

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
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63102
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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

Architect's Supplemental Instructions

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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

Architect's Supplemental Instructions

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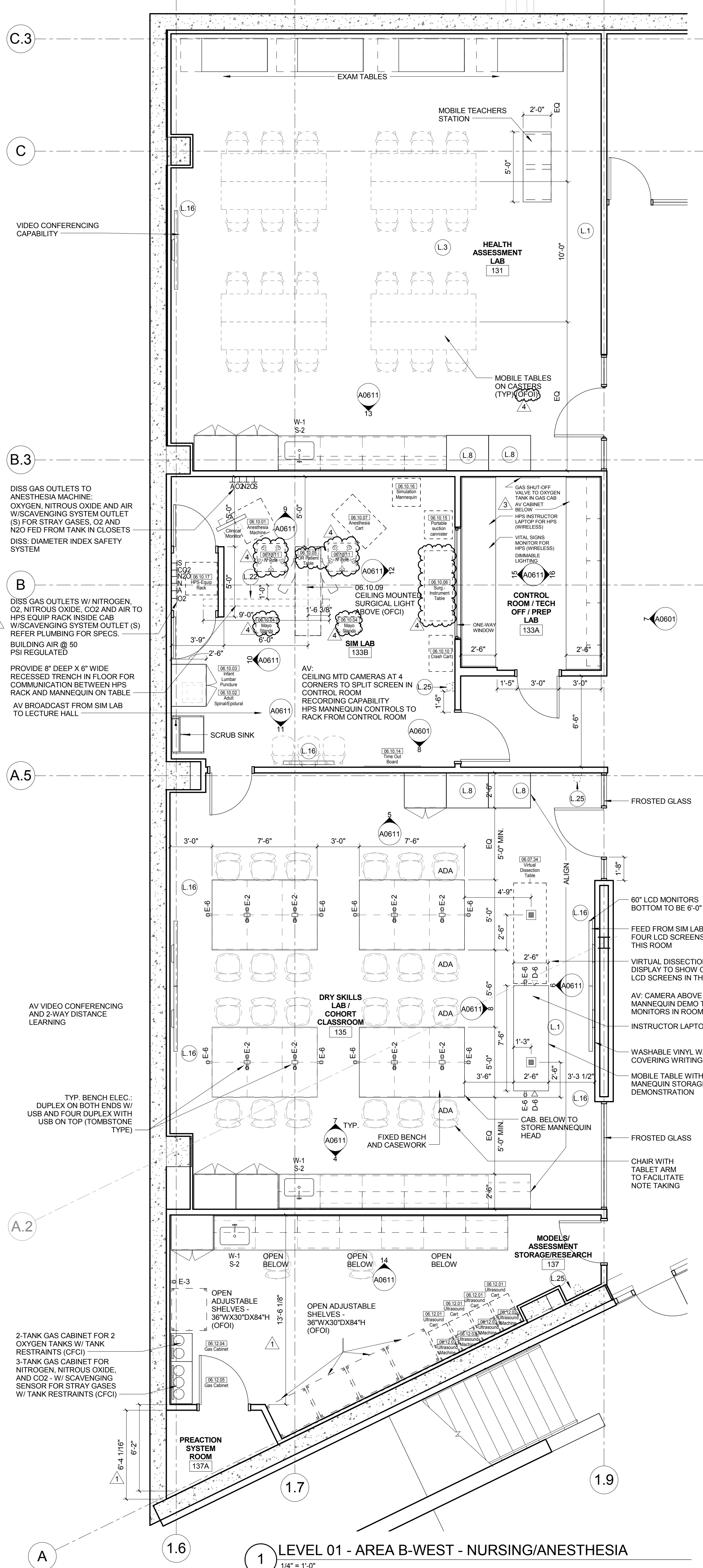
- In Organism Bio Lab 378, remove one ceiling mounted aquarium receptacle on circuit 3LL4-29 and associated branch circuit. Connect remaining two ceiling mounted receptacles to circuit 1SL1-29.
- In Organism Bio Lab 378 relocate wall mounted aquarium receptacles to north wall.

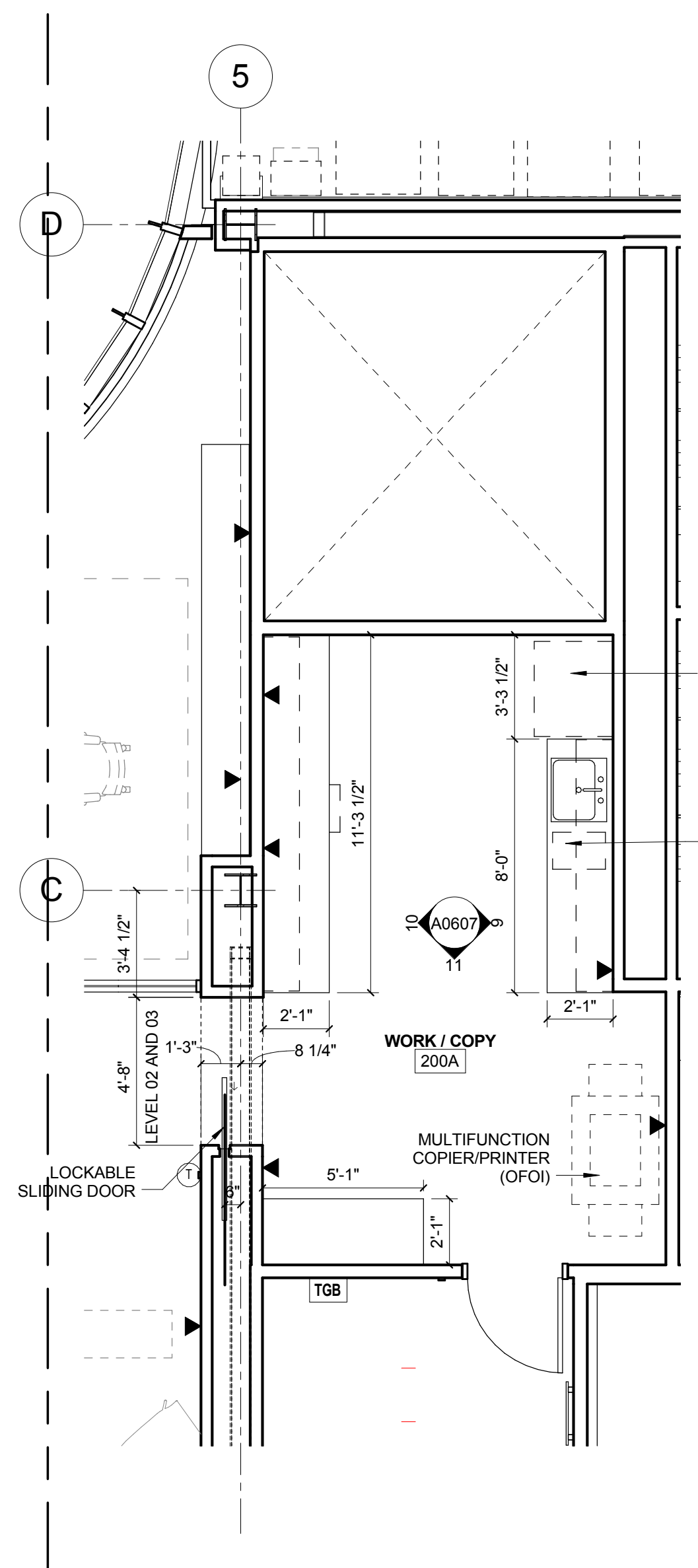
Issued by Architect: Kelvin Patel, CannonDesign;
Mark de la Fuente, William Tao & Associates, Inc.

Accepted by Contractor:

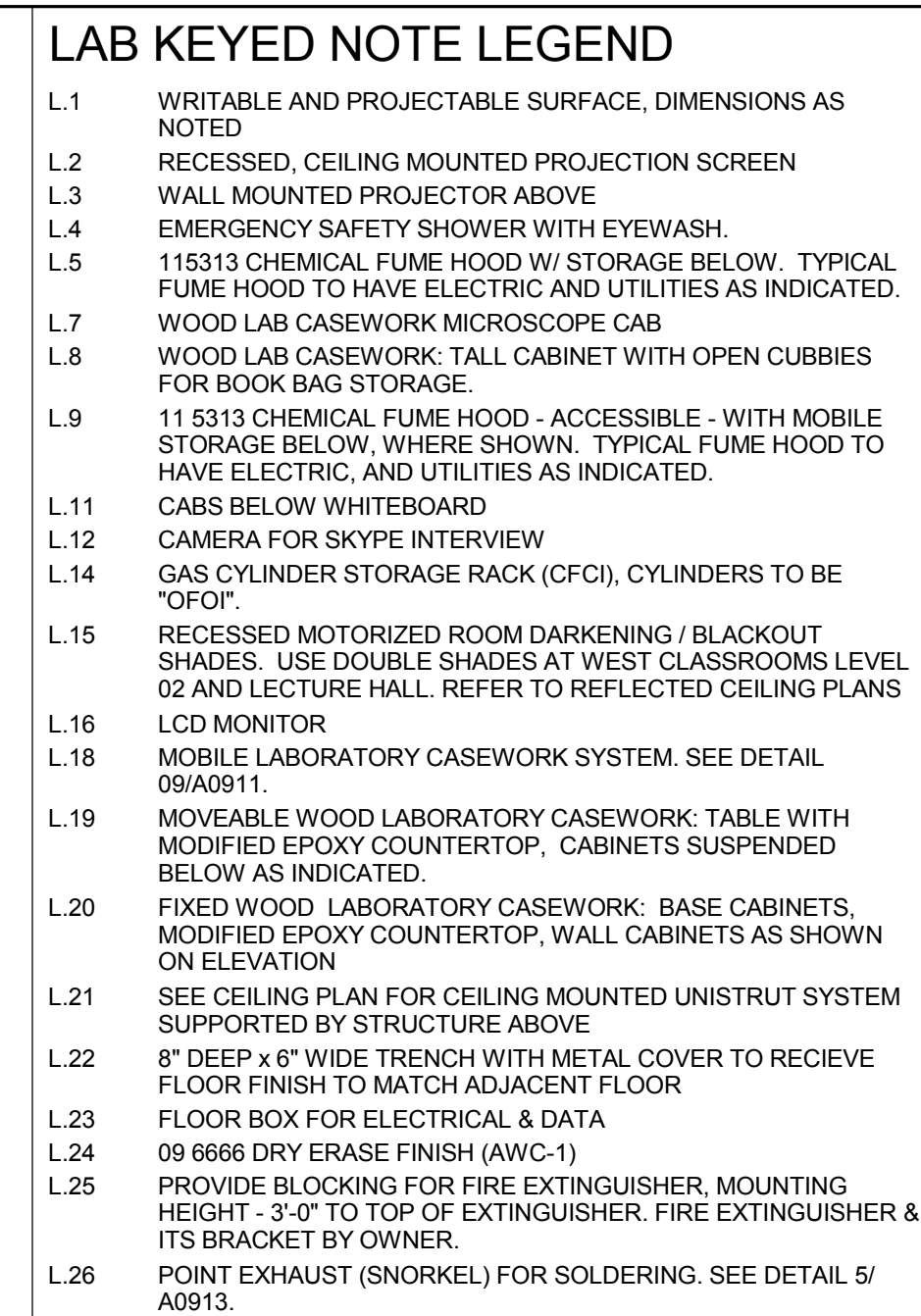
4. ALL DIMENSIONS ARE TO GIVE FACE PARTITION OR COLUMN CENTER LINE U.N.O.
5. OWNER FURNISHED EQUIPMENT INSTALLED (FOI) ITEMS ARE SHOWN WITH REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
6. PROVIDE 1/2" MIN. WOOD TRIM WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
7. ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE 1/2" MIN. WOOD TRIM WITH DRIP STOP TROUGHS TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
8. PROVIDE 1/2" COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
9. PROVIDE 1/2" MOUNTED RAYWAY TO HAVE OUTLETS AT 24" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKPLASH U.N.O.
10. ALL BACKPLASHES TO BE 4" HIGH U.N.O.
11. PROVIDE 1/2" MIN. ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
12. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL APRONS. PRICE 1/2" MIN. WOOD TRIM.**
13. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR CUPBOARD IS SHOWN.
14. **REFER SHEETS A091X FOR LABORATORY CASEWORK / MILLWORK**
15. **FOR TYPICAL MOUNTING HEIGHTS REF: 1A0911**
16. **ALL CASEWORK TO BE WOOD U.N.O.**
17. **CASEWORK IS USUALLY 1/2" MIN. WOOD UNLESS NOTED AS MILLWORK OR FOI. SEE SPECIFICATION 12-3553 - LABORATORY CASEWORK / FOR DESIGNATIONS.**
18. **EQUIPMENT ITEMS HAVE EQUIPMENT TAG - XXX-XXX. SEE SHEETS A11X FOR EQUIPMENT SCHEDULES.**
19. **PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK**

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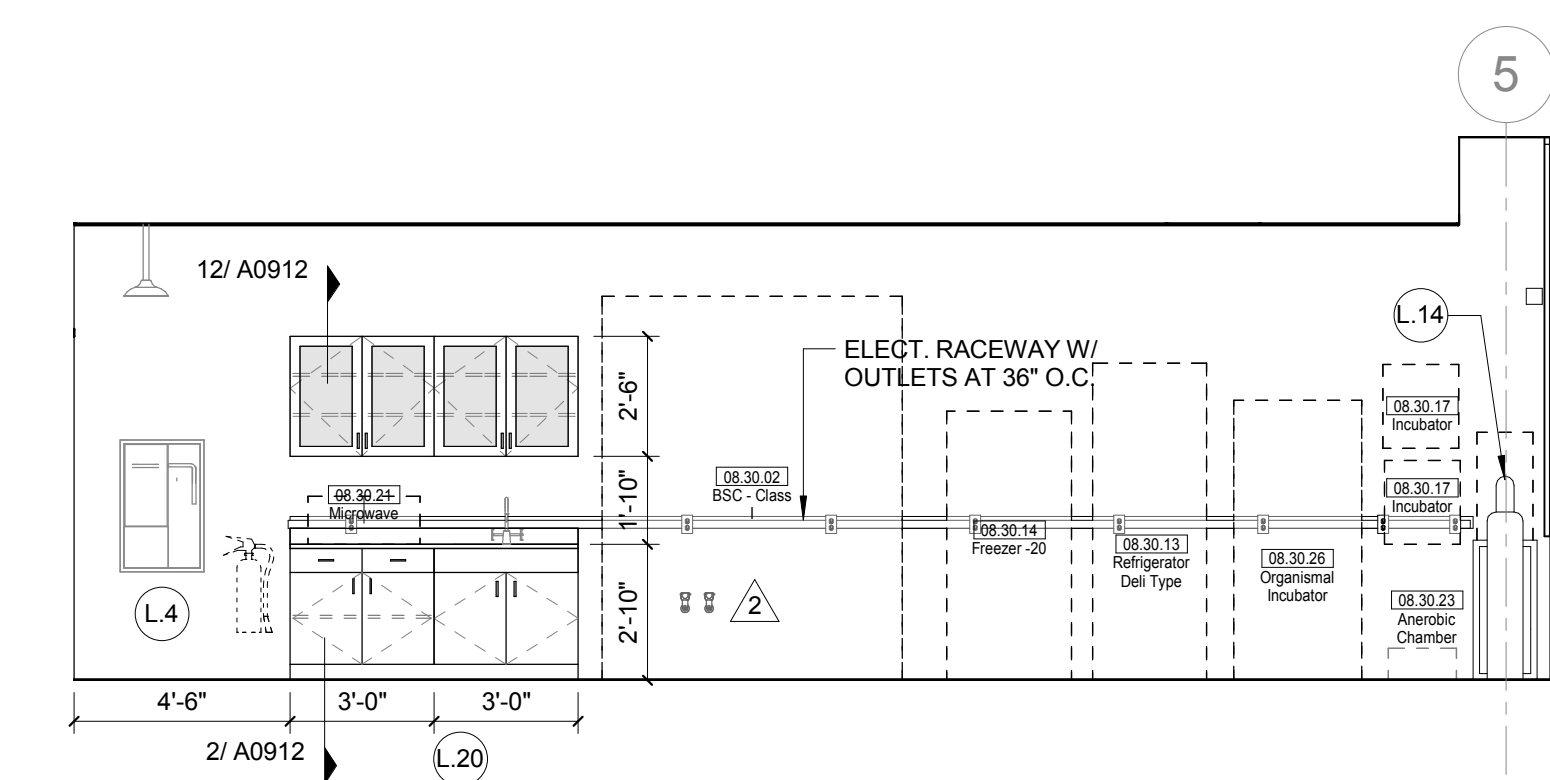
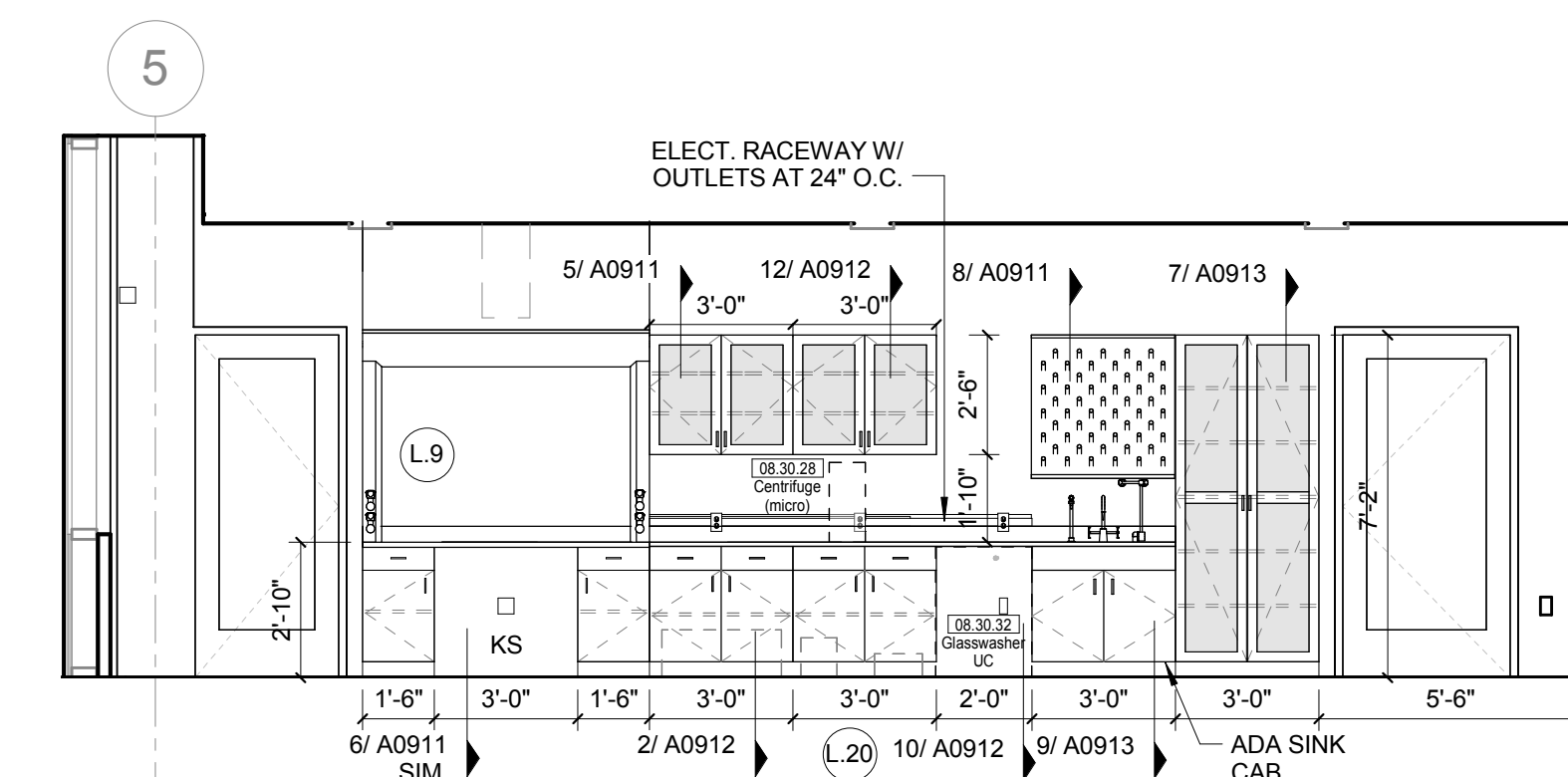
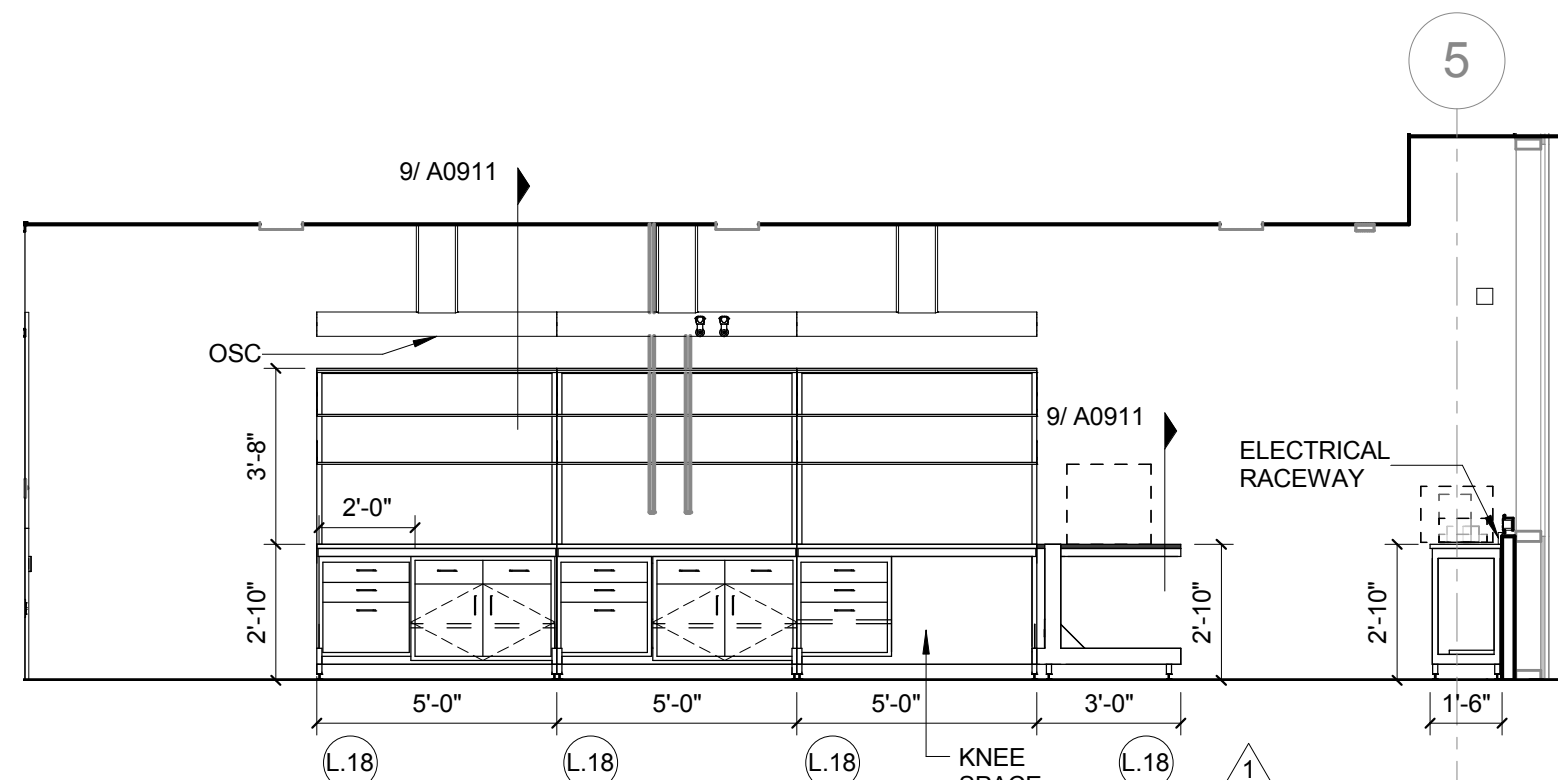
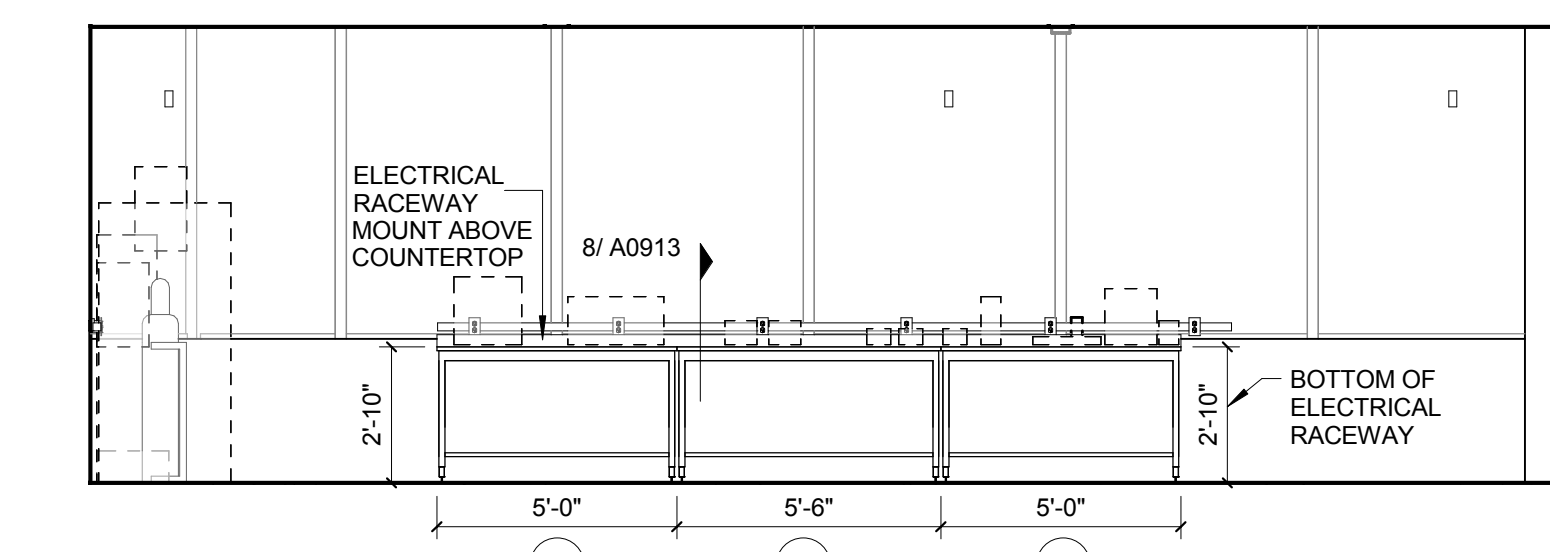
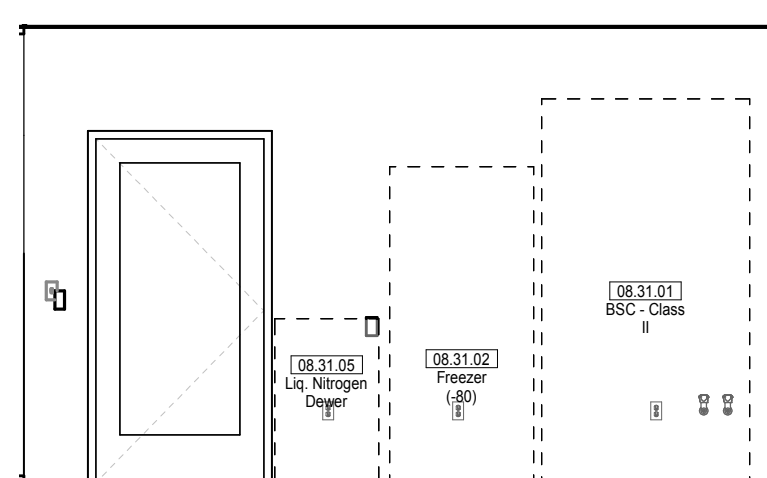
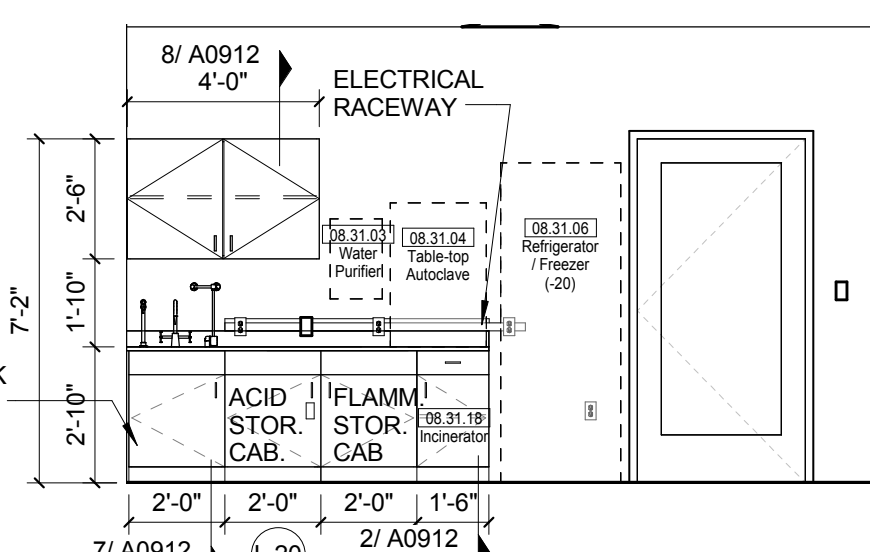
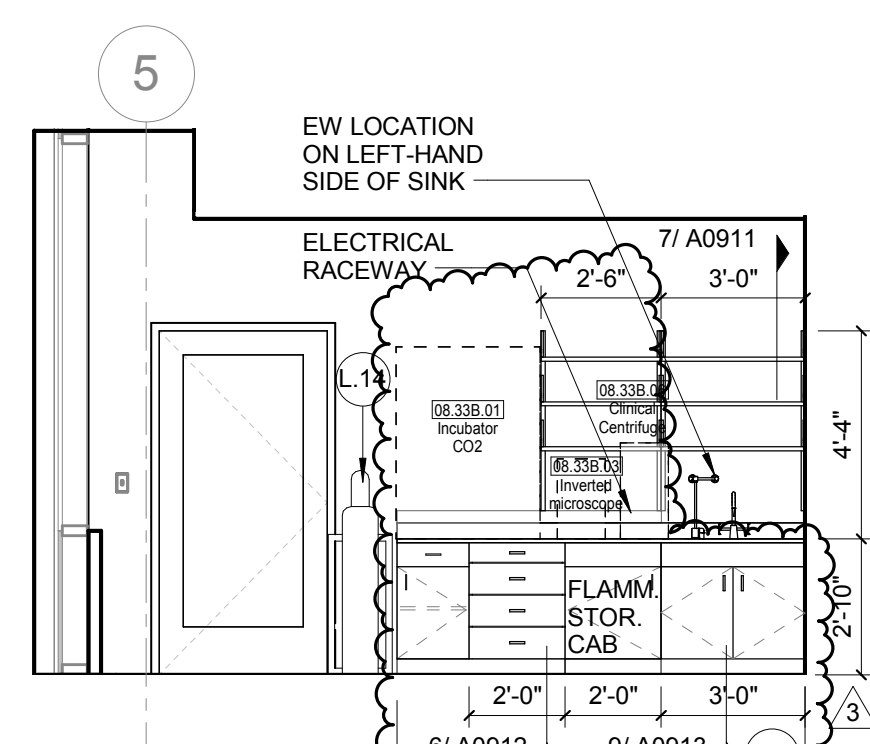
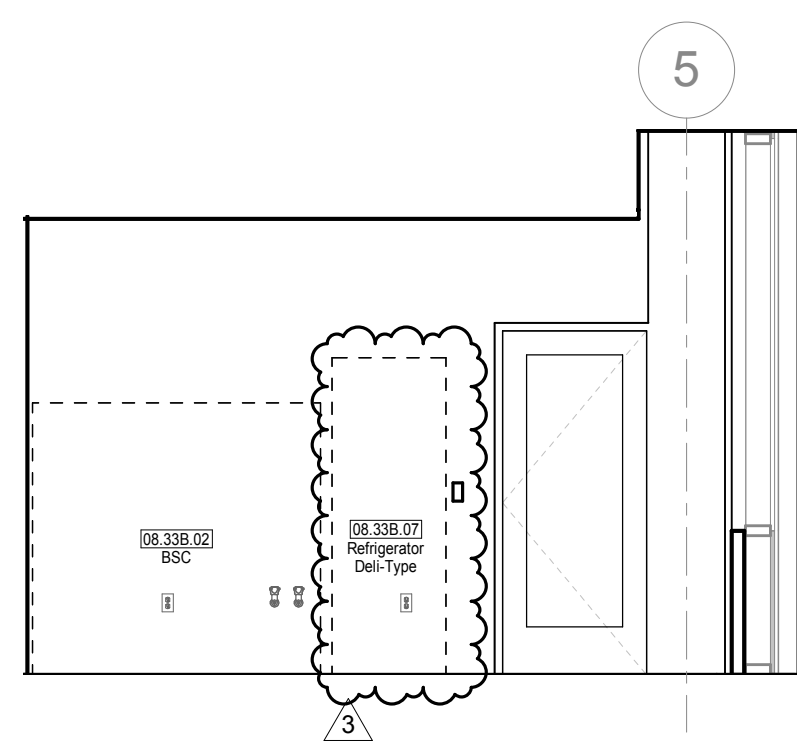
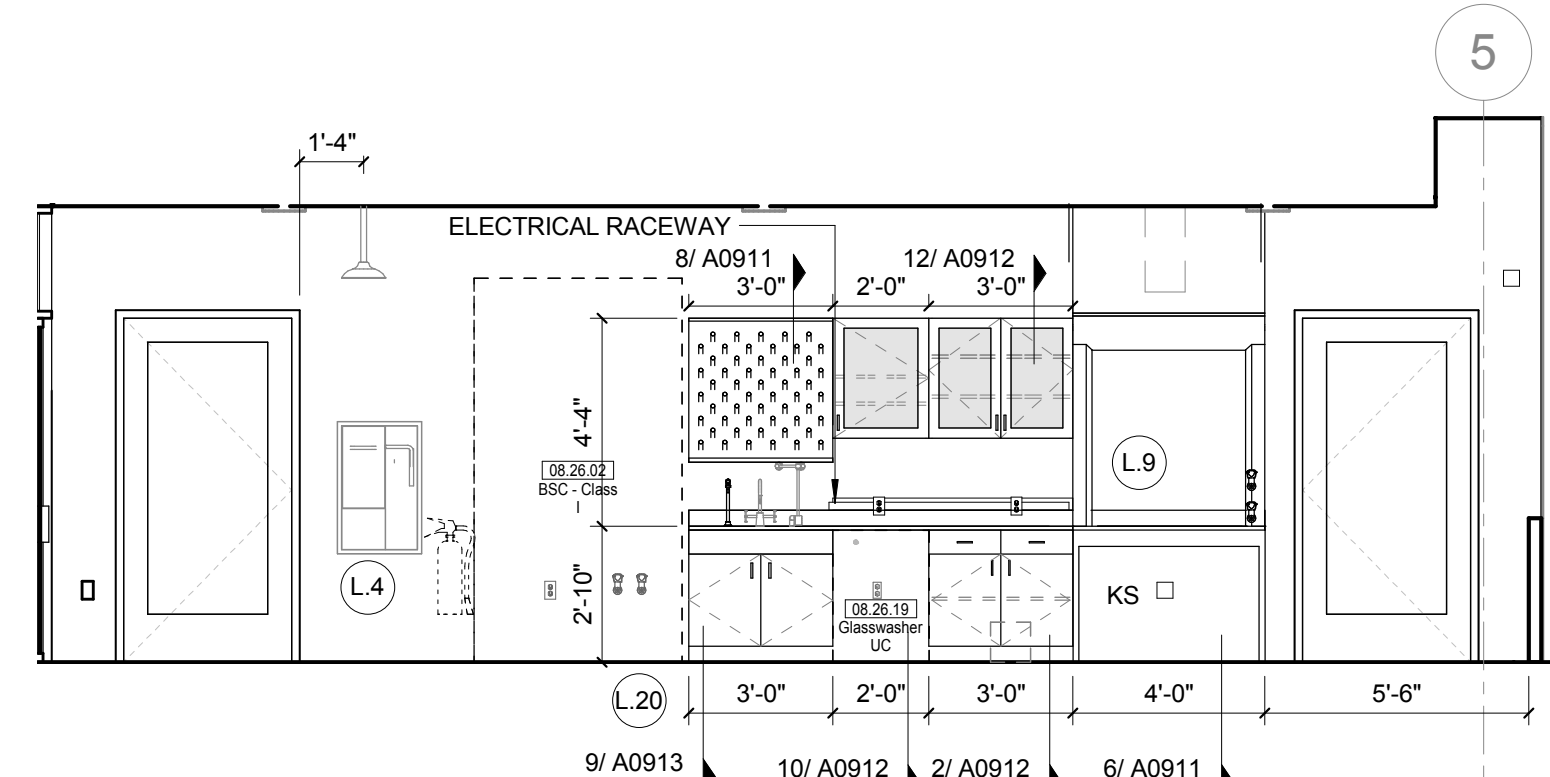
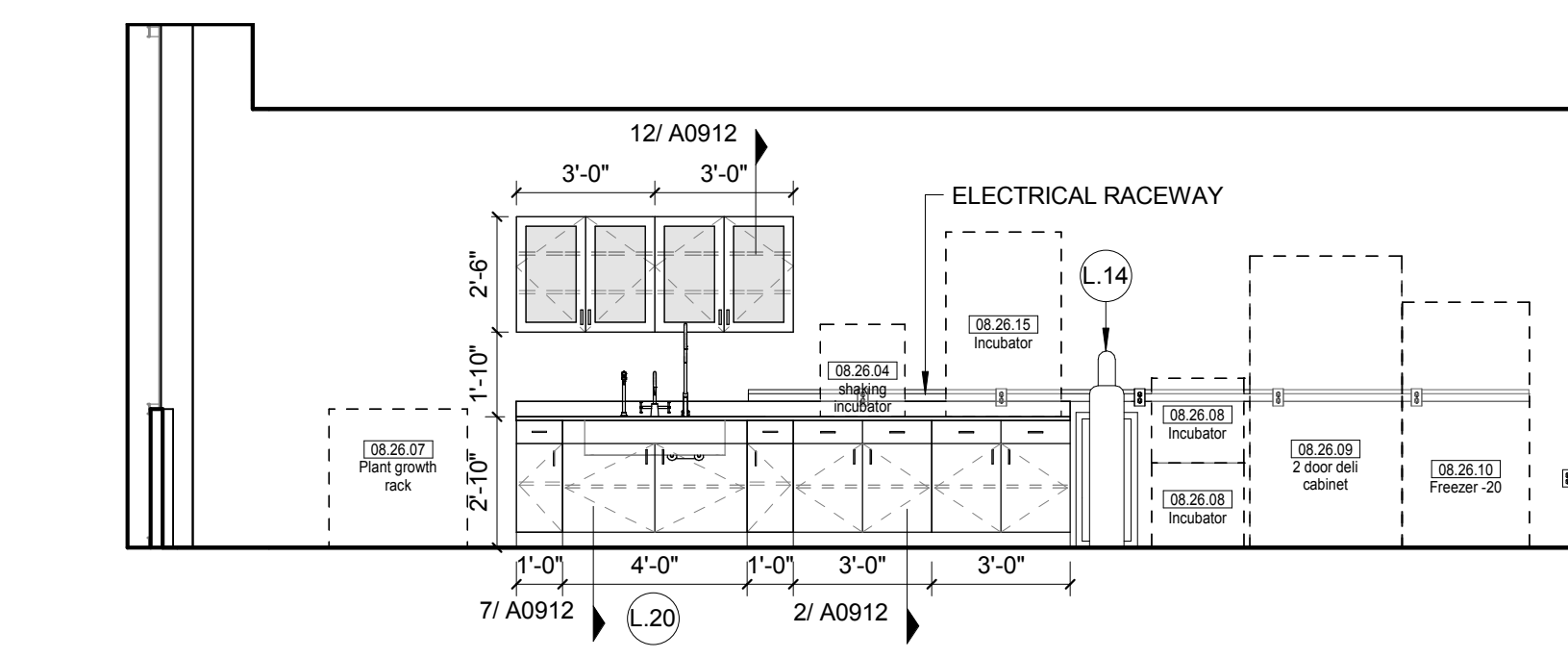
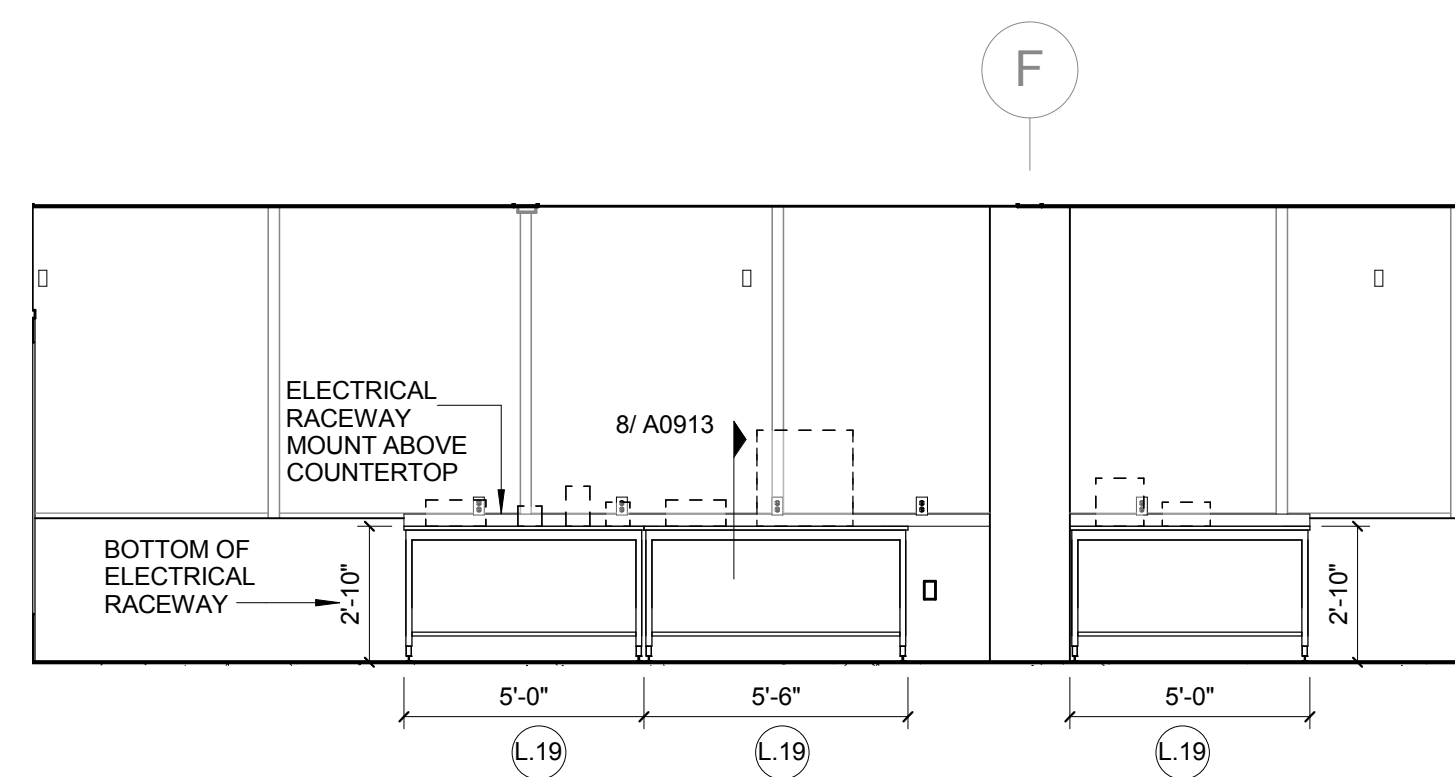
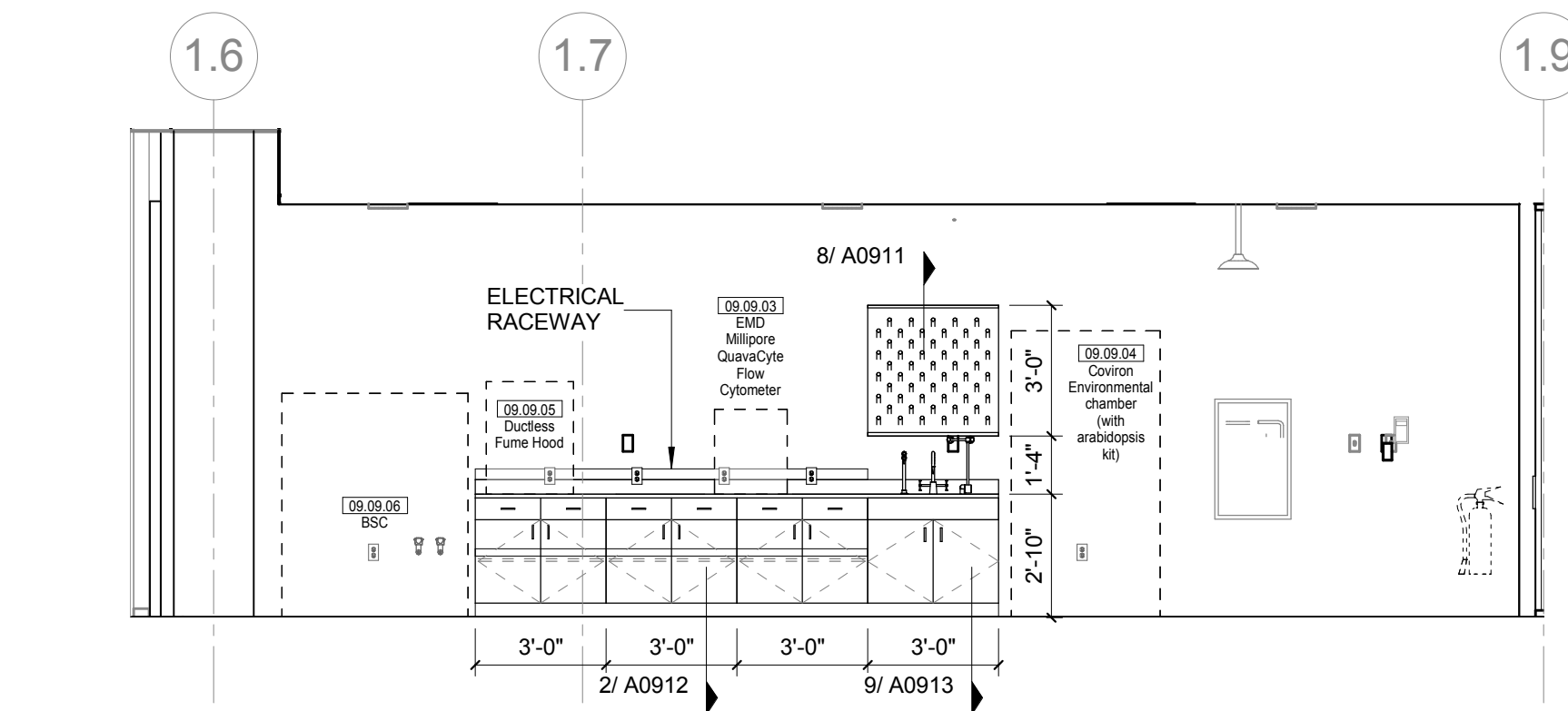
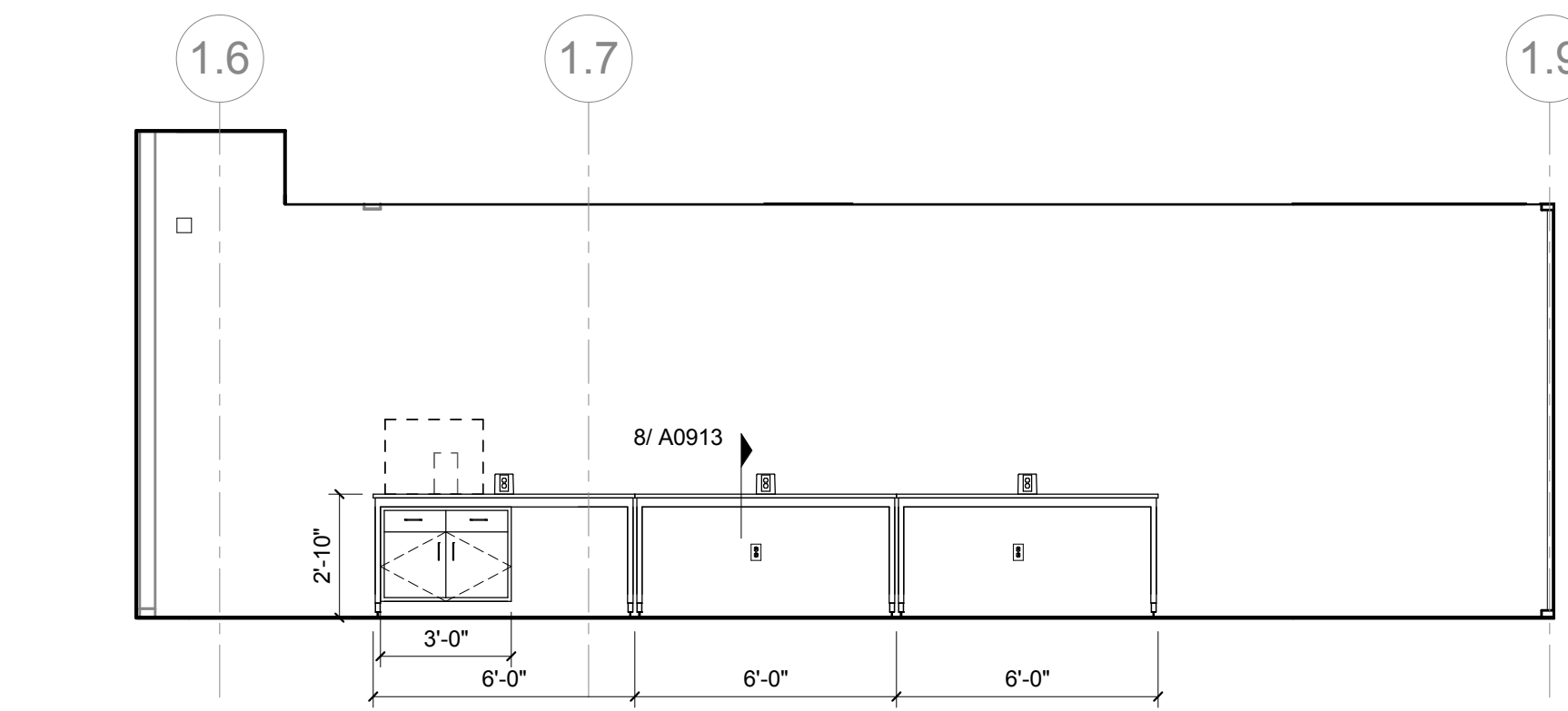
2 LEVEL 02 - AREA B - WORKROOM
1/4" = 1'-0"



CW	WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER.
W-1	WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
DI	DI WATER DI WATER FAUCET DECK MOUNTED.
W	WATER PROCESS COLD WATER SUPPLY.
EW	WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN.
DH	WATER DRENCH HOSE.
V	VACUUM FUME HOOD CONTROL.
V-3	VACUUM MOUNTED, SINGLE SERRATED OUTLET
V-4	VACUUM MOUNTED, SINGLE SERRATED OUTLET
V-4	VACUUM OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-6	VACUUM QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A-1	AIR TURRET BASE, SINGLE SERRATED OUTLET
A-1	AIR TURRET MOUNTED, SINGLE SERRATED OUTLET
A-4	AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-5	AIR OUTLET DISCONNECT FOR OVERHEAD SERVICE CARRIER
E	ELECTRIC FUME HOOD CONTROL
E	ELECTRIC DUPLEX OUTLET (GF) ON PUMESTAL
E-2	ELECTRIC COUNTERTOP MOUNTED FEEDHOLD, (1) DUPLEX ELECTRICAL OUTLET, (1) DUPLEX ELECTRICAL OUTLET
E-3	ELECTRIC COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET
E-4	ELECTRIC MOUNTED, (1) DUPLEX ELECTRICAL OUTLET
E-6	ELECTRIC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6	ELECTRIC DUPLEX ELECTRICAL OUTLET ON TABLE APRON D
D-1	DATA OUTLET
D-2	COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5	DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6	DATA DATA OUTLET ON TABLE APRON
C3	CUP SINK LIPPED MODIFIED EPOXY CUP SINK, 91x3xW OVAL (DROP-IN)
S-1	SINK LIPPED MODIFIED EPOXY SINK, 25x15x15xWxD (DROP-IN)
S-2	SINK LIPPED MODIFIED EPOXY ADA SINK 25x15x15xWxD (DROP-IN)
S-3	SINK STAINLESS STEEL SINK 25x15x15xWxD (DROP-IN)
S-4	SINK STAINLESS STEEL ADA SINK 25x15x15xWxD (DROP-IN)
S-5	SINK LIPPED MODIFIED EPOXY ADA SINK 18x15x15xWxD (DROP-IN)
S-6	SINK LIPPED MODIFIED EPOXY SINK, 36x15x15xWxD (DROP-IN)
OSC	OVERHEAD SERVICE CARRIER, SEE DETAIL 10 / A0913.
PTD	PAPER TOWEL DISPENSER

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

1. ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
2. OWNER FURNISHES OWNER INSTALLED (G/O) ITEMS ARE SHOWN AS NOTED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. PROVIDE FINISHING 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 APRONS AT VERTICAL JOINTS TO MATCH FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
5. PROVIDE COUNTER TOP MOUNTED UTILITY OUTLETS ON CENTER OF COUNTERED KNEEWAY TO HAVE OUTLETS AT 2' 0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
6. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
7. PROVIDE 1/2" ON GLASS/INTO ADJUSTABLE SHELVING INSIDE COUNTER.
8. **PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL KNEE SPACES. TYPICAL SINK KNEE SPACE.**
9. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL.
10. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR CUPBOARD IS SHOWN.
11. REFER SINKS A091x FOR LABORATORY CASKWORK / MILLWORK
12. CASKWORK TYPICAL SINK KNEE SPACE.
13. FOR TYPICAL MOUNTING HEIGHTS REF. 1A0911
14. ALL CASKWORK TO BE WOOD U.N.O.
15. ALL CASKWORK IS LABORATORY CASKWORK UNLESS NOTED AS MILLWORK OR O.F. SEE DIVISION 12 3553 - LABORATORY CASKWORK FOR SPECIFICATIONS.
16. ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXXXXX. SEE SHEETS A11x FOR EQUIPMENT SCHEDULES.
17. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



- ### LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 SMALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY LIGHTING WITH EYEWASH
- L.5 11513 CHLORAL FUME HOOD W/ STORAGE BELOW, TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED
- L.6 WOOD LAB CASEWORK MICROSCOPE CAB
- L.8 LAB CASEWORK, TALL CABINET WITH OPEN CUBBIES FOR BOOK BAGS STORAGE
- L.9 11 5131 CHLORAL FUME HOOD - ACCESSIBLE - WITH MOBILE CART, 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 (CFR), CYLINDERS TO BE "OFF"
- L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES, USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL
- L.16 LECTURE HALL, REFLECT TO REFLECTED CEILING PLANS LCD MONITOR
- L.17 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09A09.11
- L.19 MOBILE LAB WOOD LABORATORY CASEWORK, TABLE WITH MODIFIED EPXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED
- L.20 FIXED WOOD LABORATORY CASEWORK - BASE CABINETS, MODIFIED EPXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
- L.21 SEE PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM
- L.22 DEEP "X" BARGE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLAT
- L.23 FLOOR BOB FOR ELECTRICAL & DATA
- L.24 80-6666 DR EXISTE FINISH (SEE DETAIL 1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT: 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER IS BRACKET BY OWNER
- L.26 PUMP EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/A09.13

- ## LAB UTILITY LEGEND

- | | |
|-----|--|
| CV | WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER |
| W- | WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH WALL MOUNT, SERRATED NOZZLE |
| D1 | WATER DI WATER FAUCET DECK MOUNTED |
| W | WATER PROCESS COLD WATER RETURN |
| PWR | WATER PROCESS COLD WATER RETURN |
| EWE | EWE EWEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN WATER PUMP |
| G | GAS FUME HOOD CONTROL |
| V | VAC FUME HOOD CONTROL |
| W | WALL MOUNTED, SINK, SERRATED OUTLET |
| V-1 | VAC TURRET BASE, SINGLE SERRATED OUTLET |
| V-4 | VAC TURRET OUTLET FOR BIOSAFETY CABINET CONNECTIONS |
| A | AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER |
| A | AIR FUME HOOD CONTROL |
| A-1 | AIR TURRET BASE, SINGLE SERRATED OUTLET |
| W | WALL MOUNTED, SINK, SERRATED OUTLET |
| A-4 | AIR TURRET OUTLET FOR BIOSAFETY CABINET CONNECTIONS |
| A | AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER |
| E | ELEC. FUME HOOD CONTROL |
| E | ELEC. DUPLEX OUTLET (GF) ON FUME HOOD |
| E-1 | ELECT. COUNTERTOP MOUNT PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET |
| E-2 | ELEC. COUNTERTOP MOUNT PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET |
| E-3 | ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET |
| E-4 | ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER |
| E-6 | ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APPARATUS |
| D-1 | DATA DATA OUTLET |
| D-2 | DATA DATA OUTLET MOUNTED PEDESTAL, (2) DATA OUTLETS |
| D-4 | DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER |
| D-5 | DATA DATA OUTLET ON TABLE APPARATUS |
| CS | CUP LINK LIFTED MODIFIED EPOXY CUP LINK, 9LX3Wx1W (DROP-IN) |
| S-1 | SINK LIFTED MODIFIED EPOXY SINK, 25Lx15Wx1W (DROP-IN) |
| S-2 | SINK LIFTED MODIFIED EPOXY ADA SINK 25Lx15Wx1W (DROP-IN) |
| S-3 | SINK STAINLESS STEEL ADA SINK 25Lx15Wx1W (DROP-IN) |
| S-4 | SINK LIFTED MODIFIED EPOXY ADA SINK 25Lx15Wx1W (DROP-IN) |
| S-5 | SINK LIFTED MODIFIED EPOXY ADA SINK 18Lx15Wx1W (DROP-IN) |
| S-6 | SINK LIFTED MODIFIED EPOXY SINK, 36Lx15Wx1W (DROP-IN) |
| OSC | OVERHEAD SERVICE CARRIER, SEE DETAIL 10 A09.13 |
| 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 DUCTWORK INSTALLED. (FO) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
3. PROVIDE SLYVING INSULATION WITH DRIP STOP TROUGH OUTSIDE CENTERLINE OF SINKS. U.N.O.
4. ALL APPRONS AT UNDER KNEE SPACE TO BE 4" U.N.O. PROVIDE APPROPRIATE WOOD OR METAL TRIM TO MATCH FINISH OF WALLS TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE TRIM FLOOR FINISH.
5. CEILING COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF COUNTERWORK U.N.O.
6. ALL SURFACE MOUNTED SLOPEWAY TO HAVE OUTLETS AT 2' 0" O.C. OUTLETS WILL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
7. ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
8. ALL SINKS ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE COUNTERWORK.
9. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES BELOW ALL FURNISHED TYPE TYPE 1. PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
10. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR CUPBOARD IS SHOWN.
11. REFER SHEETS A091X FOR LABORATORY COUNTERWORK // MILLWORK
12. FOR TYPICAL MOUNTING HEIGHTS REF. 1'A0911
13. ALL COUNTERWORK TO BE WOOD U.N.O.
14. ALL COUNTERS IN LABS TO BE LABORATORY UNLESS NOTED AS MILLWORK OR F.O. SEE DIVISION 12 3553 - LABORATORY COUNTERWORK FOR SPECIFICATIONS.
15. ALL EQUIPMENT ITEMS HAVE IDENTIFICATION TAG - XXX-XXX. SEE SHEETS A11X FOR EQUIPMENT SPECIFICATIONS.
16. PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK.



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Drawing Title: _____

Project No.: 04561.01 Checked by:

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<u>GENERAL NOTES:</u> 1) ALL THE EQUIPMENT IS "OF" U.N.O.	<u>LEGEND:</u> <u>* MOUNTING LOCATION:</u> B: Benchtop U: Undercounter F: Floor W: Wall C: Ceiling S: Storage <u>** FURNISHED & INSTALLED BY:</u> OFI: Contractor Furnished & Contractor Installed OFCI: Owner Furnished Contractor Installed OFOI: Owner Furnished Owner Installed
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1	OFCI	Spec. 115300; Lower spindle rack; upper standard rack; 10 and 32 pin inserts; bulk tube inserts; utensil basket
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1	ASI-048	27 JAN 2017
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

Drawing Title:

Project No.: 04561.01 Checked by

<u>GENERAL NOTES:</u> 1) ALL THE EQUIPMENT IS "OFF" U.N.O.	<u>LEGEND:</u> <u>* MOUNTING LOCATION:</u> B: Benchtop U: Undercounter F: Floor W: Wall C: Ceiling S: Storage <u>** FURNISHED & INSTALLED BY:</u> OFCI: Contractor Furnished & Contractor Installed OFCI: Owner Furnished Contractor Installed OFOI: Owner Furnished Owner Installed
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LAB EQUIPMENT SCHEDULE_LEVEL-3																										
EQUIPMENT ITEM				Count	Mounting Location *	DIMENSIONS			ELECTRICAL				PLUMBING				MECHANICAL				New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks		
Equipment Number	Description	Manufacturer	Model			Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Watts	Floor Drain	Potable Water	DI Water	Gas	Vacuum					Carbon Dioxide	Nitrogen
353	QUAN. LAB / INTERVIEW LAB																									
08.13.13	Printer	hp	desk jet 842 C	1	B	2'-10"	1'-3"	1'-7"	8"	110	1			110												
372B	LAB WASTE - BIO																									
08.20B.01	Autoclave	Heidolph North America	Model 5075 HSG (Heidolph #019700000)	1	F	0"	2'-10"	3'-9"	5'-5 1/2"	480			3	X	X											
374A	BIO FAC. RESEARCH																									
08.25.01	Deii cabinet (1 door)	Lab Fridge	LF-S24	1	F	0"	2'-4 1/2"	2'-9 1/2"	6'-7 1/4"	115	4.1															
08.25.02	Microplate Reader	Bio-Tek	FLX 800	1	B	2'-10"	1'-3"	1'-4"	9"	110																
08.25.03	Microplate Reader	Bio-Tek	ELX-800	1	B	2'-10"	1'-3"	1'-5"	7"	110																
08.25.04	Platelet Aggregometer	Chrono-log	480 2D	1	B	2'-10"	1'-1"	1'-5"	6"	110	1															
08.25.05	HPLC	Bioanalytical Systems	PM80	1	B	2'-10"	4'-0"	3'-0"	6'-4"	110					X											
08.25.06	HPLC	Bioanalytical Systems	PM80	1	B	2'-10"	4'-0"	3'-0"	6'-4"	110					X											
08.25.08	Inverted Microscope	Zeiss	Axiocvert 40C	1	B	2'-10"	1'-0"	2'-0"	1'-8"	110																
08.25.09	Rotator	Labline	4637	1	B	2'-10"	1'-2"	1'-0"	6"	110																
08.25.10	Rotator	Labline	maxirotator	1	B	2'-10"	1'-2"	10"	5"	110																
08.25.12	Cytospin	Shandon	Cytospin2	1	B	2'-10"	1'-10"	1'-10"	1'-0"	110																
08.25.13	Gel-Doc	BIO-RAD	Gel-Doc	1	B	2'-10"	2'-0"	1'-3"	3'-2"	115																
08.25.14	Table Top Centrifuge	HERIUS	BioRage 1512	1	B	2'-10"	2'-0"	2'-2"	2'-0"	110																
08.25.18	Pipet dispenser rack	Fisher Scientific/POLTEX LLC	LO-01001D	1	F	0"	11"	6"	1'-4"																	
08.25.20	Analytical Balance	Fisher Scientific	ACCU224	1	B	2'-10"	8"	1'-5"	1'-0"	110																
08.25.21	Top loading Balance	Fisher Scientific	ACCU622	1	B	2'-10"	9"	1'-1"	4"	110																
08.25.22	Glasswasher UC	Labconco	SteamScrubber (4578020)	1	F	0"	2'-0 1/8"	2'-3 3/8"	2'-8 7/8"	115	16				X	X	X									
374B	TISSUE CULTURE A																									
08.33A.01	Laminar Flow Hood	Atmos-Tech	EL 4302	1	B	2'-10"	4'-6"	2'-9"	3'-0"	110								X		X						
08.33A.02	BSC - Class II	Thermo Scientific	1375	1	F	0"	4'-4"	2'-7 1/2"	8'-0"	115	8							X		X						
08.33A.03	Freezer (-20)	Norlake	NSLF241WMW/OM	1	F	0"	2'-4"	2'-11"	6'-8"	115	X	8.2														
08.33A.04	Liq. Nitrogen Storage Tank	MVE	Cryosystem 6000	1	F	0"	2'-0"	2'-0"	3'-8"	110	-															
08.33A.05	Incubator	CECO Cell Culture	2110	1	B	2'-10"	2'-2"	2'-3"	3'-5"	110	X								X	X						
08.33A.06	Incubator	New Brunswick Scientific	Excella CO-170; 14-286-147	1	B	2'-10"	2'-3"	2'-3"	2'-10"	120	X								X	X						
08.33A.07	Freezer (-80)	Revco	ULT178-7-AUUA	1	F	0"	6'-1"	3'-0"	4'-0"	115	X	16														
08.33A.08	Fluorescence Microscope	Zeiss	Axiocvert 40CFL	1	B	2'-10"	1'-0"	2'-0"	1'-11"	110																
08.33A.09	Inverted Microscope	Zeiss	Axiocvert 40CFL	1	B	2'-10"	1'-0"	2'-0"	1'-11"	110																
08.33A.10	Fluorescence Module	Zeiss	Xcite 120	2	B	2'-10"	7"	1'-2"	8"	110																
08.33A.11	Refrigerator Deli-Type	lab fridge	LF-S24	1	F	0"	2'-4 1/2"	2'-9 1/2"	6'-7 1/4"	115	4.1															
376	COLD ROOM																									
08.22.02	Incubator	midwest sci	12-140	2	F	0"	1'-7"	1'-1"	1'-9"	110	2			220												
08.22.07	Sonicator	Branson	Sonifier 450	1	B	2'-10"	1'-4"	2'-6"	1'-2"	110	4															
08.22.08	Sonicator	Diagenode	Bioruptor UCD-200	1	B	2'-10"	2'-0"	2'-0"	1'-8"	115	4															
378	ORGANIS. BIO LAB																									
08.11.02	Salt Water Tank	custom-existing	none shown	1	B	2'-10"	4'-2"	2'-6"	6'-3"	-	X															
08.11.03	UPS	Argus	CFR 1500C3	3	B	2'-10"	1'-0"	8"	1'-0"	110	X															
08.11.06	Pump	EHEIM	2286370	1	B	2'-10"	8"	8"	10"	120																
08.11.07	Pump	Rena	Filstar XP	1	B	2'-10"	8"	8"	10"	110	2			23												
08.11.08	Pump	Pacific Coast	CL450	1	B	2'-10"	10"	10"	1'-0"	110	4			450												
08.11.09	Microscope binocular	Olympus	CHT10	10	S	0"	8"	11"	1'-3"	110																
08.11.10	Microscope binocular	Olympus	CH30	3	S	0"	8"	10"	1'-4"	110																
08.11.11	Microscope - Stereo	Leica	EZ4 Stereo Zoom	7	S	0"	6"	10"	1'-3"	110																
08.11.12	Microscope - Stereo	Leica	EZ4 Stereo Zoom	6	S	0"	6"	10"	1'-3"	110																
08.11.16	Mortexer	MidSci	Benchmixer	3	B	2'-10"	5"	6 5/16"	6 11/16"	110																
08.11.17	uV box	spectroline	CM-26A	1	S	0"	1'-0"	9"	6 1/2"																	
08.11.18	Toploading Balance	my weigh	i600	3	B	2'-10"	6"	8 1/2"	1 3/4"	110																
08.11.19	Toploading Balance	ENTRIS	153-1S	3	B	2'-10"	11 7/8"	9 1/8"	5 3/8"	120																
08.11.20	Heat Block	USA Scientific	Thermal-loc	2	B	2'-10"	8 11/16"	5 1/8"	3 3/16"	110																
08.11.21	Heat Block	USA Scientific	Thermal-loc	1	B	2'-10"	8 11/16"	5 1/8"	3 3/16"	110																
08.11.22	uV box	spectroline	FBPDS81	1	S	0"	1'-8 1/2"	1'-6"	1'-2"	110																
08.11.23	Microcentrifuge	Eppendorf	Minispinplus	1	B	2'-10"	8 7/8"	9 3/8"	4 11/16"	110																
08.11.24	Mortexer	MidSci	Benchmixer	3	B	2'-10"	5"	6 5/16"	6 11/16"	110																
08.11.25	Beadwater Bath	VWR	1225PC	1	B	2'-10"	1'-2"	1'-0 1/2"	9"	110																
08.11.26	Beadwater Bath	ThermoScientific	182	1	B	2'-10"	1'-4 3/16"	8"	9 3/4"	110																
08.11.27	Aquarium	Petsmart	none shown	1	B	2'-10"	1'-0 3/16"	6 5/16"	8 5/16"	no power																
08.11.28	Incubator	Quincy Lab	12-140	1	B	2'-10"	1'-7"	1'-0 5/8"	1'-9 1/2"	110																
383	CELL BIO / BIOCHEM LAB																									
08.09.01	Chromatography Cabinet	Lab Fridge (midwest)	LF-47	1	F	0"	4'-5 1/4"	2'-6 3/4"	6'-7 1/4"	115	9	1														
08.09.03	Flow Cytometer	EMD millipore	Guava EasyCyte 6HT-2L	1	B	2'-10"	1'-8"	2'-0"	10"	110																
08.09.04	BSC	Thermo scientific	1375	4	F	0"	4'-4"	2'-7 1/2"	8'-0"	120									X			X				

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LAB EQUIPMENT SCHEDULE_LEVEL-4																										
EQUIPMENT ITEM				Count	Mounting Location *	DIMENSIONS			ELECTRICAL			PLUMBING				MECHANICAL				New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks			
Equipment Number	Description	Manufacturer	Model			Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Walls	Floor Drain	Potable Water	DI Water	Gas					Vacuum	Carbon Dioxide	Nitrogen
472 CHEM LAB - GENERAL																										
08.15.02	Balance	Denver Instruments	TR-64	1	B	2'-10"	10"	1'-1"	1'-1"	110					~12									E	10	
08.15.03	Balance	Fisher	ALF4030	1	B	2'-10"	9"	1'-1"	5"	110		0.1			13									E	10	
08.15.04	Balance	Denver Instruments	TR-6030	1	B	2'-10"	10"	1'-3"	4"	110		0.8			88									E	10	
08.15.05	Balance	Denver Instruments	PI-20316	1	B	2'-10"	10"	1'-4"	5"	110		0.1			21									E	10	
08.15.06	Balance	Fisher	ALF1202	1	B	2'-10"	1'-2"	9"	1'-1"	120		0.1			14									E	10	
08.15.07	Analytical Balance	Mettler	AG 245	1	B	2'-10"	10"	1'-1"	1'-1"	110		0.0			7									E	10	
08.15.08	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
08.15.09A	Spectrophotometers	Thermo Fisher	Genesys 20	8	S	0"	1'-0"	1'-1"	7"	120														N		
08.15.09B	Spectrophotometers	Thermo Fisher	Genesys 20	4	S	0"	1'-0"	1'-1"	7"	120														E	10	
08.15.10	Drying-Oven	Blue Line	OV-12A	1	B	2'-10"	2'-0"	2'-0"	1'-6"	110		6			660									E	10	
08.15.11	pHmeter	Mettler	MP220 and AGA8035	10	S	0"	1'-0"	1'-0"	6"	110		0.3			33									E	10	
08.15.12	Conductivity meter	fisher	15077977	4	S	0"	6"	1'-0"	4"	9 DC														E	10	
08.15.13A	Hot plates	fisher	PC220	4	S	0"	6"	4"	4"	120		2.6			313									N		
08.15.13B	Hot plates	fisher	PC220	4	S	0"	6"	4"	4"	120		2.6			313									E	10	
08.15.14	Printer	HP	CP2025	1	B	2'-10"	1'-4"	1'-7"	1'-0"	120		6			720									E	10	
44																										
475 LAB WASTE - CHEM																										
08.20A.01	Flammable Liquid Storage Cabinet- Vented	Justrite	894520	1	F	0"	3'-7"	1'-6"	5'-5"															N		
08.20A.02	Acid Storage Cabinet	Justrite	894522	1	F	0"	3'-7"	1'-6"	5'-5"															N		
2																										
478 CHEM LAB PREP																										
08.14.01	Refrigerator Deli Type	Lab fridge (midco)	LF-S24C	1	F	0"	2'-4	2'-9	6'-7	115		4.1		1										N		
08.14.04	Glasswasher UC	Labconco	SteamScrubber (4578020)	1	F	0"	2'-0	2'-3	2'-8	115		16			X	X	X							N		
08.14.05	Top Loading Balance	Ohaus	AV53	1	B	2'-10"	8"	10"	6"	110		-												N		
08.14.06	Analytical Balance	Mettler Toledo	AL54	1	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
08.14.08	DI water			1	W	3'-6"	2'-0"	8"	2'-0"							X								N		
5																										
480 CHEM LAB - ORGANIC																										
08.16.02	Analytical Balance	Mettler Toledo	AL54	4	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
4																										
483 CHEM LAB - RESEARCH																										
08.27.02	Flamm-Storage UC (repl w cawk)			1		0"	3'-0"	2'-0"	2'-8"																	
08.27.03	Acid-Storage UC (repl w cawk)			1		0"	3'-0"	2'-0"	2'-8"																	
08.27.04	Photoreactor	Ace Glass	7836-20	1	B	2'-10"	2'-8"	1'-8"	3'-0"	120		3.8			450									E	10	NEEDS WATER SOURCE
08.27.05	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
5																										
488 CHEM LAB - ANALYT / INORGANIC																										
08.12.02	Analytical Balance	Mettler Toledo	AL54	4	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
4																										
489 CHEM INSTR. LAB																										
08.13.04	NMR	Nanalysis	NMR Ready 60e	1	B	2'-10"	1'-0"	11"	1'-8"	100														N		
08.13.05	Spectrophotometer UV-Vis-NIR	Perkin Elmer	Lambda 750	1	B	2'-10"	3'-5"	2'-3"	11"	110														E	10	
08.13.06	Spectrophotometer FTIR	Perkin Elmer	Paragon 500	1	B	2'-10"	2'-8"	3'-0"	1'-8"	110														E	10	
08.13.07	Spectrophotometer UV-Vis	Perkin Elmer	Lambda Bio Rad 10	1	B	2'-10"	2'-11"	1'-10"	9"	110														E	10	
08.13.08	Fluorimeter	ISS	PC1	1	B	2'-10"	3'-5"	3'-0"	1'-0"	120														E	200K	associated with number 12 sn 14
08.13.09	Mass-Spec	Thermo	LCQ Classic	1	B	2'-10"	8'-0"	2'-4"	3'-0"	110													X	E	10	
08.13.10	FTIR-CPU	Dell		1	B	2'-10"	1'-9"	1'-7"	2'-2"	110					250									E	10	
08.13.11	UV-Vis-NIR CPU	lenovo		1	B	2'-10"	7"	1'-5"	1'-9"	110					250									E	10	
08.13.12	Fluorimeter-CPU	Dell		1	B	2'-10"	7"	1'-8"	1'-4"	110					250									E	200K	runs number 8
08.13.13	Printer	hp	desk jet 842 C	1	B	2'-10"	1'-3"	1'-7"	8"	110		1			110									E	10	
08.13.14	Fluorimeter ozone-trap	Newport	66087	1	B	2'-10"	1'-1"	1'-0"	1'-7"	110													X	E	200K	exhausts number 8
08.13.15	HPLC	X-Per Chrom	1400	1	B	2'-10"	1'-2"	1'-6"	1'-6"	110		20												E	10	
12																										
491 CHEM LAB PHYSICAL																										
08.17.02	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
2																										

GENERAL NOTES: 1) ALL THE EQUIPMENT IS "OFF" U.N.O.	LEGEND: * MOUNTING LOCATION: B: Benchtop U: Undercounter F: Floor W: Wall C: Ceiling S: Storage ** FURNISHED & INSTALLED BY: CFCI: Contractor Furnishes a Contractor Installed OFCl: Owner Furnishes Contractor Installed OFCl: Owner Furnished Owner Installed

1	ASI-048	27 JAN 2017
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

Drawing Title:	
EQUIPMENT LIST LEVEL-04	
Project No.: 04561.01	Checked by:
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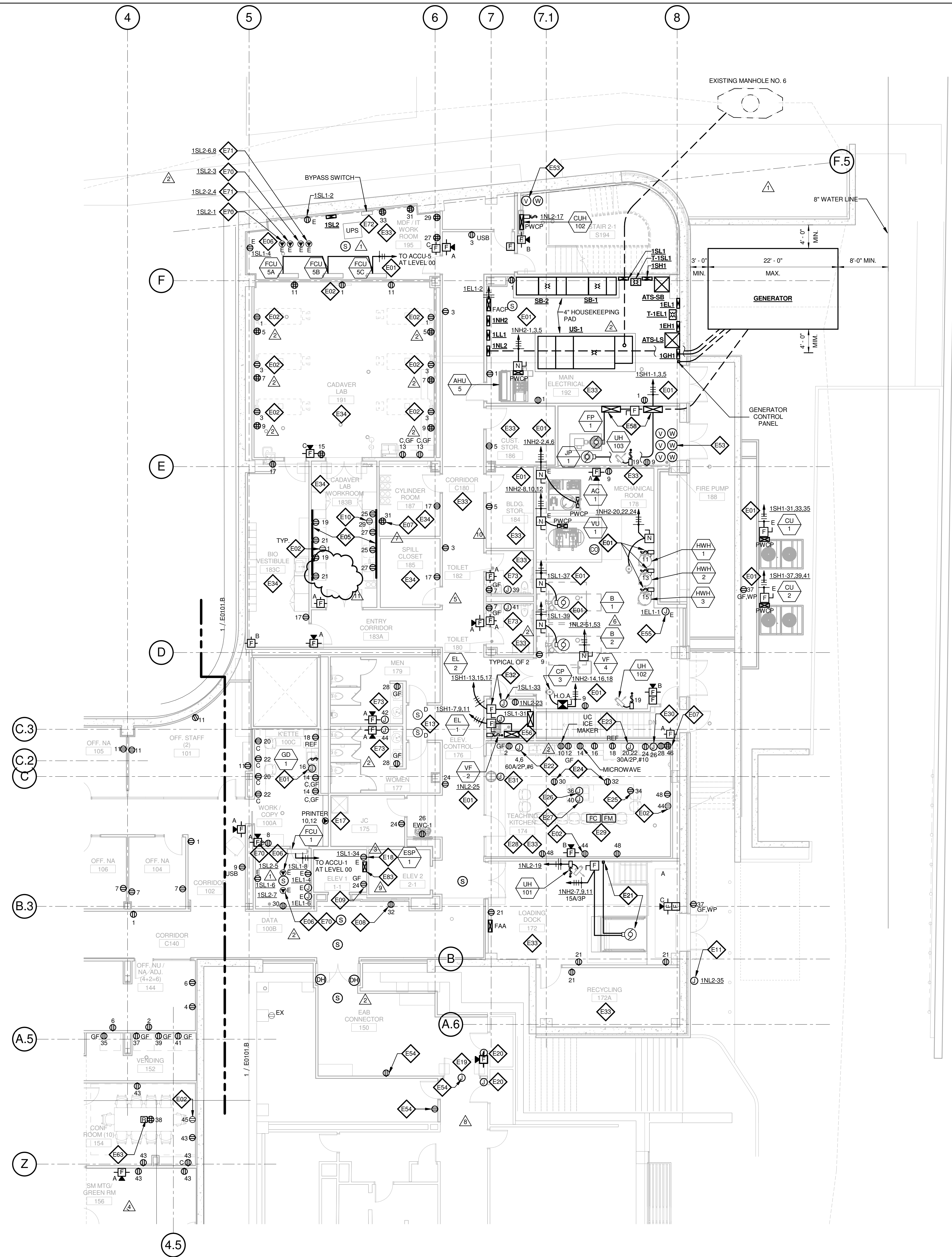
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1 LEVEL 01 - AREA A - FLOOR PLAN - POWER AND AUXILIARY
1/8" = 1'-0"

GENERAL NOTES:

- 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.
- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- 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.
- 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.
- 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.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 1N1L1 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 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 UNDERCOUNTER 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 INDICATOR 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 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 ELEVATOR AND A JUNCTION BOX WITH A 120V/20A CIRCUIT FOR CONNECTION OF ELEVATOR CONTROLS. PROVIDE ALL FINAL CONNECTIONS TO ELEVATOR CONTROLLER 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 1N1L2.
- E34 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1L1L1.
- 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 E402 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. RFB45-FC WITH A BRASS FLANGED COVER CAT. NO. RFB45-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 - AV (SEE AV DRAWINGS FOR DEVICE TYPE). 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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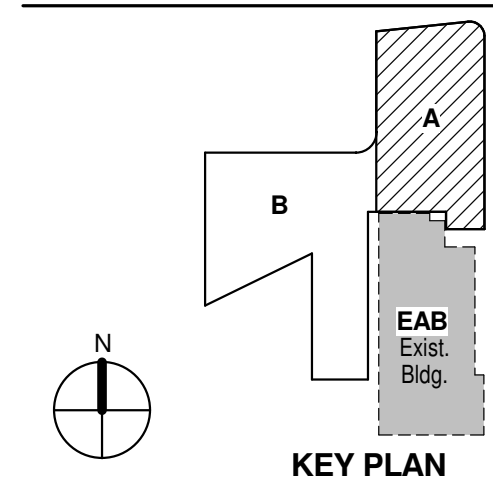
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11	ASH-048	27 JAN 2017
10	ASH-047	16 JAN 2017
9	RFI-383	12 JAN 2016
8	ASH-044	10 JAN 2017
7	ASH-035	10 NOV 2016
6	ASH-034	04 NOV 2016
5	ASH-031 - Not accepted by owner	26 OCT 2016
4	RFI-329	20 OCT 2016
3	ASH-010	21 JULY 2016
2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



LEVEL 01 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No.: 04561.01 Checked by:

E0101.A

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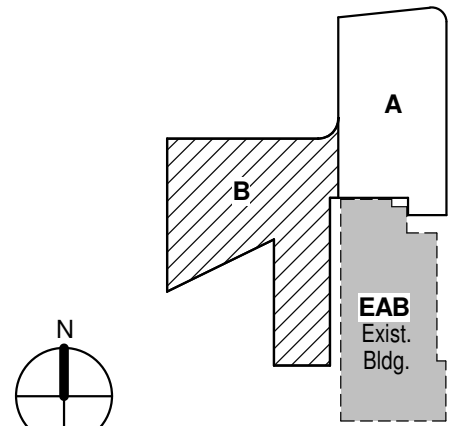
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3	ASI-017	14 OCT 2016
2	ADDENDUM 2-2	19 APRIL 2016
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ISSUED FOR CONSTRUCTION (BP2)		01 MAR 2016
No.	Description	Date



KEY PLAN

Drawing Title:

LEVEL 01 AREA B - FLOOR PLAN - POWER AND AUXILIARY

Project No.: 04561.01 Checked by:

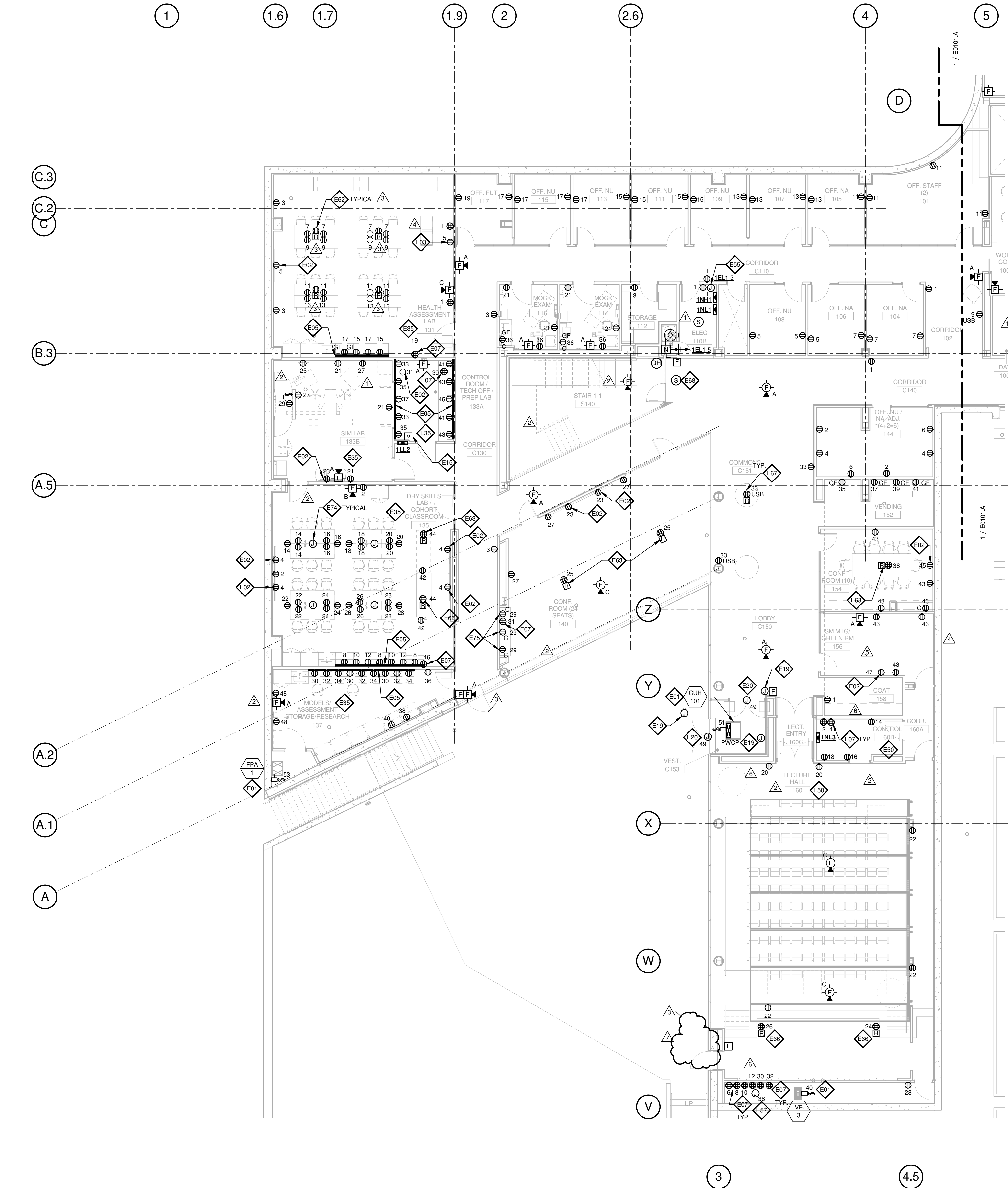
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GENERAL NOTES:

- 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.
- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- 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.
- 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.
- 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.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OF DATA, VOICE AND A/V.
- 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 AL4320 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 ARCHITECTS PLATE ELEVATIONS AND A/V DRAWINGS.
- E15 PROVIDE NEMA 15-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- 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.
- 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 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. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-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. FFBTCBS-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 A 2HR FIRE CLASSIFIED 6-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. EFB6S-FC WITH A BRASS FLANGED COVER CAT. NO. EFB610BTBS-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. FFBTCBS-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.
- 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.



1 LEVEL 01 - AREA B - FLOOR PLAN - POWER AND AUXILIARY

1/8" = 1'-0"

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GENERAL NOTES:

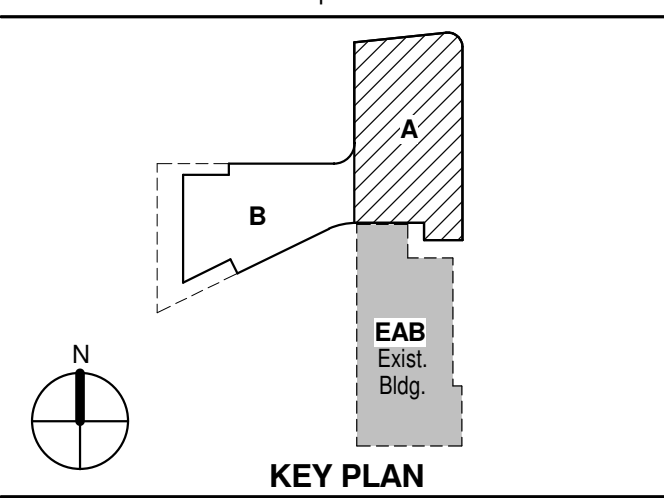
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- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- 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.
- 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.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OF DATA, VOICE AND AV.

- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 2NLL1 UNLESS NOTED OTHERWISE.

KEYED NOTES

- REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- PROVIDE NEW RECEPTACLE FOR MONITOR, COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND AV DRAWINGS.
- PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4320 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.
- 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.
- OUTLET FOR DIGITAL SIGNAGE, COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND AV DRAWINGS.
- SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN.
- PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD.
- PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH-IN.
- PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.
- ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL1.
- ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL2.
- ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL3.
- ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL4.
- PROVIDE POWER AND FINAL CONNECTIONS TO OVERHEAD SERVICE CARRIER. REFER TO LIGHTING PLANS FOR LIGHTING CIRCUITS. COORDINATE WITH ARCHITECTURAL PLANS AND ELEVATIONS.
- COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.
- 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. 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.
- 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. 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.
- PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-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.
- PROVIDE NEMA LS-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER.

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-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

LEVEL 02 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No.: 04561.01 Checked by:

E0102.A

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LEVEL 02 - AREA A - FLOOR PLAN - POWER AND AUXILIARY

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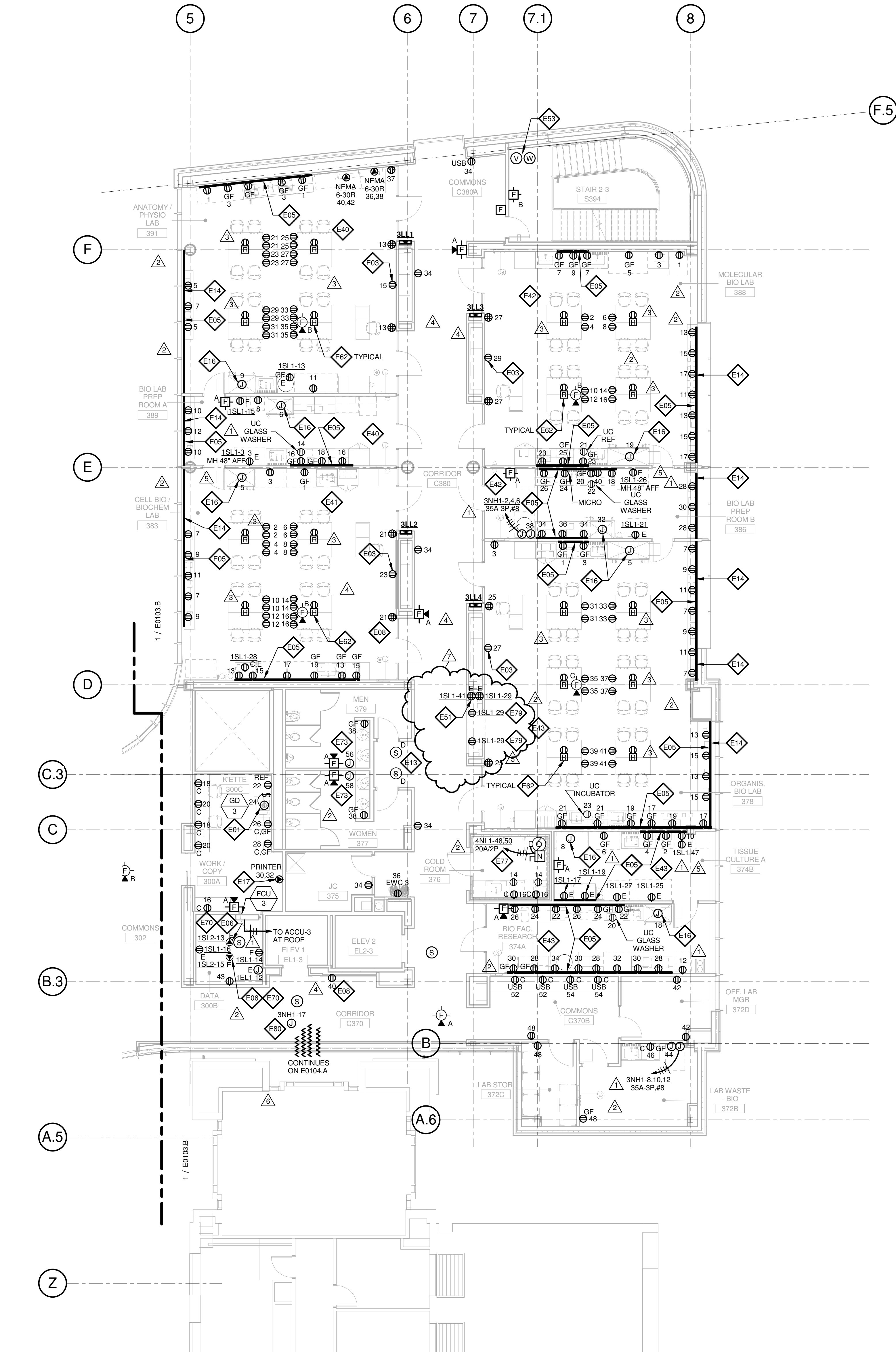
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GENERAL NOTES:

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- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- 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.
- 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.
- 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.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OF DATA, VOICE AND A/V.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 3NLL1 UNLESS NOTED OTHERWISE.

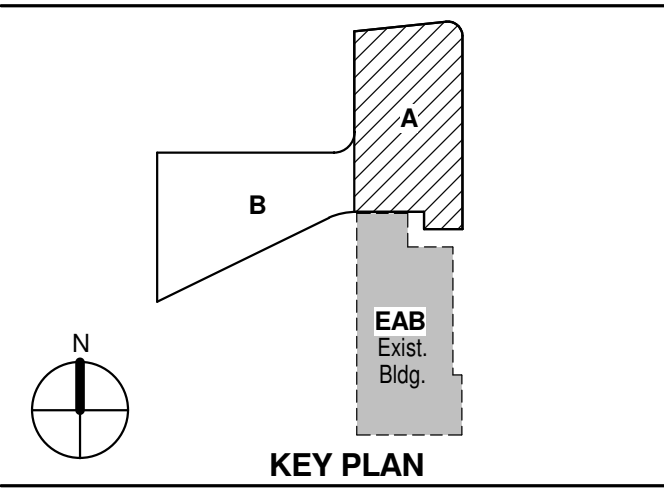
KEYED NOTES

- 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 AL4320 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.
- 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.
- 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 RECEPTACLE WITH AUDIBLE ALARM ON EMERGENCY CIRCUIT FOR FISH TANK. COORDINATE EXACT LOCATION 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. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FPB7C8S-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-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.
- 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 M0303 FOR LENGTH OF PIPES, AND SPECIFICATION SECTION 268500 FOR ADDITIONAL INFORMATION.



1 LEVEL 03 - AREA A - FLOOR PLAN - POWER AND AUXILIARY
1/8" = 1'-0"

7	ASI-048	27 JAN 2017
6	ASI-045	18 JAN 2017
5	ASI-036	30 NOV 2016
4	ASI-035	10 NOV 2016
3	ASI-017	14 OCT 2016
2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

**LEVEL 03 AREA A FLOOR
PLAN - ELECTRICAL &
AUXILIARY**

Project No.: 04561.01 Checked by:

E0103.A