MANUFACTURES RECOMMENDATIONS FOR THE NUMBER OF DRAINS TO BE SERVED ASSEMBLES BY SIOUX CHIEF MODEL 695 WITH DISTRIBUTOR OR MIFAB MODEL MX-500 WITH DISTRIBUTOR WILL BE CONSIDERED EQUAL
TRAP PRIMER TP-3 WASTE TYPE	J. R. SMIT SERIES 2698-1 PRIME-EZL WATER SAVER TRAP PRIMER SATIN CHROME PLATED 17 GAUGE CAST BRONZE P-TRAP WITH CLEANOUT SLIP JOINT NUTS WASHER AND ESCUTCHEON AND [illegible] PRIMER TUBE ASSEMBLES BY WADE MODEL 4401-TS OR MIFAB MODEL MI 750 WILL BE CONSIDERED EQUAL

CONTRACTOR NOTES
1. MANUFACTURER AND MODEL NUMBERS LISTED ARE BASIS OF DESIGN PLUMBING FIXTURES AND COMPONENTS OF COMPARABLE QUALITY DESIGN AND FUNCTION MAY BE CONSIDERED AS AN APPROVED EQUAL IN ACCORDANCE WITH THE SPECIFICATIONS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ROUGH IN AND INSTALLATION REQUIREMENTS
2. PROVIDE ANGLE SHUT-OFF VALVES ON ALL PLUMBING FIXTURES AND EQUIPMENT

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Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

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314 644 5700

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No	Description	Date
9	ASI - 050 (RFI - 472)	07 APR 2017
8	ASI - 037 Remote Alarm Panel	09 NOV 2016
7	ASI - 033 (RFI 261 286 309 & 310)	03 NOV 2016
6	ASI - 019 (RFI 182 208 & 212)	29 JUL 2016
5	ASI - 002 (RFI - 172)	15 JUL 2016
4	ADDENDUM 2-5	08 JUN 2016
3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

Drawing Title

SCHEDULES - PLUMBING

P0601

PARIC
EXPERIENCE. EXCELLENCE.

May 02, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-125 - ASI 58: HWP-1 Feeder Change

Revised

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the additive sum of Three Thousand Three Hundred Fifty-Six Dollars And Zero Cents $3,356.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0116 (ASI 58: HWP-1 Feeder Change), Total $ 3,356.00

Owner contingency will be used for this change proposal. The scope includes the revision of the feeder location for circulating pump HWP-1 from panel 1NL2 to 1NH2 per ASI 58. The conduit had already been run for the original circuit and the new circuit must be fed from overhead.

Proposed Change Proposal Total: $3,356.00

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

_____

Date:_____
Craig A. Miller Sr
Webster University

Declined:

_____

Date:_____
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 02-MAY-17
Time: 09:55 AM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0116	ASI 58: HWP-1 Feeder Change			3,356.00	02-MAY-17					3,356.00	3,356.00	

Vendor Name					Description		
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	3,199.00	ASI 58: HWP-1 Feeder Change	Revise the feeder location for circulating pump HWP-1 from panel 1NL2 to 1NH2 pre ASI 58. The conduit had already been run for this circuit previously and now needs to run overhead.
	15051	23150.005 M	Contractor Default Insurance (1.25%)	40.00	ASI 58: HWP-1 Feeder Change	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	82.00	ASI 58: HWP-1 Feeder Change	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	35.00	ASI 58: HWP-1 Feeder Change	Risk Management

	Estimated Amount	Quoted Amount	Final Amount	Budgeted Amount	Billing Amount
Total For EXT	**0.00**	**0.00**	**3,356.00**	**3,356.00**	**3,356.00**
Grand Total:	**0.00**	**0.00**	**3,356.00**	**3,356.00**	**3,356.00**

**** = Posted Change Item***

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	02-MAY-17
To Change Order:		Run Time:	09:55 AM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Posted and Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

PARIC
EXPERIENCE. EXCELLENCE.

April 21, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-127 - ASI 53 - Equipment revisions

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Six Thousand ~~Eight~~ Seven Hundred ~~Ten Dollars And Zero~~ Cents $6,810.00 . $6,770
Seventy Dollars and zero
This change will impact the scheduled completion date by 0 days.

- PCI-E-0112 (ASI 53 Equipment Revisions), Total $ 6,810.00

The owner contingency shall be utilized for this change proposal.
Proposed Change Proposal Total: $6,810.00 $6,770

If this change proposal meets with your approval, please sign and return this proposal for our records by April 28, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 5/25/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Date: 21-APR-17
Time: 10:33 AM

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0112	ASI 53 Equipment Revisions			6,810.00	21-APR-17					6,810.00	6,810.00	

Vendor Name				Description			
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	2,964.00	ASI 53 Equipment Revisions	ASI 53 - misc rec and data changes Add 2 duplex receptacles Add 1 wall mounted duplex receptacle Relocate emergency circuit from floor box in lab 235 Add 1 data drop in lab 235 Delete 1 data drop in room 274 3411.39 Material and labor -788.00 systems Total add $2964.53	
Carroll Seating Company, Inc.	15051	12350.002 S	Manufactured Casework - Labs	-200.00	ASI 53 Equipment Revisions	CO 7 ASI 53 Remove 1 tank rack Deduct $200.00	
Paric Corp - Self Perform	15051	09250.001 S	Drywall Sub	432.00	ASI 53 Equipment Revisions	COR 25 ASI 53 Remove and rework drywall in areas due to cahnges in ASI 53 Add $432	
DeLuca Plumbing LLC	15051	15400.001 S	Plumbing Sub	~~3,296.00~~ $3,256 Subtotal $6,452	ASI 53 Equipment Revisions	COR 28 ASI 53 Added 2 DW boxes to serve equipment Add $3296.00	
	15051	23150.005 M	Contractor Default Insurance (1.25%)	81.00	ASI 53 Equipment Revisions	Contractor Default Insurance	
	15051	23300.001 F	Fee (2.5%)	166.00	ASI 53 Equipment Revisions	Contractor Fee	
	15051	23100.001 M	Risk Management (1.1%)	71.00	ASI 53 Equipment Revisions	Risk Management	
Total For EXT		**0.00**	**0.00**	**6,810.00**			**6,810.00** **~~6,810.00~~**
Grand Total:		**0.00**	**0.00**	**6,810.00**			**6,810.00** **~~6,810.00~~**

$6,770

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	21-APR-17
To Change Order:		Run Time:	10:33 AM
Status Code:		Operator:	DEV_GAT
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

GUARANTEE
ELECTRICAL CONSTRUCTION 3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ASI - 053 MISC REC AND DATA CHANGI**
Date: 3/9/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

Webster ISB
ASI - 053

Description of Work

* Add (2) dedicated duplex receptacles.
* Add (1) wall mounted duplex receptacle and relocate emergency circuit from the floor box in lab 235.
* Delete (1) data drop in room 274.
* Add (1) data drop in lab 235

Base Bid Shall Incresae by: $ 2,964.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within 30 days from the date of receipt.
We request a time extension of 20 days.
We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
3/4" EMT CONDUIT	65	32.54	5.36
1" EMT CONDUIT	10	8.67	0.82
3/4" EMT STL SS CONN	3	0.58	0.48
3/4" EMT STL SS CPLG	7	1.65	0.54
1" EMT 1-H STEEL STRAP	2	0.56	0.14
1" PLASTIC BUSHING	1	0.28	0.17
#12 THHN BLACK	508	56.94	5.03
#12 WIRE POWER TERM	5	0.05	1.00
#12/2C CU MC CABLE AL ARMOR	158	81.03	7.27
3/8" MC CABLE DC SS CONN	4	2.07	0.60
1/4 PLATED T-ROD	12	5.34	1.81
1/4-20 HEX NUT - PLTD STL	8	0.12	0.29
1/4 FLAT WASHER - PLTD STL	8	0.11	0.08
#10x 3/4 P/H SELF-TAP SCREW	18	1.97	0.70
6M58 CABLE SUPPORT (MC minnie+7/16 flange clip p.53)	32	67.08	1.75

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **ASI - 053 MISC REC AND DATA CHANGI**
Date: 3/9/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 2

Description	Qty	Total Mat.	Total Hrs.
812M24 1/2-3/4" CONDUIT 1/4" FLNG	8	13.66	0.55
H23 SQ BOX MTG BRKT p.126	4	3.88	0.30
4TI24 1/4" ROD 1/4" FLNG HNGR	4	5.50	0.28
4" SQ BOX 1 1/2"D COMB KO	1	1.18	0.47
4" SQ BOX 2 1/8"D COMB KO	7	14.56	3.48
4" SQ BLANK COVER	4	4.17	0.40
4" SQ 1G PLSTR RING 5/8" RISE	4	3.31	0.80
1G DUPLEX REC PLATE - PLASTIC IVY	3	0.78	0.38
1G BLANK-BOX MNT PLATE - PLASTIC IVY	2	1.17	0.25
20A 125V DUPLEX REC - IVY (SG)	1	3.06	0.38
20A 125V DUP REC - GFCI IVY (SG)	2	28.80	0.87
PENETRATE WALL	2	0.00	1.00
Totals	**883**	**339.06**	**35.17**

Summary

General Materials	339.06
Material Total	**339.06**
LU 1 - GF - ST - ELEC (6/1-3/1/16)*	152.42
LU 1 - F - ST - ELEC (6/1-3/1/16)*	285.47
LU 1 - JW - ST - ELEC (6/1-3/1/16)*	2,392.74
AS-BUILT DRAWINGS	150.00
EXPENDABLES	6.78
SMALL TOOLS	84.92
Subtotal	**3,411.39**
Markup	341.14
Subtotal	**3,752.53**
SYSTEMS	-788.00
Subtotal	**2,964.53**
Adjustment #1	-0.53
Final Amount	**$2,964.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN #	**ASI - 053 MISC REC AND DATA CHANGI**
Date:	3/9/2017
Project Name:	WEBSTER GROVES ISB BUILDING
Project Number:	WEBSTER GROVES ISB BUILDING
Page Number:	3

CCN #: ASI - 053 MISC REC AND DATA CHANGES
Final Amount:$2,964.00
Name:
Date:
Signature:
Change Order #:

I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

Further breakdown of credit above.

GUARANTEE
ELECTRICAL CONSTRUCTION
3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

CCN# **PCO #006 ASI#053**
Date: 3/9/2017
Project Name: Webster University ISB Low Voltage
Project Number: 71841
Page Number: 1

PCO#006 ASI#053
DATA CREDIT

Description of work

Project Drawing T102.A Dated 2/24/2017

Delete (2) Dual Data locations

Project Drawing T102.B Dated 2/24/2017

Add (1) Dual Data location.

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.
We request a time extension of **20** days.
We will supply and install all materials, labor, and equipment.

Description	Qty	Total Mat.	Total Hrs.
CMP - CAT. 6A - WHITE	-250	-165.88	-5.00
4 PORT FACEPLATE	-1	-6.53	-0.05
BLANK INSERT	-0	-0.00	-0.00
DATA INSERT CAT6A GREY WORKSTATION	-2	-21.62	-0.50
DATA INSERT CAT6A GREY CLOSET	-2	-21.62	-0.50
CABLE TEST: 4PR(DATA)	-2	-0.00	-1.26
7' PATCH CORDS	-2	-27.36	-0.10
9' PATCH CORDS	-2	-30.58	-0.10
Totals	**-261**	**-273.58**	**-7.51**

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

CCN#	**PCO #006 ASI#053**
Date:	3/9/2017
Project Name:	Webster University ISB Low Voltage
Project Number:	71841
Page Number:	2

General Materials	-273.59
Material Total	**-273.59**
LU 1 - F - ST - COMM	-266.40
LU 1 - JW - ST - COMM	-247.78
Subtotal	**-787.77**
Adjustment #2	-0.23
Final Amount	**$-788.00**

CONTRACTOR CERTIFICATION

Name: _____

Date: _____

Signature: _____

I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: PCO #006 ASI#053 _____

Final Amount:$-788.00 _____

Name: _____

Date: _____

Signature: _____

Change Order #: _____

I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

CARROLL
SEATING • SCIENCES • SCHOOLS • SERVICE

112 Weldon Parkway, Maryland Heights, MO 63043
Phone: 314-227-0088 Fax: 314-227-0090

Change Order

CO Number	CO103924
Cust CO Number	
Date	

Customer Name: Paric Construction

Customer Address: 77 Westport Plaza Drive
Suite 250
St. Louis Missouri 63146

Project Name: Webster ISB - Laboratory Casework and Equipment Package

Project Number: CS404004

Change Order Name: CO 7 Removal of One (1) Tank Rack

Scope of Work: Removal of (1) Tank Rack

Change Order Estimate:

Change Order Item	Billing Amount
Laboratory Equipment	**($200.00)**
Laboratory Equipment	($200.00)
Change Order TOTAL:	**($200.00)**

Signatures:

I have reviewed and understand the information contained in this document and my signature indicates approval

Customer _____ Date _____

Webster ISB
PARIC SELF PERFORM
COR 25 - ASI 53
3/20/2017

	UNITS	RATE	TOTAL
Remove and rework drywall in areas due to changes in ASI 53 (6 MHs)	6	$ 62.92	**$377.52**
		SUBTOTAL COR=	**$378**
		Small Tools and Consumables 4%=	**$15**
		10% OH&P=	**$39**
		SUBTOTAL =	**$432**

COR Clarifications

*COR is for added labor due to rework caused by ASI 53

COR # 28 Webster ISB

DeLuca Plumbing, L.L.C.
8465 Delport Drive
St. Louis MO 63114
TO:
PARIC

Scope: **ASI 53**

Added 2 DW Boxes to Serve Equipment

Clarifications
No Overtime
No Patching
No Backflow preventers if not shown
Install of Access Panel By Others
Final connection to equipment by others

Date: 3/27/17

Labor	SHEET	HRS	RATE	TOTAL	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
Supervision		3.71	73.71	$ 273.21	
			73.71	$ -	
Labor - Piping		19.71	73.71	$ 1,452.82	
Labor DW Boxes (2) and WHA-a		5.00	73.71	$ 368.55	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
BIM		1.00	73.71	$ 73.71	
Delivery		1.00	73.71	$ 73.71	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
Labor Total Cost					$ 2,242.00

EQUIPMENT AND OPERATORS		RATE	TOTAL	
Total Equipment and Operator Cost		$ -		$ -

MATERIALS (and Units)	DATE	UNIT	QTY	RATE	TOTAL	
					$ -	
					$ -	
Materials			1	$ 486.70	$ 486.70	-(40)
					$ -	
					$ -	
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					$ -	
Total Material Costs					$ 486.70	$446.70
Subtotal Contractor Costs						$ ~~2,728.70~~ $2,688.70

Subcontractors			
Pipe Insulation		$ 280.00	
Total Subcontractor			$ 280.00

Subtotal Labor Material & Equipment Costs		$ 2,728.70	
Sub Contracted Costs		$ 280.00	
OH&P LABOR	10.00%	$ 224.20	
OH&P MATERIALS	10.00%	$ 48.67	
OH&P SUBS	5.00%	$ 14.00	
Total Subcontractor Cost		$ 3,295.57	
Total Price			$ ~~3,296~~ $3,256

ASI 53

		QTY	LABOR Unit	LABOR Subtotal
Domestic Water				
Pipe - L	1/2"	35.00	0.06	2.10
Tee	1/2"	2.00	0.57	1.14
Elbow	1/2"	9.00	0.40	3.60
Hanger	1/2"	9.00	1.43	12.87
TOTALS-Domestic Water		Pipe Ft 35		Labor Hrs 19.71

From: <Charles.Sutton@Ferguson.com> Charles.Sutton@Ferguson.com
Subject: RE: Webster - ASI 053
Date: Mar 21, 2017, 11:39:47 AM
To: <johnd@delucaplbg.com> johnd@delucaplbg.com,
<peterd@delucaplbg.com> peterd@delucaplbg.com

Price Quotation # B922462

FERGUSON - O'FALLON #1606

76 HUBBLE DRIVE
O FALLON, MO 63368-8694

Phone : 636-300-5300
Fax : 636-300-3335

Bid No.....: B922462
Bid Date...: 03/21/17
Quoted By: CES
Customer.: DELUCA PLUMBING LLC
WEBSTER UNIV SCIENCE BDG
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust Phone: 314-427-5551
Terms.....: NET 10TH PROX
Ship To.....: DELUCA PLUMBING LLC
WEBSTER UNIV SCIENCE BDG
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust PO#..: WEBSTER
Job Name.: WEBSTER UNIV. SCIENCE BDG

Item	Description	Quantity	Net Price	UM	Total
IPS88531	LF MTL ECONO IM BX SWT HAMM VLV	2	118.820	EA	237.64
LHARDD10	1/2 X 10 L HARD COP TUBE	35	157.000	C	54.95
C9D	1/2 WROT CXC 90 ELL 5/8 OD	8	0.701	EA	5.61
CTD	1/2 WROT CXCXC TEE 5/8 OD	2	1.184	EA	2.37
S652AS	LF 1/2 WTR HAMM ARRST - SWT	1	14.175	EA	14.18
~~PE1212AD~~	~~12X12 MTL UNIV ACC DR WHIT~~	~~1~~	~~33.918~~	~~EA~~	~~33.92~~
NS58566LFD	LF 1/2 BRZ SS 600# SWT FP BV	1	25.925	EA	25.93
CMAD	1/2 WROT CXM ADPT	2	1.450	EA	2.90
DDW5430	3/8X12 SDS HAMM BIT	1	10.080	EA	10.08
BTR	B - TANK REFILL RTN ED YES NO	1	41.378	EA	41.38
W331755	LF 1# PREM SOLD	1	31.902	EA	31.90
O30014	8 OZ #5 PASTE FLUX	1	5.424	EA	5.42
PS546	1/2 WIRE HDL FTG BRSH	1	1.500	EA	1.50
B200K	2 GALV NFPA ADJ SWVL RNG HGR	3	0.680	EA	2.04
GATRCU	3/8X6 Z/PLT ATR	12	0.360	FT	4.32
P05815SPWR	3/8X1-7/8 CS ROD HGR SLV ANCR	3	56.727	C	1.70

HHHXN038CZ	3/8-16 MWS HH NUT ZN	10	8.600	C	0.86
HUSFW0380100OZ	3/8 MWS USS FLT WSHR ZN (PCS)	10	3.900	C	0.39
BBB216T	11-18 T/SCOPE BX MTG BRKT	2	4.308	EA	8.62
PF34253	1/2 POLY CTS 2H PIPE CLMP	4	0.248	EA	0.99

Subtotal:	$486.70
Inbound Freight:	$0.00
Tax:	$0.00
Order Total:	$486.70

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at http://wolseleyna.com/terms_conditionsSale.html. Govt Buyers: All items quoted are open market unless noted otherwise.

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.

Chuck Sutton
Branch Manager
Office: 636-300-5300
Cell: 314-581-1211

From: John DeLuca [mailto:johnd@delucaplbg.com]
Sent: Tuesday, March 21, 2017 6:54 AM

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No: 04561.01

Architect's ASI No: 053

Project:
Webster University Interdisciplinary Science Building

Date Issued: 02/24/2017

Contract Date:

Reason Code: 06 Owner Scope

Discipline Code: 03 Electrical

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Drawings:
A0203, A0204, A0205, A0206, A0208, A0613, A0614, A1102
E0102.A, E0102.B, T0102.A, T0102.B
P0102.A, P0405

St. Louis
Baltimore
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Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

SHEET E0102.A – LEVEL 02 AREA A FLOOR PLAN – ELECTRICAL &AUXILIARY

- In Research Lab 291, add two duplex receptacles 18" AFF, and two dedicated branch circuits, to serve Conviron lab equipment.

SHEET E0102.B – LEVEL 02 AREA B FLOOR PLAN – ELECTRICAL & AUXILIARY

- In Open Research Lab 235, delete emergency circuit from floor box and lab table. Add horizontally mounted duplex receptacle above counter and connect to circuit 1SL1-49 previously floor box.

SHEET T0102.A – LEVEL 02 FLOOR PLAN – AREA A

- Delete data connections for Gel Doc CPU and Biorad Gel Dock in Microscopy Room 274.

SHEET T0102.B – LEVEL 02 FLOOR PLAN – AREA B

- Add data connection for the Illumina MiniSeq. In Open Research Lab 235.

PLUMBING DRAWINGS:

ASI-053 is being issue for the purpose of providing water service for two floor mounted Conviron Incubators in the Cell Bio/ Phsy Research Lab, Room 291.

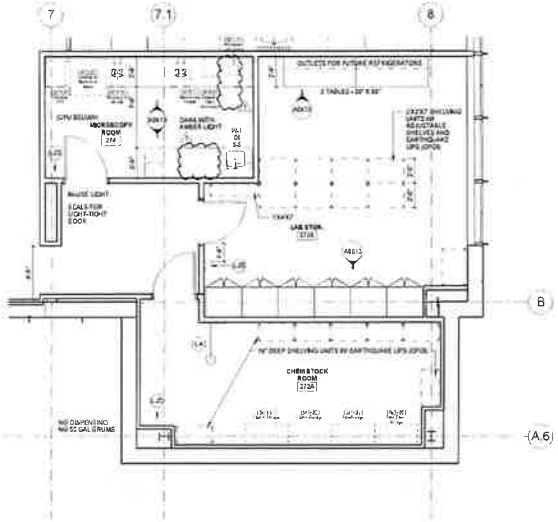
ASI-053, (P0102.A & P0405); 1/2" CW service down in wall to serve future lab equipment. Finish and install two recessed water outlet boxes, type (WD-1). Verify exact equipment placement prior to rough-in. Refer to drawing P405, water supply detail 8.

ARCHITECTURAL DRAWINGS:

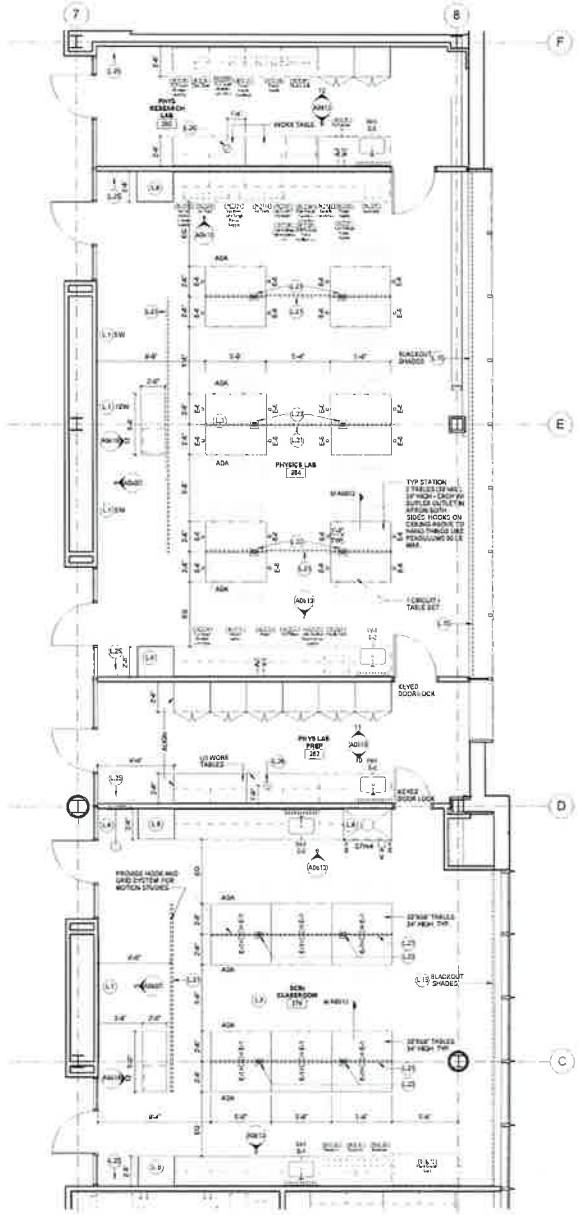
Lab equipment revisions and Gas cylinder type clarifications. Removal of Gas Cylinder Racks in rooms 489 and 386.

Issued by Architect: Mark de la Fuente, William Tao & Associates, Inc.
Tom Becker, Faith Group
Mike Whitworth, WES
Kelvin Patel, CannonDesign

Accepted by Contractor:



2 LEVEL 02 - AREA A - EAST- SOUTH END



1 LEVEL 02 - AREA A - EAST - NORTH END

LAB KEYED NOTE LEGEND

L.1	WRITABLE AND PROJECTABLE SURFACE DIMENSIONS AS NOTED
L.2	RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3	WALL MOUNTED PROJECTOR ABOVE
L.4	EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5	11.5313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7	WOOD LAB CASEWORK MICROSCOPE CAB
L.8	WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.9	11.5313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW. WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11	CABS BELOW WHITEBOARD
L.12	CAMERA FOR SKYPE INTERVIEW
L.14	GAS CYLINDER STORAGE RACK (4TCS) CYLINDERS TO BE LOCKED
L.15	RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES - USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16	LCD MONITOR
L.18	MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 5/A9.1
L.19	MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20	FIXED WOOD LABORATORY CASEWORK. BASE CABINETS. MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21	SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22	8' DEEP x 6' WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23	FLOOR BOX FOR ELECTRICAL & DATA
L.24	6 x 6 DRY ERASE FINISH (AWG-1)
L.25	PROVIDE BLOCKING FOR FIRE EXTINGUISHER MOUNTING HEIGHT - 3-5' TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
L.26	FUME EXHAUST (DAISY BELL) FOR SOLDERING. SEE DETAIL 5/ A9.1

LAB UTILITY LEGEND

CW	WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
WH	WATER GENERAL WIPING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE
DI	WATER STARTER FAUCET DECK MOUNTED
PCW	WATER PROCESS COLD WATER SUPPLY
PWR	WATER PROCESS COLD WATER RETURN
EW	WATER EYEWASH, DECK MOUNTED, AUTO-ON SHRINGDOWN
EH	WATER DRENCH HOSE
G	GAS FUME HOOD CONTROL
V	VAC FUME HOOD CONTROL
V-1	VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-2	VAC TURRET BASE, SINGLE SERRATED OUTLET
V-4	VAC OUTLET FOR MESSNETT CABINET CONNECTIONS
V-5	VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A	AIR FUME HOOD CONTROL
A-1	AIR TURRET BASE, SINGLE SERRATED OUTLET
A-2	AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-4	AIR OUTLET FOR MESSNETT CABINET CONNECTIONS
A-5	AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N	NITROGEN FUMEHOOD CONTROL
E	ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
E-1	ELEC. COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2	ELEC. COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3	ELEC. WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5	ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6	ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D	DATA DATA OUTLET
D-1	DATA COUNTERTOP MOUNTED PEDESTAL (1) DATA OUTLETS
D-5	DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6	DATA DATA OUTLET ON TABLE APRON
CC	CUP SINK LIPPED MODIFIED EPOXY CUP SINK 8"x13"W DWN. (GROPING)
S-1	SINK LIPPED MODIFIED EPOXY SINK 20"x15"W x 8" D (GROPING)
S-2	SINK LIPPED MODIFIED EPOXY FOAM SINK 20"x15"W x 8" D (GROPING)
S-3	SINK STAINLESS STEEL SINK 20"x15"W x 8" D (GROPING)
S-4	SINK STAINLESS STEEL FOAM SINK 20"x15"W x 8" D (GROPING)
S-5	SINK LIPPED MODIFIED EPOXY FOAM SINK 20"x15"W x 8" D (GROPING)
S-6	SINK LIPPED MODIFIED EPOXY SINK 20"x15"W x 8" D (GROPING)
OCC	OVERHEAD SERVICE CARRIER. SEE DETAIL 10/ A9.1
PTD	PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH4 4'-0" WIDE CHEMICAL FUME HOOD
CFH6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GAWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE
3. CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EXCELSIOR BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DRAWER LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A801s FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A09.1.1
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK & LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DIVISION 12 (033) - LABORATORY CASEWORK FOR SPECIFICATIONS
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XX.XX. SEE SHEETS A111s FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION

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No.	Description	Date
1	ADDED	28 FEB 2017
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

Drawing Title

ENLARGED PLANS-LEVEL 02

Project No. 04581.01 Checked by

A0203

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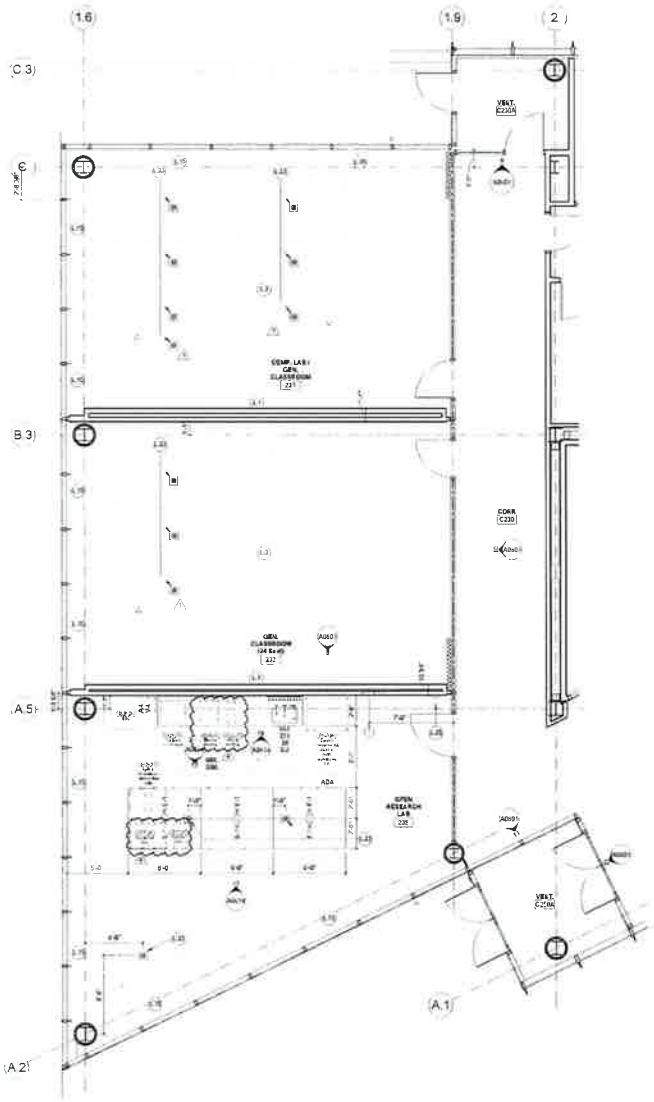
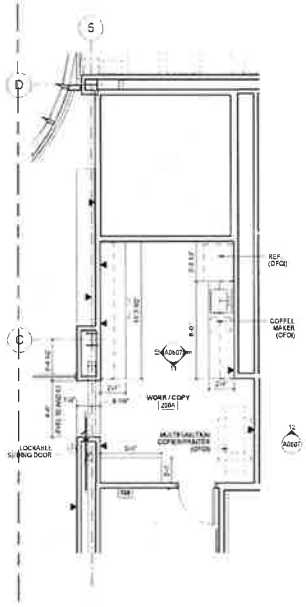
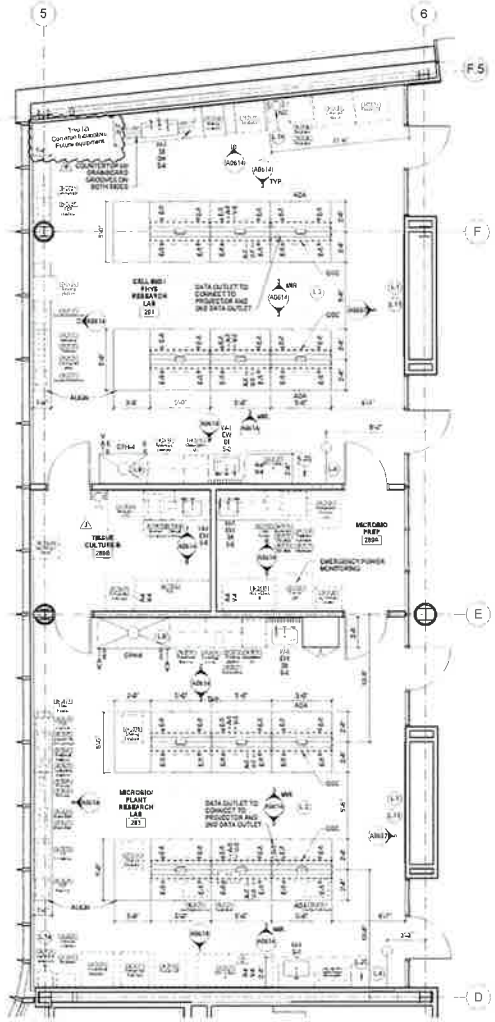


3 LEVEL 02 - AREA B - WEST - CLASSROOMS



2 LEVEL 02 - AREA B - WORKROOM



1 LEVEL 02 - AREA A - WEST - BIO LABS

LAB KEYED NOTE LEGEND

L.1 WRITABLE AND PROJECTABLE SURFACE DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH.
L.5 11.5313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.9 11.5313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 CABS BELOW WHITEBOARD
L.12 CAMERA FOR DRIPS INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (STOR. CYLINDERS TO BE 'GFOI')
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A611
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTER TOP. CABINETS SUSPENDED BELOW AS INDICATED.
L.20 FIBERGLASS LABORATORY CASEWORK - BASE CABINETS MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 6" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 SEASIDE DRY ERASE FINISH (ARCLA)
L.25 PROVIDE BACKING FOR FIRE EXTINGUISHER MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
L.26 FUME EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/A611

LAB UTILITY LEGEND

CW WATER COLD WATER FAUCET. DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE. VACUUM BREAKER.
WM WATER GENERAL WORKS FAUCET. DECK MOUNTED WITH VACUUM BREAKER. SERRATED NOZZLE.
DI WATER DISTILLATE FAUCET DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
DW WATER DEIONIZED. DECK MOUNTED AUTOFILLER GRAND DOWN
DI WATER DRINKING HOOD
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR MODIFFTY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR MODIFFTY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUME HOOD CONTROL
E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3 ELEC. WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (2) DATA OUTLETS
D-3 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-4 DATA DATA OUTLET ON TABLE APRON
CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK. 6" x 10" W x 7" D (ORIGINAL)
S-1 SINK LIPPED MODIFIED EPOXY SINK. 22"L x 15"W x 10"D (ORIGINAL)
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 27"L x 15"W x 10"D (ORIGINAL)
S-3 SINK STAINLESS STEEL SINK 22"L x 15"W x 10"D (ORIGINAL)
S-4 SINK STAINLESS STEEL ADA SINK 27"L x 15"W x 10"D (ORIGINAL)
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"L x 12"W x 10"D (ORIGINAL)
S-6 SINK LIPPED MODIFIED EPOXY SINK. 25"L x 15"W x 10"D (ORIGINAL)
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/A611
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH-4' 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6' 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GRID FACE PARTITION OR COLUMN CENTERLINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE DES AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRAINING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN SIDE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH CASED BOTTOM EDGE, FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 24" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. SHAPED LINES ON ELEVATIONS INDICATES ADJUSTABLE SHELVING INSIDE CABINETS.
9. **PROVIDE THERMED BACK PANEL AT MAKE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL.
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0611 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0611
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DIAGRAM TO 2/E3 - LABORATORY CASEWORK FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - AE.XX.XX. SEE SHEET A1.1 FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

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No.	Description	Date
6	ASI#015	24 FEB 2017
5	ASI#04R	27 JAN 2017
2	ASI#04E	19 DEC 2016
1	ASI#03/ASI#3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title:

ENLARGED PLANS-LEVEL 02

Project No: 04561.01 Checked by:

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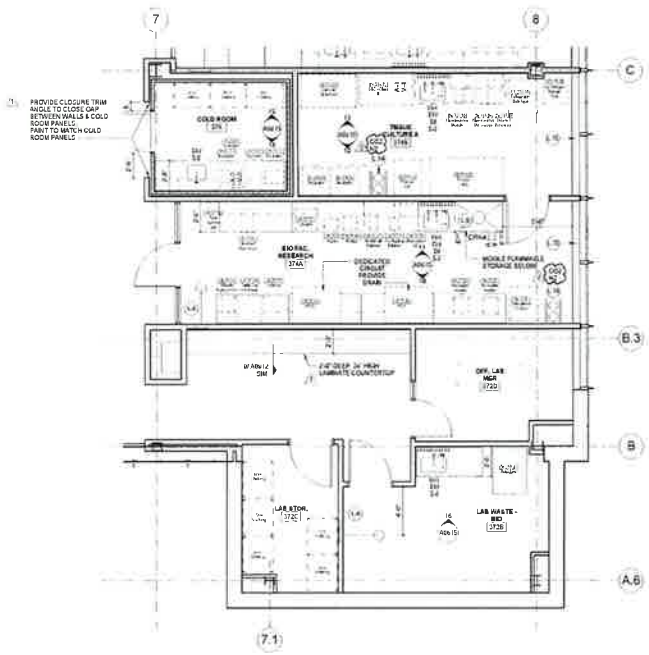
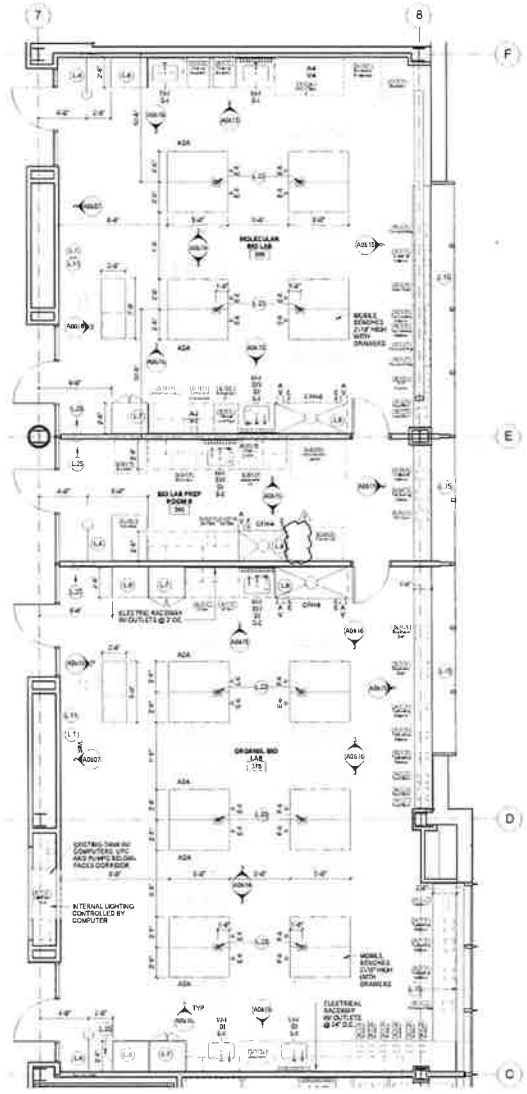


2 LEVEL 03 - BIOLOGY - EAST SIDE-S
1/4" = 1'-0"



1 LEVEL 03 - BIOLOGY - EAST SIDE-N
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

L.1 VANTABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
L.3 RECESSED, CEILING MOUNTED PROJECTION SCREEN
L.2 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 11'-0" CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 HOOD LAB CASEWORK MICROSCOPE CAB
L.9 HOOD LAB CASEWORK TALL CABINET (WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.10 11'-0" CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 CAGE KEY ON WHITEBOARD
L.12 CAMERA FOR SKYPE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (OPEN, CYLINDERS TO BE SUPPLIED
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL SHEET
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20 FIXED WOOD LABORATORY CASEWORK. BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT (VERT) SUPPORTED BY STRUCTURE ABOVE
L.22 6" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 DI 6606 DRY ERASE FINISH (WING-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
L.26 POINT EXHAUST (UNCHRELL) FOR SOLDERING. SEE DETAIL 5/ A0613

LAB UTILITY LEGEND

CW WATER COLD WATER FAUCET DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE VACUUM BREAKER
WG WATER GENERAL MIXING FAUCET DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE
DI WATER DRAWER FAUCET DECK MOUNTED
APG WATER PROCESS COLD WATER SUPPLY
APW WATER PROCESS COLD WATER RETURN
EW WATER EYEWASH, DECK MOUNTED, AUTOMATIC SWING-DOWN
SH WATER SHOWER HOSE
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-1 VAC WALL MOUNTED SINGLE SERRATED OUTLET
V-2 VAC TURRET BASE SINGLE SERRATED OUTLET
V-3 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-4 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE SINGLE SERRATED OUTLET
A-2 AIR WALL MOUNTED SINGLE SERRATED OUTLET
A-3 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-4 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUME HOOD CONTROL
E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-2 ELEC. WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-3 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-4 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (2) DATA OUTLETS
D-2 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-3 DATA DATA OUTLET ON TABLE APRON
CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK
S-1 SINK 9" x 14" x 14" DEEP (SINGLE)
S-2 SINK LIPPED MODIFIED EPOXY SINK 20" x 17" x 14" DEEP (SINGLE)
S-3 SINK LIPPED MODIFIED EPOXY SINK 20" x 15" x 14" DEEP (SINGLE)
S-4 SINK STAINLESS STEEL SINK 20" x 16" x 14" DEEP (SINGLE)
S-5 SINK STAINLESS STEEL ADA SINK 20" x 15" x 14" DEEP
S-6 SINK LIPPED MODIFIED EPOXY FOR SINK 20" x 15" x 14" DEEP (SINGLE)
S-7 SINK LIPPED MODIFIED EPOXY SINK 24" x 15" x 14" DEEP (SINGLE)
GSC OVERHEAD SERVICE CARRIER. SEE DETAIL 18/ A0613
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH4 4'-0" WIDE CHEMICAL FUME HOOD
CFH6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GYPS FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRAINING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS. U.N.O.
4. ALL APRONS AT OPEN KNEE SPACES TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH CURVED BOTTOM EDGE, FINISH TO MATCH CASEWORK SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH N.I.C.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DOCUMENTS ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUME HOODS. TYPICAL. SIMILAR TO DETAIL.**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
11. PROVIDE LOCK AND KEYWAYS AS A GRELLE AGRT TO DRAWER OR DOOR HANDLE IS SHOWN OR PHOTO NOTED.
12. REFER SHEETS A0610 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0611
14. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DETAILS 1/2 /3/ 5 - LABORATORY CASEWORK FOR SPECIFICATIONS.
15. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - KEY-KEY. SEE SHEETS A1114 FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION

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No	Description	Date
2	ADDED	28 FEB 2017
1	ADDENDUM 3-2	15 APR 2016
0	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

ENLARGED PLANS-LEVEL 03

Project No 045613.01 Checked by

A0205

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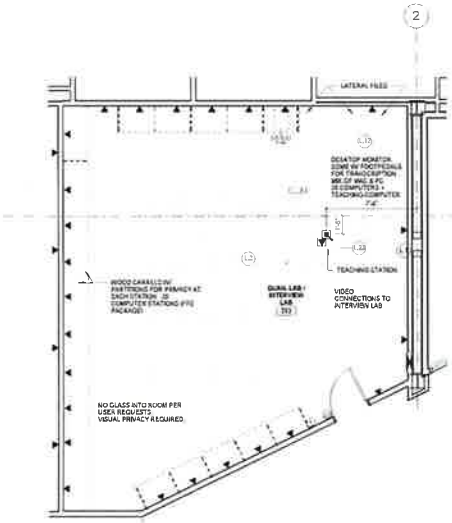
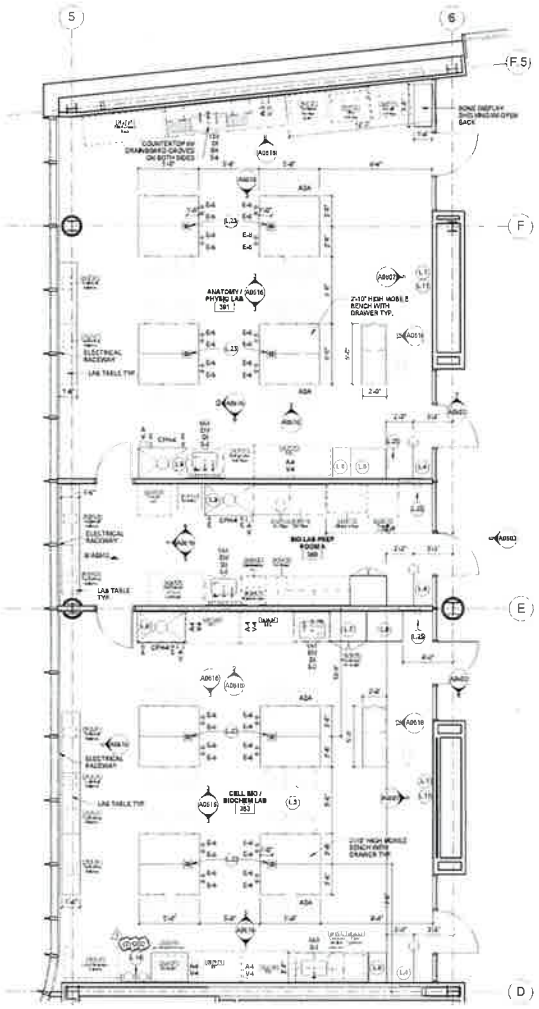


2 A-FL03-96 - AREA B -Quantitative Lab



1 LEVEL 03 - BIOLOGY - WEST

LAB KEYED NOTE LEGEND

L.1 WRITABLE AND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 1.5/3.2 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.9 1.5/3.2 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 CABS BELOW WHITEBOARD
L.12 CAMERA FOR SKYPE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (CFC) CYLINDERS TO BE 1'OFOF
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 5/A0911
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20 FIXED WOOD LABORATORY CASEWORK. BASE CABINETS, MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 09.0660 DRY ERASE FINISH (AWC-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0912.

LAB UTILITY LEGEND

CW WATER COLD WATER FAUCET DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
HW-1 WATER GENERAL WRING FAUCET DECK MOUNTED WITH VACUUM BREAKER SERRATED NOZZLE
DI WATER DI WATER FAUCET DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
EW WATER EYEWASH DECK MOUNTED, AUTO FLOW DOWNGOOWN
DH WATER DRENCH HOSE
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
VA3 VAC WALL MOUNTED SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE SINGLE SERRATED OUTLET
V4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
E ELEC DUPLEX OUTLET (GFI) ON FUME HOOD
E-1 ELEC COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2 ELEC COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3 ELEC WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CS DUP SINK LIPPED MODIFIED EPOXY DUP SINK (PLATED DUAL GROOVING)
S-1 SINK LIPPED MODIFIED EPOXY SINK 20"L x 15"W x 10"D (DROP-IN)
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 20"L x 15"W x 5" D (DROP-IN)
S-3 SINK STAINLESS STEEL SINK 20"L x 15"W x 10"D (DROP-IN)
S-4 SINK STAINLESS STEEL ADA SINK 20"L x 15"W x 5" D (DROP-IN)
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 15"L x 12"W x 5" D (DROP-IN)
S-6 SINK LIPPED MODIFIED EPOXY SINK 15"L x 12"W x 10"D (DROP-IN)
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/ A0913.
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-5 5'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO WIRE FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRYING RACKS WITH DRIP STOP TRUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH SAME BOTTOM EDGE FINISH TO MATCH POWDER EPOXIDE. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF LAZESWER U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON ELEVATIONS INDICATES NON/STABLE SHELVING INSIDE CABINGWA.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL, SIMILAR TO DETAIL.**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL.
11. PROVIDE LOCK AND KEY WHERE A DRAWER IS NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0911 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 14/A0911
14. ALL CASEWORK TO BE PROFIT U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DRAWEN "12 SERIES LABORATORY CASEWORK" FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - 03.0.0.0. SEE SHEETS 41 / 44 FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

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No.	Description	Date
1	ASI-003	24 FEB 2017
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

ENLARGED PLANS-LEVEL 03

Project No 04561.01 Checked by

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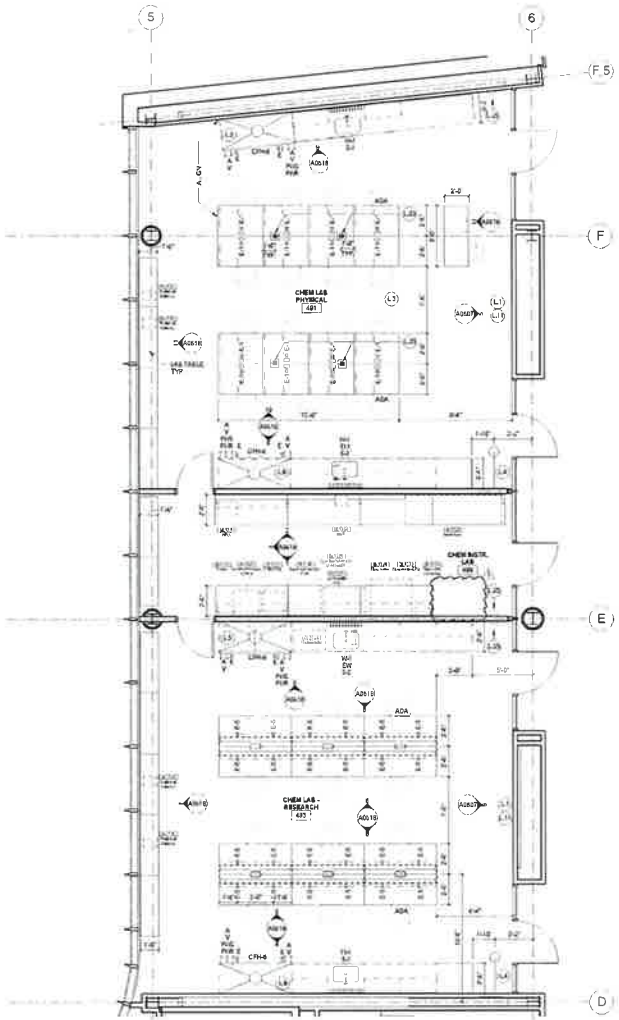

1 L04 - AREA A - WEST CHEMISTRY LAB PLAN

LAB KEYED NOTE LEGEND

- L.1 WHITEBOARD AND PROJECTABLE SURFACE DIMENSIONS AS NOTED
- L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 1(S)13 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
- L.7 WOOD LAB CASEWORK MICROSCOPE CAB
- L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
- L.9 1(S)12 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
- L.11 CABS BELOW WHITEBOARD
- L.12 CAMERA FOR SKYPE INTERVIEW
- L.14 GAS CYLINDER STORAGE RACK (OFCI) CYLINDERS TO BE 'TOFCI'.
- L.16 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
- L.18 LCD MONITOR
- L.19 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 3M/09/11
- L.19 MOVITABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
- L.20 FIXED WOOD LABORATORY CASEWORK. BASE CABINETS MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
- L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.22 6' DEEP x 6' WIDE TRENCH (WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.23 FLOOR BOX FOR ELECTRICAL & DATA
- L.24 96 x 60 DRY ERASE FINISH (NW+1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT: 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
- L.26 POINT EXHAUST UNDERHEU FOR SOLDERING. SEE DETAIL 5/ A0115

LAB UTILITY LEGEND

DW	WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH DERATED NOZZLE, VACUUM BREAKER
HW-1	WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, DERATED NOZZLE
DI	WATER DEIONIZER FAUCET DECK MOUNTED
PWS	WATER PROCESS COLD WATER SUPPLY
PWR	WATER PROCESS COLD WATER RETURN
SW	WATER EYEWASH, DECK MOUNTED, AUTO-ON SHING-DOWN
DW	WATER GREENHOUSE
C	GAS FUME HOOD CONTROL
V	VAC FUME HOOD CONTROL
V-1	VAC WALL MOUNTED, SINGLE DERATED OUTLET
V-3	VAC TURRET BASE, SINGLE DERATED OUTLET
V-4	VAC OUTLET FOR MODIFIED CABINET CONNECTIONS
V-5	VAC QUICK DISCONNECT FOR OVERHEAD DERVILE CARRIER
A	AIR FUME HOOD CONTROL
A-1	AIR TURRET BASE, SINGLE DERATED OUTLET
A-3	AIR WALL MOUNTED, SINGLE DERATED OUTLET
A-4	AIR OUTLET FOR MODIFIED CABINET CONNECTIONS
A-5	AIR QUICK DISCONNECT FOR OVERHEAD DERVILE CARRIER
N	NITROGEN FUMEHOOD CONTROL
E	ELEC DUPLEX OUTLET (GFI) ON FUME HOOD
E-1	ELEC COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2	ELEC COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3	ELEC WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5	ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD DERVILE CARRIER
E-6	ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D	DATA DATA OUTLET
D-1	DATA COUNTERTOP MOUNTED PEDESTAL (2) DATA OUTLETS
D-5	DATA DATA OUTLET ON OVERHEAD DERVILE CARRIER
D-6	DATA DATA OUTLET ON TABLE APRON
CS	CUP SINK LIPPED MODIFIED EPOXY CUP SINK, SYSTEM DUAL (GROUP-N)
S-1	SINK LIPPED MODIFIED EPOXY SINK 25 1/2"W x 15"D (GROUP-N)
S-2	SINK LIPPED MODIFIED EPOXY ADA SINK 25"x15"W x 15"D (GROUP-N)
S-3	SINK STAINLESS STEEL SINK 25 1/2"W x 15"D (GROUP-N)
S-4	SINK STAINLESS STEEL ADA SINK 25"x15"W x 15"D (GROUP-N)
S-5	SINK LIPPED MODIFIED EPOXY ADA SINK 14"x15"W x 15"D (GROUP-N)
S-6	SINK LIPPED MODIFIED EPOXY SINK 16"x12"W x 15"D (GROUP-N)
GSC	GOOSENECK SERVICE CARRIER. SEE DETAIL 1/A1 FINAL
PTD	PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LISTING

CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE
3. CENTER ALL DRAWING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH BASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL, SIMILAR TO DETAIL**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0816 FOR LABORATORY CASEWORK / MILLWORK DETAILS
13. FOR TYPICAL MOUNTING HEIGHTS REF 10/09/11
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DIVISION 12 5503 - LABORATORY CASEWORK FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XX.XX. SEE SHEETS A1.1xx FOR EQUIPMENT SCHEDULES
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION

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No	Description	Date
1	ADDED	24 FEB 2017
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

ENLARGED PLANS-LEVEL 04

Project No 043613.01 Checked by

A0208

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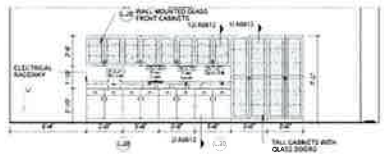
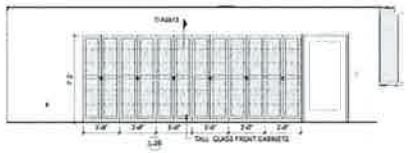
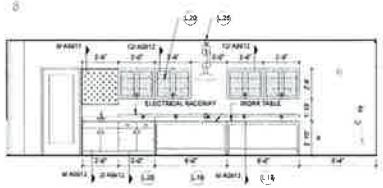


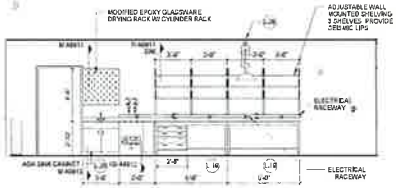
12 L02 PHYSICS RESEARCH - NORTH



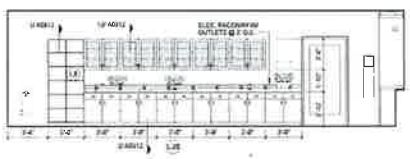
11 L02 PHYSICS LAB PREP - NORTH



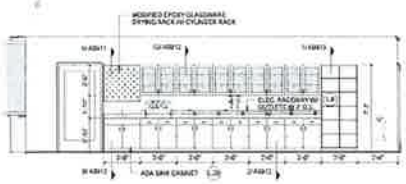
10 L02 PHYSICS LAB PREP - SOUTH



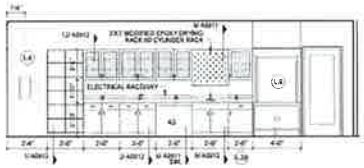
9 L02 PHYSICS RESEARCH - SOUTH



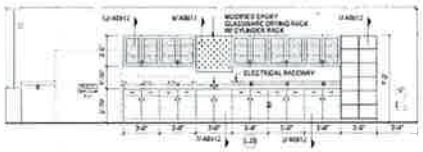
8 L02 - PHYSICS LAB NORTH



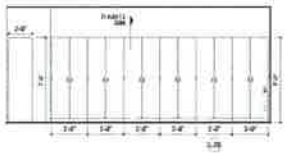
7 L02-N-PHYSICS LAB SOUTH



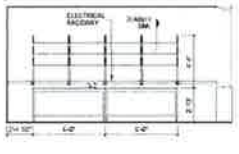
6 L02 SCIN CLASSROOM NORTH



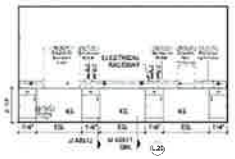
5 L02 SCIN CLASSROOM - SOUTH



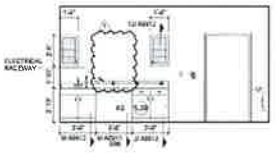
4 L02 LAB STORAGE - SOUTH



3 L02 LAB STORAGE - NORTH



2 L02 GEL DOC MICROSCOPY - NORTH



1 L02 GEL DOC MICROSCOPY - SOUTH

LAB KEYED NOTE LEGEND

L.1 WALL AND PROJECTABLE SURFACE DIMENSIONS AS NOTED
L.2 RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 11'-0 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.9 11'-0 CHEMICAL FUME HOOD- ACCESSIBLE WITH MOBILE STORAGE BELOW WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11 GABB BELOW WHITEBOARD
L.12 CAMERA FOR SKYPE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (CFO) CYLINDERS TO BE (CFO)
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 02/A0611
L.19 MOVEABLE WOOD LABORATORY CASEWORK TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20 FIXED WOOD LABORATORY CASEWORK. BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 6" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 DE MOS DRY ERASE FINISH (WWC-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITO BRACKET BY OWNER
L.26 POINT EXHAUST (UNDERSEL) FOR SOLDERING. SEE DETAIL 3/ A0613

LAB UTILITY LEGEND

CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK
W-1 WATER SEPARATE NOZZLE, VACUUM BREAKER, WATER GENERAL MIXING FAUCET, DECK MOUNTED, WITH VACUUM BREAKER, SEPARATE NOZZLE
DI WATER DI WATER FAUCET DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
DW WATER DI/DRAIN SINK, MOUNTED, AUTOFLOW SWING DOOR
DR WATER BRANCH HOSE
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-1 VAC WALL MOUNTED, SINGLE SEPARATED OUTLET
V-2 VAC TURRET BASE, SINGLE SEPARATED OUTLET
V-4 VAC OUTLET FOR MODIFIED CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE, SINGLE SEPARATED OUTLET
A-2 AIR WALL MOUNTED, SINGLE SEPARATED OUTLET
A-4 AIR OUTLET FOR MODIFIED CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
E ELEC SUPPLER OUTLET (CF) ON FUME HOOD
E-1 ELEC COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2 ELEC COUNTERTOP MOUNTED PEDESTAL (4) DUPLEX ELECTRICAL OUTLET
E-3 ELEC WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-5 ELEC SUPPLER ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC SUPPLER ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL (1) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
C5 SUP SINK UPPER MODIFIED EPOXY CUP SINK 9"x12"x6" DUAL GROOVE
S-1 SINK UPPER MODIFIED EPOXY SINK 20"x15"x6" W/ 6" GROOVE
S-2 SINK UPPER MODIFIED EPOXY ADA SINK 20"x15"x6" W/ 6" GROOVE
S-3 SINK STAINLESS STEEL SINK 20"x15"x6" W/ 6" GROOVE
S-4 SINK STAINLESS STEEL ADA SINK 20"x15"x6" W/ 6" GROOVE
S-5 SINK UPPER MODIFIED EPOXY ADA SINK 16"x11"x6" W/ 6" GROOVE
S-6 SINK UPPER MODIFIED EPOXY SINK 16"x11"x6" W/ 6" GROOVE
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 1/A0613
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND
CFH4 4'-0" WIDE CHEMICAL FUME HOOD
CFH6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GWB FACE, PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE
3. CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EXCED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL.**
10. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0611 FOR LABORATORY CASEWORK / MILLWORK DETAILS
13. FOR TYPICAL MOUNTING HEIGHTS REF. A0611
14. ALL CASEWORK TO BE WOOD U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OTHER. SEE DIVISION 12 3550 - LABORATORY CASEWORK" FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XX.XX. SEE SHEETS A1.1xx FOR EQUIPMENT SCHEDULES
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION

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No	Description	Date
1	ADDED	24 FEB 2017
0	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

INTERIOR LAB ELEVATIONS LEVEL 02

Project No 04561.01 Checked by

A0613

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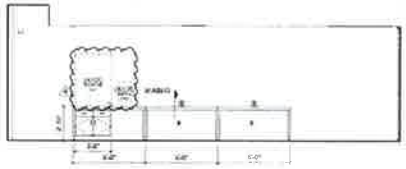
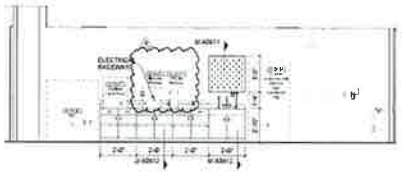
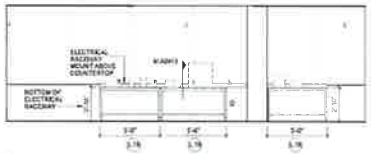


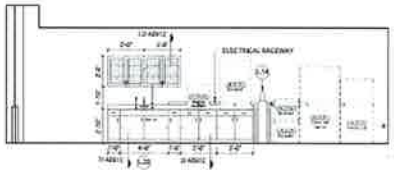
17 L02 OPEN RESEARCH LAB - TABLES - NORTH & SOUTH ELEVATION
1/4" = 1'-0"



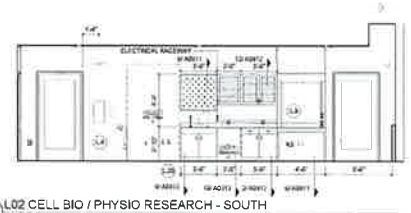
16 L02 OPEN RESEARCH LAB - NORTH
1/4" = 1'-0"



11 L02W CELL BIO AND PHYSICS RESEARCH - WEST
1/4" = 1'-0"



10 L02 CELL BIO AND PHYS RESEARCH - NORTH
1/4" = 1'-0"

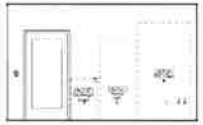


9 L02 CELL BIO / PHYSIO RESEARCH - SOUTH
1/4" = 1'-0"

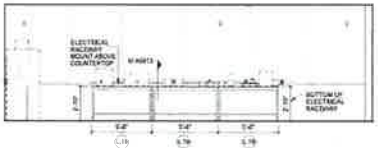
8 L02 TISSUE CULTURE - SOUTH
1/4" = 1'-0"

7 L02 TISSUE CULTURE - NORTH
1/4" = 1'-0"

6 L02 MICROBIO PREP AND TC - NORTH
1/4" = 1'-0"



5 L02 MICROBIO PREP AND TC - SOUTH
1/4" = 1'-0"



4 L02W MICRO / PLANT RESEARCH - WEST
1/4" = 1'-0"

3 L02W MICRO / PLANT BIO RESEARCH
1/4" = 1'-0"

2 L02 MICRO/ PLANT BIOLOGY RESEARCH - NORTH
1/4" = 1'-0"

1 L02 MICRO / PLANT BIO RESEARCH - SOUTH
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

L.1	WRITABLE AND PHOURCTABLE SURFACE. DIMENSIONS AS NOTED
L.2	RECESSED CEILING MOUNTED PROJECTION SCREEN
L.3	WALL MOUNTED PROJECTOR ABOVE
L.4	EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5	17'(13') CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.7	WOOD LAB CASEWORK W/ MICROSCOPE CAR
L.8	WOOD LAB CASEWORK. TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
L.9	11'(13') CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW. WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
L.11	CHAIR BELOW WHITEBOARD
L.12	CHAIRS FOR DRYPS INTERVIEW
L.14	GAS CYLINDER STORAGE RACK (2PEL CYLINDERS TO BE "OPEN")
L.15	RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO ADJUSTED CEILING PLANS
L.16	LCD MONITOR
L.18	MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 9/A0911
L.19	MOVEABLE WOOD LABORATORY CASEWORK. TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED
L.20	FIXED WOOD LABORATORY CASEWORK. BASE CABINETS, MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.21	SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22	9" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23	FLOOR BOX FOR ELECTRICAL & DATA
L.24	36 WIDE DRY ERASE FINISH (ARVO-1)
L.25	PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT = 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26	POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 9/ A0913

LAB UTILITY LEGEND

CW	WATER COLD WATER FAUCET. DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE. VACUUM BREAKER
W-I	WATER GENERAL MIXING FAUCET. DECK MOUNTED WITH VACUUM BREAKER. SERRATED NOZZLE.
DI	WATER DI WATER FAUCET DECK MOUNTED
PWS	WATER PROCESS COLD WATER SUPPLY
PWR	WATER PROCESS COLD WATER RETURN
EW	WATER WATER FAUCET WALL MOUNTED. AUTO FLOW DRINKING/EYEWASH
DR	WATER DRENCH HOSE
G	GAS FUME HOOD CONTROL
V	VAC FUME HOOD CONTROL
V-1	VAC WALL MOUNTED. SINGLE SERRATED OUTLET
V-1	VAC TURRET BASE. SINGLE SERRATED OUTLET
V-J	VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-S	VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A	AIR FUME HOOD CONTROL
A-1	AIR TURRET BASE. SINGLE SERRATED OUTLET
A-J	AIR WALL MOUNTED. SINGLE SERRATED OUTLET
A-J	AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-S	AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N	NITROGEN FUMEHOOD CONTROL
E	ELEC DUPLEX OUTLET (2EA) ON FUME HOOD
E-1	ELEC COUNTERTOP MOUNTED PEDESTAL (1) DUPLEX ELECTRICAL OUTLET
E-2	ELEC COUNTERTOP MOUNTED PEDESTAL (2) DUPLEX ELECTRICAL OUTLET
E-3	ELEC WALL MOUNTED (1) DUPLEX ELECTRICAL OUTLET
E-S	ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6	ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D	DATA DATA OUTLET
D-1	DATA COUNTERTOP MOUNTED PEDESTAL (2) DATA OUTLETS
D-S	DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6	DATA DATA OUTLET ON TABLE APRON
CS	CUP SINK UPPER MODIFIED EPOXY CUP SINK. STAINLESS SINK. (ORIGINAL)
S-1	SINK UPPER MODIFIED EPOXY SINK. 20"L x 12"W x 10"D ORIGINAL
S-2	SINK UPPER MODIFIED EPOXY ADA SINK. 20" L x 15"W x 10"D ORIGINAL
S-3	SINK STAINLESS STEEL SINK. 20"L x 15"W x 10"D ORIGINAL
S-4	SINK STAINLESS STEEL ADA SINK. 20" L x 15"W x 10"D ORIGINAL
S-5	SINK UPPER MODIFIED EPOXY ADA SINK. 14"L x 15"W x 10"D ORIGINAL
S-6	SINK UPPER MODIFIED EPOXY SINK. 30"L x 12"W x 10"D ORIGINAL
OSC	OVERHEAD SERVICE CARRIER. SEE DETAIL 16 / A0913
PTD	PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

CFH4	4'-0" WIDE CHEMICAL FUME HOOD
CFH6	6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

1. ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE LOCATIONS AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. CENTER ALL DRYING RACKS WITH SINK STOP TROUGHS ABOUT CENTERLINE OF SINKS U.N.O.
4. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EXCESS BOTTOM EDGE FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 3" CLEAR ABOVE FLOOR FINISH.
5. CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
6. ALL SURFACE MOUNTED RACEWAYS TO HAVE OUTLETS AT 24" O.C. AND WALL MOUNTED OBJECTS ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. DASHED LINES ON CLEARANCE INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
9. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL.**
10. PROVIDE FINISHED END PANEL AT ALL KNEE SPACES. TYPICAL.
11. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
12. REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
14. ALL CASEWORK TO BE INCLUDED U.N.O.
15. ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DRAWING 1/C.0102 - LABORATORY CASEWORK" FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX.XX.XX. SEE SHEETS A1.1xx FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

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No.	Description	Date
4	ASI#53	24 FEB 2017
3	ASI#49	27 JAN 2017
2	ASI#42	19 DEC 2016
1	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

INTERIOR LAB ELEVATIONS LEVEL 02

Project No. 04581.01 Checked by

A0614

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LAB EQUIPMENT SCHEDULE_LEVEL-2

Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phone	Waste	Floor Drain	Potable Water	DI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N) / Existing (E)	Existing Location	Furnished & Installed by**	Remarks
[illegible]																													

LAB EQUIPMENT SCHEDULE_LEVEL-2

Equipment Number	Description	Manufacturer	Model	Count	Mounting Location*	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phone	Waste	Floor Drain	Potable Water	DI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N) / Existing (E)	Existing Location	Furnished & Installed by**	Remarks
[illegible]																													

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No	Description	Date
[illegible]	[illegible]	[illegible]
1	ASI-048	27 JAN 2017
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

Drawing Title

EQUIPMENT LIST LEVEL-02

Project No 04561.01 Checked by

A1102

GENERAL NOTES:

1. ALL THE EQUIPMENT IS OFOI U.N.O.

LEGEND:

*MOUNTING LOCATION:
B Benchtop
U Undercounter
F Floor
W Wall
C Ceiling
S Storage

**FURNISHED & INSTALLED BY:
CFCI Contractor Furnished Contractor Installed
OFCI Owner Furnished Contractor Installed
OFOI Owner Furnished Owner Installed

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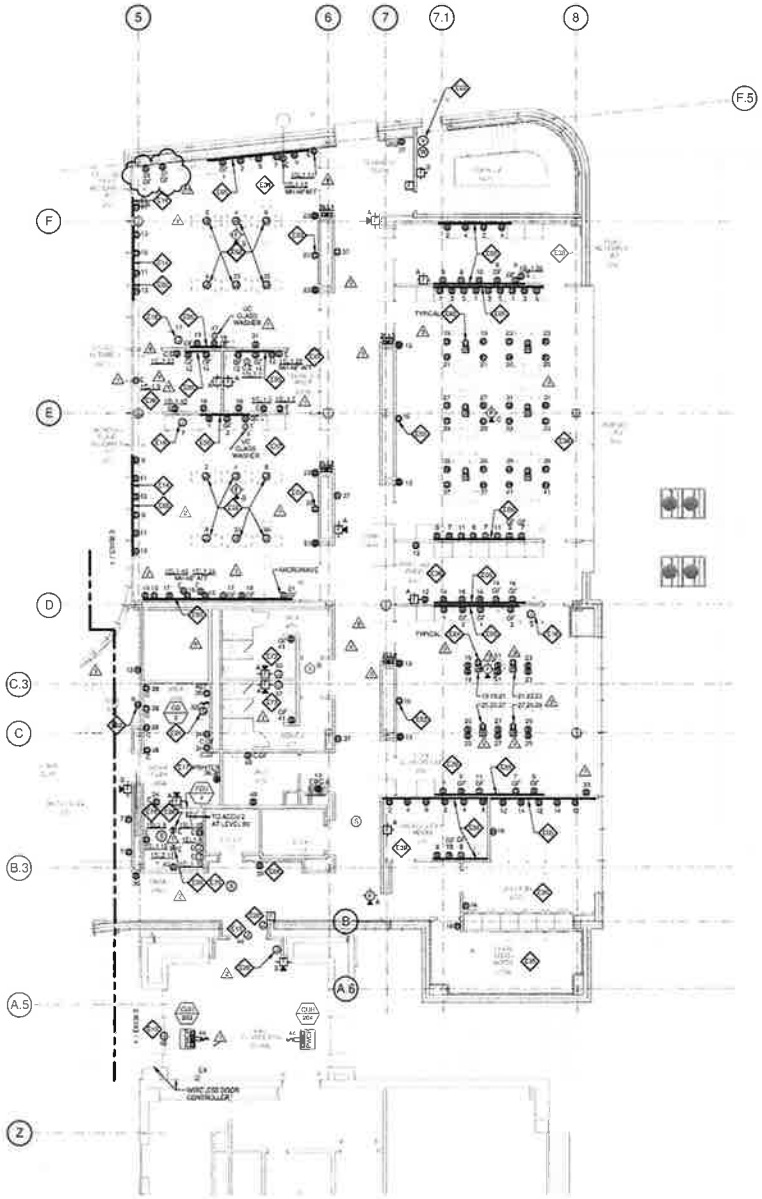

1 LEVEL 02 - AREA A - FLOOR PLAN - POWER AND AUXILLARY

GENERAL NOTES:

A DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH IN

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX"

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.

E PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH IN OF DATA, VOICE AND A/V

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 2SL1 UNLESS NOTED OTHERWISE

◇ KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY. WIREMOLD AL4320 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLTE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E14 SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN

E16 PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD

E17 PROVIDE NEMA 6-30R 30A 208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH IN

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH IN

E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN

E36 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL1

E37 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL2

E38 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL3

E39 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL4

E52 PROVIDE POWER AND FINAL CONNECTIONS TO OVERHEAD SERVICE CARRIER. REFER TO LIGHTING PLANS FOR LIGHTING CIRCUITS. COORDINATE WITH ARCHITECTURAL PLANS AND ELEVATIONS

E53 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR

E62 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB25 FC WITH A BRASS FLANGED COVER CAT. NO. FRTCB25 NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A STANDARD DUPLEX RECEPTACLES, NEMA 5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E63 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB25 FC WITH A BRASS FLANGED COVER CAT. NO. FRTCB25 NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E64 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB25 FC WITH A BRASS FLANGED COVER CAT. NO. FRTCB25 NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (3) 20A STANDARD DUPLEX RECEPTACLES, NEMA 5-20R. (1) GANG BLANK. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E70 PROVIDE NEMA L5-20R, 20A, 120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E75 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER

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No	Description	Date
10	ASI 0a4	24 FEB 2017
9	ASI 0a3	27 JAN 2017
8	ASI 0a7	16 JAN 2017
7	ASI 0a4	13 JAN 2017
6	ASI 0a6	08 NOV 2016
5	ASI 0a5	08 NOV 2016
4	ASI 0a1 - Not accepted by owner	28 OCT 2016
3	ASI 0a7	14 OCT 2016
2	ADDENDUM 2.4	19 APRIL 2016
1	ADDENDUM 2.3	17 MARCH 2016
	ISSUED FOR CONSTRUCTION (GFC)	01 MAR 2016

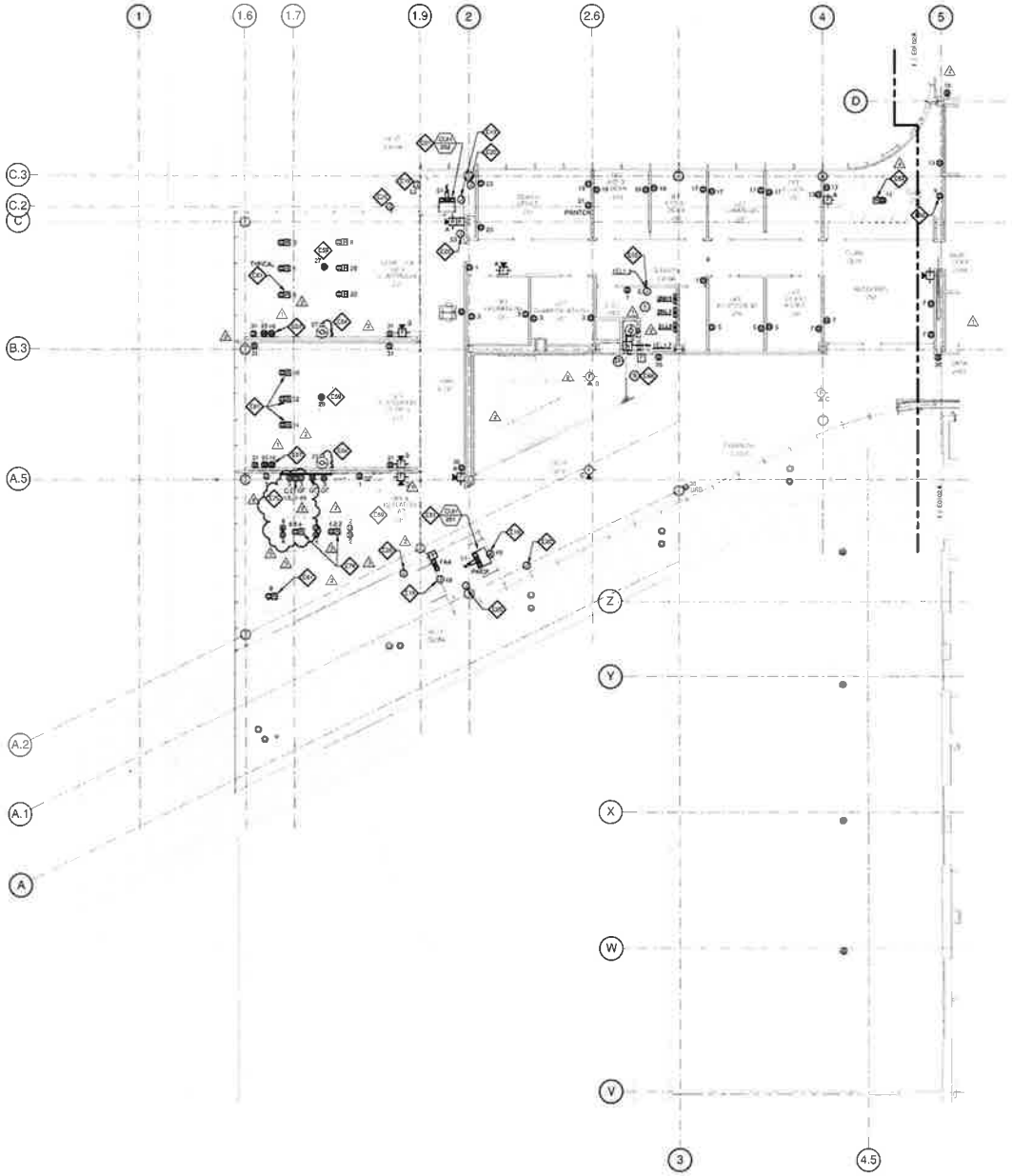
KEY PLAN

Drawing Title

LEVEL 02 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 04551.01 Checked by

E0102.A



1 LEVEL 02 - AREA B - FLOOR PLAN - POWER AND AUXILLARY
1/8" = 1'-0"

GENERAL NOTES:

A DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH IN

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX"

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.

E PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH IN OF DATA, VOICE AND A/V

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 2LL1 UNLESS NOTED OTHERWISE

◇ KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E04 PROVIDE CONNECTION TO MOTORIZED PROJECTION SCREEN AND UP/DOWN CONTROLS

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E17 PROVIDE NEMA 6-30R, 30A 208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH IN

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH IN

E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN

E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR

E59 PROVIDE NEW QUAD RECEPTACLE FLUSH MOUNTED IN CEILING FOR PROJECTOR. VERIFY EXACT LOCATION WITH ARCHITECTURAL AND A/V DRAWINGS

E61 PROVIDE A 2HR FIRE CLASSIFIED 2 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF625 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (1) 20A DUPLEX RECEPTACLE (1) GANG DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E63 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF545 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE (1) GANG DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E66 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR

E69 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL3

E70 PROVIDE NEMA L6-20R, 20A 120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E75 RECEPTACLES SHALL BE MOUNTED HORIZONTALLY. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS

E76 PROVIDE A 2HR FIRE CLASSIFIED 4 GANG MULTI SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF625 FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2)20A STANDARD DUPLEX RECEPTACLES, NEMA 5-20R, (1) GANG DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

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No.	Description	Date
6	ASI 003	24 FEB 2017
5	ASI 038	30 NOV 2016
4	ASI 022	16 NOV 2016
3	ASI 012	14 OCT 2016
2	ADDENDUM 2	15 APR, 2016
1	ADDENDUM 1	17 MAR 2016
	ISSUE FOR CONSTRUCTION (IFC)	01 MAR 2016

Drawing Title

LEVEL 02 AREA B FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 04981.01 Checked by

E0102.B

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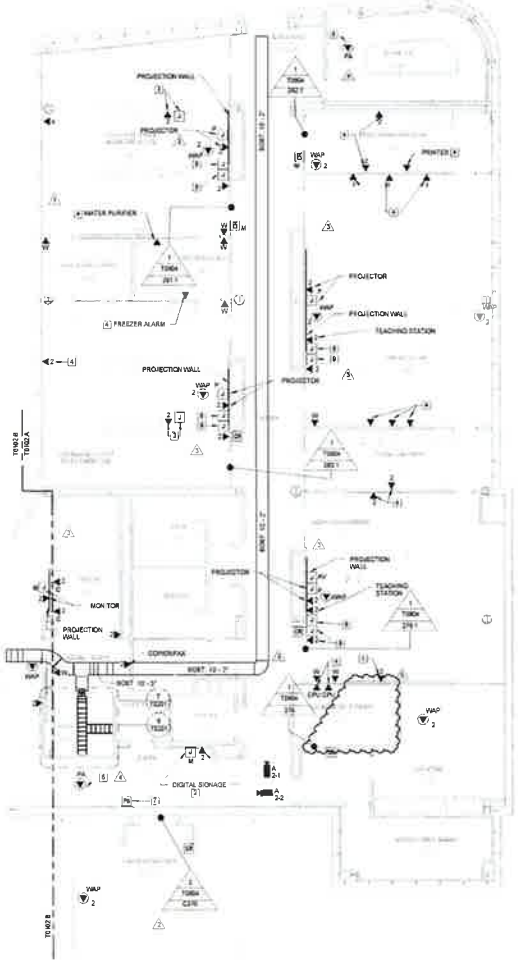

(1) LEVEL 02 - AREA A
1/8" = 1'-0"

GENERAL NOTES:

THIS SHEET ONLY

1. DATA OUTLETS IN OFFICE SHALL BE LOCATED ADJACENT TO AND AT THE SAME MOUNTING HEIGHT AS THE POWER RECEPTACLES. COORDINATE LOCATION WITH THE ELECTRICAL CONTRACTOR.
2. TELECOMMUNICATIONS CABLING ON THIS SHEET SHALL BE RUN TO LEVEL 02 DATA ROOM 2006.

KEYED NOTES:

THIS SHEET ONLY

1. CABINET MOUNTED AV EQUIPMENT (OFVI)
2. CONFIRM EXACT LOCATION OF DATA OUTLET AND MONITOR BOX WITH AV VENDOR PRIOR TO INSTALLATION
3. MOUNT DEVICES IN THE OVERHEAD SERVICE CARRIER SYSTEM. PROVIDE AN EMPTY 1" CONDUIT WITH PULL STRING FROM EACH DEVICE TO CEILING SPACE. COORDINATE DEVICE LOCATION AND MOUNTING REQUIREMENTS WITH CARRIER SYSTEM INSTALLER.
4. MOUNT IN COMMUNICATION CHANNEL OF J HOOKS RACEWAY. SEE ELECTRICAL DRAWINGS FOR RACEWAY INFORMATION.
5. NOT USED
6. COORDINATE EXACT LOCATION WITH PA INSTALLER
7. LOCAL DOOR LOCK POWER SUPPLY
8. PROVIDE (1) 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH 2 GANG RING AND (1) 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE FOR AV KEYPAD. PROVIDE (1) CAT 6A CABLE TO DATA ROOM IDENTIFIED ON PLANS. MOUNT AT LIGHT SWITCH HEIGHT.
9. PROVIDE (1) 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH 2 GANG RING FOR THE AV INPUT PLATE. MOUNT AT RECEPTACLE HEIGHT. PROVIDE (1) 1" CONDUIT UP TO THE AV KEYPAD J BOX. (SEE KEYED NOTE 8)

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No	Description	Date
5	ASI-053	24 FEB 2017
4	ASI-040	06 DEC 2016
3	ASI-035	10 NOV 2016
2	ADDENDUM 2.2	19 APR 2016
1	ADDENDUM 2.1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (SPD)	01 MAR 2016

Drawing Title

LEVEL 02 FLOOR PLAN - AREA A

Project No. 04881.01 Checked by

T0102.A

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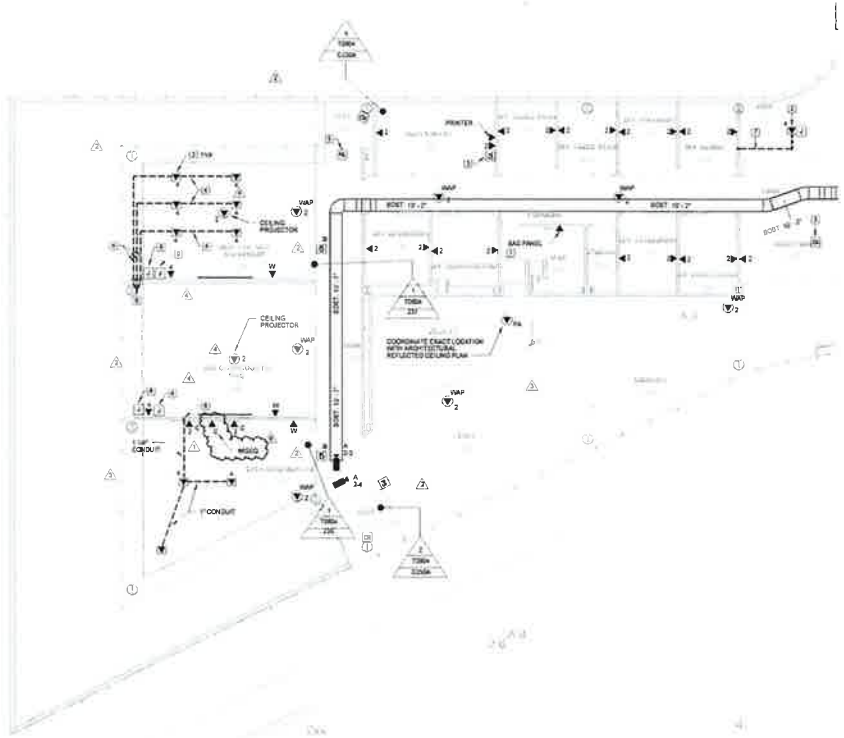

1 LEVEL 02 - AREA B
1/8" = 1'-0"

GENERAL NOTES:

THIS SHEET ONLY

1. DATA OUTLETS IN OFFICE SHALL BE LOCATED ADJACENT TO AND AT THE SAME MOUNTING HEIGHT AS THE POWER RECEPTACLES. COORDINATE LOCATION WITH THE ELECTRICAL CONTRACTOR.
2. TELECOMMUNICATIONS CABLING ON THIS SHEET SHALL BE RUN TO LEVEL 02 DATA ROOM 2008

KEYED NOTES:

THIS SHEET ONLY

1. CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
2. SEE ELECTRICAL DRAWINGS FOR FLOOR BOX INFORMATION.
3. SECURITY SYSTEM (KURESS) ALARM. INSTALL ON THE BOTTOM SIDE OF THE DESK SURFACE. COORDINATE EXACT LOCATION WITH FURNITURE INSTALLER. COORDINATE WIRING REQUIREMENTS WITH THE SECURITY SYSTEM INSTALLER
4. PROVIDE A 1-1/4" PVC CONDUIT IN SLAB FOR NETWORK CABLING SERVING DESKTOP COMPUTERS.
5. DOOR LOCK POWER SUPPLY
6. STUB CONCEALED CONDUITS UP INTO ACCESSIBLE CEILING SPACE
7. PROVIDE (2) 1" CONDUITS IN SLAB FOR AV AND DATA CABLES. STUB-UP IN WALL CAVITY TO ACCESSIBLE CEILING SPACE.
8. PROVIDE (1) 4 11/16" SQUARE X 2 1/8" DEEP BOX WITH 2-GANG RINGAND (1) 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE. PROVIDE (1) CAT 6A CABLE TO DATA ROOM IDENTIFIED ON PLANS. MOUNT AT LIGHT SWITCH HEIGHT
9. PROVIDE (1) 4 11/16" SQUARE X 2 1/8" DEEP BOX WITH 2-GANG RINGAND (1) 1" CONDUIT UP TO THE AV KEYPAD. 3-AXIS/S&E KEYED NOTE 8. MOUNT AT RECEPTACLE HEIGHT

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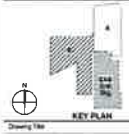
No	Description	Date
6	ASI-053	24 FEB 2017
5	ASI-038	10 NOV 2016
4	ASI-030	14 OCT 2016
3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	18 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



KEY PLAN

Drawing Title

LEVEL 02 FLOOR PLAN - AREA B

Project No 04581.01 Checked by

T0102.B

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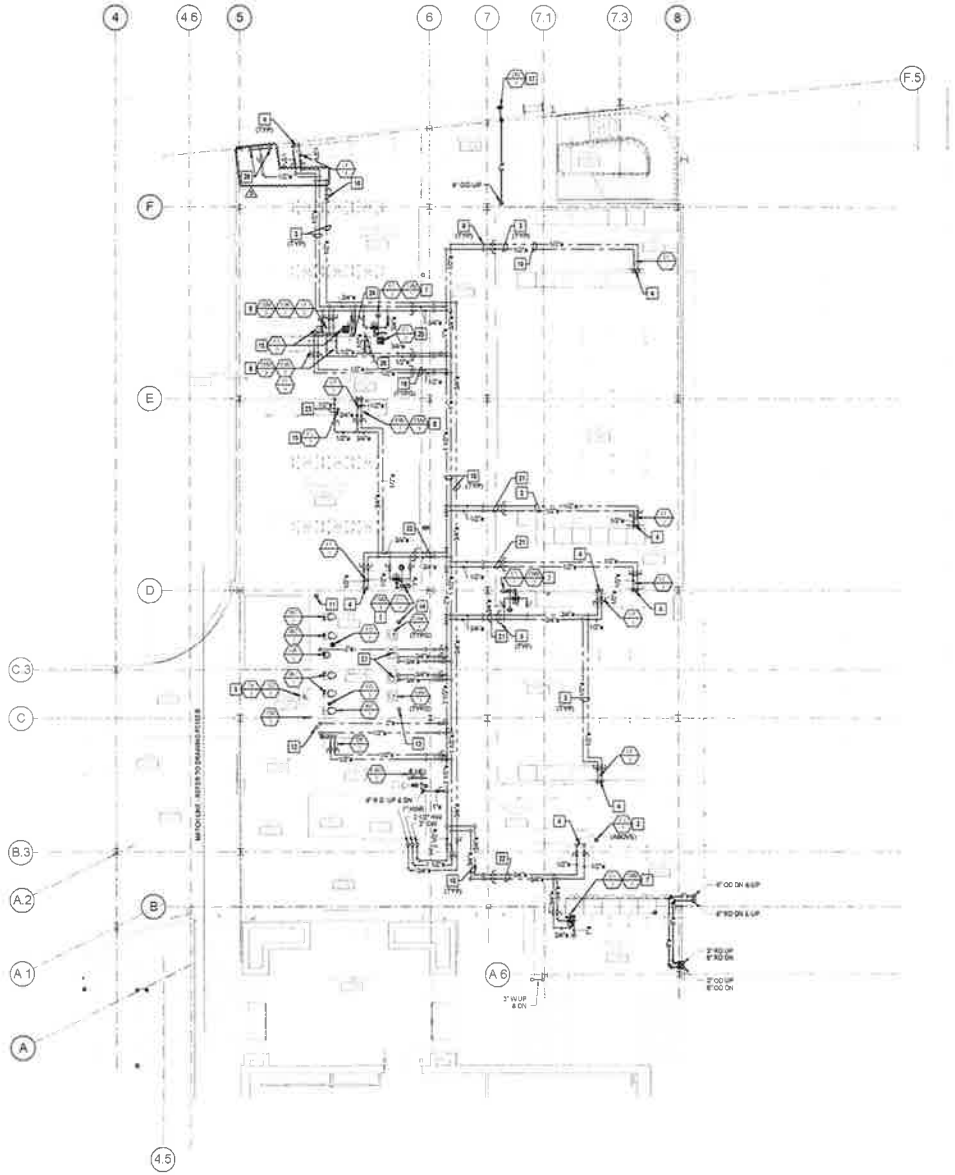

1 LEVEL 02 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

1. NOT USED
2. FLOOR SINK FOR USE ON LEVEL 3 COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR FOR THE FLOOR OPENING
3. PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN
4. 1/2 CW 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE
5. BREAKROOM SINKS ARE TO BE SERVED FROM WATER WASTE AND VENT PIPING IN TOILET ROOM CHASE
6. PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM
7. EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1 TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET EYEWASH PORTION OF ASSEMBLY TO 2" WASTE AND 2" VENT TYPICAL FOR ALL INSTALLATIONS REFER TO DRAWING P0403 DETAIL 3
8. DECK MOUNTED EMERGENCY EYEWASH TO BE LOCATED AT SINK INSTALL THERMOSTATIC MIXING VALVE IN CABINET SPACE BELOW THE SINK COORDINATE MOUNTING REQUIRMENTS OF EYEWASH AND THIV WITH THE GENERAL CONTRACTOR TYPICAL FOR ALL INSTALLATION REFER TO DRAWING P0403 DETAIL 4
9. DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER HOLD TIGHT TO BOTTOM OF STEEL
10. PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN
11. 4" SANITARY VENT RISER UP TO SERVE WATER CLOSETS URINALS AND FLOOR DRAINS ON EACH LEVEL
12. 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS URINALS AND FLOOR DRAINS ON EACH LEVEL
13. 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL
14. 2" SANITARY VENT UP TO SERVE LAVATORIES ON EACH LEVEL
15. FLOOR SINK UNDER COUNTERTOP WITH IN CASEWORK VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH IN COORDINATE FLOOR OPENING WITH THE GENERAL CONTRACTOR
16. HOT WATER RETURN CIRCUIT SETTER VALVE LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING REFER TO DRAWING P0502 DETAIL 11/P0502
17. COORDINATE AND VERIFY LOCATION OF DOWNSPOUT NOZZLE AND WALL SLEEVE PRIOR TO ROUGH-IN
18. REFER TO DRAWING P0405 WASTE SUPPLY RISER 6
19. REFER TO DRAWING P0407 WATER SUPPLY RISER 3
20. REFER TO DRAWING P0408 WATER SUPPLY RISER 2
21. REFER TO DRAWING P0407 WATER SUPPLY RISER 4
22. REFER TO DRAWING P0407 WATER SUPPLY RISER 5
23. 1/2" HW DOWN IN WALL TO SERVE UNDERCOUNTER GLASS WASHER VERIFY CONNECTION POINT AND LOCATION PROVIDE ALL FITTINGS AS REQUIRED
24. 1/2" CW AND 1/2" HW DOWN IN WALL TO SERVE CLASS 1 BIOLOGICAL CABINET VERIFY CONNECTION POINT AND LOCATION PROVIDE ALL FITTINGS AS REQUIRED
25. FLOOR SINK TO SERVE COUNTERTOP AUTOCLAVE VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH IN COORDINATE FLOOR OPENING WITH THE GENERAL CONTRACTOR
26. 1/2" CW DOWN IN WALL TO SERVE COUNTERTOP AUTOCLAVE VERIFY EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN
27. PROVIDE WASTE TYPE TRAP PRIMER (TP-3) ON LAVATORY DRAIN
28. 1/2" CW DOWN IN WALL TO SERVE FUTURE LAB EQUIPMENT FURNISH AND INSTALL TWO RECESSED WATER OUTLET BOXES TYPE (QW-1) VERIFY EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH IN REFER TO DRAWING P0403 WATER SUPPLY RISER 2

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St Louis Missouri 63102
T 314 241 6250
F 314 241 7570

Wilson Teo & Associates, Inc
MEP/FP Engineer
7996 Maryland Road Suite 126
St Louis MO 63143
314-884-7600

David Mason & Associates, Inc
Structural & Civil Engineer
800 South Vandeventer Avenue
St Louis, MO 63110
314 534 1035

Faith Group
Technology
3101 S Hanley Rd Suite 100
St Louis MO 63143
314 991 2228

Kuhlmann Leavell, Inc
Environmental Graphics & Signage
1400 Pershing Ave
St Louis, MO 63130
314 725 8616

KWA Architects
Architecture
8721 Lounger Road
St Louis, MO 63124
314 962 2580

Spellman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 300
St Louis, MO 63105
314 862 0070

BWT Design
Landscape Architect
7722 Big Bend Blvd
St Louis, MO 63119
314 644 3700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S 3rd Street, Suite 201
St Louis, MO 63104
314 588 0601

No	Description	Date
5	ASI 053	24 FEB 2017
4	ASI 033 (RFI 281 286 308 & 310)	03 NOV 2016
3	ADDENDUM 3-4	24 MAY 2016
2	ADDENDUM 2-0	18 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
	ISSUED FOR CONSTRUCTION (IFC)	01 MAR 2016

KEY PLAN

Drawing Title

LEVEL 02 AREA A FLOOR PLAN - PLUMBING

Project No 04981.01 Checked by

P0102.A

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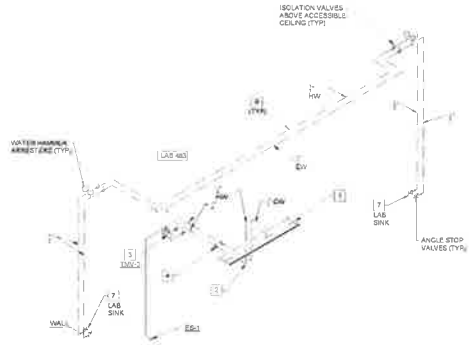
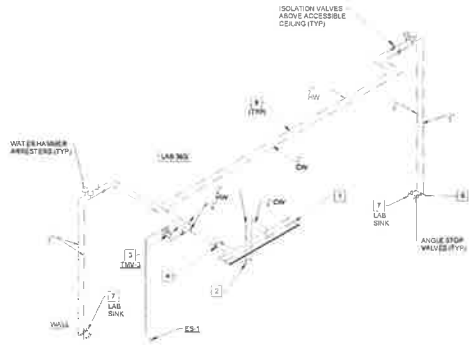
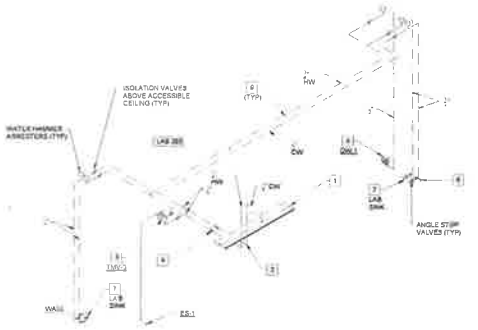


4 DOMESTIC WATER SUPPLY RISER - LAB 483



3 DOMESTIC WATER SUPPLY RISER - LAB 383

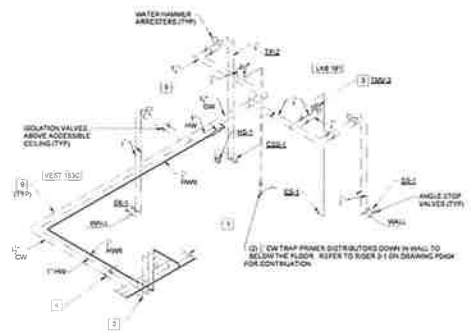


2 DOMESTIC WATER SUPPLY RISER - LAB 283

KEYED NOTES (THIS SHEET ONLY)

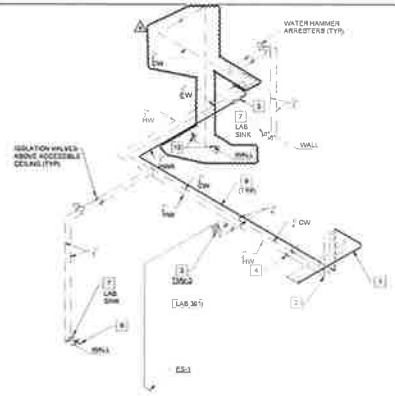
1. DOMESTIC WATER PIPING IN THE CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES ON THIS PROJECT.
2. DROP PIPING BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
3. THERMOSTATIC MIXING VALVE (TMV-2) SERVING THE EMERGENCY SHOWER TO BE LOCATED ABOVE THE ACCESSIBLE CEILING. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR PIPING DIAGRAM OF EMERGENCY SHOWER. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
4. PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
5. REFER TO DRAWING P0502, DETAIL 11/P0502 FOR HOT WATER RETURN PIPING DIAGRAM.
6. WATER PIPING CONNECTION TO THERMOSTATIC MIXING VALVE (TMV-3) SERVING THE DECK MOUNTED EMERGENCY EYEWASH. REFER TO DRAWING P0403, DETAIL 4/P0403 FOR PIPING DIAGRAM OF EMERGENCY EYEWASH. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
7. LAB SINK WITH LAB FAUCET TYPE "U".
8. WATER CONNECTION FOR UNDER COUNTER GLASS WASHER. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.
9. DOMESTIC WATER PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION WITH OTHER TRADES ON THIS PROJECT PRIOR TO ROUGH-IN.
10. WATER CONNECTION FOR ICE MACHINE. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.
11. WATER CONNECTION FOR CLASS II BIOLOGICAL CABINET. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.
12. WATER CONNECTION FOR FLOOR MOUNTED AUTOCLAVE. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK. PROVIDE WATER OUTLET BOX SIMILAR TO DW-1.
13. WATER CONNECTION FOR FUTURE FLOOR MOUNTED LAB EQUIPMENT. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK. PROVIDE WATER OUTLET BOX SIMILAR TO DW-1.

5 DOMESTIC WATER SUPPLY RISER - PREP 389

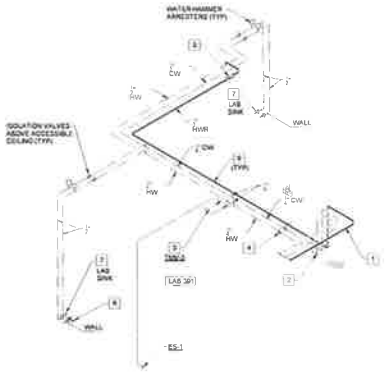


1 DOMESTIC WATER SUPPLY RISER - VESTIBULE 183C AND LAB 191

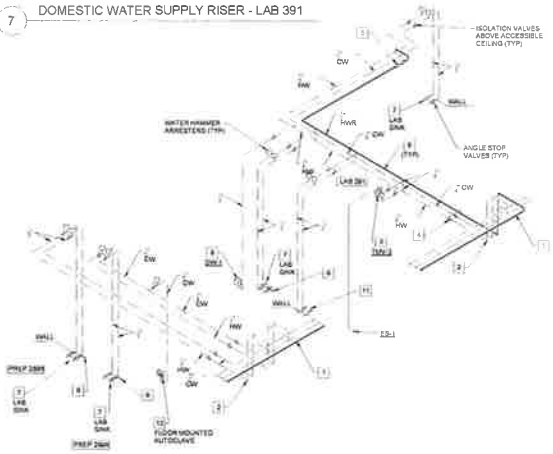
1 DOMESTIC WATER SUPPLY RISER DIAGRAMS
P0405 SCALE: NTS



8 DOMESTIC WATER SUPPLY RISER - LAB 491



7 DOMESTIC WATER SUPPLY RISER - LAB 391



6 DOMESTIC WATER SUPPLY RISER - PREP 289A - PREP 289B AND LAB 291

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

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St. Louis, Missouri 63102
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St. Louis, MO 63143
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Faith Group
Technology
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314 991 2228

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KWA Architects
Architecture
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Spellman Brady & Company
Interior Designer
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SWT Design
Landscape Architect
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314 644 1100

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314 588 0601

No	Description	Date
4	ASI - 053	24 FEB 2017
3	ASI - 033 (RFI 251, 288, 309 & 310)	03 NOV 2016
2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
0	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

Drawing Title

RISERS - PLUMBING

Project No: 04M1 Checked by

P0405

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2/28/2017 3:38:58 PM

PARIC
EXPERIENCE. EXCELLENCE.

May 05, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-131 - Teaching kitchen oven change

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Four Hundred Ninety-Eight Dollars And Zero Cents $498.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0120 (Teaching oven change), Total $ 498.00

This change will utilize the owner's contingency.
Proposed Change Proposal Total: $498.00

If this change proposal meets with your approval, please sign and return this proposal for our records by May 19, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/15/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 12-MAY-17
Time: 03:56 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0120	Teaching oven change			498.00	12-MAY-17					498.00	498.00	

Vendor Name					Description					
Paric Corp - Self Perform	15051	06200.001	S	Finish Carpentry Sub	475.00	Teaching oven change	Providing a JK 5500SFSS in lieu of the spec'd JK3500SFSS GE double oven at Webster University's request. Add $475.00			
	15051	23100.001	M	Risk Management (1.1%)	5.00	Teaching oven change	Risk Management			
	15051	23150.005	M	Contractor Default Insurance (1.25%)	6.00	Teaching oven change	Contractor Default Insurance			
	15051	23300.001	F	Fee (2.5%)	12.00	Teaching oven change	Contractor Fee			
Total For EXT		**0.00**		**0.00**	**498.00**				**498.00**	**498.00**
Grand Total:		**0.00**		**0.00**	**498.00**				**498.00**	**498.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	12-MAY-17
To Change Order:		Run Time:	03:56 PM
Status Code:		Operator:	DEV_GAT
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

Subcontractor Change Proposal Log

5/12/2017

Subcontrator COR #	Date submitted	Description	Cost	Status Approved / Declined	*Paric PCI #	*Paric Sub CO #	Comments
15050	4/19/2017	SUBTRACT JK3500SFSS	$ (1,500.00)				PER DEVIN GATES
		ADD JK5500SFSS	$ 1,975.00				
		Totals	$ 475.00				

* For Paric tracking purposes

** Change orders cannont be billed until change order is executed.

*** This log does not constitute an accepted change of work by Paric.

Scope item: Subontractors must provide a change proposal log similar to the attached with their Pay Application.

Failure to supply the information in an acceptable form without notifying Paric will result in your Pay App not being processed

Add to billing instructions

PARIC
EXPERIENCE. EXCELLENCE.

May 30, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-132 - ASI#62 Alternative for ASI#043/CP-070 3 way Valves

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of One Thousand Nine Hundred Seventy-Six Dollars And Zero Cents $1,976.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0129 (ASI#62), Total $ 1,976.00

The owner contingency shall be utilized for this change proposal. This CP replaced CP-70 / ASI#43 previously submitted.
Proposed Change Proposal Total: $1,976.00

If this change proposal meets with your approval, please sign and return this proposal for our records by June 02, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/5/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 30-MAY-17
Time: 02:00 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0129	ASI#62			1,976.00	30-MAY-17					1,976.00	1,976.00	

Vendor Name				Description			
Icon Mechanical Construction & Engineering, I	15051	15500.001 S	Mechanical Sub	1,883.00	ASI#62		Provide ASI#62 changes per ICON Mechanical proposal dated 5/5/17. Add $1,883
	15051	23150.005 M	Contractor Default Insurance (1.25%)	24.00	ASI#62		Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	48.00	ASI#62		Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	21.00	ASI#62		Risk Management
Total For EXT		**0.00**	**0.00**	**1,976.00**			**1,976.00** **1,976.00**
	Grand Total:	**0.00**	**0.00**	**1,976.00**			**1,976.00** **1,976.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	30-MAY-17
To Change Order:		Run Time:	02:00 PM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

CP-132
E-129

icon Mechanical

1616 Cleveland Boulevard • Granite City, IL 62040

May 5, 2017

Paric Corporation
77 West Port Plaza #250
St. Louis, MO 63146

Attn: **Mr. Jason Szachnieski**
Project: **Webster University ISB**
Ref: **ASI - 62**

Dear Jason,
We are pleased to submit our change proposal associated with the Webster University ISB Project. The changes covered by this change order as follows:

Price for Above Listed Addendum. This Addendum will replace ASI-43 in full: **$1,883**
The above price included:

- **Pipe Fitter Labor: 13hrs @ Contract Rate: $1,227**
- **Material Cost: $50**
- **Controls $570**
- **OH&P: $36**

Thank you for giving us the opportunity to submit on this scope change. We wish you success and look forward to continued involvement. If there are any questions or if we can be of further assistance, please contact me.

Sincerely,
icon Mechanical
Alex Chambers

(618) 452-0035 • Fax (618) 452-0037

Szachnieski, Jason

From: rick.branstetter@geco.com
Sent: Tuesday, May 2, 2017 9:50 AM
To: Gates, Devin
Cc: Alex Chambers; Szachnieski, Jason; dan.wagener@geco.com
Subject: Re: FW: WU-ISB: ASI-062
Attachments: ASI-062 WU-ISB.pdf; image004.jpg; image001.png; image002.png; image003.png

Devin,

I do not believe there is an electrical cost associated with the this ASI

GUARANTEE ELECTRICAL

Rick Branstetter
Preconstruction Manager
Phone: 314-678-8053
Main: 314-772-5400
Mobile: 314-280-7477
Fax: 314-678-8353

Web: www.geco.com
3401 Bent Ave
St. Louis, MO 63116
VIEW MAP

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"Gates, Devin" ---04/25/2017 07:33:28 AM---Alex, See attached. I believe this is just cleaning up the drawings but let me know if there is any

From: "Gates, Devin" <ddgates@paric.com>
To: Alex Chambers <achambers@iconmech.com>, Rick Branstetter <rick.branstetter@geco.com>
Date: 04/25/2017 07:33 AM
Subject: FW: WU-ISB: ASI-062

Alex,

See attached. I believe this is just cleaning up the drawings but let me know if there is any impact.

Thanks,

DEVIN GATES
SENIOR PROJECT ENGINEER

Cell: 314-348-8828
Main: 636-561-9500

77 Westport Plaza, Suite 250
St. Louis, MO 63146
PARIC.COM

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From: Patel, Kelvin [mailto:kpatel@CANNONDESIGN.COM]
Sent: Monday, April 24, 2017 7:27 PM
To: Craig Miller, Sr. (craigmiller29@webster.edu); Mayhew, Doug; Szachnieski, Jason; Gates, Devin; Ray, Steve; Ken Creehan
Cc: Grossman, Lynn; Bacino, Richard
Subject: WU-ISB: ASI-062

Below is the link for the "**ASI-062**" (Alternative for ASI-043/CP-070: 3-way valves) which is placed within 'ASI' folder for the ISB building –

https://cannondesign.box.com/v/WU-ISB-ASI

It is also uploaded on the DataStart site (link & screenshot below).

http://bw.sp.hostatacumen.net/Webster/Interdisciplinary/Interdisciplinary-Const/DrawingsConstruction/ASI

Please forward this link to any other person who needs access to.

Let me know if you have trouble accessing it or have any questions.

Have a good day!

Kelvin Patel, CDT, LEED AP BD+C
Associate

1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8756
cannondesign.com

(See attached file: image001.png)(See attached file: image002.png)(See attached file: image003.png)(See attached file: image004.jpg)(See attached file: ASI-062 WU-ISB.pdf)

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CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No: 04561.01

Architect's ASI No: 062

Project:
Webster University
Interdisciplinary Science
Building

Date Issued: 04/20/17

Contract Date:

Reason Code: 06 Owner's Scope

Discipline Code: 09 Mechanical

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Attachments:

Drawings:

M0402 – DIAGRAMS - MECHANICAL

M0603 – SCHEDULES - MECHANICAL

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

SHEET M0402 - DIAGRAMS – MECHANICAL

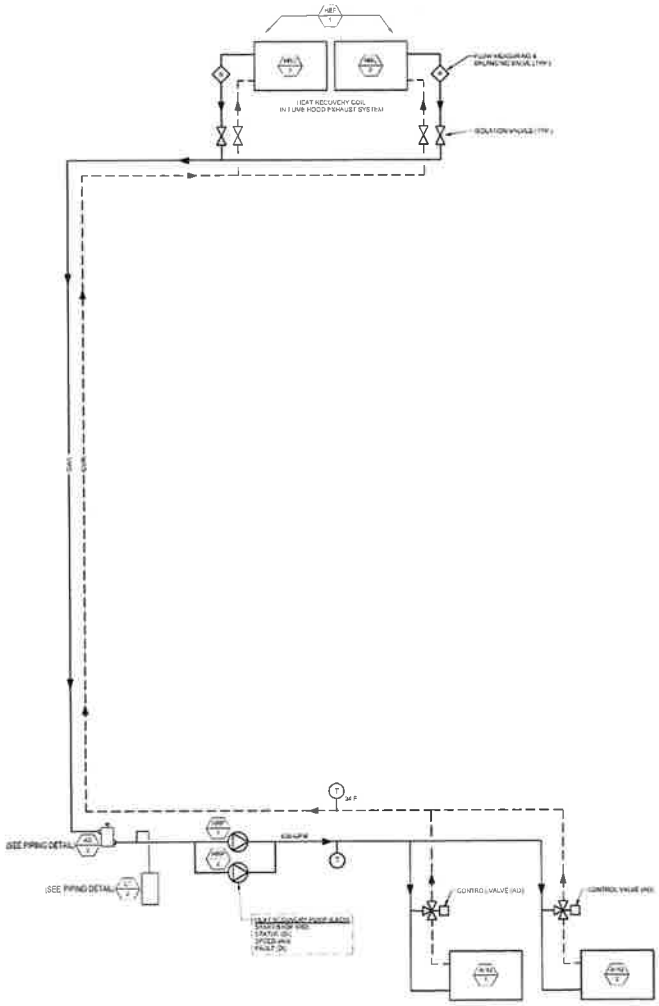
- Delete reference to 1" backpressure regulating valve from **HEATING WATER FLOW AND AUTOMATION DIAGRAM**

SHEET M0603 – SCHEDULES – MECHANICAL

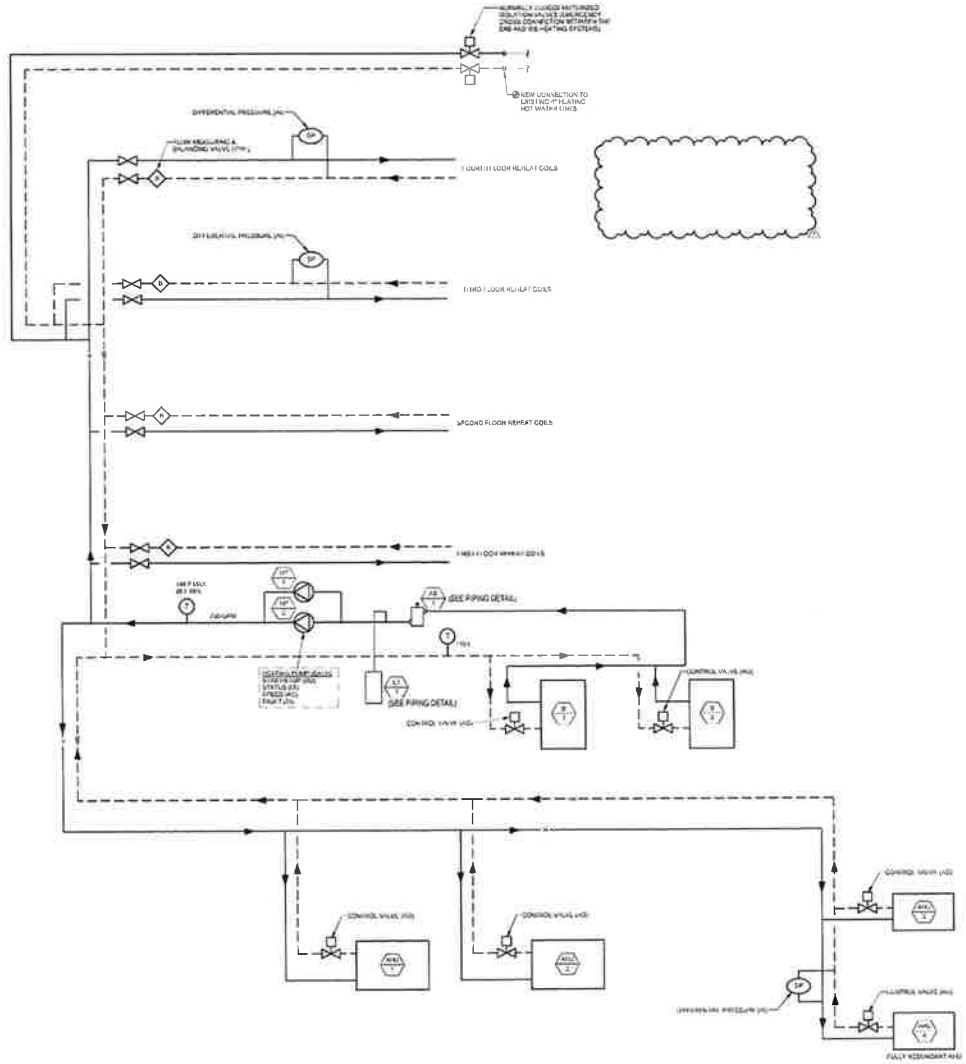
- VARIABLE AIR VOLUME BOX WITH HOT WATER (VAV) SCHEDULE: Delete Note #5 from VAV-101, VAV-201, VAV-301, and VAV-401

Issued by Architect: Mike Nolte, William Tao & Associates, Inc.

Accepted by Contractor:



HEAT RECOVERY WATER FLOW AND AUTOMATION DIAGRAM



HEATING WATER FLOW AND AUTOMATION DIAGRAM

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

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6100 Clark Avenue
St. Louis, Missouri 63112
T 314 241 0100
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No.	Description	Date
1	ASI 002	21 APR 2017
	ISSUED FOR CONSTRUCTION (IFC)	01 MAR 2019

Drawing Title

DIAGRAMS - MECHANICAL

Project No. 048818 | Checked by

M0402

VARIABLE AIR VOLUME BOX WITH HOT WATER (VAV) SCHEDULE

#	TAG NO	MANUFACTURER & MODEL NO.	INLET SIZE (INCHES)	COOLING CFM MIN	COOLING CFM MAX	DISCH. MAX NC	HEATING COIL CFM	AIR TEMP. (F°) EAT	AIR TEMP. (F°) LAT	WATER FLOW (GPM)	WATER TEMP. (F°) EWT	WATER TEMP. (F°) LWT	MAX WATER PD (FT)	COIL CAPACITY (MBH)	MAX AIR PD (IN W.C.)	NOTES
VAV	101	PRICE SDV	6"	50 CFM	200 CFM	25	125 CFM	55	85.0	0.5	140	100	2	4.6	0.35	1,2,3,4
VAV	102	PRICE SDV	8"	230 CFM	450 CFM	25	280 CFM	55	77.0	0.5	140	100	2	6.6	0.35	1,3,4
VAV	103	PRICE SDV	6"	160 CFM	400 CFM	25	280 CFM	55	86.0	0.8	140	100	2	9.6	0.35	1,2,3,4
VAV	104	PRICE SDV	6"	45 CFM	210 CFM	25	105 CFM	55	75.0	0.2	140	100	2	2.3	0.35	1,3,4
VAV	105	PRICE SDV	4"	70 CFM	275 CFM	25	90 CFM	55	74.0	0.3	140	100	2	1.9	0.35	1,3,4
VAV	106	PRICE SDV	7"	105 CFM	300 CFM	25	300 CFM	55	83.0	1.1	140	100	2	14.6	0.35	1,2,3,4
VAV	107	PRICE SDV	6"	45 CFM	250 CFM	25	170 CFM	55	86.4	0.5	140	100	2	8.9	0.35	1,2,3,4
VAV	108	PRICE SDV	7"	110 CFM	365 CFM	25	360 CFM	55	95.0	1.6	140	100	2	19.7	0.35	1,2,3,4
VAV	109	PRICE SDV	8"	175 CFM	455 CFM	25	460 CFM	55	85.0	2.0	140	100	2	20.5	0.35	1,2,3,4
VAV	110	PRICE SDV	10"	460 CFM	800 CFM	25	600 CFM	55	83.2	1.4	140	100	2	18.8	0.35	1,2,3,4
VAV	111	PRICE SDV	7"	125 CFM	300 CFM	25	430 CFM	55	60.0	0.4	140	100	2	8.1	0.35	1,2,3,4
VAV	112	PRICE SDV	6"	50 CFM	150 CFM	25	75 CFM	55	73.5	0.5	140	100	2	1.2	0.35	1,3,4
VAV	113	PRICE SDV	10"	400 CFM	600 CFM	25	600 CFM	55	86.9	1.2	140	100	2	17.6	0.35	1,2,3,4
VAV	114	PRICE SDV	8"	190 CFM	730 CFM	25	730 CFM	55	86.9	2.5	140	100	2	26.6	0.35	1,2,3,4,5
VAV	115	PRICE SDV	14"	600 CFM	1570 CFM	25	1130 CFM	55	86.9	7.9	140	100	2	38.8	0.25	1,2,3,4
VAV	116	PRICE SDV	7"	125 CFM	370 CFM	25	245 CFM	55	77.0	0.5	140	100	2	6.7	0.35	1,3,4
VAV	117	PRICE SDV	8"	220 CFM	600 CFM	25	550 CFM	55	74.5	0.5	140	100	2	12.6	0.35	1,2,3,4
VAV	118	PRICE SDV	12"	370 CFM	1130 CFM	25	1130 CFM	55	88.0	2.2	140	100	2	42.6	0.35	1,2,3,4
VAV	119	PRICE SDV	8"	170 CFM	400 CFM	25	300 CFM	55	86.8	2.6	140	100	2	11.2	0.35	1,2,3,4
VAV	120	PRICE SDV	6"	100 CFM	355 CFM	25	205 CFM	55	86.8	0.6	140	100	2	7.8	0.35	1,2,3,4
VAV	121	PRICE SDV	5"	60 CFM	215 CFM	25	180 CFM	55	86.7	0.5	140	100	2	6.3	0.35	1,2,3,4
VAV	122	PRICE SDV	5"	60 CFM	210 CFM	25	160 CFM	55	86.8	0.5	140	100	2	5.6	0.35	1,2,3,4
VAV	123	PRICE SDV	14"	700 CFM	1265 CFM	25	1065 CFM	55	86.8	2.9	140	100	2	28.2	0.35	1,2,3,4
VAV	124	PRICE SDV	14"	700 CFM	1565 CFM	25	1065 CFM	55	86.8	2.9	140	100	2	38.2	0.35	1,2,3,4
WTA LEVEL 01: 24				5420 CFM	14440 CFM		10855 CFM			28.4						
VAV	201	PRICE SDV	6"	65 CFM	200 CFM	25	200 CFM	55	83.4	0.7	140	100	2	8.4	0.35	1,2,3,4
VAV	202	PRICE SDV	10"	320 CFM	620 CFM	25	500 CFM	55	75.5	1.0	140	100	2	12.4	0.35	1,2,3
VAV	203	PRICE SDV	4"	45 CFM	90 CFM	25	90 CFM	55	86.8	0.5	140	100	2	1.6	0.35	1,3,4
VAV	204	PRICE SDV	10"	160 CFM	640 CFM	25	320 CFM	55	84.0	1.2	140	100	2	16.0	0.35	1,2,3,4
VAV	205	PRICE SDV	6"	85 CFM	310 CFM	25	310 CFM	55	86.8	0.8	140	100	2	10.9	0.35	1,2,3,4
VAV	206	PRICE SDV	6"	85 CFM	310 CFM	25	310 CFM	55	86.8	0.8	140	100	2	10.7	0.35	1,2,3,4
VAV	207	PRICE SDV	7"	85 CFM	325 CFM	25	325 CFM	55	86.8	0.9	140	100	2	11.2	0.35	1,2,3,4
VAV	208	PRICE SDV	6"	195 CFM	195 CFM	25	195 CFM	55	86.8	0.6	140	100	2	6.6	0.35	1,2,3,4
VAV	209	PRICE SDV	14"	460 CFM	1090 CFM	25	990 CFM	55	86.8	2.6	140	100	2	34.7	0.35	1,2,3,4
VAV	210	PRICE SDV	14"	420 CFM	1500 CFM	25	680 CFM	55	84.0	1.5	140	100	2	19.1	0.35	1,2,3,4
VAV	211	PRICE SDV	12"	400 CFM	1300 CFM	25	1470 CFM	55	86.9	3.9	140	100	2	21.6	0.35	1,2,3,4
VAV	212	PRICE SDV	6"	65 CFM	210 CFM	25	140 CFM	55	75.5	0.5	140	100	2	3.1	0.35	1,3,4
VAV	214	PRICE SDV	7"	105 CFM	305 CFM	25	155 CFM	55	75.5	0.5	140	100	2	3.5	0.35	1,3,4
VAV	215	PRICE SDV	5"	55 CFM	200 CFM	25	120 CFM	55	75.5	0.5	140	100	2	2.4	0.35	1,3,4
VAV	216	PRICE SDV	6"	75 CFM	275 CFM	25	95 CFM	55	75.5	0.5	140	100	2	1.9	0.35	1,3,4
VAV	217	PRICE SDV	12"	360 CFM	1200 CFM	25	640 CFM	55	86.9	1.8	140	100	2	22.5	0.35	1,2,3,4
WTA LEVEL 02: 16				3020 CFM	10270 CFM		6880 CFM			18.2						
VAV	301	PRICE SDV	6"	55 CFM	250 CFM	25	250 CFM	55	80.6	0.7	140	100	2	9.5	0.35	1,2,3,4
VAV	302	PRICE SDV	6"	110 CFM	380 CFM	25	270 CFM	55	87.0	0.6	140	100	2	8.8	0.35	1,2,3,4
VAV	303	PRICE SDV	5"	65 CFM	200 CFM	25	115 CFM	55	86.9	0.5	140	100	2	3.8	0.35	1,2,3,4
VAV	304	PRICE SDV	10"	260 CFM	680 CFM	25	475 CFM	55	86.0	1.3	140	100	2	19.6	0.35	1,2,3,4
VAV	305	PRICE SDV	10"	200 CFM	720 CFM	25	60 CFM	55	95.5	1.6	140	100	2	21.4	0.35	1,2,3,4
VAV	306	PRICE SDV	9"	165 CFM	630 CFM	25	540 CFM	55	95.5	1.6	140	100	2	21.2	0.35	1,2,3,4
VAV	307	PRICE SDV	10"	165 CFM	560 CFM	25	2 CFM	55	80.0	1.7	140	100	2	22.6	0.35	1,2,3,4
VAV	308	PRICE SDV	10"	240 CFM	825 CFM	25	690 CFM	55	86.0	1.8	140	100	2	24.3	0.35	1,2,3,4
VAV	309	PRICE SDV	14"	360 CFM	1320 CFM	25	660 CFM	55	86.0	1.9	140	100	2	27.2	0.35	1,2,3,4
VAV	310	PRICE SDV	14"	340 CFM	1020 CFM	25	570 CFM	55	86.0	2.3	140	100	2	34.3	0.35	1,2,3,4
VAV	311	PRICE SDV	12"	225 CFM	750 CFM	25	600 CFM	55	86.0	1.5	140	100	2	21.1	0.35	1,2,3,4,5
VAV	312	PRICE SDV	12"	430 CFM	1420 CFM	25	910 CFM	55	86.9	2.1	140	100	2	28.4	0.35	1,2,3,4
VAV	313	PRICE SDV	12"	300 CFM	1180 CFM	25	540 CFM	55	86.9	1.4	140	100	2	18.8	0.35	1,2,3,4
VAV	314	PRICE SDV	14"	460 CFM	1600 CFM	25	1040 CFM	55	86.3	2.7	140	100	2	28.4	0.35	1,2,3,4
VAV	315	PRICE SDV	12"	265 CFM	635 CFM	25	795 CFM	55	85.3	2.3	140	100	2	30.6	0.35	1,2,3,4
VAV	316	PRICE SDV	12"	265 CFM	1040 CFM	25	690 CFM	55	90.0	1.8	140	100	2	23.9	0.35	1,2,3,4
VAV	317	PRICE SDV	6"	65 CFM	210 CFM	25	200 CFM	55	86.9	0.5	140	100	2	4.1	0.35	1,3,4
VAV	318	PRICE SDV	7"	110 CFM	300 CFM	25	205 CFM	55	75.0	0.5	140	100	2	6.3	0.35	1,3,4
VAV	319	PRICE SDV	6"	75 CFM	300 CFM	25	190 CFM	55	75.0	0.5	140	100	2	6.3	0.35	1,3,4
VAV	320	PRICE SDV	10"	120 CFM	710 CFM	25	275 CFM	55	86.9	0.5	140	100	2	7.6	0.35	1,2,3,4
VAV	321	PRICE SDV	8"	400 CFM	600 CFM	25	400 CFM	55	86.8	0.6	140	100	2	8.1	0.35	1,3,4
VAV	322	PRICE SDV	6"	70 CFM	275 CFM	25	70 CFM	55	74.0	0.7	140	100	2	1.4	0.35	1,3,4
VAV	411	PRICE SDV	8"	185 CFM	340 CFM	25	225 CFM	55	86.9	0.9	140	100	2	11.2	0.35	1,2,3,4
WTA LEVEL 03: 23				5185 CFM	17710 CFM		10868 CFM			37.3						
VAV	401	PRICE SDV	6"	40 CFM	300 CFM	25	240 CFM	55	86.8	0.5	140	100	2	8.4	0.35	1,2,3,4
VAV	402	PRICE SDV	7"	135 CFM	440 CFM	25	440 CFM	55	86.0	1.2	140	100	2	16.4	0.35	1,2,3,4
VAV	403	PRICE SDV	10"	215 CFM	720 CFM	25	565 CFM	55	86.3	1.9	140	100	2	23.4	0.35	1,2,3,4
VAV	404	PRICE SDV	8"	180 CFM	610 CFM	25	540 CFM	55	86.8	1.5	140	100	2	19.2	0.35	1,2,3,4
VAV	405	PRICE SDV	8"	130 CFM	420 CFM	25	365 CFM	55	86.9	1.0	140	100	2	12.5	0.35	1,2,3,4
VAV	406	PRICE SDV	10"	250 CFM	800 CFM	25	510 CFM	55	86.9	1.4	140	100	2	18.0	0.35	1,2,3,4
VAV	407	PRICE SDV	10"	300 CFM	1000 CFM	25	460 CFM	55	86.9	1.3	140	100	2	16.8	0.35	1,2,3,4
VAV	408	PRICE SDV	10"	200 CFM	670 CFM	25	325 CFM	55	86.7	0.9	140	100	2	11.3	0.35	1,2,3,4
VAV	409	PRICE SDV	8"	150 CFM	500 CFM	25	385 CFM	55	86.8	1.0	140	100	2	13.5	0.35	1,2,3,4,5
VAV	410	PRICE SDV	8"	165 CFM	550 CFM	25	440 CFM	55	86.9	1.2	140	100	2	15.4	0.35	1,2,3,4
VAV	412	PRICE SDV	7"	100 CFM	320 CFM	25	145 CFM	55	86.4	0.5	140	100	2	5.1	0.35	1,2,3,4
VAV	413	PRICE SDV	10"	270 CFM	900 CFM	25	565 CFM	55	86.6	1.5	140	100	2	19.8	0.35	1,2,3,4
VAV	414	PRICE SDV	8"	130 CFM	425 CFM	25	255 CFM	55	77.0	1.5	140	100	2	6.4	0.35	1,3,4
VAV	415	PRICE SDV	10"	175 CFM	585 CFM	25	255 CFM	55	81.5	0.4	140	100	2	10.2	0.35	1,2,3,4
VAV	416	PRICE SDV	7"	100 CFM	335 CFM	25	170 CFM	55	76.0	0.5	140	100	2	3.8	0.35	1,2,3,4
VAV	417	PRICE SDV	6"	80 CFM	200 CFM	25	100 CFM	55	76.0	0.5	140	100	2	2.5	0.35	1,2,3,4
WTA LEVEL 04: 16				2685 CFM	8870 CFM		5875 CFM			17.8						
Grand total: 79				16320 CFM	51340 CFM		33480 CFM			95.2						

PLAN DESIGNATION
VAV — TAG ID
101 — TAG NUMBER

NOTES:
1. HEATING COIL [illegible] 20% ADDITIONAL CAPACITY GREATER THAN LISTED IN ABOVE VALUES AT AIRFLOW AND WATER FLOWS LISTED.
2. PROVIDE TERMINAL BOX WITH [illegible] COIL, MINIMUM.
3. [illegible] RUNOUTS TO REHEAT COILS SHALL BE 3/4" UNLESS OTHERWISE NOTED.
4. [illegible] SCHEDULED MAXIMUM AIR FLOW RATE.
5. PROVIDE WITH 3-WAY CONTROL VALVE. REFER TO [illegible] TERMINAL BOX REHEAT PIPING (WITH 3-WAY VALVE) DETAIL ON SHEET [illegible].

DIAPHRAGM EXPANSION TANK (DET) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	SERVICE	TYPE	SIZE (GAL)	CAPACITY (GAL)	INITIAL PRESSURE (PSI)	WORKING PRESSURE (PSI)	NOTES
DET	1	B&G D-120	HEATING WATER	VERTICAL	36	34	36.3	40	2
DET	2	B&G D-60	HEAT RECOVERY (GLYCOL)	VERTICAL	21.7	11.3	36.5	10	1,2
DET	3	B&G HFT-15	PROCESS CHILLED WATER	VERTICAL	2	1.9	12.7	20	2

PLAN DESIGNATION
DET — TAG ID
1 — TAG NUMBER

NOTES:
1. PROVIDE INHIBITED PROPYLENE GLYCOL FOR HEAT RECOVERY LOOP SYSTEM. FILL SYSTEM TO 30% PG SOLUTION.
2. PRESSURE REDUCING VALVE TO BE FIELD ADJUSTED.

UNIT HEATER (UH) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	TYPE	AIRFLOW CFM	CAPACITY MBH	WATER FLOW GPM	EWT	WATER P.D. (FT)	NOTES
UH	001	STERLING HS-18	HORIZONTAL	365	7.40	1.3	140°F	0.31	1,2,3,4,5,6,8
UH	002	STERLING HS-18	HORIZONTAL	365	7.40	1.3	140°F	0.31	1,2,3,4,5,6,8
WTA LEVEL 00: 2						2.6			
UH	101	STERLING HS-48	HORIZONTAL	1100	33.2	2.6	140°F	0.24	1,2,3,4,5,6,8
UH	102	STERLING HS-72	HORIZONTAL	860	27.8	3.1	140°F	0.23	1,2,3,4,5,6,8
UH	103	STERLING HS-48	HORIZONTAL	538	10.2	2.1	140°F	0.1	1,2,4,5,6,8
WTA LEVEL 01: 3						8.8			
Grand total: 5						11.4			

PLAN DESIGNATION
UH — TAG ID
1 — TAG NUMBER

NOTES:
1. MAXIMUM MOUNTING HEIGHT IS APPROX. 8 FT.
2. PROVIDE 2-WAY VALVE, PIPING CONFIGURATION.
3. PROVIDE UNIT WITH MANUFACTURER SPEED CONTROLLER KIT.
4. CAPACITY IS AS CONNECTED FOR SCHEDULED UNIT AIR & WATER TEMP.
5. PROVIDE UNIT WITH FACTORY MOUNTED DISCONNECT SWITCH.
6. VALVE ACTUATORS BY T.C.C.
7. PROVIDE HIGH STATIC ECM MOTOR, FAN SELECTED ON MEDIUM SPEED.
8. PROVIDE REMOTE MOUNTED THERMOSTAT, SUMMER FAN SWITCH AND MOUNTING BRACKET.

CABINET UNIT HEATER (CUH) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	SUPPLY AIRFLOW	CAPACITY MBH	GPM	EWT	WATER P.D. (FT)	TYPE	NOTES
CUH	101	TRANE FFEB0201	220 CFM	14	1.4	140°F	3.3	HORIZONTAL RECESSED	1,2,3
CUH	102	TRANE FFJB0601	480 CFM	29.4	2.1	140°F	4.1	VERTICAL SLOPE-TOP	1,2,3
CUH	201	TRANE FFEB0201	220 CFM	14	1.4	140°F	3.5	HORIZONTAL RECESSED	1,2,3,4
CUH	202	TRANE FFEB0201	220 CFM	14	1.4	140°F	3.5	HORIZONTAL RECESSED	1,2,3,4
CUH	203	TRANE FFEB0401	340 CFM	16.1	2.1	140°F	6.0	HORIZONTAL RECESSED	1,2,3
CUH	204	TRANE FFEB0401	340 CFM	16.1	2.1	140°F	6.0	HORIZONTAL RECESSED	1,2,3
Grand total: 6					11.5				

PLAN DESIGNATION
CUH — TAG ID
1 — TAG NUMBER

NOTES:
1. PROVIDE UNIT WITH FACTORY MOUNTED DISCONNECT SWITCH.
2. VALVE ACTUATORS BY T.C.C.
3. PROVIDE HIGH STATIC ECM MOTOR, FAN SELECTED ON MEDIUM SPEED.
4. PROVIDE UNIT WITH OA DUCT/OA DUCT CONNECTION & BALANCE FOR CFM INDICATED ON PLAN.

FIRE-SMOKE DAMPER SCHEDULE

DAMPER TYPE	TAG NUMBER	DUCT WIDTH	DUCT HEIGHT	System Type
FS	001	[illegible]	[illegible]	Return Air
FS	002	[illegible]	[illegible]	Supply Air MP
FS	003	[illegible]	[illegible]	Supply Air MP
FS	101	[illegible]	[illegible]	Supply Air MP
FS	102	[illegible]	[illegible]	Return Air
FS	103	[illegible]	[illegible]	Supply Air MP
FS	104	[illegible]	[illegible]	Exhaust Air
F	105	[illegible]	[illegible]	Return Air
F	106	[illegible]	[illegible]	Return Air
F	107	[illegible]	[illegible]	Supply Air LP
FS	201	[illegible]	[illegible]	Supply Air MP
FS	202	[illegible]	[illegible]	Return Air
FS	203	[illegible]	[illegible]	Exhaust Air
F	204	[illegible]	[illegible]	Supply Air LP
FS	301	[illegible]	[illegible]	Supply Air MP
FS	302	[illegible]	[illegible]	Return Air
F	303	[illegible]	[illegible]	Exhaust Air
F	304	[illegible]	[illegible]	Supply Air LP
F	305	[illegible]	[illegible]	Supply Air LP
FS	401	[illegible]	[illegible]	Supply Air MP
FS	402	[illegible]	[illegible]	Return Air
FS	403	[illegible]	[illegible]	Exhaust Air
FS	404	[illegible]	[illegible]	Exhaust Air
F	405	[illegible]	[illegible]	Exhaust Air
F	406	[illegible]	[illegible]	Supply Air LP
F	407	[illegible]	[illegible]	Exhaust Air
F	408	[illegible]	[illegible]	Exhaust Air
F	409	[illegible]	[illegible]	Exhaust Air
F	410	[illegible]	[illegible]	Supply Air LP

NOTES:
1. F = FIRE DAMPER
2. FS = COMBINATION FIRE AND SMOKE DAMPER
3. REFER TO SHEETS G0200 AND G0300 FOR WALL RATINGS.
4. COORDINATE WITH FIRE ALARM CONTRACTOR FOR CONNECTIONS AND OPERATIONS OF SMOKE DAMPERS IN RESPONSE TO DUCT SMOKE DETECTION.
5. VERIFY DAMPER SIZES WITH SHEET METAL FABRICATION DRAWINGS.

FIN TUBE RADIATION (FTR) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	TUBE MATERIAL	TUBE DIAMETER	FIN SIZE	FIN SPACING	NO OF TIERS	MINIMUM REQUIRED HEAT OUTPUT BTUH/FT	EAT	AVERAGE WATER TEMP. (AWT)	ELEMENT LENGTH	FLOW (GPM)	FLOW (GPM/LF)	ENCLOSURE TYPE	PIPING CONFIGURATION	NOTES
FTR	201	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	202	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	203	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	204	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	205	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	206	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	207	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	208	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	209	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	210	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	211	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	212	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	213	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
FTR	214	STERLING VERSA-LINE C34-34	COPPER	3/4"	3-1/4" SQ	40 FIN PER FT	1	421	65°F	130°F	8'-0"	1.00	0.125	BARE ELEMENT	SINGLE PASS	1
14											112'-0"	14.00				
WTA LEVEL 02: 14											112'-0"	14.00				
FTR	301A	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	27'-0"	1.40	0.05	PANEL RADIATOR	SAME END	2,3,4
FTR	301B	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	2'-0"	1.40	0.05	PANEL RADIATOR	SAME END	2,3,4
301: 2											29'-0"	2.80				
FTR	302A … 302G (7 units)	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	…	3.00	0.36	PANEL RADIATOR	OPPOSITE ENDS	2,3,4
302: 7											36'-0"	21.00				
FTR	303A	RUNTAL - R3F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	341	65°F	130	17'-0"	1.50	0.05	PANEL RADIATOR	SAME END	2,3,4
FTR	303B	RUNTAL - R3F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	341	65°F	130	17'-0"	1.50	0.05	PANEL RADIATOR	SAME END	2,3,4
303: 2											26'-0"	3.00				
FTR	304A … 304G (7 units)	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	396	65°F	130	…	2.50	0.04	PANEL RADIATOR	OPPOSITE ENDS (304G: SAME END)	2,3,4
304: 7											62'-0"	17.50				
FTR	305A	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	12'-0"	1.50	0.06	PANEL RADIATOR	SAME END	2,3,4
FTR	305B	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	12'-0"	1.50	0.06	PANEL RADIATOR	SAME END	2,3,4
305: 2											27'-0"	3.00				
FTR	306A … 306G (7 units)	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	421	65°F	130	…	3.00	0.06	PANEL RADIATOR	OPPOSITE ENDS	2,3,4
306: 7											78'-0"	21.00				
FTR	307A	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	2'-0"	0.85	0.05	PANEL RADIATOR	SAME END	2,3,4
FTR	307B	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	2'-0"	0.85	0.05	PANEL RADIATOR	SAME END	2,3,4
FTR	307C	RUNTAL - R2F-2	COPPER	3/4"	N/A	32 FIN PER FT	1	531	65°F	130	6'-0"	0.85	0.05	PANEL RADIATOR	SAME END	2,3,4
307: 3											12'-0"	2.55				
WTA LEVEL 03: 30											288'-0"	70.85				
Grand total: 44											400'-0"	84.85				

PLAN DESIGNATION
FTR — TAG ID
1 — TAG NUMBER

NOTES:
1. GPM SHOWN IS PER INDIVIDUAL UNIT.
2. [illegible]
3. COORDINATE FINISHES AND MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS AND DETAILS.
4. PROVIDE ALL PANEL RADIATORS WITH FACTORY 3/4" PIPING CONNECTION.

THE SEALS AND SIGNATURE(S) APPLY ONLY TO THE DOCUMENT TO WHICH THEY ARE AFFIXED, AND EXPRESSLY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT.

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Webster University
Interdisciplinary Science Building

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314 241 0000

No.	Description	Date
5	ASI 062	01 APR 2017
4	ASI 058	13 APR 2017
3	ASI 043	09 DEC 2016
2	ASI 032	18 OCT 2016
1	ADDENDUM 2 F	17 MAR 2016
	ISSUED FOR CONSTRUCTION (IFC)	22 MAR 2016

Drawing Title
SCHEDULES - MECHANICAL

Project No. 04081.01 Checked by

M0603

4/20/2017 3:42:34 PM WTA 14137.01 D:\Revit\Local\2015 Local\14137.01 WU_WTA MC_GLD.rvt

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June 23, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-133 - ASI#63 Video Wall Framing revisions

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Two Thousand Three Hundred Sixty Dollars And Thirty-Four Cents $2,360.34 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0140 (ASI #063 - Video Wall Revisions), Total $ 2,360.34

Owner contingency will be used for this change proposal. The scope includes the twist lock receptacle and the revised blocking and framing per ASI #063. This scope does NOT include the ceiling mounted curtains.

Proposed Change Proposal Total: $2,360.34

If this change proposal meets with your approval, please sign and return this proposal for our records by June 28, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

_____

Date:_____
Craig A. Miller Sr
Webster University

Declined:

_____

Date:_____
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 23-JUN-17
Time: 05:33 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0140	ASI #063 - Video Wall Revisions			2,360.34	07-JUN-17					2,360.34	2,360.34	

Vendor Name					Description		
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	607.00	ASI #063 - Video Wall Revisions	Furnish and install the twist-lock NEMA receptable per the ASI 63 revisions. Add $607	
Paric Corp - Self Perform	15051	09250.001 S	Drywall Sub	1,364.00	ASI #063 - Video Wall Revisions	Labor and material to install the revised blocking and trim per ASI 63 revisions and SP COR#48. Add $1,364	
	15051	01740.100 L		137.94	ASI #063 - Video Wall Revisions	Additional cleanup for the revisions (2 HRS x $68.97/HR).	
	15051	01310.103 O		140.40	ASI #063 - Video Wall Revisions	1 hr project management @ 140.40/hr	
	15051	23100.001 M	Risk Management (1.1%)	25.00	ASI #063 - Video Wall Revisions	Risk Management	
	15051	23150.005 M	Contractor Default Insurance (1.25%)	28.00	ASI #063 - Video Wall Revisions	Contractor Default Insurance	
	15051	23300.001 F	Fee (2.5%)	58.00	ASI #063 - Video Wall Revisions	Contractor Fee	
Total For EXT		**0.00**	**0.00**	**2,360.34**			**2,360.34** **2,360.34**
Grand Total:		**0.00**	**0.00**	**2,360.34**			**2,360.34** **2,360.34**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	23-JUN-17
To Change Order:		Run Time:	05:33 PM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No: 04561.01

Architect's ASI No: 063

Project:
Webster University
Interdisciplinary Science
Building

Date Issued: 04/21/17

Contract Date:

Reason Code: 06 Owner's Scope

Discipline Code: 03 Electrical
07 General Construction

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Drawings:

A0202, A0602, A0701.B, A0811
E0101.B, E0103.B

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www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

Architect's Supplemental Instructions

Description:

Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

ARCHITECTURAL REVISIONS:

- Revised partition layout and details to accommodate revised Video wall selection per AV drawings.
- Added ceiling mounted curtain tracks in room 131 HEALTH ASSESSMENT LAB.

ELECTRICAL REVISIONS:

ASI-063 is being issued for power receptacle and junction box changes.

SHEET E0101.B – LEVEL 01 AREA B FLOOR PLAN – ELECTRICAL & AUXILIARY

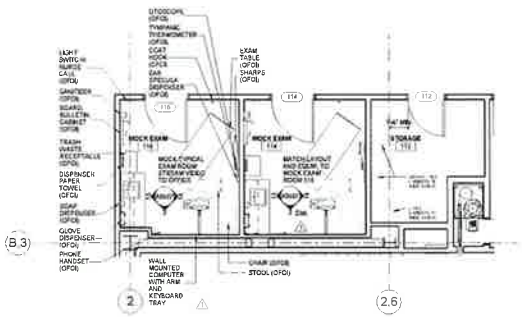
- Move power serving subwoofer to wall. Provide Nema L5-20R twist-lock receptacle in lieu of junction box. See keyed note E57.

SHEET E0103.B – LEVEL 03 AREA B FLOOR PLAN – ELECTRICAL & AUXILIARY

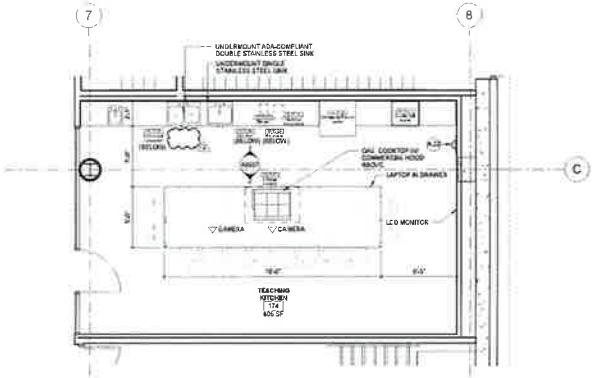
- At column C.3, 3 - Provide j-box in lieu of receptacle for power to furniture.

Issued by Architect: Kelvin Patel, CannonDesign;
Dan Veile, William Tao & Associates, Inc.

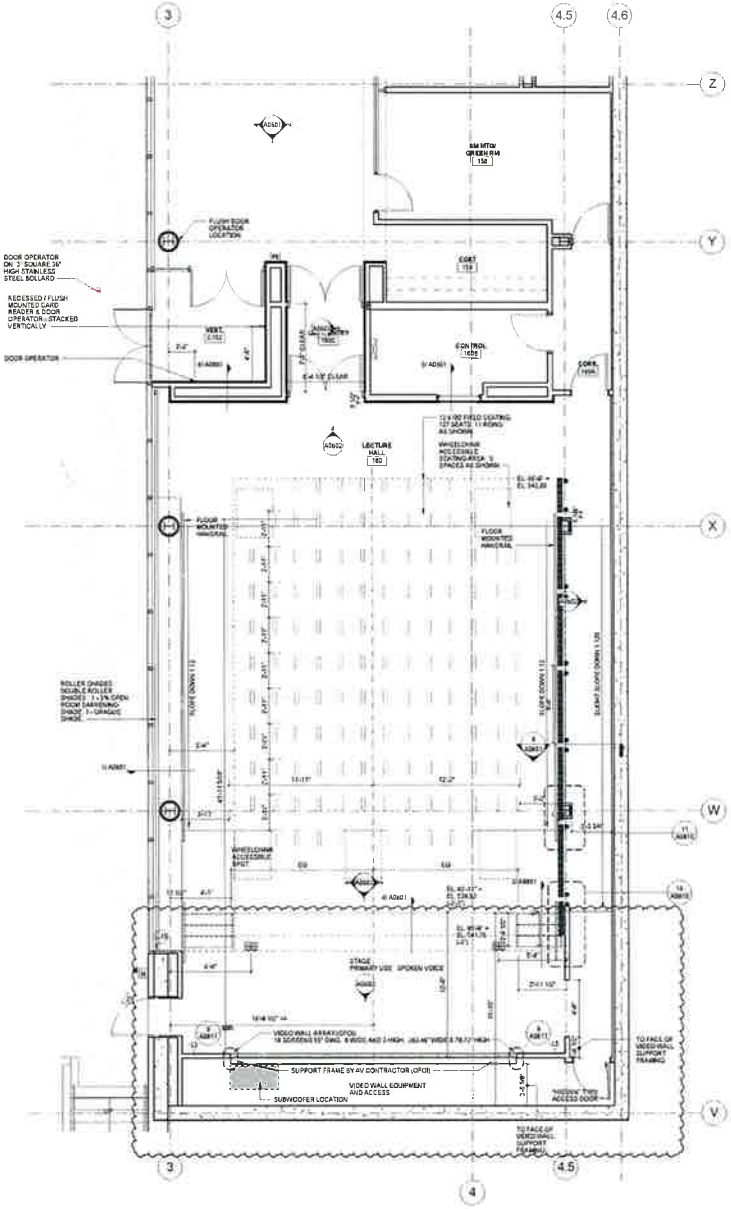
Accepted by Contractor:



3 LEVEL 01 - AREA B-WEST - MOCK EXAM ROOMS



2 LEVEL 01 AREA A FLOOR PLAN-NORTH - TEACHING KITCHEN



1 LEVEL 01 - AREA B - LECTURE HALL

KEYED NOTE LEGEND - PLAN

A.1 [illegible] GRU COLUMN COVER TO 5' ABOVE CEILING - 20" DIA. TYP. SEE DETAIL A/A0811 AND 12/A0842

A.2 [illegible] INTERIOR GLAZING SYSTEM IGG-1 REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0802

A.3 [illegible] INTERIOR GLAZING SYSTEM IGG-2 SEE TYPICAL ELEVATION 5 AND 6 A0802

A.4 [illegible] INTERIOR GLAZING SYSTEM IGG-3 REFER TO INTERIOR ELEVATIONS

A.5 [illegible] FIRE RATED GLAZING - 120 MIN. FIRE RATED GLAZING 12'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFLAME STRUCTURA - WITH BUTT JOINTS AND PERIMETER FRAMING.

A.6 [illegible] FIRE RATED GLAZING AND FRAME - 120 MIN. FIRE RATED GLAZING 7'-0" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFLAME WITH PERIMETER FRAMING.

A.7 11010 LOADING DOCK LIFT - STATIONARY - 8'wx8' DEEPW 14" PIT

A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH

A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS

A.10 NEW CONCRETE STEPS TO MATCH EXISTING REMAINS FOR CONSTRUCTION

A.12 [illegible] BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL

A.13 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)

A.14 MARKERBOARD SURFACE

A.15 WOOD SCREEN W/ SOLID LUMBER

A.17 VIDEO WALL - 24 55" SCREENS

A.18 LCD SCREEN LOCATION (OFCI)

A.19 AIR PLENUM - INSULATED PLENUM CONSTRUCTION BY DIVISION 23

A.20 12300 CURTAIN LOCATION

A.21 10A313 AED CABINET LOCATION

A.23 10 4413 FEC WITH FIRE EXTINGUISHER

A.22 08 4423 SKYLIGHT LOCATION - PROVIDE 1/4" TEMPERED CLEAR GLAZING AT INTERIOR FACE OF CURTAIN WALL MULLIONS FOR ACOUSTICAL SEPARATION

A.24 6"X 6" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER. PROVIDE BLIND SIDE WATERPROOFING

A.25 BUILT IN CAULT WATER HIGH TANK LOCATION - SIZE APPROX. 7'-0" X 2'-8" X 7'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. CLOSING DOOR ON LAB SIDE. HIGH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT.

A.26 LCD GRAPHIC SCREEN IN WALL RECESS (OFCI)

A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD ENCLOSURE ON SHEET A1802

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Plumbing & Fire Protection
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314.588.0900

No.	Description	Date
2	ASI#03	21 APR 2017
1	ADDENDUM #2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

ENLARGED PLANS-LEVEL 01

Project No. 04551.01 Checked by

A0202

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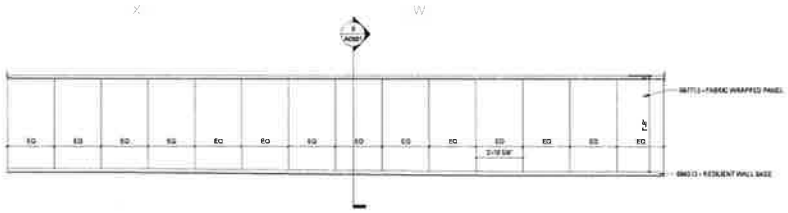
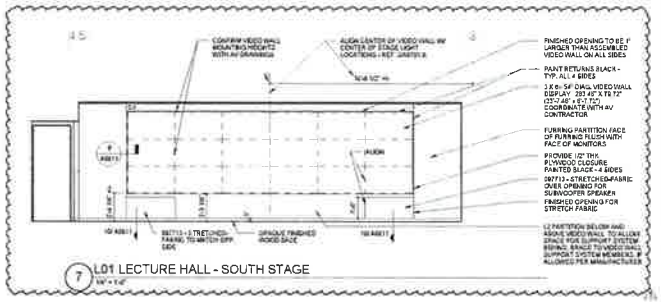
4/26/2017 1:13:26 PM

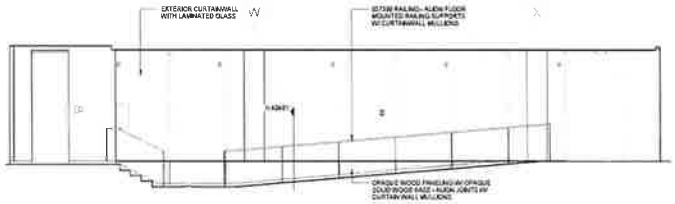
3 LECTURE HALL ENTRY
1/8" = 1'-0"



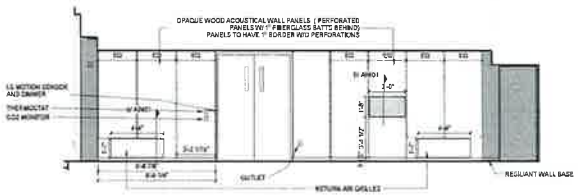
6 LECTURE HALL COORIDOR
1/8" = 1'-0"



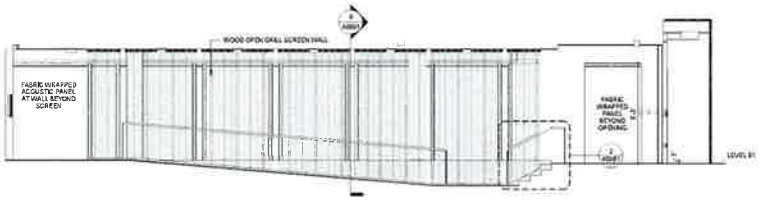
7 L01 LECTURE HALL - SOUTH STAGE
1/8" = 1'-0"



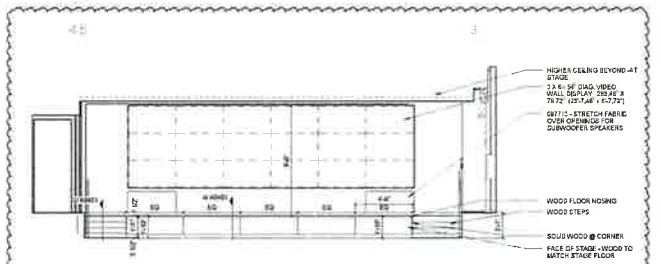
5 L01 LECTURE HALL ELEVATION - WEST
1/8" = 1'-0"



4 L01 LECTURE HALL ELEVATION - NORTH
1/8" = 1'-0"



2 L01 LECTURE HALL ELEVATION - EAST
1/8" = 1'-0"



1 L01 LECTURE HALL ELEVATION - SOUTH
1/8" = 1'-0"

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No	Description	Date
1	ADDED	21 APR 2015
-	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

Drawing Title

INTERIOR ELEVATIONS LECTURE HALL

Project No. 0439.1.01 Checked by

A0602

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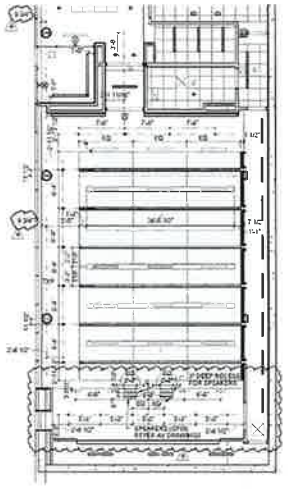
1 LEVEL 01 REFLECTED CEILING PLAN - AREA B



2 LECTURE HALL RCP - DIMENSIONS

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

- C 1 122413 TYPE 1 SHADES MOTORIZED ROLLER SHADES IN COUNTINUOUS RECESSED POCKET (OFCI)
- C 2 122413 TYPE 2 SHADES MOTORIZED DOUBLE ROLLER SHADES SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- C 3 122413 TYPE 3 SHADES MANUAL SHADES IN RECESSED POCKET
- C 4 122413 TYPE 4 SHADES WALLSON MOUNTED SHADE IN CONTINUOUS POCKET
- C 5 CEILING MOUNTING SUSPENSION FOR LCD SCREEN - PROVIDE STEEL SUPPORT ABOVE CEILING
- C 6 EXHAUST HOOD LOCATION - REFER TO HOOD SERVICE DRAWINGS
- C 7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
- C 8 EXPOSED STRUCTURE
- C 9 083333 SIDE CEILING DOOR TRACK
- C 10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID FOR WOOD GRILL CEILING
- C 11 ACOUSTICAL ISOLATION CEILING: 2 LAYERS 1/2" GYP BOARD CEILING ON SUSPENDED METAL FRAMING SUSPENSION SYSTEM TO BE ACOUSTICALLY ISOLATED FROM STRUCTURE BY SPRINGNEOPRENE ISOLATION HANGERS (KINETIC NOISE CONTROL MODEL MUTA HANGERS). PROVIDE CONTINUOUS LAYER OF 3.5" FIBERGLASS ACOUSTIC BATTS. REFER TO DETAIL 18 SHEET A0842
- C 12 6" PANEL WHERE SHOWN @ 16"x6" O.C. MATCH CEILING TYPE
- C 13 RECESSED DRAPERY TRACK AND CURTAINS - OFCI - PROVIDE BLOCKING
- C 15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET
- C 16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAILS SHEET A0501
- C 17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPED INTO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0842
- C 18 CEILING IN COLD ROOM BY COLD ROOM MFG
- C 19 LIGHTING NET ALUM. BOXES ENCLOSURE
- C 20 UNISTRUT MOUNTED TO CEILING IN STEEL ANGLE HANGERS AND WEIDERS ABOVE FOR SUPPORT
- C 21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
- C 22 REFER TO DETAIL 8/A0452
- C 23 122413 TYPE 6 SHADES MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING POCKET CONTINUOUS ACROSS OPENING
- C 24 INSULATED SOFFIT - SIMILAR TO DWG 4 ON SHEET A0400
- C 25 CEILING MOUNTED SURGICAL LIGHT - SEE EQUIPMENT LIST (OFCI) - PROVIDE STRUCTURAL STEEL SUPPORT TO DECK - 4 x 2X3X 1/4" STEEL ANGLE HANGER WITH 4 - ANGLE WEIDERS 2 X 2 X 1/4. AND MOUNTING PLATE PER MANUFACTURER. SEE DETAIL 8/A0814.
- C 26 CONTROL JOINT LOCATION
- C 27 ABOVE CEILING WHERE INDICATED WITH DASHED LINE. PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND DUCTS SERVING FLOOR GRILLES ON LEVEL ABOVE. REFER TO DETAIL SHEET A1002
- C 28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE. PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STAND PIPE RUN. REFER TO DETAIL SHEET A1002
- C 29 PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AT BOTTOM OF SHAFT. REFER TO DETAIL SHEET A1002
- C 30 122413 TYPE 7 SHADES MOTORIZED DOUBLE ROLLER SHADES SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- C 31 122413 TYPE 8 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET
- C 32 SPECIAL ACOUSTICAL SEPARATION CEILING APPLY KINETICS NOISE CONTROL QUIET TILE CAD 51 TO TOP SIDE OF ACOUSTICAL PANELS. ISOLATE CEILING TILE FROM STRUCTURE ABOVE WITH KNC AF HANGERS.
- C 33 REVEAL TRIM AROUND DIAGONAL WALL PENETRATION THROUGH CEILING - 1/2" WIDE 3/4" DEEP ALL SIDES
- C 34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS.
- C 35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
- C 36 122413 TYPE 3 SHADES MANUAL SHADES - STEPPED WITH SLOPE IN CONT SLOPED OPENING
- C 37 122413 TYPE 9 SHADES DOUBLE MANUAL SHADES IN RECESSED POCKET

CEILING LEGEND

- ACT-1 2 x 2 - ARMSTRONG OPTIMA TEGULAR (1" THICK IN 9/16" GRID)
- ACT-2 2 x 4 - ARMSTRONG ULTIMA TEGULAR IN 9/16" DELIQUETTE EL 1/16" GRID
- ACT-2A 2 x 2 - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- ACT-2B 2 x 2 - ARMSTRONG ULTIMA HEALTH ZONE TEGULAR 9/16" GRID
- ACT-4 NOT USED
- ACT-5 2 x 2 - ARMSTRONG FINE FISSURED IN 15/16" GRID
- ACT-6 RESILIENT ACOUSTICAL PLASTER SKIMMAPROOF (45 MIL) OVER 1 1/2" INSULATION OVER GYP BOARD
- ACT-7 2 x 4 - ARMSTRONG ULTIMA TEGULAR IN 9/16" DELIQUETTE EL GRID W/ 6" PANEL INSERTS AS SHOWN
- ACT-8 2 x 4 ARMSTRONG OPTIMA TEGULAR - 1" THICK NRC= .85 IN 9/16" DELIQUETTE EL 1/16" GRID BOTTOM NRC= - EXCEPT WEST (NB119) SPECIAL ACOUSTIC TREATMENT. APPLY SPECIAL ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS.
- WDC-1 3/8 SAW WOOD GRILLE CEILING 3/8 x 2 1/4" MEMBERS - 3 PER FOOT - WINDWOOD GRILL - NOD 007 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
- WDC-2 3/8 SLATS FLUSH (NOD PANEL SOFFIT - MATCH WDC-1)
- WDC-3 3/8 4/16 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL
- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

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No.	Description	Date
4	AS1-003	21 APR 2017
3	AS1-002	01 AUG 2016
2	AS1-012	12 JUL 2016
1	ADDENDUM 2-2	15 APR 2016
–	ISSUED FOR CONSTRUCTION (IFC)	15 MAR 2016

KEY PLAN

Drawing Title

LEVEL 01 REFLECTED CEILING PLAN AREA B

Project No. 30361.07 Checked by

A0701.B

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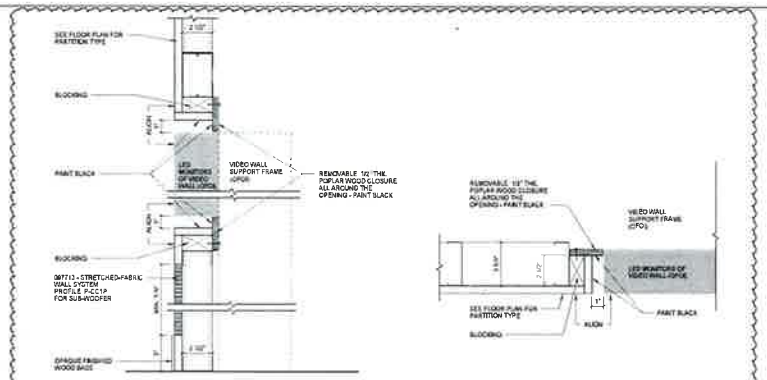
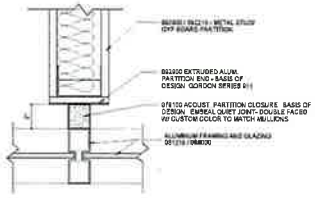
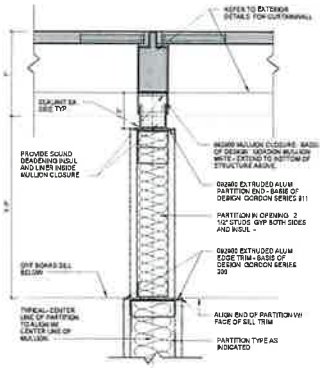


10 SECTION DETAIL OF VIDEO WALL @ LECTURE HALL

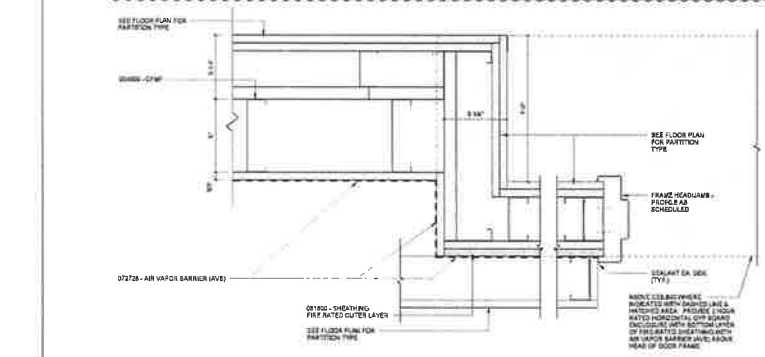
9 PLAN DETAIL OF VIDEO WALL @ LECTURE HALL



7 PLAN DETAIL - TYPICAL CLOSURE AT GLAZING

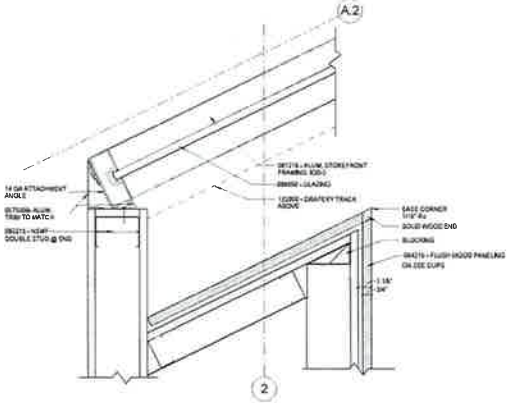


5 PLAN DETAIL AT PROJECTED WINDOW

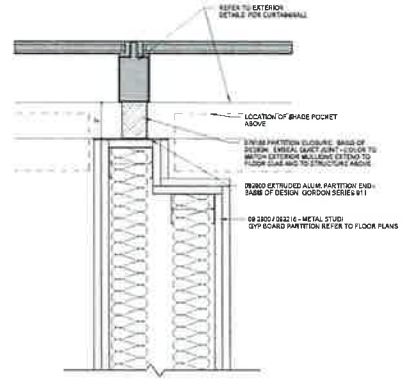


3 TYP. DETAIL FOR DOOR JAMB @ EAB CONNECTOR

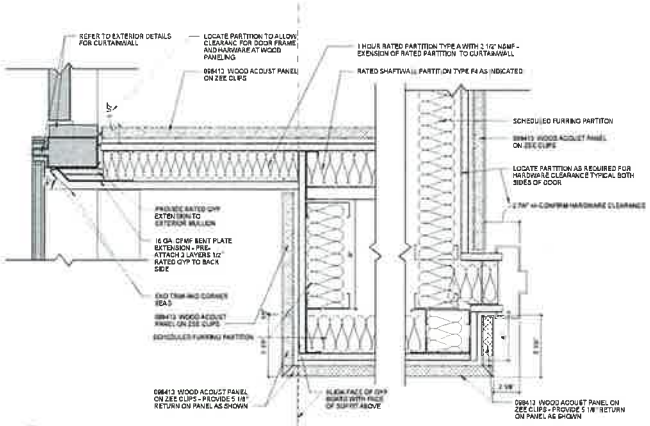
SIMILAR DETAIL FOR DOOR HEAD WITH 2 HR RATED HORIZONTAL ENCLOSURE



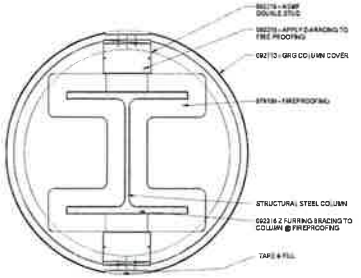
6 PLAN DETAIL AT CONF. ROOM



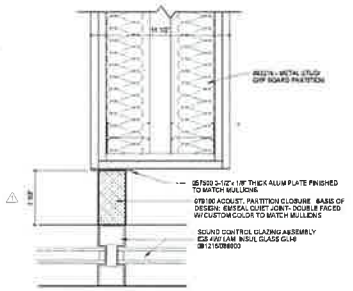
1 PLAN DETAIL - WEST WALL



8 PLAN DETAIL AT EXTERIOR CURTAINWALL LECT HALL



4 TYP. COLUMN



2 PLAN DETAIL - LEVEL 02 @ GLAZING

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3	ASI#002	21 APR 2017
2	ASI#050	13 APR 2017
1	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (SP3)	15 MAR 2016

Drawing Title

INTERIOR PLAN DETAILS

Project No: 04561.01 Checked by:

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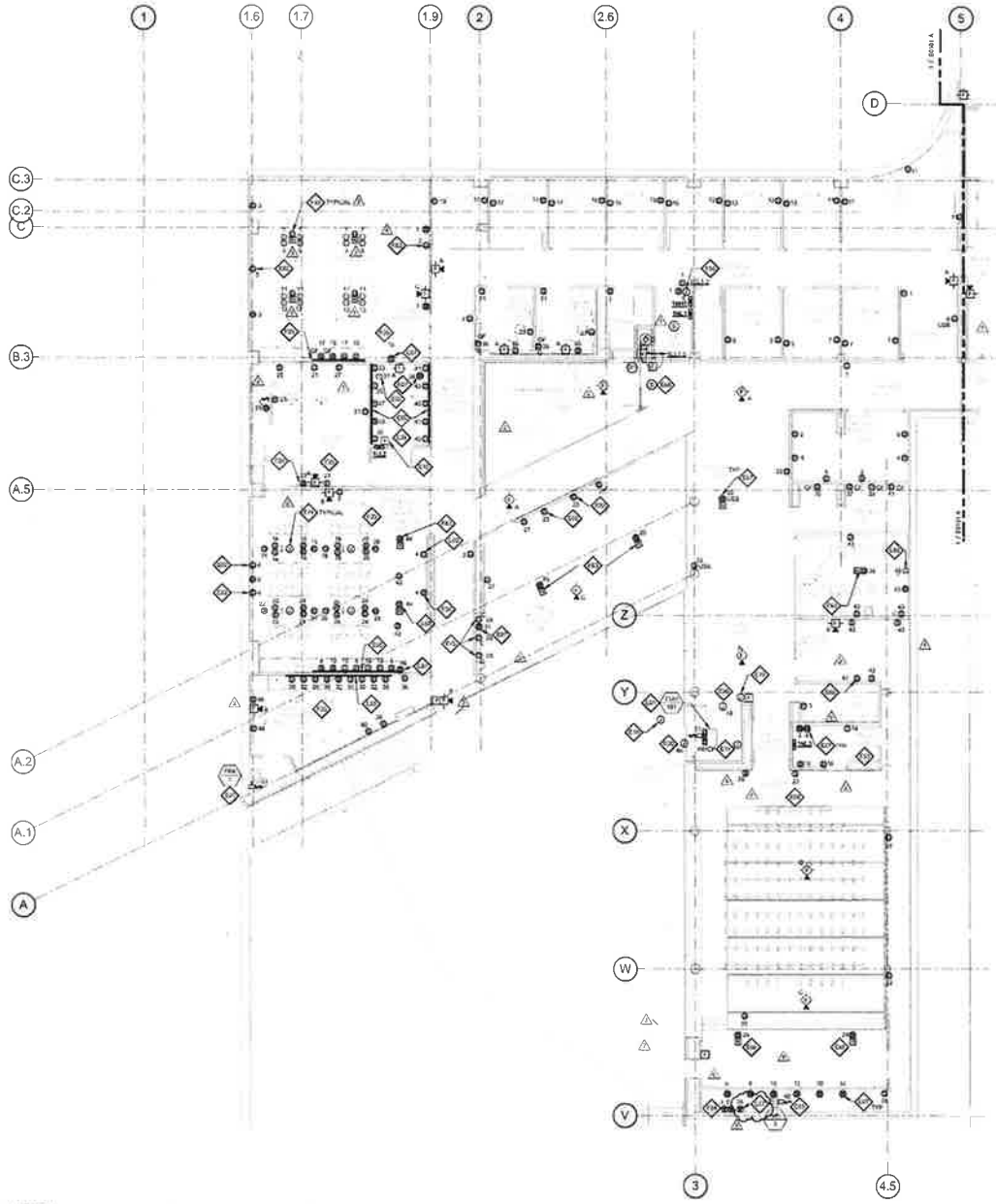

1 LEVEL 01 - AREA B - FLOOR PLAN - POWER AND AUXILLARY

GENERAL NOTES:

A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN

B. ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C. ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EXI"

D. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E. PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS

H. REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OF DATA, VOICE AND A/V

I. ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 1NL1 UNLESS NOTED OTHERWISE

KEYED NOTES

E21 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E22 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E23 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E25 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4220 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402

E26 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E27 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E15 PROVIDE MUSHROOM HEAD PUSH BUTTON SWITCH AND 5 POLE CONTACTOR. PUSH BUTTON SHALL DEACTIVATE POWER TO CONTACTOR AND ASSOCIATED CIRCUITS. VERIFY WHICH RECEPTACLES IN SIM LAB SHALL BE CONTROLLED WITH OWNERS REPRESENTATIVE. ALL RECEPTACLES AND COVER PLATES FED THROUGH CONTACTOR SHALL BE RED IN COLOR AND SHALL BE LABELED "NOT ON GENERATOR."

E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH-IN

E30 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN

E35 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1LL2

E50 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1NL3

E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR

E57 PROVIDE NEMA L5-20R TWIST-LOCK RECEPTACLE FOR SUBWOOFER. COORDINATE LOCATION WITH A/V DRAWINGS

E62 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FRBTC6S-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A STANDARD DUPLEX RECEPTACLES, NEMA 5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E63 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB4S-FC WITH A BRASS FLANGED COVER CAT. NO. FRBTC6S-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (4) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E66 PROVIDE A 2HR FIRE CLASSIFIED 6-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB6S-FC WITH A BRASS FLUSH COVER CAT. NO. FRBS1367BS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (3) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.

E67 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FRBTC6S-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLES WITH USB PORTS. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E68 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR

E70 PROVIDE NEMA L6-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

E74 FEED FIXED FURNITURE FROM BELOW AND MAKE ALL FINAL CONNECTIONS TO RECEPTACLES

E75 RECEPTACLES SHALL BE MOUNTED HORIZONTALLY. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS

E84 PROVIDE (2) NEMA L5-20R TWIST-LOCK RECEPTACLES FOR VIDEO WALL. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

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No	Description	Date
4	[illegible]	21 APR 2017
3	[illegible]	13 APR 2017
2	[illegible]	27 JAN 2017
1	[illegible]	16 NOV 2016
0	[illegible]	23 OCT 2016
3	[illegible]	14 OCT 2016
2	[illegible]	14 OCT 2016
2	ADDENDUM # 2	19 APRIL 2016
1	ADDENDUM # 1	17 MAR 2016
	ISSUED FOR CONSTRUCTION (BID)	01 MAR 2016

KEY PLAN

Drawing Title

LEVEL 01 AREA B FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 94031.01 Checked by

E0101.B

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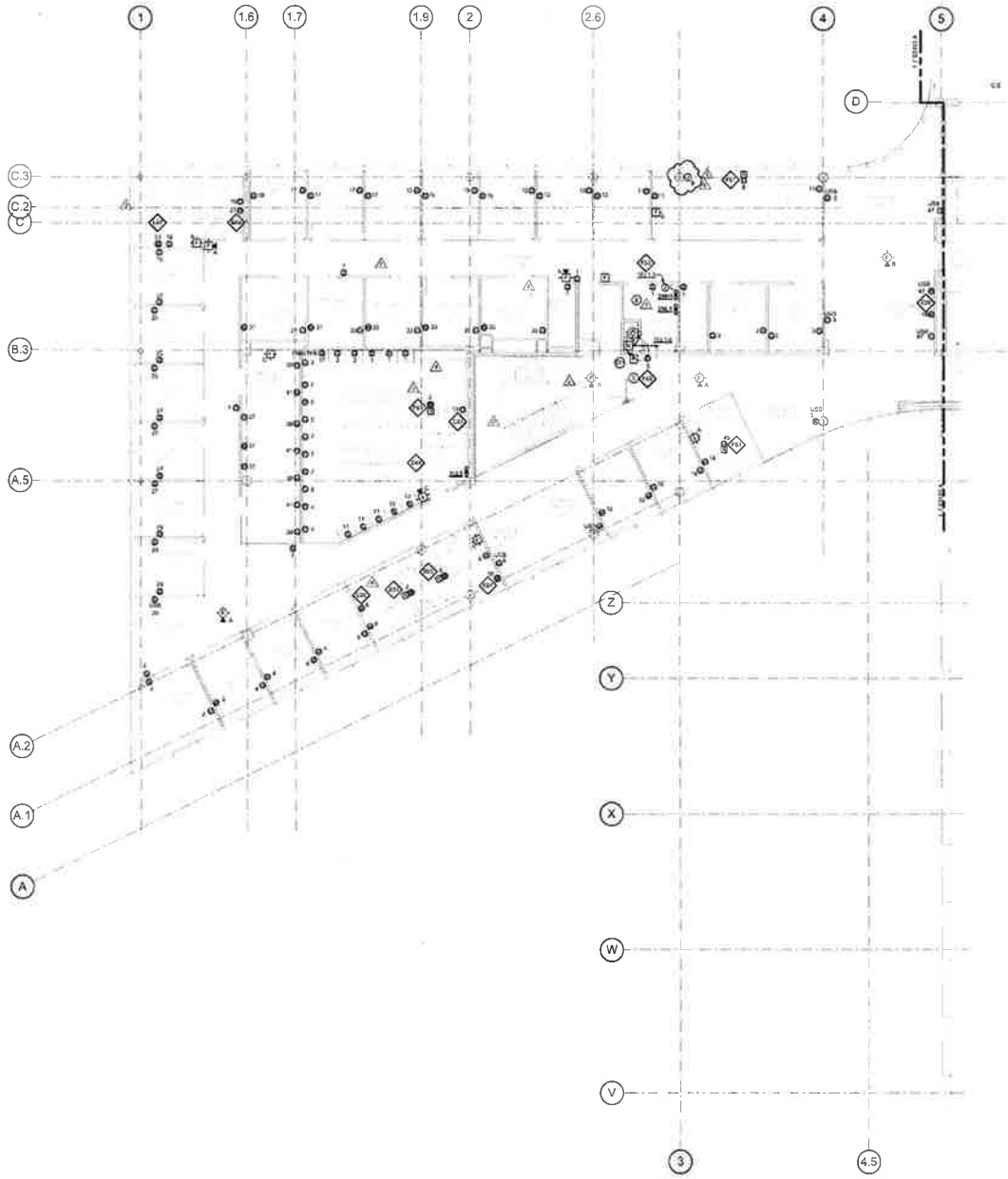

1 LEVEL 03 - AREA B - FLOOR PLAN - POWER AND AUXILLARY

GENERAL NOTES:

A DO NOT SCALE DRAWINGS REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN

B ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE

C ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN GOLD LINE WEIGHT AND SUBSCRIPT "EX"

D CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES

E PROVIDE FACE PLATES ON ALL J BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS COORDINATE COLOR AND FINISH WITH ARCHITECT CONTRACTOR TO VERIFY QUANTITY IN THE FIELD

F WHERE EXPOSED CONDUIT IS NOTED CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE

G ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS

H REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OF DATA VOICE AND A/V

I ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 3NL1 UNLESS NOTED OTHERWISE

◇ KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION

E02 PROVIDE NEW RECEPTACLE FOR MONITOR COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS

E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION

E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E08 OUTLET FOR DIGITAL SIGNAGE COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS

E17 PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN

E24 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL2

E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL COORDINATE LOCATION WITH AUTOMATION CONTRACTOR

E61 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT NO RFB3S-FC WITH A BRASS FLANGED COVER CAT NO FPBTC3S NA THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (1) 20A DUPLEX RECEPTACLE (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE) THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E63 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT NO RFB4S-FC WITH A BRASS FLANGED COVER CAT NO FPBTC3S NA THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE) (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPE) THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR

E66 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR

E70 PROVIDE NEMA L6-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T 314 241 6200
F 314 241 2370

William Tao & Associates, Inc
MEP/FP Engineer
7560 Manchester Road, Suite 125
St. Louis, MO 63143
314-644-7200

David Mason & Associates, Inc
Structural & Civil Engineer
620 South Kingshighway Avenue
St. Louis, MO 63110
314.534.1052

Faith Group
Technology
3151 S. Hanley Rd, Suite 100
St. Louis, MO 63143
314.991.3338

Kathleen Lavelle, Inc
Environmental Graphics & Signage
1406 Parkking Ave
St. Louis, MO 63139
314.725.9975

RMA Architects
Architecture
9141 Ladage Road
St. Louis, MO 63124
314.962.3960

Bowman Brady & Company
Interior Designer
5051 Maryland Avenue, Suite 200
St. Louis, MO 63108
314.862.9070

SWT Design
Landscape Architect
1722 Big Bend Blvd
St. Louis, MO 63119
314.962.5700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1420 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.9600

No	Description	Date
6	ASI 063	21 APR 2017
5	ASI 056	30 NOV 2016
4	ASI 053	10 NOV 2016
3	ASI 038	14 OCT 2016
2	ADDENDUM 2.2	19 APRIL 2016
1	ADDENDUM 2.1	17 MAR 2016
	ISSUED FOR CONSTRUCTION (SPK)	01 MAR 2016

KEY PLAN

Drawing Title

LEVEL 03 AREA B FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No. 94661.01 Checked by

E0103.B

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GUARANTEE
ELECTRICAL CONSTRUCTION 3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN #	**ASI - 063 AUDITORIUM CHANGES**
Date:	6/14/2017
Project Name:	WEBSTER GROVES ISB BUILDING
Project Number:	WEBSTER GROVES ISB BUILDING
Page Number:	1

Work Description

WEBSTER ISB
ASI - 063 AUDITORIUM CHANGES

Description of work

*** Furnish and install (1) Twist lock NEMA L5-20R receptacle.**

Base bid shall increase by: 607.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.
We request a time extension of **20** days.
We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
3/4" EMT CONDUIT	20	9.89	1.49
3/4" EMT STL SS CONN	2	0.38	0.29
3/4" EMT STL SS CPLG	2	0.47	0.14
#10 THHN BLACK	66	10.44	0.69
#10x 3/4 P/H SELF-TAP SCREW	2	0.22	0.08
812M24 1/2-3/4" CONDUIT 1/4" FLNG	3	5.12	0.23
H23 SQ BOX MTG BRKT p.126	1	0.97	0.07
4" SQ BOX 2 1/8"D COMB KO	1	2.21	0.35
4" SQ BLANK COVER	1	1.10	0.09
4" SQ 1G PLSTR RING 5/8" RISE	1	0.88	0.20
1G SINGLE REC PLATE - PLASTIC IVY	1	0.56	0.13
NEMA L5 - 20R	1	28.13	0.35
Totals	**101**	**60.37**	**4.11**

Summary

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN #	**ASI - 063 AUDITORIUM CHANGES**
Date:	6/14/2017
Project Name:	WEBSTER GROVES ISB BUILDING
Project Number:	WEBSTER GROVES ISB BUILDING
Page Number:	2

Summary (Cont'd)	
General Materials	60.37
Material Total	**60.37**
LU 1 - GF - ST - ELEC	18.19
LU 1 - F - ST - ELEC	33.25
LU 1 - JW - ST - ELEC	279.72
AS-BUILT DRAWINGS	150.00
EXPENDABLES	1.21
SMALL TOOLS	9.93
Subtotal	**552.67**
Markup	55.27
Subtotal	**607.94**
Adjustment #1	-0.94
Final Amount	**$607.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: ASI - 063 AUDITORIUM CHANGES
Final Amount:$607.00
Name: _____
Date: _____
Signature: _____
Change Order #: _____
I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

Webster ISB
PARIC SELF PERFORM
COR 48 - ASI 63
6/7/2017

	UNITS	RATE	TOTAL
Furnish 1/2" black painted trim per ASI 63	1	$ 500.00	**$500.00**
Install 1/2" black painted trim per ASI 63 (6 MHs)	6	$ 62.92	**$377.52**
Credit for fabric changes from G&S	1	$ (37.00)	**($37.00)**
Furnish additional blocking	1	$ 100.00	**$100.00**
Install additional blocking (4 MHs)	4	$ 62.92	**$251.68**
		SUBTOTAL COR=	**$1,192**
		Small Tools and Consumables 4%=	**$48**
		10% OH&P=	**$124**
		SUBTOTAL =	**$1,364**

COR Clarifications

*COR is for labor and material added in ASI-63

ARCHITECTURAL PRODUCTS
Golterman & Sabo

Change Order Request #: 1

Proposal Contract
Product: Clipso

Paric Corporation
Attn: Matt Horton
77 Westport Plaza Drive
Suite 250
St. Louis, MO 63146

Ph: 636-561-9500
Fax: 636-561-9501

Date: May 18, 2017
Project: Webster ISB
Location: St Louis, MO

G&S Job #: **I-55453- 95443**

Bid Type: Per your Request

Revise size of the Clipso fabric Speaker Covers to approximately 4'0" wide x 1'9" high per Revised Elevations and Details for the Lecture Hall South elevation.

Change In Price: DEDUCT THIRTY-SEVEN DOLLARS ($37.00)

Pricing valid thirty (30) days from date of Proposal.

Please issue a Change Order or sign and return this sheet to authorize this change.

By: _____
Cyndi Walker cyndiw@golterman.com

Accepted By: _____ **Date:** _____

2010, 2011 & 2013 ASA "Outstanding Specialty Subcontractor"
2013 ASA Safety Award

PARIC
EXPERIENCE. EXCELLENCE.

May 05, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-135 - ASI#61 Revise Valve for Kitchen Dishwasher

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the additive sum of One Thousand Two Hundred Eighty-Nine Dollars And Thirty-Four Cents $1,289.34 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0141 (ASI #61 - Plumbing Valve Revision), Total $ 1,289.34

Owner contingency will be used for this change proposal. The scope includes the replacement of the revised plumbing valve in Kitchen 174 and the replacement of the drywall that needed to be cut out for the revised valve.

Proposed Change Proposal Total: $1,289.34

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/14/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 07-JUN-17
Time: 04:44 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0141	ASI #61 - Plumbing Valve Revision			1,289.34	07-JUN-17					1,289.34	1,289.34	

Vendor Name				Description		
DeLuca Plumbing LLC	15051	15400.001 S	Plumbing Sub	390.00	ASI #61 - Plumbing Valve Revision	Labor and material to replace the valve in Kitchen 174 per ASI #061.
Paric Corp - Self Perform	15051	09250.001 S	Drywall Sub	561.00	ASI #61 - Plumbing Valve Revision	Replace and retape the drywall that had to be cut out to install the revised plumbing valve per ASI #061.
	15051	01310.103 O		140.40	ASI #61 - Plumbing Valve Revision	Coordination and management for the revisions ($140.40/HR x 1 HR).
	15051	01740.100 L		137.94	ASI #61 - Plumbing Valve Revision	Additional cleanup labor (2 HRS x $68.97/HR).
	15051	23100.001 M	Risk Management (1.1%)	14.00	ASI #61 - Plumbing Valve Revision	Risk Management
	15051	23150.005 M	Contractor Default Insurance (1.25%)	15.00	ASI #61 - Plumbing Valve Revision	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	31.00	ASI #61 - Plumbing Valve Revision	Contractor Fee

	Estimated Amount	Quoted Amount	Final Amount	Budgeted Amount	Billing Amount
Total For EXT	**0.00**	**0.00**	**1,289.34**	**1,289.34**	**1,289.34**
Grand Total:	**0.00**	**0.00**	**1,289.34**	**1,289.34**	**1,289.34**

**** = Posted Change Item***

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	07-JUN-17
To Change Order:		Run Time:	04:44 PM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Posted and Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

COR # 33 Webster ISB

DeLuca Plumbing, L.L.C.
8465 Delport Drive
St. Louis MO 63114
TO:
PARIC

Scope: **ASI 61**

Domestic water changes per ASI.

Clarifications **No Drywall Patch**
No Pipe Insulation

Date: 5/22/17

Labor	SHEET	HRS	RATE	TOTAL	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
Supervision		0.57	73.71	$ 41.68	
			73.71	$ -	
Labor - Domestic Water		1.27	73.71	$ 93.61	
Replace Box		2.00	73.71	$ 147.42	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
BIM		0.50	73.71	$ 36.86	
Delivery			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
			73.71	$ -	
Labor Total Cost					$ 319.57

EQUIPMENT AND OPERATORS		RATE	TOTAL	
Total Equipment and Operator Cost		$ -		$ -

MATERIALS (and Units)	DATE	UNIT	QTY	RATE	TOTAL
					$ -
					$ -
Materials			1	$ 39.27	$ 39.27
Hose Bibb			-1	$ 9.20	$ (9.20)
Add for solder / flux / gas			1	$ 5.00	$ 5.00
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
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					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
Total Material Costs					$ 35.07

Subtotal Contractor Costs	$ 354.64

Subcontractors		
Total Subcontractor		$ -

Subtotal Labor Material & Equipment Costs		$	354.64
Sub Contracted Costs		$	-
OH&P LABOR	10.00%	$	31.96
OH&P MATERIALS	10.00%	$	3.51
OH&P SUBS	5.00%	$	-
Total Subcontractor Cost		$	390.10

Total Price	$ 390

WU ISB - ASI 61

		QTY	LABOR Unit	LABOR Subtotal
Domestic Water				
Pipe - L	1/2"	1.00	0.06	0.06
Elbow	1/2"	3.00	0.40	1.20
TOTALS-Domestic Water		Pipe Ft 1		Labor Hrs 1.26

Price Quotation # B962122

FERGUSON - O'FALLON #1606

76 HUBBLE DRIVE
O FALLON, MO 63368-8694

Phone : 636-300-5300
Fax : 636-300-3335

Bid No.....: B962122
Bid Date...: 05/18/17
Quoted By: CES
Customer.: DELUCA PLUMBING LLC
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust Phone: 314-427-5551
Terms.....: 2% 10TH NET 30TH
Ship To.....: DELUCA PLUMBING LLC
8465 DELPORT DRIVE
ST LOUIS, MO 63114

Cust PO#..: WEBSTER

Job Name.: WEBSTER

Item	Description	Quantity	Net Price	UM	Total
PFX75FC	LFN 3/4 BRS MIP BLR DRN	1	9.198	EA	9.20
PFVB	*NP 3/4 CB VB	1	5.802	EA	5.80
CCD	1/2 WROT CXC COUP 5/8 OD	2	0.525	EA	1.05
CMAD	1/2 WROT CXM ADPT	1	1.450	EA	1.45
LHARDD10	1/2 X 10 L HARD COP TUBE	1	175.200	C	1.75
BBB216T	11-18 T/SCOPE BX MTG BRKT	1	4.021	EA	4.02
I88400	WM BX 1/4 TURN RB VLV RED. HDL	1	16.000	EA	16.00

Subtotal: $39.27

Inbound Freight: $0.00

Tax: $2.93

Order Total: $42.20

Webster ISB
PARIC SELF PERFORM
COR 49 - ASI 61
6/7/2017

	UNITS	RATE	TOTAL
Labor to remobilize and patch/trim walls dues to plumbing changes in ASI 61 (4 MHs)	4	$ 62.92	**$251.68**
Taping time to remobilize and retape unfinished areas in a finished room (3 MHs)	3	$ 62.92	**$188.76**
Additional Taping and Drywall Material	1	$ 50.00	**$50.00**
		SUBTOTAL COR=	**$490**
		Small Tools and Consumables 4%=	**$20**
		10% OH&P=	**$51**
		SUBTOTAL =	**$561**

COR Clarifications

*COR is for the time and material to go back and patch/tape areas that had to be cut in to due to ASI 61.

CANNONDESIGN

Architect's Supplemental Instructions

Architect's Project No: 04561.01

Architect's ASI No: 061

Project:
Webster University Interdisciplinary Science Building

Date Issued: 04/11/2017

Contract Date:

Reason Code: 05 A/E Scope

Discipline Code: 11 (Plumbing)

Owner:
Webster University

Architect:
Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:
Paric Construction

Contract For: General construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

St. Louis
Baltimore
Boston
Buffalo
Calgary
Chicago
Houston
Los Angeles
Mumbai
New York
Phoenix
San Francisco
Shanghai
Toronto
Vancouver
Victoria
Washington DC

Attachments:

Drawings:
P0402 – Risers – Plumbing

<End of Drawing List>

1100 Clark Avenue
St. Louis, Missouri
63102
T: 314.241.6250
F: 314.241.2570
www.cannondesign.com

Reason Codes:
#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes
#1. Demo-demolition
#2. Div1-Division 1 items on the spec book (this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment, Owner Purchased)
#6. Fire Protection

Discipline Codes
#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

CANNONDESIGN

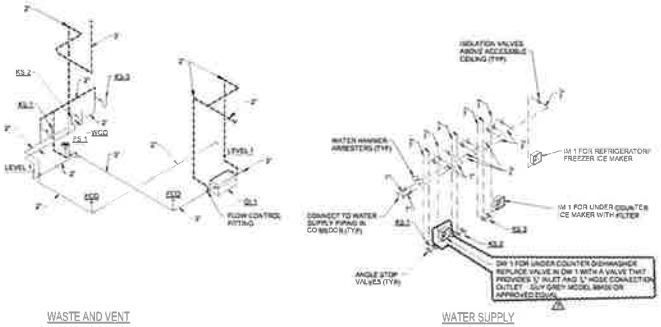
Description: ASI – 061 (RFI-509)

ASI-061 is being issued for the purpose of replacing the water supply valve in DW-1 that serves the under-counter dishwasher in Teaching Kitchen 174. The new valve to provide ½" inlet and ¾" hose end connection outlet. Valve shall be Guy Grey model 88400 or approved equal.

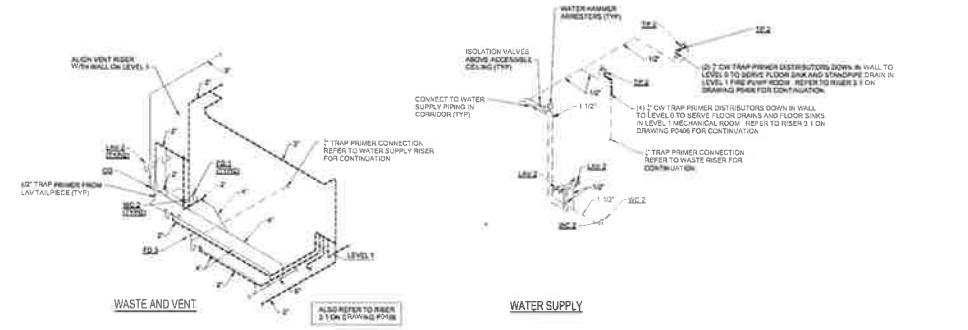
Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

Issued by Architect: Michael R. Whitworth
Webb engineering Services, Inc.

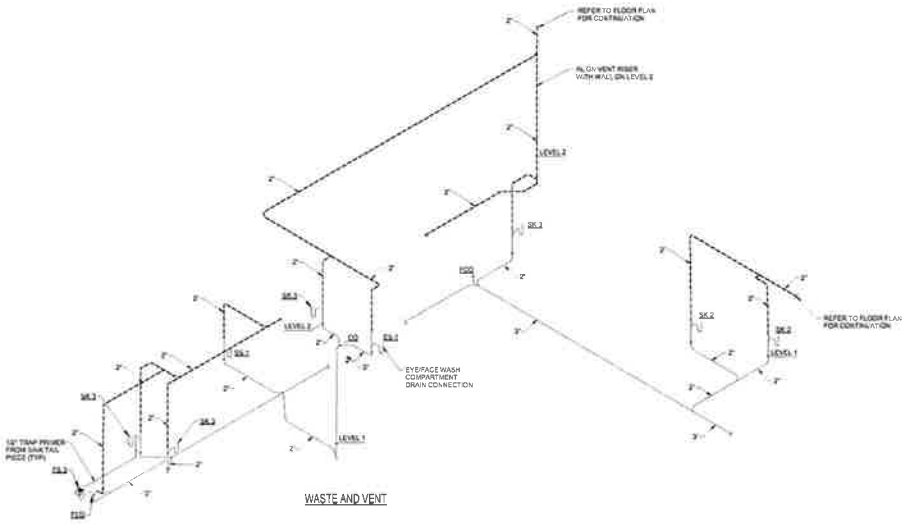
Accepted by Contractor:

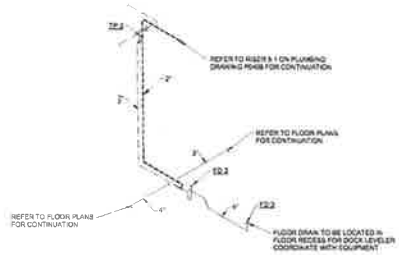


1 P0402 TEACHING KITCHEN 174 PLUMBING RISERS
SCALE: N.T.S.

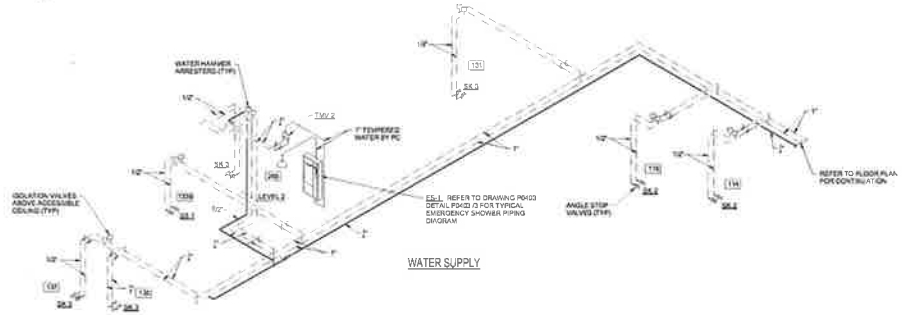


2 P0402 TOILET ROOMS 180 AND 182 PLUMBING RISERS
SCALE: N.T.S.

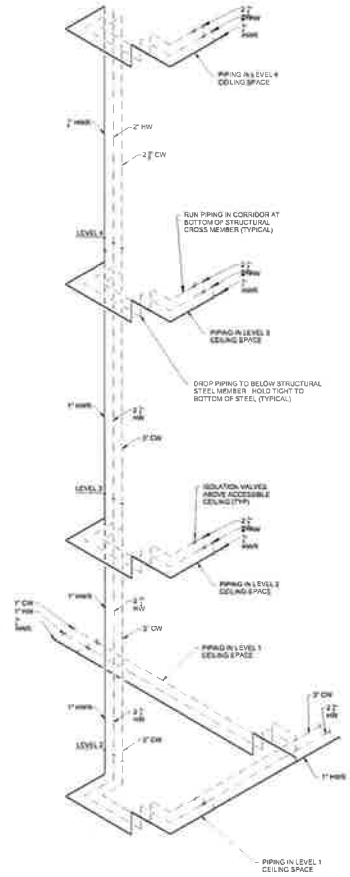




5 P0402 LOADING DOCK 172 FLOOR DRAINS
SCALE: N.T.S.



3 P0402 LEVEL 1 AND LEVEL 2 AREA B RISERS
SCALE: N.T.S.



4 P0402 DOMESTIC WATER SERVICE BUILDING RISER
SCALE: N.T.S.

MSD P# 28874-01 MSD BASE MAP 23K3

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T 314 241 8200
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William Tao & Associates, Inc
MEP/FP Engineer
7800 Manchester Road, Suite 120
St. Louis, MO 63143
314 644 3030

David Mason & Associates, Inc
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St. Louis, MO 63110
314 534 1053

Faith Group
Technology
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314 991 2700

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Environmental Graphics & Signage
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314 725 5616

KWA Architects
Architecture
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St. Louis, MO 63124
314 962 2560

Spielman Brady & Company
Interior Designer
6251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314 863 0070

SWT Design
Landscape Architect
7733 Big Bend Blvd
St. Louis, MO 63119
314 644 3100

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1408 S. 3rd Street, Suite 201
St. Louis, MO 63104
314 589 3500

No	Description	Date
5	ASI 051 (HH, 50B)	11 APR 2017
4	ASI 033 (HH 261, 268, 309 & 310)	03 NOV 2016
3	ADDENDUM 3-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
	BIDSUCD FOR CONSTRUCTION (BPS)	01 MAR 2016

Drawing Title

RISERS - PLUMBING

Project No 04561.01 Checked by

P0402

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June 02, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-141 - Added Locks to Teaching Kitchen Casework

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the additive sum of Two Thousand Nine Hundred Thirty-Eight Dollars And Zero Cents $2,938.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0133 (Locks for Teaching Kitchen Casework), Total $ 2,938.00

Owner contingency will be used for this change proposal. The scope includes the material and labor to install locks at the teaching kitchen (room 174) cabinets and drawers and also add a center solid surface divider and metal support.

Proposed Change Proposal Total: $2,938.00

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/14/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 02-JUN-17
Time: 01:35 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0133	Locks for Teaching Kitchen Casework			2,938.00	02-JUN-17					2,938.00	2,938.00	

Vendor Name					Description		
Paric Corp - Self Perform	15051	06200.001 S	Finish Carpentry Sub	2,800.00	Locks for Teaching Kitchen Casework	Additional cost for the material and labor to install locks at the teaching kitchen (room 174) cabinets and drawers and also add a center solid surface divider and metal support.
	15051	23150.005 M	Contractor Default Insurance (1.25%)	35.00	Locks for Teaching Kitchen Casework	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	72.00	Locks for Teaching Kitchen Casework	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	31.00	Locks for Teaching Kitchen Casework	Risk Management
Total For EXT		**0.00**	**0.00**	**2,938.00**		
	Grand Total:	**0.00**	**0.00**	**2,938.00**		

	Budgeted Amount	Billing Amount
Total For EXT	**2,938.00**	**2,938.00**
Grand Total:	**2,938.00**	**2,938.00**

**** = Posted Change Item***

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	02-JUN-17
To Change Order:		Run Time:	01:35 PM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Posted and Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

Webster ISB
PARIC SELF PERFORM
COR 34 - Teaching Kitchen 174 Locks
5/3/2017

	UNITS	RATE	TOTAL
Add Locks to all cabinets and drawers at Teaching Kitchen 174 (Material)	1	$ 2,196.00	**$2,196.00**
Add Locks to all cabinets and drawers at Teaching Kitchen 174 (4 MHs)	4	$ 62.92	**$251.68**
		SUBTOTAL COR=	**$2,448**
		Small Tools and Consumables 4%=	**$98**
		10% OH&P=	**$255**
		SUBTOTAL =	**$2,800**

COR Clarifications

*COR is for time and material to have locks installed for casework in Teaching Kitchen 174

ST. LOUIS WOODWORKS
500 Prospect Ave - St. Louis, MO 63110
Phone (314) 652-9663 - Fax (314) 652-7684

CHANGE ORDER 3

Date: 4/7/17

To:
Company Name: FITZGERALD CONSTRUCTION
Attention:
E-mail:
Job Name:
Architect: WEBSTER SCIENCE
Plan date:

In reference to our original bid dated 3/15/17 *, we hereby agree to make the following changes:*

C.O.# *3* *4/7/17*

LINE	DESCRIPTION	AMOUNT
1	ADD LOCKS AT KITCHEN TEACHING 174 ON ALL CABS AND DRAWERS	1,950.00
2	ADD CENTER SOLID SURFACE DIVIDER AND METAL L-ANGLE SUPPORT	246.00

Delivery: 0.00
Subtotal: 2,196.00
Tax: 0.00
Total: **2,196.00**

The signing, dating, and returning of this change order is required before any work may be performed.

Submitted by: ***GARY LEEK***

Accepted by:

Date:

Original Contract Amount: 0.00
Previous Change Order(s): 0.00
This Change Order: 2,196.00
Revised Contract Amount: **2,196.00**

PARIC
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May 23, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-144 - RFI #536 Wire Management Credit

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the deducted sum of Negative Two Thousand Six Hundred Ninety-Six Dollars And Zero Cents (-$2,696.00).

This change will impact the scheduled completion date by 0 days.

- PCI-E-0135 (RFI 536 - Wire Management Credit), Total $ -2,696.00

Owner contingency will be credited with this change proposal. Scope includes the credit for the alternate wire management system per the RFI 536 response.

Proposed Change Proposal Total: -$2,696.00

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/14/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 02-JUN-17
Time: 02:20 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT EXT

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0135	RFI 536 - Wire Management Credit			-2,696.00	02-JUN-17					-2,696.00	-2,696.00	

Vendor Name				Description			
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub	-2,570.00	RFI 536 - Wire Management Credit	Credit for the alternate wire management system per the RFI 536 response.	
	15051	23100.001 M	Risk Management (1.1%)	-28.00	RFI 536 - Wire Management Credit	Risk Management	
	15051	23150.005 M	Contractor Default Insurance (1.25%)	-32.00	RFI 536 - Wire Management Credit	Contractor Default Insurance	
	15051	23300.001 F	Fee (2.5%)	-66.00	RFI 536 - Wire Management Credit	Contractor Fee	
Total For EXT		**0.00**	**0.00**	**-2,696.00**			**-2,696.00** **-2,696.00**
Grand Total:		**0.00**	**0.00**	**-2,696.00**			**-2,696.00** **-2,696.00**

**** = Posted Change Item***

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	02-JUN-17
To Change Order:		Run Time:	02:20 PM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Posted and Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

PARIC
EXPERIENCE. EXCELLENCE.

PARIC CORPORATION
77 Westport Plaza Suite 250
St. Louis, MO 63146
TEL: 636-561-9500
FAX: 636-561-9501

REQUEST FOR INFORMATION

DATE: May 08, 2017 **NO.:** RFI-536

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Proposed alternate comm room fitout equipment

Response Required By: May 15, 2017

Drawing / Spec Reference:

Information Requested:

Ortronics is having trouble delivering the wire manager, which was approved in 271100-001 on schedule. In order to maintain schedule proposes the attached alternate equipment. Tom Becker has reviewed and does not have any concerns, however it should be ultimately approved by Webster. Substitution request attached.

Response:

THE PROPOSED SUBSTITUTION HAS BEEN DISCUSSED WITH WEBSTER AND IS CONSIDERED ACCEPTABLE. THE CONTRACTOR AGREES TO ISSUE A CREDIT IN THE AMOUNT OF $2,570 FOR THIS SUBSTITUTION.

ARCHITECT'S RESPONSE:
This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By:_____ Date:_____

Interdisciplinary Science Building
Webster University
Cannon Design Project No. 004561.01

Project: Webster ISB

Substitution Request Number:

From:

To: Melissa Pirtle stl-cac@cannondesign.com

Date:

Re:

Contract For:

Specification Title:

Description:

Section:

Page:

Article/Paragraph:

Proposed Substitution: ORTRONICS VERTICAL MANAGER (Part Number OR-MM20VMS706-B)

Trade Name: VERTICAL MANAGER

Model No.: OR-MM20VMS706-B

Manufacturer: ORTRONICS

Address: 125 EUGENE O'NEILL DRIVE

NEW LONDON, CT 06320

Phone: 1-860-445-3800 Manufacturer Web Page: WWW.ORTRONICS.COM

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

Savings to Owner for accepting substitution: ($

Proposed substitution changes Contract Time: ☐No ☒Yes [Add] [Deduct] days.

The Undersigned Bidding General Contractor/Construction Manager Certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified products.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Interdisciplinary Science Building
Webster University
Cannon Design Project No. 004561.01

- The following supporting data is attached to this request and verifies the above statements:
  - ☐ Drawings
  - ☒ Product Data
  - ☐ Samples
  - ☐ Tests
  - ☐ Reports
  - ☐ Other (explain) _____

Submitted by: MIKE HOEFLER

Signed by: Mike Hoefler

Contractor: GUARANTEE ELECTRICAL

Address: 3405 BENT AVENUE

ST. LOUIS, MO 63116

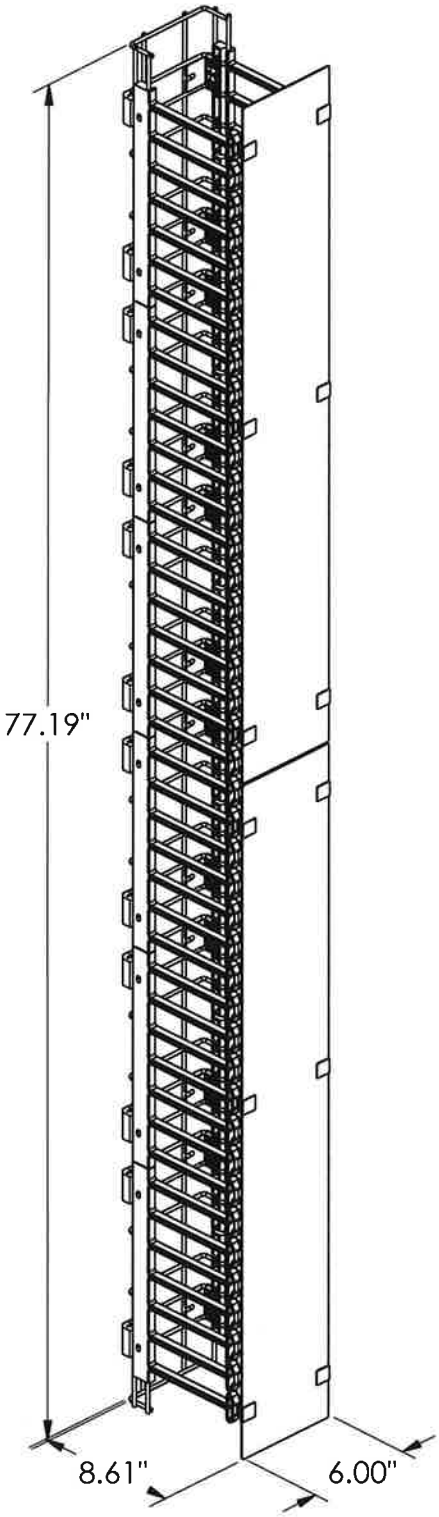
Phone: 314-568-7429 Email: MIKE.HOEFLER@GECO.COM

Review and Action

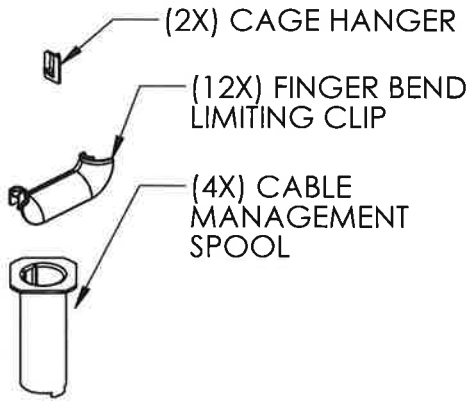
- ☐ Substitution approved – Make submittals in accordance with the Specifications.
- ☐ Substitution approved as noted – Make submittals in accordance with the Specifications.
- ☐ Substitution rejected – Use specified materials.
- ☐ Substitution received too late – Use specified materials.

Comments: _____

Signed by: _____ Date: _____



KIT ALSO INCLUDES:



NOTE: MOUNTING HARDWARE INCLUDED

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ORTRONICS®
125 EUGENE O'NEILL DRIVE
NEW LONDON, CT 06320
TEL: 860-445-3800
FAX: 860-405-2990
WWW.ORTRONICS.COM

TITLE

MM20, 6"VERTICAL CABLE MGMT CAGE 6" X 8.37" X 77.19" W/SPLIT COVERS

	NAME	DATE
DWN	JH	5/12/2014
CHK	JQ	5/12/2014
APPR	CV	5/15/2014

SIZE	CAD FILE	DWG NO	REV
A	MM20VMS706XC	OR-MM20VMS706-X	01
SCALE NONE	WEIGHT	SHEET 1 OF 1	

PARIC
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May 23, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-146 - Accepted VE Items

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the deducted sum of Negative Twenty-Five Thousand Seven Dollars And Zero Cents (-$25,007.00).

This change will impact the scheduled completion date by 0 days.

- PCI-E-0124 (Approved VE Credits), Total $ -25,007.00

Owner contingency will be credited with this change proposal. This credit includes accepted VE credits for ceramic tile, waterproofing, floor base, ceiling tile, and carpet revisions.

Proposed Change Proposal Total: -$25,007.00

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/5/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0124	Approved VE Credits			-25,007.00	23-MAY-17					-25,007.00	-25,007.00	

Vendor Name				Description			
Flooring Systems, Inc.	15051	09650.001 S	Resilient Flooring Sub	-11,534.00	Approved VE Credits	Accepted credit for the use of the Anatolia Segment in lieu of the AO Method ceramic tile in the restrooms.
Superior Waterproofing & Restoration Co., Inc.	15051	07110.001 S	Damp/Waterproofing Sub	-2,440.00	Approved VE Credits	Accepted credit for the waterproofing at the courtyard site walls.
Flooring Systems, Inc.	15051	09650.001 S	Resilient Flooring Sub	-3,592.00	Approved VE Credits	Accepted credit for the alternative CPT7 and CPT3.
Flooring Systems, Inc.	15051	09650.001 S	Resilient Flooring Sub	1,905.00	Approved VE Credits	Accepted alternate to move from wood base to resilient base in rooms 154, 156, 202, 203, 205, 206, 207, 209, 211, 212, 214, 210, and 230A.
Paric Corp - Self Perform	15051	06200.001 S	Finish Carpentry Sub	-4,776.00	Approved VE Credits	Accepted credit to move from wood base to resilient base in rooms 154, 156, 202, 203, 205, 206, 207, 209, 211, 212, 214, 210, and 230A.
St. Charles Acoustics L.L.C.	15051	09510.000 S	Acoustic Ceiling Sub	-3,400.00	Approved VE Credits	Accepted credit to change ceiling panels to CertainTeed Symphony M tile.
	15051	23100.001 M	Risk Management (1.1%)	-262.00	Approved VE Credits	Risk Management
	15051	23150.005 M	Contractor Default Insurance (1.25%)	-298.00	Approved VE Credits	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	-610.00	Approved VE Credits	Contractor Fee
Total For EXT		**0.00**	**0.00**	**-25,007.00**		**-25,007.00**	**-25,007.00**
	Grand Total:	**0.00**	**0.00**	**-25,007.00**		**-25,007.00**	**-25,007.00**

**** = Posted Change Item***

5/5/2017 VE List - Update

VE	Savings	Action / Comments	Need Decision by
Use Anatolia Segment in lieu of AO Method Ceramic tile at Restrooms	$ (12,100)	Approved - need formal document revision. Color selection received.	N/A
Fluid applied waterproofing at courtyard site walls	$ (2,560)	Approved -Revised to use fluid applied waterproofing, drainboard and no insulation ILO specified system	N/A
Alt carpet pricing	$ (3,768)	Approved - Revised pricing for CPT-3 and CPT-7 from vendors.	N/A
Revise wood base to resilient base	$ (3,012)	Approved - Includes base in rooms 154, 156, 202, 203, 205, 206, 207, 209, 211, 212, 214, 210, 230A.	N/A
Change Ceiling Panels for APC-1 to CertainTeed Symphony M tile. This is the same finish as APC-1 but the NRC would be 0.7	$ (3,400)	Approved	N/A
Delete CPT-1 in Portico between ISB and EAB	$ -	See ASI#60 scope	N/A
TOTAL	$ (24,840)	Actual savings with accurate markup credit = $25,007.00	

Shared savings at project completion	$ (300,000)	Would be realized at completion of project	N/A

Rejected items per 1/19 Meeting	Target		
Porcelain tile ILO terrazzo	$ (75,000)		1/31/2017
Picket rails ILO glass @ stair #1	$ (40,000)		1/31/2017
Revsions to monunmetal stair treads and risers at Stair #1	$ (25,000)		1/31/2017
Omit Window film	$ (75,000)		1/31/2017
Omit wood paneling at Stair #1	$ (15,000)		1/31/2017
Alt wood clg at lecture hall	$ (20,000)		1/31/2017
Delete the type EB LED linear lighting located in the exterior hand rail	$ (17,000)	Replacement lights necessary?	1/31/2017
Delete the type EA hand Rail Lights (2) Runs	$ (27,353)	Replacement lights necessary?	1/31/2017
Delete the type BA stairwell light at Stair #1	$ (7,500)	Replacement lights necessary?	1/31/2017
Delete the Type EC up light located in the court yard	$ (4,150)	Replacement lights necessary?	1/31/2017
Change wood panels in corridor to wood wall covering	$ (36,693)	Preliminary number, number to be finalized based on material selection made by Cannon. Includes paneling in E-W Corridors at elevators and N-S Corridors at lab floors; does not include wood soffits or wood at monumental stair. Deduct of approx 4,200 sf of paneling	1/31/2017
Revise terrazzo base to resilient base	$ (7,049)		1/31/2017
Reduce quantity of interior glass walls (in offices)	$ (20)	Ave cost per SF, cost to be based on total area changed	1/31/2017
Reduce quantity of fire rated glass	$ (132)	Ave cost per SF, cost to be based on total area changed	1/31/2017
Change kitchen counters to from quartz to plastic laminate	$ (4,410)	Preliminary number, final number will be established based on material selection by Cannon	2/6/2017
Change workroom east elevation from quartz to plastic laminate	$ (540)	Preliminary number, final number will be established based on material selection by Cannon	2/6/2017
Remove glass backsplash at kitchen	$ (593)	Removed glass painted wall.	2/6/2017
Change toilet partitions to metal	$ (7,500)	Preliminary number, final number will be established based on material selection by Cannon	2/6/2017
Delete loading dock lift	$ (17,000)	Paric to find out status and what future costs would be	1/31/2017
TOTAL	$ (379,939)		

Rejected Items per 1/26/17 Meeting			
Manual shades ILO Electric	$ (85,000)		1/31/2017
Delete all of the type SA cove lighting located on 3B, 4A and 4B	$ (47,380)	Photometrics, and controls need to be verified by Tao	1/31/2017
Use AO Decorum in lieu of AO Method Ceramic tile at Restrooms	$ (9,185)	Can only utilize 1 ceramic tile VE item	1/31/2017
Remove CPT-7 from Stair 2 and seal concrete and paint treads	$ (1,388)	Credit could be $4543 if painting of tread risers and sealing of concrete is not required	1/31/2017

Sexauer, Richard

From: Tyler M. Reando <TReando@flooringsystemsinc.net>
Sent: Thursday, January 26, 2017 1:53 PM
To: Szachnieski, Jason
Subject: FW: Webster ISB VE Ideas

Tyler Reando
Direct: 314-329-9309
Cell: 636-208-2677

www.flooringsystemsinc.net

From: Mayhew, Doug [mailto:DDMayhew@paric.com]
Sent: Wednesday, January 25, 2017 2:45 PM
To: Geoff Hewett
Cc: Ron Komlos; Tyler M. Reando; Dennis Godat
Subject: RE: Webster ISB VE Ideas

Thank you for your input, numbers were presented to the owner/architect last week. They are now considering other options, please review the following items and let me know if what they are proposing is reasonable and that the numbers make sense. **Jason has another meeting with them tomorrow.**

CERAMIC TILE
CT-1 - $10 material / roughly $15 unit cost = $104,475 extended cost ($57,497 cost savings)
CT-2 - $10 material / roughly $15 unit cost = $5,025 extended cost ($3,282 cost savings)
Total cost savings of CT = $60,779

consider vinyl tile option instead of CT-1 in corridors - $2.25 s.f. material cost

TERRAZZO
Verify unit installed cost as the options we are considering are $8.75-9.50 s.f. material

CARPET
CPT-1 - $36 material / $40.41 unit cost = $1,334 extended cost ($131 cost savings)
CPT-2 - $21 material / $25.41 unit cost = $34,812 extended cost ($5,473 cost savings)
CPT-3 - $25 material / $29.41 unit cost = $12,529 extended cost ($2,128 cost savings)
CPT-4 - $25 material / $29.41 unit cost = $13,470 extended cost ($2,288 cost savings)
CPT-5 – remains

Total cost savings of CPT = $10,020
there is opportunity for more savings once we have our finish meeting

Thanks for the help.

DOUG MAYHEW
PRECONSTRUCTION DIRECTOR

Direct: 636-561-9586
Main: 636-561-9500
- - - - - -
77 Westport Plaza, Suite 250
St. Louis, MO 63146
- - - - - -
PARIC.COM

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From: Geoff Hewett [mailto:ghewett@flooringsystemsinc.net]
Sent: Wednesday, January 18, 2017 3:51 PM
To: Mayhew, Doug
Cc: Ron Komlos; Tyler M. Reando; Dennis Godat
Subject: Webster ISB VE Ideas

Doug,

Please see below for a few cost saving ideas we have for you. I will get you sample boards but I have also included links for your use.

Ceramic Restroom Tile
Use AO Decorum in lieu of AO Method = DEDUCT $9,885.00
Use Anatolia Segment in lieu of AO Method = DEDUCT $11,534.00

Terrazzo Flooring
Use 12x12 Patcraft Admix in lieu of base bid terrazzo = ADD $69,986.00
Use 36x36 Patcraft Admix in lieu of base bid terrazzo = ADD $80,987.00
Use 36x36 Patcraft Admix with seam weld in lieu of base bid terrazzo = ADD $82,957.00
**Moisture Mitigation Included in Patcraft product pricing*

Decorum http://americanolean.com/series.cfm?series=180
Segment http://www.anatoliatile.com/segment_porcelain.html

Sexauer, Richard

From: Sexauer, Richard
Sent: Tuesday, May 23, 2017 12:40 PM
To: Sexauer, Richard
Subject: FW: Superior WP - Update
Attachments: CO#1.pdf

RICHARD SEXAUER
PROJECT MANAGER

Mobile: 636-248-1708
Direct: 636-561-9588
Main: 636-561-9500

- - - - - -

77 Westport Plaza, Suite 250
St. Louis, MO 63146

- - - - - -

PARIC.COM

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From: Joseph McGahan [mailto:joseph@superiorwaterproofing.com]
Sent: Thursday, February 2, 2017 3:03 PM
To: Szachnieski, Jason
Subject: RE: Superior WP - Update

Jason,

Please see attached revised CO request; this includes everything we have to date. Other pricing below:

- ASI 03 – Revised (eliminate rigid insulation & switch to a suitable fluid applied monolithic membrane application). Original proposal $11,800.00: Revised amount $9,360.00. Credit of $2,440.00
- RFI – 359 (change directive to include only 2' of below grade waterproofing assembly extended out from foundation both interior and exterior). Original proposal $17,350.00: Revised amount $3,780.00.

If there is anything else please let me know.

Regards,

Effective immediately, please send all Bid Invitations to: bidinvitations@superiorwaterproofing.com. Thank you

Joseph McGahan
Project Manager
Superior Waterproofing & Restoration Co., Inc.
3001 Washington Ave., Ste 100 St. Louis, MO 63103
Tel: (314)531-6100 Fax: 314-531-6200 Cell: (314)-603-9464
joseph@superiorwaterproofing.com http://www.superiorwaterproofing.com

From: Szachnieski, Jason [mailto:JRSzachnieski@paric.com]
Sent: Tuesday, January 31, 2017 1:10 PM
To: Joseph McGahan <joseph@superiorwaterproofing.com>
Cc: Gates, Devin <ddgates@paric.com>
Subject: FW: Superior WP - Update

Joe,
Webster has asked for a price to only waterproof the first 2' of wall away from the foundation instead of all of the North retaining walls as indicated in RFI#359. Can you please let us know what that would cost?

Also I tried to catch up with you about your CO#2 pricing before you were out of the office. Are you back now and can we catch up on this?

Thanks,
Jason

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

Direct: 636-561-9608
Main: 636-561-9500
- - - - - -
77 Westport Plaza, Suite 250
St. Louis, MO 63146

- - - - - -
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From: Joseph McGahan [mailto:joseph@superiorwaterproofing.com]
Sent: Tuesday, January 10, 2017 12:53 PM
To: Gates, Devin
Subject: Superior WP - Update

Devin,
Any updates or developments on the two attached pricing items. Any update is appreciated.
Regards,

Sexauer, Richard

To: Sexauer, Richard
Subject: FW: Webster ISB - Webster ISB VE list

RICHARD SEXAUER
PROJECT MANAGER

Mobile: 636-248-1708
Direct: 636-561-9588
Main: 636-561-9500
- - - - - -
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St. Louis, MO 63146
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From: Tyler M. Reando [mailto:TReando@flooringsystemsinc.net]
Sent: Wednesday, February 8, 2017 3:11 PM
To: Szachnieski, Jason
Subject: RE: Webster ISB - Webster ISB VE list

Jason,
See the deduct amounts for the pricing change in some of the carpets that were requested.

CPT-3 -- Deduct $3,202.00
CPT-7 – Deduct $390.00

Total Credit = $3,592.00

Thanks,
Tyler Reando
Direct: 314-329-9309
Cell: 636-208-2677

Sexauer, Richard

From: Szachnieski, Jason
Sent: Wednesday, February 15, 2017 8:57 AM
To: treando@flooringsystemsinc.net
Cc: Gates, Devin
Subject: Webster ISB - Carpet

Tyler,
I am supposed to hear back today to confirm we are staying with the original carpet selections. Once I know I will let you know.

Also – Webster did want to make a change from wood base to resilient base in rooms 154, 156, 202, 203, 205, 206, 207, 209, 211, 212, 214, 210, and 230A. Doug Mayhew received unit pricing from you guys and we came up with the following credit amount: 657LF at $2.90/LF = $1905 Add for this scope. Let me know if you disagree, otherwise I'll make this adjustment when we do the adjustment for the carpet savings.

Thanks,
Jason

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

Direct: 636-561-9608
Main: 636-561-9500
- - - - - -
77 Westport Plaza, Suite 250
St. Louis, MO 63146

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Webster ISB

PARIC SELF PERFORM

COR 41 - Credit for Wood Base install in rooms: 154, 156, 202, 203, 205, 206

	UNITS	RATE	TOTAL
Credit for Wood Base install in rooms: 154, 156, 202, 203, 205, 206, 207, 209, 211, 212, 214, 210, 230A	-66	$ 62.92	$ (4,152.72)
		SUBTOTAL COR=	**$ (4,152.72)**
		Small Tools and Consumables 4%=	**$ (166.11)**
		10% OH&P=	**$ (457.36)**
		SUBTOTAL =	**$ (4,776)**

COR Clarifications

Sexauer, Richard

From: Patel, Kelvin <kpatel@CANNONDESIGN.COM>
Sent: Friday, February 3, 2017 12:06 PM
To: Craig A. Miller, Sr.; Szachnieski, Jason
Cc: Grossman, Lynn; Bacino, Richard; 'Ken Creehan'
Subject: RE: WU-ISB: VE Office ceiling tile

Craig,

Per acoustical report, NRC of 0.70 is acceptable for offices (see clip from report below)-

3. Offices
   a. The square footage of acoustical ceiling material above the offices should be a minimum of 80% of the ceiling area. This is to achieve the recommended average reverberation time (500, 1K, 2K) of .5 to .7 seconds.
   b. The ceiling acoustical material should have minimum NRC of .70 such as Armstrong Ultima.

Thanks,

Kelvin Patel, CDT, LEED AP BD+C
Associate
CANNONDESIGN
T 314.425.8756

From: Craig A. Miller, Sr. [mailto:craigmiller29@webster.edu]
Sent: Thursday, January 26, 2017 1:38 PM
To: 'Szachnieski, Jason' <JRSzachnieski@paric.com>; Patel, Kelvin <kpatel@CANNONDESIGN.COM>
Cc: Grossman, Lynn <lgrossman@CANNONDESIGN.COM>; Bacino, Richard <rbacino@CANNONDESIGN.COM>; 'Ken Creehan' <creehan@webster.edu>
Subject: RE: WU-ISB: VE Office ceiling tile

Kelvin,

Did the acoustical engineer verify that a NRC reduction is acceptable? What are the ramifications of this reduction?

CAM Sr.

From: Szachnieski, Jason [mailto:JRSzachnieski@paric.com]
Sent: Thursday, January 26, 2017 1:15 PM
To: Patel, Kelvin <kpatel@CANNONDESIGN.COM>
Cc: Grossman, Lynn <lgrossman@CANNONDESIGN.COM>; Bacino, Richard <rbacino@CANNONDESIGN.COM>; Craig Miller, Sr. (craigmiller29@webster.edu) <craigmiller29@webster.edu>; Ken Creehan (creehan@webster.edu) <creehan@webster.edu>
Subject: RE: WU-ISB: VE Office ceiling tile

Kelvin,
The feedback that I got from our acoustical panel vendor is below. I will update the VE list:

Jason,

My best option would be to us a CertainTeed Symphony M tile. The Cirrus would not be a cost saving to me.

The Symphony M would have the same finish as the specified ACT-1 but the NRC would be 0.70.

Cost savings would be approximately $3,400.00.

Curt Tusler
St. Charles Acoustics
curttusler@stcacoustics.com
314-220-0966 cell

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

Direct: 636-561-9608
Main: 636-561-9500
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From: Patel, Kelvin [mailto:kpatel@CANNONDESIGN.COM]
Sent: Wednesday, January 25, 2017 3:42 PM
To: Szachnieski, Jason
Cc: Grossman, Lynn; Bacino, Richard; Craig Miller, Sr. (craigmiller29@webster.edu); Ken Creehan (creehan@webster.edu)
Subject: WU-ISB: VE Office ceiling tile

Jason,

Change Ceiling Panels for APC-1 to Armstrong Cirrus High NRC – 9/16" beveled tegular. 24"x24". Grid remains per documents – 9/16".

Offices are listed as a typical application for this ceiling tile. NRC is .75 instead of .90 as specified.

Please recommend similar product from CertainTeed if that manufacturer is desired instead of Armstrong.

Thanks,

Kelvin Patel, CDT, LEED AP BD+C
Associate
CANNONDESIGN
1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8756
cannondesign.com

PARIC
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May 26, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Corporation Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-151 - RFI#545 Additional Security Cabinet

Dear Craig A. Miller Sr:

Paric Corporation proposes to complete the following additional work for the additive sum of Nine Hundred Thirty-Five Dollars And Zero Cents $935.00 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0127 (RFI#545 Additional Security Cabinet), Total $ 935.00

The owner contingency shall be utilized for this change proposal
Proposed Change Proposal Total: $935.00

If this change proposal meets with your approval, please sign and return this proposal for our records by May 31, 2017 at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/19/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Date: 26-MAY-17
Time: 04:28 PM

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0127	RFI#545 Additional Security Cabinet			935.00	26-MAY-17					935.00	935.00	

Vendor Name					Description		
Guarantee Electrical Construction Co	15051	16000.001 S	Electrical Sub		891.00	RFI#545 Additional Security Cabinet	Provide RFI 545 additional security cabinet work per GECO PCO dated 5/24/17. Add $891
	15051	23150.005 M	Contractor Default Insurance (1.25%)		11.00	RFI#545 Additional Security Cabinet	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)		23.00	RFI#545 Additional Security Cabinet	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)		10.00	RFI#545 Additional Security Cabinet	Risk Management
Total For EXT		**0.00**	**0.00**	**935.00**			**935.00** **935.00**
	Grand Total:	**0.00**	**0.00**	**935.00**			**935.00** **935.00**

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	26-MAY-17
To Change Order:		Run Time:	04:28 PM
Status Code:		Operator:	JAS39SZA
Report Type:	DETAIL	Posting Status:	Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

PARIC
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PARIC CORPORATION
77 Westport Plaza Suite 250
St. Louis, MO 63146
TEL: 636-561-9500
FAX: 636-561-9501

REQUEST FOR INFORMATION

DATE: May 19, 2017 **NO.:** RFI-545

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Ryan Tune

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Power for Security Cabinet in Elevator Room

Response Required By: May 26, 2017

Drawing / Spec Reference:

Information Requested:

Please provide both a location of the security cabinet, location and power requirements, and the panel this should be fed from.

Response:

Locate the elevator security panel on the east wall of Data 100B, adjacent to the security panel previously installed. Connect to the same power circuit as the adjacent security panel. Maintain a minimum of 30" x 30" wall space for the TTB punchdown blocks between the elevator security panel and the north wall.

ARCHITECT'S RESPONSE:
This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By:_____ Date:_____

E-127

GUARANTEE

ELECTRICAL CONSTRUCTION

3415 Bent Avenue St. Louis, MO 63116 ph (314) 772-5400 fx (314) 772-2526 web geco.com

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
Contact: Jason Szachnieski
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **RFI 545 ADDITIONAL SECURITY CABINI**
Date: 5/24/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 1

Work Description

WEBSTER ISB
RFI - 545 ADDITIONAL SECURITY CABINET

Description of work

*** Install (1) additional security cabinet.**
*** Provide power for this secuirty cabinet from existing circuitry with in the room.**

Base bid shall increase by: $ 891.00

We reserve the right to correct this quote for errors and omissions.

This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.
This price is good for acceptance within **30** days from the date of receipt.
We request a time extension of **20** days.
We will supply and install all materials, labor, and equipment.

Itemized Breakdown

Description	Qty	Total Mat.	Total Hrs.
3/4" EMT CONDUIT	10	4.85	0.62
3/4" EMT STL SS CONN	2	0.38	0.24
3/4" EMT STL SS CPLG	1	0.24	0.06
3/4" EMT 1-H STEEL STRAP	2	0.32	0.10
#12 THHN BLACK	33	3.34	0.25
#12 WIRE POWER TERM	3	0.03	0.60
B2-1 RED WIRE CONN	5	1.09	0.40
RED SCOTCHLOCK (#16-10)	3	0.78	0.24
P-1000 1 5/8 STRUT	4	9.90	0.60
1/4 SPRING NUT	4	9.52	0.30
# 8-10x 7/8 PLAS ANCHOR (3/16)	4	0.14	0.75
1/4-20x 1 1/4 BOLT - PLTD STL	4	0.20	0.14
1/4 FLAT WASHER - PLTD STL	4	0.06	0.04
#10x 1 P/H SELF-TAP SCREW	4	0.46	0.16
4" SQ BOX 2 1/8"D COMB KO	1	2.21	0.35
4" SQ BLANK COVER	1	1.10	0.09
GROUND SCREW W/ INSUL #12 LEAD	1	1.77	0.08
MOUNT SECURITY PANEL CAN	1	0.00	2.50

ORIGINAL

PROPOSED CHANGE ORDER

Client Address:

PARIC CORPORATION
77 W PORT PLAZA # 250
ST. LOUIS, MO 63146

CCN # **RFI 545 ADDITIONAL SECURITY CABINI**
Date: 5/24/2017
Project Name: WEBSTER GROVES ISB BUILDING
Project Number: WEBSTER GROVES ISB BUILDING
Page Number: 2

Description	Qty	Total Mat.	Total Hrs.
Totals	**87**	**36.39**	**7.51**

Summary

General Materials	36.39
Material Total	**36.39**
LU 1 - GF - ST - ELEC	32.91
LU 1 - F - ST - ELEC	60.83
LU 1 - JW - ST - ELEC	511.06
AS-BUILT DRAWINGS	150.00
EXPENDABLES	0.73
SMALL TOOLS	18.14
Subtotal	**810.06**
Markup	81.01
Subtotal	**891.07**
Adjustment #1	-0.07
Final Amount	**$891.00**

CONTRACTOR CERTIFICATION

Name: _____
Date: _____
Signature: _____
I hereby certify that this quotation is complete and accurate based on the information provided.

CLIENT ACCEPTANCE

CCN #: RFI 545 ADDITIONAL SECURITY CABINET
Final Amount:$891.00
Name: _____
Date: _____
Signature: _____
Change Order #: _____
I hereby accept this quotation and authorize the contractor to complete the above described work.

ORIGINAL

June 07, 2017

Craig A. Miller Sr
Webster University
470 East Lockwood Ave
St. Louis, MO 63119-3194

Via Email

Re: Paric Project No. 15051
15051-Webster University Interdisciplinary Science Building
CP-156 - Fabric Stain Treatment

Dear Craig A. Miller Sr:

The Owner's Contractor(s) proposes to complete the following additional work for the additive sum of Four Thousand Eighty-Six Dollars And Sixty-Seven Cents $4,086.67 .

This change will impact the scheduled completion date by 0 days.

- PCI-E-0144 (Fabric Stain Treatment), Total $ 4,086.67

Owner contingency will be used for this change proposal. The scope includes supplying the InCase finish on the new chair seating fabric.

Proposed Change Proposal Total: $4,086.67

If this change proposal meets with your approval, please sign and return this proposal for our records by at the latest. If accepted this scope will be incorporated into a change order.

Sincerely,

Paric Corporation

Jason Szachnieski
Project Manager

Accepted:

Date: 6/14/2017
Craig A. Miller Sr
Webster University

Declined:

Date:
Craig A. Miller Sr
Webster University

Paric Corporation

Date: 07-JUN-17
Time: 06:17 PM

PROJECT MANAGEMENT - CHANGE ITEM DETAIL REPORT

15051 - 15051-Webster University Interdisciplinary Science Building

Status: EXT **EXT**

CI Type	CI Number	Description	Estimated Amount	Quoted Amount	Final Amount	Due to Owner	Notes	Date Sent	Date Received	Date Closed	Budgeted Amount	Billing Amount	Owner CO
EXT	PCI-E-0144	Fabric Stain Treatment			4,086.67	07-JUN-17					4,086.67	4,086.67	

Vendor Name				Description		
Carroll Seating Company, Inc.	15051	12610.010 S	Fixed Seating Sub	3,894.67	Fabric Stain Treatment	Additional cost for InCase finish for chair fabric.
	15051	23150.005 M	Contractor Default Insurance (1.25%)	49.00	Fabric Stain Treatment	Contractor Default Insurance
	15051	23300.001 F	Fee (2.5%)	100.00	Fabric Stain Treatment	Contractor Fee
	15051	23100.001 M	Risk Management (1.1%)	43.00	Fabric Stain Treatment	Risk Management

	Estimated Amount	Quoted Amount	Final Amount	Budgeted Amount	Billing Amount
Total For EXT	**0.00**	**0.00**	**4,086.67**	**4,086.67**	**4,086.67**
Grand Total:	**0.00**	**0.00**	**4,086.67**	**4,086.67**	**4,086.67**

**** = Posted Change Item***

END OF REPORT

Report Parameters

Job:	15051	Project Code:	
From Change Order:		Run Date:	07-JUN-17
To Change Order:		Run Time:	06:17 PM
Status Code:		Operator:	RIC_SEX
Report Type:	DETAIL	Posting Status:	Posted and Unposted CI
Print Notes:	Y	Report Code:	PM5000
Group By:	STATUS		

CARROLL
SEATING • SCIENCES • SCHOOLS • SERVICE

112 Weldon Parkway, Maryland Heights, MO 63043

Phone: 314-227-0088 Fax: 314-227-0090

Change Order

CO Number	CO103932
Cust CO Number	
Date	

Customer Name: Paric Construction

Customer Address: 77 Westport Plaza Drive
Suite 250
St. Louis Missouri 63146

Project Name: Webster ISB - Fixed Seating Bid Package

Project Number: CS404003

Change Order Name: CO 1 Add InCase finish on new Chair Fabric

Scope of Work:

Change Order Estimate:

Change Order Item	Billing Amount
Fixed Audience Seating	**$3,894.67**
Add InCase Finish @ $30.67 per chair 127 chairs	$3,894.67
Change Order TOTAL:	**$3,894.67**

Signatures:

I have reviewed and understand the information contained in this document and my signature indicates approval

Customer _____ Date _____

Sexauer, Richard

From: Amanda Kohlbrecher <AKohlbrecher@CarrollSeating.com>
Sent: Monday, April 10, 2017 8:51 AM
To: Szachnieski, Jason
Subject: Re: Auditorium Seating Fabric

If we are released on this today, delivery is 11 weeks.

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: "Szachnieski, Jason" <JRSzachnieski@paric.com>
Date: 4/10/17 7:44 AM (GMT-06:00)
To: Amanda Kohlbrecher <AKohlbrecher@CarrollSeating.com>
Cc: "Gates, Devin" <ddgates@paric.com>, Eddie Scheer <EScheer@CarrollSeating.com>
Subject: RE: Auditorium Seating Fabric

So what does that mean for the delivery date for the chairs?

Jason

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

Direct: 636-561-9608
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- - - - - -
77 Westport Plaza, Suite 250
St. Louis, MO 63146

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From: Amanda Kohlbrecher [mailto:AKohlbrecher@CarrollSeating.com]
Sent: Friday, April 7, 2017 5:19 PM
To: Szachnieski, Jason
Cc: Gates, Devin; Eddie Scheer
Subject: RE: Auditorium Seating Fabric

Jason,
The fabric chosen for the chair will increase the pricing slightly – I still don't have the final answer on that yet, but more importantly, putting the InCase finish on the fabric will add 3 weeks to the timeline.

From: Szachnieski, Jason [mailto:JRSzachnieski@paric.com]
Sent: Thursday, April 6, 2017 9:09 PM
To: Amanda Kohlbrecher <AKohlbrecher@CarrollSeating.com>
Cc: Gates, Devin <ddgates@paric.com>
Subject: RE: Auditorium Seating Fabric

Ok, thanks. Hopefully the news is good.

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

Direct: 636-561-9608
Main: 636-561-9500
- - - - - -
77 Westport Plaza, Suite 250
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From: Amanda Kohlbrecher [mailto:AKohlbrecher@CarrollSeating.com]
Sent: Thursday, April 6, 2017 9:07 PM
To: Szachnieski, Jason
Cc: Gates, Devin
Subject: RE: Auditorium Seating Fabric

They have not gotten back to me yet. I sent another email this afternoon. Planning on calling first thing in the morning.

From: Szachnieski, Jason [mailto:JRSzachnieski@paric.com]
Sent: Thursday, April 6, 2017 9:06 PM
To: Amanda Kohlbrecher <AKohlbrecher@CarrollSeating.com>
Cc: Gates, Devin <ddgates@paric.com>
Subject: FW: Auditorium Seating Fabric

Mandy,
What did you find out on the leadtime for the auditorium seating based on the selection below?

Thanks,
Jason

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

Direct: 636-561-9608
Main: 636-561-9500
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77 Westport Plaza, Suite 250
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From: Szachnieski, Jason
Sent: Tuesday, April 4, 2017 8:25 AM
To: 'Amanda Renshaw'
Cc: Grossman, Lynn; Amanda Kohlbrecher; Patel, Kelvin; Craig A. Miller Sr.; Gates, Devin
Subject: RE: Auditorium Seating Fabric

Amanda R – Thanks for the quick response!

Amanda K – Can you please get this information to Sedia and advise me on what this means for leadtime for manufacturing and any costs?

Thanks,
Jason

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

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From: Amanda Renshaw [mailto:arenshaw@spellmanbrady.com]
Sent: Tuesday, April 4, 2017 8:17 AM
To: Szachnieski, Jason
Cc: Grossman, Lynn; Amanda Kohlbrecher; Patel, Kelvin; Craig A. Miller Sr.; Gates, Devin
Subject: FW: Auditorium Seating Fabric
Importance: High

Hi Jason,

Please see below from Momentum—InCase is the recommended finish for the auditorium seating fabric and will be equivalent to Nanotex.

Thanks,

Amanda Renshaw
Designer
Spellman Brady & Company
8251 Maryland Avenue, Suite 300 | St. Louis, MO 63105
D 314-669-3471 | T 314-862-0070 x114
www.spellmanbrady.com
Facebook | LinkedIn | Instagram

From: Michele Land [mailto:mland@momtex.com]
Sent: Monday, April 03, 2017 6:00 PM
To: Amanda Renshaw
Subject: RE: Auditorium Seating Fabric

HI Amanda

I was mistaken on my previous email – we use Incase finish. The Incase finish has the same properties as Nanotex it is just a different formula, however Incase offers microbial protection. They are both soil and stain barriers. Both are applied with an immersion process which fully protects the fibers. Both brand are owned by Crypton. The incase finish will perform identically compared to Nanotex in your application.

Let me know if you have any questions. Sorry for the confusion!

Have a great day.
Michele

MOMENTUM GROUP
Michele Land, Sales Representative
314-413-2261 cell
800.366.6839 x845
mland@momtex.com | www.themomgroup.com
17811 Fitch, Irvine, California 92614
Momentum Textiles • LoomSource • Textus

From: Amanda Renshaw [mailto:arenshaw@spellmanbrady.com]
Sent: Monday, April 03, 2017 4:59 PM
To: Michele Land
Subject: Fwd: Auditorium Seating Fabric

Michele

Please see below. Can you confirm the momentum will add Nana text or do we need to send to a third-party for finishing? Please advise ASAP

Begin forwarded message:

From: "Szachnieski, Jason" <JRSzachnieski@paric.com>
Date: April 3, 2017 at 4:55:26 PM CDT
To: Amanda Renshaw <arenshaw@spellmanbrady.com>, "Grossman, Lynn" <lgrossman@CANNONDESIGN.COM>, Amanda Kohlbrecher <AKohlbrecher@CarrollSeating.com>
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>, "Craig A. Miller Sr." <craigmiller29@webster.edu>, "Gates, Devin" <ddgates@paric.com>
Subject: RE: Auditorium Seating Fabric

Amanda R and Lynn,
Amanda K with Carroll has reported back that Sedia and Momentum do not use a Nanotex stain resistance on their fabrics. Attached are the options of finishes there are to choose from for the Momentum Fabrics. Please advise of which finish you would like so we can finalize the cost and lead time information.

Thanks,
Jason

JASON SZACHNIESKI, PE, LEED® AP
SENIOR PROJECT MANAGER

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