CONTRA COSTA COMMUNITY COLLEGE DISTRICT

L-1177 Industrial Trades Labs Renovation

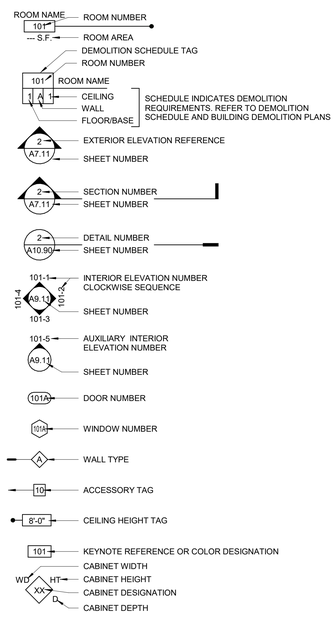
2700 EAST LELAND ROAD PITTSBURG, CA 94565

DSA FILE NO.:7-C1 **DSA APP NO.: 01-113866**

ABBREVIATIONS

A	- ACCESSIBLE	MECH	- MEHCNAICAL
AB	- ANCHOR BOLT	MED	- MEDIUM
AC	- ASPHALT CONCRETE	MFG	- MANUFACTURING
A/C	- AIR CONDITIONING	MFR	- MANUFACTURER
ACOUS	- ACOUSTICAL	MIN	- MINIMUM
ADD	- ADDENDUM	MIR	- MIRROR
ADJ	- ADJUSTABLE or ADJACENT	MISC	- MISCELLANEOUS
		MOD	- MODULAR
AGG	- AGGREGATE	MNT	- MOUNT (ED), (ING)
ALT	- ALTERNATE	MTL	- METAL
ALUM	- ALUMINUM	MUL	- MULLION
APP	- APPROVED		
APPROX	- APPROXIMATE	(N)	- NEW
ARCH	- ARCHITECT (URAL)	NIC	- NOT IN CONTRACT
		NO	- NUMBER
BD	- BOARD	NOM	- NOMINAL
BEL	- BELOW	NPS	- NOMINAL PIPE SIZE
BLDG	- BUILDING	NTS	- NOT TO SCALE
BLKG	- BLOCKING		
BOT	- BOTTOM	O/	- OVER
BOJ	- BOTTOM OF JOISTS	OC	- ON CENTER
		OD	- OUTSIDE DIAMETER
C	- CARPET	OFD	- OVERFLOW DRAIN
CAB	- CABINET	OFCI	- OWNER FURNISHED, CONTRACTOR INSTALLED
CB	- CATCH BASIN		
CEM	- CEMENT		
CF	- CUBIC FOOT	OFOI	- OWNER FURNISHED, OWNER INSTALLED
CFL	- COUNTERFLASHING		
CHAM	- CHAMFER	OPP	- OPPOSITE
CJ	- CONTROL JOINT	OPT	- OPTIONAL
CLG	- CEILING		
CLR	- CLEAR	PAF	- POWDER ACTUATED FASTENER
CT	- CERAMIC MOSAIC (TILE)		
CMU	- CONCRETE MASONRY UNIT	PERIM	- PERIMETER
		PERF	- PERFORATED
CO	- CLEAN OUT	PL	- PROPERTY LINE
COL	- COLUMN	PLAM	- PLASTIC LAMINATE
CONC	- CONCRETE	PLAS	- PLASTER
CONT	- CONTINUOUS or CONTINUE	PLT	- PLATE
		PLWD	- PLYWOOD
CONST	- CONSTRUCTION	PNL	- PANEL
COTF	- CLEAN OUT THRU FLOOR	POC	- POINT OF CONNECTION
		PT	- POINT
COTG	- CLEAN OUT TO GRADE	PTDF	- PRESERVATIVE TREATED DOUGLAS FIR
COTW	- CLEAN OUT THRU WALL		
CSK	- COUNTERSINK	PTN	- PARTITION
CSMT	- CASEMENT	PSL	- PARALLEL STRAND LUMBER
CTSK	- COUNTERSUNK SCREW		
CW	- COLD WATER	PVC	- POLYVINYL CHLORIDE
DET	- DETAIL	R	- RISER
DF	- DRINKING FOUNTAIN	RC	- RELATIVE COMPACTION
DIA	- DIAMETER	RD	- ROOF DRAIN
DIAG	- DIAGONAL	REF	- REFERENCE
DIM	- DIMENSION	REFR	- REFRIGERATOR
DIV	- DIVISION	REM	- REMOVE
DR	- DOOR	REQ'D	- REQUIRED
DS	- DOWNSPOUT	RES	- RESILIENT
DWG	- DRAWING	REV	- REVISION
		RFL	- REFLECT
E	- ENAMEL	RHWS	- ROUND HEAD WOOD SCREW
(E)	- EXISTING		
EA	- EACH	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	SED	- SEE ELECTRICAL DRAWINGS
EMER	- EMERGENCY		
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 DRAWINGS
(F)	- FUTURE		
FAB	- FABRICATION	SMD	- SEE MECHANICAL DRAWINGS
FAC	- FACTORY		
FBO	- FURNISHED BY OTHERS	SPEC	- SPECIFICATIONS
FD	- FLOOR DRAIN	SQ	- SQUARE
FF	- FINISHED FLOOR	SS	- STAINLESS STEEL
FHMS	- FLAT HEAD MACHINE SCREW	SSD	- SEE STRUCTURAL DRAWINGS
FHWS	- FLAT HEAD WOOD SCREW	STN	- STAIN
		STD	- STANDARD
FIN	- FINISH	STL	- STEEL
FJ	- FLOOR JOIST	STSMS	- SELF TAPPING SHEET METAL SCREW
FLR	- FLOOR		
FLUOR	- FLUORESCENT		
FND	- FOUNDATION	T	- TREAD
FOF	- FACE OF FINISH	T&B	- TOP AND BOTTOM
FOP	- FACE OF PLYWOOD SHEATHING	TELE	- TELEPHONE
		TEMP	- TEMPERED
FOS	- FACE OF STUD	T&G	- TONGUE-AND-GROOVE
FR	- FRAME (D), (ING)	THRU	- THROUGH
FRP	- FIBERGLASS REINFORCED PLASTIC PANELS	TJ	- TOOL JOINT
		TOC	- TOP OF CURB,
FTG	- FOOTING	CRICKET,	or CONCRETE
FURR	- FIRRED (ING)	TOP	- TOP OF PARAPET
		TOS	- TOP OF SLAB, SHEATHING, or STEEL
GA	- GAUGE		
GB	- GYPSUM BOARD	TPTN	- TOILET PARTITION
GI	- GALVANIZED IRON	TS	- TOP OF SHEATHING
GKT	- GASKET (ED)	TSB	- TOP SET BASE
GL	- GLASS or GLAZING	TV	- TELEVISION
GLV	- GALVANIZED	TYP	- TYPICAL
GSM	- GALVANIZED SHEET METAL	TWS	- TACKABLE WALL SYSTEM
GYP	- GYPSUM		
		UON	- UNLESS OTHERWISE NOTED
HB	- HOSE BIBB		
HDW	- HARDWOOD		
HEX	- HEXAGONAL	VAR	- VARIES
HM	- HOLLOW METAL	VB	- VAPOR BARRIER
(STEEL)		VCT	- VINYL COMPOSITION TILE
HOR	- HORIZONTAL		
HT	- HEIGHT	VCTB	- VINYL COVERED TACKBOARD
HVAC	- HEATING VENTILATING AIR CONDITIONING		
		VERT	- VERTICAL
HW	- HOT WATER	VFY	- VERIFY
		VG	- VERTICAL GRAIN
ID	- INSIDE DIAMETER	VIF	- VERIFY 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	VWC	- VINYL WALL COVERING
INV	- INVERT		
		W/	- WITH
JST	- JOIST	WD	- 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	WSCT	- WAINSCOT
MAS	- MASONRY	@	- AT
MATL	- MATERIAL	ø	- DIAMETER
MAX	- MAXIMUM	±	- PLUS/MINUS
MB	- MACHINE BOLT	°	- DEGREES
		℄	- CENTER LINE

SYMBOLS LEGEND



GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CALIFORNIA CODE OF REGULATIONS (TITLE DOCUMENTS) AND ALL OTHER LOCAL CODES AND ORDINANCES OF THE GOVERNING AUTHORITY HAVING JURISDICTION AND AS IDENTIFIED UNDER APPLICABLE CODES ON THIS SHEET. IT IS THE INTENT OF THESE DOCUMENTS TO COMPLY HERETO.

2.ALL DRAWINGS SHALL BE USED IN CONCERT WITH EACH OTHER. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCY BETWEEN THEDOCUMENTS, THE CONTRACTOR SHALL REQUEST IN WRITING A CLARIFICATION FROM THE ARCHITECT. REFER TO THE ARCHITECTURAL AND ENGINEERING DRAWINGS FOR PLACEMENT, ORIENTATION AND COORDINATION OF WORK. INFORMATION SHOWN IN LARGER SCALE IS INTENDED TO SUPPLEMENT INFORMATION OF SMALLER, PRECEDING REFERENCE DRAWINGS. LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.

3.NOTATIONS MARKED "TYPICAL" (TYP.) SHALL BE CONSISTENT THROUGHOUT ALL SUCH REFERENCE NOMENCLATURE, SYMBOLS AND DRAWING INDICATIONS OF LIKE OR SIMILAR KIND.

4.DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONSTRUCTION CONDITIONS AND DIMENSIONS PRIOR TO ORDERING, FABRICATING OR INSTALLING ANY ASSOCIATED WORK. IF DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL REQUEST IN WRITING A CLARIFICATION FROM THE ARCHITECT PRIOR TO COMMENCEMENT OF ANY ASSOCIATED WORK.

5.CONTRACTOR SHALL VERIFY, AT THE SITE, ALL EXISTING CONDITIONS PRIOR TO SUBMITTAL OF BIDS. SITE VISITS DURING BIDDING SHALL BE COORDINATED WITH THE OWNER IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATIONS.

6.CONTRACTOR SHALL PROTECT ALL EXISTING WORK. ANY DAMAGED WORK SHALL BE REPLACED WITH THE SAME MATERIALS, INCLUDING MATCHING THE EXISTING COLORS AND TEXTURES.

7.EXISTING WORK IS SHOWN FOR REFERENCE ONLY. THE OWNER AND/OR ARCHITECT DO NOT GUARANTEE EXISTING CONDITIONS AS SHOWN ON THESE DOCUMENTS.

8.CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THEIR OWN CLEANUP AS WORK PROGRESSES.

9.MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS THAT ARE DISCOVERED DURING THE PROGRESS OF THE WORK SHALL BE REPORTED TO THE OWNER IN WRITING. WORK IN THAT PARTICULAR AREA SHALL BE SUSPENDED UNTIL THE OWNER TESTS THE SUSPECT MATERIAL AND IT IS FOUND TO BE SAFE, OR THE MATERIAL HAS BEEN PROPERLY ABATED.

10.ALL WORK IS NEW UNLESS OTHERWISE NOTED.

11.IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN.

12.STORAGE OF CONSTRUCTION MATERIAL AND EFFECT OF WORK ON EXISTING OCCUPIED AREAS SHALL BE APPROVED BY THE LOCAL FIRE AUTHORITY.

13.CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK PROVIDED BY OTHERS UNDER SEPARATE CONTRACT.

14.KEYNOTES USED ON THE ARCHITECTURAL DRAWINGS ARE FOR ASSEMBLIES, MATERIAL REFERENCES AND NOTES. REFER TO THE KEYNOTE LIST ON THE RESPECTIVE DRAWING FOR THE INFORMATION WHICH RELATES TO EACH KEYNOTE.

15.DURING CONSTRUCTION, COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION WILL BE ENFORCED.

16.DURING CONSTRUCTION, COMPLIANCE WITH CBC CHAPTER 33, SAFETY WILL BE ENFORCED.

17.NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEMS UNLESS SUCH CHANGES OR REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL

18.SUBSTITUTIONS AFFECTING DSA REGULATIONS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA AND APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION

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

PLUMBING**

P0001 PLUMBING LEGENDS, SCHDULES, NOTES & DETAILS
P0002 PLUMBING FIXTURE SCHEDULES
P2010 PLUMBING DEMOLITION PLAN
P2310 PLUMBING FLOOR PLAN
Grand total: 4

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

FIRE ALARM **

FA0.1 FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES
FA1.1 FIRE ALARM RISER DIAGRAM, BATTERY & VOLTAG DROP, CALCULATIONS
FA2.1 ELECTRICAL SITE PLAN
FA4.1 FIRE ALARM PLAN
Grand total: 4

Overal Total: 31

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 (h))*

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

☒ is/are in general conformance with the project design, and
☒ has/have been coordinated with the project plans and specifications.

Signature Date 2020-7-8

Architect or Engineer designated to be in general responsible charge

SHARON A RUSSO, AIA — C-27345 — 09 /21
Print Name Architect — License Number — Expiration Date

PROJECT DIRECTORY

ARCHITECT:
IBI GROUP ARCHITECTURE PLANNING
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PRINCIPAL

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PHONE: (408) 564-7925

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 SPECIFCATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.

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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) (2018 National Electrical Code with 2019 California amendments)
2019 CALIFORNIA MECHANICAL CODE (CMC), Title 24, Part 4, CCR) (2018 Uniform Mechanical Code with 2019 California amendments)
2019 CALIFORNIA PLUMBING CODE (CPC), Title 24, Part 5, CCR) (2018 Uniform Plumbing Code with 2019 California amendments)
2019 CALIFORNIA ENERGY CODE, (Title 24, Part 6, CCR)
2019 CALIFORNIA HISTORICAL BUILDING CODE, (Title 24, Part 8, CCR) (2018 International Building Code with 2019 California amendments)
2019 CALIFORNIA FIRE CODE (CFC), Title 24, Part 9, CCR) (2018 International Fire Code with 2019 California amendments)
2019 CALIFORNIA EXISTING BUILDING CODE, (Title 24, Part 10, CCR) (2018 International Building Code with 2019 California amendments)
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), Title 24, Part 11, CCR) - 2019 California Green Building Standards Code applies at those 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 & ELECRICTAL DISTRIBUTION IN THE TWO ROOMS

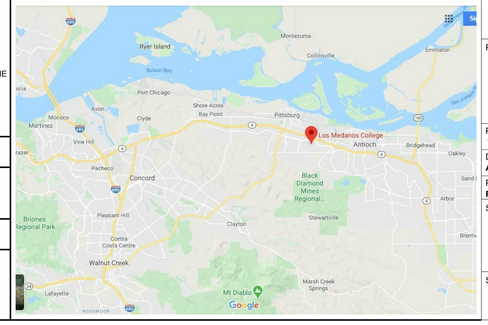
DEFERRED SUBMITTALS

NONE

ALTERNATES

NONE

VICINITY MAP



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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IBI Group - A California Partnership
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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

SEAL

LICENSED ARCHITECT
SHARON A. RUSSO
No. C27345
REN. 2/21
STATE OF CALIFORNIA

PRIME CONSULTANT

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333 W. San Carlos St., Suite 600
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ibigroup.com

PROJECT
L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO: 121030

DRAWN BY:	CHECKED BY:
AJ	RH
PROJECT MGR:	APPROVED BY:
RH	SG

SHEET TITLE
COVER SHEET

SHEET NUMBER
G0001

ISSUE

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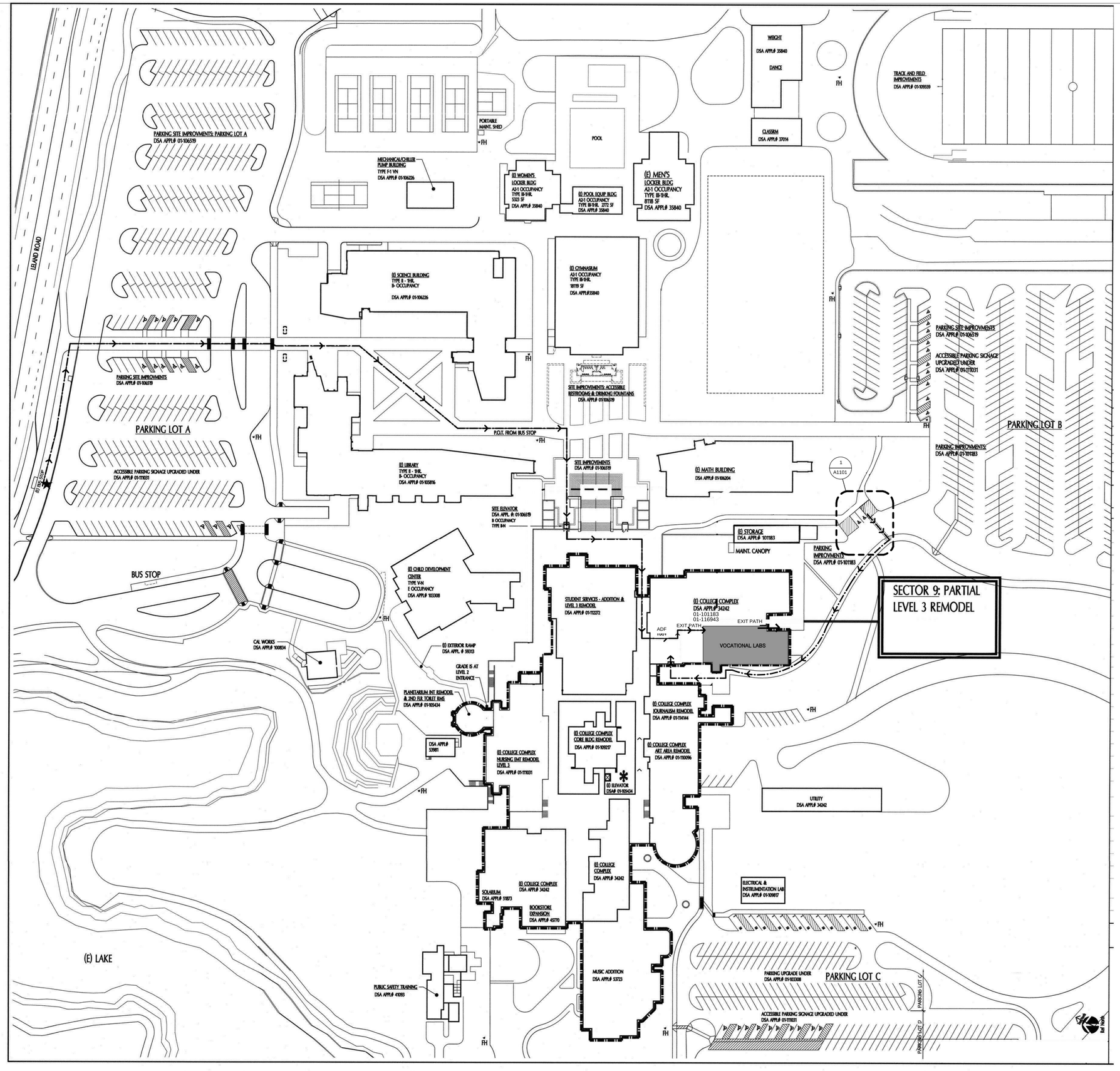
SCALE CHECK 1 in 10mm



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, CBC1133B.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
ADF	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	3
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	3
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
IDENTIFICATION STAMP
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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

CONSULTANTS

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PROJECT
L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:	CHECKED BY:
AJ	RH
PROJECT MGR:	APPROVED BY:
RH	SG

SHEET TITLE
OVERALL SITE PLAN

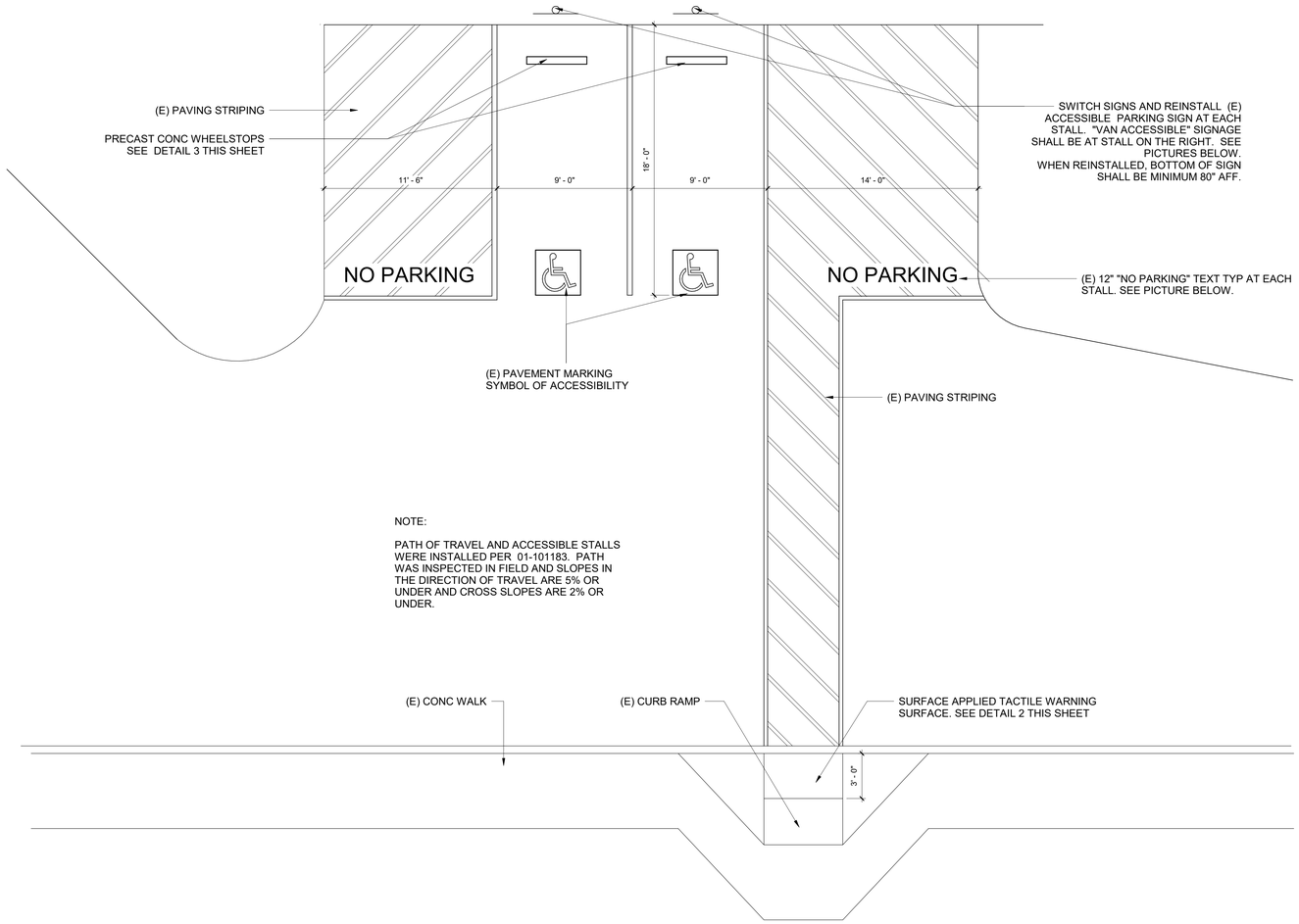
SHEET NUMBER
A1100

ISSUE

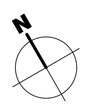
SCALE CHECK
1 in.

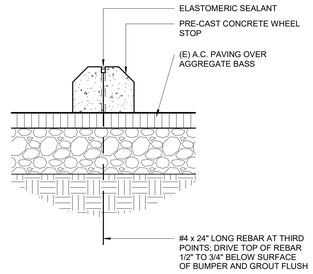
C:\Users\Shan.Gerke\Documents\A_Building_v2019_20194-29_shan.gerke@ibigroup.com.rvt

2020-07-06 2:12:02 PM

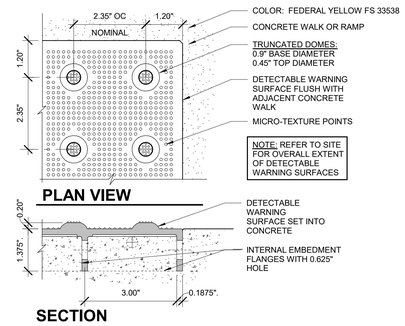


1 ACCESSIBLE PARKING





3 WHEELSTOP



2 TRUNCATED DOMES

EXISTING CURB RAMP

EXISTING STRIPING

EXISTING ACCESSIBLE PARKING SIGNAGE
SWITCH SIGNS ON POSTS

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

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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
ACCESSIBLE ELEMENTS

SHEET NUMBER	ISSUE
A1101	

SCALE CHECK
1 in.
(Uses)

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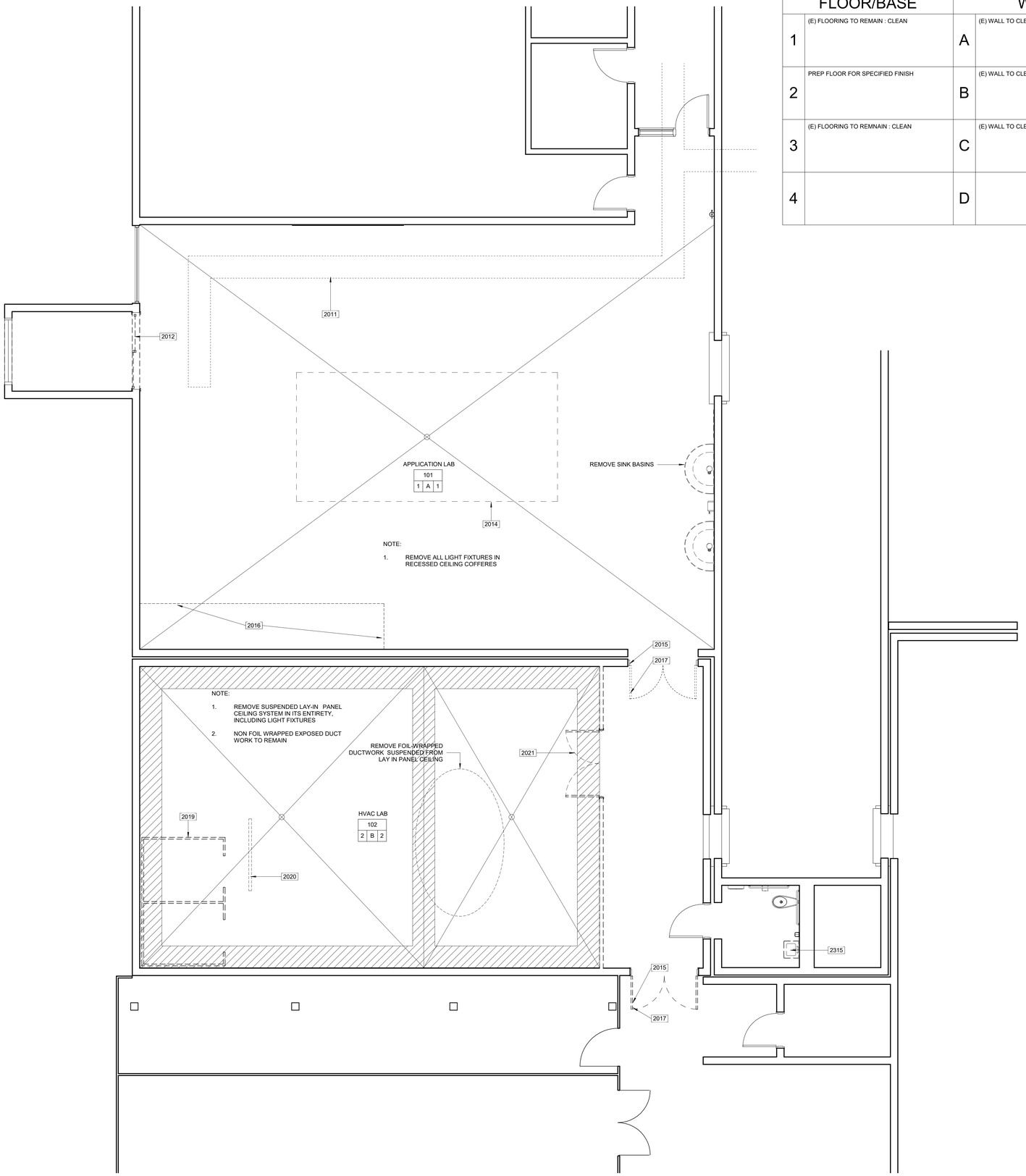


1 FIRST FLOOR DEMOLITION PLAN

0 2' 4' 8'

N

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 REMNAIN : 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. -- USER TO ADD ADDTIONAL GENERAL NOTES HERE. --

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

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 ENTIERTY

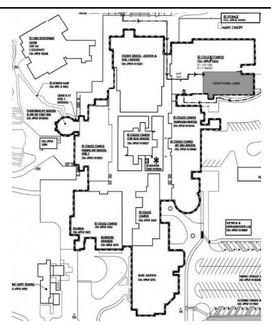
REMOVE (E) DOOR & FRAME IN ITS ENTIERTY

REMOVE (E) WINDOW & FRAME IN ITS ENTIERTY

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 WIH SLOPE OF FLOOR)

KEY PLAN



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ISSUES

No.	DESCRIPTION	DATE

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PROJECT
L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:	CHECKED BY:
Author	**Checker**
PROJECT MGR:	APPROVED BY:
ARCHITECTURAL	**Approver**

SHEET TITLE
DEMOLITION PLAN

SHEET NUMBER
AD1-A2010

ISSUE

SCALE CHECK
1 in

10mm

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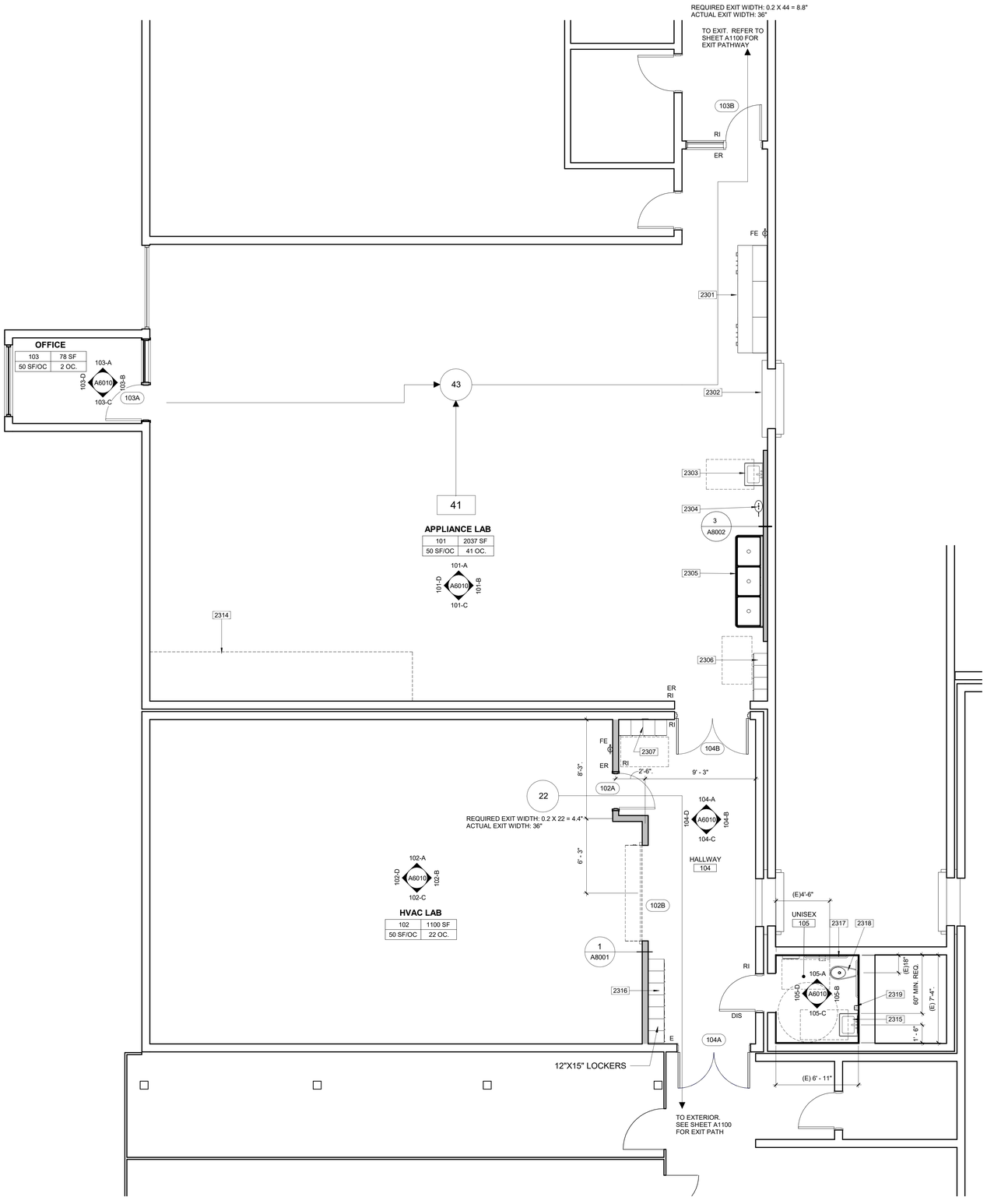


NOTE:

EXISTING WALLS ARE 8" CONCRETE WALLS. ALL TO REMAIN.

0 2' 4' 8'

N

1 FLOOR PLAN AND CODE ANALYSIS PLAN

2300-GENERAL NOTES

1. REFER TO DEMOLITION PLAN, A2010 FOR EXISTING CONSTRUCTION TO BE REMOVED.
2. REFER TO SHEET A9101 FOR FINISH SCHEDULE.
3. REFER TO INTERIOR ELEVATION FOR ALL WALL MOUNTED ITEMS AND CABINET TYPES.
4. REFER TO STRUCTURAL DRAWINGS FOR FRAMING OF OPENINGS.
5. WHERE STRUCTURAL DRAWINGS INDICATE PLYWOOD SHEAR WALL OVER STUD FRAMING, PLYWOOD IS TO EXTEND OVER ENTIRE SURFACE, REGARDLESS OF EXTENT SHOWN ON THE STRUCTURAL DRAWINGS, TO ELIMINATE OFFSETS IN SUBSTRATE FOR FINISHES.
6. PROVIDE SOLID 2x FIRE STOP BLOCKING IN ALL STUD WALL FRAMED CAVITIES, AT INTERSECTION OF CEILING, FLOORS, AND MAXIMUM 10 FT. INTERVALS.

2300- KEYNOTES

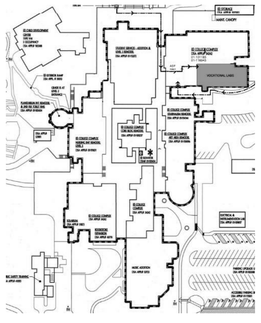
2301 CABINET
2302 (E) SERVICE WINDOW.
2303 SINK
2304 EYE WASH
2305 MULTISTATION WASHUP SINK - S.P.D.
2306 MTL. LOCKERS (15" DEEP)
2307 MTL. LOCKER (12" DEEP)
2314 DASHED LINE INDICATES EXHAUST HOOD ABOVE
2315 CUSTOM LAVATORY. SIZE TO PROVIDE 60 INCHES FROM SIDE WALL
2316 EXISTING METAL LOCKER TO BE SALVAGE, STORED, AND REINSTALLED
2317 (E) GRAB BAR TO REMAIN
2318 (E) FIXTURE TO REMAIN
2319 (E) ACCESSORY TO REMAIN

LEGEND

NOTE: ALL SYMBOLS AND PATTERNS MAY NOT NECESSARILY OCCUR ON THIS SHEET.

	(E) WALL TO REMAIN
	METAL STUD WALL /FURRED WALL
	60" DIA. ACCESSIBLE FLOOR SPACE LOCATION
	30" X 48" ACCESSIBLE FLOOR SPACE LOCATION
	60" X 60" ACCESSIBLE FLOOR SPACE LOCATION
RI	ROOM IDENTIFICATION SIGN
DIS	DOOR IDENTIFICATION SIGN
E	EXIT SIGN
ER	EXIT ROUTE
FE	FIRE EXTINGUISHER

KEY PLAN



DSA STAMP

IDENTIFICATION STAMP
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No.	DESCRIPTION	DATE

CONSULTANTS

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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
FLOOR PLAN AND CODE ANALYSIS PLAN

SHEET NUMBER
A2310

ISSUE

SCALE CHECK
1 in.

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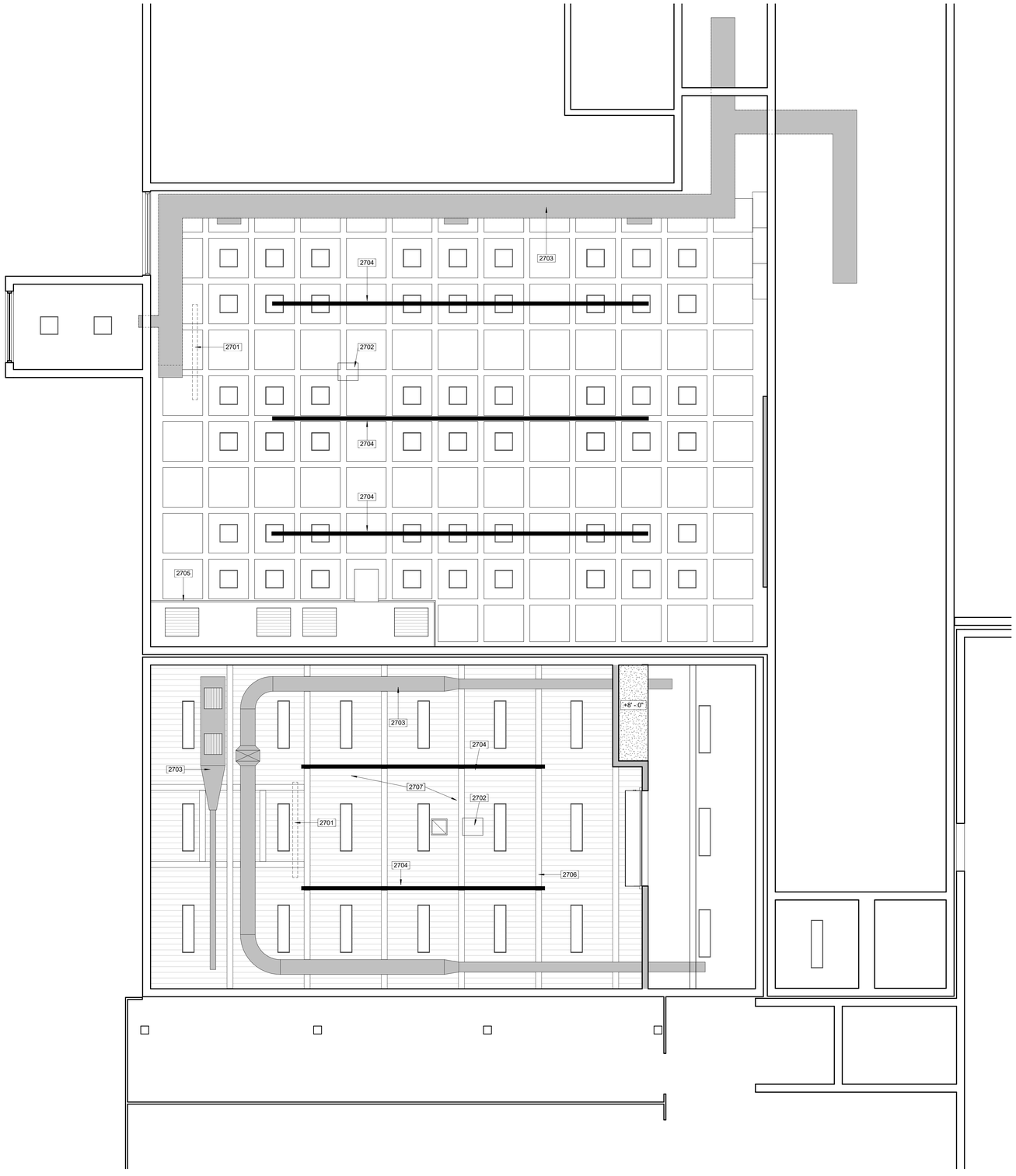
2020-07-08 2:47:56 PM



1 FIRST FLOOR REFLECTED CEILING PLAN

0 2' 4' 8'

N

2700-GENERAL NOTES

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.

2700 - KEYNOTES

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

LEGEND

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

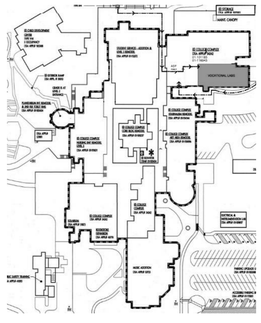
GYP BD, PAINT

AIR TERMINAL . SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION

EXIT LIGHT . SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

LIGHT FIXTURES . SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

KEY PLAN



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ISSUES

No.	DESCRIPTION	DATE

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121030

DRAWN BY:	CHECKED BY:
Author	**Checker**
PROJECT MGR:	APPROVED BY:
ARCHITECTURAL	**Approver**

SHEET TITLE
REFLECTED CEILING PLAN

SHEET NUMBER
A2710

ISSUE

SCALE CHECK
1 in.

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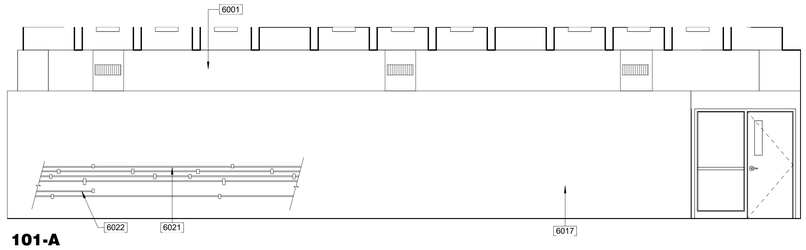
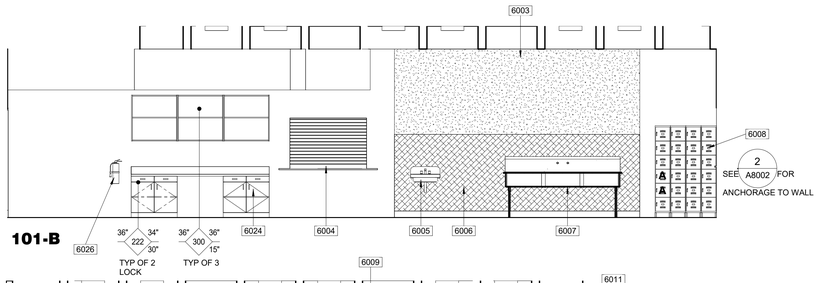
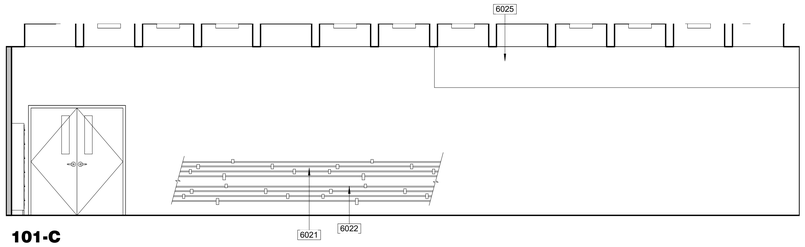


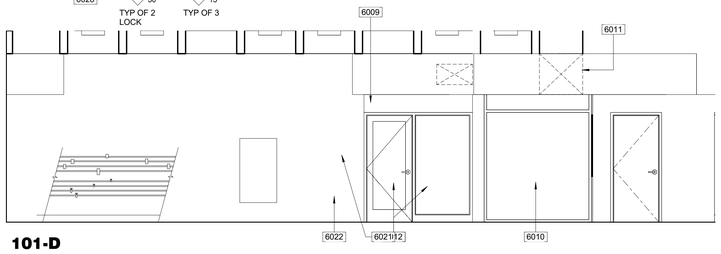
101-A



101-B

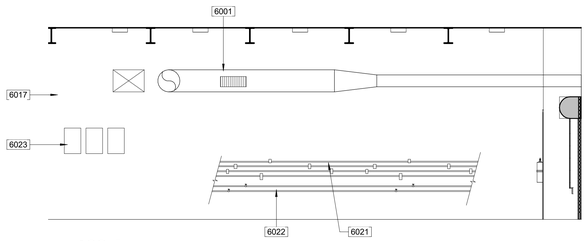


101-C



101-D

ROOM 101- APPLIANCE LAB



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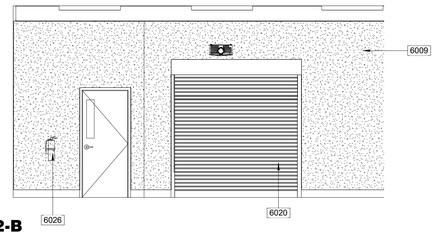
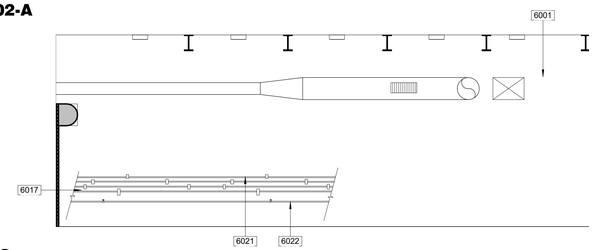
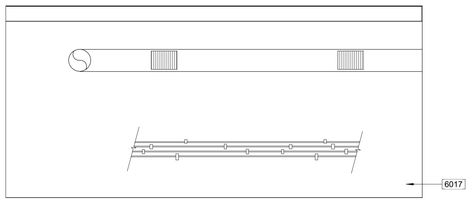


102-B

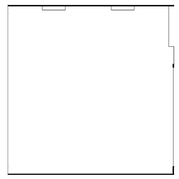


102-C

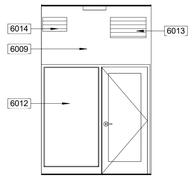


102-D

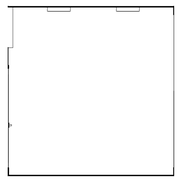
ROOM 102- HVAC LAB



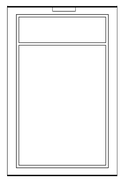
103-A



103-B

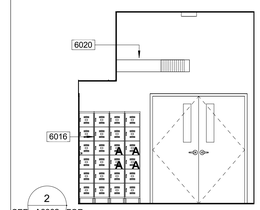


103-C

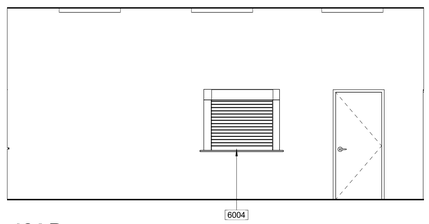


103-D

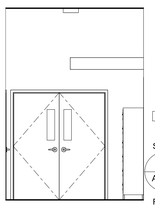
ROOM 103 - OFFICE



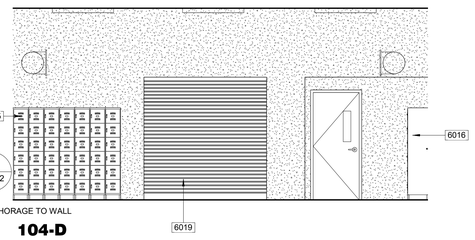
104-A



104-B

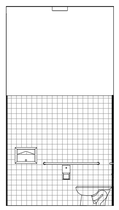


104-C

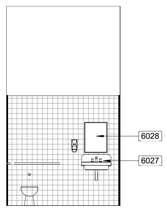


104-D

ROOM 104 - HALL



105-A



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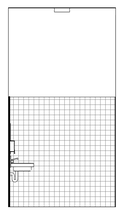

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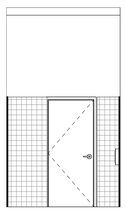

105-D

ROOM 105 - TOILET

INTERIOR ELEVATIONS

0 4' 8' 16'

6000-GENERAL NOTES

1. 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.
2. REFER TO DETAIL 18 SHEET A8001 FOR ACCESSIBLE MOUNTING HEIGHTS.
3. 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 WAL-MTD ELEC LINES
6022 WAL-MTD PLUMB LINES
6023 ELEC PLANELS
6024 PLASTIC LAMINATE CASEWORK AND COUNTER
6025 (E) 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 24 NEW 42 EXISTING	66 TOTAL
	5% OF TOTAL = 4 ACCESSIBLE LOCKERS

ACCESSORY LEGEND

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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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

SEAL

LICENSED ARCHITECT
RICHARD A. HAASS
No. C27345
REN. 2/21
STATE OF CALIFORNIA

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:	CHECKED BY:
AJ	RH
PROJECT MGR:	APPROVED BY:
RH	RH

SHEET TITLE
INTERIOR ELEVATIONS

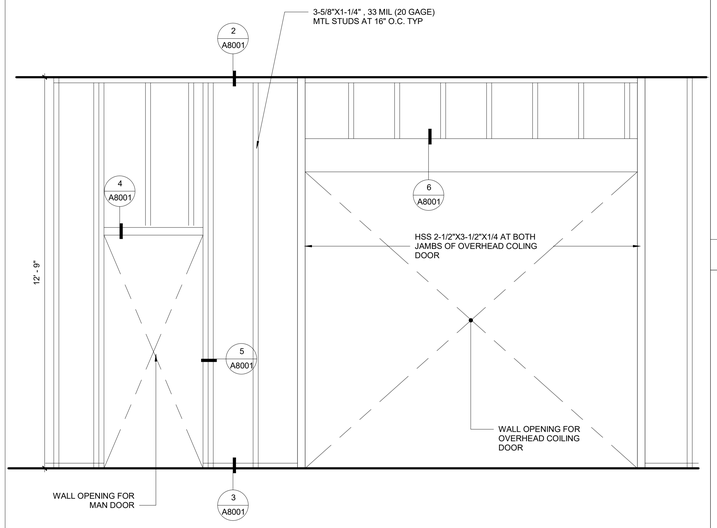
SHEET NUMBER
A6010

ISSUE

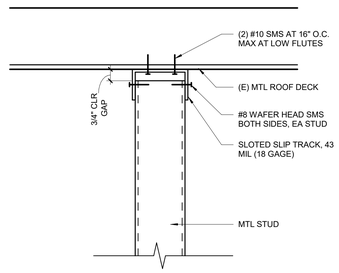
SCALE CHECK
1 in
10mm

C:\Users\Shari.Grantez\Documents\A_Building_v2019_2020-07-07_shari.grantz@ibigroup.com.rvt

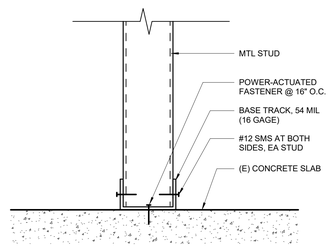
2020-07-08 2:49:11 PM



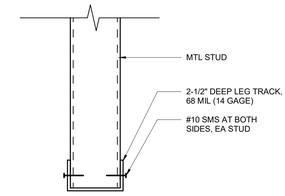
1 INTERIOR PARTITION FRAMING ELEVATION 1/2" = 1'-0"



2 TOP TRACK 3" = 1'-0"

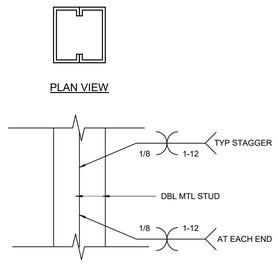


3 BTTM TRACK 3" = 1'-0"

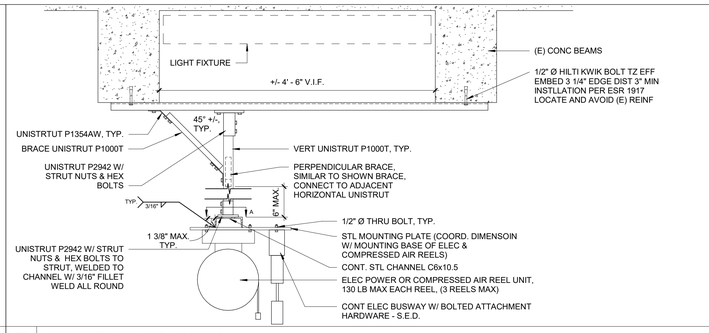


4'-0" SPAN OR LESS

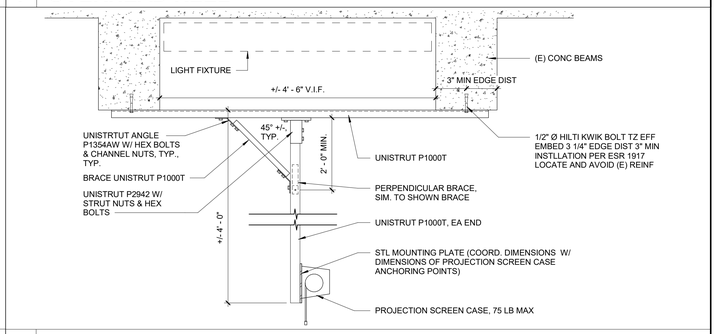
4 HEADER 3" = 1'-0"



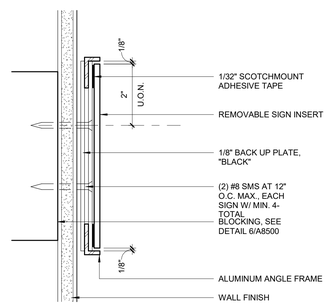
5 DBL JAMB STUDS 3" = 1'-0"



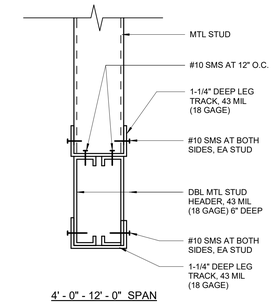
7 OVERHEAD REEL 1" = 1'-0"



8 OVERHEAD PROJECTION SCREEN 1" = 1'-0"

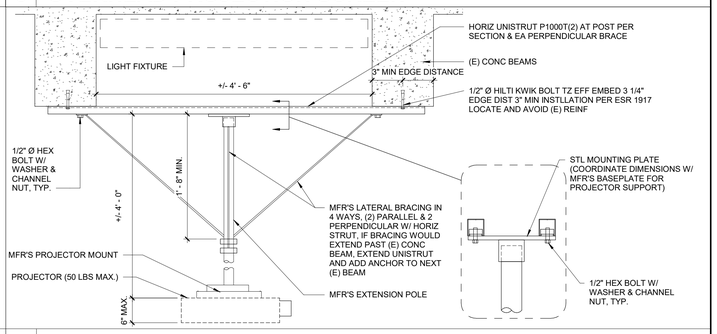


12 SIGNAGE FRAME 6" = 1'-0"

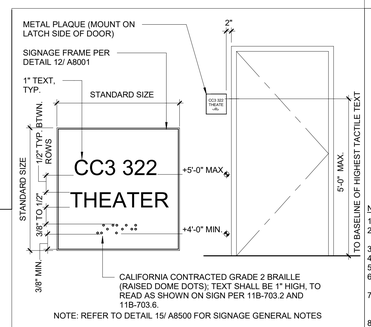


4' - 0" - 12' - 0" SPAN

6 HEADER 3" = 1'-0"

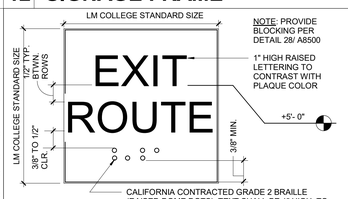


9 OVERHEAD PROJECTOR 1" = 1'-0"



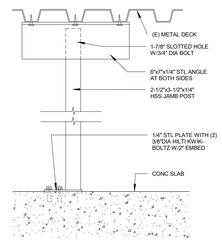
NOTE: REFER TO DETAIL 15/ A8500 FOR SIGNAGE GENERAL NOTES

13 ROOM ID SIGN 1/2" = 1'-0"

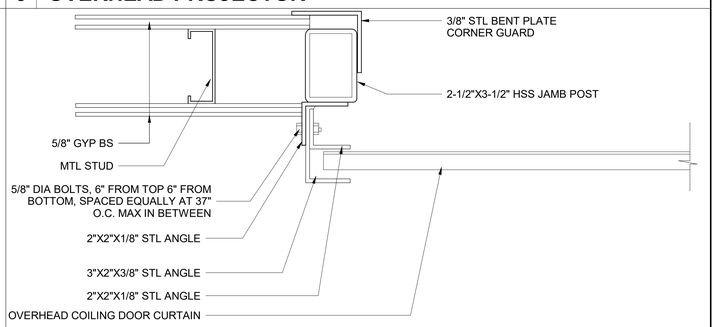


NOTES:
1. ALL SIGNS AND PLAQUES TO BE 1/4" THICK.
2. RAISE ALL SYMBOLS AND LETTERS 1/32" ABOVE SIGN/ PLAQUE SURFACE UNLESS OTHERWISE NOTED.
3. CONTRAST BETWEEN SIGN AND SIGN CONTENT SHALL BE 70% MINIMUM.
4. CONTRAST BETWEEN SIGN AND MOUNTING SURFACE SHALL BE 70% MINIMUM.
5. REFER TO DOOR ELEVATION FOR TYPICAL SIGNAGE LOCATION.
6. WHERE GLAZING OCCURS ADJACENT TO STRIKE SIDE OF DOOR, ADHERE SIGNAGE TO GLAZING.
7. CALIFORNIA GRADE 2 DOTS SHALL BE DOMES RAISED A MIN. OF 1/40" (0.635mm), 1/10" (2.54mm) BETWEEN DOTS WITHIN CELLS, WITH 1/5" (5.08"mm) BETWEEN EACH CELL.
8. SIGNAGE SHALL COMPLY WITH TITLE 24, SEC 11B-216.1 THRU 11B-216.4.4.

14 EXIT ROUTE SIGN 1/2" = 1'-0"



10 HSS ANCHORAGE 3" = 1'-0"

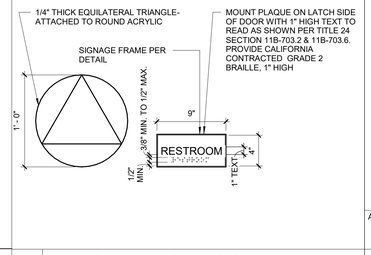


11 OVERHEAD COLING DOOR JAMB 3" = 1'-0"

GENERAL SIGNAGE NOTES

1. ALL SIGNS AND PLAQUES TO BE 1/4" THICK.
2. RAISE ALL SYMBOLS AND LETTERS 1/32" ABOVE SIGN/ PLAQUE SURFACE UNLESS OTHERWISE NOTED.
3. CONTRAST BETWEEN SIGN AND SIGN CONTENT SHALL BE 70% MIN. AND HAVE A NON-GLARE FINISH.
4. CONTRAST BETWEEN SIGN AND MOUNTING SURFACE SHALL BE 70% MINIMUM.
5. REFER TO DOOR ELEVATION FOR TYP. SIGNAGE LOCATION
6. CALIFORNIA GRADE 2 DOTS SHALL BE DOMESRAISED A MINIMUM OF 0.6m; 2.5mm BETWEEN TWO DOTS IN THE SAME CELL; 7.6mm BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS; 0.4mm BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW.
7. SIGNAGE SHALL COMPLY WITH 2016 TITLE 24, SECTION 11B-216 AND 11B-703.
8. WHERE GLAZING OCCURS ADJACENT TO STRIKE SIDE OF DOOR, ADHERE SIGNAGE TO GLAZING AND PROVIDE "BLANK-OFF" PANEL ON OPPOSITE SIDE OF GLAZING.
9. REFER TO DETAIL 13 A8001 FOR FRAME AND ANCHORAGE.
10. ROOM NAMES AND NUMBERING SHALL BE DETERMINED BY THE OWNER DURING THE CONSTRUCTION SUBMITTAL PROCESS.
11. TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48" MIN. A.F.F. OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST BRAILE TACTILE CHARACTER AND 60" MAX. A.F.F. OR GROUND SURFACE, MEASURED FROM THE BASLINE OF THE HIGHTEST TACTILE CHARACTER (2013 CBC ARTICLE 11B-703.4.1).
12. SIGNS AND IDENTIFICATION SHALL BE FIELD INSPECTED PER 2013 CBC 11B-703 AFTER INSTALLATION AND APPROVED BY THE ENFORCING AGENCY PRIOR TO THE ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY PER APPENDIX CHAPTER 1, SECTION 110.2, OR FINAL APPROVAL WHERE NO CERTIFICATE OF OCCUPANCY IS ISSUED. THE INSPECTION SHALL INCLUDE, BUT NOT BE LIMITED TO, VERIFICATION THAT BRAILLE DOTS AND CELLS ARE PROPERLY SPACED AND THE SIZE, PROPORTION AND TYPE OF RAISED CHARACTERS ARE IN COMPLIANCE WITH THESE REGULATIONS. 2013 CBC 11B-703.3 - 703.4

15 SIGNAGE NOTES

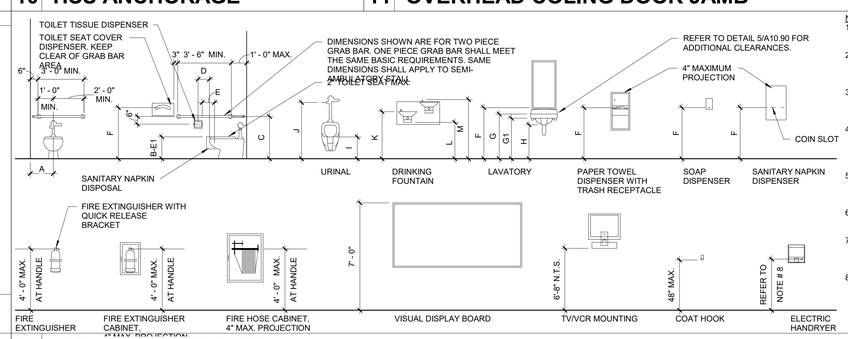


16 UNISEX RESTROOM 1 1/2" = 1'-0"

LETTER	DESCRIPTION	ADULT
A	FROM WALL TO CENTERLINE OF TOILET	17" - 18"
B	TOILET SEAT HEIGHT (TO TOP OF SEAT)	17" - 19"
C	GRAB BAR HEIGHT	33" - 36" TOP
D	TOILET TISSUE DISPENSER TO TOILET	7" - 9" C
E	SANITARY NAPKIN DISPOSAL TO TOILET	12" MAX.
E1	SANITARY NAPKIN DISPOSAL FROM FLOOR TO TOP	19" MIN.
F	DISPENSER OR MIRROR TO REFLECTIVE SURFACE	40" MAX.
G	LAVATORY/ SINK HEIGHT	34" MAX.
G1	LAVATORY APRON CLEARANCE	29" MIN.
H	KNEE CLEARNCE	27" MIN.
I	URINAL RIM HEIGHT	13" - 17"
J	URINAL FLUSH HANDLE HEIGHT	44" MAX.
K	DRINKING FOUNTAIN BUBBLER HEIGHT	36" MAX.
L	DRINKING FOUNTAIN KNEE	27" MIN.
M	D.F. BUBBLER HEIGHT (STANDING UNIT)	38" - 43"

ADULT DIMENSIONS FOR PERSONS 12 YEARS AND OLDER

17 ACC. MTG HEIGHTS 1/4" = 1'-0"



NOTES:
1. NOT ALL FIXTURES/ ACCESSORIES SHOWN APPLY TO THIS PROJECT.
2. HEIGHTS INDICATED ON INTERIOR ELEVATIONS TAKE PRECEDENCE OVER HEIGHTS SHOWN HERE.
3. FIXTURES/ ACCESSORIES SHOWN ARE AT HEIGHTS ACCESSIBLE TO PERSONS WITH DISABILITIES.
4. MOUNTING HEIGHTS FOR ABLE BODIED PERSONS SHALL BE DETERMINED BY RECOMMENDATIONS FROM THE MANUFACTURER, UNLESS NOTE OTHERWISE.
5. WATER CLOSET FLUSH VALVE SHALL BE ORIENTED ON THE APPROACH SIDE OF ACCESSIBLE TOILET.
6. FOR DIMENSIONS INDICATED BY A LETTER REFER TO DETAIL 16/A8001
7. MOUNT GRAB BARS 36" ABOVE FINISHED FLOOR AT TANK TYPE TOILETS. ALLOW 6" CLEAR TO GRAB BAR.
8. AT ACCESSIBLE LOCATIONS, MOUNT CENTERLINE OF ELECTRIC HANDRYER PUSH BUTTOM AT +40" A.F.F.; AT STANDARD LOCATIONS, CENTERLINE OF PUSH BUTTON SHALL BE +44" A.F.F.

18 MOUNTING HEIGHTS 1/4" = 1'-0"

CLIENT

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

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

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IBI Group - A California Partnership
is a member of the IBI Group of companies

ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

SEAL

LICENSED ARCHITECT
AARON A. RUSSELL
No. C27345
REN. 2/21
STATE OF CALIFORNIA

PRIME CONSULTANT
IBI GROUP ARCHITECTURE PLANNING
160 W. Santa Clara Street, Suite 800
San jose, CA 95113, 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**
SCALE: **As indicated**	DATE: **08/24/18**

SHEET TITLE
DETAILS

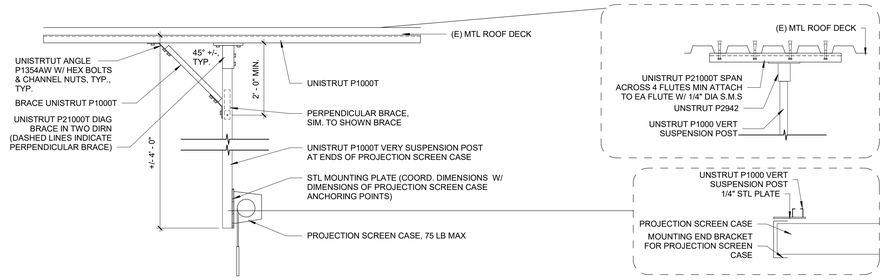
SHEET NUMBER
A8001

ISSUE

SCALE CHECK
1 in.
10mm

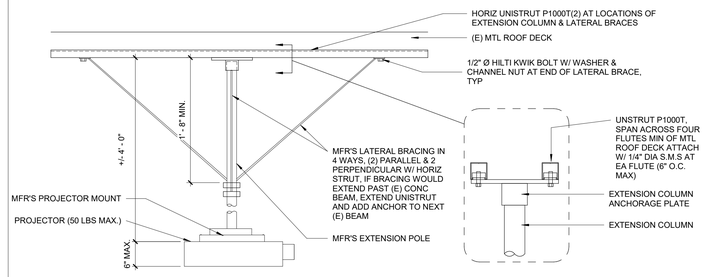
C:\Users\Shae.Grabler\Documents\A_Building_(2018)_2020-07-07_shae.grabler@ibigroup.com.rvt

2020-07-08 2:49:46 PM



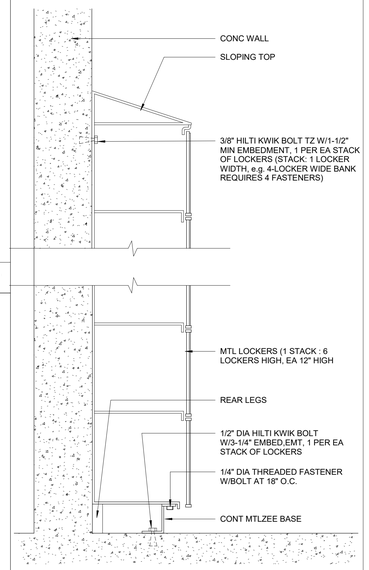
6 PROJECTION SCREEN AT METAL DECK CEILING

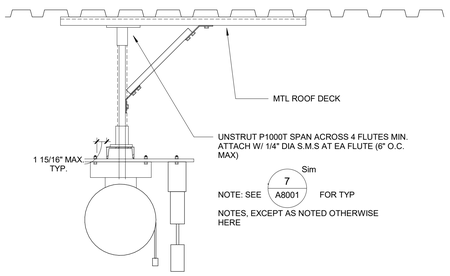
1" = 1'-0"



5 OVERHEAD PROJECTOR AT MTL DECK CEILING

1" = 1'-0"



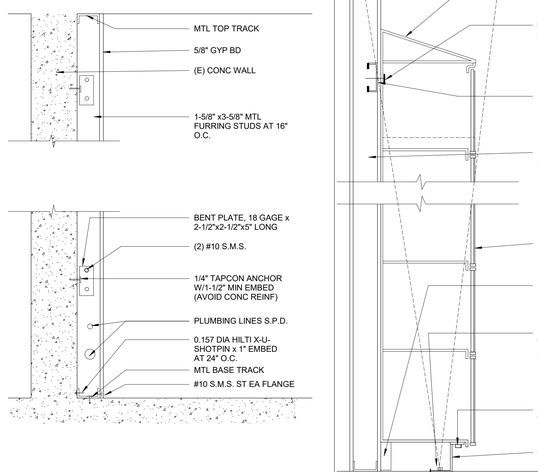


4 OVERHEAD AIR REEL

1" = 1'-0"

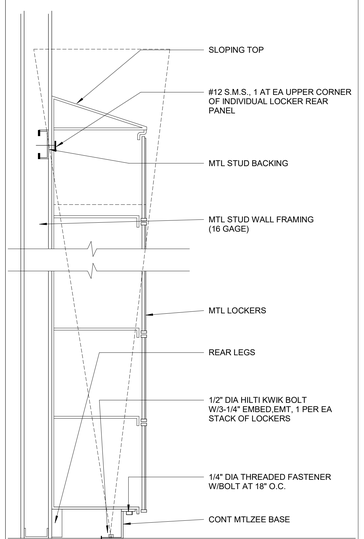
2 ATTACHMENT, CONC

1" = 1'-0"



3 WALL FURRING

1/2" = 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

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CONTRA COSTA COMMUNITY COLLEGE DISTRICT

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ISSUES

No.	DESCRIPTION	DATE

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PROJECT
L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO:
121030

DRAWN BY:	CHECKED BY:
Author	**Checker**
PROJECT MGR:	APPROVED BY:
Designer	**Approver**

SHEET TITLE
DETAILS

SHEET NUMBER
A8002

ISSUE

SCALE CHECK
1 in
10mm

C:\Users\Shari.Grafe\Documents\A_Building_v2018_2020-07-07_shari.grafe@ibigroup.com.rvt

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ABBREVIATIONS

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.

FLOOR MATERIAL DESIGNATIONS

FLR1 - EXISTING CONCRETE
FLR2 - CONC TOPPING OVER EXISTING SLAB, TROWEL FINISH

BASE MATERIAL DESIGNATIONS

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

WALL MATERIAL DESIGNATIONS

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

CEILING MATERIAL DESIGNATION

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

FINISH DESIGNATIONS

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

MISCELLANEOUS DESIGNATIONS

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

ROOM SCHEDULE REMARKS

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

ROOM - GENERAL NOTES

1. REFER TO SPECIFICATION SECTION 09 06 00 (COLORS AND FINISHES) FOR MATERIAL AND FINISH INFORMATION AND COLOR 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.

DOOR AND WINDOW - GENERAL NOTES

1. DOORS AND WINDOWS ARE IDENTIFIED AS DEFINED IN SYMBOL LEGEND ON SHEET A0.01.
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.
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.
4. ALL RATED DOORS TO BE POSITIVE LATCHING AND SELF-CLOSING. 'LABEL' SHALL MEAN 'FIRE ASSEMBLY' AS DEFINED IN 2013 CBC SECTION 715
5. ALL LABELED DOORS SHALL HAVE APPROPRIATE CLOSER AND HARDWARE ASSEMBLIES AS REQUIRED BY DOOR LABELING AGENCY.
6. ALL DOORS AND FRAMES SHALL BE PAINTED COLOR AS SPECIFIED BY THE ARCHITECT.
7. THE MAXIMUM EFFORT TO OPERATE DOORS SHALL BE AS FOLLOWS:
   A. INTERIOR DOORS = 5 LBS
   B. EXTERIOR DOORS = 5 LBS
   C. FIRE DOORS = THE AUTHORITY HAVING JURISDICITON MAY INCREASE THE MAXIMUM EFFORT TO OPERATE FIRE DOORS TO ACHIEVE POSITIVE LATCHING BUT NOT TO EXCEED 15 LBS. MAXIMUM.
8. FLOOR MOUNTED DOOR STOPS AND SIMILAR OBSTRUCTIONS TO BE INSTALLED 4" MAX. FROM FACE OF WALL OR PARTITION.
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.
10. REFER TO DOOR SCHEDULE FOR DOOR WIDTHS, HEIGHTS, AND MATERIAL.
11. REFER TO FLOOR PLANS FOR DOOR LOCATIONS, AND DIRECTION OF SWINGS.
12. DOOR AND FRAME TYPE SCHEDULE: IF NO DETAIL IS REFERENCED, REFER TO SIMILAR CONDITIONS.
13. IN ADDITON TO THE LOCATIONS INDICATED, PROVIDE TEMPERED GLASS IN THE FOLLOWING LOCATIONS.
   A. WITHIN A 24-INCH RADIOUS OF DOOR JAMBS.
   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.
14. GLAZING DESIGNATIONS:
   T CLEAR TEMPERED GLASS
   FR FIRE RATED SAFETY GLASS
   IG CLEAR TEMPERED INSULATED GLASS
15. 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.
16. WINDOW HEIGHTS INDICATED ARE RELATIVE TO FINISH FLOOR ELEVATION IN WHICH WINDOW OCCURS.

DOOR AND WINDOW SCHEDULE REMARKS

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.

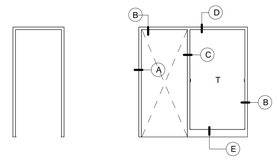
9100 - ROOM FINISH SCHEDULE

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

9200 - DOOR SCHEDULE

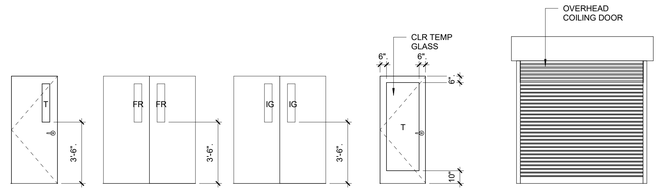
DOOR No.	DOOR TYPE	DOOR MAT	DOOR FINISH	DOOR WIDTH	DOOR HEIGHT	FIRE RATING	HARDWARE	FRAME TYPE	FRAME MAT	FRAME FINISH	FRAME HEAD	FRAME STRIKE	FRAME THRESHOLD	REMARKS	DOOR No.
101A	B	HM	P	6' - 0"	7' - 0"	60 MIN	03	(E)	HM	P					101A
102A	A	HM	P	3' - 0"	7' - 0"		01	AA	HM	P					102A
102B	E	STL	FAC	8' - 0"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

FRAME TYPES



AA BB

DOOR TYPES



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ISSUES

No.	DESCRIPTION	DATE

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PROJECT

L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO: 121030

DRAWN BY:	CHECKED BY:
Author	**Checker**
PROJECT MGR:	APPROVED BY:
ARCHITECTURAL	**Approver**

SHEET TITLE

ROOM FINISH SCHEDULE

SHEET NUMBER A9101

ISSUE

SCALE CHECK 1 in. 10mm

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MECHANICAL GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES AND INDUSTRY STANDARDS.
2. VERIFY EXACT LOCATION OF ALL (E) EQUIPMENT, DUCTWORK, DIFFUSERS, REGISTERS AND GRILLES. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN (E) SYSTEMS AND DRAWINGS.
3. COORDINATE EXACT LOCATION OF EQUIPMENT AND ALL PENETRATIONS THROUGH ROOF, FLOORS AND WALLS WITH ARCHITECTURAL STRUCTURAL SYSTEMS PRIOR TO COMMENCING WORK.
4. COORDINATE EXACT SIZE AND ROUTING OF DUCTWORK WITH ARCHITECTURAL PLANS, STRUCTURE AND EQUIPMENT PRIOR TO COMMENCING WORK.
5. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING DIFFUSERS, REGISTERS AND GRILLES.
6. FURNISH AND INSTALL MANUAL AIR DAMPERS AT ALL DUCT BRANCH TAKEOFFS TO A SINGLE SUPPLY DUFFUSER.
7. 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.
8. (E) DUCTWORK AND ITEMS TO BE REMOVED ARE SHOWN CROSSED ("X") OUT, SEE LEGEND, COORDINATE CLOSELY WITH (N) DUCTWORK AND P.O.C.'S SHOWN. ALL OTHER (E) DUCTWORK, ETC. TO REMAIN.
9. THERMOSTAT TO BE INSTALLED AT 46" 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
S*	DOUBLE DEFLECTION SUPPLY GRILLE WITH VERTICAL FRONT BARS, 3/4" SPACING	880 V	V 4004 S	61 DV	300 RS
R & E*	RETURN OR EXHAUST GRILLE WITH 35° OR 45° HORIZONTAL BARS.	S 80 H	SRH	7145 H	350 RL
SDS & SDR	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:
1. ALL SYMBOLS NOTED MAY NOT BE USED. REFER TO PLANS FOR SIZE AND QUANTITY.
2. ALL SUPPLY AIR DIFFUSERS ARE 4 WAY BLOW UNLESS SHOWN OTHERWISE.
3. FURNISH ALL PRODUCTS OF A SINGLE MANUFACTURER.
4. COORDINATE DIFFUSER TYPE WITH REFLECTED CEILING PLAN.
5. OPPOSED BLADE DAMPERS ARE NOT REQUIRED AT DIFFUSERS, REGISTERS OR GRILLES.
6. 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
24x12	24x12	RECTANGULAR DUCT – WIDTH x DEPTH (PLAN VIEW) DEPTH x WIDTH (SECTION VIEW)
26x14L	26x14L	1" ACOUSTICALLY LINED RECTANGULAR DUCT–DIMENSIONS ARE OUTSIDE
28x16L2	28x16L2	2" ACOUSTICALLY LINED RECTANGULAR DUCT–DIMENSIONS ARE OUTSIDE
		MANUAL AIR DAMPER
R OR D	RISE OR DROP	RISE OR DROP DUCT IN DIRECTION OF AIR FLOW
OR		RECTANGULAR TO RECTANGULAR TRANSISTION , MAX. SLOPE OF 1:3 RECTANGULAR TO ROUND TRANSITION , MAX. SLOPE OF 1:3
	R, W, R/W = 1.5	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	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 TREE 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 MOUNITING 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)
MAD	18"ø, 10"ø, 12"ø	45° REDUCING LATERAL FITTING
MAD	18"ø, 10"ø, 18"ø, 10"ø, 12"ø	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
REF 101	VOCATIONAL LAB 101	GB–220	4,400	0.5	E	RED	730	1.0	208/3	125	EMS TIMECLOCK	2 M5001	1 2 3

DUTY: E– EXHAUST
STYLE: RED– ROOF EXHAUST DOWNBLAST, REU– ROOF EXHAUST UPBLAST

NOTES:
1. PROVIDE WITH THERMAL OVERLOAD PROTECTED MOTOR.
2. PROVIDE WITH FACTORY BACKDRAFT DAMPER.
3. RECONNECT TO EXISTING "ANDOVER" CONTROLS SERVING REMOVED FAN. FAN SHALL OPERATE ON EMS TIMECLOCK SCHEDULE SAME AS THE ASSOCIATED BUILDING AIR HANDLING UNIT.

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	BPT	BYPASS TIMER
	CC	CENTER TO CENTER
	CLG	CEILING
	CEF	CEILING EXHAUST FAN
	CLR	CLEAR
	CONC	CONCRETE
		CONCENTRIC REDUCER
CD	CD	CONDENSATE DRAIN
	COND	CONDENSER
	CONN	CONNECT OR CONNECTION
	CONT	CONTINUATION
	CONTR	CONTRACTOR
f	CFM	CUBIC FEET OF AIR FLOW PER MINUTE
	DPR	DAMPER
°F		DEGREES FAHRENHEIT
ø	DIA	DIAMETER , PHASE
	DL	DOOR LOUVER
	DN	DOWN
	DR	DRAIN
	DB	DRY BULB (DEGREES FAHRENHEIT)
DS	DS	DYNAMIC SENSOR
		ECCENTRIC REDUCER
	EP	ELECTRICAL PANEL
	EL	ELEVATION
	ENT	ENTERING
	EDB	ENTERING DRY BULB
	EW	ENTERING WATER
	EWT	ENTERING WATER TEMPERATURE
	EWB	ENTERING WET BULB
	EVAP	EVAPORATOR
	EC	EVAPORATIVE COOLER
	EA	EXHAUST AIR
	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
F	FD	FIRE DAMPER
FS	FS	FIRE/SMOKE DAMPER
	FC	FLEXIBLE CONNECTION
	FLR	FLOOR
		FLOW IN DIRECTION OF ARROW
	FLV	FLOW LIMITING VALVE
	FA	FROM ABOVE
	FB	FROM BELOW
	FLA	FULL LOAD AMPS
	GALV	GALVANIZED
	GI	GALVANIZED IRON
	GA	GAUGE

MECHANICAL LEGEND cont'd

SYMBOL	ABBREVIATION	DESCRIPTION
	HTG	HEATING
Hx	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
	MIN	MINIMUM
	MCC	MOTOR CONTROL CENTER
	(N)	NEW
	OC	ON CENTER
	OA	OUTSIDE AIR
	OAD	OUTSIDE AIR DAMPER
	OD	OUTSIDE DIAMETER
	OV	OUTLET VELOCITY
	OH	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	RG	REFRIGERANT GAS PIPING
RS	RS	REFRIGERANT SUCTION PIPING
RL	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	SD	SMOKE DAMPER
SD	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
	TCP	TEMPERATURE CONTROL PANEL
	TCV	TEMPERATURE CONTROL VALVE
TSx		TEMPERATURE SENSOR, "X" INDICATES DEVICE CONTROLLED
Tx	T	THERMOSTAT, "X" INDICATES DEVICE CONTROLLED
	MBH	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

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.

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.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. 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 RECEPTIACLES HAVING FLEXIBLE CABLE.
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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 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 COMPONENETS 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.

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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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

CAPITAL ENGINEERING CONSULTANTS, INC.
RANCHO CORDOVA, CALIFORNIA
TD - RCC/JH — PM - DESIGN TEAM
191204.00 — PROJECT NO.

REGISTERED PROFESSIONAL ENGINEER
THOMAS DOYLE
M 22836
EXPIRES 9/30/20
MECHANICAL
STATE OF CALIFORNIA
DATE SIGNED: 06/30/2020

SEAL

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333 W. San Carlos St., Suite 600
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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 LEGENDS & NOTES

SHEET NUMBER: M0001

ISSUE

QC	
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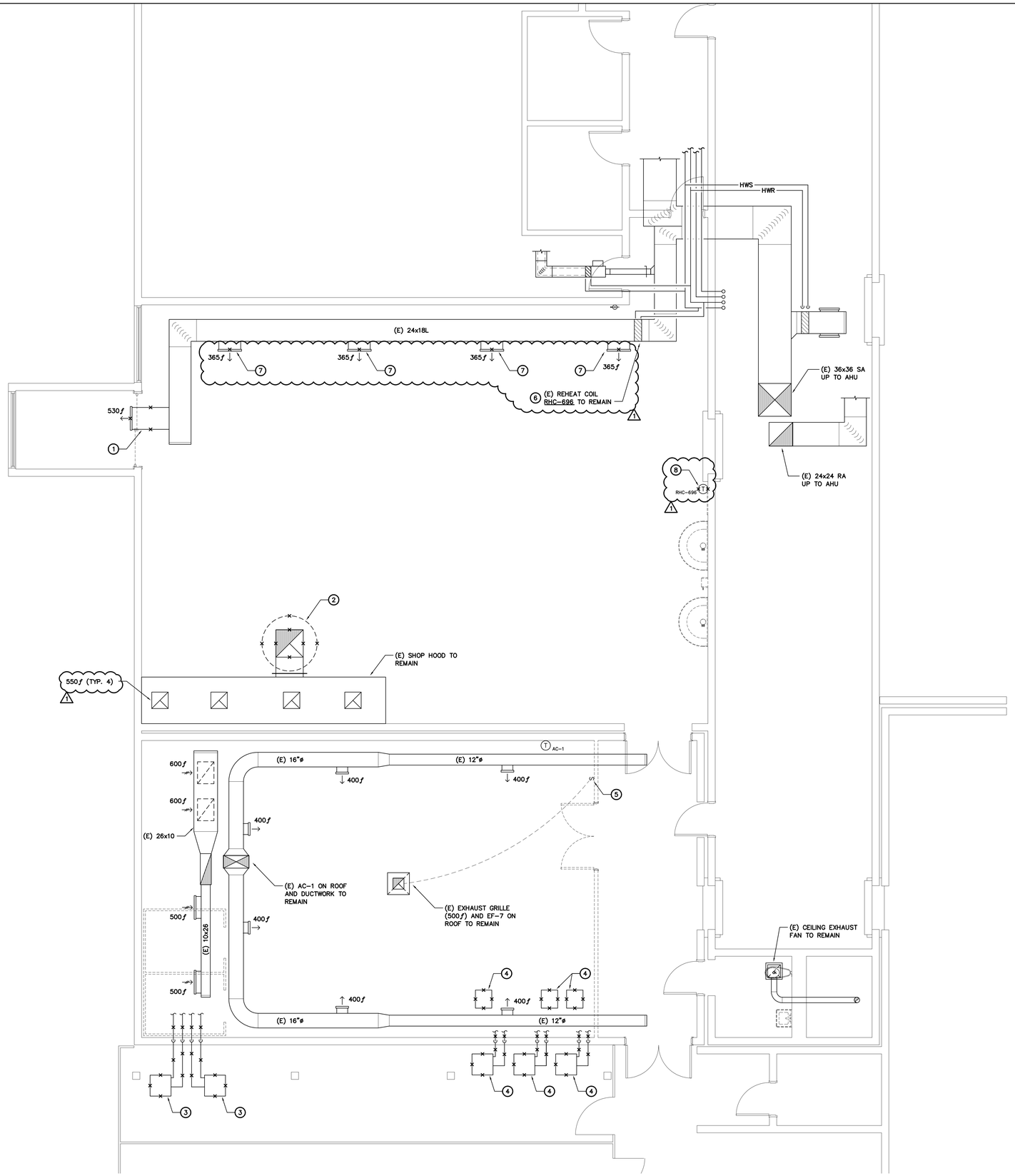

MECHANICAL DEMOLITION PLAN

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

1
M2010

N

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

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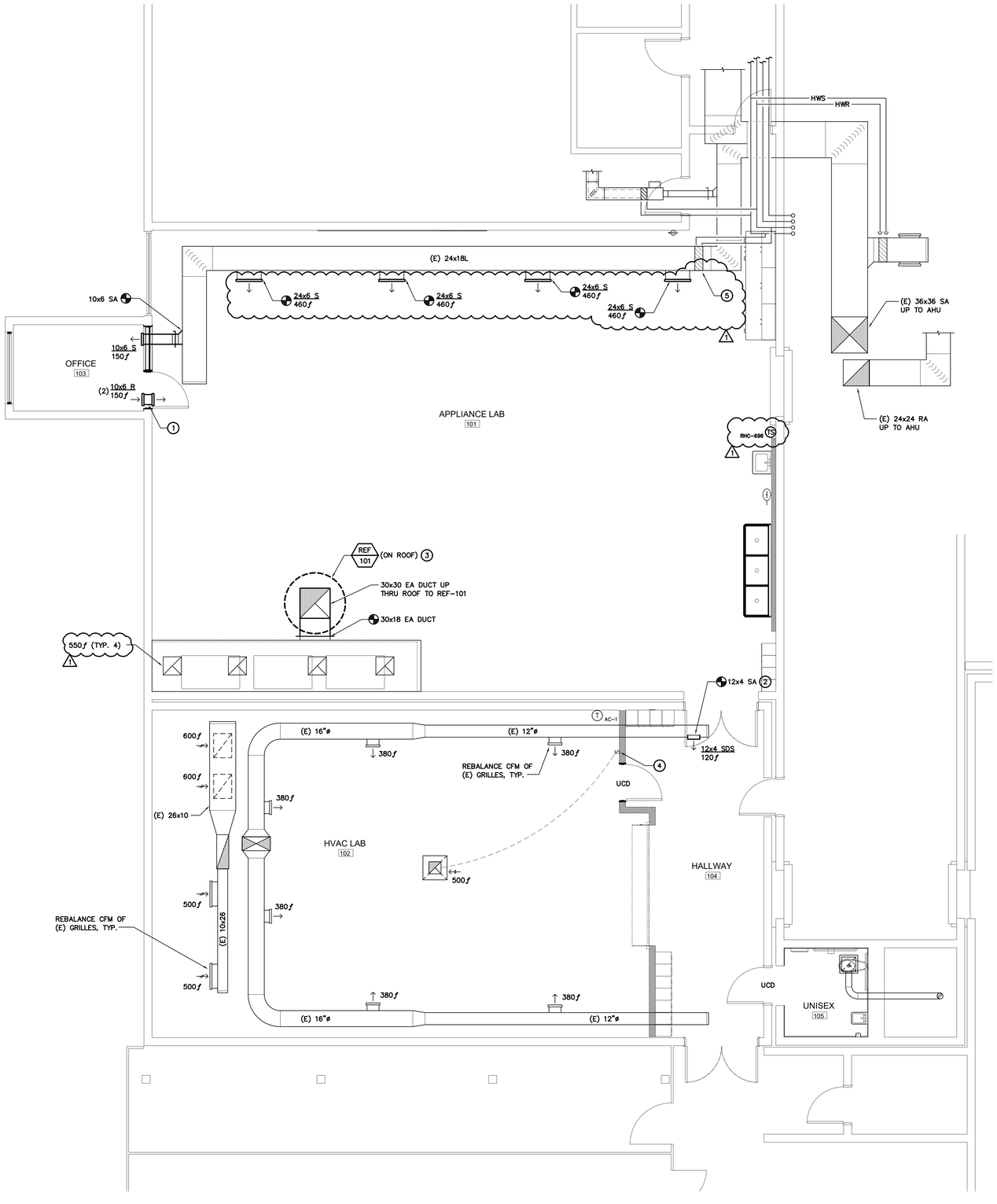
SHEET TITLE

MECHANICAL DEMOLITION PLAN

SHEET NUMBER: AD1-M2010

ISSUE

QC	
INI	%



MECHANICAL FLOOR PLAN

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

1
M2310

N

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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1	ADDENDUM 1	03/23/21

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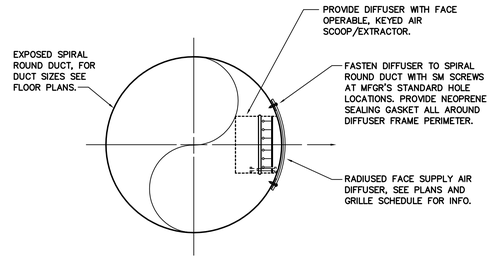
SHEET TITLE

MECHANICAL FLOOR PLAN

SHEET NUMBER: AD1-M2310

ISSUE

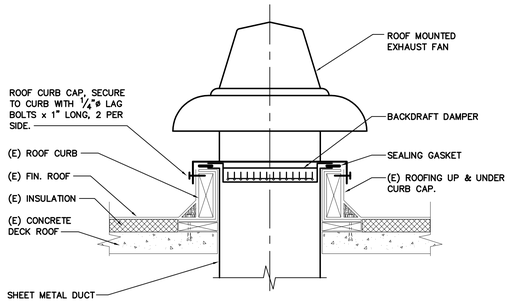
QC	
INI	%



RADIUSED FACE DIFFUSER MOUNTING

1
M5001

SCALE : NONE



NOTE: CONTRACTOR TO FIELD VERIFY EXISTING CURB SIZE AND ENSURE NEW EXHAUST FAN CURB CAP MATCHES, OR PROVIDE FACTORY ADAPTOR CURB IF REQUIRED.

REF MOUNTING DETAIL

2
M5001

SCALE : NONE

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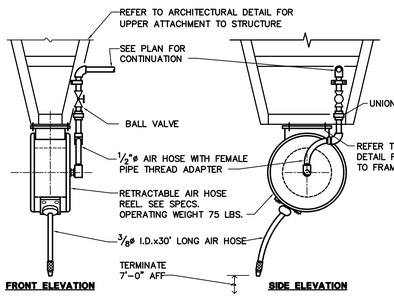
MECHANICAL DETAILS

SHEET NUMBER	ISSUE
M5001	

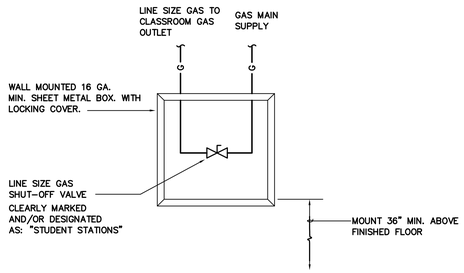
QC	
INI	%



OVERHEAD HOSE REEL DETAIL

1 / P0001

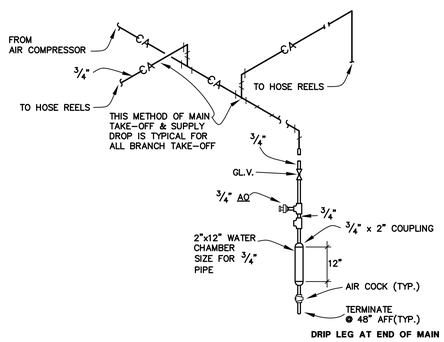
SCALE : NONE



GAS SHUT-OFF VALVE BOX DETAIL

2 / P0001

SCALE : NONE



TYPICAL AIR DROP DETAIL

3 / P0001

SCALE : NONE

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.

PLUMBING GENERAL NOTES

1. DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS, SIZES, AND ELEVATIONS OF ALL ITEMS SHOWN AS EXISTING PRIOR TO DEMOLITION OR THE INSTALLATION OF ANY NEW WORK.
2. SANITARY VENT LINES SHALL TERMINATE AT A MINIMUM DISTANCE OF 10 FEET FROM HVAC UNIT OUTSIDE AIR INTAKES.
3. THE DRAWINGS ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTING OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT THE JOB SITE AND SHALL HAVE THE APPROVAL OF THE ARCHITECT BEFORE BEING INSTALLED.
4. ALL VALVES SHOWN SHALL BE FULL LINE SIZE UNLESS OTHERWISE NOTED.
5. CLOSELY COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO TRENCHING OR INSTALLATION OF NEW. IDENTIFY SIZE AND LOCATIONS OF ALL PENETRATIONS THROUGH FOUNDATIONS, WALLS OR ROOFS PRIOR TO FABRICATION OF ANY SYSTEMS OR ORDERING MATERIALS AFFECTED BY POSSIBLE COORDINATION CONFLICTS.
6. OFFSET ALL RISERS AND DROPS TO AVOID PENETRATIONS AT TOP PLATES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS, TRANSITIONS, OFFSETS, ETC., TO AVOID DUCTWORK, PIPING, EQUIPMENT OR STRUCTURE AND TO MAKE A COMPLETE AND FUNCTIONING SYSTEM.
8. INSTALL ALL WORK TO CLEAR ARCHITECTURAL, STRUCTURAL MEMBERS AND MECHANICAL SYSTEMS. ADJUST PIPING AS NECESSARY. NO ITEM SUCH AS PIPE, ETC., SHALL BE IN CONTACT WITH ANY EQUIPMENT. INSTALL ALL PIPING AS HIGH AS POSSIBLE OR AS SPECIFIED ON DRAWINGS TO MAINTAIN MAXIMUM ACCESSIBILITY.
9. ALL NEW SANITARY WASTE PIPING SHOWN SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM UNLESS OTHERWISE NOTED ON PLANS. WHERE SLOPES LESS THAN 1/4" PER FOOT ARE INDICATED, CONTRACTOR SHALL SLOPE NEW PIPING UNIFORMLY BETWEEN UPPER TERMINAL OF PIPE AND THE POINT OF CONNECTION TO THE SITE PIPING (AS INDICATED ON CIVIL PLANS) TO ACHIEVE THE MAXIMUM SLOPE POSSIBLE, BUT IN NO CASE SHALL THE PIPING BE SLOPED AT LESS THAN THE MINIMUM SLOPE INDICATED.
10. PENETRATION OF PIPES, CONDUITS, ETC., IN WALLS AND/OR FLOORS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE STATE FIRE MARSHAL.
11. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR CUTTING THRU STRUCTURAL SYSTEM. CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL FROM THE ARCHITECT BEFORE MAKING PENETRATIONS THAT ARE NOT DETAILED ON THE CONSTRUCTION DOCUMENTS.
12. REFER TO SPECIFICATIONS FOR CURRENT CODES & STANDARDS.
13. HVAC UNITS ARE SHOWN FOR THE COORDINATION OF UTILITIES ONLY. FOR CONTINUATION REFER TO HVAC PLANS, 'M' SHEETS.
14. NATURAL GAS CONNECTIONS TO EQUIPMENT SHALL INCLUDE A LINE SIZE UNION, GAS SHUT-OFF VALVE AND A MINIMUM 6" LONG DIRT LEG WITH AN ACCESSIBLE/REMOVABLE CAP.
15. CONDENSATE DRAIN LINE CONNECTIONS TO EQUIPMENT SHALL INCLUDE A LINE SIZE UNION, 4" DEEP VENTED 'P'-TRAP AND A PLUGGED TEE (CLEANOUT) AT ALL OFFSETS.

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PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	ABC	ABOVE CEILING
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	AF , BF	ABOVE FLOOR , BELOW FLOOR
AV	AD , AP	ACCESS DOOR , ACCESS PANEL
AW	AW	ACID WASTE BELOW FLOOR
AW	AW	ACID WASTE ABOVE FLOOR
AV	AV	ACID VENT PIPING
	ANV	ANGLE VALVE
	AQ	AQUASTAT
	AD	AREA DRAIN
	BFP, RP, DCV	BACKFLOW PREVENTER, REDUCED PRESSURE, DOUBLE CHECK VALVE
	BV	BALL VALVE
		BRANCH - TOP CONNECTION
		BRANCH - BOTTOM CONNECTION
or		BRANCH - SIDE CONNECTION
	BFV	BUTTERFLY VALVE
	CBV	CALIBRATED BALANCE VALVE
	COP	CAP ON END OF PIPE
CO_2	CO_2	CARBON DIOXIDE
	CB , RD	CATCH BASIN , ROOF DRAIN
℄		CENTER LINE
CG	CG	CHASIS GREASE
	CKV	CHECK VALVE
DWR	DWR	CHILLED DRINKING WATER RETURN
DWS	DWS	CHILLED DRINKING WATER SUPPLY
	CP	CIRCULATING PUMP
	CW	COLD WATER
	CWD	COLD WATER DROP
	CWR	COLD WATER RISE
H	CWH, HWH, VH	COLD WATER HEADER, HOT WATER HEADER, VENT HEADER
A	A	COMPRESSED AIR
X#A	X#A	COMPRESSED AIR - X#
	CR	CONCENTRIC REDUCER
CD	CD	CONDENSATE DRAIN LINE
	CMP	CORRUGATED METAL PIPE
CO	CO	CLEANOUT
DI	DI	DEIONIZED WATER
°F		DEGREES FAHRENHEIT
ø , ▯		DIAMETER , SQUARE (FEET)
DF	DF	DIESEL FUEL
DIS	DIS	DISTILLED WATER
DSP	DSP	DRY STAND PIPE
	ER	ECCENTRIC REDUCER
	(E)	EXISTING TO BE REMOVED
	EJ	EXPANSION JOINT
FF=		FINISHED FLOOR ELEVATION
	FHC	FIRE HOSE RACK AND CABINET
F	F	FIRE PROTECTION WATER SUPPLY
FU		FIXTURE UNIT
	FC	FLEXIBLE CONNECTOR
	CO	CLEANOUT
	FD	FLOOR DRAIN
	FS	FLOOR SINK
		FLOW IN DIRECTION OF ARROW
FLV	FLV	FLOW LIMITING VALVE
FS	FS	FLOW SWITCH
FV , FT		FLUSH VALVE , FLUSH TANK
(FA) , (TA)		FROM ABOVE , TO ABOVE
(FB) , (TB)		FROM BELOW , TO BELOW
	GCK	GAGE COCK
	GSCK , PC	GAS COCK , PLUG COCK
GA	GA	GASOLINE
GV		GASOLINE VENT
G	G	GAS - LOW PRESSURE
MG	MG	GAS - MEDIUM PRESSURE
HG	HG	GAS - HIGH PRESSURE
	GPR	GAS PRESSURE REGULATOR VALVE
R	GPR	GAS PRESSURE REGULATOR
	GM	GAS METER
		GAS SEISMIC VALVE
	GV	GATE VALVE
	GV	GREASE VENT
	GPM	GALLONS PER MINUTE
	GLV	GLOBE VALVE
	CO	CLEANOUT
GW	GW	GREASE WASTE PIPING
	HD	HOPPER DRAIN , HUB DRAIN
	HB	HOSE BIBB

PLUMBING LEGEND cont'd

SYMBOL	ABBREVIATION	DESCRIPTION
	HW	HOT WATER PIPING
	HWR	HOT WATER PIPING RISE
	HWD	HOT WATER PIPING DROP
	HW	HOT WATER PIPING WITH HEAT TRACE TAPE
	HWRET	HOT WATER RETURN
	HWRET(R)	HOT WATER RETURN RISE
	HWRET(D)	HOT WATER RETURN DROP
( )	( ) HW	HOT WATER (TEMP. °F)
( )	( ) HWR	HOT WATER RETURN (TEMP. °F)
IS	IS	IRRIGATION SUPPLY
D	D	INDIRECT DRAIN , CONDENSATE DRAIN
LPG	LPG	LIQUIFIED PETROLEUM GAS
LO	LO	LUBRICATING OIL
LOV	LOV	LUBRICATING OIL VENT
	(N) , (E)	NEW , EXISTING
	(NTS)	NOT TO SCALE
	OH	OVERHEAD
OF	OF	OVERFLOW RAINWATER LEADER
	OFD	OVERFLOW DRAIN
	AN	PIPE ANCHOR
		PIPE GUIDE
		PIPE IN SLEEVE
		PITCH DOWN IN DIRECTION OF FLOW
	PT	PLUGGED TEE
	POC	POINT OF CONNECTION
	PG	PRESSURE GAUGE
P & TRV	P & TRV	PRESSURE & TEMPERATURE RELIEF VALVE PIPING
	PRV	PRESSURE REDUCING VALVE
PD	PD	PUMP DISCHARGE LINE
RWL	RWL	RAINWATER LEADER
	WH	RECESSED BOX HOSE BIBB OR WALL HYDRANT
	RV or P&TRV	RELIEF VALVE OR PRESSURE & TEMPERATURE RELIEF VALVE
	RET	RETURN
	RE , IE	RIM ELEVATION , INVERT ELEVATION
	(R) , (D)	RISE , DROP
		RISER DOWN (ELBOW)
		RISER UP (ELBOW)
	R , D	RISE OR DROP
	RD	ROOF DRAIN
	S, W	SOIL, WASTE OR SANITARY SEWER ABOVE FLOOR
	S, W	SOIL, WASTE OR SANITARY SEWER BELOW FLOOR
		SOLENOID VALVE WITH MOTOR ACTUATOR
SD	SD	STORM DRAIN
	STR	STRAINER
T	T	TEMPERED WATER SUPPLY
	TH	THERMOMETER
		THREE WAY CONTROL VALVE
	TP	TRAP PRIMER
		TRAP PRIMER PIPING
		TWO WAY CONTROL VALVE
	TYP	TYPICAL
	UN	UNION OR FLANGE
UD	UD	UNDER DRAIN
	AV	VALVE WITH MOTOR ACTUATOR
		VALVE IN RISER (TYPE AS INDICATED OR NOTED)
	VB	VALVE IN VALVE BOX (VALVE TYPE SYMBOL AS REQUIRED FOR VALVE TYPE USED)
	V	VENT PIPING
V , VR , VTR		VENT , VENT RISER , VENT THRU ROOF
VCP		VITRIFIED CLAY PIPE
	WCO	WALL CLEANOUT
	WHA	WATER HAMMER ARRESTER
WM	WM	WATER METER
WO	WO	WASTE OIL
WOV	WOV	WASTE OIL VENT
WSP	WSP	WET STAND PIPE
	PIV	POST INDICATOR VALVE
	FH	FIRE HYDRANT
	FDC	FIRE DEPARTMENT CONNECTION

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PROJECT NO: 121030

DRAWN BY: RCC/JH	CHECKED BY: TD
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE

PLUMBING LEGENDS, SCHEDULES, NOTES, & DETAIL

SHEET NUMBER: P0001

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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	"KOHLER" KINGSTON NO. K-2005 WALL HUNG, VITREOUS CHINA WITH CONTOURED BACK AND SIDE SPLASH SHIELDS, FRONT OVERFLOW, CONCEALED ARM RECESS, 4" CENTERS, 21-1/4" x 18-1/8" D SHAPED BOWL.	"CHICAGO" 3600-E2805AB FAUCET, PUSH LEVER WITH AERATOR WITH 0.5 GPM FLOW RATE. WITH VANDAL RESISTANT ECONO-FLO SPRAY OUTLET. WITH IPS CONNECTIONS, ADA COMPLIANT.	ADA COMPLIANT. LAVATORY GRID DRAIN WITH 1-1/4" OFFSET TAILPIECE, INTEGRAL PERFORATED GRID NO. 7723.018, CHROME FINISH. 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" 115V5 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-TA1 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 HOSEREEL 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:

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.

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.

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DRAWN BY:	CHECKED BY:
RCC/JH	**TD**
PROJECT MGR:	APPROVED BY:
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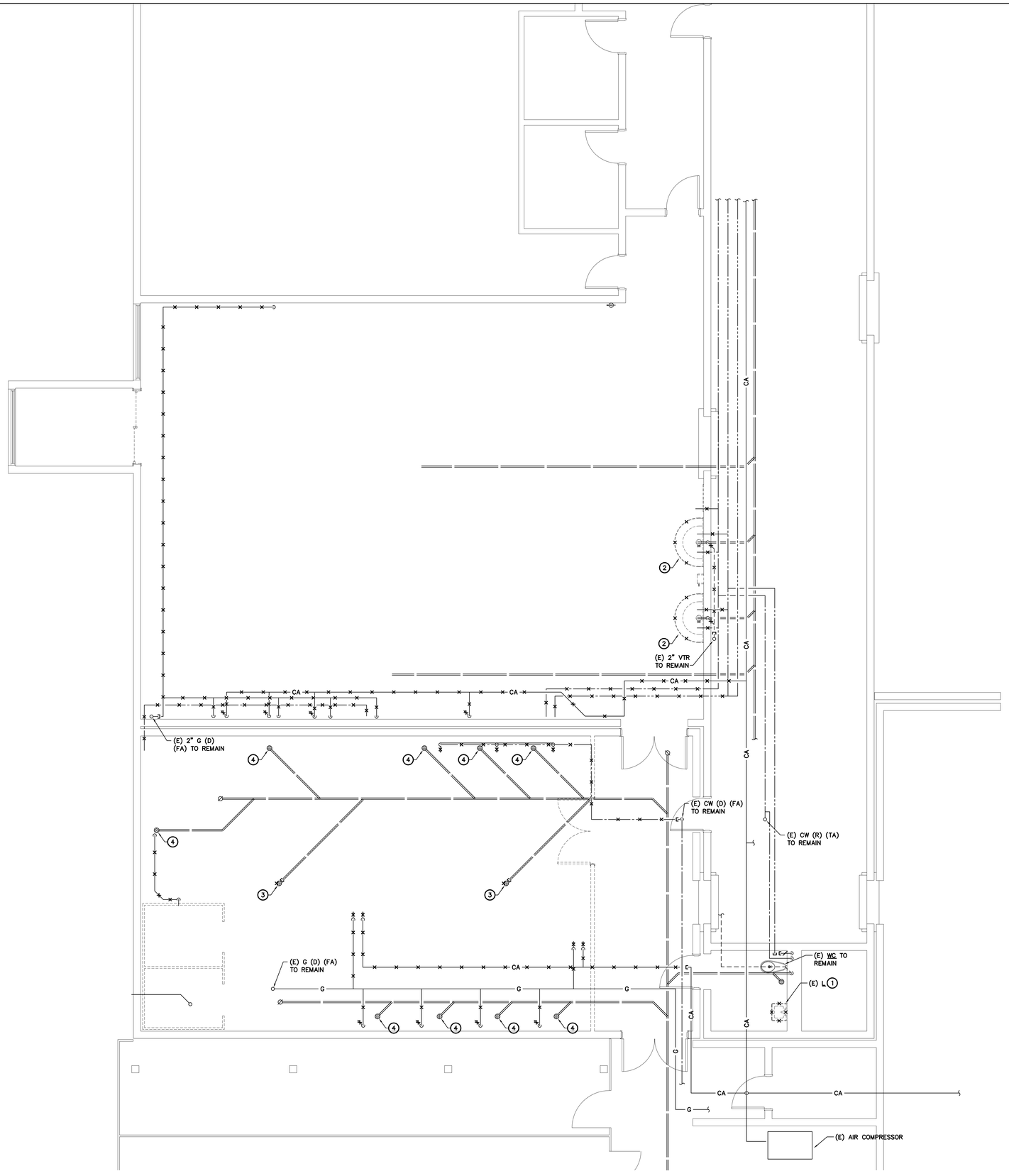
SHEET TITLE

PLUMBING FIXTURE SCHEDULES

SHEET NUMBER: P0002

ISSUE:

QC	
INI	%



PLUMBING DEMOLITION PLAN

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

1
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 (FD) TO BE REMOVED. PLUG OPENING AND ABANDON PIPE BELOW FLOOR.
4. EXISTING FLOOR DRAIN (FD) TO REMAIN.

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PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE

PLUMBING DEMOLITION PLAN

SHEET NUMBER: P2010

ISSUE

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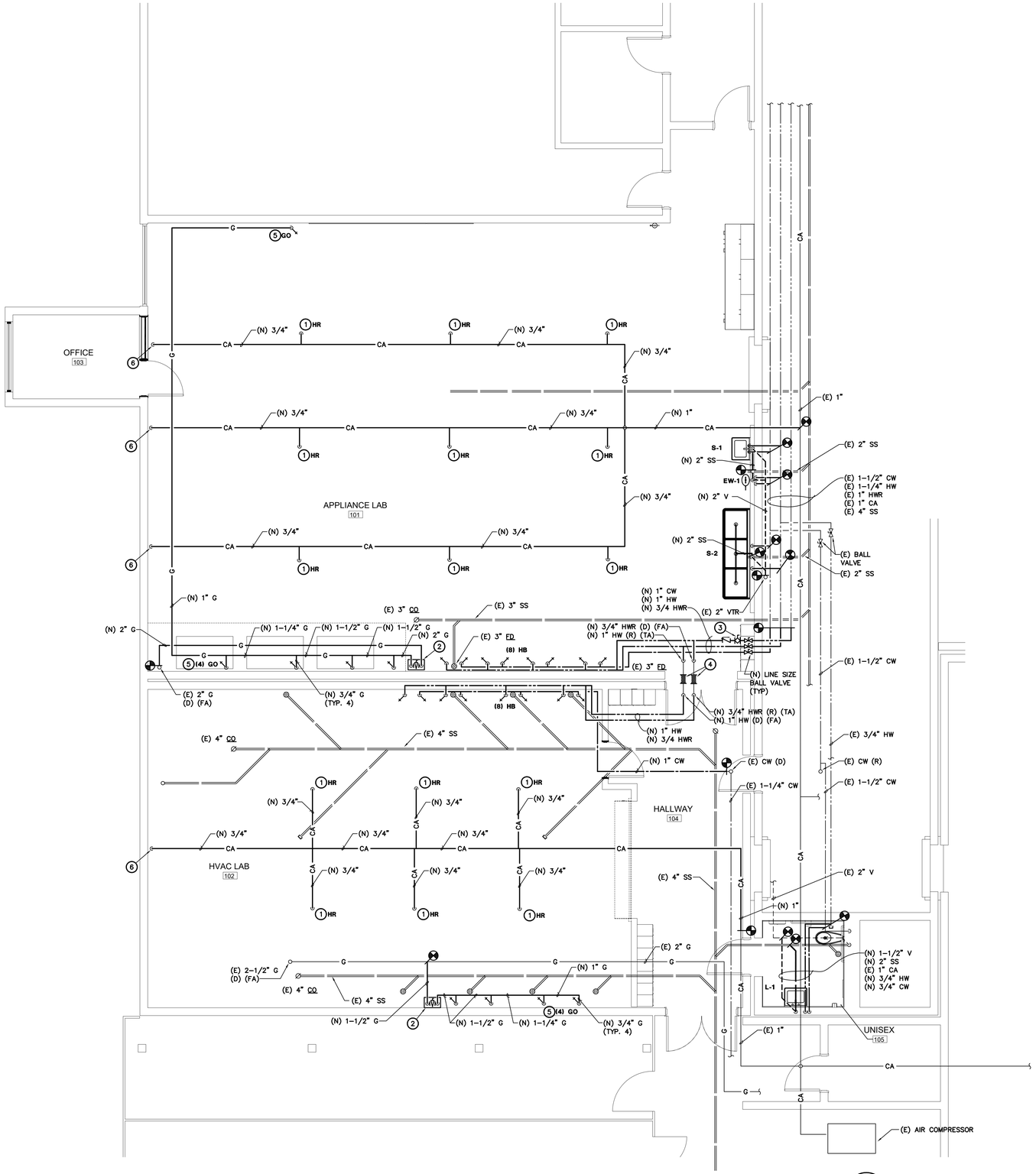

PLUMBING FLOOR PLAN

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 MLSUPC80 FLEXIBLE SEISMIC JOINT ON ROOF. PROVIDE ANCHORS AS RECOMMENDED BY MANUFACTURER.
5. PROVIDE LINE SIZE GAS SHUT OFF, UNION, AND 6" DIRT LEG AT EACH GAS OUTLET.
6. DRIP LEG AT END OF COMPRESSED AIR MAIN, FOR DETAIL SEE 3/P0001

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SHEET TITLE

PLUMBING FLOOR PLAN

SHEET NUMBER: P2310

ISSUE

GENERAL CONSTRUCTION NOTES

1. 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 BUILDING 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 MULTIWIRE CIRCUITS IS NOT ALLOWED.
13. ALL 120/277V LIGHT SWITCHES AND WALL OCCUPANT 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 FLUSH MOUNT PANELS; THE CONTRACTOR SHALL STUB 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 FULLY 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 NECESSARY TO CUT 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 OWNERS SATISFACTION WITHOUT 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, FURRED SPACE, HOLLOW MULLIONS, ETC. IN EACH AREA AND REVIEW 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 THE ENGINEER. NO ALLOWANCE FOR ADDITIONAL COMPENSATION DUE TO ROUTING AS DIRECTED BY THE ENGINEER WILL BE MADE.

ELECTRICAL SYMBOLS & ABBREVIATIONS

SYMBOLS & ABBREVIATIONS SHOWN ARE FOR GENERAL USE. DISREGARD THOSE WHICH DO NOT APPEAR ON THE PLANS.

- FLUORESCENT OR LED LUMINAIRE - SEE SCHEDULE
- EMERGENCY OR NIGHT LIGHT
- STRIP FLUORESCENT OR LED LUMINAIRE - SEE SCHEDULE
- LUMINAIRE - RECESSED - SEE SCHEDULE
- RECESSED WALL WASHER
- LUMINAIRE - SURFACE MOUNTED - SEE SCHEDULE
- LUMINAIRE - POLE OR POST MOUNTED - SEE SCHEDULE
- LUMINAIRE - WALL MOUNTED SEE SCHEDULE
- BOLLARD OR PATH LIGHT - SEE SCHEDULE
- EXIT LIGHT - DIRECTIONAL ARROWS AS INDICATED - SEE SCHEDULE
- TRACK LIGHTING - SEE SCHEDULE
- EMERGENCY LIGHT
- DIGITAL DUAL TECHNOLOGY OCC. SENSOR
- LIGHTING CONTROL OCCUPANCY SENSOR CORNER MOUNTED
- DRC — DIMMER ROOM CONTROLLER
- PC — PLUG LOAD CONTROLLER
- RC — ROOM LIGHTING CONTROLLER
- LCP — LIGHTING CONTROL PANEL
- DL — DIGITAL DAYLIGHT SENSOR
- SINGLE POLE SWITCH ★★
- SINGLE POLE SWITCH, ★★ a = CIRCUIT CONTROLLED
- 3 — THREE WAY SWITCH★★
- 4 — FOUR WAY SWITCH★★
- M — MANUAL MOTOR STARTER
- K — KEY OPERATED SWITCH★★
- LIGHTING DIMMER★★
- D — DIGITAL ON/OFF SWITCH ★★
- D — DIGITAL DIMMER SWITCH ★★
- SCMB — DIGITAL MULTI SCENE LIGHTING SWITCH ★★
- D — DIGITAL DUAL TECHNOLOGY WALL OCC. SENSOR★★
- WALL OCCUPANCY SENSOR ★★
- 2 — DOUBLE SWITCHED WALL OCCUPANCY SENSOR ★★
- D — DIMMING DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR ★★
- 2 — 2-BUTTON DIMMING DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR ★★
- SECURITY DOOR CONTACTS
- MD — SECURITY MOTION DETECTOR
- SC — CCTV CAMERA
- KP — SECURITY SYSTEM KEYPAD
- PA/CLOCK PUSHBUTTON
- CH — DOOR CHIME WITH LED
- RECEPTACLE - DUPLEX★
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
- GFCI CONVENIENCE RECEPTACLE - DUPLEX★
- GFCI CONVENIENCE DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
- RECEPTACLE DOUBLE DUPLEX★
- HALF SWITCHED DUPLEX RECEPTACLE ★
- SINGLE RECEPTACLE★
- DUPLEX RECEPTACLE - CEILING MOUNTED
- HC — LETTER INDICATES DUPLEX HALF CONTROLLED RECEPTACLE ★
- C — LETTER INDICATES DUPLEX FULLY CONTROLLED RECEPTACLE ★
- FLOOR MOUNTED DUPLEX RECEPTACLE
- FLOOR MOUNTED BOX
- POWER OUTLET - SEE PLANS FOR NEMA TYPE★
- POWER POLE
- WALL TELEPHONE OUTLET ★★
- [#] — VOICE/DATA WALL OUTLET★
- [#] — VOICE/DATA OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
- [#] — SURFACE MOUNTED VOICE/DATA WALL OUTLET ★
- [#] — SURFACE MOUNTED VOICE/DATA OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
- WIRELESS ACCESS POINT (WAP) - CEILING MOUNTED
- WIRELESS ACCESS POINT (WAP) - WALL MOUNTED - FIELD VERIFY HEIGHT
- [#] — VOICE/DATA OUTLET - FLOOR MOUNTED
- TV OUTLET★
- [#] — VOICE/DATA OUTLET - CEILING MOUNTED
- S — INTERIOR SPEAKERS CEILING MOUNTED
- S — INTERIOR SPEAKERS WALL MOUNTED
- C — CLOCK +8'-0" AFF U.O.N. VERIFY BEFORE INSTALLATION
- PANELBOARD - FLUSH MOUNTED
- EQUIPMENT PANEL - FLUSH MOUNTED
- PANELBOARD - SURFACE MOUNTED
- EQUIPMENT PANEL - SURFACE MOUNTED
- M — METER W/ CURRENT TRANSFORMER
- J — JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
- MOTOR CONNECTION
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH; FUSED WITH DUAL-ELEMENT FUSES SIZED PER EQUIPMENT MFGR'S NAMEPLATE DATA
- COMBINATION STARTER/FUSED DISCONNECT SWITCH; FUSED DISCONNECT SWITCH ELEMENT FUSES SIZED PER EQUIPMENT MF'GRS NAMEPLATE DATA
- MAGNETIC STARTER - NEMA SIZE INDICATED NEMA 3R ENCLOSURE UNLESS OTHERWISE SPECIFIED
- CIRCUIT BREAKER
- GROUND ROD WITH GROUNDWELL BOX
- GROUND ELECTRODE
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- TRANSFORMER - SEE SINGLE LINE FOR SIZE
- PULLBOX
- FLEX CONDUIT WITH CONNECTION
- CONDUIT - UP
- CONDUIT - DOWN
- E — CONDUIT EMERGENCY SYSTEM
- LV — LOW VOLTAGE WIRING
- SURFACE METAL OR NON-METALLIC RACEWAY
- CONDUIT - CONCEALED IN WALLS OR CEILING
- CONDUIT - EXISTING
- CONDUIT - BELOW SLAB OR UNDERGROUND: 3/4"MIN.
- CAPPED OR STUB-OUT CONDUIT
- CONDUIT CONTINUATION
- #10 — CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES 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.
- 2 — SHEET NOTE REFERENCE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET
- 3 — SCHEDULE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET
- 2 — DETAIL NOTE REFERENCE SYMBOL SEE ASSOCIATED NOTE ON SAME DETAIL
- F301 — FEEDER DESIGNATION; SEE ASSOCIATED NOTE ON SAME DETAIL
- 1 / E3.0 — DETAIL NUMBER; DETAIL OR SECTION REFERENCE; SHEET NUMBER
- 1 — INDICATES QUANTITY OF TELEPHONE OUTLETS
- 2 — INDICATES QUANTITY OF DATA OUTLETS

ABBREVIATIONS

A	AMPERE	GFCI	GROUND FAULT INTERRUPTING	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	GFI	GROUND	OAH	OVERALL HEIGHT
ALUM/AL	ALUMINUM	GND, G	GALVANIZED RIGID STEEL	OC	ON CENTER
ARCH	ARCHITECT	GRS	HEIGHT	OH	OVERHEAD
AWG	AMERICAN WIRE GAUGE	HT	INTERCOM	PA	PUBLIC ADDRESS
BKR	BREAKER	IC	INTERMEDIATE DISTRIBUTION FRAME	PB	PULL BOX
C	CONDUIT	IDF	INCANDESCENT	PF	POWER FACTOR
CATV	CABLE TV	INCAND	JUNCTION BOX	PH	PHASE
CB	CIRCUIT BREAKER	JB	KILOVOLT	PIR	PASSIVE INFRARED
CCTV	CLOSED CIRCUIT TV	KV	KILOVOLT AMPERES	PNL	PANEL
CKT	CIRCUIT	KVA	KILOWATT	PV	PHOTOVOLTAIC
CL	CENTER LINE	KW	LIGHTING CONTROL PANEL	PVC	POLYVINYL CHLORIDE
CLG	CEILING	LCP	LIGHTING	PWR	POWER
C.O.	CONDUIT ONLY	LTG	LOW VOLTAGE	(R)	RELOCATED
CTR	CENTER	LV	THOUSAND CIRCULAR MILS	(RP)	REMOVABLE POLE
D	DIMMER	KCM	MAIN CIRCUIT BREAKER	RECPT'S	RECEPTACLES
DIM	DIMENSION	M.B.	MINIMUM CIRCUIT AMPS	REQD	REQUIRED
DIST	DISTRIBUTION	MCA	MAIN DISTRIBUTION FRAME	REQMT'S	REQUIREMENT(S)
(E)	EXISTING	MDF	MECHANICAL	SHT	SHEET
EC	ELECTRICAL CONTRACTOR	MECH	METAL HALIDE	SLD	SINGLE LINE DIAGRAM
(EL)	EVENING LIGHT	MH	MAIN LUGS ONLY	STC	SYSTEMS TERMINATION CABINET
EM	EMERGENCY	MLO	MAIN POINT OF ENTRANCE	SW	SWITCH
EMT	ELECTRICAL METALLIC TUBING	MPOE	MOUNTED	SWBD	SWITCHBOARD
EQUIP	EQUIPMENT	MTD	MOUNTING	TTB	TELEPHONE TERMINAL BACKBOARD
EV	ELECTRICAL VEHICLE	MTG	MAXIMUM OVER CURRENT PROTECTION	TYP	TYPICAL
FA	FIRE ALARM	MOCP	NEW	UON	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	(N)	NOT IN CONTRACT	UG	UNDERGROUND
FC	FOOT CANDLE	NIC	NOT IN ELECTRICAL CONTRACT	V	VOLT
FIN	FINISH	NIEC	NIGHT LIGHT	VD	VOLTAGE DROP
FL	FLOOR	(NL)	NUMBER	W	WATT
FLA	FULL LOAD AMPS	NO.	NOMINAL	W/	WITH
FLUOR	FLUORESCENT	NOM		WP	WEATHERPROOF
(F)	FUTURE			XFMR	TRANSFORMER
GC	GENERAL CONTRACTOR				

FIRE ALARM

NOTE: SEE FIRE ALARM DRAWINGS FOR QUANTITIES AND MOUNTING HEIGHTS.

- P — MANUAL PULL STATION
- STROBE ONLY
- HORN ONLY
- M — MINI HORN
- HORN/STROBE
- CHIME/STROBE
- HEAT DETECTOR
- SMOKE DETECTOR
- CO — CARBON MONOXIDE ALARM
- DUCT SMOKE DETECTOR
- TAMPER SWITCH
- FLOW SWITCH
- POST INDICATING VALVE
- FIRE SMOKE DAMPER
- BELL (GONG)
- FCP — FIRE ALARM CONTROL PANEL
- APS — AUXILIARY POWER SUPPLY
- FSA — FIRE SYSTEM ANNUNCIATOR
- FTR — FIRE ALARM TRANSPONDER OR TRANSMITTER
- ESR — ELEVATOR STATUS/RECALL
- FAC — FIRE ALARM COMMUNICATOR
- ANN — REMOTE ANNUNCIATORS
- EOL — END OF LINE

★ +15" A.F.F. TO BOTTOM OF BOX, U.O.N.
★★ +48" A.F.F. TO TOP OF BOX, U.O.N.

[#] NUMBER IN BRACKETS DENOTES NUMBER OF CABLE DROPS WHEN MORE THAN (2).

EQUIPMENT ANCHORAGE

M/E/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 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 IS 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 BE DETAILED IN THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FELXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.

A. COMPONENTS WEIGHTING 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 WEIGHTING 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, 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 PRE-APPROVED INSTALLATION GUIDE (e.g. 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 #) #_____.

APPLICABLE CODES & STANDARDS

CODES:

1. 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
2. 2019 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)

SHEET INDEX

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.

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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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

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PROJECT

L-1177 Industrial Trades Labs Renovation

2700 EAST LELAND ROAD
PITTSBURG, CA 94565

PROJECT NO: 121030

DRAWN BY: CADD	CHECKED BY: NA
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE
SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, NOTES & SHEET INDEX

SHEET NUMBER E0.1

ISSUE

SCALE CHECK 1 in

G:\Projects\19\jobs\19598.00 LMC Industrial Trades Renovation\Dwgs\011195980.1.dwg, 7/1/2020 5:55:14 AM
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STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 1 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

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.

A. GENERAL INFORMATION

01	Project Location (city)	Pittsburg	04	Total Conditioned Floor Area (ft^2)	3,486
02	Climate Zone	12	05	Total Unconditioned Floor Area (ft^2)	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	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft^2)	Calculation Method	Area (ft^2)
☐ New Lighting System				
☑ Altered Lighting System	Area Category	3,486		
Total Area of Work (ft^2)	**3,486**			

C. COMPLIANCE RESULTS

Table Instructs: 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)						Adjusted Lighting Power per §140.6(a) (Watts)					Compliance Results
	01	02	03	04		05	06	07		08		09
	Complete Building §140.6(c)1	Area Category §140.6(c)2	Area Category Additional §140.6(c)2G (+)	Tailored §140.6(c)3 (+)	=	**Total Allowed** (Watts)	≥ Total Designed (Watts)	Adjustments: PAF Control Credits §140.6(a)2 (-)	=	**Total Adjusted** (Watts) *Includes Adjustments		**05 Must be ≥ 08** §140.6
	(See Table I)	(See Table I)	(See Table J)	(See Table K)			(See Table F)	(See Table P)				
Conditioned:		2,415.1			=	**2,415.1**	≥ 2,345.1		=	**2,345.1**		**COMPLIES**
Unconditioned:					=		≥		=			

Table Continued

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

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 2 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

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.

E. ADDITIONAL REMARKS

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

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[1]	Watts per luminaire[2]	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)3	Design Watts	Field Inspector: Pass	Fail
A1	1' x 4' Surface LED	☐	☐	26.7	Mfr. Spec[2]	1	☐	26.7	☐	☐
A1E	1' x 4' Surface LED EM	☐	☐	26.7	Mfr. Spec[2]	2	☐	53.4	☐	☐
A2	2' x 4' Surface LED	☐	☐	41.6	Mfr. Spec[2]	9	☐	374.4	☐	☐
A2E	2' x 4' Surface EM	☐	☐	41.6	Mfr. Spec[2]	9	☐	374.4	☐	☐
A3	2' x 2' Surface LED	☐	☐	26.6	Mfr. Spec[2]	57	☐	1,516.2	☐	☐
							Total Designed Watts CONDITIONED SPACES:	**2,345.1**		

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

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 3 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

[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.

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 * 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 §110.12(c)	Shut-Off Controls §130.1(c)	Field Inspector: Pass	Fail
Not Required ≤ 10,000 SF	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 §130.1(a)	Multi-Level Controls §130.1(b)	Shut-Off Controls §130.1(c)	Primary/Skylit Daylighting §130.1(d)	Secondary Daylighting §140.6(d)	Interlocked Systems §140.6(a)1	Field Inspector: Pass	Fail
Appliance Lab 101	Classroom, Lecture, Training, Vocational	Auth. Personel	Dimmer	Exempt*	NA	NA	☐	☐	☐
HVAC Lab 102	Classroom, Lecture, Training, Vocational	Auth. Personel	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	☐	☐	☐

*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)2

13	
Plan Sheet Showing Daylit Zones:	
N/A	
Appliance Lab 101	*Shut-Off: Exempt because life safety.*

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

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 4 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

HVAC Lab 102	*Shut-Off: Exempt because life safety.*
Hallway 104	*Shut-Off: Dim to 50% when unoccupied.*

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/ft^2)	Area (ft^2)	Allowed Wattage (Watts)	Additional Allowances / Adjustment: Area Category	PAF
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

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

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 5 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

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

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://ww2.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

YES	NO	Form/Title	Field Inspector: Pass	Fail
◉	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐	☐
◉	○	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-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.	☐	☐
○	◉	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐	☐

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

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 6 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

○	◉	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐	☐

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: Pass	Fail
○	◉	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐	☐
○	◉	NRCA-LTI-03-A - Must be submitted for automatic daylight 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
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Vocational Labs	Report Page: Page 7 of 7
Project Address: 2700 East Leland Road, Pittsburg, CA 94565	Date Prepared: 06/30/2020

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

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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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

NAJIB ANWARY No. E21043 Exp. 3/31/21 LICENSED PROFESSIONAL ENGINEER STATE 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 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
CHECKED BY: NA
PROJECT MGR: ARCHITECTURAL
APPROVED BY: Approver

SHEET TITLE
CALIFORNIA ENERGY COMPLIANCE TITLE 24 - INDOOR

SHEET NUMBER E0.2
ISSUE

SCALE CHECK 1 in.

G:\Projects19\jobs\19598.00 LMC Industrial Trades Renovation\Dwgs01\19598D2.dwg, 7/1/2020 5:55:24 AM
2020-01-20 3:32:16 PM
j:\121030_CCC_LMCCheckSet\9 Drawings\Architecture\A_Building_v2018_2019-4-28.rvt

PANELBOARD SCHEDULES

PANEL ALLA

Voltage:	120/208V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	M.L.O.
Bussing:	100A
Feed:	TOP
Mounting:	SURFACE
A.I.C.	10,000

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load
RECEPT - APPLIANCE LAB 101	900			20/1	1		2	20/1	900			RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101		900		20/1	3		4	20/1		900		RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101			900	20/1	5		6	20/1			900	RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101	900			20/1	7		8	20/1	900			RECEPT - HVAC LAB 102
RECEPTS - APPLIANCE LAB 101		360		20/1	9		10	20/1		900		RECEPT - HVAC LAB 102
RECEPTS - OFFICE 103			720	20/1	11		12	20/1			900	RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101	900			20/1	13		14	20/1	900			RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101		900		20/1	15		16	20/1		900		RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101			900	20/1	17		18	20/1			360	RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101	900			20/1	19		20	20/1	900			RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101		900		20/1	21		22	20/1		900		RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101			900	20/1	23		24	20/1			900	RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101	900			20/1	25		26	20/1	900			RECEPT - HVAC LAB 102
RECEPT - APPLIANCE LAB 101		900		20/1	27		28	20/1		900		RECEPT - HVAC LAB 102
RECEPTS - APPLIANCE LAB 101			360	20/1	29		30	20/1			900	RECEPT - HVAC LAB 102
SPACE ONLY				-	31		32	20/1	900			RECEPT - HVAC LAB 102
SPACE ONLY				-	33		34	20/1		360		RECEPTS - HVAC LAB 102
SPACE ONLY				-	35		36	-				SPACE ONLY
SPACE ONLY				-	37		38	-				SPACE ONLY
SPACE ONLY				-	39		40	-				SPACE ONLY
SPACE ONLY				-	41		42	-				SPACE ONLY
	4500	3960	3780						5400	4860	3960	

1. SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.
2. LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CEC 110-24.

KVA Phase A	9.9
KVA Phase B	8.8
KVA Phase C	7.7
Total Connected Load KVA	26.5
Total Load Amperes	74

DISTRIBUTION PANEL AL1

Voltage:	120/208V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	600/3 100% RATED
Bussing:	600A
Feed:	TOP
Mounting:	SURFACE
A.I.C.	18,000

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load
BUSWAY - APPLIANCE LAB 101	12033			150/3	1		2	-				SPACE ONLY
BUSWAY - APPLIANCE LAB 101		12033			3		4	-				SPACE ONLY
BUSWAY - APPLIANCE LAB 101			12033		5		6	-				SPACE ONLY
SPACE ONLY				-	7		8		12033			BUSWAY SYSTEM - HVAC LAB 102
SPACE ONLY				-	9		10	150/3		12033		BUSWAY SYSTEM - HVAC LAB 102
SPACE ONLY				-	11		12				12033	BUSWAY SYSTEM - HVAC LAB 102
BUSWAY - APPLIANCE LAB 101	12033			150/3	13		14	-				SPACE ONLY
BUSWAY - APPLIANCE LAB 101		12033			15		16	-				SPACE ONLY
BUSWAY - APPLIANCE LAB 101			12033		17		18	-				SPACE ONLY
SPACE ONLY				-	19		20		12033			BUSWAY SYSTEM - HVAC LAB 102
SPACE ONLY				-	21		22	150/3		12033		BUSWAY SYSTEM - HVAC LAB 102
SPACE ONLY				-	23		24				12033	BUSWAY SYSTEM - HVAC LAB 102
BUSWAY - APPLIANCE LAB 101	12033			150/3	25		26	-				SPACE ONLY
BUSWAY - APPLIANCE LAB 101		12033			27		28	-				SPACE ONLY
BUSWAY - APPLIANCE LAB 101			12033		29		30	-				SPACE ONLY
EXHAUST FAN REF-101	566			15/3	31		32	-				SPACE ONLY
EXHAUST FAN REF-101		566			33		34	-				SPACE ONLY
EXHAUST FAN REF-101			566		35		36	-				SPACE ONLY
SPACE ONLY				-	37		38	-				SPACE ONLY
SPACE ONLY				-	39		40	-				SPACE ONLY
SPACE ONLY				-	41		42	-				SPACE ONLY
	36665	36665	36665						24066	24066	24066	

1. SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.
2. LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CEC 110-24.

KVA Phase A	60.7
KVA Phase B	60.7
KVA Phase C	60.7
Total Connected Load KVA	182.2
Total Load Amperes	506

(E) DISTRIBUTION SWBD ASHA

Voltage:	277/480V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	M.L.O.
Bussing:	600A
Feed:	EXISTING
Mounting:	EXISTING
A.I.C.	EXISTING

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load	
LTG-STORAGE	1000			20/1	1		2	20/1	2150			LTG-AUTO SHOP	
2 LTG-LABS 4 CORRIDOR		2345		20/1	3		4	20/1		2150		LTG-AUTO SHOP	
SPARE				20/1	5		6	20/1			2100	LTG-RMS 8,9,10,11,12	
SPARE				20/1	7		8	20/1	1300			LTG-APPLIANCE LAB/HALL	
SPARE				20/1	9		10	20/1		1300		LTG-APPLIANCE LAB/HALL OUTDOOR	
SPARE				20/1	11		12	20/1				SPARE	
SPARE				20/1	13		14	20/1				SPARE	
SPARE				20/1	15		16	20/1				SPARE	
SPARE				20/1	17		18	20/1				SPARE	
SPARE				20/1	19		20		6646			AIR COMPRESSOR	
SPARE				20/1	21		22	30/3		6646		AIR COMPRESSOR	
SPARE				20/1	23		24				6646	AIR COMPRESSOR	
AUTO SHOP TEMP A/C	0				25		26		94693			XFMR T1 FEEDS ASLA	2
AUTO SHOP TEMP A/C		0		150/3	27		28	400/3		88577		XFMR T1 FEEDS ASLA	2
AUTO SHOP TEMP A/C			0		29		30				88767	XFMR T1 FEEDS ASLA	2
	1000	2345	0						104769	98673	97513		

1. U.O.N., ALL BREAKERS AND LOADS SHOWN ARE EXISTING.
2. EXISTING BREAKER, NEW LOAD.
3. NEW BREAKER, NEW LOAD.

KVA Phase A	105.8
KVA Phase B	101.0
KVA Phase C	97.5
Total Connected Load KVA	304.3
Total Load Amperes	366

(E) PANEL ASLA

Voltage:	120/208V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	600/3
Bussing:	600A
Feed:	EXISTING
Mounting:	EXISTING
A.I.C.	EXISTING

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load	
UH-1 & UH-2	1730			20/1	1		2	20/1	1730			UH-3 & UH-4	
EF-5		1180		20/1	3		4	20/1				SPARE	
EF-2			765	20/2	5		6	20/2			765	EF-3	
EF-2	765				7		8		765			EF-3	
EF-6 & EF-7		1400		20/1	9		10	20/1		900		ANDOVER CONTROLS	
ROOF RECEPTS			1000	20/1	11		12	20/1				SPARE	
RECEPTS-STOR. 12 & HALL 6	1000			20/1	13		14	20/1				SPARE	
RECEPTS-TOOL ROOM		800		20/1	15		16	20/1		1100		RECEPTS & EF-8	
FA TOOL RM ROLL UP DOORS			900	20/1	17		18	20/1			1100	RECEPTS & EF-8	
SPARE				30/2	19		20	20/2				SPARE	
SPARE					21		22					SPARE	
SPARE				20/1	23		24	20/1				SPARE	
AC-2	4666				25		26	20/1	900			GFI CONEX	
AC-2		4666		60/3	27		28	20/1				SPARE	
AC-2			4666		29		30	20/1			900	AIR DRYER	
2 PANEL ALLB	22080				31		32		11000			PANEL ASLC	
2 PANEL ALLB		21230		225/3	33		34	225/3		11000		PANEL ASLC	
2 PANEL ALLB			20134		35		36				11000	PANEL ASLC	
2 PANEL ALL	32724				37		38		17333			PANEL ASLB	
2 PANEL ALL		28065		400/3	39		40	225/3		17333		PANEL ASLB	
2 PANEL ALL			30204		41		42				17333	PANEL ASLB	
	62965	58244	57669						31728	30333	31098		

1. U.O.N., ALL BREAKERS AND LOADS SHOWN ARE EXISTING.
2. EXISTING BREAKER, NEW LOAD.
3. NEW BREAKER, NEW LOAD.

DEMAND LOAD CALCS	
NON-CONTINUOUS LOADS @100%	243,939
RECEPTACLE LOADS; 1ST 10KVA @100%	2,800
RECEPTACLE LOADS; REMAINDER @50%	0
LIGHTING LOADS	
LIGHTING LOADS @100%	0
MECHANICAL LOADS CEC 430.24	
LARGEST LOAD @125%	17,498
REMAINING @ 100 %	11,300
TOTAL DEMAND LOAD (KVA)	275,537
DEMAND LOAD @120/208V, 3 PHASE (AMPS)	**763**

KVA Phase A	94.7
KVA Phase B	86.6
KVA Phase C	88.8
Total Connected Load KVA	272.0
Total Load Amperes	754

(E) PANEL ALLB

Voltage:	120/208V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	M.L.O.
Bussing:	225A
Feed:	EXISTING
Mounting:	EXISTING
A.I.C.	EXISTING

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load	
SPARE				20/1	1		2	30/2	2500			FURNIAC CONDENSOR 7	
SPARE				20/1	3		4			2500		FURNIAC CONDENSOR 7	
SPARE				20/1	5		6	30/2			2500	FURNIAC CONDENSOR 8	
SPARE				20/1	7		8		2500			FURNIAC CONDENSOR 8	
SPARE				20/1	9		10	30/2		2500		FURNIAC CONDENSOR 9	
SPARE				20/1	11		12				2500	FURNIAC CONDENSOR 9	
SPARE				20/1	13		14	30/2	2500			FURNIAC CONDENSOR 10	
SPARE				20/1	15		16			2500		FURNIAC CONDENSOR 10	
CE MAKER			1800	25/1	17		18	20/2			2100	WALK-IN FREEZER CONDENSOR 6	
SPARE				25/1	19		20		2100			WALK-IN FREEZER CONDENSOR 6	
2 RECEPT - HVAC LAB 102		2496		30/2	21		22	15/2		1250		WALK-IN REF. CONDENSOR 6	
2 RECEPT - HVAC LAB 102			2496		23		24				1250	WALK-IN REF. CONDENSOR 6	
3 RECEPT - HVAC LAB 102	2496			30/2	25		26	30/2	2496			RECEPT - HVAC LAB 102	3
3 RECEPT - HVAC LAB 102		2496			27		28			2496		RECEPT - HVAC LAB 102	3
3 RECEPT - HVAC LAB 102			2496	30/2	29		30	30/2			2496	RECEPT - HVAC LAB 102	3
3 RECEPT - HVAC LAB 102	2496				31		32		2496			RECEPT - HVAC LAB 102	3
3 RECEPT - HVAC LAB 102		2496		30/2	33		34	20/1				SPARE	
3 RECEPT - HVAC LAB 102			2496		35		36	20/1				SPARE	
3 RECEPT - HVAC LAB 102	2496			30/2	37		38	20/1				SPARE	
3 RECEPT - HVAC LAB 102		2496			39		40	20/1				SPARE	
SPARE				20/1	41		42	20/1				SPARE	
	7488	9984	9288						14592	11246	10846		

1. U.O.N., ALL BREAKERS AND LOADS SHOWN ARE EXISTING.
2. EXISTING BREAKER, NEW LOAD.
3. NEW BREAKER, NEW LOAD.

DEMAND LOAD CALCS	
NON-CONTINUOUS LOADS @100%	0
RECEPTACLE LOADS; 1ST 10KVA @100%	10,000
RECEPTACLE LOADS; REMAINDER @50%	12,472
LIGHTING LOADS	
LIGHTING LOADS @100%	0
MECHANICAL LOADS CEC 430.24	
LARGEST LOAD @125%	6,250
REMAINING @ 100 %	23,500
TOTAL DEMAND LOAD (KVA)	52,222
DEMAND LOAD @120/208V, 3 PHASE (AMPS)	**145**

KVA Phase A	22.1
KVA Phase B	21.2
KVA Phase C	20.1
Total Connected Load KVA	63.4
Total Load Amperes	176

(E) PANEL ALL

Voltage:	120/208V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	M.L.O.
Bussing:	400A
Feed:	EXISTING
Mounting:	EXISTING
A.I.C.	EXISTING

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load	
2 RECEPTS- HALLWAY 104	360			20/1	1		2	30/2	2496			RECEPT - APPLIANCE LAB 101	3
2 RECEPTS- UNISEX 105		180		20/1	3		4			2496		RECEPT - APPLIANCE LAB 101	3
2 RECEPT- HVAC LAB 102			2496	30/2	5		6	30/2			2496	RECEPT - APPLIANCE LAB 101	3
2 RECEPT- HVAC LAB 102	2496				7		8		2496			RECEPT - APPLIANCE LAB 101	3
3 RECEPT- HVAC LAB 102		2496		30/2	9		10	30/2		2496		RECEPT - APPLIANCE LAB 101	2
3 RECEPT- HVAC LAB 102			2496		11		12				2496	RECEPT - APPLIANCE LAB 101	2
2 RECEPT- HVAC LAB 102	2496			30/2	13		14	30/2	2496			RECEPT - APPLIANCE LAB 101	2
2 RECEPT- HVAC LAB 102		2496			15		16			2496		RECEPT - APPLIANCE LAB 101	2
2 RECEPT- HVAC LAB 102			2496	30/2	17		18	30/2			2496	RECEPT - APPLIANCE LAB 101	2
2 RECEPT- HVAC LAB 102	2496				19		20		2496			RECEPT - APPLIANCE LAB 101	2
SPARE				20/1	21		22	30/2		2496		RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	23		24				2496	RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	25		26	30/2	2496			RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	27		28			2496		RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	29		30	30/2			2496	RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	31		32		2496			RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	33		34	30/2		2496		RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	35		36				2496	RECEPT - APPLIANCE LAB 101	3
SPARE				20/1	37		38		9900			PANEL ALLA	3
SPARE				20/1	39		40	100/3		6820		PANEL ALLA	3
SPARE				20/1	41		42				7740	PANEL ALLA	3
	7848	5172	7488						24876	23796	22716		

1. U.O.N., ALL BREAKERS AND LOADS SHOWN ARE EXISTING.
2. EXISTING BREAKER, NEW LOAD.
3. NEW BREAKER, NEW LOAD.

DEMAND LOAD CALCS	
NON-CONTINUOUS LOADS @100%	0
RECEPTACLE LOADS; 1ST 10KVA @100%	10,000
RECEPTACLE LOADS; REMAINDER @50%	40,948
LIGHTING LOADS	
LIGHTING LOADS @100%	0
MECHANICAL LOADS CEC 430.24	
LARGEST LOAD @125%	0
REMAINING @ 100 %	0
TOTAL DEMAND LOAD (KVA)	50,948
DEMAND LOAD @120/208V, 3 PHASE (AMPS)	**141**

KVA Phase A	32.7
KVA Phase B	29.0
KVA Phase C	30.2
Total Connected Load KVA	91.9
Total Load Amperes	255

DISTRIBUTION PANEL LMLH

Voltage:	277/480V,3ø
Wire:	4W
Type:	NEMA 3R
Mains:	400/3
Bussing:	600A
Feed:	TOP
Mounting:	SURFACE
A.I.C.	22,000

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load
SPARE				20/1	1		2	-				SPACE ONLY
SPARE				20/1	3		4	-				SPACE ONLY
SPARE				20/1	5		6	-				SPACE ONLY
SPARE				20/1	7		8	-				SPACE ONLY
SPARE				20/1	9		10	-				SPACE ONLY
SPACE ONLY				-	11		12	-				SPACE ONLY
SPACE ONLY				-	13		14	-				SPACE ONLY
SPACE ONLY				-	15		16	-				SPACE ONLY
SPACE ONLY				-	17		18	-				SPACE ONLY
SPACE ONLY				-	19		20	-				SPACE ONLY
SPACE ONLY				-	21		22	-				SPACE ONLY
SPACE ONLY				-	23		24	-				SPACE ONLY
SPACE ONLY				-	25		26	-	G073.1			XFMR T-AL/DIST. PANEL AL1
SPACE ONLY				-	27		28	300/3		G073.1		XFMR T-AL/DIST. PANEL AL1
SPACE ONLY				-	29		30				G073.1	XFMR T-AL/DIST. PANEL AL1
	0	0	0						G073.1	G073.1	G073.1	

1. SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.
2. LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CEC 110-24.

KVA Phase A	60.7
KVA Phase B	60.7
KVA Phase C	60.7
Total Connected Load KVA	182.2
Total Load Amperes	219

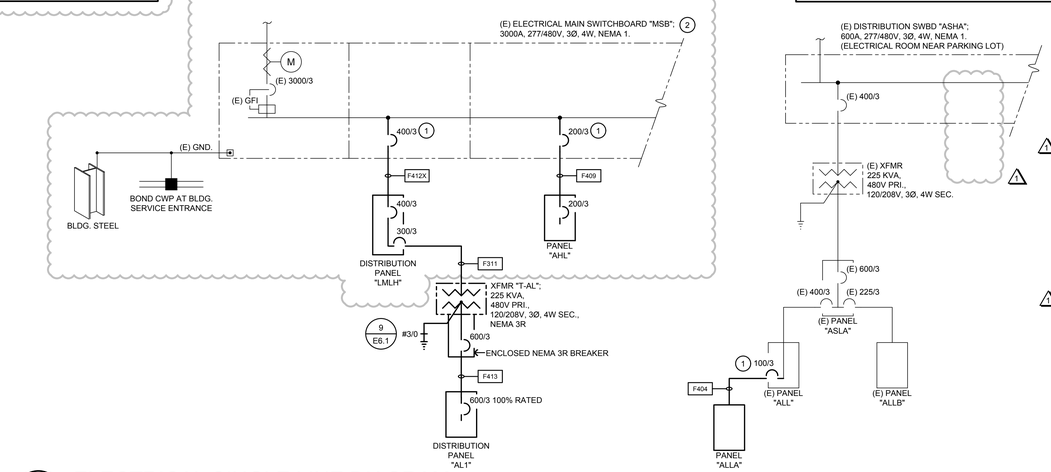
PANEL AHL

Voltage:	277/480V,3ø
Wire:	4W
Type:	NEMA 1
Mains:	M.L.O.
Bussing:	225A
Feed:	TOP
Mounting:	SURFACE
A.I.C.	10,000

Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load	
3 SPACE ONLY				-	1		2	-				SPACE ONLY	3
3 SPACE ONLY				-	3		4	-				SPACE ONLY	3
3 SPACE ONLY				-	5		6	-				SPACE ONLY	3
3 SPACE ONLY				-	7		8	-				SPACE ONLY	3
3 SPACE ONLY				-	9		10	-				SPACE ONLY	3
3 SPACE ONLY				-	11		12	-				SPACE ONLY	3
3 SPACE ONLY				-	13		14	-				SPACE ONLY	3
3 SPACE ONLY				-	15		16	-				SPACE ONLY	3
3 SPACE ONLY				-	17		18	-				SPACE ONLY	3
SPACE ONLY				-	19		20	-				SPACE ONLY	
SPACE ONLY				-	21		22	-				SPACE ONLY	
SPACE ONLY				-	23		24	-				SPACE ONLY	
SPACE ONLY				-	25		26	-				SPACE ONLY	
SPACE ONLY				-	27		28	-				SPACE ONLY	
SPACE ONLY				-	29		30	-				SPACE ONLY	
SPACE ONLY				-	31		32	-				SPACE ONLY	
SPACE ONLY				-	33		34	-				SPACE ONLY	
SPACE ONLY				-	35		36	-				SPACE ONLY	
SPACE ONLY				-	37		38	-				SPACE ONLY	
SPACE ONLY				-	39		40	-				SPACE ONLY	
SPACE ONLY				-	41		42	-				SPACE ONLY	
	0	0	0						0	0	0		

1. SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.
2. LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CEC 110-24.
3. FOR FUTURE CONNECTIONS.

KVA Phase A	0.0
KVA Phase B	0.0
KVA Phase C	0.0
Total Connected Load KVA	0.0
Total Load Amperes	0



1 ELECTRICAL SINGLE LINE DIAGRAM

NO SCALE

DETAIL NOTES:

1. PROVIDE & INSTALL NEW BREAKER AND ASSOCIATED MOUNTING HARDWARE. NEW BREAKER SHALL MATCH EXISTING IN RATING AND TYPE.
2. CONTRACTOR SHALL COORDINATE SHUT-OFF WITH PG&E FOR NEW WORK IF REQUIRED CONTRACTOR SHALL COORDINATE WITH DISTRICT TO MINIMIZE DOWNTIME. WHERE DOWNTIME IS GREATER THAN 24-HOURS, CONTRACTOR SHALL PROVIDE AS PART OF BID, SEPARATE LINE ITEM FOR TEMPORARY 500KW GENERATOR FOR MINIMUM 7 DAYS TO SUPPORT SITE DURING DURING EXISTING MAIN SWITCHBOARD "MSB" DOWNTIME.

FEEDER SCHEDULE

DESIGNATION	AMPACITY	CONDUIT & CONDUCTORS SIZES
F311	300	3" C., 3 #350kcm & 1 #4 GND.
F404	100	1 1/2" C., 4 #2 & 1 #8 GND.
F409	225	2 1/2" C., 4 #4/0 & 1 #4 GND.
F412X	450	(2) 2 1/2" C., EACH W/4 #4/0 & 1 #4 GND (PARALLEL).
F413	600	(2) 3 1/2" C., EACH W/4 #350kcm & 1 #2/0 GND (PARALLEL).

SINGLE LINE DIAGRAM LEGEND

- (EXISTING)
- (NEW)
- (E) FLOOR/PAD MOUNTED EQUIPMENT
- (N) FLOOR/PAD MOUNTED EQUIPMENT

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ISSUES

No.	DESCRIPTION	DATE
1	ADDENDUM 1	03/11/2021

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PROJECT MGR: **ARCHITECTURAL**	APPROVED BY: **Approver**

SHEET TITLE

ELECTRICAL SINGLE LINE DIAGRAM & PANELBOARD SCHEDULES

SHEET NUMBER

AD1-E1.1

ISSUE

SCALE CHECK 1 in.

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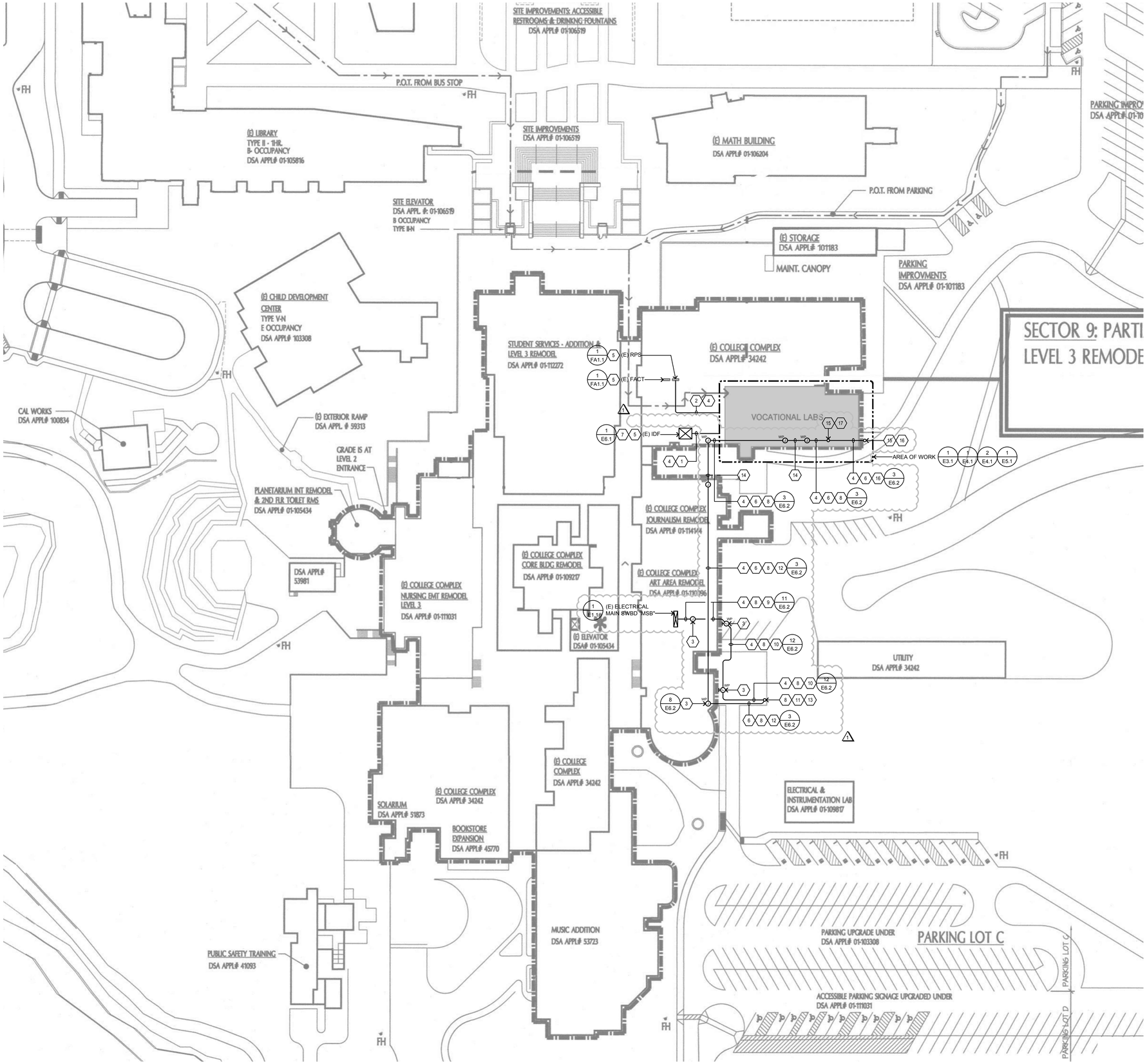

1 ELECTRICAL SITE PLAN

SCALE: 1"=30'-0"

SHEET NOTES

1. PROVIDE & INSTALL (2) 2"C. FOR TELE/DATA CABLES. STUB (1) 2"C. AT PULLCAN IN EACH LAB. SEE E4.1 FOR LOCATION. SEAL ALL PENETRATIONS AS NECESSARY BETWEEN EXISTING IDF AND PULLCANS AT EACH LAB. CONTRACTOR SHALL PROVIDE & INSTALL MINIMUM (1) 24" SQ. x 6" DEEP NEMA 1 PULLCAN TO NOT EXCEED 360 DEGREES IN CONDUIT BENDS.
2. PROVIDE & INSTALL (1) 1"C. FOR FIRE ALARM CABLES. STUB (1) 1"C. AT PULLCAN IN EACH LAB. SEE E4.1 FOR LOCATION. SEAL ALL PENETRATIONS AS NECESSARY BETWEEN EXISTING RPS AND PULLCANS AT EACH LAB. CONTRACTOR SHALL PROVIDE & INSTALL MINIMUM (1) 24" SQ. x 6" DEEP NEMA 1 PULLCAN TO NOT EXCEED 360 DEGREES IN CONDUIT BENDS.
3. PROVIDE & INSTALL 32" SQ. x 8" DEEP NEMA 4 PULLCAN. 1
4. CONTRACTOR SHALL X-RAY CONCRETE WALL/ROOF WHEN CORE DRILL PENETRATION ARE NECESSARY PRIOR TO ROUGH-IN. SEAL ALL PENETRATIONS AS NECESSARY.
5. FIELD VERIFY EXACT LOCATION.
6. ROUTE FEEDER ON ROOF.
7. PROVIDE & INSTALL ADDITIONAL PATCH PANEL AS NECESSARY FOR ALL NEW CABLE CONNECTIONS. 1
8. PROVIDE & INSTALL FEEDERS FOR DISTRIBUTION PANEL "LMLH" & PANEL "AHL". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR FEEDERS SIZE AND REQUIREMENTS.
9. CONTRACTOR SHALL MOUNT NEW FEEDERS/CONDUITS AT INDOOR CEILING.
10. CONTRACTOR SHALL MOUNT NEW FEEDERS/CONDUITS ALONG EXTERIOR WALL.
11. CONTRACTOR SHALL MOUNT NEW FEEDERS CONDUITS VIA EXISTING CHASE TO ROOF. SUPPORT AS NECESSARY PER CEC/NEC REQUIREMENTS.
12. CONTRACTOR SHALL AVOID DAMAGE TO EXISTING ROOF CONDUITS/PIPES. FIELD COORDINATE ROUGH-IN PRIOR TO INSTALL.
13. CONTRACTOR SHALL FLEX SEAL WATERTIGHT WHERE NECESSARY. INSTALL SHALL BE CEC/NEC COMPLIANT.
14. CONTRACTOR SHALL PROVIDE & INSTALL PULLCANS AND FLEX CONDUIT BETWEEN WHERE SEISMIC TRANSITIONS OCCUR. INCLUDE MINIMUM (2) PULLCANS.
15. SEE 1/E4.1 FOR CONTINUATION.
16. PROVIDE & INSTALL FEEDERS FOR DISTRIBUTION PANEL "LMLH". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR FEEDERS SIZE AND REQUIREMENTS.
17. PROVIDE & INSTALL FEEDERS FOR PANEL PANEL "AHL". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR FEEDERS SIZE AND REQUIREMENTS.

GENERAL NOTE:

SEAL ALL INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY.

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PROJECT NO: 121030	
DRAWN BY: **CADD**	CHECKED BY: **NA**
PROJECT MGR: **ARCHITECTURAL**	APPROVED BY: **Approver**

SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NUMBER

AD1-E2.1

ISSUE

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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. PER GENERAL DEMOLITION NOTES; DISCONNECT AND SALVAGE WIFI ROUTER FOR RE-USE UNDER NEW WORK. SEE NEW WORK FOR LOCATION AND REQUIREMENTS.
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. PER GENERAL DEMOLITION NOTES; DISCONNECT AND SALVAGE SECURITY CAMERA FOR RE-USE UNDER NEW WORK. SEE NEW WORK FOR LOCATION AND REQUIREMENTS.
10. EXHAUST FAN IS EXISTING TO REMAIN. 1
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.

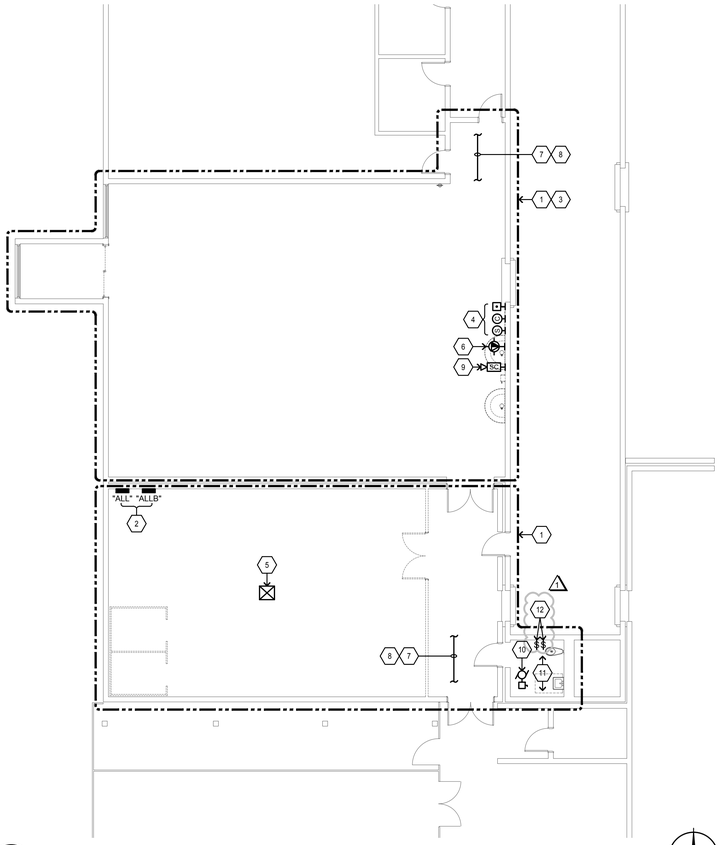
J. EXISTING FLUSH OUTLETS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK, MEET THE REQUIREMENTS OF THE CURRENT C.E.C. FOR VOLUME AND COINCIDE WITH LOCATION SHOWN FOR THE NEW WORK.

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.



1 ELECTRICAL DEMOLITION PLAN

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

8' 0' 2' 4' 6' 8'

PLAN NORTH

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PROJECT NO: 121030	
DRAWN BY: **CADD**	CHECKED BY: **NA**
PROJECT MGR: **ARCHITECTURAL**	APPROVED BY: **Approver**

SHEET TITLE

ELECTRICAL DEMOLITION PLAN

SHEET NUMBER

AD1-E3.1

ISSUE

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SHEET NOTES

1. FOR CEILING MOUNTED PROJECTOR. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH ARCHITECT/DISTRICT.
2. NEMA TYPE RECEPTACLE; 30A, 208V, 1Ø. CONTRACTOR SHALL VERIFY WITH ARCHITECT/DISTRICT FOR EXACT REQUIREMENTS.
3. ½"C. 2 #10 & 1 #10 GND.
4. PROVIDE & INSTALL 1"C.O. AND STUB INTO ELECTRICAL PANEL FOR FUTURE CONNECTION.
5. 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. 1
6. 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.
7. 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.
8. 24" SQ. x 6" DEEP NEMA 1 PULLCAN FOR TELE/DATA CABLES. PROVIDE & INSTALL (1) 2"C. BACK TO EXISTING IDF FROM PULLCAN FOR CABLING.
9. 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.
10. 2" C., 4 #10 & 1 #6 GND. 1
11. EXHAUST FAN; 1 HP, 208V, 3Ø. LOCATED ON ROOF.
12. INSTALL BUSWAY SYSTEM BETWEEN LIGHT FIXTURES ROWS. COORDINATE WITH LIGHTING PLANS.
13. PROVIDE & INSTALL FEEDER TO DISTRIBUTION PANEL "AL1". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS.
14. PROVIDE & INSTALL FEEDER TO EXISTING ELECTRICAL MAIN SWITCHBORD "MSB". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS. SEE 1/E2.1 FOR CONTINUATION.
15. PROVIDE & INSTALL FEEDER TO TRANSFORMER "T-AL". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS. 1
16. PROVIDE & INSTALL FEEDER TO PANEL "ALLA". SEE ELECTRICAL SINGLE LINE DIAGRAM 1/E1.1 FOR SIZE AND REQUIREMENTS.
17. PA/CLOCK SYSTEM. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH ARCHITECT/DISTRICT.

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. WHERE GFCI RECEPTACLES ARE INSTALLED THE GROUND-FAULT CIRCUIT-INTERRUPTER SHALL BE INSTALLED READILY ACCESSIBLE LOCATION.

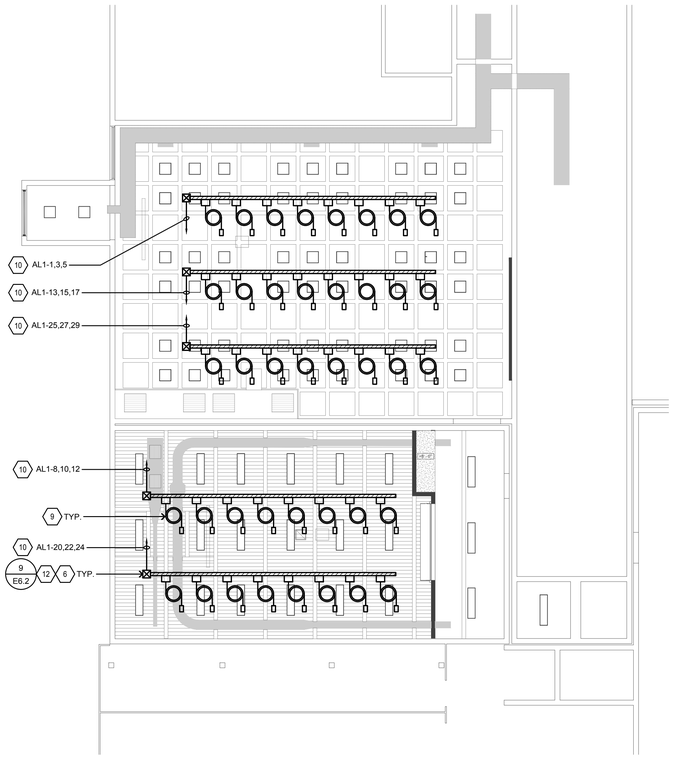
B. UNLESS OTHERWISE NOTED; ALL GENERAL 20 AMP, 120V RECEPTACLES SHALL BE GFCI TYPE.

C. SEAL ALL INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY.

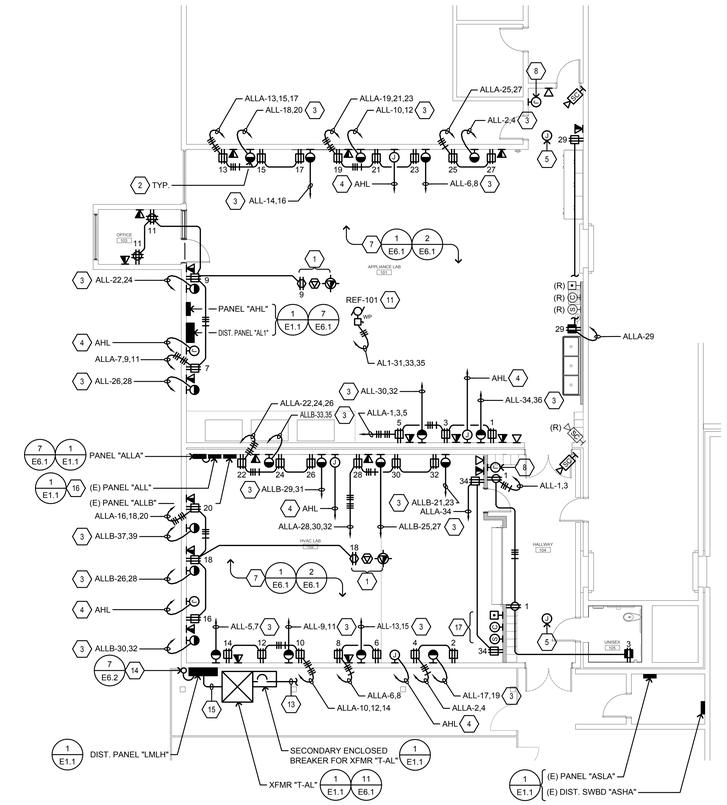
D. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH EQUIPMENT MANUFACTURER'S FOR EXACT ELECTRICAL CONNECTIONS/NEMA TYPE RECEPTALES. PROVIDE & INSTALL MATCHING PLUG FOR EQUIPMENT AND RECEPTACLE TO MATCH.

E. ALL SURFACE MOUNTED BOXES SHALL BE METAL BOXES WITH EMT/RIGID CONDUIT FOR POWER/TELECOM DEVICES.

F. 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"

PLAN NORTH

DSA STAMP

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ISSUES

No.	DESCRIPTION	DATE
1	ADDENDUM 1	03/11/2021

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HAUTS ANWAY
No. E21043
Exp. 3/31/23
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MONTEREY BAY, INC.

Project No. 19598.00

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PITTSBURG, CA 94565

PROJECT NO: 121030	
DRAWN BY: **CADD**	CHECKED BY: **NA**
PROJECT MGR: **ARCHITECTURAL**	APPROVED BY: **Approver**

SHEET TITLE
POWER PLAN

SHEET NUMBER
AD1-E4.1

ISSUE

SCALE CHECK
1 in.

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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. 1
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 2' x 2'.	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.

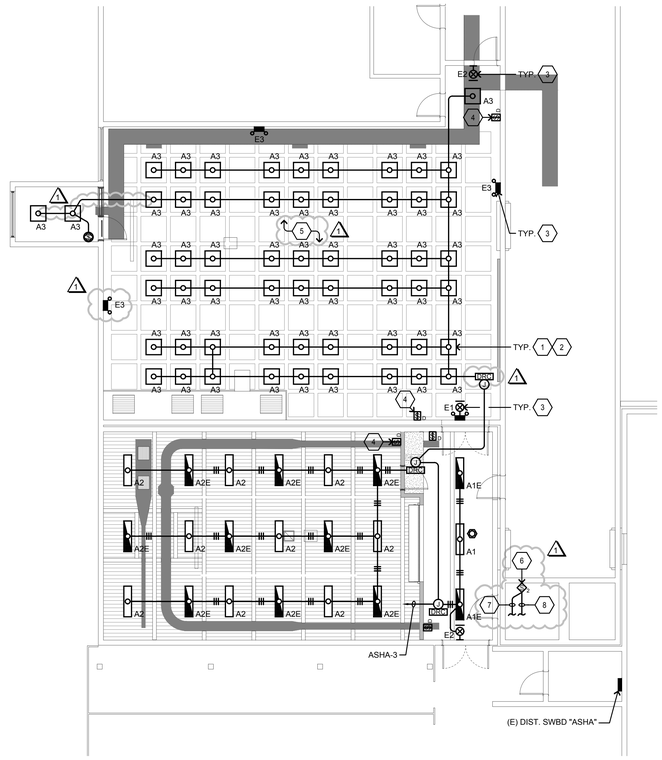
GENERAL NOTES:

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.



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

8' 0' 2' 4' 6' 8"

PLAN NORTH

DSA STAMP

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PITTSBURG, CA 94565

PROJECT NO: 121030

DRAWN BY:	CHECKED BY:
CADD	NA
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE
LIGHTING PLAN & LIGHT FIXTURE SCHEDULE

SHEET NUMBER AD1-E5.1

ISSUE

SCALE CHECK
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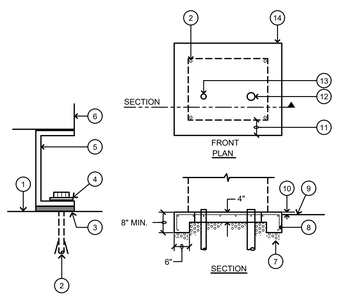
FIRE RATED PENETRATIONS SHOWN ARE FOR USE WHERE THE PROJECT WALL OR/AND FLOOR CONSTRUCTION CORRESPONDS TO ANY SHOWN IN DETAILS 8 BELOW

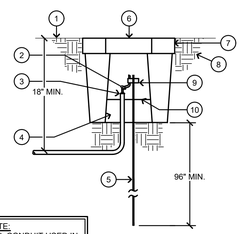


DETAIL NOTES:

1. CONCRETE PAD
2. 1/2" DIA. STAINLESS STEEL HILTI KWIK BOLT TZ x 2" MIN EFFECTIVE EMBED (ICC ESR-1917) & WITH 7/8" EDGE DISTANCE EACH WAY.
3. KORFUND ISOLATION PAD
4. LOCK WASHER
5. TRANSFORMER MOUNTING CHANNEL
6. TRANSFORMER HOUSING
7. CRUSHED BASE ROCK
8. #4 ASTM A612 OR A706 GRADE 60 DEFORMED BAR @ 12" OC EACH WAY WITH 2" CLEAR COVER TO EDGE OF CONCRETE TYPICAL & 1½" CLEAR COVER TO TOP OF SLAB.
9. FINISHED GRADE
10. 2" MAX.
11. 4" TYP. ALL AROUND (6" MAX FROM EDGE OF TRANSFORMER TO CENTER OF ANCHOR)
12. SECONDARY CONDUIT
13. PRIMARY CONDUIT
14. REINFORCED NORMAL WEIGHT CONCRETE PAD EXACT L&W AS REQUIRED FOR TRANSFORMER SUPPLIED (MIN. 3000 PSI AT 28 DAYS.) (MAX AGGREGATE SIZE = 1½" MAX WATER-TO-CEMENT RATION =0.55)

11 DRY TYPE TRANSFORMER MOUNTING DETAIL

NO SCALE



GENERAL NOTE:
WHERE METAL CONDUIT USED IN LIEU OF PVC, PROVIDE GROUND BUSHINGS & BONDS PER CODE.

DETAIL NOTES:

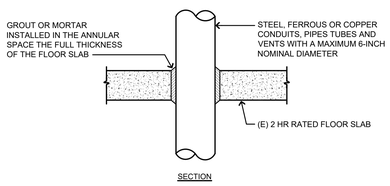
1. FINISHED GRADE.
2. GROUND CONDUCTOR.
3. SEAL CONDUIT WATERTIGHT.
4. GROUT BOTTOM MINIMUM 3".
5. ¾" x 10'-0" COPPER CLAD GROUND ROD.
6. LID LABELED "GROUND ROD".
7. CHRISTY "F8" GROUND ROD BOX.
8. UNDISTURBED EARTH.
9. GROUND CLAMP.
10. COAT ALL INSIDE SURFACES WITH SEALANT.

10 GROUND ROD BOX DETAIL

NO SCALE

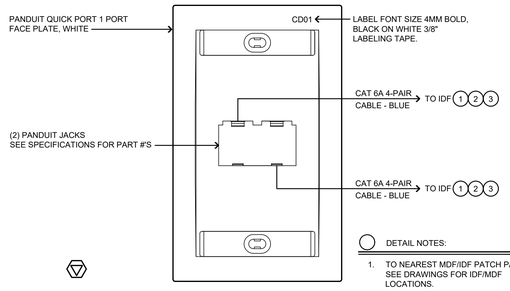
SEE FLOOR PLAN DRAWINGS
FOR RATED FLOOR LOCATIONS

FLOOR PENETRATION PER 2016 CALIFORNIA BUILDING CODE, VOLUME 1, SECTION 714.4.1.1 EXCEPTION 2.



8 2-HR FIRE-RATED FLOOR PENETRATION

NO SCALE



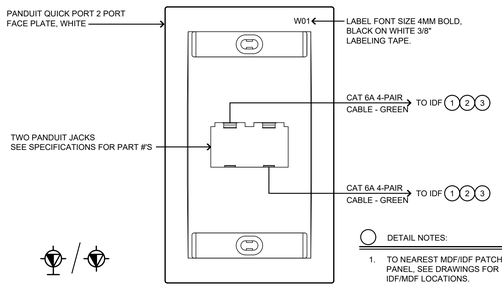
GENERAL NOTE:
SEE 27000 APPENDIX "A" FOR PART #'S.

DETAIL NOTES:

1. TO NEAREST MDF/IDF PATCH PANEL, SEE DRAWINGS FOR IDF/MDF LOCATIONS.
2. LABEL PAIRS USED AND LABEL ROOM NUMBER.
3. LABEL PER I.T. DEPT. STANDARDS.

6 CEILING OUTLET

NO SCALE



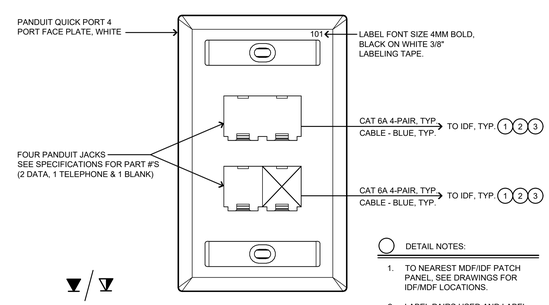
GENERAL NOTE:
CONTRACTOR SHALL COIL AN ADDITIONAL 20 FEET OF CABLE AT EACH ACCESS POINT.

DETAIL NOTES:

1. TO NEAREST MDF/IDF PATCH PANEL, SEE DRAWINGS FOR IDF/MDF LOCATIONS.
2. LABEL PAIRS USED AND LABEL ROOM NUMBER.
3. LABEL PER I.T. DEPT. STANDARDS.

5 WIRELESS OUTLET

NO SCALE



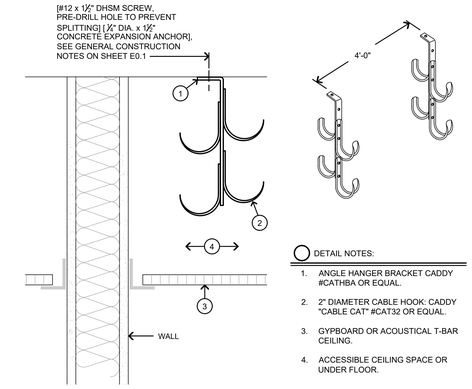
GENERAL NOTE:
SEE 27000 APPENDIX "A" FOR PART #'S.

DETAIL NOTES:

1. TO NEAREST MDF/IDF PATCH PANEL, SEE DRAWINGS FOR IDF/MDF LOCATIONS.
2. LABEL PAIRS USED AND LABEL ROOM NUMBER.
3. LABEL PER I.T. DEPT. STANDARDS.

4 WORKSTATION OUTLET

NO SCALE



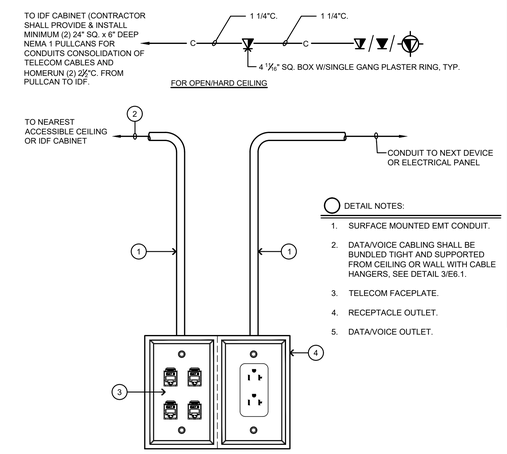
DETAIL NOTES:

1. ANGLE HANGER BRACKET CADDY #CATHBA OR EQUAL.
2. 2" DIAMETER CABLE HOOK: CADDY "CABLE CAT" #CAT32 OR EQUAL.
3. GYPBOARD OR ACOUSTICAL T-BAR CEILING.
4. ACCESSIBLE CEILING SPACE OR UNDER FLOOR.

GENERAL NOTE:
NOT TO EXCEED 12" SAG IN CABLE.

3 J-HOOK MOUNTING DETAIL

NO SCALE

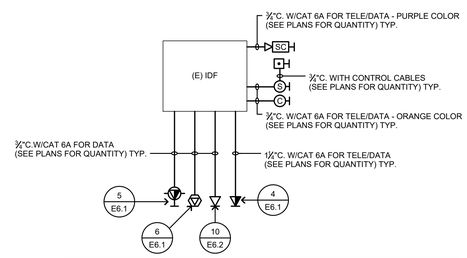


DETAIL NOTES:

1. SURFACE MOUNTED EMT CONDUIT.
2. DATA/VOICE CABLING SHALL BE BUNDLED TIGHT AND SUPPORTED FROM CEILING OR WALL WITH CABLE HANGERS, SEE DETAIL 3/E6.1.
3. TELECOM FACEPLATE.
4. RECEPTACLE OUTLET.
5. DATA/VOICE OUTLET.

2 SURFACE MOUNTED DATA/POWER OUTLET

NO SCALE



GENERAL NOTES:

A. AT EACH LOCATION SHOWN ON POWER & SYSTEMS PLANS FOR TELEPHONE, PROVIDE PHONE COMPATIBLE WITH DISTRICT STANDARDS.

B. U.O.N., ALL SHOWN IS NEW.

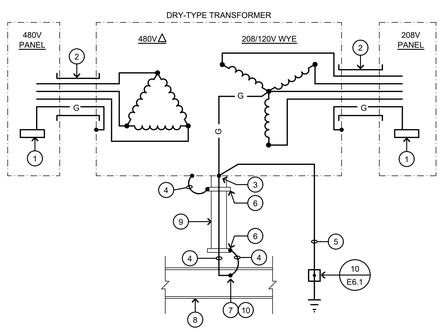
C. PROVIDE & INSTALL NECESSARY ADDITIONAL PATCH PANELS AND ASSOCIATED MOUNTING HARDWARE FOR NEW CONNECTIONS AS PART OF NEW WORK.

D. CONTRACTOR SHALL PROVIDE LABELING AND SHALL BE DONE WITH TYPED INSERTS, TYPE OF ADHESIVE LABELS, OR PRE-STAMPED JACK USAGE INDICATORS FOR PATCH PANELS. FOR CABLING THE LABELEING SHALL BE PRINTED HEAT SHRINK LABELS OR TYPED ADHESIVE LABELS SPECIFICALLY DESIGNED FOR CABLING. HANDWRITTEN LABELS ARE NOT ALLOWED. SEE BELOW FOR REQUIREMENTS.

E. TR ROOM NUMBER (WHERE CABLE TERMINATES), ROOM NUMBER OF THE WORK AREA, STATION NUMBER, JACK NUMBER (PREFIXED WITH TYPE "V" FOR VOICE, "D" FOR DATA) (EXEMPLE: 109 122-1-V1 109 IS THE TR, 122 IS THE ROOM WHERE THE JACK IS LOCATED, 1 IS THE STATION LOCATION, V1 IS THE 1ST VOICE JACK IN THE PARTICULAR WALL PLATE).

1 TELE/DATA RISER DIAGRAM

NO SCALE

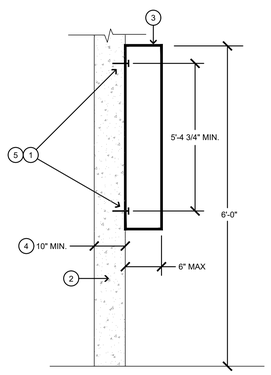


DETAIL NOTES:

1. PANEL OR SWITCHBOARD EQUIPMENT GROUND BUS.
2. CONDUIT WITH SEAL-TITE FLEX CONNECTION TO TRANSFORMER.
3. TRANSFORMER CASE BOND.
4. BARE COPPER GROUND PER CEC 250-66
5. 1" SCHEDULE 80 PVC CONDUIT WITH BARE COPPER GROUNDING ELECTRODE CONDUCTOR, SEE SINGLE LINE DIAGRAM 1/E1.1 FOR REQUIREMENTS.
6. GROUNDING BUSHINGS.
7. BOLTED OR EXOTHERMIC WELD CONNECTION.
8. BUILDING STEEL STRUCTURE FRAMING.
9. ELECTRICAL METALLIC TUBING (EMT).
10. METAL COLD WATER PIPE PER CEC 250.30 OR OTHER ELECTRODES PER 250.50 IF BUILDING STEEL OR WATER PIPE ARE NOT AVAILABLE.

9 DRY TYPE TRANSFORMER GROUNDING DETAIL

NO SCALE



DETAIL NOTES:

1. ½" DIA. HILTI KWIK BOLT TZ (ICC ESR-1917) x 2" EFFECTIVE EMBED ((1) AT EACH CORNER, (4) TOTAL), PULL TEST MIN (1) ANCHOR TO 4900 LBS.
2. EXISTING CONCRETE WALL.
3. PANEL (WEIGHT 480 LBS MAX).
4. VERIFY IN FIELD.
5. 15" MIN. HORIZONTAL SPACING BETWEEN ANCHORS.

7 SURFACE MOUNTED PANEL

NO SCALE

DSA STAMP

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

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CONTRA COSTA COMMUNITY COLLEGE DISTRICT

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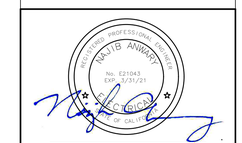

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PITTSBURG, CA 94565

PROJECT NO: 121030	
DRAWN BY: CADD	CHECKED BY: NA
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER	ISSUE
E6.1	

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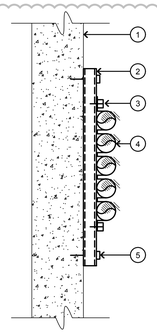
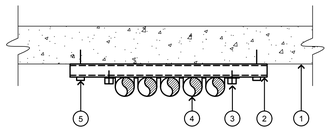


DETAIL NOTES:

1. EXISTING CONCRETE WALL.
2. UNISTRUT P1001.
3. CONDUIT CLAMPS.
4. CONDUIT, SEE PLANS.
5. ⅜" HILTI KB-TZ EXPANSION ANCHOR. 3-½" EMBEDMENT & 4O FT-LBS TORQUE. TYP OF (2).

12 WALL MOUNTED UNISTRUT CONDUIT SUPPORT

NO SCALE

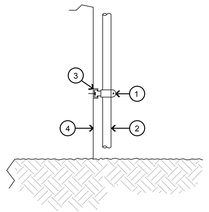


DETAIL NOTES:

1. CONCRETE DECK.
2. UNISTRUT P1001.
3. CONDUIT CLAMPS.
4. CONDUIT, SEE PLANS.
5. ⅜"DIA. x 3" LONG BOLT AT EACH CORNER OF EACH SECTION. MINIMUM 2½" EMBEDMENT.

11 CEILING MOUNTED UNISTRUT CONDUIT SUPPORT

NO SCALE



DETAIL NOTES:

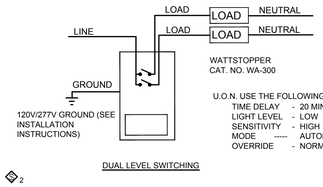
1. UNISTRUT BRACKET P1109-P1126 @ 4'-0" OC MAX.
2. GALVANIZED RIGID STEEL CONDUIT.
3. UNISTRUT P1000 1'-0" MAX LENGTH CHANNEL.
4. EXISTING 10" THICK CONCRETE WALL, VERIFY IN FIELD.

GENERAL NOTE:

USE (1) ½" DIA. HILTI KWIK BOLT TZ x 2" MIN EFFECTIVE EMBED (ICC ESR-1917) @ 1" FROM EACH END OF CHANNEL ((2) TOTAL). LOCATE AND AVOID REINFORCEMENT.

7 CONDUIT RISER DETAIL

NO SCALE



FOR TECHNICAL SUPPORT CALL 1-800-879-8585

WATTSTOPPER
CAT. NO. WA-300

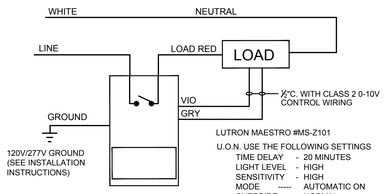
U.O.N. USE THE FOLLOWING SETTINGS

TIME DELAY	-	20 MINUTES
LIGHT LEVEL	-	LOW
SENSITIVITY	-	HIGH
MODE	-----	AUTOMATIC ON
OVERRIDE	-	NORMAL

2

6 WALL OCCUPANCY SENSOR WIRING

NO SCALE



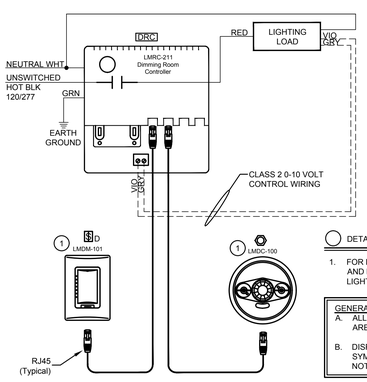
LUTRON MAESTRO #MS-Z101

U.O.N. USE THE FOLLOWING SETTINGS

TIME DELAY	-	20 MINUTES
LIGHT LEVEL	-	HIGH
SENSITIVITY	-	HIGH
MODE	-----	AUTOMATIC ON
OVERRIDE	-	NORMAL

5 WALL OCCUPANCY SENSOR WIRING

NO SCALE



DETAIL NOTES:

1. FOR DEVICE QUANTITY AND LOCATION; SEE LIGHTING FLOOR PLANS.

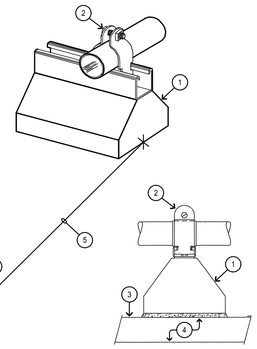
GENERAL NOTES:

A. ALL PART NUMBERS ARE WATTSTOPPER.

B. DISREGARD SYMBOLS/CONTROLS NOT SHOWN IN PLANS.

4 1-ZONE DIMMING LIGHTING CONTROLS

NO SCALE

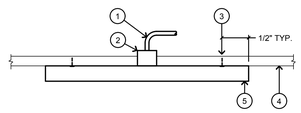


DETAIL NOTES:

1. ROOF TOP CONDUIT SUPPORT; 5" x 6" x 9.5" WITH 1" HIGH 14 GA. GALVANIZED CHANNEL STRUT. COOPER B-LINE "DB" SERIES.
2. 14 GA. RIGID CONDUIT CLAMP WITH RECESS HEX HEAD MACHINE SCREW AND SQUARE NUT COMBINATION. COPPER B-LINE B200 SERIES.
3. CLEAN (E) ROOF AREA AS REQUIRED.
4. ROOF STRUCTURE.
5. PROVIDE AND INSTALL CONDUIT SUPPORT PER CEC REQUIREMENTS.

3 ROOF MOUNTED CONDUIT SUPPORT DETAIL

NO SCALE



DETAIL NOTES:

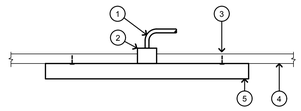
1. EXISTING BRANCH CIRCUIT CONDUIT.
2. EXISTING JUNCTION BOX.
3. MOUNT LIGHT FIXTURE WITH (2) #12 SCREWS (ICC ESR-2196) EACH END AND ALTERNATING DECK FLUTES IN BETWEEN ((4) SCREWS MIN).
4. EXISTING METAL DECK CEILING.
5. SURFACE MOUNT LIGHT FIXTURE.

GENERAL NOTE:

EXISTING METAL DECK, VERIFY IN FIELD:
- 20 GA, MIN
- I = 0.216 IN 4
+ S = 0.236 IN 3
- S = 0.248 IN 3
- MAX SPAN = 6'-6"

2 SURFACE MOUNTED FIXTURE DETAIL (METAL DECK)

NO SCALE

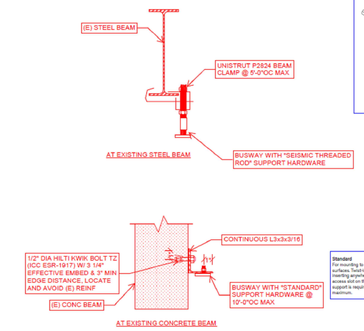


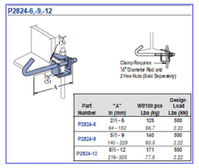
DETAIL NOTES:

1. EXISTING BRANCH CIRCUIT CONDUIT.
2. EXISTING JUNCTION BOX.
3. MOUNT LIGHT FIXTURE WITH ¾" DIA. SIMPSON STRONG BOLT WITH 2" MINIMUM EMBEDMENT THRU EXISTING CONCRETE CEILING. (4) PER LIGHT FIXTURE.
4. EXISTING CONCRETE CEILING.
5. SURFACE MOUNT LIGHT FIXTURE.

1 SURFACE MOUNTED FIXTURE DETAIL (CONCRETE)

NO SCALE





Part Number	"A" in (mm)	WI/100 pcs Lbs (kg)	Design Load Lbs (kN)
P2824-6	2/0 - 6 64 - 152	128 58.7	500 2.22
P2824-9	8/0 - 9 140 - 229	148 68.5	500 2.22
P2824-12	8/0 - 12 216- 305	171 77.6	500 2.22

Seismic Threaded Rod
For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the bus, for maximum flexibility, and includes a seismic brace. Hangers are required every 5 feet maximum for seismic support.

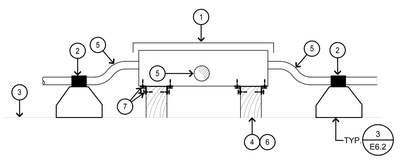
Part Number
U38H-3
Available in plain zinc or black (ABJ0)
Weight
.8 lb

Standard
For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the bus full-access slot on the busway. Hanger support is required every 10 feet maximum.

Part Number
U38H-1
Available in plain zinc or black (ABJ0)
Weight
.3 lb

9 BUSWAY MOUNTING DETAIL

NO SCALE

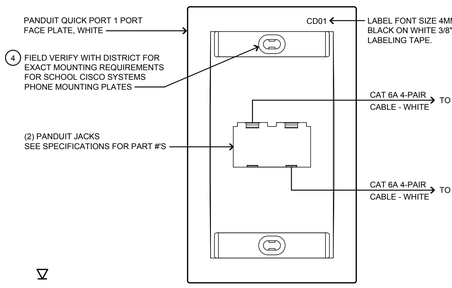


DETAIL NOTES:

1. PULLCAN, NEMA 4 LOCKABLE.
2. CONDUIT STRAP.
3. FINISHED ROOF.
4. 4 x 4 SLEEPER, SET IN MASTIC.
5. RIGID STEEL CONDUITS.
6. PRESSURE TREATED LUMBER.
7. (2) SIMPSON L30 EACH END WITH (2) #10 SDS WOOD SCREWS TO SLEEPER & (2) #10 SMS TO PULLCAN (ICC ESR-2196)

8 PULLCAN AT ROOF DETAIL

NO SCALE



GENERAL NOTE:
SEE 27000 APPENDIX "A" FOR PART #'S.

DETAIL NOTES:

1. TO NEAREST MDF/IDF PATCH PANEL, SEE DRAWINGS FOR IDF/MDF LOCATIONS.
2. LABEL PAIRS USED AND LABEL ROOM NUMBER.
3. LABEL PER I.T. DEPT. STANDARDS.
4. RJ45 WALL JACK CAPABLE OF SUPPORT PHONE INSTRUMENT.

10 PHONE OUTLET

NO SCALE

DSA STAMP

CLIENT

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

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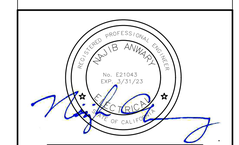
ISSUES

No.	DESCRIPTION	DATE
1	ADDENDUM 1	03/11/2021

CONSULTANTS



AURUM CONSULTING ENGINEERS
MONTEREY BAY, INC.

Project No. 19598.00

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SEAL

PRIME CONSULTANT

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San Jose, CA 95110, USA
tel 408 924 0811 fax 408 924 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
ELECTRICAL DETAILS

SHEET NUMBER
AD1-E6.2

ISSUE

SCALE CHECK
1 in

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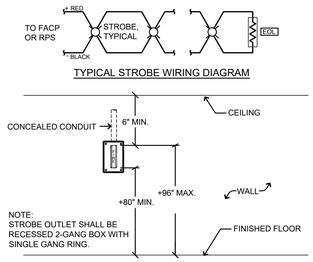
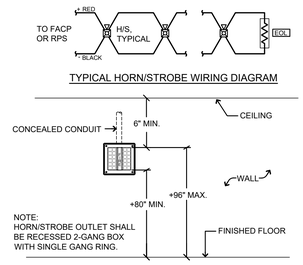


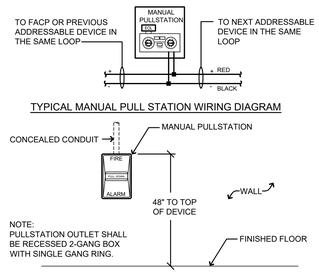
3 STROBE INSTALLATION DETAIL

NO SCALE



2 HORN/STROBE INSTALLATION DETAIL

NO SCALE



1 PULL STATION MOUNTING DETAIL

NO SCALE

FIRE ALARM EQUIPMENT LIST

SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGR'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
	WALL MOUNT, MULTI-CANDELA, FIRE ALARM STROBE WITH FIELD SELECTABLE CANDELA SETTING OF 15,15/75, 30, 60, 75, 95, 110, 115, 135, 150, 177 & 185. WHEELOCK EXCEDER SERIES, WHITE FINISH.	STR	7125-0785:0168
	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 dBA SETTINGS OF 90 OR 95dBA. IN TEMPORAL PATTERN (CODE 3). WHEELOCK EXCEDER SERIES, WHITE FINISH.	HSR	7125-0785:0168
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 15DBA 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 50 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 UUFX OR UUJS 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

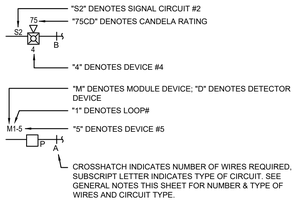
SYMBOLS

- CONDUIT - CONCEALED IN WALLS OR CEILING.
- CONDUIT - IN OR BELOW FLOOR: 3/4"C 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
CLG	CEILING	NO	NUMBER
(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



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 ANWARY PE.

FIRE ALARM SYSTEM OPERATIONAL MATRIX

CAUSE \ EFFECT	ALARM: AUDIBLE FACP	ALARM: VISUAL FACP	ALARM: AUDIBLE FIRE SOUNDER	ALARM: VISUAL FIRE SOUNDER	ALARM: AUDIBLE OFF SITE REPORTING	ALARM: VISUAL OFF SITE REPORTING	TROUBLE: AT FACP	TROUBLE: AT ANNUNCIATOR	TROUBLE: OFF SITE REPORTING	SUPERVISORY: AT FACP	SUPERVISORY: AT ANNUNCIATOR	SUPERVISORY: OFF SITE REPORTING	FAN SHUT DOWN	DEACTIVATE AUDIBLES	DEACTIVATE VISUALS	DEACTIVATE AUDIO/VISUALS	SYSTEM RESET	ELEVATOR RECALL	DOOR HOLD RELEASE	SHUT FIRE SMOKE DAMPERS	REMARKS
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							•	•	•												

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

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ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

REGISTERED PROFESSIONAL ENGINEER
NAJIB ANWARY
No. E21043
Exp. 3/31/21
ELECTRICAL
STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS
MONTEREY BAY, INC.

Project No. 19598.00

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SEAL

PRIME CONSULTANT

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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	CHECKED BY: NA
PROJECT MGR: ARCHITECTURAL	APPROVED BY: Approver

SHEET TITLE

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

SHEET NUMBER: FA0.1

ISSUE

SCALE CHECK: 1 in.

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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	0.082	0.057						
TOTAL AMPS@DEV.	0.484	0.287	0.139	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
DEVICE #	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)										
AMPS OF DEVICE										
TOTAL AMPS@DEV.	0	0	0	0	0	0	0	0	0	0
VOLT. DROP @ DEV.	0	0	0	0	0	0	0	0	0	0
TOTAL CIRCUIT AMPS =	**0.484**			WIRE	RESIS.	CIRC.		FORMULA		
				SIZE	/M FT.	MILS.				
TOTAL VOLT DROP =	**0.401**			10	1.29	10380		I * FEET * 21.6		
				12	2.01	6530		C.M.		
CKT. VOLTAGE =	**20.4**			14	3.19	4110				
				16	5.08	2580				
% VOLTAGE DROP =	**2.0%**									

BATTERY CALCULATIONS

EXISTING FIRE ALARM CONTROL PANEL "FACP"

QTY		DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1		(E) SMB-2 MAIN CONTROL BOARD	0.1750	0.1750	0.1750	0.1750
2		(E) ALD LOOP	0.0660	0.1320	0.0660	0.1320
2		(E) NAC CIRCUIT	0.0120	0.0240	0.0120	0.0240
1		(E) MKB-4 ANNUNCIATOR KEY BOARD	0.0050	0.0050	0.0050	0.0050
1		(E) NIM-1W NETWORK INTERFACE MODULE	0.0700	0.0700	0.0700	0.0700
1		(E) NIM-1W NETWORK INTERFACE MODULE	0.0700	0.0700	0.0700	0.0700
1		(E) NIM-1W NETWORK INTERFACE MODULE	0.0700	0.0700	0.0700	0.0700
		PANEL STANDBY CURRENT		0.5460		
		PANEL ALARM CURRENT				0.5460

FIELD DEVICES

QTY	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	TOTAL
4	MS-10B	ADDRESSABLE PULL STATION	0.0004	0.0016	0.0004	0.0016

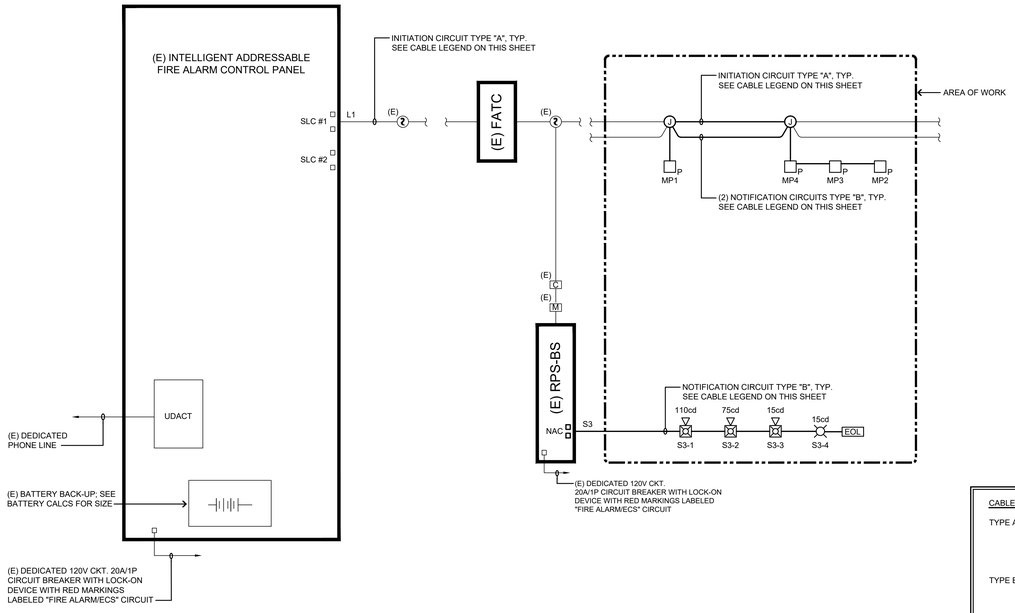
DESCRIPTION	STANDBY	ALARM
CONTROL PANEL	0.5460	0.5460
FIELD DEVICES	0.0000	0.0000
TOTAL STANDBY CURRENT	0.5460	
X 24 HOUR STANDBY	13.1040	
TOTAL ALARM CURRENT		0.5460
15 MINUTES OF ALARM (X .25)		0.1365
TOTAL BATTERY REQUIREMENT		13.2425
SAFETY MARGIN (20%)		15.8886
BATTERY SUPPLIED		(2) 12V 5AH

EXISTING ALD 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 EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	FCPS-24S8	NOTIFIER REMOTE POWER SUPPLY	0.0750	0.0750	0.0750	0.0750
1	S3	NOTIFICATION CIRCUIT No. 3	0.0000	0.0000	0.0000	0.4860
1	S2	EXISTING NOTIFICATION CIRCUIT NO. 2	0.0000	0.0000	0.0000	0.7380
1	S1	EXISTING NOTIFICATION CIRCUIT NO. 1	0.0000	0.0000	0.0000	0.9660
1	SPARE	SPARE	0.0000	0.0000	0.0000	0.0000
		PANEL STANDBY CURRENT		0.0750		
		PANEL ALARM CURRENT				2.2530

TOTAL SYSTEM CURRENT

DESCRIPTION	STANDBY	ALARM
TOTAL STANDBY CURRENT (A)	0.0750	
X 24 HOUR STANDBY	1.8000	
TOTAL ALARM CURRENT (B)		2.2530
15 MINUTES OF ALARM (X .25)		0.5633
TOTAL BATTERY REQUIREMENT (A+B)		2.3633
SAFETY MARGIN (20%)		2.8350
BATTERY SUPPLIED (2) 7AH		7AH



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.

1 FIRE ALARM RISER DIAGRAM

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

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DATE: 07/09/2020

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No. E21043
EXP. 3/31/21
ELECTRICAL
STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS MONTEREY BAY, INC.

Project No. 19598.00

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PROJECT

L-1177 Industrial Trades Labs Renovation

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 RISER DIAGRAM, BATTERY & VOLTAGE DROP CALCULATIONS

SHEET NUMBER FA1.1

ISSUE

ISSUE CHECK

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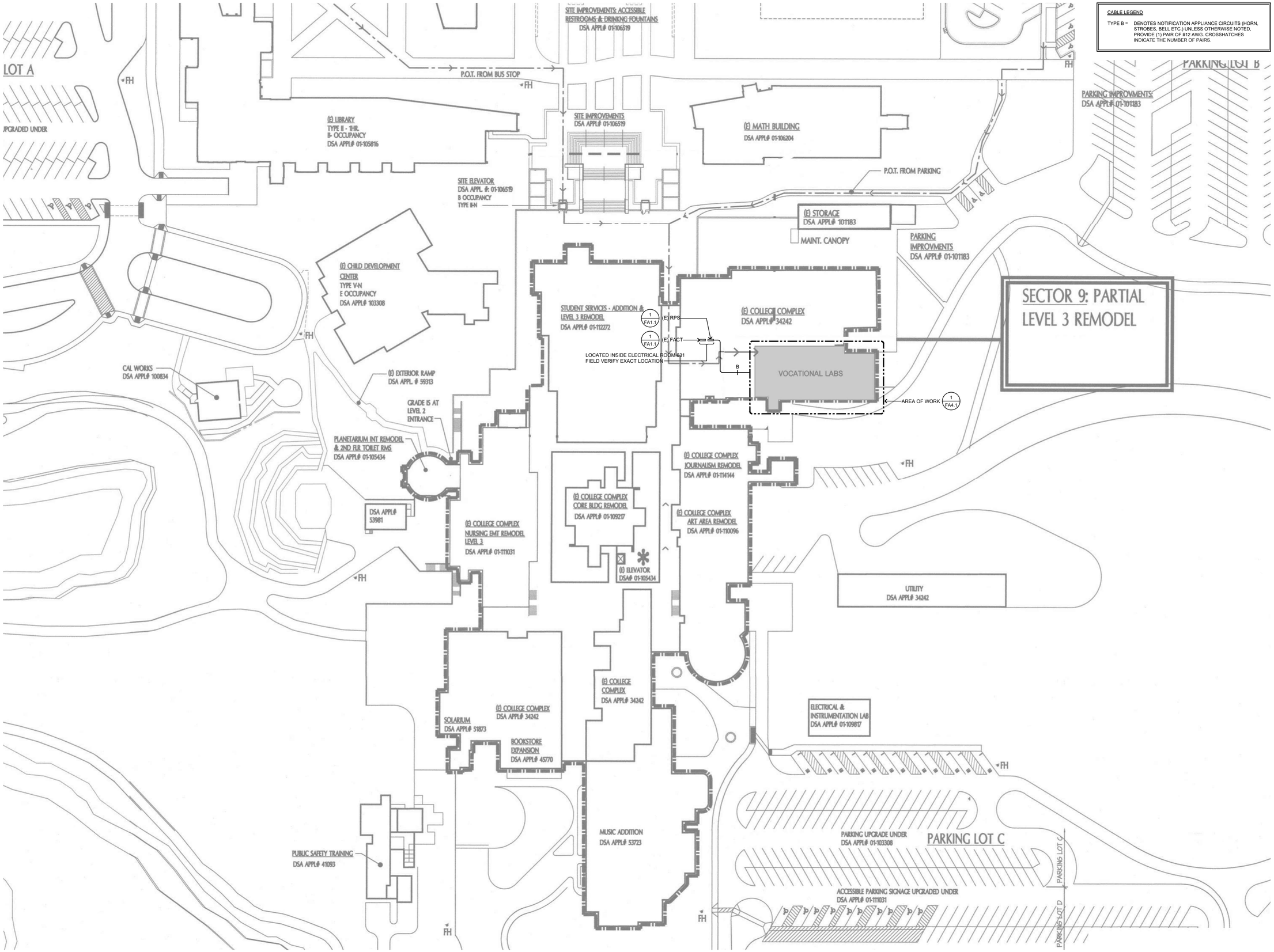

1 FIRE ALARM SITE PLAN

SCALE: 1"=30'-0"

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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PROJECT

L-1177 Industrial Trades Labs Renovation

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 SITE PLAN

SHEET NUMBER FA2.1

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SHEET NOTES

1. HOMERUN TO EXISTING RPS-BS. 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.

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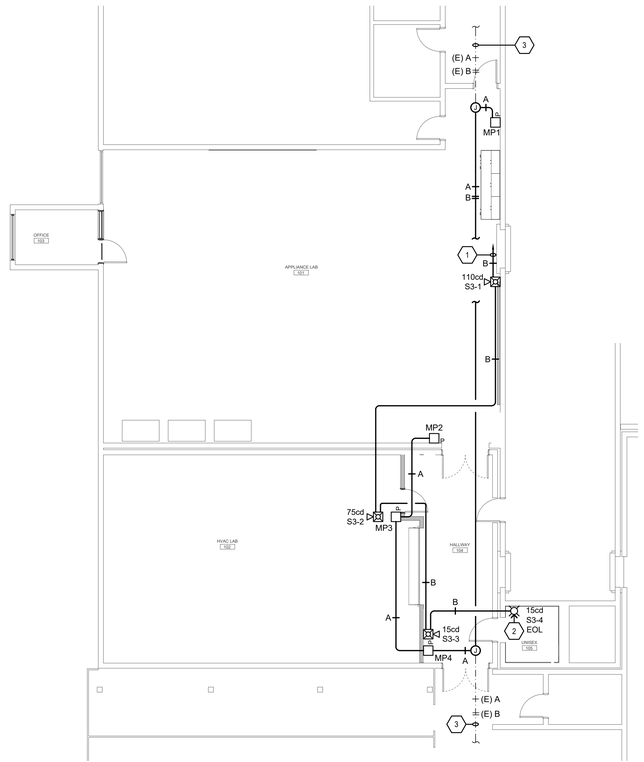

1 FIRE ALARM PLAN

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

8' 0' 2' 4' 6' 8'

PLAN NORTH

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PROJECT NO: 121030

DRAWN BY:	CHECKED BY:
CADD	**NA**
PROJECT MGR:	APPROVED BY:
ARCHITECTURAL	**Approver**

SHEET TITLE

FIRE ALARM PLAN

SHEET NUMBER

FA4.1

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