

ABBREVIATIONS			SYMBOLS LEGEND		
A	- ACCESSIBLE	MECH	- MECHANICAL		
AB	- ANCHOR BOLT	MED	- MEDIUM		
AC	- ASPHALT CONCRETE	MFG	- MANUFACTURING		
ACC	- AIR CONDITIONING	MFR	- MANUFACTURER		
ACCU	- ACOUSTICAL	MIN	- MINIMUM		
ADD	- ADDENDUM	MIR	- MIRROR		
ADJ	- ADJUSTABLE or ADJACENT	MISC	- MISCELLANEOUS		
AGG	- AGGREGATE	MOD	- MODULAR		
ALT	- ALTERNATE	MNT	- MOUNT (ED), (ING)		
ALUM	- ALUMINUM	MTL	- METAL		
APP	- APPROVED	MUL	- MULLION		
APPRX	- APPROXIMATE				
ARCH	- ARCHITECT (URAL)	(N)	- NEW		
		NIC	- NOT IN CONTRACT		
BD	- BOARD	NO	- NUMBER		
BEL	- BELOW	NOM	- NOMINAL		
BLDG	- BUILDING	NPS	- NOMINAL PIPE SIZE		
BUG	- BLOCKING	NTS	- NOT TO SCALE		
BOT	- BOTTOM				
BOJ	- BOTTOM OF JOISTS	OC	- OVER		
		OD	- OUTSIDE DIAMETER		
CAB	- CARPET	OFD	- OVERFLOW DRAIN		
CB	- CABINET	OFDI	- OWNER FURNISHED,		
CBM	- CATCH BASIN		CONTRACTOR		
CEM	- CEMENT		INSTALLED		
CFL	- CUBIC FOOT	OFDI	- OWNER FURNISHED,		
CHAM	- COUNTERFLASHING		OWNER INSTALLED		
CLJ	- CHAMFER	OPP	- OPPOSITE		
CLG	- CONTROL JOINT	OPT	- OPTIONAL		
CLR	- CLEAR				
CMU	- CERAMIC MOSAIC (TILE)	PAF	- POWDER ACTUATED		
	- CONCRETE MASONRY		FASTENER		
		PERM	- PERIMETER		
COL	- CLEAN OUT	PERF	- PERFORATED		
CONC	- COLUMN	PL	- PROPERTY LINE		
CONC	- CONCRETE	PLAS	- PLASTIC LAMINATE		
CONST	- CONTINUOUS or	PLT	- PLASTER		
COTF	- CONTINUE	PLYD	- PLYWOOD		
		PNL	- PANEL		
COTG	- CONSTRUCTION	POC	- POINT OF CONNECTION		
COTW	- CLEAN OUT THRU	PT	- POINT		
CSK	- CLEAN OUT TO GRADE	PTDF	- PRESERVATIVE		
CSMT	- CLEAN OUT THRU WALL	PTN	- TREATED DOUGLAS FIR		
CTSK	- CASEMENT	PSL	- PARTITION		
OW	- COUNTERSUNK SCREW		- PARALLEL STRAND		
	- COLD WATER	PVC	- LUMBER		
			- POLYVINYL CHLORIDE		
DET	- DETAIL	R	- RISER		
DF	- DRINKING FOUNTAIN	RC	- RELATIVE COMPACTION		
DIA	- DIAMETER	RD	- ROOF DRAIN		
DIA	- DIAGONAL	REF	- REFERENCE		
DIM	- DIMENSION	REFR	- REFRIGERATOR		
DIV	- DIVISION	REM	- REMOVE		
DR	- DOWN	REQD	- REQUIRED		
DS	- DOWNSPOUT	RES	- RESILIENT		
DWG	- DRAWING	REV	- REVISION		
		RHWS	- ROUND HEAD WOOD		
E	- ENAMEL		SCREW		
(E)	- EXISTING	RDWD	- REDWOOD		
EB	- EXPANSION BOLT	RWL	- RAIN WATER LEADER		
EIFS	- EXTERIOR INSULATION FINISHING SYSTEM	SCH	- SCHEDULE		
EJ	- EXPANSION JOINT	SD	- STORM DRAIN		
ELEV	- ELEVATION	SEC	- SECTION		
ELECT	- ELECTRICAL	SEC	- SEE ELECTRICAL		
EMER	- EMERGENCY	SECT	- DRAWINGS		
ENCL	- ENCLOSURE (URE)	SF	- SQUARE FEET		
EQ	- EQUAL	SHLF	- SHELF		
EQPT	- EQUIPMENT	SHLV	- SHELVING		
EXH	- EXHAUST	SHT	- SHEET		
EXP	- EXPOSED	SHTG	- SHEATHING		
EXT	- EXTERIOR	SIM	- SIMILAR		
		SLD	- SEE LANDSCAPE		
(F)	- FUTURE		DRAWINGS		
FAB	- FABRICATION	SMD	- SEE MECHANICAL		
FAC	- FACTORY		DRAWINGS		
FBD	- FURNISHED BY OTHERS	SPEC	- SPECIFICATIONS		
FD	- FLOOR DRAIN	SS	- SQUARE		
FFMS	- FINISHED FLOOR	SS	- STAINLESS STEEL		
	- FLAT HEAD MACHINE	ST	- SEE STRUCTURAL		
	SCREW	STD	- DRAWINGS		
FWHS	- FLAT HEAD WOOD	STD	- STAIN		
	SCREW	STD	- STANDARD		
FIN	- FINISH	STL	- STEEL		
FJ	- FLOOR JOIST	STSMS	- SELF TAPPING SHEET		
FLR	- FLOOR		METAL SCREW		
FLUOR	- FLUORESCENT				
FND	- FOUNDATION	T	- TREAD		
FOF	- FACE OF FINISH	T&B	- TOP AND BOTTOM		
FOP	- FACE OF PLYWOOD	TELE	- TELEPHONE		
FOS	- FACE OF STUD	TEMP	- TEMPERED		
FR	- FRAME (D), (ING)	THRU	- THROUGH		
FRP	- FIBERGLASS	TJ	- TOOL JOINT		
	REINFORCED PLASTIC	TOC	- TOP OF CURB,		
	PANELS	TOC	CRICKET,		
FTG	- FOOTING	TRC	- TOP OF CONCRETE		
FURR	- FIRRED (NG)	TOS	- TOP OF PARAPET		
		TPT	- TOP OF SLAB,		
GA	- GAUGE	TPTN	- SHEATHING, or STEEL		
GB	- GYPSUM BOARD	TS	- TOP OF SHEATHING		
GI	- GALVANIZED IRON	TSB	- TOP SET BASE		
GKT	- GASKET (ED)	TV	- TELEVISION		
GL	- GLASS or GLAZING	TYP	- TYPICAL		
GLV	- GALVANIZED	TWS	- TACKABLE WALL		
GSM	- GALVANIZED SHEET		SYSTEM		
METAL					
GYP	- GYPSUM	UON	- UNLESS OTHERWISE		
			NOTED		
HB	- HOSE BIBB				
HDW	- HARDWOOD	VAR	- VARIES		
HEX	- HEXAGONAL	VBS	- VAPOR BARRIER		
HM	- HOLLOW METAL	VCT	- VINYL COMPOSITION		
(STEEL)			TILE		
HOR	- HORIZONTAL	VCTB	- VINYL COVERED		
HT	- HEIGHT		TACKBOARD		
HVAC	- HEATING VENTILATING	VERT	- VERTICAL		
	AIR CONDITIONING				
HW	- HOT WATER	VG	- VERTICAL GRAIN		
ID	- INSIDE DIAMETER	VIF	- VENT IN FIELD		
INCL	- INCLUDE (D), (ING)	VO	- VENT OVER or OFFSET		
INSTR	- INSTRUCTION (S)	VR	- VENT RISER		
INSUL	- INSULATE (D), (ION)	VTR	- VENT THROUGH ROOF		
INT	- INTERIOR	WVC	- VINYL WALL COVERING		
INV	- INVERT				
		W/	- WITH		
JST	- JOIST	WO	- WOOD		
JT	- JOINT	WF	- WIDE FLANGE		
		WI	- WOODWORK INSTITUTE		
LAM	- LAMINATE (D)	WIN	- WINDOW		
LAV	- LAVATORY	W/O	- WITH OUT		
LB	- LAG BOLT	WO	- WHERE OCCURS		
LVR	- LOUVER	WS	- WOOD SCREW		
LCP	- LAY-IN CEILING PANEL	WSCOT	- WAINSCOT		
MAS	- MASONRY	@	- AT		
MATL	- MATERIAL	@	- DIAMETER		
MAX	- MAXIMUM	±	- PLUS/MINUS		
MB	- MACHINE BOLT	°	- DEGREES		
		°	- CENTER LINE		

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD PITTSBURG, CA 94565

BID SET 2021-4-30

DSA FILE NO.:7-C1

DSA APP NO.:01-113866

SHEET INDEX

GENERAL

G0001 COVER SHEET

Grand total: 1

ARCHITECTURAL

A1100 OVERALL SITE PLAN

A1101 ACCESSIBLE ELEMENTS

A2010 DEMOLITION PLAN

A2310 FLOOR PLAN AND CODE ANALYSIS PLAN

A2710 REFLECTED CEILING PLAN

A6010 INTERIOR ELEVATIONS

A8001 DETAILS

A8002 DETAILS

A9101 ROOM FINISH SCHEDULE

Grand total: 9

MECHANICAL **

M0001 MECHANICAL LEGENDS & NOTES

M2010 MECHANICAL DEMOLITION PLAN

M2310 MECHANICAL FLOOR PLAN

M5001 MECHANICAL DETAILS

Grand total: 4

FIRE ALARM **

FA0.1 FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES

FA1.1 FIRE ALARM RISER DIAGRAM, BATTERY & VOLTAGE DROP, CALCULATIONS

FA2.1 ELECTRICAL SITE PLAN

FA4.1 FIRE ALARM PLAN

Grand total: 4

PLUMBING **

P0001 PLUMBING LEGENDS, SCHEDULES, NOTES & DETAILS

P0002 PLUMBING FIXTURE SCHEDULES

P2010 PLUMBING DEMOLITION PLAN

P2310 PLUMBING FLOOR PLAN

Grand total: 4

Overall Total: 31

ELECTRICAL **

E0.1 SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, NOTES & SHEET INDEX

E0.2 CALIFORNIA ENERGY COMPLIANCE TITLE 24 - INDOOR

E1.1 ELECTRICAL SINGLE LINE DIAGRAM & PANELBOARD SCHEDULES

E2.1 ELECTRICAL SITE PLAN

E3.1 ELECTRICAL DEMOLITION PLAN

E4.1 POWER PLAN

E5.1 LIGHTING PLAN & LIGHT FIXTURE SCHEDULE

E6.1 ELECTRICAL DETAILS

E6.2 ELECTRICAL DETAILS

Grand total: 9

STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

☒ The drawings or sheets listed on the cover or sheet index indicated with **

☐ This drawing, page of specifications/ calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for:

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and

2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344 of Title 24, Part 1, (Title 24, Part 1, Section 4-317 (a))

I certify that: ☒ All drawings or sheets listed on the cover or index sheet indicated with **

☐ This drawing or page

Sharon A. Russo

2020-7-8

Signature Date

Architect or Engineer designated to be in general responsible charge

SHARON A. RUSSO, AIA

Print Name Architect

C-27346

09/21

License Number

Expiration Date

PROJECT DIRECTORY

ARCHITECT:

IBI GROUP ARCHITECTURE PLANNING
333 W. SAN CARLOS ST., SUITE 600
SAN JOSE, CA 95110
PHONE: (408) 924-0811

CONTACT: SHARI GRATKE
PRINCIPAL

MECHANICAL:

CAPITAL ENGINEERING
11020 SUN CENTER DRIVE, SUITE 100
RANCHO CORDOVA, CA 95670
PHONE: (916) 851-3500

CONTACT: RYAN CELAYA

ELECTRICAL:

AURUM CONSULTING ENGINEERS
1798 TECHNOLOGY DRIVE, SUITE 242
SAN JOSE, CA 95110
PHONE: (408) 564-7025

CONTACT: NAJIB ANWARY

DSA ADMIN. REQUIREMENTS

ADMINISTRATIVE REQUIREMENTS:

1. A COPY OF PARTS 1,2,3,4, & 5 TITLE 24, C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.

2. ALL CONSTRUCTION CHANGE DOCUMENTS - C.C.D. (CHANGE ORDERS) - AND ADDENDA TO BE SIGNED BY ARCHITECT AND THE OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS - C.C.D. (CHANGE ORDERS) AND ADDENDA ARE NOT VALID UNTIL APPROVED BY DSA PER SECTION 4- 338, PART 1, TITLE 24.

3. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24, AND APPROVED TESTS AND INSPECTIONS SHEET.

4. TESTS OF MATERIALS SHALL AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335, PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RE-TEST SHALL BE PER GENERAL CONDITIONS.

5. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF CONCRETE PER SECTION 4-331, PART 1, TITLE 24.

6. INSPECTOR SHALL BE EMPLOYED BY THE OWNER AND APPROVED BY ARCHITECT, STRUCTURAL ENGINEER AND DSA. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(b). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.

7. SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.

8. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (Form SSS-6) IN ACCORDANCE WITH SECTIONS 4-336 AND 4-343, PART 1, TITLE 24.

9. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTIONS 4-333(a) AND 4-341, PART 1, TITLE 24.

10. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTIONS 4-336 AND 4-343, PART 1, TITLE 24.

11. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CHANGE DOCUMENT (C.C.D.) OR SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.

BUILDING DATA (EXISTING BLDG)

SUMMARY:

A PARTIAL THIRD FLOOR RENOVATION OF THE EXISTING COLLEGE COMPLEX. AREA OF WORK IS ON GRADE.

THERE IS NO CHANGE IN USE OR OCCUPANCY

USE & OCCUPANCY:

EDUCATIONAL GROUP B

CONSTRUCTION TYPE:

TYPE I, FIRE RESISTIVE

NOT SPRINKLERED

FLOOR AREA OF EXISTING BUILDING:

178,626 SF

FLOOR AREA OF EXISTING BUILDING RECEIVING WORK:

3,538 SF

APPLICABLE CODES

CALIFORNIA CODE OF REGULATIONS, TITLE 24 - BUILDING STANDARDS

2019 CALIFORNIA ADMINISTRATIVE CODE (CAC) (Title 24, Part 1, CCR)

2019 CALIFORNIA BUILDING CODE (CBC), Volumes 1 & 2 (Title 24, Part 2, CCR) (2018 International Building Code with 2019 California amendments)

2019 CALIFORNIA ELECTRICAL CODE, Title 24, Part 3, CCR)

2019 CALIFORNIA PLUMBING CODE (CPC), Title 24, Part 5, CCR)

2019 CALIFORNIA ENERGY CODE, (Title 24, Part 6, CCR)

2019 CALIFORNIA HISTORICAL BUILDING CODE, (Title 24, Part 8, CCR)

2019 CALIFORNIA FIRE CODE (CFC), Title 24, Part 9, CCR)

2019 CALIFORNIA EXISTING BUILDING CODE, (Title 24, Part 10, CCR)

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), Title 24, Part 11, CCR)

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE applies at these portions designated by California Building Standards Commission.

2019 CALIFORNIA REFERENCE STANDARDS CODE, (Title 24, Part 12, CCR)

2010 ADA STANDARDS FOR ACCESSIBILITY DESIGN, U.S. Department of Justice

2019 NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2015 Edition

2019 NFPA 72, NATIONAL FIRE ALARM CODE AND SIGNALING CODE, 2015 Edition

NOTE: SOME CODES MAY NOT APPLY IF WORK REGULATED BY SUCH CODES IS NOT WITHIN THE SCOPE OF THIS PROJECT.

SCOPE OF WORK

GENERAL

MODERNIZATION OF TWO (2) EXISTING VOCATIONAL LABS, INCLUDING THE FOLLOWING:

-NEW INTERIOR PARTITION AND OVERHEAD COILING DOOR

-UPDATED LIGHTING

-UPDATED MECHANICAL, PLUMBING & ELECTRICAL DISTRIBUTION IN THE TWO ROOMS

DEFERRED SUBMITTALS

NONE

ALTERNATES

NONE

VICINITY MAP

PRIME CONSULTANT

IBI GROUP

333 W. San Carlos St., Suite 600
San Jose, CA 95110 USA
tel 408 924 0811 fax 408 924 0844
ibi@ibigroup.com

PROJECT

L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:

121030

DRAWN BY:

AJ

CHECKED BY:

RH

PROJECT MGR:

RH

APPROVED BY:

SG

SHEET TITLE

COVER SHEET

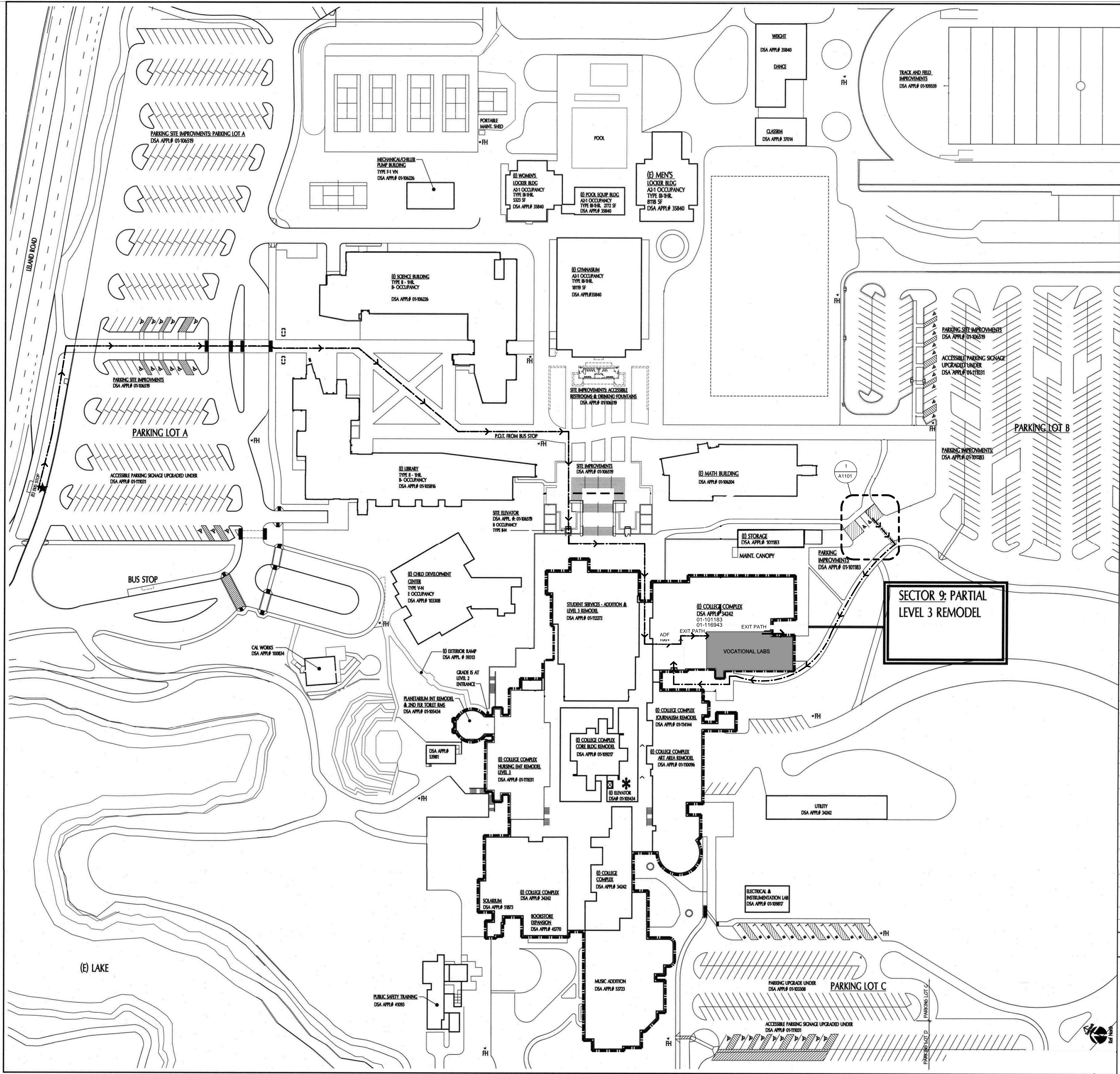
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SYMBOL LEGEND

- ASSUMED PROPERTY LINE
- FIRE DEPARTMENT ACCESS, WIDTH 20'-0"
- PROPERTY LINE
- CHAIN LINK FENCE 6'-0" HIGH U.O.N.
- ORNAMENTAL FENCE
- ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE AT LEAST 48" WIDE, WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" AT 1:2 MAX. SLOPE. EXCEPT LEVEL CHANGES THAT DO NOT EXCEED 2% AND SLOPES IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 5%. "PASSING SPACES" AT LEAST 60"x60" ARE LOCATED NOT MORE THAN 200' APART. PART OF ACCESSIBLE PATH OF TRAVEL WITH CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS NOT MORE THAN 400' APART. P.O.T. SHALL BE FREE OF OBSTRUCTIONS OVERHANGING WITHIN 80" ABOVE WALKING SURFACE AND PROJECTING GREATER THAN 4" FROM WALL SURFACES. BETWEEN 27" AND 80" ABOVE WALKING SURFACE, CBC 11338.8.6 THE ARCHITECT SHALL VERIFY THAT ALL BARRIERS ON THE INDICATED PATH OF TRAVEL HAVE BEE REMOVED. GATES IN PATH OF TRAVEL SHALL COMPLY WITH EXIT DOOR REQUIREMENTS PER CBC SECTION 11B-404.1
- ACCESSIBLE BUILDING ENTRANCE
- AREA OF MODERNIZATION TO BE CONSTRUCTED AS PART OF DSA APPLICATION NUMBER AND CONTRACT
- EXISTING ACCESSIBLE DRINKING FOUNTAIN PER 01-111835

PARKING DATA

PARKING LOT A:	320
VAN ACCESSIBLE STALLS	3
STANDARD ACCESSIBLE STALLS	11
STANDARD STALLS	306
PARKING LOT B:	441
VAN ACCESSIBLE STALLS	4
STANDARD ACCESSIBLE STALLS	9
STANDARD STALLS	429
PARKING LOT C:	115
VAN ACCESSIBLE STALLS	4
STANDARD ACCESSIBLE STALLS	8
STANDARD STALLS	103
PARKING LOT D:	281
VAN ACCESSIBLE STALLS	7
STANDARD ACCESSIBLE STALLS	7
STANDARD STALLS	271

BUILDING CODE ANALYSIS

SUMMARY:
A PARTIAL THIRD FLOOR RENOVATION OF THE EXISTING COLLEGE COMPLEX. AREA OF WORK IS ON GRADE.

THERE IS NO CHANGE IN USE OR OCCUPANCY

USE & OCCUPANCY: EDUCATIONAL GROUP B, CONSTRUCTION TYPE: TYPE I, FIRE RESISTIVE NOT SPRINKLERED

FLOOR AREA OF EXISTING BUILDING: 178,626 SF

FLOOR AREA OF EXISTING BUILDING RECEIVING WORK: 3,538 SF

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-118866 INC.
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 07/09/2020

CLIENT
CONTRA COSTA
COMMUNITY COLLEGE
DISTRICT

500 COURT STREET MARTINEZ, CA

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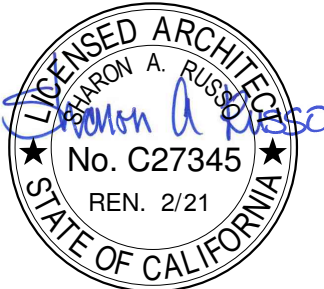
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ISSUES

No.	DESCRIPTION	DATE
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CONSULTANTS

SEAL



PRIME CONSULTANT
IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 0844
ibi@ibi.com

PROJECT
L-1177 Industrial Trades Labs
Renovation

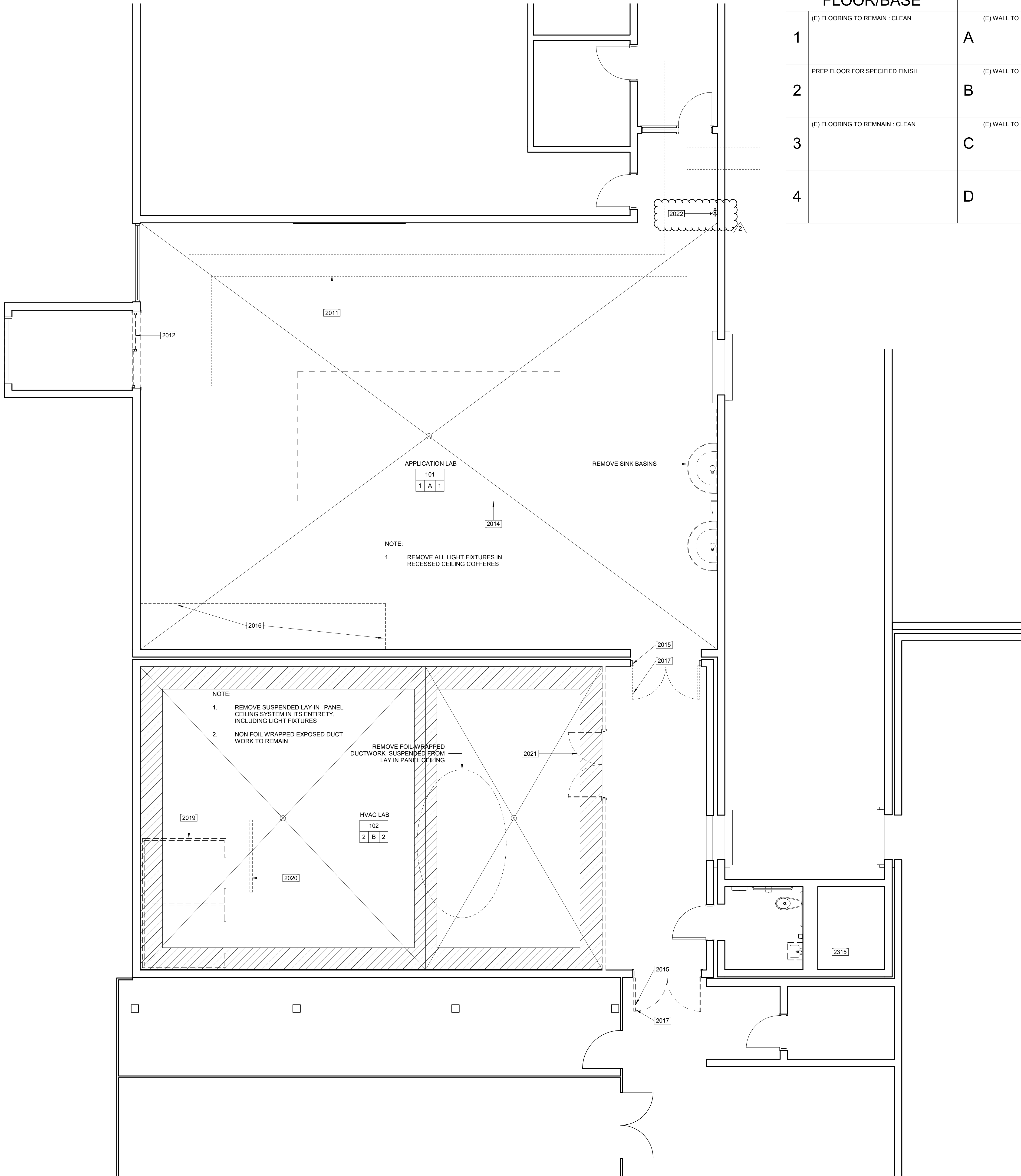
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030
DRAWN BY:
AJ
PROJECT MGR:
RH
SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
A1100
ISSUE



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1 FIRST FLOOR DEMOLITION PLAN



DEMOLITION SCHEDULE					
FLOOR/BASE		WALL		CEILING	
1	(E) FLOORING TO REMAIN : CLEAN	A	(E) WALL TO CLEAN	1	CEILING PATCH AS REQUIRED
2	PREP FLOOR FOR SPECIFIED FINISH	B	(E) WALL TO CLEAN	2	REMOVE (E) DROPPED CEILING CLEAN AND PREP (E) CEILING FINISHED FIRE TREATMENT FOR FINISH
3	(E) FLOORING TO REMAIN : CLEAN	C	(E) WALL TO CLEAN	3	(E) CEILING TO REMAIN
4		D		4	

- 2000-DEMOLITION NOTES
1.

ALL MATERIAL INDICATED TO BE REMOVED IS TO BE DISPOSED OF OFF SITE IN A LEGAL MANNER, UNLESS INDICATED TO BE SALVAGED OR REINSTALLED.
2.

CONTRACTOR SHALL PROTECT PORTIONS OF EXISTING CONSTRUCTION NOT INDICATED TO BE DEMOLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT AND REPAIR OF ITEMS TO REMAIN.
3.

REFER TO OTHER PLANS FOR ADDITIONAL DEMOLITION WORK.
4.

REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR DEMOLITION OF MECHANICAL, ELECTRICAL, AND PLUMBING ITEMS.
5.

REFER TO FLOOR PLANS FOR PATCHING AND REINSTALLATION OF EXISTING CONSTRUCTION.
6.

PARTIAL DEMOLITION SHALL INCLUDE TRIMMING AND CAPPING SYSTEMS THAT ARE TO REMAIN OPERABLE.
7.

CONTRACTOR SHALL COORDINATE WITH HAZARDOUS MATERIAL CONSULTANT FOR REMOVAL OF HAZARDOUS MATERIALS.
8.

DEMOLITION PLAN IS DIAGRAMMATIC. CONTRACTOR SHALL REMOVE EXTENT REQUIRED FOR THE INSTALLATION OF (N) WORK.
9.

CONTRACTOR SHALL REMOVE ALL MISCELLANEOUS ITEMS TO INCLUDE: MARKERBOARDS, CHALKBOARDS, TACKBOARDS, FIRE EXTINGUISHERS, BRACKETS, PENCIL SHARPENERS, FLAG HOLDERS, DOOR BUMPERS, DOOR HOLDERS, DRAPERY, BLINDS, ETC. THAT HAS NOT BEEN PREVIOUSLY REMOVED BY THE DISTRICT
10.

AFTER REMOVAL OF ALL ITEMS BY OWNER AND PER DEMOLITION AS NOTED BY ALL DISCIPLINES, ALL WALLS SHALL BE PREPPED, WASHED, AND CLEANED AS REQUIRED FOR NEW WORK. FULL EXTENT OF WALLS AND CEILINGS AND FLOORS TO BE PREPPED AND CLEANED.

- 2000 - KEYNOTES DEMO
- 2011

EXISTING EXPOSED DUCTWORK TO REMAIN (SHOWN DASHED)
- 2012

REMOVE SLIDING GLASS DOOR AND FRAME
- 2014

REMOVE OVERHEAD SUSPENDED FRAME AND ASSOCIATED ELECTRICAL CONDUIT, PLUMBING PIPING, J-BOXES, AND FITTINGS
- 2015

REMOVE DOOR(S), FRAME TO REMAIN
- 2016

EXISTING EXHAUST HOOD TO REMAIN (SHOWN DASHED)
- 2017

SALVAGE HARDWARE FOR RE-USE
- 2019

REMOVE EXISTING REFRIGERATOR/FREEZER STRUCTURES IN THEIR ENTIRETY
- 2020

REMOVE PROJECTION SCREEN SUSPENDED FROM CEILING
- 2021

REMOVE DOORS AND FRAME
- 2315

LAVATORY TO BE REMOVED. PREPARE FOR REPLACEMENT. PREP AND CLEAN ALL WALL SURFACES. EXISTING MIRROR TO BE REMOVED AND STORED FOR RE-INSTALLATION
- 2022

(E) FIRE EXTINGUISHER TO BE REMOVED. PATCH AND REPAIR WALL TO MATCH EXISTING. SALVAGE EXTINGUISHER AND STORE FOR REINSTALLATION.

DEMOLITION LEGEND

RM NAME

RM #

X

X

X

CEILING

WALL

FLOOR / BASE

SCHEDULE INDICATES REMOVAL REQUIREMENTS. REFER TO DEMO SCHEDULE AND BUILDING DEMOLITION PLAN

--- --

REMOVE (E) WALL OR PORTION OF WALL IN ITS ENTIRETY

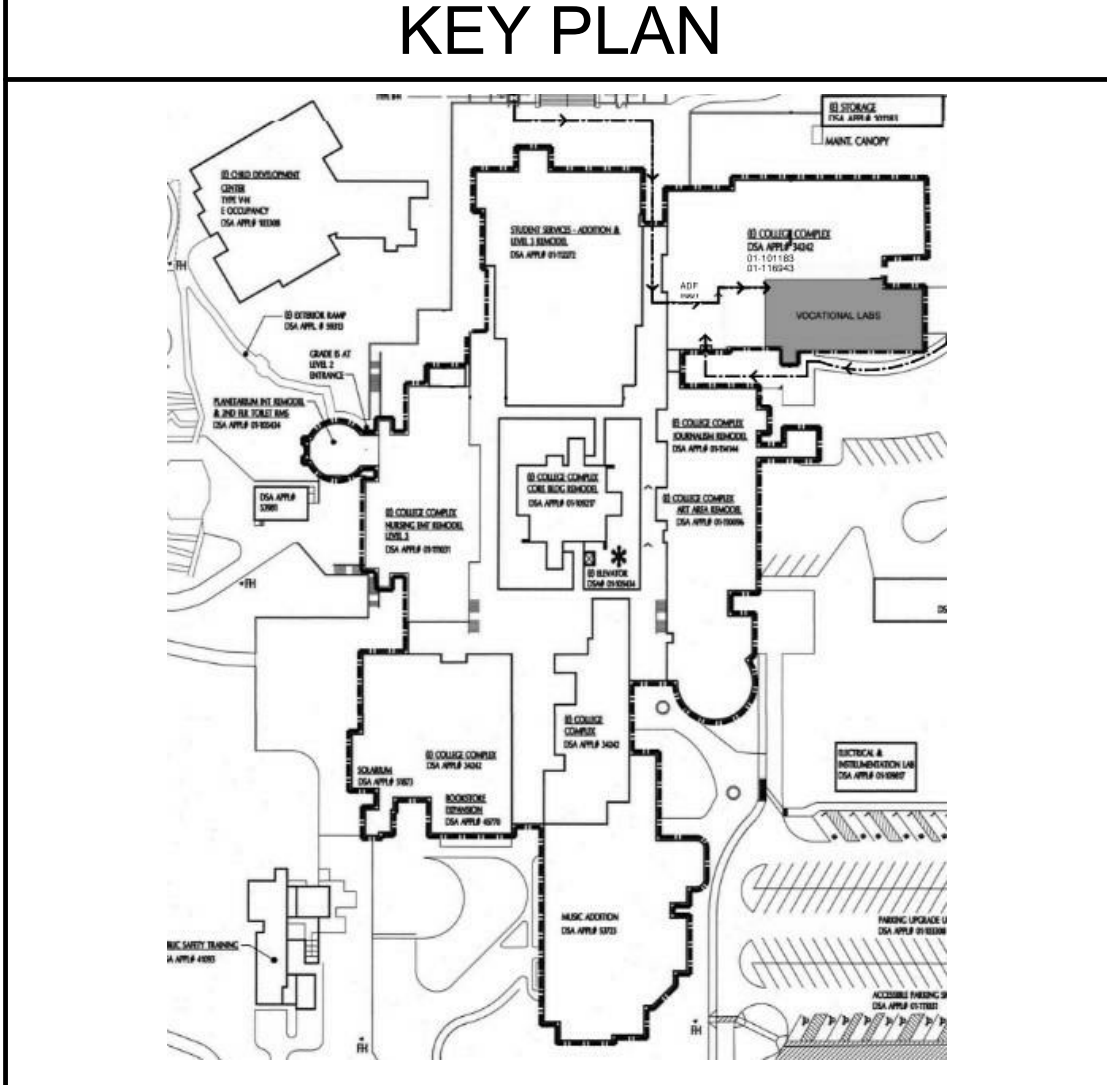
REMOVE (E) DOOR & FRAME IN ITS ENTIRETY

REMOVE (E) WINDOW & FRAME IN ITS ENTIRETY

REMOVE (E) CONSTRUCTION. REFER TO REMOVAL KEYNOTES FOR ADDITIONAL INFORMATION

///

GRIND DOWN (E) CONC AS REQ'D TO ALLOW MIN 1/2" THICKNESS OF NEW CONC TOPPING (DEPTH OF GRINDING WILL VARY WITH SLOPE OF FLOOR)



DSA STAMP

CLIENT

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

500 COURT STREET MARTINEZ, CA

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ISSUES

No.	DESCRIPTION	DATE
1	ADDENDUM 1	3/23/2021
2	ADDENDUM 2	4/30/2021

CONSULTANTS

SEAL

LICENSED ARCHITECT
JAMES A. RUSSELL
No. C27345
REN. 2/23
STATE OF CALIFORNIA

PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 0844
ibigroup.com

PROJECT

L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
Author

CHECKED BY:
Checker

PROJECT MGR:
ARCHITECTURAL

APPROVED BY:
Approver

SHEET TITLE

DEMOLITION PLAN

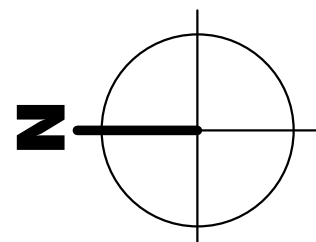
SHEET NUMBER

AD1-A2010

ISSUE

SCALE: AS SHOWN

1 in = 10m




1. MECHANICAL AND ELECTRICAL ITEMS ARE SHOWN ON THIS PLAN FOR PLACEMENT PURPOSES, ONLY. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR DETAILED INFORMATION AND ADDITIONAL ITEMS NOT SHOWN ON THIS PLAN.

2701 CEILING SUSPENDED PROJECTION SCREEN. SEE DETAIL 8/A8001
2702 CEILING MOUNTED PROJECTOR. SEE 9/A8001
2703 EXISTING EXPOSED DUCTWORK. PREP AND PAINT IN ITS ENTIRETY
2704 SUSPENDED ELECTRICAL SYSTEM AND SUPPORTS. SEE 7/A8001
2705 EXISTING EXHAUST HOOD, PREP AND PAINT IN ITS ENTIRETY
2706 EXISTING STRUCTURAL FRAMING, EXPOSED
2707 EXISTING EXPOSED FIRE PROTECTED DECK. PREP, PRIME AND PAINT

NOTE:
REFER TO DETAIL 1/A8301 FOR SUSPENDED ACOUSTICAL CEILING SYSTEM LEGEND

	(E) CEILING FINISH TO REMAIN
--	------------------------------




(E) EXPOSED WAFFLE
SLAB STRUCTURE

	(E) EXPOSED ROOF STRUCTURE, PAINT
--	--------------------------------------

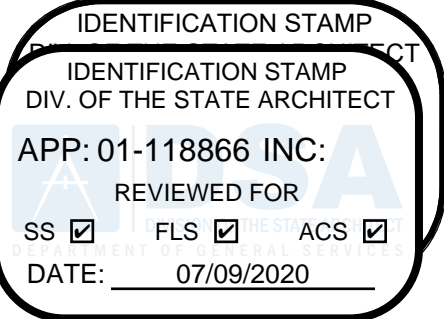


GYP BD, PAINT

 AIR TERMINAL . SEE
MECHANICAL DRAWINGS
FOR ADDITIONAL
INFORMATION

EXIT LIGHT . SEE
ELECTRICAL DRAWINGS
FOR ADDITIONAL
INFORMATION

 LIGHT FIXTURES . SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

[illegible]

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DISTRICT

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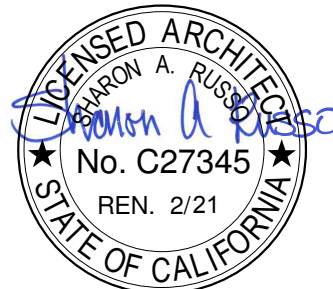
IBI Group - A California Partnership

ISSUES

No.	DESCRIPTION	DATE
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CONSULTANTS

SEAL



PRIME CONSULTANT



IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 084
ibigroup.com

PROJECT
L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO
121030

DRAWN BY:
Author

DRAWN BY:
Author

PROJECT MG
ABOUTEOTL

ARCHITECTURE
SHEET TITLE

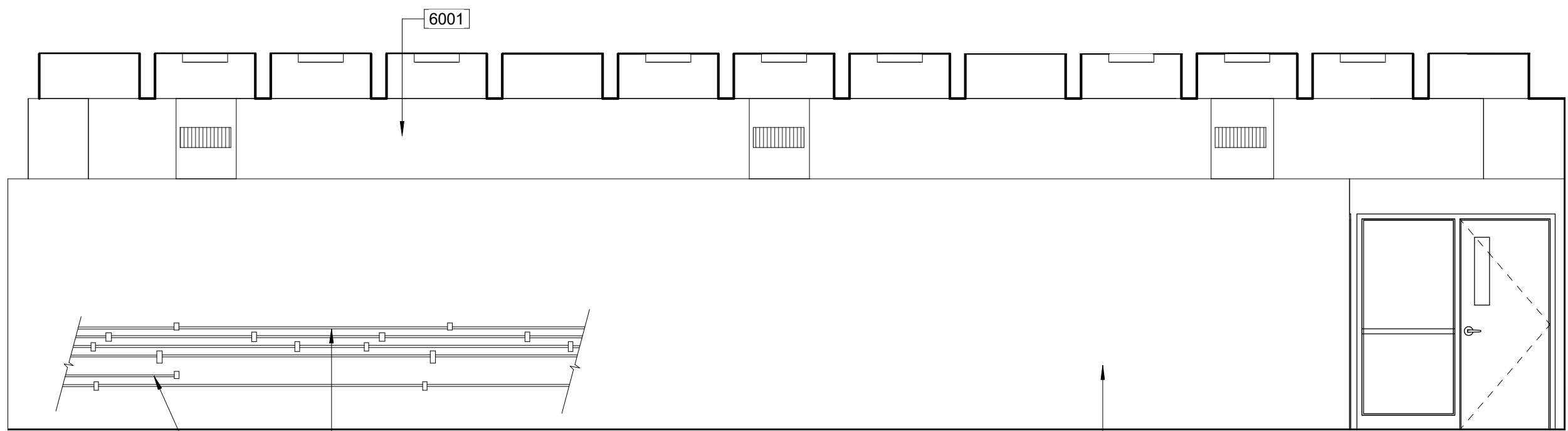
REFLECTED CEILING PLAN

SHEET NUMBER

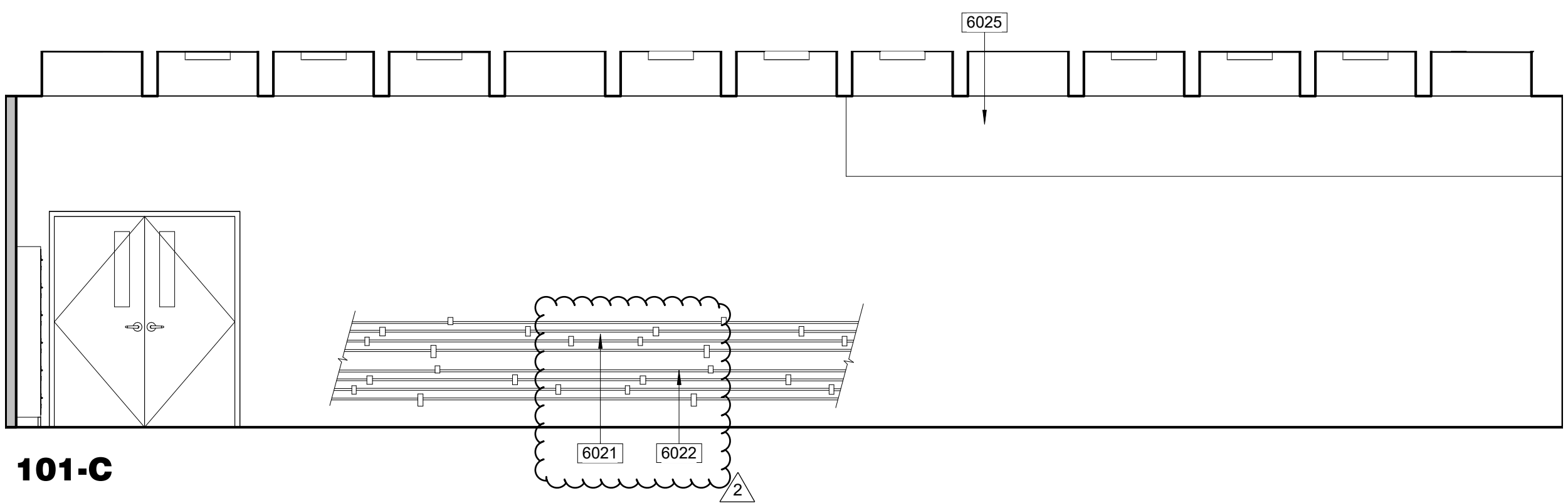
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ISSUE

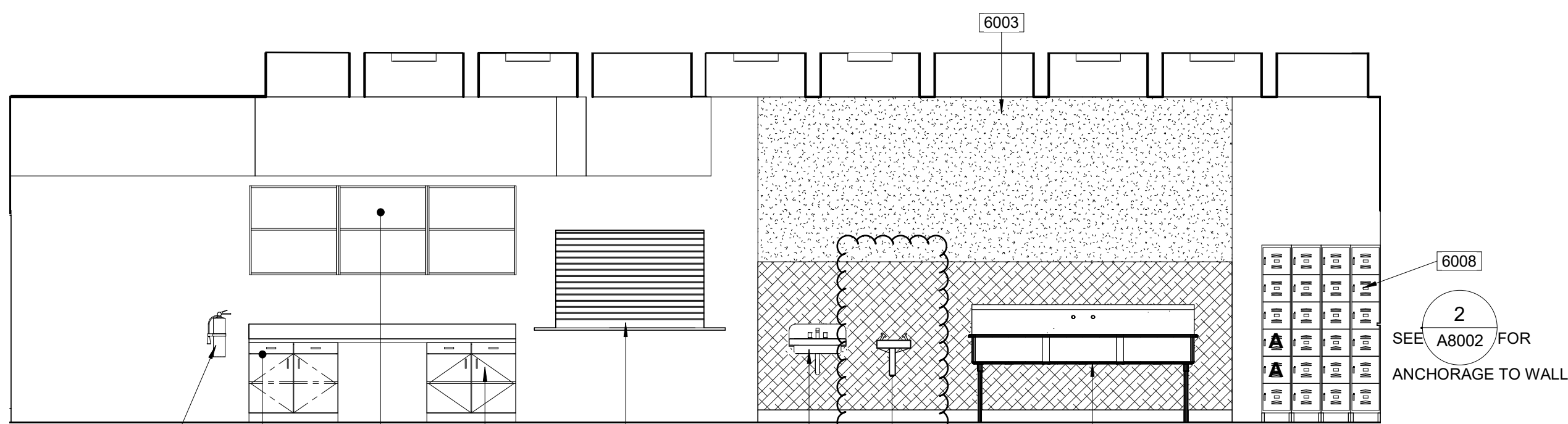
SCALE CHECK	C:\Users\Shari.Gratke\Documents\A Building v2018 2020-07-07 shari.gratke@ibigroup.com
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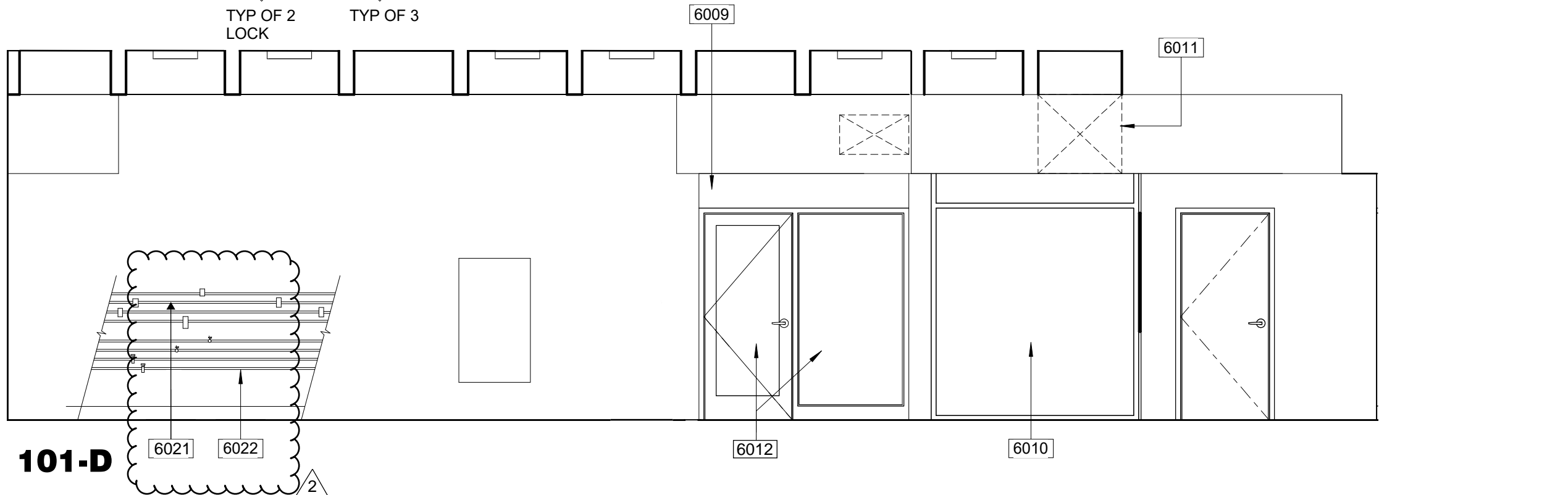
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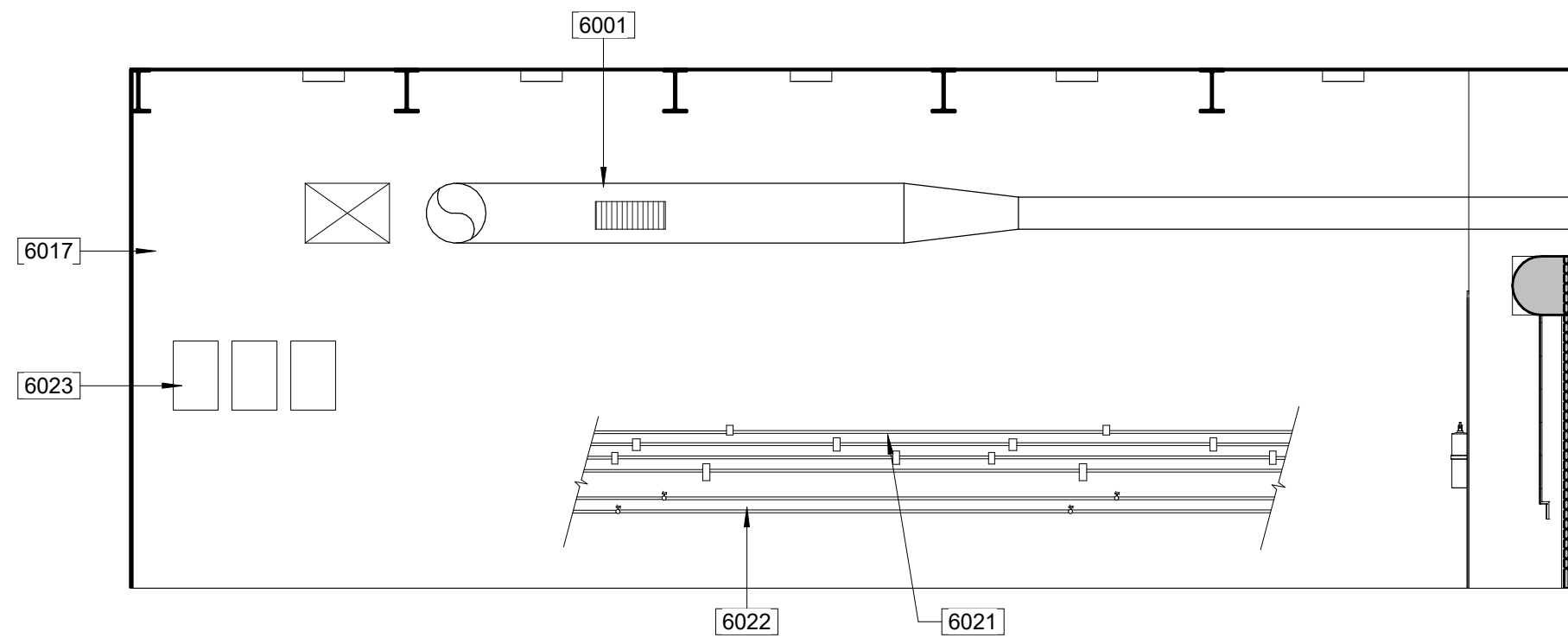
ROOM 101- APPLIANCE LAB



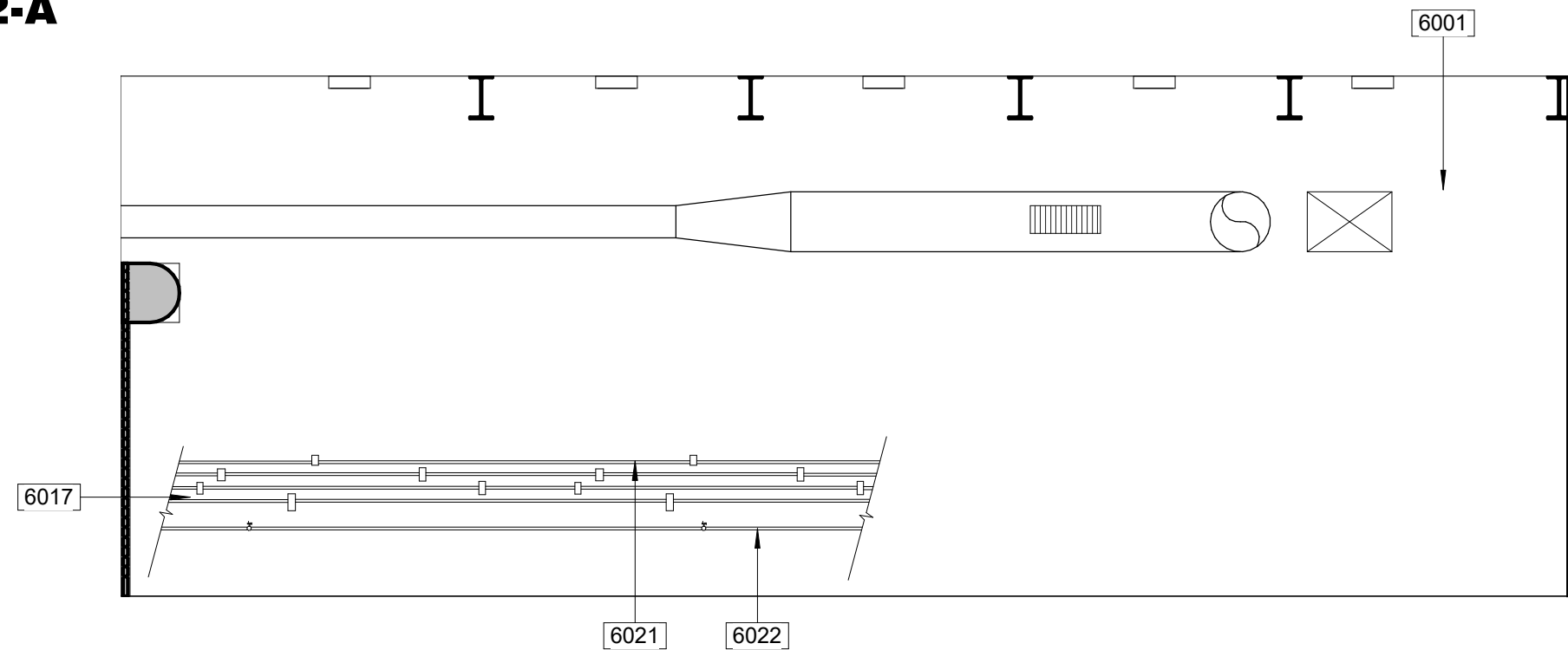
101-B



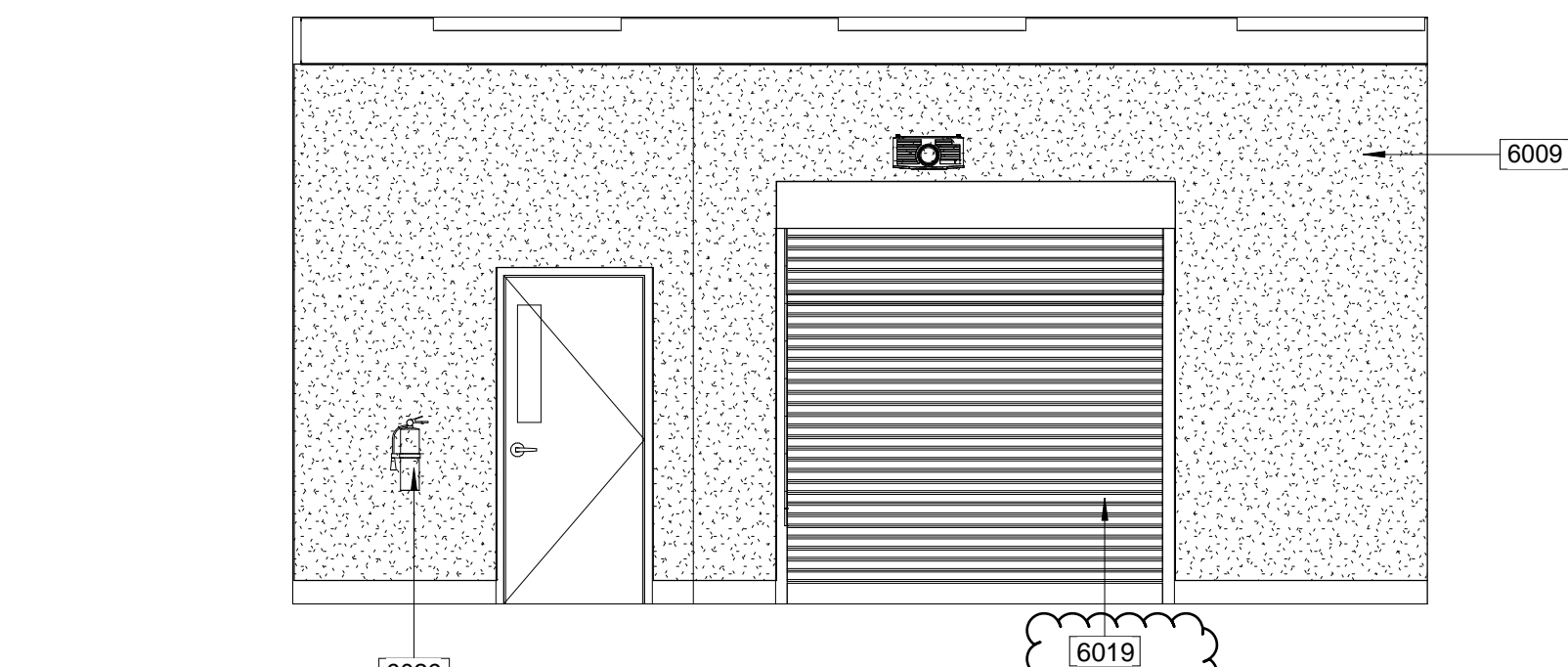
101-D



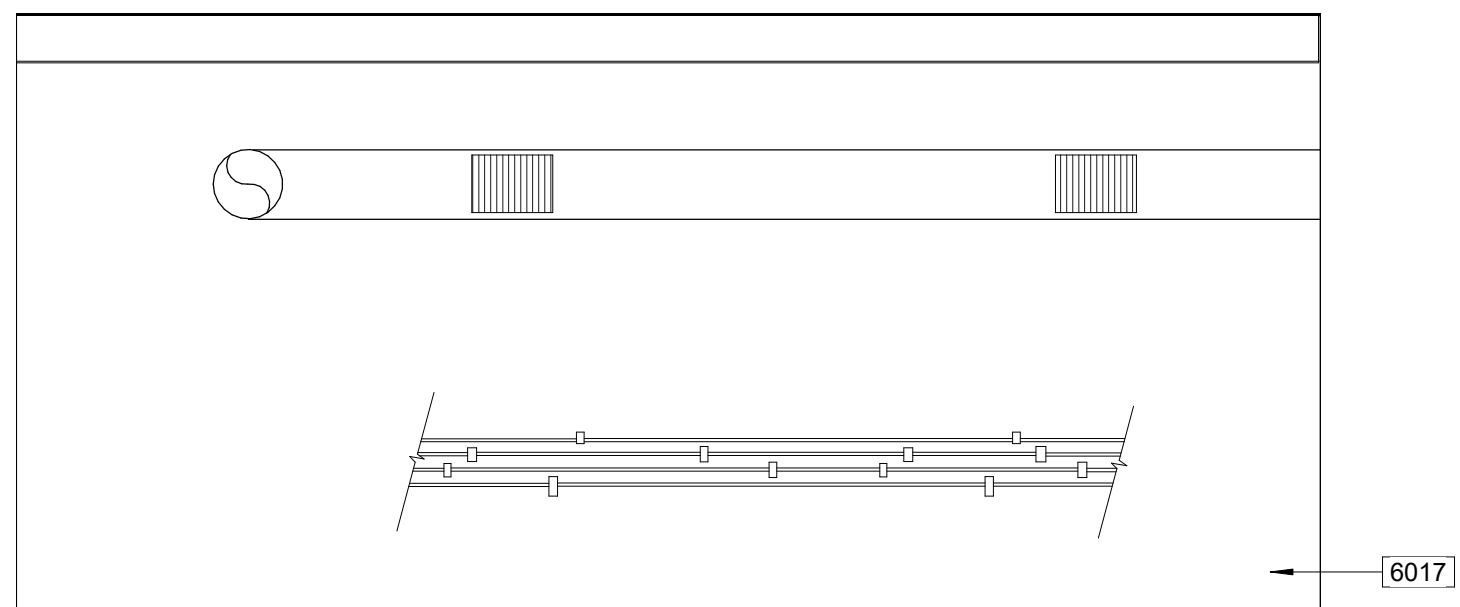
102-A



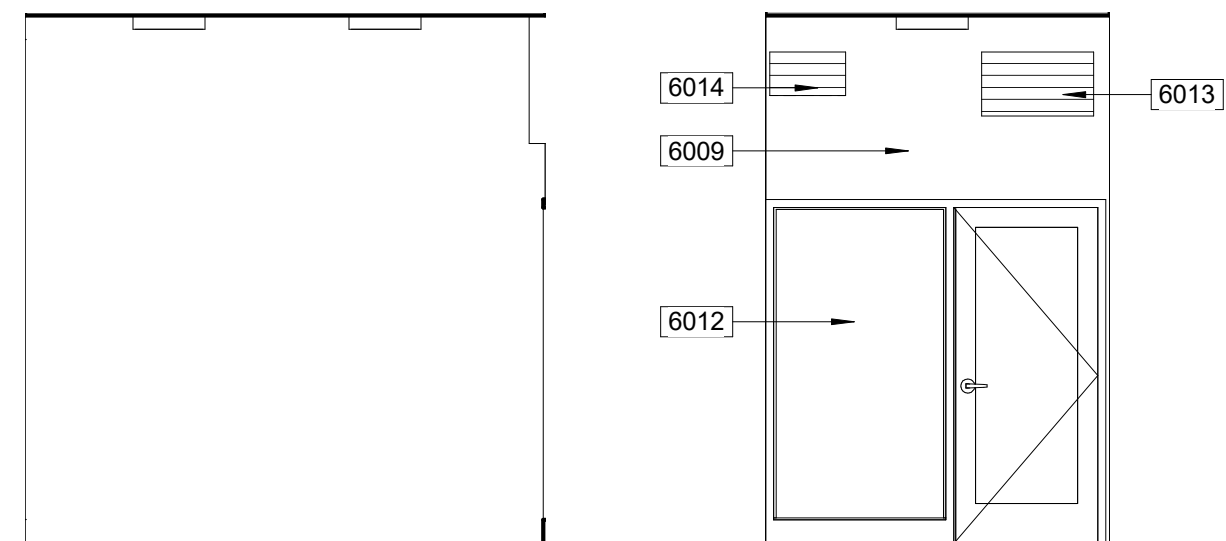
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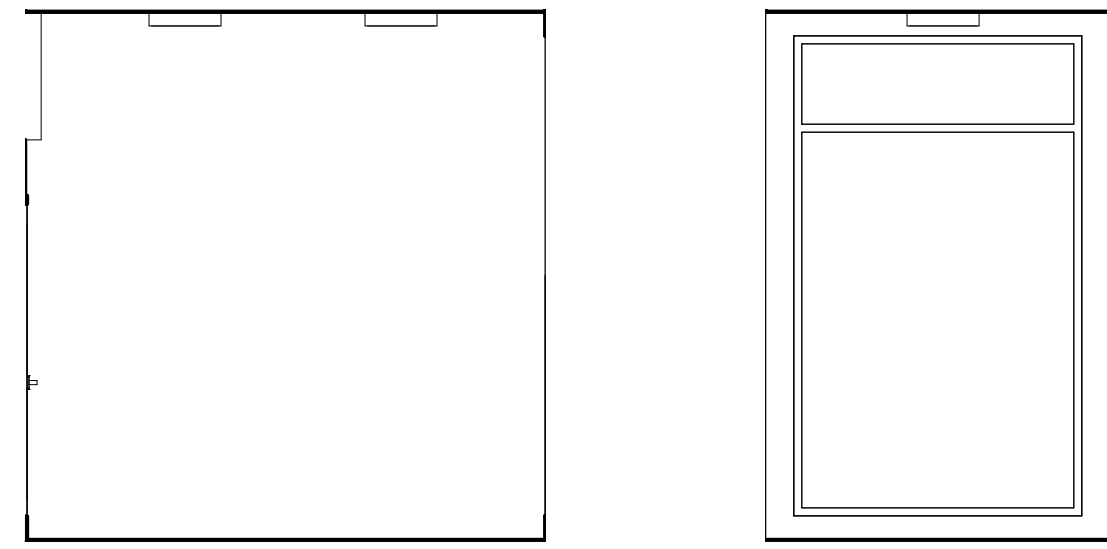
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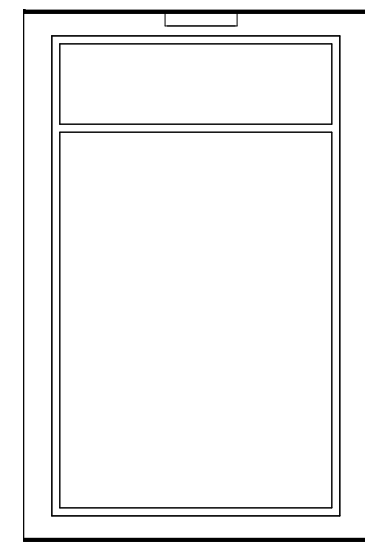
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103-A

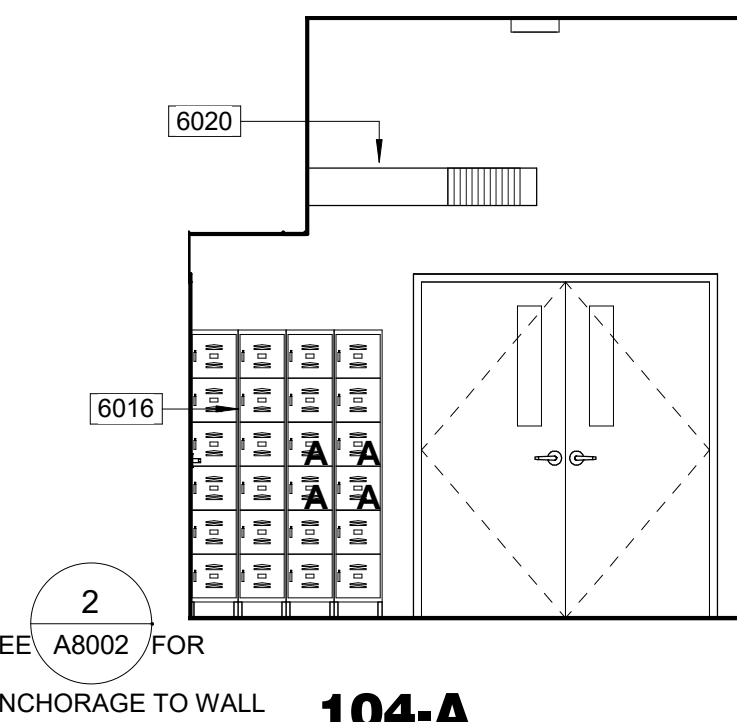


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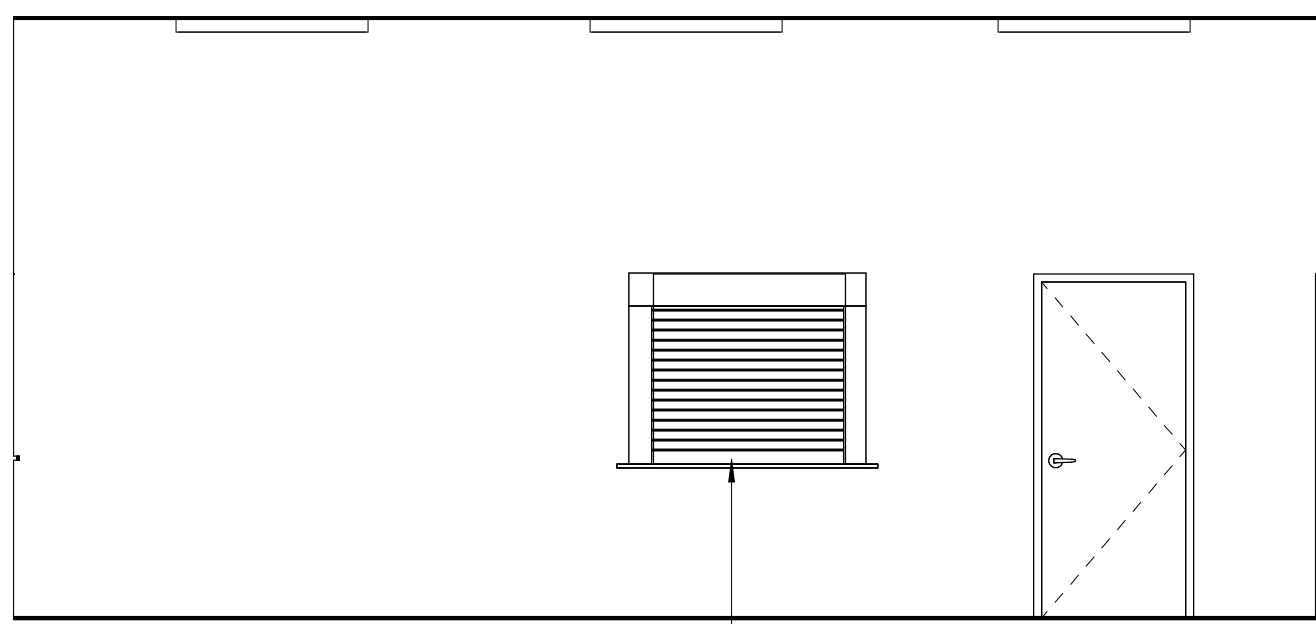


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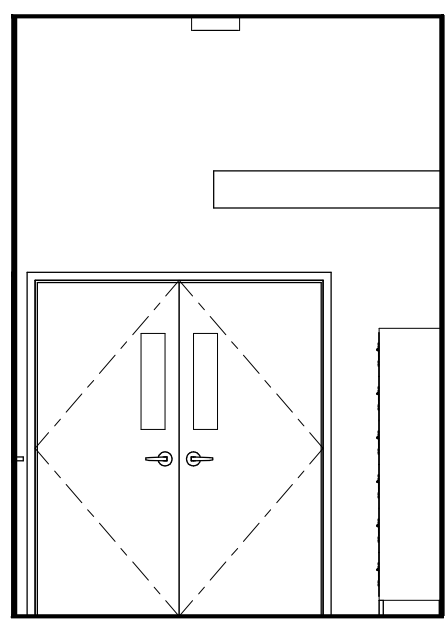
ROOM 103 - OFFICE



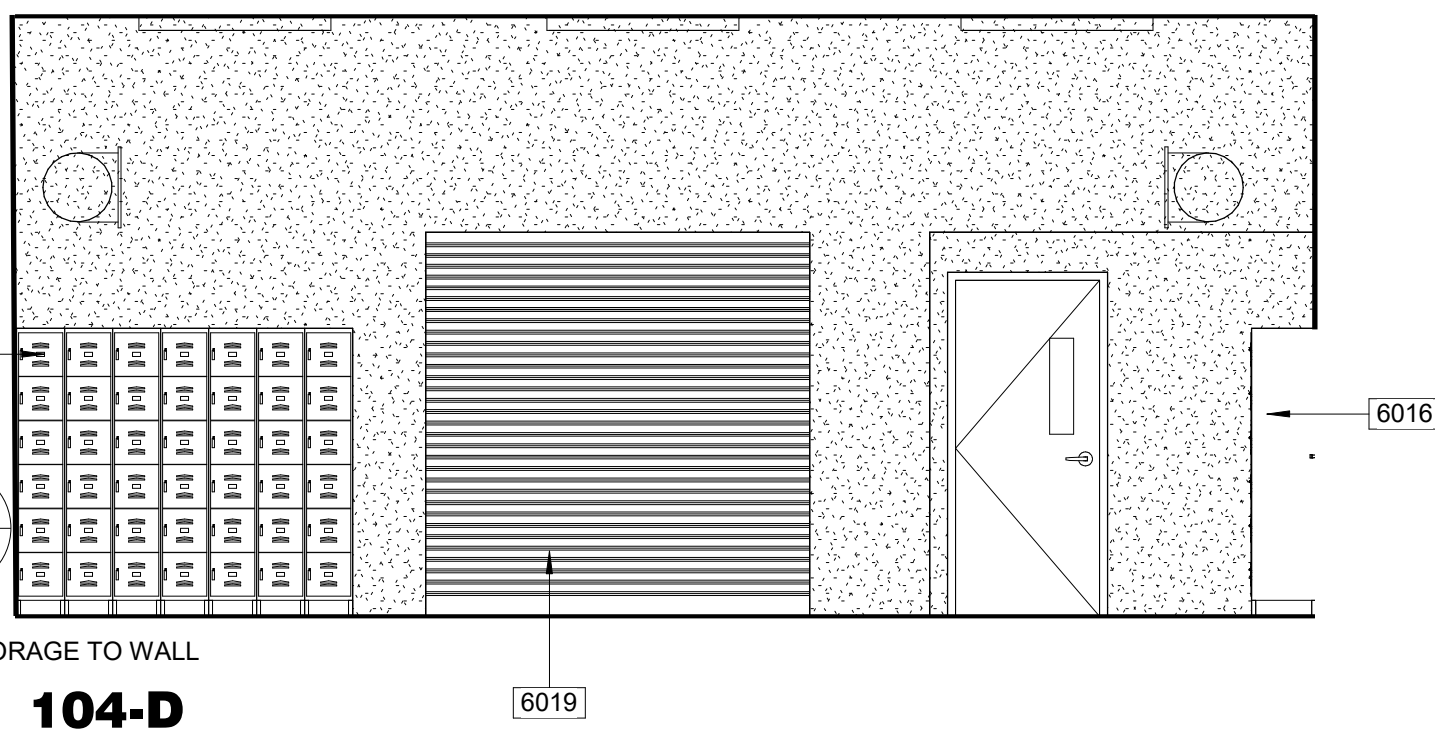
104-A



104-B

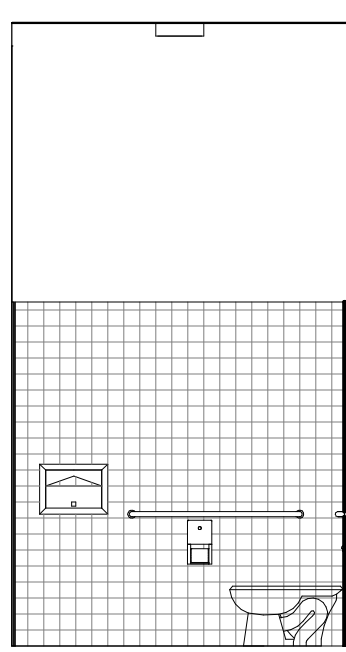


104-C

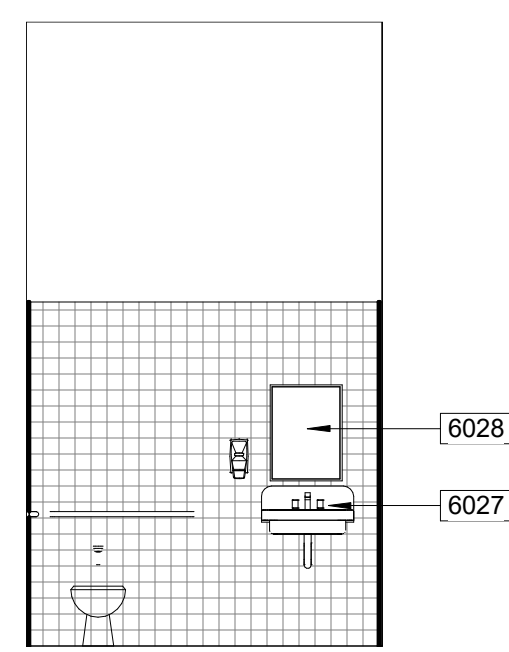


104-D

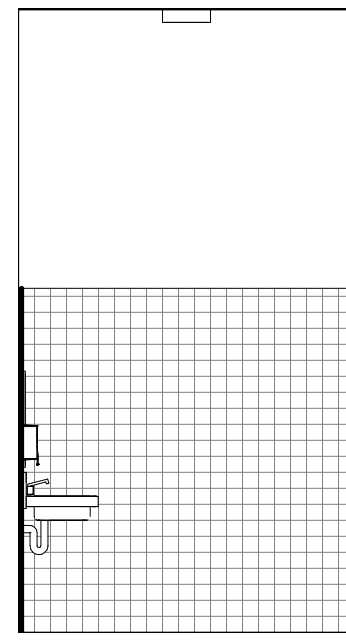
ROOM 104 - HALL



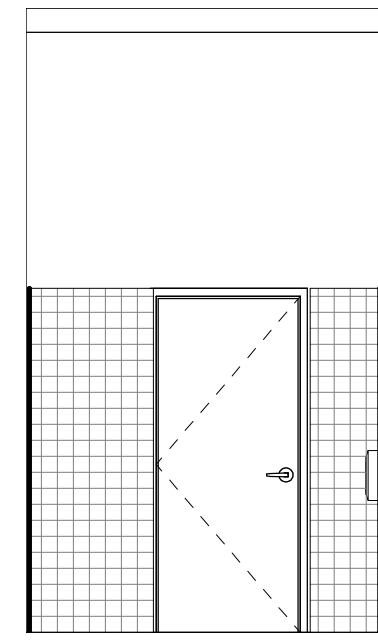
105-A



105-B



105-C



105-D

ROOM 105 - TOILET

6000-GENERAL NOTES

- WALL MOUNTED ELECTRICAL ITEMS ARE SHOWN ON THIS DRAWING ONLY WHERE PLACEMENT IS CRITICAL TO VISUAL APPEARANCE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL RECEPTACLES, SWITCHES, AND OTHER WALL MOUNTED ELECTRICAL DEVICES NOT SHOWN ON THIS DRAWING.
- REFER TO DETAIL 18 SHEET A8001 FOR ACCESSIBLE MOUNTING HEIGHTS.
- ALL WALLS TO BE CLEANED AND ALL HOLES THAT REMAIN DUE TO REMOVAL OF UTILITIES SHALL BE FILLED TO MATCH ADJACENT MATERIAL IN COLOR.

6000 - KEYNOTES

- 6001 (E) EXPOSED DUCTWORK, PAINT
6003 GYP BD OVER FURRED MTL STUD FRAMING
6004 (E) OVERHEAD COILING COUNTER DOOR
6005 SINK
6006 EYE WASH
6007 MULTI-STATION SINK
6008 MTL LOCKERS, 4 ACROSS, 6 HIGH (INDIVID LOCKERS DIM 12"w x 12"h x 15"d)
6009 GYP BD
6010 GLAZING
6011 (E) EXPOSED DUCTWORK (SHOWN DASHED FOR CLARITY), PAINT
6012 GLAZED HOLLOW-MTL DOOR & WINDOW FRAME (SEE DOOR SCHD)
6013 TRANSFER GRILLE
6014 SUPPLY AIR GRILLE
6015 SALVAGED AND REINSTALLED LOCKERS
6016 MTL LOCKERS, 4 ACROSS, 6 HIGH (INDIVID LOCKERS DIM 12"w x 12"h x 12"d)
6017 (E) CONC WALL
6019 OVERHEAD COILING DOOR
6020 EXPOSED DUCTWORK
6021 Wall Mounted Electrical Lines, refer to detail drawing sheet AD1-12 for mounting height of wall mounted plumbing and electrical lines at Appliance Lab and HVAC Lab.
6022 Wall Mounted Plumbing Lines, refer to addendum drawing sheet AD1-12 for mounting height of wall mounted plumbing and electrical lines at Appliance Lab and HVAC Lab.
6023 ELEC PANELS
6024 PLASTIC LAMINATE CASEWORK AND COUNTER
6025 EXHAUST HOOD, PAINT
6026 FIRE EXTINGUISHER
6027 CUSTOM LAVATORY
6028 REMOUNT EXISTING MIRROR TO BE CENTERED ON CUSTOM LAVATORY

LEGEND

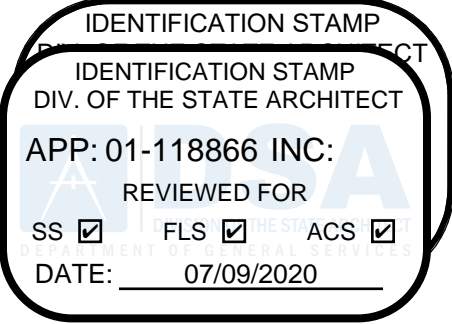
- (E) WALL FINISH TO REMAIN, PAINT U.O.N.
NEW OR PATCHED WALL SURFACE
GYPSUM BD ENAMEL PAINT U.O.N.
FIBER REINFORCED PANEL

LOCKER COUNT

- PER 11B-225.2.1 LOCKERS: WHERE PROVIDE, 5% BUT NO FEWER THAN 1 OF EACH TYPE OF LOCKER
ACCESSIBLE LOCKERS ARE INDICATED BY AN "A" ON INTERIOR ELEVATIONS
- | | |
|---------------------------|------------------------------------|
| 12x12 LOCKERS IN ROOM 101 | 24 TOTAL |
| | 5% OF TOTAL = 2 ACCESSIBLE LOCKERS |
| 12x15 LOCKERS IN ROOM 104 | 66 TOTAL |
| 24 NEW
42 EXISTING | 5% OF TOTAL = 4 ACCESSIBLE LOCKERS |

ACCESSORY LEGEND

DSA STAMP



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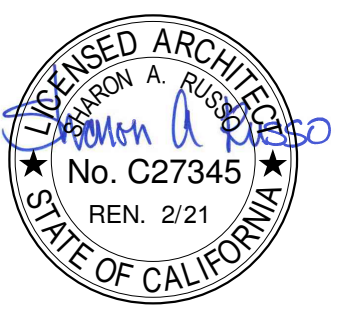
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ISSUES

No.	DESCRIPTION	DATE
1	ADDENDUM 1	3/23/2021
2	ADDENDUM 2	4/30/2021

CONSULTANTS

SEAL



PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 0844
ibigroup.com

PROJECT

L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:

121030

DRAWN BY:

AJ

CHECKED BY:

RH

PROJECT MGR:

RH

APPROVED BY:

RH

SHEET TITLE

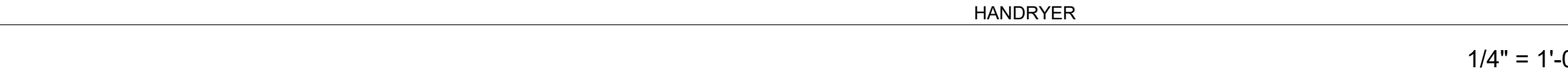
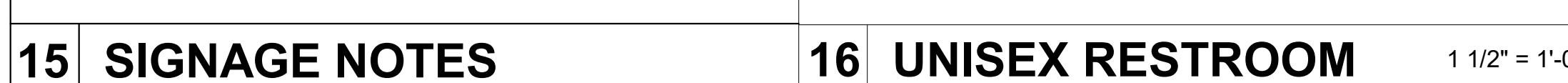
INTERIOR ELEVATIONS

SHEET NUMBER

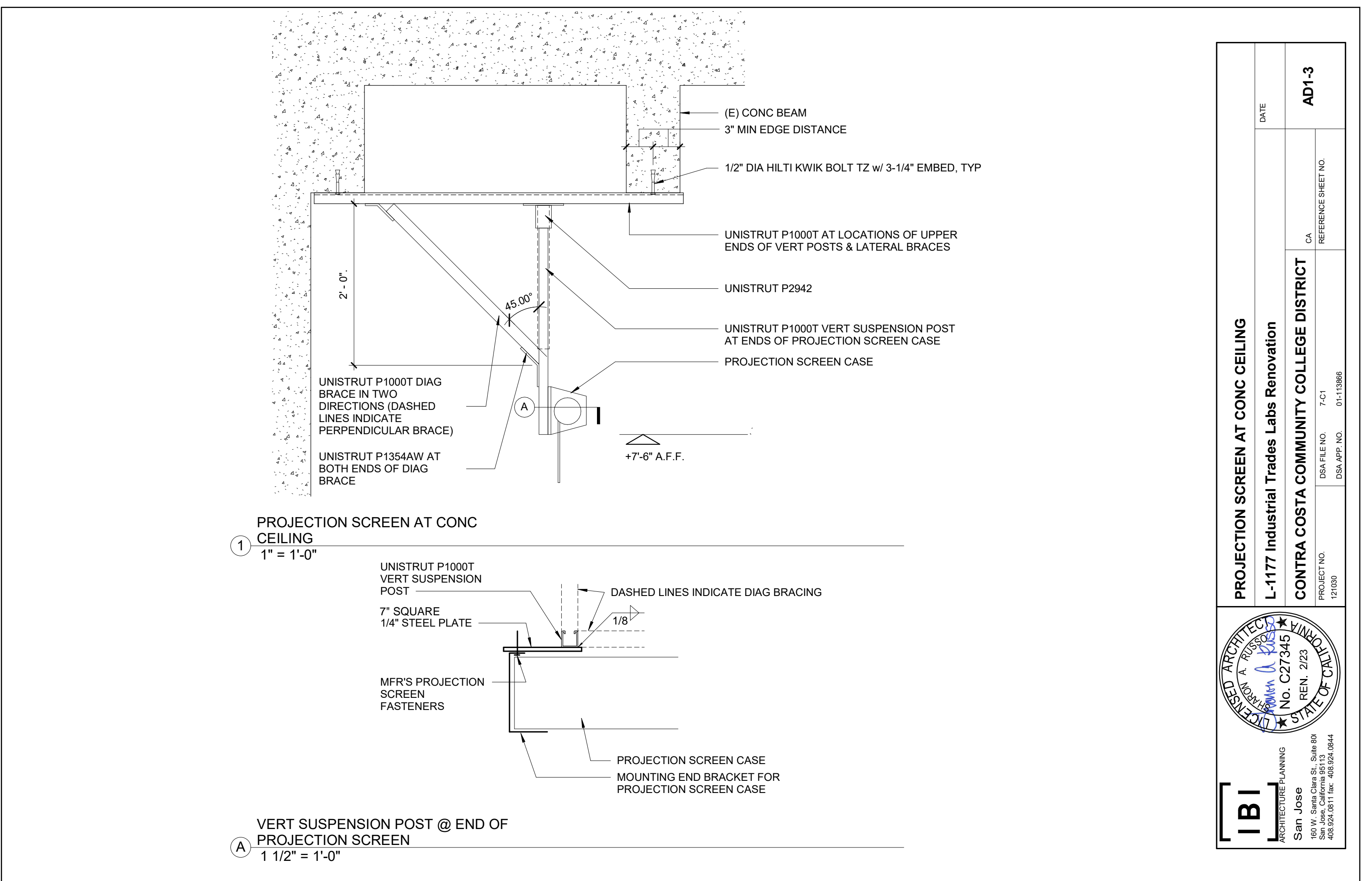
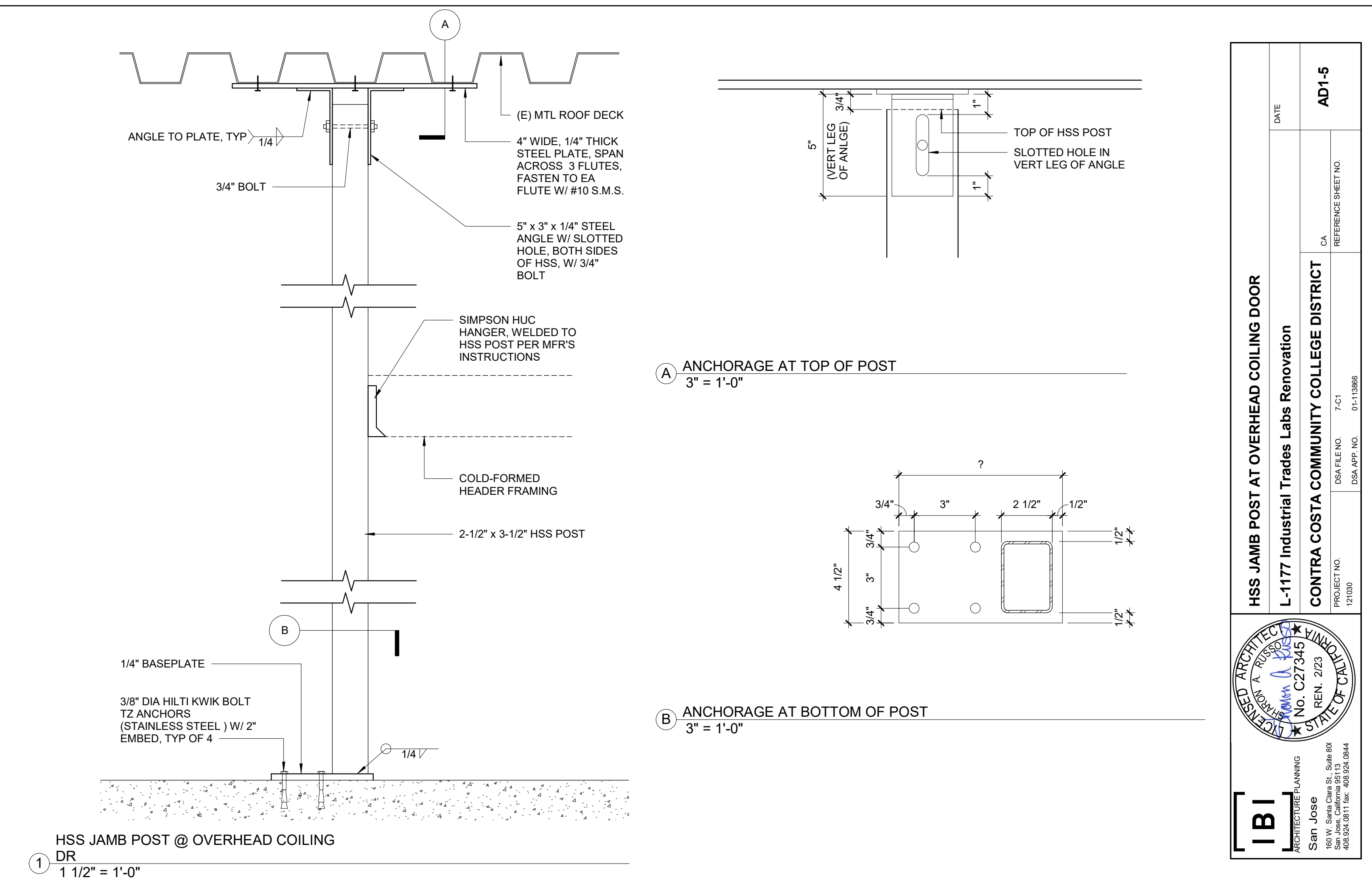
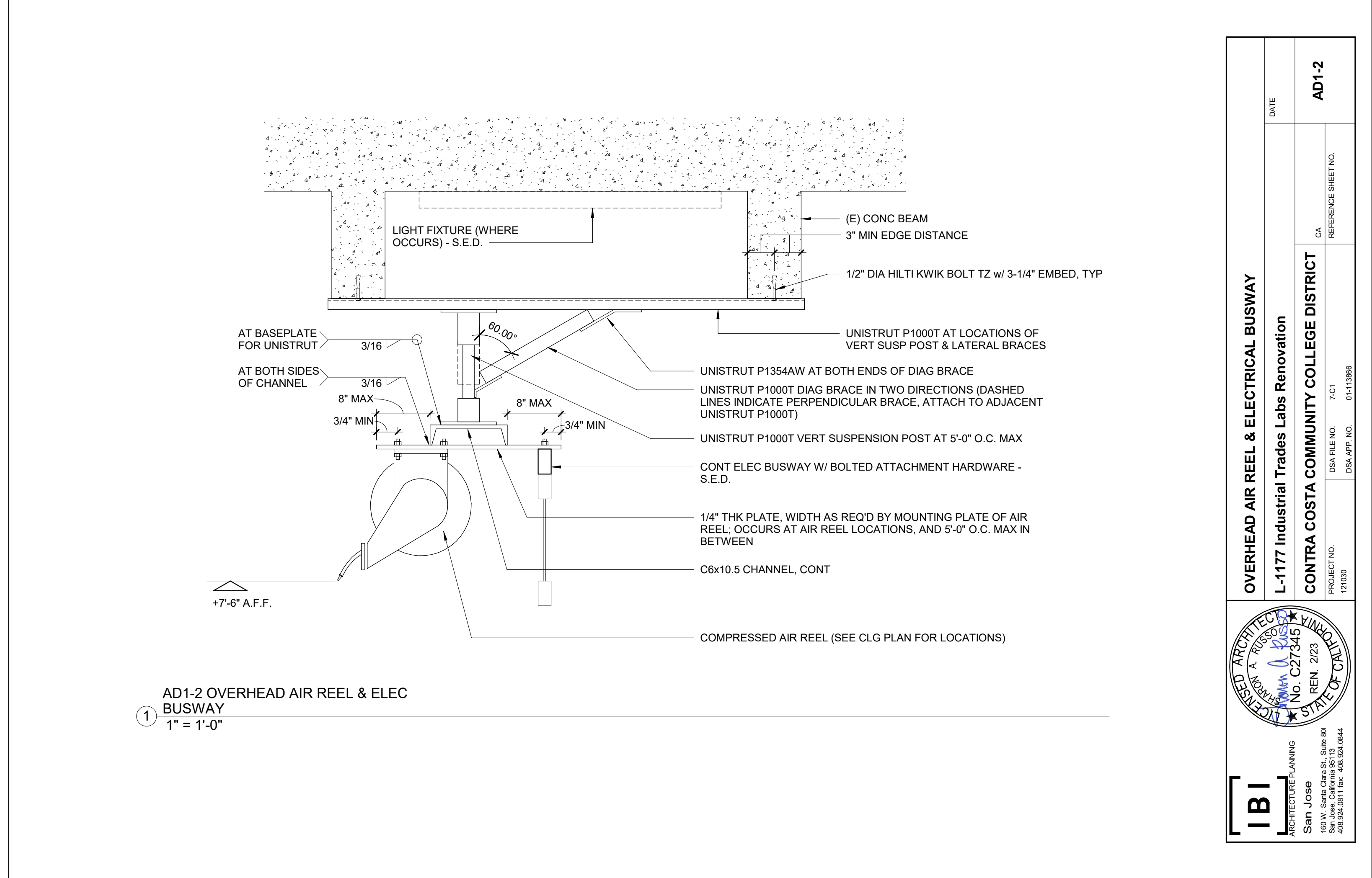
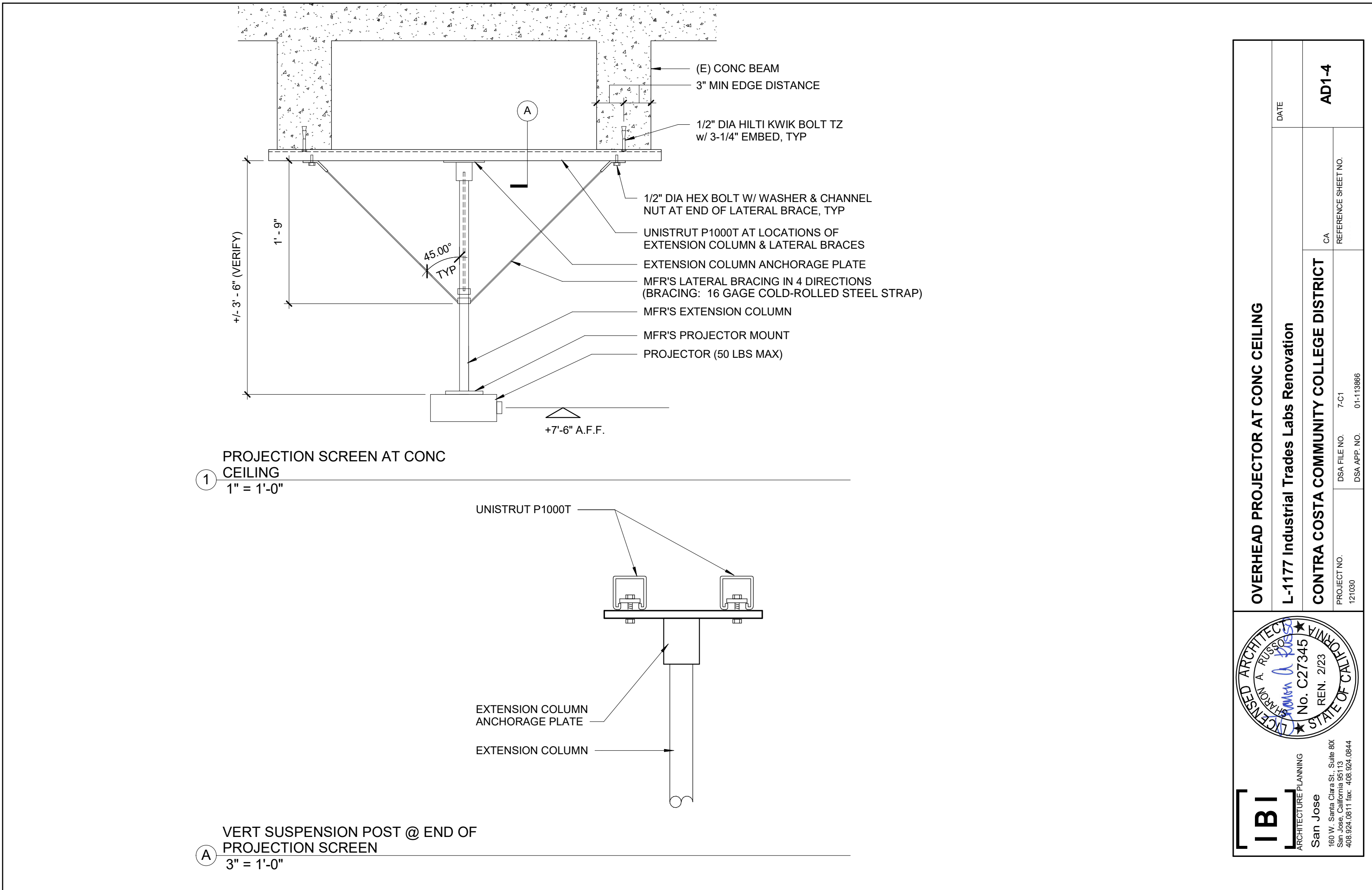
AD2-A6010

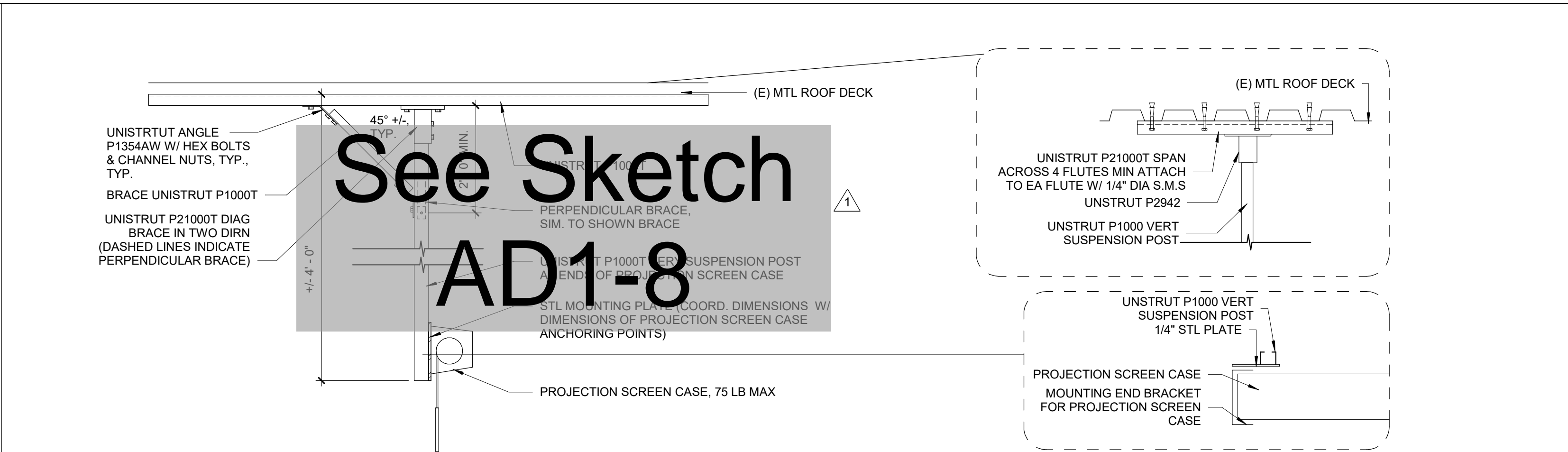
ISSUE

1 of 1

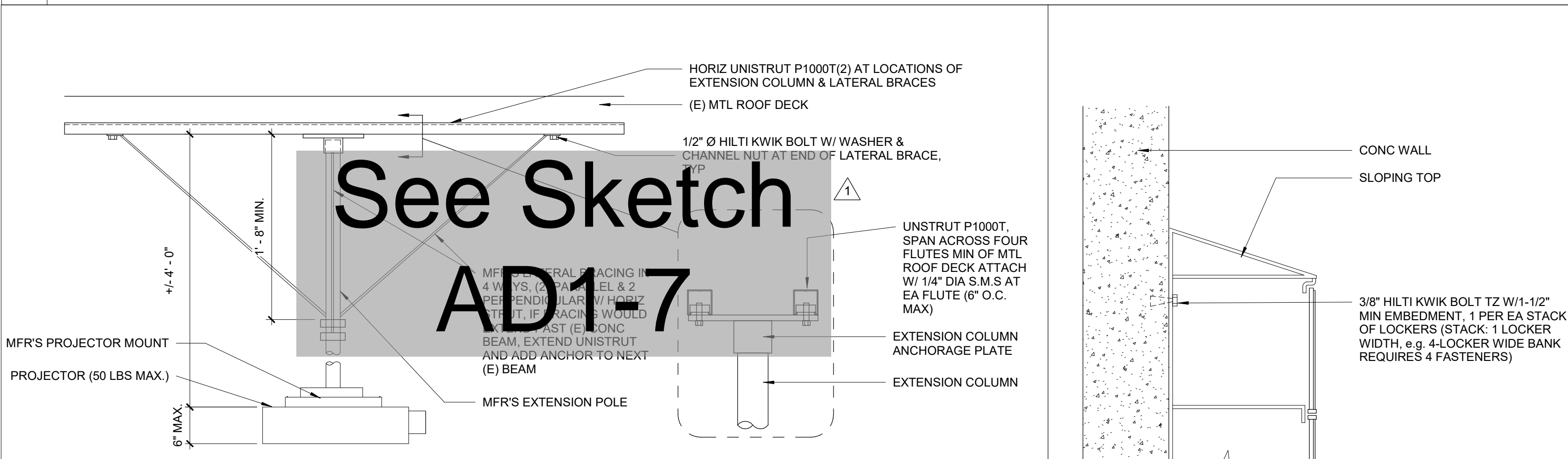


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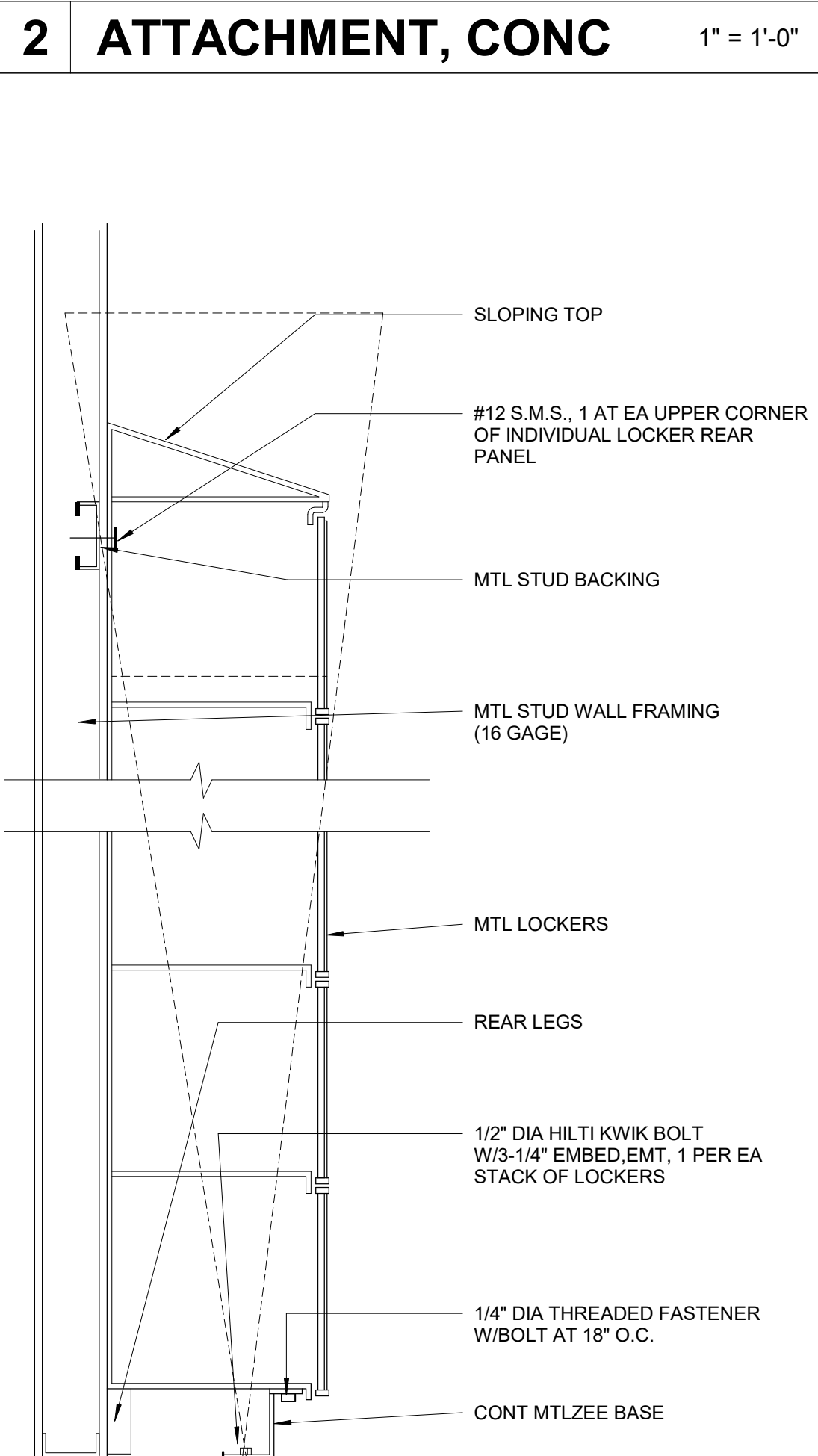
6 PROJECTION SCREEN AT METAL DECK CEILING 1" = 1'-0"



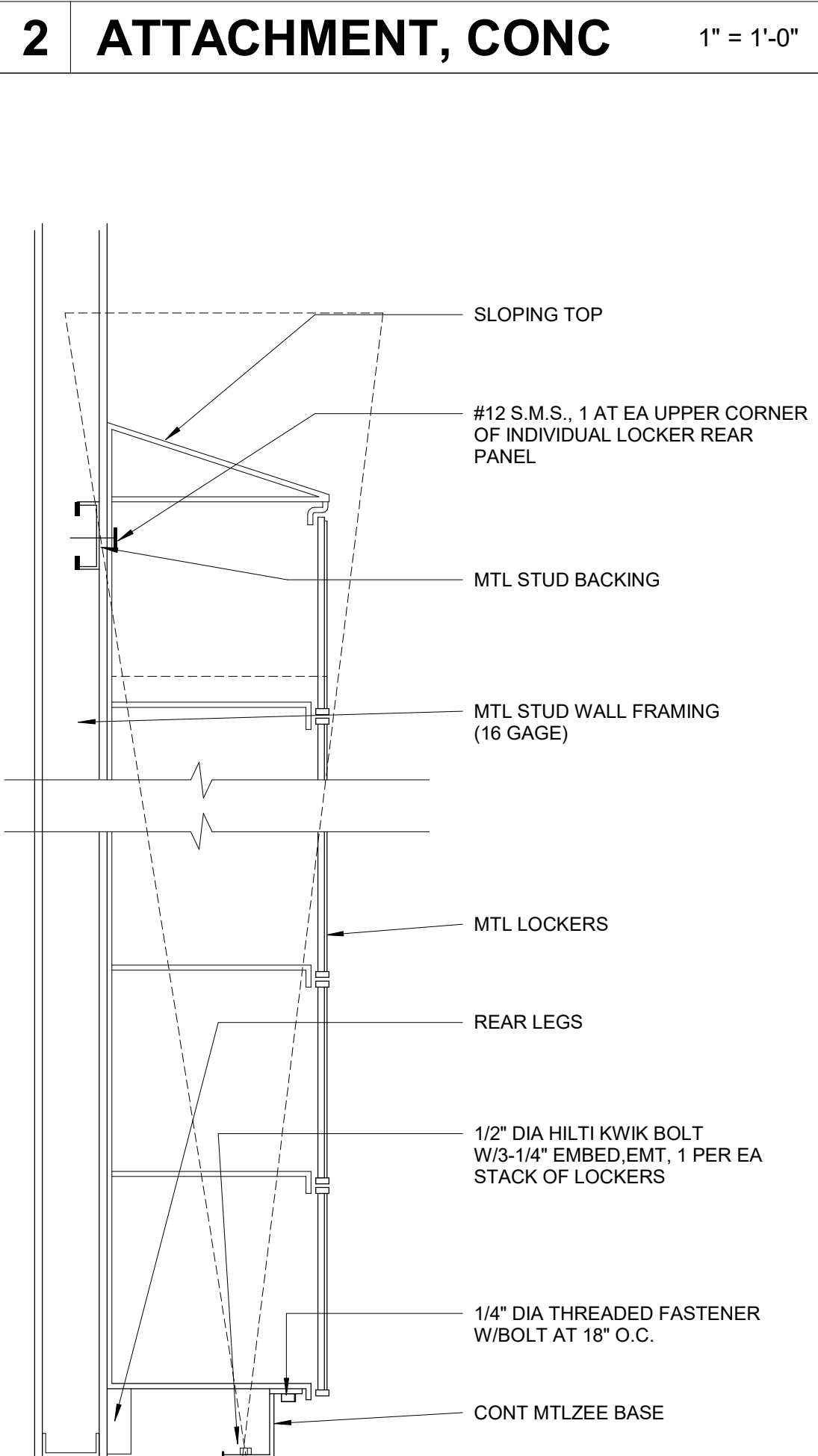
5 OVERHEAD PROJECTOR AT MTL DECK CEILING 1" = 1'-0"



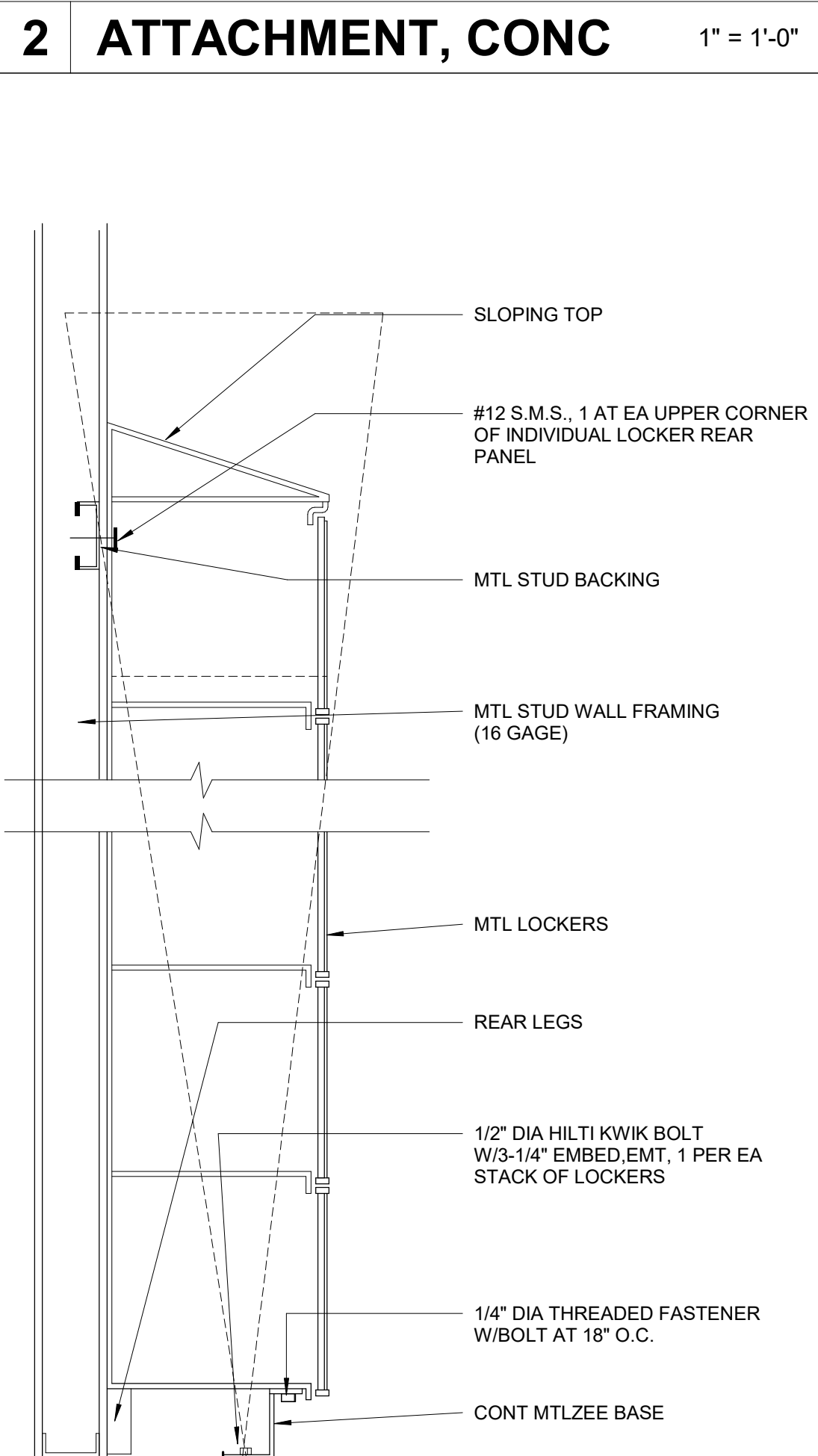
4 OVERHEAD AIR REEL 1" = 1'-0"



3 WALL FURRING 1/2" = 1'-0"



2 ATTACHMENT, CONC 1" = 1'-0"



1 ATTACHMENT, STUD 1" = 1'-0"

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-118866 INC:
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 07/09/2020

CLIENT

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DISTRICT

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CONSULTANTS

SEAL

PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 0844
ibigroup.com

PROJECT

L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
Author

CHECKED BY:
Checker

PROJECT MGR:
Designer

APPROVED BY:
Approver

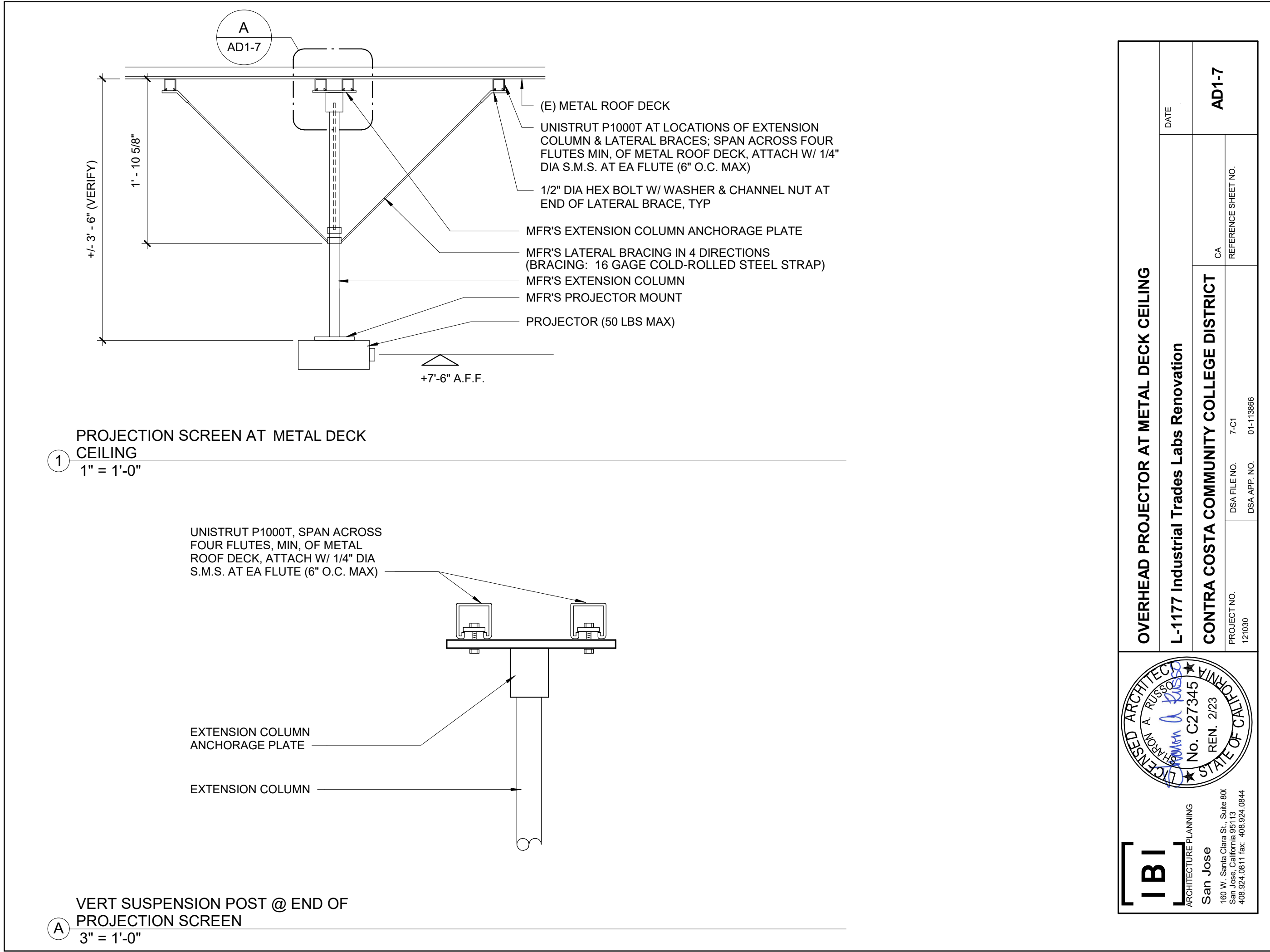
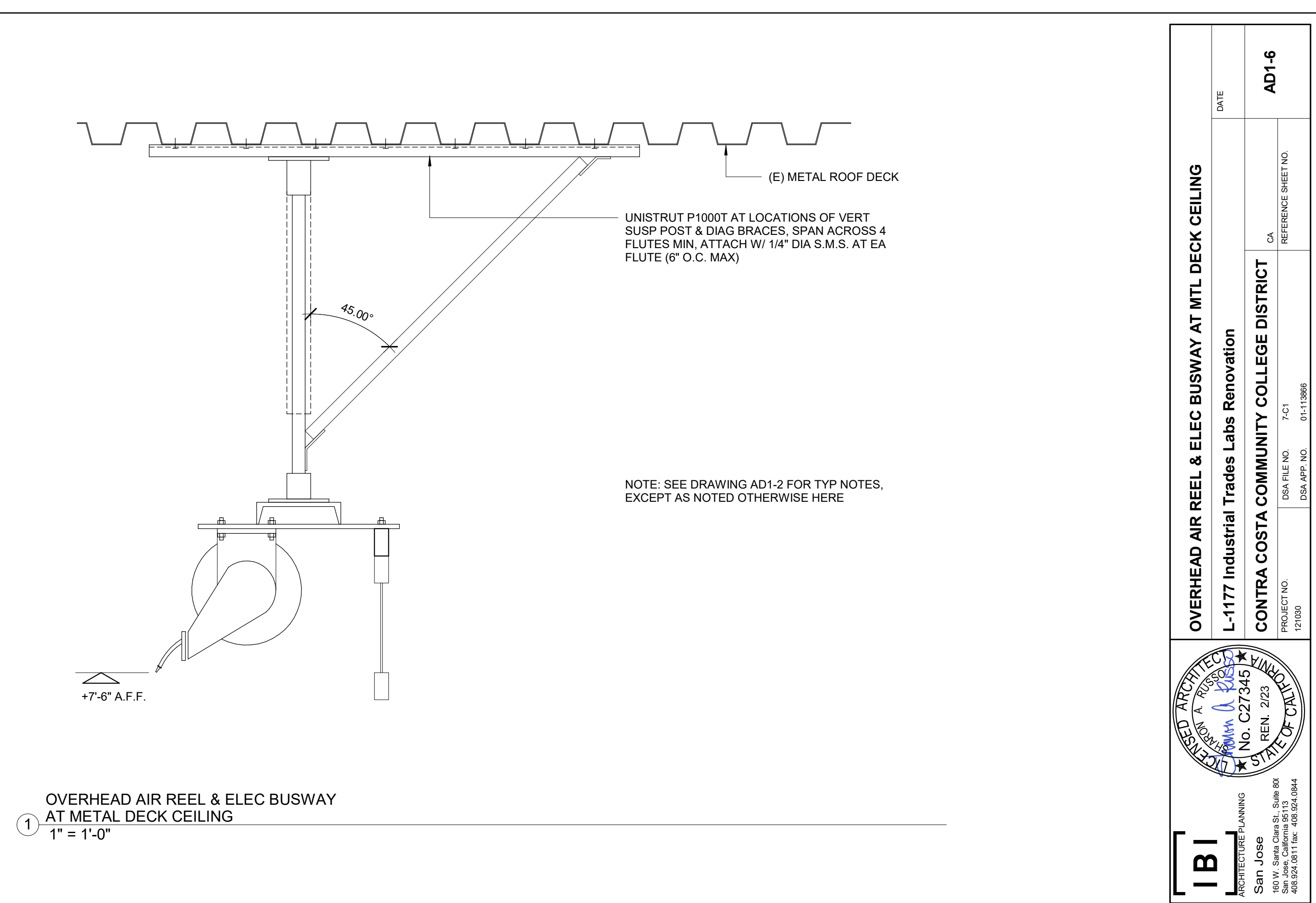
SHEET TITLE

DETAILS

SHEET NUMBER

A8002

ISSUE



MATERIAL ABBREVIATIONS LISTED BELOW APPLIES TO THIS SHEET ONLY AND TAKE PRECEDENCE OVER THOSE ABBREVIATIONS LISTED ON SHEET A0.01. REFER TO SHEET A0.01 FOR ABBREVIATIONS NOT LISTED BELOW.

FLR1 - EXISTING CONCRETE
FLR2 - CONC TOPPING OVER EXISTING SLAB, TROWEL FINISH
SEE DETAIL 1 ON SKETCH AD1-1 ON THIS SHEET

B1 - RESILIENT TOP SET BASE (AT NEW GYP BD WALL)

C	- EXISTING CONC, UNPAINTED
GB	- GYPSUM BOARD, PAINTED
GBWR	- WATER RESISTANT GYPSUM BOARD
P	- PAINT
PL	- PLASTIC LAMINATE
PLAS	- PLASTER
PLY	- PLYWOOD
VCTP	- VINYL COVERED TACKABLE PANEL

CLG1	- EXISTING CONC COFFERED ROOF STRUCTURE, UNPAINTED
CLG2	- EXISTING EXPOSED STL ROOF STRUCTURE: NEW PAINT FOR FRAMING & UNDERSIDE OF DECKING

HS - HARDENER/SEALER
FAC - FACTORY APPLIED FINISH
P - PAINT
PF - PREFINISHED

FP	- SPRAYED FIRE PROOFING
GRT	- GROUT
INTU	- INTUMESCENT PAINT
MIR	- MIRROR

1. REFER TO INTERIOR ELEVATIONS FOR ELEVATIONS, WALLS, AND FINISHES NOT NOTED IN THE ROOM FINISH SCHEDULE.

1. REFER TO INTERIOR ELEVATIONS FOR ELEVATIONS, WALLS, AND FINISHES NOT NOTED IN THE ROOM FINISH SCHEDULE.

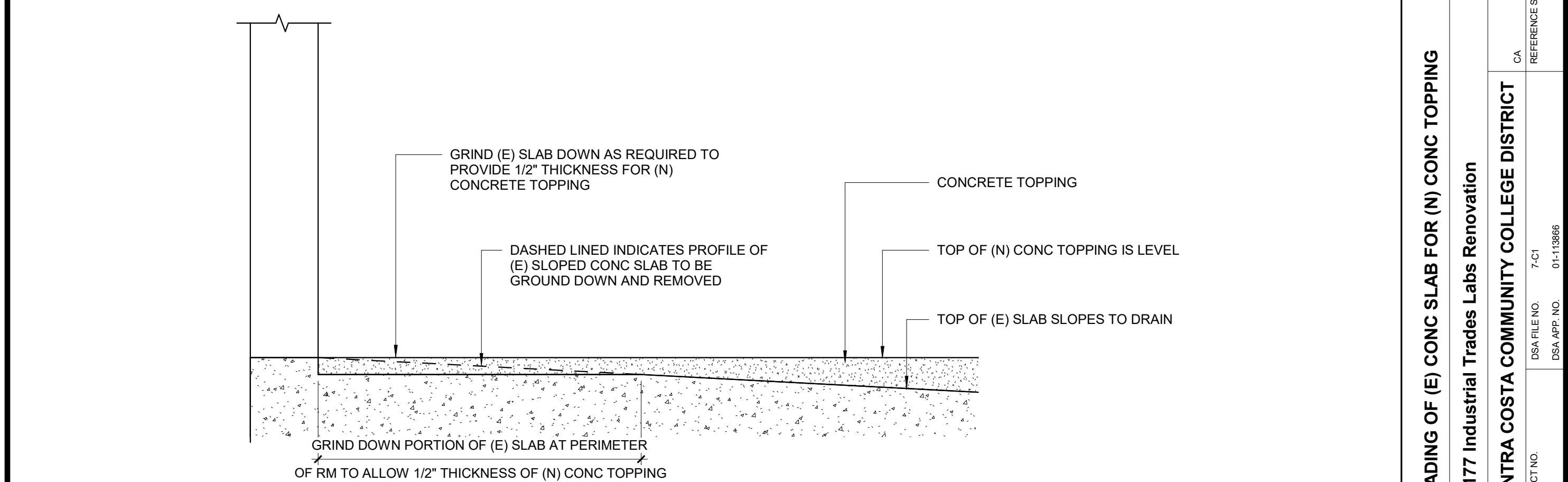
2. WHERE MORE THAN ONE FLOOR FINISH MATERIAL IS INDICATED IN A ROOM, REFER TO FLOOR PLAN FOR EXTENT AND LAYOUT OF EACH TYPE OF MATERIAL.
2. WHERE MORE THAN ONE WALL FINISH IS INDICATED, REFER TO INTERIOR ELEVATIONS.
3. PAINT ACCESS PANELS, LOUVERS, GRILLES, ETC. TO MATCH ADJACENT FINISH. ACCESS PANELS IN CERAMIC TILE SHALL BE STAINLESS STEEL.
4. WHERE MORE THAN ONE CEILING FINISH MATERIAL IS INDICATED IN A ROOM, REFER TO REFLECTED CEILING PLAN FOR EXTENT AND LAYOUT OF EACH TYPE OF MATERIAL.
5. GYPSUM BOARD IN CONCEALED SPACES TO HAVE LEVEL-1 FINISH.
6. THE FINISH FLOOR TRANSITION BETWEEN SPACES IS TO OCCUR AT THE "STRIKE-SIDE" OF THE DOORWAY IN THE DIRECTION OF DOOR SWING, UNLESS OTHERWISE NOTED ON FLOOR PLAN. OPENINGS WITHOUT DOORS SHALL BE AS INDICATED ON FLOOR PLANS.

1.	DOORS AND WINDOWS ARE IDENTIFIED AS DEFINED IN SYMBOL LEGEND ON SHEET AD.01.	10.	REFER TO DOOR SCHEDULE FOR DOOR WIDTHS, HEIGHTS, AND MATERIAL.
2.	ALL DOORS ARE 1-3/4" THICK U.O.N. ALL HOLLOW METAL FRAME MEMBERS ARE 2" IN WIDTH. U.O.N. REFER TO DETAILS.	11.	REFER TO FLOOR PLANS FOR DOOR LOCATIONS, AND DIRECTION OF SWINGS.
3.	EXIT DOORS FROM ALL OCCUPIED SPACES TO BE PROVIDED WITH TYPE OF LOCK OR LATCH THAT IS OPENABLE FROM THE INSIDE PER THE REQUIREMENTS OF THE 2013 CALIFORNIA BUILDING CODE SECTION 1008, ARTICLE 1008.1.9 - DOOR OPERATIONS.	12.	DOOR AND FRAME TYPE SCHEDULE. IF NO DETAIL IS REFERENCED, REFER TO SIMILAR CONDITIONS.
4.	ALL RATED DOORS TO BE POSITIVE LATCHING AND SELF-CLOSING. 'LABEL' SHALL MEAN 'FIRE ASSEMBLY' AS DEFINED IN 2013 CBC SECTION 715	13.	IN ADDITION TO THE LOCATIONS INDICATED, PROVIDE TEMPERED GLASS IN THE FOLLOWING LOCATIONS:
5.	ALL LABELED DOORS SHALL HAVE APPROPRIATE CLOSER AND HARDWARE ASSEMBLIES AS REQUIRED BY DOOR LABELING AGENCY.	A.	WITHIN A 24-INCH RADIUS OF DOOR JAMBS.
6.	ALL DOORS AND FRAMES SHALL BE PAINTED COLOR AS SPECIFIED BY THE ARCHITECT.	B.	IN FIXED PANELS WHICH HAVE A GLAZED AREA IN EXCESS OF 9 SQUARE FEET AND THE LOWEST EDGE IS LESS THAN 18-INCHES ABOVE FINISHED FLOOR LEVEL.
7.	THE MAXIMUM EFFORT TO OPERATE DOORS SHALL BE AS FOLLOWS:	14.	GLAZING DESIGNATIONS:
A.	INTERIOR DOORS = 5 LBS	T	CLEAR TEMPERED GLASS
B.	EXTERIOR DOORS = 5 LBS	FR	FIRE RATED SAFETY GLASS
C.	FIRE DOORS = THE AUTHORITY HAVING JURISDICTION MAY INCREASE THE MAXIMUM EFFORT TO OPERATE FIRE DOORS TO ACHIEVE POSITIVE LATCHING BUT NOT TO EXCEED 15 LBS. MAXIMUM.	IG	CLAR TEMPERED INSULATED GLASS
8.	FLOOR MOUNTED DOOR STOPS AND SIMILAR OBSTRUCTIONS TO BE INSTALLED 4" MAX. FROM FACE OF WALL OR PARTITION.		ANCHORAGE OF WINDOWS, ALUMINUM STOREFRONT, AND CURTAIN WALL SYSTEMS TO ADJACENT STRUCTURE AS INDICATED ON DETAILS IS SHOWN ONLY FOR PURPOSES OF OBTAINING DRAWING APPROVAL FROM THE DIVISION OF THE STATE ARCHITECT. ACTUAL ANCHORAGES ARE TO BE INDICATED ON SHOP DRAWINGS AND FULLY ENGINEERED (WITH SUPPORTING CALCULATIONS) TO PERFORMANCE REQUIREMENTS INDICATED IN PROJECT MANUAL.
9.	PROVIDE ROOM IDENTIFICATION SIGNAGE AT ALL DOORS, U.O.N. REFER TO DOOR SCHEDULE. CONTRACTOR SHALL SUBMIT A DOOR SIGNAGE SCHEDULE TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.	16.	WINDOW HEIGHTS INDICATED ARE RELATIVE TO FINISH FLOOR ELEVATION IN WHICH WINDOW OCCURS.

1. FRAMES INDICATED TO BE REFINISHED, CONTRACTOR SHALL: MODIFY FRAME TO RECEIVE NEW HARDWARE AND STRIP, SAND, PATCH, AND REPAINT FRAME.
2. CONTRACTOR SHALL FIELD VERIFY ALL DOOR SIZES PRIOR TO CONSTRUCTION.

NOTE: DETAIL B, E, AND F REFER TO DRAWING AD-10;
DETAIL D, E, F, AND F REFER TO DRAWING AD-11.

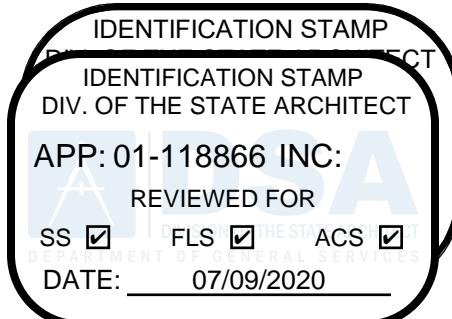
No.	ROOM NAME	FLOOR				BASE				NORTH		EAST		SOUTH		WEST		CEILING	REMARKS	No.
		M1	F1	M2	F2	M1	F1	M2	F2	M1	F1	M1	F1	M1	F1	M1	F1			
101	APPLIANCE LAB		(E)			NONE					C		C			C		(E)EXP	CLEAN	101
102	HVAC LAB		FLR2			B1					C		GB		C	C		(E)EXP	CONCRETE TOPPING	102
103	OFFICE		FLR1			NONE					C		C		C	C		(E)EXP		103
104	HALLWAY		FLR1			B1					C		C		C		GB	(E)EXP		104
105	UNISEX		(E)			(E)	(E)				(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	PATCH (E) FINISHES TO MATCH EXISTING AFTER NEW LAV INSTALLATION	105



AD1-1 GRADING (E) CONC NEW
TOPPING
1" = 1'-0"

DOOR No.	DOOR				FIRE RATING	HARDWARE	FRAME					REMARKS	DOOR No.	
	TYPE	MAT	FINISH	WIDTH			HEIGHT	TYPE	MAT	FINISH	HEAD			STRIKE
101A	B	HM	P	6'-0"	7'-0"	60 MIN	03	(E)	HM	P				101A
102A	A	HM	P	3'-0"	7'-0"		01	AA	HM	P				102A
102B	E	STL	FAC	8'-0"	8'-0"		--	--	HM	P				102B
103A	D	HM	P	3'-0"	7'-0"		02	BB	HM	P				103A
103B	(E)	HM	P	3'-0"	7'-0"		--	(E)	HM	P				103B
104A	C	HM	P	6'-0"	7'-0"		04	(E)	HM	P				104A
104B	B	HM	P	6'-0"	7'-0"	60 MIN	03	(E)	HM	P				104B

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No.	DESCRIPTION	DATE
1	ADDENDUM 1	3/23/2021
2	ADDENDUM 2	4/30/2021

CONSULTANTS

SEAL



PRIME CONSULTANT



IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 084
ibigroup.com

PROJECT
L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT N
121030

DRAWN BY: Author	CHECKED BY: Checker
PROJECT MGR:	APPROVED BY:

ARCHITECTURAL	Approver
SHEET TITLE	
ROOM FINISH SCHEDULE	

SHEET NUMBER	ISSUE
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A9101

QC	
INI	%

MECHANICAL GENERAL NOTES

- ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES AND INDUSTRY STANDARDS.
- VERIFY EXACT LOCATION OF ALL (E) EQUIPMENT, DUCTWORK, DIFFUSERS, REGISTERS AND GRILLES. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN (E) SYSTEMS AND DRAWINGS.
- COORDINATE EXACT LOCATION OF EQUIPMENT AND ALL PENETRATIONS THROUGH ROOF, FLOORS AND WALLS WITH ARCHITECTURAL STRUCTURAL SYSTEMS PRIOR TO COMMENCING WORK.
- COORDINATE EXACT SIZE AND ROUTING OF DUCTWORK WITH ARCHITECTURAL PLANS, STRUCTURE AND EQUIPMENT PRIOR TO COMMENCING WORK.
- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING DIFFUSERS, REGISTERS AND GRILLES.
- FURNISH AND INSTALL MANUAL AIR DAMPERS AT ALL DUCT BRANCH TAKEOFFS TO A SINGLE SUPPLY DIFFUSER.
- ALL DUCTWORK, CEILING DIFFUSERS/REGISTERS/GRILLES, EQUIPMENT, PIPING ETC., ARE NEW U.O.N. (SHOWN HEAVY). (E) DUCTWORK, PIPING ETC. IS SHOWN LIGHT. SEE LEGEND.
- (E) DUCTWORK AND ITEMS TO BE REMOVED ARE SHOWN CROSSED ("X") OUT, SEE LEGEND, COORDINATE CLOSELY WITH (N) STRUCTURAL AND P.O.C.'S SHOWN. ALL OTHER (E) DUCTWORK, ETC. TO REMAIN.
- THERMOSTAT TO BE INSTALLED AT 48" ABOVE FINISHED FLOOR (TOP OF THERMOSTAT), DO NOT INSTALL THERMOSTAT OVER CASEWORK OR SHELVING OVER 24" IN DEPTH & 34" IN HEIGHT.

DIFFUSER, REGISTER & GRILLE SCHEDULE

SYMBOL	DESCRIPTION	KRUEGER	METALAIRE	NAILOR	TITUS
	DOUBLE DEFLECTION SUPPLY GRILLE WITH VERTICAL FRONT BARS, 3/4" SPACING	880 V	V 4004 S	61 DV	300 RS
	RETURN OR EXHAUST GRILLE WITH 35" OR 45" HORIZONTAL BARS.	S 80 H	SRH	7145 H	350 RL
	DOUBLE DEFLECTION SPIRAL DUCT MOUNTED SUPPLY OR RETURN GRILLE WITH CURVED FRAM AIR SCOOP EXTRACTOR, VERTICAL FRONT BLADES, 3/4" SPACING.	EQUAL	EQUAL	EQUAL	S300FS

- NOTES:**
- ALL SYMBOLS NOTED MAY NOT BE USED. REFER TO PLANS FOR SIZE AND QUANTITY.
 - ALL SUPPLY AIR DIFFUSERS ARE 4 WAY BLOW UNLESS SHOWN OTHERWISE.
 - FURNISH ALL PRODUCTS OF A SINGLE MANUFACTURER.
 - COORDINATE DIFFUSER TYPE WITH REFLECTED CEILING PLAN.
 - OPPOSED BLADE DAMPERS ARE NOT REQUIRED AT DIFFUSERS, REGISTERS OR GRILLES.
 - PROVIDE MANUAL AIR DAMPERS AT EACH BRANCH DUCT TO A SINGLE DIFFUSER, REGISTER OR GRILLE.
- * ALUMINUM REGISTERS FOR SHOWERS AND DAMP AREAS

DUCT LEGEND

SINGLE LINE SYMBOL	DOUBLE LINE SYMBOL	DESCRIPTION
		RECTANGULAR DUCT - WIDTH x DEPTH (PLAN VIEW)
		RECTANGULAR DUCT - DEPTH x WIDTH (SECTION VIEW)
		1" ACOUSTICALLY LINED RECTANGULAR DUCT-DIMENSIONS ARE OUTSIDE
		2" ACOUSTICALLY LINED RECTANGULAR DUCT-DIMENSIONS ARE OUTSIDE
		MANUAL AIR DAMPER
		RISE OR DROP DUCT IN DIRECTION OF AIR FLOW
		RECTANGULAR TO ROUND TRANSITION, MAX. SLOPE OF 1:3
		RECTANGULAR TO ROUND TRANSITION, MAX. SLOPE OF 1:3
		ELBOW, RECTANGULAR, SMOOTH RADIUS, WITHOUT TURNING VANES
		SQUARE/RECTANGULAR DUCT ELBOW WITH TURNING VANES
		CONVERGING OR DIVERGING TEE, 45° ENTRY, RECTANGULAR MAIN AND BRANCH. WHEN REDUCING MAIN, SIDE OF TAKE OFF OR ENTRY BRANCH TO BE FLAT, OTHER SIDES MAX. SLOPE OF 1:3
		CONICAL DUCT TAKE OFF FROM RECTANGULAR VIA SPIN-IN W/DAMPER AND SCOOP
		ROUND DUCT TAKE OFF FROM RECTANGULAR VIA SMOOTH CONVERGING BELL MOUTH
		RECTANGULAR DUCT TEE, MAD'S ON THE 2 BRANCHES, THROAT SIZED FOR EQUAL PRESSURE DROP
		RECTANGULAR DUCT SPLIT MAD'S, THROAT SIZED FOR EQUAL PRESSURE DROP
		3-WAY RECTANGULAR SPLIT WITH TWO TRANSITIONAL ELBOWS AND TRANSITIONING MAIN. DOWNSTREAM MAD'S ON THE THREE BRANCHES. THROATS SIZED FOR EQUAL PRESSURE DROP.
		FOR CONCEALED DUCT: DROP TO DIFFUSER SHALL BE FULL SIZE OF DIFFUSER NECK. FOR EXPOSED DUCT: DROP SHALL BE FULL SIZE OF OD DIFFUSER FRAME, FLANGE FOR MOUNTING DIFFUSER TURNED IN. AIR EXTRACTOR AND EQUALIZER GRID AT CONNECTION TO MAIN.
		SUPPLY AIR, SUPPLY AIR DUCT IN SECTION, SUPPLY DROP
		RETURN AIR, RETURN AND OUTSIDE AIR DUCT IN SECTION, RETURN AIR DROP
		EXHAUST AIR, EXHAUST AIR DUCT IN SECTION, EXHAUST AIR DROP
		FLEXIBLE DUCT (ROUND)
		FLEXIBLE DUCT (FABRIC)
		45° REDUCING LATERAL FITTING
		90° REDUCING TEE FITTING

EXHAUST FAN SCHEDULE

UNIT	SERVES	"GREENHECK" MODEL NO. U.N.O.	CFM	SP (IN. W.G.)	DUTY	STYLE	RPM	HP	VOLT/PH	OPER. WT. (LBS.)	INTERLOCK TO RUN WITH	MOUNTING DETAIL	NOTES
	VOCATIONAL LAB 101	G-180-VG	4,400	0.5	E	RED	840	0.75	208/1	85	EMS TIMECLOCK		
DUTY: E- EXHAUST STYLE: RED- ROOF EXHAUST DOWNBLAST, REU- ROOF EXHAUST UPBLAST NOTES: PROVIDE WITH THERMAL OVERLOAD PROTECTED MOTOR. PROVIDE WITH FACTORY BACKDRAFT DAMPER. REFER TO CONTROL DIAGRAM 3/M5001.													

MECHANICAL LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	ABV	ABOVE
	ABC	ABOVE CEILING
	AF	ABOVE FLOOR
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	AD, AP	ACCESS DOOR, ACCESS PANEL
	AC	AIR CONDITIONING
	APD	AIR PRESSURE DROP, INCHES WATER COLUMN
	AB	ANCHOR BOLT
	BDD	BACK DRAFT DAMPER
	BF	BELOW FLOOR
	BHP	BRAKE HORSE POWER
	BTU(H)	BRITISH THERMAL UNITS (PER HOUR)
	BPT	BYPASS TIMER
	CC	CENTER TO CENTER
	CLG	CEILING
	CEF	CEILING EXHAUST FAN
	CLR	CLEAR
	CONC	CONCRETE
	CD	CONCENTRIC REDUCER
	COND	CONDENSATE DRAIN
	CONN	CONDENSER
	CONT	CONNECT OR CONNECTION
	CONTR	CONTINUATION
	CFM	CONTRACTOR
	CFM	CUBIC FEET OF AIR FLOW PER MINUTE
	DPR	DAMPER
	DIA	DEGREES FAHRENHEIT
	DL	DIAMETER, PHASE
	DN	DOOR LOUVER
	DR	DOWN
	DB	DRAIN
	DS	DRY BULB (DEGREES FAHRENHEIT)
	EP	DYNAMIC SENSOR
	EL	ECCENTRIC REDUCER
	ENT	ELECTRICAL PANEL
	EDB	ELEVATION
	EW	ENTERING
	EWT	ENTERING DRY BULB
	EWB	ENTERING WATER
	EW	ENTERING WATER TEMPERATURE
	EVAP	ENTERING WET BULB
	EC	EVAPORATOR
	EA	EVAPORATIVE COOLER
	EAD	EXHAUST AIR DAMPER
	EF	EXHAUST FAN
	(E), EXIST	EXISTING
	(E)	EXISTING TO BE REMOVED
	(E)	EXISTING TO BE ABANDONED
	(E)	EXISTING TO BE CAPPED
	ESP	EXTERNAL STATIC PRESSURE
	FPM	FEET PER MINUTE
	FIN	FINISH
	FD	FIRE DAMPER
	FS	FIRE/SMOKE DAMPER
	FC	FLEXIBLE CONNECTION
	FLR	FLOOR
	FLV	FLOW IN DIRECTION OF ARROW
	FA	FLOW LIMITING VALVE
	FB	FROM ABOVE
	FLA	FROM BELOW
	GALV	FULL LOAD AMPS
	GI	GALVANIZED
	GA	GALVANIZED IRON
		GAUGE

PIPING, DUCTWORK & ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON PREAPPROVED INSTALLATION GUIDE (E.G., SMACNA OR OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP ☐ MD ☐ PP ☐ E ☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS

MP ☐ MD ☒ PP ☐ E ☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #) #0043-13.

MECHANICAL LEGEND cont'd

SYMBOL	ABBREVIATION	DESCRIPTION
	HTG	HEATING
	H	HUMIDISTAT, "X" INDICATES DEVICE CONTROLLED
	IE	INVERT ELEVATION
	KW	KILOWATTS
	KWH	KILOWATT HOUR
	LDB	LEAVING DRY BULB IN DEGREES FAHRENHEIT
	LWB	LEAVING WET BULB IN DEGREES FAHRENHEIT
	LRA	LOCKED ROTOR AMPERES
	LVR	LOUVER
	MAD, MD	MANUAL AIR DAMPER
	MFR	MANUFACTURER
	MAX	MAXIMUM
	MCC	MINIMUM
	(N)	MOTOR CONTROL CENTER
	OC	NEW
	OA	ON CENTER
	OAD	OUTSIDE AIR
	OD	OUTSIDE AIR DAMPER
	OV	OUTSIDE DIAMETER
	OH	OUTLET VELOCITY
		OVERHEAD
		PIPE DROP
		PIPE RISE
		PITCH DOWN IN DIRECTION OF FLOW
	POC	POINT OF CONNECTION
	LBS	POUNDS
	PSI (G) (A)	POUNDS PER SQUARE INCH (GAUGE) (ABSOLUTE)
	PD	PRESSURE DROP
	PRV	PRESSURE REDUCING VALVE
	RG	REFRIGERANT GAS PIPING
	RS	REFRIGERANT SUCTION PIPING
	RL	REFRIGERANT LIQUID PIPING
	RA	RETURN AIR
	RAD	RETURN AIR DAMPER
	RPM	REVOLUTIONS PER MINUTE
	RLA	RUNNING LOAD AMPERES
	SB	SECURITY BARS
	SM	SHEET METAL
	SD	SMOKE DAMPER
	SKD	SMOKE DETECTOR
	SD	SPLITTER DAMPER
	SQFT, FT ²	SQUARE FEET
	SQIN, IN ²	SQUARE INCHES
	SP	STATIC PRESSURE
	SPD	STATIC PRESSURE DROP
	SA	SUPPLY AIR
	SF	SUPPLY FAN
	TCV	TEMPERATURE CONTROL PANEL
		TEMPERATURE CONTROL VALVE
	T	TEMPERATURE SENSOR, "X" INDICATES DEVICE CONTROLLED
	TM	THERMOSTAT, "X" INDICATES DEVICE CONTROLLED
	TB	THOUSAND BRITISH THERMAL UNITS PER HOUR
	TA	TO ABOVE
	TB	TO BELOW
	TP	TOTAL PRESSURE
	TSP	TOTAL STATIC PRESSURE
	TYP	TYPICAL
	UG	UNDERGROUND
	UCD	UNDER CUT DOOR
	UON	UNLESS OTHERWISE NOTED
	WPD	WATER PRESSURE DROP
	W	WATTS
	WT	WEIGHT
	WB	WET BULB
	WMS	WIRE MESH SCREEN

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

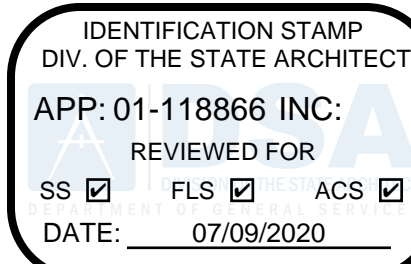
- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING FLEXIBLE CABLE.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT ARE REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.

- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTION SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL. RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

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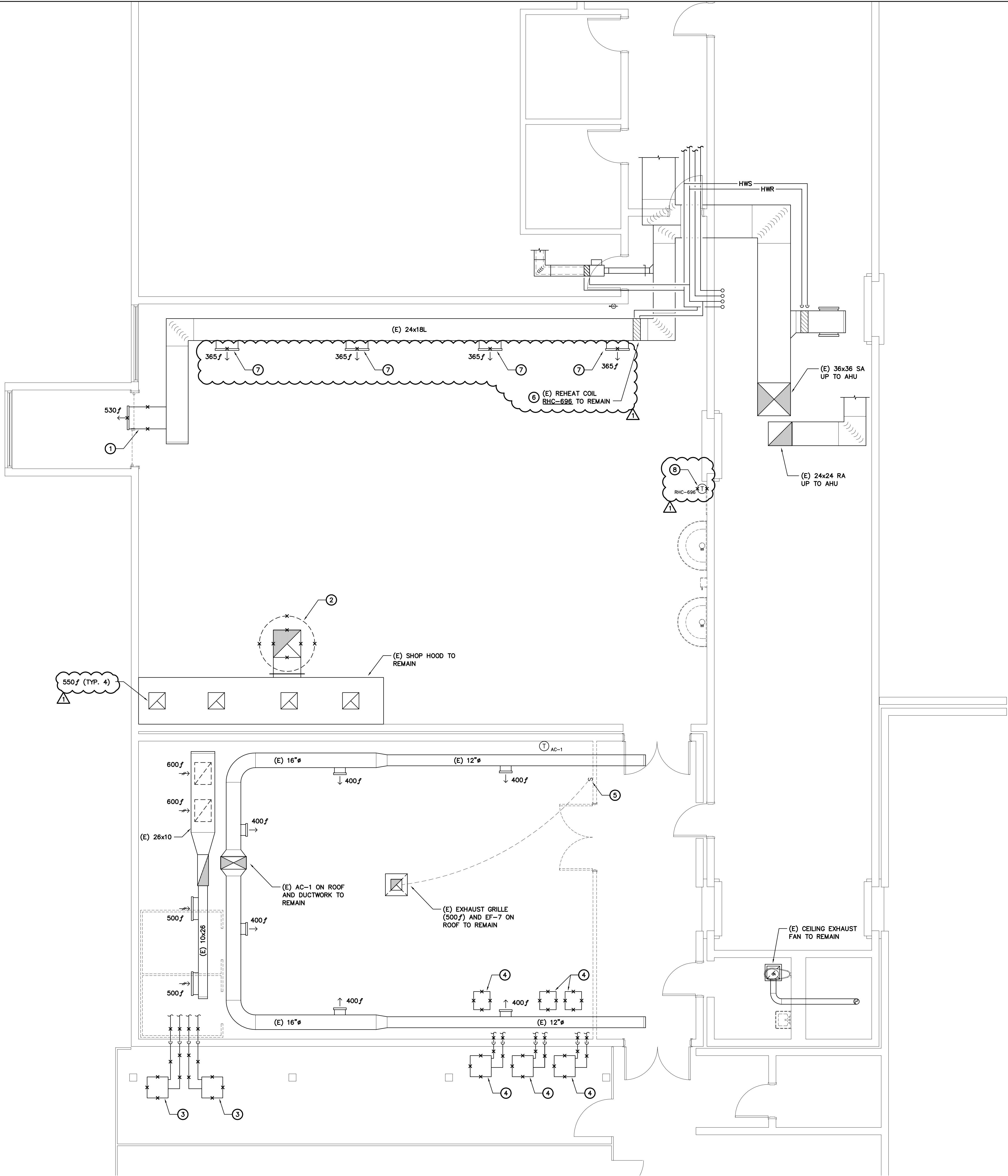
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ISSUES

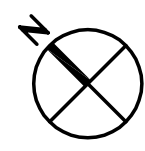
No.	DESCRIPTION	DATE
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QC	INI	%



MECHANICAL DEMOLITION PLAN
SCALE : 1/4" = 1'-0"

1
M2010



SHEET NOTES:

1. LOCATIONS OF EXISTING EQUIPMENT, DUCTWORK AND PIPING SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL EXISTING HVAC COMPONENTS THAT WILL REQUIRE REMOVAL OR ABANDONMENT FOR COMPLETION OF NEW WORK. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS AND NUMBER OF EXISTING HVAC COMPONENTS IN FIELD PRIOR TO BEGINNING WORK AND PROVIDE ALL NECESSARY DEMOLITION REQUIRED TO COMPLETE NEW HVAC SYSTEM INSTALLATION.

- KEYNOTES:**
- 1 REMOVE EXISTING 28x6 SA DUCT AND GRILLE, AND PREPARE MAIN DUCT FOR NEW CONNECTION SHOWN ON SHEET M2310.
 - 2 REMOVE EXISTING EXHAUST FAN ON ROOF AND DUCTWORK BELOW AS SHOWN. DISCONNECT EXISTING CONTROLS AND PREPARE FOR RECONNECTION TO NEW FAN. PREPARE EXISTING CURB FOR REUSE AS SHOWN ON DETAIL 2/M5001. PREPARE DUCTWORK FOR CONNECTION TO NEW AS SHOWN ON SHEET M2310.
 - 3 REMOVE (E) CONDENSING UNITS, PIPING, CONTROLS AND ACCESSORIES SERVING WALK-IN FREEZERS. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL NOTES REGARDING THE REMOVAL OF THE WALK-IN FREEZERS.
 - 4 REMOVE (E) CONDENSING UNITS & INDOOR UNITS, PIPING, CONTROLS AND ACCESSORIES SERVING HVAC UNITS USED FOR TEACHING PURPOSES.
 - 5 EXISTING WALL SWITCH TO BE REMOVED AND RELOCATED AS SHOWN ON SHEET M2310.
 - 6 REMOVE (E) PNEUMATIC CONTROLS SERVING CONTROL VALVE.
 - 7 REMOVE (E) GRILLE.
 - 8 REMOVE (E) PNEUMATIC THERMOSTAT.

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No.	DESCRIPTION	DATE
1	ADDENDUM 1	03/23/21

CONSULTANTS

CAPITAL

ENGINEERING CONSULTANTS, INC.

RANCHO CONCORD, CALIFORNIA

TD - RCC/JH 191204.00

PM - DESIGN TEAM PRODUCT NO.

REGISTERED PROFESSIONAL ENGINEER

THOMAS A. JAMES

22836

EXPIRES 8/30/20

MECHANICAL

STATE OF CALIFORNIA

DATE SIGNED: 06/20/2020

SEAL

PRIME CONSULTANT

IBI

IBI GROUP

333 W. San Carlos St., Suite 600

San Jose, CA 95110, USA

tel 408 924 0811 fax 408 924 0844

ibigroup.com

PROJECT

L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
RCC/JH

CHECKED BY:
TD

PROJECT MGR:
ARCHITECTURAL

APPROVED BY:
Approver

SHEET TITLE

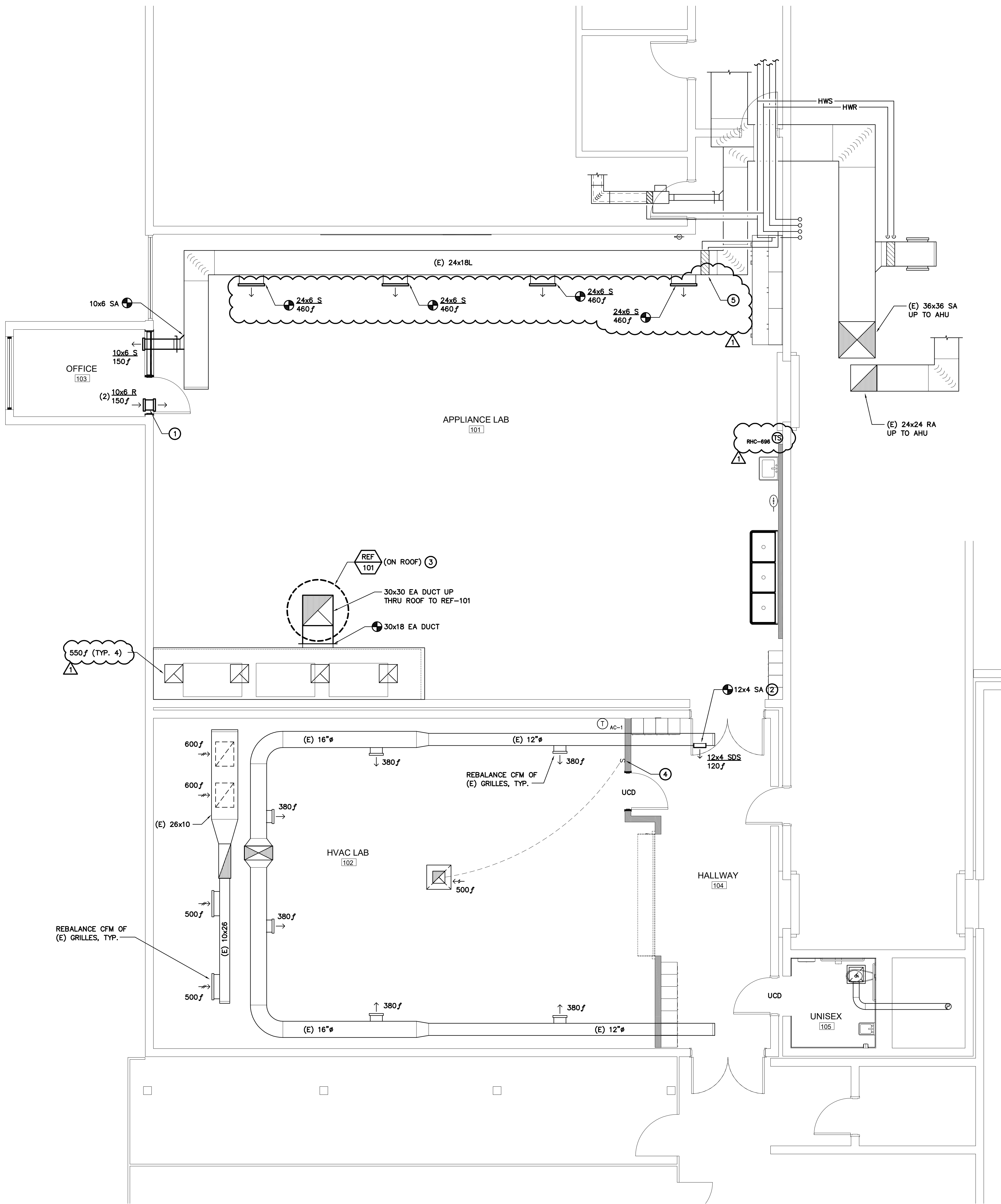
MECHANICAL
DEMOLITION PLAN

SHEET NUMBER

AD1-M2010

ISSUE

QC	
INI	%



MECHANICAL FLOOR PLAN

SCALE : 1/4" = 1'-0"

1
M2310

SHEET NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS / GRILLES / FANS / ACCESS PANELS, TYP.
2. EXISTING DIFFUSERS/GRILLES SHALL BE REBALANCED AT COMPLETION OF THE PROJECT TO THE CFM'S INDICATED.
3. SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36" HORIZONTALLY FROM SUPPLY REGISTERS. COORDINATE WITH SHEET FA4.1.

KEYNOTES:

- ① 10x6 TRANSFER DUCT.
- ② SIDEWALL DIFFUSER, REFER TO DETAIL 1/M5001 FOR MOUNTING.
- ③ NEW EXHAUST FAN ON EXISTING CURB, REFER TO DETAIL 2/M5001. RECONNECT EXISTING CONTROL WIRING. FIELD VERIFY EXISTING CURB SIZE AND PROVIDE FACTORY TRANSITION CURB IF REQUIRED.
- ④ EXISTING WALL SWITCH RELOCATED TO NEW WALL.
- ⑤ PROVIDE NEW "ANDOVER" EMS CONTROLS FOR EXISTING HOT WATER CONTROL VALVE, REFER TO CONTROL DIAGRAM 4/M5001.

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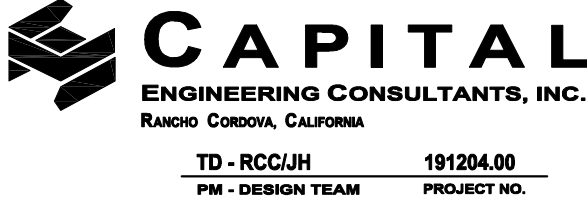
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ISSUES		
No.	DESCRIPTION	DATE
1	ADDENDUM 1	03/23/21

CONSULTANTS



DATE SIGNED: 06/30/2020

SEAL

PRIME CONSULTANT



PROJECT

L-1177 Industrial Trades Labs
Renovation
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:

RCC/JH

PROJECT MGR:

ARCHITECTURAL

SHEET TITLE

MEC

PLAN

TEXT

SHEET NUMBER
A-1

AD1-

ABSTRACT

ISSUE

QC	
INI	%

PLUMBING FIXTURE SPECIFICATION & CONNECTION SCHEDULE													
ADA	SYMBOL	FIXTURE	FIXTURE MANUFACTURER AND MODEL No.	FAUCET OR VALVE MANUFACTURER AND MODEL No.	TRIM MANUFACTURER AND MODEL No.	REMARKS	VENT	WASTE		COLD WATER		HOT WATER	
								BRANCH	OUTLET	BRANCH	OUTLET	BRANCH	OUTLET
	L-1	LAVATORY WALL MOUNTED HOT AND COLD WATER STD/ACCESSIBLE	"SPASH" SILVER SERIES WM900 WALL HUNG, 22 GA. STAINLESS STEEL, 7-3/4" BACKSPASH, 6" x 11" x 5"D SHAPED BOWL.	INTEGRAL FAUCET W/ WRIST BLADE HANDLE KIT. ADA COMPLIANT.	ADA COMPLIANT. 1-1/2" STAINLESS STEEL DRAIN. MOUNT P-TRAP FLUSH TO WALL. CARRIER: "JAY R. SMITH" 0700 OR ZURN Z1231	MOUNT AT HEIGHT INDICATED ON ARCHITECTURAL DRAWINGS. PROVIDE CONCEALED ARMS AND FLOOR SUPPORT, WITH FEET OF SUPPORT SECURELY ANCHORED TO FLOOR. IN ADDITION ANCHOR TOP OF SUPPORT TO WALL CONSTRUCTION.	1 1/2"	2"	1 1/2"	3/4"	1/2"	3/4"	1/2"
	S-1	SINK COUNTER MOUNTED HOT & COLD WATER	"TABCO" MODEL 7-PS-25 WALL HUNG SINK 24" FRONT TO BACK, 20" WIDE x 5" DEPTH OVERALL. HEAVY GAUGE 304 STAINLESS STEEL, WALL HUNG. PROVIDE REAR DRAIN LOCATION, VANDAL RESISTANT BACKING PLATE AT FAUCET FOR VANDAL RESISTANT PINS.	PROVIDE "TABCO" 6" EXTENDED DECK MOUNTED GOOSENECK FAUCET WITH WRIST HANDLES. PROVIDE PROVIDE DECK MOUNTED LIQUID SOAP DISPENSER. PROVIDE 1.0 GPM VANDAL RESISTANT LAMINAR FLOW AERATOR.	"TABCO" MODEL 7-PS-10, OFFSET STRAINER DRAIN AND P-TRAP. INSTALL P-TRAP FLUSH TO WALL.	"POWERS" 115VS SERIES THERMOSTATIC FAUCET, AERATOR WITH 1.0 GPM VANDAL RESISTANT OUTLET. ADA COMPLIANT. SET MAXIMUM HOT WATER TEMP TO 105 DEGRESS F.	1 1/2"	2"	1 1/2"	3/4"	1/2"	3/4"	1/2"
	S-2	SINK WALL MOUNTED HOT & COLD WATER	"JUST" MODEL CUSTOM WALL HUNG WASH-UP MULTI-STATION SINK SIMILAR TO "JUST" J-9620. ADA COMPLIANT. 20" FRONT TO BACK, 96" WIDE, 8" DEEP. PROVIDE JWP-1236 FLAT PANEL WALL GUARD. COORDINATE HOLE LOCATION WITH MANUFACTURER TO FIT 3 FAUCETS	"JUST" MODEL JSL-48-TAI LEAD FREE COMPLIANT FAUCET WITH SOAP DISH. PROVIDE WITH 6" WRIST BLADES AND VANDAL RESISTANT HANDLES AND 1.5GPM RESTRICTING AERATORS. PROVIDE 3 FAUCETS FOR EACH SINK	"JUST" MODEL J-ADA-35-SSF , OFFSET STRAINER DRAIN AND P-TRAP. INSTALL P-TRAP FLUSH TO WALL.		1 1/2"	2"	1 1/2"	3/4"	1/2"	3/4"	1/2"
	EW	EMERGENCY EYES/FACE WASH ACCESSIBLE	"HAWS" MODEL 7360BTWC, EYE/FACE WASH 10GPM, PROVIDE TMV 9201EW	INTEGRAL	PROVIDE ACCESSIBLE P-TRAP AND ACCESS PANEL	PROVIDE THERMOSTATIC MIXING VALVE. SET POINT 85F WITH HIGH TEMPERATURE LIMIT AT 90F. SEE INSTALLATION INSTRUCTIONS FOR CONNECTION POINTS AND OTHER INFORMATION.	1 1/2"	2"	2"	3/4"	1/2"	3/4"	1/2"
	HB	HOSE BIBB	INTERIOR WALL MOUNTED - ACORN MODEL 8121CP-LF WOODFORD MODEL 24PC, OR EQUAL.	WITH INTEGRAL VACUUM BREAKER PROTECTED, CARTRIDGE OPERATED HOSE VALVE WITH LOCK SHIELD BONNET AND REMOVABLE KEY HANDLE.		SET HEIGHT AT 18" ABOVE FINISHED FLOOR	-	-	-	3/4"	3/4"	-	-
	HR	HOSE REEL	"REELCRAFT" MODEL RS7850 REELSAFE HOSE/REEL OR EQUAL										
	GO	GAS OUTLET	"BRASSCRAFT" TBV12F FULL-PORT GAS BALL VALVE; HEAVY DUTY FORGED BRASS BODY; QUARTER TURN, FULL FLOW OPERATION; 3/4" FIP x 3/4" FIP			PROVIDE 12" "BRASSCRAFT" CSSB FLEXIBLE GAS APPLIANCE CONNECTION							
NOTES:						2. PIPE, PLUMBING FITTINGS, FIXTURES, SOLDER AND FLUX SHALL COMPLY WITH LEAD FREE REQUIREMENTS OF THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 116875. PROVIDE PRODUCTS LISTED AND LABELED AS COMPLYING WITH NSF 61, ANNEX G, OR PROVIDE OTHER EVIDENCE OF COMPLIANCE WITH THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 116875. PROVIDE PRODUCT SUBMITTAL INFORMATION PROVING COMPLIANCE WITH LEAD FREE REQUIREMENTS.							
1. WATER SUPPLIES AND STOPS (REFER TO SPECIFICATION SECTION OR 22 40 00)													
A. PROVIDE 85 PERCENT IPS RED BRASS PIPE, SECURELY ANCHORED TO BUILDING CONSTRUCTION, FOR EACH CONNECTION TO FAUCETS, STOPS, HOSE BIBBS, ETC. EACH FIXTURE, EXCEPT HOSE BIBBS, SHALL HAVE A STOP VALVE INSTALLED ON WATER SUPPLY LINES TO PERMIT REPAIRS WITHOUT SHUTTING OFF WATER MAINS.													
B. PROVIDE ALL WATER SUPPLIES TO FIXTURES WITH COMPRESSION SHUT-OFF STOPS WITH IPS INLETS WITH THREADED BRASS NIPPLES AT PIPE CONNECTION AND LOCK SHIELD LOOSE KEY. PROVIDE COMBINATION FIXTURES WITH COMPRESSION STOP AND IPS INLET ON EACH WATER SUPPLY FITTING. PROVIDE LOOSE KEY HANDLE FOR EACH STOP.													
C. PROVIDE 1/2 INCH RISER TUBES WITH REDUCING COUPLING FOR ALL FIXTURES, UNLESS OTHERWISE NOTED.													

SEA STAMP

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITECT

APP: 01-118866 INC.

REVIEWED FOR

SS ☒ FLS ☒ ACS ☒

DATE: 07/09/2020

CLIENT

CONTRA COSTA

COMMUNITY COLLEGE

DISTRICT

500 COURT STREET MARTINEZ, CA

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ISSUES

No.	DESCRIPTION	DATE
1	ADDENDUM 1	3/23/2021

CONSULTANTS

CAPITAL

ENGINEERING CONSULTANTS, INC.

RAJAO CORRAL, CALIFORNIA

TD - RCC/JH

PROJECT NO. 191284.00

REGISTERED PROFESSIONAL ENGINEER

RICKAS A. JARAMA

22836

EXPIRES 9/30/20

MECHANICAL

STATE OF CALIFORNIA

DATE SIGNED: 06/30/2020

SEAL

PRIME CONSULTANT

IBI GROUP

533 W. San Carlos St., Suite 600

San Jose, CA 95110, USA

tel 408 924 0511 fax 408 924 0844

bigroup.com

PROJECT

L-1177 Industrial Trades Labs

Renovation

2700 EAST LELAND ROAD

PITTSBURG, CA 94565

PROJECT NO:

121030

DRAWN BY:

RCC/JH

CHECKED BY:

TD

PROJECT MGR:

ARCHITECTURAL

APPROVED BY:

Approver

SHEET TITLE

PLUMBING FIXTURE

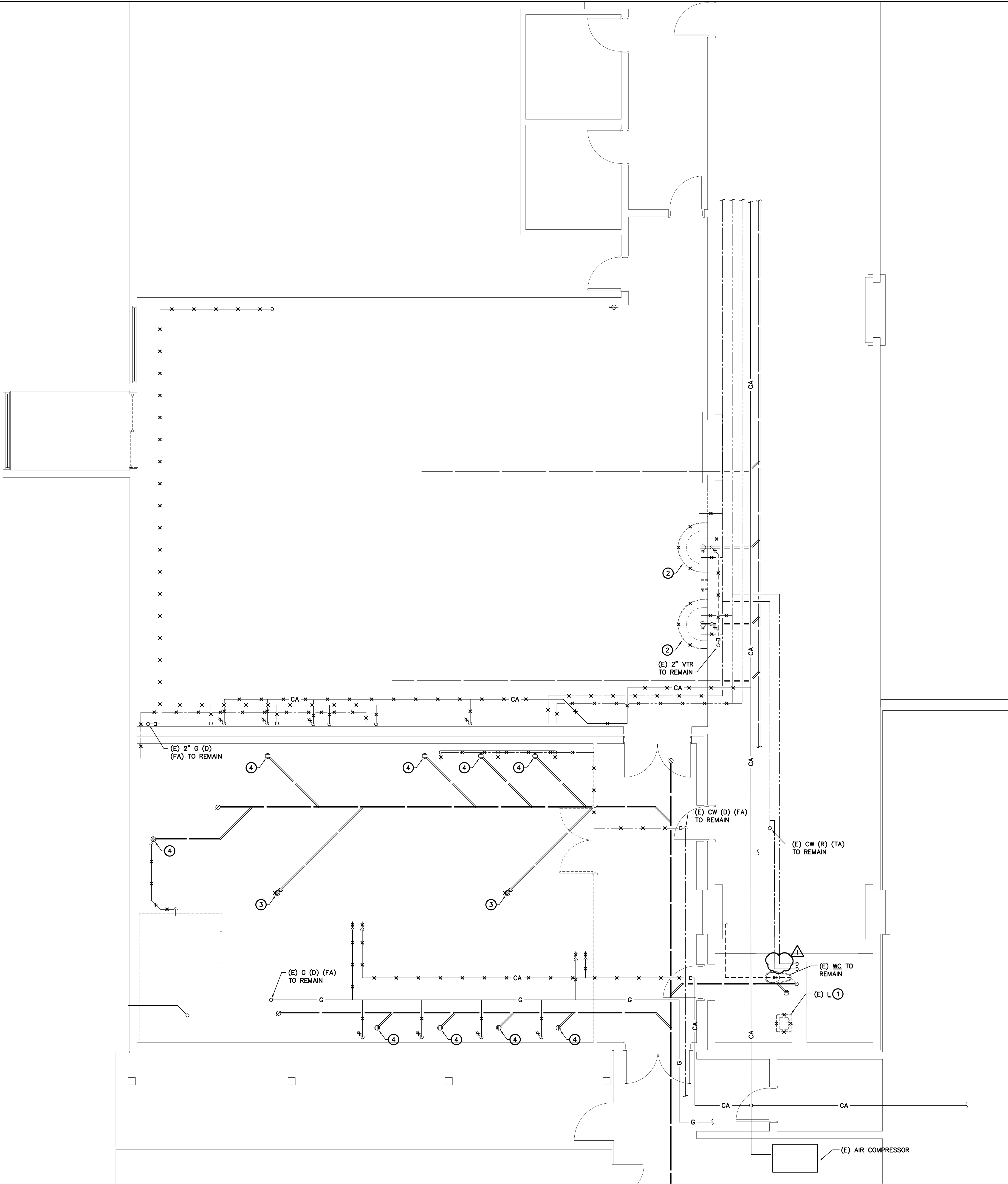
SCHEDULES

SHEET NUMBER

P0002

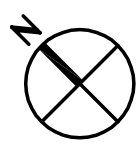
ISSUE

QC	
INI	%



PLUMBING DEMOLITION PLAN
SCALE : 1/4" = 1'-0"

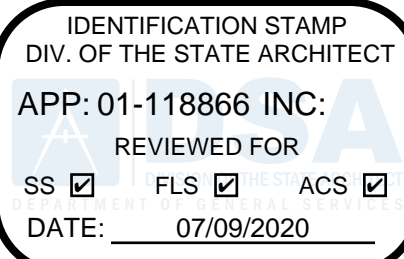
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P2010



- GENERAL NOTES:**
1. CONTRACTOR TO FIELD VERIFY EXACT LOCATIONS, SIZES, ROUTING, AND INVERTS OF ALL PIPING PRIOR TO CONSTRUCTION.
 2. SEE SHEET P0001 FOR ADDITIONAL NOTES.

- DEMOLITION KEYNOTES:**
- 1 EXISTING LAVATORY (L) TO BE REMOVED AND REPLACED WITH NEW. ADJUST EXISTING PIPING TO ACCOMMODATE NEW ROUGH-IN REQUIREMENTS OF REPLACEMENT FIXTURE.
 - 2 EXISTING SINK (S) TO BE REMOVED AND REPLACED WITH NEW. ADJUST EXISTING PIPING TO ACCOMMODATE NEW ROUGH-IN REQUIREMENTS OF REPLACEMENT FIXTURE.
 - 3 EXISTING FLOOR DRAIN (ED) TO BE REMOVED. PLUG OPENING AND ABANDON PIPE BELOW FLOOR.
 - 4 EXISTING FLOOR DRAIN (ED) TO REMAIN.

DSA STAMP



CLIENT
**CONTRA COSTA
COMMUNITY COLLEGE
DISTRICT**

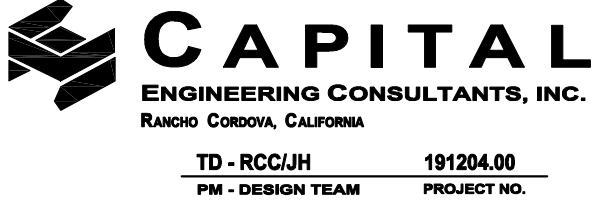
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ISSUES	No.	DESCRIPTION	DATE
1	ADDENDUM 1		3/23/2021

CONSULTANTS



SEAL

PRIME CONSULTANT



PROJECT
**L-1177 Industrial Trades Labs
Renovation**
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
RCC/JH

CHECKED BY:
TD

PROJECT MGR:
ARCHITECTURAL

APPROVED BY:
Approver

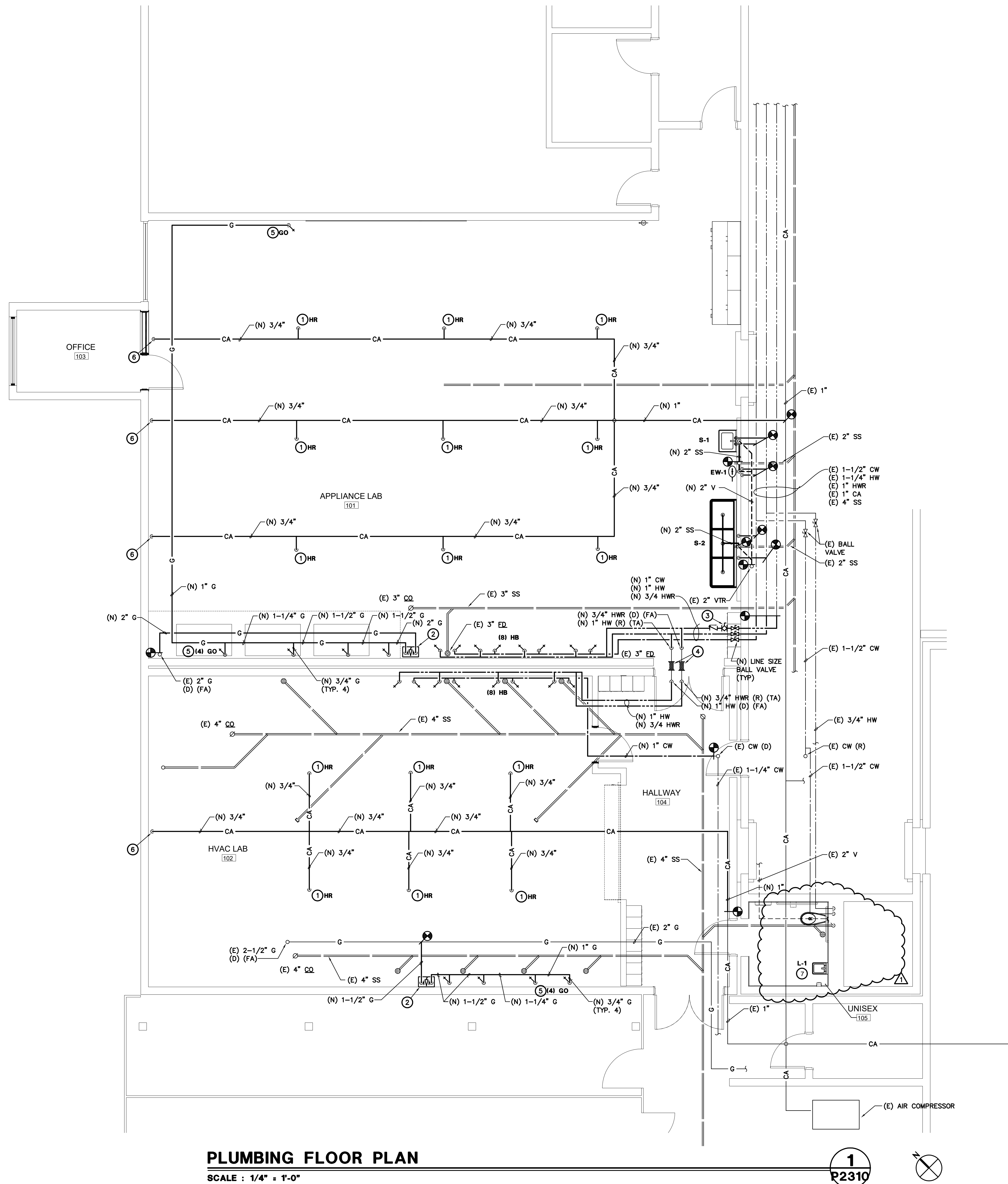
SHEET TITLE
**PLUMBING
DEMOLITION PLAN**

SHEET NUMBER

P2010

ISSUE

QC	
INI	%



PLUMBING FLOOR PLAN

SCALE : 1/4" = 1'-0"

1
P2310

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXACT LOCATIONS, SIZES, ROUTING, AND INVERTS OF ALL PIPING PRIOR TO CONSTRUCTION.
2. SEE SHEET P0001 FOR ADDITIONAL NOTES.

KEYNOTES:

- 1 HOSE REEL, FOR DETAIL SEE 1/P0001
- 2 GAS SHUT-OFF VALVE BOX, FOR DETAIL SEE 2/P0001
- 3 CALIBRATED BALANCE VALVE, SET TO 0.125 GPM.
- 4 "METRAFLEX" METRALOOP MODEL MSLSPC80 FLEXIBLE SEISMIC JOINT ON ROOF. PROVIDE ANCHORS AS RECOMMENDED BY MANUFACTURER.
- 5 PROVIDE LINE SIZE GAS SHUT OFF, UNION, AND 6" DIR LEG AT EACH GAS OUTLET.
- 6 DRIP LEG AT END OF COMPRESSED AIR MAIN, FOR DETAIL SEE 3/P0001
- 7 CONNECT TO EXISTING CW, HW, SS & V PIPING BEHIND WALL. MODIFY PIPING AS REQUIRED TO INSTALL LAVATORY IN ORDER TO MEET ALL ADA REQUIREMENTS.

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ISSUES		
No.	DESCRIPTION	DATE
1	ADDENDUM 1	3/23/202

CONSULTANTS

CAPITAL
ENGINEERING CONSULTANTS, INC.
Rancho Conejo, California

TD - RCUH	191204-00
PM - DESIGN TEAM	PROJECT NO.

Professional Engineer Seal:
REGISTERED PROFESSIONAL ENGINEER
THOMAS A. CUKAL
M 22836
EXPIRES 9/30/20
MECHANICAL
STATE OF CALIFORNIA

DATE SIGNED: 06/30/2020

SEAL

PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 0844
ibigroup.com

PROJECT
L-1177 Industrial Trades Lab
Renovation
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO: 121030	
DRAWN BY: RCC/JH	CHECKED BY: TD
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE
PLUMBING FLOOR
PLAN

SHEET NUMBER	ISSUE
P2310	

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
3. CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL PROPERTY DAMAGE. TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
5. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
6. ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
7. CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
8. CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
10. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDINGS UNLESS OTHERWISE NOTED ON DRAWINGS.
11. ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND, "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
12. ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRED CIRCUITS IS NOT ALLOWED.
13. ALL 120/277V LIGHT SWITCHES AND WALL OCCUPANCY SENSORS SHALL HAVE A NEUTRAL INSTALLED TO THE DEVICE BOX EXCEPT WHERE A CONDUIT OR SURFACE RACEWAY SYSTEM IS INSTALLED.
14. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
15. SEE ARCHITECTURAL DOCUMENTS FOR EXACT PLACEMENT OF LIGHTING FIXTURES AND DEVICES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF CEILING TYPES FROM ARCHITECTURAL DOCUMENTS AND PROVIDE AND INSTALL ALL REQUIRED FIXTURE MOUNTING HARDWARE. PROVIDE AND INSTALL U.L. LISTED FIRE STOP ENCLOSURES FOR ALL RECESSED FIXTURES IN FIRE RATED CEILINGS.
16. FROM ALL NEW FLOUSH MOUNT PANELS: THE CONTRACTOR SHALL STUP UP INTO ACCESSIBLE CEILING SPACE A MINIMUM OF FOUR (4) 3/4" CONDUITS FOR FUTURE USE.
17. CONTRACTOR SHALL, PRIOR TO BID, FIELD VERIFY ALL REQUIREMENTS FOR MODIFYING THE EXISTING CLOCK, DATA, AND INTERCOM SYSTEMS TO ACCOMMODATE ADDITIONS NOTED. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS NEEDED TO MAKE A FULL OPERATIONAL SYSTEM AT THE CONCLUSION OF PROJECT WORK.
18. CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
19. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NOT POSSIBLE TO CONCEAL (E) CONDUIT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE (E) CONDUIT WHERE POSSIBLE.
20. WHERE IT IS NOT POSSIBLE TO REUSE (E) CONDUIT OR RUN (N) CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
21. EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO (E) UNDERGROUND SYSTEMS (GAS, WATER, TELEPHONE, ELECTRICAL, SEWER, ETC.). THE CONTRACTOR SHALL REPAIR & PAY ALL EXPENSES FOR DAMAGE TO (E) UNDERGROUND SYSTEMS AS A RESULT OF (N) WORK. REPAIR TO DAMAGED UNDERGROUND SYSTEMS SHALL BE TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXTRA EXPENSE TO THE OWNER.
23. EXISTING WIRING SHOWN HAS BEEN TAKEN FROM OLD PLANS AND IS ASSUMED TO BE CORRECT. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS AND MAKE ADJUSTMENTS TO SUIT ACTUAL CONDITIONS AND TO MEET THE INTENT OF THE CONTRACT DOCUMENTS.
24. WHERE NON-METALLIC SHEATHED CONDUCTORS ARE FOUND, THE CONTRACTOR SHALL REMOVE TO FULLEST EXTENT PER THE GENERAL DEMOLITION NOTES AND REPLACE WITH CONDUIT. METAL CLAD CABLE WILL BE PERMITTED ON A CASE-BY-CASE BASIS ONLY BY WRITTEN APPROVAL FROM THE ARCHITECT.
25. ALL INSTALLATION OF EXPOSED SURFACE MOUNTED RACEWAY IN PUBLIC AREAS SHALL BE REVIEWED BY ELECTRICAL ENGINEER BEFORE ROUGH-IN. CONTRACTOR IS TO DETERMINE THE ACCESSIBILITY OF ATTIC, FURFURELANCE, HIDE TOW MILESTONES, ETC. IN EACH CASE. CONSULT WITH ENGINEER. IF SYSTEM CAN BE ROUTED CONCEALED EITHER BY FISHING OR ACCESSIBILITY, CONTRACTOR IS TO DO SO. IF INACCESSIBILITY IS DETERMINED, CONTRACTOR SHALL INSTALL SURFACE MOUNTED RACEWAY IN THE MOST AESTHETICALLY PLEASING MEANS AS DETERMINED BY THE ENGINEER. NO ALLOWANCE FOR ADDITIONAL COMPENSATION DUE TO ROUTING AS DIRECTED BY THE ENGINEER WILL BE MADE.

	FLUORESCENT OR LED LUMINAIRE - SEE SCHEDULE		SECURITY DOOR CONTACTS		PANELBOARD - FLUSH MOUNTED		DETAIL NOTE REFERENCE SYMBOL - SEE ASSOCIATED NOTE ON SAME DETAIL		DETAIL OR SECTION REFERENCE SHEET NUMBER
	EMERGENCY OR NIGHT LIGHT		SECURITY MOTION DETECTOR		EQUIPMENT PANEL - FLUSH MOUNTED				
	STRIP FLUORESCENT OR LED LUMINAIRE - SEE SCHEDULE		CCTV CAMERA		PANELBOARD - SURFACE MOUNTED		FEEDER DESIGNATION - SEE ASSOCIATED NOTE ON SAME DETAIL		INDICATES QUANTITY OF TELEPHONE OUTLETS
	LUMINAIRE - RECESSED - SEE SCHEDULE		SECURITY SYSTEM KEYPAD		EQUIPMENT PANEL - SURFACE MOUNTED		FEEDER DESIGNATION - SEE ASSOCIATED NOTE ON SAME DETAIL		INDICATES QUANTITY OF DATA OUTLETS
	RECESSED WALL WASHER		PAC/CLOCK PUSHBUTTON		METER W CURRENT TRANSFORMER	ABBREVIATIONS			
	LUMINAIRE - SURFACE MOUNTED - SEE SCHEDULE		DOOR CHIME WITH LED		JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES	A	AMPERE	GFCI	GROUND FAULT INTERRUPTING
	LUMINAIRE - POLE OR POST MOUNTED - SEE SCHEDULE		RECEPTACLE - DUPLEX *		MOTOR CONNECTION	ALF	ALUMINUM ABOVE FINISHED FLOOR	GFI	GROUND INTERRUPTING
	LUMINAIRE - WALL MOUNTED SEE SCHEDULE		DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		NON-FUSED DISCONNECT SWITCH	ARC	ARCHITECT	GND	GROUND
	EXIT LIGHT - DIRECTIONAL ARROWS AS INDICATED - SEE SCHEDULE		GFCI CONVENIENCE RECEPTACLE - DUPLEX *		FUSED DISCONNECT SWITCH; FUSED WITH CABLE ELEMENTS SIZED PER EQUIPMENT MFG'S NAMEPLATE DATA	AWG	AMERICAN WIRE GAUGE	GND	GROUND
	TRACK LIGHTING - SEE SCHEDULE		GFCI CONVENIENCE DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		COMBINATION STARTER-FUSED DISCONNECT SWITCH; FUSED DISCONNECT SWITCH ELEMENTS SIZED PER EQUIPMENT MFG'S NAMEPLATE DATA	BKR	BREAKER	HT	HEIGHT
	EMERGENCY LIGHT		RECEPTACLE - DOUBLE DUPLEX *		CENTER LINE	CB	CABLE TV CIRCUIT BREAKER	IDF	INTERCOM INTERMEDIATE DISTRIBUTION FRAME
	DIGITAL DUAL TECHNOLOGY OCC. SENSOR		HALF SWITCHED DUPLEX RECEPTACLE *		CEILING CENTER	CCTV	CLOSED CIRCUIT TV	INCAND	INCANDESCENT
	LIGHTING CONTROL OCCUPANCY SENSOR CORNER MOUNTED		SINGLE RECEPTACLE *		CEILING CENTER ONLY	CKT	CIRCUIT	JB	JUNCTION BOX
	DIMMER LOAD CONTROLLER		DUPLEX RECEPTACLE - CEILING MOUNTED		GROUND ROD WITH GROUNDWELL BOX	CL	CENTER LINE	KV	KILOVOLT
	PLUG LOAD CONTROLLER		LETTER INDICATES DUPLEX HALF CONTROLLED RECEPTACLE *		GROUND ELECTRODE	CLG	CEILING	KW	KILOWATT
	ROOM LIGHTING CONTROLLER		LETTER INDICATES DUPLEX FULLY CONTROLLED RECEPTACLE *		NORMALLY CLOSED CONTACT	C.O.	CONDUIT ONLY	LCP	LIGHTING CONTROL PANEL
	LIGHTING CONTROL PANEL		FLOOR MOUNTED DUPLEX RECEPTACLE		TRANSFORMER - SEE SINGLE LINE FOR SIZE	CTR	CIRCUIT BREAKER	LV	LOW VOLTAGE
	DIGITAL DAYLIGHT SENSOR		FLOOR MOUNTED BOX		FLEX CONDUIT WITH CONNECTION	D	DIMMER	LTH	LIGHTING
	SINGLE POLE SWITCH **		POWER OUTLET - SEE PLANS FOR NEMA TYPE *		CONDUIT - UP	DM	DIMENSION	LTV	LOW VOLTAGE
	SINGLE POLE SWITCH, ** a = CIRCUIT CONTROLLED		POWER POLE		CONDUIT - DOWN	DIST	DISTRIBUTION	KCM	THOUSAND CIRCULAR MILS
	THREE WAY SWITCH **		WALL TELEPHONE OUTLET **		CONDUIT EMERGENCY SYSTEM	(E)	EXISTING	EC	ELECTRICAL CONTRACTOR
	FOUR WAY SWITCH **		VOICE/DATE WALL OUTLET *		E	(EL)	EVENING LIGHT	M.B.	MAIN CIRCUIT BREAKER
	MANUAL MOTOR STARTER		VOICE/DATE OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		LOW VOLTAGE WIRING	EM	EMERGENCY	MCA	MINIMUM SWITCH AMPS
	KEY OPERATED SWITCH **		SURFACE MOUNTED VOICE/DATE WALL OUTLET *		SURFACE METAL OR NON-METALLIC RACEWAY	EMT	ELECTRICAL METALLIC TUBING	MDF	MAIN DISTRIBUTION FRAME (RACKS)
	LIGHTING DIMMER **		SURFACE MOUNTED VOICE/DATE OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		CONDUIT - CONCEALED IN WALLS OR CEILING	EQUIP	EQUIPMENT	MCH	MECHANICAL
	DIGITAL ON/OFF SWITCH **		WIRELESS ACCESS POINT (WAP) - CEILING MOUNTED		CONDUIT - EXISTING	EV	ELECTRICAL VEHICLE	MH	METAL HALIDE
	DIGITAL DIMMER SWITCH **		WIRELESS ACCESS POINT (WAP) - WALL MOUNTED - FIELD VERIFY HEIGHT		CONDUIT - BELOW SLAB OR UNDERGROUND: 3/4" MIN.	FA	FIRE ALARM	MLO	MAIN LUGS ONLY
	DIGITAL MULTI SCENE LIGHTING SWITCH **		VOICE/DATE OUTLET - FLOOR MOUNTED		CONDUIT CONTINUATION	FAC	FIRE ALARM CONTROL PANEL	MPC	MAIN POINT OF ENTRANCE
	DIGITAL DUAL TECHNOLOGY WALL OCC. SENSOR **		TV OUTLET *		CAPPED OR STUB-OUT CONDUIT	FC	FOOT CANDLE	MTD	MOUNTED
	WALL OCCUPANCY SENSOR **		VOICE/DATE OUTLET - CEILING MOUNTED		CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKED WITH CROSS-HATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.	FL	FLOOR	MOC	MAXIMUM CURRENT PROTECTION
	DOUBLE SWITCHED WALL OCCUPANCY SENSOR **		INTERIOR SPEAKERS CEILING MOUNTED		CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKED WITH CROSS-HATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.	FN	FINISH	(N)	NEW
	DIMMING DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR **		INTERIOR SPEAKERS WALL MOUNTED		CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKED WITH CROSS-HATCHES INDICATE NUMBER OF #12 AWG WI				

ME/P COMPONENT ANCHORAGE NOTES:

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTION 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 & 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRE) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. PERMANENTLY ATTACHED SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 120 / 220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF GRAVITY EXCEEDING 4 FEET OR MORE ABOVE THE FLOOR OR ROOF LEVEL. THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE PERMANENTLY IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL, ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED IN THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL, THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT OF THE APPROVAL OF THE DESIGN PROFESSIONAL. IN GENERAL, RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORKS AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC, SECTIONS 1617A.1.14, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED INSTALLATION SYSTEM ARE AS NOTED BELOW. WHEN BRACINGS AND ATTACHMENTS ARE BASED ON PRE-APPROVED INSTALLATION GUIDE (e.g. OSHDP OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE ATTACHED ON THE JOBSITE. FOR THE START OF THE BRACING, THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS, THE STRUCTURAL ENGINEER OR RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E);

MP □ MD □ PP □ E □ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP □ MD □ PP □ E □ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHDP PRE-APPROVED OPM # _____

CODES:

1. 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
2. 2018 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
3. 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
4. 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
5. 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
6. 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
7. 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
8. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
9. 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
11. NATIONAL FIRE ALARM CODE (NFPA 72) 2019.

STANDARDS:

1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
2. ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
3. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
4. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
5. NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
6. UNDERWRITER LABORATORIES (UL)
7. CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)

E0.1	SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, NOTES & SHEET INDEX.
E0.2	CALIFORNIA ENERGY COMPLIANCE TITLE 24 - INDOOR.
E1.1	ELECTRICAL SINGLE LINE DIAGRAM & PANELBOARD SCHEDULES.
E2.1	ELECTRICAL SITE PLAN.
E3.1	ELECTRICAL DEMOLITION PLAN.
E4.1	POWER PLAN.
E5.1	LIGHTING PLAN & LIGHT FIXTURE SCHEDULE.
E6.1	ELECTRICAL DETAILS.
E6.2	ELECTRICAL DETAILS.
FA0.1	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES
FA1.1	FIRE ALARM RISER DIAGRAM, BATTERY & VOLTAGE DROP CALCULATIONS.
FA2.1	FIRE ALARM SITE PLAN.
FA4.1	FIRE ALARM PLAN.

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19)
CERTIFICATE OF COMPLIANCE
This document is used to demonstrate compliance with requirements in §110.9, §110.12(c), §130.0, §130.1, §140.6, and §141.0(b)2 for indoor lighting scopes using the prescriptive path.
Project Name: Vocational Labs
Project Address: 2700 East Leland Road, Pittsburg, CA 94565
Report Page: Page 1 of 7
Date Prepared: 06/30/2020

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

A. GENERAL INFORMATION

01 Project Location (city)

Pittsburg

04 Total Conditioned Floor Area (ft²)

3,486

02 Climate Zone

12

05 Total Unconditioned Floor Area (ft²)

0

03 Occupancy Types Within Project (select all that apply):

06 # of Stories (Habitable Above Grade)

1

☐ Office

☐ Retail

☐ Warehouse

☐ Hotel/Motel

☒ School

☐ Support Areas

☐ Parking Garage

☐ High-Rise Residential

☐ Relocatable

☐ Healthcare

☐ Other (write in):

B. PROJECT SCOPE

Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work

01

My Project Consists of (check all that apply):

☐ New Lighting System

02

Calculation Method

03

Area (ft²)

04

Calculation Method

05

Area (ft²)

☒ Altered Lighting System

Area Category

3,486

Total Area of Work (ft²)

3,486

C. COMPLIANCE RESULTS

Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1.

Allowed Lighting Power per §140.6(b) (Watts)

01

02

03

04

05

06

07

08

09

01

Complete Building

Area Category

Area Category Additional

Tailored Credits

= Total Allowed

≥

Total Designed

= Total Adjusted

05 Must be ≥ 08

(See Table I)

(See Table I)

(See Table J)

(See Table K)

(See Table F)

(See Table P)

02

2,415.1

=

2,415.1

≥

2,345.1

=

2,345.1

COMPLIES

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

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I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Conditioned Spaces

01

02

03

04

05

06

Area Description

Complete Building or Area Category Primary Function Area

Allowed Density (W/ft²)

Area (ft²)

Allowed Wattage (Watts)

Additional Allowances / Adjustment

Vocational Lab 101

Classroom, Lecture, Training, Vocational

0.7

2,042

1,429.4

☐

HVAC Lab 102

Classroom, Lecture, Training, Vocational

0.7

1,119

783.3

☐

Hallway 104

Corridor

0.6

251

150.6

☐

Office 103

Office (≤ 250 square feet)

0.7

74

51.8

☐

TOTAL:

3,486

2,415.1

See Tables J or P for detail

J. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This Section Does Not Apply

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This Section Does Not Apply

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This Section Does Not Apply

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This Section Does Not Apply

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS

This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This Section Does Not Apply

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS

This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS

This Section Does Not Apply

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This Section Does Not Apply

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CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCLTI-E

YES

NO

Form/Title

Field Inspector

☒

☐

NRCLTI-01-E - Must be submitted for all buildings

Pass

Fail

☒

☐

NRCLTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.

☐

☐

☐

☒

NRCLTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.

☐

☐

☐

☒

NRCLTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.

☐

☐

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

YES

NO

Form/Title

Field Inspector

☐

☒

NRCA-LTI-06-E - Must be submitted for occupancy sensors and automatic time switch controls.

Pass

Fail

☐

☒

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

☐

☐

☐

☒

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

☐

☐

☐

☒

NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

☐

☐

☐

☒

NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).

☐

☐

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name:

Najib Anwary

Documentation Author Signature:

Company:

Aurum Consulting Engineers

Signature Date:

06/30/2020

Address:

1798 Technology Drive Suite 242

CEA/HERS Certification Identification (if applicable):

City/State/Zip:

San Jose, CA 95110

Phone:

(408) 564-7925

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.

2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)

3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.

4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:

Najib Anwary

Responsible Designer Signature:

Company:

Aurum Consulting Engineers

Date Signed:

06/30/2020

Address:

1798 Technology Drive Suite 242

License:

E21043

City/State/Zip:

San Jose, CA 95110

Phone:

(408) 564-7925

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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NRCC-LTI-E

Controls Compliance (See Table H for Details)

COMPLIES with Exceptional Conditions

Rated Power Reduction Compliance (See Table Q for Details)

Not Applicable

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Table H Indoor Lighting Controls Permit Applicant Notes:
Appliance Lab 101: Shut-Off: Exempt because life safety.
HVAC Lab 102: Shut-Off: Exempt because life safety.
Hallway 104: Shut-Off: Dim to 50% when unoccupied.

Selections made in Table T have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

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NRCC-LTI-E

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Indoor Lighting
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F. INDOOR LIGHTING FIXTURE SCHEDULE

Table Instructions: Include all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01

02

03

04

05

06

07

08

09

10

Name or Item Tag

Complete Luminaire Description

Modular (Track) Fixture

Small Aperture & Color Change

Watts per luminaire

How Wattage is determined

Total number luminaires

Exempt per

Design Watts

Field Inspector

A1

1' x 4' Surface LED

☐

☐

26.7

Mfr. Spec

1

☐

26.7

☐

☐

A1E

1' x 4' Surface LED EM

☐

☐

26.7

Mfr. Spec

2

☐

53.4

☐

☐

A2

2' x 4' Surface LED

☐

☐

41.6

Mfr. Spec

9

☐

374.4

☐

☐

A2E

2' x 4' Surface EM

☐

☐

41.6

Mfr. Spec

9

☐

374.4

☐

☐

A3

2' x 2' Surface LED

☐

☐

26.6

Mfr. Spec

57

☐

1,516.2

☐

☐

Total Designed Watts CONDITIONED SPACES:

2,345.1

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS

This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This Section Does Not Apply

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS

This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS

This Section Does Not Apply

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This Section Does Not Apply

STATE OF CALIFORNIA
Indoor Lighting
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T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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YES

NO

Form/Title

Field Inspector

☒

☐

NRCLTI-01-E - Must be submitted for all buildings

Pass

Fail

☒

☐

NRCLTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.

☐

☐

☐

☒

NRCLTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.

☐

☐

☐

☒

NRCLTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.

☐

☐

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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G. MODULAR LIGHTING SYSTEMS

This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a "a" is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

Building Level Controls

01

02

03

Mandatory Demand Response

Shut-Off Controls

Field Inspector

☒

☐

Not Rated

See Area/Space Level Controls

☐

☐

Area Level Controls

04

05

06

07

08

09

10

11

12

Area Description

Complete Building or Area Category Primary Function Area

Area Controls

Multi-Level Controls

Shut-Off Controls

Primary/Skylit Daylighting

Secondary Daylighting

Interlocked Systems

Field Inspector

Appliance Lab 101

Classroom, Lecture, Training, Vocational

Auth. Personnel

Dimmer

Exempt*

NA

NA

☐

Pass

Fail

HVAC Lab 102

Classroom, Lecture, Training, Vocational

Auth. Personnel

Dimmer

Exempt*

NA

NA

☐

☐

☐

Hallway 104

Corridor

Manual ON/OFF

Dimmer

Partial Off*

NA

NA

☐

☐

☐

Office 103

Office (≤ 250 square feet)

Manual ON/OFF

Dimmer

Vacancy

NA

NA

☐

☐

☐

Appliance Lab 101

Shut-Off: Exempt because life safety.

¹ FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)4B is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

² Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19)
CERTIFICATE OF COMPLIANCE
Project Name: Vocational Labs
Project Address: 2700 East Leland Road, Pittsburg, CA 94565
Report Page: Page 6 of 7
Date Prepared: 06/30/2020

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

YES

NO

Form/Title

Field Inspector

☐

☒

NRCA-LTI-06-E - Must be submitted for occupancy sensors and automatic time switch controls.

Pass

Fail

☐

☒

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

☐

☐

☐

☒

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

☐

☐

☐

☒

NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

☐

☐

☐

☒

NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).

☐

☐

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19)
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CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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YES

NO

Form/Title

Field Inspector

☐

☒

NRCA-LTI-06-E - Must be submitted for occupancy sensors and automatic time switch controls.

Pass

Fail

☐

☒

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

☐

☐

☐

☒

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

☐

☐

☐

☒

NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

☐

☐

☐

☒

NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).

☐

☐

STATE OF CALIFORNIA
Indoor Lighting
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CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

W. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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YES

NO

Form/Title

Field Inspector

☐

☒

NRCA-LTI-06-E - Must be submitted for occupancy sensors and automatic time switch controls.

Pass

Fail

☐

☒

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

☐

☐

☐

☒

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

☐

☐

☐

☒

NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

☐

☐

☐

☒

NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).

☐

☐

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

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CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E

X. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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YES

NO

Form/Title

Field Inspector

☐

☒

NRCA-LTI-06-E - Must be submitted for occupancy sensors and automatic time switch controls.

Pass

Fail

☐

☒

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

☐

☐

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☒

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

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☒

NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

☐

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☐

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NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).

☐

☐

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

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CALIFORNIA ENERGY COMMISSION
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Y. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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YES

NO

Form/Title

Field Inspector

☐

☒

NRCA-LTI-06-E - Must be submitted for occupancy sensors and automatic time switch controls.

Pass

Fail

☐

☒

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

☐

☐

☐

☒

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

☐

☐

☐

☒

NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

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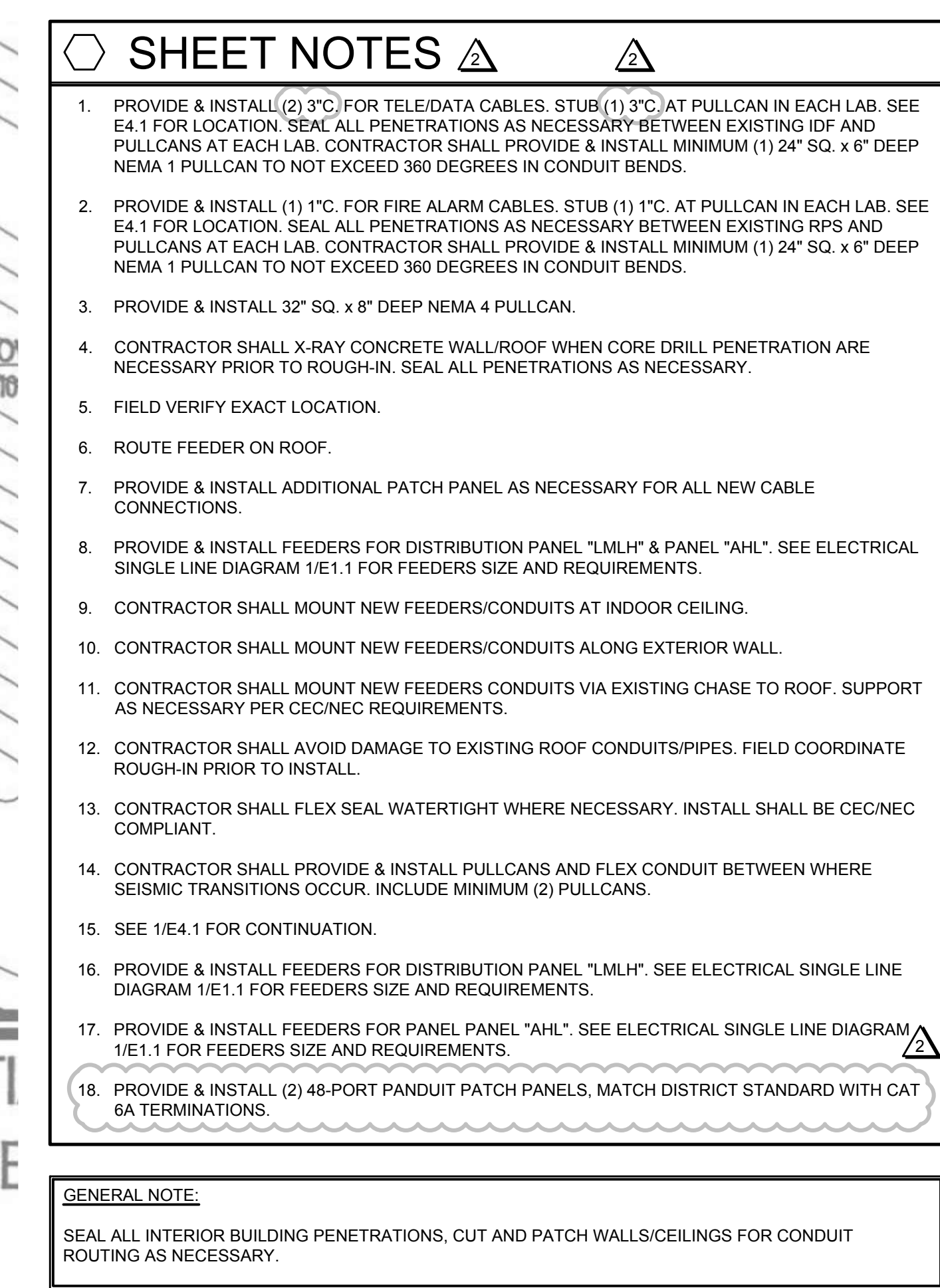
☒

NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).

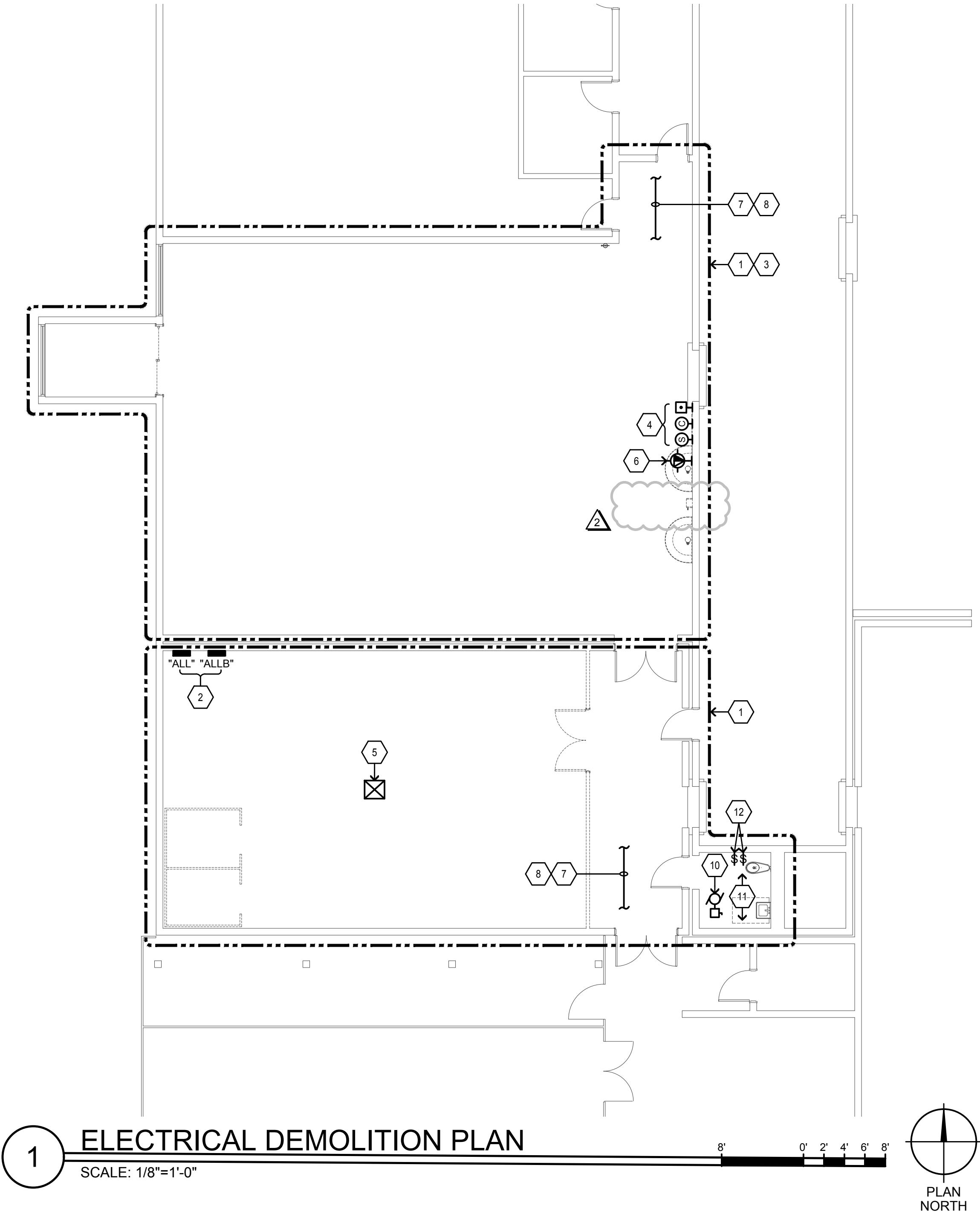
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CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance:



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ISSUES		
No.	DESCRIPTION	DATE
	ADDENDUM 2	04/28/2021
CONSULTANTS		
 <i>(Handwritten Signature)</i>		
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;"> AURUM CONSULTING ENGINEERS MONTREY BAY, INC. </div> </div> <p style="text-align: center; margin-top: 10px;">Project No. 19598.00</p> <p style="font-size: small; margin-top: 5px;">60 Garden Court • Suite 210 • Monterey, CA 93940 T.831.646.3330 • F.831.646.3336 • www.acemb.com</p>		
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<div style="display: inline-block; vertical-align: middle; text-align: left; margin-left: 10px;"> IBI GROUP 333 W. San Carlos St., Suite 600 San Jose, CA 95110, USA tel 408 924 0811 fax 408 924 0844 ibigroup.com </div>		
PROJECT		
<h2 style="margin: 0;">VOCATIONAL LABS</h2> <p style="margin: 0;">2700 EAST LELAND ROAD PITTSBURG, CA 94665</p>		
PROJECT NO: 121030		
DRAWN BY: CADD	CHECKED BY: NA	
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver	
SHEET TITLE <h3 style="margin: 0;">ELECTRICAL SITE PLAN</h3>		
SHEET NUMBER <h2 style="margin: 0;">AD2-E2.1</h2>		ISSUE



1 ELECTRICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0"

SHEET NOTES

1. UNLESS OTHERWISE NOTED, DEMOLISH PER GENERAL DEMOLITION NOTES.

2. EXISTING ELECTRICAL PANELS TO REMAIN. CONTRACTOR SHALL PROTECT DURING DEMOLITION WORK.

3. PER GENERAL DEMOLITION NOTES; DISCONNECT AND REMOVE LIGHT FIXTURES AND PRESERVE. JUNCTION BOXES WITH ASSOCIATED CONNECTIONS/CIRCUITS/CONDUITS FOR REUSE UNDER NEW WORK. NEW LIGHT FIXTURES ARE TO BE INSTALL AT SAME LOCATION AS EXISTING. SEE NEW WORK FOR REQUIREMENTS.

4. PER GENERAL DEMOLITION NOTES; DISCONNECT AND SALVAGE PA/CLOCK SYSTEM FOR RE-USE UNDER NEW WORK. SEE NEW WORK FOR LOCATION AND REQUIREMENTS.

5. PER GENERAL DEMOLITION NOTES; DISCONNECT AND SALVAGE CEILING MOUNTED PROJECTOR FOR RE-USE UNDER NEW WORK. SEE NEW WORK FOR REQUIREMENTS.

6. WIFI ROUTER IS EXISTING TO REMAIN.

7. PER GENERAL DEMOLITION NOTES; PRESERVE FIRE ALARM INITIATION AND NOTIFICATION CIRCUITS/CONDUITS FOR REUSE UNDER NEW WORK. SEE NEW WORK FOR REQUIREMENTS.

8. EXISTING FIRE ALARM INITIATION AND NOTIFICATION DEVICES NOT IN SCOPE OF WORK SHALL REMAIN ACTIVE AND FULLY FUNCTIONAL. SEE NEW WORK FOR REQUIREMENTS.

9. NOTE NOT USED.

10. EXHAUST FAN IS EXISTING TO REMAIN.

11. LIGHT FIXTURES ARE EXISTING TO REMAIN.

12. PER GENERAL DEMOLITION NOTES; DISCONNECT AND REMOVE EXISTING LIGHT SWITCHES AND PRESERVE ASSOCIATED CONNECTION FOR REUSE UNDER NEW WORK. SEE NEW WORK FOR REQUIREMENTS.

GENERAL DEMOLITION NOTES

A. CONTRACTOR SHALL FIELD VERIFY EXTENT OF ELECTRICAL DEMOLITION AND QUANTITIES OF ELECTRICAL TO BE REMOVED AS DICTATED BY THE REQUIREMENTS OF THE PROJECT.

B. REMOVAL SHALL INCLUDE WIRING, RACEWAY, BOXES, SWITCHES, LIGHT FIXTURES, ETC. AS INDICATED ON THE PLANS AND AS REQUIRED BY THESE DEMOLITION NOTES.

C. RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE CONCEALED IN EXISTING REMAINING WALLS MAY BE ABANDONED IN PLACE. REMOVE WIRING FROM CONDUIT.

D. RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE EXPOSED SHALL BE REMOVED.

E. WHERE REMOVAL OF EQUIPMENT OR WIRING IS INDICATED, IT SHALL INCLUDE ALL ASSOCIATED WIRING BACK TO LAST ACTIVE REMAINING OUTLET, DEVICE, FIXTURE OR PANEL.

F. ELECTRICAL CONTRACTOR SHALL INSURE THAT ALL REMAINING ACTIVE CIRCUITS, DEVICES, OUTLETS, LIGHT FIXTURES, ETC. HAVE NOT BEEN DISCONNECTED OR MADE INOPERATIVE DURING DEMOLITION. ELECTRICAL CONTRACTOR SHALL RESTORE ALL INTERRUPTED OR DISCONNECTED CIRCUITS TO OPERATION.

G. ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL REMOVED ELECTRICAL EQUIPMENT AND MATERIAL.

H. NO REMOVED EQUIPMENT OR MATERIAL SHALL BE REUSED AS PART OF NEW WORK, U.O.N.

I. EXISTING REMAINING CONCEALED RACEWAYS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK.

J. EXISTING FLUSH OUTLETS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK. MEET THE REQUIREMENTS OF THE CURRENT C.E.C. FOR VOLUME AND COINCIDE WITH LOCATION SHOWN FOR THE NEW WORK.

K. FLUSH OUTLET BOXES IN EXISTING WALLS TO REMAIN MAY BE ABANDONED IN PLACE. REMOVE DEVICES AND WIRING, PLUG OPENING AND PROVIDE AND INSTALL A BLANK DEVICE PLATE.

L. EXISTING WIRING SHOWN HAS BEEN TAKEN FROM OLD PLANS AND IS ASSUMED TO BE CORRECT. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS AND MAKE ADJUSTMENTS TO SUIT ACTUAL CONDITIONS AND TO MEET THE INTENT OF THE CONTRACT DOCUMENTS.

M. WHERE TELEPHONE, COMPUTER DATA, FIBER OPTICS, FIRE ALARM OR OTHER COMMUNICATIONS OUTLETS OR WIRING IS TO BE DEMOLISHED IT SHALL BE REMOVED BACK TO THE NEXT TERMINAL POINT. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER OR HIS REPRESENTATIVE TO HAVE EQUIPMENT AND WIRING DESIGNATED FOR REMOVAL OR PRESERVATION PRIOR TO REMOVAL OF OUTLET BOXES, CONDUIT OR WIRING BY ELECTRICAL CONTRACTOR.

N. COORDINATE WITH OWNER PRIOR TO START OF DEMOLITION TO MINIMIZE POWER INTERRUPTIONS. WORK MAY HAVE TO OCCUR DURING NON-REGULAR BUSINESS HOURS. COORDINATE IN WRITING WITH OWNER ONE WEEK PRIOR TO PLANNED POWER INTERRUPTIONS.

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San Jose, CA 95110, USA
tel 408 924 0844 fax 408 924 0844
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ISSUES

No.	DESCRIPTION	DATE
ADDENDUM 2		04/28/2021

CONSULTANTS

ACcredited PROFESSIONAL ENGINEER

NO. 5210841

EXP. 5/31/23

MONTEREY BAY, CA

AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.

Project No. 19598.00

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PRIME CONSULTANT

IBI GROUP

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San Jose, CA 95110, USA
tel 408 924 0844 fax 408 924 0844
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PROJECT

VOCATIONAL LABS
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
CADD

PROJECT MGR:
ARCHITECTURAL

CHECKED BY:
NA

APPROVED BY:
Approver

SHEET TITLE

ELECTRICAL
DEMOLITION PLAN

SHEET NUMBER

AD2-E3.1

ISSUE

J:\121030_CDD_LMC\000\035 Drawings\Sheet\000\035.dwg, 2018, 2018-4-28 14:22:41

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

SHEET NOTES

- FOR CEILING MOUNTED PROJECTOR. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH ARCHITECT/DISTRICT.
- NEMA TYPE RECEPTACLE: 30A, 208V, 1Ø. CONTRACTOR SHALL VERIFY WITH ARCHITECT/DISTRICT FOR EXACT REQUIREMENTS.
- $\frac{1}{2}$ " C. 2 #10 & 1 #10 GND.
- PROVIDE & INSTALL 1" C.O. AND STUB INTO ELECTRICAL PANEL FOR FUTURE CONNECTION.
- FOR INTERCEPTION OF EXISTING FIRE ALARM NOTIFICATION AND INITIATION CIRCUITS. PROVIDE & INSTALL 8" SQ. x 4" DEEP NEMA 1 PULLCAN FOR FIRE ALARM. COORDINATE WITH FIRE ALARM CONTRACTOR FOR EXACT LOCATION.
- PROVIDE & INSTALL 32' BUSWAY SYSTEM, 225A, 120/208V, 3Ø, 4 WIRE STARLINE TRACK BUSWAY 225T3 SERIES. CONTRACTOR SHALL ENSURE BUSWAY IS PROVIDED WITH PROVISIONS FOR MINIMUM (6) 30A, 208V, 3Ø CONNECTIONS ALONG BUSWAY SPACED OUT ALONG THE 32 FEET, NOT IN ONE CENTRAL LOCATION.
- ALL CONDUITS AND BOXES ARE TO BE EXPOSED. COORDINATE WITH ARCHITECT FOR EXACT REQUIREMENTS FOR PAINT/FINISH OF EXPOSED CONDUITS/BOXES. FIELD COORDINATE MOUNTING HEIGHT FOR ALL WALL MOUNTED RECEPTACLES WITH DISTRICT/ARCHITECT.
- PROVIDE & INSTALL 24" SQ. x 6" DEEP NEMA 1 PULLCAN FOR TELE/DATA CABLES. PROVIDE & INSTALL (1) 3" C. BACK TO EXISTING IDF FROM PULLCAN FOR CABLING.
- PROVIDE & INSTALL 15' CORD REEL, 12 AWG, 20 AMP, 120V WITH (2) GFCI DUPLEX RECEPTACLES, BACK TO BACK. CORD REEL SHALL BE COMPATIBLE WITH BUSWAY SYSTEM.
- 2" C., 4 #10 & 1 #6 GND.
- EXHAUST FAN, 1 HP, 208V, 3Ø, LOCATED ON ROOF.
- INSTALL BUSWAY SYSTEM BETWEEN LIGHT FIXTURES ROWS. COORDINATE WITH LIGHTING PLANS.
- PROVIDE & INSTALL FEEDER TO DISTRIBUTION PANEL "AL1". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS.
- PROVIDE & INSTALL FEEDER TO EXISTING ELECTRICAL MAIN SWITCHBOARD "MSB". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS. SEE 1/E2.1 FOR CONTINUATION.
- PROVIDE & INSTALL FEEDER TO TRANSFORMER "T-AL". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS.
- PROVIDE & INSTALL FEEDER TO PANEL "ALLA". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS.
- PACLOCK SYSTEM. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH ARCHITECT/DISTRICT.

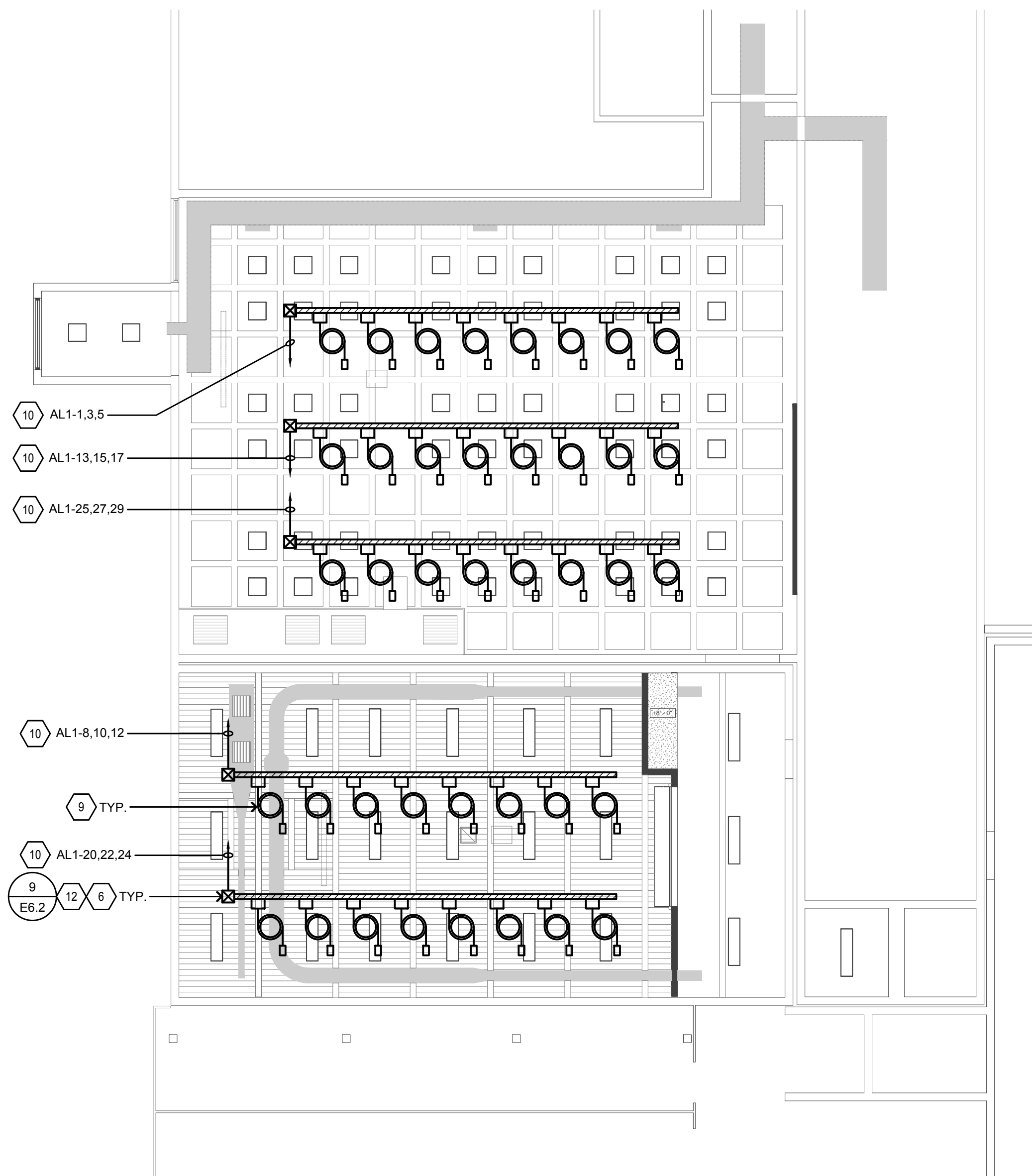
BRANCH CIRCUIT CONDUCTOR SIZING TABLE

CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	REQUIREMENT
20/120	56'-90'	$\frac{1}{2}$ " C., 2 #10 & 1 #10 GND.
20/120	91'-140'	$\frac{1}{2}$ " C., 2 #8 & 1 #10 GND.
20/277	131'-205'	$\frac{1}{2}$ " C., 2 #10 & 1 #10 GND.
20/277	206'-330'	$\frac{1}{2}$ " C., 2 #8 & 1 #10 GND.

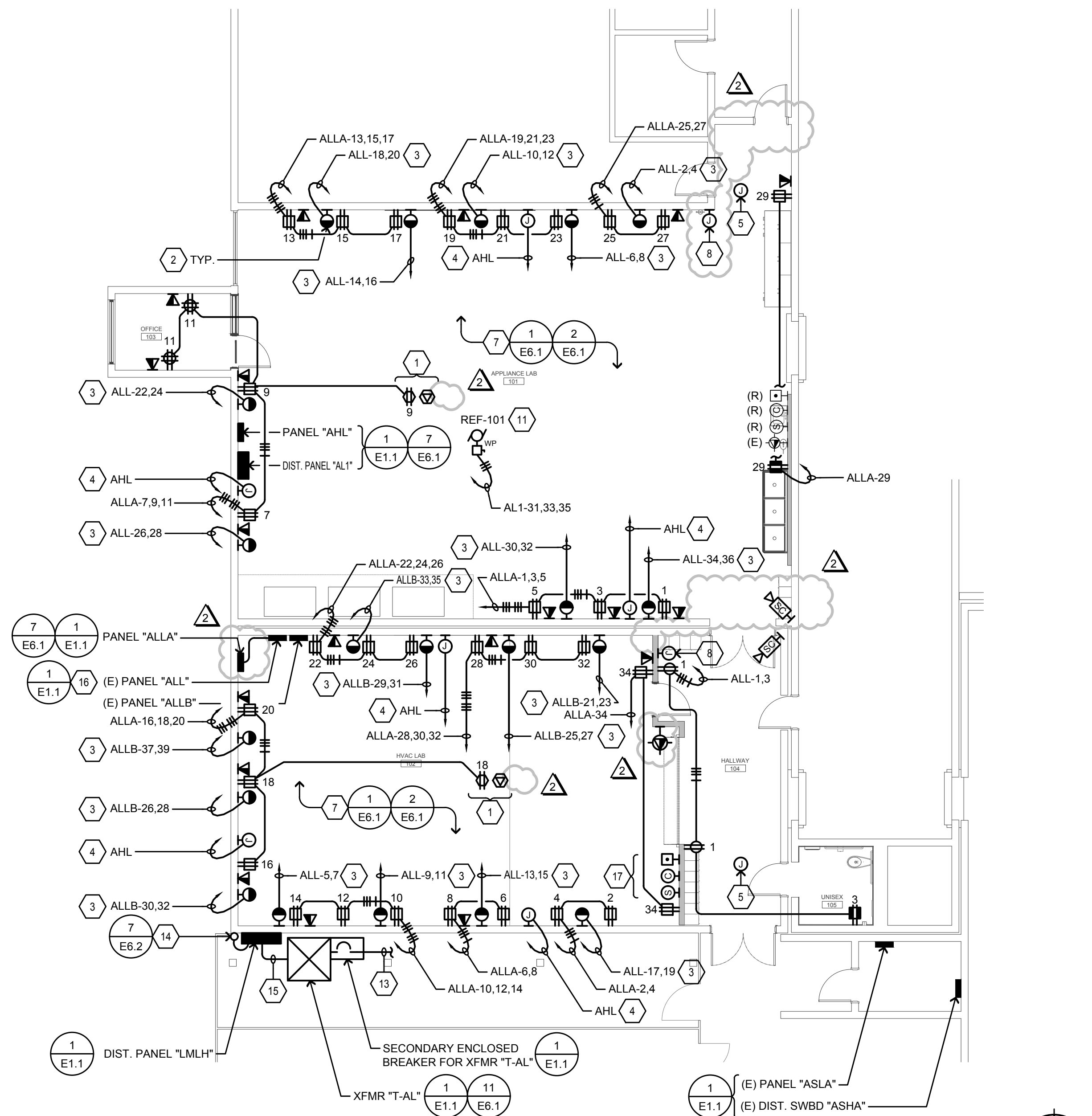
NOTE:
CONTRACTOR SHALL SIZE BRANCH CIRCUIT CONDUCTORS PER THE TABLE ABOVE AS DETERMINED BY THE CIRCUIT CONDUCTOR LENGTH, U.O.N. CONTRACTOR SHALL SPLICE TO #12 AWG WITHIN TERMINATION BOX FOR DEVICE CONNECTION IF NECESSARY.

GENERAL NOTES:

- WHERE GFCI RECEPTACLES ARE INSTALLED THE GROUND-FAULT CIRCUIT-INTERRUPTER SHALL BE INSTALLED READILY ACCESSIBLE LOCATION.
- UNLESS OTHERWISE NOTED, ALL GENERAL 20 AMP, 120V RECEPTACLES SHALL BE GFCI TYPE.
- SEAL ALL INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH EQUIPMENT MANUFACTURER'S FOR EXACT ELECTRICAL CONNECTIONS/NEMA TYPE RECEPTACLES. PROVIDE & INSTALL MATCHING PLUG FOR EQUIPMENT AND RECEPTACLE TO MATCH.
- ALL SURFACE MOUNTED BOXES SHALL BE METAL BOXES WITH EMT/RIGID CONDUIT FOR POWER/TELECOM DEVICES.
- CONTRACTOR SHALL X-RAY CONCRETE WALL WHEN CORE DRILL PENETRATION ARE NECESSARY PRIOR TO ROUGH-IN. SEAL ALL PENETRATIONS AS NECESSARY.



2 POWER PLAN - BUSWAY SYSTEM
SCALE: 1/8"=1'-0"



1 POWER PLAN
SCALE: 1/8"=1'-0"

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ADDENDUM 2		04/28/2021

CONSULTANTS



**AURUM CONSULTING
ENGINEERS**
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Project No. 19598.00
60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.acemb.com

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PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
Tel: 408.524.0811 Fax: 408.524.0844
ibi@ibigroup.com

PROJECT

VOCATIONAL LABS
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:

121030

DRAWN BY:

CADD

PROJECT MGR:

ARCHITECTURAL

SHEET TITLE

POWER PLAN

SHEET NUMBER

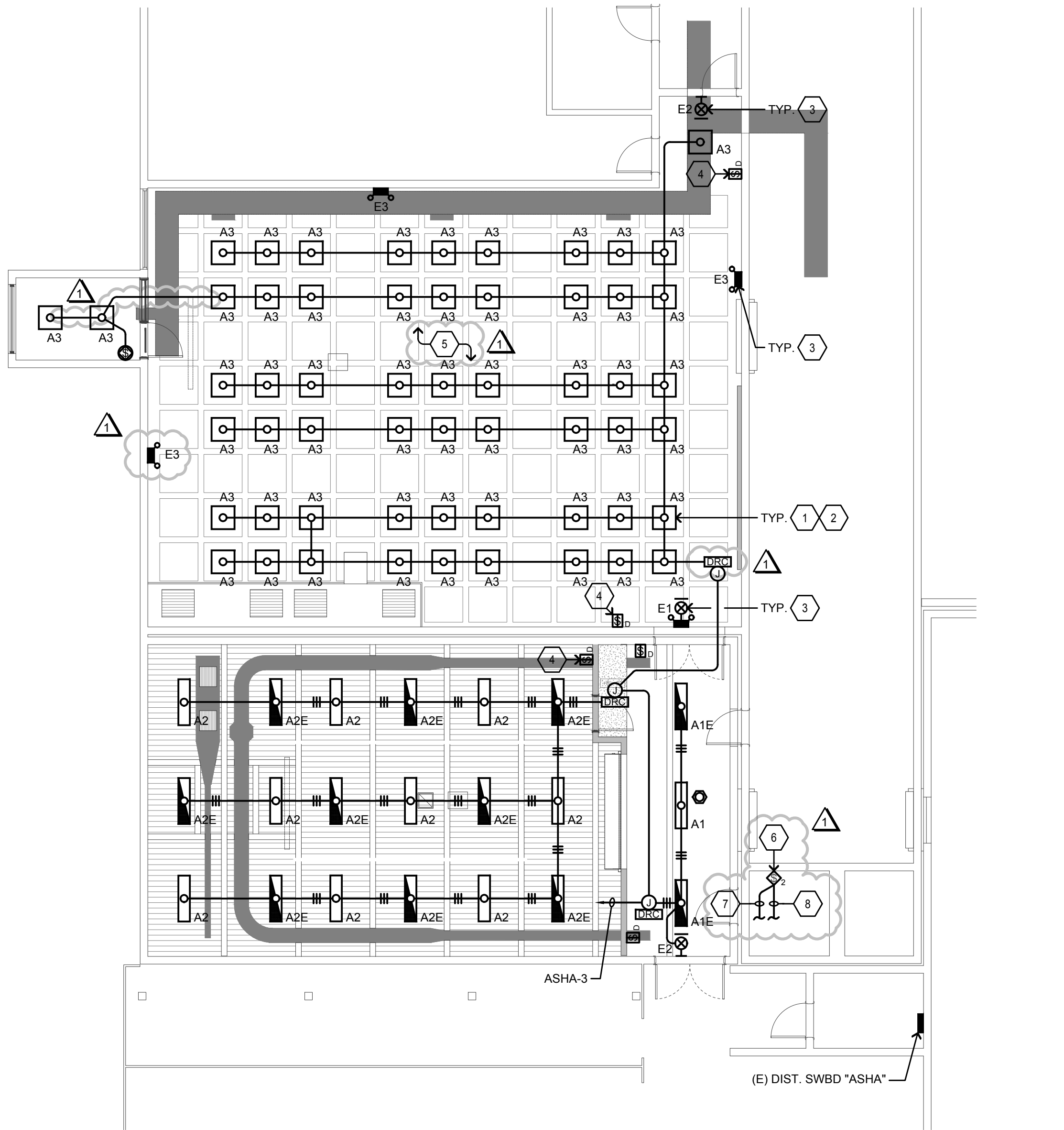
AD2-E4.1

ISSUE

1

LIGHTING PLAN

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



SHEET NOTES

1. PROVIDE & INSTALL NEW LIGHT FIXTURE AT EXISTING LIGHT FIXTURE LOCATION REMOVED DURING DEMOLITION WORK.

2. RECONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUIT/CONDUIT/JUNCTION BOX PRESERVED DURING DEMOLITION WORK.

3. CONNECT TO LIGHTING CIRCUIT UNSWITCHED HOT SERVING SAME SPACE.

4. PROVIDE & INSTALL LOCKABLE CLEAR ENCLOSURE WITH KEY.

5. CORE THROUGH CONCRETE WAFFLE CEILING FOR ROUTE OF CONDUITS. COORDINATE WITH STRUCTURAL FOR X-RAY OF CONCRETE CEILINGS/WALLS.

6. PROVIDE & INSTALL NEW SWITCH AND RECONNECT TO EXISTING CABLES PRESERVED DURING DEMOLITION. INSTALL NEW SWITCH IN SAME LOCATION OF EXISTING SWITCH BEING REMOVED DURING DEMOLITION WORK.

7. CONNECT/CONTROL EXISTING LIGHT FIXTURE IN SPACE.

8. CONNECT/CONTROL EXISTING EXHAUST FAN IN SPACE.

LIGHT FIXTURE SCHEDULE

FIXTURE NOTES:

1. ALL LED LIGHT FIXTURE DRIVERS SHALL BE ELECTRONIC TYPE, 10% TOTAL HARMONIC DISTORTION MAXIMUM.

2. ALL LED LIGHT MODULES SHALL BE ENERGY SAVING 3500" K, 80 CRI MINIMUM, U.O.N. (SEE SPECIFICATIONS FOR MORE INFORMATION).

3. ALL LED DRIVERS (AND ASSOC. FIXTS.) SHALL HAVE MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH CALIFORNIA ENERGY COMMISSION STANDARDS AND REQUIREMENTS, WHERE SUCH ARE USED IN CONDITIONED SPACES.

4. EXIT SIGNS, EMERGENCY LIGHTS AND LIGHT FIXTURES WITH EMERGENCY BATTERY BACK-UP SHALL SUPPLY A MINIMUM DURATION OF 90 MINUTES OF POWER IN THE EVENT OF A POWER OUTAGE/FAILURE.

5. ALL RECESSED LIGHT FIXTURES SHALL BE U.L. APPROVED FOR ZERO CLEARANCE INSULATION COVER WHEN INSTALLED IN INSULATED CEILINGS.

TYPE	DESCRIPTION	LAMPS	MANUFACTURER	MOUNTING
A1	1' x 4' SURFACE LED FIXTURE, FROSTED RIBBED ACRYLIC DIFFUSERS, 0-10V DIMMING DRIVER, 277V, FINISH PER ARCHITECT.	26.7W LED 3000 LUMENS	H.E. WILLIAMS HES SERIES	2 E6.2
A1E	SAME AS FIXTURE TYPE "A1" EXCEPT WITH ADDITIONAL EMERGENCY BATTERY BACK-UP.	26.7W LED 3000 LUMENS	H.E. WILLIAMS HES SERIES	2 E6.2
A2	1' x 4' SURFACE LED FIXTURE, 0-10V DIMMING DRIVER, 277V, FINISH PER ARCHITECT.	41.6W LED 6300 LUMENS	H.E. WILLIAMS 80 LED SERIES	2 E6.2
A2E	SAME AS FIXTURE TYPE "A2" EXCEPT WITH ADDITIONAL EMERGENCY BATTERY BACK-UP.	41.6W LED 6300 LUMENS	H.E. WILLIAMS 80 LED SERIES	2 E6.2
A3	SAME AS FIXTURE TYPE "A1" EXCEPT Z x Z.	26.6W LED 3000 LUMENS	H.E. WILLIAMS HES SERIES	1 E6.2
E1	EXIT SIGN AND EMERGENCY LIGHTING WITH 2-HEAD LED LAMPS, THERMOPLASTIC HOUSING, SPECTRON SELF-TESTING, FULLY ADJUSTABLE LAMPS, 277V, FINISH PER ARCHITECT.	FURN. WITH FIXTURE	DUAL LITE LT SERIES	WEIGHT: LESS THAN 15 LBS.
E2	SAME AS FIXTURE TYPE "E1" EXCEPT WITHOUT LAMP HEADS.	FURN. WITH FIXTURE	DUAL LITE LT SERIES	WEIGHT: LESS THAN 15 LBS.
E3	EMERGENCY LIGHT WITH 2-HEAD LED LAMPS, SURFACE MOUNTED, PLASTIC HOUSING, EMERGENCY BATTERY CHARGER AND TESTER, SELF-TESTING, FULLY ADJUSTABLE LAMPS, 277V, FINISH PER ARCHITECT.	FURN. WITH FIXTURE	DUAL LITE LZ SERIES	WEIGHT: LESS THAN 15 LBS.

BRANCH CIRCUIT CONDUCTOR SIZING TABLE

CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	REQUIREMENT
20/120	56'-90'	½" C., 2 #10 & 1 #10 GND.
20/120	91'-140'	½" C., 2 #8 & 1 #10 GND.
20/277	131'-205'	½" C., 2 #10 & 1 #10 GND.
20/277	206'-330'	½" C., 2 #8 & 1 #10 GND.

NOTE:

CONTRACTOR SHALL SIZE BRANCH CIRCUIT CONDUCTORS PER THE TABLE ABOVE AS DETERMINED BY THE CIRCUIT CONDUCTOR LENGTH, U.O.N. CONTRACTOR SHALL SPLICE TO #12 AWG WITHIN TERMINATION BOX FOR DEVICE CONNECTION IF NECESSARY.

- GENERAL NOTES:

A. LIGHTING CONTROL SYSTEM ALONG PATH OF EGRESS SHALL BE PROGRAMMED TO MAINTAIN A MINIMUM OF 1 F.C.

B. MANUAL AREA CONTROLS CONTROLLING LIGHTING FOR PATH OF EGRESS SHALL NOT BE ACCESSIBLE TO UNAUTHORIZED PERSONNEL.

C. CONTRACTOR SHALL PROVIDE & INSTALL ½"C. FROM ROOM CONTROLLER TO EACH DEVICE IN SPACE CONNECTED TO ROOM CONTROLLER MODULE (SWITCHES, OCCUPANCY SENSORS, DAYLIGHT SENSOR, ETC.).

D. SEE E6.2 FOR LIGHT FIXTURE CONTROLS.

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ADDENDUM 1		03/11/2021

CONSULTANTS



**AURUM CONSULTING
ENGINEERS**
MONTEREY BAY, INC.
Project No. 19598.00
60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.acemb.com

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SEAL

PRIME CONSULTANT
IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
408 924 0844 fax 408 924 0844
ibigroup.com

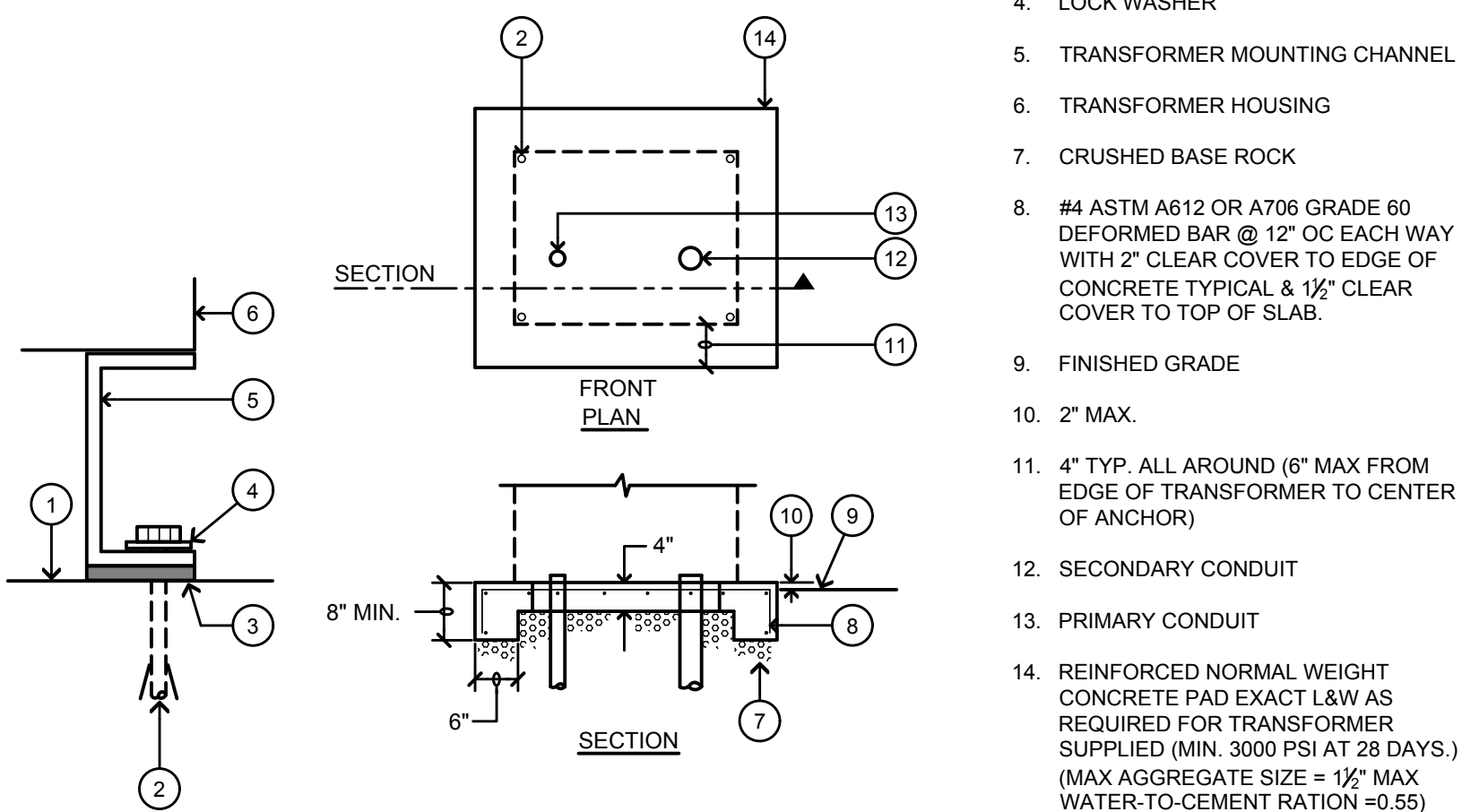
PROJECT
VOCATIONAL LABS
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

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PROJECT MGR:
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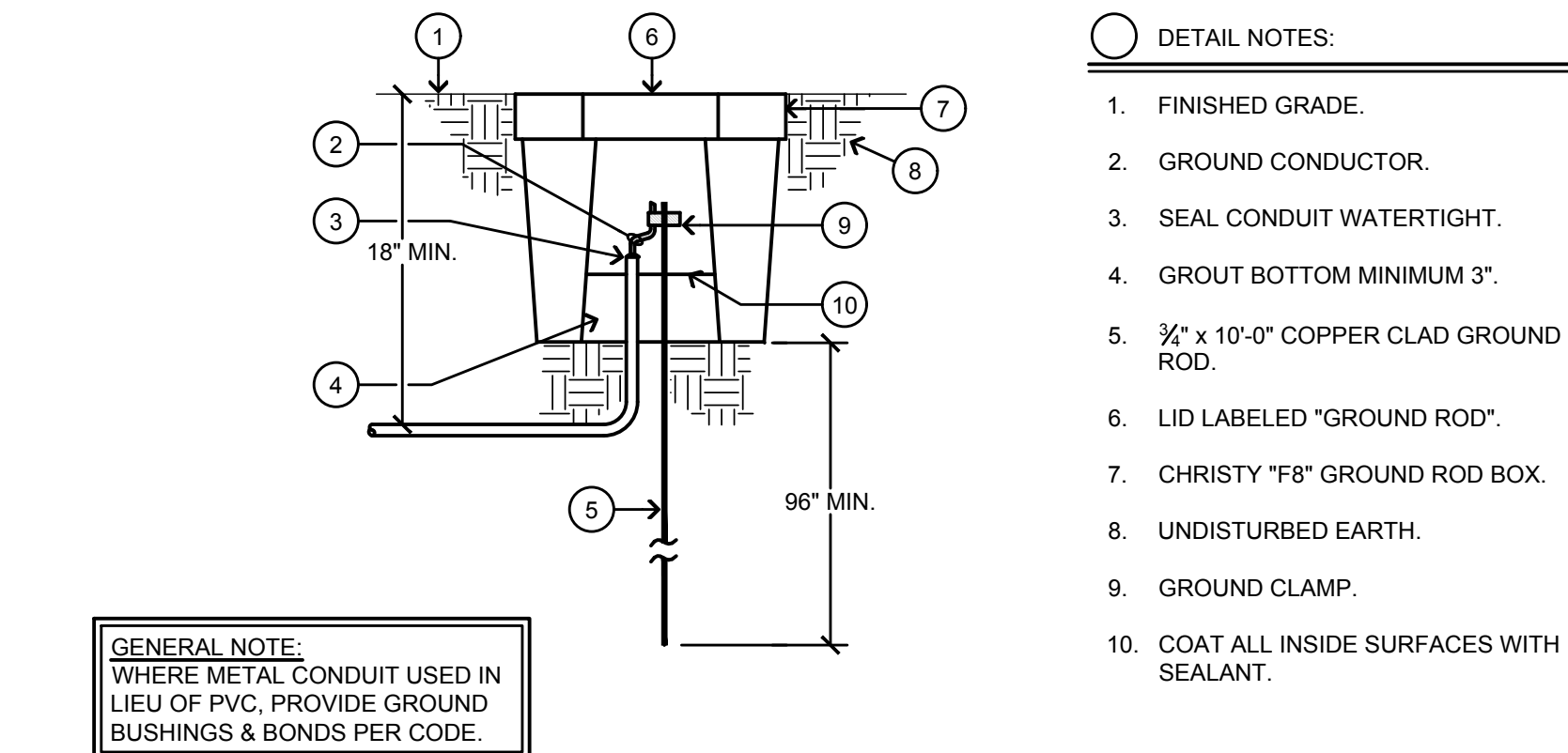
SHEET TITLE
**LIGHTING PLAN & LIGHT
FIXTURE SCHEDULE**

SHEET NUMBER
AD1-E5.1
ISSUE

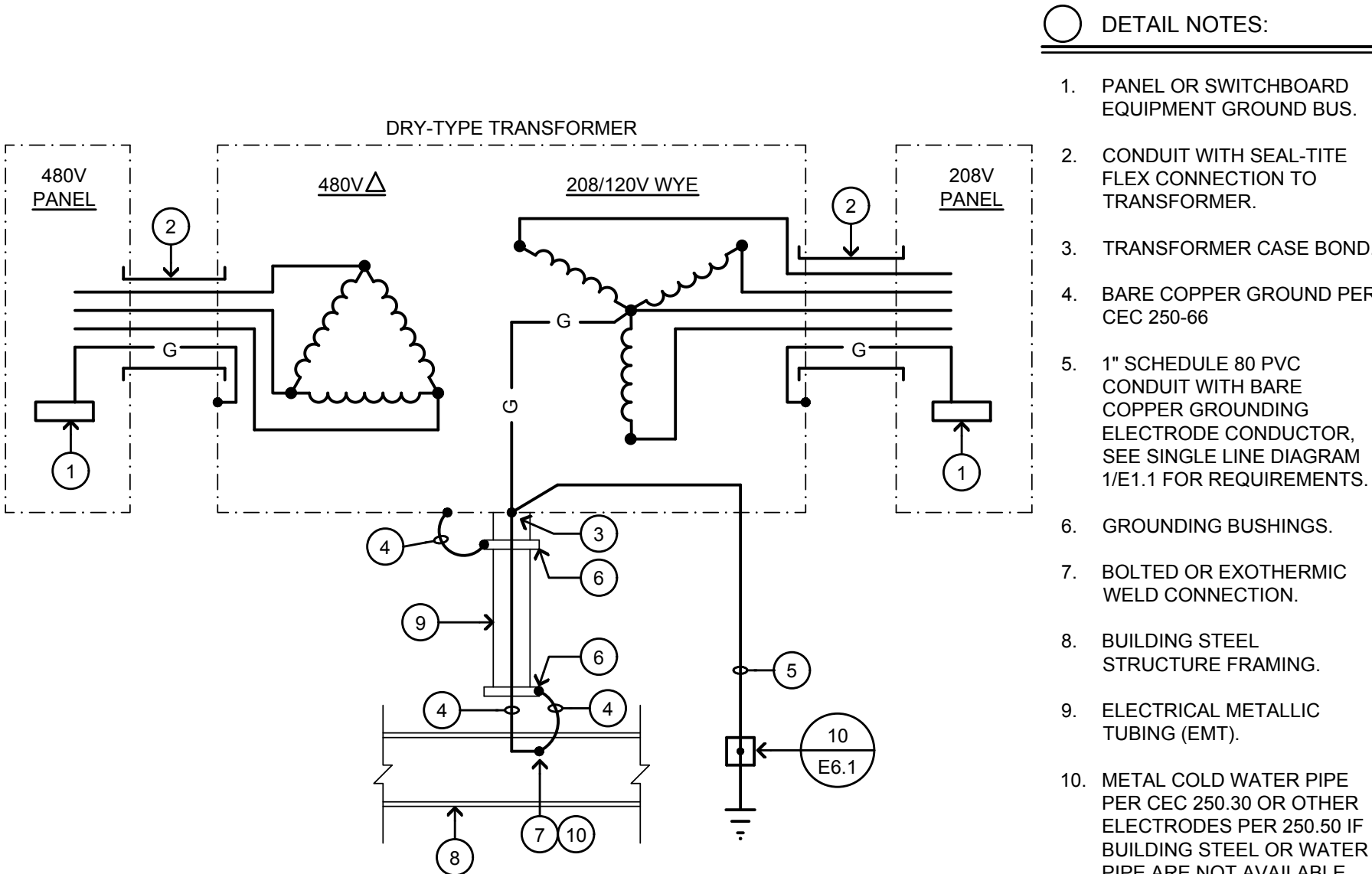
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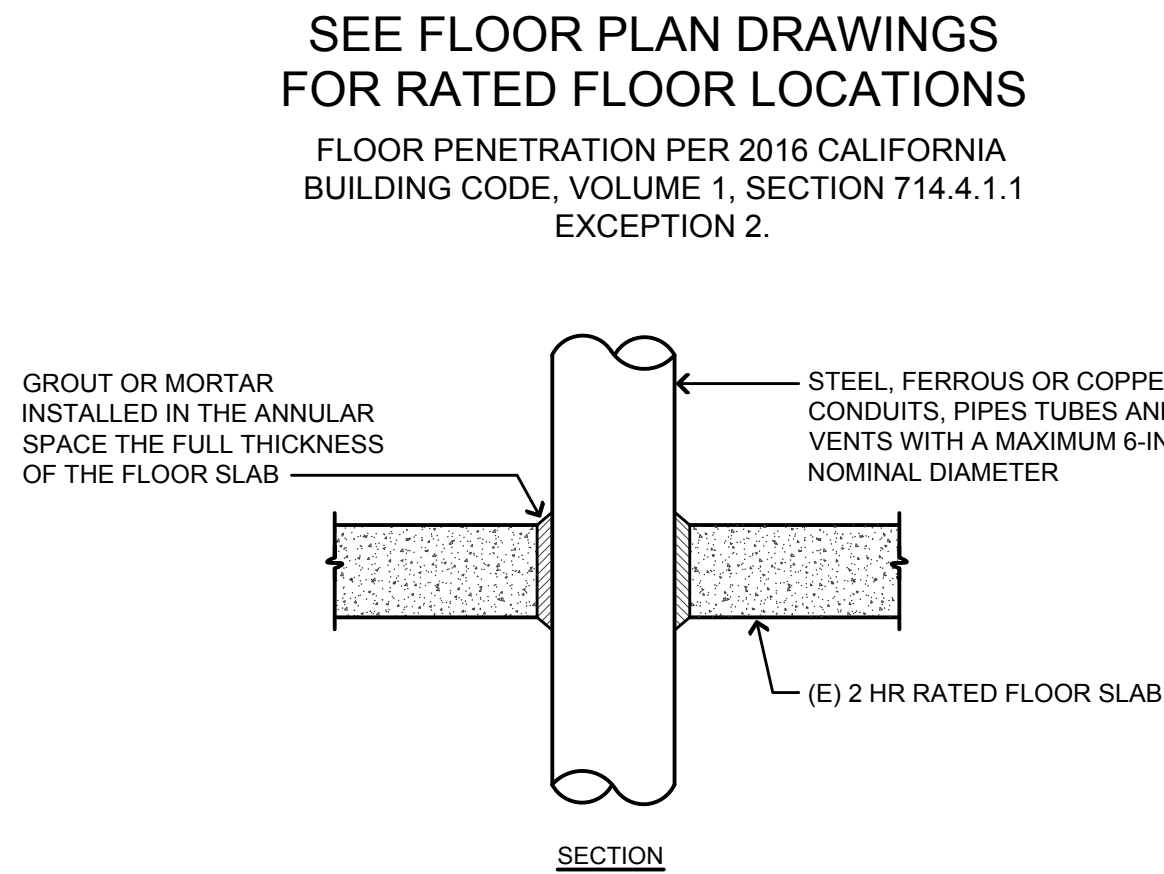
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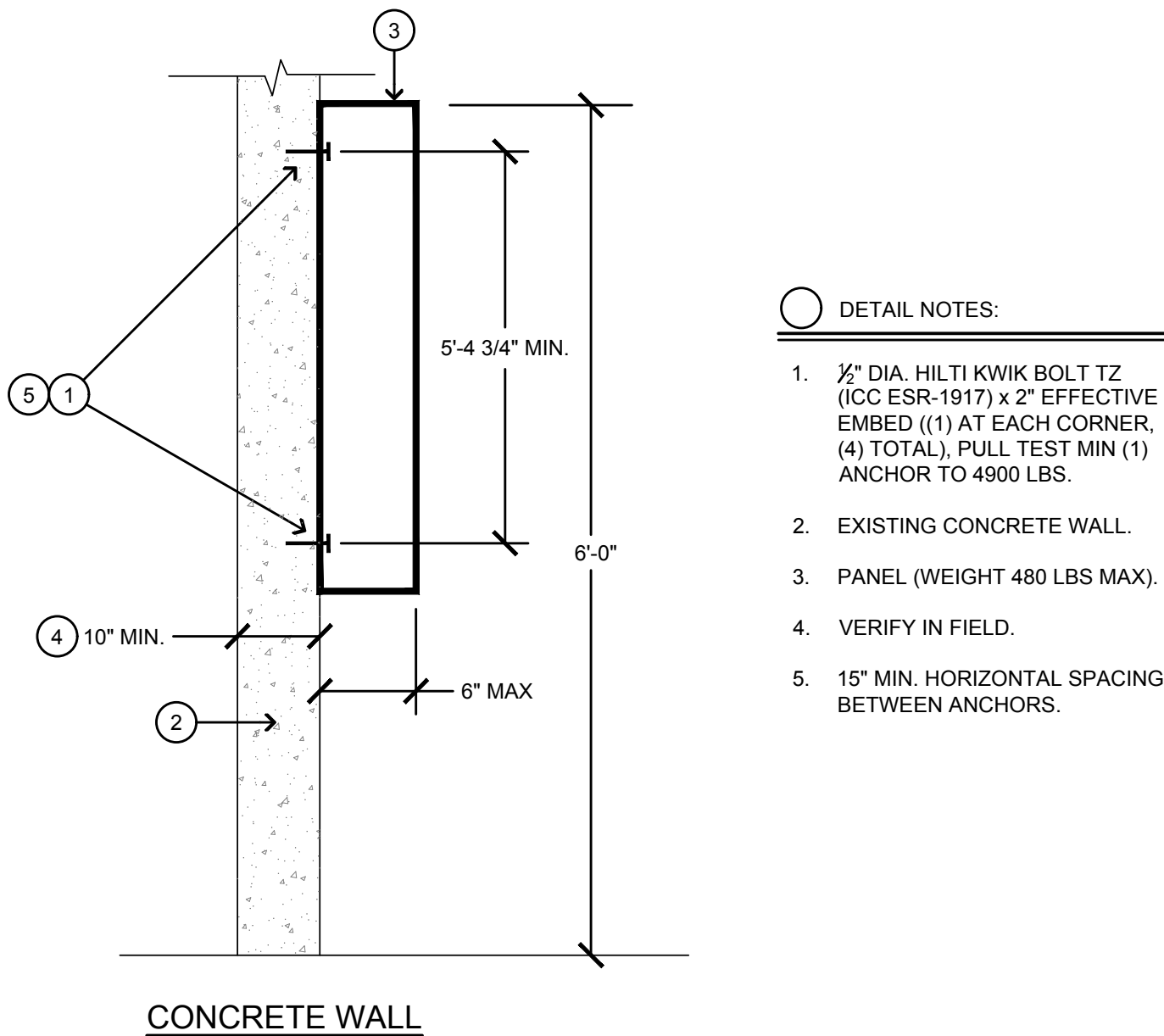
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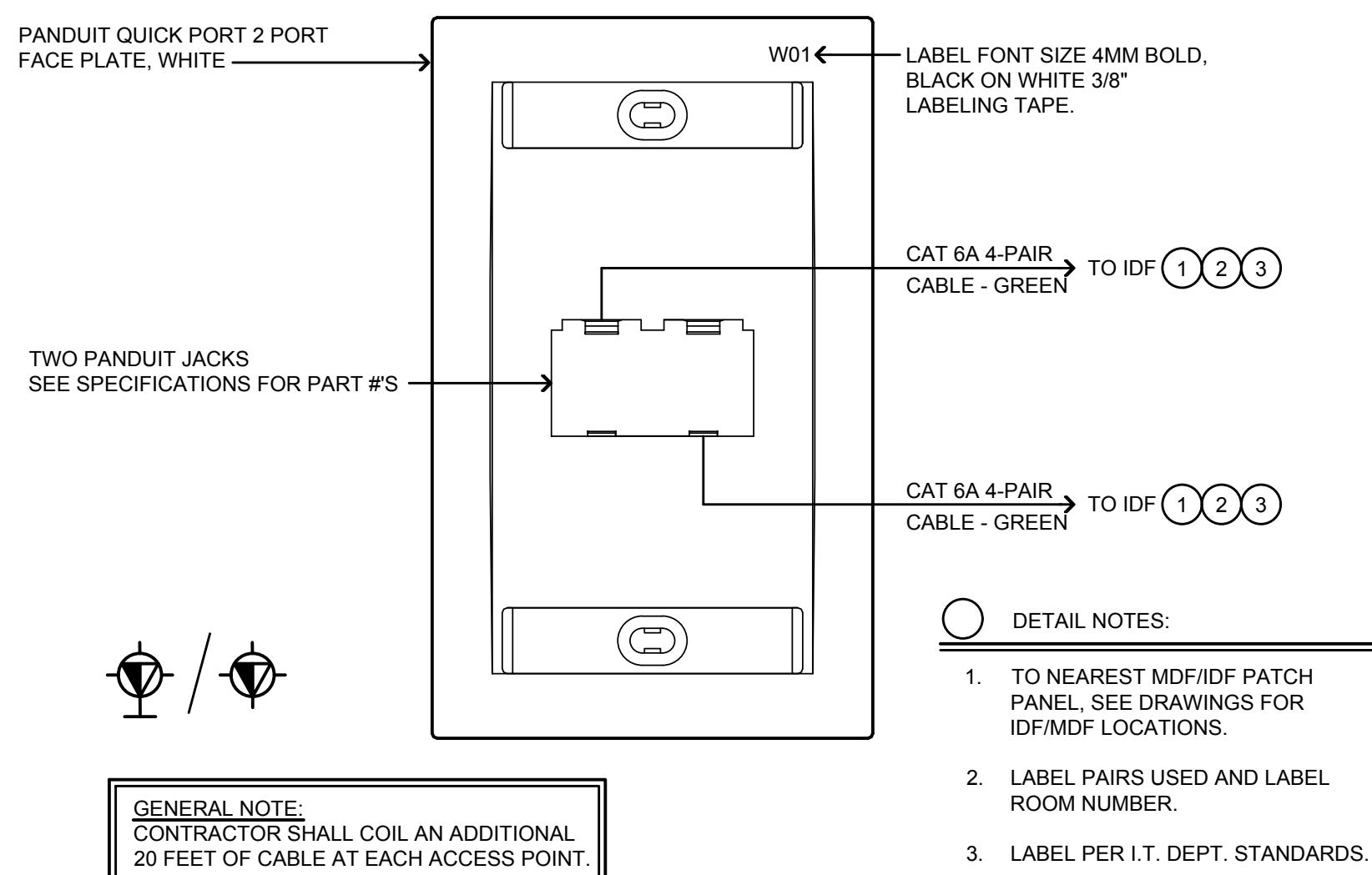
8 2-HR FIRE-RATED FLOOR PENETRATION
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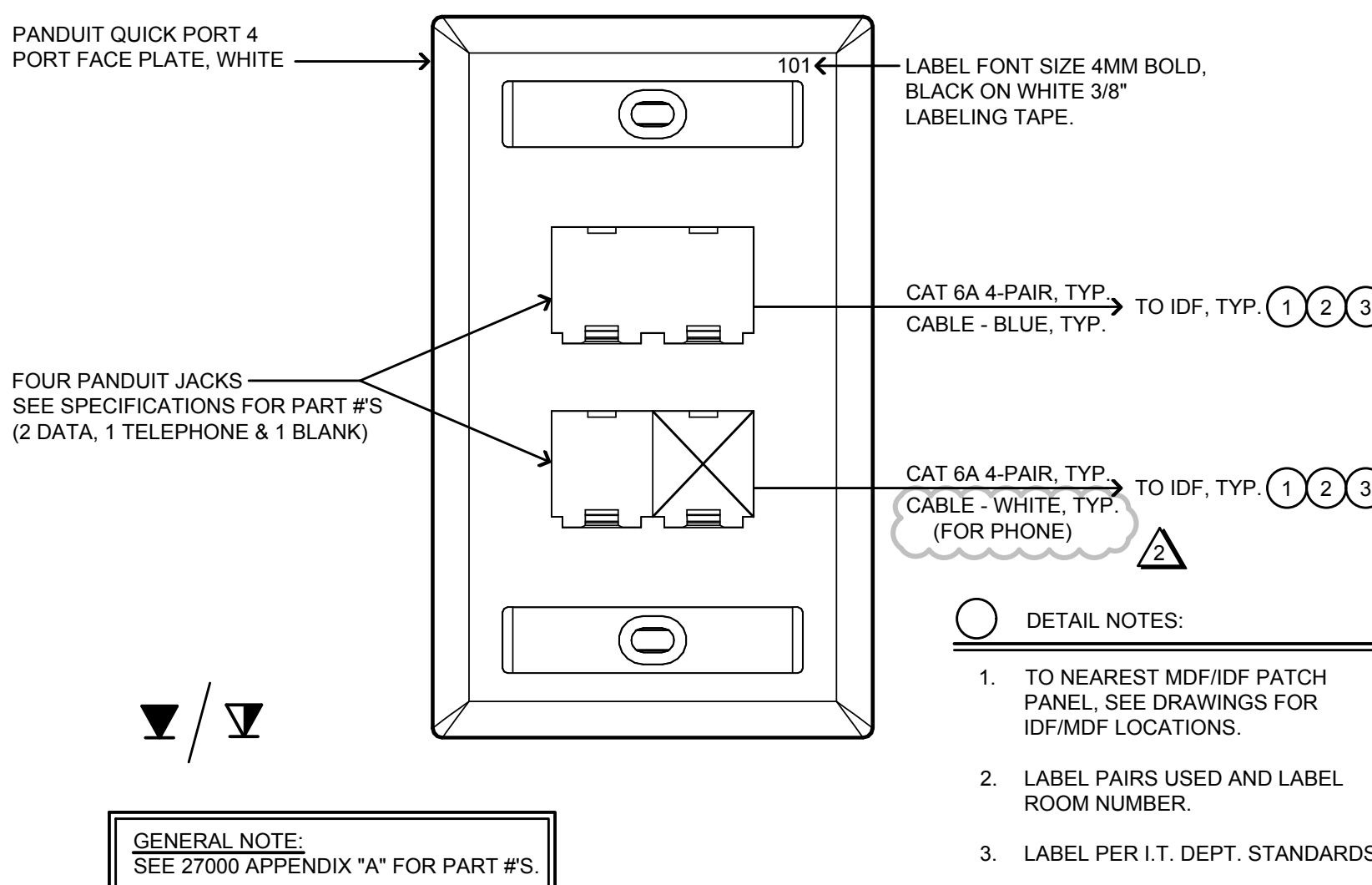
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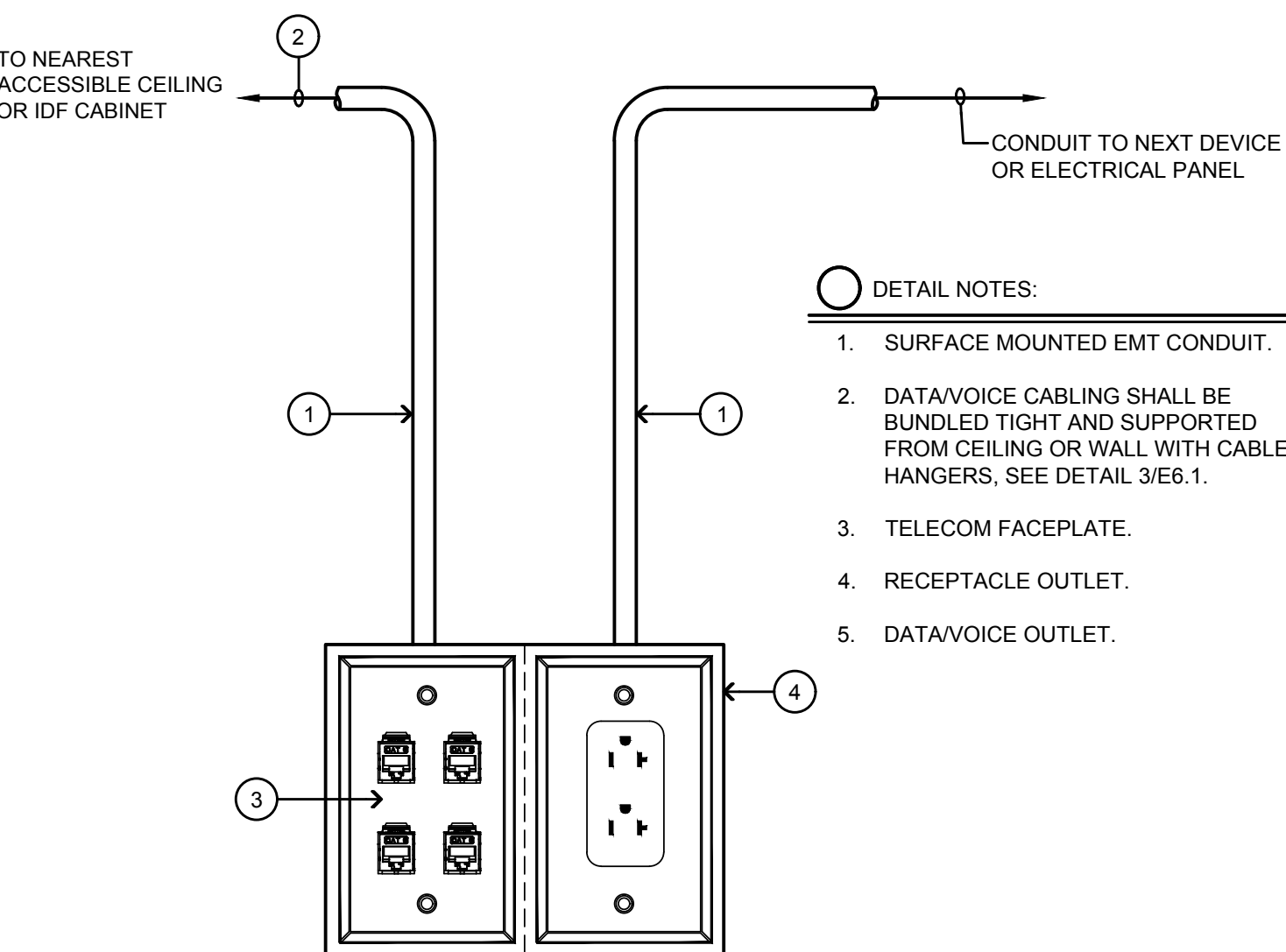
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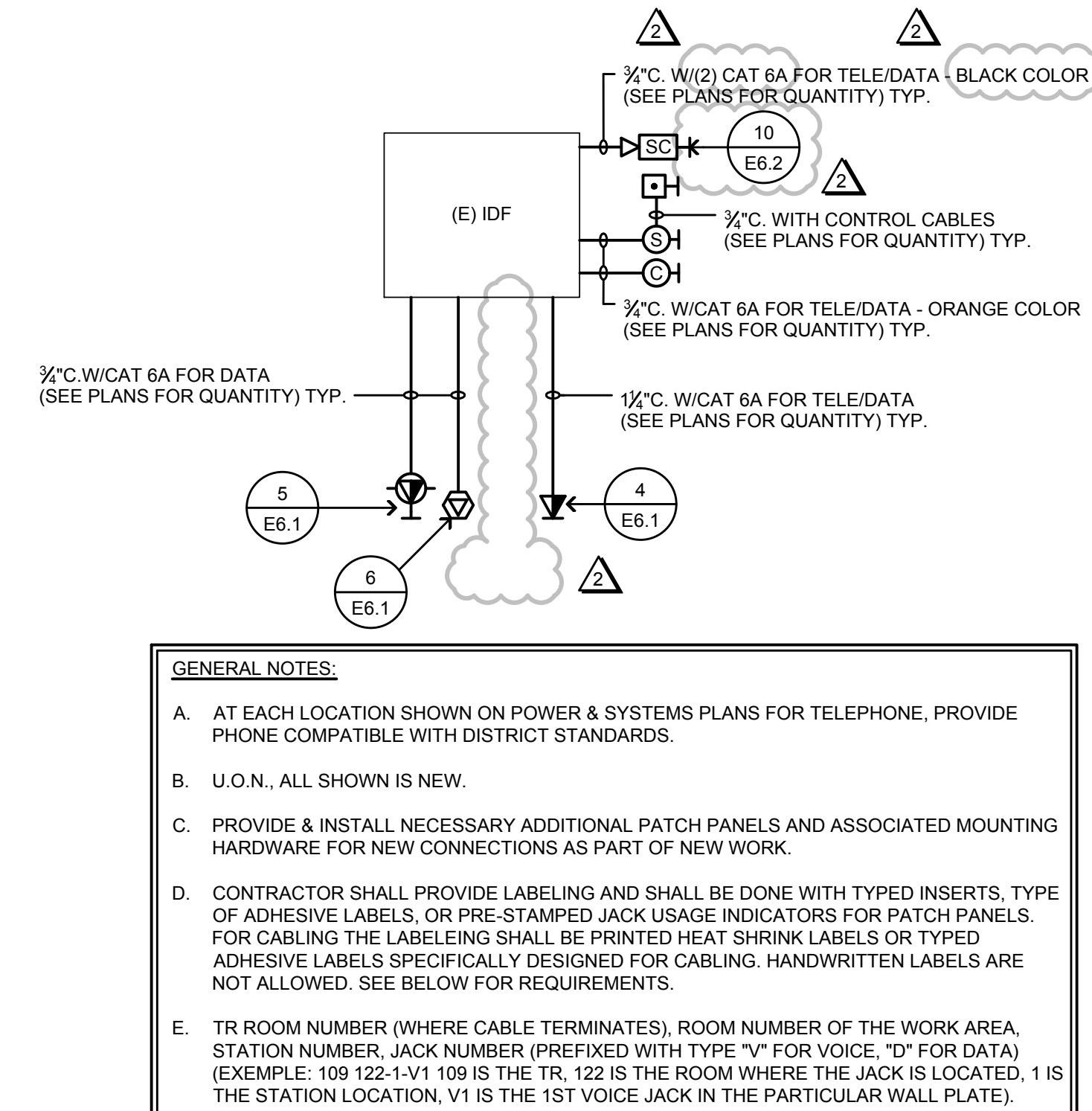
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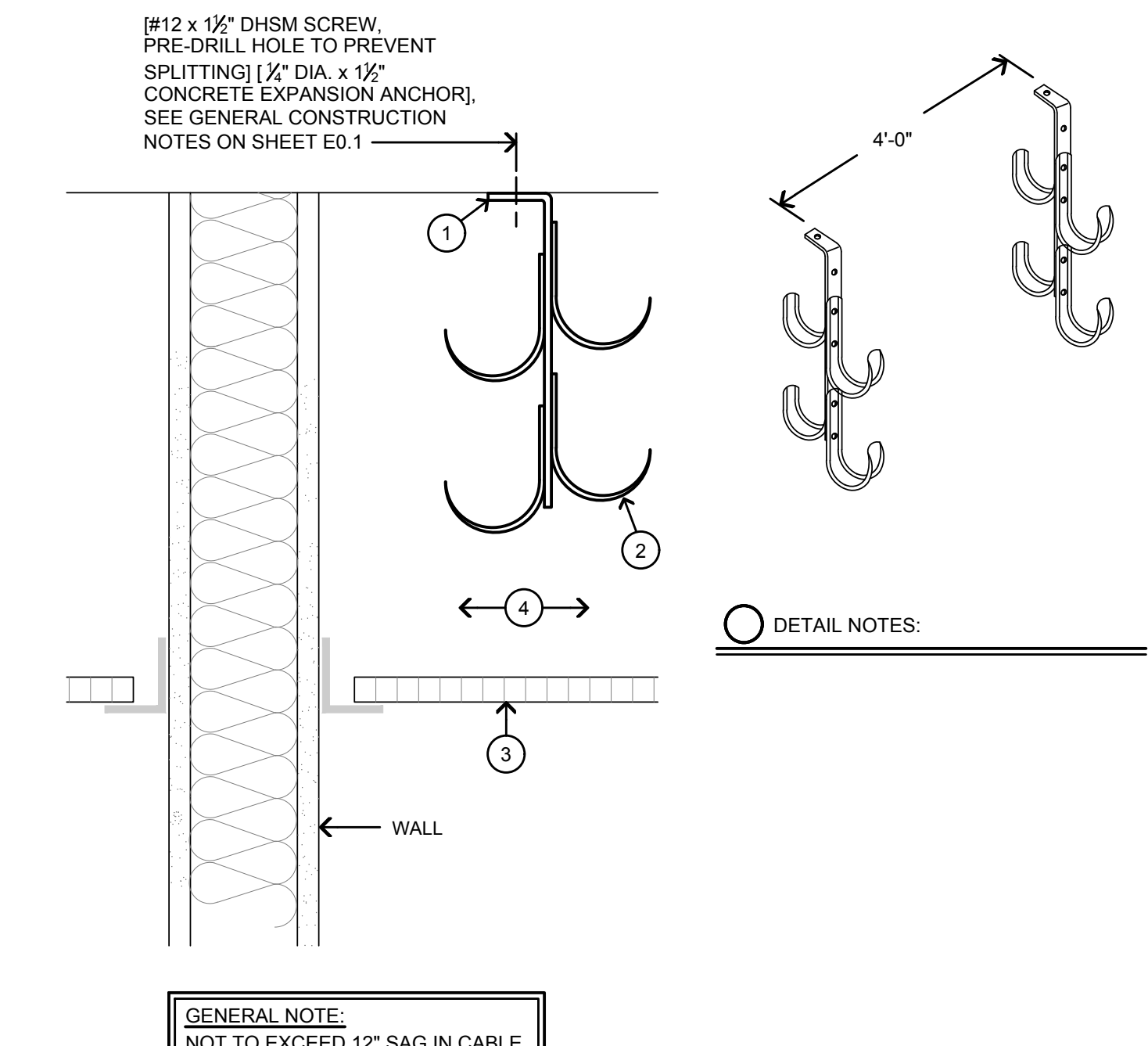
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NO SCALE



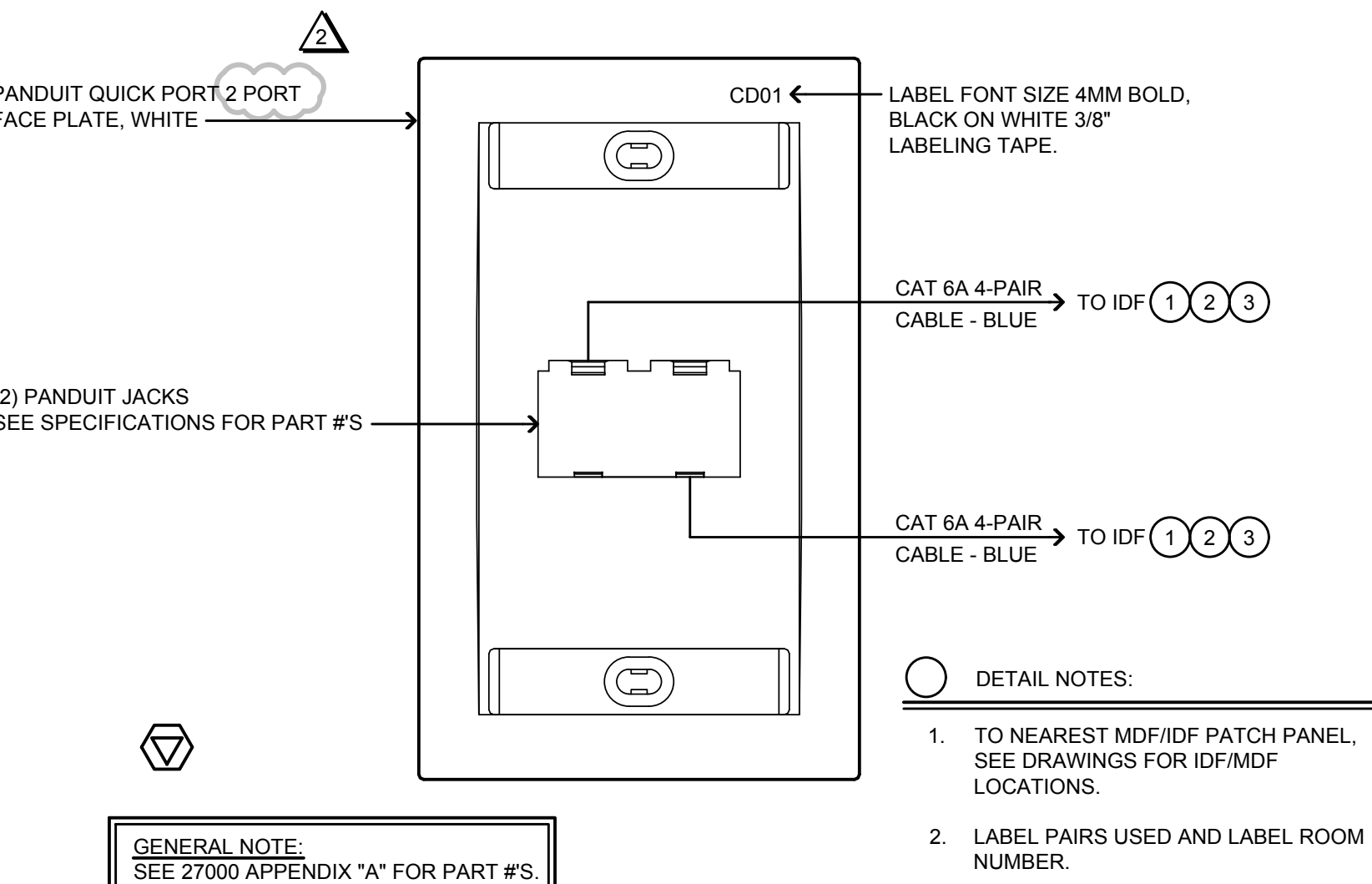
1 TELE/DATA RISER DIAGRAM
NO SCALE



3 J-HOOK MOUNTING DETAIL
NO SCALE



6 CEILING OUTLET
NO SCALE



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ISSUES

No.	DESCRIPTION	DATE
ADDENDUM 2		04/28/2021

CONSULTANTS

AURUM CONSULTING ENGINEERS
MONTEREY BAY, INC.
Project No. 15598.00
60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.aecmb.com

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PRIME CONSULTANT
IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
Tel: 408.524.0811 Fax: 408.524.0844
ibi@group.com

PROJECT
VOCATIONAL LABS
2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
CADD

CHECKED BY:
NA

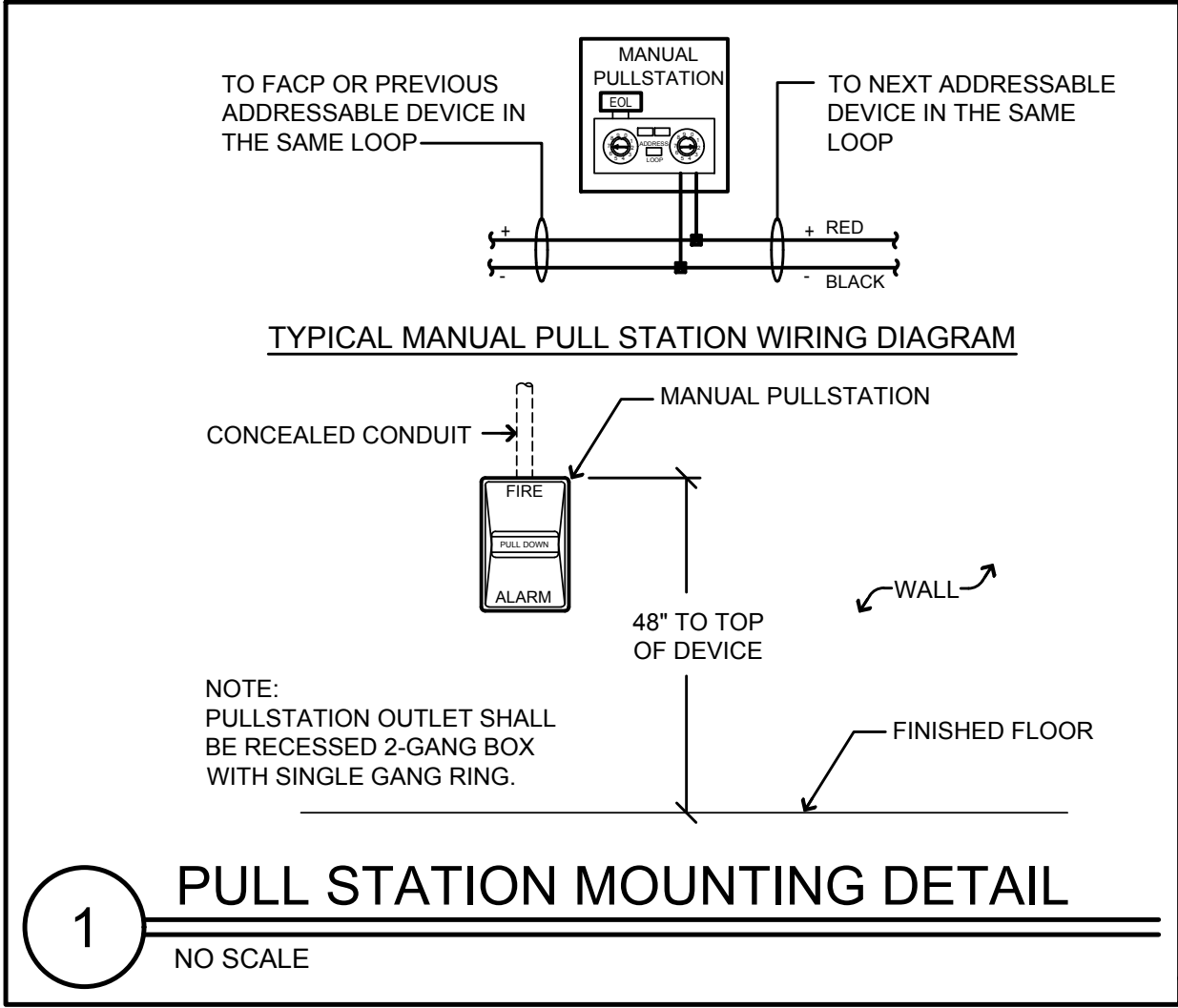
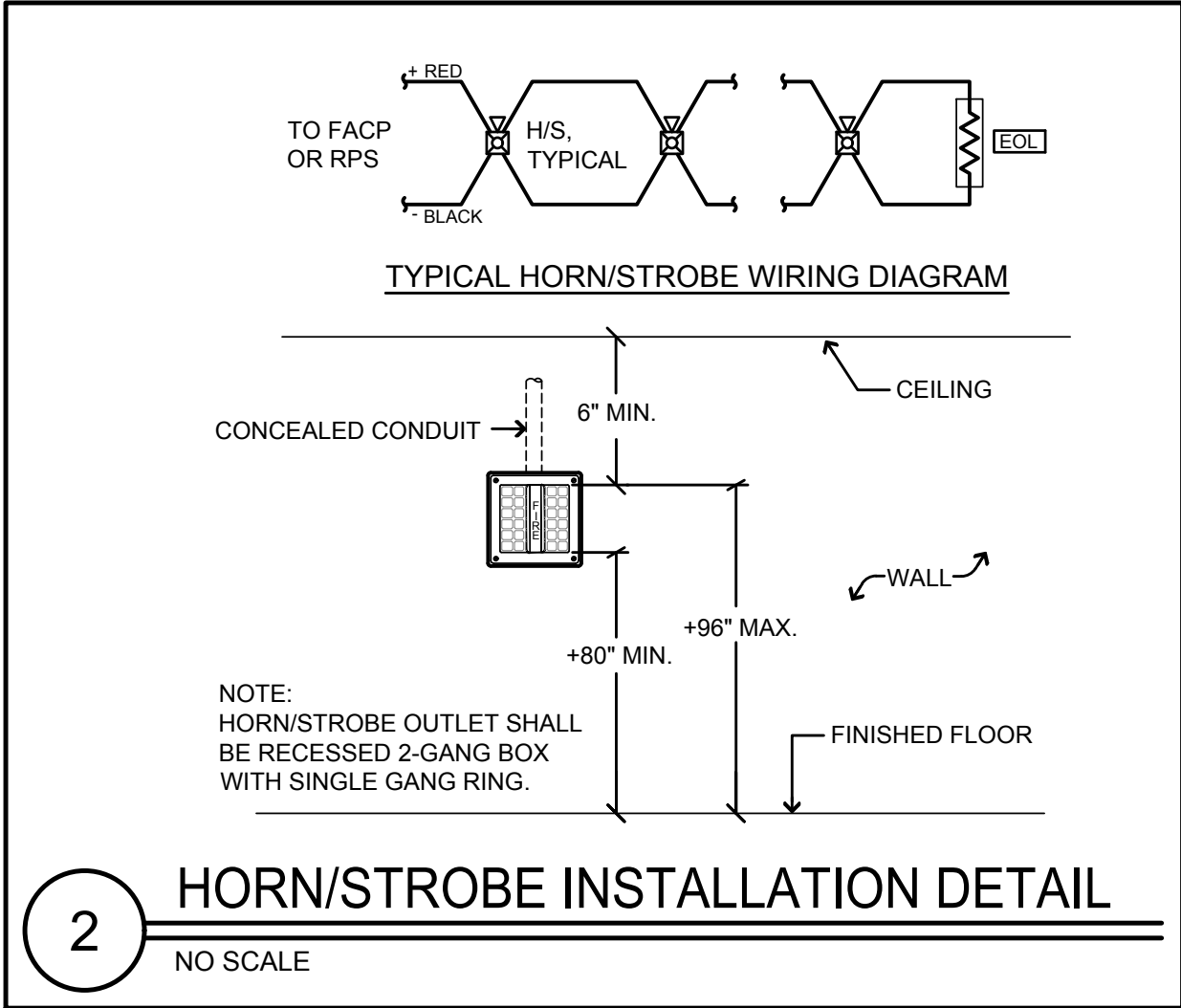
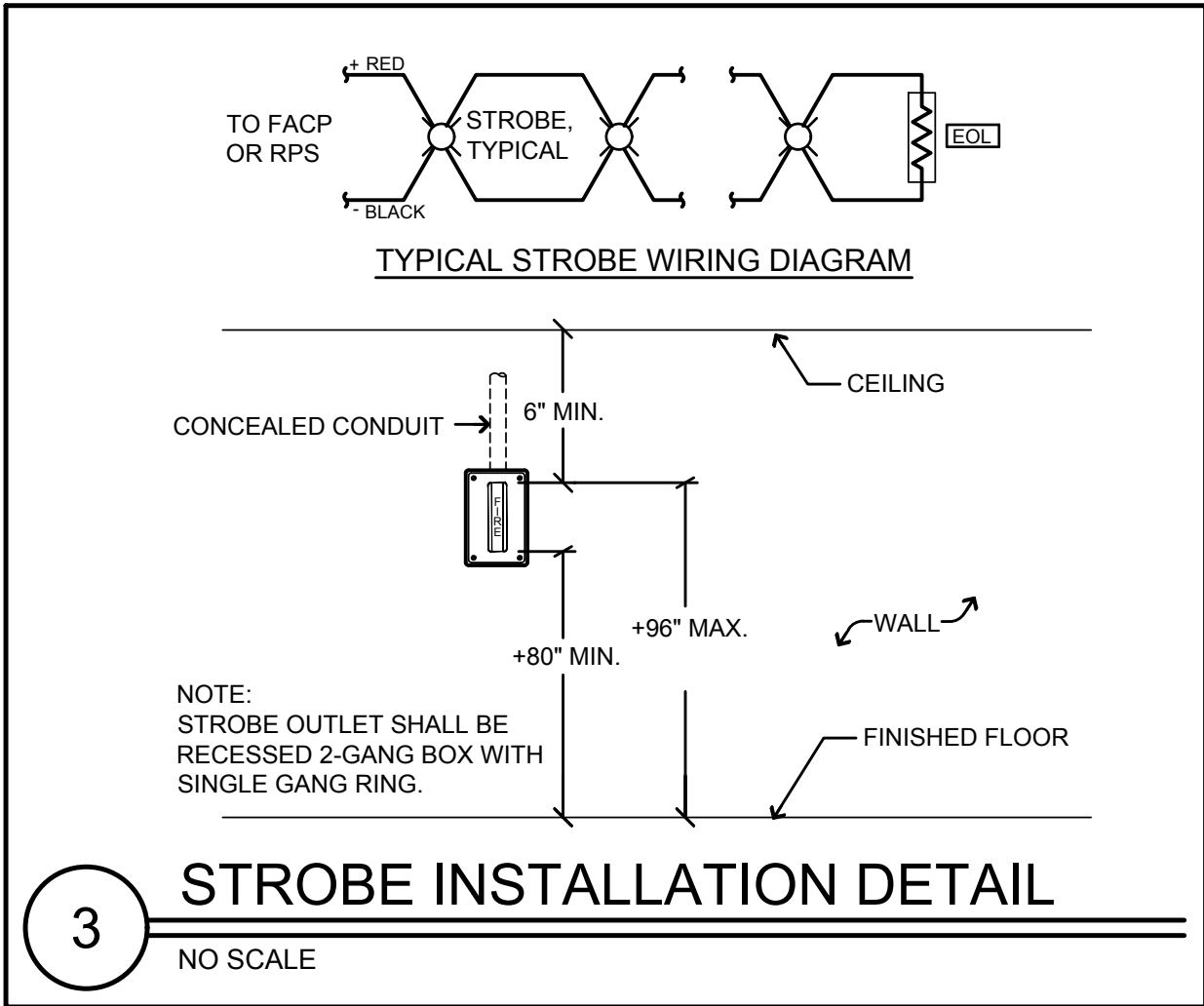
PROJECT MGR:
ARCHITECTURAL

APPROVED BY:
Approver

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
AD2-E6.1

ISSUE



FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFG'S PART No.	CSFM LISTING
[FACP]	EXISTING ADDRESSABLE FIRE ALARM CONTROL PANEL SIEMENS MXL SERIES WITH BUILT-IN DACT-UD2 COMMUNICATOR. (SEE BATTERY CALCULATIONS FOR SIZE OF BATTERIES REQUIRED.)	MXL	7165-0067-0144
[P]	ADDRESSABLE INTELLIGENT MANUAL PULL STATION, SIEMENS MS SERIES.	MSI-10B	7150-0067-0036
[X]	WALL MOUNT, MULTI-CANDELA, FIRE ALARM STROBE WITH FIELD SELECTABLE CANDELA SETTING OF 15,15/75, 30, 90, 75, 95, 110, 115, 135, 150, 177 & 185/ RED FINISH, SIEMENS ZR SERIES.	ZR	7125-0067-0248
[X]	WALL MOUNT, MULTI-CANDELA, FIRE ALARM HORN/STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15,15/75, 30, 75, 95, 110, 135 & 185 AND SELECTABLE cBA SETTINGS OF 60 OR 80/80A-IN TEMPORAL PATTERN (CODE 0), RED FINISH, SIEMENS ZH SERIES.	ZH	7125-0067-0248
[EOL]	END OF LINE DEVICE.		

- ### FIRE ALARM GENERAL NOTES
1. WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 2. WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 3. UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 4. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4."
 5. THE CONDUIT AND WIRE SHOWN ON THESE PLANS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. "AS-BUILT" PLANS SHALL BE MAINTAINED AND BE PROVIDED AS REQUIRED BY THE PROJECT INSPECTOR OF RECORD.
 6. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF THROUGH PENETRATION FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
 7. ALL DEVICES SHALL BE "CSFM" LISTED.
 8. EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM."
 9. AUDIBLE ALARM PRODUCED BY "FACP" SHALL SOUND THE CALIFORNIA UNIFORM SIGNAL IN TEMPORAL MODE.
 10. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 150DBA ABOVE THE AVERAGE SOUND LEVEL.
 11. AUDIBLE SIGNALS INTENDED FOR OPERATION IN THE PUBLIC SHALL HAVE A SOUND LEVEL OF NOT LESS THAN 75DBA AT 10 FEET OR MORE THAN 110DBA AT THE MINIMUM HEARING DISTANCES FROM THE AUDIBLE APPLIANCE.
 12. WHERE VISUAL DEVICES ARE REQUIRED, VISUAL DEVICE SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELA. NO PLACE IN ANY ROOM SHALL BE MORE THAN 90 FEET FROM A DEVICE.
 13. APPROVED BY THE "DIVISION OF THE STATE ARCHITECT/OFFICE OF REGULATION SERVICES" CONTRACTOR SHALL PROVIDE COPIES OF APPROVED PLANS TO THE PROJECT INSPECTOR OF RECORD PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING TO ENGINEER PRIOR TO PURCHASE FOR REVIEW. THE FIRE PROTECTION SYSTEM SHALL NOT BE INSTALLED UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED TO AND RECEIVED BY THE ENGINEER OF RECORD.
 14. FINAL ALARM TEST SHALL BE WITNESSED BY THE DSA INSPECTOR OF RECORD (IOR), BOTH THE DSA INSPECTOR OF RECORD (IOR) AND THE LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING BY THE FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL PROVIDE "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TEST.
 15. POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 16. AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC CHAPTER 80. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UJFX OR UJUS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
 17. EXISTING FIELD DEVICES SHALL REMAIN IN PLACE UNTIL NEW FIELD DEVICES ARE IN PLACE AND NEW WIRING HAS BEEN HOMERAN TO LOCATION OF FACP.

SYMBOLS & ABBREVIATIONS			
SYMBOLS			
---	CONDUIT - CONCEALED IN WALLS OR CEILING.		
----	CONDUIT - IN OR BELOW FLOOR, 3/4" MIN.		
---	CONDUIT CONTINUATION.		
[201]	ROOM NUMBER.		
[2]	SHEET NOTE REFERENCE SYMBOL: SEE ASSOCIATED NOTE ON SAME SHEET.		
[2 E1]	DETAIL OR SECTION DESIGNATION.		
ABBREVIATIONS			
ARCH.	ARCHITECT	FSD	FIRE SMOKE DAMPER
AWG	AMERICAN WIRE GAUGE	IDC	INITIATING DEVICE CIRCUITS
BKR	BREAKER	(N)	NEW
C	CONDUIT	NAC	NOTIFICATION APPLIANCE CIRCUITS
CB	CIRCUIT BREAKER		
CKT	CIRCUIT	NIC	NOT IN CONTRACT NUMBER
CLG	CEILING	NO	
(E)	EXISTING	SLC	SIGNALING LINE CIRCUITS
EOL	END OF LINE		
FA	FIRE ALARM	TYP	TYPICAL
FACP	FIRE ALARM CONTROL PANEL	UON	UNLESS OTHERWISE NOTED
FBO	FURNISHED BY OTHERS	WP	WEATHERPROOF

TYPICAL ZONE NOMENCLATURE

"S2" DENOTES SIGNAL CIRCUIT #2

"75CD" DENOTES CANDELA RATING

"4" DENOTES DEVICE #4

"M" DENOTES MODULE DEVICE; "D" DENOTES DETECTOR DEVICE

"1" DENOTES LOOP#

"5" DENOTES DEVICE #5

CROSSHATCH INDICATES NUMBER OF WIRES REQUIRED, SUBSCRIPT LETTER INDICATES TYPE OF CIRCUIT. SEE GENERAL NOTES THIS SHEET FOR NUMBER & TYPE OF WIRES AND CIRCUIT TYPE.

PROJECT DESCRIPTION	
SCOPE OF WORK: EXTENSION OF EXISTING ADDRESSABLE FIRE ALARM SYSTEM TO REMODELED SPACES.	
SYSTEM DESCRIPTION: SLC = CLASS B IDC = CLASS B NAC = CLASS B	
DESIGN BY: NAJIB ANHWARY PE.	

FIRE ALARM SYSTEM OPERATIONAL MATRIX									
CAUSE	ALARM				TROUBLE		SUPERVISORY		MISC.
	EFFECT	ALARMATION	NOTIFICATION	REPORTING	TROUBLE AT TOP	TROUBLE AT SITE	SUPERVISORY AT TOP	SUPERVISORY AT SITE	REPORTING
SMOKE DETECTORS	•	•	•	•	•	•	•	•	•
HEAT DETECTORS	•	•	•	•	•	•	•	•	•
MANUAL PULL STATIONS	•	•	•	•	•	•	•	•	•
DUCT SMOKE DETECTORS	•	•	•	•	•	•	•	•	•
FLOW SWITCH	•	•	•	•	•	•	•	•	•
TAMPER SWITCH	•	•	•	•	•	•	•	•	•
SIGNAL SILENCE	•	•	•	•	•	•	•	•	•
SYSTEM RESET	•	•	•	•	•	•	•	•	•
AC POWER FAILURE	•	•	•	•	•	•	•	•	•
TROUBLE (OPEN, SHORTS, GROUNDS) ON INITIATION OR SIGNAL CIRCUITS	•	•	•	•	•	•	•	•	•

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No.	DESCRIPTION	DATE
ADDENDUM 2		04/28/2021

CONSULTANTS

NAJIB ANHWARY

REGISTERED PROFESSIONAL ENGINEER

EXPIRATION DATE: 03/31/25

OF CALIFORNIA

AURUM CONSULTING ENGINEERS

MONTEREY BAY, INC.

Project No. 19598.00

60 Garden Court • Suite 210 • Monterey, CA 93940

T.831.646.3330 • F.831.646.3336 • www.acemb.com

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SEAL

PRIME CONSULTANT

IBI GROUP

333 W. San Carlos St., Suite 900

San Jose, CA 95110, USA

408.524.0844

408.524.0811 fax 408.524.0844

ibigroup.com

PROJECT

VOCATIONAL LABS

2700 EAST LELAND ROAD

PITTSBURG, CA 94565

PROJECT NO:

121030

DRAWN BY:

CADD

CHECKED BY:

NA

PROJECT MGR:

ARCHITECTURAL

APPROVED BY:

Approver

SHEET TITLE

FIRE ALARM SYMBOLS, ABBREVI., EQUIP. LIST, OP. MATRIX, DETAILS & NOTES

SHEET NUMBER

AD2-FA0.1

ISSUE

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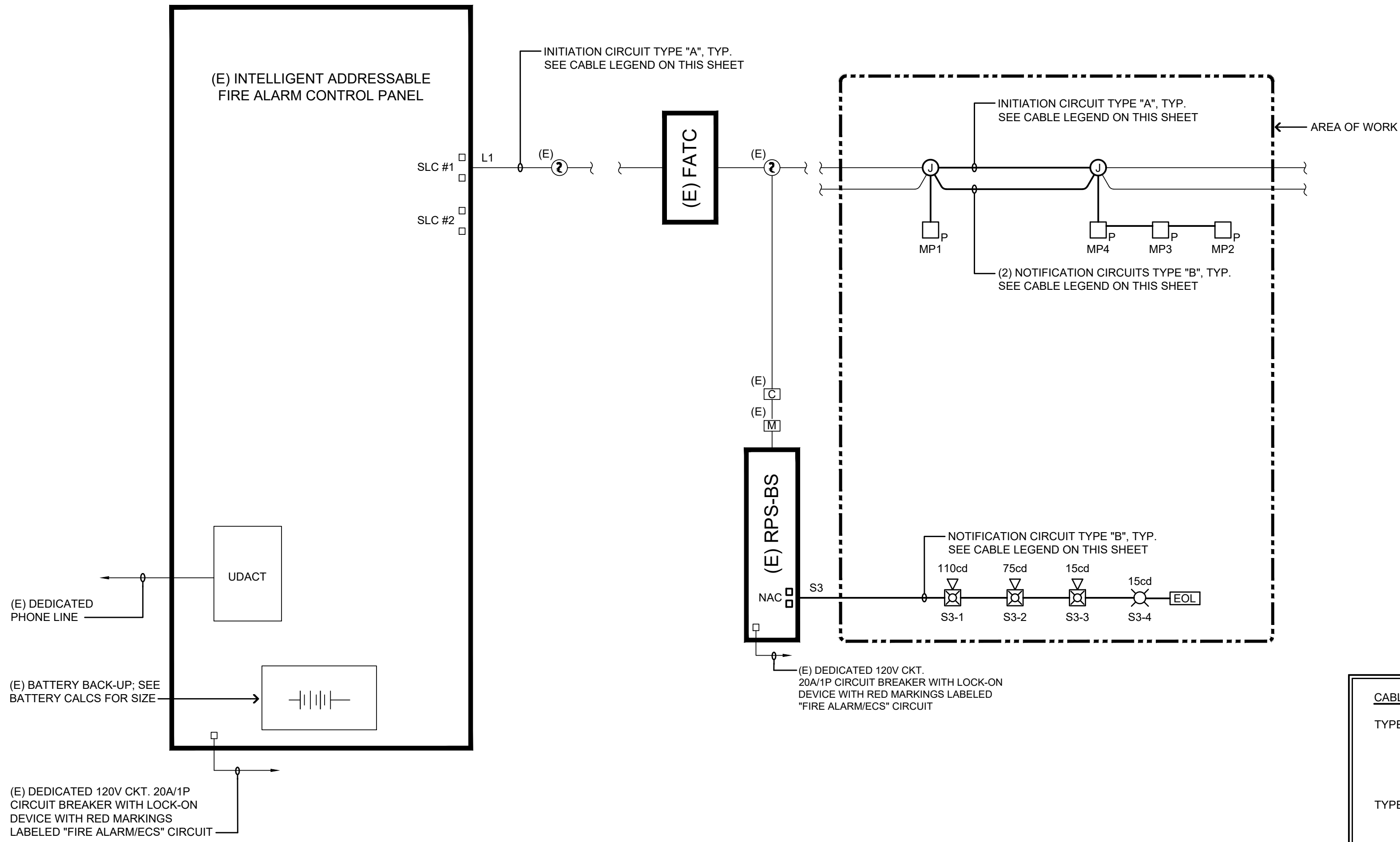
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1 of 1

SCALE CHECK

1 FIRE ALARM RISER DIAGRAM

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



VOLTAGE DROP CALCULATIONS

VOLTAGE DROP (VD) CALCULATION - CIRCUIT NO. S3										
DEVICE #	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	200	60	40	30						
AMPS OF DEVICE	0.197	0.148	0.062	0.057	0	0	0	0	0	0
TOTAL AMP@DEV	0.484	0.291	0.138	0.057	0	0	0	0	0	0
VOLT DROP @ DEV	0.32	0.057	0.018	0.006	0	0	0	0	0	0
TOTAL VOLT DROP = 0.401										
% VOLTAGE DROP = 2.0%										

BATTERY CALCULATIONS

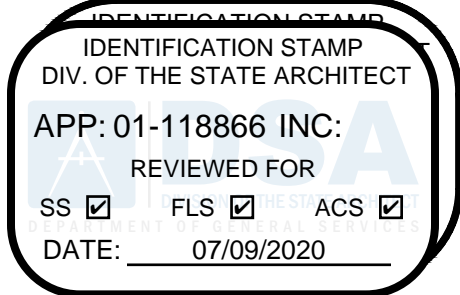
EXISTING FIRE ALARM CONTROL PANEL "FACP"					
QTY	DESCRIPTION	STANDBY		ALARM	
		EACH	TOTAL	EACH	TOTAL
1	(E) SMOKE MAIN CONTROL BOARD	0.1750	0.1750	0.1750	0.1750
2	(E) ALD LOOP	0.0980	0.1960	0.0980	0.1960
2	(E) NAM-4 LOOP	0.0700	0.0040	0.0700	0.0040
1	(E) NAM-4 ANNUNCIATOR KEY BOARD	0.0050	0.0050	0.0050	0.0050
1	(E) NAM-4 NETWORK INTERFACE MODULE	0.0050	0.0050	0.0050	0.0050
1	(E) NAM-4 NETWORK INTERFACE MODULE	0.0050	0.0050	0.0050	0.0050
1	(E) NAM-4 NETWORK INTERFACE MODULE	0.0050	0.0050	0.0050	0.0050
PANEL STANDBY CURRENT			0.5480		
PANEL ALARM CURRENT					0.5480

FIELD DEVICES						
QTY	PRODUCT ID	DESCRIPTION	STANDBY		ALARM	
			EACH	TOTAL	EACH	TOTAL
4	MFL-108	ADDRESSABLE PULL STATION	0.0004	0.0016	0.0004	0.0016
DESCRIPTION			STANDBY		ALARM	
CONTROL PANEL			0.5480		0.5480	
FIELD DEVICES			0.0560		0.0560	
TOTAL STANDBY CURRENT			0.5480		0.5480	
X 2 HOUR STANDBY			13.1560			
TOTAL ALARM CURRENT					0.5480	
15 MINUTES OF ALARM (A = 2)					0.1380	
TOTAL BATTERY REQUIREMENT					13.2616	
SAFETY MARGIN (20%)					13.6880	
BATTERY SUPPLIED					(2) 12V 50AH	

EXISTING A/D LOOPS INCLUDE CURRENT DRAW FOR MAXIMUM NUMBER OF INITIATION DEVICES. THEREFORE ADDITIONAL DEVICES ADDED IN THIS PROJECT DO NOT CHANGE THE EXISTING BATTERY REQUIREMENT.

QTY	MODEL NO.	DEVICE DESCRIPTION	STANDBY		ALARM	
			EACH	TOTAL	EACH	TOTAL
1	FCPS-2488	NOTIFIER REMOTE POWER SUPPLY	0.0750	0.0750	0.0750	0.0750
1	82	NOTIFICATION CIRCUIT NO. 3	0.0000	0.0000	0.0000	0.0000
1	82	EXISTING NOTIFICATION CIRCUIT NO. 2	0.0000	0.0000	0.0000	0.0000
1	81	EXISTING NOTIFICATION CIRCUIT NO. 1	0.0000	0.0000	0.0000	0.0000
1	SPARE	SPARE	0.0000	0.0000	0.0000	0.0000
PANEL STANDBY CURRENT				0.0750		0.0750
PANEL ALARM CURRENT						2.2500
TOTAL SYSTEM CURRENT						2.3250
DESCRIPTION			STANDBY		ALARM	
24-HOUR STANDBY			0.0750		0.0750	
TOTAL ALARM CURRENT (B)			2.3250		2.3250	
15 MINUTES OF ALARM (A) (20)			46.5000		46.5000	
TOTAL BATTERY REQUIREMENT (A+B)			48.8250		48.8250	
SAFETY MARGIN (20%)			9.7650		9.7650	
BATTERY SUPPLIED (2) 7AH			14.8880		14.8880	

DSA STAMP



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COMMUNITY COLLEGE
DISTRICT

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ISSUES

No.	DESCRIPTION	DATE
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AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.

Project No. 19598.00

60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.acemb.com

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SEAL

PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408 524 0811 fax 408 524 0844
ibigroup.com

PROJECT

L-1177 Industrial Trades Labs
Renovation
2700 EAST LELAND ROAD
PITTSBURG, CA 94505

PROJECT NO:

121030

DRAWN BY:

CADD

CHECKED BY:

NA

PROJECT MGR:

ARCHITECTURAL

APPROVED BY:

Approver

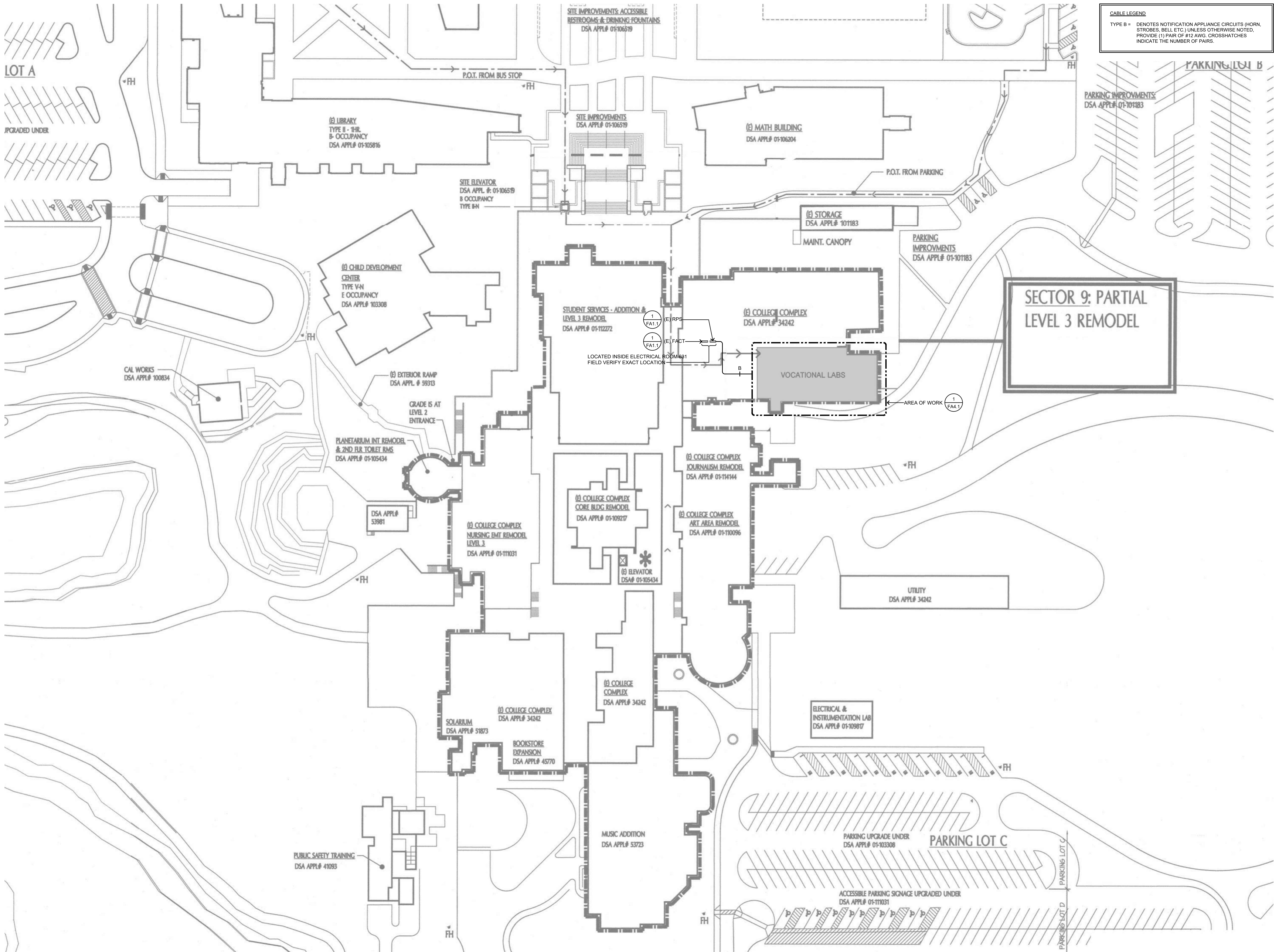
SHEET TITLE

FIRE ALARM RISER DIAGRAM,
BATTERY & VOLTAGE DROP
CALCULATIONS

SHEET NUMBER

FA1.1

ISSUE



CABLE LEGEND
TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL, ETC.) UNLESS OTHERWISE NOTED. PROVIDE (1) PAIR OF #12 AWG CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-118866 INC.
REVIEWED FOR
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**AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.**
Project No. 15598.00
60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.aecmb.com

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SEAL

PRIME CONSULTANT

IBI GROUP
333 W. San Carlos St., Suite 600
San Jose, CA 95110, USA
tel 408.524.0111 fax 408.524.0844
ibigroup.com

PROJECT

L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:
CADD

PROJECT MGR:
ARCHITECTURAL

CHECKED BY:
NA

APPROVED BY:
Approver

SHEET TITLE

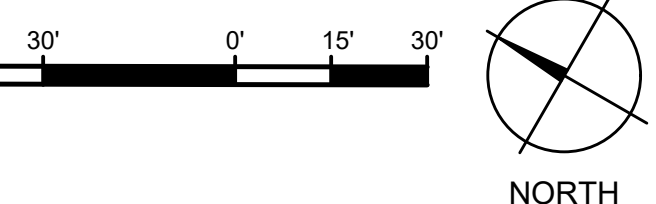
FIRE ALARM
SITE PLAN

SHEET NUMBER

FA2.1

ISSUE

1 FIRE ALARM SITE PLAN
SCALE: 1"=30'-0"



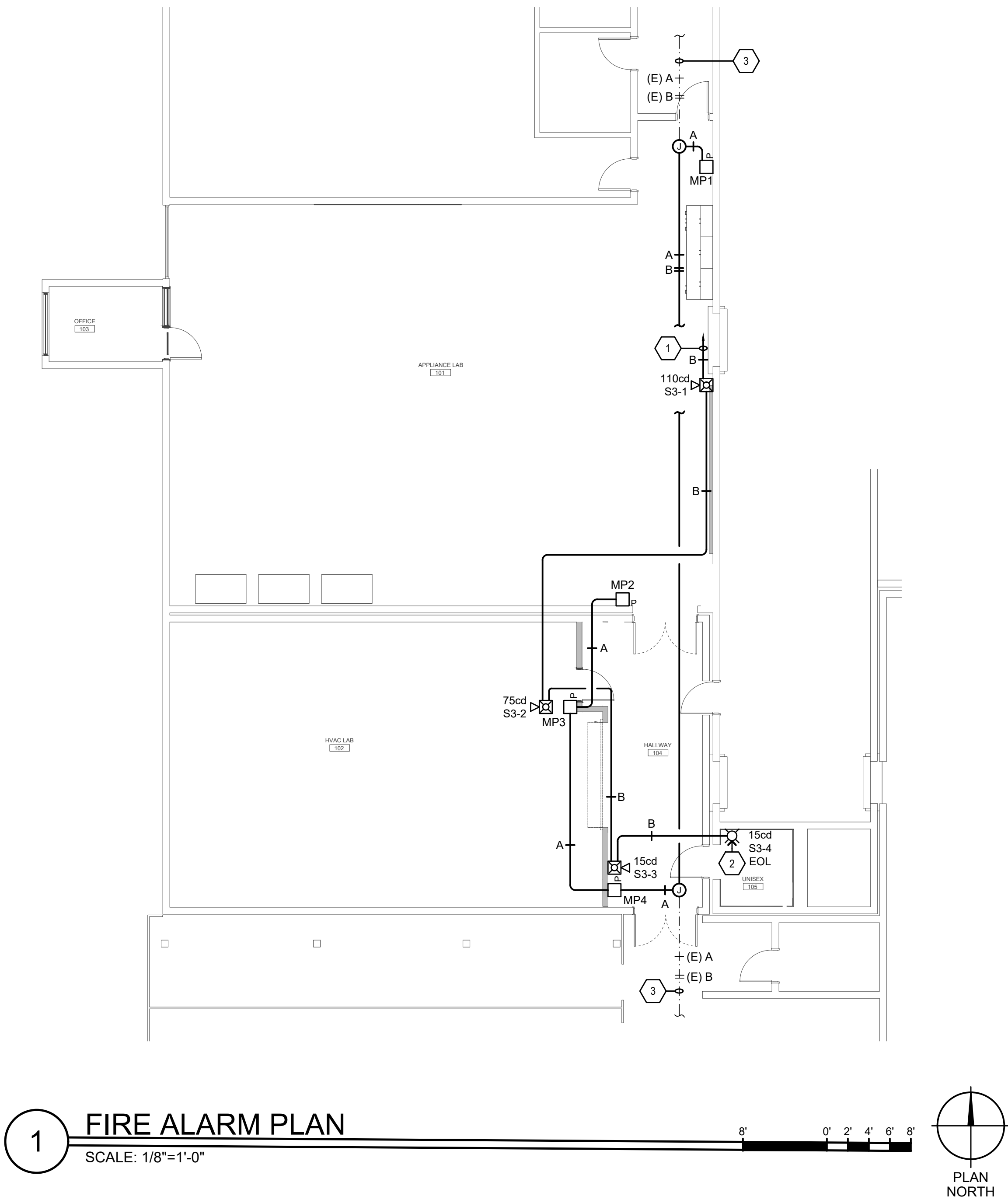
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SHEET NOTES

1. HOMERUN TO EXISTING RPS-B5. SEE 1/FA2.1 FOR LOCATION.

2. PROVIDE & INSTALL LAMICOID NAME PLATE READING "EOL".

3. EXISTING FIRE ALARM NOTIFICATION AND INITIATION DEVICES NOT IN SCOPE OF WORK SHALL REMAIN ACTIVE. CONTRACTOR SHALL ENSURE A FULLY FUNCTIONAL SYSTEM WITH EXISTING AND NEW FIRE ALARM DEVICES. INTERCEPT CIRCUITS AT EACH END AND ENSURE FULL FUNCTIONALITY OF ALL UPSTREAM/DOWNSTREAM DEVICES LOCATION IN ARES NOT PART OF DEMOLITION WORK.

CABLE LEGEND

TYPE A = DENOTES INITIATING DETECTION CIRCUITS (SMOKE DETECTOR, HEAT DETECTOR ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) #14 TWISTED-UNSHIELDED PAIR. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

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CONSULTANTS

PROFESSIONAL SEAL

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EXP. 3/31/21

IBI GROUP

OF CALIF.

AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.

Project No. 19598.00

60 Garden Court • Suite 210 • Monterey, CA 93940

T.831.646.3330 • F.831.646.3336 • www.acemb.com

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SEAL

PRIME CONSULTANT

IBI GROUP

333 W. San Carlos St., Suite 600

San Jose, CA 95110, USA

tel 408 924 0811 fax 408 924 0844

ibigroup.com

PROJECT

L-1177 Industrial Trades Labs
Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:

121030

DRAWN BY:

CADD

PROJECT MGR:

ARCHITECTURAL

CHECKED BY:

NA

APPROVED BY:

Approver

SHEET TITLE

FIRE ALARM PLAN

SHEET NUMBER

FA4.1

ISSUE

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