RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

ADDENDUM NO. 1

Bid #1384

Purchase of Engineering Equipment for the New Science Center at Santa Ana College

April 3, 2020

Owner:
Rancho Santiago Community College District
2323 North Broadway Room 112
Santa Ana, California 92706

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON BID FORM WHEN SUBMITTED

The following changes, additions, deletions or corrections shall become a part of the Contract Documents for the project named on the previous page and all other conditions shall remain the same. The Bidders shall be responsible for transmitting this information to all affected prior to the closing of Bids. Prospective Bidders shall acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

Item No. AD-1-1

Question:
Please confirm the location of Santa Ana College, New Science Center is 1530 W. 17th St., Santa Ana CA 92706

Answer: Yes, that is correct.

Item No. AD-1-2

Question:
I know the Bid closes on April 14, 2020. You are requiring delivery of the machine between July 31, 2020 and August 13, 2020. When will the bid be awarded? The machines are built to order and will need time to build.

Answer: This bid is tentatively scheduled to be presented to the Board of Trustees on the May 11, 2020 meeting.

Item No. AD-1-3

Question:
Can you tell me about the door entrance to the Delivery location. What are the dimension of the entrance / door. It is easy access to get the machine in? Can we take a forklift in the building. Does anything else have to be moved to get the machine in? I need to know this information for quoting the freight / rigging.

Answer: Please refer to **Attachment A** regarding path of travel for delivery to the engineering lab. Refer to **Attachment B** for the floorplan, mechanical, electrical, and door schedule information. When reviewing door schedule information vendor shall allow for width reduction of 1-1/2" for door leaves. Refer to **Attachment C** for equipment layout information. A forklift cannot enter the building, but a pallet jack would be able to enter the building/lab. Path of travel to the location of delivery will remain clear/open. Relocation of other existing furniture/equipment to place unit(s) is not anticipated.

Item No. AD-1-4
Question:
Training and Demonstration -Page 9 #D How Much training are you requiring per Vendor during August 17 – August 21, 2020

Answer: Vendor to provide standard training package in their bid.

Item No. AD-1-5
Question:
We do not do Seismic Anchorage. You would need to consult a specialist for Seismic Anchorage

Answer: The District's preference is for the Bidder to provide this service. The vendor shall clearly state if this is excluded in the bid for the Haas Compact Mill or the Slant PRO CNC Lathe with Turret.

Item No. AD-1-6
Question:
The Haas CM-1 requires air - Minimum 2scfm, 3/8" inline airline, with minimum constant air pressure 80psi. Will the New Science Center have air available for the Haas CM-1?

Answer: The compressed air pipe for this unit is ½" and the outlet is designed for up to 5 sCFM. The building compressed air is designed for 100 PSI and the outlet pressure at the local regulator is user controllable from 2 to 111 PSI, as set by the user. There should be no trouble meeting the requirements indicated above.

Item No. AD-1-7
Question:
Instron manufactures the 34TM-30 tensile test system. Can we submit a bid for just that one item?

Answer: Yes.

Item No. AD-1-8

Question:

Can the bidder security deposit be waived? Instron is a large company with $200+ million annual sales, we are owned by Illinois Tool Works, a Fortune 150 company with approximately 13 billion dollars of sales. We have the financial stability and wherewithal to accept and carry out this purchase if awarded without any risk on the College's part. We employ 8 field people here in Southern California. In the past few years we have bid on and sold systems to the following Southern California Universities; Cal Poly (2 systems), CSU Channel Islands, Los Angeles Community College, Taft College, UCLA (4 systems), UCI, USC. All of these projects have been successfully completed.

Answer: Pursuant to Public Contract Code section 20651(a), the District is required to have potential bidders provide some form of bid security. Pursuant to Section 8 of the Information for Bidders, bid security is requested "as a guarantee that the bidder will enter into the contract (Purchase Agreement Form), if the same is awarded to such bidder, and will provide any other required documents.

Item No. AD-1-9

Question:

Your RFQ states that the weight of an Instron 34TM-30 is 140 lbs. It is in fact 308 lbs. 140 kg = 308 lbs, so perhaps the units are incorrect. You may wish to correct the RFQ.

Answer: Weight Correction. The weight of the Instron 34TM-30 is 308 lbs.

Item No. AD-1-10

Question:

Instron does not offer inside delivery and cannot dispose of shipping materials. Our customers are expected to receive the delivered machines, unload from truck, unpack, and move them to their final location or resting place. While we can hire a rigger to perform these tasks, it will add a significant amount (about $5,000) or so to the cost. System comes with safe handling instructions. Can we bid without inside installation? If not, can we arrange to have our rigger come on-site before bid so he can give us an estimated cost?

Answer: Vendor is to submit bid including these services. The building is not available to arrange an on-site visit.

Item No. AD-1-11

Question:

You ask for a 2 year warranty and we are happy to bid that way, please be aware that this will increase our price and in earlier discussions with end user any budgetary prices that were given included a one year warranty. So any bid with a two year warranty will be higher. Can I bid with a one year warranty or would you rather a higher price with a two year warranty? Or show 2nd year as an option?

Answer: Vendor is to submit bid based on a 2-year warranty.

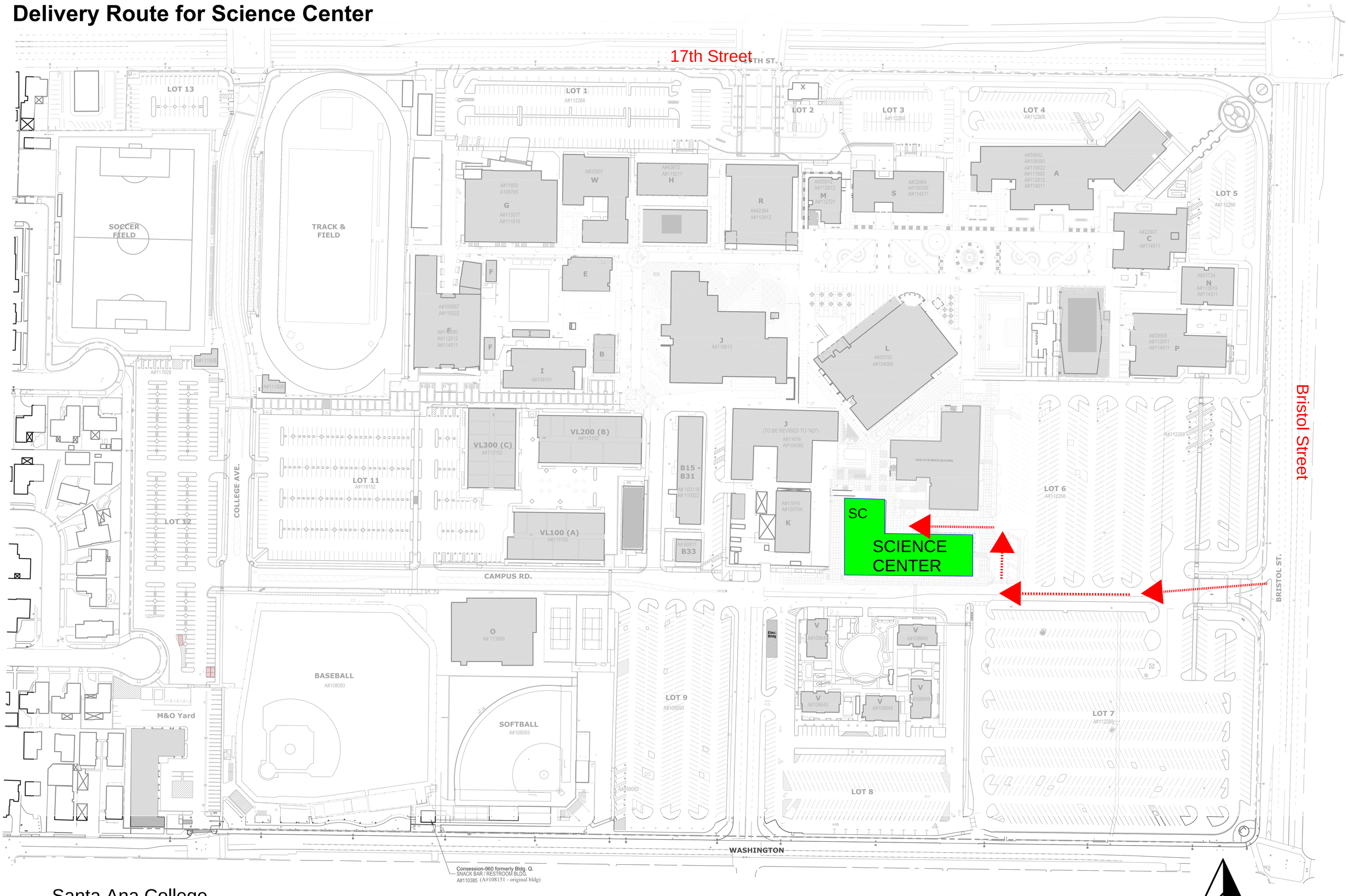
Item No. AD-1-12 (Hass CM-1 Dimension Clarification)

The corrected approximate dimensions of the Compact Mill are as follows:
Height: 83”; Depth: 48.2”; Width: 66.5”.

This is the end of ADDENDUM NO. 1

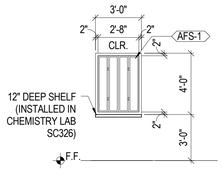
ATTACHMENT A

Delivery Route for Science Center

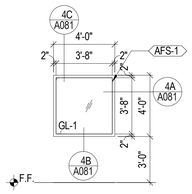


Santa Ana College
1530 W. 17th St.
Santa Ana, CA 92706

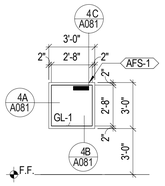
ATTACHMENT B



11 F11 - CENTRAL PREP & STORAGE SC322
1/4" = 1'-0"



10 F10 - INSTRUMENT RM SC320-1
1/4" = 1'-0"



9 F9 - CHEMISTRY PREP & STORAGE SC313
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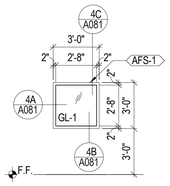

8 F8 - CHEMISTRY PREP & STORAGE SC313
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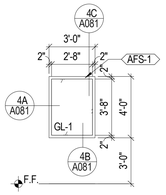

7 F7 - CHEMISTRY PREP & STORAGE SC310
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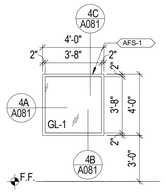

6 F6 - CADAVER RM SC217-1
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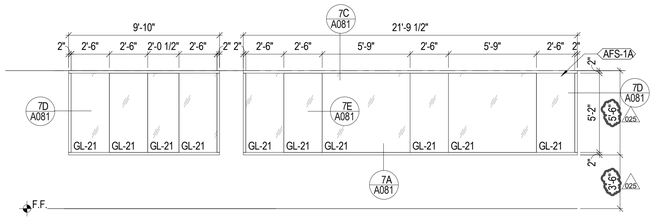

5 F6 - ENGINEERING LAB SC134
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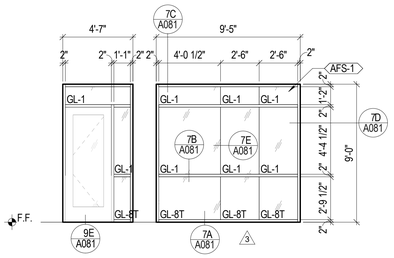

4 F5 - RECEPTION SC116
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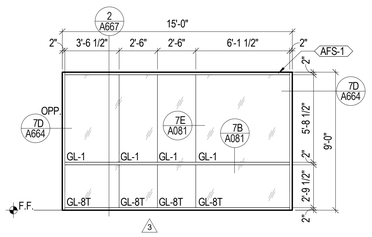
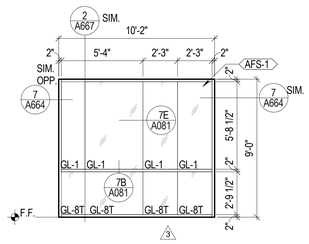


3 F3 - SCIENCE LEARNING CENTER SC103
1/4" = 1'-0"



2 F2 - SCIENCE LEARNING CENTER SC103
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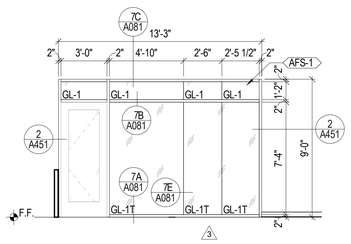

1 F1 - SCIENCE LEARNING CENTER SC103
1/4" = 1'-0"

1918 Main Street, Third Floor
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Telephone 310.557.7600

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SHERMAN OAKS, CA 91423
818-377-8220

ELECTRICAL ENGINEER
FBA ENGINEERING
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COSTA MESA, CA 92626
949-852-9995

CIVIL ENGINEER
KPFF CONSULTING ENGINEERS
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619-297-0159

SCIENCE CENTER
SANTA ANA COLLEGE

RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

1530 W. 17TH ST.
SANTA ANA, CA 92706

SANTA ANA COLLEGE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY
DATE: MAY 16, 2017
REGISTRATION NUMBER: C34799

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04-115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
3	Addendum 3	9/22/17
05	RFI#5	12/18/17
025	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET

DRAWN BY: MS | REVIEW BY: Approver

HGA NO: 3584-001-00

INTERIOR GLAZING ELEVATIONS

DATE: JULY 06, 2017

A630

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RFI 558

RFI 577

CCD-A-03 - Revised Office Layout.pdf

DOOR NUMBER	ROOM NAME	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR GLAZING TYP	DOOR FINISH	FRAME TYPE	FRAME GLAZING TYP	FRAME FINISH	HEAD	JAMB	SILL/ THRESHOLD	RATING (MIN)	HDWE GROUP	ELEC	ALARM	SECURITY TYPE	NOTES
100-1A	CORRIDOR	6' - 0"	7' - 6"	STL-FR	GL-63	NOTE 9	SF3	GL-63	NOTE 9	6/A443	3/A443	10D/A081	60 MIN.	SH-1	X	X	CR	PH, ADO
100A	CORRIDOR	6' - 0"	7' - 6"	STL-FR	GL-63	NOTE 9	SF5	GL-63	NOTE 9	6/A443	3/A443	10D/A081	60 MIN.	SH-1A	X	X	CR	PH, ADO
100B	CORRIDOR	6' - 0"	8' - 0"	AL	GL-1T	NOTE 8	CW3	GL-1T	NOTE 8	2/A434	1/A456	10D/A081	--	SH-1A.1	X	X	CR	PH, ADO
101A	RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-2	--	--	--	--
102A	MEN'S RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-1	--	--	--	--
103-1A	MODEL STORAGE / LOCKERS	3' - 0"	7' - 6"	WD-F	--	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	9B/A081	--	SH-2B.1	--	--	CR	--
103-2A	WORK ROOM	3' - 0"	7' - 6"	AL-FG	GL-1T	PT-5D	F1	--	PT-5D	5B/A081	2/A451	--	--	HW-1B	--	--	--	--
103A	SCIENCE LEARNING CENTER	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-100A	GL-62	PT-5D	3B/A081	3A/A081	9C/A081	45 MIN.	SH-7A	--	X	CR	WMR, PH, DPS
103B	SCIENCE LEARNING CENTER	3' - 0"	8' - 0"	AL-FG	GL-1T	NOTE 7	SF1	GL-1T	NOTE 7	1/A431SIM	4/A451	10D/A081	--	SH-6	--	X	CR	--
103C	SCIENCE LEARNING CENTER	10' - 2"	11' - 0"	CD-1	--	--	--	--	--	2/A667	7/A664	--	90 MIN.	MFR	X	X	--	--
103D	SCIENCE LEARNING CENTER	15' - 0"	11' - 0"	CD-1	--	--	--	--	--	2/A667	7/A664	--	90 MIN.	MFR	X	X	--	--
104A	WOMEN'S RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-1	--	--	--	--
105A	LOBBY	6' - 0"	8' - 0"	AL	GL-1T	NOTE 8	CW1	GL-1T	NOTE 8	1/A431	1/A452	10D/A081	--	SH-1A.1	X	X	CR	PH, ADO
105B	LOBBY	6' - 0"	8' - 0"	AL	GL-1T	NOTE 8	CW1	GL-1T	NOTE 8	1/A431	1/A452	10D/A081	--	SH-4	--	X	CR	PH, DPS
106A	CUSTODIAL	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081		--	HW-5	--	--	--	--
107A	MACHINE ROOM	4' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	--	45 MIN.	SH-5A	--	X	--	--
109A	BDF	4' - 0"	7' - 6"	HM-F	--	PT-4D	HM-001	--	PT-4D	6B/A081	6A/A081	--	45 MIN.	SH-2A.1	--	X	CR	--
110A	VESTIBULE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.1	--	X	CR	
110C	CONFERENCE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	6B/A081	6A/A081	9B/A081	--	HW-1A	--	--	--	--
111A	LARGE CLASSROOM	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-110A	GL-62T, GL-7(T)	PT-5D	3B/A081	3A/A081	--	45 MIN.	SH-9	--	X	CR	PH
111B	LARGE CLASSROOM	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-110A	GL-62T, GL-7(T)	PT-5D	3B/A081	3A/A081	--	45 MIN.	SH-9A	--	X	I/L111A	PH, WMR, ADB
113-1A	LARGE CLASSROOM (DIVISIBLE)	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-110A	GL-62T, GL-7(T)	PT-5D	3B/A081	3A/A081	--	45 MIN.	SH-9A	--	X	CR	PH
113-2A	LARGE CLASSROOM (DIVISIBLE)	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-110A	GL-62T, GL-7(T)	PT-5D	3B/A081	3A/A081	--	45 MIN.	SH-9	--	X	CR	PH
114A	ELECTRICAL CLOSET	6' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-14	--	X	--	--
114B	ELECTRICAL CLOSET	6' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-14	--	X	--	--
115-1A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
115-2A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
115-3A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
115-4A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
115A	CORRIDOR	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-110A	GL-62T, GL-7(T)	PT-5D	3B/A081	3A/A081	--	--	SH-2B	--	X	CR	--
116-1A	WORK ROOM	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	6B/A081	6A/A081	10B/A081	--	SH-2B.1	--	X	CR	--
116-1B	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	GL-1	PT-5D	6B/A081	6A/A081	10B/A081	--	HW-3	--	X	--	--
116A	RECEPTION	3' - 0"	7' - 6"	AL-FG	GL-1T	PT-5D	F5	--	PT-5D	2B/A081	2A/A081	9C/A081	--	SH-15	--	X	CR	I/L
116B	RECEPTION	3' - 0"	2' - 6"	WD-F	--	PLAM-2	--	--	PT-5D	--	6A/A081	--	--	HW-3B	--	--	--	DOUBLE ACTING
118A	GEOLOGY / EARTH SCIENCE LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.3	--	X	CR	ADB
118B	GEOLOGY / EARTH SCIENCE LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	10B/A081	--	SH-7E	--	X	I/L 118A	ADB, UNEQUAL: 3'-0", 1'-6"
120A	GEOLOGY / PHYSICAL SCIENCE PREP & STORAGE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"
120B	GEOLOGY / PHYSICAL SCIENCE LAB & LECTURE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
120C	GEOLOGY / EARTH SCIENCE LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
122A	GEOLOGY / PHYSICAL SCIENCE LAB & LECTURE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2B.3	--	X	CR	--
122B	GEOLOGY / PHYSICAL SCIENCE LAB & LECTURE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7E	--	X	I/L 122A	ADB, UNEQUAL: 3'-0", 1'-6"
124A	STORAGE	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9C/A081 SIM.	--	SH-12	--	X	CR	--
126A	EMERGENCY ELECTRICAL	3' - 0"	7' - 6"	HM-F	--	NOTE 6	HM-001	--	NOTE 6	6B/A081	6A/A081	10A/A081	--	SH-8	--	X	--	PH
128A	MECHANICAL ROOM	6' - 0"	7' - 6"	HM-F	--	NOTE 6	HM-001	--	NOTE 6	6B/A081	6A/A081	10A/A081	--	SH-5	--	X	--	--
128B	MECHANICAL ROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-2A	--	X	CR	--
130A	MAIN ELECTRICAL	4' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	45 MIN.	SH-13	--	X	--	PH
132A	ENGINEERING PREP & STORAGE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	9D/A081	--	SH-12	--	X	CR	--
132B	ENGINEERING PREP & STORAGE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
134A	ENGINEERING LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.3	--	X	CR	ADB
134B	ENGINEERING LAB	6' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-11B	--	--	I/L 134A	EPH, ADB
136A	FIRE RISER RM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	HW-5D	--	--	--	-
200-1A	CORRIDOR	6' - 0"	7' - 6"	STL-FR	GL-63	NOTE 9	SF3	GL-63	NOTE 9	6/A443	3/A443	--	60 MIN.	SH-1B	X	X	CR	PH
200-1B	CORRIDOR	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-001	--	PT-5D	2B/A081	2A/A081	9B/A081	45 MIN.	HW-7	--	--	--	PH, MHO
200-1C	STAIR #2	3' - 0"	7' - 6"	GATE	--	PT-5E	--	--	--	NOTE 4	NOTE 4	--	--	HW-20	--	--	--	PH
200A	CORRIDOR	6' - 0"	7' - 6"	STL-FR	GL-63	NOTE 9	SF5	GL-63	NOTE 9	6/A443	3/A443	10D/A081	60 MIN.	SH-1B	X	X	CR	PH
200B	STAIR #1	3' - 0"	7' - 6"	GATE	--	PT-5E	--	--	--	NOTE 4	NOTE 4	--	--	HW-20	--	--	--	PH
201-1A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201-2A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201-3A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201-4A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201-5A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201-6A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201-7A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
201A	CORRIDOR	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.1	--	X	CR	ADB
201B	CORRIDOR	3' - 0"	7' - 6"	WD-F	--	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	10B/A081	--	SH-2.1	--	X	CR	ADB
202A	MEN'S RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-1	--	--	--	--
203A	RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-2	--	--	--	--
204A	WOMEN'S RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-1	--	--	--	--
206A	CUSTODIAL	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	HW-5	--	--	--	--
208A	CLASSROOM	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.1	--	X	CR	ADB
209A	LACTATION ROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	HW-3C	--	--	--	--
210A	ELEC. CLOSET	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	HW-5	--	--	--	--
211A	IDF	4' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-2A	--	X	CR	--
212A	MOLECULAR BIOLOGY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	10B/A081	--	SH-7E	--	X	CR	ADB, UNEQUAL: 3'-0", 1'-6"
212B	MOLECULAR BIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B	--	X	I/L212A	ADB
213A	PHYSIOLOGY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	10B/A081	--	SH-7E	--	X	CR	ADB, UNEQUAL: 3'-0", 1'-6"
213B	PHYSIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B	--	X	I/L213A	ADB
213C	PHYSIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
214A	MOLECULAR BIOLOGY PREP & STORAGE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"

DOOR NUMBER	ROOM NAME	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR GLAZING TYP	DOOR FINISH	FRAME TYPE	FRAME GLAZING TYP	FRAME FINISH	HEAD	JAMB	SILL/ THRESHOLD	RATING (MIN)	HDWE GROUP	ELEC	ALARM	SECURITY TYPE	NOTES
214B	MICROBIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
214C	MOLECULAR BIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
215A	ANATOMY & PHYSIOLOGY PREP & STORAGE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T)	PT-5D	2B/A081	2A/A081	--	--	SH-2D	--	X	CR	--
215B	ANATOMY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-2	--	--	CR	--
216A	MICROBIOLOGY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7	--	X	I/L216B	PH, UNEQUAL: 3'-0", 1'-6"
216B	MICROBIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2B	--	X	CR	--
217-1A	CADAVER ROOM	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	10B/A081	--	SH-2C	--	--	CR	ADB
217A	ANATOMY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2B	--	X	CR	--
217B	ANATOMY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-7(T), GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7	--	X	I/L 217A	UNEQUAL: 3'-0", 1'-6"
218A	GENERAL BIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2C	--	X	CR	--
218B	GENERAL BIOLOGY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	I/L 218A	DPS, UNEQUAL: 3'-0", 1'-6"
220A	ORGANISMAL BIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
220B	GENERAL BIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
220C	GENERAL & ORGANISMAL PREP & STORAGE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"
222A	WASTE	3' - 0"	7' - 6"	HM-F		PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	10A/A081	--	SH-2B.1	--	X	CR	ADB
224A	ELEC. CLOSET	6' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-14	--	X	--	--
224B	ELEC. CLOSET	6' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-14	--	X	--	--
226A	ORGANISMAL BIOLOGY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	9B/A081	--	SH-2B	--	X	CR	--
226B	ORGANISMAL BIOLOGY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7	--	X	I/L 226A	UNEQUAL PAIR: 3'-0", 1'-6"
300-1A	CORRIDOR	6' - 0"	7' - 6"	STL-FR	GL-63	NOTE 9	SF4	GL-63	NOTE 9	6/A443	3/A443	10D/A081	60 MIN.	SH-1B	--	X	CR	PH
300A	CORRIDOR	6' - 0"	7' - 6"	STL-FR	GL-63	NOTE 9	SF5	GL-63	NOTE 9	6/A443	3/A443	10D/A081	60 MIN.	SH-1B	--	X	CR	PH
301-1A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301-2A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301-3A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301-4A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301-5A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301-6A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301-7A	OFFICE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	HW-3	--	X	--	ADB
301A	CORRIDOR	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	---	SH-2B	--	X	CR	ADB
301B	CORRIDOR	3' - 0"	7' - 6"	WD-F	--	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	10B/A081	--	SH-2.1	--	X	CR	ADB
302A	MEN'S RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-1	--	--	--	--
303A	RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-2	--	--	--	--
304A	WOMEN'S RESTROOM	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9E/A081	--	HW-1	--	--	--	--
306A	CUSTODIAL	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	HW-5	--	--	--	--
307A	IDF	4' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-2A	--	X	CR	--
308A	CLASSROOM	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.1	--	X	CR	ADB
309A	STORAGE	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9C/A081	--	SH-12	--	X	CR	
310A	ELEC. CLOSET	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-5A	--	X	--	--
311A	CHEMISTRY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B	--	X	CR	ADB
311B	CHEMISTRY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7	--	X	I/L 309A	UNEQUAL: 3'-0", 1'-6"; ADB
312A	PHYSICS LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2	--	X	CR	ADB
312B	PHYSICS LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	10B/A081	--	SH-7C.1	--	X	I/L 312A	ADB, UNEQUAL: 3'-0", 1'-6"
313A	WASTE	3' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	10B/A081	--	SH-2B.2	--	X	CR	--
314A	PHYSICS PREP & STORAGE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"
314B	PHYSICS LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
315A	CHEMISTRY PREP & STORAGE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2D	--	X	CR	--
315B	CHEMISTRY PREP & STORAGE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
315C	CHEMISTRY PREP & STORAGE	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
316A	CHEMISTRY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2B	--	X	CR	--
316B	CHEMISTRY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081		--	SH-7	--	X	I/L 316A	UNEQUAL: 3'-0", 1'-6"
317A	CHEMISTRY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	--	--	SH-2B	--	X	CR	--
317B	CHEMISTRY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7	--	X	I/L 315A	UNEQUAL: 3'-0", 1'-6"
318A	CHEMISTRY PREP & STORAGE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"
318B	CHEMISTRY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
320-1A	INSTRUMENT ROOM	3' - 0"	7' - 6"	WD-F	--	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-2C.1	--	X	CR	--
320A	ORGANIC CHEMISTRY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-001	--	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"
320B	ORGANIC CHEMISTRY LAB	3' - 0"	7' - 6"	WD-D	--	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	HW-5E	--	--	CR	DUTCH DOOR
322-1A	CHEMICAL STORAGE	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	45 MIN.	SH-2B.1	--	--	CR	--
322-2A	CHEMICAL STORAGE	3' - 0"	7' - 6"	WD-NV	GL-62	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	45 MIN.	SH-2B.1	--	--	CR	--
322A	CHEMISTRY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-001	--	PT-5D	6B/A081	6A/A081	--	--	SH-12	--	--	CR	--
322B	CENTRALIZED PREP & STORAGE	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7B	--	X	CR	UNEQUAL: 3'-0", 1'-6"
324A	ELEC. CLOSET	6' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-14	--	X	--	--
324B	ELEC. CLOSET	6' - 0"	7' - 6"	HM-F	--	PT-2D	HM-001	--	PT-5D	6B/A081	6A/A081	9D/A081	--	SH-14	--	X	--	--
326A	CHEMISTRY LAB	3' - 0"	7' - 6"	WD-NV	GL-1	WD-1	HM-110A	GL-7(T), GL-1	PT-5D	2B/A081	2A/A081	10B/A081	--	SH-2B.1	--	X	CR	--
326B	CHEMISTRY LAB	4' - 6"	7' - 6"	WD-NV2	GL-1	WD-1	HM-100A	GL-1	PT-5D	2B/A081	6A/A081	--	--	SH-7	--	X	I/L 326A	UNEQUAL: 3'-0", 1'-6"
400A	STAIR #1	4' - 0"	7' - 6"	GATE	--	NOTE 6	--	--	--	NOTE 4	NOTE 4	--	--	SH-18	--	X	--	--
S1A		4' - 0"	6' - 10"	HM-F	--	PT-2D	HM-001	--	PT-5D	8A/A081	8B/A081	--	--	SH-8	X	X	CR	--
S1B	GENERATOR	20' - 0"	8' - 0"	SLIDING GATE	--	PT-5E	--	--	--	NOTE 5	NOTE 5	--	--	HW-13	--	--	--	--
S2A		3' - 0"	7' - 6"	GATE	--	PT-5E	--	--	--	NOTE 4	NOTE 4	--	--	HW-18	--	--	--	--
SC001A	GREENHOUSE	6' - 0"	7' - 10"	AL	GL-21	PT-5D	MFR	GL-24T	PT-5D	5/A081	5/A081	--	--	SH-19	X	X	CR	PH
SC001B	GREENHOUSE	3' - 0"	7' - 6"	GATE	--	PT-5E	--	--	--	NOTE 4	NOTE 4	--	--	SH-20	--	X	CR	PH
SC001C	GREENHOUSE	3' - 0"	7' - 6"	GATE	--	PT-5E	--	--	--	NOTE 4	NOTE 4	--	--	SH-20	--	X	CR	PH

RFI 327

NOTES:

1. REFER TO SHEET A081 FOR ALL HEAD, JAMB, SILL, AND GLAZING DETAILS, UNLESS NOTED OTHERWISE.
2. REFERENCE CW/SF FRAME TYPES ON SHEET A491.
3. REFERENCE F FRAME TYPES ON SHEET A630.
4. REFERENCE SHEET A067 FOR GATE DETAILS.
5. REFERENCE SHEET A065 FOR SLIDING GATE DETAILS.
6. COLOR TO MATCH <MP-2A> COLOR
7. COLOR TO MATCH <AFS-2> COLOR
8. COLOR TO MATCH <CW-1> COLOR
9. COLOR TO MATCH <CW-3> COLOR
10. REFER TO DOOR HARDWARE SPECS FOR ADDITIONAL HARDWARE REQUIREMENTS.
11. ALL EXTERIOR GATE TO BE PAINTED <HPC-1>, UON. COLOR AS INDICATED ON DOOR SCHEDULE.

ABBREVIATIONS

ADB	AUTOMATIC DOOR BOTTOM	I/L	INTERLOCK, CR AT INDICATED DOOR UNLOCKS
ADO	AUTOMATIC DOOR OPERATOR	MFR	MANUFACTURER
AL	CLEAR ANODIZED ALUMINUM	MHO	MAGNETIC HOLD OPEN
CR	CARD READER	MP	METAL PANEL
DPS	DOOR POSITION SWITCH	PH	PANIC HARDWARE
EC	ELECTRONIC HARDWARE WITHOUT A CARD READER	FS	FIRE SHUTTER
EML	OMNI CARD READER STAND ALONE	WMR	WALL-MOUNTED READER
EH	ELECTRIC PANIC HARDWARE		

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LICENSED ARCHITECT KEVIN DONAGHEY C34799 SEPTEMBER 30, 2019 RENEWAL DATE STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY
DATE: MAY 16, 2017
REGISTRATION NUMBER: C34799

NO	DESCRIPTION	DATE
4	Addendum 4	10/02/17
003	CCD#003	02/27/18
011b	CCD#011b	06/26/18
013	CCD-A-013	08/01/18
045b	CCD-B-045b	10/26/18
035	CCD-A-035	12/14/18
063b	CCD-B-063b	02/08/19

ISSUANCE HISTORY - THIS SHEET

DRAWN BY: SK REVIEW BY: TE

HGA NO: 3584-001-00

DOOR AND FRAME SCHEDULE

DATE: JULY 06, 2017

A082

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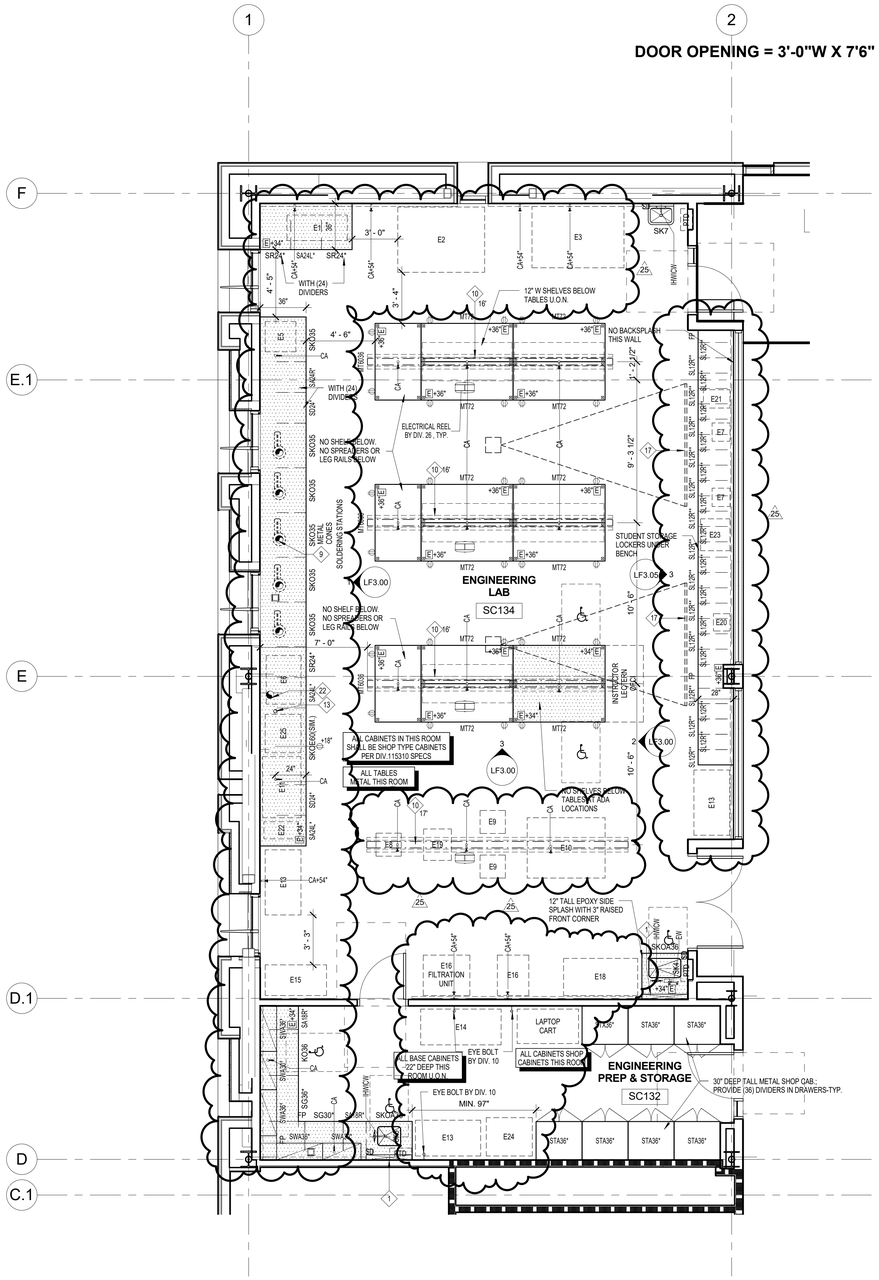

1 FIRST LEVEL PARTIAL PLAN
1/4" = 1'-0"

ALL LOCKABLE CABINETS IN EACH ROOM SHALL BE KEYED ALIKE W/ MASTER KEY SYSTEM - (NO KEY LOCKS AT PAD LOCK HASP LOCATIONS) - TYP AT ALL FLOORS

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LICENSED ARCHITECT KEVIN DONAGHEY No. C34799 Exp. 12/31/19 STATE OF CALIFORNIA

LICENSED ARCHITECT BEN TIMMONS No. C34749 Exp. 9/30/2019 STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY
DATE: SEPTEMBER 30, 2019
REGISTRATION NUMBER: C34799

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04- 115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
2	Addendum 2	09/01/17
25	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET

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HGA NO: 3584-001-00

FIRST LEVEL PARTIAL PLAN

DATE: JULY 06, 2017

LF2.01A

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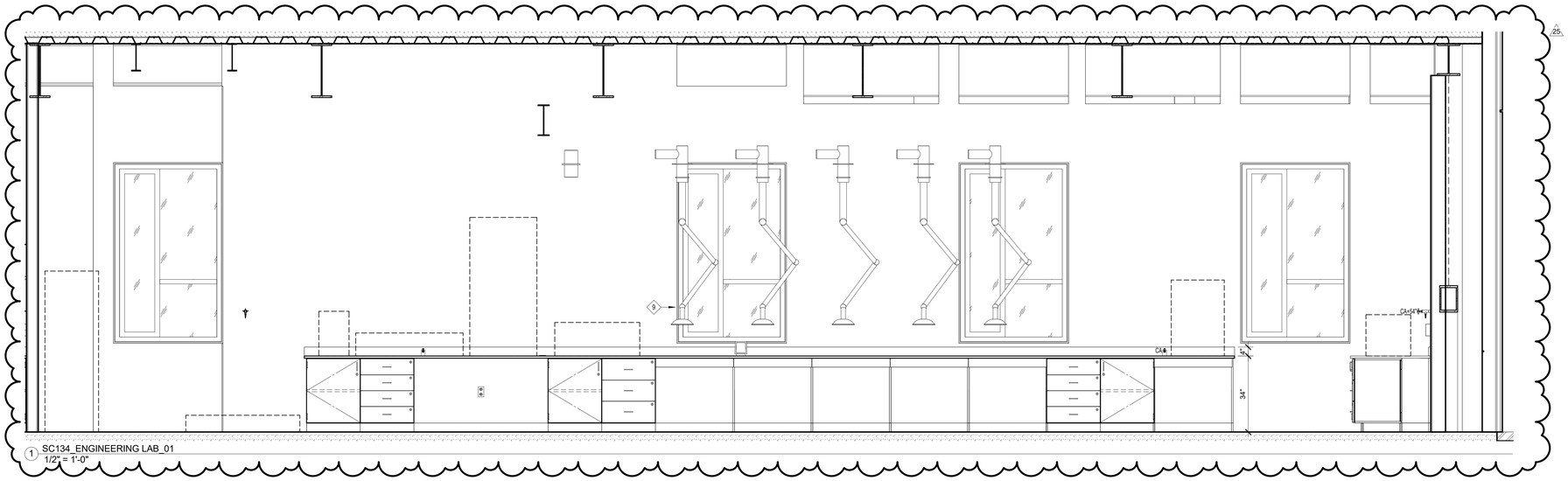

1 SC134_ENGINEERING LAB_01
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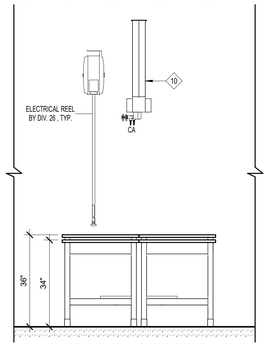

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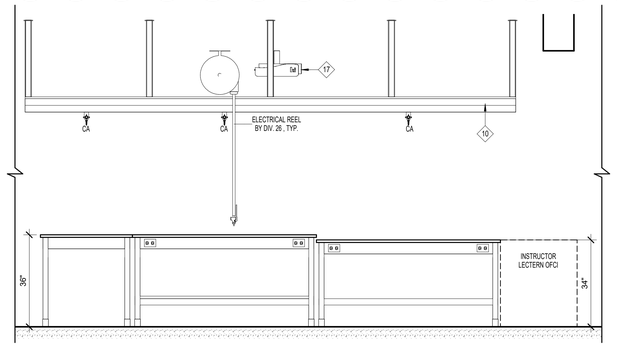

3 SC134_ENGINEERING LAB_02A
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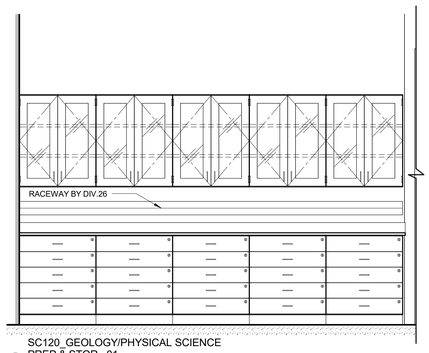

4 SC120_GEOLOGY/PHYSICAL SCIENCE
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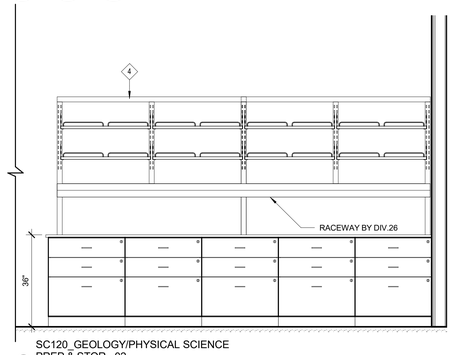

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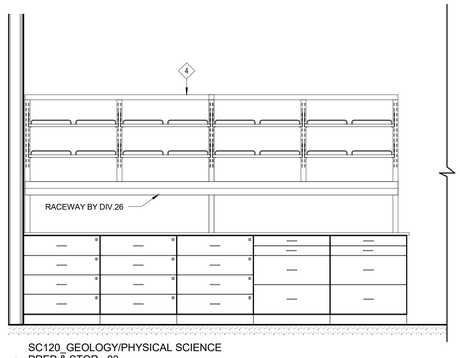

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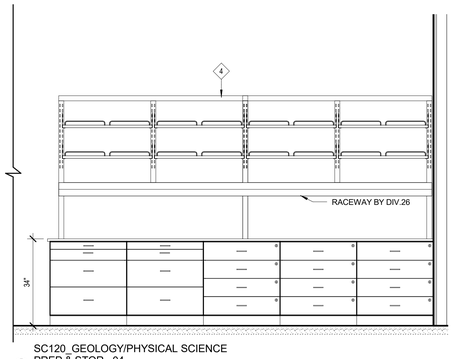

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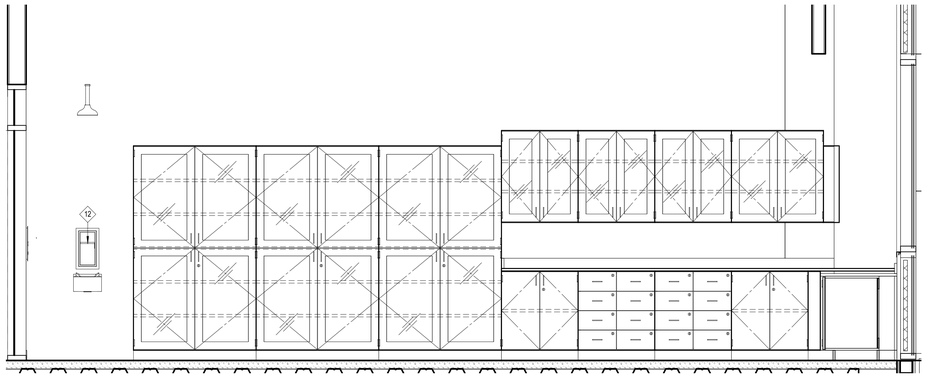

8 SC212_MOLECULAR BIOLOGY LAB_01
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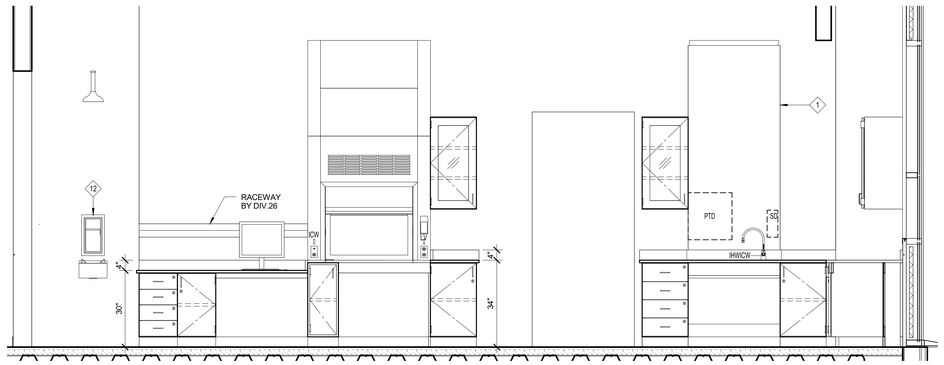

9 SC213_PHYSIOLOGY LAB_01
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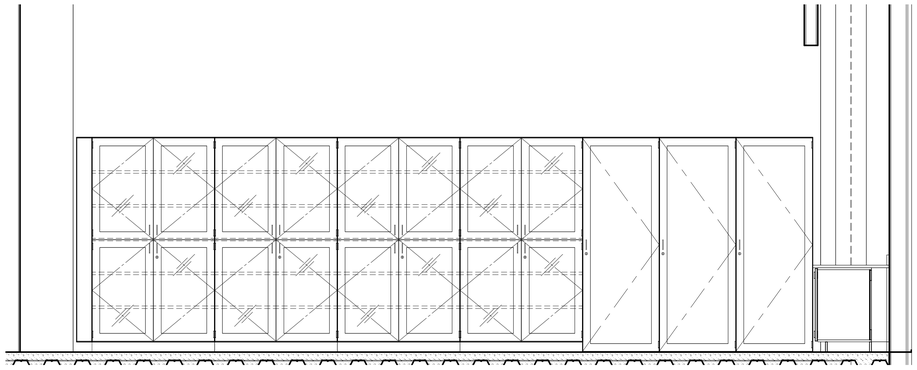

10 SC217_ANATOMY LAB_01
1/2" = 1'-0"

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LICENSED ARCHITECT KEVIN DONAGHEY No. C34799 Exp. 12/31/19 STATE OF CALIFORNIA

LICENSED ARCHITECT JEAN TOMASSIAN No. C34799 Exp. 12/31/19 STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY
DATE: SEPTEMBER 30, 2019
REGISTRATION NUMBER: C34799

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04-115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
3	Addendum 3	09/22/17
25	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET

DRAWN BY: Author | REVIEW BY: Approver

HGA NO: 3584-001-00

ELEVATIONS

DATE: JULY 06, 2017

LF3.00

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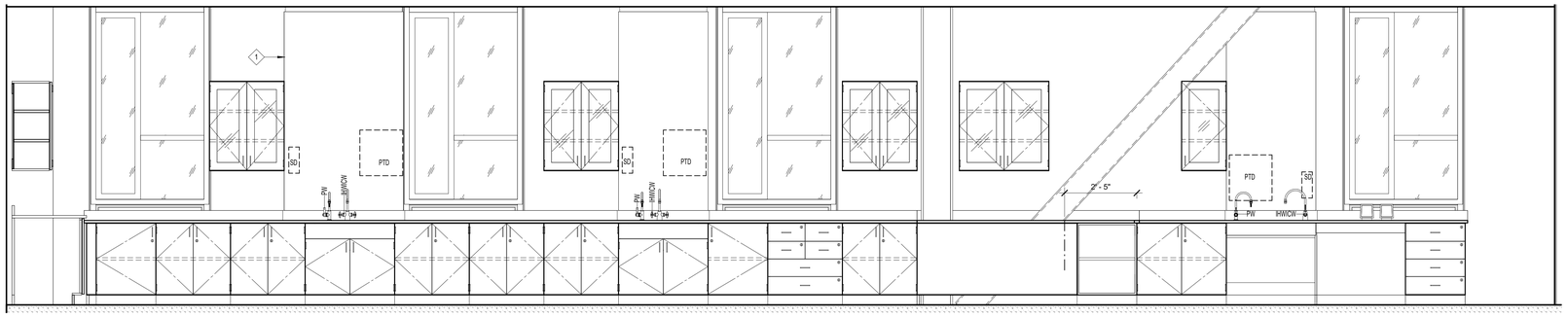

1 SC212_MOLECULAR BIOLOGY LAB_02
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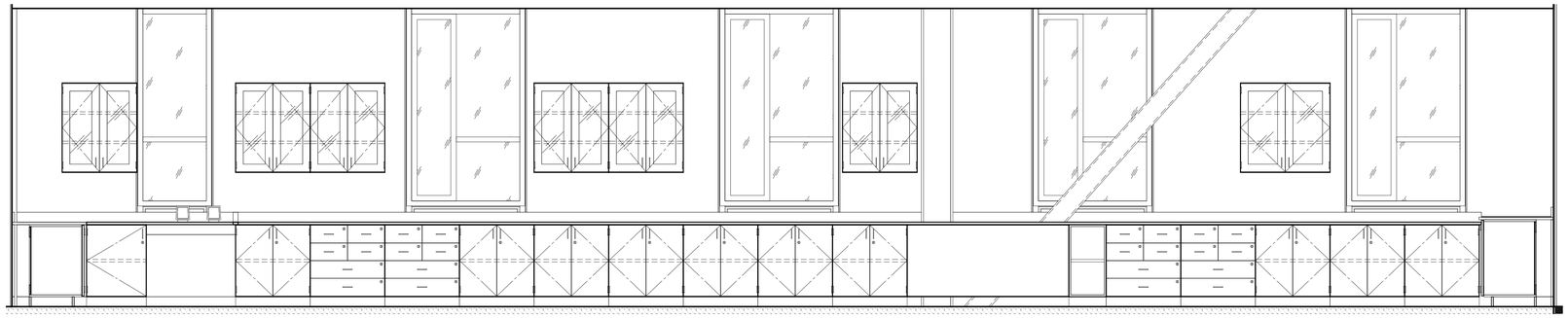

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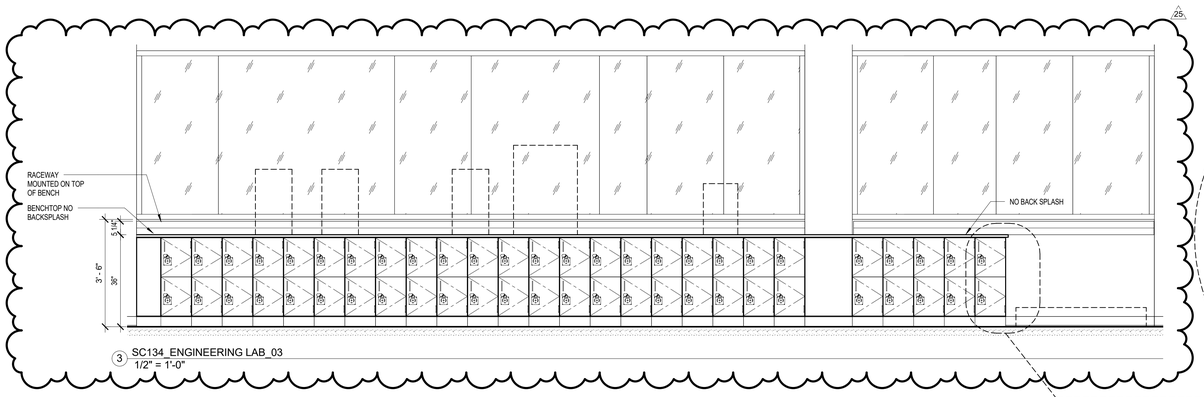

3 SC134_ENGINEERING LAB_03
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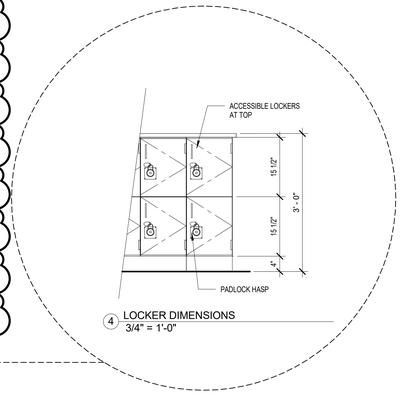

4 LOCKER DIMENSIONS
3/4" = 1'-0"

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REGISTERED ARCHITECT KEVIN DONAGHEY REG. NO. C34799 EXP. 9-30-2019 STATE OF CALIFORNIA

LICENSED ARCHITECT KEVIN DONAGHEY REG. NO. C34799 EXP. 9-30-2019 STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY
DATE: SEPTEMBER 30, 2019
REGISTRATION NUMBER: C34799

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04- 115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
25	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET

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HGA NO: 3584-001-00

ELEVATIONS

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FIXTURE CONNECTION SCHEDULE

PIPE SIZE IN INCHES									
FIXTURE/FITTING NO.	TW@DH	ICW	IHW	PW	LG	LV	CA	LW(P-TRAP)	LW(SED. TRAP)
SKA	1/2	1/2	1/2					1 1/2	
SKB		1/2	1/2					1 1/2	
SKC		1/2	1/2	1/2				1 1/2	
SKD		1/2	1/2						
SKE		1/2	1/2	1/2					
SKF		1/2	1/2						1 1/2
CSA								1 1/2	

NOTES:
1. BUILDING PW WATER LOOP TO EACH FIXTURE PER LP-SERIES DRAWINGS.
2. CONNECTION TO SERVICE PER LP-SERIES DRAWINGS.
3. ALL SERVICES TO FUME HOOD TO BE PRE-PIPED TO SINGLE POINT OF CONNECTION BY DIV. 11. FUME HOOD SERVICE FITTING LOCATION MAY VARY, REFER TO LF PLANS.

SERVICE FITTING SCHEDULE

PIPE SIZE IN INCHES							
SERVICE FITTING NO.	TW	ICW	IHW	PW	LG	LV	CA
SF1	1 1/4						
SF2							1/2
SF3						3/4	
SF4					1/2		
SF5					1/2	3/4	
SF6		1/2					
SF7		3/4	3/4				
SF8				1/2			

EQUIPMENT CONNECTION SCHEDULE

PIPE SIZE IN INCHES							
EQUIPMENT NO.	ICW	IHW	PW	SW	LG	LV	CA
EQ1(ICE MACHINE)	1/2						
EQ2(WATER SOFTENER)	1/2						
EQ3(AUTOCLAVE, 20x20x38)	1			1/2			1/2

NOTES:
1. BUILDING PW WATER LOOP TO EACH EQUIPMENT PER LP-SERIES DRAWINGS.
2. CONNECTION TO SERVICE PER LP-SERIES DRAWINGS.

SERVICE DROP SCHEDULE

PIPE SIZE IN INCHES								
DROP NUMBER NO.	TW	ICW	IHW	PW	LG	LV	CA	IHWR
1							1/2	
2	3/4	1/2	1/2				25	
3		1/2	1/2					
4		3/4	3/4	*				
5		3/4	3/4					
6		1/2	1/2				1/2	
7		1/2			1/2			
8		3/4	3/4		1 1/4	2		
9					3/4	1 1/4		
10					1/2	3/4		
11		1/2				3/4		
12		1	1					
13		1	3/4	*			1/2	
14		1/2			1/2	3/4		
15		1/2	1/2	*	1	2		
16					1/2	1		
17		1/2	1/2		1 1/4	2		
18					1 1/4	2		
19		1/2	1/2	*	1 1/4	2		
20					1/2			
21		1	1	*				1/2
~~22~~		~~3/4~~	~~3/4~~	~~1/2~~				
23		3/4	1					

25

* BUILDING PW WATER SIZE

NOTES:
1. BUILDING PW WATER LOOP TO EACH SERVICE DROP PER LP-SERIES DRAWINGS.

PIPING POINT OF CONNECTION SCHEDULE

ROOM NAME	ROOM NO.	POC NO.		TW GPM	ICW GPM	IHW GPM	IHWR GPM	PW GPM	LG sCFH	LV sCFM	CA sCFM
FIRST LEVEL											
ENGINEERING LAB	SC134	1.01	DESIGN FLOW	3	3	3					60
			PIPE SIZE (IN)	3/4	3/4	3/4	1/2				1
ENGINEERING PREP & STORAGE	SC132	1.02	DESIGN FLOW		1.5	1.5					5
			PIPE SIZE (IN)		1/2	1/2	1/2				1/2
GEOLOGY / PHYSICAL SCIENCE LAB & LECTURE	SC122	1.03	DESIGN FLOW	23	3	3					
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2				
GEOLOGY / PHYSICAL SCIENCE PREP & STORAGE	SC120	1.04	DESIGN FLOW		1.5	1.5					
			PIPE SIZE (IN)		1/2	1/2	1/2				
GEOLOGY / EARTH SCIENCE LAB	SC118	1.05	DESIGN FLOW	23	4	4					
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2				
SECOND LEVEL											
ORGANISMAL BIOLOGY LAB	SC226	2.01	DESIGN FLOW	23	4	4		1			
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2	*			
ANATOMY LAB / CADAVER ROOM	SC217 / SC217-1	2.02	DESIGN FLOW	23	7	7					
			PIPE SIZE (IN)	1 1/4	1	1	1/2				
GENERAL & ORGANISMAL PREP & STORAGE	SC220	2.03	DESIGN FLOW	23	3	3		2	4		
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2	*	1/2		
GENERAL BIOLOGY LAB	SC218	2.04	DESIGN FLOW	23	5	5					
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2				
ANATOMY & PHYSIOLOGY PREP & STORAGE	SC215	2.05	DESIGN FLOW	23	2	1.5			4		
			PIPE SIZE (IN)	1 1/4	1/2	1/2	1/2		1/2		
MICROBIOLOGY	SC216	2.06	DESIGN FLOW	23	11	10			116	22	
			PIPE SIZE (IN)	1 1/4	1	1	1/2		1 1/4	2	
PHYSIOLOGY LAB	SC213	2.07	DESIGN FLOW	23	9	8				1	
			PIPE SIZE (IN)	1 1/4	1	1	1/2			3/4	
MOLECULAR BIOLOGY PREP & STORAGE	SC214	2.08	DESIGN FLOW	23	11	6		3	4	2	
			PIPE SIZE (IN)	1 1/4	1	3/4	1/2	*	1/2	3/4	
MOLECULAR BIOLOGY LAB	SC212	2.09	DESIGN FLOW	23	4	4		3	64	18	
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2	*	1	2	
THIRD LEVEL											
CHEMISTRY LAB	SC326	3.01	DESIGN FLOW	23	7	4		3	112	32	
			PIPE SIZE (IN)	1 1/4	1	3/4	1/2	*	1 1/4	2 1/2	
CHEMISTRY LAB	SC315	3.02	DESIGN FLOW	23	7	4		3	112	32	
			PIPE SIZE (IN)	1 1/4	1	3/4	1/2	*	1 1/4	2 1/2	
CENTRALIZED PREP & STORAGE	SC322	3.03	DESIGN FLOW	23	7	7		3	12	2	
			PIPE SIZE (IN)	1 1/4	1	1	1/2	*	1/2	3/4	
ORGANIC CHEMISTRY LAB	SC320	3.04	DESIGN FLOW	23	27	7		6	92	24	
			PIPE SIZE (IN)	1 1/4	1 1/4	1	1/2	*	1 1/4	2	
CHEMISTRY PREP & STORAGE	SC318	3.05	DESIGN FLOW	23	1.5	1.5			4	1	
			PIPE SIZE (IN)	1 1/4	1/2	1/2	1/2		1/2	3/4	
CHEMISTRY LAB	SC316	3.06	DESIGN FLOW	23	7	4		3	112	32	
			PIPE SIZE (IN)	1 1/4	1	3/4	1/2	*	1 1/4	2 1/2	
CHEMISTRY PREP & STORAGE	SC313	3.07	DESIGN FLOW	23	3	3		1	8	2	
			PIPE SIZE (IN)	1 1/4	3/4	3/4	1/2	*	1/2	3/4	
CHEMISTRY LAB	SC309	3.08	DESIGN FLOW	23	7	4		3	112	32	
			PIPE SIZE (IN)	1 1/4	1	3/4	1/2	*	1 1/4	2 1/2	
PHYSICS PREP & STORAGE	SC314	3.09	DESIGN FLOW		1.5	1.5					
			PIPE SIZE (IN)		1/2	1/2	1/2				
PHYSICS LAB	SC312	3.10	DESIGN FLOW		1.5	1.5					35
			PIPE SIZE (IN)		1/2	1/2	1/2				1/2

NOTES:
1. FLOW RATES REPRESENT DESIGN PEAK LABORATORY LOADS USED FOR PIPE SIZING AT POC.
2. TW- TEPID WATER FOR SAFETY SHOWER/EYEWASH SIZED FOR INSTANTANEOUS/INCIDENTAL USE.
3. * PROVIDE MINIMUM 3 fps CIRCULATION VELOCITY IN LABORATORY PW LOOP. SYSTEM STATIC PRESSURE SHOULD NOT EXCEED 60 psig. VALVED SERVICE CONNECTION PER LP SCHEDULES AND DETAILS.
4. COMPRESSED AIR DISTRIBUTED AT 100 psig TO LABORATORY POC. PROVIDE PRESSURE REGULATORS AS SHOWN ON PLANS FOR LOWER PRESSURE SERVICES.
5. IHWR CIRCULATED INSIDE LABORATORY AS SHOWN ON PLANS. DESIGN FLOW PER P-SERIES DRAWINGS.

ESTIMATED PW WATER CONSUMPTION AND PEAK LOAD		
	GAL	GPM
PW WATER HOURLY CONSUMPTION	60	
PW WATER 4-HOUR CONSUMPTION	240	
PW WATER PEAK FLOW RATE		10

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LICENSED ARCHITECT KEVIN DONAGHEY No. C34798 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER A. BROOKS STOUT M35475 EXP. 6/30/19 MECHANICAL STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY — A. BROOKS STOUT
DATE: SEPTEMBER 30, 2019 — JUNE 30, 2019
REGISTRATION NUMBER: C34798 — M35475

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04- 115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
25	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET

DRAWN BY: RI — REVIEW BY: PL

HGA NO: 3584-001-00

LABORATORY PLUMBING SCHEDULES

DATE: JULY 06, 2017

LP1.01

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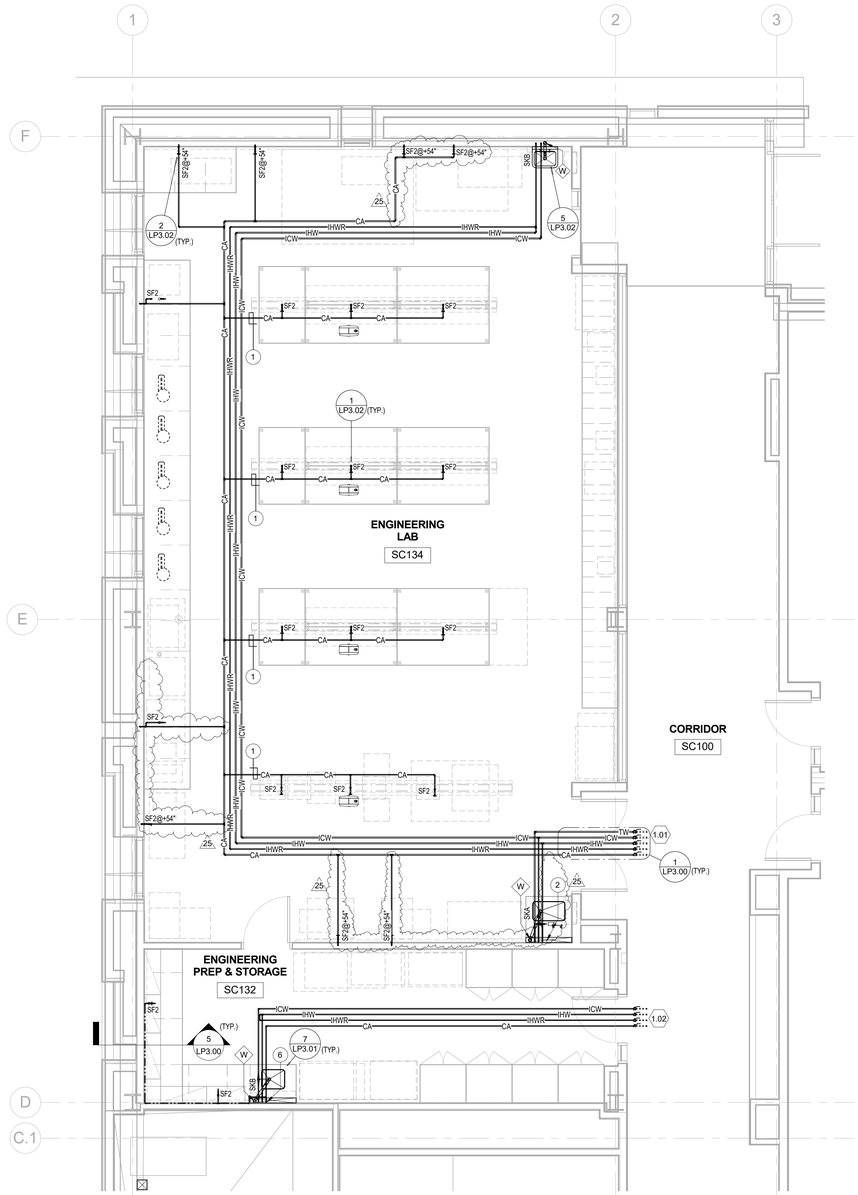

1 FIRST LEVEL PARTIAL PLAN
1/4" = 1'-0"

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LICENSED ARCHITECT KEVIN DONAGHEY No. C34799 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER A. BROOKS STOUT M35475 Exp. 6/30/19 MECHANICAL STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY — A. BROOKS STOUT
DATE: SEPTEMBER 30, 2019 — JUNE 30, 2019
REGISTRATION NUMBER: C34799 — M35475

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04- 115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
25	CCD-A-025	08/29/18

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DRAWN BY: RI — REVIEW BY: PL

HGA NO: 3584-001-00

LABORATORY PLUMBING FIRST LEVEL PATIAL PLAN

DATE: JULY 06, 2017

0' 2' 4' 8'

LP2.01A

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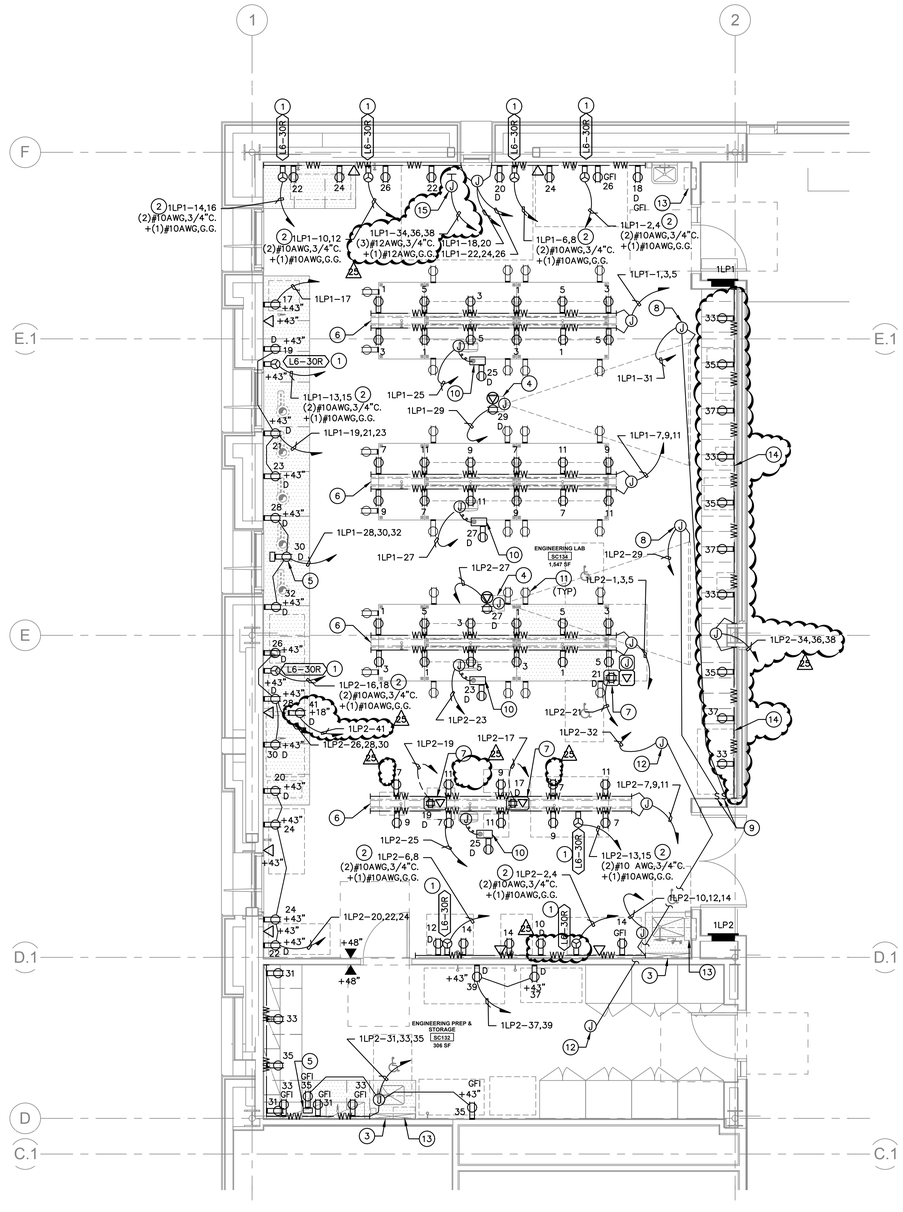
RI 8/29/2018 9:20:59 AM N:\2014\1-2014\04\REVITL\PLP-SAC-2016.rvt



KEY NOTES:

1. MOUNT RECEPTACLE IN WIREWAY.
2. ROUTE HOMERUN THROUGH WIREWAY.
3. PIPEDROP, UTILIZE FOR CONCEALMENT OF CONDUIT. SEE DETAIL 6/LE4.01 AND 1/LE4.02.
4. CEILING MOUNT PROJECTOR. PROVIDE RECEPTACLE. VERIFY LOCATION AND MOUNTING WTH AV SERIES DRAWINGS AND SPECIFICATIONS.
5. ELECTRICAL PEDESTAL, SEE DETAIL 2/LE4.02.
6. OVERHEAD SERVICE CARRIER. SEE DETAIL 1/LE4.01.
7. PROVIDE AND INSTALL RECESSED FLOORBOX SUITABLE FOR SLAB ON GRADE INSTALLATION. WIREMOLD RFB4 SERIES.
8. J-BOX FOR MOTORIZED PROJECTION SCREEN. PROVIDE CONNECTION, VERIFY REQUIREMENTS.
9. PROVIDE AND INSTALL UP-DOWN SWITCH FOR PROJECTION SCREEN. COORDINATE WITH MANUFACTURER AND PROVIDE CONNECTION. PROVIDE AND INSTALL POWER CORD REEL.
10. COXREELS EZ-PC13-2512-F OR EQUAL WITH DUPLEX G.F.C.I. METAL INDUSTRIAL RECEPTACLE AND 25 CORD FEET, UNLESS OTHERWISE SPECIFIED IN LABORATORY FURNISHINGS DESIGN. COORDINATE LOCATION WITH LABORATORY FURNISHING DRAWINGS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
11. PROVIDE AND INSTALL J-BOX AND RECEPTACLE TO MOVEABLE TABLE. PROVIDE AND INSTALL S.O. CORD (10'MIN.) AND PLUG (5-20P). SEE DETAIL 3/LE4.02.
12. PROVIDE J-BOX AND 120V CIRCUIT FOR PAPER TOWEL DISPENSERS. REQUIRED 6V DC POWER SUPPLY BY OTHERS. CONTRACTOR SHALL PROVIDE CONDUIT FROM J-BOX TO PAPER TOWEL DISPENSER LOCATIONS. SEE KEYNOTE 13 FOR PAPER TOWEL DISPENSER LOCATIONS.
13. LOCATION OF PAPER TOWEL DISPENSER. SEE KEYNOTE 12 FOR ADDITIONAL INFORMATION.
14. RACEWAY AT THIS LOCATION MOUNTED ON WALL ABOVE BENCH AT +38"A.F.F. TO BOTTOM OF RACEWAY.
15. PROVIDE J-BOX AND CIRCUITS FOR COMPACT MILL PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH MANUFACTURER AND PROVIDE CONNECTION.

GENERAL NOTES:

1. COORDINATE ALL DEVICE MOUNTING HEIGHTS AND LOCATIONS WITH LABORATORY FURNISHING DESIGN PRIOR TO ROUGH-IN.
2. AT ISLAND BENCHES WITHOUT PIPEDROP STUB ELECTRICAL FROM BELOW FLOOR UP INTO PIPE CHASE. SEE LABORATORY FURNISHINGS DETAIL FOR LOCATION AND DIMENSIONS OF PIPE CHASE.
3. ALL OUTLETS WITHIN 6'-0" OF SINK TO BE GFI.
4. PROVIDE (1) 1-1/4" C.O. STUBBED FROM EACH WALL, FLOOR, OR WIREWAY MOUNTED TELE/DATA OUTLET TO ACCESSIBLE CEILING.
5. PROVIDE A MINIMUM OF (1) 1-1/4" C.O. STUBBED FROM EACH TELE/DATA SECTION OF DUAL CHANNEL WIREWAY TO ACCESSIBLE CEILING. THIS IS REQUIRED FOR ALL DUAL CHANNEL WIREWAY LOCATIONS, EVEN WHERE NO DATA IS SHOWN.
6. COORDINATE ALL FLOOR BOX LOCATIONS WITH LABORATORY FURNISHING DRAWINGS PRIOR TO ROUGH-IN.
7. FOR WIREWAY DETAILS SEE 1 THRU 5/LE4.01.
8. PROVIDE (1) 1" C.O. STUBBED FROM EACH PEDESTAL TELE/DATA OUTLET TO ACCESSIBLE CEILING.
9. PROVIDE INDEPENDENT HOT AND NEUTRAL CONDUCTORS FOR EACH RECEPTACLE CIRCUIT IN A HOMERUN.
10. PROVIDE A MINIMUM OF (1)1-1/4"C.O. STUBBED FROM THE TEL/DATA SECTION OF EACH FLOOR BOX TO ACCESSIBLE CEILING.

1 PARTIAL POWER PLAN LEVEL 1
1/4" = 1'-0"

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NAME: KEVIN DONAGHEY — GUY J. CARPINO
DATE: SEPTEMBER 30, 2019 — JUNE 30, 2019
REGISTRATION NUMBER: C34799 — E 15951

APPROVED
DIVISION OF THE STATE ARCHITECT

ACS MP FLS JA SSR CNg

A# 04- 115788 DATE: 09.11.18

△NO	DESCRIPTION	DATE
2	Addendum 2	09/01/17
3	RFI #148	07/02/18
4	RFI #170	07/02/18
25	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET

DRAWN BY: Author — REVIEW BY: Approver

HGA NO: 3584-001-00

PARTIAL POWER PLAN LEVEL 1

DATE: JULY 06, 2017

MICHAEL WALL ENGINEERING
858-638-0600
858-638-0640 (fax)
www.mwalleng.com
4115 Sorrento Valley Blvd.
San Diego, CA 92121
REGISTERED ELECTRICAL ENGINEERS

LE2.01A

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W:\PROJ16\16026\DWG\LE2.01A - PARTIAL POWER PLAN LEVEL 1.DWG Wednesday, August 29, 2018 8:12:46 AM - ABaker

W:\PROJ16\16026\DWG\LE3.01 - PANEL SCHEDULES.DWG Wednesday, August 29, 2018 8:12:46 AM - ABaker

MOUNTING: RECESSED — PANEL 2LP8 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
214 WW RCPT.	720						1	20	1	A - -	2	20	1				180			214 RCPT.
214 WW RCPT.		540					1	20	3	- B -	4	20	1					1000		214 EQUIP.
214 PURIF.			1000				1	20	5	- - C	6	20	1							SPARE
214 CFH	1000						1	20	7	A - -	8	20	1				180			214 RCPT.
214 EQUIP.		1000					1	20	9	- B -	10	20	1					180		214 RCPT.
214 U.C. GLSWSH			1800				2	30	11	- - C	12	20	1						1040	214 ATCLV CNTRL
-----	1800						-	-	13	A - -	14	20	1				60			214 CNPY HD LTG
214 U.C. GLSWSH		1000					1	20	15	- B -	16	20	1							SPARE
214 EQUIP.			1000				1	20	17	- - C	18	20	1							SPARE
SPARE							1	20	19	A - -	20	20	1							SPARE
SPARE							1	20	21	- B -	22	20	1							SPARE
SPARE							1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	3520	2540	3800														420	1180	1040	

NOTES: PHASE SUBTOTALS:
A - 3940 VA SUBTOTAL= 12500 VA
B - 3720 VA X 0.25LCL= 3125 VA
C - 4840 VA TOTAL= 15625 VA
43 AMPS

MOUNTING: RECESSED — PANEL 2LP4 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
217 PEDESTALS	720						1	20	1	A - -	2	20	1				720			217 FLOORBOX
217 PEDESTALS		720					1	20	3	- B -	4	20	1					1000		217 PROJECTOR
217 PEDESTALS			720				1	20	5	- - C	6	20	1						1000	217 PROJECTOR
217 PEDESTALS	720						1	20	7	A - -	8	20	1				360			217 RCPT.
217 PEDESTALS		720					1	20	9	- B -	10	20	1					360		217 RCPT.
217 PEDESTALS			720				1	20	11	- - C	12	20	1						360	217 RCPT.
217 PEDESTALS	720						1	20	13	A - -	14	20	1				1000			217 EXAM LIGHT
217 PEDESTALS		720					1	20	15	- B -	16	20	1					180		217 RCPT.
217 PEDESTALS			720				1	20	17	- - C	18	20	1						400	217 CAMERA
217 PEDESTALS	720						1	20	19	A - -	20	20	1				250			PT DISP.
217 PEDESTALS		720					1	20	21	- B -	22	20	1							SPARE
217 PEDESTALS			720				1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	2880	2880	2880														2330	1540	1760	

NOTES: PHASE SUBTOTALS:
A - 5210 VA SUBTOTAL= 14270 VA
B - 4420 VA X 0.25LCL= 3568 VA
C - 4640 VA TOTAL= 17838 VA
50 AMPS

MOUNTING: RECESSED — PANEL 1LP4 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
120 WW RCPT.	720				4		1	20	1	A - -	2	20	1				720			118 FLOORBOX
120 WW RCPT.		720			4		1	20	3	- B -	4	20	1					720		118 FLOORBOX
120 WW RCPT.			720		4		1	20	5	- - C	6	20	1						720	118 FLOORBOX
120 WW RCPT.	720				4		1	20	7	A - -	8	20	1				720			118 FLOORBOX
120 WW RCPT.		360			2		1	20	9	- B -	10	20	1					720		118 FLOORBOX
120 WW RCPT.			360		2		1	20	11	- - C	12	20	1						720	118 FLOORBOX
120 WW RCPT.	540				3		1	20	13	A - -	14	20	1				720			118 FLOORBOX
120 WW RCPT.		540			3		1	20	15	- B -	16	20	1					360		118 WW RCPT.
118 WW / PED.			360		2		1	20	17	- - C	18	20	1						180	118 WW RCPT.
118 WW RCPT.	180				1		1	20	19	A - -	20	20	1				360			118 RCPT.
118 RCPT.		540			3		1	20	21	- B -	22	20	1					1000		118 PROJECTOR
118 RCPT.			360		2		1	20	23	- - C	24	20	1						300	PT DISP.
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	2160	2160	1800														2520	2800	1920	

NOTES: PHASE SUBTOTALS:
A - 4680 VA SUBTOTAL= 13360 VA
B - 4960 VA X 0.25LCL= 3340 VA
C - 3720 VA TOTAL= 16700 VA
46 AMPS

MOUNTING: RECESSED — PANEL 1LP1 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
134 OHSC RCPT	720				4		1	20	1	A - -	2	30	2				1800			134 EQUIP.
134 OHSC RCPT		720			4		1	20	3	- B -	4	-	-					1800		-----
134 OHSC RCPT			720		4		1	20	5	- - C	6	30	2						1800	134 EQUIP.
134 OHSC RCPT	720				4		1	20	7	A - -	8	-	-				1800			-----
134 OHSC RCPT		720			4		1	20	9	- B -	10	30	2					1800		134 EQUIP.
134 OHSC RCPT			720		4		1	20	11	- - C	12	-	-						1800	-----
134 EQUIP.	1800						2	30	13	A - -	14	30	2				1800			134 EQUIP.
-----		1800					-	-	15	- B -	16	-	-					1800		-----
134 RCPT.			180				1	20	17	- - C	18	20	1						1000	134 EQUIP.
134 EQUIP.	1000						1	20	19	A - -	20	20	1				1000			134 EQUIP.
134 EQUIP.		1000					1	20	21	- B -	22	20	1					1000		134 WW RCPT.
134 EQUIP.			1000				1	20	23	- - C	24	20	1						1000	134 WW RCPT.
134 CORD REEL	1000						1	20	25	A - -	26	20	1				1000			134 WW RCPT.
134 CORD REEL		1000					1	20	27	- B -	28	20	1					1000		134 EQUIP.
134 PROJECTOR			1000				1	20	29	- - C	30	20	1						1000	134 EQUIP.
134 PROJ. SCREEN	500						1	20	31	A - -	32	20	1				1000			134 EQUIP.
134 COMP. MILL		1440					3	20	33	- B -	34	20	1							SPARE
-----			1440				-	-	35	- - C	36	20	1							SPARE
-----	1440						-	-	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	7180	6680	5060														8400	7400	6600	

NOTES: PHASE SUBTOTALS:
A - 15580 VA SUBTOTAL= 41320 VA
B - 14080 VA X 0.25LCL= 10330 VA
C - 11660 VA TOTAL= 51650 VA
143 AMPS

25

MOUNTING: RECESSED — PANEL 2LP9 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
212 BENCH RCPT.	720						1	20	1	A - -	2	20	1				720			212 FLOORBOX
212 BENCH RCPT.		720					1	20	3	- B -	4	20	1					1000		212 PROJECTOR
212 BENCH RCPT.			720				1	20	5	- - C	6	20	1						1000	212 PROJECTOR
212 BENCH RCPT.	720						1	20	7	A - -	8	20	1				360			212 PEDESTAL
212 BENCH RCPT.		720					1	20	9	- B -	10	20	1					360		212 RCPT.
212 BENCH RCPT.			720				1	20	11	- - C	12	20	1						540	212 RCPT.
212 BENCH RCPT.	720						1	20	13	A - -	14	20	1				720			212 RCPT.
212 BENCH RCPT.		720					1	20	15	- B -	16	20	1					540		212 RCPT.
212 BENCH RCPT.			720				1	20	17	- - C	18	20	1						1000	212 CFH
212 BENCH RCPT.	720						1	20	19	A - -	20	20	1				1000			212 EQUIP.
212 BENCH RCPT.		720					1	20	21	- B -	22	20	1					1000		212 EQUIP.
212 BENCH RCPT.			720				1	20	23	- - C	24	20	1						1000	212 EQUIP.
PT DISP.	250						1	20	25	A - -	26	20	1				1000			212 REFRIG.
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	3130	2880	2880														3800	2900	3540	

NOTES: PHASE SUBTOTALS:
A - 6930 VA SUBTOTAL= 19130 VA
B - 5780 VA X 0.25LCL= 4783 VA
C - 6420 VA TOTAL= 23913 VA
66 AMPS

MOUNTING: RECESSED — PANEL 2LP5 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
217-1 EXAM LIGHT	1000						1	20	1	A - -	2	20	1				1000			215 CFH
217-1 EXAM LIGHT		1000					1	20	3	- B -	4	20	1					1000		215 EQUIP.
217-1 EQUIP.			1000				1	20	5	- - C	6	20	1							SPARE
217-1 RCPT.	540						1	20	7	A - -	8	20	1				180			215 RCPT.
217-1 RCPT.		540					1	20	9	- B -	10	20	1							SPARE
SPARE							1	20	11	- - C	12	20	1							SPARE
SPARE							1	20	13	A - -	14	20	1							SPARE
SPARE							1	20	15	- B -	16	20	1							SPARE
SPARE							1	20	17	- - C	18	20	1							SPARE
SPARE							1	20	19	A - -	20	20	1							SPARE
SPARE							1	20	21	- B -	22	20	1							SPARE
SPARE							1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	1540	1540	1000														1180	1000	0	

NOTES: PHASE SUBTOTALS:
A - 2720 VA SUBTOTAL= 6260 VA
B - 2540 VA X 0.25LCL= 1565 VA
C - 1000 VA TOTAL= 7825 VA
22 AMPS

MOUNTING: RECESSED — PANEL 2LP1 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
226 BENCH RCPT.	900						1	20	1	A - -	2	20	1				1000			226 FLOORBOX
226 BENCH RCPT.		720					1	20	3	- B -	4	20	1					1000		226 PROJECTOR
226 BENCH RCPT.			720				1	20	5	- - C	6	20	1						1000	226 PROJECTOR
226 BENCH RCPT.	900						1	20	7	A - -	8	20	1				360			226 RCPT.
226 BENCH RCPT.		720					1	20	9	- B -	10	20	1					540		226 RCPT.
226 BENCH RCPT.			720				1	20	11	- - C	12	20	1						540	226 RCPT.
226 BENCH RCPT.	900						1	20	13	A - -	14	20	1				360			226 RCPT.
226 BENCH RCPT.		720					1	20	15	- B -	16	20	1					1000		226 EQUIP.
226 BENCH RCPT.			720				1	20	17	- - C	18	20	1						1000	226 EQUIP.
226 BENCH RCPT.	900						1	20	19	A - -	20	20	1				540			226 WW RCPT.
226 BENCH RCPT.		720					1	20	21	- B -	22	20	1					360		226 WW RCPT.
226 BENCH RCPT.			720				1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	3600	2880	2880														2260	2900	2540	

NOTES: PHASE SUBTOTALS:
A - 5860 VA SUBTOTAL= 17060 VA
B - 5780 VA X 0.25LCL= 4265 VA
C - 5420 VA TOTAL= 21325 VA
59 AMPS

MOUNTING: RECESSED — PANEL 1LP2 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
134 OHSC RCPT	720				4		1	20	1	A - -	2	30	2				1800			134 EQUIP.
134 OHSC RCPT		720			4		1	20	3	- B -	4	-	-					1800		-----
134 OHSC RCPT			720		4		1	20	5	- - C	6	30	2						1800	134 EQUIP.
134 OHSC RCPT	720				4		1	20	7	A - -	8	-	-				1800			-----
134 OHSC RCPT		720			4		1	20	9	- B -	10	20	1					1000		134 EQUIP.
134 OHSC RCPT			720		4		1	20	11	- - C	12	20	1						1000	134 EQUIP.
134 EQUIP.	1800						2	30	13	A - -	14	20	1				540			134 RCPT.
-----		1800					-	-	15	- B -	16	30	2					1800		134 EQUIP.
134 FLOORBOX			720				1	20	17	- - C	18	-	-						1800	-----
134 FLOORBOX	720						1	20	19	A - -	20	20	1				1000			134 EQUIP.
134 FLOORBOX		720					1	20	21	- B -	22	20	1					1000		134 EQUIP.
134 CORD REEL			1000				1	20	23	- - C	24	20	1						360	134 RCPT.
134 CORD REEL	1000						1	20	25	A - -	26	20	1				1000			134 EQUIP.
134 PROJECTOR		1000			1		1	20	27	- B -	28	20	1					1000		134 EQUIP.
134 PROJ. SCREEN			500				1	20	29	- - C	30	20	1						1000	134 EQUIP.
132 WW RCPT.	540				3		1	20	31	A - -	32	20	1				150			PT DISP.
132 WW RCPT.		540			3		1	20	33	- B -	34	20	1					720		134 WW RCPT.
132 WW RCPT.			540		3		1	20	35	- - C	36	20	1						540	134 WW RCPT.
132 WW DED. REC	1000						1	20	37	A - -	38	20	1				540			134 WW RCPT.
132 WW DED. REC		1000					1	20	39	- B -	40	20	1							SPARE
132 RCPT.			500				1	20	41	- - C	42	20	1							SPARE
	6500	6500	4700														6830	7320	6500	

NOTES: PHASE SUBTOTALS:
A - 13330 VA SUBTOTAL= 38350 VA
B - 13820 VA X 0.25LCL= 9588 VA
C - 11200 VA TOTAL= 47938 VA
133 AMPS

25 25 3

MOUNTING: RECESSED — PANEL 2LP6 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
213 BENCH RCPT.	720						1	20	1	A - -	2	20	1				720			213 FLOORBOX
213 BENCH RCPT.		720					1	20	3	- B -	4	20	1					1000		213 PROJECTOR
213 BENCH RCPT.			540				1	20	5	- - C	6	20	1						1000	213 PROJECTOR
213 BENCH RCPT.	720						1	20	7	A - -	8	20	1				360			213 RCPT.
213 BENCH RCPT.		720					1	20	9	- B -	10	20	1					540		213 RCPT.
213 BENCH RCPT.			540				1	20	11	- - C	12	20	1						540	213 RCPT.
213 BENCH RCPT.	720						1	20	13	A - -	14	20	1				360			213 RCPT.
213 BENCH RCPT.		720					1	20	15	- B -	16	20	1					1000		213 CFH
213 BENCH RCPT.			540				1	20	17	- - C	18	20	1						540	213 RCPT.
213 BENCH RCPT.	720						1	20	19	A - -	20	20	1				540			213 RCPT.
213 BENCH RCPT.		720					1	20	21	- B -	22	20	1					360		213 RCPT.
213 BENCH RCPT.			540				1	20	23	- - C	24	20	1						1000	213 EQUIP.
PT DISP.	150						1	20	25	A - -	26	20	1				1000			213 EQUIP.
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	3030	2880	2160														2980	2900	3080	

NOTES: PHASE SUBTOTALS:
A - 6010 VA SUBTOTAL= 17030 VA
B - 5780 VA X 0.25LCL= 4258 VA
C - 5240 VA TOTAL= 21288 VA
59 AMPS

MOUNTING: RECESSED — PANEL 2LP2 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
220 OHSC RCPT.	720						1	20	1	A - -	2	20	1				1000			220 CFH
220 OHSC RCPT.		720					1	20	3	- B -	4	20	1					360		220 RCPT.
220 EQUIP.			1000				1	20	5	- - C	6	20	1						360	220 RCPT.
220 EQUIP.	1000						1	20	7	A - -	8	20	1				250			PT DISP.
220 EQUIP.		1000					1	20	9	- B -	10	20	1							SPARE
220 EQUIP.			1000				1	20	11	- - C	12	20	1							SPARE
SPARE							1	20	13	A - -	14	20	1							SPARE
SPARE							1	20	15	- B -	16	20	1							SPARE
SPARE							1	20	17	- - C	18	20	1							SPARE
SPARE							1	20	19	A - -	20	20	1							SPARE
SPARE							1	20	21	- B -	22	20	1							SPARE
SPARE							1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	1720	1720	2000														1250	360	360	

NOTES: PHASE SUBTOTALS:
A - 2970 VA SUBTOTAL= 7410 VA
B - 2080 VA X 0.25LCL= 1853 VA
C - 2360 VA TOTAL= 9263 VA
26 AMPS

MOUNTING: RECESSED — PANEL 1LP3 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
122 FLOORBOX	720						1	20	1	A - -	2	20	1				360			122 WW RCPT.
122 FLOORBOX		720					1	20	3	- B -	4	20	1					180		122 WW RCPT.
122 FLOORBOX			720				1	20	5	- - C	6	20	1						540	122 RCPT.
122 FLOORBOX	720						1	20	7	A - -	8	20	1				360			122 RCPT.
122 FLOORBOX		720					1	20	9	- B -	10	20	1					180		122 WW RCPT.
122 FLOORBOX			720				1	20	11	- - C	12	20	1						180	122 PEDESTAL
122 FLOORBOX	720						1	20	13	A - -	14	20	1				1000			122 PROJECTOR
122 FLOORBOX		720					1	20	15	- B -	16	20	1					1000		122 PROJECTOR
122 FLOORBOX			720				1	20	17	- - C	18	20	1						360	122 RCPT.
SPARE							1	20	19	A - -	20	20	1				1000			122 DED. REC.
SPARE							1	20	21	- B -	22	20	1					1000		122 DED. REC.
SPARE							1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	2160	2160	2160														2720	2360	1080	

NOTES: PHASE SUBTOTALS:
A - 4880 VA SUBTOTAL= 12640 VA
B - 4520 VA X 0.25LCL= 3160 VA
C - 3240 VA TOTAL= 15800 VA
44 AMPS

MOUNTING: RECESSED — PANEL 3LP1 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
326 BENCH RCPT.	720						1	20	1	A - -	2	20	1				1000			326 FLOORBOX
326 BENCH RCPT.		720					1	20	3	- B -	4	20	1					1000		326 PROJECTOR
326 BENCH RCPT.			360				1	20	5	- - C	6	20	1						1000	326 PROJECTOR
326 BENCH RCPT.	720						1	20	7	A - -	8	20	1				360			326 RCPT.
326 BENCH RCPT.		720					1	20	9	- B -	10	20	1					720		326 RCPT.
326 BENCH RCPT.			720				1	20	11	- - C	12	20	1						720	326 RCPT.
326 BENCH RCPT.	720						1	20	13	A - -	14	20	1				720			326 RCPT.
326 BENCH RCPT.		720					1	20	15	- B -	16	20	1					1000		326 CFH
326 BENCH RCPT.			360				1	20	17	- - C	18	20	1						1000	326 CFH
326 BENCH RCPT.	720						1	20	19	A - -	20	20	1				1000			326 CFH
326 BENCH RCPT.		720					1	20	21	- B -	22	20	1					1000		326 CFH
326 BENCH RCPT.			360				1	20	23	- - C	24	20	1							SPARE
SPARE							1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	2880	2880	1800														3080	3720	2720	

NOTES: PHASE SUBTOTALS:
A - 5960 VA SUBTOTAL= 17080 VA
B - 6600 VA X 0.25LCL= 4270 VA
C - 4520 VA TOTAL= 21350 VA
59 AMPS

MOUNTING: RECESSED — PANEL 2LP7 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
216 PEDESTALS	540						1	20	1	A - -	2	20	1				720			216 FLOORBOX
216 PEDESTALS		540					1	20	3	- B -	4	20	1					1000		216 PROJECTOR
216 PEDESTALS			720				1	20	5	- - C	6	20	1						1000	216 PROJECTOR
216 PEDESTALS	720						1	20	7	A - -	8	20	1				1000			216 PEDESTAL
216 PEDESTALS		720					1	20	9	- B -	10	20	1					360		216 RCPT.
216 PEDESTALS			720				1	20	11	- - C	12	20	1						1000	216 EQUIP.
216 PEDESTALS	720						1	20	13	A - -	14	20	1				1000			216 EQUIP.
216 PEDESTALS		720					1	20	15	- B -	16	20	1					1000		216 EQUIP.
216 PEDESTALS			720				1	20	17	- - C	18	20	1						1000	216 EQUIP.
216 PEDESTALS	720						1	20	19	A - -	20	20	1				1000			216 EQUIP.
216 PEDESTALS		720					1	20	21	- B -	22	20	1					540		216 RCPT.
216 PEDESTALS			720				1	20	23	- - C	24	20	1						540	216 RCPT.
216 PEDESTALS	540						1	20	25	A - -	26	20	1				540			216 RCPT.
216 PEDESTALS		540					1	20	27	- B -	28	20	1					1000		216 EQUIP.
SPARE							1	20	29	- - C	30	20	1						1000	216 EQUIP.
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1					1000		216 CFH
SPARE							1	20	35	- - C	36	20	1						200	PT DISP.
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	3240	3240	2880														4260	4900	4740	

NOTES: PHASE SUBTOTALS:
A - 7500 VA SUBTOTAL= 23260 VA
B - 8140 VA X 0.25LCL= 5815 VA
C - 7620 VA TOTAL= 29075 VA
81 AMPS

MOUNTING: RECESSED — PANEL 2LP3 — VOLTAGE: 208Y/120V 3PH 4W
NEMA: 1 — BUS: 225A — MAIN: 150A
STATUS: NEW — FEEDER: 225A

Description	A	B	C	L	R	M	P	A				A	P	M	R	L	A	B	C	Description
218 BENCH RCPT.	720						1	20	1	A - -	2	20	1				720			218 FLOORBOX
218 BENCH RCPT.		540					1	20	3	- B -	4	20	1					1000		218 PROJECTOR
218 BENCH RCPT.			540				1	20	5	- - C	6	20	1						1000	218 PROJECTOR
218 BENCH RCPT.	720						1	20	7	A - -	8	20	1				360			218 RCPT.
218 BENCH RCPT.		540					1	20	9	- B -	10	20	1					180		218 RCPT.
218 BENCH RCPT.			540				1	20	11	- - C	12	20	1						180	218 WW RCPT.
218 BENCH RCPT.	720						1	20	13	A - -	14	20	1				540			218 RCPT.
218 BENCH RCPT.		540					1	20	15	- B -	16	20	1					540		218 RCPT.
218 BENCH RCPT.			540				1	20	17	- - C	18	20	1						360	218 RCPT.
218 BENCH RCPT.	720						1	20	19	A - -	20	20	1				1000			218 EQUIP.
218 BENCH RCPT.		540					1	20	21	- B -	22	20	1					1000		218 EQUIP.
218 BENCH RCPT.			540				1	20	23	- - C	24	20	1							SPARE
PT DISP.	200						1	20	25	A - -	26	20	1							SPARE
SPARE							1	20	27	- B -	28	20	1							SPARE
SPARE							1	20	29	- - C	30	20	1							SPARE
SPARE							1	20	31	A - -	32	20	1							SPARE
SPARE							1	20	33	- B -	34	20	1							SPARE
SPARE							1	20	35	- - C	36	20	1							SPARE
SPARE							1	20	37	A - -	38	20	1							SPARE
SPARE							1	20	39	- B -	40	20	1							SPARE
SPARE							1	20	41	- - C	42	20	1							SPARE
	3080	2160	2160														2620	2720	1540	

NOTES: PHASE SUBTOTALS:
A - 5700 VA SUBTOTAL= 14280 VA
B - 4880 VA X 0.25LCL= 3570 VA
C - 3700 VA TOTAL= 17850 VA
50 AMPS

- PANEL SCHEDULES SHOWN ON THIS SHEET ARE TO BE USED FOR PANELBOARD MAIN CIRCUIT BREAKER RATING AND BRANCH CIRCUIT BREAKER RATING AND POSITION WITHIN THE PANELBOARD.
- PANELBOARDS SHALL BE PROVIDED AS SPECIFIED IN THE PROJECT SPECIFICATION SECTION 262416 'PANELBOARDS'.

3

2LP8	2LP4	1LP4	1LP1
2LP9	2LP5	2LP1	1LP2
	2LP6	2LP2	1LP3
3LP1	2LP7	2LP3	

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MECHANICAL & PLUMBING ENGINEER
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14130 RIVERSIDE DR. # 201
SHERMAN OAKS, CA 91423
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ELECTRICAL ENGINEER
FBA ENGINEERING
150 PAULARINO AVE. #A120
COSTA MESA, CA 92626
949-852-9995

CIVIL ENGINEER
KPFF CONSULTING ENGINEERS
700 SOUTH FLOWER ST. #2100
LOS ANGELES, CA 90017
213-418-0201

LANDSCAPE ARCHITECT
LYNN CAPOUYA, INC.
17992 MITCHELL SOUTH, #110
IRVINE, CA 92614
949-756-0150

LABORATORY CONSULTANT
RESEARCH FACILITIES DESIGN
3965 FIFTH AVE. #400
SAN DIEGO, CA 92103
619-297-0159

SCIENCE CENTER
SANTA ANA COLLEGE
RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT
1530 W. 17TH ST.
SANTA ANA, CA 92706

SANTA ANA COLLEGE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE

LICENSED ARCHITECT KEVIN DONAGHEY C34799 SEPTEMBER 30, 2019 RENEWAL DATE STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER GUY J. CARPINO E 15951 Exp. 6-30-19 ELECTRICAL STATE OF CALIFORNIA

NAME: KEVIN DONAGHEY — GUY J. CARPINO
DATE: SEPTEMBER 30, 2019 — JUNE 30, 2019
REGISTRATION NUMBER: C34799 — E 15951

APPROVED
DIVISION OF THE STATE ARCHITECT
ACS MP FLS JA SSR CNg
A# 04-115788 DATE: 09.11.18

NO	DESCRIPTION	DATE
2	Addendum 2	09/01/17
3	RFI #148	07/02/18
4	RFI #170	07/02/18
25	CCD-A-025	08/29/18

ISSUANCE HISTORY - THIS SHEET
DRAWN BY: Author — REVIEW BY: Approver
HGA NO: 3584-001-00

PANEL SCHEDULES

MICHAEL WALL ENGINEERING
858-638-0600
858-638-0640 (fax)
www.mwalleng.com
4115 Sorrento Valley Blvd.
San Diego, CA 92121
REGISTERED ELECTRICAL ENGINEERS

DATE: JULY 06, 2017

LE3.01

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3/13/2020: Reference Drawing for Bid #1384 Purchase of Engineering Equipment for New Science Center at SAC

ATTACHMENT C

NEW EQUIPMENT

E2

Bid Item #1
Compact
Mill

E5

Bid Item #3
Manual
Vision
System

E10

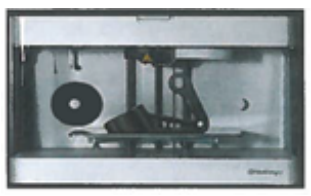
Bid Item #4
Robot
Training
Package

E18

Bid Item #2
Lathe
w/Turret
Automation
Package

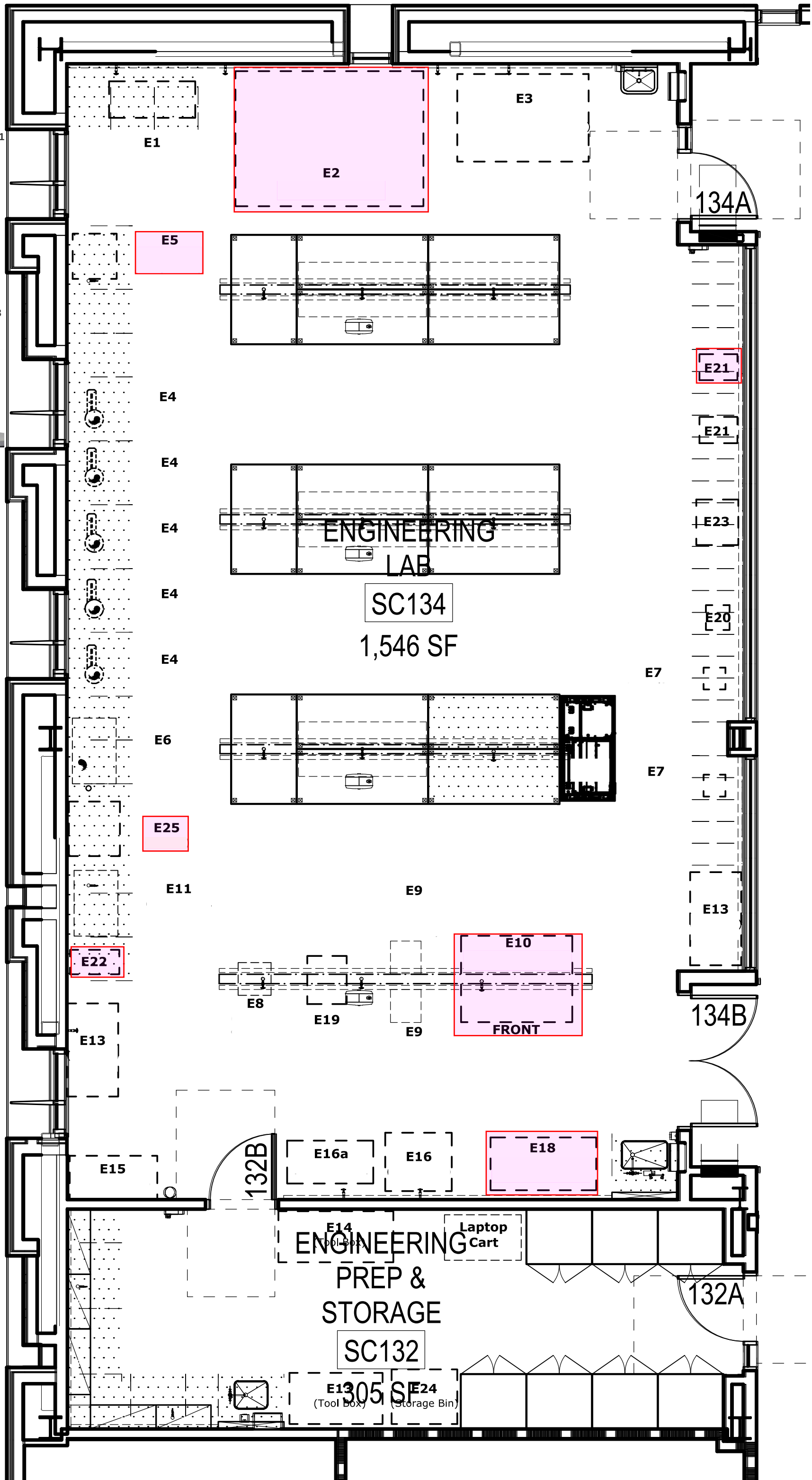
E21

Bid Item #7
Mark Two
3D Printer



E22

Bid Item #6
Ultimaker
3 Extended
3D Printer

E25

Bid Item #5
Tensile
Tester