PALOMAR COLLEGE

NORTH EDUCATION CENTER - INTERIM VILLAGE
3 SCIENCE MODULARS

35090 HORSE RANCH CREEK ROAD
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GENERAL
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MODULAR BUILDINGS
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PO BOX 78447
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PREPARED BY OTHERS, SEE STATEMENT OF GENERAL CONFORMANCE

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MODULAR BUILDINGS
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PREPARED BY OTHERS, SEE STATEMENT OF GENERAL CONFORMANCE

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A1.10.4	OVERALL CAMPUS PLAN
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MODULAR BUILDINGS
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Example of Statement of General Conformance and Signature Block per IR A-18

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

(Application No. 04-116582 **File No.** 37-C1**)**

[X] The drawings or sheets listed on the cover or index sheet
[ ] 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 (b))*

I certify that: [X] All drawings or sheets listed on the cover or index sheet
[ ] This drawing or page

[X] is/are in general conformance and [X] have been coordinated	[ ] is/are in general conformance and [ ] have been coordinated
(signature) 9/14/2017	
Signature **Date**	**Signature** **Date**
Architect or Engineer designated to be in general responsible charge	**Architect or Engineer delegated responsibility for this portion of the work.**
Brad Glassick	
Print Name	**Print Name**
C-32427 2/28/2019	
License Number **Expiration Date**	**License Number** **Expiration Date**

SCOPE OF WORK

WORK INCLUDED IN THE CONTRACT:

PLACEMENT OF 3 MODULAR SCIENCE BUILDINGS.

GENERAL NOTES

1. CONSTRUCTION DOCUMENTS DESCRIBE THE PRODUCTS, SYSTEMS, QUANTITIES, CONFIGURATION, AND PERFORMANCE SPECIFICATIONS THAT DELIVER THE OVERALL DESIGN INTENT OF THE PROJECT.

2. THE CONSTRUCTION DOCUMENT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY BOTH.

3. PERFORMANCE BY THE CONSTRUCTION TEAM SHALL BE CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AS NECESSARY TO DELIVER THE INDICATED RESULTS OF THE DESIGN INTENT.

4. VERIFY ALL DIMENSIONS, LOCATIONS OF EXISTING UTILITIES, AND CONDITIONS ON THE JOB SITE PRIOR TO THE START OF WORK OR PORTIONS OF THE WORK. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS. EXISTING CONDITIONS ARE INDICATED AS A RESULT OF FIELD OBSERVATIONS, INFORMATION SHOWN ON AVAILABLE DOCUMENTS AND FIELD CONDITIONS AT THE TIME OF PREPARATION.

5. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.

6. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

7. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.

8. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE DRAWINGS.

9. DETAILS MARKED 'TYPICAL' SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY NOTED OTHERWISE.

10. ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.

11. PRIOR TO THE START OF WORK THE CONTRACTOR SHALL COORDINATE BETWEEN THE REQUIREMENTS OF ALL DISCIPLINES HEREIN AND BETWEEN THE REQUIREMENTS OF ALL DRAWINGS AND SPECIFICATIONS IN ORDER THAT ALL ITEMS SATISFACTORILY RELATE TO ONE ANOTHER. NOTIFY ARCHITECT IMMEDIATELY REGARDING ANY ITEMS THAT CANNOT BE COORDINATED.

12. CONTRACTOR SHALL EXCERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING, CONDUIT, ETC. AND TO PREVENT HAZARD TO PERSONNEL AND/OR TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.

13. CHANGES TO THE APPROVED DRAWINGS AND/OR SPECIFICATIONS SHALL BE MADE BY ADDENDA OR A CHANGE ORDER.

14. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURAL ELEMENTS SHALL NOT TO BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT, AND STRUCTURAL ENGINEER OF RECORD.

D.S.A. GENERAL NOTES

1. ALL WORK SHALL CONFORM TO 2016 EDITION TITLE 24, CALIFORNIA CODE OR REGULATION (CCR).

2. THE SCOPE OF WORK INDICATED ON SHEET G0.10.4

3. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUALL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT.

4. CHANGE TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24 CCR.

5. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR. INSPECTOR TO BE CLASS 3.

6. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

7. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR)

8. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2017*

2016 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR*
2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
(2015 INTERNATIONAL BUILDING CODE, VOL. 1 & 2 AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
(2014 NATIONAL ELECTRICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
(2015 IAPMO UNIFORM MECHANICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
(2015 IAPMO UNIFORM PLUMBING CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2016 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
(2015 INTERNATIONAL FIRE CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
(2015 INTERNATIONAL EXISTING BUILDING CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2016 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
2013 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS

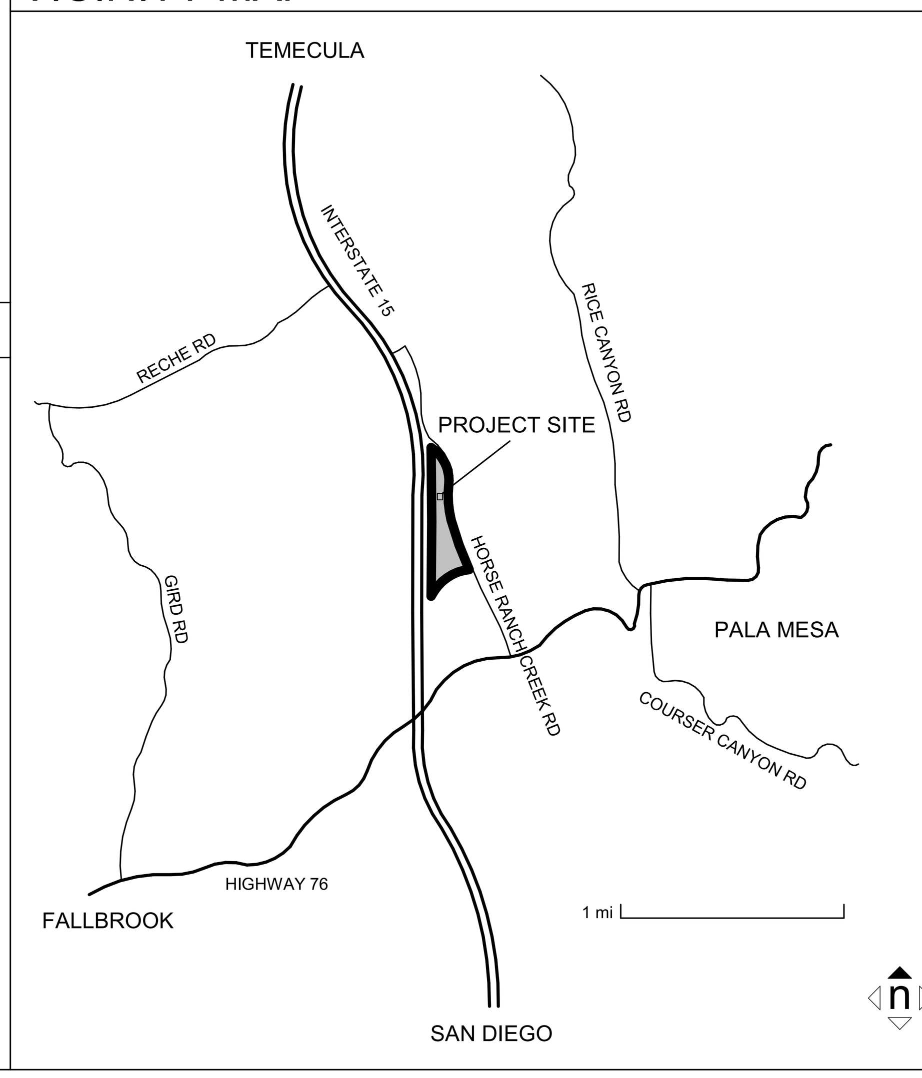
PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS	2013 EDITION
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	2013 EDITION
NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	2013 EDITION
NFPA 20	STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 22	STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES	2016 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2016 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALIING SYSTEMS, INCLUDING ACCESSORIES	2003 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2012 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2016 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

VICINITY MAP



ABBREVIATIONS

Ø	DIAMETER OR ROUND	BTWN	BETWEEN	DIM	DIMENSION	FE	FIRE EXTINGUISHER	HM	HOLLOW METAL	NR	NON RATED	PREP	PREPARE	STL	STEEL	WH	WATER HEATER
+/-	PLUS/MINUS	C	CHANNEL	DL	DOOR LOUVER	FEC	FIRE EXTINGUISHER W/CABINET	HOR	HORIZONTAL	NTS	NOT TO SCALE	PSF	POUNDS PER SQUARE FOOT	STRUCT	STRUCTURAL	WI	WOODWORK INSTITUTE
#	POUND OR NUMBER	CER	CERAMIC	DN	DOWN	FF	FINISH FLOOR	HR	HOUR	NTS	NOT TO SCALE	PSI	POUNDS PER SQUARE INCH	T&B	TOP AND BOTTOM	WIN	WINDOW
%	PERCENT	CF	CUBIC FEET	DP	DISABLED PERSON ACCESSIBLE	FG	FINISH GRADE	HVAC	HEATING VENTILATION AIR	O/	OVER	PTD	PAINTED	TEMP	TEMPORARY	WP	WATERPROOF
@	AT	CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	DS	DOWNSPOUT	FH	FIRE HYDRANT	ID	INSIDE DIAMETER	OA	OVERALL	PVC	POLYVINYL CHLORIDE	TO	TOP OF	WS	WOOD SCREW
°	DEGREE			DWG	DRAWING	FHC	FIRE HOSE W/ CABINET	IN	INCH OR INCHES	OC	ON CENTER	R	RISER, RADIUS	TOC	TOP OF CURB	WT	WEIGHT
℄	CENTER LINE	CFOI	CONTRACTOR FURNISHED, OWNER INSTALLED	EA	EACH	FHWS	FLAT HEAD WOOD SCREW	INT	INTERIOR	OD	OUTSIDE DIAMETER	RD	ROOF DRAIN	TOD	TOP OF DRAIN	WWF	WELDED WIRE FABRIC
∠	ANGLE			EJ	EXPANSION JOINT	FL	FLOOR	INV	INVERT	OFCI	OWNER-FURNISHED CONTRACTOR-INSTALLED	REC	RECESSED	TOP	TOP OF PARAPET	x	BY
—-—	PROPERTY LINE	C.I.P.	CAST IN PLACE	ELEV	ELEVATION	FO	FACE OF	JBOX	JUNCTION BOX			REF	REFERENCE	TOPL	TOP OF PLATE	YD	YARD
AB	ANCHOR BOLT	CJ	CONTROL JOINT	ELEC	ELECTRICAL	FOC	FACE OF CONCRETE	JAN	JANITOR CLOSET	OFOI	OWNER-FURNISHED OWNER-INSTALLED	REQ	REQUIRED	TOR	TOP OF RIDGE		
ABS	ABSOLUTE	CLG	CEILING	EMT	ELECTRICAL METAL TUBING	FOF	FACE OF FINISH	LAV	LAVATORY			RM	ROOM	TOS	TOP OF SLAB		
AC	ASPHALTIC CONCRETE	CLR	CLEAR	ENCL	ENCLOSURE	FOM	FACE OF MASONRY	LB(S)	POUND(S)	OH	OPPOSITE HAND	RWL	RAIN WATER LEADER	TOW	TOP OF WALL		
ACC	ACCESSIBLE	CMU	CONCRETE MASONRY UNIT	ENGR	ENGINEER	FOS	FACE OF STUD	MAX	MAXIMUM	OTO	OUT TO OUT	RO	ROUGH OPENING	TST	TOP OF STEEL		
ACOUS	ACOUSTICAL	CONC	CONCRETE	EOS	EDGE OF SLAB	FS	FINISH SURFACE	MB	MACHINE BOLT	PA	PUBLIC ADDRESS	SCHED	SCHEDULE	TV	TELEVISION		
ADJ	ADJACENT	CONT	CONTINUOUS	EQ	EQUAL	FT	FOOT OF FEET	MDF	MEDIUM DENSITY FIBERBOARD	PE	PAD ELEVATION	SECT	SECTION	TYP	TYPICAL		
AFF	ABOVE FINISH FLOOR	CORR	CORRIDOR	EQPT	EQUIPMENT	FTG	FOOTING	MFR	MANUFACTURER	PERP	PERPENDICULAR	SF	SQUARE FEET	UC	UNERCUT		
ALUM	ALUMINIUM	CR	CLASSROOM	EW	EACH WAY	GA	GAUGE	MH	MANHOLE	PH	PANIC HARDWARE	SHT	SHEET	UNO	UNLESS NOTED OTHERWISE		
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CTSK	COUNTER SUNK	(E)	EXISTING	GALV	GALVANIZED	MIN	MINIMUM	PL	PLATE	SIM	SIMILAR	VCT	VINYL COMPOSITION TILE		
		CTC	CENTER TO CENTER	EXP	ECPANSION	GB	GYPSUM BOARD	MISC	MISCELLANEOUS	PLAM	PLASTIC LAMINATE	SM	SURFACE MOUNTED	V.I.F.	VERIFY IN FIELD		
ARCH	ARCHITECTURAL	d	PENNY	EXT	EXTERIOR	GFRC	GLASS FIBER REINFORCED CONCRETE	MO	MASONRY OPENING	PLUMB	PLUMBING	SMS	SHEET METAL SCREW	VERT	VERTICAL		
BD	BOARD	DBL	DOUBLE	FA	FIRE ALARM			MTL	METAL	PLYWD	PLYWOOD	SOV	SHUT OFF VALVE	W	WIDE FLANGE		
BLDG	BUILDING	DEL	DELETE	FD	FLOOR DRAIN	GYP	GYPSUM	(N)	NEW	PM	PARTITION MOUNTED	SPEC	SPECIFICATION	W/	WITH		
BLK	BLOCK	DET	DETAIL	FDC	FIRE DEPARTMENT CONNECTION	HB	HOSE BIB	NIC	NOT IN CONTRACT	POC	POINT OF CONNECTION	SST	STAINLESS STEEL	W/O	WITHOUT		
BLKG	BLOCKING	DF	DRINKING FOUNTAIN	FDN	FOUNDATION	HDWE	HARDWARE	NO	NUMBER	PR	PAIR	STD	STANDARD	WD	WOOD		
		DIA	DIAMETER														

NOTE:
OTHER ABBREVIATIONS USED ON THESE DRAWINGS ARE CONSIDERED STANDARDS IN THE BUILDING INDUSTRY. CONTACT ARCHITECT FOR NECESSARY CLARIFICATION.

Consultant Seal

Agency Approval FILE NO. 37-C1
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DIV. OF THE STATE ARCHITECT
APPL. 04-116582
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DATE____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
TITLE SHEET

Architect's Seal
LICENSED ARCHITECT
BRADLEY E. GLASSICK
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: 12" = 1'-0"
QAQC SC	Drawing No. G0.10.4
Date: 10/13/2017	

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GENERAL NOTES

POST-INSTALLED ANCHORS

1. POST-INSTALLED ANCHORS INSTALLED IN NORMAL WEIGHT OR LIGHTWEIGHT CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:

   A. KWIK BOLT TZ EXPANSION ANCHORS (ICC-ES REPORT ESR-1917) AS MANUFACTURED BY HILTI, INC.

2. POST-INSTALLED ANCHORS OF EQUAL QUALITY AND WITH CURRENT ICC-ES REPORT MAY BE SUBSTITUTED IF APPROVED BY THE ARCHITECT (STRUCTURAL ENGINEER).

3. POST-INSTALLED ANCHORS INSTALLED IN EXTERIOR EXPOSURE OR DAMP ENVIRONMENT SHALL BE STAINLESS STEEL.

4. INSTALL POST-INSTALLED ANCHORS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THREADED RODS AND ANCHORS SHALL BE FREE OF DUST, GREASE, RUST AND OTHER MATERIALS THAT WILL IMPAIR BOND WITH CONCRETE.

5. USE ONLY NON-REBAR CUTTING DRILL BITS TO DRILL HOLES IN CONCRETE. EXISTING REINFORCING STEEL SHALL BE POSITIVELY LOCATED BY NON-DESTRUCTIVE MEANS PRIOR TO DRILLING HOLES. DO NOT CUT OR DAMAGE EXISTING REINFORCING STEEL UNLESS APPROVED BY THE ARCHITECT (STRUCTURAL ENGINEER).

6. WHERE EXISTING CONCRETE IS DAMAGED AND/OR DRILLED HOLES ABANDONED, THE DAMAGED CONCRETE OR ABANDONED HOLES SHALL BE REPAIRED OR FILLED WITH NON- SHRINK GROUT, RESPECTIVELY. BRING EACH CONDITION TO THE ATTENTION OF THE ARCHITECT (STRUCTURAL ENGINEER) PRIOR TO IMPLEMENTING REPAIRS.

7. BRING TO THE ATTENTION OF THE ARCHITECT (STRUCTURAL ENGINEER) ANY POST-INSTALLED ANCHOR LOCATION THAT CANNOT COMPLY WITH THE PARAMETERS STATED HEREIN AND INDICATED ON THE DRAWINGS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" ANSI/AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", AND AISI/AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", AS AMENDED BY CALIFORNIA BUILDING CODE (CBC) SECTIONS 2203, 2204 AND 2205.

2. SEISMIC FORCE RESISTING SYSTEM (SFRS) IS THAT PART OF THE STRUCTURAL SYSTEM THAT HAS BEEN CONSIDERED IN THE DESIGN TO PROVIDE THE REQUIRED RESISTANCE TO THE SEISMIC FORCES PRESCRIBED IN ASCE/SEI 7.

3. STRUCTURAL STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS, UNLESS NOTED OTHERWISE ON DRAWINGS:

   CHANNELS, ANGLES, M- & S-SHAPES..... ASTM A36/A36M
   PIPES..... ASTM A53/A53M, GRADE B (Fy=35 KSI)
   RECTANGULAR HOLLOW STRUCTURAL SECTIONS..... ASTM A500/A500M, GRADE C (Fy=50 KSI)
   PLATES..... ASTM A36/A36M (UNO)
   ANCHOR BOLTS..... ASTM F1554, GRADE 36 (UNO)
   THREADED ROUND STOCK..... ASTM A36/A36M

   FURNISH READILY IDENTIFIABLE STRUCTURAL STEEL IN COMPLIANCE WITH CBC SECTION 2203.1.

4. HEADED STUD ANCHORS SHALL BE NELSON TYPE S3L OR TYPE H4L FLUX-FILLED HEADED SHEAR CONNECTOR STUDS (ICC EVALUATION SERVICE REPORT ER-2856), OR AN APPROVED EQUAL, AND SHALL BE MADE FROM COLD DRAWN, LOW CARBON STEEL CONFORMING TO ASTM A108, GRADES C1010 THROUGH C1020, WITH A MINIMUM TENSILE STRENGTH OF 65 KSI. STUD WELDING TEST AND INSPECTION SHALL CONFORM TO AWS D1.1, CHAPTER 7. ANCHOR LENGTHS NOTED ON DRAWINGS ARE AFTER WELD LENGTHS.

5. SUBMIT SHOP DRAWINGS TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW AND, UPON REQUEST, TO GOVERNING CODE AUTHORITY. INDICATE AN ERECTION SEQUENCE OF WELDING TO MINIMIZE LOCKED-UP STRESSES OR DISTORTION FOR MOMENT-RESISTING STEEL FRAMES.

6. HOURLY FIRE RESISTIVE REQUIREMENTS FOR STRUCTURAL STEEL MEMBERS SHALL BE DETERMINED USING CBC TABLE 601. BUILDING TYPES OF CONSTRUCTION AND FIREPROOFING MATERIALS ARE AS INDICATED ON ARCHITECTURAL DRAWINGS.

7. ALL STRUCTURAL STEEL AND MISCELLANEOUS METALS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.

8. WELDING SHALL CONFORM TO LATEST EDITION OF AWS D1.1/D1.1M, AS AMENDED IN CBC SECTION 2204.1.

   A. WELDING PROCESS SHALL BE ELECTRIC ARC USING E70XX ELECTRODES, SUBMERGED ARC PROCESS (SAW) WITH AUTOMATIC WELDING MAY BE USED AS AN ALTERNATIVE.
   B. WELDERS SHALL BE CERTIFIED TO CONFORM WITH AWS STANDARDS AND APPROVED BY THE GOVERNING CODE AUTHORITY.
   C. SHOP WELDING, INCLUDING ULTRASONIC TESTING OF FULL PENETRATION GROOVE WELDS, SHALL BE PERFORMED ON THE PREMISES OF AN APPROVED FABRICATOR.
   D. MINIMUM FILLET WELD SIZE SHALL CONFORM TO AISC SPECIFICATION TABLE J2.4. WELD LENGTHS NOTED ON DRAWINGS ARE THE NET EFFECTIVE LENGTHS REQUIRED.
   E. FIELD WELD SYMBOLS NOTED ON THE DRAWINGS SHOW ENGINEERING INTENT, BUT NO ATTEMPT HAS BEEN MADE TO CLASSIFY ALL WELDS. AT FABRICATOR'S OPTION, ANY WELD INDICATED AS A FIELD WELD MAY BE SHOP WELDED AND ANY WELD INDICATED AS A SHOP WELD MAY BE FIELD WELDED.

9. WELDS SHALL BE PREQUALIFIED PER AWS D1.1. NON-PREQUALIFIED WELDED JOINTS SHALL BE QUALIFIED BY TEST PER AWS D1.1.

10. SUBMIT TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW A WRITTEN WELDING PROCEDURE SPECIFICATION (WPS) FOR ALL WELDS USED ON PROJECT PRIOR TO FABRICATION. FOR WELDS NOT PREQUALIFIED, THE SUPPORTING PROCEDURE QUALIFICATION RECORD (PQR) SHALL ALSO BE SUBMITTED WITH THE WPS. WPS SHALL BE IN ACCORDANCE TO AWS D1.1, SECTION 4.6 AND SHALL INCLUDE THE FOLLOWING INFORMATION FOR EACH WELD TYPE AND POSITION:

    A. SKETCH OF JOINT DESCRIBING GEOMETRY AND APPLICABLE DIMENSIONS, WELD TYPE AND SIZE, SEQUENCE OF WELD DEPOSITION, AND MAXIMUM LAYER THICKNESS AND BEAD WIDTHS. LAYER THICKNESS SHALL NOT EXCEED 1/4 INCH, AND BEAD WIDTH SHALL NOT EXCEED 5/8 INCH.
    B. BASE METAL TYPES AND THICKNESS.
    C. APPLICABLE WELD PROCESS (SMAW OR FCAW).
    D. FILLER METAL PER AWS STANDARD AND ELECTRODE SPECIFICATION AND CLASSIFICATION, AS WELL AS DETAILS OF SHIELDING MATERIAL.
    E. ELECTRICAL CHARACTERISTICS FOR WELD PROCESS USED SUCH AS TYPE OF CURRENT AND ACCEPTABLE RANGE OF CURRENT MEASURED IN AMPERAGE, VOLTAGE RANGE, AND ELECTRODE DIAMETER. FOR WELD FEED PROCESS, INDICATE MANUFACTURER RECOMMENDED WIRE SPEED, CONTACT DISTANCE, MELT OFF RATE AND DEPOSITION RATE.
    F. A COPY OF ELECTRODE MANUFACTURER'S TECHNICAL INFORMATION AND CERTIFICATE OF CONFORMANCE.

11. TESTING LABORATORY WILL VERIFY COMPLIANCE WITH ACCEPTED WPS AND WILL PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) IF DEVIATIONS ARE FOUND.

12. ELECTRODE DIAMETER SHALL NOT EXCEED PREQUALIFIED LIMITS SHOWN IN AWS D1.1 TABLE 3.7, AS APPLICABLE. FOR FCAW PROCESS, MAXIMUM ELECTRODE SIZE SHALL NOT EXCEED 1/8 INCH.

13. DIFFUSIBLE HYDROGEN LEVEL FOR ELECTRODES AND ELECTRODE-FLUX COMBINATION SHALL MEET THE REQUIREMENTS TABLE 6.3 OF AWS D1.8/D1.8M.

14. DETAILS, MATERIALS, WORKMANSHIP, AND TESTING AND INSPECTION REQUIREMENTS OF WELDED JOINTS COMPRISING THE SFRS SHALL CONFORM TO THE FOLLOWING APPLICABLE STANDARDS:

    A. AWS D1.1/D1.1M "STRUCTURAL WELDING CODE - STEEL."
    B. AWS D1.8/D1.1M "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT."
    C. ANSI/AISC 341, "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", CHAPTER J (QUALITY CONTROL AND QUALITY ASSURANCE).

15. WELD MATERIALS USED IN SFRS WELDED CONNECTIONS SHALL CONFORM TO THE FOLLOWING TOUGHNESS REQUIREMENTS:

    A. WELDED CONNECTIONS SHALL BE MADE WITH A FILLER METAL THAT CAN PRODUCE WELDS THAT HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LB AT 0°F AS DETERMINED BY THE APPROPRIATE AWS CLASSIFICATION TEST METHOD.
    B. WELDED CONNECTIONS DESIGNATED AS "DEMAND CRITICAL", SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 40 FT-LB AT 60°F BASED ON WPS HEAT INPUT ENVELOPE TESTING PRESCRIBED IN ANNEX A OF AWS D1.8/D1.8M.

16. INTERMIX OF FILLER METAL: WHEN FCAW-S FILLER METALS ARE USED IN COMBINATION WITH FILLER METALS FOR OTHER PROCESSES, INCLUDING FCAW-G, SUPPLEMENTAL CVN NOTCH TOUGHNESS TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ONE OF MORE OF THE FOLLOWING:

    A. TESTS AS DESCRIBED IN ANNEX B OF AWS D1.8/D1.8M.
    B. PQR TESTS THAT CONTAIN INTERMIX WELD METAL, WHEREIN CVN TEST SPECIMENS HAVE BEEN TAKEN FROM THE INTERMIX ZONE.

17. WELDING OF SHEET METAL AND METAL STUDS SHALL BE IN ACCORDANCE WITH AWS D1.3.

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE STANDARDS OF THE AMERICAN CONCRETE INSTITUTE, ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", WITH MODIFICATIONS AS NOTED IN THE CONTRACT DOCUMENTS.

2. CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28-DAY (f'c), UNLESS NOTED OTHERWISE:

   ALL CONCRETE 3,000 PSI NORMAL WEIGHT

3. CONCRETE IS ASSIGNED TO EXPOSURE CLASSES F0, S0, P0, AND C0, AS DEFINED IN TABLE 4.2.1 OF ACI 318.

4. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR TYPE II.

5. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33. NORMAL WEIGHT CONCRETE SHALL HAVE A MINIMUM DRY UNIT WEIGHT OF 145 PCF.

6. MAXIMUM AGGREGATE SIZE SHALL BE 1-1/2 INCHES FOR FOUNDATIONS AND 1 INCH ELSEWHERE, BUT NO LARGER THAN (A) 1/5 THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS, (B) 1/3 THE DEPTH OF SLABS, OR (C) 3/4 THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR WIRES, BUNDLES OF BARS, INDIVDUAL TENDONS, BUNDLED TENDONS, OR DUCTS. SMALLER AGGREGATE SIZES MAY BE ALLOWED WITH THE APPROVAL OF THE ARCHITECT (STRUCTURAL ENGINEER).

7. MAXIMUM SLUMP SHALL BE 5 INCHES TYPICALLY AND 4 INCHES IN FLATWORK, UNLESS A HIGH-RANGE WATER REDUCING ADMIXTURE (SUPERPLASTICIZER) IS USED IN THE CONCRETE MIX PROPORTIONS.

8. CONCRETE SHRINKAGE SHALL BE LIMITED TO 0.05 PERCENT AT 35 DAYS, AS DETERMINED BY ASTM C157. TEST SPECIMENS SHALL BE MOIST CURED IN LIME SATURATED WATER FOR 28 DAYS AND AIR STORED FOR 7 DAYS.

9. WATER CEMENT RATIO SHALL NOT EXCEED 0.45 FOR ALL FLATWORK THAT RECEIVES A MOISTURE SENSITIVE ADHESIVE TO AFFIX FLOOR FINISHES AND 0.50 ELSEWHERE. EXCEPTION: FOR CONCRETE ON METAL DECK, A WATER CEMENT RATIO OF 0.50 MAY BE USED FOR CONCRETE PLACED ON VENTED METAL DECKS. WATER CEMENT RATIO FOR CONCRETE IN EXPOSURE CLASS S2 SHALL NOT EXCEED 0.45 AND f'c NOT LESS THAN 4500 PSI.

10. CONCRETE MIX PROPORTIONING SHALL BE SIGNED AND SEALED BY A PROFESSIONAL CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA AND SHALL BE SUBMITTED TO THE ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW AND APPROVAL

    A. STRENGTH: CONCRETE MIX PROPORTIONING SHALL BE BASED ON FIELD EXPERIENCE AND/OR TRIAL MIXTURES AS STIPULATED IN ACI318, SECTION 5.3. SUBMIT CONCRETE MIX PROPORTIONING DATA, INCLUDING HISTORICAL STRENGTH RECORDS AND/ OR RESULTS OF TRIAL MIXTURES, FOR EACH TYPE AND COMPRESSIVE STRENGTH OF CONCRETE.
    B. MODULUS OF ELASTICITY (MOE): MODULUS OF ELASTICITY TESTS SHALL BE PERFORMED ON LABORATORY TRIAL MIXTURES FOR EACH CONCRETE STRENGTH, EACH CONCRETE MIX PROPORTION, AND FOR EACH AGGREGATE SOURCE. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
    C. THE DESIGN CONCRETE MIX PROPORTION SHALL SPECIFY AGGREGATES THAT PRODUCE A CONCRETE MODULUS OF ELASTICITY NOT LESS THAN THAT SPECIFIED IN THE PROJECT PLANS AND SPECIFICATIONS. THE MODULUS OF ELASTICITY OF PRODUCTION CONCRETE DELIVERED TO THE JOBSITE SHALL BE CONSISTENT WITH THE MODULUS OF ELASTICITY OF THE DESIGN MIX PROPORTION FOR THE ESTABLISHING THE CONCRETE f'c AND MOE USED IN THE BUILDING DESIGN.

11. CONCRETE MIXING SHALL CONFORM TO ASTM C94.

12. PRIOR TO PLACING CONCRETE, REINFORCING BARS (INCLUDING WELDED WIRE REINFORCMENT), EMBEDDED PLATES, ANCHOR BOLTS, AND OTHER CONCRETE EMBEDMENTS SHALL BE WELL SECURED IN POSITION.

13. PROVIDE KEYED CONSTRUCTION JOINT WHERE INDICATED ON DRAWINGS. CLEAN, REMOVE LAITANCE, THOROUGHLY WET, AND REMOVE STANDING WATER IMMEDIATELY BEFORE PLACING FRESH CONCRETE.

14. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT UNLESS OTHERWISE ACCEPTED BY ARCHITECT (STRUCTURAL ENGINEER).

15. CURING COMPOUNDS, SEALERS, HARDENERS, ETC., USED ON CONCRETE THAT RECEIVES A FINISH SHALL BE APPROVED BY THE ARCHITECT BEFORE USE.

16. GROUT SHALL BE NON-SHRINK, NON-METALLIC, SHALL NOT CONTAIN CHLORIDES, AND SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 6,000 PSI.

17. LEAN CONCRETE SHALL CONTAIN 2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE. USE ONLY WHERE SPECIFICALLY INDICATED.

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE TO AMERICAN CONCRETE INSTITUTE ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE".

2. REINFORCING STEEL SHALL CONFORM TO ASTM A615/A615M, GRADE 60, UNLESS NOTED OTHERWISE. BARS TO BE WELDED SHALL CONFORM TO LOW ALLOY ASTM A706/A706M, GRADE 60.

3. LENTON FORM SAVER COUPLERS, FA OR FS SERIES, SHALL BE BY ERICO INTERNATIONAL CORPORATION (IAPMO UES EVALUATION REPORT NO. 0129) OR APPROVED EQUAL.

4. LENTON TERMINATORS BY ERICO INTERNATIONAL CORPORATION (IAPMO UES EVALUATION REPORT NO. 0188) OR APPROVED EQUAL MAY BE USED IN LIEU OF STANDARD HOOKS.

5. MECHANICAL SPLICES SHALL BE LENTON STANDARD COUPLERS BY ERICO INTERNATIONAL CORPORATION (IAPMO UES EVALUATION REPORT NO. 0129) OR APPROVED EQUAL.

6. PREPARE REINFORCING STEEL SHOP DRAWINGS IN ACCORDANCE TO ACI 315, PART B. SHOP DRAWINGS MAY BE PREPARED MANUALLY OR BY COMPUTER. PLACING DRAWINGS SHALL BE PREPARED TO THE SAME STANDARD AS CONTRACT DRAWINGS. SHOW REINFORCING PLACEMENT, SPLICE LOCATIONS, REINFORCING LENGTHS, DETAILS, ELEVATIONS, BEND DETAILS, ETC. SUBMIT TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW PRIOR TO FABRICATION. PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) PRIOR TO DEVELOPING REINFORCING STEEL SHOP DRAWINGS IF INSUFFICIENT CLEAR DISTANCES BETWEEN REINFORCING STEEL OR OTHER CONGESTION IS ENCOUNTERED. DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CLEARLY IDENTIFIED ON THE SHOP DRAWINGS. IF SUBMITTAL IS PARTIAL, CLEARLY INDICATE ITEMS EXCLUDED FROM SUBMITTAL. SHOP DRAWINGS WILL BE REJECTED IF NOT PREPARED TO THE STANDARDS STATED ABOVE.

7. REINFORCING STEEL SHALL BE SPLICED AS SHOWN ON THE DRAWINGS. IF NOT SHOWN, LOCATE SPLICES IN AREAS OF MINIMUM STRESS. LAP (SPLICE) LENGTHS ARE AS INDICATED ON THE DRAWINGS.

8. MINIMUM CLEARANCES BETWEEN PARALLEL REINFORCING STEEL INCLUDING SPLICED BARS SHALL BE ONE INCH, ONE BAR DIAMETER, OR 4/3 TIMES THE MAXIMUM SIZE AGGREGATE, WHICHEVER IS GREATER. PROVIDE 1 1/2 INCHES OR 1 1/2 BAR DIAMETERS, WHICHEVER IS GREATER, AT COLUMNS ONLY. FOR BUNDLED BARS, MINIMUM CLEAR DISTANCES BETWEEN UNITS OF BUNDLED BARS SHALL BE SAME AS SINGLE BARS EXCEPT BAR DIAMETER IS DERIVED FROM EQUIVALENT TOTAL AREA OF BUNDLE.

9. PROVIDE THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL PLACED IN CAST-IN-PLACE CONCRETE:

   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
   B. CONCRETE EXPOSED TO EARTH OR WEATHER:
      NO. 6 THROUGH NO. 18 BARS.....2"
      NO. 5 BARS, W31 OR D31 WIRE, AND SMALLER.....1-1/2"
   C. CONCRETE NOT EXPOSED WEATHER OR IN CONTACT WITH GROUND:
      SLAB, WALLS, JOISTS:
      NO. 14 AND NO. 18 BARS.....1-1/2"
      NO. 11 BARS AND SMALLER (*).....1"
   D. SLAB-ON-GRADE.....MID-HEIGHT OF SLAB

   (*) CONCRETE COVERAGE ADEQUATE FOR FIRE-RESISTIVE PERIOD OF 2 HOURS.

10. USE PLASTIC OR PLASTIC COATED SPACERS AND CHAIRS IF RESTING ON EXPOSED CONCRETE SURFACES.

11. WELDING OF REINFORCING STEEL SHALL BE MADE WITH LOW HYDROGEN ELECTRODES IN CONFORMANCE WITH AMERICAN WELD SOCIETY AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCING STEEL".

    A. EXCEPT FOR REINFORCING STEEL CONFORMING TO ASTM A706/A706M, DETERMINE CARBON EQUIVALENT OF ALL REINFORCING STEEL TO BE WELDED. SUBMIT WPS FOR ALL REINFORCING STEEL TO BE WELDED TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW AND TO GOVERNING CODE AUTHORITY FOR APPROVAL PRIOR TO EXECUTION
    WPS SHALL INCLUDE:
       1) SKETCH OF JOINT DESCRIBING GEOMETRY AND APPLICABLE DIMENSIONS, WELD TYPE AND SIZE, SEQUENCE OF WELD DEPOSITION, AND MAXIMUM LAYER THICKNESS AND BEAD WIDTHS.
       2) APPLICABLE WELD PROCESS.
       3) FILLER METAL PER AWS STANDARD AND ELECTRODE SPECIFICATION AND CLASSIFICATION, AS WELL AS DETAILS OF SHIELDING MATERIAL.
       4) ELECTRICAL CHARACTERISTICS FOR WELD PROCESS USED SUCH AS TYPE OF CURRENT AND ACCEPTABLE RANGE OF CURRENT MEASURED IN AMPERAGE, VOLTAGE RANGE, AND ELECTRODE DIAMETER. FOR WELD FEED PROCESS, INDICATE MANUFACTURER RECOMMENDED WIRE SPEED, MELT OFF RATE AND DEPOSITION RATE.
       5) PREHEAT TEMPERATURES.
       6) PROCEDURE QUALIFICATION RECORDS (PQR) FOR ALL WPS'S QUALIFIED BY TESTING.
    B. WELDERS SHALL BE CERTIFIED TO CONFORM WITH AWS STANDARDS AND APPROVED BY THE GOVERNING CODE AUTHORITY.

12. REINFORCING STEEL BENDS SHALL BE MADE COLD. RE-BENDING OF PREVIOUSLY BENT REINFORCING IS NOT PERMITTED.

13. ALL REINFORCING STEEL, INCLUDING WELDED WIRE REINFORCING SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS, CONCRETE BLOCKS, CHAIRS, BOLSERS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL REINFORCING. HOOKING AND WALKING-IN IS NOT PERMITTED.

14. ALL REINFORCING STEEL SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN FINAL INSPECTION IS CONDUCTED.

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Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
GENERAL NOTES

Architect's Seal

LICENSED ARCHITECT
BRIAN LEE GLASS
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale:
QAQC SC	Drawing No. G0.11.4
Date: 10/13/2017	

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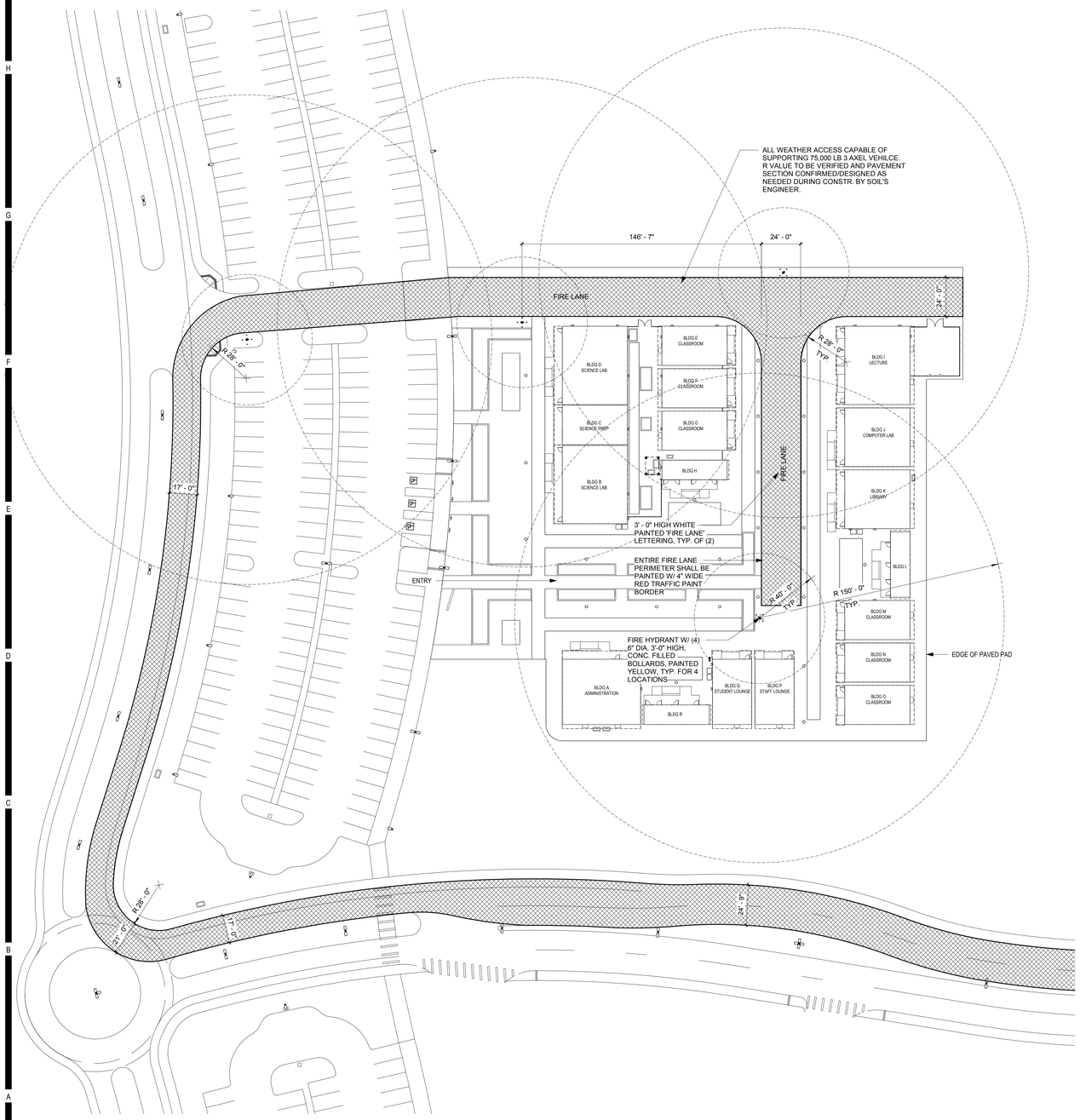
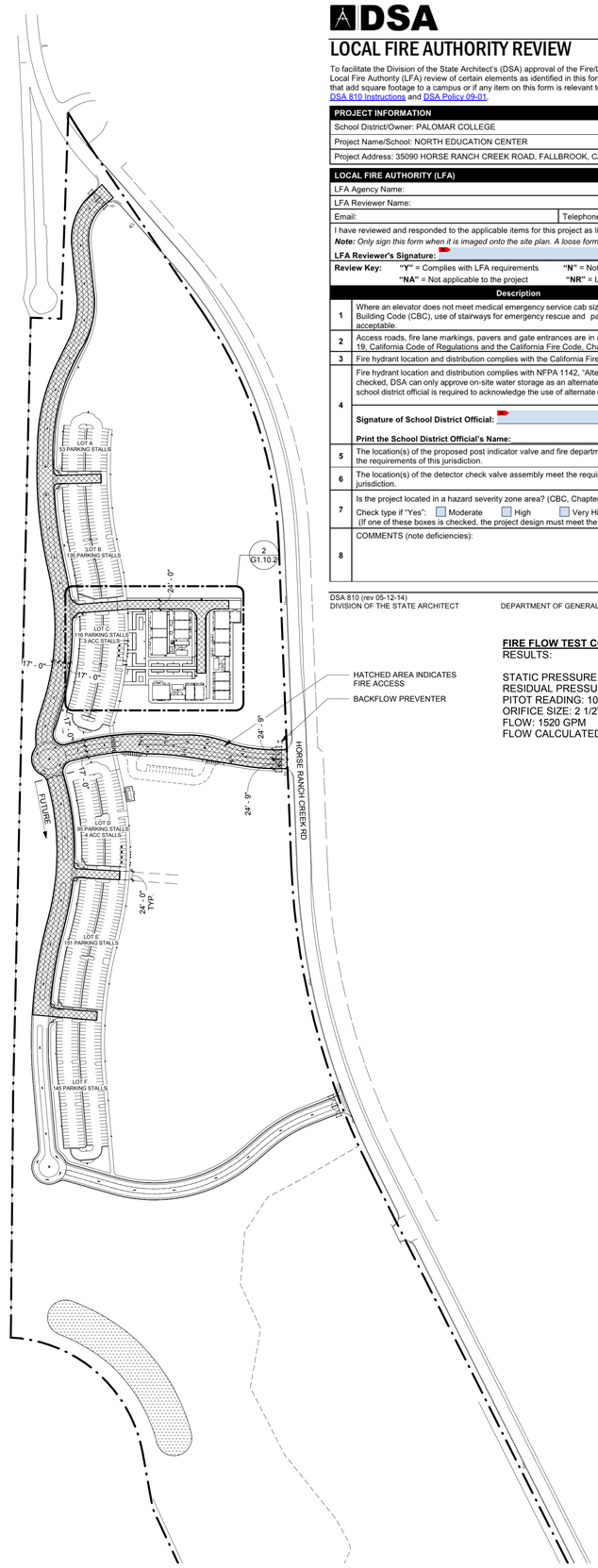


ENLARGED FIRE ACCESS - INTERIM VILLAGE | 2 | 1/32" = 1'-0"



FIRE ACCESS SITE PLAN - INTERIM VILLAGE | 1 | 1" = 160'-0"

DSA 810

LOCAL FIRE AUTHORITY REVIEW

To facilitate the Division of the State Architect's (DSA) approval of the Fire/Life Safety portion of a project, DSA requires Local Fire Authority (LFA) review of certain elements as identified in this form. Use of this form is mandatory for projects that add square footage to a campus or if any item on this form is relevant to the project. For additional information, see DSA 810 Instructions and DSA Policy 09-01.

PROJECT INFORMATION

School District/Owner: PALOMAR COLLEGE

Project Name/School: NORTH EDUCATION CENTER

Project Address: 35090 HORSE RANCH CREEK ROAD, FALLBROOK, CA 92028

LOCAL FIRE AUTHORITY (LFA)

LFA Agency Name:

LFA Reviewer Name: | Title:

Email: | Telephone Number:

I have reviewed and responded to the applicable items for this project as listed below.

Note: *Only sign this form when it is imaged onto the site plan. A loose form is not acceptable to DSA.*

LFA Reviewer's Signature: **Date:**

Review Key: **"Y"** = Complies with LFA requirements **"N"** = Not approved (complete Section 8) **"NA"** = Not applicable to the project **"NR"** = LFA elects not to review

	Description	Y	N	NA	NR
1	Where an elevator does not meet medical emergency service cab size, per the California Building Code (CBC), use of stairways for emergency rescue and patient transport is acceptable.				
2	Access roads, fire lane markings, pavers and gate entrances are in accordance with Title 19, California Code of Regulations and the California Fire Code, Chapter 5.				
3	Fire hydrant location and distribution complies with the California Fire Code (or see # 4).				
4	Fire hydrant location and distribution complies with NFPA 1142, "Alternate Means." If "NR" is checked, DSA can only approve on-site water storage as an alternate. The signature of the school district official is required to acknowledge the use of alternate means.				
	Signature of School District Official: **Date:** **Print the School District Official's Name:**				
5	The location(s) of the proposed post indicator valve and fire department connection meet the requirements of this jurisdiction.				
6	The location(s) of the detector check valve assembly meet the requirements of this jurisdiction.				
7	Is the project located in a hazard severity zone area? (CBC, Chapter 7A, Section 701A.) ☐ Yes ☐ No Check type if "Yes": ☐ Moderate ☐ High ☐ Very High ☐ WIFA (If one of these boxes is checked, the project design must meet the requirements of Chapter 7A.)				
8	COMMENTS (note deficiencies):				

DSA 810 (rev 05-12-14) DIVISION OF THE STATE ARCHITECT | DEPARTMENT OF GENERAL SERVICES | Page 1 of 1 STATE OF CALIFORNIA

FIRE FLOW TEST CONDUCTED 7/10/2017

RESULTS:

STATIC PRESSURE: 132 PSI
RESIDUAL PRESSURE: 119 PSI
PITOT READING: 100 PSI
ORIFICE SIZE: 2 1/2" LPD 250
FLOW: 1520 GPM
FLOW CALCULATED AT 20 PSI (RES): 4856 GPM

HMC Architects
3546 Concours Street / Ontario, CA 91764
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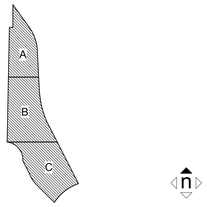
SM

LEGEND

FIRE ACCESS LANE

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116580
ACS.____ FLS.____ SSS.____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE II	10/06/2017

Drawing Title:

LOCAL FIRE AUTHORITY ACCESS SITE PLAN

Architect's Seal

LICENSED ARCHITECT BRIAN E. CLAYSON NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	BL	Project No.	5015019-102
Drawn:	AC, MB	Scale:	As indicated
QAQC	SC	Drawing No.	G1.10.2
Date:	10/13/2017		

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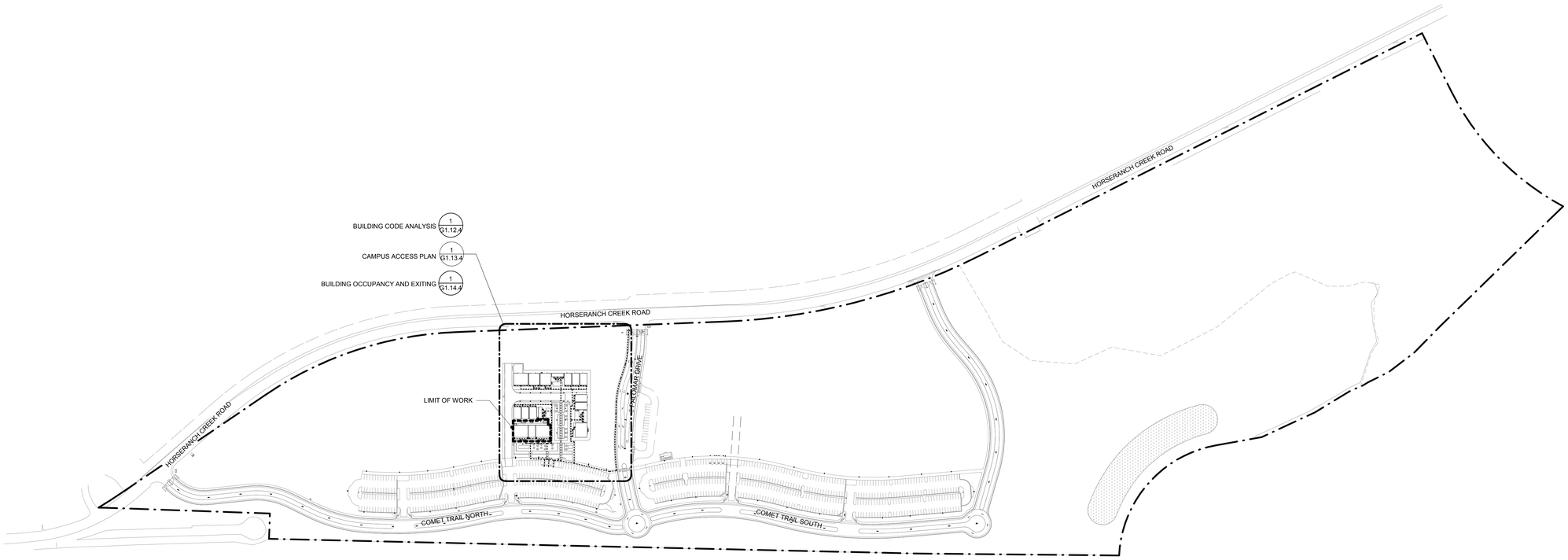
PLEASE RECYCLE

DSA SUBMITTAL



CAMPUS PLAN | 1
1" = 160'-0"

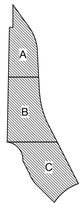
HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

(SM)

KEYNOTES

NOTES

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____
DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
CAMPUS PLAN

Architect's Seal

LICENSED ARCHITECT
BRIAN E. BLACK
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: 1" = 160'-0"
QAQC SC	Drawing No. G1.11.4
Date: 10/13/2017	

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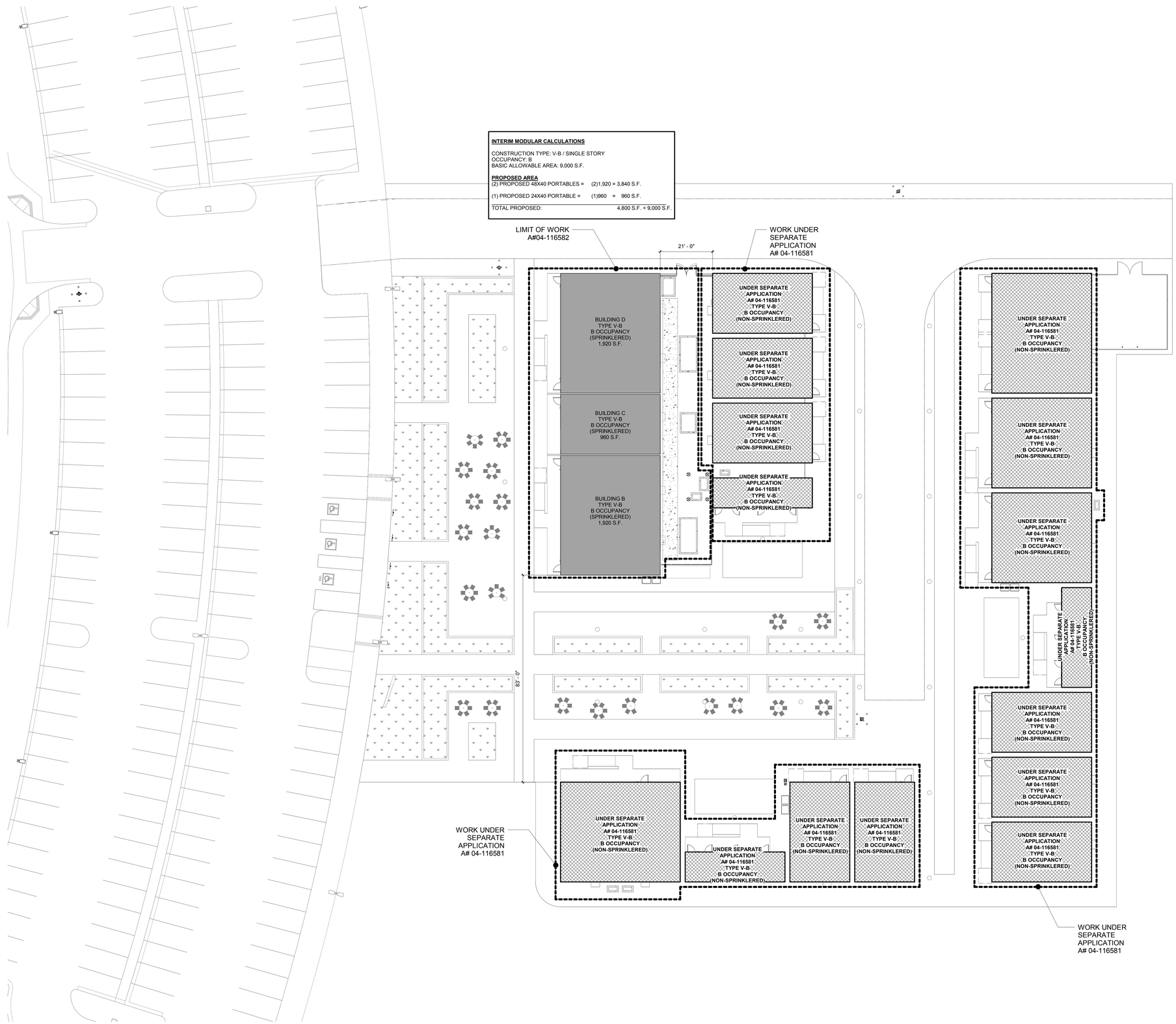
DSA SUBMITTAL

INTERIM MODULAR CALCULATIONS

CONSTRUCTION TYPE: V-B / SINGLE STORY
OCCUPANCY: B
BASIC ALLOWABLE AREA: 9,000 S.F.

PROPOSED AREA

(2) PROPOSED 48X40 PORTABLES =	(2)1,920 = 3,840 S.F.	
(1) PROPOSED 24X40 PORTABLE =	(1)960 = 960 S.F.	
TOTAL PROPOSED:		4,800 S.F. < 9,000 S.F.



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KEYNOTES

LEGEND

LIMIT OF WORK

SCOPE SHOWN IS IN A# 04-116581, NOT IN THIS CONTRACT

NOTES

1. REFER TO MODULAR DRAWINGS SHEET A-0 FOR FURTHER BUILDING INFORMATION.

Key Plan

Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____
DATE _____

Project Title

Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
CODE ANALYSIS

Architect's Seal

Designed: BL
Drawn: AC, MB
QAQC: SC
Date: 10/13/2017
Project No. 5015019-102
Scale: As indicated
Drawing No. G1.12.4

CODE ANALYSIS | 1 | 1/16" = 1'-0"

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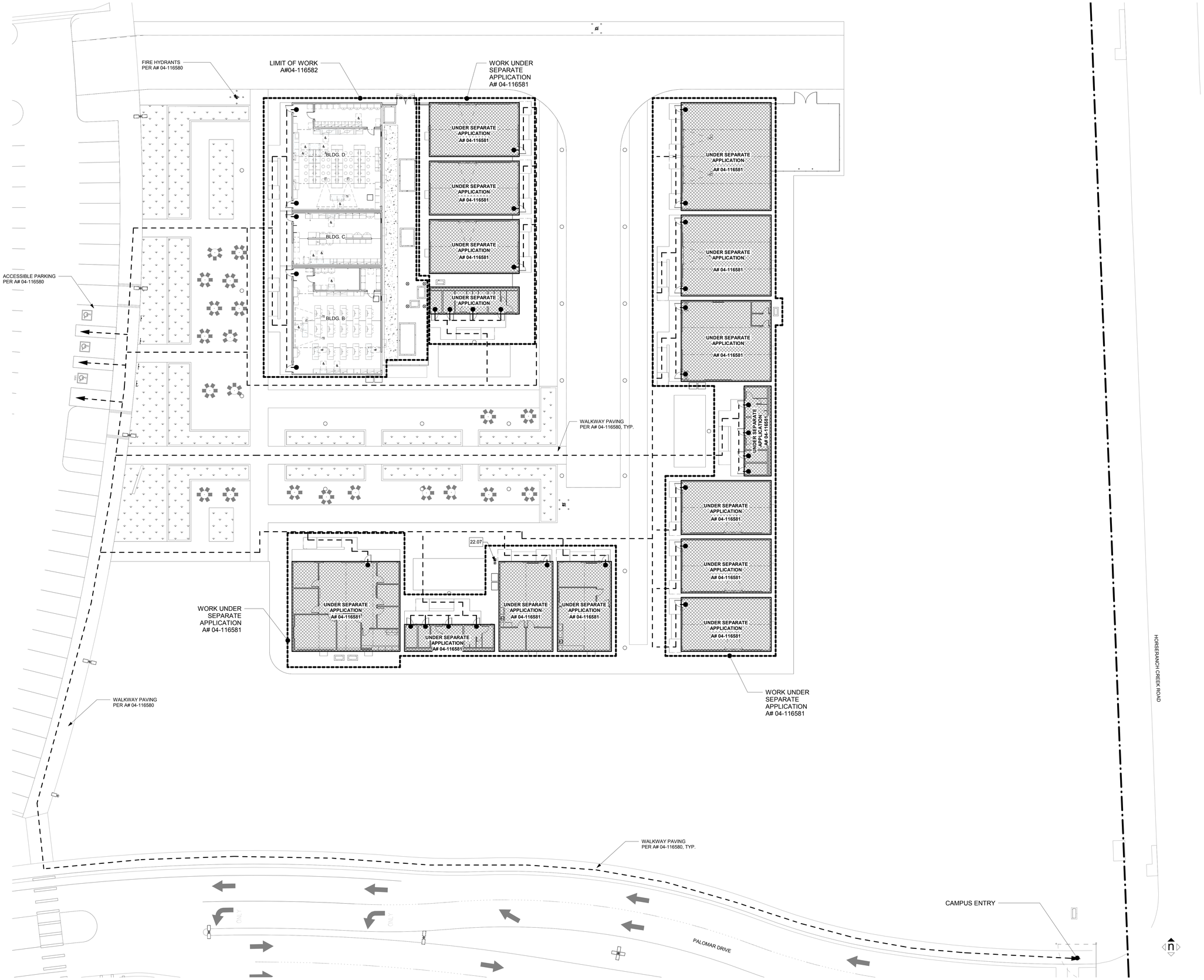
PLEASE RECYCLE

DSA SUBMITTAL



ENLARGED SITE PLAN - CAMPUS ACCESS PLAN | 1 | 1/16" = 1'-0"

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

KEYNOTES

NO.	Note - Detail
22.07	DRINKING FOUNTAIN - 16/A10.02

LEGEND

PATH OF TRAVEL
ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX. SLOPE. OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM, AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECTS SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

LIMIT OF WORK

SCOPE SHOWN, NOT IN THIS CONTRACT

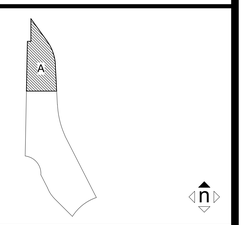
NOTES

1. **DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:** THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS, AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT WITH THE CBC HAVE BEEN IDENTIFIES AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS, AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS, OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIPARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC, COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

2. REFER TO CIVIL DRAWINGS UNDER APPLICATION A# 04-116580 FOR GRADING PLANS AND ELEVATIONS

Key Plan



Consultant Seal

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS_____ FLS_____ SSS_____
DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

CAMPUS ACCESS PLAN

Architect's Seal

REGISTERED ARCHITECT
BRIAN E. GLASCOCK
NO. C-32437
REN. 02-28-18
STATE OF CALIFORNIA

Designed:	BL	Project No.	5015019-102
Drawn:	AC, MB	Scale:	As indicated
QAQC	SC	Drawing No.	G1.13.4
Date:	10/13/2017		

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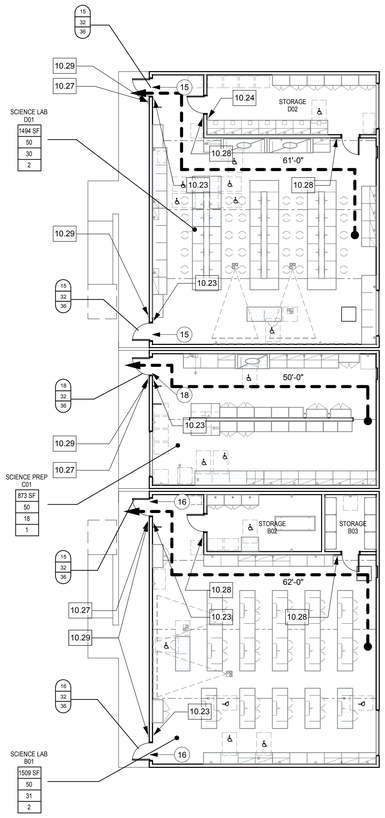
PLEASE RECYCLE

DSA SUBMITTAL

TABLE 1004.1.2 Maximum Floor Area Allowances Per Occupant		
Use Description	Occupant Load Factor	Gross/ Net
0 No Classification Applies	0	N/A
1 Accessory storage areas, mechanical equipment room	300	gross
2 Agricultural building	300	gross
3 Aircraft Hangers	500	gross
4 Airport terminal, Baggage claim	20	gross
4 Airport terminal, Baggage handling	300	gross
4 Airport terminal, Concourse	100	gross
4 Airport terminal, Waiting Areas	15	gross
5 Assembly, Gaming floors	11	gross
6 Assembly with fixed seats	1	PER SEAT
7 Assembly without fixed seats, Concentrated (chairs only- not fixed)	7	net
7 Assembly without fixed seats, Standing Space	5	net
7 Assembly without fixed seats, Unconcentrated (tables and chairs)	15	net
8 Bowling centers, additional areas	7	net
8 Bowling centers, per lane	5	EACH
9 Business area	100	gross
10 Courtrooms - other than fixed seating	40	net
11 Day care	35	net
12 Dormitories	50	gross
13 Educational, Classroom area	20	net
13 Educational, Shops and other vocational room areas	50	net
14 Exercise rooms	50	gross
15 H-5 Fabrication and manufacturing areas	200	gross
16 Industrial areas	100	gross
17 Institutional areas, Inpatient treatment areas	240	gross
17 Institutional areas, Outpatient areas	100	gross
17 Institutional areas, Sleeping areas	120	gross
18 Kitchens, commercial	200	gross
19 Library, Reading rooms	50	net
19 Library, Stack areas	100	gross
20 Locker rooms	50	gross
21 Mercantile, Areas on other floors	60	gross
21 Mercantile, Basement and grade floor areas	30	gross
21 Mercantile, Storage, stock, shipping areas	300	gross
22 Parking garages	200	gross
23 Residential	200	gross
24 Skating rinks and swimming pools, Decks	50	gross
24 Skating rinks and swimming pools, Rink and pool	15	gross
25 Stages and platforms	15	net
26 Warehouses	500	gross



ENLARGED SITE PLAN - OCCUPANCY & EXITING ANALYSIS | 1 | 3/32" = 1'-0"

HMC Architects
3546 Concours Street / Ontario, CA 91764
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SM

KEYNOTES

NO.	Note - Detail
10.23	TACTILE EXIT SIGN - EXIT- 13/A10.21
10.24	TACTILE EXIT SIGN - EXIT ROUTE - 13/A10.21
10.27	BUILDING IDENTIFICATION SIGNAGE - 14/A10.21
10.28	ROOM SIGN - 7/A10.21
10.29	CLASSROOM SIGN - 8/A10.21

NOTES

1. **DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:** THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS, AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT WITH THE CBC HAVE BEEN IDENTIFIES AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS, AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS, OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIPARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC, COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

2. REFER TO CIVIL DRAWINGS UNDER APPLICATION A# 04-116580 FOR GRADING PLANS AND ELEVATIONS

LEGEND

ROOM EXITING INFORMATION

ROOM NAME 1.01
150 SF
OLF
OL
EXIT

- ROOM NAME
- ROOM NUMBER
- ROOM AREA
- OCCUPANT LOAD FACTOR (REFER TO CBC TABLE 1004.1.2)
- OCCUPANT LOAD
- # OF EXITS REQUIRED

DOOR EXITING INFORMATION

AC
MW
DW
PHW

- # OF OCCUPANTS SERVED
- REQUIRED EXITING WIDTH (32" MIN)
- PROVIDED EXITING WIDTH
- PANIC HARDWARE PROVIDED

EXITING TAG

###

- # OF OCCUPANTS EXITING ALONG EGRESS PATH
- DIRECTION OF TRAVEL

PATH OF TRAVEL
ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX. SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM, AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECTS SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

Consultant Seal

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
OCCUPANCY AND EXITING ANALYSIS

Architect's Seal
LICENSED ARCHITECT — BRIAN E. GLASS — NO. C-32437 — REN. 02-28-19 — STATE OF CALIFORNIA

Designed: BL		Project No.	5015019-102
Drawn: AC, MB		Scale:	As indicated
QAQC SC		Drawing No.	G1.14.4
Date: 10/13/2017			

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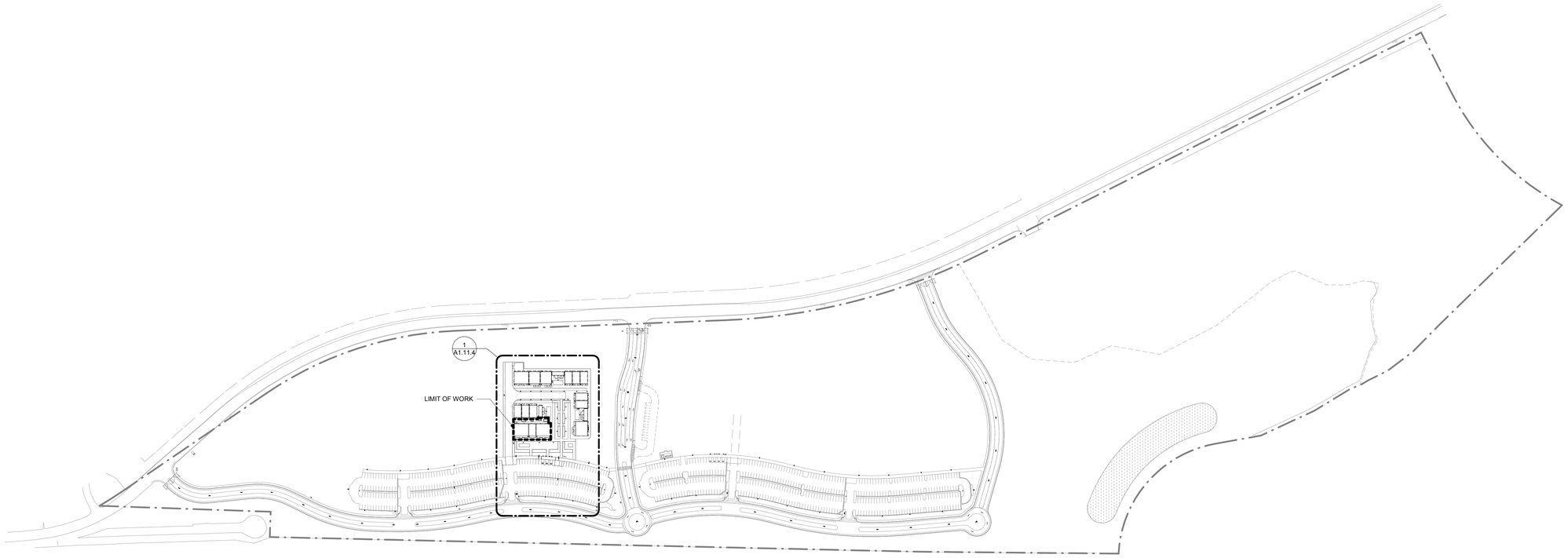
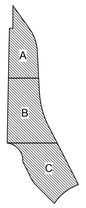


CAMPUS PLAN | 1
1" = 160'-0"

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

SM

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS_____ FLS_____ SSS_____
DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
OVERALL CAMPUS PLAN

Architect's Seal

LICENSED ARCHITECT
BRIAN E. CLAYCOMB
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: 1" = 160'-0"
QAQC SC	Drawing No. A1.10.4
Date: 10/13/2017	

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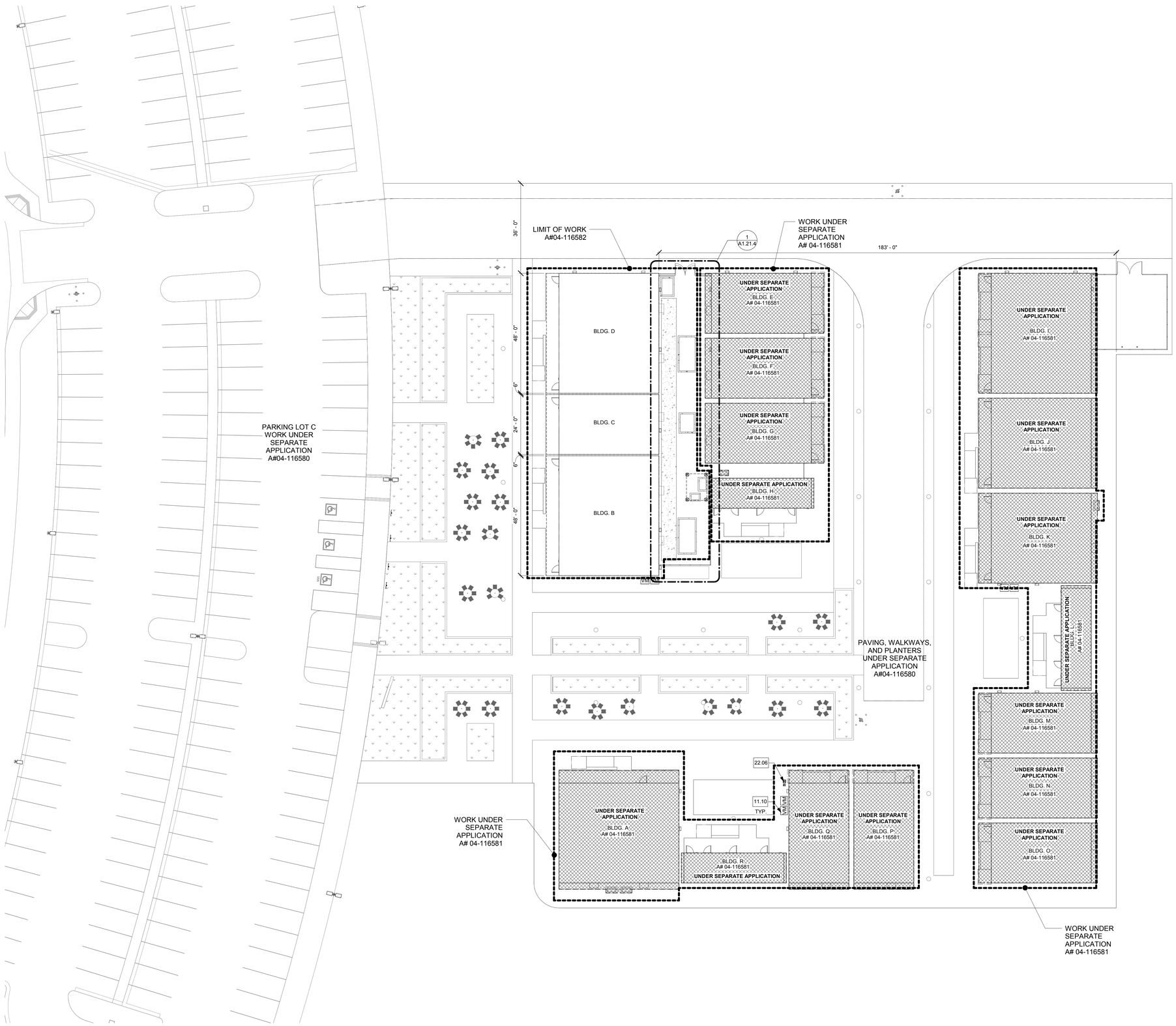

HMC Architects
3546 Concours Street / Ontario, CA 91764
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SM

KEYNOTES

NO.	Note - Detail
11.10	VENDING MACHINE - OFOI
22.06	DRINKING FOUNTAIN PER A# 04-116580

LEGEND

- LIMIT OF WORK
- SCOPE SHOWN IS IN A# 04-116581, NOT IN THIS CONTRACT

NOTES

1. REFER TO CIVIL DRAWINGS UNDER APPLICATION A# 04-116580 FOR GRADING PLANS AND ELEVATIONS

Key Plan

Consultant Seal

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS_____ FLS_____ SSS_____
DATE_____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
ENLARGED SITE PLAN

Architect's Seal — LICENSED ARCHITECT, JAMES E. CLARK, NO. C-32437, REN. 02-28-19, STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: As indicated
QAQC: SC	Drawing No. A1.11.4
Date: 10/13/2017	

ENLARGED SITE PLAN | 1 | 1/16" = 1'-0"

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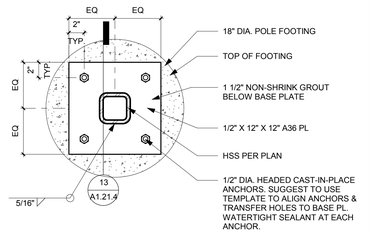
PLEASE RECYCLE

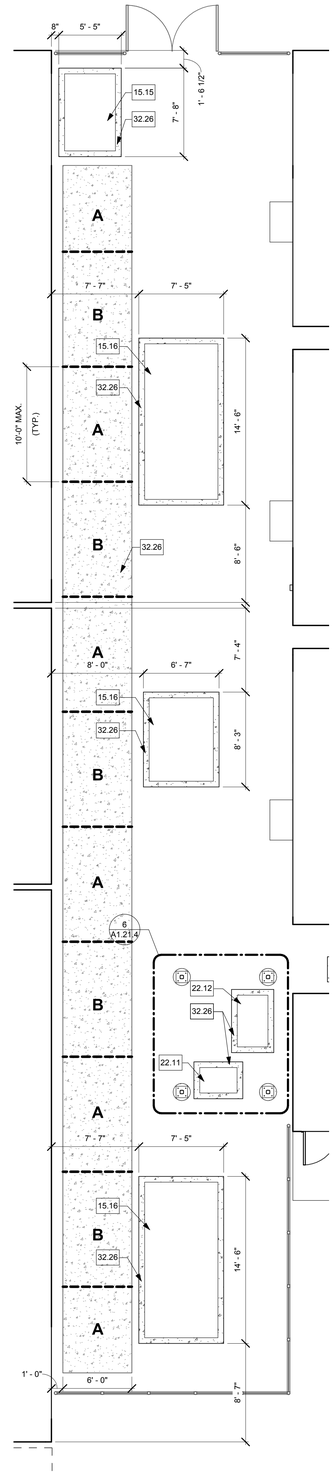
DSA SUBMITTAL

NOTE:
ALL WELDS TO BE TOUCH-UP GALVANIZED

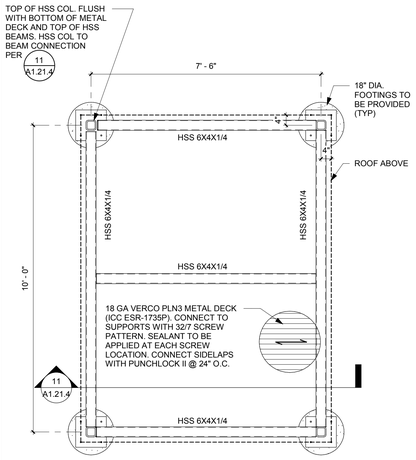


HSS TO BASE PLATE CONNECTION | 10
1 1/2" = 1'-0"

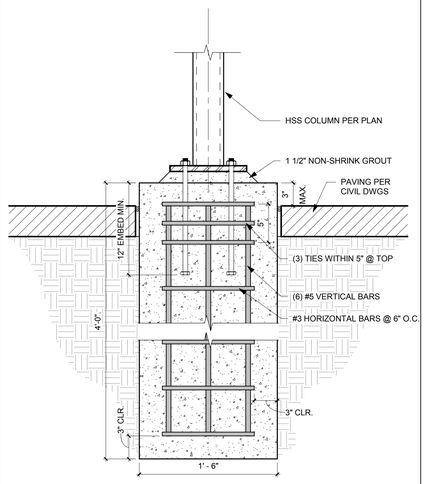
NOTE:
CONCRETE STRIP @ STACKED DUCTS IS TO BE POURED IN TWO PHASES. THE FIRST POUR WILL CONSIST OF ALL ZONE A SEGMENTS, AND THE SECOND POUR WILL CONSIST OF ALL ZONE B SEGMENTS. POUR/CONSTRUCTION JOINTS TO BE PER 17 / A1.21.4



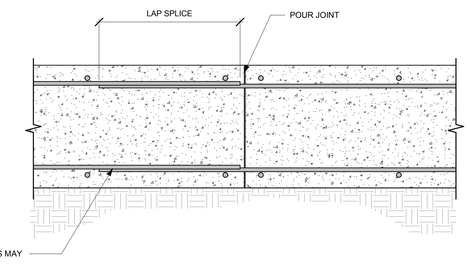
NOTE:
ALL STEEL TO BE GALVANIZED



EQUIPMENT CANOPY - ROOF FRAMING | 8
1/2" = 1'-0"

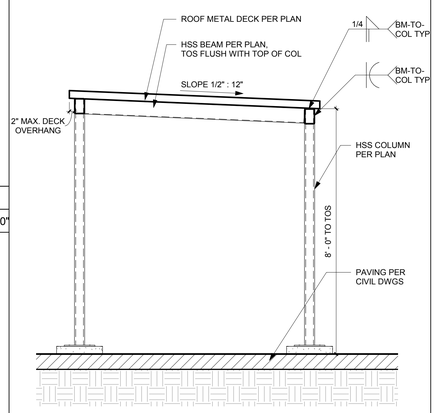


HSS TO BASE PLATE CONNECTION - SECTION | 13
1 1/2" = 1'-0"



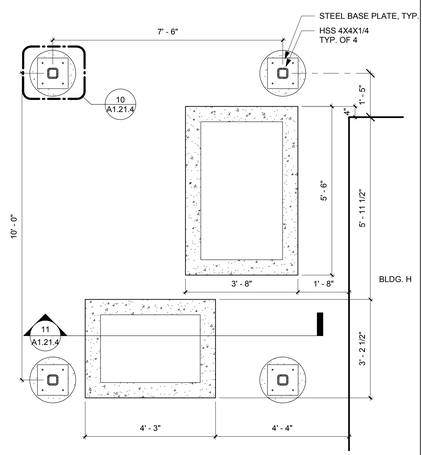
POUR/CONSTRUCTION JOINT | 17
1 1/2" = 1'-0"

NOTE:
ALL STEEL TO BE GALVANIZED &
ALL WELDS TO BE TOUCH-UP GALVANIZED

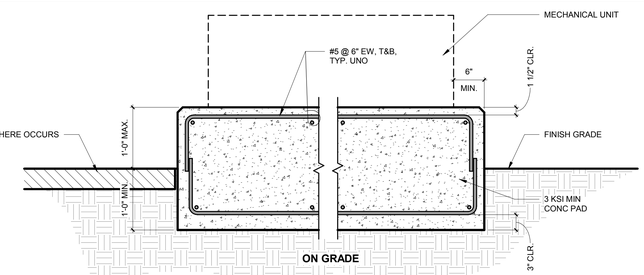


SECTION AT EQUIPMENT CANOPY | 11
1/2" = 1'-0"

NOTE:
ALL STEEL TO BE GALVANIZED



EQUIPMENT CANOPY | 6
1/2" = 1'-0"



TYPICAL EQUIPMENT CONCRETE PAD | 16
1" = 1'-0"

EQUIPMENT YARD | 1
3/16" = 1'-0"

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(SM)

KEYNOTES

NO.	Note - Detail
15.15	EXHAUST FAN, REFER TO MECHANICAL DWGS
15.16	AIR HANDLING UNIT, REFER TO MECHANICAL DWGS
22.11	LABORATORY COMPRESSOR, REFER TO PLUMBING DWGS.
22.12	LABORATORY VACUUM, REFER TO PLUMBING DWGS
32.26	CONCRETE HOUSE KEEPING SLAB - 16/A1.21.4

NOTES

Consultant Seal

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
ENLARGED SITE PLAN/SITE DETAILS

Architect's Seal
REGISTERED ARCHITECT — BRIAN E. CLARK — NO. C-32437 — REN. 02-28-19 — STATE OF CALIFORNIA

Designed:	BL	Project No.	5015019-102
Drawn:	AC, MB	Scale:	As indicated
QAQC	SC	Drawing No.	A1.21.4
Date:	10/13/2017		

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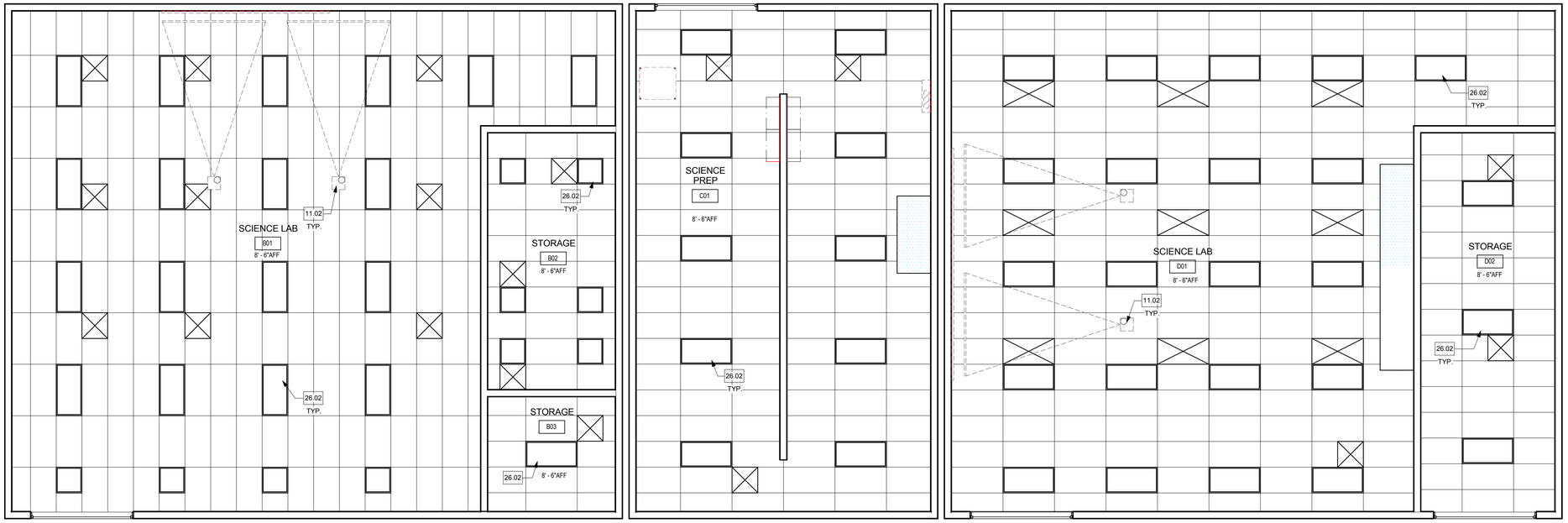
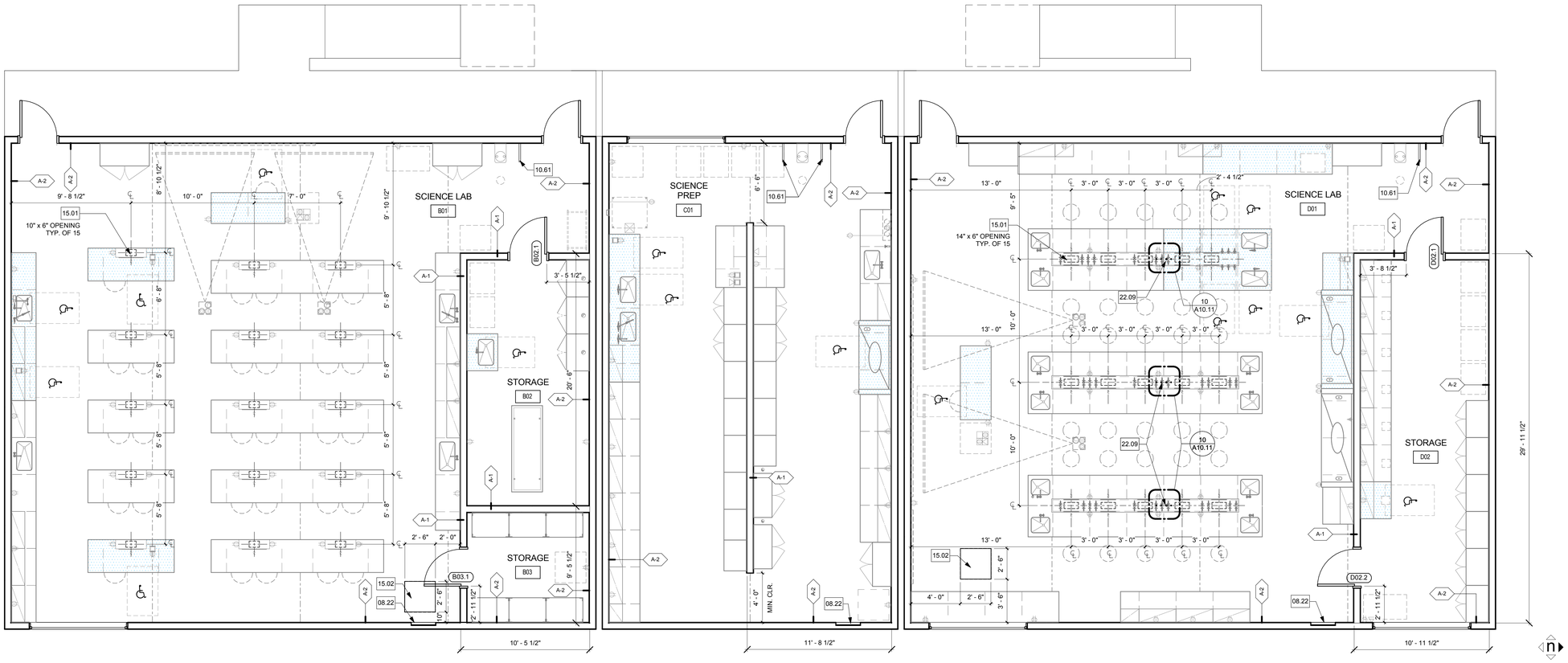
PLEASE RECYCLE

DSA SUBMITTAL



BLDG. B, C, D REFLECTED CEILING PLAN | 2 | 1/4" = 1'-0"



BLDG. B, C, D FLOOR PLANS | 1 | 1/4" = 1'-0"

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

(SM)

KEYNOTES

NO.	Note - Detail
08.22	ACCESS PANEL PER PLUMBING - 8/A10.11
10.61	GUARDRAIL - 13/A10.11
11.02	CEILING MOUNTED PROJECTOR, OFOI - 19/A10.31
15.01	DUCT OPENING AT FLOOR PER MECHANICAL DWGS - 4/A10.11
15.02	ACCESS PANEL PER MECHANICAL - 5/A10.11
22.09	PIPE OPENINGS AT FLOOR PER PLUMBING DWGS - 3/A10.11
26.02	LIGHT FIXTURE, REFER TO ELECTRICAL DWGS

NOTES

LEGEND

A101	DOOR TAG, REFER TO DOOR SCHEDULE ON SHEET A9.11.4
---	WALL TAG, REFER TO WALL TYPES ON SHEET A10.11
1'-0"AFF	CEILING TAG HEIGHT
	SUSPENDED T-BAR CEILING SYSTEM
	MECHANICAL DIFFUSER
	LIGHT FIXTURE

1 A10.31 | 2 A10.31 | 8 A10.31

Consultant Seal

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
FLOOR PLANS AND RCP

Architect's Seal — REGISTERED ARCHITECT, NO. C-32437, REN. 02-28-19, STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: 1/4" = 1'-0"
QAQC SC	Drawing No. A2.11.4
Date: 10/13/2017	

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DSA SUBMITTAL

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KEYNOTES

NOTES

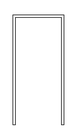
1. REFER TO SHEET G0.10.4 FOR TYPICAL ABBREVIATIONS

DOOR SCHEDULE ABBREVIATIONS:

HM HOLLOW METAL
PT PAINTED
SSCD STEEL STIFFENED CORE DOORS
T TEMPERED GLAZING

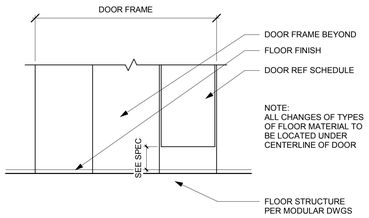
DOOR SCHEDULE - LAB CLASSROOMS

DOOR NUMBER	DOOR SIZE WIDTH PANEL 1	DOOR SIZE WIDTH PANEL 2	DOOR SIZE HEIGHT	Fire Rating	Door MATERIAL	Door FINISH	Door PANEL TYPE	Door UNDERCUT	FRAME MATERIAL	FRAME FINISH	FRAME TYPE	HARDWARE GROUP	PANIC	GLASS	DETAILS (SHEET A10.15 U.N.O.) HEAD	JAMB 1	JAMB 2	THRESH	Comments
B02.1	3' - 0"		7' - 0"	NR	SSCD	PT	02	0' - 0"	HM	PT	A : S	1	No	T	1/A9.11.4	1/A9.11.4	N/A	2/A9.11.4	
B03.1	3' - 0"		7' - 0"	NR	SSCD	PT	02	0' - 0"	HM	PT	A : S	1	No	T	1/A9.11.4	1/A9.11.4	N/A	2/A9.11.4	
D02.1	3' - 0"		7' - 0"	NR	SSCD	PT	02	0' - 0"	HM	PT	A : S	1	No	T	1/A9.11.4	1/A9.11.4	N/A	2/A9.11.4	
D02.2	3' - 0"		7' - 0"	NR	SSCD	PT	02	0' - 0"	HM	PT	A : S	1	No	T	1/A9.11.4	1/A9.11.4	N/A	2/A9.11.4	



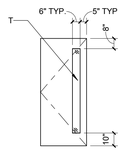
A:S

DOOR FRAMES



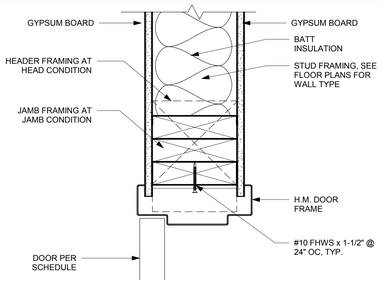
08.307

INTERIOR DOOR SILL 2
6" = 1'-0"



02:S

DOOR PANELS



08.306

INT. HM DOOR HEAD / JAMB 1
3" = 1'-0"

Consultant Seal

Agency Approval FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS._____ FLS._____ SSS._____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
SCHEDULES & DETAILS

Architect's Seal
LICENSED ARCHITECT BRIAN E. BLACK NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed: BL		Project No. 5015019-102	
Drawn: AC, MB		Scale: As indicated	
QAQC SC		Drawing No. A9.11.4	
Date: 10/13/2017			

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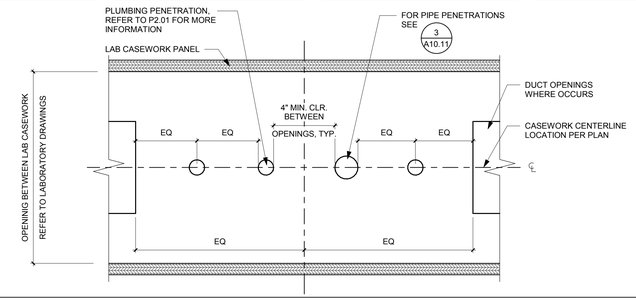
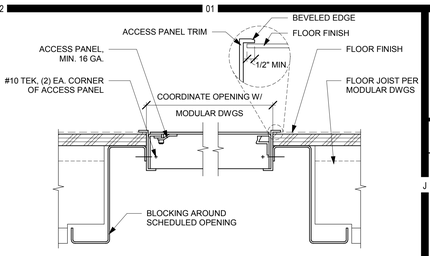


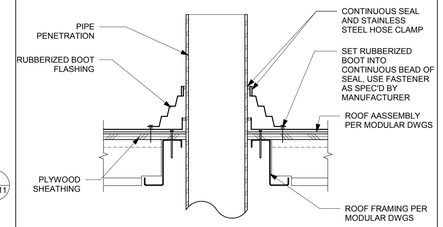
PIPE PENETRATION LOCATIONS AT FLOOR | 10 | 3" = 1'-0"



NOTE: COORDINATE FLOOR OPENINGS WITH MECHANICAL AND MODULAR DRAWINGS

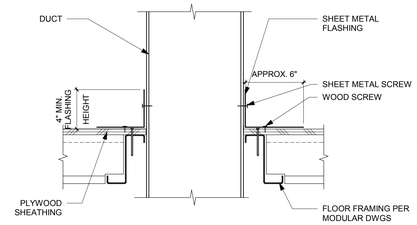
09.108

FLOOR ACCESS PANEL | 5 | 3" = 1'-0"



07.033

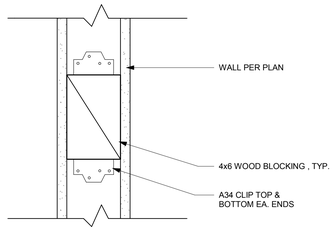
PLUMBING VENT @ ROOF | 9 | 1 1/2" = 1'-0"



NOTE: COORDINATE FLOOR OPENINGS WITH LAB CASEWORK AND MODULAR DRAWINGS

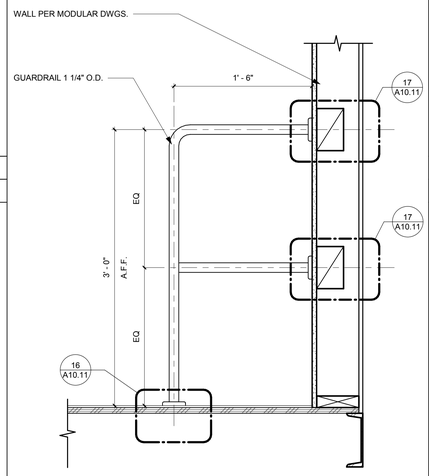
07.029

DUCT PENETRATION @ FLOOR | 4 | 1 1/2" = 1'-0"



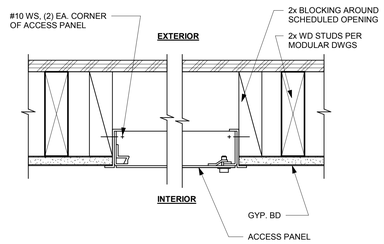
06.006

TYPICAL BACKING DETAIL | 18 | 3" = 1'-0"



10.013

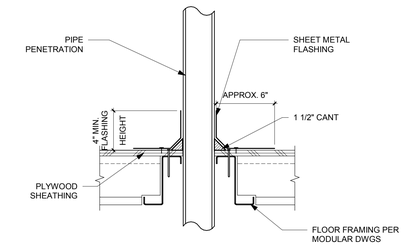
EYEWASH GUARDRAIL | 13 | 1 1/2" = 1'-0"



NOTE: COORDINATE WALL OPENING WITH PLUMBING AND MODULAR DRAWINGS

08.109

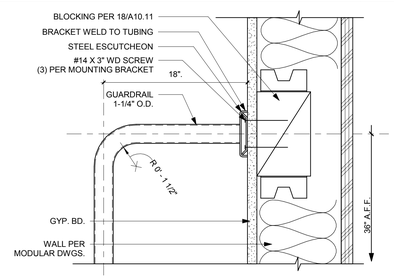
WALL ACCESS PANEL | 8 | 3" = 1'-0"



NOTE: COORDINATE FLOOR OPENINGS WITH LAB CASEWORK AND MODULAR DRAWINGS

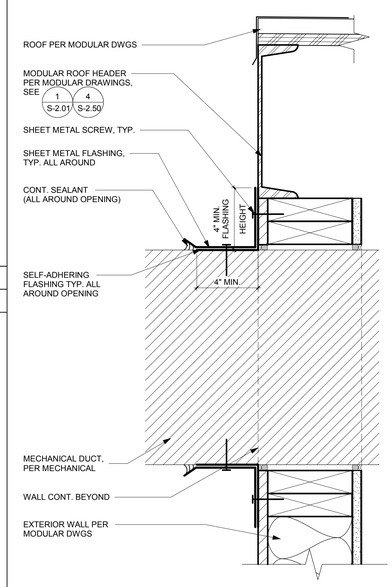
07.028

PIPE PENETRATION @ FLOOR | 3 | 1 1/2" = 1'-0"

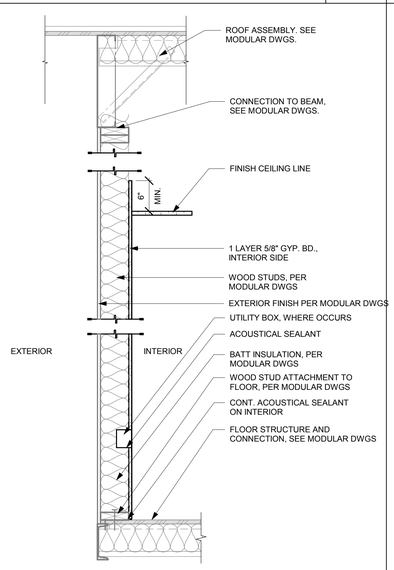


10.012

EYEWASH GUARDRAIL @ WALL | 17 | 3" = 1'-0"



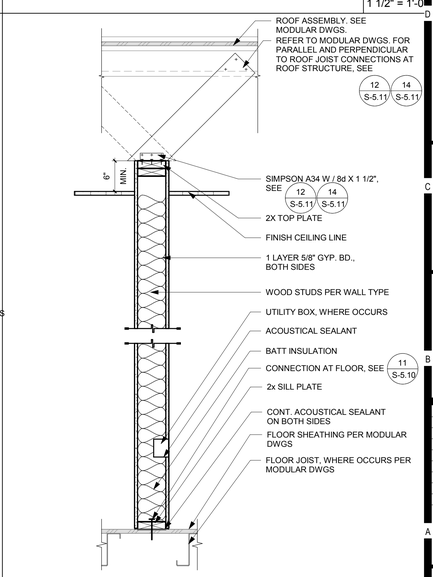
DUCT PENETRATION THRU WALL | 11 | 3" = 1'-0"



WALL TYPE	STUD SIZE	U.L.#	NOTES
A-2	PER MODULAR DWGS	-	5/8" GWB @ INTERIOR

07.002

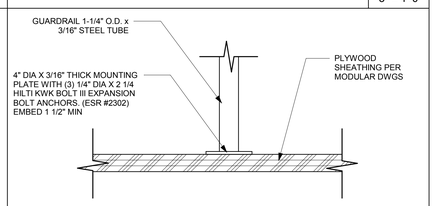
INTERIOR WALL TYPE "A-2" | 6 | 1" = 1'-0"



WALL TYPE	STUD SIZE	U.L.#	NOTES
A-1	2X6	-	ACOUSTICAL INSULATION, 5/8" GWB ON BOTH SIDES

07.001

INTERIOR WALL TYPE "A-1" | 1 | 1" = 1'-0"



10.011

EYEWASH GUARDRAIL @ FLOOR | 16 | 3" = 1'-0"

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SM

KEYNOTES

NOTES

Consultant Seal

Agency Approval FILE NO. 37-C1

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Project Title

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Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
WALL DETAILS/MISCELLANEOUS DETAILS

Architect's Seal

LICENSED ARCHITECT STEVEN E. CLAPP NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: As indicated
QAQC SC	Drawing No. A10.11
Date: 10/13/2017	

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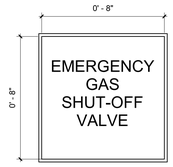
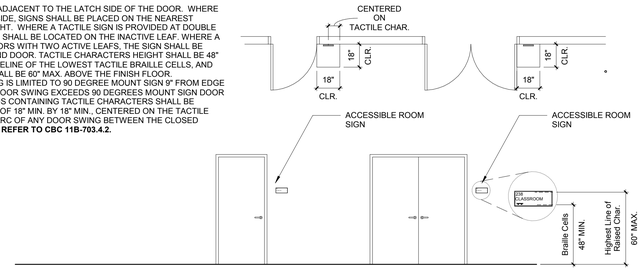
NOTE:
1. TO BE POSTED WHERE GAS SHUT OFF IS LOCATED PER MECH/PLUMB PLANS
2. LOCATE PER DETAIL 5/A10.21
3. FOR GENERAL REQUIREMENTS REFER TO 1/A10.21



10.030

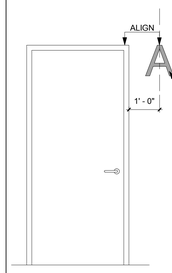
GAS SHUT-OFF SIGNAGE 15
N.T.S.

NOTES:
1.
SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONCE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. TACTILE CHARACTERS HEIGHT SHALL BE 48" MIN. ABOVE THE FINISH FLOOR TO THE BASELINE OF THE LOWEST TACTILE BRAILLE CELLS, AND HIGHEST LINE OF RAISED CHARACTERS SHALL BE 60" MAX. ABOVE THE FINISH FLOOR.
FOR PAIRS OF DOORS WHERE DOOR SWING IS LIMITED TO 90 DEGREE MOUNT SIGN 9" FROM EDGE OF DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING EXCEEDS 90 DEGREES MOUNT SIGN DOOR WIDTH PLUS 9" FROM EDGE OF DOOR. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN. BY 18" MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. **REFER TO CBC 11B-703.4.2.**
2.
RESTROOM GEOMETRIC SIGNS SHALL BE INSTALLED CENTERED ON THE DOOR. MOUNTING HEIGHT SHALL BE 60" ABOVE THE FINISH FLOOR TO THE CENTERLINE OF THE SIGN. THE COLOR AND CONTRAST OF THE SIGN SHALL BE DISTINCTLY DIFFERENT FROM THE COLOR AND CONTRAST OF THE DOOR.
3.
SEE (2/A10.21) FOR SIGNAGE ON GLAZING



10.005

DOOR SIGNAGE LOCATIONS 5
1/4" = 1'-0"



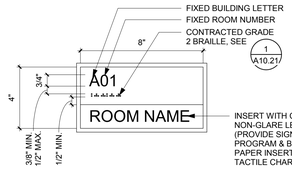
PIN-MOUNTED TEXT THREADED STUD MOUNT TO WALL PER MANUF. RECOMMENDATIONS
FINISH: BRUSHED ANODIZED ALUMINUM, U.N.O.
FONT: HELVETICA

NOTES:
1. EXTERIOR APPLICATION, EXACT LETTERS AND LOCATIONS TO BE DETERMINED BY OWNER
2. DIMENSIONAL LETTER THICKNESS AND SPACING TO BE DETERMINED
3. PROVIDE BACKING AT ALL LETTER MOUNTS

10.001

PIN-MOUNTED DIMENSIONAL LETTER 14
1/2" = 1'-0"

NOTES:
1. PROVIDE SIGN WHERE INDICATED ON PLANS. ALL SIGNED DOORS TO RECEIVE BRAILLE ROOM IDENTIFICATION PER 1/A10.21
2. WHERE SIGNAGE IS INSTALLED ON GLASS PROVIDE BLANK SIGNAGE ON OPPOSITE SIDE BEING EQUAL SIZE AND COLOR TO MASK ADHESIVE, SEE 2/A10.21
3. LOCATE PER DETAIL 5/A10.21
4. FOR BRAILLE NOTES/GENERAL REQUIREMENTS REFER TO 1/A10.21

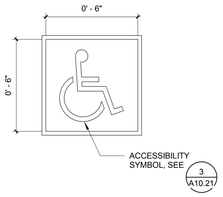


10.016

OFFICE SIGNAGE 9
N.T.S.

NOTES:
1. WHERE SIGNAGE IS INSTALLED ON GLASS PROVIDE BLANK SIGNAGE ON OPPOSITE SIDE BEING EQUAL SIZE AND COLOR TO MASK ADHESIVE.

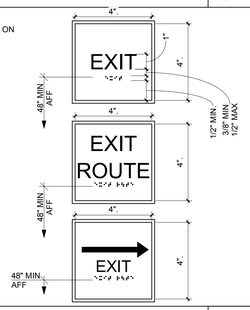
2. ALL BLDG. ENTRANCES THAT ARE ACCESSIBLE TO & USABLE BY PHYSICALLY DISABLED PERSONS SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN & ADDITIONAL DIRECTIONAL SIGNS AS REQUIRED TO BE VISIBLE TO PERSONS ALONE APPROACHING PEDESTRIAN WAYS.



10.004

ACCESSIBILITY SIGN 4
3" = 1'-0"

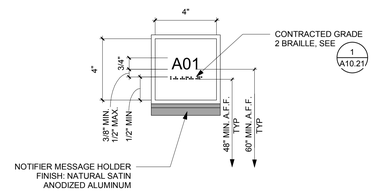
NOTES:
1. PROVIDE SIGN WHERE INDICATED ON PLANS.
2. LOCATE PER DETAIL 5/A10.21
3. FOR BRAILLE NOTES/GENERAL REQUIREMENTS REFER TO 1/A10.21



10.019

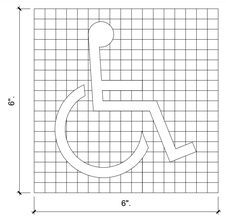
TACTILE EXIT SIGNAGE 13
N.T.S.

NOTES:
1. PROVIDE SIGN WHERE INDICATED ON PLANS. ALL SIGNED DOORS TO RECEIVE BRAILLE ROOM IDENTIFICATION PER 1/A10.21
2. WHERE SIGNAGE IS INSTALLED ON GLASS PROVIDE BLANK SIGNAGE ON OPPOSITE SIDE BEING EQUAL SIZE AND COLOR TO MASK ADHESIVE, SEE 2/A10.21
3. LOCATE PER DETAIL 5/A10.21
4. FOR BRAILLE NOTES/GENERAL REQUIREMENTS REFER TO 1/A10.21



10.015

CLASSROOM SIGNAGE 8
N.T.S.



NOTES:
1.GRID LINES ARE SHOWN FOR PROPORTION ONLY AND ARE NOT TO APPEAR AS PART OF SYMBOL.

2. SIGNAGE SHALL COMPLY WITH SECTION 11B-703.7 CALIFORNIA BUILDING CODE.

10.003

ACCESSIBILITY SYMBOL 3
N.T.S.

NOTES:
1. FOR SYSTEM LOCATION, SEE AV DRAWINGS.
2. SIGNAGE SHALL COMPLY WITH SECTION 11B-703.7 CALIFORNIA BUILDING CODE
3. LOCATE PER DETAIL 5/A10.21
4. FOR GENERAL REQUIREMENTS, SEE DETAIL 1/A10.21

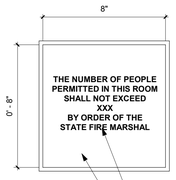
LETTERS & SYMBOL
COLOR: WHITE

BACKGROUND COLOR
#A54 GRAPHITE

10.013

ASSISTED LISTENING SYSTEM SIGN 17
N.T.S.

NOTES:
1. PROVIDE SIGN WHERE INDICATED ON PLANS.
2. LOCATE PER DETAIL 5/A10.21
3. FOR GENERAL REQUIREMENTS REFER TO 1/A10.21



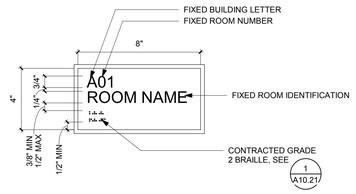
OCCUPANCY LOAD OF 50 OR MORE;
OCCUPANCY # PER ROOM

PRINTED INSERT WITH CLEAR
NON-GLARE LENS

10.014

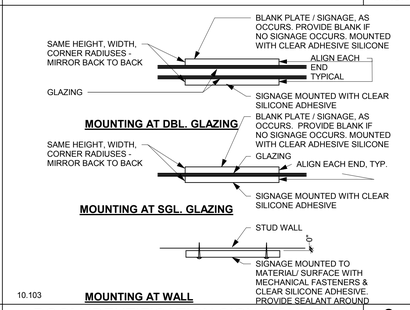
OCCUPANT LOAD SIGN 12
N.T.S.

NOTES:
1. PROVIDE SIGN WHERE INDICATED ON PLANS. ALL SIGNED DOORS TO RECEIVE BRAILLE ROOM IDENTIFICATION PER 1/A10.21
2. WHERE SIGNAGE IS INSTALLED ON GLASS PROVIDE BLANK SIGNAGE ON OPPOSITE SIDE BEING EQUAL SIZE AND COLOR TO MASK ADHESIVE, SEE 2/A10.21
3. LOCATE PER DETAIL 5/A10.21
4. FOR BRAILLE NOTES/GENERAL REQUIREMENTS REFER TO 1/A10.21



10.012

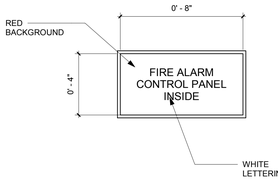
TACTILE ROOM IDENTIFICATION 7
N.T.S.



10.103

ROOM IDENTIFICATION SIGN MOUNTING 2
3" = 1'-0"

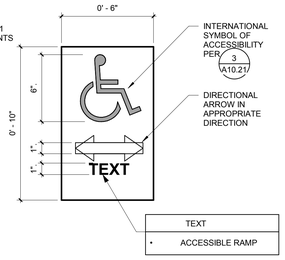
NOTES:
1. TO BE POSTED WHERE FIRE ALARM CONTROL PANEL IS LOCATED PER PLAN
2. LOCATE PER DETAIL 5/A10.21



10.029

FIRE ALARM SIGNAGE 16
N.T.S.

NOTES:
1. PROVIDE SIGN WHERE INDICATED ON PLANS.
2. LOCATE PER DETAIL 5/A10.21
3. FOR GENERAL REQUIREMENTS REFER TO 1/A10.21



10.017

ACCESSIBILITY INFORMATION SIGN 11
3" = 1'-0"

NOTES:
1. CHARACTER TYPE: CHARACTERS ON SIGN SHALL BE RAISED 1/32" MINIMUM AND SHALL BE "FUTURA MEDIUM" UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.

2. CHARACTER SIZE: RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8" AND A MAXIMUM OF 2" HIGH.

3. FINISH AND CONTRAST: CHARACTERS, SYMBOLS, AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH AND CONTRAST 70% MIN. WITH THEIR BACKGROUNDS.

CHARACTER & SYMBOLS - "APCO" COLOR #A01 WHITE (U.N.O.)

BACKGROUND - "APCO" COLOR #A54 GRAPHITE (U.N.O.)

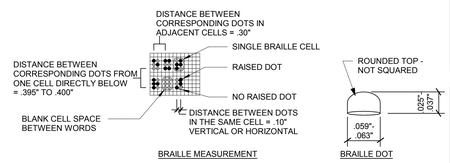
INTEGRAL COLOR FRAME: "APCO" COLOR PEARL GREY (U.N.O.)

PANEL: 1/4" THICK ACRYLIC PANEL WITH PHOTO POLYMER RAISED TACTILE COPY SUB-SURFACE SYMBOL (U.N.O.)

4. BRAILLE: CONTRACTED CALIFORNIA GRADE 2 BRAILLE SHALL BE USED WHERE BRAILLE IS REQUIRED. DOTS SHALL BE 1/10 INCH ON CENTERS IN EACH CELL WITH 2/10 INCH SPACE BETWEEN CELLS AND HAVE DOMED OR ROUNDED TOPS. CBC TABLE 11B-703.3.1

5. EXTERIOR SIGNS SHALL BE METAL COMPONENTS SUITABLE TO EXTERIOR USE AND SIMILAR TO INTERIOR SIGNS FOR SHAPE AND FORM

6. CONTRACTOR TO SUBMIT A SCHEDULE TO VERIFY ALL PERMANENT NUMBERS AND TEXT PRIOR TO FABRICATION.



10.101

CHARACTER & BRAILLE STANDARDS FOR SIGNAGE PER TITLE 24 1
1/4" = 1'-0"

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

(SM)
KEYNOTES

NOTES

Consultant Seal

Agency Approval FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116581
ACS____ FLS____ SSS____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
SIGNAGE DETAILS

Architect's Seal
LICENSED ARCHITECT
BRIAN E. GLASS
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: As indicated
QAQC SC	Drawing No. A10.21
Date: 10/13/2017	

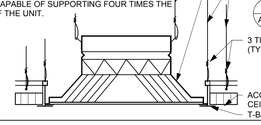
C:\Revit Local Files\5015019_A17_Central_acontreras.rvt

10/26/2017 8:40:06 AM

PLEASE RECYCLE

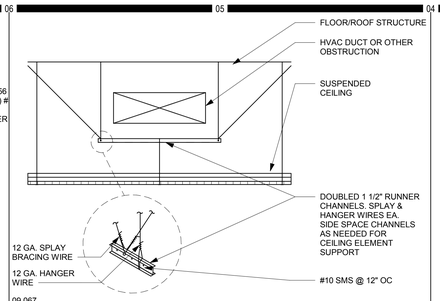
DSA SUBMITTAL

NOTES:
1. ATTACH ALL LIGHT FIXTURES AND CEILINGS MOUNTED AIR TERMINALS OR SERVICES TO CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE TO THE WEIGHT OF THE FIXTURES.
2. FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES, WEIGHING LESS THAN 56 POUNDS, MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF TWO 12 GAUGE SLACK SAFETY WIRES ATTACHED TO THE FIXTURE AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
3. ALL FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES WEIGHING 56 POUNDS OR MORE MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR(4) TAUT 12 GAUGE WIRES EACH ATTACHED TO THE FIXTURE AND TO THE STRUCTURE ABOVE. THE (4) WIRES, INCLUDING ATTACHMENTS, MUST BE CAPABLE OF SUPPORTING FOUR TIMES THE WEIGHT OF THE UNIT.



09.318

TYP. FIXTURE,DIFFUSER OR DEVICE @SUSP. CLG — 20
1 1/2" = 1'-0"



09.067

TYP.CEILING SUPPORT AT OBSTRUCTION — 15
1" = 1'-0"

CHANNEL COMPRESSION STRUT	MAXIMUM LENGTH
250S125-33	5'-0"
250S137-33	6'-10"
362S137-33	8'-0"
250137-43	8'-10"
400S137-43	10'-10"

COMPRESSION STRUT TABLE — 10
3" = 1'-0"

1. CEILING SYSTEM GENERAL NOTES:

1.01 Ceiling system components shall comply with ASTM C635-07 and Section 5.1 of ASTM E580-10a.

1.02 The ceiling grid system must be rated heavy duty as defined by ASTM C635-08.

1.03 Ceiling systems. The following ceiling system(s) is/are part of the scope of this project:

Manufacturer's Name **ARMSTRONG**
Product Evaluation Report Type and Number **ICC-ES, ESR-1308**
Manufacturer's Model Number - main runner **PRELUDE XL 7301**
Manufacturer's Catalog Number - cross runner **XL7341 (48 INCH GRID)**
Ceiling Panel. **FISSURED 15/16" SQUARE LAY-IN 755 (24" X 48")**

1.04 Seismic Wall Clip:
Manufacturer's Model **BERC2**

1.05 Ceiling panels shall not support any light fixtures, air terminals or devices.

1.06 For ceiling installations utilizing acoustical tile panels of mineral or glass fiber, it is not mandatory to provide ¼" clearance between the acoustical tile panels and the wall on the sides of the ceiling which are free to slip. For all other ceiling panel types, provide ¾" clearance between the ceiling panel and the wall on the sides of the ceiling free to slip.

2. MATERIALS:

2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641-09a. Wire shall be #12 gage (0.106" diameter) with soft temper and minimum tensile strength = 70 ksi.

2.02 Galvanized sheet steel (including that used for metal stud and track compression struts/post) shall conform to ASTM A653-11, or other equivalent sheet steel listed in Section A2.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members 2007, including supplement 2 dated 2010 (AISI S100-07/S2-10). Material 43 mil (18 gage) and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gage) and heavier shall have a minimum yield strength of 50 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES:

3.01 Separate all ceiling hanger and bracing wires at least six (6) inches from all unbraced ducts, pipes, conduit, etc.

3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to: piping, ductwork, conduit and equipment.

3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.

3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.

3.05 Hanger and bracing wire anchorage to the structure shall be installed in such a manner that the direction of the anchorage aligns closely with the direction of the wire. (e.g. bracing wire ceiling clips must be bent as shown in the details and rotated as required to align closely with the direction of the wire, screw eyes in wood must be installed so they align closely with the direction of the wire, etc.)

4. FASTENERS AND WELDING:

4.01 Sheet metal screws shall comply with ASTM C1513-10, ASME B18.6.4-89 (R2005). Penetration of screws through joined material shall not be less than three exposed threads.

4.03 Power-Actuated Fasteners shall be: **HILTI X-4ICC-ESR 2269**

4.04 If not otherwise specified in the evaluation report, power-actuated fasteners installed in steel shall be installed so the entire pointed end of the fastener is driven through the steel member.

4.05 Power-actuated fasteners in concrete are not permitted for bracing wires.

4.06 Concrete reinforcement and prestressing tendons shall be located by non-destructive means prior to installing post - installed anchor.

4.07 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING: All field testing must be performed in the presence of the project inspector.

5.01 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power actuated fasteners in concrete shall be field tested for 200 lbs. in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1913A.7.

5.02 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1913A.7.

6. LIGHT FIXTURES:

6.01 All light fixtures shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the fixture. A minimum of two screws or approved fasteners are required at each light fixture, per ASTM E580, Section 5.3.1.

6.02 Surface-mounted light fixtures shall be attached to the main runner with at least two positive clamping devices. The clamping device shall completely surround the supporting ceiling runner and be made of steel with a minimum thickness of #14 gage. Rotational spring catches do not comply. A #12 gage slack safety wire shall be connected from each clamping device to the structure above. Provide additional supports when light fixtures are eight (8) feet or longer or exceed 56 lb. Maximum spacing between supports shall not exceed eight (8) feet.

6.03 Light fixtures weighing less than or equal to 10 lb. shall have a minimum of one (1) #12 gage slack safety wire connected from the fixture housing to the structure above.

6.04 Light fixtures weighing less than or equal to 10 lb. shall have a minimum of one (1) #12 gage slack safety wire connected from the fixture housing to the structure above.

6.05 Light fixtures weighing greater than 10 lb. but less than or equal to 56 lbs. may be supported directly on the ceiling runners, but they shall have a minimum of two (2) #12 gage slack safety wires connected from the fixture housing at diagonal corners to the structure above.
Exception: All light fixtures greater than two by four feet weighing less than 56 lbs. shall have a #12 gage slack safety wire at each corner.

6.06 All Light fixtures weighing greater than 56 lb. shall be independently supported by not less than four (4) taut # 12 gage hanger wires (one at each corner) attached from the fixture housing to the structure above or other approved hangers. The four (4) taut #12 gage wires or other approved hangers, including their attachment to the structure above, shall be capable of supporting four (4) times the weight of the fixture.

7. SERVICES WITHIN THE CEILING:

7.01 All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals or other services shall be positively attached to the ceiling suspension systems by mechanical means. Screws or approved fasteners are required. A minimum of two attachments are required at each component.

7.02 Ceiling-mounted air terminals or other services weighing less than or equal to 20 lb. shall have one (1) #12 gage slack safety wire attached from the terminal or service to the structure above.

7.03 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 20 lb. but less than or equal to 56 lb. shall have two (2) #12 gage slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.

7.04 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 56 lb. shall be supported directly from the structure above by not less than four (4) taut #12 gage hanger wires attached from the terminal or service to the structure above or other approved hangers.

8. OTHER DEVICES WITHIN THE CEILING:

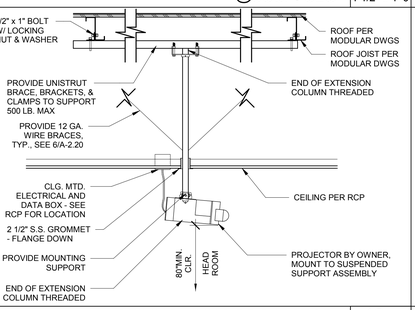
8.01 All lightweight miscellaneous devices, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid. In addition, devices weighing more than 10 lbs. shall have a #12 gage slack safety wire anchored to the structure above. Devices weighing more than 20 lb. shall be supported independently from the structure above.

DSA NOTE:

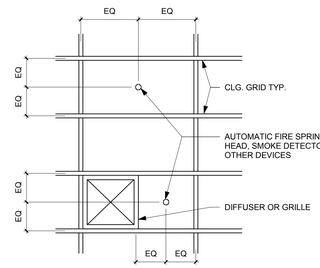
SUSPENDED T-BAR CEILING SYSTEM SHALL COMPLY WITH DSA IR 25-2.13

09.100

SUSPENDED ACOUSTICAL T-BAR CEILING NOTES — 2
N.T.S.

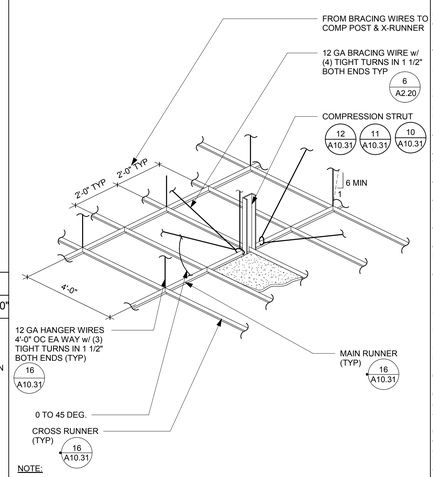


CEILING-HUNG PROJECTOR — 19
3/4" = 1'-0"



09.105

HORZ. CONTROL FOR CEILING DEVICES — 14
1 1/2" = 1'-0"

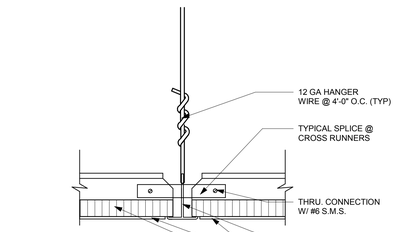


NOTE:

1. COMPRESSION STRUT SHALL NOT REPLACE HANGER WIRE.
2. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFERE WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED

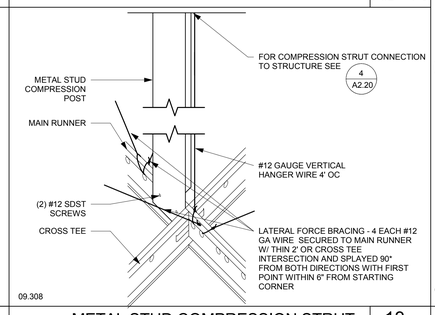
09.101

SUSPENDED T-BAR CEILING — 8
3" = 1'-0"



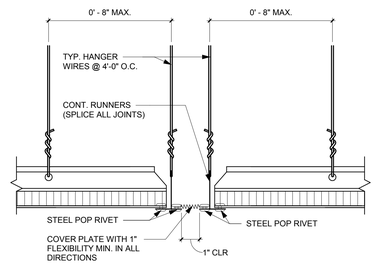
09.112

TYP. T-BAR INTERSECTION — 18
6" = 1'-0"

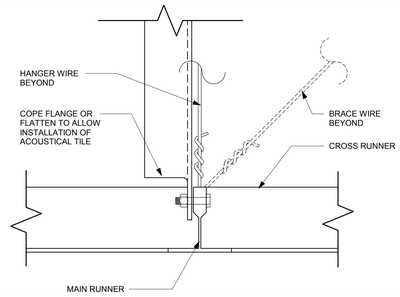


09.308

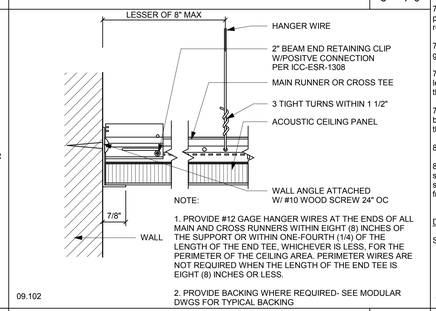
METAL STUD COMPRESSION STRUT — 13
3" = 1'-0"



SUSP. ACOUTICAL CEILING - EXPANSION JOINT AT INTERSECTIONS — 17
3" = 1'-0"



SUSP. ACOUSTICAL CEILING - CHANNEL TYPE STRUT SECTION — 12
3" = 1'-0"



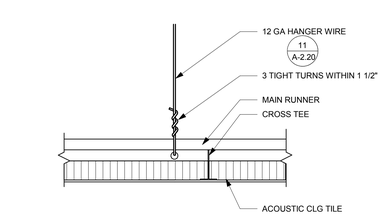
NOTE:

1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.

2. PROVIDE BACKING WHERE REQUIRED- SEE MODULAR DWGS FOR TYPICAL BACKING

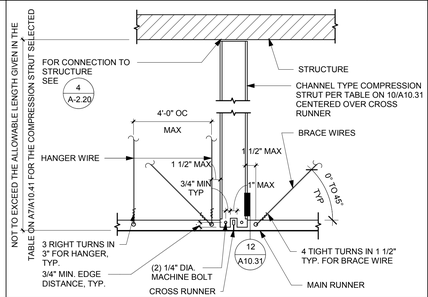
09.102

T-BAR CEILING PERMIETER FIXED — 7
3" = 1'-0"

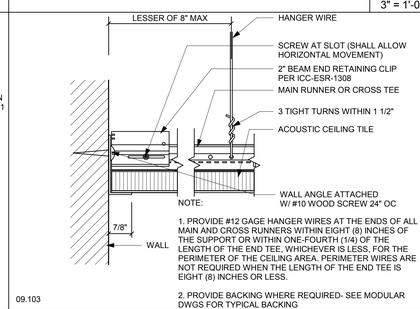


09.106

HANGER WIRE CONNECTION TO CEILING GRID — 16
3" = 1'-0"



SUSP. ACOUSTICAL CEILING - CHANNEL TYPE STRUT — 11
1/2" = 1'-0"



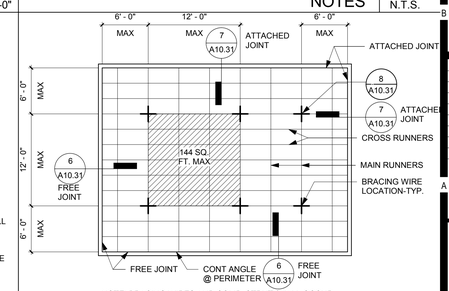
NOTE:

1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.

2. PROVIDE BACKING WHERE REQUIRED- SEE MODULAR DWGS FOR TYPICAL BACKING

09.103

T-BAR CEILING PERIMETER SLIP JOINT — 6
3" = 1'-0"



NOTE: BRACING WIRES AND COMP. STRUT SHALL OCCUR AT EVERY 144 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.

09.111

TYPICAL CEILING PLAN — 1
1/8" = 1'-0"

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(SM)

KEYNOTES

NOTES

Consultant Seal

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
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DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
CEILING DETAILS

Architect's Seal
REGISTERED ARCHITECT — NO. C-32437 — REN. 02-28-19 — STATE OF CALIFORNIA

Designed: BL	Project No. 5015019-102
Drawn: AC, MB	Scale: As indicated
QAQC: SC	Drawing No. A10.31
Date: 10/13/2017	

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10/26/2017 8:40:06 AM

PLEASE RECYCLE

DSA SUBMITTAL

GENERAL NOTES

1. ALL WALL BENCHTOPS AND MOVABLE TABLES SHALL BE 30" DEEP INCLUDING WALL BENCH BACK SPLASH (UNLESS OTHERWISE NOTED).
2. ALL ISLAND/PENINSULA BENCHTOPS SHALL BE 60" DEEP (UNLESS OTHERWISE NOTED).
3. ALL BENCHES AND TABLES SHALL BE 36" HIGH (UNLESS OTHERWISE NOTED).
4. ALL BENCH/TABLE TOPS TO BE 1" THICK EPOXY RESIN (UNLESS OTHERWISE NOTED).
5. ALL BACK AND SIDE SPLASHES TO BE 3/4" THICK AND 4" HIGH, PIPEDROP CURBS TO BE 3/4" THICK AND 5" HIGH (UNLESS OTHERWISE NOTED).
6. PROVIDE SIDESPLASHES AT ALL BENCH TOPS AGAINST FUME HOODS AND/OR ADJACENT WALLS.
7. OVERALL LENGTH OF BENCHTOPS SHALL BE DETERMINED BY CASEWORK SIZES AND DIMENSIONS AS INDICATED ON PLANS. TOPS SHALL OVERHANG 1/2" AT EACH END AND 1" FROM FRONT OF BASE CABINETS AND TABLES. WHEN OVERALL DIMENSIONS ARE GIVEN, 1/2" OVERHANG IS NOT INCLUDED.
8. ALL CASEWORK, FUME HOODS AND ANY OTHER FURNISHINGS WITH EXPOSED-TO-VIEW BACKS AND SIDES SHALL BE FINISHED.
9. INSTALL CLOSURE PANELS BETWEEN BACK OF HOODS AND WALLS AT EXPOSED ENDS AND BETWEEN BASE CABINETS AND/OR HOODS THAT ARE SET BACK TO BACK. FOR BASE CABINETS, PROVIDE EXTENDED ENDS AT THESE LOCATIONS.
10. ALL PENETRATIONS THROUGH BENCHTOP SHALL BE SEALED WITH SEALANT.
11. BACKS OF COUNTERTOPS AND SPLASHES AGAINST WALLS SHALL BE SEALED TO THE WALL WITH SEALANT.
12. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
13. OWNER'S REPRESENTATIVE WILL SELECT COLORS FOR ALL COMPONENTS OF PROJECT INDICATED ON THESE DRAWINGS. COLOR SELECTION WILL BE FROM THE CASEWORK MANUFACTURER'S STANDARD COLOR LINE.
14. FREE STANDING SHELVING AND CASEWORK LESS THAN 18" DEEP SHALL BE SECURED TO PREVENT TIPPING.
15. SAFETY SHOWER/EYEWASH UNITS SHALL COMPLY WITH ANSI STANDARDS FOR USABILITY BY THE PHYSICALLY DISABLED. SAFETY SHOWER/EYEWASH UNITS SHALL BE FURNISHED UNDER DIVISION 11 FOR INSTALLATION UNDER DIVISION 22.
16. FOR LABORATORY SERVICE FITTING TYPES, LOCATIONS AND ORDER, SEE LABORATORY FURNISHINGS PLANS. THESE FITTINGS SHALL BE PROVIDED UNDER DIVISION 11, FOR INSTALLATION UNDER DIVISION 22 U.O.N.
17. AT ALL TALL FREESTANDING VENTED, CORROSIVE STORAGE CABINETS, VENT PIPING WILL BE PROVIDED AND INSTALLED FROM THE CABINET POINT OF CONNECTION TO THE EXHAUST DUCT SYSTEM PER DIVISION 23.
18. WHERE FUME HOOD OCCURS ADJACENT TO UNDER COUNTER CORROSIVE STORAGE CABINETS, ROUTE VENT PIPE (IN PIPE CHASE) TO FUME HOOD AND EXTEND 4" ABOVE FUME HOOD WORK SURFACE BEHIND BAFFLE.
19. LOCATION OF EQUIPMENT, SUCH AS FUME HOODS, BRACES OR ANY OTHER ITEMS THAT MAY INTERFERE WITH LIGHTING, STRUCTURAL OR MECHANICAL SYSTEMS, SHALL BE CAREFULLY COORDINATED. NOTIFY OWNER'S REPRESENTATIVE OF DISCREPANCIES PRIOR TO PROCEEDING WITH WORK.
20. UNLESS OTHERWISE NOTED, ALL MISCELLANEOUS CHANNELS, BRACKETS AND FITTINGS INDICATED ON ALL LABORATORY FURNISHINGS DRAWINGS SHALL BE SUPPLIED, INSTALLED AND PAINTED UNDER DIVISION 11.
21. CONTRACTOR SHALL EXAMINE ALL LABORATORY FURNISHINGS PLANS AND COORDINATE WITH REFLECTED CEILING PLANS FOR PROPER CEILING HEIGHTS & PIPE DROP ENCLOSURE HEIGHTS AND LOCATIONS.
22. ALL BULLETIN BOARDS, MARKER BOARDS, CHALKBOARDS, PROJECTION SCREENS, COAT RACKS AND FIRE EXTINGUISHERS ARE INDICATED ON THE "LF" DRAWINGS FOR COORDINATION ONLY.
23. SERVICE FITTINGS SHOWN ON THE "LF" PLAN DRAWINGS ARE FOR LOCATION ONLY. REFER TO DETAILS AND SPECIFICATIONS FOR ACTUAL FITTINGS.
24. ELECTRICAL DEVICES SHALL BE PROVIDED UNDER DIVISION 26. ELECTRICAL DEVICES SHOWN ON THE "LF" DRAWINGS ARE FOR THE LOCATION OF CASEWORK CUTOUTS. DEVICES SHOWN AT FUME HOODS SHALL BE PROVIDED BY THE EQUIPMENT SUPPLIER.

TYPICAL ABBREVIATIONS

(NOTE: NOT ALL ABBREVIATIONS SHOWN ARE USED. REFER TO FLOOR PLANS FOR ACTUAL ABBREVIATION TYPES.)

ADA	AMERICAN DISABILITIES ACT
A.F.F.	ABOVE FINISHED FLOOR
ARCH	ARCHITECTURAL DOCUMENTS
CFM	CUBIC FEET/MINUTE
CENT	CENTRIFUGE
CLG.	CEILING
CLR.	CLEARANCE
DIA	DIAMETER
DIV.	DIVISION
EQUIP	EQUIPMENT
FZR	FREEZER
GA.	GAUGE
G.C.	GENERAL CONTRACTOR
G.W.	GLASSWARE WASHER
H.D.	HEAVY DUTY
INC	INCUBATOR
MAX.	MAXIMUM
MIN.	MINIMUM
MTD.	MOUNTED
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OFOI	OWNER FURNISHED, OWNER INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
O.H.	OVERHEAD
OHSC	OVERHEAD SERVICE CARRIER
PH	PHASE
REF	REFRIGERATOR
SIM.	SIMILAR
SPEC	SPECIFICATIONS
ST.STL.	STAINLESS STEEL
TEMP	TEMPERATURE
TYP.	TYPICAL
UC	UNDER COUNTER
U.O.N.	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF

LABORATORY SERVICE ABBREVIATIONS

CW	POTABLE COLD WATER
DH	DRENCH HOSE
EW	EYEWASH
HW	POTABLE HOT WATER
LA	LABORATORY AIR
LG	LABORATORY GAS
LV	LABORATORY VACUUM
SS	SAFETY SHOWER
__(VB)	SERVICE VALVE BOX - PROVIDED UNDER DIV. 22

LABORATORY SYMBOLS LEGEND

	SYMBOL LEGEND	DESCRIPTION	DETAIL
1		DRYING RACK	1 F10.11
2		ADJUSTABLE WALL SHELVES (2 TIER U.O.N.)	2 F10.11
3		INDUSTRIAL SHELVING UNIT	4 F10.11
4	SS EW	SAFETY SHOWER WITH EYEWASH UNIT	5 F10.11
5		WATER PURIFIER - OWNER FURNISHED, OWNER INSTALLED	
6		MULTI-MEDIA PROJECTOR & SCREEN (CEILING MOUNT) - SHOWN FOR COORDINATION ONLY - REFER TO ARCHITECTURAL DRAWINGS	
7		MARKER BOARD (SEE ARCHITECTURAL DOCUMENTS, SHOWN FOR COORDINATION ONLY)	
8*		EQUIPMENT CEILING EXHAUST - SEE EXHAUST SCHEDULE	
	WCxx	WALL CABINET - SEE CASEWORK MENU	
	TAxx	TALL STORAGE CABINET - SEE CASEWORK MENU	
		LEG POST UNDER BENCH/TABLE TOP	
	6"CFH	CHEMICAL FUME HOOD - SEE EXHAUST SCHEDULE	
	6"ACFH +34"	ADA CHEMICAL FUME HOOD - SEE EXHAUST SCHEDULE	
		OWNER FURNISHED, OWNER INSTALLED EQUIPMENT	
		EPOXY RESIN SINK - SEE SINK SCHEDULE	
		CUP SINK - SEE SINK SCHEDULE	
		ADA COMPLIANT AREA	
	FS	FLOOR SINK (SHOWN FOR COORDINATION ONLY)	

LABORATORY BENCHTOP SCHEDULE

E EPOXY RESIN BENCHTOP

+30", +34" & +36" INDICATES BENCHTOP HEIGHT ABOVE FINISHED FLOOR

NOTE:

FOR BENCHTOP TRANSITION HEIGHT REFER TO DETAILS: 5 F10.11

DETAIL SYMBOLS LEGEND

DETAIL NUMBER
SHEET NUMBER

SECTION NUMBER
SHEET NUMBER

ELEVATION NUMBER
SHEET NUMBER

ELECTRICAL SYMBOLS (SHOWN FOR CUT-OUTS)

120V, 1PH, 20A SINGLE RECEPTACLE/SWITCH
120V, 1PH, 20A DUPLEX RECEPTACLE
DOUBLE DUPLEX RECEPTACLE
PEDESTAL BOX
INSTRUMENT GROUND

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Consultant Seal: LICENSED ARCHITECT RICHARD M. TIEDRICH NO. 12916 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval — FILE NO. 37-C1
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APPL. 04-116582
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DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS
GENERAL NOTES

Architect's Seal: REGISTERED ARCHITECT JEFFREY E. CLASSEN NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/4" = 1'-0"
QAQC	ME R	Drawing No.	LF0.11
Date:	10/13/2017		

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EXHAUST EQUIPMENT SCHEDULES

CHEMICAL FUME HOODS

DRAWING REFERENCE	HOOD SIZE AND TYPE	TYPE OF SASH	TYPE OF SILL	NUMBER OF VERTICAL SASHES	NOMINAL VERTICAL SASH HEIGHT	HORIZONTAL SASH CONFIGURATION		DESIGN OPERATING CONDITIONS			MAXIMUM OPERATING CONDITIONS			MINIMUM VAV AIR FLOW (NOTE 1)	MAX HOOD STATIC PRESSURE DROP	EXHAUST CONNECTION BY MECHANICAL (NOTE 2)	REMARKS
								SASH OPENING	FACE VELOCITY	AIRFLOW	SASH OPENING	FACE VELOCITY	AIRFLOW				
					INCH	NUMBER OF SASHES	NUMBER OF TRACKS	INCH	FPM	CFM	INCH	FPM	CFM	CFM	INCH OF WATER	INCH DIAMETER	
6' ACFH	6' ADA CHEMICAL FUME HOOD	VERTICAL	AIRFOIL	1	30	-	-	18	100	800	28.5	100	1,300	300	0.25	12	1/LF10.12
8' CFH	8' CHEMICAL FUME HOOD	VERTICAL	AIRFOIL	2	30	-	-	18	100	1,100	28.5	100	1,750	400	0.25	12 (QTY/2)	1/LF10.12
8' ACFH	8' ADA CHEMICAL FUME HOOD	VERTICAL	AIRFOIL	2	30	-	-	18	100	1,100	28.5	100	1,750	400	0.25	12 (QTY/2)	2/LF10.12

NOTES:
1. MINIMUM VARIABLE AIR VOLUME (VAV) EXHAUST AIRFLOW CORRESPONDS TO 25" DEEP WORK SURFACE. FOR EXTENDED DEPTHS, APPLY AIRFLOW CORRECTION PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE EXHAUST DUCT TRANSITION PIECE TO TRANSITION FROM FUME HOOD COLLAR SIZE TO SCHEDULED EXHAUST CONNECTION SIZE.

OTHER EXHAUST EQUIPMENT

DRAWING REFERENCE	EQUIPMENT	EXHAUST AIR FLOW	STATIC PRESSURE	EXHAUST DUCT CONNECTION SIZE	REMARKS
		CFM	INCH OF WATER	INCH	
TCS •	TALL CORROSIVE STORAGE CABINET	UNREGULATED	-	2	PROVIDE SCHEDULE 80 PVC/CPVC PIPE FOR EXHAUST DUCT PIPE.
8A TAV	TALL VENTED CABINET	UNREGULATED	-	2	
8B	BACKDRAFT EXHAUST - A (CHEM.)	250	0.5	6	BACK TO BACK DOWNDRAFT GRILLES. GRILLES ARE 15"W X 6"H OUTSIDE DIMENSION, INCLUDING 1/2" FLANGE 3/LF0.15
8C	BACKDRAFT EXHAUST - B (BIO.)	125	0.5	6	SINGLE SIDED DOWNDRAFT GRILLES. GRILLES ARE 25"W X 4"H OUTSIDE DIMENSION, INCLUDING 1/2" FLANGE 2/LF0.15

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Consultant Seal

LICENSED ARCHITECT RICHARD M. THOMAS NO. C 12916 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1

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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS SCHEDULES

Architect's Seal

LICENSED ARCHITECT BRIAN E. CLARK NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/4" = 1'-0"
QAQC	ME R	Drawing No.	LF0.12
Date:	10/13/2017		

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LABORATORY SERVICE FITTING SCHEDULE

ABBREV.	FITTING TYPE	MOUNTING	NOTES	DETAIL
CW	COLD WATER	DECK	AT LABORATORY SINK	1 / F10.13
		DECK (ADA)	AT LABORATORY SINK (PROVIDE WRIST BLADE HANDLE)	
		DECK (SPRAY)	AT LABORATORY SINK	SIM. ADA 6 / F10.13
		DECK (ADA-SPRAY)	AT LABORATORY SINK (PROVIDE WRIST BLADE HANDLE)	
		WALL	AT WALL LOCATION AT +72"	3 / F10.13
		HOOD	REMOTE	2 / F10.13
		HOOD (ADA)	REMOTE (PROVIDE BALL VALVE LEVER HANDLES AT ADA HOODS)	
HWCW	HOT WATER/ COLD WATER	DECK	AT LABORATORY SINK	7 / F10.13
		DECK (ADA)	AT LABORATORY SINK (PROVIDE WRIST BLADE HANDLE)	
		DECK (ADA-SPRAY)	AT LABORATORY SINK (PROVIDE WRIST BLADE HANDLE)	6 / F10.13
LA,LG & LV	LABORATORY GAS & LABORATORY VACUUM	DECK	LA(2), LG(2) & LV(2) (PROVIDE LEVER HANDLES AT LG ONLY)	1 / F10.14
		PANEL (ADA)	LA, LG & LV (PROVIDE LEVER HANDLES)	4 / F10.14
		HOOD	REMOTE - LG & LV (PROVIDE BALL VALVE LEVER HANDLES AT LG ONLY)	2 / F10.14
		HOOD (ADA)	REMOTE - LG & LV (PROVIDE BALL VALVE LEVER HANDLES AT ADA HOODS)	
EW	EYEWASH UNIT	DECK	SWING DOWN EYEWASH - BARRIER FREE	4 / F10.13
EW/DH	EYEWASH UNIT	DECK	AT LABORATORY SINK	3 / F10.14
SS/EW	SAFETY SHOWER/ EYEWASH UNIT	WALL	BOWL AND SKIRT	5 / F10.13

VALVES & VALVE BOXES BY DIV. 22

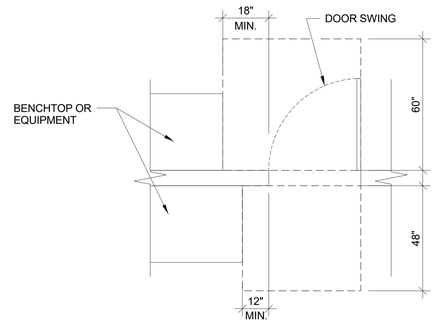
VALVE BOX(VB) CW	COLD WATER	WALL	VALVE BOX - BY DIV. 22 - AT +18" A.F.F. U.O.N., SEE PLANS

NOTES:

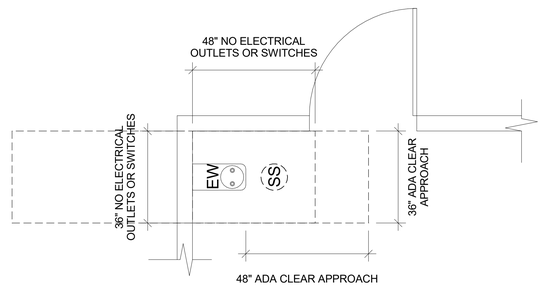
1. FOR FIXTURE SPACING REFER TO DETAILS: 7 / LF0.15, 8 / LF0.15

2. SERVICE ABBREVIATION __(VB) REFERS TO SERVICE VALVE BOX - PROVIDED UNDER DIVISION 22.

INTERIOR DOOR CLEARANCES (ADA COMPLIANT)



ELECTRICAL AND ADA APPROACH CLEARANCES AT SS/EW



LABORATORY SINK SCHEDULE

SINK NUMBER	DESCRIPTION	OUTLET	WIDTH x DEPTH x HEIGHT (INSIDE DIMENSIONS)	SINK OUTLET SIZE	REMARKS	DETAIL
SK1	EPOXY RESIN	CORNER	18" x 15" x 10"	1-1/2"	DROP-IN	9 / F10.13
SK2	EPOXY RESIN	SIDE	28" x 15" x 12"	1-1/2"	DROP-IN	9 / F10.13
SK3	EPOXY RESIN	CORNER	25" x 15" x 4.8"	1-1/2"	REQUIRES ADA FITTINGS	9 / F10.13
CS1	EPOXY RESIN	CENTER	3" x 6"	1-1/2"	OVAL, TYPICAL @ FUME HOOD W/ RAISED LIP	8 / F10.13

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Consultant Seal

LICENSED ARCHITECT RICHARD M. TIERNEY NO. C 12916 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval — FILE NO. 37-C1

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Palomar College
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No.	Description	Date
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Drawing Title:
LABORATORY FURNISHINGS SCHEDULES

Architect's Seal

LICENSED ARCHITECT BRADLEY E. CLASSEN NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/4" = 1'-0"
QAQC	ME R	Drawing No.	LF0.13
Date:	10/13/2017		

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D24 — BASE CABINET TYPE; WIDTH (INCHES - TYPICAL)

A24L — BASE CABINET TYPE; WIDTH; DOOR HINGE ON LEFT SIDE

A24R — BASE CABINET TYPE; WIDTH; DOOR HINGE ON RIGHT SIDE

LD24 — SITTING HEIGHT AT BASE CABINET & KO; BASE CABINET TYPE; WIDTH

KO24 — KNEE OPENING; WIDTH

KOX24 — KNEE OPENING; KNEE OPENING TYPE (SEE KNEE OPENINGS SECTION); WIDTH (X = A)

WA36 — WALL-HUNG CABINET; WALL CABINET DOOR TYPE; WIDTH

TC48 — TALL STORAGE CABINET; TALL CABINET DOOR TYPE; WIDTH

TAV48 — DESIGNATES VENTED CABINET WITH 2"DIA CONNECTION

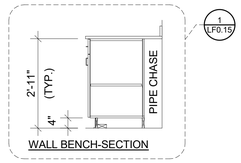
FP — FILLER PANEL

* — DESIGNATES KEY LOCKABLE CASEWORK

** — DESIGNATES PADLOCK HASP

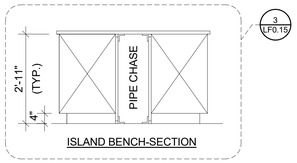
FOR BACKING AND ATTACHMENT DETAILS REFER TO: - / A-5.80

CASEWORK LEGEND & NOTES



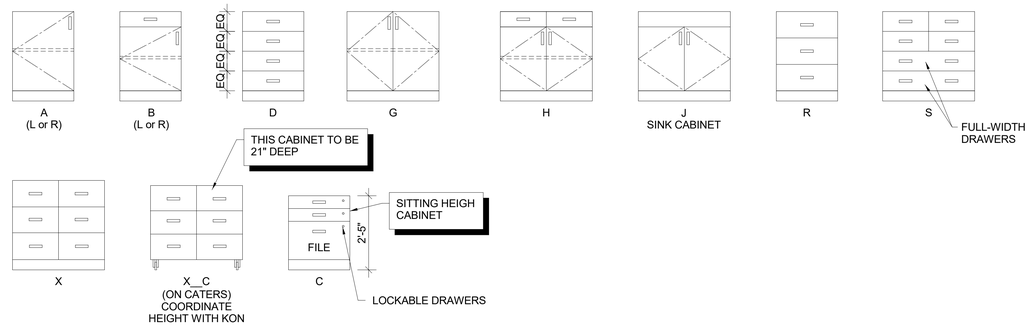
WALL BENCH-SECTION

NOTE:
ALL SHELVES TO BE ADJUSTABLE U.O.N.

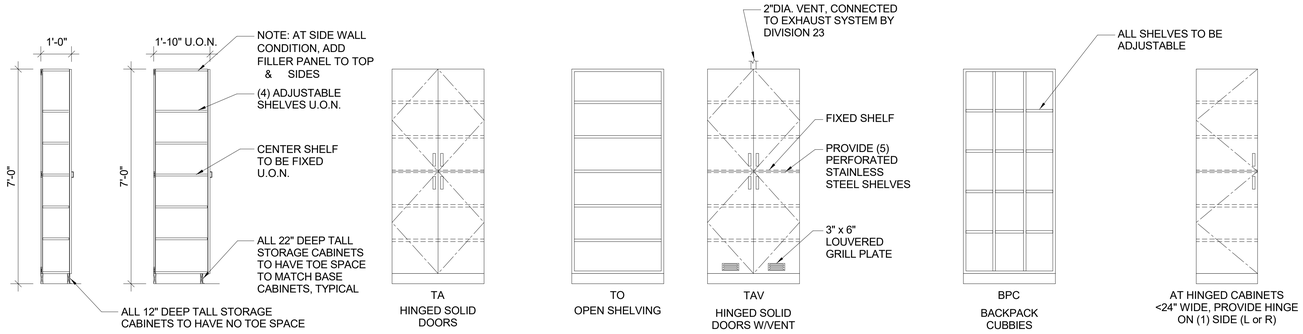


ISLAND BENCH-SECTION

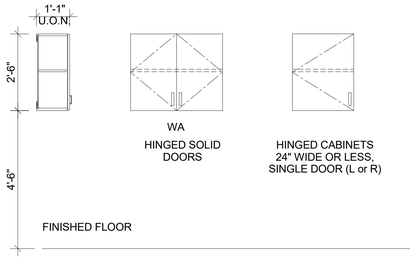
STANDING HEIGHT BASE CABINETS (+36)



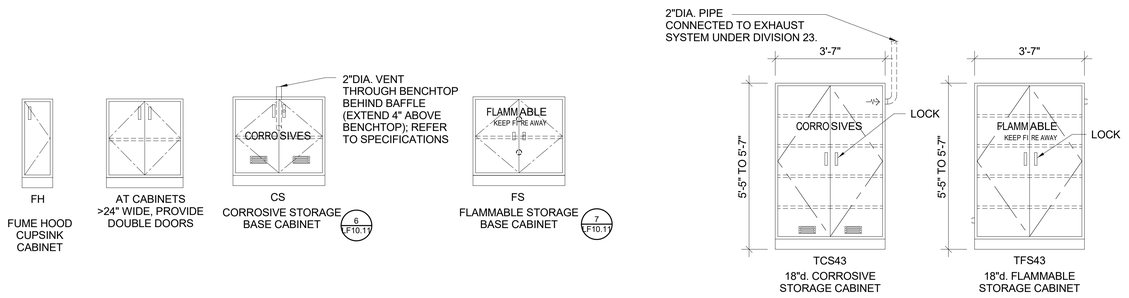
STANDING HEIGHT BASE CABINETS (PLASTIC LAMINATE - U.O.N.)



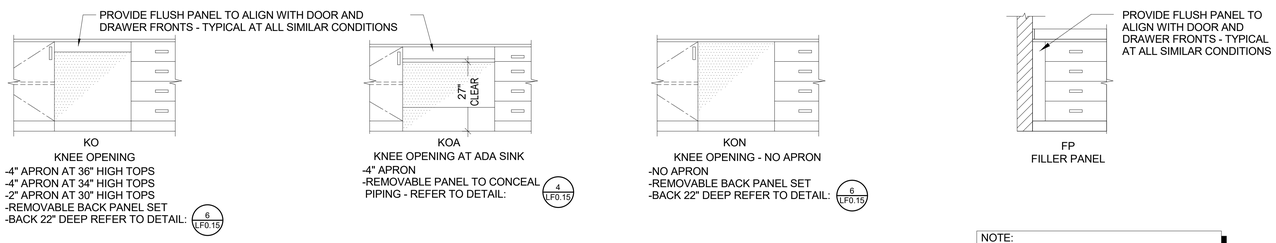
TALL STORAGE CABINETS (PLASTIC LAMINATE - U.O.N.)



WALL CABINETS (PLASTIC LAMINATE - U.O.N.)



SPECIAL CABINETS (METAL - U.O.N.)



NOTE:
AT LOCATIONS WHERE KNEE OPENINGS WIDTHS ARE NOT GIVEN ON PLANS, FIELD VERIFY WALL TO WALL DIMENSIONS.

KNEE OPENINGS

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Consultant Seal: LICENSED ARCHITECT RICHARD W. HEDGER NO. C 12910 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title
PALOMAR COLLEGE
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS
CASEWORK MENU

Architect's Seal: LICENSED ARCHITECT MARK E. GLASS NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/2" = 1'-0"
QAQC	ME R	Drawing No.	LF0.14
Date	10/13/2017		

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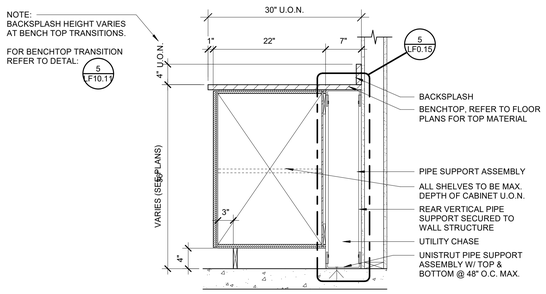
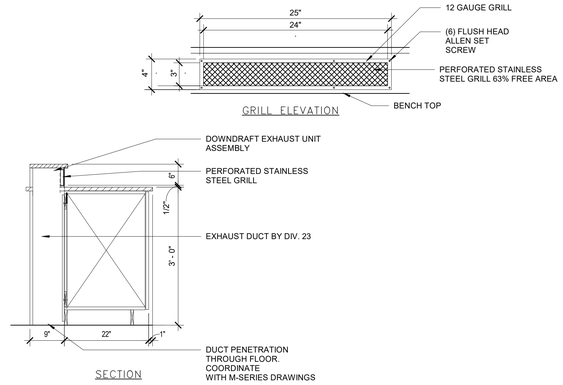
FOR BACKING AND ATTACHMENT DETAILS REFER TO: A-5.80

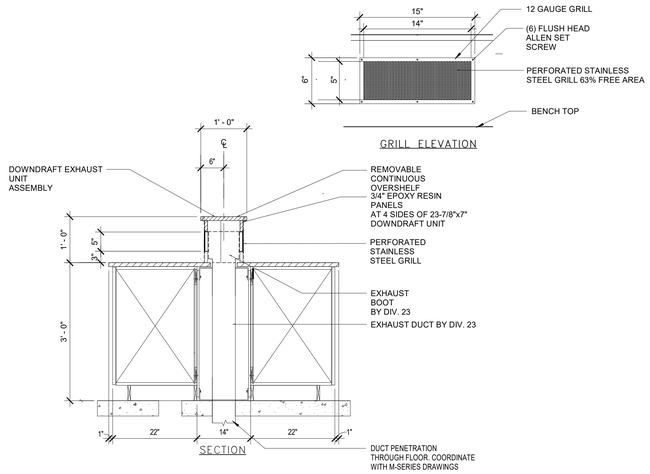


SECTION

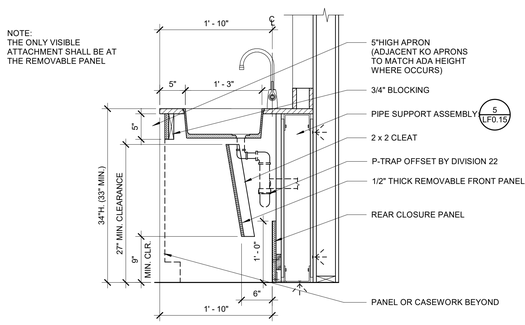
1 CONVENTIONAL CASEWORK - WALL BENCH
1" = 1'-0"



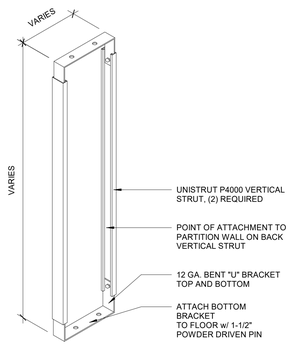
2 DOWNDRAFT BENCH SINGLE SIDE
3/4" = 1'-0"



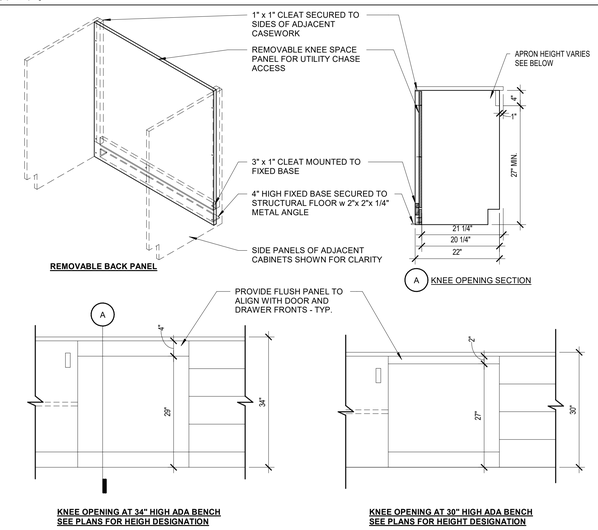
3 ISLAND BENCH DOWNDRAFT EXHAUST
3/4" = 1'-0"



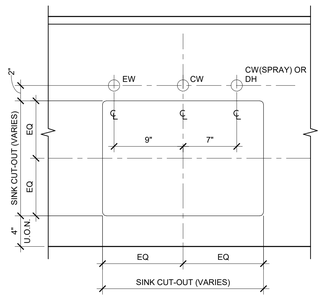
4 KNEE OPENING - AT ADA SINK
1" = 1'-0"



5 UNISTRUT PIPE SUPPORT ASSEMBLY
1 1/2" = 1'-0"



6 KNEE OPENING - REAR PANEL.
3/4" = 1'-0"

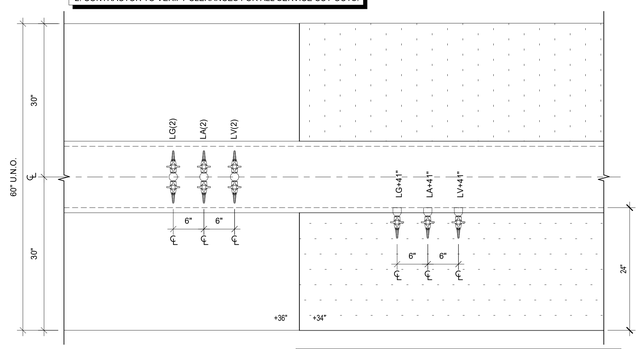


PLAN - FITTINGS AT BACK

NOTE:
1. FIXTURE SPACING REPRESENT TYPICAL CONFIGURATIONS. REFER TO FLOOR PLANS FOR ACTUAL SERVICES REQUIRED.
2. CONTRACTOR TO VERIFY CLERANCES FOR ALL SERVICE CUT-OUTS.
3. REFER TO PLANS AND SINK SCHEDULE FOR SINK TYPES AND SIZES.

7 FIXTURE SPACING - SINK AT WALL BENCH
1 1/2" = 1'-0"

NOTE:
1. FIXTURE SPACING REPRESENT TYPICAL CONFIGURATIONS. REFER TO FLOOR PLANS FOR ACTUAL SERVICES REQUIRED.
2. CONTRACTOR TO VERIFY CLERANCES FOR ALL SERVICE CUT-OUTS.



NOTES:
1. ALL FIXTURES @ ADA SINKS TO HAVE ADA COMPLIANT WRISTBLADE HANDLE.
2. TOP OF WORK SURFACE NOT TO EXCEED 34" ABOVE FINISH FLOOR.
3. REFER TO FLOOR PLANS FOR ACTUAL SERVICES REQUIRED.

PLAN VIEW

8 FIXTURE SPACING - BENCH ISLAND
1" = 1'-0"

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Consultant Seal: LICENSED ARCHITECT RICHARD M. HUDSON NO. C 12919 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS.____ FLS.____ SSS.____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS CASEWORK & SPACING DETAILS

Architect's Seal: LICENSED ARCHITECT MARK E. ROSSI NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	As indicated
QAQC	ME R	Drawing No.	LF0.15
Date:	10/13/2017		

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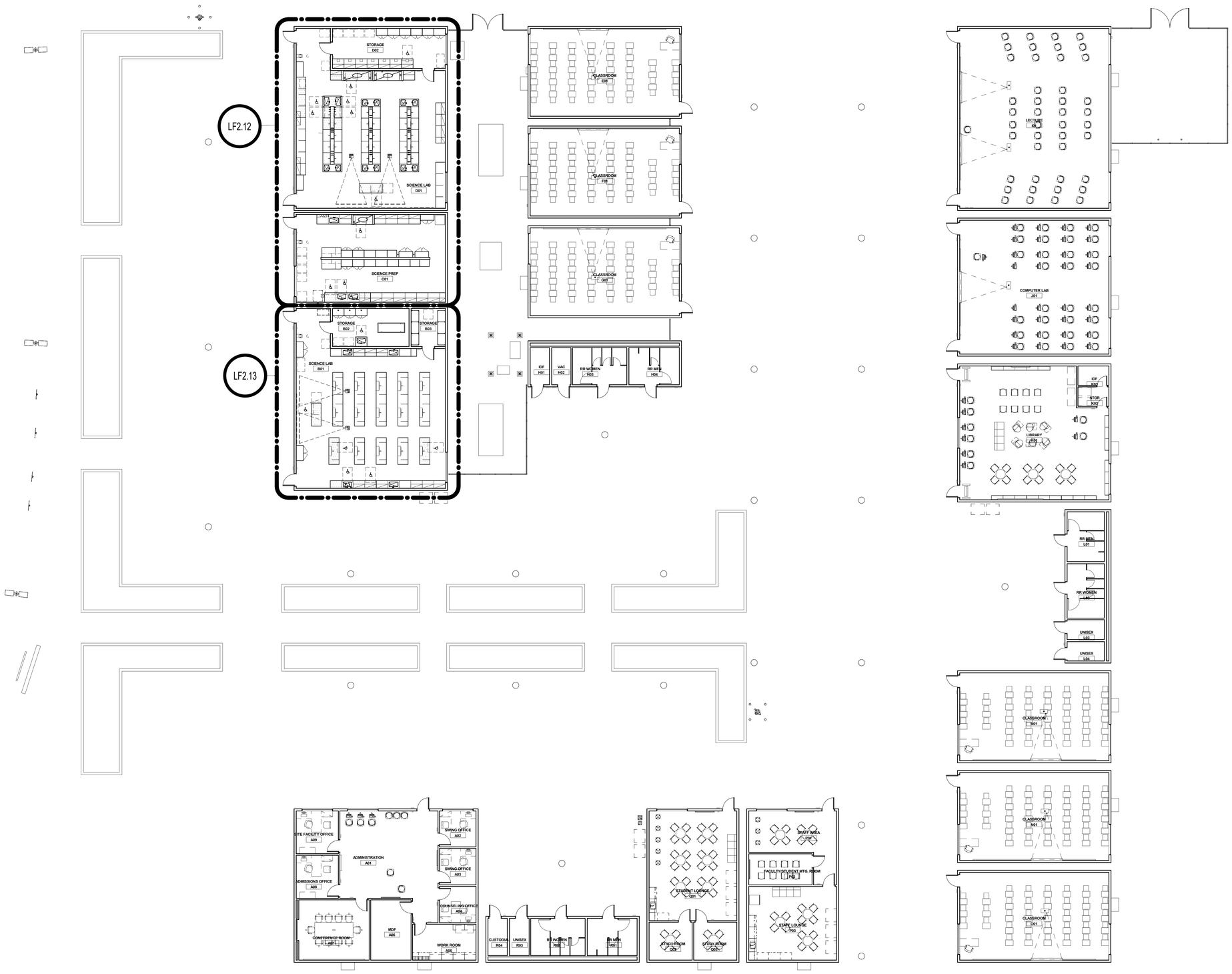

1 LABORATORY FURNISHINGS OVERALL PLAN
3/32" = 1'-0"

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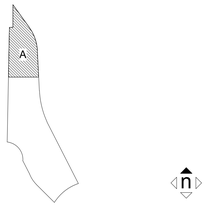
Key Plan



Consultant Seal

LICENSED ARCHITECT
RICHARD M. MERRILL
NO. C 12919
REN. 3-31-19
STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS____ FLS____ SSS____

DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

LABORATORY FURNISHINGS OVERALL PLANS

Architect's Seal

REGISTERED ARCHITECT
BRADFORD E. GLASS
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	3/32" = 1'-0"
QAQC	ME R	Drawing No.	LF2.11
Date:	10/13/2017		

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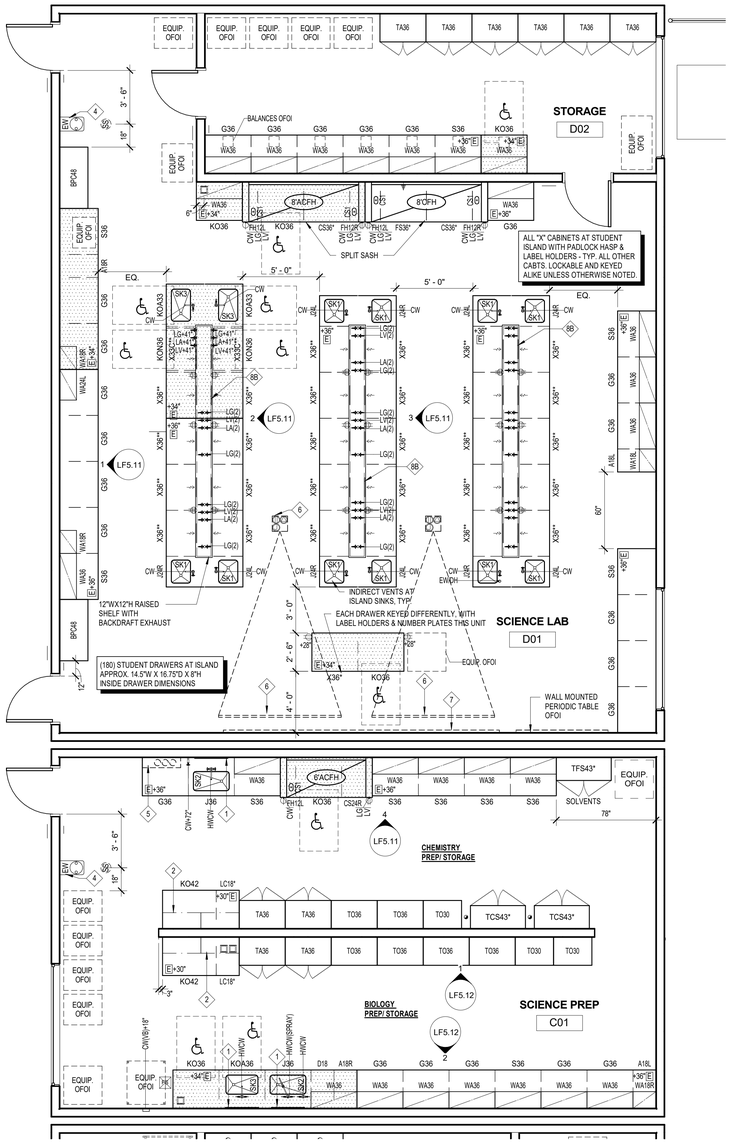

1 CHEMISTRY LAB
1/4" = 1'-0"

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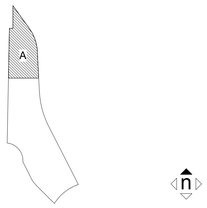
Key Plan



Consultant Seal

LICENSED ARCHITECT RICHARD M. THOMAS NO. C 12916 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1

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DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

LABORATORY FURNISHINGS CHEMISTRY LAB

Architect's Seal

REGISTERED PROFESSIONAL ENGINEER NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/4" = 1'-0"
QAQC	ME R	Drawing No.	LF2.12
Date	10/13/2017		

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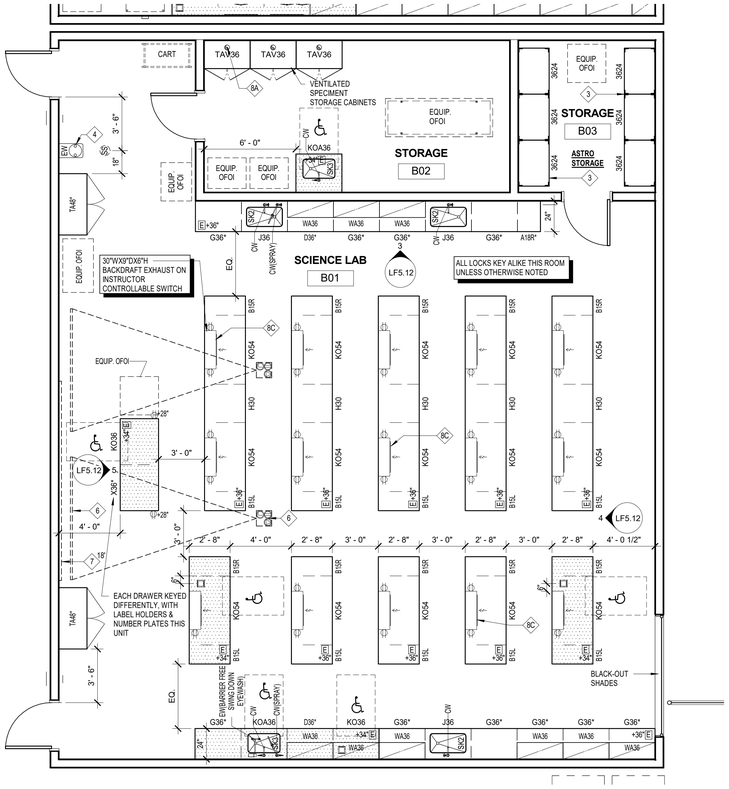

1 BIOLOGY LAB
1/4" = 1'-0"

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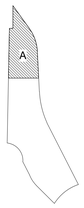
Key Plan



Consultant Seal

LICENSED ARCHITECT RICHARD M. TIEDRICH NO. C 12919 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

LABORATORY FURNISHINGS BIOLOGY LAB

Architect's Seal

LICENSED ARCHITECT JEFFREY E. CLASSEN NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/4" = 1'-0"
QAQC	ME R	Drawing No.	LF2.13
Date:	10/13/2017		

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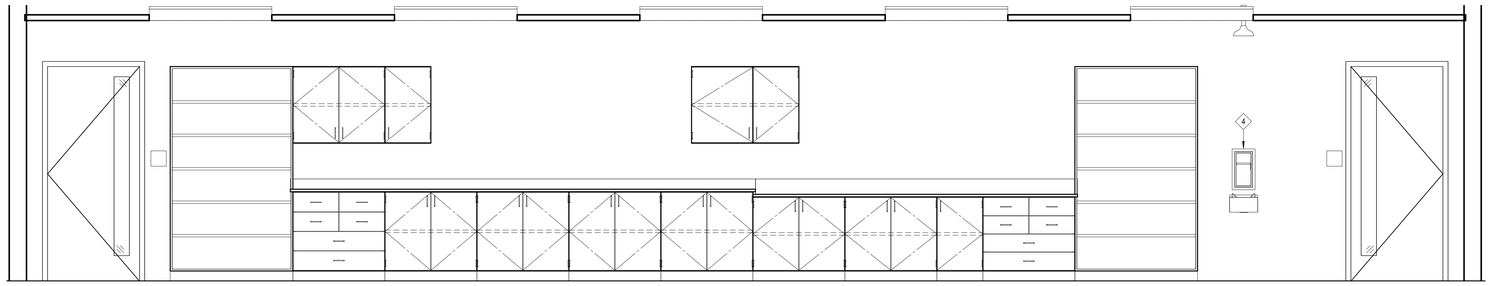
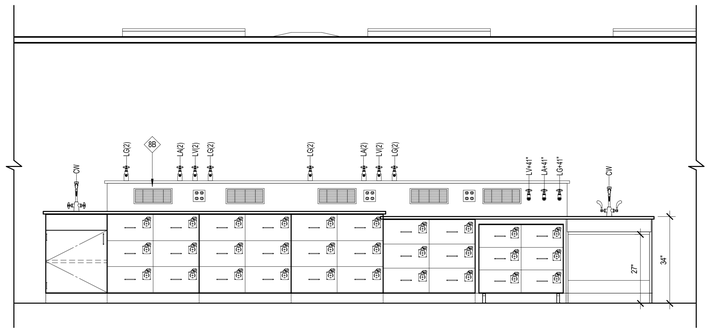
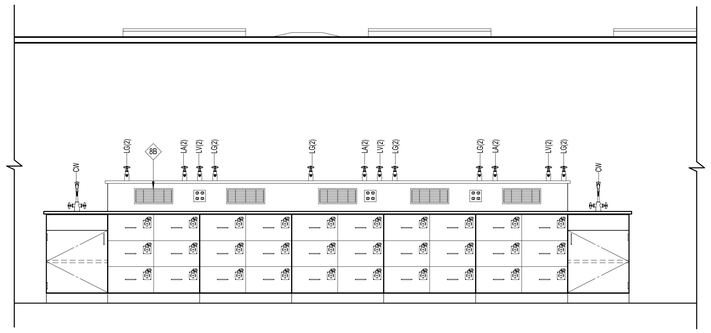


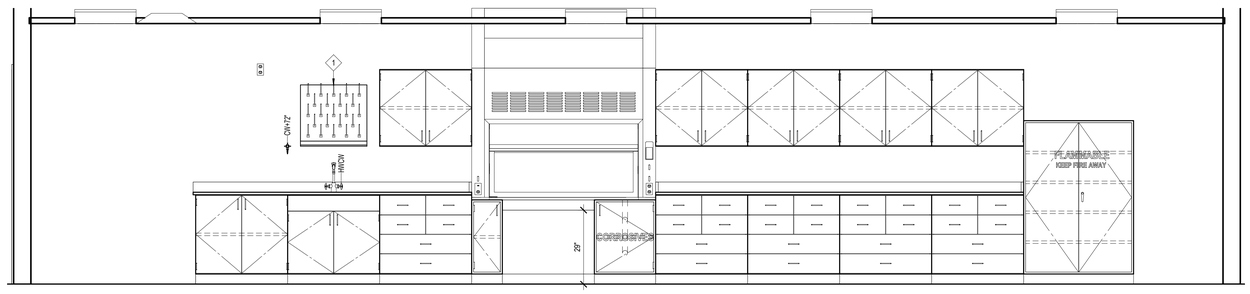
1 SCIENCE LAB D01 - EAST WALL
1/2" = 1'-0"



2 SCIENCE LAB D01 - EAST ISLAND BENCH ADA
1/2" = 1'-0"



3 SCIENCE LAB D01 - EAST ISLAND BENCH
1/2" = 1'-0"



4 SCIENCE PREP C01 - NORTH
1/2" = 1'-0"

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Consultant Seal
LICENSED ARCHITECT RICHARD M. THERRIEN NO. C 12919 REN. 3-31-19 STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
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DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS ELEVATIONS

Architect's Seal
REGISTERED ARCHITECT RICHARD M. THERRIEN NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	1/2" = 1'-0"
QAQC	ME R	Drawing No.	LF5.11
Date	10/13/2017		

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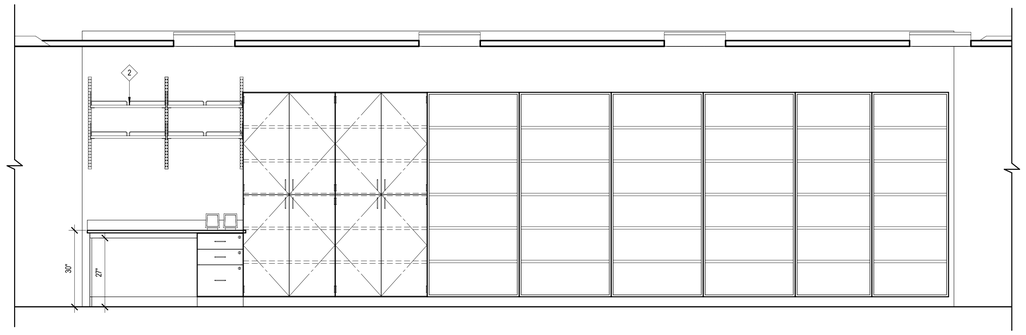

1 SCIENCE PREP C01 - NORTH ISLAND
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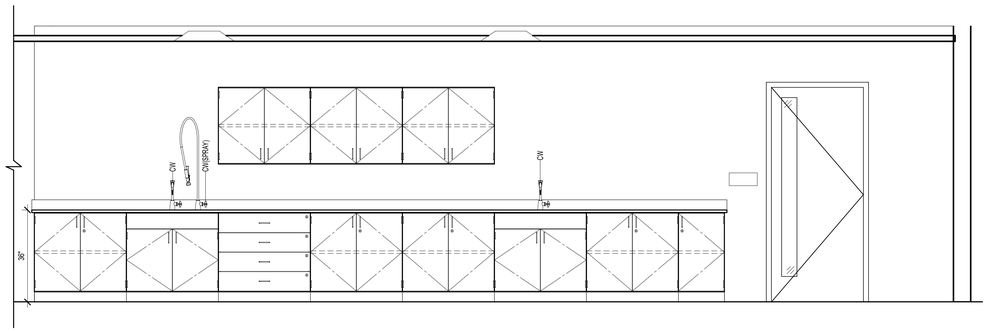
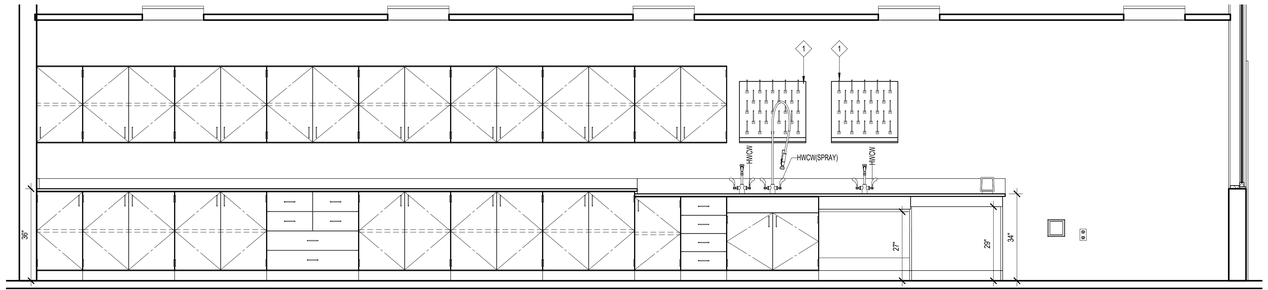


3 SCIENCE LAB B01 - NORTH
1/2" = 1'-0"



2 SCIENCE PREP C01 - SOUTH
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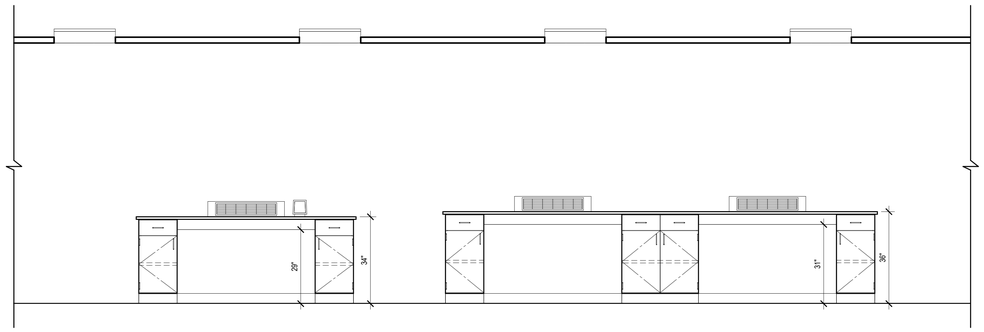
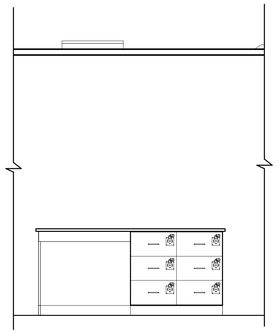


4 SCIENCE LAB B01 - EASR ISLAND
1/2" = 1'-0"



5 SCIENCE LAB B01 - WEST INSTRUCTOR
1/2" = 1'-0"

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Consultant Seal

LICENSED ARCHITECT
RICHARD M. HUDSON
No. C 12919
REN. 3-31-18
STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____
DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS ELEVATIONS

Architect's Seal

REGISTERED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	Designer	Project No.	5015019
Drawn:	Author	Scale:	1/2" = 1'-0"
QAQC	Checker	Drawing No.	LF5.12
Date:	10/13/2017		

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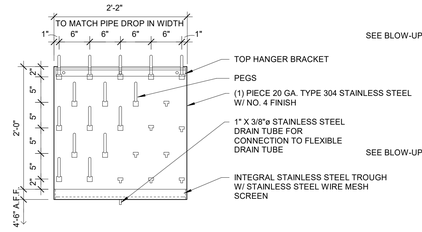
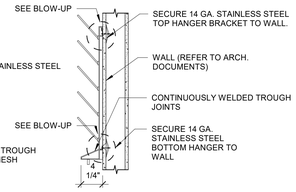
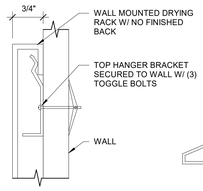


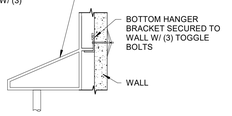
DRYING RACK ELEVATION
1"=1'-0"



SECTION @ WALL CONDITION
1"=1'-0"

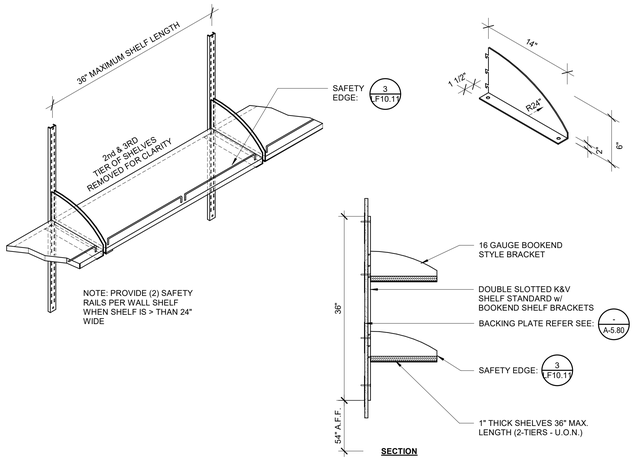


BLOW-UP @ TOP HANGER
3"=1'-0"

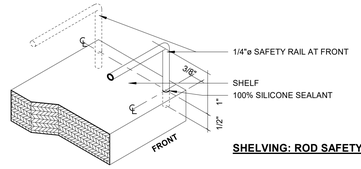


BLOW-UP @ BOTTOM HANGER
1-1/2"=1'-0"

1 DRYING RACK - STAINLESS STEEL
1" = 1'-0"

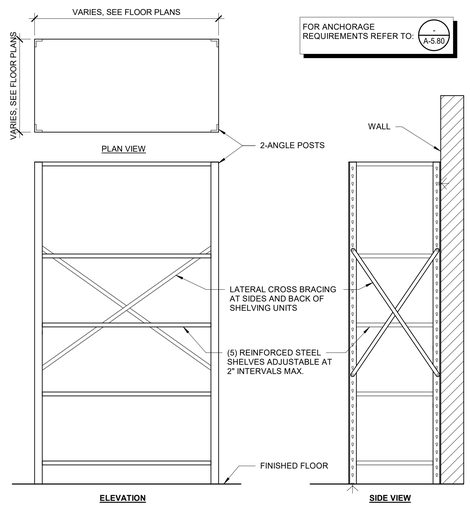


2 ADJUSTABLE WALL SHELVES (2-TIER)
1" = 1'-0"

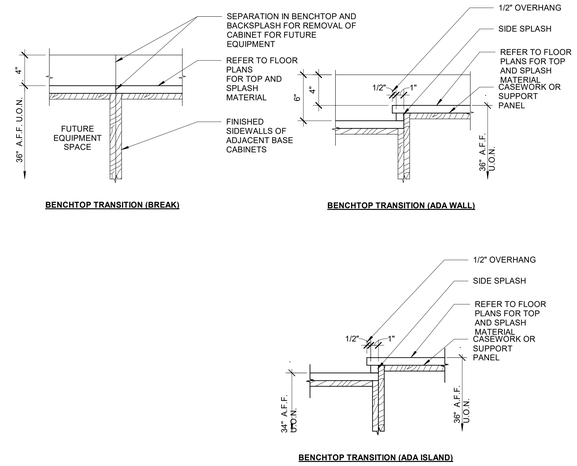


SHELVING: ROD SAFETY EDGE

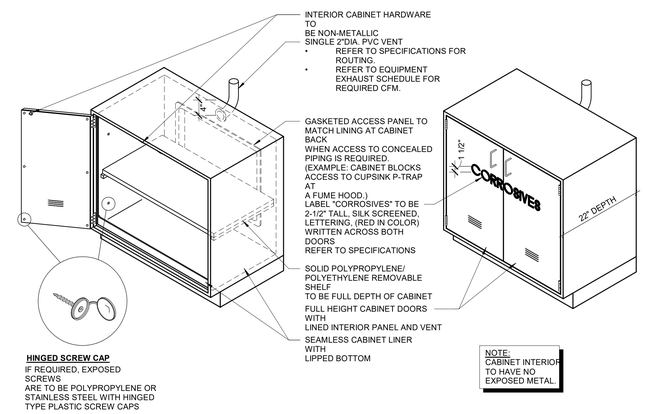
3 SAFETY EDGES
6" = 1'-0"



4 INDUSTRIAL SHELVING UNIT
3/4" = 1'-0"

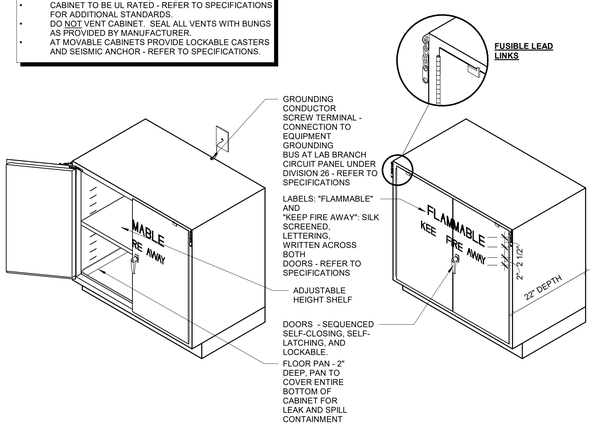


5 BENCHTOP TRANSITIONS
1 1/2" = 1'-0"



6 CORROSIVES STORAGE CABINET
3/4" = 1'-0"

NOTES:
- CABINET AND DOORS TO BE OF DOUBLE WALLED METAL CONSTRUCTION (U.O.N.).
- CABINET TO BE UL RATED - REFER TO SPECIFICATIONS FOR ADDITIONAL STANDARDS.
- DO NOT VENT CABINET. SEAL ALL VENTS WITH BUNGS AS PROVIDED BY MANUFACTURER.
- AT MOVABLE CABINETS PROVIDE LOCKABLE CASTERS AND SEISMIC ANCHOR - REFER TO SPECIFICATIONS.



7 FLAMMABLE STORAGE CABINET
3/4" = 1'-0"

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FAX 619 294 4901

Consultant Seal
LICENSED ARCHITECT RICHARD M. MERRILL NO. C 12910 REN. 3-31-19 STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS DETAILS

Architect's Seal
LICENSED ARCHITECT RICHARD E. GLASS NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	As indicated
QAQC	ME R	Drawing No.	LF10.11
Date:	10/13/2017		

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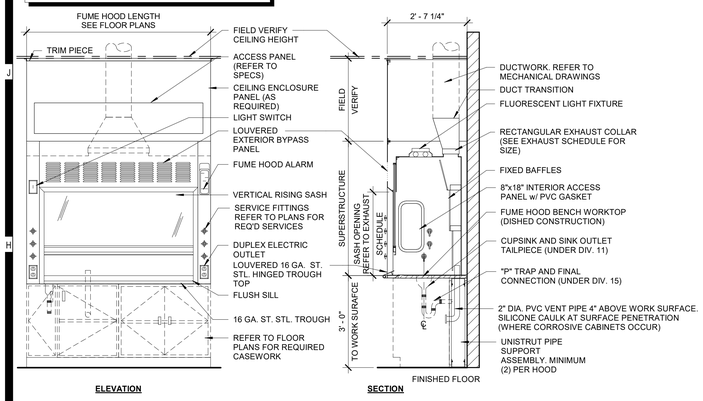
PLEASE RECYCLE

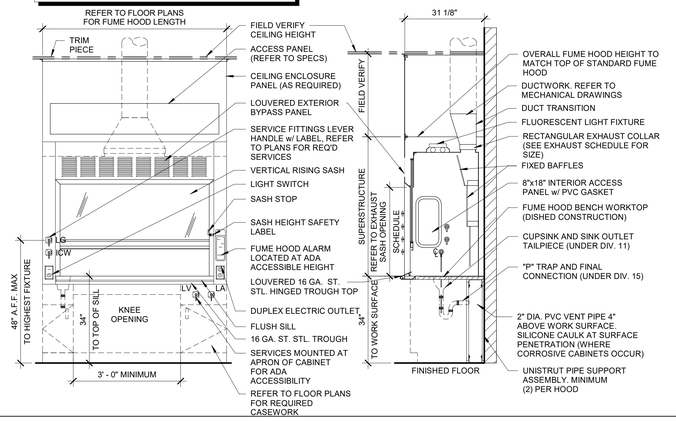
DSA SUBMITTAL

NOTES:
1. FOR FUME HOOD PRE-PIPING REFER TO DETAIL 3/F10.12
2.FOR FUME HOOD SAFETY LABEL REFER TO DETAIL 4/F10.12
3.WATER FITTING REQUIRED TO ALIGN WITH CENTER OF CUP SINK. COORDINATE WITH FUME HOOD AND BENCHTOP MANUFACTURER.

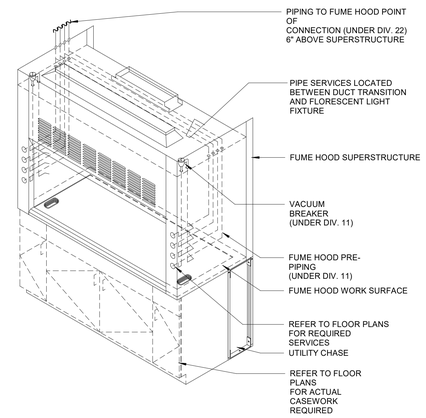


1 FUME HOOD - FLUSH SILL - VERTICAL SASH - (TYP.)
1/2" = 1'-0"

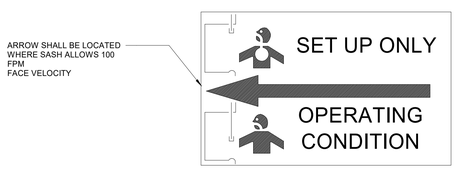
NOTES:
1. FOR FUME HOOD PRE-PIPING REFER TO DETAIL 3/F10.12
2.FOR FUME HOOD SAFETY LABEL REFER TO DETAIL 4/F10.12
3.WATER FITTING REQUIRED TO ALIGN WITH CENTER OF CUP SINK. COORDINATE WITH FUME HOOD AND BENCHTOP MANUFACTURER.



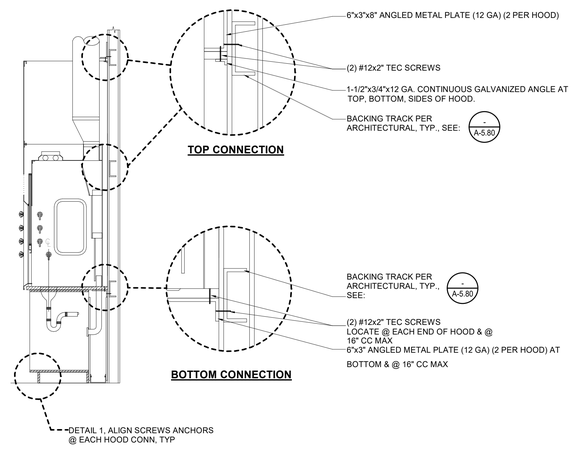
2 FUME HOOD - FLUSH SILL - (ADA)
1/2" = 1'-0"



3 FUME HOOD - PRE-PIPING - VACUUM BREAKER
1/2" = 1'-0"



4 FUME HOOD - SAFETY LABEL
1/2" = 1'-0"



5 ANCHORAGE DETAIL - HOOD
1 1/2" = 1'-0"

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FAX 619 294 4901

Consultant Seal
LICENSED ARCHITECT RICHARD W. HEDGE C-12910 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS_____ FLS_____ SSS_____
DATE _____

Project Title
PALOMAR COLLEGE
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS FUME HOOD DETAILS

Architect's Seal
LICENSED ARCHITECT MICHAEL R. GIBBS NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	As indicated
QAQC	ME R	Drawing No.	LF10.12
Date:	10/13/2017		

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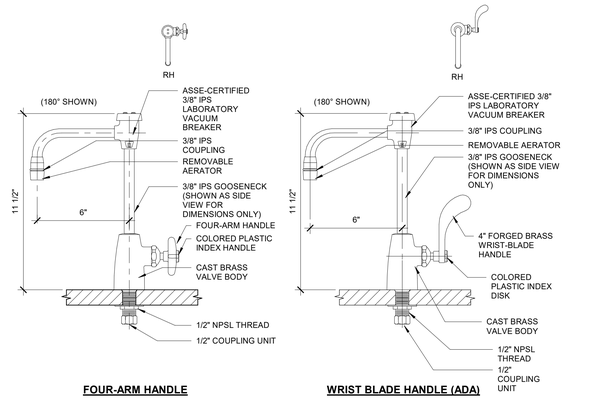
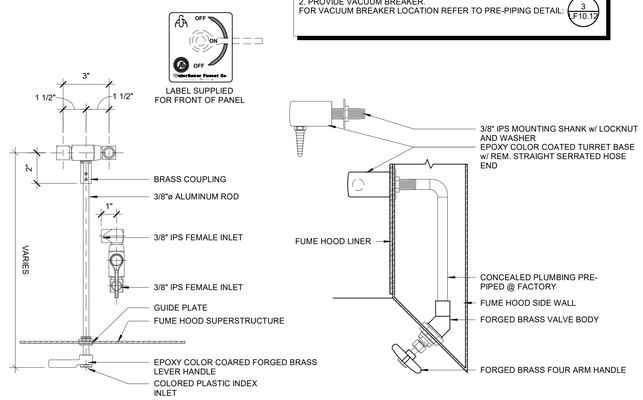


FOUR-ARM HANDLE **WRIST BLADE HANDLE (ADA)**

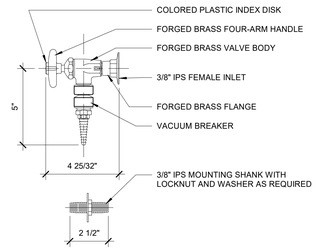
1 CW - DECK
3" = 1'-0"

NOTE:
1. FITTING TO BE CENTERED WITH FUME HOOD CUP SINK.
2. PROVIDE VACUUM BREAKER.
FOR VACUUM BREAKER LOCATION REFER TO PRE-PIPING DETAIL 3/F10.12

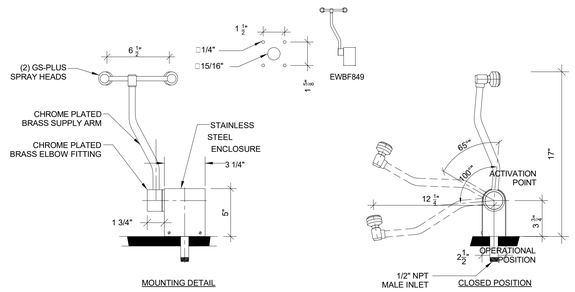


LEVER HANDLE (ADA) **FOUR-ARM HANDLE**

2 CW - HOOD
3" = 1'-0"



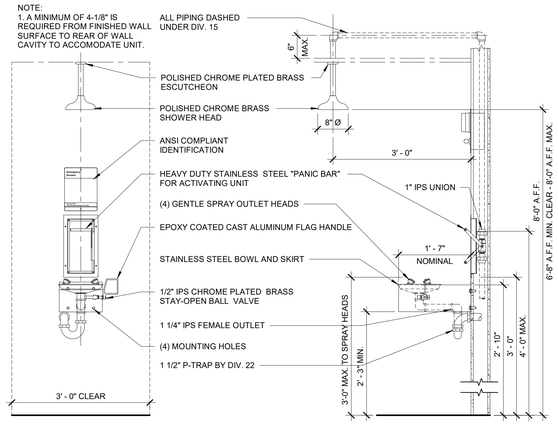
3 CW - WALL/PANEL
3" = 1'-0"



NOTES:
1. SWINGING OUTLET HEAD ASSEMBLY DOWN 100 DEGREES FROM VERTICAL POSITION ACTIVATES WATER FLOW.
2. EACH GS-PLUS SPRAY HEAD HAS A "FLIP-TOP" DUST COVER, INTERNAL FLOW CONTROL AND FILTER TO REMOVE IMPURITIES FROM THE WATER FLOW.
3. SECURE UNIT TO COUNTER USING MOUNTING SCREWS SUPPLIED WITH UNIT. UNIT MOUNTS INTO COUNTERTOPS UP TO 2" THICK.
4. COORDINATE WITH SINK SIZE AND LOCATIONS OF ALL OTHER SERVICE FITTINGS AND EQUIPMENT TO DETERMINE IF LEFT OR RIGHT HAND TO BE PROVIDED AND EXACT MODEL CONFIGURATION REQUIRED FOR PROPER ADA COMPLIANT FUNCTION.

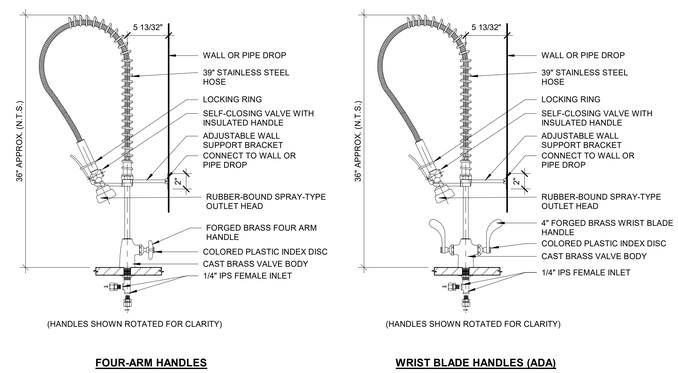
4 EW/DH - DECK - SWING DOWN
1 1/2" = 1'-0"

NOTE:
1. A MINIMUM OF 4-1/8" IS REQUIRED FROM FINISHED WALL SURFACE TO REAR OF WALL CAVITY TO ACCOMODATE UNIT.



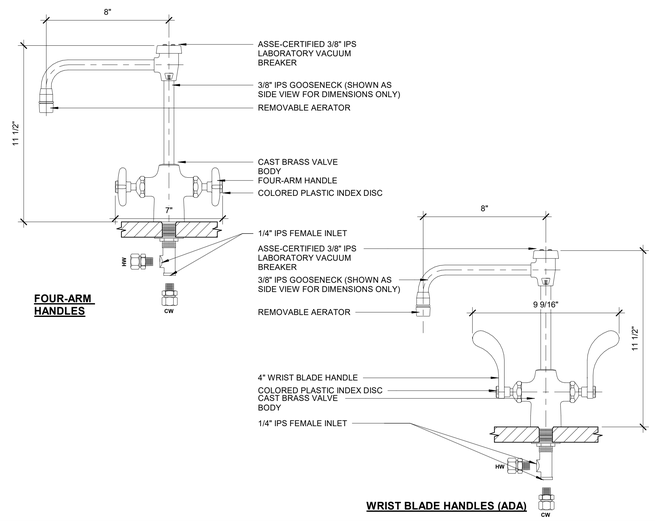
5 SSEW - BOWL AND SKIRT.
3/4" = 1'-0"

NOTE:
THIS HOSE SHOULD NOT BE USED IN APPLICATIONS WHERE WATER PRESSURE EXCEEDS 90 PSI.
PROVIDE L110 VACUUM BREAKER



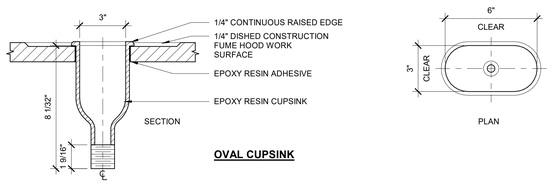
FOUR-ARM HANDLES **WRIST BLADE HANDLES (ADA)**

6 HWCW (SPRAY) - DECK
1 1/2" = 1'-0"

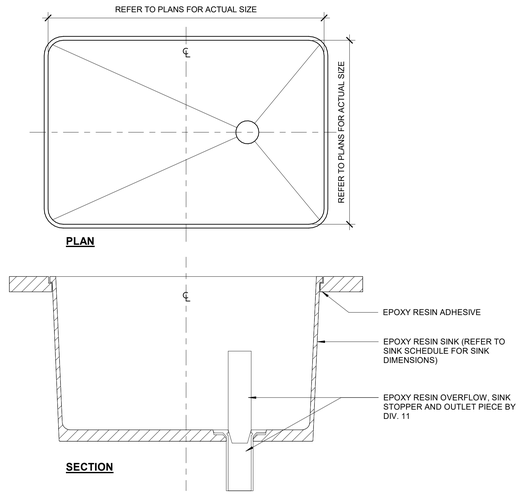


7 HWCW - DECK
3" = 1'-0"

NOTE:
WATER FITTING TO BE CENTERED WITH CUPSINK.
REFER TO PLANS FOR ACTUAL SIZE AND LOCATION



8 SINK - CUPSINK RAISED LIP @ FUME HOOD
3" = 1'-0"



9 SINK - EPOXY DROP-IN
3" = 1'-0"

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Consultant Seal: LICENSED ARCHITECT RICHARD M. TIERNEY NO. 12916 REN. 3-31-19 STATE OF CALIFORNIA

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS_____ FLS_____ SSS_____
DATE _____

Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS
FITTINGS DETAILS

Architect's Seal: REGISTERED ARCHITECT BRYAN E. CLASON NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	As indicated
QAQC	ME R	Drawing No.	LF10.13
Date:	10/13/2017		

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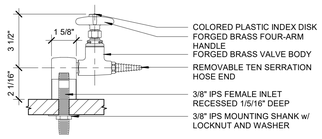
LV(2)
LA(2)

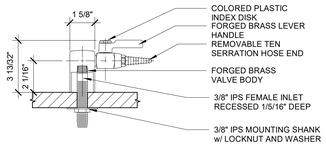
POSSIBLE CONFIGURATIONS



FOUR-ARM HANDLE

LA(2)
LG(2)
LV(2)

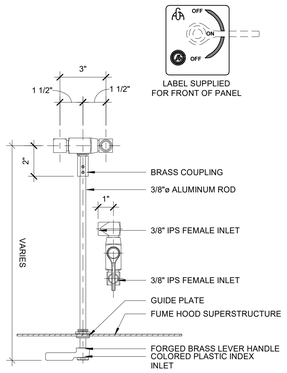
POSSIBLE CONFIGURATIONS



LEVER HANDLE

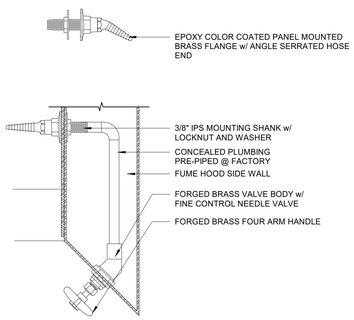
NOTE:
PROVIDE LEVER HANDLE AT ALL LG (LAB GAS) FITTINGS

1 LG, LA & LV - DECK
3" = 1'-0"



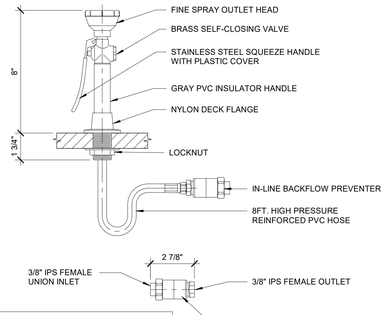
LEVER HANDLE (ADA)

NOTE:
PROVIDE LEVER HANDLE AT ALL LG (LAB GAS) FITTINGS



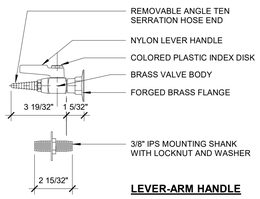
FOUR-ARM HANDLE

2 LG, LA & LV - HOOD
3" = 1'-0"



NOTES:
1. LOCAL PLUMBING INSPECTOR SHALL APPROVE IN WRITING THIS SPECIFIC BACKFLOW DEVICE AND THE SYSTEM CONFIGURATION PRIOR TO SHIPPING & INSTALLATION.
2. NO SHARP OBJECTS TO BE INSTALLED BELOW SINK WHERE DRENCH HOSES OCCUR.

3 EW/DH - DECK
3" = 1'-0"



LEVER-ARM HANDLE

4 LG, LA & LV - WALL/PANEL - STRAIGHT
3" = 1'-0"

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Consultant Seal

LICENSED ARCHITECT RICHARD M. THOMAS NO. C 12916 REN. 3-31-18 STATE OF CALIFORNIA

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village
Palomar College
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No.	Description	Date
1	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
LABORATORY FURNISHINGS FITTINGS DETAILS

Architect's Seal

REGISTERED ARCHITECT MARK E. EBERLE NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	MR	Project No.	5015019
Drawn:	EB	Scale:	3" = 1'-0"
QAQC	ME R	Drawing No.	LF10.14
Date	10/13/2017		

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LEGEND

SYMBOL	DESCRIPTION
-	NOTE CALLOUT
- / -	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
- / -	MECHANICAL EQUIPMENT CALLOUT, SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS
- / -	SECTION CALLOUT
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	NEW LINEWORK
	EXISTING LINEWORK
	DEMOLITION LINEWORK
4" CHWR	NEW PIPING (SIZE-SERVICE)
16"x12"	SHEET METAL DUCT
16"x12"	HIDDEN SHEET METAL DUCT
16"x12"	INTERNALLY INSULATED SHEET METAL DUCT
	DIRECTION OF FLOW
	STANDARD BRANCH FOR SUPPLY AND RETURN
	ROUND ELBOW DOWN
	ROUND ELBOW UP
	RECTANGULAR TO ROUND TRANSITION
8"	FLEXIBLE DUCT
FC	FLEX CONNECTION
BDD	BACK DRAFT DAMPER
FD	FIRE DAMPER
FSD	COMBINATION FIRE AND SMOKE DAMPER
M	MOTORIZED DAMPER
	SUPPLY DIFFUSER: 2-WAY/3-WAY/4-WAY
	GRILLE: RETURN/EXHAUST
	1'x2' RETURN AIR GRILLE
	2'x2' RETURN AIR GRILLE
UP DN	SUPPLY AIR DUCT SECTION
UP DN	RETURN AIR DUCT SECTION
UP DN	EXHAUST AIR DUCT SECTION
	POWER OR GRAVITY ROOF VENTILATOR - EXHAUST
	POWER OR GRAVITY ROOF VENTILATOR - SUPPLY
UC	UNDERCUT DOOR
TG	TRANSFER GRILLE OR LOUVER
DG	DOOR GRILLE OR LOUVER
	SINGLE DUCT VAV BOX WITH REHEAT COIL
	SINGLE DUCT VAV BOX WITHOUT REHEAT COIL
T	SPACE TEMPERATURE SENSOR
PS	PRESSURE SWITCH
SD	SMOKE DETECTOR
SP	STATIC PRESSURE SENSOR
RS	REFRIGERANT SENSOR
D	DEW POINT SENSOR
H	SPACE HUMIDITY SENSOR

SYMBOL	DESCRIPTION
	COOLING COIL
	HEATING COIL
	DAMPER, OPPOSED BLADE
	DAMPER, PARALLEL BLADE
	FILTER
	HUMIDIFIER
	LOUVER
AD	ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK
1" 2"	STATIC PRESSURE CHANGE TAG
2"	STATIC PRESSURE TAG
	TURNING VANES (RECTANGULAR)
	DRAIN, FUNNEL
	PUMP
	CENTRIFUGAL FAN
	CONVERTER OR HEAT EXCHANGER SHELL AND TUBE
	PLATE HEAT EXCHANGER
	BALL VALVE
	BALL VALVE W/ ACTUATOR
	BUTTERFLY VALVE
	BUTTERFLY VALVE W/ ACTUATOR
	GATE VALVE
	GATE VALVE W/ ACTUATOR
	GLOBE VALVE
	GLOBE VALVE W/ ACTUATOR
	THREE-WAY VALVE
	THREE-WAY VALVE W/ ACTUATOR
	CHECK VALVE, SWING
S	CHECK VALVE, SPRING LOADED
	MULTI-PURPOSE VALVE
	FLOW MEASURING AND BALANCING VALVE
	HOSE BIBB VALVE
	LOCK SHIELD MANUAL VALVE
	PLUG VALVE
	PRESSURE REGULATOR
	PRESSURE-REDUCING REGULATOR
	STRAINER, Y-TYPE
	STRAINER, DOUBLE BASKET
	PRESSURE GAUGE WITH SHUTOFF COCK
	PRESSURE GAUGE WITH SNUBBER AND SHUTOFF COCK
	SHUTOFF COCK
	SELF-SEALING PRESSURE AND TEMPERATURE TAP
	THERMOMETER
	THERMOWELL

SYMBOL	DESCRIPTION
	ELBOW FACING AWAY FROM VIEWER
	ELBOW FACING TOWARD VIEWER
	TEE FACING AWAY FROM VIEWER
	TEE FACING TOWARD VIEWER
	PIPE CAP
	TRANSITION, ASYMMETRIC
	TRANSITION, SYMMETRIC
	EXPANSION JOINT (COMPENSATOR)
	PIPE GUIDE
	PIPE ANCHOR
S	AIR SEPARATOR
DCBFP	DOUBLE CHECK BACKFLOW PREVENTER
FM	FLOW METER
FL	FLOW REGULATOR AND FLOW LIMITING VALVE
PSD	PUMP SUCTION DIFFUSER
RPZBP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
VB	VACUUM BREAKER
	AIR VENT, AUTOMATIC
	FLEXIBLE CONNECTION
	SAFETY OR RELIEF VALVE
	UNION, SCREWED
	ANALOG SIGNAL
	DIGITAL SIGNAL
	ELECTRIC LEAD
	INSTRUMENT CAPILLARY TUBING
	ELECTRONIC 3-WAY VALVE
	ELECTRONIC 2-WAY VALVE
	DDC INPUT
	DDC OUTPUT
	LOCALLY MOUNTED INSTRUMENT
C02	CARBON DIOXIDE SENSOR
DPS	DIFFERENTIAL PRESSURE SENSOR
FM	FLOW METER
FS	AIRFLOW SENSOR
HS	RELATIVE HUMIDITY SENSOR
TS	TEMPERATURE SENSOR
TS	AVERAGING TEMPERATURE SENSOR

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AAV	AUTOMATIC AIR VENT	HD	HEAD
ABV	ABOVE	HP	HEAT PUMP
AC	AIR CONDITIONING UNIT	HP	HORSEPOWER
AD	ACCESS DOOR	HT	HEIGHT
AFF	ABOVE FINISHED FLOOR	HZ	HERTZ
AHU	AIR HANDLING UNIT	IC	MOTOR STATUS
ALUM	ALUMINUM	ICW	INDUSTRIAL COLD WATER
AP	ACCESS PANEL	ID	INSIDE DIAMETER
BD	BLOWDOWN	IN	INCHES
BDD	BACK DRAFT DAMPER	KW	KILOWATTS
BEL	BELOW	LAT	LEAVING AIR TEMPERATURE
BFC	BELOW FINISHED CEILING	LBS	POUNDS
BFP	BACK FLOW PREVENTER	LD	LINEAR DIFFUSER
BHP	BRAKE HORSEPOWER	LF	LINEAR FEET
BLDG	BUILDING	LWT	LEAVING WATER TEMPERATURE
BOB	BOTTOM OF BEAM	MAX	MAXIMUM
BOP	BOTTOM OF PIPE	MBH	THOUSAND BTU PER HOUR
BSMT	BASEMENT	MC	MECHANICAL CONTRACTOR
BTU	BRITISH THERMAL UNIT	MCA	MINIMUM CIRCUIT AMPS
CD	CEILING DIFFUSER	MH	MANHOLE
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CH	CHILLER	MOCP	MAXIMUM OVERLOAD CIRCUIT PROTECTION
CHWP	CHILLED WATER PUMP	MTD	MOUNTED
CHWR	CHILLED WATER RETURN	MUA	MAKE-UP AIR UNIT
CHWS	CHILLED WATER SUPPLY	NFA	NET FREE AREA
CI	CAST IRON	NIC	NOT IN CONTRACT
CL	CENTER LINE	NPSHR	NET POSITIVE SUCTION HEAD REQUIRED
CLG	CEILING	OAT	OUTSIDE AIR TEMPERATURE
CO	CLEAN OUT	OBD	OPPOSED BLADE DAMPER
COL	COLUMN	OC	ON CENTER
CP	CONDENSATE PUMP	OD	OUTSIDE DIAMETER
CT	COOLING TOWER	OSA	OUTSIDE AIR
CU	CONDENSING UNIT	PBD	PARALLEL BLADE DAMPER
CV	CONSTANT VOLUME BOX	PD	PRESSURE DROP
CWP	CONDENSER WATER PUMP	PERF	PERFORATED
CWR	CONDENSER WATER RETURN	PH	PHASE
CWS	CONDENSER WATER SUPPLY	POD	POINT OF DISCONNECT
CWFR	CONDENSER WATER FILTER RETURN	PR	PRESSURE RELIEF
CWFS	CONDENSER WATER FILTER SUPPLY	PRV	PRESSURE REDUCING VALVE
D	DRAIN	PSID	POUNDS PER SQUARE INCH DIFFERENTIAL
DB	DRY BULB	PSIG	POUNDS PER SQUARE INCH GAUGE
DEG	DEGREES	PTAC	PACKAGED TERMINAL AIR CONDITIONER
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE
DL	DOOR LOUVER	RA	RETURN AIR
DN	DOWN	RAG	RETURN AIR GRILLE
DS	DUCT SILENCER	RAR	RETURN AIR REGISTER
DWP	DOMESTIC WATER PUMP	RD	ROOF DRAIN
DX	DIRECT EXPANSION	RF	RETURN FAN
(E)	EXISTING	RHC	REHEAT COIL
EA	EACH	RLA	RATED LOAD AMPS
EAT	ENTERING AIR TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
EC	ELECTRICAL CONTRACTOR	SA	SUPPLY AIR
EF	EXHAUST FAN	SAR	SUPPLY AIR REGISTER
EFF	EFFICIENCY	SD	SMOKE DAMPER
EJ	EXPANSION JOINT	SF	SUPPLY FAN
EL	ELEVATION	SMBH	SENSIBLE MBH
EQ	EQUAL	SPEC	SPECIFICATION
ER	EXHAUST REGISTER	SS	STAINLESS STEEL
ESP	EXTERNAL STATIC PRESSURE	STD	STANDARD
ET	EXPANSION TANK	TAD	TRANSFER AIR DUCT
EWC	ELECTRIC WATER COOLER	TDH	TOTAL DYNAMIC HEAD
EWT	ENTERING WATER TEMPERATURE	TEFC	TOTALLY ENCLOSED FAN COOLED
°F	DEGREES FAHRENHEIT	TEMP	TEMPERATURE
FA	FREE AREA	TG	TRANSFER GRILLE
FC	FAN COOL UNIT	TMBH	TOTAL MBH
FD	FIRE DAMPER	TSP	TOTAL STATIC PRESSURE
FG	FILTER GRILLE	TYP	TYPICAL
FLA	FULL LOAD AMPS	UC	UNDERCUT
FLR	FLOOR	TYP	TYPICAL
FOB	FLAT ON BOTTOM	UON	UNLESS OTHERWISE NOTED
FOT	FLAT ON TOP	V	VOLTS
FP	FIRE PUMP	VAV	VARIABLE AIR VOLUME UNIT
FPI	FINS PER INCH	VD	VOLUME DAMPER
FPM	FEET PER MINUTE	VFD	VARIABLE FREQUENCY DRIVE
FT	FEET OR FOOT	VTR	VENT THRU ROOF
FX	FLEXIBLE CONNECTION	W/	WITH
GA	GAUGE	W/O	WITHOUT
GALV	GALVANIZED	WB	WET BULB
GC	GENERAL CONTRACTOR	WC	WATER COLUMN
GPH	GALLONS PER HOUR	WG	WATER GAUGE
GPM	GALLONS PER MINUTE	WT	WEIGHT
HB	HOSE BIBB		

REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

CONTROL ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	ALARM	PT	PRESSURE TRANMITTER
AI	ANALOG INPUT	RH	RELATIVE HUMIDITY
AO	ANALOG OUTPUT	S	STATUS
DI	DIGITAL INPUT	SC	SPEED CONTROL
DO	DIGITAL OUTPUT	SI	SPEED INDICATOR
DP	DIFFERENTIAL PRESSURE	SP	SETPOINT
FS	FLOW SWITCH	SS	START/STOP
FM	FLOW METER	T	TEMPERATURE
HOA	HANDS OFF AUTO	TI	TEMPERATURE INDICATOR
KW	KILOWATTS	VA	DAMPER/VALVE ACTUATOR
LA	LEVEL ALARM	VP	VELOCITY PRESSURE
MOD	MOTOR OPERATED DAMPER	VSH	VIBRATION SWITCH
NC	NORMALLY CLOSED	ZC	CLOSED END SWITCH
NO	NORMALLY OPEN	ZI	POSITION INDICATOR
PS	PRESSURE SWITCH	ZO	OPEN END SWITCH

REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

SHEET INDEX

SHEET	DESCRIPTION
M0.01	GENERAL NOTES, LEGEND, ABBREVIATIONS, AND SHEET INDEX
M0.02	SCHEDULES
M0.03	SCHEDULES
M2.01A	BELOW FLOOR PLAN - AREA A
M2.01B	BELOW FLOOR PLAN - AREA B
M2.02A	FLOOR PLAN - AREA A
M2.02B	FLOOR PLAN - AREA B
M5.01	CONTROL DIAGRAMS
M5.02	CONTROL DIAGRAMS
M6.01	DETAILS
M6.02	DETAILS
M7.01	TITLE 24 FORMS

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE 2016 EDITIONS OF THE CALIFORNIA BUILDING, MECHANICAL, PLUMBING, AND OTHER APPLICABLE FEDERAL, STATE, OR LOCAL CODES AS ADOPTED AND ENFORCED BY THE LOCAL JURISDICTION. IN CASE THE PLANS SHOW MORE STRINGENT REQUIREMENTS, THE PLANS SHALL GOVERN THE DESIGN, YET NOTHING ON THE DESIGN DOCUMENTS SHALL BE INTERPRETED AS AUTHORITY TO VIOLATE CODE(S) OR REGULATION(S).

2. SUBMISSION OF BID IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH THE CONTRACTOR WILL BE OBLIGATED TO OPERATE UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.

3. WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".

4. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DESIGN PLANS / SPECIFICATIONS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL PREVAIL.

5. THIS CONTRACTOR SHALL FURNISH LABOR, MATERIALS, EQUIPMENT, AND TRANSPORTATION AS REQUIRED TO PROPERLY INSTALL ALL NEW HVAC SYSTEMS OR RELATED COMPONENTS AS INDICATED ON PLANS AND SPECIFIED HEREIN.

6. ALL NEW EQUIPMENT AND MATERIAL TO BE INSTALLED AS PART OF RENOVATION / NEW CONSTRUCTION SHALL BEAR AN UNDERWRITERS' LABORATORIES LABEL (UL), AND INSTALLED IN SUCH A MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED.

7. THIS CONTRACTOR SHALL DOCUMENT AND RELAY ANY MAJOR DEVIATIONS FROM THE DESIGN DOCUMENTS, AND ATTAIN APPROVAL FROM THE MECHANICAL ENGINEER BEFORE PROCEEDING. AS-BUILT COPIES SHALL BE PROVIDED INDICATING ALL CHANGES / DEVIATIONS MADE DURING CONSTRUCTION.

8. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.

9. NO PIPING, EQUIPMENT, ETC. SHALL BE REMOVED, DISCONNECTED OR SHUT DOWN WITHOUT PRIOR REVIEW WITH THE OWNER TO CONFIRM THAT AREAS TO REMAIN IN OPERATION WILL NOT BE AFFECTED. IF ANY AREAS NOT WITHIN THE SCOPE OF WORK ARE AFFECTED BY ANY SHUTDOWN, REMOVAL OR DISCONNECTION, SUFFICIENT ADVANCE NOTICE MUST BE GIVEN TO THE OWNER INDICATING WHICH AREAS WILL BE AFFECTED, WHEN THE PROPOSED SHUTDOWN WILL OCCUR, AND FOR HOW LONG A PERIOD OF TIME.

10. THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS PECULIAR TO A SPECIFIC MANUFACTURER. THE DRAWINGS ARE, IN PART, DIAGRAMMATIC AND SOME FEATURES OF THE ILLUSTRATED EQUIPMENT INSTALLATION MAY REQUIRE REVISION TO MEET ACTUAL EQUIPMENT INSTALLATION REQUIREMENTS. STRUCTURAL SUPPORTS, FOUNDATIONS, CONNECTED PIPING, VALVES AND ELECTRICAL CONDUIT SPECIFIED MAY HAVE TO BE ALTERED TO ACCOMMODATE THE EQUIPMENT PROVIDED. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH REVISIONS AND ALTERATIONS.

11. THIS CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF HVAC SYSTEMS. MAKE ALLOWANCE FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE OWNER'S REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, WELDS AND CONFIGURATIONS AND SUBMITTED TO ENGINEER FOR REVIEW.

12. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF ALL WORK.

13. BEFORE COMMENCEMENT OF WORK, THIS CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS, AND CHARACTERISTICS OF ALL UTILITIES.

14. CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMITS PERTAINING TO THE CONTRACT.

15. EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.

16. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

17. GALVANIZED SHEET METAL SHALL BE PROVIDED FOR ALL HVAC DUCT SYSTEMS, AND CONSTRUCTED / SUPPORTED / INSTALLED IN ACCORDANCE WITH THE 2016 CALIFORNIA MECHANICAL CODE AND THE LATEST SMACNA STANDARDS.

18. ALL PIPING SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS IN A NEAT WORKMANSHIP-LIKE MANNER AND BE SUPPORTED AS REQUIRED BY CODES. PIPING SHALL BE SET UP AND DOWN AND OFFSET AS REQUIRED TO SUIT FIELD CONDITIONS. DIELECTRIC COUPLINGS SHALL BE USED WHERE DISSIMILAR METALS ARE JOINED.

19. THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORTS FOR FIXTURES, DUCTWORK, PIPING, AND MECHANICAL EQUIPMENT, IN ORDER TO COMPLY WITH SEISMIC REQUIREMENTS AS OUTLINED BY THE LATEST EDITION(S) OF THE CALIFORNIA BUILDING CODE, SMACNA INSTALLATION STANDARDS, AND ALL RELATED LOCAL ORDINANCES.

20. PIPING AND DUCT SUPPORTS SHALL BE AS FOLLOWS:

    A. ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, OR AS DETAILED AND SPECIFIED HEREIN.

    B. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL ENGINEER.

    C. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB AT ALL TIMES.

21. THIS CONTRACTOR SHALL NOT BORE, NOTCH, CUT, OR PENETRATE INTO A STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM A DESIGNATED STRUCTURAL ENGINEER AND THE OWNER.

22. ALL PIPE ELBOWS SHALL BE LONG RADIUS UNLESS OTHERWISE SPECIFICALLY NOTED ON THE DRAWINGS.

23. ISOLATE AND DRAIN EXISTING PIPING SYSTEM AS REQUIRED TO ACCOMMODATE INSTALLATION OF THE WORK.

24. INSTALL MANUAL VOLUME DAMPERS WITHIN DUCT BRANCHES TO BALANCE AIR FLOW CFM. ON INSULATED DUCTS, MOUNT DAMPER REGULATOR ON 2" STAND-OFF BRACKET TO CLEAR INSULATION.

25. PER 2016 CMC 608.1 AUTOMATIC SHUT OFF OF AIR HANDLER SHALL BE DONE UPON THE DETECTION OF SMOKE IN THE MAIN SUPPLY AIR DUCT SERVED BY THE AIR HANDLER.

26. ALL MATERIAL EXPOSED WITHIN RA PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 25 AND SMOKE DEVELOPED INDEX NOT GREATER THAN 50. COMPLY WITH CMC-602.2.

27. 2016 CBC MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT 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 FORCES AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2016 CBC, SECTIONS 1616A.1.18-1616A.1.26 AND ASCE 7-10 CHAPTER 13.

    A. ALL PERMANENT EQUIPMENT AND COMPONENTS.

    B. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.

    C. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

    THE ATTACHMENT OF THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENT SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

    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 SUPPORTS THE COMPONENT.

    B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

    FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

28. PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTES:

    PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8.3, 13.6.7, 13.6.5.6, AND 2016 CBC, SECTIONS 1616A.1.23, 1. 24, 1 25, 1. 26.

    THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPM #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

    COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.

    THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

HMC Architects
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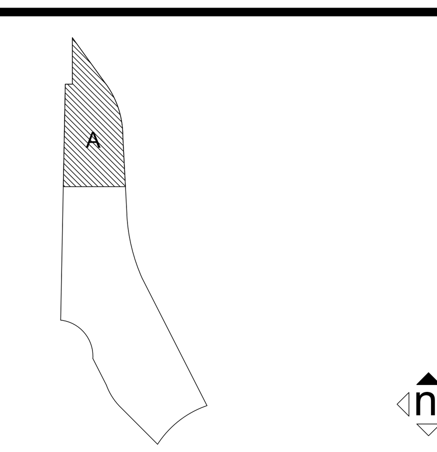
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES DEL MONACO
No. M35128
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS_____ FLS_____ SSS_____
DATE ________

Project Title

Palomar North Education Center - Interim Village
Palomar College
PALOMAR COLLEGE Learning for Success
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
General Notes, Legend, Abbreviations, and Sheet Index

Architect's Seal

LICENSED ARCHITECT
BRADLEY E. GLASSCOCK
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M0.01
Date:	10/13/2017		

P2S No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

AIR HANDLING UNIT

MARK	MANUFACTURER & MODEL	LOCATION	TYPE	SERVICE	TOTAL CFM	FAN CLASS	TSP IN WC	ESP IN WC	RPM	MOTOR BHP	MOTOR HP	MOTOR RPM	FV FPM	AMBIENT °F	MBH TOTAL MBH	MBH SENS. MBH	REFRIGERANT TYPE	AIR SIDE EAT °F DB	AIR SIDE EAT °F WB	AIR SIDE LAT °F DB	AIR SIDE LAT °F WB	AIR SIDE ΔP IN. WC	EFFICIENCY EER	COIL DESCRIPTION QTY.	COIL DESCRIPTION FACE AREA [SF]	COIL DESCRIPTION ROWS / FPI	INDIRECT GAS SECTION INPUT MBH	INDIRECT GAS SECTION OUTPUT MBH	INDIRECT GAS SECTION EAT/LAT °F	FILTERS TYPE	FILTERS QUANTITY / SIZE [W x H x L]	FILTERS EFF	ELECTRICAL V/PH	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MOCP	OPERATING WEIGHT [LBS.]	ANCHORAGE/ BRACING DETAIL	ACCESSORIES	REMARKS
AHU-1	DAIKIN DPS020A	ON GRADE	100% OSA	CHEM. LAB/ CHEM. STORAGE	5,880	II	3.5	2	2,111	5.53	10	-	260	96	258	258	R410	96	68	53.4	52.7	0.21	10.1	1	21.4	4 / 15	450	360	30/90	LIFT OUT	9 / 18 x 24 x 2	MERV 8	460/3	46.1	53.6	80	3,751	1/M6.01	A B	D
AHU-2	DAIKIN DPS004A	ON GRADE	100% OSA	CHEM. PREP	1,050	II	2.3	2	2,219	0.64	1.3	-	207	96	47	47	R410	96	68	52.9	52.5	0.16	11.8	1	4.8	4 / 16	80	64	30/90	LIFT OUT	4 / 16 x 16 x 2	MERV 8	460/3	6.3	7.4	15	1,294	1/M6.01	C	D
AHU-3	DAIKIN DPS016A	ON GRADE	100% OSA	BIOLOGY/BIO. PREP	4,330	II	2.9	2	2,825	3.64	5	-	222	96	189	189	R410	96	68	54.8	53.3	0.16	12.3	1	18.9	4 / 16	450	360	30/90	LIFT OUT	9 / 18 x 24 x 2	MERV 8	460/3	32.4	38.1	60	3,657	1/M6.01	A B	D

A PROVIDE ABB ACH 550 VFD OR EQUAL WITH INTEGRAL DISCONNECT.

B GROUNDED SHAFT, PREMIUM-EFFICIENCY INDUCTION MOTOR MOTORS,

C EC MOTOR.

D INSTALLATION REQUIRES A MIN. 6-INCH CONCRETE PAD.

FANS

MARK	MANUFACTURER & MODEL	FAN CLASS	LOCATION	TYPE	SERVICE	FAN AIRFLOW CFM	FAN ESP IN WG.	FAN RPM	MOTOR HP	MOTOR BHP	MOTOR VOLTS	MOTOR PHASE	MOTOR RPM	MOTOR ENCLOSURE	INLET SOUND dBA	OPERATING WEIGHT [LBS.]	ANCHORAGE/ BRACING DETAIL	ACCESSORIES	REMARKS
EF-1	GREENHECK CSW-33-AF-41-8-70	II	ON GRADE	UTILITY CENTRIFUGAL	LAB EXHAUST	11,385	4.0	1,194	15	10.07	460	3	1,170	TEFC	80	1,530	6/M6.01	A	B C

A BACKDRAFT DAMPER, HINGED ACCESS DOOR, EXTENDED LIFE BEARINGS, AMCA TYPE A SPARK RESISTANT CONSTRUCTION, MOTOR WEATHERHOOD COVER, BELT GUARD, HI-PRO POLYESTER COATING, DRAIN WITH PLUG, SHAFT SEALS, EXTENDED LUBRICATION LINES, FACTORY ISOLATION BASE WITH RESTRAINED SPRING MOUNTS WITH 2 INCH DEFLECTION

B CONTROLLED BY VFD THROUGH BAS. SEE VFD SCHEDULE AND CONTROLS DETAIL 2/M5.01.

C FAN SHALL BE DIRECT DRIVE, ARRANGEMENT 8

SUPPLY AIR VALVES

MARK	MANUFACTURER & MODEL	INLET SIZE [IN.]	MAX AIRFLOW [CFM]	MIN AIRFLOW [CFM]	VALVE FAIL POSITION	FUNCTION	MATERIAL	WEIGHT [LBS.]	ANCHORAGE/ BRACING DETAIL	ACCESSORIES	REMARKS
SV-100	ACCUTROL ACCUVALVE H-AV3147-06-IF	6	210	110	LAST	GENERAL SUPPLY	ALUMINUM	10	2/M6.01	B	A
SV-101A	ACCUTROL ACCUVALVE AVC5143-18-IF	18 x 12	1,890	330	LAST	GENERAL SUPPLY	ALUMINUM	30	2/M6.01	B C	A
SV-101B	ACCUTROL ACCUVALVE AVC5143-18-IF	18 x 12	1,890	330	LAST	GENERAL SUPPLY	ALUMINUM	30	2/M6.01	B C	A
SV-101C	ACCUTROL ACCUVALVE AVC5143-18-IF	18 x 12	1,890	330	LAST	GENERAL SUPPLY	ALUMINUM	30	2/M6.01	B C	A
SV-102	ACCUTROL ACCUVALVE AVC5143-10-IF	10	1,050	705	LAST	GENERAL SUPPLY	ALUMINUM	14	2/M6.01	B C	A
SV-103A	ACCUTROL ACCUVALVE H-AV3147-14-IF	14	1,260	465	LAST	GENERAL SUPPLY	ALUMINUM	20	2/M6.01	B	A
SV-103B	ACCUTROL ACCUVALVE H-AV3147-14-IF	14	1,260	465	LAST	GENERAL SUPPLY	ALUMINUM	20	2/M6.01	B	A
SV-103C	ACCUTROL ACCUVALVE H-AV3147-14-IF	14	1,260	465	LAST	GENERAL SUPPLY	ALUMINUM	20	2/M6.01	B	A
SV-104	ACCUTROL ACCUVALVE H-AV3147-08-IF	8	550	190	LAST	GENERAL SUPPLY	ALUMINUM	16	2/M6.01	B	A

A SEE AIR BALANCE SCHEDULE FOR FULL OPERATION SETPOINTS AND ROOM BALANCING.

B PROVIDE FACTORY INSULATION AND FLANGES.

C PROVIDE HIGH SPEED VALVE ACTUATOR FOR FUME HOOD LAB DUTY.

EXHAUST AIR VALVES

MARK	MANUFACTURER & MODEL	INLET SIZE [IN.]	MAX AIRFLOW [CFM]	MIN AIRFLOW [CFM]	VALVE FAIL POSITION	FUNCTION	MATERIAL	WEIGHT [LBS.]	ANCHORAGE/ BRACING DETAIL	ACCESSORIES	REMARKS
EV-100	ACCUTROL ACCUVALVE H-AV3147-08-F	8	310	210	LAST	LAB EXHAUST	ALUMINUM	12	2/M6.01	B	A
EV-101A	ACCUTROL ACCUVALVE AVC5143-10-F	10	726	0	LAST	LAB EXHAUST	ALUMINUM	14	2/M6.01	B	A C
EV-101B	ACCUTROL ACCUVALVE H-AV3247-36-F	36 x 12	3,750	0	LAST	BACKDRAFT TABLE EXHAUST	ALUMINUM	59	2/M6.01	B	A
EV-101-F1	ACCUTROL ACCUVALVE AVC5123-12-F	12	1100	400	LAST	FUME HOOD EXHAUST	304SS	26	2/M6.01	B D E	A C
EV-101-F2	ACCUTROL ACCUVALVE AVC5123-12-F	12	1,100	400	LAST	FUME HOOD EXHAUST	304SS	26	2/M6.01	B D E	A C
EV-102A	ACCUTROL ACCUVALVE AVC5143-8-F	8	550	50	LAST	LAB EXHAUST	ALUMINUM	12	2/M6.01	B	A C
EV-102B	ACCUTROL ACCUVALVE H-AV3127-06-F	6	100	100	LAST	CABINET EXHAUST	304SS	13	2/M6.01	B	A
EV-102-F	ACCUTROL ACCUVALVE AVC3123-10-F	10	800	300	LAST	FUME HOOD EXHAUST	304SS	20	2/M6.01	B D E	A C
EV-103A	ACCUTROL ACCUVALVE H-AV3147-14-F	14	1,550	1,040	LAST	LAB EXHAUST	ALUMINUM	20	2/M6.01	B	A
EV-103B	ACCUTROL ACCUVALVE H-AV3247-18-F	18 x 12	1,875	0	LAST	BACKDRAFT TABLE EXHAUST	ALUMINUM	26	2/M6.01	B	A
EV-104A	ACCUTROL ACCUVALVE H-AV3147-08-F	8	500	140	LAST	LAB EXHAUST	ALUMINUM	12	2/M6.01	B	A
EV-104B	ACCUTROL ACCUVALVE H-AV3127-06-F	6	150	150	LAST	CABINET EXHAUST	304SS	13	2/M6.01	B	A
EV-105	ACCUTROL ACCUVALVE H-AV3147-06-F	6	100	100	LAST	LAB EXHAUST	ALUMINUM	9	2/M6.01	B	A

A SEE AIR BALANCE SCHEDULE FOR FULL OPERATION SETPOINTS AND ROOM BALANCING.

B PROVIDE WITH FLANGES.

C PROVIDE HIGH SPEED VALVE ACTUATOR FOR FUME HOOD LAB DUTY.

D AFC5000 FUME HOOD CONTROLLER, VERTICAL SASH POSITION SENSOR.

E PROVIDE ZONE PRESENCE SENSOR ACCESSORY FOR FUME HOODS WHICH DRIVE THE ROOM MINIMUM ACH RATE.

FIELD-MOUNTED VARIABLE FREQUENCY DRIVES

MARK	MANUFACTURER & MODEL	LOCATION	ENCLOSURE	SERVICE	ELECTRICAL MOTOR HP	ELECTRICAL VFD HP	ELECTRICAL VOLTAGE	ELECTRICAL PH	OPERATING WEIGHT LBS.	ANCHORAGE/ BRACING DETAIL	ACCESSORIES	REMARKS
VFD-EF-1	ABB ACH 550	EXT. WALL	NEMA 3R	EF-1	15	15	460	3	194	4/M6.02	A	-

A BACNET COMMUNICATIONS CARD, NEMA 3R ENCLOSURE WITH FAN, THERMOSTAT, AND HEATER. FURNISH WITH CIRCUIT BREAKER AND LOCKABLE HANDLE.

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3546 Concours Street / Ontario, CA 91764
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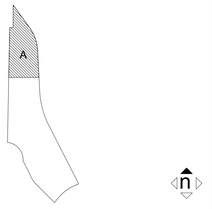
Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER JAMES DEL MONTE MECHANICAL STATE OF CALIFORNIA

SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS____ FLS____ SSS____

DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Schedules

Architect's Seal

REGISTERED ARCHITECT JOHN DAVID BOSTICK NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M0.02
Date:	10/13/2017		

PCS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

ROOM AIRFLOW BALANCE SCHEDULE

AHU	ROOM NUMBER	AREA [SF]	HEIGHT [FT]	SPACE USE	OCCUPIED MIN. ACH	UNOCCUPIED MIN. ACH	TERMINAL UNIT		SUPPLY AIRFLOW [CFM]			EXHAUST AIRFLOW [CFM]				REMARKS
							SA TAG	EA TAG	OCC. MIN.	UNOCC. MIN.	SA CLG MAX	OCC. MIN. EA	UNOCC. MIN. EA	MAX. EA	(SA - EA) AIRFLOW OFFSET	
1	-	309	10	STORAGE/BALANCE RM.	6	4	SV-100	EV-100	210	110	210	310	210	310	-100	
1	-	1,526	10	CHEMISTRY LAB	6	4	SV-101	EV-101A	1,250	990	5,670	730	470	0	+280	A
								EV-101B				0	0	3,750		
								EV-101-F1				400	400	1,100		
								EV-101-F2				400	400	1,100		
2	-	908	10	CHEMISTRY PREP	6	4	SV-102	EV-102A	1,050	705	1,050	550	205	50	+100	A
								EV-102B				100	100	100		
								EV-102-F				300	300	800		
3	-	1,550	10	BIOLOGY	6	4	SV-103	EV-103A	1,905	1,395	3,780	1,550	1,040	1,550	+355	
								EV-103B				0	0	1,875		
3	-	200	10	BIOLOGY STORAGE	15	4	SV-104	EV-103A	550	190	550	500	140	500	-100	
								EV-103B				150	150	150		
3	-	90	10	ASTRO STORAGE	6	6	N/A	EV-104	-	-	-	100	100	100	-100	

A CONTRACTOR SHALL HIRE A QUALIFIED TESTING AGENT TO PERFORM ASHRAE STANDARD 110 TESTING FOR ALL FUME HOODS WITHIN THIS ROOM AND COORDINATE WITH PALOMAR COLLEGE ENVIRONMENTAL HEALTH AND SAFETY REPRESENTATIVE TO PROVIDE RESULTS OF THE TESTING TO THE COLLEGE.

GRILLES, REGISTERS, DIFFUSERS

MARK	MANUFACTURER & MODEL	DESCRIPTION	NOMINAL SIZE [IN.]	INLET SIZE [IN.]	MATERIAL	BORDER	DAMPER	FINISH	REMARKS
CSP-1	PRICE PDSP	PERFORATED SUPPLY	24x24	8	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CSP-2	PRICE PDSP	PERFORATED SUPPLY	24x24	10	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CSP-3	PRICE PDSP	PERFORATED SUPPLY	24x24	12	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CSP-4	PRICE PDSP	PERFORATED SUPPLY	24x24	14	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CSR-1	PRICE RFD	RADIAL FLOW SUPPLY	24x24	8	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CSR-2	PRICE RFD	RADIAL FLOW SUPPLY	24x48	12	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CRP-1	PRICE PDDR	PERFORATED RETURN	24x24	15x15	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CRP-2	PRICE PDDR	PERFORATED RETURN	24x24	22x22	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CEP-1	PRICE PDDR	PERFORATED EXHAUST	24x24	8	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CEP-2	PRICE PDDR	PERFORATED EXHAUST	24x24	10	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CEP-3	PRICE PDDR	PERFORATED EXHAUST	24x24	12	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CEP-4	PRICE PDDR	PERFORATED EXHAUST	24x24	14	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
CEP-5	PRICE PDDR	PERFORATED EXHAUST	24x24	15	ALUMINUM	-	NONE	MATCH ARCHITECTURAL CEILING	-
EG-1	PRICE 730H	LOUVERED EXHAUST	8x8	8x8	304 SS	MOUNT IN DOWNDRAFT TABLES	NONE	MATCH TABLES	-

DAMPER

MARK	MANUFACTURER & MODEL	LOCATION	BLADE PROFILE	EQUIPMENT SERVED	FUNCTION	SIZE		DESIGN AIRFLOW [CFM]	DESIGN PRESSURE DROP [IN. W.C.]	ACCESSORIES	REMARKS
						WIDTH [IN.]	HEIGHT [IN.]				
BD-EF-1	GREENHECK VCD-40	GROUND LEVEL	AIRFOIL	EF-1	BYPASS	48	26	7,870	0.15	-	A

A PROVIDE BELIMO ACTUATOR AND EXTERNAL ACTUATOR MOUNT.

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3546 Concours Street / Ontario, CA 91764
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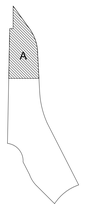
Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
DEL
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS____ FLS____ SSS____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Schedules

Architect's Seal

LICENSED ARCHITECT
BRIAN E. GLASS
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M0.03
Date:	10/13/2017		

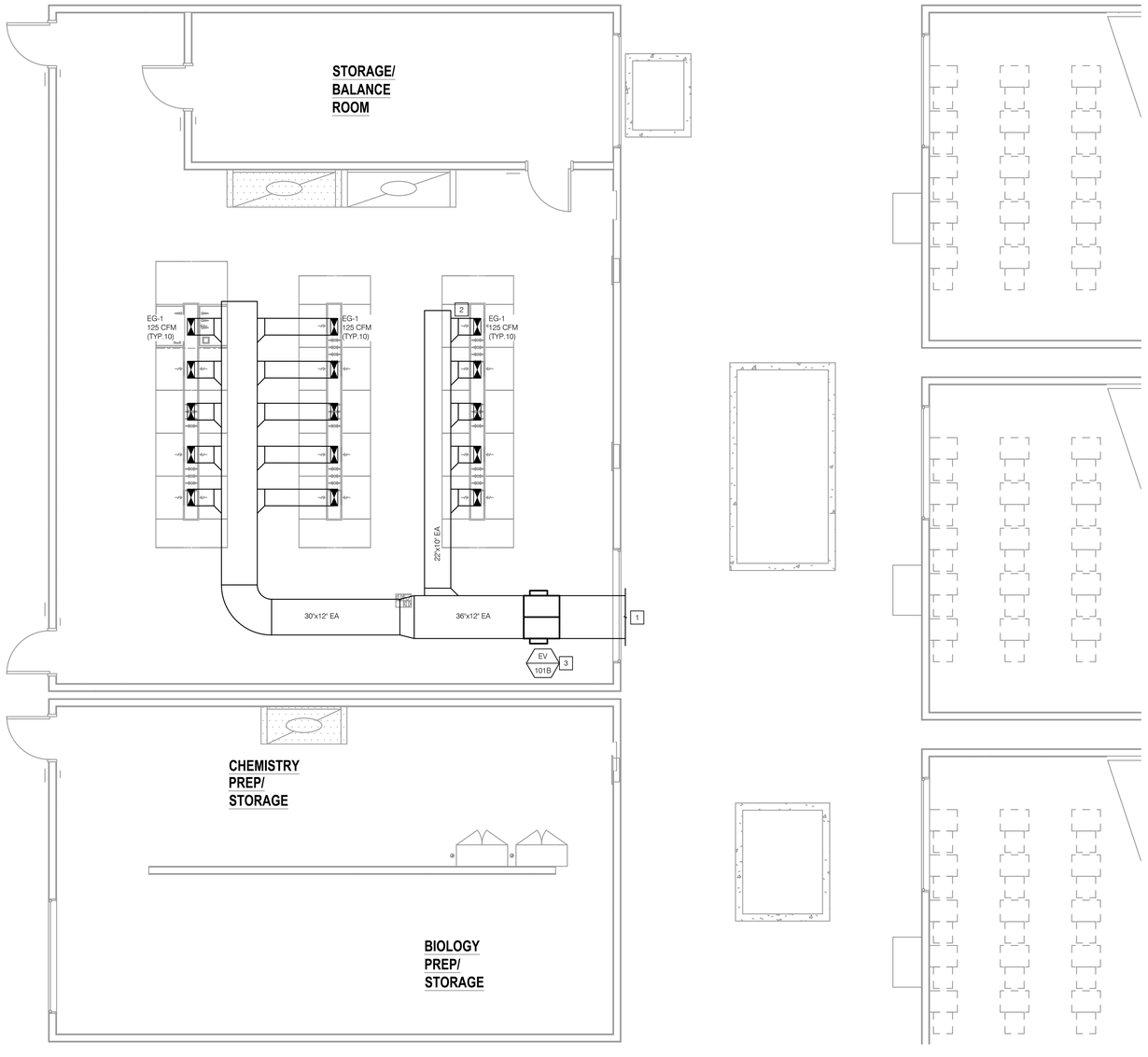
PZS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

NOTES

1. CONNECT 36"X12" EXHAUST DUCT TO 36"Ø EXHAUST DUCT MAIN LOCATED OUTSIDE OF MODULAR ON M2.02A. CONNECTION NOT SHOWN ON DRAWINGS FOR CLARITY PURPOSES.
2. 14"X6" EXHAUST RISER CONNECTED TO BACKDRAFT TABLE. PROVIDE CONNECTION TWO EG-1 AT BOTH SIDES OF TABLE. REFER TO DIVISION 32 FOR CONNECTION DETAILS. PROVIDE REMOTE ACTUATED BALANCING DAMPER IN RISER.
3. PROVIDE ACCESS DOOR FOR EXHAUST AIR VALVE. ACCESS IS REQUIRED FOR CONTROLLER ON BOTH SIDES OF VALVE.

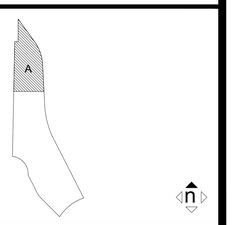


0 4

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES DEL ROSARIO
No. M 20819
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____

DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Below Floor Plan - Area A

Architect's Seal

LICENSED ARCHITECT
BRUCE E. GRAUE
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	1/4"=1'-0"
QAQC	NB	Drawing No.	M2.01A
Date:	10/13/2017		

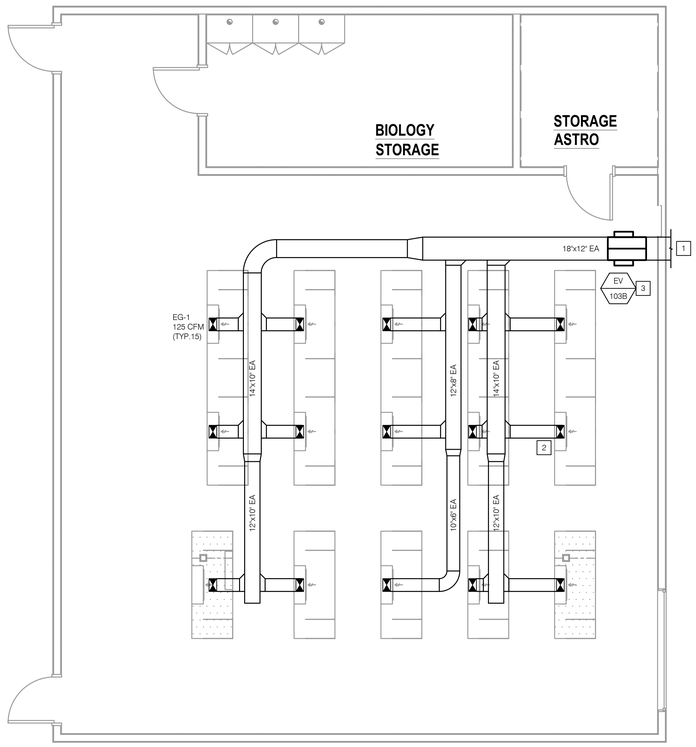
PZ3 No. 8867

PLEASE RECYCLE

DSA SUBMITTAL

NOTES

1. CONNECT 18"X12" EXHAUST DUCT TO 24"Ø EXHAUST DUCT MAIN LOCATED OUTSIDE OF MODULAR ON M2.02A. CONNECTION NOT SHOWN ON DRAWINGS FOR CLARITY PURPOSES.
2. 14"X6" EXHAUST RISER CONNECTED TO BACKDRAFT TABLE. REFER TO DIVISION 32 FOR CONNECTION. PROVIDE REMOTE ACTUATED BALANCING DAMPER IN RISER.
3. PROVIDE ACCESS DOOR FOR EXHAUST AIR VALVE. ACCESS IS REQUIRED FOR CONTROLLER ON BOTH SIDES OF VALVE.



HMC Architects
3546 Concours Street / Ontario, CA 91764
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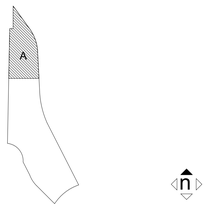
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES DEL MONTE
No. M 22079
MECHANICAL
STATE OF CALIFORNIA

SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____

DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Below Floor Plan - Area B

Architect's Seal

REGISTERED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	1/4"=1'-0"
QAQC	NB	Drawing No.	M2.01B
Date:	10/13/2017		

0 4

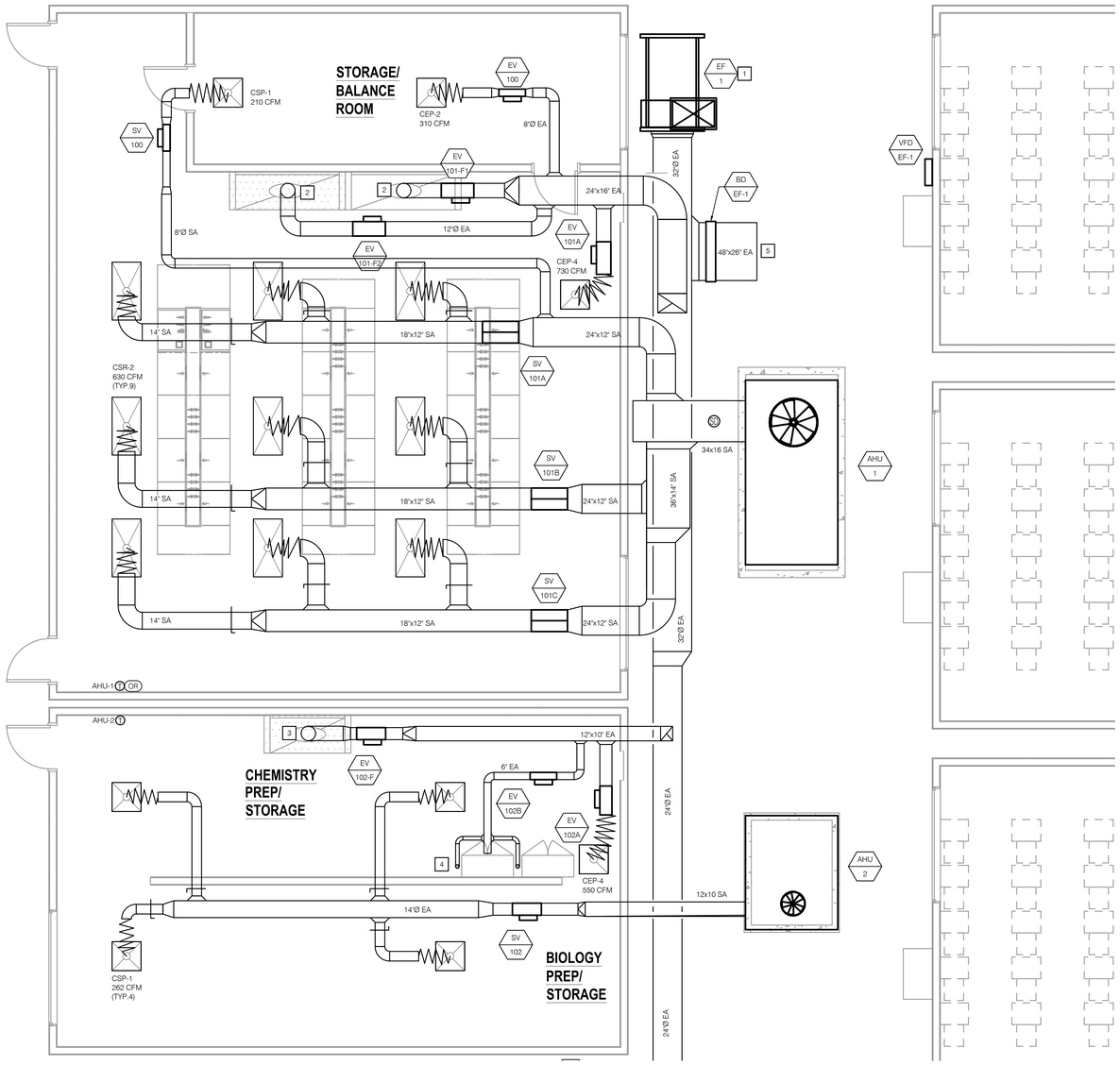
PLEASE RECYCLE

DSA SUBMITTAL

P25 No. 8897

NOTES

1. 32"Ø WELDED STAINLESS STEEL EXHAUST DUCT UP. TERMINATE DISCHARGE 25' ABOVE GRADE.
2. 12"Ø CONNECTION TO 8'-0" FUME HOOD.
3. 8"Ø CONNECTION TO 6'-0" FUME HOOD.
4. 4"Ø CONNECTION TO VENTED CABINET.
5. PROVIDE 45° WEATHERHOOD WITH BIRDSCREEN FOR BYPASS AIR INTAKE DUCT.



HMC Architects
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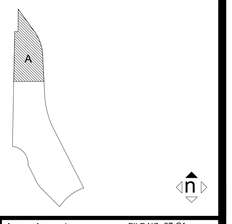
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES DEL ROSARIO
No. M 29278
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS.____ FLS.____ SSS.____
DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Floor Plan - Area A

Architect's Seal

LICENSED ARCHITECT
JOSEPH E. BUSSIERE
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	1/4"=1'-0"
QAQC	NB	Drawing No.	M2.02A
Date:	10/13/2017		

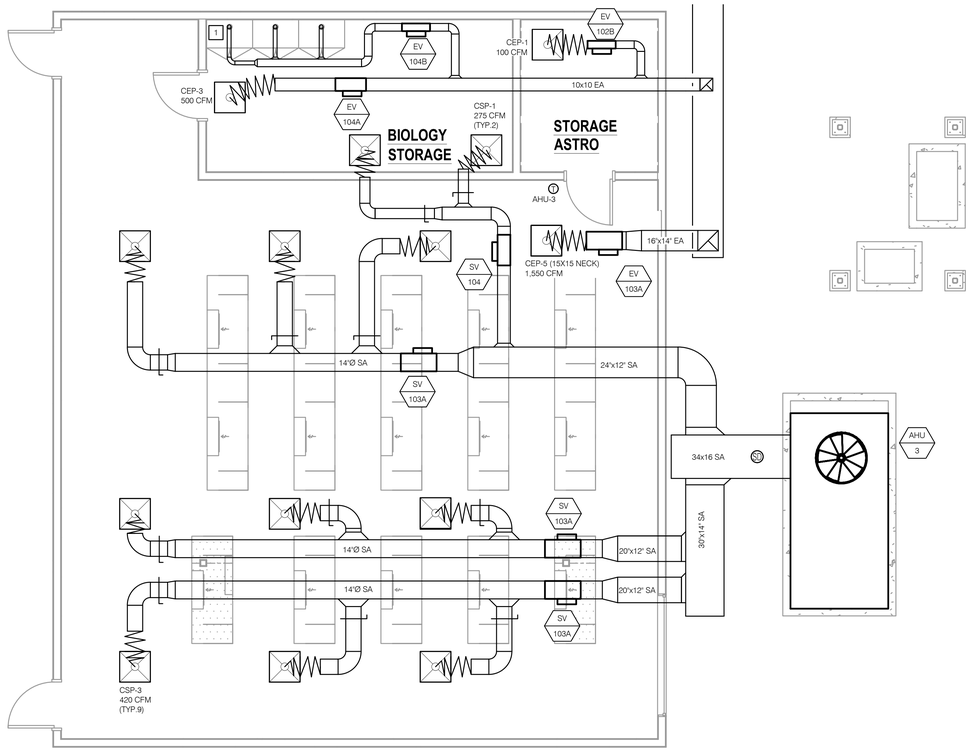
PZS No. 8687

PLEASE RECYCLE

DSA SUBMITTAL

NOTES

1 4"Ø CONNECTION TO VENTED CABINET.



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HMC Architects
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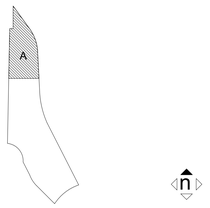
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
DEL
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

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ACS_____ FLS_____ SSS_____

DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Floor Plan - Area B

Architect's Seal

REGISTERED ARCHITECT
JOSEPH E. GLASS
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	1/4"=1'-0"
QAQC	NB	Drawing No.	M2.02B
Date:	10/13/2017		

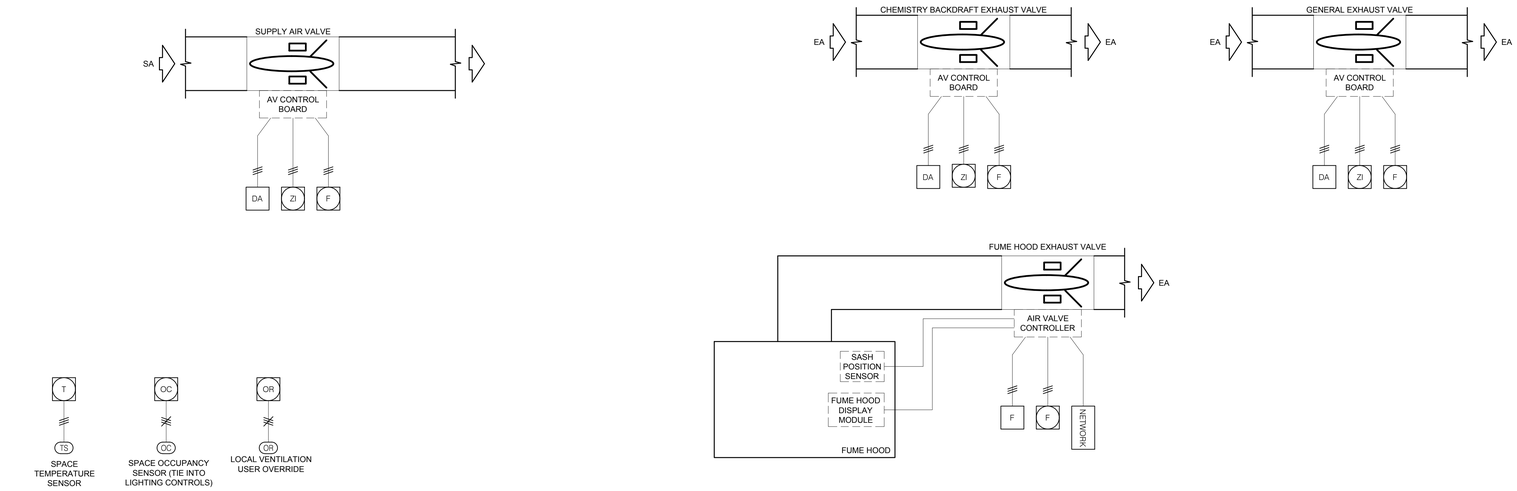
PZS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

NOTES

1. SEE FLOOR PLANS FOR LOCATION OF TEMPERATURE, OCCUPANCY AND OVERRIDE SENSORS.
2. SEE FLOOR PLANS FOR QUANTITY OF SUPPLY AIR VALVES AND EXHAUST VALVES

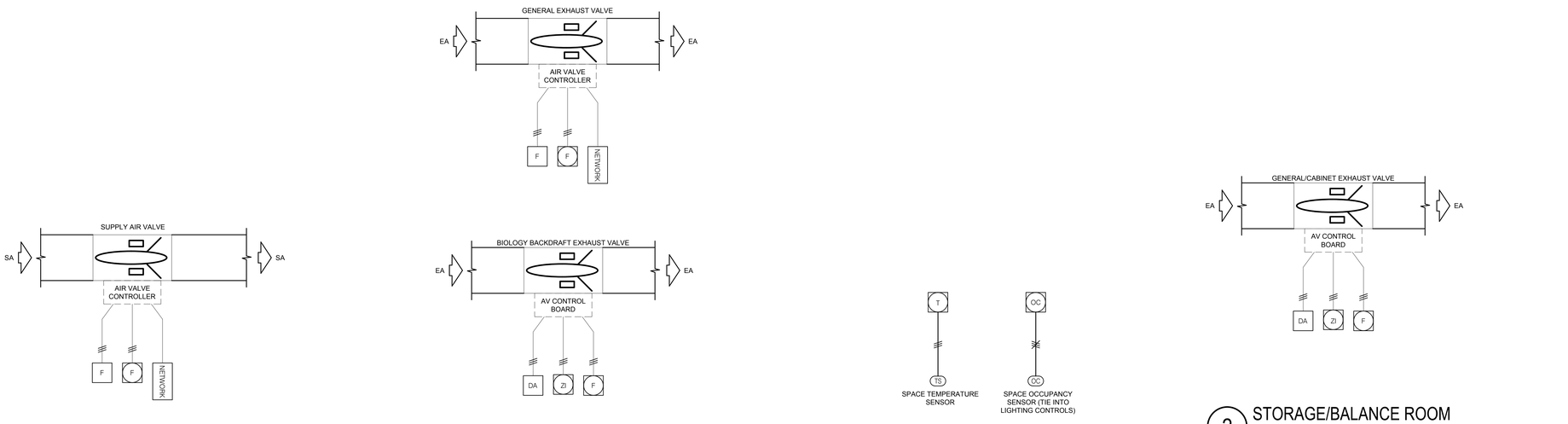


1 CHEMISTRY LAB

NO SCALE

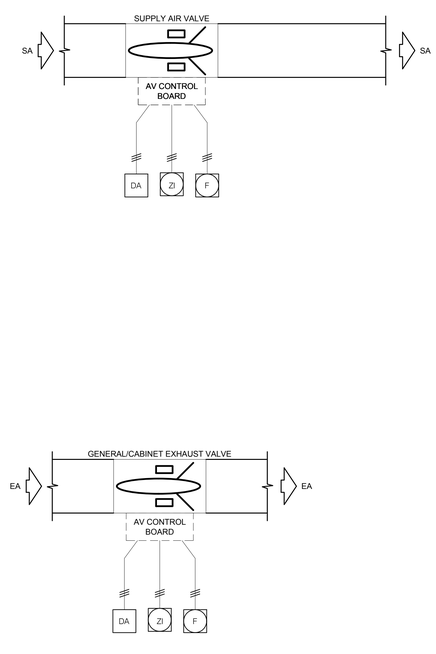
NOTES

1. SEE FLOOR PLANS FOR LOCATION OF TEMPERATURE AND OCCUPANCY SENSORS.
2. SEE FLOOR PLANS FOR QUANTITY OF SUPPLY AIR VALVES AND EXHAUST VALVES



3 BIOLOGY LAB

NO SCALE



2 STORAGE/BALANCE ROOM

NO SCALE

HMC Architects
3546 Concours Street / Ontario, CA 91764
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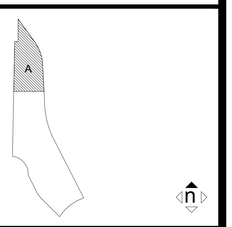
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____

DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Control Diagrams

Architect's Seal

LICENSED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M5.01
Date:	10/13/2017		

PZS No. 8887

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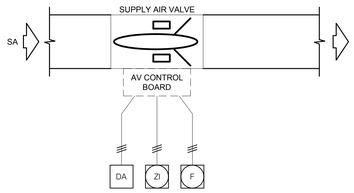
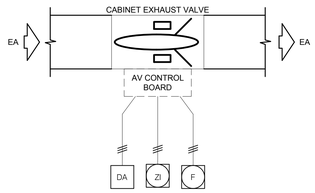
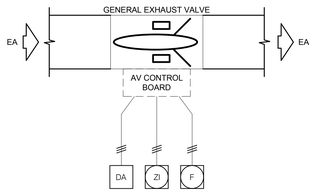
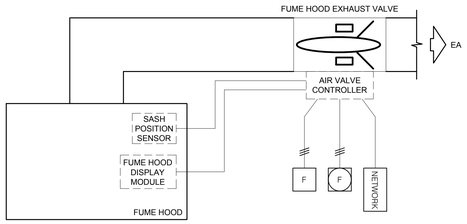
NOTES

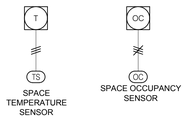
1. SEE FLOOR PLANS FOR LOCATION OF TEMPERATURE, OCCUPANCY, AND OVERRIDE SENSORS.
2. SEE FLOOR PLANS FOR QUANTITY OF SUPPLY AIR VALVES AND EXHAUST VALVES





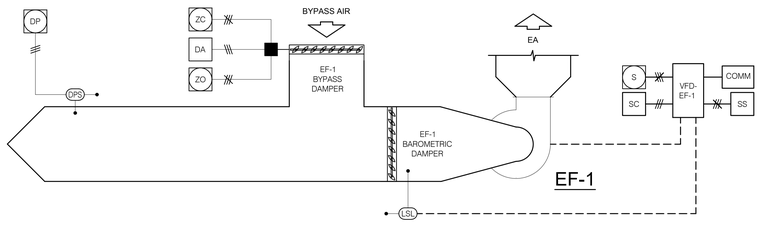






1 CHEMISTRY/BIOLOGY PREP

NO SCALE



3 EXHAUST FAN

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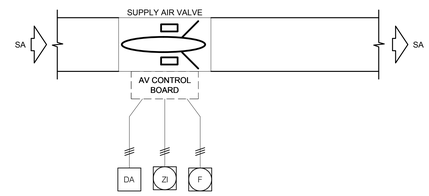

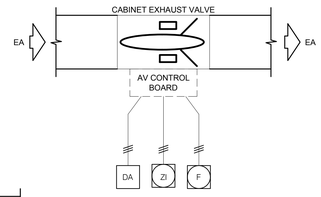

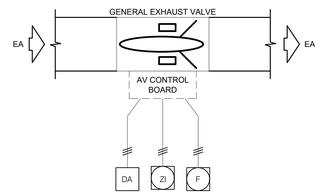

2 BIOLOGY STORAGE

NO SCALE

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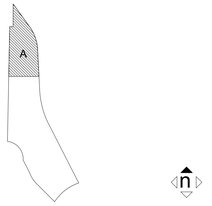
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

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DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Control Diagrams

Architect's Seal

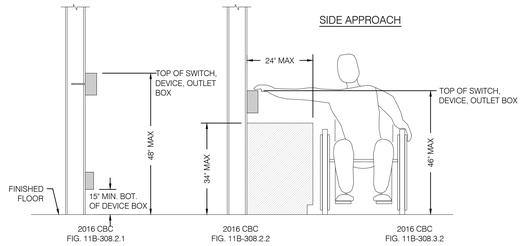
LICENSED ARCHITECT
BRIAN C. BEN
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

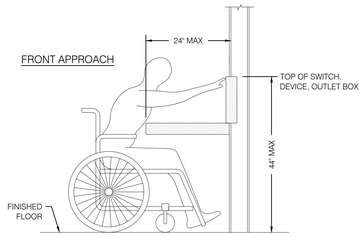
Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M5.02
Date:	10/13/2017		

PCS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL





2016 CBC
FIG. 11B-308.3.1

NOTES

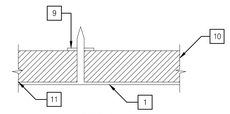
1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

DEVICE MOUNTING HEIGHT | 5

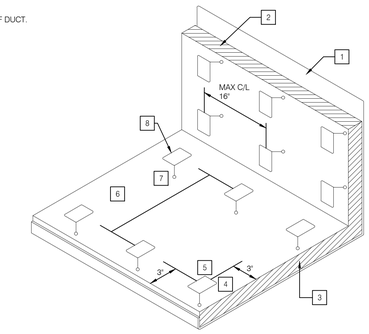
NO SCALE

NOTES

1. DUCT.
2. LINING.
3. ALL ENDS OF LINER. COATED WITH ADHESIVE.
4. NOT MORE THAN 3" FROM EDGE OF LINER.
5. TYPICAL STUD-WELDED PINS AND SPEED CLIP WASHER (SEE DETAIL 'A')
6. COATED SURFACE OF INSULATION EXPOSED TO AIRSTREAM.
7. PINS SPOT WELDED TO DUCTWORK.
8. SEPARATE SPEED CLIP WASHER.
9. DOWN OVER PIN TO LINING.
10. WELD-PIN STUD WELDED TO DUCT (PIN FASTENED TO DUCT WITH ADHESIVE NOT APPROVED).
11. ADHESIVE OVER COMPLETE SURFACE OF DUCT.

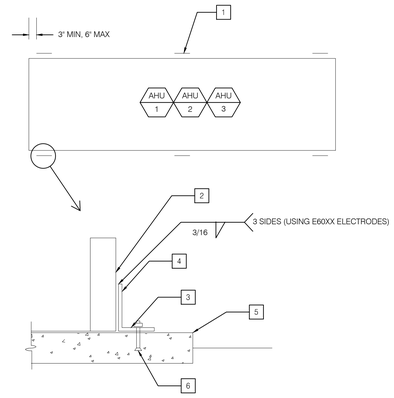


DETAIL 'A'



DUCT LINER | 3

NO SCALE



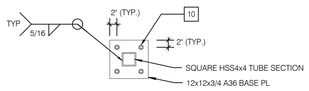
NOTES

1. ANGLE CONNECTIONS AT EACH END OF UNIT'S LONG DIMENSION
2. AIR HANDLING UNIT BASE FRAME
3. 4" LONG L3x3x1/4
4. WELD ANGLE BRACKETS TO AHU BASE FRAME. PRIME AND PAINT AREAS AROUND WELD WHERE PAINT WAS DAMAGED FROM WELDING.
5. CONCRETE PAD PER DETAIL 16/A1.21.4.
6. SS 3/8" KB-TZ AB (2-5/16" NOMINAL EMBED). WATERTIGHT SEALANT AT EACH ANCHOR.

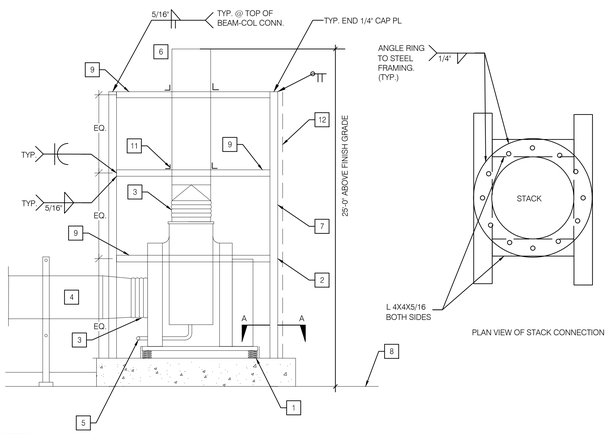
GENERAL NOTES:
A. ALL STEEL TO BE GALVANIZED & WELDS TO BE TOUCH-UP GALVANIZED.

AIR HANDLING UNIT MOUNTING | 1

NO SCALE



SECTION A-A

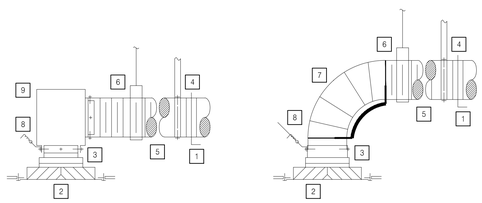


NOTES

1. PROVIDE EXHAUST FAN ON PREFABRICATED MANUFACTURER ISOLATION BASE ANCHORED INTO CONCRETE CURB WITH (2) SS 5/8" KB-TZ ABs **(3-9/16" NOMINAL EMBED □ 5" MIN CONCRETE EDGE DISTANCE)** AT EACH ISOLATOR (ONE AT EACH CORNER OF ISOLATION BASE). CONCRETE CURB PER 16/A1.24.1.
2. ALL STEEL TO BE GALVANIZED AND WELDS TO BE TOUCH-UP GALVANIZED.
3. PROVIDE FLEXIBLE CONNECTION.
4. HARD DUCT FROM EXHAUST PLENUM.
5. 1/2" SS PIPED TO CHEMICAL WASTE DRAIN.
6. PROVIDE STAINLESS STEEL EXHAUST AIR DUCT AT DISCHARGE SIDE OF FAN WITH FLEX CONNECTION TO FAN. TRANSITION TO 32"Ø AND EXTEND STACK UP TO 25 FT ABOVE GROUND LEVEL.
7. HSS4x4x1/4 (TYP.)
8. ASPHALT PAVING.
9. HSS4x4x1/4 EQUALLY SPACED. TOP OF FRAME TO BE 24'-0" FROM FINISHED GRADE.
10. (4) 5/8" DIA. SS KB-TZ ABs WITH 3-9/16" MIN. EMBED AND 5" MIN. CONC EDGE DISTANCE. WATERTIGHT SEALANT AT EACH CORNER.
11. REFER TO PLAN VIEW OF STACK CONNECTION TO STRUCTURE.
12. WIND SCREEN TO BE PROVIDED ALL AROUND. PERMITTED TO TERMINATE AT DUCT CONNECTIONS.

UTILITY EXHAUST FAN MOUNTING | 6

NO SCALE

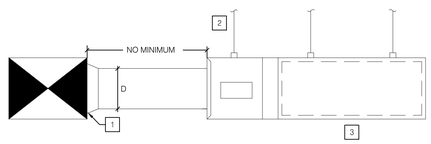


NOTES

1. PROVIDE MANUAL VOLUME DAMPER NEAR MAIN DUCT CONNECTION. MANUAL VOLUME DAMPER SHALL BE LOCKING QUADRANT TYPE AS MANUFACTURED BY DURO-DYNE SPECLINE ELEVATED DAMPER REGULATOR WITH HEX NUT.
2. CEILING DIFFUSER SUPPORTED ONTO CEILING. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT CEILING TYPES.
3. RECTANGULAR OR SQUARE TO ROUND CEILING CAN SECURED TO DIFFUSER WITH MINIMUM 4, #10 SHEET METAL SCREWS AND SEAL AIRTIGHT WITH CASCOTE DUCT SEALANT. IF REQUIRED, PROVIDE ADDITIONAL GALVANIZED STEEL DUCTWORK TO ALLOW FOR STRAIGHT DUCT RUN DOWN TO CEILING DIFFUSER.
4. CONNECT RIGID DUCT WITH MINIMUM 3, #10 SHEET METAL SCREWS AND SEAL WITH CASCOTE DUCT SEALANT. SUPPORT RIGID DUCT TO STRUCTURE ABOVE WITH SHEET METAL STRAPS PER 2016 CMC.
5. REFER TO SPECIFICATION SECTION 233300 FOR FLEXIBLE DUCT REQUIREMENTS.
6. PROVIDE 1-1/2" WIDE, 22 GAUGE HANGER STRAP FOR DUCT SUPPORT. CONNECT 12 GAUGE WIRE FOR SUPPORT TO STRUCTURE ABOVE. WIRE SHALL BE USED OF FLEX DUCT ONLY.
7. PROVIDE FLEXIBLE 90° FULL RADIUS ELBOW AND ADDITIONAL STRAIGHT LENGTH OF DUCT (AS REQUIRED) FOR CONNECTION TO DIFFUSER CEILING CAN COLLAR. PROVIDE FLEXRIGHT FLEXIBLE DUCT ELBOW SUPPORT BY TITUS OR APPROVED EQUAL. CONNECT DUCT TO DIFFUSER CEILING CAN WITH MINIMUM 3, #10 SHEET METAL SCREWS AND SEAL AIRTIGHT WITH DUCT SEALANT. CONNECT SHEET METAL ELBOW TO FLEX DUCT. INSULATE DIFFUSER CEILING CAN AND ALL DUCTWORK.
8. PROVIDE 1"X3" LONG, 16 GAUGE BENT CLIP SECURED TO DIFFUSER WITH #10 SHEET METAL SCREWS. TWO PER DIFFUSER AT DIAGONAL. SECURE 12 GAUGE WIRE TO STRUCTURE ABOVE.
9. ALTERNATE CEILING DIFFUSER CONNECTION AT SHALLOW CEILING SPACE LOCATIONS. PROVIDE GALVANIZED STEEL PLENUM AND INSULATE EXTERIOR. SECURE TO CEILING DIFFUSER WITH MINIMUM FOUR #10 SHEET METAL SCREWS AND SEAL AIR TIGHT WITH CASCOTE DUCT SEALANT.

CEILING DIFFUSER CONNECTION | 4

NO SCALE



NOTES: DISTANCE FROM VALVE CONNECTION TO MAIN DUCT VARIES. IN CASE PLANS SHOW DIFFERENT DUCT SIZES DUE TO LONG RUN, SIZES SHOWN ON PLANS SHALL BE FOLLOWED AND CONTRACTOR TO PROVIDE TRANSITION TO THE VALVE INLET DUCT DIAMETER.

NOTES

1. METAL DUCTWORK CONNECTED TO MAIN AIR DUCT WITH BELLMOUTH FITTING.
2. AIR VALVE SUPPORTED TO STRUCTURE ABOVE PER STRUCTURAL DETAIL 1/S1.50.
3. CONTRACTOR SHALL PROVIDE DISCHARGE AIR PLENUM WITH INTERNAL 1" LINER PER SPECIFICATION SECTION 230713 AND 233113. REFER TO PLANS FOR EXTENT OF LINING.

VALVE CONNECTION AND SUPPORT | 2

NO SCALE

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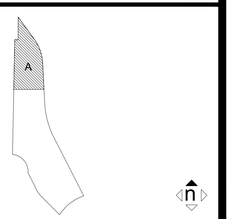
Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER DEL TORO MECHANICAL STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Details

Architect's Seal

REGISTERED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M6.01
Date:	10/13/2017		

PSS No. 8887

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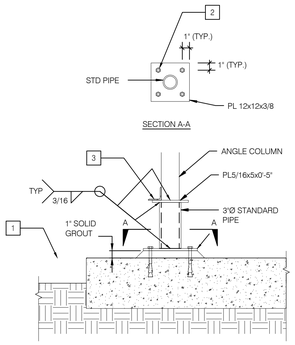
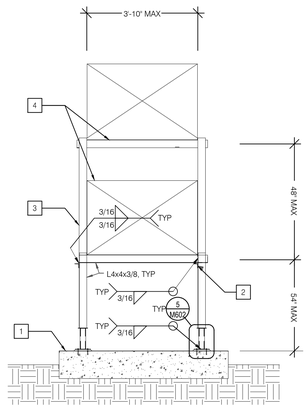


NOTES

1. CONCRETE PAD PER DETAIL 16/A1.21.4.
2. 3/8"Ø HILTI KBTZ W/ 2-5/16" NOM. EMBED AND 5" MIN. CONCRETE EDGE DISTANCE (4 TOTAL) INSTALLED PER ICC ESR-1917.
3. KICKER & WELD PER 3/M6.02.

GENERAL NOTES:
A. ALL STEEL TO BE GALVANIZED & WELDS TO BE TOUCH-UP GALVANIZED.

DUCT SUPPORT BASE — 5 — NO SCALE

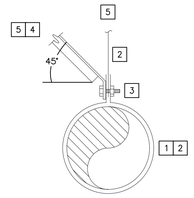


NOTES

1. CONCRETE PAD PER DETAIL 16/A1.21.4.
2. L4x4x3/8 KICKER (1:1 SLOPE) TO BASE CONNECTION PER 5/M602. PROVIDE 2 KICKERS AT EVERY OTHER FRAME (MIN. 2 PER DUCT RUN). ALTERNATE DIRECTION OF KICKER AT EACH FRAME.
3. STACKED DUCT FRAMING TO BE SPACED AT 4'-0" MAX.
4. DUCT TOP AND/OR BOTTOM PER MECHANICAL DRAWINGS.

GENERAL NOTES:
A. ALL STEEL TO BE GALVANIZED & WELDS TO BE TOUCH-UP GALVANIZED.

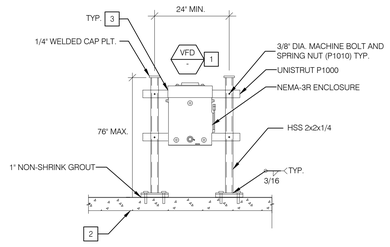
DUCT SUPPORT ON GRADE — 3 — NO SCALE

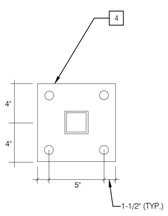


NOTES

1. REFER TO DRAWINGS FOR ROUND DUCT SIZES. FOR ADDITIONAL DUCT SUPPORT, BRACING TO STRUCTURE, AND OTHER DUCT CONSTRUCTION REQUIREMENTS REFER TO 2005 SMACNA DUCT CONSTRUCTION STANDARDS.
2. PROVIDE MINIMUM 1" WIDE, 20 GAUGE, GALVANIZED STEEL DUCT HANGER STRAPS. DUCT SUPPORTS SHALL BE PROVIDED AT MAXIMUM 6'-0" ON CENTER FOR STRAIGHT LENGTH OF DUCT AND MAXIMUM 2'-0" ON CENTER AT ALL ELBOWS AND DUCT TRANSITIONS.
3. SECURE GALVANIZED STEEL HANGER STRAP TO DUCT STRAP WITH 5/8" A307 MACHINE BOLT AND NUT.
4. PROVIDE L2"x2"x1/4 DIAGONAL ANGLE BRACE AS REQUIRED PER CEC.
5. REFER TO SMACNA SEISMIC RESTRAINT GUIDELINES FOR ADDITIONAL REQUIREMENTS. SUBMIT FOR APPROVAL.

ROUND DUCT SUPPORT — 1 — NO SCALE



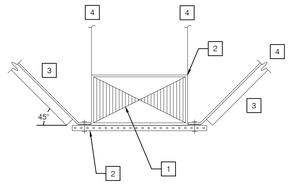


NOTES

1. LOCATE TO ALLOW DOOR TO HAVE 90° OPENING AND 42" CLEAR IN FRONT ON VFD.
2. CONCRETE PAD PER DETAIL 16/A1.21.4.
3. #10 SMS AND SPRING NUTS (P1006-1024) AT MANUFACTURER ATTACHMENT POINTS EACH CORNER.
4. 3/8"x6"x8" PLT. WITH (4) 3/8" DIA. HILTI KB-TZ STAINLESS STEEL WITH 2-5/6" NOMINAL EMBED AND 5" MIN. CONC. EDGE DISTANCE. WATERTIGHT SEALANT AT EACH ANCHOR.

GENERAL NOTES:
A. ALL STEEL TO BE GALVANIZED & WELDS TO BE TOUCH-UP GALVANIZED.

VFD MOUNTING ON GRADE — 4 — NO SCALE



NOTES

1. REFER TO DRAWINGS FOR RECTANGULAR OR SQUARE DUCT SIZES. FOR ADDITIONAL DUCT SUPPORT, BRACING TO STRUCTURE, AND OTHER DUCT CONSTRUCTION REQUIREMENTS REFER TO 2005 SMACNA DUCT CONSTRUCTION STANDARDS.
2. PROVIDE UNISTRUT BELOW DUCTWORK FOR SUPPORT. SECURE DUCTWORK TO UNISTRUT WITH MINIMUM 1" WIDE, 20 GAUGE, GALVANIZED STEEL DUCT HANGER STRAPS. DUCT SUPPORTS SHALL BE PROVIDED AT MAXIMUM 10'-0" ON CENTER FOR STRAIGHT LENGTH OF DUCT AND MAXIMUM 2'-0" ON CENTER AT ALL ELBOWS AND DUCT TRANSITIONS.
3. PROVIDE 2"X2"X16 GAUGE GALVANIZED STEEL DIAGONAL ANGLE BRACE AND CONNECT TO UNISTRUT WHERE REQUIRED PER CEC REQUIREMENTS. SECURE DIAGONAL ANGLE AND DUCT HANGER STRAP TO UNISTRUT WITH 5/8" A307 MACHINE BOLT AND NUT.
4. REFER TO SMACNA SEISMIC RESTRAINT GUIDELINES FOR ADDITIONAL REQUIREMENTS. SUBMIT FOR APPROVAL.

RECTANGULAR DUCT SUPPORT — 2 — NO SCALE

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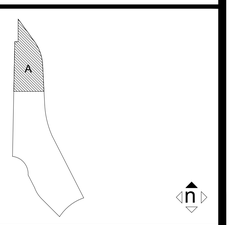
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
ALI SAMIMI
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

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STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	Page of
Project Name: Palomar NEC - Science Modulars	Date Prepared: 9/12/17

A. MECHANICAL COMPLIANCE FORMS & WORKSHEETS
(indicate if worksheet is included)

For detailed instructions on the use of this and all Energy Standards compliance documents, refer to the 2016 Nonresidential Manual
Note: The Enforcement Agency may require all compliance documents to be incorporated onto the building plans. The NRCC-MCH-04-E and NRCC-MCH-05-E are alternative compliance documents to NRCC-MCH-01-E, NRCC-MCH-02-E and NRCC-MCH-03-E for projects using only single zone packaged HVAC systems.

YES	NO	Form	Title
◉	○	NRCC-MCH-04-E (1 of 2)	Certificate of Compliance. Required on plans when used.
◉	○	NRCC-MCH-04-E (2 of 2)	Mechanical Acceptance Tests. Required on plans when used.
◉	○	NRCC-MCH-05-E (1 of 2)	HVAC Prescriptive Requirements. It is required on plans when used.
○	◉	NRCC-MCH-05-E (2 of 2)	Mechanical SWH Equipment Summary is required for all submittals with service water heating, pools or spas. It is required on plans where applicable.

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	Page of
Project Name:	Date Prepared:

Designer:
This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the applicable boxes by all acceptance tests that apply and list all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems. The NA number designates the Section in the Appendix of the Nonresidential Reference Appendices Manual that describes the test. Since this compliance document will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Enforcement Agency:
Systems Acceptance. Before occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.

Systems Acceptance. Before occupancy permit is granted all newly installed HVAC equipment must be tested using the Acceptance Requirements. The NRCC-MCH-04-E compliance document is not considered a completed document and is not to be accepted by the building department unless the correct boxes are checked. The equipment requiring testing, person performing the test (Example: HVAC installer, TAB contractor, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following checked-off forms are required for ALL newly installed and replaced equipment. In addition a Certificate of Acceptance compliance documents shall be submitted to the building department that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of Section 10-103(b) and Title 24 Part 6. The building inspector must receive the properly filled out and signed compliance documents before the building can receive final occupancy.

Test Description		MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-11-A	MCH-12-A	MCH-14-A	MCH-18-A	
Equipment Requiring Testing or Verification	# of Units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation (DCV)	Supply Fan VAV	Automatic Demand Shed Control	FDD for Packaged DX Units	Distributed Energy Storage DX AC Systems	Energy Management Control System	Test Performed By:
AHU-1	1	☑	☐	☐	☐	☐	☑	☐	☑	☐	☑	Contractor
AHU-2	1	☑	☐	☐	☐	☐	☑	☐	☑	☐	☑	Contractor
AHU-3	1	☑	☐	☐	☐	☐	☑	☐	☑	☐	☑	Contractor

Add Row Remove Last

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CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	Page of
Project Name:	Date Prepared:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: James Del Monaco	Documentation Author Signature:
Company: P2S Engineering, Inc.	Signature Date: 9/12/17
Address: 5000 E. Spring St.	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Long Beach, CA 90815	Phone: 562-497-2999

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: James Del Monaco	Responsible Designer Signature:
Company: P2S Engineering, Inc.	Date Signed: 9/12/17
Address: 5000 E. Spring St.	License: M35128
City/State/Zip: Long Beach, CA 90815	Phone: 562-497-2999

STATE OF CALIFORNIA
REQUIREMENTS FOR PACKAGED SINGLE ZONE UNITS
CEC-NRCC-MCH-05-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-05-E
Requirements for Packaged Single-Zone Units	(Page 1 of 2)
Project Name: Palomar NEC - Science Modulars	Date Prepared: 9/12/17

Equipment Tag(s)[1]		AHU-1		AHU-2		AHU-3	
MANDATORY MEASURES	T-24 Sections	Requirement[3]	As Scheduled[3]	Requirement[3]	As Scheduled[3]	Requirement[3]	As Scheduled[3]
Heating Equipment Efficiency[4]	110.1 or 110.2(a)	78%	80%	78%	80%	78%	80%
Cooling Equipment Efficiency[4]	110.1 or 110.2(a)	10.0 EER	10.5 EER	11.2 EER	11.8 EER	11.2 EER	12.3 EER
Thermostats[5]	110.2(b), 110.2(c)	Progr. Setback	Progr. Setback	Progr. Setback	Progr. Setback	Progr. Setback	Progr. Setback
Furnace Standby Loss Control[6]	110.2(d)	N/A	N/A	N/A	N/A	N/A	N/A
Low Leakage AHU	110.2(f)	N/A	N/A	N/A	N/A	N/A	N/A
Ventilation[7]	120.1(b)	525	5,500	150	1,000	525	4,290
Demand Control Ventilation[8]	120.1(c)4	N/A	N/A	N/A	N/A	N/A	N/A
Occupant Sensor Ventilation Control[8]	120.1(c)5, 120.2(e)3	N/A	N/A	N/A	N/A	N/A	N/A
Shutoff and Reset Controls[9]	120.2(e)	Timeclock	Progr. Timeclock	Timeclock	Progr. Timeclock	Timeclock	Progr. Timeclock
Outdoor Air and Exhaust Damper Control	120.2(f)	Yes	Yes	Yes	Yes	Yes	Yes
Automatic Demand Shed Controls	120.2(h)	N/A	N/A	N/A	N/A	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A	N/A	N/A	N/A	N/A
Duct Insulation	120.4	R-8	R-8	R-8	R-8	R-8	R-8
PRESCRIPTIVE MEASURES							
Equipment is sized in conformance with 140.4 (a & b)	140.4(a & b)	Yes	Yes	Yes	Yes	Yes	Yes
Economizer	140.4(e)	N/A	N/A	N/A	N/A	N/A	N/A
Electric Resistance Heating[10]	140.4(g)	N/A	N/A	N/A	N/A	N/A	N/A
Duct Leakage Sealing and Testing.[11]	140.4(l)	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
1. *Provide equipment tags (e.g. AC1 or AC1 to 10). Multiple units of the same make and model with the same application and accessories can be grouped together.*
2. *Enter the following information as appropriate: Unit Manufacturer; Unit Model Number (including all accessories); Description of the unit (e.g. gas-pack or heat pump; rated heating capacity (enter "N/A" if no heating); and, rated cooling capacity (enter "N/A" if no cooling). For unit capacities include the units (e.g. kBtuh or tons).*
3. *For each requirement, enter the minimum requirement from the Standard In the left column (under "Standard Requirement"). In the right column (under "As Scheduled") enter the value for the units as specified.*
4. *Where there is more than one requirement (e.g. full and part load efficiency) enter both with the appropriate labels (e.g. COP and IEER).*
5. *In the left column identify the thermostatic requirements from the standard (e.g. programmable setback thermostat or heatpump with electric heat), . In the right column indicate the capabilities of the thermostat as scheduled.*
6. *If the unit has a furnace which is rated at ≥ 225,000 Btuh of capacity, indicate the rated standby loss and ignition source (e.g. IID). If there is no furnace or the unit is rated for <225,000 Btuh indicate "N/A".*
7. *In the left column, enter both the required ventilation value from Table 120.1A and for the number of occupants times 15 cfm/person. In the right column enter the actual minimum ventilation as scheduled. If the space is naturally ventilated enter "N/A" in the left column and "the space is naturally ventilated" in the right column.*
8. *If the space is required to have either DCV or Occupant Sensor Ventilation Control indicate "required" in the left column (otherwise indicate "N/A" in the left column). If either DCV or Occupant Sensor Ventilation Control is provided indicate "provided" in the right column (otherwise indicate "N/A" in the right column)*
9. *In the left column indicate the required time controls from the standard. In the right column identify the device that provides this functionality (e.g. EMCS or programmable timeclock).*
10. *Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.*
11. *If duct leakage sealing and testing is required, a **MCH-04-A** compliance document must be submitted.*

STATE OF CALIFORNIA
REQUIREMENTS FOR PACKAGED SINGLE ZONE UNITS
CEC-NRCC-MCH-05-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-05-E
Requirements for Packaged Single-Zone Units	(Page 2 of 2)
Project Name: Palomar NEC - Science Modulars	Date Prepared: 9/12/17

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STATE OF CALIFORNIA
LABORATORY EXHAUST
CEC-NRCC-PRC-09-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-09-E
Laboratory Exhaust	(Page 2 of 2)
Project Name: Palomar NEC - Science Modulars	Date Prepared: 9/12/17

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STATE OF CALIFORNIA
LABORATORY EXHAUST
CEC-NRCC-PRC-09-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-09-E
Laboratory Exhaust	(Page 1 of 2)
Project Name: Palomar NEC - Science Modulars	Date Prepared: 9/12/17

System air flow as designed : 6 **ACH**

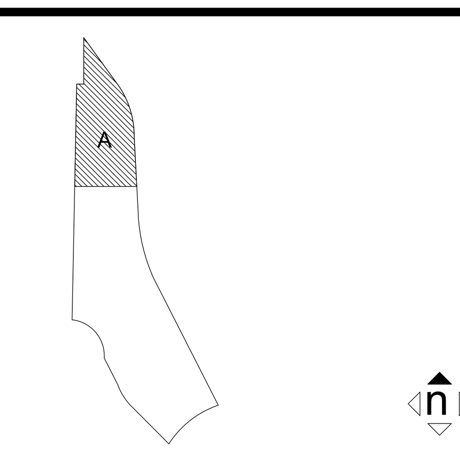
Equipment Tags and System Description[2]		EF-1		
PRESCRIPTIVE MEASURES	*T-24 Sections*	*Reference to the Requirements in the Contract Documents[3]*		
Exhaust system with VAV hood	140.9(c)	M0.03, M5.01		
Exhaust system without VAV hood – Exc. 1c	140.9(c) Exception 1			
Exhaust system without VAV hood – Exc. 1c	140.9(c) Exception 2			

Notes:
1. Enter the designed system air flow rate in Air Changes per Hour (ACH) for all Laboratory systems under this permit.
2. Provide equipment tags (e.g. EF-1 to x and AHU 1 to y) for all systems that are covered by these requirements. This includes systems that are VAV flow Hoods as well as system that are exempted as per sections 1 or 2 under section 140.9 (c).
3. Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system. Explicitly list which exception is used (if used).

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

SM

Key Plan



Consultant Seal
REGISTERED PROFESSIONAL ENGINEER
JAMES DEL MONACO
No. M35128
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS______ FLS______ SSS______
DATE __________

Project Title
PALOMAR COLLEGE
Learning for Success
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Title 24 Forms

Architect's Seal
LICENSED ARCHITECT
BRADLEY E. GLASSCOCK
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JDM	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	NB	Drawing No.	M7.01
Date:	10/13/2017		

P2S No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

LEGEND

SYMBOL	DESCRIPTION
-	NOTE CALLOUT
- / -	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
- / -	MECHANICAL EQUIPMENT CALLOUT, SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS
- / -	SECTION CALLOUT
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	CHANGING PIPE SIZE
4" CHWR	NEW PIPE (SIZE-SERVICE)
	EXISTING PIPE/EQUIPMENT
	DEMOLISHED PIPE/EQUIPMENT
G	LOW PRESSURE NATURAL GAS
MPG	MEDIUM PRESSURE NATURAL GAS
IW	INDIRECT WASTE
	SANITARY SEWER/WASTE UNDERGROUND
	SANITARY SEWER/WASTE ABOVEGROUND
	SANITARY VENT
	DOMESTIC HOT WATER RETURN
	DOMESTIC HOT WATER SUPPLY
	DOMESTIC COLD WATER
SD	STORM DRAIN PIPING
SSD	SUBSOIL DRAIN
AW	ACID WASTE
AV	ACID VENT
TW	TEMPERED WATER
CD	CONDENSATE DRAIN
LA	LABORATORY COMPRESSED AIR
ICW	NONPOTABLE COLD WATER
LV	LABORATORY VACUUM
	VALVE AT DROP
	VALVE AT RISE
	ELBOW DOWN
	PIPE TEE UP & DOWN OR ELBOW UP
	PIPE TEE DOWN
	PIPE TEE UP

SYMBOL	DESCRIPTION
S	SOLENOID VALVE
	GATE VALVE
	BALL VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE, SWING
	PLUG VALVE
	STRAINER, Y-TYPE
FM	FLOW METER
	BACKFLOW PREVENTER
	HOSE BIBB
	FLOOR DRAIN
	FLOOR SINK, 1/2 GRATE
	AREA DRAIN / INDUSTRIAL RECEPTOR
	SHUT-OFF VALVE IN YARDBOX
	BALANCING VALVE
	FLOOR CLEANOUT
	CLEANOUT TO GRADE
	WALL CLEANOUT
	WATER HAMMER ARRESTOR
	TRAP PRIMER

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
@	AT
ABV	ABOVE
A/C	ABOVE CEILING
AC	ACETYLENE
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFSR	AUTOMATIC FIRE SPRINKLER RISER
AR	ARGON GAS
AV	ACID VENT
AW	ACID WASTE
BEL	BELOW
BFP	BACKFLOW PREVENTER
B/G	BELOW GRADE
B/F	BELOW FLOOR
BTM	BOTTOM
BV	BALL VALVE
CI	CAST IRON
CIP	CAST IRON PIPE
CLG	CEILING
COTG	CLEAN-OUT TO GRADE
CU	CUBIC
CW	COLD WATER
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DN	DOWN
DS	DOWNSPOUT
DWG	DRAWING(S)
(E)	EXISTING
EXIST	EXISTING
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
F	FIRE
F/A	FROM ABOVE
F/B	FROM BELOW
FCO	FLOOR CLEAN-OUT
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FM	FORCE MAIN
FS	FLOOR SINK
FT	FEET
G	NATURAL GAS (LOW PRESSURE)
GAL	GALLONS
GPM	GALLONS PER MINUTE
GPR	GAS PRESSURE REGULATOR
H&CW	HOT AND COLD WATER
H/L	HIGH LEVEL
HDR	HEADER
HT	HEIGHT
IN	INCHES
IW	INDIRECT WASTE
L or LAV	LAVATORY
MAX	MAXIMUM
MIN	MINIMUM
MPG	NATURAL MEDIUM PRESSURE GAS
MTD	MOUNTED
NTS	NOT TO SCALE
O	OXYGEN
OD	OVERFLOW DRAIN
OS&Y	OPEN SCREW AND YOKE
POC	POINT OF CONNECTION
POD	POINT OF DISCONNECTION
PSI	POUNDS PER SQUARE INCH
RD	ROOF DRAIN
RI&C	ROUGH-IN AND CONNECT
S	SINK, SEWER, SOIL
SD	STORM DRAIN
SOV	SHUT-OFF VALVE
SQ	SQUARE
SS	SERVICE SINK
T/A	TO ABOVE
T/B	TO BELOW
TP	TRAP PRIMER
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	SANITARY VENT
VOLT	VOLTAGE
VTR	VENT THRU ROOF
W	WASTE
W/	WITH
WC	WATER CLOSET
WCO	WALL CLEAN-OUT
WH	WATER HEATER
WHA	WATER HAMMER ARRESTOR

REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE 2016 EDITIONS OF THE CALIFORNIA BUILDING, MECHANICAL, PLUMBING, AND OTHER APPLICABLE FEDERAL, STATE, OR LOCAL CODES AS ADOPTED AND ENFORCED BY THE LOCAL JURISDICTION. IN CASE THE PLANS SHOW MORE STRINGENT REQUIREMENTS, THE PLANS SHALL GOVERN THE DESIGN, YET NOTHING ON THE DESIGN DOCUMENTS SHALL BE INTERPRETED AS AUTHORITY TO VIOLATE CODE(S) OR REGULATION(S).

2. SUBMISSION OF BID IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH THE CONTRACTOR WILL BE OBLIGATED TO OPERATE UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.

3. WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".

4. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DESIGN PLANS / SPECIFICATIONS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL PREVAIL.

5. CONTRACTOR SHALL FURNISH LABOR, MATERIALS, EQUIPMENT, AND TRANSPORTATION AS REQUIRED TO PROPERLY INSTALL ALL PLUMBING SYSTEMS OR RELATED COMPONENTS AS INDICATED ON PLANS AND SPECIFIED HEREIN.

6. ALL NEW EQUIPMENT AND MATERIAL TO BE INSTALLED AS PART OF RENOVATION / NEW CONSTRUCTION SHALL BEAR AN UNDERWRITERS LABORATORIES LABEL (UL), AND INSTALLED IN SUCH A MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED.

7. CONTRACTOR SHALL DOCUMENT AND RELAY ANY MAJOR DEVIATIONS FROM THE DESIGN DOCUMENTS, AND ATTAIN APPROVAL FROM THE MECHANICAL ENGINEER BEFORE PROCEEDING. AS-BUILT COPIES SHALL BE PROVIDED INDICATING ALL CHANGES / DEVIATIONS MADE DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE COMPLETED AS-BUILT DRAWINGS IN THE LATEST VERSION OF AUTOCAD.

8. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.

9. NO PIPING, EQUIPMENT, ETC. SHALL BE REMOVED, DISCONNECTED OR SHUT DOWN WITHOUT PRIOR REVIEW WITH THE COLLEGE TO CONFIRM THAT AREAS TO REMAIN IN OPERATION WILL NOT BE AFFECTED. IF ANY AREAS NOT WITHIN THE SCOPE OF WORK ARE AFFECTED BY ANY SHUTDOWN, REMOVAL OR DISCONNECTION, SUFFICIENT ADVANCE NOTICE MUST BE GIVEN TO THE COLLEGE INDICATING WHICH AREAS WILL BE AFFECTED, WHEN THE PROPOSED SHUTDOWN WILL OCCUR, AND FOR HOW LONG A PERIOD OF TIME.

10. THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS PECULIAR TO A SPECIFIC MANUFACTURER. THE DRAWINGS ARE, IN PART, DIAGRAMMATIC AND SOME FEATURES OF THE ILLUSTRATED EQUIPMENT INSTALLATION MAY REQUIRE REVISION TO MEET ACTUAL EQUIPMENT INSTALLATION REQUIREMENTS. STRUCTURAL SUPPORTS, FOUNDATIONS, CONNECTED PIPING, VALVES, PIPE SUPPORTS AND ELECTRICAL CONDUIT SPECIFIED MAY HAVE TO BE ALTERED OR ADDITIONAL ITEMS REQUIRED TO ACCOMMODATE THE EQUIPMENT PROVIDED. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH REVISIONS, ALTERATIONS AND / OR ADDITIONS.

11. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND PROVIDE SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF ALL HVAC AND PIPING SYSTEMS. MAKE ALLOWANCE FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE UNIVERSITY REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, WELDS AND CONFIGURATIONS AND SUBMITTED TO ENGINEER FOR REVIEW. CONTRACTOR SHALL PROVIDE DIMENSIONED SHOP DRAWINGS COMPLETED IN THE LATEST VERSION OF AUTOCAD.

12. CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF ALL WORK.

13. BEFORE COMMENCEMENT OF WORK, CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS, AND CHARACTERISTICS OF ALL UTILITIES.

14. CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMITS PERTAINING TO THE CONTRACT.

15. EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.

16. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

17. ALL PLUMBING FIXTURE VENTS TO TERMINATE MINIMUM 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM OR 3 FEET ABOVE ANY OUTSIDE AIR INTAKES. NO FLAGPOLING PERMITTED.

18. ALL PIPING SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS IN A NEAT WORKMANSHIP-LIKE MANNER AND BE SUPPORTED AS REQUIRED BY CODES. PIPING SHALL BE SET UP AND DOWN AND OFFSET AS REQUIRED TO SUIT FIELD CONDITIONS. DIELECTRIC COUPLINGS SHALL BE USED WHERE DISSIMILAR METALS ARE JOINED.

19. ALL PIPING DISCHARGING INTO FLOOR-SINKS AND/OR FLOOR DRAINS SHALL MAINTAIN MINIMUM AIR-GAP AS REQUIRED BY LOCAL CODES.

20. ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS LINE SIZE UNLESS OTHERWISE INDICATED ON DRAWINGS.

21. ISOLATE AND DRAIN EXISTING PIPING SYSTEM AS REQUIRED TO ACCOMMODATE INSTALLATION OF THE WORK.

22. UNIONS SHALL BE PROVIDED AND INSTALLED AFTER EACH SCREW-TYPE VALVE AND PRIOR TO EQUIPMENT CONNECTIONS.

23. EQUIPMENT 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 2016 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 6 AND 30.

    A. ALL PERMANENT EQUIPMENT AND COMPONENTS.

    B. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.

    C. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

    THE ATTACHMENT OF THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT:

    A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

    B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

    FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

24. 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 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, 13.6.5.6 ITEM 6, AND 2016 CBC SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26.

    THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPM #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

    COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM.

    THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

25. PLUMBING FIXTURES AND FAUCETS SHALL BE CERTIFIED BY THE STATE OF CALIFORNIA ENERGY COMMISSION AS REQUIRED BY THE CALIFORNIA ENERGY EFFICIENCY STANDARDS SECTION S-5314 AND TABLE "G".

26. ALL SOIL, WASTE, STORM DRAIN AND VENT PIPING SHALL SLOPE AT 2% UNLESS OTHERWISE INDICATED.

27. PIPING THROUGH FIRE RATED WALLS SHALL BE PER U.L. FIRE RESISTANCE SYSTEM NO. W1001. SEE ARCHITECTURAL PLANS FOR ALL WALL LOCATIONS.

28. REFER TO THE SPECIFICATIONS BOOK FOR ADDITIONAL REQUIREMENTS.

29. ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND THE ARCHITECT PRIOR TO ANY INSTALLATION.

30. KEEP ALL PIPING FROM LOAD BEARING FOOTINGS. IF UNABLE TO CLEAR FOOTINGS OR GRADE BEAMS, INSTALL PIPING THROUGH PIPE SLEEVES.

31. BEFORE FABRICATION OR INSTALLATION, THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL EQUIPMENT AND FIXTURES. EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED IN FIELD.

32. ACCESSIBLE PLUMBING FIXTURES SHALL COMPLY WITH ALL OF THE REQUIREMENTS OF 2016 CBC CHAPTER 11A AND/OR 11B. HEIGHTS AND LOCATION OF ALL FIXTURES SHALL BE ACCORDING TO CBC 2016 SECTION 1138A. FIXTURE CONTROLS SHALL COMPLY WITH CBC 2016 SECTION 1138A.4.

33. ALL VALVES, TRAP PRIMERS, WATER HAMMER ARRESTERS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED BEHIND AN ACCESS PANEL.

34. ALL VENT THROUGH ROOF SHALL BE MINIMUM OF 3 FEET VERTICALLY AND 10 FEET HORIZONTALLY FROM ANY AIR CONDITIONING EQUIPMENT FRESH AIR INTAKES.

35. VERIFY WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL FLOOR DRAINS, ROOF, OVERFLOW DRAINS AND FLOOR SINKS.

36. FIXTURES SHALL BE PROTECTED DURING CONSTRUCTION FROM ANY DAMAGES. REFINISHED FIXTURES WILL NOT BE ACCEPTABLE UNDER ANY CONDITIONS.

37. HOSE BIB WITH VACUUM BREAKER SHALL BE PROVIDED UNDER LAVATORY IN EACH PUBLIC RESTROOM.

38. INSULATE INDIRECT DRAIN LINES FROM REFRIGERATORS, FREEZERS, ICE MAKER AND ICE BINS WITH MANVILLE AERO-TUBE OR EQUAL TO PREVENT CONDENSATE DRIPS.

39. INSULATE WASTE PIPE AND P-TRAP FROM FLOOR SINK, FLOOR DRAINS OR FUNNEL DRAINS COLLECTING INDIRECT DRAINS FROM REFRIGERATORS, FREEZERS, ICE MAKER AND ICE BINS TO PREVENT CONDENSATE DRIPS. INSULATE WASTE PIPE UP TO THE NEXT 3" OR 4" MAIN CONNECTION.

40. PROVIDE AND INSTALL GAS COCKS AND UNION AT EACH GAS FIRED EQUIPMENT.

41. PROVIDE AND INSTALL CHROME ANGLE VALVES ON HOT AND COLD WATER SUPPLY AT EACH PLUMBING FIXTURES.

42. ALL WATER FAUCETS SHALL BE PROVIDED WITH CODE APPROVED FLOW RESTRICTORS.

43. COVER ALL FLOOR DRAINS, FLOOR SINKS, ROOF AND OVERFLOW DRAINS DURING CONSTRUCTIONS TO PREVENT DEBRIS FROM ENTERING PIPE AND PROTECT GRATES FROM DAMAGES.

44. COORDINATE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT FOR AVAILABLE VOLTAGES AT ALL EQUIPMENT LOCATIONS.

45. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL TAMPER AND FLOW SWITCH LOCATIONS.

46. BECAUSE OF THE SMALL SCALE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE CONDITIONS SURROUNDING INSTALLATION OF HIS WORK, FURNISHING THE NECESSARY PIPING, FITTINGS, VALVES, TRAPS, AND OTHER DEVICES WHICH MAY BE REQUIRED TO COMPLETE THE INSTALLATION.

47. UNLESS SPECIFIED ON STRUCTURAL DRAWINGS, ANY ALTERATION OR MODIFICATIONS TO STRUCTURAL ELEMENTS BY CUTTING, DRILLING, BORING, BRACING, WELDING ETC. SHALL HAVE WRITTEN APPROVAL STRUCTURAL ENGINEER PRIOR TO START WORK.

48. ITEMS NOT SHOWN IN THE DRAWINGS BUT NECESSARY FOR COMPLETE OPERATION OF THE SYSTEM/FIXTURES/EQUIPMENT OR FOR COMPLETE CODE INSTALLATION SHALL BE PROVIDED AT NO ADDED COST TO THE OWNER.

49. DIELECTRIC UNION ISOLATOR WITH THREADED CONNECTIONS SHALL BE PROVIDED FOR CONNECTING INCOMPATIBLE MATERIALS.

50. ALL PLUMBING FIXTURES SHALL BE APPROVED BY OWNER PRIOR TO ORDERING.

51. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF ALL EXISTING UTILITIES TO WHERE HE IS TO CONNECT PRIOR TO INSTALLATION OF ANY PIPING. EXTEND NEW PIPING IF NECESSARY TO WHERE THE EXISTING IS.

52. ALL CONNECTIONS TO EXISTING SERVICES SHALL BE MADE SUCH THAT INTERRUPTION TIME WILL BE AS SHORT AS POSSIBLE. THE CONTRACTOR SHALL GIVE THE OWNER'S REPRESENTATIVE SUFFICIENT NOTICE OF SUCH INTERRUPTION AND THE ACTUAL SHUT DOWN TIME SHALL BE AT A TIME DESIGNATED BY THE OWNER'S REPRESENTATIVE.

53. ALL EXISTING PIPING DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH MATERIALS TO MATCH EXISTING BY THE CONTRACTOR.

54. PROVIDE AND INSTALL WATER HAMMER ARRESTORS IN THE FOLLOWING LOCATIONS (ONLY NON-FERROUS ARRESTORS MAY BE INSTALLED IN ANY WATER SYSTEM):

    A. WATER LINES TO LAVATORY HEADERS, WATER CLOSET AND URINAL HEADERS, SERVICE SINKS, KITCHEN SINKS, WASH FOUNTAINS, DRINKING FOUNTAINS, LABORATORIES WITH MEDICAL TYPE FAUCETS AND ON WASH SINKS HAVING 3 OR MORE STATIONS AND ALL OTHER QUICK CLOSING FIXTURE SUCH AS CLOTHES WASHERS, AS CLOSE TO FIXTURE AS POSSIBLE.

    B. BETWEEN LAST 2 FIXTURES WHEN 3 OR MORE FIXTURES, OTHER THAN THOSE LISTED IN "A" ABOVE, ARE SERVED BY A COMMON HEADER.

    C. WHEN ARRESTOR SHALL BE INSTALLED IN WALL OR FURRING, FURNISH WITH AN ACCESS PLATE LARGE ENOUGH TO PERMIT REMOVAL OF ARRESTOR. ACCESS PLATE SHALL BE A MINIMUM OF 2 INCHES LARGER IN EACH DIRECTION THAN ARRESTOR.

55. ALL PIPING INTO STEM WALLS AND FOOTINGS SHALL BE DOUBLE HALF LAP WRAPPED WITH 1/8" THICK "ARMAFLEX" INSULATION. THE CONTRACTOR SHALL ALSO PROVIDE BLOCKED OUT AREAS IN STEM WALL AND FOOTING. ALL PIPING SHALL AVOID THE LOWER 8" OF THE FOOTING.

56. ALL HOT WATER PIPING SHALL BE INSULATED. INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING 50 PER 2016 CMC SEC. 1201.3.2.11. SEE SPECIFICATION FOR OTHER REQUIREMENTS.

57. ALL CONNECTIONS TO SITE PIPING SHALL BE DONE BY THE PLUMBING CONTRACTOR.

58. CLEANOUTS SHALL BE PROVIDED PER 2016 CPC SECTION 707.0 & 719.0 AND TO THE FOLLOWING LOCATIONS:

    A. AT EACH BASE OF ROOF DRAIN DOWNSPOUTS.

    B. AT EACH BASE OF WASTE STACK.

    C. AT EVERY 100 FT OF STRAIGHT RUN OF HORIZONTAL PIPING .

    D. AT EACH AGGREGATE HORIZONTAL CHANGE IN DIRECTION EXCEEDING ONE HUNDRED THIRTY-FIVE (135) DEGREES.

    E. AT EACH HORIZONTAL DRAINAGE PIPE UPPER TERMINAL

    F. ABOVE EACH URINAL.

    G. BELOW EACH SINK.

59. PROVIDE SEDIMENT TRAP AS CLOSE AS POSSIBLE TO ALL GAS APPLIANCES AND GAS FIRED EQUIPMENTS INLET EXCEPT FOR APPLIANCES LISTED PER 2016 CPC SECTION 1211.8. SEE SEDIMENT TRAP INSTALLATION PER 2016 CPC FIGURE 1211.8.

60. DOMESTIC WATER PIPING AND COMPONENTS SHALL BE PROVIDED AND INSTALLED IN COMPLIANCE WITH CALIFORNIA AB 1953 LEGISLATION, WHICH LIMITS THE ALLOWABLE LEAD CONTENT IN CERTAIN DOMESTIC WATER SYSTEM COMPONENTS.

61. ALL PLUMBING FIXTURES AND FITTINGS SHALL MEET CALGREEN MANDATORY REQUIREMENT OF 20% REDUCED FLOW RATE SPECIFIED IN TABLE 5.303.2.3.

SHEET INDEX

SHEET	DESCRIPTION
P0.01	GENERAL NOTES, LEGEND, ABBREVIATIONS, AND SHEET INDEX
P0.02	SCHEDULES
P1.01	PLUMBING SITE PLAN
P2.01	PLUMBING FLOOR PLAN
P6.01	DETAILS
P6.02	DETAILS

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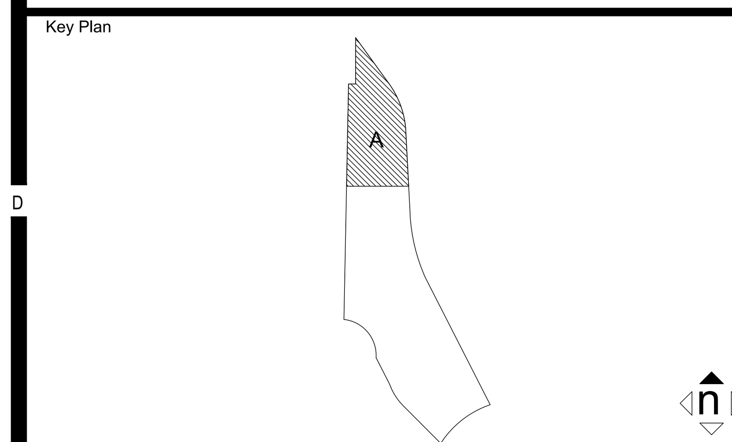
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES DEL MONACO
No. M35128
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS______ FLS______ SSS______
DATE __________

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
General Notes, Legend And Abbreviations

Architect's Seal

LICENSED ARCHITECT
BRADLEY E GLASSCOCK
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	JDM	Drawing No.	P0.01
Date:	10/13/2017		

P2S No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

WATER HEATER SCHEDULE

MARK	MANUFACTURER & MODEL	LOCATION	DIMENSIONS		TEMP		FLOW (GPM)	ELECTRICAL DATA			KW	AMPS	OPER. WEIGHT (LBS)	REMARKS
			HT X WD (IN.xIN.)	DEPTH (IN.)	IN (°F)	OUT (°F)		V	PH	CYCL E (HZ)				
IWH-1	EEMAX SPECADVANTAGE AP064208 EFD	BLDG B,C,D	24 x 30	13.5	60	82	20	208	3Ø	60	64	178	130	TANKLESS WATER HEATER CONSTRUCTED WITH NSF 61 LISTED MATERIALS, NON-FERROUS DIRECT HEATING ELEMENT, CARTRIDGE STYLE, COMPLETE WITH INTEGRATED FLOW METER, REDUNDANT SAFETY PROTECTION INCLUDING THERMO MECHANICAL SAFETY SWITCHES, INFRARED ELEMENT MONITORING AND DUAL TEMPERATURE MONITORING, AND HIGH VISIBLE LCD DISPLAY AND CONTROL WITH BUILT IN DIAGNOSTICS.
IWH-2	EEMAX PROSERIES PRO18240	BLDG B	17 x 14	4	60	91	4	240	1Ø	60	18	75	15	TANKLESS WATER HEATER WITH COPPER CLAD IMMERSION HEATING ELEMENT(S), COMPLETE WITH INTERNAL TEMPERATURE CONTROL AND DISPLAY, AND IFR 3-4 INLINE FLOW REGULATOR.

NOTE: ALL EQUIPMENT AND/OR COMPONENTS AS PART OF THE PLUMBING SYSTEM SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

LAB VACUUM PUMP

MARK	MANUFACTURER AND MODEL	LOCATION	TYPE	CAPACITY (EACH)		MOTOR (EACH)			OPER. WT. (LB.)	REMARKS
				ACFM	IN HG	HP	RPM	VOLT/PH/HZ		
LV-1	BEACON MEDAES LVLV05S-120V-S	SERVICE YARD	OIL LUBRICATED ROTARY VANE	56	19	5	--	208/3/60	665	SIMPLEX OIL LUBRICATED ROTARY VANE VACUUM PUMP MOUNTED ON A VERTICAL ASME CODED RECEIVER, WITH MAGNETIC MOTOR STARTER AND VIBRATION ISOLATORS, COMPLETE WITH ELECTRICAL CONTROLS DESIGNED, ASSEMBLED, AND FACTORY TESTED.

LAB AIR COMPRESSOR

MARK	MANUFACTURER AND MODEL	LOCATION	TYPE	CAPACITY (EACH)		MOTOR (EACH)			OPER. WT. (LB.)	REMARKS
				SCFM	PSI	HP	RPM	VOLT/PH/HZ		
LA-1	BEACON MEDAES LES07-115-RD-310	SERVICE YARD	SIMPLEX SCROLL PACKAGE	20.8	101.5	7.5	--	208/3/60	503	OIL-FREE SCROLL COMPRESSOR WITH ENCLOSURE, INTEGRATED DRYER AND TANK SUPPLIED AS A COMPLETE PACKAGE UNIT WITH ALL NECESSARY EQUIPMENT, INCLUDING BUT NOT LIMITED TO INLET FILTER, AIR COMPRESSOR ELEMENT, DRIVE MOTOR, AFTERCOOLER, STARTER AND REGULATION SYSTEM, CONTROL PANEL.

FIXTURE SCHEDULE

	FIXTURE	MIN. ROUGH-IN SIZES				REMARKS
		CW	HW	S OR W	V	
SK-1	SINK	1/2"	-	2"	2"	SINK AND FAUCET TRIMS BY OTHERS. REFER TO "LF" DRAWINGS. PROVIDE WITH PRE-WRAPPED OFFSET DRAIN WITH McGUIRE PROWRAP P-TRAP & COLD WATER ANGLE STOP SUPPLY COVERS. ANGLE STOPS AND SUPPLIES.
SK-2	SINK	1/2"	-	2"	2"	SINK AND FAUCET TRIMS BY OTHERS. REFER TO "LF" DRAWINGS. PROVIDE WITH PRE-WRAPPED OFFSET DRAIN WITH McGUIRE PROWRAP P-TRAP & COLD WATER ANGLE STOP SUPPLY COVERS. ANGLE STOPS AND SUPPLIES.
SK-3	SINK	1/2"	1/2"	2"	2"	SINK AND FAUCET TRIMS BY OTHERS. REFER TO "LF" DRAWINGS. PROVIDE WITH PRE-WRAPPED OFFSET DRAIN WITH McGUIRE PROWRAP P-TRAP & HOT & COLD WATER ANGLE STOP SUPPLY COVERS. ANGLE STOPS AND SUPPLIES.
CS-1	CUP SINK	-	-	2"	1-1/2"	CUP SINK INTEGRAL WITH FUMEHOOD. PROVIDE WITH P-TRAP DRAIN ASSEMBLY.
IMB-1	ICE MAKER BOX	1/2"	-	-	-	OATEY 12K ICE MAKER BOX COMPLETE WITH FACEPLATE RECESSED BOX, 1/4 TURN BRASS BALL VALVE, LOW LEAD, OR EQUIVALENT.
ESEW-1	EMERGENCY SHOWER & EYE WASH	1-1/4"	-	1-1/4"	-	EMERGENCY EQUIPMENT BY OTHERS. REFER TO "LF" DRAWINGS.
EW-1	EYE WASH	3/4"	-	-	-	EMERGENCY EQUIPMENT BY OTHERS. REFER TO "LF" DRAWINGS.
FS-1	FLOOR SINK	1/2"	-	2"	1-1/2"	ZURN ZN1930-KC-2, 8" x 4" FLOOR SINK WITH ANCHOR FLANGE & CLAMP COLLAR WITH HALF GRATE AND TRAP PRIMER CONNECTION.
GPR-1	GAS PRESSURE REGULATOR	-	-	-	-	AMERICAN METER REGULATOR, MODEL 1813C, 1 1 /4" INLET & OUTLET CONNECTIONS, 5/16" ORIFICE, 6-15" WC SPRING RANGE.
EQV-1	EARTHQUAKE VALVE	-	-	-	-	CALIFORNIA SEISMIC VALVE, MODEL 315, 3" NPT VALVE, HORIZONTAL FLOW,
BFP-1	BACKFLOW PREVENTER	3"	-	-	-	PROVIDE LEAD-FREE VALVE WITH INLET & OUTLET PRESSURE GAUGE, STRAINER AND LOW FLOW BY-PASS VALVE OPTIONS.
PRV-1	PRESSURE REDUCING VALVE	3"	-	-	-	PROVIDE LEAD-FREE VALVE WITH INLET & OUTLET PRESSURE GAUGE, STRAINER AND LOW FLOW BY-PASS VALVE OPTIONS.
EGV-1	EMERGENCY GAS VALVE	SEE PLANS FOR SIZE				AMERICAN GAS SAFETY MERLIN MODEL 1000S, GAS SHUT-OFF CONTROL PANEL, WALL MOUNTED, UL CERTIFIED, COMPLETE WITH REMOTE EMERGENCY STOP BUTTON, GAS PRESSURE TRANSDUCER, AGS 120V AC GAS SOLENOID VALVE (SIZE TO MATCH LINE SIZE). PROVIDE WITH 120 VAC 50/60HZ POWER, AND LOW VOLTAGE WIRING.

NOTES: ALL FIXTURES SHALL BE PROVIDED WITH MINIMUM ROUGH-IN CONNECTIONS AS INDICATED IN THIS SCHEDULE OR PER MANUFACTURERS RECOMMENDATIONS. THE PLUMBING CONTRACTOR SHALL RUN ALL SERVICE LINES, ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL FIXTURES. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL TRIMS, FLUSH VALVES, TAILPIECES, STRAINERS, P-TRAPS, TRAP ARMS, HOT & COLD WATER STOPS AND FAUCETS AS REQUIRED.

PIPING MATERIALS

1.	DRAIN PIPING SEWER WASTE, AND STORM DRAIN EXTERIOR BELOW GRADE:	CAST IRON "NO-HUB" PIPE CONFORMING TO CISPI 301 AND ASTM A 888 WITH NEOPRENE GASKET AND STANDARD DUTY, SHIELDED, STAINLESS-STEEL COUPLINGS.
2.	DRAIN PIPING SEWER WASTE, AND STORM ABOVE GRADE:	CAST IRON "NO-HUB" PIPE CONFORMING TO CISPI 301 AND ASTM A 888 WITH NEOPRENE GASKET AND STANDARD DUTY, SHIELDED, STAINLESS-STEEL COUPLINGS.
3.	VENT PIPING FOR SEWER WASTE/STORM ABOVE GRADE:	CAST IRON "NO-HUB" PIPE CONFORMING TO CISPI 301 AND ASTM A 888 WITH NEOPRENE GASKET AND STANDARD, SHIELDED, STAINLESS-STEEL COUPLINGS.
4.	ACID WASTE AND VENT INTERIOR ABOVE/BELOW GRADE:	POLYPROPYLENE DRAINAGE PIPE AND FITTINGS, ASTM F-1412, SCHEDULE 40, WITH FIRE-RETARDANT ADDITIVE COMPLYING WITH ASTM D-4101 WITH FUSION AND MECHANICAL JOINT ENDS.
5.	DOMESTIC WATER PIPING BELOW GRADE:	TYPE 'L' COPPER TUBING, HARD DRAWN CONFORMING TO ASTM B 88, WITH WROUGHT COPPER SOLDER FITTINGS WITH BRAZED JOINTS. AVOID UNNECESSARY JOINTS BELOW SLAB. PIPE WRAP ALL UNDERGROUND PIPING.
6.	DOMESTIC WATER PIPING ABOVE GRADE:	TYPE 'L' COPPER TUBING, HARD DRAWN CONFORMING TO ASTM B 88, WITH WROUGHT COPPER SOLDER SWEAT FITTINGS AND LEAD FREE-SOLDER JOINTS (OR) BRAZED W/0% BRAZING ROD.
7.	CONDENSATE DRAIN PIPING: INDOOR	SCHEDULE 40, SOLID WALL PVC PIPE CONFORMING TO ASTM D 2665 WITH DWV FITTINGS CONFORMING TO ASTM D 2665/ASTM D 3311 WITH ADHESIVE PRIMER CONFORMING TO ASTM F656 AND SOLVENT CEMENT CONFORMING TO ASTM D 2564 WITH INSULATION TO MEET ASTM E-84 25/50 FLAME/SMOKE RATING.
	OUTDOOR	TYPE 'M' COPPER PIPING, HARD DRAWN CONFORMING TO ASTM B88, WITH WROUGHT COPPER SOLDER SWEAT FITTINGS AND SOLDERED JOINTS.
8.	INSULATION OF DOMESTIC HOT/TEMPERED WATER AND CONDENSATE DRAIN PIPING:	GLASS FIBER PIPE INSULATION WITH FACTORY-APPLIED JACKET CONFORMING TO ASTM C547. 1-INCH THICK FOR PIPE SIZES 1" & SMALLER. 1½-INCH THICK FOR PIPE SIZES 1¼" INCHES & LARGER. SEAL ALL JOINTS WITH THE FACTORY-APPLIED, SELF-SEAL LAP AND BUTT STRIPS. JOHNS MANVILLE MICRO-LOK 'HP' OR EQUAL.
9.	GAS PIPING:	SEAMLESS SCHEDULE 40 CARBON STEEL ASTM A53 TYPE "S", GRADE A OR B WITH CLASS 150 MALLEABLE IRON THREADED FITTINGS ASME B16.3. DOMESTIC ONLY, IMPORTED PIPING ARE NOT ACCEPTABLE.
10.	GAS PIPING BELOW GRADE: (EXTERIOR SITE DISTRIBUTION)	POLYETHYLENE PIPE (PE) ORANGE OR YELLOW IN COLOR CONFORMING TO ASTM D 2513, SDR-11 AND IAPMO INSTALLATION STANDARD IS-12 WITH PE FITTINGS CONFORMING TO ASTM D-2683, SOCKET-FUSION TYPE OR ASTM D-3261 WITH DIMENSIONS MATCHING PE PIPE. P.E. TRANSITION FITTINGS, FACTORY-FABRICATED FITTINGS WITH PE COMPLYING WITH ASTM D-2513, SDR-11. PROTECTIVE COATING FOR UNDERGROUND PIPING, FACTORY APPLIED, THREE-LAYER COATING OF EPOXY, ADHESIVE AND PE.
11.	COMPRESSED AIR (LA): PIPING	OXY-MED GRADE TYPE "L" HARD DRAWN TEMPER SEAMLESS COPPER TUBING, CLEANED, NITROGEN CHARGED & CAPPED SIMILAR TO CERROPURE WITH WROUGHT COPPER BRAZED FITTINGS.
	VALVE	ISOLATION BALL VALVES SHALL BE 3-PIECE BODY, BRASS OR BRONZE, FULL-PORT, WITH PTFE OR TFE SEATS.
12.	VACUUM (LV): PIPING	HARD COPPER TUBE, ASTM B88, TYPE L WATER TUBE, DRAWN TEMPER WITH WROUGHT COPPER SOLDER JOINT FITTINGS ASME B16.22.
	VALVE	ISOLATION BALL VALVES, COPPER ALLOY, MSS SP-110, 3-PIECE BODY, BRASS OR BRONZE, FULL-PORT, WITH PTFE OR TFE SEATS.
13.	PIPE PROTECTION: ALL UNDERGROUND METALLIC PIPE WETHER BURIED OR ENCASED SHALL BE WRAPPED WITH ANTI-CORROSIVE 20 MIL PVC TAPE AND PRIMED OR INSTALLED IN 8 MIL POLYETHYLENE SLEEVE CONFORMING TO ASTM D-1248 AND/OR ANSI/AWWA C105/A21.5.	
14.	PIPE PROTECTION: PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS JOINING DISSIMILAR METALS.	
15.	TRACER WIRE: ALL UNDERGROUND ON-SITE PLASTIC GAS PIPE SHALL BE INSTALLED WITH BARE COPPER WIRE, TYPE TW, SIZE AWG#12 PLACED AND SECURED ON TO THE TOP OF THE MAINS AND BRANCHES WITH ALL WIRE TO WIRE CONNECTIONS SOLDERED FOR CONTINUITY.	

FIXTURE LOAD CALCULATION - PALOMAR

BASIS: 2016 CPC APPENDIX "A" TABLE A-2 (WATER SUPPLY FIXTURE UNITS) & CHAPTER 7 TABLE 7-3 (DRAINAGE FIXTURE UNIT VALUES). VOLUME BASED ON "PUBLIC" VALUES

FIXTURE	QTY.	COLD WATER		HOT WATER		DRAINAGE/WASTE	
		FIXTURE UNITS	TOTAL FU	FIXTURE UNITS	TOTAL FU	FIXTURE UNITS	TOTAL FU
LAB SINK	20	2.0	40.0	1.5	30.0	2.0	40.0
CUP SINK	5	1.0	5.0	1.0	5.0	2.0	10.0
ICE MACHINE	1	0.5	0.5			0.5	0.5
HOSE BIBB (1st)	1	2.5	2.5				
HOSE BIBB (each additional)	5	1.0	5.0				
TOTAL FIXTURE UNITS			53.0		35.0		50.5
EQUIVALENT GPM			30		44		51
INTERMITTENT FLOW, GPM			25				
TOTAL GPM			55				

DOMESTIC WATER CALCULATION - PALOMAR

PRESSURE AVAILABLE :

MINIMUM	= 100 PSI	PROVIDE PRV, SET @	70	PSI
MAXIMUM	= 132 PSI			
DOMESTIC WATER DEMAND :	= 55 GPM			

WATER PRESSURE INFO OBTAINED BY:

PRESSURE LOSS

1	PRESSURE LOSS DUE TO METER LOSS @ CAMPUS MAIN	6	PSI
2	PRESSURE LOSS THRU BACKFLOW DEVICE @ CAMPUS MAIN	12	PSI
3	STATIC HEAD LOSS (5 ft. x 0.433)	2	PSI
4	TOTAL PRESSURE LOSS	20	PSI
5	PRESSURE AVAILABLE AT BUILDING	80	PSI
6	PROVIDE PRESSURE REDUCING VALVE (PRV) SET @	70	PSI

BUILDING PRESSURE LOSS

7	MINIMUM PRESSURE REQUIRED	30	PSI
8	STATIC HEIGHT (12' x 0.433)	5	PSI
9	TOTAL BUILDING PRESSURE LOSS	35	PSI

LOSS AVAILABLE FOR FRICTION

10	ITEM 6 - ITEM 9	35	PSI

LENGTH OF RUN FROM PRV TO FARTHEST FIXTURE

	OUTSIDE BUILDING	96	FT
	INSIDE BUILDING	88	FT
11	TOTAL LENGTH	184	FT

EQUIVALENT LENGTH OF RUN

12	ITEM 7 + 25%	230	FT

ALLOWABLE FRICTION LOSS

13	ITEM 10 X 100 / ITEM 8	15.22	PSI/100 FT
14	USE UNIFORM FRICTION LOSS	5.00	PSI/100 FT

PIPE SIZE CHART FOR COLD WATER SIZING AT 5.0 PSI/100 FT., 8 F/S MAX VELOCITY

PIPE SIZE	1/2	3/4	1	1-1/4	1-1/2	2	2 1/2	3	4
GPM	1.98	5.8	12.3	22.1	35.7	76.0	136.8	221.1	471.4
FU (FT)	1	7	18	34	66	245	455	719	1668
FU (FV)	0	0	0	5	20	124	329	666	1668
VEL (FPS)	3.23	4.18	5.01	5.77	6.47	7.77	8.94	10.04	12.04

PIPE SIZE CHART FOR HOT WATER SIZING AT 5.0 PSI/100 FT., 5 F/S MAX VELOCITY

PIPE SIZE	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
GPM	1.98	5.8	12.3	22.1	35.7	76.0	136.8	221.1	471.4
FU (FT)	1	7	16	28	46	119	245	406	840
VEL (FPS)	3.23	4.18	5.01	5.77	6.47	7.77	8.94	10.04	12.04

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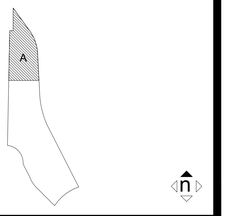
Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

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DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
SCHEDULES

Architect's Seal

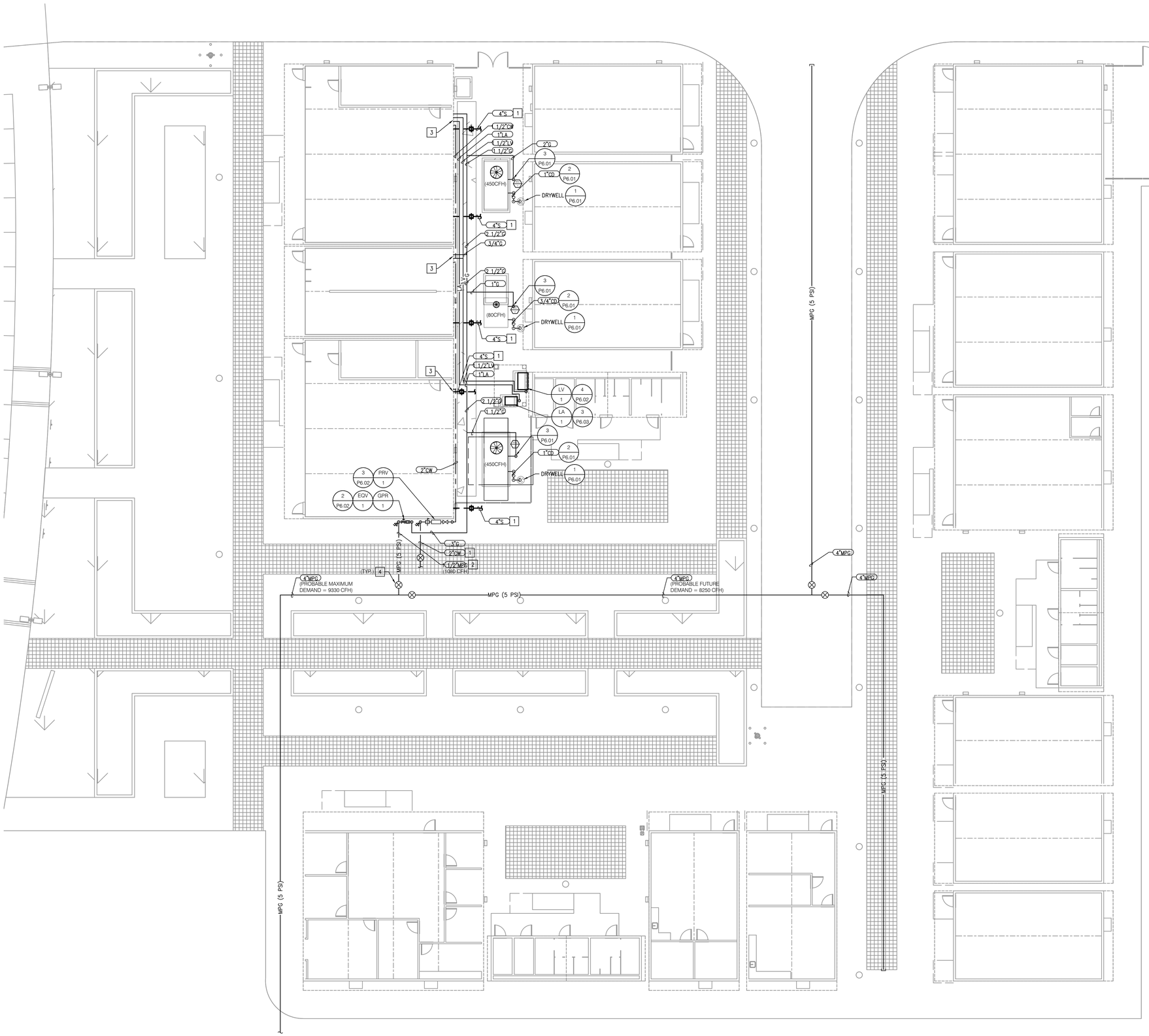
BRADLEY E. CLASSEY
LICENSED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	JDM	Drawing No.	P0.02
Date:	10/13/2017		

PCS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL



NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
2. DEMAND = 1080 CFH @ 400 FT TOTAL EQUIVALENT PIPE LENGTH FROM GAS CO. METER/REGULATOR ASSEMBLY TO GPR-1.
3. REFER TO P2.01 FOR CONTINUATION.
4. SHUT OFF VALVE IN YARBOX.

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Key Plan

Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
RICHARD DEL ROSARIO
MECHANICAL
STATE OF CALIFORNIA

SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

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DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS _____

DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Plumbing Site Plan

Architect's Seal

REGISTERED ARCHITECT
JAMES E. GLASCOCK JR.
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	3/32" = 1'-0"
QAQC	JDM	Drawing No.	P1.01
Date:	10/13/2017		

PSS No. 8887

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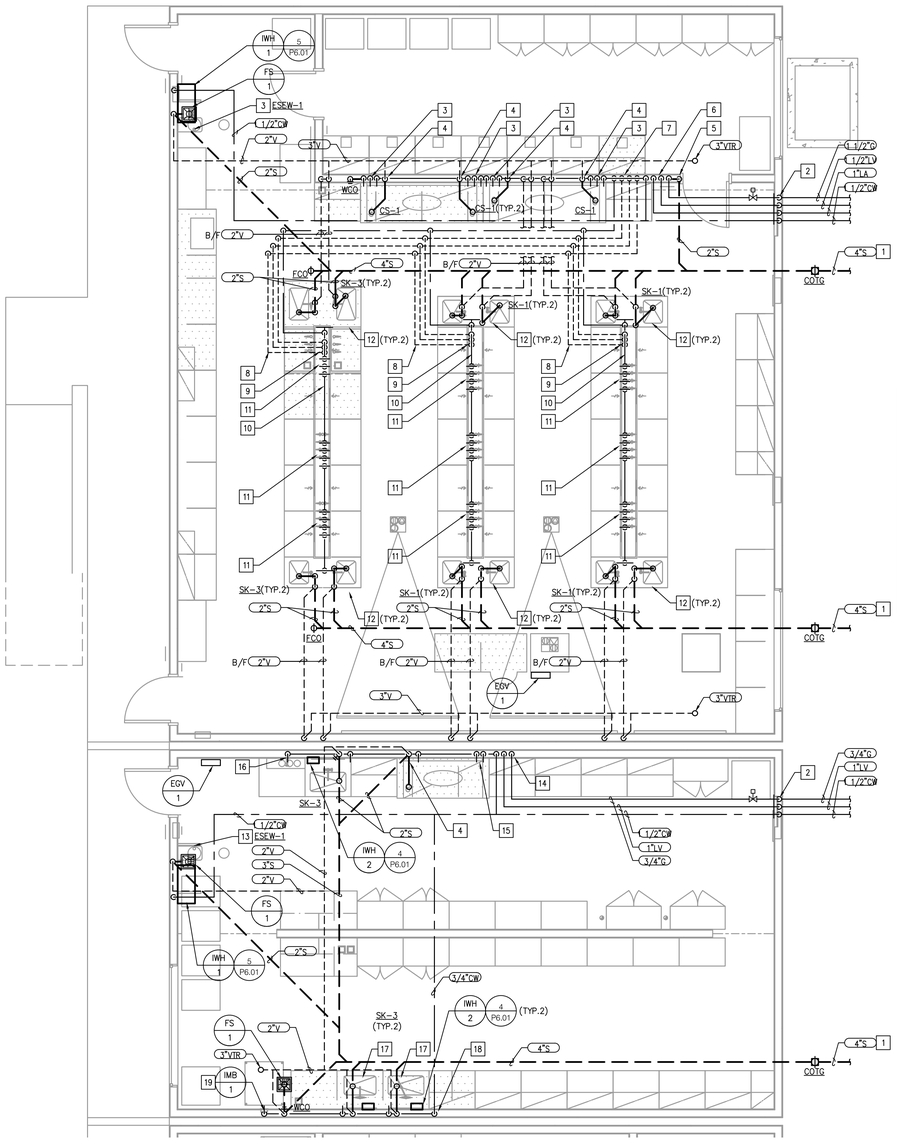

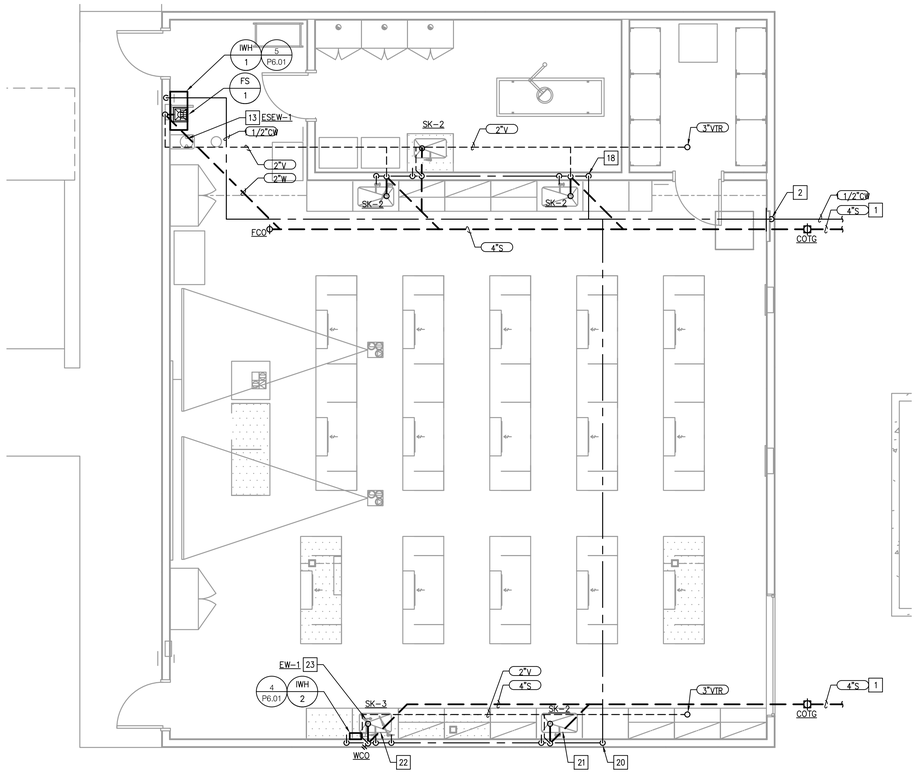

NOTES

1. REFER TO P101 FOR CONTINUATION.
2. PROVIDE SHUT-OFF VALVES ON RISE WITH ACCESS PANEL.
3. ROUGH-IN AND CONNECT 1/2"CW, 3/4"LV, & 1/2"G TO FUMEHOOD PLUMBING CONNECTIONS.
4. ROUGH-IN AND CONNECT P-TRAP ASSEMBLY, 2"W, & 1 1/2"V TO FUMEHOOD CUPSINK.
5. 2"W FULL SIZE HEADER DOWN TO BELOW FLOOR.
6. 1"G, 1 1/2"LV, 1"LA, 1 1/2"CW DOWN TO FULL SIZE HEADER.
7. 1"G, 1 1/2"LV, 1"LA, 1 1/4"CW DOWN TO BELOW FLOOR.
8. 1"G, 1 1/2"LV, 1"LA, 1"CW BELOW FLOOR.
9. 1"G, 1 1/2"LV, 1"LA, 1"CW UP TO ISLAND BENCH PIPE CHASE.
10. 1"G, 1 1/2"LV, 1"LA, 1"CW FULL SIZE HEADER. INSTALL TO ONE SIDE OF EXHAUST DUCT.
11. LAB GAS TURRETS SPECIFIED UNDER LAB FURNITURE DRAWINGS. ROUGH-IN AND CONNNECT 1/2"G, 3/4"V, AND 1/2"LA.
12. LAB SINK SPECIFIED UNDER LAB FURNITURE DRAWINGS. ROUGH-IN AND CONNECT 1/2"CW, AND A 2" ISLAND WASTE AND VENT. REFER TO DETAIL 1/P6.02.
13. PROVIDE WITH 1 1/4"TWS FROM IWH-1.
14. 3/4"G, 1"LV, 3/4"CW DOWN TO FULL SIZE HEADER.
15. ROUGH-IN AND CONNECT 1/2"CW, 3/4"LV, & 1/2"G TO FUMEHOOD PLUMBING CONNECTIONS.
16. WALL TURRET SPECIFIED UNDER LAB FURNITURE DRAWINGS. ROUGH-IN AND CONNECT 1/2"CW.
17. LAB SINK SPECIFIED UNDER LAB FURNITURE DRAWINGS. ROUGH-IN AND CONNECT 1/2"CW, 1/2"HW FROM IWH-2, 2"S, AND 1 1/2"V.
18. 3/4"CW DOWN TO FULL SIZE HEADER.
19. 1/2"CW TO IMB-1.
20. 1"CW DOWN TO FULL SIZE HEADER.
21. LAB SINK SPECIFIED UNDER LAB FURNITURE DRAWINGS. ROUGH-IN AND CONNECT 1/2"CW, 2"S, AND 1 1/2"V.
22. LAB SINK SPECIFIED UNDER LAB FURNITURE DRAWINGS. ROUGH-IN AND CONNECT (2)1/2"CW, 2"S, AND 1 1/2"V.
23. PROVIDE WITH 3/4"TWS FROM IWH-2.

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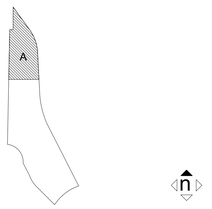
Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES DEL ROSARIO
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

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Project Title

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Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Plumbing Floor Plan

Architect's Seal

LICENSED ARCHITECT
JEFFREY E. GLASS
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	1/4"=1'-0"
QAQC	JDM	Drawing No.	P2.01
Date:	10/13/2017		

PCS No. 8887

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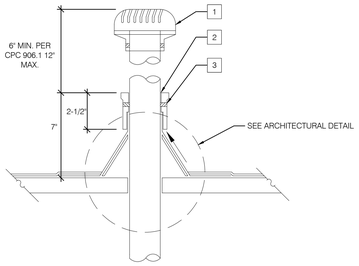
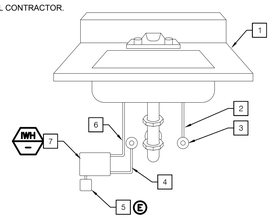


NOTES

1. HOOD FOR VENT PIPE ATTACHED WITH VANDEL PROOF SET SCREWS.
2. WATER PROOFING COMPOUND.
3. COUNTER FLASHING SLEEVE ATTACHED WITH VANDAL PROOF SET SCREWS.

VENT THRU ROOF — 6 — NO SCALE

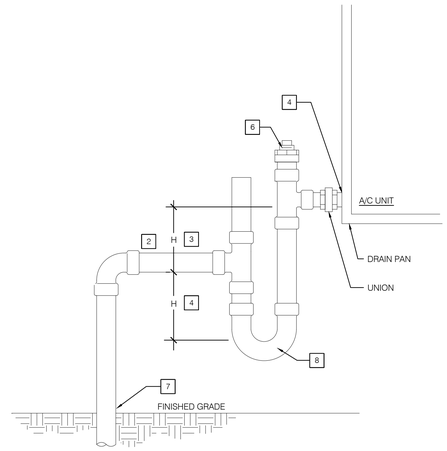
(E) INDICATES ITEMS PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.



NOTES

1. SINK OR LAVATORY
2. 1/2" CW SUPPLY
3. ANGLE VALVE, CHICAGO NO. 1006 (TYP.)
4. 1/2" CW TO IWH
5. JUNCTION BOX
6. 1/2" HW SUPPLY
7. SECURE UNIT TO WALL
8. 1 1/4" NPT INLET.

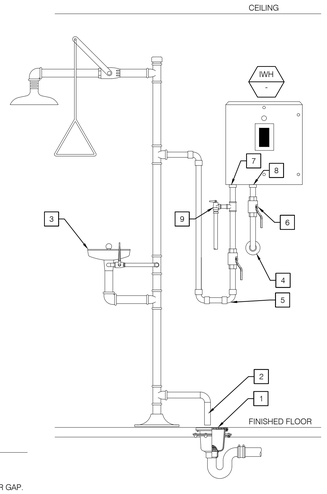
SINK/LAVATORY INSTANTANEOUS WATER HEATER — 4 — NO SCALE



NOTES

1. ALL CONDENSATE DRAIN LINES WITHIN BUILDING SHALL BE INSULATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 15400, PLUMBING SPECIFICATIONS.
2. SEE DRAWING FOR SIZES.
3. CONDENSATE PIPE HEIGHT 'H' SHALL EQUAL FAN INLET PRESSURE (IN. WC.) PLUS 1.0 INCH. "H" SHALL BE MINIMUM 6 INCHES.
4. DEPTH SAME AS NOTE 3.
5. DRAIN LINE SHALL BE AT LEAST THE SAME SIZE AS THE NIPPLE ON THE DRAIN PAN.
6. BRASS CLEANOUT PLUG (THREADED)
7. FOR CONTINUATION OF PIPING, SEE PLANS.
8. TYPE "L" COPPER TUBING WITH WROUGHT COPPER FITTINGS

CONDENSATE TRAP — 2 — NO SCALE



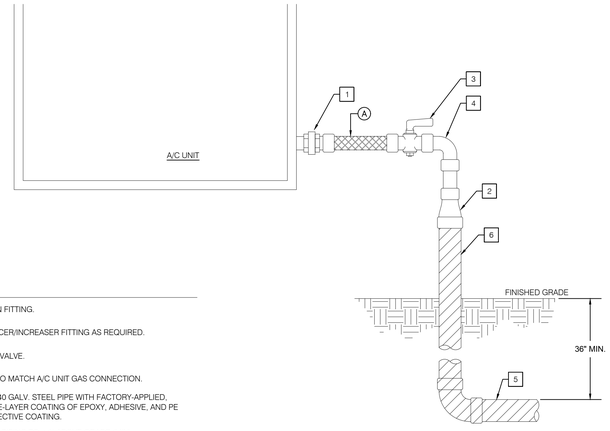
NOTES

1. FLOOR SINK
2. 1 1/4" WASTE, TERMINATE AT FLOOR SINK WITH 2" AIR GAP.
3. EMERGENGY EYE/FACEWASH AND DRENCH SHOWER.
4. 1 1/4"CW SUPPLY. PROVIDE WITH ESCUTCHEON PLATE.
5. 1 1/4" TEMPERED WATER SUPPLY (85° F).
6. BALL-TYPE SHUT-OFF VALVE (TYP.).
7. 1 1/4" NPT OUTLET.
8. 1 1/4" NPT INLET.
9. TEMPERATURE & PRESSURE RELIEF VALVE. TERMINATE 3/4" RELIEF DISCHARGE TO NEAREST FLOOR RECEPTOR WITH 2" MIN. AIR GAP.

TYPICAL EMERGENCY EYE WASH/SHOWER WITH IWH DETAIL — 5 — NO SCALE

DORMONT GAS APPLIANCE CONNECTION

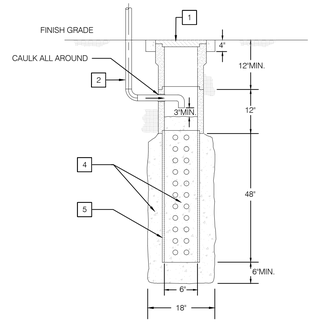
SIZE	(A) PART NO.
1/2"	31-3132-12
3/4"	41-4142-12
1"	51-5152-12
1-1/4"	61-6162-12



NOTES

1. UNION FITTING.
2. REDUCER/INCREASER FITTING AS REQUIRED.
3. PLUG VALVE.
4. SIZE TO MATCH A/C UNIT GAS CONNECTION.
5. SCH. 40 GALV. STEEL PIPE WITH FACTORY-APPLIED, THREE-LAYER COATING OF EPOXY, ADHESIVE, AND PE PROTECTIVE COATING.
6. WRAP PIPING TO +6" ABOVE GRADE (MIN).

VENT THRU ROOF — 3 — NO SCALE



NOTES

1. 8" DIA. TRAFFIC WEIGHT GALVANIZED COVER WITH BROOKS CONCRETE YARD BOX.
2. INDIRECT WASTE PIPE FROM MECHANICAL EQUIPMENT. PROVIDE 3" MINIMUM AIR GAP.
3. PROVIDE 8"Ø SECTION OF PERFORATED PVC PIPE.
4. PEA GRAVEL.

DRYWELL — 1 — NO SCALE

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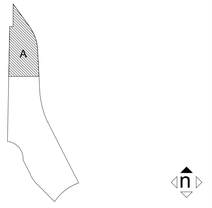
Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
JAMES E. DEY
No. M 20000
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STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval — FILE NO. 37-C1

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Learning for Success

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Palomar College

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No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Details

Architect's Seal

REGISTERED ARCHITECT
BRADLEY E. CLASSEY
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	JDM	Drawing No.	P6.01
Date:	10/13/2017		

PCS No. 8887

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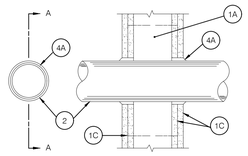
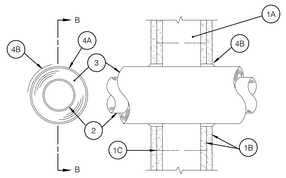
SYSTEM NO. WL1001 F RATINGS-1 AND 2 HR. (SEE ITEM 4) T RATINGS-0. 1, 1-1/2" AND 2HR. (SEE ITEM 4)

FIRESTOP CONFIGURATION "A"



SECTION A-A

FIRESTOP CONFIGURATION "B"



SECTION B-B

1. THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT BE DETAILED ON THE PLANS AND THE PROJECT INSPECTOR WILL VERIFY THAT THESE ITEMS (EQUIPMENT) HAVE BEEN ANCHORED:

   A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOMINAL 2 BY 4 INCH LUMBER SPACED 16 INCH OC WITH NOMINAL 2 BY 4 INCH LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MINIMUM 3-5/8 INCH WIDE BY 1-3/8 INCH DEEP CHANNELS WITH NOMINAL 1/4 INCH FOLDED-BACK RETURN ON FLANGE EDGES, FORMED FROM MINIMUM 0.025 INCH THICK (NO. 25 GAUGE) GALVANIZED STEEL. STEEL STUDS CUT 3/4 INCH LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH ENDS NESTING IN AND SECURED TO CHANNEL-SHAPED GALVANIZED STEEL FLOOR AND CEILING TRACKS WITH 1/2 INCH LONG TYPE S-12 SELF-DRILLING, SELF-TAPPING STEEL SCREWS ON BOTH SIDES OF STUDS OR BY WELDING OR BOLTED CONNECTIONS DESIGNED IN ACCORDANCE WITH AISI SPECIFICATIONS. STEEL STUD SPACING NOT TO EXCEED 24 INCHES O.C.

   B. WALLBOARD GYPSUM - 5/8 INCH THICK 4 FT. WIDE WITH SQUARE OR TAPERED EDGES. ANY GYPSUM WALLBOARD BEARING THE UL CLASSIFICATION MARKING AS TO FIRE RESISTANCE. WALLBOARD INSTALLED VERTICALLY ON BOTH SIDES OF STUD FRAMING WITH JOINTS CENTERED OVER STUDS AND WITH JOINTS ON OPPOSITE SIDES OF WALL STAGGERED ONE STUD. FOR 1 HOUR FIRE-RATED WALL ASSEMBLY, A SINGLE LAYER OF GYPSUM WALLBOARD IS REQUIRED. FOR 2 HOUR FIRE-RATED WALL ASSEMBLY, TWO LAYERS OF GYPSUM WALLBOARD IS REQUIRED WITH OUTER LAYER JOINTS STAGGERED ONE STUD FROM INNER LAYER JOINTS.

   SEE WALLBOARD, GYPSUM (CKNX) CATEGORY IN UL FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

   C. FASTENERS - WHEN WOOD STUD FRAMING IS EMPLOYED FOR 1 HOUR FIRE-RATED WALL ASSEMBLY, GYPSUM WALLBOARD ATTACHED TO STUDS WITH 1-7/8 INCH LONG 6D CEMENT-COATED NAILS SPACED 6 TO 8 INCH O.C. AT JOINT EDGES AND IN THE FIELD. OUTER LAYER OF GYPSUM WALLBOARD ATTACHED TO STUDS WITH 2-3/8 INCH LONG 8D CEMENT- COATED NAILS SPACED 6 TO 8 INCH O.C. AT JOINT EDGES AND IN THE FIELD. WHEN STEEL CHANNEL STUD FRAMING IS EMPLOYED FOR 1 HOUR FIRE-RATED WALL ASSEMBLY, GYPSUM WALLBOARD ATTACHED TO STUDS WITH 1 INCH LONG TYPE S SELF-DRILLING, SELF-TAPPING BUGLE-HEAD STEEL SCREWS SPACED 8 INCH O.C. AT JOINT EDGES AND 8 TO 12 INCH O.C. IN THE FIELD. WHEN STEEL CHANNEL STUD FRAMING IS EMPLOYED FOR 2 HOUR FIRE-RATED WALL ASSEMBLY, INNER LAYER OF GYPSUM WALLBOARD ATTACHED TO STUDS WITH 1 INCH LONG TYPE S SELF-DRILLING, SELF-TAPPING BUGLE-HEAD STEEL SCREWS SPACED MAXIMUM 12 INCHES O.C. AT JOINT EDGES AND IN THE FIELD. OUTER LAYER OF GYPSUM WALLBOARD ATTACHED TO STUDS WITH 1-5/8 INCH LONG TYPE S SELF-DRILLING, SELF- TAPPING BUGLE-HEAD STEEL SCREWS SPACED MAXIMUM 12 INCH O.C. AT JOINT EDGES AND IN THE FIELD.

   D. JOINT TAPE AND COMPOUND - (NOT SHOWN) - VINYL OR CASEIN, DRY OR PREMIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS AND SCREW OR NAIL HEADS OF OUTER LAYER OF GYPSUM WALLBOARD. PERFORATED PAPER TAPE, 2 INCH WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS OF OUTER LAYER OF GYPSUM WALLBOARD.

2. STEEL PIPE OR CONDUIT - NOM 12 INCH DIAMETER (OR SMALLER) SCHEDULE 10S (OR HEAVIER) STEEL PIPE, NOM 6 INCH DIAMETER (OR SMALLER) RIGID STEEL CONDUIT, NOM 4 INCH DIAMETER (OR SMALLER) STEEL E.M.T. CONDUIT OR NOM 1 INCH DIAMETER (OR SMALLER) FLEXIBLE STEEL CONDUIT. STEEL PIPES OR CONDUITS LARGER THAN NOM 4 INCH DIAMETER MAY ONLY BE USED IN WALLS CONSTRUCTED USING STEEL CHANNEL STUDS. A MAXIMUM OF ONE PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.

3. PIPE COVERING* - (OPTIONAL) - NOM 1 OR 2 INCH THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN. 3.5 PCF) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH FOIL-SCRIM-KRAFT. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OF FACTORY-APPLIED SSL. TRANSVERSE JOINTS SEALED WITH METAL FASTENERS OR WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT.

   SEE PIPE AND EQUIPMENT COVERINGS - MATERIALS (BRGU) CATEGORY IN BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD VALUE OF 25 OR LESS AND A SMOKE DEVELOPED VALUE OF 50 OR LESS MAY BE USED.

4. FIRESTOP SYSTEM - INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EITHER 1 OR 2 HOURS DEPENDING UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTAL- LED. THE HOURLY T RATINGS FOR THE FIRESTOP SYSTEM ARE DEPENDENT UPON THE SIZE OF THE STEEL PIPE OR CONDUIT, THE ABSENCE OR PRESENCE OF PIPE COVERING (ITEM NO. 3), THE FIRESTOP CONFIGURATION AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. THE FIRESTOP CONFIGURATION (A, B, C OR D) IS DEPENDENT UPON THE SIZE OF THE ANNULAR SPACE BETWEEN THE STEEL PIPE OR CONDUIT (OR PIPE COVERING) AND THE PERIMETER OF THE CIRCULAR THROUGH OPENING IN THE GYPSUM WALLBOARD LAYERS, AS TABULATED BELOW:

MAX. PIPE OR CONDUIT DIAMETER	NOM PIPE COVERING THKNS	ANNULAR SPACE	FIRESTOP CONFIG. (A)	T RATING
1 INCH	NONE	0-3/16"	A	1 OR 2H
4 INCH	NONE	0-1/4"	A	0H
12 INCH	NONE	3/16-5/16"	A	0H
4 INCH	NONE	1/4-3/8"	B	0H
12 INCH	1 INCH	1/4-3/8"	B	1 OR 1-1/2H
12 INCH	2 INCH	1/2-3/4"	B	1 OR 1-1/2H
4 INCH	1 INCH	0-3/16"	C	1 OR 2H
12 INCH	NONE	1-1/4"	C	0H

(A) A, B, C AND D INDICATE FIRESTOP CONFIGURATION, AS DESCRIBED IN THE FOLLOWING:

FIRESTOP CONFIGURATION A

FILL, VOID OR CAVITY MATERIAL* - CAULK/CAULK FILL MATERIAL FORCED INTO ANNULAR SPACE TO MAXIMUM EXTENT POSSIBLE AND WITH A MIN. 1/4 INCH DIAMETER BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL.

MINNESOTA MINING & MANUFACTURING CO. - TYPES CP-25 S/L, CP-25 N/S.

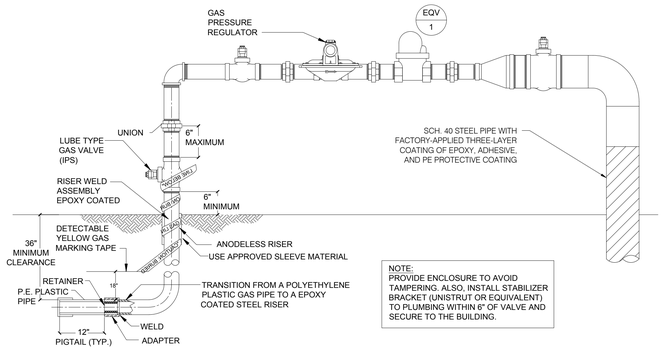
FIRESTOP CONFIGURATION B

FILL, VOID OR CAVITY MATERIALS* - NOM 1/4 INCH THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN 2 INCH WIDE STRIPS. NOM. 2 INCH WIDE STRIP TIGHTLY WRAPPED AROUND STEEL PIPE, STEEL CONDUIT OR PIPE COVERING (FOIL SIDE OUT) WITH SEAM BUTTED. WRAP STRIP LAYER SECURELY BOUND WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND SLIDE INTO ANNULAR SPACE APPROXIMATELY 1- 1/4" SUCH THAT APPROXIMATELY 3/4 INCH OF THE WRAP STRIP WIDTH PROTRUDES FROM THE WALL SURFACE. ONE LAYER OF WRAP STRIP IS REQUIRED WHEN NON 1 INCH THICK PIPE COVERING IT USED. TWO LAYERS OF WRAP STRIP ARE REQUIRED WHEN NOM 2 INCH THICK PIPE COVERING IS USED.

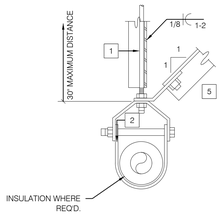
MINNESOTA MINING & MANUFACTURING CO. - TYPES FS-195

FILL, VOID OR CAVITY MATERIALS* - CAULK - MINIMUM 1/4 INCH DIAMETER CONTINUOUS BEAD APPLIED TO THE WRAP STRIP/WALL INTERFACE AND TO THE EXPOSED EDGE OF THE WRAP STRIP LAYER APPROXIMATELY 3/4 INCH FROM THE WALL SURFACE.
MINNESOTA MINING & MANUFACTURING CO. - TYPES CP-25 S/L, CP-25 N/S

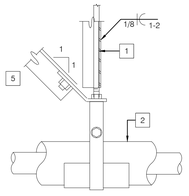
FIRE RATED PENETRATIONS | 4 | NO SCALE



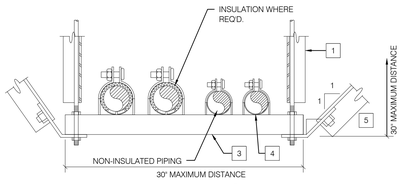
GAS REGULATOR AND EARTHQUAKE VALVE ASSEMBLY DETAIL | 2 | NO SCALE



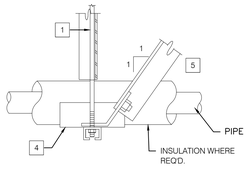
SINGLE PIPE HANGER (20# MAX)



SINGLE PIPE HANGER



MULTIPLE PIPE HANGER (50# MAX)



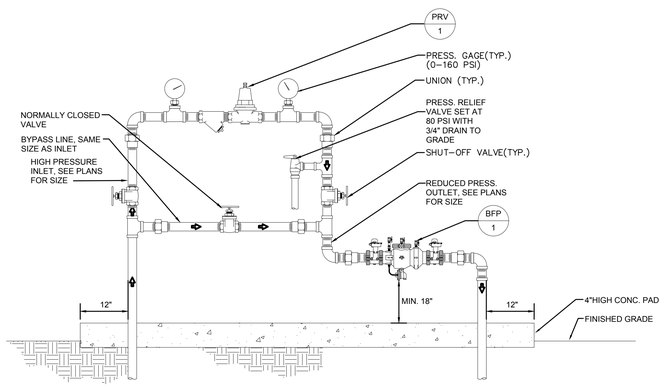
NOTES

1. 5/8"Ø HANGER ROD, WELDED TO 2"X2"X16 GAUGE VERTICAL ANGLE. ATTACH TO STRUCTURE ABOVE PER STRUCTURAL DRAWING 8/S0.12.
2. PROVIDE A SECTION OF HIGH COMPRESSION STRENGTH INSULATION AT EACH HANGER POINT. INSULATION MAY BE HALF ROUND OR FULL ROUND & EXTENDED 2" BEYOND GALV. SHIELD EA. WAY.
3. MULTIPLE PIPES SUPPORTED ONTO UNISTRUT P1000 CHANNEL AT 8'-0" O.C. MAX. PROVIDE INSULATED HOT WATER PIPING ON ROLLERS AND CHILLED WATER PIPING SECURED WITH PIPE CLAMPS. REFER TO SPECIFICATION FOR ADDITIONAL REQUIREMENTS FOR SUPPORTS AND FOR PIPING MATERIAL REQUIREMENTS.
4. PROVIDE PIPE SADDLE BETWEEN PIPE AND HANGER.
5. PROVIDE DIAGONAL BRACE FOR ALL PIPING. BRACE SHALL BE MINIMUM 3"x3"X 16 GAUGE DIAGONAL ANGLE, INSTALLED AT MAXIMUM 20'-0" IN EACH DIRECTION ON CENTER OR WITHIN 2'-0" OF ELBOWS. ATTACH TO STRUCTURE ABOVE PER 12/S0.12

GENERAL NOTES

1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM THE STEEL STRUCTURE TO THE TOP CORD OF JOISTS OR BEAMS.
2. PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.

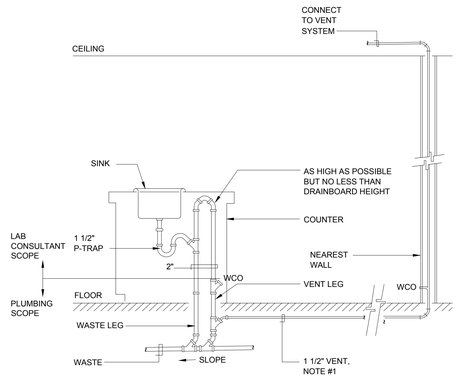
PIPE HANGERS | 5 | NO SCALE



PRESSURE REDUCING VALVE | 3 | NO SCALE

NOTES

1. INCREASE TO 2" IF LENGTH EXCEEDS 20-FEET HORIZONTAL OR 60-FEET TOTAL DEVELOPED LENGTH PRIOR TO TIE-IN.
2. FOR PIPE SIZES & CONTINUATION REFER TO DRAWINGS.
3. FOR UNDERGROUND INSTALLATION PIPE SHALL BE TREATED AS REQUIRED BY CODE.

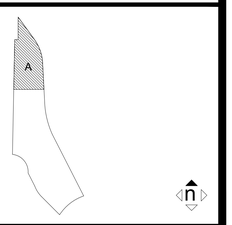


ISLAND SINK WASTE & VENT DETAIL | 1 | NO SCALE

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA
SIGNED: 10/06/2017

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS.____ FLS.____ SSS.____
DATE ____

Project Title

PALOMAR COLLEGE
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Details

Architect's Seal

LICENSED ARCHITECT
BRADLEY E. CLASSEY
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	JDM	Drawing No.	P6.02
Date:	10/13/2017		

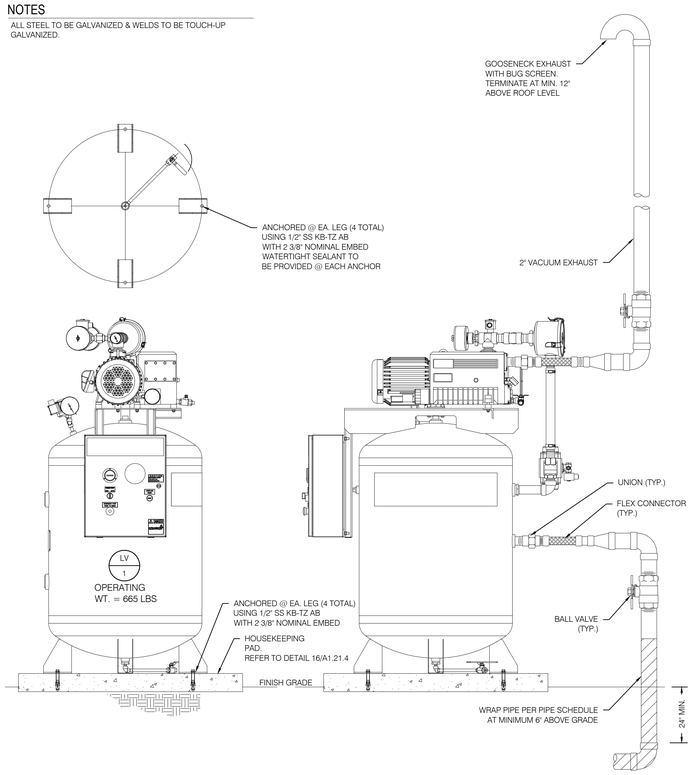
PCS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

NOTES

ALL STEEL TO BE GALVANIZED & WELDS TO BE TOUCH-UP GALVANIZED.

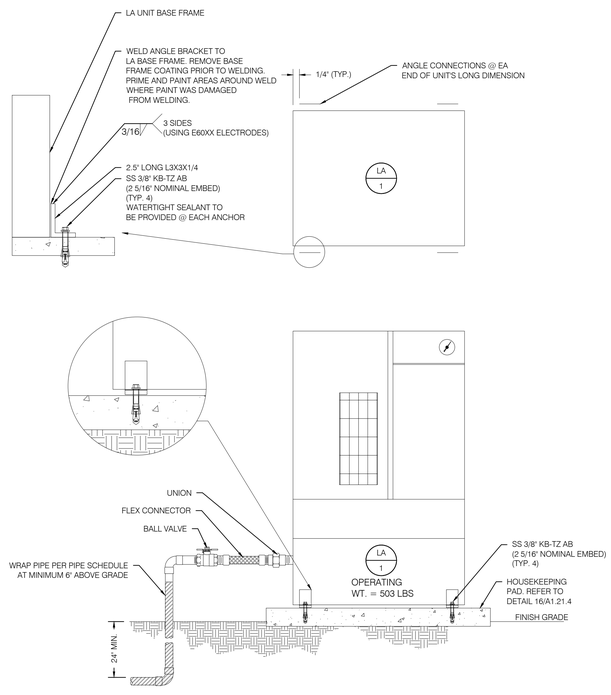


LABORATORY COMPRESSED AIR 3

NO SCALE

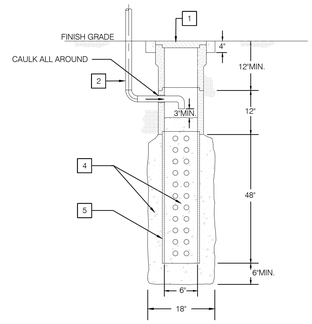
NOTES

ALL STEEL TO BE GALVANIZED & WELDS TO BE TOUCH-UP GALVANIZED.



INSTANTANEOUS WATER HEATER 1

NO SCALE



NOTES

1. 8" DIA. TRAFFIC WEIGHT GALVANIZED COVER WITH BROOKS CONCRETE YARD BOX.
2. INDIRECT WASTE PIPE FROM MECHANICAL EQUIPMENT. PROVIDE 3" MINIMUM AIR GAP.
3. PROVIDE 8"Ø SECTION OF PERFORATED PVC PIPE.
4. PEA GRAVEL.

HMC Architects
3546 Concours Street / Ontario, CA 91764
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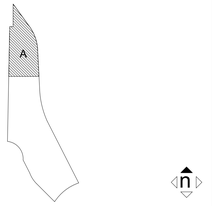
SM

Key Plan



Consultant Seal

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA

SIGNED: 10/06/2017

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

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DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Details

Architect's Seal

REGISTERED ARCHITECT
PRUDENCE E. CLASSEY
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	RC	Project No.	5015019-102
Drawn:	MU	Scale:	Not To Scale
QAQC	JDM	Drawing No.	P6.03
Date:	10/13/2017		

PCS No. 8887

PLEASE RECYCLE

DSA SUBMITTAL

ABBREVIATIONS

A	AMPERE (AMPS)
AC	ALTERNATING CURRENT
AF	AMPS-FRAME (RATING)
AIC	AMP INTERRUPTING CURRENT
AM	AMMETER
AS	AMP SWITCH (FUSED SWITCH RATING)
AT	AMPS-TRIP (RATING)
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CO	CONDUIT ONLY
CT	CURRENT TRANSFORMER
CU	COPPER
CFOI	CONTRACTOR FURNISHED OWNER INSTALLED
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DWG	DRAWING
EX	EXISTING
FLA	FULL LOAD AMPS
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GFI	GROUND FAULT INTERRUPTER
GRD/GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
KW	KILOWATT
LCL	LONG CONTINUOUS LOAD
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MCM (KCM)	THOUSAND CIRCULAR MILS
MECH	MECHANICAL
NC	NORMALLY CLOSED
NF	NON-FUSED
NO	NORMALLY OPEN/NUMBER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
P	POLE
PH	PHASE
POC	POINT OF CONNECTION
PRS	PVC COATED RIGID STEEL (CONDUIT)
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE DUCT
SWBD	SWITCHBOARD
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLTAMPERES
VM	VOLTMETER
VL	VERIFY LOCATION
W	WIREWATTS
WP	WEATHERPROOF (NEMA TYPE 3R)
WT	WATERTIGHT
XP	EXPLOSION PROOF (RATED FOR AREA HAZARD)

ELECTRICAL SYMBOL LEGEND

LIGHTING

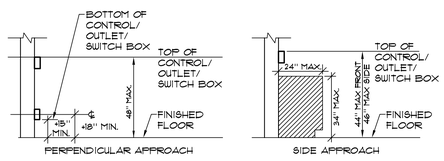
A	LIGHTING FIXTURE DESIGNATION
	LIGHTING FIXTURE, CEILING OR WALL MOUNTED AS SHOWN.
	FLUORESCENT LIGHT FIXTURE
	LIGHTING FIXTURE ON EMERGENCY CIRCUIT (LIFE SAFETY BRANCH OR BATTERY PACK).
	EXIT SIGN WITH DIRECTION ARROWS AS INDICATED. SHADED QUADRANT INDICATES FACE.
b b	EMERGENCY LIGHTING UNIT, WALL MOUNTED 12' BELOW CEILING (U.O.N.) LETTER INDICATES CIRCUIT CONTROLLED. SEE DETAIL
	FLUORESCENT STRIP LIGHT
S_a	SINGLE POLE SWITCH, SUBSCRIPT WHEN SHOWN INDICATES FIXTURES CONTROLLED +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0. WHERE USED IN CONJUCTION WITH OCCUPANCY SENSORS FOR SWITCH TYPE SEE DETAIL
S_3	THREE-WAY SWITCH +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
S_4	FOUR-WAY SWITCH +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
S_{P}	SWITCH WITH PILOT LIGHT +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
S_2	DOUBLE POLE SWITCH +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
S_{WP}	WEATHER PROOF SWITCH +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
S_K	KEY OPERATED SWITCH +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
	SURFACE MOUNTED TRACK LIGHTING FIXTURES
	EXTERIOR SITE LIGHTING FIXTURE AND POLE
	EXTERIOR DECORATIVE SITE LIGHTING FIXTURE AND POLE
	LANDSCAPE LIGHTING FIXTURE
	SPORTS LIGHTING FIXTURES AND POLES
H #b	WALL MOUNTED OCCUPANCY SENSOR LIGHTING CONTROL +48" A.F.F. (U.O.N.) HEIGHT PER DETAILS #/E1.0
#b	CEILING MOUNTED (CORNER OF THE ROOM) OCCUPANCY SENSOR LIGHTING CONTROL
	CEILING MOUNTED OCCUPANCY SENSOR LIGHTING CONTROL
S_{LV}	LOW VOLTAGE LIGHT SWITCH. HEIGHT PER DETAILS #/E1.0
	DIGITAL LIGHTING CONTROL TYPICAL ROOM REQUIREMENTS.
	NUMBERED DEVICES ARE ADDITIONAL ITEMS SHOWN ON FLOOR PLAN IN ADDITION TO WHAT IS REQUIRED FOR THE TYPICAL ROOM REQUIREMENTS.

DISTRIBUTION EQUIPMENT

	DRAW OUT TYPE EQUIPMENT
	VACUUM CIRCUIT BREAKER, RATING AS NOTED.
	AIR INTERRUPTER SWITCH AND FUSE
	AIR INTERRUPTER
	FUSE
	POWER TRANSFORMER, RATING AS NOTED
	POWER CIRCUIT BREAKER DRAWOUT
	AUTOMATIC TRANSFER SWITCH. SEE SCHEDULE
A	AMMETER
V	VOLTMETER
200AF 200AT 3P 10,000AIC	CIRCUIT BREAKER 200AMP FRAME 200AMP TRIP 3 POLE 10,000 AMPS INTERRUPTING CURRENT
200AS 200AF 3P	FUSED SWITCH 200AMP SWITCH 200AMP FUSE 3 POLE
M	UTILITY COMPANY METER

SYMBOL LEGEND

	POINT OF INTERCEPTION



NOTE: MAINTAIN MINIMUM 30"X48" CLEAR FLOOR SPACE AT EACH APPROACH.

MOUNTING HEIGHT OVER OBSTRUCTION (1 / E1.0)

NO SCALE

POWER CONTINUED

	DUPLEX RECEPTACLE, FLOOR MOUNTED
	DUPLEX RECEPTACLE, WALL MOUNTED, +18" A.F.F. (U.O.N.)
HORZ.	RECEPTACLE, WALL MOUNTED HORIZONTALLY, +18" A.F.F. (U.O.N.)
	FOURPLEX RECEPTACLE, WALL MOUNTED, +18" A.F.F. (U.O.N.)
	RECEPTACLE MOUNTED +6" ABOVE COUNTER BACKSPLASH SEE ARCHITECTURAL PLANS FOR REQUIRED MOUNTING HEIGHT PRIOR TO ROUGH-IN.
LCD	PROVIDE (2) DUPLEX RECEPTACLE CEILING MOUNTED LOCATE ADJACENT TO PROJECTOR. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
	SINGLE RECEPTACLE, WALL MOUNTED +18" A.F.F. (U.O.N.)
C	SINGLE RECEPTACLE (CLOCK HANGER TYPE) WALL MOUNTED +7'-0" A.F.F. (U.O.N.)
	SWITCH CONTROLLED DUPLEX RECEPTACLE +18" U.O.N.
GFI	DUPLEX GROUND FAULT INTERRUPTING RECEPTACLE +18" A.F.F. (U.O.N.)
	DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT +18" A.F.F. (U.O.N.)
WP	DUPLEX RECEPTACLE IN WEATHERPROOF ENCLOSURE +18" A.F.F. (U.O.N.)
WP/L	DUPLEX RECEPTACLE IN WEATHERPROOF "LOCKING" ENCLOSURE +18" A.F.F. (U.O.N.) (SEE TYPICAL DETAILS E3 SERIES SHEETS AND SPECIFICATIONS FOR REQUIRED TYPE).
IG	DUPLEX RECEPTACLE (ORANGE) ISOLATED GROUND WALL MOUNTED +18" A.F.F. (U.O.N.)
IG	FOURPLEX RECEPTACLE (ORANGE) ISOLATED GROUND WALL MOUNTED +18" A.F.F. (U.O.N.)
TP	DUPLEX RECEPTACLE SAFETY TYPE / TAMPER PROOF WALL MOUNTED +18" A.F.F. (U.O.N.)
	DUPLEX COMPUTER RECEPTACLE (GREY), WALL MOUNTED +18" A.F.F. (U.O.N.)
	DUPLEX COMPUTER RECEPTACLE (BLUE) ISOLATED GROUND, SURGE SUPPRESSION, WALL MOUNTED +18" A.F.F. (U.O.N.)
A	SINGLE RECEPTACLE 30 AMP, 250V, 4W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
B	SINGLE RECEPTACLE 50 AMP, 250V, 4W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
C	SINGLE RECEPTACLE 50 AMP, 250V, 3W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
E	SINGLE RECEPTACLE 30 AMP, 125V, 3W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
F	SINGLE RECEPTACLE 30 AMP, 250V, 3W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
G	SINGLE RECEPTACLE 30 AMP, 250V, 5W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
H	SINGLE RECEPTACLE 30 AMP, 480V, 3W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
J	SINGLE RECEPTACLE 20 AMP, 250V, 5W, GROUNDING, WALL MOUNTED +18" A.F.F. (U.O.N.). FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT PRIOR TO ROUGH-IN.
K	SPECIAL PURPOSES KITCHEN EQUIPMENT RECEPTACLE. SEE KITCHEN PLANS FOR EXACT TYPE. FIELD VERIFY EXACT OUTLET CONFIGURATION WITH EQUIPMENT SUPPLIER PRIOR TO ORDERING. SEE KITCHEN PLANS FOR EXACT MOUNTING HEIGHT.
FP	DUPLEX RECEPTACLE, WALL MOUNTED ADJACENT TO FLAT PANEL OUTLET, SEE SIGNAL PLAN FOR EXACT LOCATION.
LV	RECEPTACLE MOUNTED ABOVE CEILING FOR LOW VOLTAGE LIGHTING CONTROL (VL)
TP	DUPLEX RECEPTACLE SAFETY TYPE / TAMPER PROOF WALL MOUNTED +18" A.F.F. (U.O.N.)
	MULTI-OUTLET ASSEMBLY, "WIREMOLD" G-3000 SERIES WITH 20AMP DUPLEX RECEPTACLES ON 18" CENTERS, RECEPTACLES TO BE ALTERNATELY WIRED AND INSULATED GROUNDING CONDUCTOR PROVIDED TO EACH
	JUNCTION BOX, FLOOR MOUNTED
J J+H	JUNCTION BOX, CEILING OR WALL MOUNTED
H	HAND DRYER CONNECTION, SEE ARCHITECTURAL FOR MOUTNING HEIGHT.
	FUSED DISCONNECT SWITCH, WHERE SHOWN NF = NON-FUSED.
S_M	MANUAL MOTOR STARTER +48" A.F.F. OR ON EQUIPMENT (U.O.N.)
1	MOTOR CONNECTION, NUMERAL INDICATES HORSEPOWER.
AC	MECHANICAL EQUIPMENT TAG (SEE MECHANICAL DRAWINGS FOR DESCRIPTION)
	CONDUIT AND WIRE, CONCEALED IN CEILING OR WALL
	CONDUIT AND WIRE, CONCEALED IN OR UNDER FINISHED FLOOR OR UNDER FINISHED GRADE.
	FLEXIBLE CONDUIT CONNECTION
	BRANCH CIRCUIT HOMERUN TO PANEL. SLASHES INDICATE NUMBER OF CONDUCTORS. EQUIPMENT GROUND WIRE NOT INDICATED U.O.N. #12 CONDUCTORS ARE MINIMUM, NO HASH MARKS = MIN (2) #12
	3/4" CONDUIT STUBBED FROM DEVICE TO ABOVE ACCESSIBLE CEILING
#8	BRANCH CIRCUIT HOMERUN, NUMBER INDICATES INCREASED CONDUCTOR SIZE, CONDUCTORS SHALL REMAIN AS INDICATED FOR SIZE THROUGHOUT THE ENTIRE CIRCUIT.
	PANELBOARD, SURFACE MOUNTED.
	PANELBOARD, RECESSED
T	STEP-DOWN TRANSFORMER
	DISTRIBUTION SWITCHBOARD
SR	SURFACE MOUNTED RACEWAY SINGLE SECTION SERIES, NON METALLIC (WHITE)
SR 2	SURFACE MOUNTED RACEWAY TWO SECTION SERIES, NON METALLIC (WHITE)
SR 3	SURFACE MOUNTED RACEWAY THREE SECTION SERIES, NON METALLIC (WHITE)

GENERAL PROJECT NOTES:

1. UNLESS WHERE OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK.
2. UNLESS WHERE OTHERWISE NOTED, ALL DIMENSIONS ARE TO BE CENTERLINE OF THE DEVICE.
3. "GENERAL NOTES" SHOWN ON AN INDIVIDUAL DRAWING APPLY TO ALL WORK SHOWN ON THAT SHEET. "KEY NOTES" ONLY APPLY TO SPECIFIC ITEMS WHERE ANNOTATED AT SPECIFIC LOCATIONS. SOME KEY NOTES MAY NOT APPLY TO ANY SPECIFIC ITEMS.
4. UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

MEP COMPONENT ANCHORAGE NOTE:

ALL 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 2016 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. 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 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.5.6, 13.6.7, 13.6.8, AND 2016 CBC, SECTIONS 1616A.1.23, 1616A.1.24 AND 1616A.1.25 AND 1616A.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 A PREAPPROVED INSTALLATION GUIDE (e.g. SMACNA OR OSHPD OPM), 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 SYSTEM (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) *

MP☐MD☐PP☐ - OPTION 3: SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IDENTIFIED IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPACIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT FOR THE APPLICABLE SEISMIC HAZARD LEVEL_____ AND CONNECTION LEVEL_____ FOR THE PROJECT AND CONDITIONS.

FIRE RATED ASSEMBLIES NOTE:

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DESCRIPTION AND DETAIL OF ALL FIRE RATED ASSEMBLIES.

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

KEYNOTES

NOTES

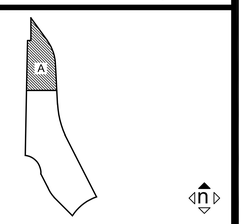
Consultant

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P 858.679.4030 | F 858.513.0559
www.jce-inc.com

REGISTERED PROFESSIONAL ENGINEER No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA

#17057.04 10/2/2017

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS_____ FLS_____ SSS_____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
ELECTRICAL LEGEND & NOTES

Architect's Seal

REGISTERED ARCHITECT No. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E1.0
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

A. General Information

Climate Zone: 10 — Conditioned Floor Area: 1920 — Unconditioned Floor Area: 0

Building Type:	☐ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel		
☑ Schools	☐ Relocatable Public Schools	☐ Conditioned Spaces	☐ Unconditioned Spaces		
Phase of Construction:	☑ New Construction	☐ Addition	☐ Alteration		
Method of Compliance:	☐ Complete Building	☑ Area Category	☐ Tailored		

Project Address: 35090 Horse Ranch Creek Rd. Fallbrook, CA 92028

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
◉	○	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
◉	○	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
◉	○	NRCC-LTI-03-E	Indoor Lighting Power Allowance
○	◉	NRCC-LTI-04-E	Tailored Method Worksheets
○	◉	NRCC-LTI-05-E	Low Voltage Track Lighting Worksheets
○	◉	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts		Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	1447	01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+	0	02			
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	−	0	03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	−	
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	1447	04	Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
05	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)			05	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
	Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1 — Alterations with replacement luminaires that have at least 50/70% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		2405		**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 — Alterations with replacement luminaires that have at least 50/70% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
◉	○	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.	☐ Field Inspector
◉	○	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
○	◉	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.	☐ Field Inspector
○	◉	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
○	◉	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
○	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
○	○	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
○	○	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
○	○	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used to demonstrate compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- This section shall be filled out ONLY for portable luminaires in offices (As defined in §100: 1). All other planned portable luminaires shall be documented on next page of this compliance document.
- This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
- Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft[1]							Office Location	Field Inspector	
01	02	03	04	05	06	07	08	09	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per luminaire	Number of luminaires	Installed portable luminaire watts in this office (02 x 03))	Square Feet of office	Watts per square foot (04 / 05)	If 06 ≤ 0.3, enter zero; If 06 > 0.3, (06-0.3)	(605 x 607)	Identify Office area in which these portable luminaires are installed	Pass	Fail
			0				0		☐	☐
			0				0		☐	☐
			0				0		☐	☐
			0				0		☐	☐
			0				0		☐	☐
Total installed portable luminaire watts that are greater than 0.3 W/ft[2] per office:							0	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule						Location	Field Inspection[2]	
01	02	03	04	05	06	07	08	
Name or Item Tag	Complete Luminaire Description (i.e, T-lamp fluorescent troffer; F32T8 are dimmable electronic ballast)	Watts per Luminaire	How wattage was determined: CEC Default (see Manual)	How wattage was determined: According to §10.3(b)	Number Luminaires	Total Installed Watts (03 x 04) (02 x 05)	Primary Function area in which these luminaires are installed	Pass	Fail
T.TE	5X0 Lumen 2'x4' LED Direct Indirect	43	☐	☐	19	1156	Labs	○	○
T1	4X0 Lumen 2'x2' LED Direct Indirect	36	☐	☐	8	288	Storage Rooms	○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			INSTALLED WATTS PAGE TOTAL			1447	Enter sum total of all pages into NRCC-LTI-01-E; Page 2	1447	

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Monica Hansen	Documentation Author Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Signature Date:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):	
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

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:	Monica Hansen	Responsible Designer Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Date Signed:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	License:	E14781
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
◉	○	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
◉	○	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	○	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	○	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
◉	○	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
◉	○	All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
◉	○	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
◉	○	The general lighting of any enclosed area 10K square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
◉	○	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
○	○	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(c) and daylit zones are shown on the plans.
○	○	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
○	○	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4 (a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule																							
			Standards Complying With [1] (✓ all that apply, or leave empty if Exempted)									PAF Credit Calculation [2]											
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15									
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§130.1(f)	§150.0(k)2	Installed Lighting Power Density (W/ft²)	# of Units	Watts per Control	Control Credit (W) (12 x 13)	Control Credit Subtotal	Pass	Fail							
Lab. Storage Rooms	Occupancy sensors	4			★							0		○	○								
Lab. Storage Rooms	MANUAL ON AND OFF SWITCH	1	★									0		○	○								
Lab. Storage Rooms	DIMMER	1		★								0		○	○								
												0		○	○								
												0		○	○								
												0		○	○								
												0		○	○								
												0		○	○								
Control Credit PAGE TOTAL (Sum of Column 15):														0									
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 15):														Enter Control Credit total into NRCC-LTI-01-E; Page 1.									

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §150.0(k)2 = Additional lighting controls installed to earn a PAF; §140.6(a) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Monica Hansen	Documentation Author Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Signature Date:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):	
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

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:	Monica Hansen	Responsible Designer Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Date Signed:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	License:	E14781
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☐ CONDITIONED SPACES ☑ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule																							
			Standards Complying With [1] (✓ all that apply, or leave empty if Exempted)									PAF Credit Calculation [2]											
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15									
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§130.1(f)	§150.0(k)2	Installed Lighting Power Density (W/ft²)	# of Units	Watts per Control	Control Credit (W) (12 x 13)	Control Credit Subtotal	Pass	Fail							
Lab. Storage Rooms	Occupancy sensors	4			★							0		○	○								
Lab. Storage Rooms	MANUAL ON AND OFF SWITCH	1	★									0		○	○								
Lab. Storage Rooms	DIMMER	1		★								0		○	○								
												0		○	○								
												0		○	○								
												0		○	○								
												0		○	○								
												0		○	○								
Control Credit PAGE TOTAL (Sum of Column 15):														0									
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 15):														Enter Control Credit total into NRCC-LTI-01-E; Page 1.									

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §150.0(k)2 = Additional lighting controls installed to earn a PAF; §140.6(a) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

	(a)	(b)
01 Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)	0	
02 Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		2405
03 Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1	0	2405

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

01	02		03		04
TYPE OF BUILDING (From §140.6 Table 140.6-B)	WATTS PER ft²	x	COMPLETE BLDG. AREA	=	ALLOWED WATTS
					0
Total Area					
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					0

C -1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES

	Watts
Total from section C-2	
Total from section C-3	
Total Watts. Enter Total Watts into section A, row 2 (Above on this page)	0

For Alterations Only – Reduced lighting power option (Total Allowed Watts x 0.85). Enter this value into section A, row 2 if using this option.

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

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C -2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE

- Do not include portable lighting for offices. Portable lighting for offices shall be documented only in Section G of NRCC-LTI-01-E.
- Separately list lighting for each primary function area as defined in §100.1 of the Standards.

01		02		03		04
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS PER ft²	X	AREA (ft²)	=	ALLOWED WATTS
Location in Building	Primary Function Area per Table 140.6-C					
Lab Room B01	Laboratory Area, Scientific	1.4		1406		2248.4
Storage Rooms B02, B03	Other Area	0.5		314		157
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
				TOTALS		1920
Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance document)						2405
						WATTS

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 3 of 4)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

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C-3 AREA CATEGORY METHOD ADDITIONAL LIGHTING WATTAGE ALLOWANCE (from Table 140.6-C Footnotes)

01	02	03 [3]	04	05	06	07
Primary Function	Sq Ft or Linear ft [1]	Additional Watts Allowed	Wattage Allowance (02 x 03)	Description(s) and Quantity of Special Luminaire Types in each Primary Function Area	Total Design Watts [2]	ALLOWED WATTS Smaller of 04 or 06
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
TOTALS – Enter into TOTAL AREA CATEGORY METHOD ADDITIONAL ALLOWANCES – Section C-1						0

1. Use linear feet only for additional allowance for white board or chalk board. All other additional Area Category allowances shall use watts per square foot.
2. Additional watts are available only when allowed according to the footnotes on bottom of Table 140.6-C, which include: Specialized task work; Ornamental lighting; Precision commercial and industrial work; Per linear foot of white board or chalk board; Accent, display and feature lighting; and Videoconferencing studio lighting..
3. Luminaire classification and wattage shall be determined in accordance with §130.0(c) of the Standards.

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 4 of 4)
Project Name: Palomar College Interim Village Labs Bldg B	Date Prepared: 9/8/17

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Monica Hansen	Documentation Author Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Signature Date:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):	
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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Responsible Designer Name:	Monica Hansen	Responsible Designer Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Date Signed:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	License:	E14781
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance — April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

A. General Information

Climate Zone: 10 — Conditioned Floor Area: 960 — Unconditioned Floor Area: 0

Building Type:	☐	Nonresidential	☐	High-Rise Residential	☐	Hotel/Motel
☑ Schools	☐	Relocatable Public Schools	☐	Conditioned Spaces	☐	Unconditioned Spaces
Phase of Construction:	☑	New Construction	☐	Addition	☐	Alteration
Method of Compliance:	☐	Complete Building	☐	Area Category	☐	Tailored

Project Address: 35090 Horse Ranch Creek Rd Fallbrook, CA 92028

B. Lighting Compliance Documents (Select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
◉	○	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
◉	○	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
◉	○	NRCC-LTI-03-E	Indoor Lighting Power Allowance
○	◉	NRCC-LTI-04-E	Tailored Method Worksheets
○	◉	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
○	◉	NRCC-LTI-06-E	Indoor Lighting Exhibit Conditions

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	610	**Installed** lighting NRCC-LTI-01-E, Table H, page 5	+	
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+	0			
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	610	Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)			Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
05	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1 — Alterations with replacement luminaires that have at least 50/50% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		1344	**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 — Alterations with replacement luminaires that have at least 50/50% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
◉	○	NRCC-LTI-01-E - Must be submitted for all buildings	
◉	○	NRCC-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS) to be recognized for compliance.	☐ Field Inspector
◉	○	NRCC-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
○	◉	NRCC-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.	☐ Field Inspector
○	◉	NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
○	◉	NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
○	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
○	○	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
○	○	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
○	○	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

- ☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
- ☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
- ☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
- ☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
- This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
- Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft²							Office Location	Field Inspector	
01	02	03	04	05	06	07	08	09	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Installed portable luminaire watts in this office (I02 x I03)	Watts per square foot (I04 / G02)	Watts per square foot (I05 x 10.764)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, (I05-0.3)	(I06 x G07)	Identify Office area in which these portable luminaires are installed		Pass	Fail
						0			○	○
		0				0			○	○
		0				0			○	○
		0				0			○	○
		0				0			○	○
Total installed portable luminaire watts that are greater than 0.3 W/ft² per office:						0	Enter sum total of all pages into NRCC-LTI-01-E; Page 2			

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule			Installed Watts				Location	Field Inspector	
01	02	03	04		05	06	07	08	
Name or Item Tag	Complete Luminaire Description (i.e. 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined: CEC-Tabulated Fixture Watt	How wattage was determined: According to §130.0(c)	Number Luminaires	Total Installed Watts in this area (03x05)	Primary Function area in which these luminaires are installed	Pass	Fail
T.TE	5000 Lumen 2'x4' LED Direct Indirect	61	☐	☐	10	610	Labs	○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
INSTALLED WATTS PAGE TOTAL						610	Enter sum total of all pages into NRCC-LTI-01-E; Page 2	610	

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

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STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
◉	○	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
◉	○	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	○	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	○	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
◉	○	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1
◉	○	All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
◉	○	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
◉	○	The general lighting of any enclosed area 10K square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
◉	○	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
○	○	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
○	○	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
○	○	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule			Standards Complying With[1] (✓ all that apply, or leave empty if Exempted)							PAF Credit Calculation[2]: Control Credit Lighting	PAF	Credit = (11) x (12)	Field Inspection: Acceptance Tests Completed	Field Inspector	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§130.1(f)	§150.0(k)2				Pass	Fail	
Lab	Occupancy sensors	3			★							0	☐	○	○
Lab	MANUAL ON AND OFF SWITCH	3	★									0	☐	○	○
Lab	DIMMER	3		★								0	☐	○	○
												0	☐	○	○
												0	☐	○	○
												0	☐	○	○
												0	☐	○	○
Control Credit PAGE TOTAL (Sum of Column 13):												0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):													Enter Control Credit total into NRCC-LTI-01-E; Page 1.		

1. §130.1(a) = Manual area controls; §130.0(b) = Multi-Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(d) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Skylit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Monica Hansen	Documentation Author Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Signature Date:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):	
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

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:	Monica Hansen	Responsible Designer Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Date Signed:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	License:	E14781
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

	(a)	(b)
01 Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)	0	
02 Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		1344
03 Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1	0	1344

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

01	02		03		04
TYPE OF BUILDING (From §140.6 Table 140.6-B)	WATTS PER ft²	X	COMPLETE BLDG. AREA	=	ALLOWED WATTS
					0
Total Area					
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					0

C-1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES

	Watts
Total from section C-2	
Total from section C-3	
Total Watts. Enter Total Watts into section A, row 2 (Above on this page)	0

For Alterations Only – Reduced lighting power option (Total Allowed Watts x 0.85). Enter this value into section A, row 2 if using this option.

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: Palomar College Interim Village Labs Bldg C	Date Prepared: 9/8/17

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☐ CONDITIONED spaces ☐ UNCONDITIONED spaces

C-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE

- Do not include portable lighting for offices. Portable lighting for offices shall be documented only in Section G of NRCC-LTI-01-E.
- Separately list lighting for each primary function area as defined in §100.1 of the Standards.

01		02		03		04
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS PER ft²	X	AREA (ft²)	=	ALLOWED WATTS
Location in Building	Primary Function Area per Table 140.6-C					
Lab Room 801	Laboratory Area, Scientific	1.4		960		1344
						0
						0
						0

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

A. General Information

Climate Zone:	10	Conditioned Floor Area: 1920 Unconditioned Floor Area: 0			
Building Type:	☐ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel		
☑ Schools	☐ Relocatable Public Schools	☐ Conditioned Spaces	☐ Unconditioned Spaces		
Phase of Construction:	☑ New Construction	☐ Addition	☐ Alteration		
Method of Compliance:	☐ Complete Building	☐ Area Category	☐ Tailored		

Project Address: 35090 Horse Ranch Creek Rd. Fallbrook, CA 92028

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
◉	○	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
◉	○	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
◉	○	NRCC-LTI-03-E	Indoor Lighting Power Allowance
○	◉	NRCC-LTI-04-E	Tailored Method Worksheets
○	◉	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
○	◉	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts		Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	1464		**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+	0				
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2		0		Minus Lighting Control Credits NRCC-LTI-02-E, page 2		
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	1464		Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
05	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)				Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
	Allowed Lighting Power Conditioned NRCC-LTI-02-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		2405		**Allowed** Lighting Power Unconditioned NRCC-LTI-02-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		

D. Declaration of Required Certificates of Installation

Declare by selectingyes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
◉	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
◉	○	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.	☐ Field Inspector
◉	○	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
○	◉	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.	☐ Field Inspector
○	◉	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
○	◉	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
○	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
○	○	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
○	○	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
○	○	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
- This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
- Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft[1]							Office Location	Field Inspector	
01	02	03	04	05	06	07	08	09	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per luminaire	Number of luminaires	Installed portable luminaire watts in this office (G02 x G03)			Watts per square foot (G04 / G05)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, (G06-0.3)	(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass	Fail
			0					0		☐	☐
			0					0		☐	☐
			0					0		☐	☐
			0					0		☐	☐
			0					0		☐	☐
Total installed portable luminaire watts that are greater than 0.3 W/ft² per office:								0	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule			Installed Watts				Location	Field Inspection[1]	
01	02		03	04	05	06	07	08	
Name or Item Tag	Complete Luminaire Description (e.g. 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)		Watts per Luminaire	How wattage was determined (CEC Default Table, Manufacturer Data, According to §130.0(c))	Number Luminaires	Total Installed Watts (Watts x Qty) (03 x 05)	Primary Function area in which these luminaires are installed	Pass	Fail
T.TE	5000 Lumen 2'x4' LED Direct Indirect		61	☐	☐	24	1464	Labs, Storage Rooms	○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
				☐	☐		0		○	○
		INSTALLED WATTS PAGE TOTAL				1464	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		1464

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that the Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Monica Hansen	Documentation Author Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Signature Date:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):	
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

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:	Monica Hansen	Responsible Designer Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Date Signed:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	License:	E14781
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4020

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
◉	○	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
◉	○	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	○	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	○	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
◉	○	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
◉	○	All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
◉	○	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
◉	○	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
◉	○	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
○	○	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
○	○	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
○	○	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4 (a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule			Standards Complying With:[1] (✓ all that apply, or leave empty if Exempted)								PAF Credit Calculation:[2] Occupancy Sensor Credit (Watts)	PAF	Daylit Credit (111 x 122)	Total Controlled Watts	Pass	Field Inspection[3] Fail
01	02		03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)		# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§130.1(f)	§150.0(k)2						
Lab. Storage Rooms	Occupancy sensors		4			★							0		☐	○
Lab. Storage Rooms	MANUAL ON AND OFF SWITCH		1	★									0		☐	○
Lab. Storage Rooms	DIMMER		1		★								0		☐	○
													0		☐	○
													0		☐	○
													0		☐	○
													0		☐	○
Control Credit PAGE TOTAL [Sum of Column 13]:													0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit 'or all pages HERE (Sum of all Column 13):														Enter Control Credit total into NRCC-LTI-01-E; Page 1		

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §150.0(k) = Additional lighting controls installed to earn a PAF; §140.6(a) = Prescriptive Secondary Sitkit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Monica Hansen	Documentation Author Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Signature Date:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):	
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

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:	Monica Hansen	Responsible Designer Signature:	Monica Hansen
Company:	Johnson Consulting Engineers	Date Signed:	9/8/17
Address:	12875 Brookprinter Place, Suite 300	License:	E14781
City/State/Zip:	Poway, CA 92064	Phone:	858-679-4030

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

- If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
- If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

	(a)	(b)
01 Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page).	0	
02 Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		2405
03 Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1	0	2405

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

01	02		03		04
TYPE OF BUILDING (From §140.6 Table 140.6-B)	WATTS PER ft²	X	COMPLETE BLDG. AREA	=	ALLOWED WATTS
					0
Total Area					
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					0

C.-1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES

	Watts
Total from section C-2	
Total from section C-3	
Total Watts. Enter Total Watts into section A, row 2 (Above on this page)	0

For Alterations Only – Reduced lighting power option (Total Allowed Watts x 0.85). Enter this value into section A, row 2 if using this option.

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: Palomar College Interim Village Labs Bldg D	Date Prepared: 9/8/17

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☐ CONDITIONED spaces ☐ UNCONDITIONED spaces

C.-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE

- Do not include portable lighting for offices. Portable lighting for offices shall be documented only in Section G of NRCC-LTI-01-E.
- Separately list lighting for each primary function area as defined in §100.1 of the Standards.

01		02		03		04
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS				ALLOWED
Location in Building	Primary Function Area per Table 140.6-C	PER ft²	X	AREA (ft²)	=	WATTS
Lab Room 801	Laboratory Area, Scientific	1.4		1696		2248.4
Storage Rooms 002, 003	Other Area	0.5		314		157
						0
						0
						0

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 1 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

A. General Information

Project Address: 35090 HORSE RANCH CREEK ROAD, FALLBROOK, CA 92028			Total Illuminated Hardscape Area: 699	
Phase of Construction:	☐ New Construction	☐ Addition	☑ Alteration	
Outdoor Lighting Zone (LZ)	☐ LZ-1	☐ LZ-2	☑ LZ-3	☐ LZ-4
I have confirmed with the AHJ which LZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114				

B. Lighting Compliance Documents (check box for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

☑	NRCC-LTO-01-E	Certificate of Compliance
☑	NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
☑	NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance
☐	NRCC-LTO-04-E	Outdoor Lighting Existing Conditions Certificate of Compliance

C. Summary of Allowed Outdoor Lighting Power		Watts
01	**Sum Total ALLOWED** Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1 Alterations with NO increase of connected lighting load may instead use the allowed wattage from NRCC-LTO-04, page 2.	1001.31
	Complies ONLY if **Installed** (Box 02) ≤ **Allowed** (Box 01)	
02	**Sum Total INSTALLED** Outdoor Lighting Wattage from NRCC-LTO-01-E, page 3.	94

D. Declaration of Required Installation Certificates

Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

☐ NRCI-LTO-01-E - Must be submitted for all buildings	☐ Field Inspector
☐ NRCI-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector

E. Declaration of Required Certificates of Acceptance

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

☐ NRCA-LTO-02-A - Must be submitted for outdoor lighting controls.	☐ Field Inspector

F. Schedule of Luminaires Exempt from the Outdoor Lighting Power Requirements in §140.7

01	02
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 2 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

G. Schedule of Luminaires Exempt from the Cutoff Requirements in §130.2(b)

01	02
Name or Symbol	Description of exempt luminaire in accordance with the exemptions
W	EACH LED HEAD IS LESS THAN 150W

H. Schedule of Luminaires Exempt from the Outdoor Lighting Control Requirements in §130.2(c)

01	02
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 3 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

I. Outdoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Cutoff	Field Inspector	
01	02	03	04		05	06	07	08	09	
			How wattage was determined							
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	CEC Default from NA8	According to §130.0(c)	Number of Luminaires	Total Installed Watts in this area (03 x 05)	Primary Function area in which these luminaires are installed (Outdoor Lighting Zone)	BUG Rating	Pass	Fail
			☐	☐		0	PARKING LOT LIGHT	UH: UL: FVH: BVH: FH: BH:	○	○
			☐	☐		0	WALKWAY LIGHT	UH: UL: FVH: BVH: FH: BH:	○	○
W	47W WALL PACKS	47	☐	☑	2	94	WALL PACKS	UH: UL: FVH: BVH: FH: BH:	○	○
					INSTALLED WATTS PAGE TOTAL:	94	Enter sum total of all pages (**Sum Total INSTALLED** Outdoor lighting wattage) into NRCC-LTO-01-E; Page 1		94	

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 4 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Monica Hansen	Documentation Author Signature: [signature]
Company: Johnson Consulting Engineers	Signature Date: 10/3/2017
Address: 12875 Brookprinter Place, Suite 300	CEA Certification Identification (if applicable):
City/State/Zip: Poway, CA 92064	Phone: 858-679-4030

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Responsible Designer Name: Monica Hansen	Responsible Designer Signature: [signature]
Company: Johnson Consulting Engineers	Date Signed: 10/3/2017
Address: 12875 Brookprinter Place, Suite 300	License: E14781
City/State/Zip: Poway, CA 92064	Phone: 858-679-4030

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTO-02-E (Revised 08/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-02-E
Outdoor Lighting Controls	(Page 1 of 3)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

A. Mandatory Outdoor Lighting Control Declaration Statements

Check all that apply:
- ☑ Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with §110.9(a).
- ☑ Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with §130.4(b).
- ☑ All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with §130.0(d).
- ☐ Part-Night Outdoor Lighting Controls, as defined in Section 100.1(b), shall meet the requirements in Section 110.9(b)5.
- ☐ All outdoor incandescent luminaires rated over 100 watts, determined in accordance with Section 130.0(c), shall be controlled by a motion sensor.
- ☐ All outdoor luminaires rated for use with lamps greater than 150 lamp watts, determined in accordance with Section 130.0(c), shall comply with Uplight and Glare requirements in accordance with Section 130.2(b)
- ☑ All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control, or other control capable of automatically switching OFF in accordance with Section 130.2(c)1.
- ☑ All installed outdoor lighting shall be circuited and independently controlled from other electrical loads by an automatic scheduling control in accordance with Section 130.2(c)2.
- ☑ All installed outdoor lighting, where the bottom of the luminaire is mounted 24 feet or less above the ground, shall be controlled with automatic lighting controls in accordance with Section 130.2(c)3.
- ☐ For Outdoor Sales Frontage, an automatic lighting control shall be installed in accordance with Section 130.2(c)4.
- ☐ For Building Facade, Ornamental Hardscape and Outdoor Dining lighting, an automatic lighting control shall be installed in accordance with Section 130.2(c)5
- ☐ Before an occupancy permit is granted for the newly constructed building or for the addition, or for any altered outdoor lighting controls, shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with §130.4.(a). Outdoor lighting controls shall comply with the applicable requirements of Section 130.2(c) and Reference Nonresidential Appendix NA7.8.

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTO-02-E (Revised 08/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-02-E
Outdoor Lighting Controls	(Page 2 of 3)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

B. Mandatory Outdoor Lighting Control Schedule and Field Inspection Checklist

Outdoor Lighting Control Schedule			Standards Complying With (✓ all that apply, or leave empty if Exempted)						✓ if Acceptance Test Required	Field Inspector	
01	02	03	04	05	06	07	08	09	10	11	
Location and Application of Luminaires Being Controlled	Type/ Description of Lighting Control (i.e. outdoor motion sensor, outdoor photocontrol, outdoor astronomical time-switch control, automatic scheduling control, part-night outdoor lighting control)	# of Units	§130.2(a)	§130.2(c)1	§130.2(c)2	§130.2(c)3	§130.2(c)4	§130.2(c)5		Pass	Fail
WALKWAY LIGHT	MOTION SENSOR	14				◆			☐	○	○
WALKWAY LIGHT	TIME CLOCK	1			◆				☐	○	○
									☐	○	○
									☐	○	○
									☐	○	○
									☐	○	○
									☐	○	○
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									☐	○	○
									☐	○	○

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTO-02-E (Revised 08/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-02-E
Outdoor Lighting Controls	(Page 3 of 3)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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Responsible Designer Name: Monica Hansen	Responsible Designer Signature: [signature]
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Address: 12875 Brookprinter Place, Suite 300	License: E14781
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STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 1 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

A. OUTDOOR LIGHTING POWER ALLOWANCE SUMMARY

1. General Hardscape Lighting Power Allowance (Site Total from Section B of NRCC-LTO-03-E) — 1. 178.01

2. Additional Specific "use it or lose it" Lighting Power Allowances listed in each of these cells shall be identical to total allowed watts determined in Section C-1 to C-4 of NRCC-LTO-03-E.

PER APPLICATION from Section C-1		PER UNIT LENGTH (SALES FRONTAGE) from Section C-2		PER HARDSCAPE AREA (ORNAMENTAL LIGHTING) from Section C-3		PER SPECIFIC AREA from Section C-4.		
0	+	0	+	0	+	0	=	2. 0

3. **Sum Total ALLOWED** Outdoor Lighting Wattage (add rows 1 and 2) — 3. 178.01

B. GENERAL HARDSCAPE LIGHTING POWER ALLOWANCE FROM TABLE 140.7-A

Area Wattage Allowance (AWA)				Linear Wattage Allowance (LWA)			Initial Wattage Allowance (IWA)	Total General Hardscape Lighting Allowance
01	02	03	04	05	06	07	08	09
Name of Area	Illuminated Hardscape Area	AWA Per Square Foot	AWA (B02 x B03)	Perimeter Length of General Hardscape	LPA per Linear Foot	LWA (B05 x B06)	IWA (Watts)	B04 + B07 + B08
WALKWAY	699	0.04	27.96	143	0.35	50.05	100	178.01
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
			0			0		0
							TOTAL	178.01

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 2 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

C. ADDITIONAL "USE IT OR LOSE IT" OUTDOOR LIGHTING POWER ALLOWANCES FOR SPECIFIC APPLICATIONS
- ☐ The additional specific outdoor lighting power allowance shall be the smaller of the allowed lighting power or the actual lighting power used.
- ☐ Use Outdoor Lighting Zone (OLZ) that is documented on page 1 of NRCC-LTO-01-E to calculate the specific wattage allowances.

C-1. WATTAGE ALLOWANCE PER APPLICATION – Table 140.7-B
- ☐ Available only for qualifying locations, which include Building Entrances or Exits; Primary Entrances to Senior Care Facilities, Police Stations, Hospitals, Fire Stations, and Emergency Vehicle Facilities; Drive Up Windows; Vehicle Service Station Uncovered Fuel Dispenser, ATM Machine Lighting
- ☐ If more than one luminaire type is used per location, use multiple rows for that location

01	02	03	04	05	06	07	08	09	10
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for Which Allowance is Claimed	Number of Qualifying Locations	Wattage Allowance per Qualifying Location	Allotted Watts (02 x 03)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per Luminaire	Design Watts (07 x 08)	Allowed Watts (smaller of 04 or 09)
			0					0	
			0					0	
			0					0	
			0					0	
								Sum total allowance per application on this site:	0

C-2. WATTAGE ALLOWANCE PER UNIT LENGTH (Sales Frontage) from Table 140.7-B
- ☐ If more than one luminaire type is used per location, use multiple rows for that location

01	02	03	04	05	06	07	08	09	10
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for Which Allowance is Claimed	Linear Feet of Sales Frontage	Wattage Allowance per Linear Foot	Allotted Watts (02 x 03)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per Luminaire	Design Watts (07 x 08)	Allowed Watts (smaller of 04 or 09)
			0					0	
			0					0	
			0					0	
			0					0	
								Sum total allowance for sales frontage on the site:	0

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 3 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

C-3. WATTAGE ALLOWANCE PER SQUARE FOOT OF HARDSCAPE AREA (Ornamental Lighting) – Table 140.7-B
- Allowance for the total site illuminated hardscape area. Luminaires qualifying for this allowance shall be rated for 100 watts or less as determined in accordance with Section 130.0(c), and shall be post-top luminaires, lanterns, pendant luminaires, or chandeliers.
- If more than one luminaire type is used per location, use multiple rows for that location

01	02	03	04	05	06	07	08	09	10
	ALLOTTED WATTS			DESIGN WATTS					
Name of area for which ornamental allowance is claimed	Square Feet of Hardscape	Wattage Allowance per Square Foot	Allotted Watts (02 x 03)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per Luminaire	Design Watts (07 x 08)	Allowed Watts (smaller of 04 or 09)
			0					0	
			0					0	
			0					0	
			0					0	
								Sum total allowance for ornamental lighting on the site:	0

C-4. WATTAGE ALLOWANCE PER SQUARE FOOT OF SPECIFIC AREA - Table 140.7-B
- Allowances for Building Facades; Outdoor Sales Lots; Vehicle Service Station Hardscape; Vehicle Service Station Canopies; Sales Canopies; Non-sales Canopies; Tunnels; Guard Stations; Student Pick-up/Drop-off zone: Outdoor Dining; Special Security Lighting for Retail Parking and Pedestrian Hardscape.
- If more than one luminaire type is used per location, use multiple rows for that location

01	02	03	04	05	06	07	08	09	10
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for Which Allowance is Claimed	Illuminated Area of Application	Wattage Allowance per Square Foot	Allotted Watts (02 x 03)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per Luminaire	Design Watts (07 x 08)	Allowed Watts (smaller of 04 or 09)
			0					0	
			0					0	
			0					0	
			0					0	
								Sum total allowance for specific area on the site:	0

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 4 of 4)
Project Name: PALOMAR COLLEGE - NORTH EDUCATION CENTER INTERIM VILLAGE	Date Prepared: 10/3/2017

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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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: Monica Hansen	Responsible Designer Signature: [signature]
Company: Johnson Consulting Engineers	Date Signed: 10/3/2017
Address: 12875 Brookprinter Place, Suite 300	License: E14781
City/State/Zip: Poway, CA 92064	Phone: 858-679-4030

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SM
KEYNOTES

NOTES

Consultant

REGISTERED PROFESSIONAL ENGINEER MONICA GIESE-HANSEN No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA

#17057.04 10/3/2017

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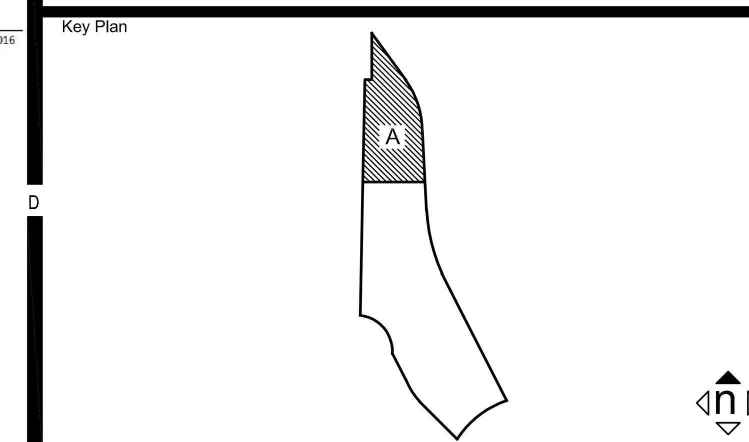
Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
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APPL. 04-116582
ACS____ FLS____ SSS____
DATE ____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
TITLE 24 OUTDOOR LIGHTING

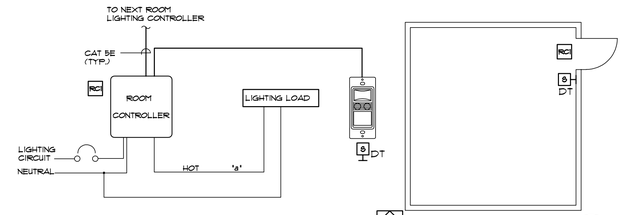
Architect's Seal

LICENSED ARCHITECT BRADLEY E. GLASSCOCK NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed: JF	Project No. 5015019-102
Drawn: AO	Scale:
QAQC RG	Drawing No. E2.0.3
Date: 10/13/2017	

PLEASE RECYCLE

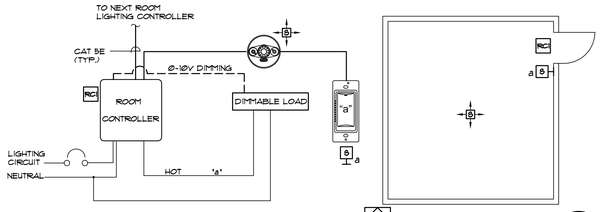
DSA SUBMITTAL



TYPICAL ROOM TYPE - STORAGE/RESTROOM (A)

NO SCALE

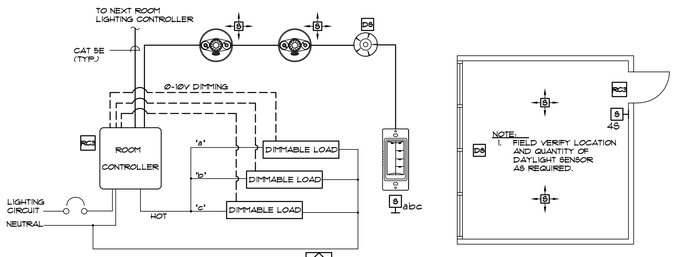
1 / E2.1



TYPICAL ROOM TYPE - STOR./R.R./W.R./IDF (C)

NO SCALE

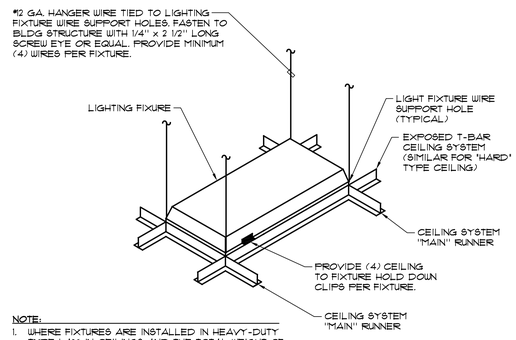
2 / E2.1



TYPICAL ROOM TYPE - CLASSROOM (G)

NO SCALE

3 / E2.1



NOTE:

1. WHERE FIXTURES ARE INSTALLED IN HEAVY-DUTY TYPE LAY-IN CEILINGS AND THE TOTAL WEIGHT OF THE FIXTURE IS LESS THAN 56 LBS. REDUCE THE QUANTITY OF HANGER WIRES TO (2) BLACK WIRES AT DIAGONAL CORNERS.
2. REFERENCE ARCHITECTURAL PLANS FOR ADDITIONAL CEILING ANCHORAGE REQUIREMENTS.

FLUORESCENT FIXTURE SEISMIC RESTRAINT DETAIL

NO SCALE

3CT-L1

4 / E2.1

SYMBOL LENGEND

- S — WALL MOUNTED MANUAL ON AND OFF SWITCH @48" U.O.N.
- S DT — WALL MOUNTED DUAL TECH OCCUPANCY SENSOR WITH MANUAL ON AND OFF 48" U.O.N.
- S — CEILING MOUNTED OCCUPANCY SENSOR (DUAL TECHNOLOGY)
- S — WALL MOUNTED OCCUPANCY SENSOR (DUAL TECH) @84" U.O.N.
- RCC — SINGLE CIRCUIT ROOM CONTROLLER FOR ROOMS WITH ONE DIMMING ZONE.
- RCC — SINGLE CIRCUIT ROOM CONTROLLER FOR ROOMS WITH TWO DIMMING ZONES.
- RCC — SINGLE CIRCUIT ROOM CONTROLLER FOR ROOMS WITH THREE DIMMING ZONES.
- PL — PLUG LOAD CONTROLLER
- DS — DAYLIGHT SENSOR
- S 4S — 4 ZONE DIMMING CONTROL STATION
- S K — MANUAL ON AND OFF KEY SWITCH
- S a — MAIN ENTRY MANUAL ON AND OFF WITH DIMMER FOR ZONE 'a'
- S ab — MAIN ENTRY MANUAL ON AND OFF WITH DIMMER FOR ZONE 'a'&'b'
- S abc — MAIN ENTRY MANUAL ON AND OFF WITH DIMMER FOR ZONE 'a'&'b'&'c'
- S D abc — MAIN ENTRY MANUAL DIMMERS FOR ZONE 'a', 'b' & 'c'

GENERAL NOTES

1. REFERENCE SPECIFICATION SECTION 260923 DIGITAL LIGHTING CONTROL SYSTEM FOR ADDITIONAL SCOPE OF WORK.
2. ITEMS RCC RCC RCC PL TO BE WALL MOUNTED ABOVE THE ROOM ENTRY DOOR, ABOVE THE CEILING IN ALL ROOMS WITH T-BAR CEILINGS.
3. ITEMS RCC RCC RCC PL TO BE LOCATED WITHIN A 24" x 24" RECESSED ENCLOSURE WITH HINGED LOCKING COVER LOCATED ABOVE THE ROOM ENTRY DOOR IN ALL ROOMS WITH INACCESSIBLE CEILINGS.
4. ALL 0-10V WIRING AND CAT 5E WIRING MAY BE INSTALLED AS OPEN WIRE WHERE ABOVE ACCESSIBLE CEILINGS. WHERE ABOVE INACCESSIBLE OR EXPOSED CEILINGS IT SHALL BE INSTALLED IN CONDUIT.
5. S — WHERE CEILING HEIGHT EXCEED 11'-0" OR ROOM HAS EXPOSED CEILING PROVIDE S TYPE SENSOR MOUNTED ON WALL IN PLACE OF CEILING SENSOR.

LIGHTING FIXTURE SCHEDULE

Mark	Approved Manufacturer's (See Key Note No.1)	Catalog Series Type (See Key Note No.2)	FIXTURE: Incandescent	Fluorescent	Metal Halide	High pressure sodium	Low pressure sodium	LED	Volts	Lamp Watts / Fixture Watts	LAMP: NO.	Type	MOUNTING: Recessed / Ceiling	Surface/ Ceiling	Wall Sconce	Recessed / Wall	Pendant	Surface / Wall	Pole	Description
T	Columbia	LTRE24 Grid 2'x4'	☐	☐	☐	☐	☐	■	☐ 120	52		LED	■	☐	☐	☐	☐	☐	☐	2'x4' DIRECT/INDIRECT
	Lithonia	2AVL4 Grid Series							☐ 208			Recessed direct/indirect fixture with opal diffuser, MINIMUM 5000 LUMENS, 4000 KELVIN, 0-10V DIMMING.								
	Philips Daybrite	2EVG Series							■ 277			☐ Provide emergency battery driver			☐ Provide custom color finish, to be selected at time of submittal				☐ See detail	
									☐ 480											
TE	Columbia	LTRE24 Grid 2'x4'	☐	☐	☐	☐	☐	■	☐ 120	61		LED	■	☐	☐	☐	☐	☐	☐	2'x4' DIRECT/INDIRECT
	Lithonia	2AVL4 Grid Series							☐ 208			Recessed direct/indirect fixture with opal diffuser, MINIMUM 5000 LUMENS, 4000 KELVIN, 0-10V DIMMING, provide minimum 700 lumen emergency battery driver.								
	Philips Daybrite	2EVG Series							■ 277			■ Provide emergency battery driver			☐ Provide custom color finish, to be selected at time of submittal				☐ See detail	
									☐ 480											
T1	Columbia	LTRE22 Grid 2'x2'	☐	☐	☐	☐	☐	■	☐ 120	61		LED	■	☐	☐	☐	☐	☐	☐	2'x2' DIRECT/INDIRECT
	Lithonia	2AVL2 Grid Series							☐ 208			Recessed direct/indirect fixture with opal diffuser, MINIMUM 3000 LUMENS, 4000 KELVIN, 0-10V DIMMING.								
	Philips Daybrite	2EVG Series							■ 277			☐ Provide emergency battery driver			☐ Provide custom color finish, to be selected at time of submittal				☐ See detail	
									☐ 480											
W	EATON INVUE	ENT Series	☐	☐	☐	☐	☐	■	■ 120	47		LED	☐	☐	■	☐	☐	☐	☐	
									☐ 208			MINIMUM 5,000 LUMEN, 4000 KELVIN, 0-10V DIMMING TYPE III DISTRIBUTION, CAST ALUMINUM, DARK BRONZE FINISH. MAXIMUM 16" WIDE x 8" HIGH x 9" DEEP ARCHITECTURAL SHAPE. PROVIDE WITH MOTION SENSOR TO DIM LIGHT DOWN TO 50% WHEN AREA IS NOT OCCUPIED.								
									☐ 277			☐ Provide emergency ballast Type 'EM'			☐ Provide custom color finish, to be selected at time of submittal				☐ See detail	
									☐ 480											
X	ISOLITE	SLX-60 Series	☐	☐	☐	☐	☐	☐	☐ 120	N/A	NA	NA	☐	☐	☐	☐	☐	☐	☐	
	Penteco	P160 Series							☐ 208			Surface mount self luminous exit sign mount above door. Green stencil, 20yr. Life, and plastic white frame. Field verify mounting hardware required.								
	SRB Tech.	171 Series							☐ 277	N/A		☐ Provide emergency ballast Type 'EM'			☐ Provide custom color finish, to be selected at time of submittal				☐ See detail	
	Lightolier	TE Series							☐ 480											
	Mule	EGX Series																		

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SM KEYNOTES

NOTES

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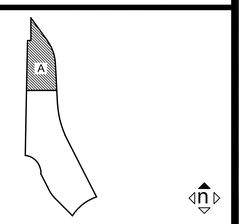
REGISTERED PROFESSIONAL ENGINEER No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA

#170570.04 10/5/2017

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

LIGHT FIXTURE SCHEDULE, DETAILS & CONTROL DETAILS

Architect's Seal

LICENSED ARCHITECT REGISTERED PROFESSIONAL ENGINEER NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E2.1
Date:	10/13/2017		

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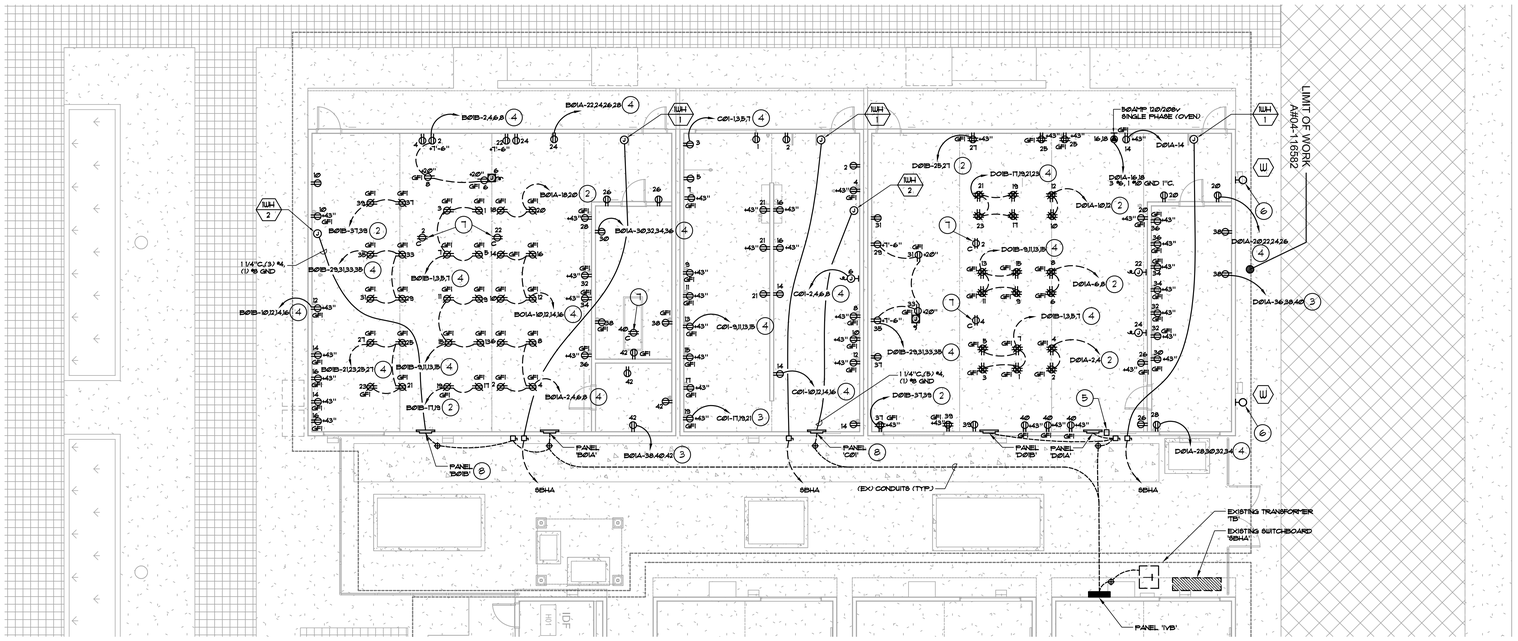
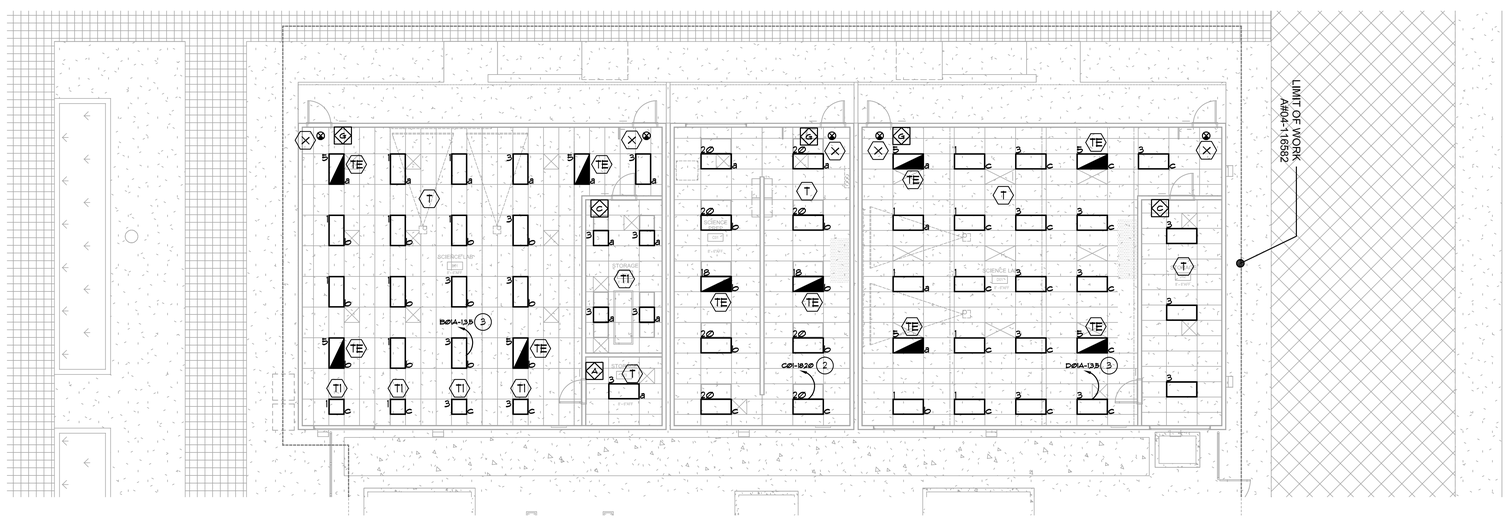


POWER FLOOR PLAN



LIGHTING FLOOR PLAN

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KEYNOTES

KEY NOTES:

1. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
2. 2 #12 (HOT), 1 #10 (NEUTRAL), 1 #12 (GND), 1/2"C.
3. 3 #12 (HOT), 1 #10 (NEUTRAL), 1 #12 (GND), 1/2"C.
4. 4 #12 (HOT), 2 #10 (NEUTRAL), 1 #12 (GND), 3/4"C.
5. PROVIDE PROGRAMMABLE TIMECLOCK 'TORK' DGLC SERIES MOUNT ABOVE PANEL. PROVIDE 20A/1P BREAKER IN LOAD CENTER AND 2 #12, 1 #12 GND. TO EXTERIOR LIGHTS, CONNECTED VIA TIMECLOCK.
6. MOUNT EXTERIOR LIGHT ON BUILDING EXTERIOR AS HIGH AS POSSIBLE, CONNECT VIA TIMECLOCK.
7. CEILING MOUNTED RECEPTACLE.
8. PROVIDE 60A/2P BREAKER FOR IWH-2.

NOTES

GENERAL NOTES:

1. NUMBERS ADJACENT TO EACH POWER DEVICE INDICATES THE CIRCUIT NUMBER TO WHICH THE DEVICE IS TO BE CONNECTED.
2. CIRCUIT HOMERUNS ARE INDICATED TO SHOW THE LOCATION AND NUMBER OF CIRCUITS TO BE GROUPED TOGETHER.
3. PROVIDE MINIMUM 3/4" CONDUIT AND #12 CIRCUIT CONDUCTORS AS REQUIRED TO CONNECT EACH POWER DEVICE TO THEIR INDICATED CIRCUIT (U.O.N.).
4. FIELD VERIFY EXACT ROUTING LOCATION FOR CONCEALED CONDUITS AND RECEPTACLES PRIOR TO ROUGH-IN.

⊕ EXTEND SITE FEEDER CONDUITS TO THIS LOCATION TO SERVE PANEL LOCATIONS FROM EXISTING CONDUITS INSTALLED IN CONTRACT A#04-116582.

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2019
ELECTRICAL
STATE OF CALIFORNIA

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#17057.04 10/5/2017

Key Plan

Consultant Seal

Agency Approval FILE NO. 37-C1

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APPL. 04-116582
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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

FLOOR PLAN - ELECTRICAL / LIGHTING

Architect's Seal

REGISTERED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E3.1
Date:	10/13/2017		

INTERIM VILLAGE 1

1/8" = 1'-0"

PLEASE RECYCLE

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KEYNOTES

- FACP — MAIN FIRE ALARM CONTROL PANEL
- FA — REMOTE FIRE ALARM POWER EXTENDER
- F — WALL MOUNTED WEATHERPROOF EXTERIOR HORN MOUNTED

NOTES

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#17057.04 10/5/2017

Key Plan

Consultant Seal

Agency Approval — FILE NO. 37-C1

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Project Title

PALOMAR COLLEGE — Learning for Success

Palomar North Education Center
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
INTERIM VILLAGE - SITE PLAN
FIRE ALARM

Architect's Seal — REGISTERED ARCHITECT — NO. C-32437 — REN. 02-28-19 — STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E4.0
Date:	10/13/2017		

OVERALL SITE PLAN - INTERIM VILLAGE | 1
1/16" = 1'-0"

PLEASE RECYCLE

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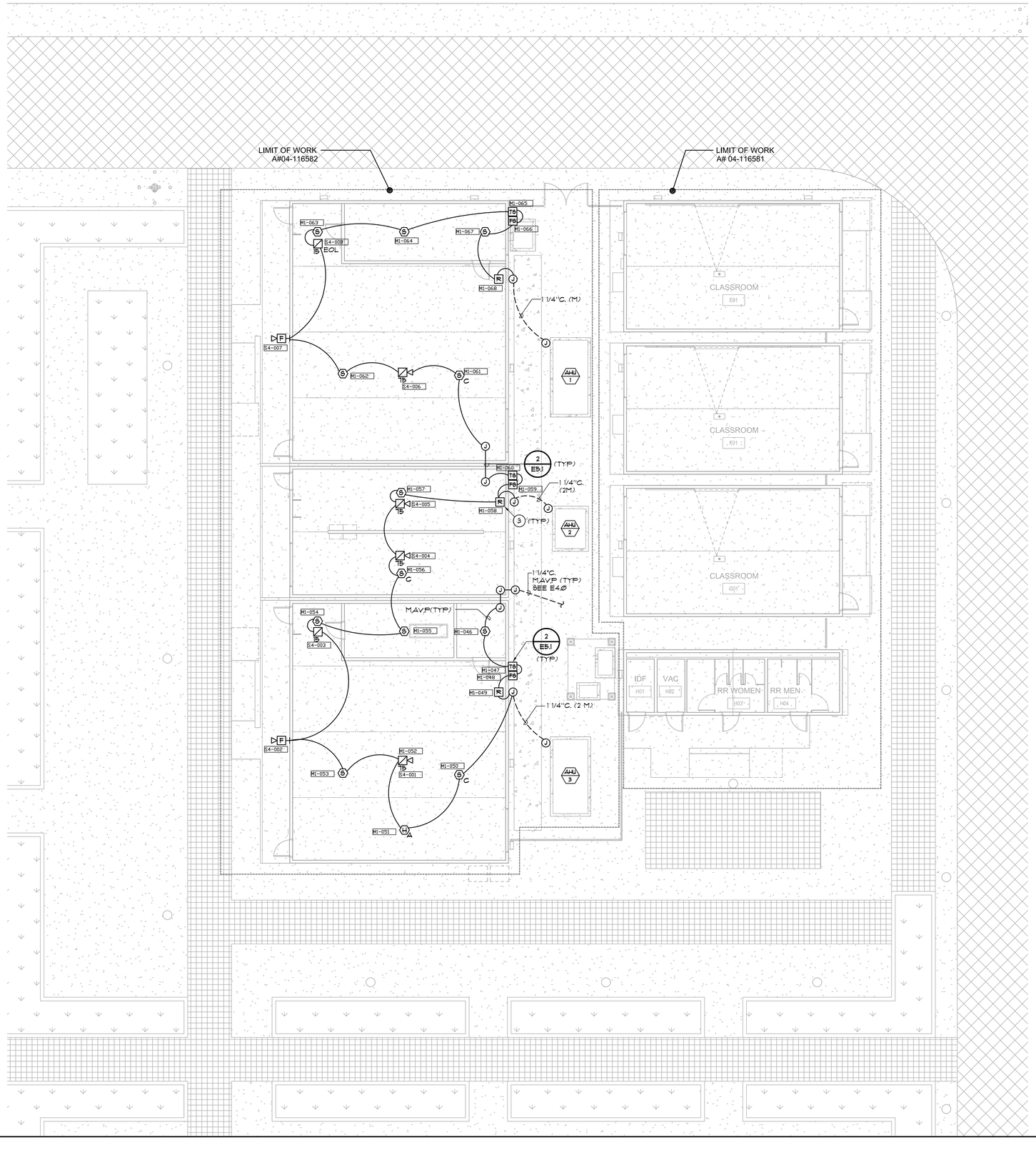

FIRE ALARM SYMBOL LEGENDS

- MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- S1 / 15 — CEILING MOUNTED FLASHING LIGHT STROBE (15 = STROBE CANDELA RATING) (S1 = SIGNAL CIRCUIT IDENTIFICATION)
- S1 / 15 — CEILING MOUNTED COMBINATION HORN/STROBE (15 = STROBE CANDELA RATING) (S1 = SIGNAL CIRCUIT IDENTIFICATION)
- S1 — WALL MOUNTED WEATHERPROOF EXTERIOR HORN MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (S1 = SIGNAL CIRCUIT IDENTIFICATION) SEE TYPICAL DETAIL 2/E4.1
- CEILING MOUNTED SMOKE DETECTOR
- C — CEILING MOUNTED SMOKE DETECTOR / CO DETECTOR WITH SOUNDER BASE
- CEILING MOUNTED HEAT DETECTOR
- A — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL
- FA — REMOTE FIRE ALARM POWER EXTENDER
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE
- PS — FLOW SWITCH WITH M
- TS — TAMPER SWITCH WITH M
- EOL — END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH 2010 CBC 907.1.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

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KEYNOTES

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT, 1P, 20 AMP BREAKER TO EXISTING RELO PANEL CONNECT TO "LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP-1",
3. PROVIDE CONNECTION TO HVAC UNIT CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON DETECTION OF SMOKE BY ANY AREA SMOKE DETECTOR.

NOTES

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. REFERENCE MECHANICAL PLANS FOR EXACT LOCTION OF ALL DUCT DETECTORS AND SMOKE DAMPER LOCATIONS.
5. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 3/4" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 3/4" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
6. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAYIN TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
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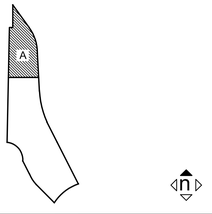

Consultant Seal

Agency Approval — FILE NO. 37-C1

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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

FLOOR PLAN - FIRE ALARM

Architect's Seal

REGISTERED ARCHITECT
No. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E4.1
Date:	10/13/2017		

INTERIM VILLAGE | 1 | 1/8" = 1'-0"

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NOTIFIER MODEL NFS 320

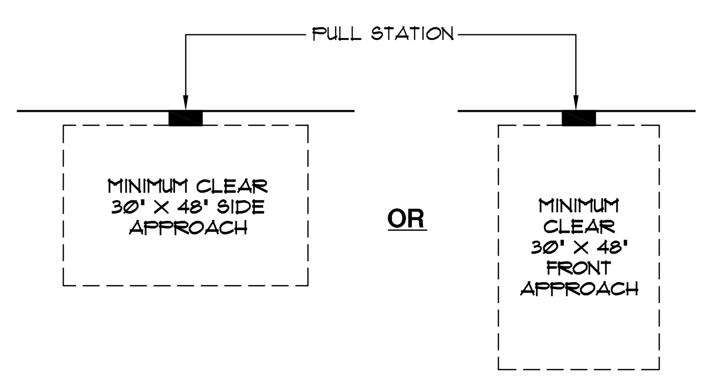
	SYM	MODEL NO.	DESCRIPTION	C.S.F.M. LISTING	MFG.
001	FACP	NSF-320	MAIN FIRE ALARM CONTROL PANEL	7165-0028:0243	NOTIFIER
002	FA	FCPS-24S6	REMOTE POWER SUPPLY	7315-0028:0225	NOTIFIER
003	SM	DSM	SYNC MODULE	7300-0785:0132	COOPER WHEELOCK
			BATTERIES		
006	S	FSP-851	INTELLIGENT SMOKE DETECTOR	7272-0028:0206	NOTIFIER
		B210LB	SENSOR BASE	7300-1653:0109	SYSTEM SENSOR
007	SC	FCO-851	COMBINATION SMOKE/CO DETECTOR	7275-0028:0284	NOTIFIER
		B200S	SOUNDER BASE	7135-1653:0213	SYSTEM SENSOR
009	H	FST-851	INTELLIGENT HEAT DETECTOR	7270-0028:0196	NOTIFIER
		B210LB	SENSOR BASE	7300-1653:0109	SYSTEM SENSOR
010	HA	FST-851H	INTELLIGENT HEAT DETECTOR (ABOVE CEILING)	7270-0028:0196	NOT
		B210LB	SENSOR BASE	7300-1653:0109	SYSTEM SENSOR *
013	FS	WFDN	WATERFLOW SWITCH	7770-1653:0231	SYSTEM SENSOR
014	TS	P1BV2	TAMPER SWITCH	7770-1653:0118	SYSTEM SENSOR
015	F	AH	EXTERIOR HORN	7125-0785:0131	COOPER WHEELOCK
			EXTERIOR FLUSH PLATE (PART OF ABOVE)		
018		LHSC	HORN/STROBE (15/30/75) cd (CEIL MNT)	7135-0785:0181	COOPER WHEELOCK
020		LSTC	STROBE (15/30/75/110) cd (CEIL MNT)	7125-0785:0180	COOPER WHEELOCK
025	M	FCM-1	ADDRESSABLE MONITOR MODULE	7300-0028:0219	NOTIFIER
026	R	FCM-1	ADDRESSABLE RELAY MODULE	7300-0028:0219	NOTIFIER
027	RI	RIC-1	120 VOLT RELAY MODULE	7300-1004:0101	SAE INC
028	~	TYPE FPL	SIGNAL LINE CIRCUIT CONDUCTORS ('M')	7161-2067:0100	WEST PENN
029	~	TYPE THHN	AUDIO VISUAL AND POWER CONDUCTORS (AV,P)	N/A	SOUTHWIRE

* IF OTHER MANUFACTURER IS USED IT IS TO BE UL. AND CSFM LISTED.

WIRING SCHEDULE

DES	CONDUCTOR TYPE	WIRE COLOR	CIRCUIT TYPE
P	(2) #12 THHN	RED/BLACK	POWER
M	(1) 1 PR #14 TWISTED SHIELDED	RED/BLACK/SHIELD	SIGNAL LINE CIRCUIT
AV	(2) #12 THHN	BLUE/WHITE	NOTIFICATION APP. CIRCUIT (NAC)

CLEAR SPACE REQUIREMENTS AT FIRE ALARM PULL STATIONS:



ANNUNCIATOR ZONE SCHEDULE

	ROOM SMOKE OR HEAT DETECTORS	ABOVE CEILING HEAT DETECTORS	MANUAL PULL STATIONS	DUCT DETECTORS	SPRINKLER SYSTEM	TROUBLE INDICATION
BLDG	YES	YES	NO	N/A	N/A	YES

NOTES:

1. ALL SMOKE DETECTORS, HEAT DETECTORS ABOVE CEILING DETECTORS, DUCT DETECTORS MANUAL PULL STATIONS, FLOW SWITCHES, TAMPER SWITCHES SHALL BE INDIVIDUALLY ADDRESSABLE.
2. PROVIDE (1) ANNUNCIATOR WHICH WILL PROVIDE LED LIGHT INDICATORS TO IDENTIFY THE ABOVE ZONE SCHEDULE (IN ADDITION TO ANNUNCIATOR NOTED IN NOTE # 3).
3. PROVIDE (1) 32 CHARACTER BACK-LIGHTED ALPHA-NUMERIC DISPLAY ANNUNCIATOR WITH KEYPAD FOR OPERATOR CONTROL, PROGRAMMING AND TESTING.

FIRE ALARM MONITORING NOTE:

1. AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC SECTION 907. 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. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

FIRE ALARM GENERAL REQUIREMENTS:

1. THE COMPLETE INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE ABOVE LOCAL MANUFACTURERS REPRESENTATIVE. SEE SPECIFICATIONS (28 30 00), FOR ADDITIONAL CONTRACTOR QUALIFICATIONS AND REQUIREMENTS.
2. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 3/4" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 3/4" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TYPES AND QUANITITES SHOWN ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE ALL WIRING AS REQUIRED TO MAKE A FULLY OPERATIONAL SYSTEM. SHOP DRAWINGS AND OR AS-BUILT DOCUMENTS SHALL INDICATE ALL WIRING PROVIDED.
3. THE AUDIBILITY OF FIRE ALARM WARNING DEVICES SHALL BE AUDIBLE THROUGH THE OCCUPANCY WITH A MINIMAL SOUND LEVEL 15 db's OVER THE AMBIENT NOISE LEVEL. ADD ADDITIONAL DEVICES AS REQUIRED.
4. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A REACCEPTANCE TEST OF THE ENTIRE SYSTEM SHALL BE PERFORMED IN THE PRESENCE OF THE ENFORCING AGENCY AND IN ACCORDANCE WITH SPECIFICATIONS (28 30 00). THE CONTRACTOR SHALL FURNISH db METERS AND ALL OTHER EQUIPMENT TO PERFORM THESE TESTS.
5. ALL CONDUIT PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL PREVENT THE PASSAGE OF HEAT, SMOKE AND FIRE GASES. ALL PENETRATIONS SHALL COMPLY WITH U.L. ASSEMBLY WL-1001. REFER TO THROUGH-PENETRATION FIRESTOP DETAIL ON THE DETAIL SHEET.
6. ALL OPERATING HARDWARE AT INITIATING DEVICES SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST, AND THE FORCE REQUIRED TO OPERATE SHALL BE LESS THAN 5 POUNDS.

APPLICABLE CODES

2016 BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24 C.C.R.).

2016 CALIFORNIA BUILDING CODE (PART 2, TITLE 24 C.C.R.).
(2012 INTERNATIONAL BUILDING CODE WITH 2013 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24 CCR)
(2011 NATIONAL ELECTRICAL CODE AND 2013 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR)
(2012 UNIFORM MECHANICAL CODE WITH 2013 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA PLUMBING CODE (PART 5, TITLE 24, CCR)
(2012 UNIFORM PLUMBING CODE AND 2013 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)

2016 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR)
(2015 INTERNATIONAL FIRE CODE AND 2015 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.

2016 CALIFORNIA REFERENCED STANDARDS (PART 12, TITLE 24, CCR)

TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS	2013 EDITION
NFPA 14	STANDPIPE SYSTEMS (CA AMENDED)	2013 EDITION
NFPA 17A	WEST CHEMICAL SYSTEMS	2013 EDITION
NFPA 20	STATIONARY PUMPS	2013 EDITION
NFPA 24	PRIVATE FIRE MAINS (CA AMENDED)	2013 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2013 EDITION
NFPA 80	FIRE DOOR AND OTHER OPENING PROTECTIVES	2013 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2013 EDITION

REFERENCE CODE SECTION FOR NFPA STANDARDS - 2013 CBC (SFM) CHAPTER 35.
SEE CHAPTER FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

MAXIMUM NUMBER OF CONDUCTORS IN TRADE SIZES OF CONDUIT OR TUBING MINIMUM CONDUIT SIZE FOR THIS PROJECT IS 3/4"

CONDUIT TRADE SIZE (INCHES)		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5
TYPE LETTERS	CONDUCTOR SIZE AWG, kcmil											
THWN	14 12	13 10	24 18	39 29	69 51	94 70	154 114	164				
THHN	10 8	6 3	11 5	18 9	32 16	44 22	73 36	104 51	160 79	106	136	

TRADE SIZE	INTERNAL DIAMETER INCHES	AREA—SQUARE INCHES 100% INCHES	OVER 2 COND. 40%	PERCENT REDUCTION PER NUMBER OF 18AWG TWISTED SHIELD PAIRS 1	2	3	4	5	6	7	8
1/2	.622	.30	.12	38%	66%	99%	X	X	X	X	X
3/4	.824	.53	.21	19%	38%	57%	76%	95%	X	X	X
1	1.049	.86	.34	12%	24%	36%	48%	60%	72%	84%	96%
1 1/4	1.380	1.50	.60	7%	14%	21%	28%	35%	42%	49%	56%
1 1/2	1.610	2.04	.82	5%	10%	15%	20%	25%	30%	35%	40%
2	2.067	3.36	1.34	3%	6%	9%	12%	15%	18%	21%	24%

FIRE ALARM SEQUENCE OF OPERATION

ACTION \ DEVICE	MANUAL PULL STATION	AREA/DUCT SMOKE/HEAT DETECTOR	AC POWER FAILURE	SPRINKLER ACTIVATION TAMPER SW.	SPRINKLER ACTIVATION FLOW SW.
SOUND ALARM TROUGHOUT BLDG.	YES	YES	NO	N/A	YES
ACTIVATE RELAY FOR MONITORING	YES	YES	YES	N/A	YES
ANNUNCIATE AT PANEL AND ANNUNCIATOR	YES	YES	YES	N/A	YES
SOUND TROUBLE BUZZER	ON WIRING FAULT	ON WIRING FAULT	YES	N/A	ON WIRING FAULT
SOUND SPRINKLER BELL	NO	NO	NO	N/A	YES
REPORT TO MONITORING STATION	YES	YES	YES	YES	YES
INITIATE SHUTDOWN OF HVAC UNITS	YES	YES	NO	N/A	YES

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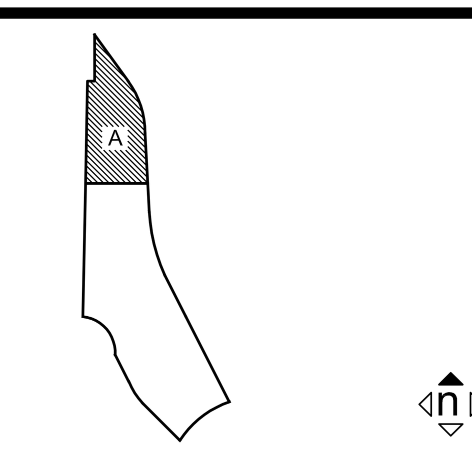
REGISTERED PROFESSIONAL ENGINEER — MONICA GIESE-HANSEN — No. E 14781 — Exp. 6-30-2019 — ELECTRICAL — STATE OF CALIFORNIA
#17057.04 9/11/2017

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS ____ FLS ____ SSS ____
DATE ____

Project Title
Palomar North Education Center
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

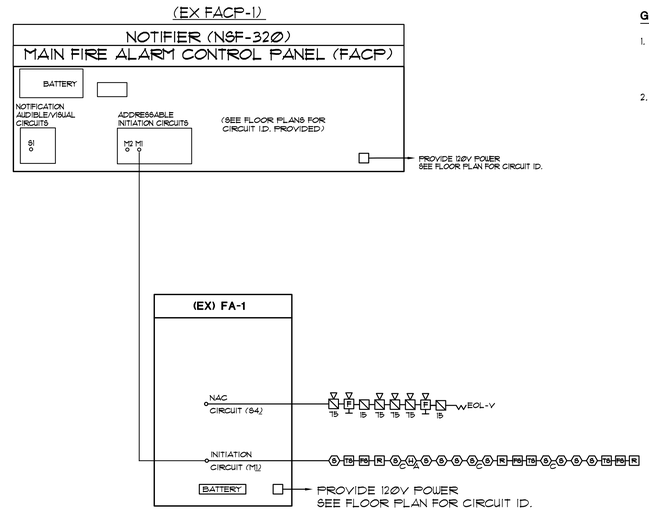
Drawing Title:
FIRE ALARM SCHEDULE

Architect's Seal
LICENSED ARCHITECT — BRADLEY E. GLASSCOCK — NO. C-32437 — REN. 02-28-19 — STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E4.4
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL



GENERAL NOTES:

1. ALL WIRING INDICATED IS FOR GENERAL REFERENCE ONLY. CONTRACTOR SHALL PROVIDE ALL WIRING AND COMPONENTS NEEDED TO PROVIDE A COMPLETE OPERATIONAL SYSTEM.
2. REFERENCE FLOOR PLANS FOR EXACT QUANTITY, TYPE, AND LOCATION OF ALL DEVICES.

FIRE ALARM RISER DIAGRAM

NO SCALE

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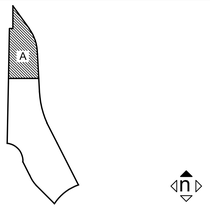
REGISTERED PROFESSIONAL ENGINEER No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA
#17057.04 10/2/2017

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1
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Project Title
PALOMAR COLLEGE Learning for Success
Palomar North Education Center
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
FIRE ALARM RISER DIAGRAM

Architect's Seal
REGISTERED ARCHITECT ERIC G. GLANCY NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E4.5
Date:	10/13/2017		

(EX) FA-1
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Extender Panel(HPF24S6)	1	0.002	0.002	1	0.002	0.002
Dual Sync Module	1	0.035	0.035	1	0.035	0.035
Exterior Horn	2		0.000	2	0.050	0.100
15cd Horn/Strobe	0		0.000	0	0.082	0.000
30cd Horn/Strobe	0		0.000	0	0.102	0.000
75cd Horn/Strobe	0		0.000	0	0.148	0.000
110cd Horn/Strobe	0		0.000	0	0.197	0.000
15cd Horn/Strobe (Ceiling)	0		0.000	0	0.082	0.000
30cd Horn/Strobe (Ceiling)	0		0.000	0	0.102	0.000
75cd Horn/Strobe (Ceiling)	4		0.000	4	0.148	0.592
95cd Horn/Strobe (Ceiling)	0		0.000	0	0.176	0.000
15cd Strobe Only	0		0.000	0	0.057	0.000
30cd Strobe Only	0		0.000	0	0.085	0.000
75cd Strobe Only	0		0.000	0	0.135	0.000
110cd Strobe Only	0		0.000	0	0.182	0.000
15cd Strobe Only (Ceiling)	2		0.000	2	0.061	0.122
30cd Strobe Only (Ceiling)	0		0.000	0	0.085	0.000
75cd Strobe Only (Ceiling)	0		0.000	0	0.135	0.000
95cd Strobe Only (Ceiling)	0		0.000	0	0.163	0.000
Total Standby Amperage			**0.137**	**Total Alarm Amperage**		**0.851**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.137 = 3.288 Amp Hours

Alarm Time Required

.083 (5 Min.) x Total Alarm Amperage = .083 x 0.851 = 0.071 Amp Hours

Total Required = **3.359** Amp Hours

Minimum Battery Amp Hour Required = **7** Amp Hours

Fire Alarm Voltage Drop Calculations

Calculation Formula:

Total Current x Feet x 21.6 / Circular Mills (Voltage Drop)

Voltage Drop / 24 Volts x 100 Percent = Percentage Voltage Drop

Circular Mils Using #10 wire =10380
Circular Mils Using #12 wire = 6530
Circular Mils Using #14 wire = 4110
Circular Mils Using #18 wire = 1620

FA-1

Circuit I.D.	Device Type	Devices x Current		Total Current	Distance In Feet	Circular Mils	=	Total Voltage Dropped: Volts Dropped	=	% Volts Dropped
S 4	Exterior Horn	2	0.050	0.100						
	Sync Module	1	0.035	0.035						
	15cd Horn / Strobe	0	0.082	0.000						
	30cd Horn / Strobe	0	0.102	0.000						
	75cd Horn / Strobe	0	0.148	0.000						
	110cd Horn / Strobe	0	0.197	0.000						
	15cd Horn / ST (Ceiling)	0	0.082	0.000						
	30cd Horn / ST (Ceiling)	0	0.102	0.000						
	75cd Horn / ST (Ceiling)	4	0.148	0.592						
	95cd Horn / ST (Ceiling)	0	0.176	0.000						
	15cd Strobe	0	0.057	0.000						
	30cd Strobe	0	0.085	0.000						
	75cd Strobe	0	0.135	0.000						
	110cd Strobe	0	0.182	0.000						
	15cd Strobe (Ceiling)	2	0.061	0.122						
	30cd Strobe (Ceiling)	0	0.085	0.000						
	75cd Strobe (Ceiling)	0	0.135	0.000						
	95cd Strobe (Ceiling)	0	0.163	0.000						
			Total	0.849	280	6530	=	0.786	=	**3.28%**

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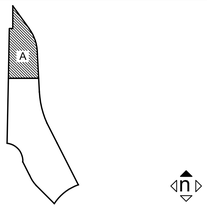
REGISTERED PROFESSIONAL ENGINEER No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA

#17057.04 10/2/2017

Key Plan



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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
FIRE ALARM CALCULATIONS

Architect's Seal

LICENSED ARCHITECT REGISTERED PROFESSIONAL ENGINEER NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E4.6
Date:	10/13/2017		

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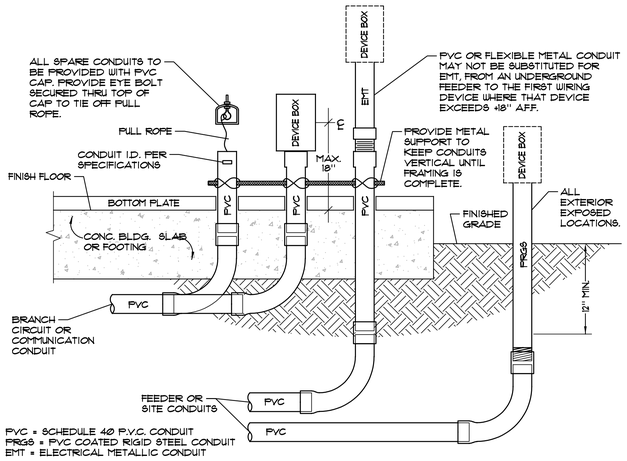


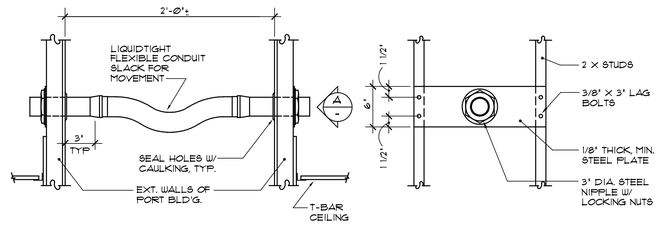
PVC = SCHEDULE 40 P.V.C. CONDUIT
FRGS = PVC COATED RIGID STEEL CONDUIT
EMT = ELECTRICAL METALLIC CONDUIT

TYPICAL CONDUIT DETAIL

NO SCALE

DET- C13

1 / E5.1



SECTION

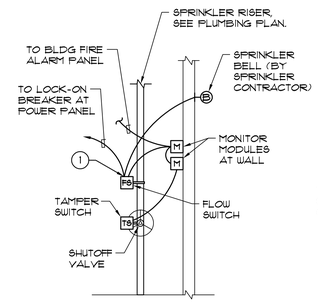
ELEV. A

CONDUIT CONNECTIONS AT BUILDING SEPARATIONS

NO SCALE

DET- C06

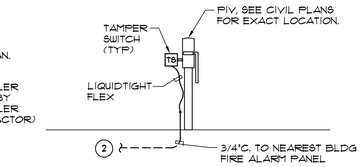
2 / E5.1



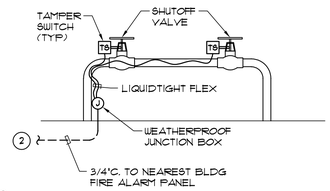
BUILDING SPRINKLER RISER

KEY NOTES:

1. TAMPER SWITCH AUXILIARY CONTACTS TO ACTIVATE SPRINKLER BELL.
2. PROVIDE CONNECTION TO MONITOR MODULE LOCATED IN FIRE RISER ROOM OR ABOVE NEAREST ACCESSIBLE CEILING IN NEAREST BUILDING.



POST INDICATOR VALVE (PIV)



BACKFLOW PREVENTION ASSEMBLY

TYPICAL FIRE SPRINKLER SYSTEM CONNECTION DETAILS

NO SCALE

DET- M48

3 / E5.1

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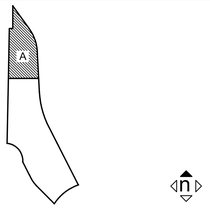
#17057.04 9/11/2017

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

ELECTRICAL DETAILS

Architect's Seal

REGISTERED ARCHITECT NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E5.1
Date:	10/13/2017		

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PANEL SCHEDULES

B01A

120/208 1PH, 3WIRE — 200 AMP — Main: Breaker / Lug — Enclosure: Recessed X / Surface — ENCLOSURE TYPE: X NEMA TYPE 1; NEMA TYPE 3R; NEMA TYPE 4X — ENCLOSURE NOTE

200% Neutral Bus; (INTEGRAL)TVSS Protection; (REMOTE)TVSS Protection; Service Entrance Rated X; Load Side Feed thru Lugs

GENERAL DISTRIBUTION BREAKER REQUIREMENTS : PROVIDE LOCK ON BREAKER DEVICES FOR ALL EMERGENCY LIGHTING, WATER HEATERS MOTORS, AND FIRE ALARM EQUIPMENT SERVED FROM THIS PANEL

LCL	NHL	CIRCUIT DESCRIPTION	AMP	POLE	NO	PHASE A	PHASE B	NO	AMP	POLE	CIRCUIT DESCRIPTION	LCL	NHL
		Lighting	20	1	1	1200 800		2	20	1	RECEPTACLES		
		Lighting	20	1	3		1200 800	4	20	1	RECEPTACLES		
		Lighting	20	1	5	1200 1200		6	20	1	RECEPTACLES		
		Spare	20	1	7		1200	8	20	1	RECEPTACLES		
		Spare	20	1	9	1200		10	20	1	RECEPTACLES		
		Spare	20	1	11		1200	12	20	1	RECEPTACLES		
		Spare	20	1	13	1200		14	20	1	RECEPTACLES		
		Spare	20	1	15		1200	16	20	1	RECEPTACLES		
		Spare	20	1	17	1200		18	20	1	RECEPTACLES		
		Spare	20	1	19		1200	20	20	1	RECEPTACLES		
		Spare	20	1	21	1200		22	20	1	RECEPTACLES		
		Spare	20	1	23		1200	24	20	1	RECEPTACLES		
		Spare	20	1	25	1200		26	20	1	RECEPTACLES		
		Spare	20	1	27		1200	28	20	1	RECEPTACLES		
		Spare	20	1	29	1200		30	20	1	RECEPTACLES		
		Spare	20	1	31		1200	32	20	1	RECEPTACLES		
		Spare	20	1	33	1200		34	20	1	RECEPTACLES		
		Spare	20	1	35		1200	36	20	1	RECEPTACLES		
		Spare	20	1	37	1200		38	20	1	RECEPTACLES		
		Spare	20	1	39		1200	40	20	1	RECEPTACLES		
		RECEPTACLES	20	1	41	1200		42	20	1	RECEPTACLES		

SPECIAL PANEL NOTE — NOTE #1 PROVIDE LOCK–ON BREAKER IN SPACE; NOTE #2

NHL= Non Harmonic Load; LCL= Long Continuous Load

	PHASE A	PHASE B
TOTAL LOAD PER PHASE	15200	12800
25% LONG CONTINUOUS LOADS	0	0
SUB PANEL		
SUB PANEL		
TOTAL CONNECTED LOAD	15200	12800

HIGH PHASE 15200 / 0.9pf = VA @ 120V 140.7 AMPS; ALL PHASES 28000 / 0.9pf = VA @ 208V 149.6 AMPS; DEMAND PER NEC 220-34 0 sq. ft. AMPS

Max. Neut. Laod 215 AMPS

B01B

120/208 1PH, 3WIRE — 200 AMP — Main: Breaker / Lug — Enclosure: Recessed X / Surface — ENCLOSURE TYPE: X NEMA TYPE 1; NEMA TYPE 3R; NEMA TYPE 4X — ENCLOSURE NOTE

200% Neutral Bus; (INTEGRAL)TVSS Protection; (REMOTE)TVSS Protection; Service Entrance Rated X; Load Side Feed thru Lugs

GENERAL DISTRIBUTION BREAKER REQUIREMENTS : PROVIDE LOCK ON BREAKER DEVICES FOR ALL EMERGENCY LIGHTING, WATER HEATERS MOTORS, AND FIRE ALARM EQUIPMENT SERVED FROM THIS PANEL

LCL	NHL	CIRCUIT DESCRIPTION	AMP	POLE	NO	PHASE A	PHASE B	NO	AMP	POLE	CIRCUIT DESCRIPTION	LCL	NHL
		RECEPTACLES	20	1	1	1200		2	20	1	RECEPTACLE		
		RECEPTACLES	20	1	3		1200	4	20	1	RECEPTACLE		
		RECEPTACLES	20	1	5	1200		6	20	1	RECEPTACLE		
		RECEPTACLES	20	1	7		1200	8	20	1	RECEPTACLE		
		RECEPTACLES	20	1	9	1200		10	20	1	SPARE		
		RECEPTACLES	20	1	11		1200	12	20	1	SPARE		
		RECEPTACLES	20	1	13	1200		14	20	1	SPARE		
		RECEPTACLES	20	1	15		1200	16	20	1	SPARE		
		RECEPTACLES	20	1	17	1200		18	20	1	SPARE		
		RECEPTACLES	20	1	19		1200	20	20	1	SPARE		
		RECEPTACLES	20	1	21	1200		22	20	1	SPARE		
		RECEPTACLES	20	1	23		1200	24	20	1	SPARE		
		RECEPTACLES	20	1	25	1200		26	20	1	SPARE		
		RECEPTACLES	20	1	27		1200	28	20	1	SPARE		
		RECEPTACLES	20	1	29	1200		30	20	1	SPARE		
		RECEPTACLES	20	1	31		1200	32	20	1	SPARE		
		RECEPTACLES	20	1	33	1200		34	20	1	SPARE		
		RECEPTACLES	20	1	35		1200	36	20	1	SPARE		
		RECEPTACLES	20	1	37	1200		38	20	1	SPARE		
		RECEPTACLES	20	1	39		1200	40	20	1	SPARE		
		RECEPTACLES	20	1	41	1200		42	20	1	SPARE		

SPECIAL PANEL NOTE — NOTE #1 PROVIDE LOCK–ON BREAKER IN SPACE; NOTE #2

NHL= Non Harmonic Load; LCL= Long Continuous Load

	PHASE A	PHASE B
TOTAL LOAD PER PHASE	13200	12000
25% LONG CONTINUOUS LOADS	0	0
SUB PANEL		
SUB PANEL		
TOTAL CONNECTED LOAD	13200	12000

HIGH PHASE 13200 / 0.9pf = VA @ 120V 122.2 AMPS; ALL PHASES 25200 / 0.9pf = VA @ 208V 134.6 AMPS; DEMAND PER NEC 220-34 0 sq. ft. AMPS

Max. Neut. Laod 187 AMPS

C01

120/208 1PH, 3WIRE — 200 AMP — Main: Breaker / Lug — Enclosure: Recessed X / Surface — ENCLOSURE TYPE: X NEMA TYPE 1; NEMA TYPE 3R; NEMA TYPE 4X — ENCLOSURE NOTE

200% Neutral Bus; (INTEGRAL)TVSS Protection; (REMOTE)TVSS Protection; Service Entrance Rated X; Load Side Feed thru Lugs

GENERAL DISTRIBUTION BREAKER REQUIREMENTS : PROVIDE LOCK ON BREAKER DEVICES FOR ALL EMERGENCY LIGHTING, WATER HEATERS MOTORS, AND FIRE ALARM EQUIPMENT SERVED FROM THIS PANEL

LCL	NHL	CIRCUIT DESCRIPTION	AMP	POLE	NO	PHASE A	PHASE B	NO	AMP	POLE	CIRCUIT DESCRIPTION	LCL	NHL
		RECEPTACLES	20	1	1	1200 800		2	20	1	RECEPTACLE		
		RECEPTACLES	20	1	3		1200 800	4	20	1	RECEPTACLE		
		RECEPTACLES	20	1	5	1200 1200		6	20	1	RECEPTACLE		
		RECEPTACLES	20	1	7		600 1200	8	20	1	RECEPTACLE		
		RECEPTACLES	20	1	9	800 1200		10	20	1	RECEPTACLE		
		RECEPTACLES	20	1	11		800 1200	12	20	1	RECEPTACLE		
		RECEPTACLES	20	1	13	800 1200		14	20	1	RECEPTACLE		
		RECEPTACLES	20	1	15		800 1200	16	20	1	RECEPTACLE		
		RECEPTACLES	20	1	17	800		18	20	1	SPARE		
		RECEPTACLES	20	1	19		800	20	20	1	SPARE		
		RECEPTACLES	20	1	21	800		22	20	1	SPARE		
		Spare	20	1	23			24	20	1	SPARE		
		Spare	20	1	25			26	20	1	SPARE		
		Spare	20	1	27			28	20	1	SPARE		
		Spare	20	1	29			30	20	1	SPARE		
		Spare	20	1	31			32	20	1	SPARE		
		Spare	20	1	33			34	20	1	SPARE		
		Spare	20	1	35			36	20	1	SPARE		
		Spare	20	1	37			38	20	1	SPARE		
		Spare	20	1	39			40	20	1	SPARE		
		RECEPTACLES	20	1	41			42	20	1	SPARE		

SPECIAL PANEL NOTE — NOTE #1 PROVIDE LOCK–ON BREAKER IN SPACE; NOTE #2

NHL= Non Harmonic Load; LCL= Long Continuous Load

	PHASE A	PHASE B
TOTAL LOAD PER PHASE	10000	8600
25% LONG CONTINUOUS LOADS	0	0
SUB PANEL		
SUB PANEL		
TOTAL CONNECTED LOAD	10000	8600

HIGH PHASE 10000 / 0.9pf = VA @ 120V 92.6 AMPS; ALL PHASES 18600 / 0.9pf = VA @ 208V 99.4 AMPS; DEMAND PER NEC 220-34 0 sq. ft. AMPS

Max. Neut. Laod 142 AMPS

D01A

120/208 1PH, 3WIRE — 200 AMP — Main: Breaker / Lug — Enclosure: Recessed X / Surface — ENCLOSURE TYPE: X NEMA TYPE 1; NEMA TYPE 3R; NEMA TYPE 4X — ENCLOSURE NOTE

200% Neutral Bus; (INTEGRAL)TVSS Protection; (REMOTE)TVSS Protection; Service Entrance Rated X; Load Side Feed thru Lugs

GENERAL DISTRIBUTION BREAKER REQUIREMENTS : PROVIDE LOCK ON BREAKER DEVICES FOR ALL EMERGENCY LIGHTING, WATER HEATERS MOTORS, AND FIRE ALARM EQUIPMENT SERVED FROM THIS PANEL

LCL	NHL	CIRCUIT DESCRIPTION	AMP	POLE	NO	PHASE A	PHASE B	NO	AMP	POLE	CIRCUIT DESCRIPTION	LCL	NHL
		Lighting	20	1	1	1200 800		2	20	1	RECEPTACLE		
		Lighting	20	1	3		1200 800	4	20	1	RECEPTACLE		
		Lighting	20	1	5	1200 1200		6	20	1	RECEPTACLE		
		Spare	20	1	7		1200	8	20	1	RECEPTACLE		
		Spare	20	1	9	1200		10	20	1	RECEPTACLE		
		Spare	20	1	11		1200	12	20	1	RECEPTACLE		
		Spare	20	1	13	1200		14	20	1	RECEPTACLE		
		Spare	20	1	15		3500	16	50	2	Range		
		Spare	20	1	17	3500		18					
		Spare	20	1	19		1200	20	20	1	RECEPTACLE		
		Spare	20	1	21	1200		22	20	1	RECEPTACLE		
		Spare	20	1	23		1200	24	20	1	RECEPTACLE		
		Spare	20	1	25	1200		26	20	1	RECEPTACLE		
		Spare	20	1	27		1200	28	20	1	RECEPTACLE		
		Spare	20	1	29	1200		30	20	1	RECEPTACLE		
		Spare	20	1	31		1200	32	20	1	RECEPTACLE		
		Spare	20	1	33	1200		34	20	1	RECEPTACLE		
		Spare	20	1	35		1200	36	20	1	RECEPTACLE		
		Spare	20	1	37	1200		38	20	1	RECEPTACLE		
		Spare	20	1	39		1200	40	20	1	RECEPTACLE		
		RECEPTACLES	20	1	41	1200		42	20	1	RECEPTACLE		

SPECIAL PANEL NOTE — NOTE #1 PROVIDE LOCK–ON BREAKER IN SPACE; NOTE #2

NHL= Non Harmonic Load; LCL= Long Continuous Load

	PHASE A	PHASE B
TOTAL LOAD PER PHASE	17500	15100
25% LONG CONTINUOUS LOADS	0	0
SUB PANEL		
SUB PANEL		
TOTAL CONNECTED LOAD	17500	15100

HIGH PHASE 17500 / 0.9pf = VA @ 120V 162.0 AMPS; ALL PHASES 32600 / 0.9pf = VA @ 208V 174.1 AMPS; DEMAND PER NEC 220-34 0 sq. ft. AMPS

Max. Neut. Laod 248 AMPS

D01B

120/208 1PH, 3WIRE — 200 AMP — Main: Breaker / Lug — Enclosure: Recessed X / Surface — ENCLOSURE TYPE: X NEMA TYPE 1; NEMA TYPE 3R; NEMA TYPE 4X — ENCLOSURE NOTE

200% Neutral Bus; (INTEGRAL)TVSS Protection; (REMOTE)TVSS Protection; Service Entrance Rated X; Load Side Feed thru Lugs

GENERAL DISTRIBUTION BREAKER REQUIREMENTS : PROVIDE LOCK ON BREAKER DEVICES FOR ALL EMERGENCY LIGHTING, WATER HEATERS MOTORS, AND FIRE ALARM EQUIPMENT SERVED FROM THIS PANEL

LCL	NHL	CIRCUIT DESCRIPTION	AMP	POLE	NO	PHASE A	PHASE B	NO	AMP	POLE	CIRCUIT DESCRIPTION	LCL	NHL
		RECEPTACLES	20	1	1	1200 800		2	20	1	RECEPTACLE		
		RECEPTACLES	20	1	3		1200 800	4	20	1	RECEPTACLE		
		RECEPTACLES	20	1	5	1200		6	20	1	SPARE		
		RECEPTACLES	20	1	7		1200	8	20	1	SPARE		
		RECEPTACLES	20	1	9	1200		10	20	1	SPARE		
		RECEPTACLES	20	1	11		1200	12	20	1	SPARE		
		RECEPTACLES	20	1	13	1200		14	20	1	SPARE		
		RECEPTACLES	20	1	15		1200	16	20	1	SPARE		
		RECEPTACLES	20	1	17	1200		18	20	1	SPARE		
		RECEPTACLES	20	1	19		1200	20	20	1	SPARE		
		RECEPTACLES	20	1	21	1200		22	20	1	SPARE		
		RECEPTACLES	20	1	23		1200	24	20	1	SPARE		
		RECEPTACLES	20	1	25	1200		26	20	1	SPARE		
		RECEPTACLES	20	1	27		1200	28	20	1	SPARE		
		RECEPTACLES	20	1	29	1200		30	20	1	SPARE		
		RECEPTACLES	20	1	31		1200	32	20	1	SPARE		
		RECEPTACLES	20	1	33	1200		34	20	1	SPARE		
		RECEPTACLES	20	1	35		1200	36	20	1	SPARE		
		RECEPTACLES	20	1	37	1200		38	20	1	SPARE		
		RECEPTACLES	20	1	39		1200	40	20	1	SPARE		
		RECEPTACLES	20	1	41	1200		42	20	1	SPARE		

SPECIAL PANEL NOTE — NOTE #1 PROVIDE LOCK–ON BREAKER IN SPACE; NOTE #2

NHL= Non Harmonic Load; LCL= Long Continuous Load

	PHASE A	PHASE B
TOTAL LOAD PER PHASE	14000	12800
25% LONG CONTINUOUS LOADS	0	0
SUB PANEL		
SUB PANEL		
TOTAL CONNECTED LOAD	14000	12800

HIGH PHASE 14000 / 0.9pf = VA @ 120V 129.6 AMPS; ALL PHASES 26800 / 0.9pf = VA @ 208V 143.2 AMPS; DEMAND PER NEC 220-34 0 sq. ft. AMPS

Max. Neut. Laod 198 AMPS

IVB

120/208 3PH, 4WIRE — 400 AMP — Main: Breaker X / Lug — Enclosure: Recessed / Surface X — ENCLOSURE TYPE: NEMA TYPE 1; X NEMA TYPE 3R; NEMA TYPE 4X — ENCLOSURE NOTE

200% Neutral Bus; (INTEGRAL)TVSS Protection; (REMOTE)TVSS Protection; Service Entrance Rated X; Load Side Feed thru Lugs

GENERAL DISTRIBUTION BREAKER REQUIREMENTS : PROVIDE LOCK ON BREAKER DEVICES FOR ALL EMERGENCY LIGHTING, MOTORS, AND FIRE ALARM EQUIPMENT SERVED FROM THIS PANEL

LCL	NHL	CIRCUIT DESCRIPTION	AMP	POLE	NO	PHASE A	PHASE B	PHASE C	NO	AMP	POLE	CIRCUIT DESCRIPTION	LCL	NHL
		Panel D01A	200	2	1	12000 7200			2	100	2	Panel E01		
					3		12000 7200		4					
		Panel D01B	200	2	5			10000 7200	6	100	2	Panel F01		
					7	10000 7200			8					
		Panel C01	200	2	9		8000 7200		10	100	2	Panel G01		
					11			8000 7200	12					
		Panel B01A	200	2	13	8000 6000			14	100	2	Panel H0		
					15		8000 6000		16					
		Panel B01B	200	2	17			7000	18	20	1	Spare		
					19	7000			20	20	1	Spare		
		Spare	20	1	21				22	20	1	Spare		
		Spare	20	1	23				24	20	1	Spare		
		Spare	20	1	25				26	20	1	SPACE		
		Spare	20	1	27				28	20	1	SPACE		
		SPACE	20	1	29				30	20	1	SPACE		
		SPACE	20	1	31				32	20	1	SPACE		
		SPACE	20	1	33				34	20	1	SPACE		
		SPACE	20	1	35				36	20	1	SPACE		
		SPACE	20	1	37				38	20	1	SPACE		
		SPACE	20	1	39				40	20	1	SPACE		
		SPACE	20	1	41				42	20	1	SPACE		

SPECIAL PANEL NOTE — NOTE #1; NOTE #2

NHL= Non Harmonic Load; LCL= Long Continuous Load

	PHASE A	PHASE B	PHASE C
TOTAL LOAD PER PHASE	57400	48400	39400
25% LONG CONTINUOUS LOADS	0	0	0
SUB PANEL			
SUB PANEL			
TOTAL CONNECTED LOAD	57400	48400	39400

HIGH PHASE 57400 / 0.9pf = VA @ 120V 531.5 AMPS; ALL PHASES 145200 / 0.9pf = VA @ 208V/3PH 448.1 AMPS; DEMAND PER X NEC 220-34 336 AMPS

Max. Neut. Laod 813 AMPS

KEYNOTES

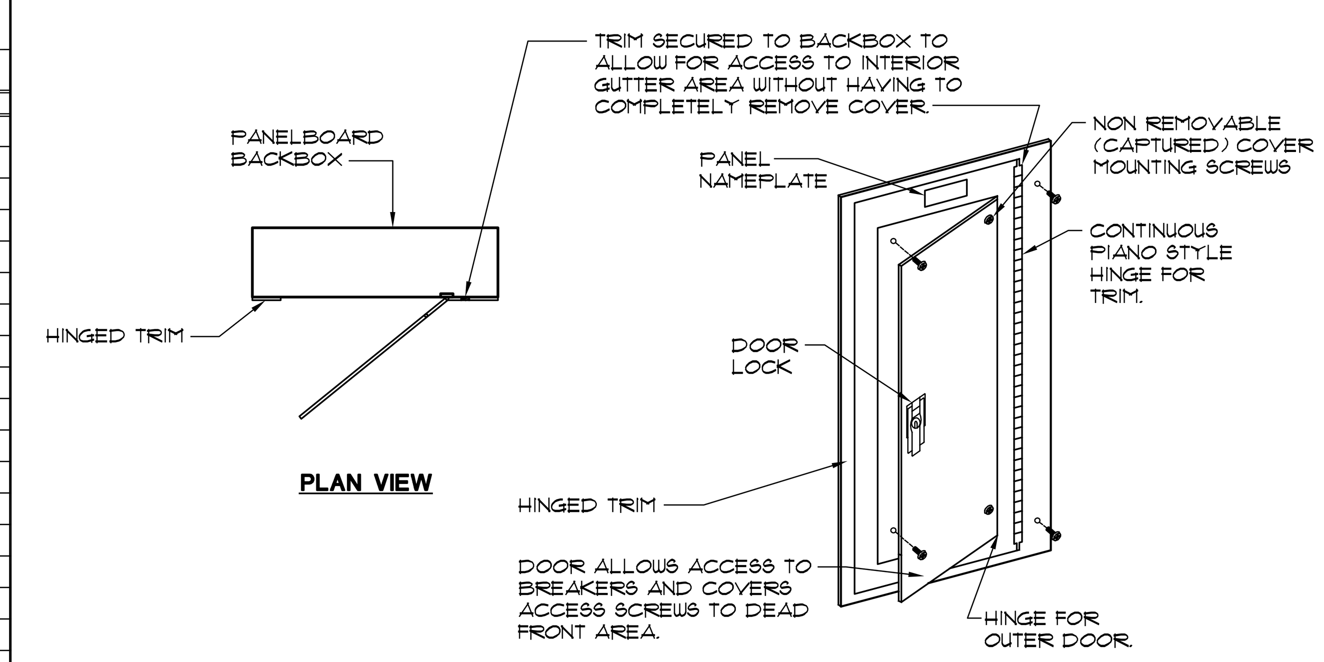
KEY NOTES:

1. REMOVE EXISTING BREAKERS AND PROVIDE (1) 50A/2P BREAKER.

NOTES

GENERAL NOTES:

1. ALL PANELS SHOWN HERE, EXCEPT PANEL 'IVB' ARE FURNISHED WITH THE BUILDING AND ARE SHOWN FOR CIRCUITING REFERENCE ONLY.

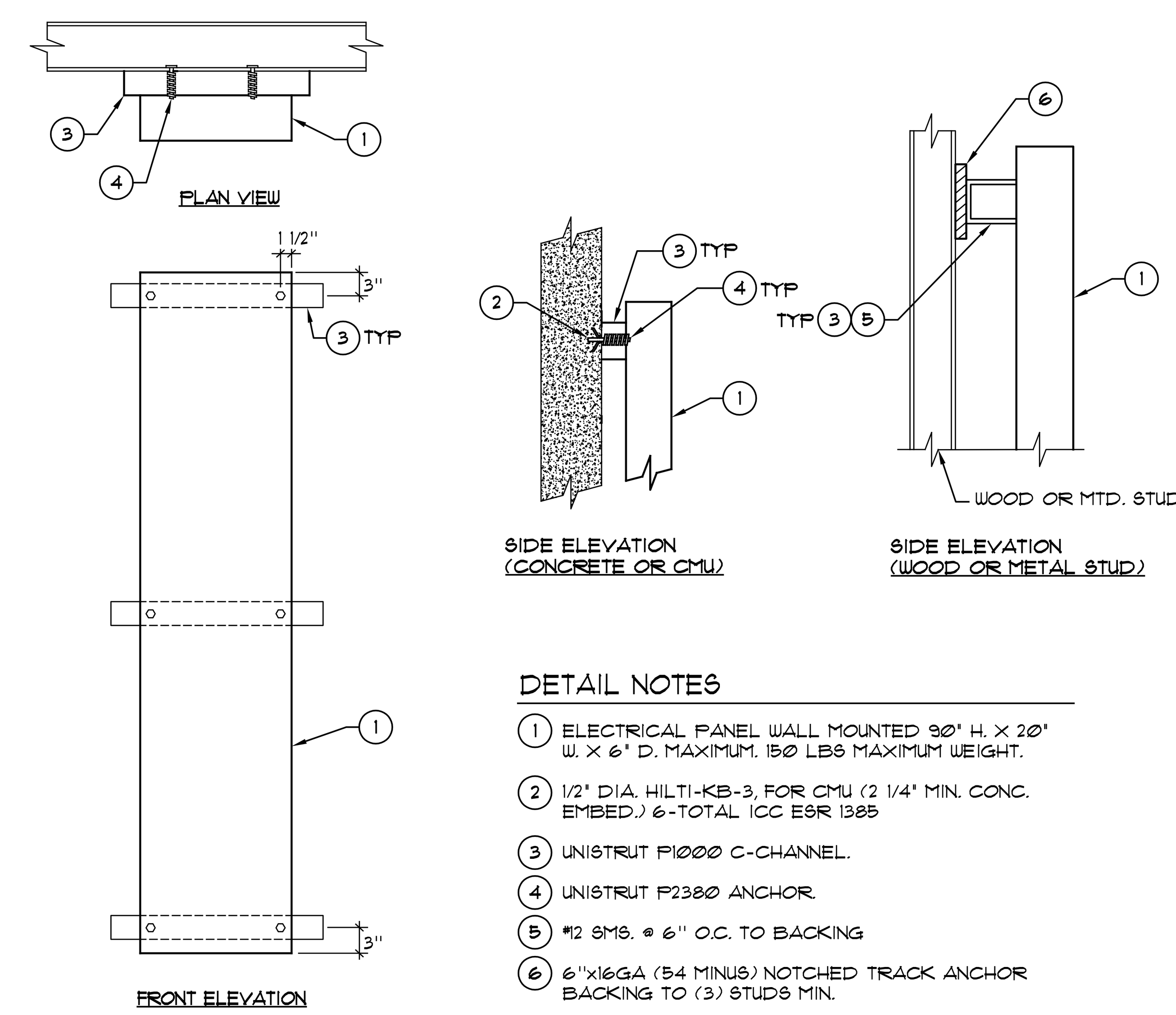


DETAIL GENERAL NOTES

1. PROVIDE FOR ALL PANELBOARDS FOR THIS PROJECT - SURFACE, RECESSED NEMA 1, OR NEMA 3R CONFIGURATION.
2. SEE REFERENCE ONE LINE DIAGRAM FOR ALL PANELBOARD AIC RATINGS.

TYPICAL PANELBOARD DOOR / TRIM DETAIL

NO SCALE — 1 / E7.1 — DET-P27



DETAIL NOTES

1. ELECTRICAL PANEL WALL MOUNTED 90" H. X 20" W. X 6" D. MAXIMUM. 150 LBS MAXIMUM WEIGHT.
2. 1/2" DIA. HILTI-KB-3, FOR CMU (2 1/4" MIN. CONC. EMBED.) 6-TOTAL ICC ESR 1385
3. UNISTRUT P1000 C-CHANNEL.
4. UNISTRUT P2380 ANCHOR.
5. #12 SMS. @ 6" O.C. TO BACKING
6. 6"x16GA (54 MINUS) NOTCHED TRACK ANCHOR BACKING TO (3) STUDS MIN.

SURFACE WALL MOUNTED ELECTRICAL PANEL DETAIL

NO SCALE — 2 / E7.1

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JOHNSON CONSULTING ENGINEERS, INC.
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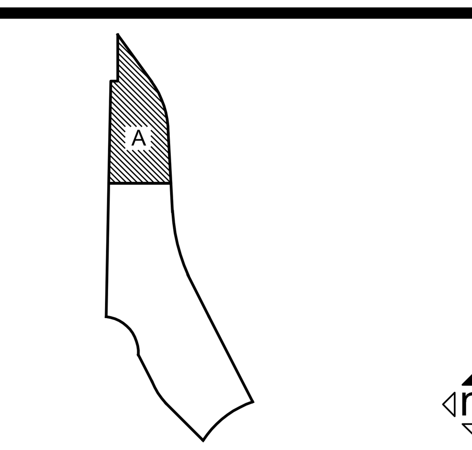
REGISTERED PROFESSIONAL ENGINEER — MONICA GRESE-HANSEN — No. E 14781 — Exp. 6-30-2019 — ELECTRICAL — STATE OF CALIFORNIA
#17057.04 10/3/2017

Key Plan



Consultant Seal

Agency Approval — FILE NO. 37-C1
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS ____ FLS ____ SSS ____
DATE ____

Project Title: Palomar North Education Center — Palomar College
PALOMAR COLLEGE Learning for Success
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

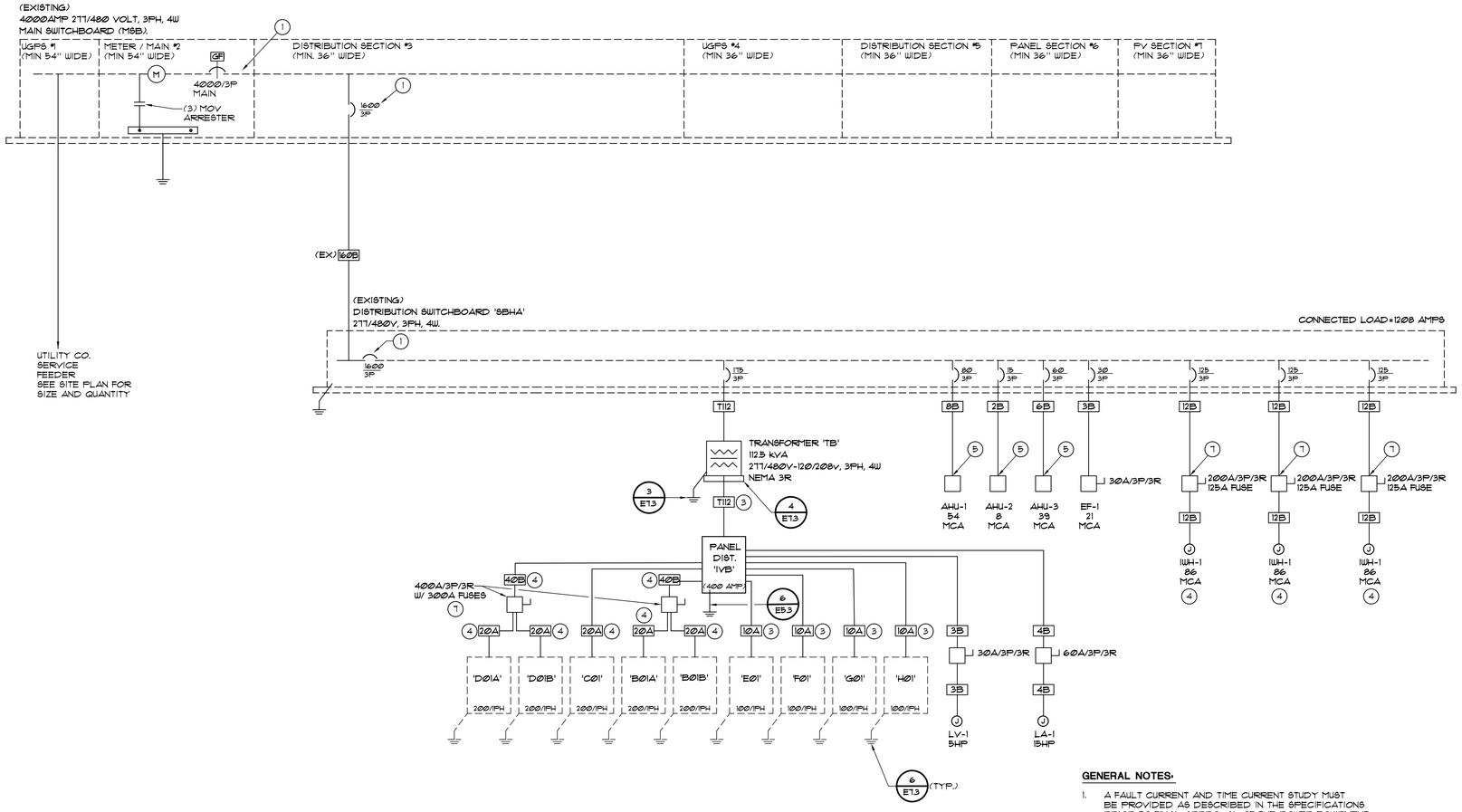
Drawing Title: PANEL SCHEDULES

Architect's Seal — LICENSED ARCHITECT — BRADLEY E. GLASSICK — NO. C-32437 — REN. 02-28-19 — STATE OF CALIFORNIA

Designed: JF	Project No. 5015019-102
Drawn: AO	Scale:
QAQC: RG	Drawing No. E7.1
Date: 10/13/2017	

PLEASE RECYCLE

DSA SUBMITTAL



ELECTRICAL ONE-LINE DIAGRAM

NO SCALE

1
E7.2

GENERAL NOTES:

1. A FAULT CURRENT AND TIME CURRENT STUDY MUST BE PROVIDED AS DESCRIBED IN THE SPECIFICATIONS PRIOR TO FINAL APPROVAL OF THE POWER EQUIPMENT.
2. REFERENCE DETAIL FOR ALL EQUIPMENT FAULT CURRENT RATINGS. (1 / E7.3)
3. UNLESS WHERE OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK. ITEMS SHOWN DASHED SHALL BE INCLUDED OTHER CONTRACTS.
4. ALL ELECTRICAL GEAR AND EQUIPMENT SHOWN ON ONE-LINE DIAGRAM SHALL BE NEMA 3R UNLESS OTHERWISE NOTED.

KEY NOTES:

1. 100% RATED ELECTRONIC TRIP MAIN.
2. PROVIDE SPLICE AT PEDESTAL #1 TO #8 AS REQUIRED.
3. PROVIDE CONDUIT. ONLY FINAL CONDUIT CONNECTION, WIRING AND PANEL AND PANEL INSTALLATIONS TO BE INCLUDED IN CONTRACT A04-116581.
4. (EXISTING CONDUIT) PROVIDE FINAL CONDUIT CONNECTION, WIRING AND PANEL INSTALLATIONS.
5. VFD/DISCONNECT PROVIDED WITH EQUIPMENT BY DIVISION 23.
6. TIMECLOCK. SEE E1.3
7. PROVIDE MULTI SERVICE DISCONNECT PLAQUE AND LOCATE 277/480v AND 120/208v DISCONNECTS ADJACENT TO EACH OTHER PER CEC 225.37.

600Volt Feeder Schedule

I.D.	Type	Ampacity	Copper Conduit	Copper Conductors	Aluminum Conduit	Aluminum Conductors
2A		20	(1) 3/4"	3 # 12, 1# 12 Gnd	NA	NA
2B		20	(1) 3/4"	4 # 12, 1# 12 Gnd	NA	NA
3A		30	(1) 3/4"	3 # 10, 1# 10 Gnd	NA	NA
3B		30	(1) 3/4"	4 # 10, 1# 10 Gnd	NA	NA
4A		40	(1) 1"	3 # 8, 1# 10 Gnd	NA	NA
4B		40	(1) 1"	4 # 8, 1# 10 Gnd	NA	NA
5A		50	(1) 1"	3 # 6, 1# 10 Gnd	NA	NA
5B		50	(1) 1"	4 # 6, 1# 10 Gnd	NA	NA
6A		60	(1) 1 1/4"	3 # 4, 1# 8 Gnd	NA	NA
6B		60	(1) 1 1/4"	4 # 4, 1# 8 Gnd	NA	NA
7A		70	(1) 1 1/4"	3 # 4, 1# 8 Gnd	NA	NA
7B		70	(1) 1 1/4"	4 # 4, 1# 8 Gnd	NA	NA
8A		80	(1) 1 1/4"	3 # 3, 1# 8 Gnd	NA	NA
8B		80	(1) 1 1/4"	4 # 3, 1# 8 Gnd	NA	NA
9A		90	(1) 1 1/2"	3 # 2, 1# 8 Gnd	NA	NA
9B		90	(1) 1 1/2"	4 # 2, 1# 8 Gnd	NA	NA
10A		100	(1) 1 1/2"	3 # 1, 1# 6 Gnd	NA	NA
10B		100	(1) 1 1/2"	4 # 1, 1# 6 Gnd	NA	NA
12A		125	(1) 2"	3 # 1, 1# 6 Gnd	(1) 2"	3 # 2/0, 1# 3 Gnd
12B		125	(1) 2"	4 # 1, 1# 6 Gnd	(1) 2"	4 # 2/0, 1# 3 Gnd
15A		150	(1) 2"	3 # 1/0, 1# 6 Gnd	(1) 2"	3 # 3/0, 1# 3 Gnd
15B		150	(1) 2"	4 # 1/0, 1# 6 Gnd	(1) 2"	4 # 3/0, 1# 3 Gnd
17A		175	(1) 2"	3 # 2/0, 1# 6 Gnd	(1) 2"	3 # 4/0, 1# 3 Gnd
17B		175	(1) 2"	4 # 2/0, 1# 6 Gnd	(1) 2"	4 # 4/0, 1# 3 Gnd
20A		200	(1) 3"	3 # 3/0, 1# 4 Gnd	(1) 3"	3 # 250, 1# 2 Gnd
20B		200	(1) 3"	4 # 3/0, 1# 4 Gnd	(1) 3"	4 # 250, 1# 2 Gnd
22A		225	(1) 3"	3 # 4/0, 1# 4 Gnd	(1) 3"	3 # 300, 1# 2 Gnd
22B		225	(1) 3"	4 # 4/0, 1# 4 Gnd	(1) 3"	4 # 300, 1# 2 Gnd
25A		250	(1) 3"	3 # 250, 1# 4 Gnd	(1) 3"	3 # 350, 1# 2 Gnd
25B		250	(1) 3"	4 # 250, 1# 4 Gnd	(1) 3"	4 # 350, 1# 2 Gnd
30A		300	(1) 3"	3 # 350, 1# 4 Gnd	(1) 3"	3 # 500, 1# 2 Gnd
30B		300	(1) 3"	4 # 350, 1# 4 Gnd	(1) 3"	4 # 500, 1# 2 Gnd
35A		350	(2) 2"	3 # 2/0, 1# 2 Gnd	(2) 2"	3 # 4/0, 1# 1 Gnd
35B		350	(2) 2"	4 # 2/0, 1# 2 Gnd	(2) 2"	4 # 4/0, 1# 1 Gnd
40A		400	(2) 3"	3 # 3/0, 1# 2 Gnd	(2) 3"	3 # 250, 1# 1/0 Gnd
40B		400	(2) 3"	4 # 3/0, 1# 2 Gnd	(2) 3"	4 # 250, 1# 1/0 Gnd
45A		450	(2) 3"	3 # 4/0, 1# 2 Gnd	(2) 3"	3 # 300, 1# 1/0 Gnd
45B		450	(2) 3"	4 # 4/0, 1# 2 Gnd	(2) 3"	4 # 300, 1# 1/0 Gnd
50A		500	(2) 3"	3 # 250, 1# 2 Gnd	(2) 3"	3 # 350, 1# 1/0 Gnd
50B		500	(2) 3"	4 # 250, 1# 2 Gnd	(2) 3"	4 # 350, 1# 1/0 Gnd
60A		600	(2) 3"	3 # 350, 1# 1 Gnd	(2) 3"	3 # 500, 1# 2/0 Gnd
60B		600	(2) 3"	4 # 350, 1# 1 Gnd	(2) 3"	4 # 500, 1# 2/0 Gnd
70A		700	(3) 3"	3 # 4/0, 1# 1/0 Gnd	(3) 3"	3 # 300, 1# 3/0 Gnd
70B		700	(3) 3"	4 # 4/0, 1# 1/0 Gnd	(3) 3"	4 # 300, 1# 3/0 Gnd
80A		800	(3) 3"	3 # 300, 1# 1/0 Gnd	(3) 3"	3 # 500, 1# 3/0 Gnd
80B		800	(3) 3"	4 # 300, 1# 1/0 Gnd	(3) 3"	4 # 500, 1# 3/0 Gnd
100B		1000	(4) 3"	4 # 250, 1# 2/0 Gnd	(4) 3"	4 # 400, 1# 4/0 Gnd
120B		1200	(4) 4"	4 # 350, 1# 3/0 Gnd	(4) 4"	4 # 500, 1# 250 Gnd
160B		1600	(5) 4"	4 # 400, 1# 4/0 Gnd	(5) 4"	4 # 600, 1# 350 Gnd
200B		2000	(6) 4"	4 # 500, 1# 250 Gnd	(6) 4"	4 # 600, 1# 400 Gnd
250B		2500	(7) 4"	4 # 500, 1# 350 Gnd	(7) 4"	4 # 750, 1# 600 Gnd
300B		3000	(8) 4"	4 # 500, 1# 350 Gnd	(8) 4"	4 # 750, 1# 600 Gnd
350B		3500	(12) 4"	4 # 350, 1# 400 Gnd	(12) 4"	4 # 500, 1# 600 Gnd
400B		4000	(12) 4"	4 # 400, 1# 400 Gnd	(12) 4"	4 # 600, 1# 750 Gnd
PP		30	(1) 2"	3 # 1, 1# 6 Gnd		

600V FEEDER SCHEDULE LEGEND

T75 — 'T' INDICATES TYPICAL TRANSFORMER FEEDER REFERENCE. THE NUMBER INDICATES TRANSFORMER TYPE. REFER TO SCHEDULE ON SHEET (E7.3) FOR SIZE REQUIRED.

2 | 00 — 2 | | INDICATES QUANTITY OF CONDUITS REQUIRED = (2)

| 4 | INDICATES SIZE OF CONDUITS REQUIRED = 4"

| 00 INDICATES 'CONDUIT ONLY'

600V FEEDER SCHEDULE GENERAL NOTES:

1. ALL CONDUCTOR SHALL BE PROVIDED WITH TYPE THWN-2 INSULATION. REFERENCE SPECIFICATION SECTION 26 05 19 (16120) FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE 60 DEGREE COPPER/ALUMINUM RATED TERMINATION FOR ALL FEEDERS SIZED WITH #2 OR SMALLER CONDUCTORS. PROVIDE 75 DEGREE COPPER/ALUMINUM RATED TERMINATIONS FOR ALL FEEDERS SIZED WITH #1 OR LARGER CONDUCTORS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING LUG CONFIGURATION AN ALL EQUIPMENT, BREAKER OF DISCONNECTS TO MATCH FEEDER CONFIGURATIONS INDICATED.
4. WHERE MULTIPLE CONDUIT QUANTITIES ARE INDICATED, CONDUCTOR QUANTITIES AND SIZES SHOWN IN SCHEDULE SHALL BE PROVIDED IN EACH CONDUIT.

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SM KEYNOTES

NOTES

Consultant

REGISTERED PROFESSIONAL ENGINEER No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA

#170571.04 10/4/2017

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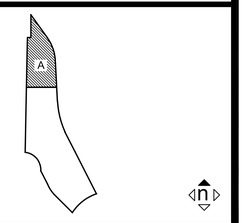
Key Plan



Consultant Seal

Agency Approval — FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS ____ FLS ____ SSS ____
DATE ____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

ONE LINE DIAGRAM

Architect's Seal

REGISTERED ARCHITECT No. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

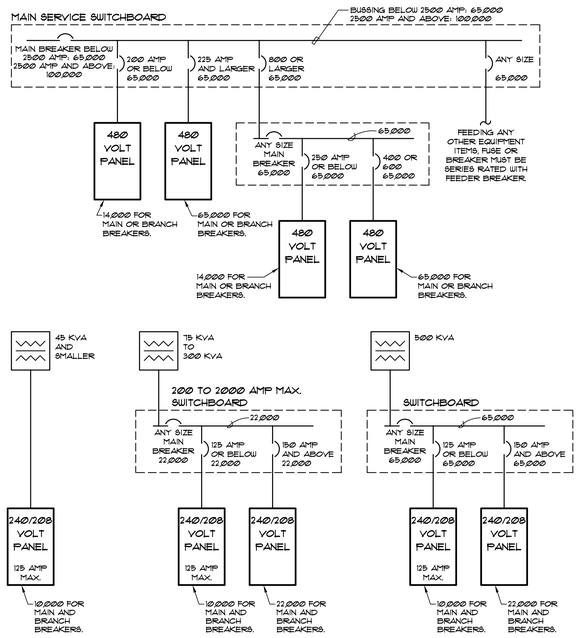
Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E7.2
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL

GENERAL NOTE:

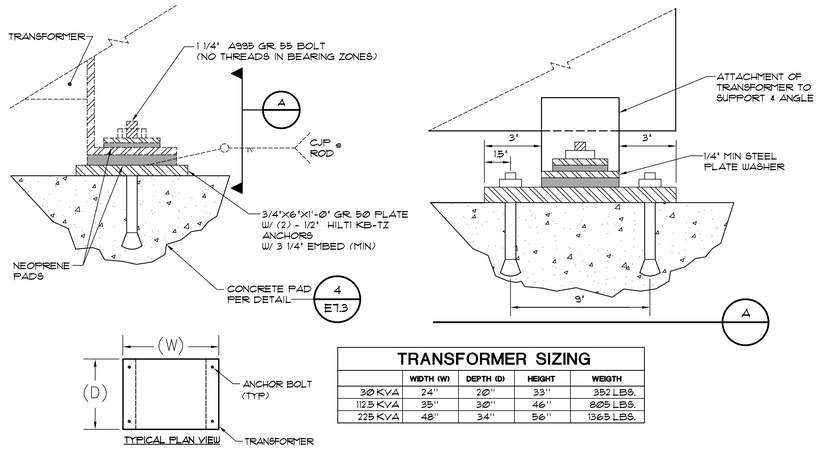
1. ALL RATINGS SHOWN ARE FOR A UL LISTED SERIES COMBINATION OF THE BREAKERS INDICATED.



TYPICAL 480 VOLT SERVICE AIC EQUIPMENT RATINGS

NO SCALE

1 / E7.3



TRANSFORMER SIZING				
	WIDTH (W)	DEPTH (D)	HEIGHT	WEIGTH
30 KVA	24"	20"	33"	352 LBS.
112.5 KVA	35"	30"	46"	805 LBS.
225 KVA	48"	34"	56"	1365 LBS.

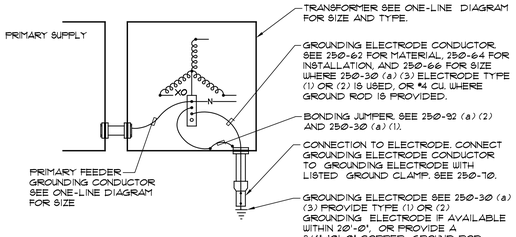
TRANSFORMER ANCHORAGE DETAIL

NO SCALE

2 / E7.3

SINGLE PHASE TRANSFORMER FEEDER SCHEDULE				
ID	RATING	CONDUCTOR	PRIMARY	SECONDARY
T10	10KVA	COPPER	(1) 3/4"C. 2 #10, 1 #12 GND	(1) 1 1/4"C. 3 #4, 1 #10 GND
		ALUMINUM	NA	NA
T15	15KVA		(1) 3/4"C. 2 #8, 1#10 GND	(1) 1 1/2"C. 3 #3, 1 #6 GND
			NA	NA
T25	25KVA		(1) 1 1/4"C. 2 #4, 1 #8 GND	(1) 2"C. 3 #1, 1 #6 GND
			NA	NA

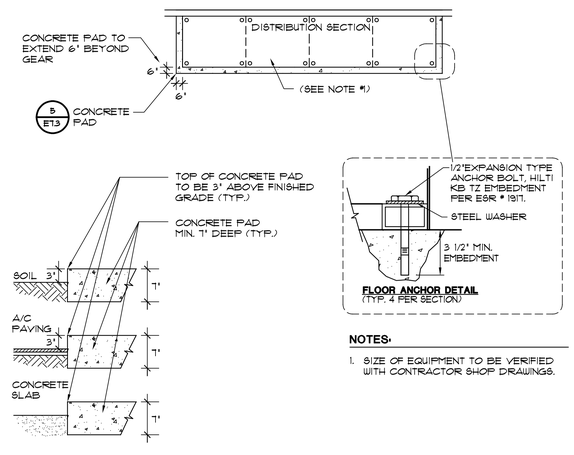
THREE PHASE TRANSFORMER FEEDER SCHEDULE				
ID	RATING	CONDUCTOR	PRIMARY	SECONDARY
T30	30 KVA	COPPER	(1) 1"C. 3 #6, 1 #8 GND	(1) 1 1/2"C. 4 #1, 1 #6 GND
		ALUMINUM	NA	NA
T45	45 KVA	COPPER	(1) 1 1/4"C. 3 #4, 1 #6 GND	(1) 2"C. 4 #2/0, 1 #6 GND
		ALUMINUM	NA	NA
T75	75 KVA	COPPER	(1) 2"C. 3 #1, 1 #6 GND	(1) 3"C. 4 #250, 1 #4 GND
		ALUMINUM	(1) 2"C. 3 #2/0, 1 #3 GND	3"C. 4 #350, 1 #2 GND
T112	112 1/2 KVA	COPPER	(1) 2"C. 3 #2/0, 1 #4 GND	(2) 3"C. 4 #3/0, 1 #2 GND
		ALUMINUM	(1) 2"C. 3 #4/0, 1 #2 GND	(2) 3"C. 4 #250, 1 #1/0 GND
T150	150 KVA	COPPER	(1) 3"C. 3 #4/0, 1 #4 GND	(2) 3"C. 4 #350, 1 #1 GND
		ALUMINUM	(1) 3"C. 3 #300, 1 #2 GND	(2) 3"C. 4 #500, 1 #2/0 GND
T225	225 KVA	COPPER	(2) 2"C. 3 #2/0, 1 #2 GND	(3) 3"C. 4 #300, 1 #1/0 GND
		ALUMINUM	(2) 2"C. 3 #4/0, 1 #1/0 GND	(3) 3"C. 4 #500, 1 #3/0 GND
T300	300 KVA	COPPER	(2) 3"C. 3 #4/0, 1 #2 GND	(4) 3"C. 4 #350, 1 #3/0 GND
		ALUMINUM	(2) 3"C. 3 #300, 1 #1/0 GND	(4) 3"C. 4 #500, 1 #250 GND
T500	500 KVA	COPPER	(3) 4"C. 3 #300, 1 #1/0 GND	(8) 3"C. 4 #250, 1 #250 GND
		ALUMINUM	(3) 4"C. 3 #400, 1 #3/0 GND	(8) 3"C. 4 #400, 1 #400 GND



THREE PHASE TRANSFORMER GROUNDING

NO SCALE

3 / E7.3



NOTES:

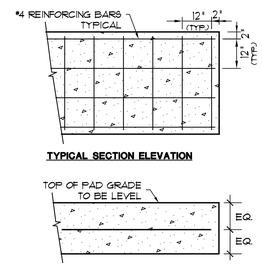
1. SIZE OF EQUIPMENT TO BE VERIFIED WITH CONTRACTOR SHOP DRAWINGS.

TYPICAL ELECTRICAL EQUIPMENT PAD DETAIL

NO SCALE

DET- 011

4 / E7.3



GENERAL NOTES

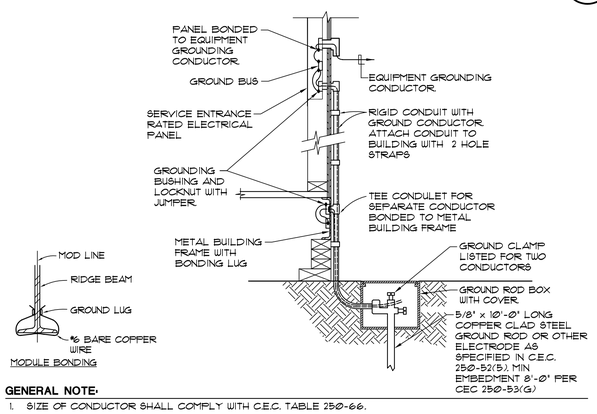
1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. AS PER 1905A METHOD 'A' AND TABLE 19A-A-8. BATCH PLANT INSPECTIONS AND TESTS OF CEMENT AND REINFORCING BARS MAY BE WAIVED PER TITLE 24 SECTION 17044.4.3 & 17044.4.4.
2. CONCRETE MIX DESIGNS SHALL COMPLY WITH TITLE 24 SECTION 1905A.2.
3. PORTLAND CEMENT SHALL CONFORM TO (ASTM C-150) TYPE I OR II
4. CONCRETE AGGREGATES SHALL CONFORM TO ASTM C-33
5. CONCRETE PLACEMENT SHALL CONFORM TO TITLE 24 SECTION 1905A.7.
6. ALL REINFORCING BARS SHALL CONFORM TO TITLE 24 SECTION 1903A AND ASTM A-615 GRADE 60.

TYPICAL HOUSEKEEPING PAD DETAIL

NO SCALE

DET- 012

5 / E7.3



GENERAL NOTE:

1. SIZE OF CONDUCTOR SHALL COMPLY WITH C.E.C. TABLE 250-66.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL (250-52(B)) AND TO METAL BUILDING FRAME (C.E.C. 250-104(C)). IN ADDITION TO THE DETAIL ABOVE BOND THE ELECTRICAL GROUND TO METAL WATER PIPE IF AVAILABLE. (C.E.C. 250-104(A)).
3. ALL MODULES OF METAL FRAME BUILDINGS AND RAMP SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING).
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, EXTEND CONDUCTORS, AS REQUIRED TO ADDITIONAL GROUND RODS AS NEEDED, SEPARATED BY AT LEAST 6'-0" UNTIL RESISTANCE IS 25 OHM OR LESS (CEC 250.56).

RELOCATABLE CLASSROOM GROUNDING DETAIL

NO SCALE

DET- 022 (2007 CEC)

6 / E7.3

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KEYNOTES

NOTES

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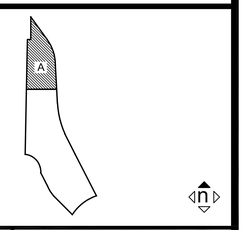
REGISTERED PROFESSIONAL ENGINEER No. E 14781 Exp. 6-30-2019 ELECTRICAL STATE OF CALIFORNIA

#170571.04 10/3/2017

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
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Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

ONE LINE DETAILS

Architect's Seal

REGISTERED ARCHITECT No. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JF	Project No.	5015019-102
Drawn:	AO	Scale:	
QAQC	RG	Drawing No.	E7.3
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL

TELECOM LEGEND

SYMBOL	DESCRIPTION
-	NOTE CALLOUT
- / -	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
1	BUILDING NUMBER
	EXPOSED CONDUIT
	EXISTING EXPOSED CONDUIT
	UNDERGROUND CONDUIT
	EXISTING UNDERGROUND CONDUIT
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	CONDUIT WITH CAP
W	WALL MOUNTED PHONE. STUB A 1-1/4" C.O. UP 6" ABOVE THE ACCESSIBLE CEILING AND PROVIDE A BUSHING. PROVIDE RANDL 5S BOX T-55017 MINIMUM WITH SINGLE GANG RING. PROVIDE AND INSTALL (1) CAT 6A CABLES/JACKS TERMINATED IN A SINGLE-PORT STAINLESS STEEL FACEPLATE.
#	COMBINATION TELEPHONE AND DATA OUTLET BOX, WALL MOUNTED. STUB A 1-1/4" C.O. UP 6" ABOVE THE ACCESSIBLE CEILING AND PROVIDE A BUSHING. PROVIDE RANDL 5S BOX T-55017 MINIMUM WITH SINGLE GANG RING. (#) DENOTES THE QUANTITY OF CABLES PER OUTLET.
	DATA OUTLET BOX, FLUSH MOUNTED IN CEILING. PROVIDE AND INSTALL (2) CAT 6A CABLES/JACKS TERMINATED IN A 4-PORT FACEPLATE.
	COMBINATION TELEPHONE AND DATA OUTLET BOX, WALL MOUNTED. STUB A 1-1/4" C.O. UP 6" ABOVE THE ACCESSIBLE CEILING AND PROVIDE A BUSHING. PROVIDE RANDL 5S BOX T-55017 MINIMUM WITH SINGLE GANG RING. PROVIDE AND INSTALL (2) CAT 6A CABLES/JACKS TERMINATED IN A 4-PORT FACEPLATE.
(#)	COMBINATION TELEPHONE AND DATA OUTLET BOX, MOUNTED IN FLOOR BOX OR POKE-THRU PER PLAN FOR FLEXIBLE CONNECTION TO FURNITURE SYSTEM. VERIFY CONNECTION REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN - MOUNT FLUSH IN FLOOR WHEN INDICATED IN A FLOOR BOX OR POKE-THRU SYMBOL. (#) DENOTES THE QUANTITY OF CABLES PER OUTLET.
IWAP	INTERIOR WIRELESS ACCESS POINT - CEILING MOUNTED, FURNISH AND INSTALL (2) CAT6A CABLE IN SURFACE MOUNT MODULAR OUTLET. FURNISH AND INSTALL OBERON WAP MOUNT AT EACH ACCESS LOCATION, MODEL #1046-C00AP3800. COORDINATE OBERON MOUNT WITH CEILING INSTALLATION.
EWAP	EXTERIOR WIRELESS ACCESS POINT - WALL MOUNTED, FURNISH AND INSTALL (2) CAT6A CABLE IN SURFACE MOUNT MODULAR OUTLET. FURNISH AND INSTALL TESSCO ENCLOSURE BOX WITH ANTENNA MODEL# 502103. COORDINATE INSTALLATION AND WAP REQUIREMENT WITH CAMPUS IT

TELECOM GENERAL NOTES

1. ALL TELECOMMUNICATIONS WORK SHALL COMPLY WITH THE LATEST EDITION OF THE PALOMAR COLLEGE TELECOMMUNICATIONS INFRASTRUCTURE STANDARDS AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL CODES. WHERE THE CONSTRUCTION DOCUMENTS INDICATE MORE RESTRICTIVE REQUIREMENTS, THE DOCUMENTS SHALL GOVERN BUT THE CONSTRUCTION DOCUMENTS SHALL NOT BE INTERPRETED AS AUTHORITY TO VIOLATE ANY CODE OR REGULATION.
2. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS AND/OR SPECIFICATIONS OR WITH CODE REQUIREMENTS, THE NOTE SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR THE HIGHER STANDARD SHALL PREVAIL.
3. OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS OR THE MISDESCRIPTION OF DETAILS OF WORK WHICH ARE CLEAR AND NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH ARE CUSTOMARILY PERFORMED, SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH OMITTED OR MISDESCRIBED DETAILS OF THE WORK BUT THEY SHALL BE PERFORMED AS IF FULLY AND CORRECTLY SET FORTH AND DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL CHECK ALL DRAWINGS FURNISHED IMMEDIATELY UPON THEIR RECEIPT AND SHALL PROMPTLY NOTIFY THE OWNER OF ANY DISCREPANCIES.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BEAR THE UNDERWRITERS LABEL (UL) AND SHALL BE INSTALLED IN THE MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED.
6. THE CONTRACTOR SHALL NOT BORE, NOTCH OR IN ANYWAY CUT INTO ANY STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT OR STRUCTURAL ENGINEER.
7. FOR PURPOSES OF CLEARNESS AND LEGIBILITY THE TELECOM DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DATA INFORMATION AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE TELECOM WORK INTERFACES WITH OTHER TRADES.
8. USE "J" HOOKS FOR THE BULK OF THE STATION CABLE DISTRIBUTION. DO NOT USE CEILING TILE WIRE HANGERS, WATER OR ELECTRICAL PIPES, OR LIGHT FIXTURES TO HANG CABLE. CABLE MUST BE A MINIMUM OF SIX INCHES ABOVE THE CEILING TILE AND MUST NOT COME WITHIN TWELVE INCHES OF A LIGHT FIXTURE.
9. ALL STATION CABLES SHALL BE NEATLY DRESSED AND SECURED EVERY FIVE FEET AT A MAXIMUM.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILING TILE INCLUDING REPLACEMENT OF BROKEN OR DAMAGED TILES.
11. ALL LOCATIONS PASSING THROUGH A FIRE OR A SMOKE BARRIER MUST BE FIRE STOPPED USING APPROVED (UL CLASSIFIED) FIRE STOP MATERIAL INSTALLED, PER THE MANUFACTURER'S INSTRUCTIONS.
12. ALL STATION CABLE SHALL BE PLACED WITH A MINIMUM 2 METER MAINTENANCE LOOP ABOVE CEILING AT OUTLET LOCATION. A MINIMUM MAINTENANCE LOOP OF 1 METER SHALL BE PRODUCED AT IDF LOCATION IN LADDER RACK.
13. CONDUIT SHALL BE FILLED TO MAXIMUM CAPACITY (PER STANDARD) BEFORE UTILIZING ANOTHER VACANT CONDUIT.
14. ALL STATION OUTLETS AND TERMINALS INCLUDING EXISTING SHALL BE PROPERLY IDENTIFIED USING THE STANDARD CAMPUS INTERNAL DISTRIBUTION NUMBERING SCHEME. ALL LABELS BE PREPRINTED OR TYPED.
15. FIBER CABLE SHALL BE PLACED WITH SIX METER (6) MAINTENANCE LOOP AT BOTH ENDS OF THE RUN. THE MAINTENANCE LOOP SHALL BE SECURED IN SUCH A MANNER TO PROVIDE PROTECTION DURING SUBSEQUENT CABLE PULLS.
16. ANY DEVIATIONS FROM PLANS OR SPECIFICATIONS MUST BE APPROVED IN WRITING BY THE ENGINEER AND DISTRICT REPRESENTATIVE.
17. ALL NEW STATION CABLES/OUTLETS SHALL BE TESTED AND DOCUMENTED USING A PAIR SCANNER SPECIFICALLY DESIGNED TO TEST THE TYPE OF CABLE INSTALLED. TEST RESULTS SHALL BE ONE PAGE PER AND NOTED WITH THE STATION/JACK NUMBERING SCHEME THAT IS STANDARDIZED FOR THE DISTRICT.
18. ALL WORK SHALL BE COMPLETED IN A NEAT AND PROFESSIONAL MANNER. THE WORK SITE SHALL BE KEPT CLEAN AND ALL DAMAGE TO DISTRICT PROPERTY REPAIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING A FINAL CLEANUP OF THE WORK SITE PRIOR TO FINAL SYSTEM ACCEPTANCE.
19. ALL FOOTAGES ON DRAWINGS ARE ESTIMATED AND MUST BE VERIFIED BY CONTRACTOR PRIOR TO ORDERING MATERIAL.
20. PULL ROPES SHALL BE PLACED IN ALL VACANT CONDUITS.
21. ALL CHANGES TO STRUCTURES (BUILDING, DRILLING, CORING, ETC.) NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED IN WRITING BY STRUCTURAL ENGINEER.

TELECOM RESPONSIBILITY MATRIX

TASK	PARTY
TELECOM CONDUIT, BACKBOXES, SLEEVES	ELITE
TELECOM CONDUIT ID LABELING AND PULLSTRINGS	ELITE
GROUNDING FOR TELECOM	EC
TELECOM EQUIPMENT (WAP DEVICES, NETWORK SWITCHS, ROUTERS, SERVERS)	OFOI
TELECOM CABLING AND TERMINATION	CC
TELECOM FACEPLATES AND DIVIDERS	CC
WAP TERRAWAVE/VENTEV EXTERIOR MOUNT BOX W/ANTENNA	CC

LEGEND

GC	GENERAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
CC	COMMUNICATIONS CONTRACTOR
SC	SECURITY CONTRACTOR
AVC	AUDIO VISUAL CONTRACTOR
ELITE	ELITE MODULAR

AUDIOVISUAL LEGEND

D1	DISPLAY BACK BOX WITH POWER AND DATA. LEGRAND EFSB4 BACK BOX.
AV	INSTRUCTOR POSITION POWER, PHONE AND DATA. INSTRUCTOR POSITION, STUB 1.25" CONDUIT TO CEILING FOR AV.
P	CEILING MOUNT PROJECTOR BACK BOX, LEGRAND ECB WITH ECB-CBKIT. PART NUMBER FOR REFERENCE ONLY.
S	CEILING MOUNTED A/V SPEAKERS.
P	EMERGENCY PAGING SPEAKERS. ELECTRICAL CONTRACTOR SHALL PROVIDE (1) 1" CONDUIT TO ACCESSIBLE CEILING SPACE. REFER TO TAV/4.01 FOR CABLING DETAILS

AUDIOVISUAL GENERAL NOTES

1. THE CONDUIT DIAGRAMS SHOWN ON THESE DRAWING SETS ARE FOR AV CABLING ONLY. THE DIAGRAMS ARE SHOWN ONLY FOR INTENT, AND ACTUAL ROUTING SHALL BE BASED ON FIELD CONDITIONS.
2. ELITE MODULAR SHALL PROVIDE ALL CONDUIT, JUNCTION BOXES, CABLE TRAYS, PULL STRING, ENCLOSURES, FLOOR BOXES, POWER RECEPTACLES AND POWER CONNECTIONS IDENTIFIED IN THESE DRAWINGS AND SPECIFICATIONS.
3. ALL CONDUIT CONNECTORS SHALL BE FURNISHED WITH NYLON BUSHINGS AND CHASE NIPPLES TO PREVENT DAMAGE TO CABLES FROM UNEVENLY CUT CONDUIT.
4. ALL JUNCTION BOXES IN WALLS AND CEILINGS SHALL BE FLUSH MOUNTED, AND CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
5. CAULK OR SEAL PENETRATIONS THAT ARE MADE THROUGH ACOUSTIC WALLS WITH ACOUSTICAL SEALANT.
6. DIMENSIONS ARE INDICATED ON AUDIOVISUAL DRAWINGS WHERE CRITICAL TO THE INSTALLATION OF THE AUDIOVISUAL DEVICES. WHERE INFORMATION AND REQUIREMENTS CONFLICT WITH SPECIFICATIONS AND DESIGNS DELINEATED ELSEWHERE, THE GENERAL CONTRACTOR SHALL IMMEDIATELY BRING SUCH CONFLICTS TO THE ATTENTION OF THE ARCHITECT.
7. ELITE MODULAR SHALL PROVIDE STRUCTURAL SUPPORT FOR MOUNTING OF PROJECTION SCREEN AT LOCATIONS DESIGNATED IN THESE DRAWINGS. THIS SHALL ALSO INCLUDE, BUT NOT BE LIMITED TO, BLOCKING FOR WALL MOUNTED DEVICES AND OVERHEAD SUPPORT FOR CEILING MOUNTED PROJECTORS AND PROJECTION SCREENS. REFER TO ARCHITECTURAL DRAWINGS FOR SUPPORT DETAILS AND REQUIREMENTS.
8. DATA OUTLETS AND POWER OUTLETS ARE SHOWN FOR REFERENCE ONLY. REFER TO THE TELECOMMUNICATION DRAWINGS FOR EXACT LOCATION OF THE DATA/ COMMUNICATION OUTLETS AND TO THE ELECTRICAL DRAWINGS FOR THE EXACT LOCATION OF THE POWER RECEPTACLES.
9. CEILING MOUNTED SPEAKER ENCLOSURES SHALL BE SUPPORTED FROM OVERHEAD STRUCTURE. DO NOT HANG SPEAKER ENCLOSURES FROM CEILING.
10. GENERAL CONTRACTOR SHALL PROVIDE PULL STRINGS WITH DESTINATION LABEL IN ALL CONDUIT SPECIFIED IN AUDIOVISUAL DRAWINGS.
11. GENERAL CONTRACTOR SHALL PROVIDE BLANK COVER PLATES AT ALL AUDIOVISUAL JUNCTION BOXES. VERIFY ALL DEVICE PLATE FINISHES WITH ARCHITECT.
12. COORDINATE MOUNTING HEIGHTS AND LOCATIONS OF ALL AUDIOVISUAL JUNCTION BOXES AND DEVICES WITH ARCHITECT.
13. SOME JUNCTION BOXES AND ENCLOSURES SPECIFIED IN AUDIOVISUAL DRAWINGS MAY BE DEEPER THAN STANDARD WALL DEPTH. COORDINATE WITH ARCHITECT TO VERIFY INSTALLATION REQUIREMENTS AND DETAILING. AT A MINIMUM, OUTLET BOXES SHALL BE AT LEAST 3.5" DEEP.
14. WHERE MORE THAN ONE CONDUIT TERMINATES IN A JUNCTION BOX, ELITE MODULAR SHALL LABEL EACH CONDUIT IN A MANNER ALLOWING IDENTIFICATION OF CONDUITS AFTER WALL FINISHED ARE APPLIED.
15. ALL CONDUITS SPECIFIED SHALL BE EMT (GALVANIZED) OR RIGID TYPE. FLEXIBLE STEEL CONDUITS MAY BE USED IN RUNS OF 72" OR LESS. FLEXIBLE CONDUITS SHALL NOT BE ALLOWED WHERE ACCESS CANNOT BE PROVIDED TO THE FULL LENGTH OF THE CONDUIT RUN. PVC IS UNACCEPTABLE UNLESS OTHERWISE NOTED.

A/V RESPONSIBILITY MATRIX

TASK	PARTY
AV CONDUIT, BACKBOXES, SLEEVES	EC
AV CONDUIT ID LABELING AND PULLSTRINGS	EC
POWER TO AUDIOVISUAL EQUIPMENT	EC
AV EQUIPMENT STRUCTURAL SUPPORTS (SCREENS, DISPLAY BACKING, SPEAKERS)	EC
AV EQUIPMENT RACKS AND CREDENZA CABINET INSTALLATION	AVC
AV EQUIPMENT (MANUAL SCREENS, PROJECTORS, DISPLAYS, SPEAKERS)	AVC
AV CABLING AND TERMINATION	AVC
AV FACEPLATES AND DIVIDERS	AVC

LEGEND

GC	GENERAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
CC	COMMUNICATIONS CONTRACTOR
SC	SECURITY CONTRACTOR
AVC	AUDIO VISUAL CONTRACTOR
ELITE	ELITE MODULAR

SECURITY LEGEND

CR	ACCESS CONTROL PROXIMITY CARD/FOB READER. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" SQ DEEP JUNCTION BOX AT SWITCH HEIGHT WITH A 1" EMT CONDUIT CONNECTED ABOVE DOOR JUNCTION BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, CONDUIT SUPPORT, CONNECTORS, COUPLINGS, PLASTIC BUSHINGS, PULL STRINGS, OUTLET BOX AND MUD RING.
EP	WALL MOUNTED EMERGENCY PHONE. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" SQ DEEP JUNCTION BOX AT SWITCH HEIGHT WITH A 1" EMT CONDUIT TO ACCESSIBLE CEILING SPACE. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, CONDUIT SUPPORT, CONNECTORS, COUPLINGS, PLASTIC BUSHINGS, PULL STRINGS, OUTLET BOX AND MUD RING.
MS	SECURITY ALARM DUAL TECHNOLOGY MOTION SENSOR (CEILING MOUNTED).
KP	ACCESS CONTROL KEY PAD. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" SQ DEEP JUNCTION BOX AT SWITCH HEIGHT WITH A 1" EMT CONDUIT TO ACCESSIBLE CEILING SPACE. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, CONDUIT SUPPORT, CONNECTORS, COUPLINGS, PLASTIC BUSHINGS, PULL STRINGS, OUTLET BOX AND MUD RING.
EDH	ACCESS CONTROL ELECTRONIC DOOR HARDWARE. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 1" EMT CONDUIT CONNECTED TO THE DOOR CONTACT OUTLET BOX
REX	ACCESS CONTROL REQUEST TO EXIT SENSOR. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 1" EMT CONDUIT CONNECTED TO THE DOOR CONTACT OUTLET BOX
SDC	ACCESS CONTROL DOOR CONTACT SENSOR. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" SQ DEEP JUNCTION BOX ABOVE DOOR WITH A 1" EMT CONDUIT STUBBED INTO NEAREST ACCESSIBLE CEILING SPACE. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, CONDUIT SUPPORT, CONNECTORS, COUPLINGS, PLASTIC BUSHINGS, PULL STRINGS, OUTLET BOX AND MUD RING.
	OUTDOOR RATED WALL MOUNTED CAMERA. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" SQ DEEP JUNCTION BOX WITH 1" EMT CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE (U.O.N). ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT SUPPORT, CONNECTORS, COUPLINGS, PLASTIC BUSHING, PULL STRING, OUTLET BOX, AND MUD RING. EACH CAMERA TO HAVE (1) CATEGORY 6A CABLE PROVIDED BY SECURITY CONTRACTOR.
ACP	SECURITY ACCESS CONTROL PANEL.

SECURITY GENERAL NOTES

1. ELITE MODULAR SHALL PROVIDE ALL CONDUIT, JUNCTION BOXES, CABLE TRAYS, PULL STRING, ENCLOSURES, FLOOR BOXES, POWER RECEPTACLES AND POWER CONNECTIONS IDENTIFIED IN THESE DRAWINGS AND SPECIFICATIONS.
2. ALL CONDUIT RUNS SHALL BE CONTINUOUS FROM END TO END. NO CONDUIT RUNS SHALL EXCEED 100 FEET.
3. ALL CONDUIT CONNECTORS SHALL BE FURNISHED WITH NYLON BUSHINGS AND CHASE NIPPLES TO PREVENT DAMAGE TO CABLES FROM UNEVENLY CUT CONDUIT.
4. ALL JUNCTION BOXES IN WALLS AND CEILINGS SHALL BE FLUSH MOUNTED, AND CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
5. CAULK OR SEAL PENETRATIONS THAT ARE MADE THROUGH ACOUSTIC WALLS WITH ACOUSTICAL SEALANT.

SECURITY RESPONSIBILITY MATRIX

TASK	PARTY
SECURITY CONDUIT, BACKBOXES, SLEEVES	ELITE
SECURITY CONDUIT ID LABELING AND PULLSTRINGS	ELITE
POWER TO ACS SECURITY EQUIPMENT	ELITE
SECURITY EQUIPMENT (CAMERAS, ACS DEVICE, HEADEND EQUIPMENT)	SC
ACCESS CONTROL AND INTRUSION CABLING AND TERMINATION	SC
SECURITY FACEPLATES AND DIVIDERS	SC
DOOR HARDWARE PROCURE AND INSTALL	GC
SECURITY CATEGORY CABLING AND TERMINATION	CC

LEGEND

GC	GENERAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
CC	COMMUNICATIONS CONTRACTOR
SC	SECURITY CONTRACTOR
AVC	AUDIO VISUAL CONTRACTOR
ELITE	ELITE MODULAR

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
A OR AMP	AMPERES
ACCU	AIR COOLED CONDENSING UNIT
ACS	ACCESS CONTROL SYSTEM
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
ARCH.	ARCHITECT; ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE
BDF	BUILDING DISTRIBUTION FRAME
C	CONDUIT
CKT	CIRCUIT
CLG.	CEILING
C.O.	CONDUIT ONLY WITH PULL WIRE
CU	COPPER
DWG	DRAWING
EA	EACH
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NONMETALLIC TUBING
EQUIP	EQUIPMENT
EXIST / (E)	EXISTING
E/W	EQUIPPED WITH
FCU	FAN COIL UNIT
FIN.	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FOC	FIBER OPTIC CABLE
FT	FEET
FTU	FIBER TERMINAL UNIT
GFI	GROUND FAULT INTERRUPTER
GRC	GALVANIZED RIGID CONDUIT
GND	GROUND
IDF	INTERMEDIATE DISTRIBUTION FRAME
IDS	INTRUSION DETECTION SYSTEM
JB	JUNCTION BOX
LTG.	LIGHTING
MDF	MAIN DISTRIBUTION FRAME
MH	MOUNTING HEIGHT
MM	MULTIMODE
MTG.	MOUNTING
N	NORTH
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NO.	NUMBER
PH	PHASE
PNL	PANEL
PWR	POWER
PRO	PROTECTED TERMINAL
POE	POWER OVER ETHERNET
REC/RECEPT	RECEPTACLE
REQ'D	REQUIRED
RM	ROOM
SF	SQUARE FEET
SHT	SHEET
SM	SINGLE MODE
SMJ	SURFACE MOUNTED J-BOX
SP	SINGLE POLE
SPECS	SPECIFICATIONS
SW	SWITCH
TYP	TYPICAL
TERM	TERMINATION
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
V	VOLTS
V-A	VOLT-AMPERES
W	WATTS
W/	WITH
W/O	WITHOUT
WAP	WIRELESS ACCESS POINT
GC	GENERAL CONTRACTOR
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED

SHEET INDEX

SHEET	DESCRIPTION
T1.00	GENERAL NOTES, LEGEND AND ABBREVIATIONS
T1.01	INTERIM VILLAGE SITE PLAN
T2.01	FLOOR PLAN
T4.01	SINGLE LINE DIAGRAM
T5.01	DETAILS
T5.02	DETAILS
TAV4.01	AUDIOVISUAL SYSTEM DIAGRAM PAGING SYSTEM

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3546 Concours Street / Ontario, CA 91764
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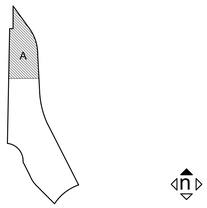
SM

KEYNOTES

NOTES

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. 04-116582
ACS____ FLS____ SSS____
DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

General Notes, Legend And Abbreviations

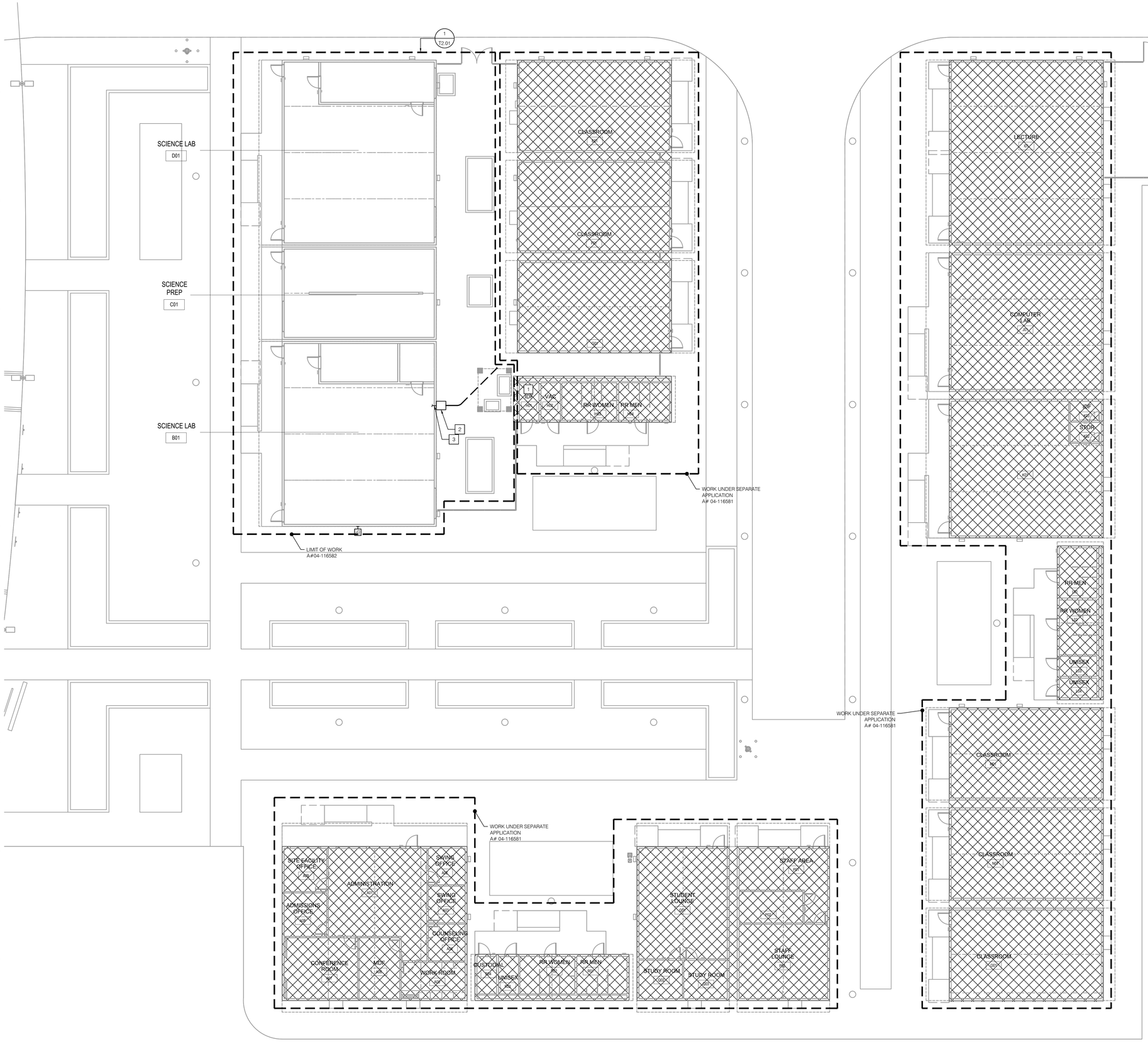
Architect's Seal

REGISTERED ARCHITECT NO. C-32437 REN. 02-28-19 STATE OF CALIFORNIA

Designed:	JQ	Project No.	5015019-102
Drawn:	JQ	Scale:	No Scale
QAQC	ER	Drawing No.	T1.00
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL



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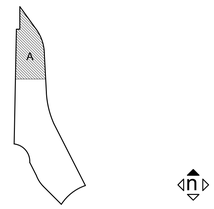
SM

KEYNOTES

1. ALL CABLING FOR LAB ROOMS B01,C01, AND D01 TO CABLE TO IDF ROOM H01.
2. FURNISH AND INSTALL 24" x 36" x 6" WALL MOUNTED PULLBOX.
3. PROVIDE AND INSTALL (5) 2" CONDUIT STUBBED INTO THE CEILING SPACE.

NOTES

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS._____ FLS._____ SSS._____

DATE _____

Project Title

PALOMAR COLLEGE
Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Interim Village Site Plan

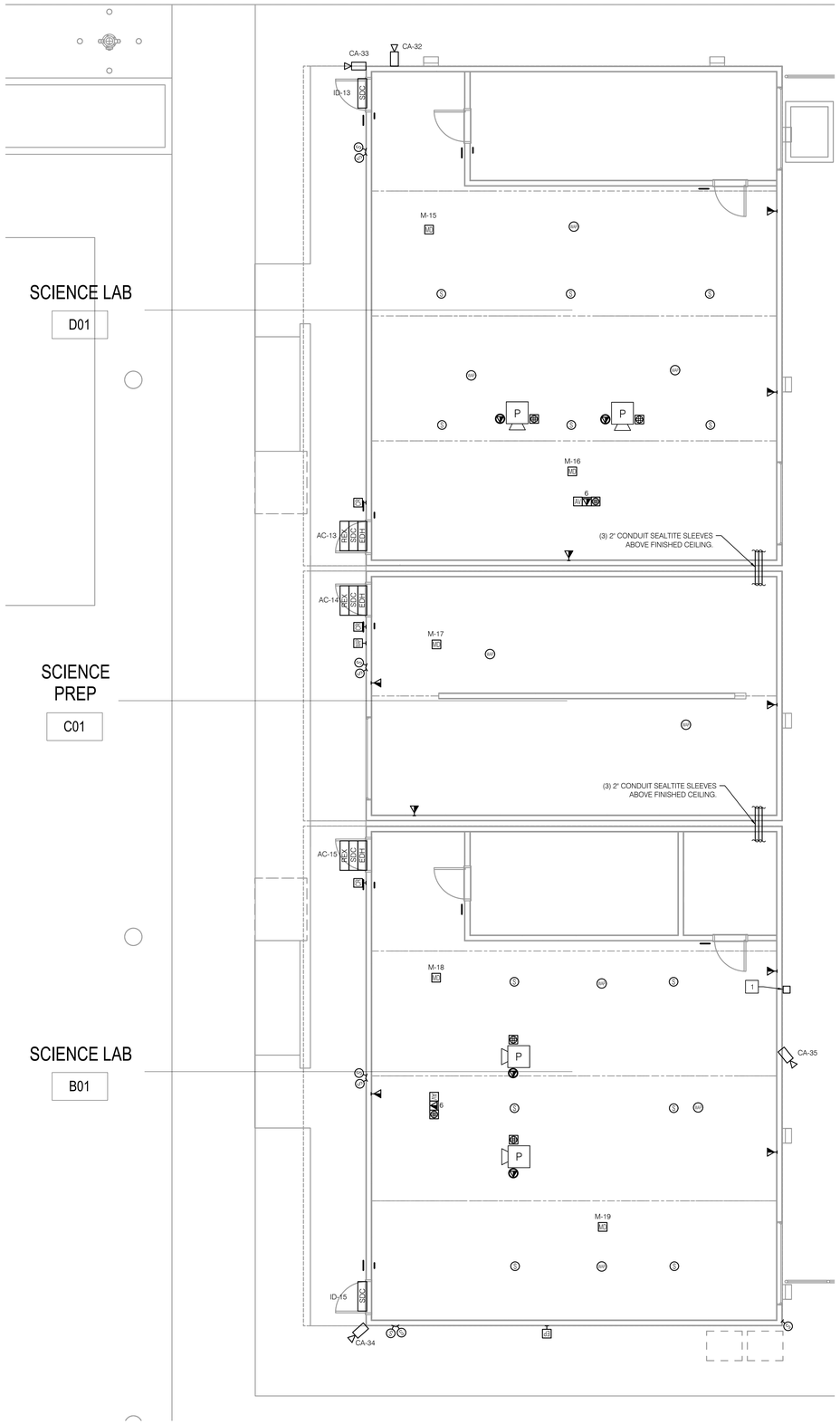
Architect's Seal

LICENSED ARCHITECT
ERIC RIEDEL
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	ER	Project No.	5015019-102
Drawn:	JQ	Scale:	1" = 10'-0"
QAQC	ER	Drawing No.	T1.01
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL



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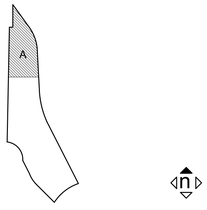
KEYNOTES

1 WALL MOUNTED PULLBOX TO IDF H01.

NOTES

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

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APPL. 04-116582
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DATE _____

Project Title

PALOMAR COLLEGE

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Floor Plan

Architect's Seal

LICENSED ARCHITECT
ERIC RIEGER
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	ER	Project No.	5015019-102
Drawn:	JQ	Scale:	3/16" = 1'-0"
QAQC	ER	Drawing No.	T2.01
Date:	10/13/2017		

PLEASE RECYCLE

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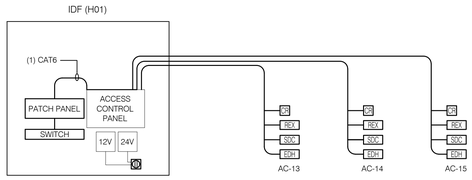
CABLING LEGEND

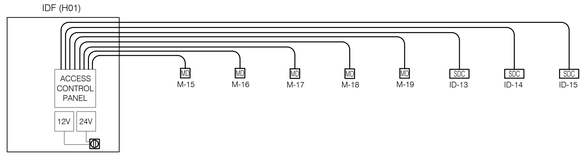
REX	18 AWG / 2
SOC	22 AWG / 2
EDH	18 AWG / 4
DR	22 AWG / 6
MS	18 AWG / 4



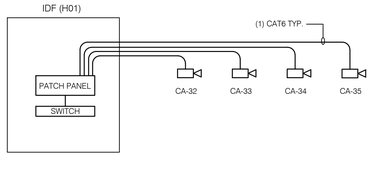
2 ACCESS CONTROL SYSTEM SINGLE LINE DIAGRAM
NO SCALE

ACCESS CONTROL SCHEDULE

READER #	REF. SHEET #	ROOM# - LOCATION	READER TYPE	LOCK TYPE	DOOR SWITCH	REX	NOTES
AC-13	T2.01	D01 - SCIENCE LAB	Schlage MT15	Per Div. 8	Interlogix, per Door Type	Schlage Scan II or Integral to Panic Hardware	
AC-14	T2.01	C01 - SCIENCE PREP	Schlage MT15	Per Div. 8	Interlogix, per Door Type	Schlage Scan II or Integral to Panic Hardware	
AC-15	T2.01	B01 - SCIENCE LAB	Schlage MT15	Per Div. 8	Interlogix, per Door Type	Schlage Scan II or Integral to Panic Hardware	



2 INTRUSION DETECTION SYSTEM SINGLE LINE DIAGRAM
NO SCALE



1 CAMERA SYSTEM SINGLE LINE DIAGRAM
NO SCALE

CAMERA SCHEDULE

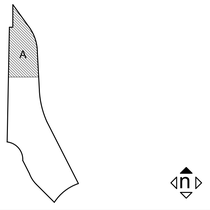
CAMERA #	REF. SHEET #	PART #	RESOLUTION	MOUNT/HOUSING (WALL/CEILING/PEDESTAL)	FOV	FPS	POWER	MOUNT HEIGHT FT)	NOTES
CA-32	T2.01	Panasonic WV-S2531LN	1080p	W	2.8 - 10MM	12	POE	10	
CA-33	T2.01	Panasonic WV-S2531LN	1080p	W	2.8 - 10MM	12	POE	10	
CA-34	T2.01	Panasonic WV-S2531LN	1080p	W	2.8 - 10MM	12	POE	10	
CA-35	T2.01	Panasonic WV-S2531LN	1080p	W	2.8 - 10MM	12	POE	10	

KEYNOTES

NOTES

1. IDF ROOM H01 IS SHOWN FOR REFERENCE ONLY. IT IS PART OF PHASE III.

Key Plan



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Agency Approval FILE NO. 37-C1
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APPL. 04-116582
ACS. FLS SSS
DATE

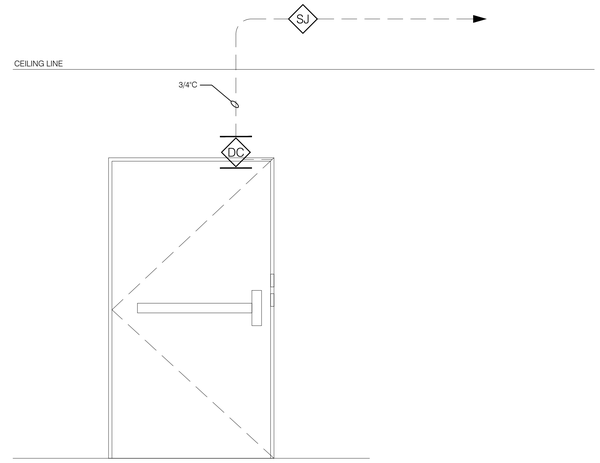
Project Title
PALOMAR COLLEGE
Palomar North Education Center - Interim Village
Palomar College
35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:
Single Line Diagram

Architect's Seal
LICENSED ARCHITECT
ERIC REIN
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	ER	Project No.	5015019-102
Drawn:	JQ	Scale:	Not To Scale
QAQC	ER	Drawing No.	T4.01
Date:	10/13/2017		

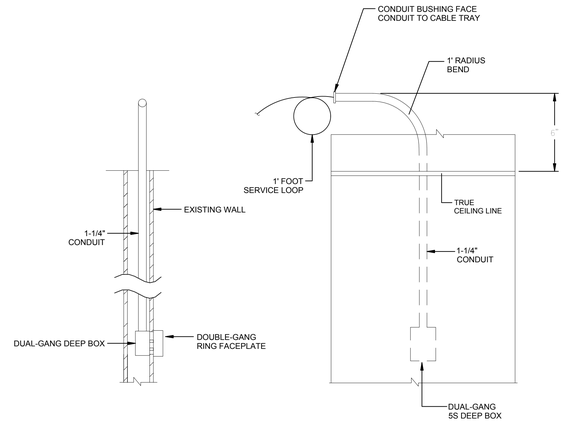


LEGEND

SYMBOL	DESCRIPTION
DC	DOOR CONTACT.
SJ	SECURITY JUNCTION BOX 4-11/16" SQ.

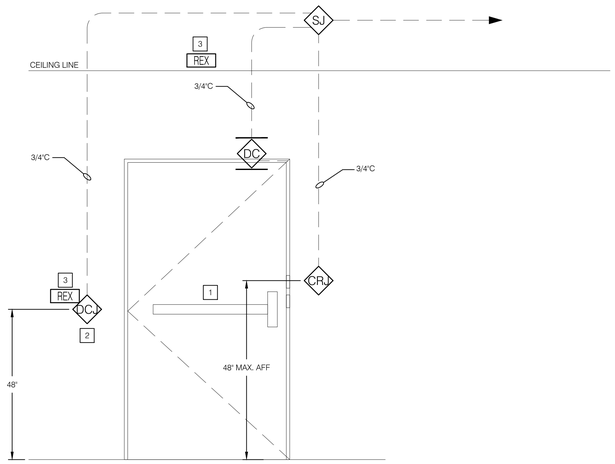
4 SECURITY DOOR INFRASTRUCTURE

NO SCALE



2 TYPICAL OUTLET CONCEALED CONDUIT

NO SCALE



LEGEND

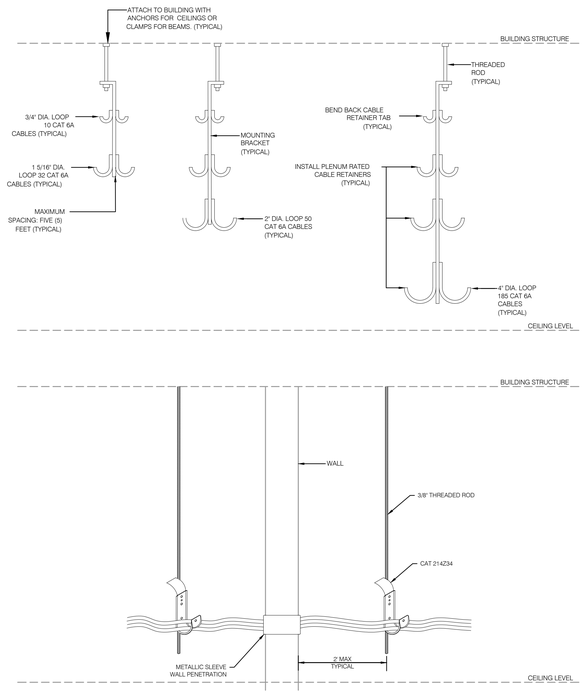
SYMBOL	DESCRIPTION
DC	DOOR CONTACT.
DC	4" SQ.J-BOX WITH SG MUD RING FOR DOOR CORD. STAINLESS STEEL COVER.
SJ	SECURITY JUNCTION BOX 4-11/16" SQ.
CR	CARD READER JUNCTION BOX 4"SQ. WITH SINGLE GANG MUD RING AND STAINLESS STEEL COVER.

NOTES

1. REQUEST TO EXIT IN DOOR HARDWARE.
2. DOOR CORD JUNCTION BOX LOCATED INTERIOR BUILDING.
3. ALL ACCESS DOORS EITHER HAVE INTEGRAL REX IN PANIC HARDWARE OR EXTERNAL REX. COORDINATE WITH DIVISION 8 CONTRACTOR.

5 SECURITY DOOR INFRASTRUCTURE

NO SCALE



3 TYPICAL J-HOOK INSTALLATION

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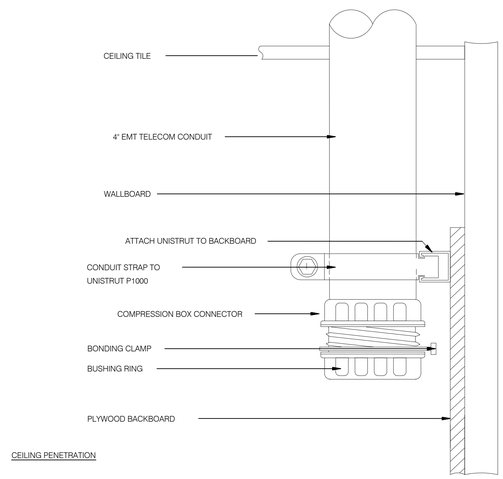

1 CONDUIT STUBBED THROUGH CEILING

NO SCALE

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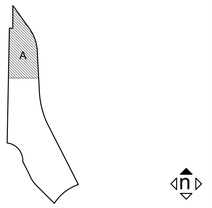
KEYNOTES

NOTES

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

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DATE _____

Project Title

PALOMAR COLLEGE Learning for Success

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Details

Architect's Seal

REGISTERED ARCHITECT
ELIZABETH RIVERA
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	ER	Project No.	5015019-102
Drawn:	JQ	Scale:	Not To Scale
QAQC	ER	Drawing No.	T5.01
Date:	10/13/2017		

PLEASE RECYCLE

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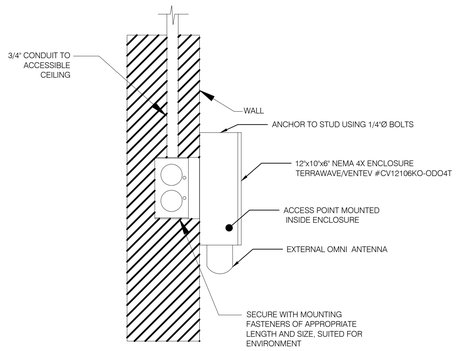

4 EXTERIOR AP WALL MOUNT

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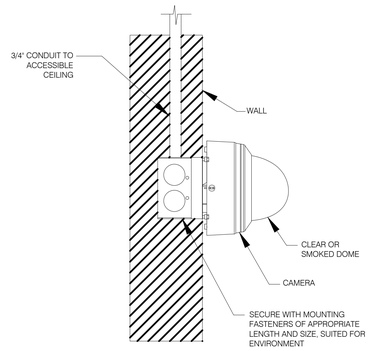
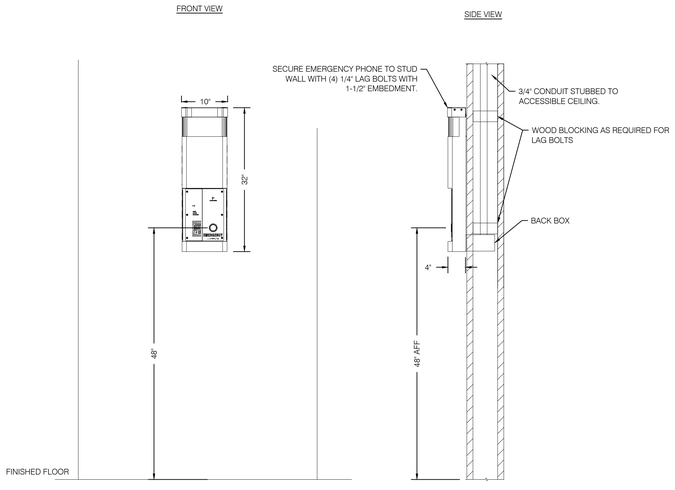


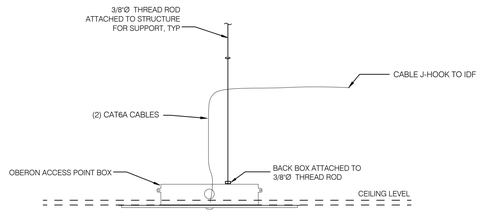
2 WALL MOUNT MINI DOME

NO SCALE



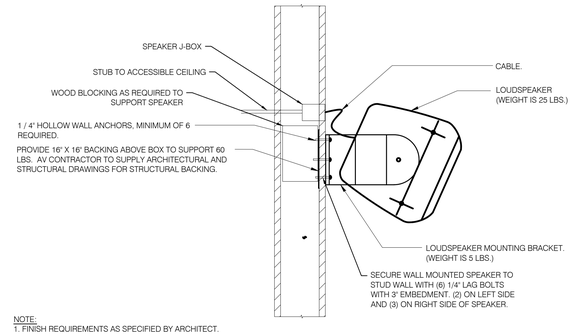
5 WALL MOUNT EMERGENCY PHONE

NO SCALE



3 TYPICAL AP CEILING MOUNT

NO SCALE



NOTE:
1. FINISH REQUIREMENTS AS SPECIFIED BY ARCHITECT.

2. SPEAKER WEIGHT IS APPROXIMATELY 25 LBS.

1 EMERGENCY SPEAKER, WALL MOUNTED

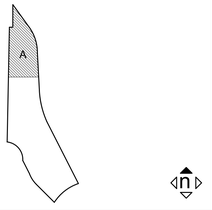
NO SCALE

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

KEYNOTES

NOTES

Key Plan



Consultant Seal

Agency Approval FILE NO. 37-C1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL. 04-116582

ACS.____ FLS.____ SSS.____

DATE _____

Project Title

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
	DSA SUBMITTAL - PHASE IV	10/13/2017

Drawing Title:

Details

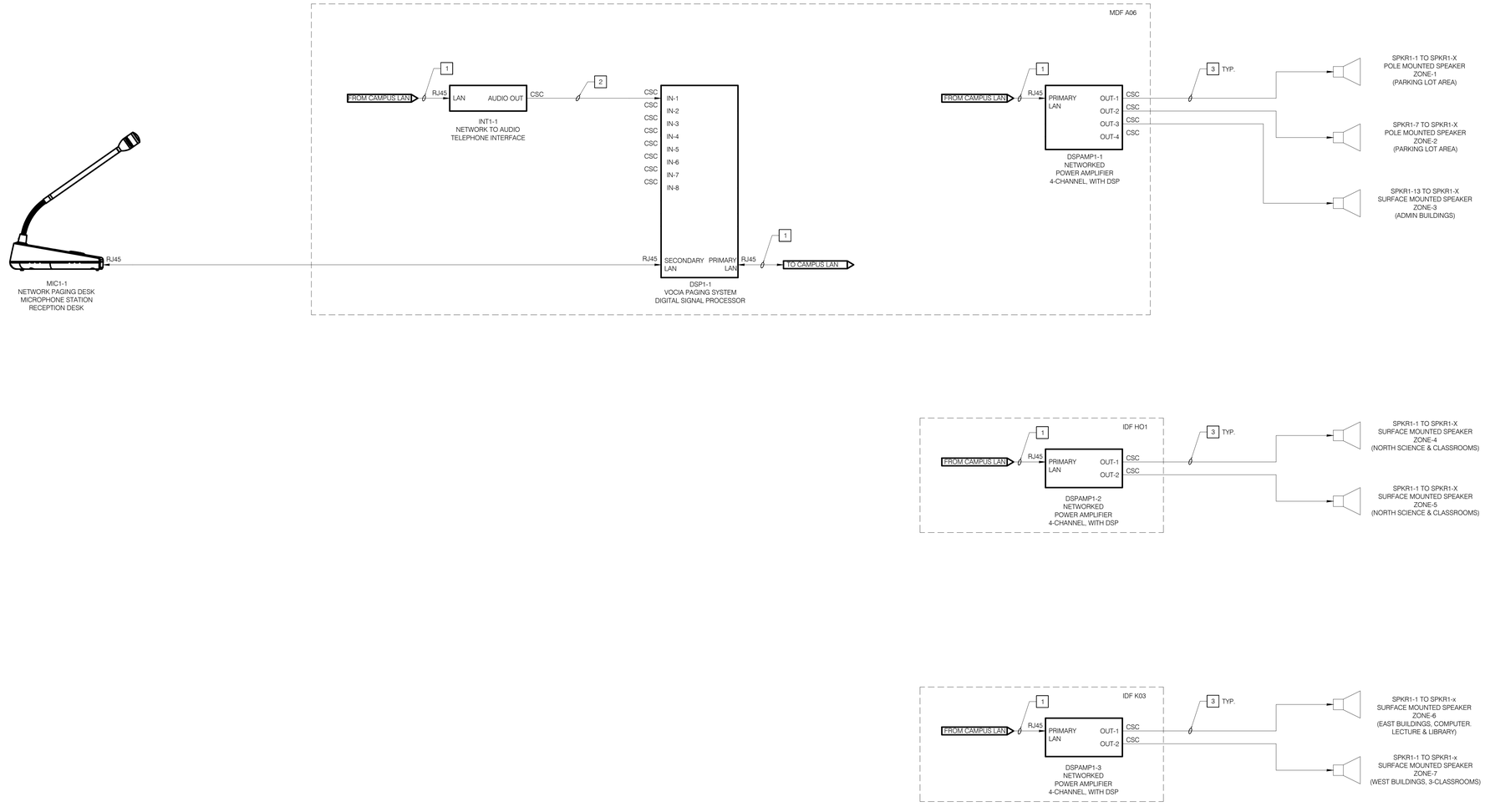
Architect's Seal

LICENSED ARCHITECT
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	ER	Project No.	5015019-102
Drawn:	JQ	Scale:	Not To Scale
QAQC	ER	Drawing No.	T5.02
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL



AUDIOVISUAL SYSTEM DIAGRAM, PAGING SYSTEM 1

N.T.S.

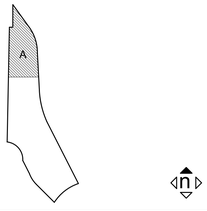
HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

KEYNOTES

1. CABLE, CAT-6A.
2. CABLE, AUDIO, 2-22, 22-GAUGE, SHIELDED TWISTED PAIR, PLENUM RATED.
3. CABLE, SPEAKER, 16 AWG, PAIR, NON SHIELDED OSP

NOTES

Key Plan



Consultant Seal

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APPL. 04-116582

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DATE _____

Project Title

Palomar North Education Center - Interim Village

Palomar College

35090 Horse Ranch Creek Road
Fallbrook, CA 92028

No.	Description	Date
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Drawing Title:

AUDIOVISUAL SYSTEM DIAGRAM
PAGING SYSTEM

Architect's Seal

LICENSED ARCHITECT
ER
NO. C-32437
REN. 02-28-19
STATE OF CALIFORNIA

Designed:	ST	Project No.	5015019-102
Drawn:	ST	Scale:	N.T.S.
QAQC	ER	Drawing No.	TAV4.01
Date:	10/13/2017		

PLEASE RECYCLE

DSA SUBMITTAL

MODULAR CLASSROOM BUILDINGS

BUILDING SIZE: 24'x40', 36'x40', 48'x40'

BY

SILVER CREEK INDUSTRIES, INC.

2830 BARRETT AVE, PERRIS, CALIFORNIA 92571

PHONE : (951) 943-5393 FAX : (951) 943-2211

PALOMAR COLLEGE EDUCATION CTR.

PALOMAR COLLEGE SCIENCE BUILDING

GENERAL NOTES

SEE PC SHEET A-0

APPLICABLE STANDARDS

SEE PC SHEET A-0

APPLICABLE CODES

SEE PC SHEET A-0

BUILDING DATA

SEE PC SHEET A-0

WIND DESIGN DATA

EARTHQUAKE DESIGN DATA

SEE PC SHEET A-0

SHEET INDEX

PROJECT SPECIFIC SHEET INDEX

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A-0.2N	SCHEDULES
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A-1.01N	FLOOR PLAN - 24x40
A-1.03N	FLOOR PLAN - 48x40
A-1.03.1N	FLOOR PLAN - 48x40
A-2.01N	REFLECTED CEILING PLAN - 24x40
A-2.03N	REFLECTED CEILING PLAN - 48x40
A-2.031N	REFLECTED CEILING PLAN - 48x40
A-4.01N	EXTERIOR ELEVATIONS - 24x40
A-4.03N	EXTERIOR ELEVATIONS - 48x40
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A-6.01N	INTERIOR ELEVATIONS - 24x40
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A-6.03.1N	INTERIOR ELEVATIONS - 48x40

SHT NO.	ELECTRICAL
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E-1.03N	ELECTRICAL PLAN - 48x40
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SHT NO.	RAMP
R-1.00	OVERALL RAMP AND LANDING PLAN

SHT NO.	FOUNDATION
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SHT NO.	STRUCTURAL
S-1.01N	FLOOR FRAMING PLAN
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SHT NO.	FIRE SPRINKLERS
FS-1	FIRE SPRINKLER - PROJECT DATA
FS-2	FIRE SPRINKLER - FSP
FS-3	FIRE SPRINKLER - DETAILS
FS-4	FIRE SPRINKLER - SITE UTILITY

PC SHEET INDEX

SHT NO.	ARCHITECTURAL
A-0	COVER SHEET
A-0A	T & I FORMS
A-0.0	BUILDING OPTIONS SCHEDULE
A-0.1	SYMBOLS LEGEND, ABBREVIATION, AND ADA SIGNAGE
A-0.2	SCHEDULES
A-0.3	TYPICAL KEY PLANS - 24' TO 120' x 40'
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S-5.10	WALL FRAMING DETAILS - WOOD STUDS
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SHT NO.	PLUMBING
P-1.01	PLUMBING DETAILS AND SCHEDULE

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SHT NO.	FIRE SPRINKLERS
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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:

PALOMAR COLLEGE EDUCATION CTR.

PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:

COVER SHEET

ARCHITECT OF RECORD SUBMISSION DATE

No. C-33467
REN. 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS

1
2
3
4
5
6
7
8

SILVER CREEK INDUSTRIES

PROJECT NO:

DRAWN BY:

SCALE: AS NOTED

DATE:

SHEET NUMBER

A-0N

WINDOW SCHEDULE

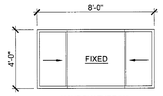
WINDOW NO.	QTY	TYPE	WIDTH	HEIGHT	FUNCTION	FRAME MATERIAL	GLASS MATERIAL	WALL THICKNESS	NOTES
A		1	8'-0"	4'-0"	XOX	ANOD	DP		

WINDOW FINISH

ANOD: CLEAR ANODIZED ALUMINUM FRAME
BRONZ: BRONZE ANODIZED ALUMINUM FRAME
PAINT: PAINTED FRAME
WF: 16GA WELDED FRAME
FRW: FIRE RATED WINDOW
FRAME: MIN 0.048" THICK WELDED FRAME
FRG: FIRE RATED GLAZING: 1/4" WIRED GLASS. LABELED TO MEET THE REQUIREMENTS FOR A 3/4 HOUR FIRE WINDOW ASSEMBLY PER CBC SECTION/TABLE 715.5

DP: 3/16" MINIMUM DUAL PANE TEMPERED GLASS OF SOLAR GRAY - 3/16" ENERGYSHIELD. ALL OPERABLE SASH SHALL HAVE SCREENS. (U-FACTOR = .510 MAX, VT = 0.500 MIN., SHGC = .350 MAX, STC = 36 MIN.)

WINDOW TYPE



WINDOW TYPE "1"

DOOR SCHEDULE

DOOR NO	WIDTH	HEIGHT	DOOR TYPE	QTY	DOOR MAT/FIN	FRAME MAT/FIN	HARDWARE SET	WALL THICKNESS	NOTES*
1	3'-0"	7'-0"	A		HM	KD	HW - 1		
1P	3'-0"	7'-0"	A1		HM	KD	HW - 2		
2	3'-0"	7'-0"	A		SCL	KD	HW - 3		

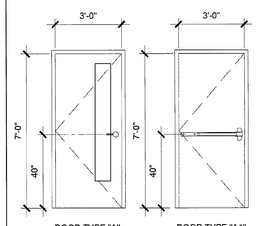
DOOR MATERIAL AND FINISH ABBREVIATIONS

HM: 18GA HOLLOW METAL
WF: 16GA WELDED FRAME
AL: ALUMINUM
SST: STAINLESS STEEL

KD: KNOCK DOWN FRAME
SCL: SOLID CORE WOOD LEGACY
HC: HOLLOW CORE WOOD
PT: PAINTED

*EXTERIOR DOORS TO BE UNINSULATED SINGLE LAYER DOORS W/ U-FACTOR OF 0.500 MAX

DOOR TYPES & NOTES



DOOR TYPE "A" DOOR TYPE "A1"

1. DOOR HANDLE FOR LOCKSETS AND PANIC HARDWARE TO BE CENTERED AT 40" AFF. HARDWARE TO BE OPENED FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. LEVERS TO RETURN TO WITHIN 1/2" OF DOOR.
2. ALL DOORS SHALL BE 1 3/4" THICK U.N.O.
3. CLOSER SHALL BE SET FOR MAXIMUM OPENING PRESSURE OF 5 LBS AT EXTERIOR AND INTERIOR DOORS.
4. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER. CBC 1008.1.10
5. ALL HARDWARE SHALL COMPLY WITH SILVER CREEK'S SPEC'S ON THIS SHEET AND CBC SECTIONS 11B-206.5, 11B-404.1 AND 1008.
6. DOOR CLOSER SHALL BE ADJUSTED TO SO THAT FROM AN OPEN POSITION OF 70°, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3° FROM THE LATCH, MEASURED TO THE LANDING SIDE OF THE DOOR
7. PANIC AND FIRE EXIT HARDWARE. WHERE THIS TYPE HARDWARE IS INSTALLED, IT SHALL COMPLY WITH THE FOLLOWING:
   - THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH.
   - THE MAXIMUM UNLATCHING FORCE SHALL NOT EXCEED 5LBS PER THE 2013 CBC
   APPROVED BY AUTHORITY W/ JURISDICTION, PANIC HARDWARE SHALL COMPLY WITH CBC SECTION 1008.1.10
8. THE FIRE PROTECTION FOR EXTERIOR WALL IS DETERMINED BASED UPON THE FIRE SEPARATION DISTANCE IN WHICH THE WALL IS LOCATED. SEE CBC TABLE 705.8 OR TABLE 602

FINISH SCHEDULE

ROOM NAME	FLOORING		WALL FINISH				CEILING		
	FLOOR	BASE	FRONT	LEFT	REAR	RIGHT	CEILING	CEILING HT	NOTES
CLASSROOM 101	CARP	4" TS	TACK	TACK	TACK	TACK	CP	8'-6"	
	CARP	4" TS	TACK	TACK	TACK	TACK	CP	8'-6"	
	SV	6" TS	FRP	FRP	FRP	FRP	CP		

FLOOR, WALL, CEILING MATERIALS

FLOORING
CARP: CARPET PER STATE OF CALIFORNIA SPECIFICATIONS COMPLYING WITH GROUP 1; TYPE "A" OR TYPE "B"; CLASS 2; DENSITY 4600; DIRECT GLUE DOWN
SV: SHEET VINYL FLOORING
VCT: VINYL COMPOSITION TILE

BASE
4" TS: 4" TOP SET BASE
6" TS: 6" TOP SET BASE
SC: 6" SELF-COVE BASE

WALLS
TACK: 1/2" VINYL TACKBOARD CLASS 1 OVER ½" GYPSUM BOARD BACKING
FRP: 1/8" FIBER REINFORCED PANEL OVER ½" WATER RESISTANT GYPSUM BOARD
GYP: 1/2" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH
PLY: 1/2" PLYWOOD FINISH
NF: NO FINISH

CEILING
CP: ACOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATION NOTES ON REFLECTED CEILING PLAN)
HC: 5/8" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH (HARD LID CEILING)
GBP: 1/2" GYPSUM BOARD WASHABLE PANELS (PAINTED)

INSULATION SPECIFICATIONS

MOISTURE PROTECTION INSULATION:

DESCRIPTION OF WORK: THE FURNISHING AND INSTALLING OF ALL INSULATION FOR ALL CEILING, FLOOR AREAS, AND EXTERIOR WALLS. (CLASS A = 0-25 FLAME SPREAD:) SMOKE DEVELOPMENT DENSITY LESS THAN 450.

MATERIAL: INSULATING MATERIAL FOR WALLS, CEILINGS, AND FLOORS SHALL BE FIBERGLASS BATTS (UNFACED) AND SHALL COMPLY WITH CBC 719.2+719.3. INSULATION SHALL BE AS MANUFACTURED BY OWENS-CORNING FIBERGLASS CORPORATION, JOHNS-MANVILLE, CERTAINTIES, OR EQUAL.

INSULATION VALUES
SEE SHEETS A-0.7 FOR MINIMUM REQUIRED INSULATION VALUES FOR SPECIFIC BUILDING SIZE AND CONFIGURATION.

EXTERIOR WALL INSULATION (MIN.)
- [ ] R-13 (2x4)
- [x] R-19 (2x6)
- [ ] R-30 (2x8)

INTERIOR WALL INSULATION (MIN.)
R-13

FLOOR INSULATION (MIN.)
- [x] NONE
- [ ] R-13
- [ ] R-19

ROOF INSULATION (MIN.)
- [ ] R-19
- [x] R-30
- [ ] R-38
- [ ] R-19 BETWEEN JOISTS AND R-19 BELOW JOISTS

STEEL STUD EXTERIOR WALL
- [ ] R-13 (2X4) W/ R-4 CONT. RIGID INSULATION

FINISH NOTES

1. ALL FINISHES SHALL COMPLY WITH CBC, CFC AND TITLE 19 CCR.
2. PREPARATION FOR SUB-FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. PLYWOOD SUB-FLOOR IS 2.4.1. PLYWOOD. OUTER PLYWOOD IS PLUGGED AND TOUCH SANDED. ANY DEFORMITIES DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR. THE JOINT AT THE MODLINE SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR.
3. RESILIENT FLOORING DEMONSTRATING A COEFFICIENT OF FRICTION OF AT LEAST 0.6 PER ASTM D2047, WILL BE ACCEPTED AS MEETING THE INTENT OF SLIP RESISTANCE.
4. CARPET SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT, OR LEVEL CUT / UNCUT PILE TEXTURE AND MAXIMUM PILE HEIGHT OF 1/2" PER THE 2013 CBC. CARPET EDGED SHALL COMPLY WITH THE 2013 CBC
5. INTERIOR WALL AND CEILING FINISHES SHALL HAVE A MIN. CLASS 'C' RATING. FLAME SPREAD INDEX 76-200 & SMOKE DEVELOPED INDEX 0-450 PER 2013 CBC 803.

DOOR HARDWARE

CLASSROOM - EXTERIOR DOOR HW-1

LOCKSET	SCHLAGE NO75PDRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER BB1191 4 1/2" x 4 1/2" NRP	Finish 26D	or equal
CLOSER	NORTON 8501 BFDA	Finish 689	or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum	or equal
THRESHOLD	HAGER 413SA 36	Finish Alum	or equal
DOOR BOTTOM	HAGER 783SAV 35N	Finish Alum	or equal

DOOR W/ PANIC HARDWARE - EXTERIOR DOOR HW-2

EXIT DEVICE	VON DUPRIN 99L-PA-2 w/ SCHLAGE rim cylinder	Finish Alum	or equal
BUTTS	HAGER BB1191 4 1/2" x 4 1/2" NRP	Finish 26D	or equal
CLOSER	NORTON 8501 BFDA	Finish 689	or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum	or equal
THRESHOLD	HAGER 413SA 36	Finish Alum	or equal
DOOR BOTTOM	HAGER 783SAV 35N	Finish Alum	or equal
LOCK	VON DUPRIN NL-OP		

EMERGENCY EXIT AND PANIC HARDWARE IS TO COMPLY WITH SFM STANDARD 12-10-3, SECTION 12-10-302:
a) THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR/GATE.
d) THE ENDS OF THE CROSS-BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS.

STAFF RESTROOM / SINGLE-OCCUPANCY - INTERIOR DOOR HW-3

LOCKSET	SCHLAGE ND40SRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER 1279 4 1/2" x 4 1/2"	Finish 26D	or equal

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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
SCHEDULES

ARCHITECT OF RECORD SUBMISSION DATE
REGISTERED PROFESSIONAL ENGINEER
Rick Ruiz
No. C-33487
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
2
3
4
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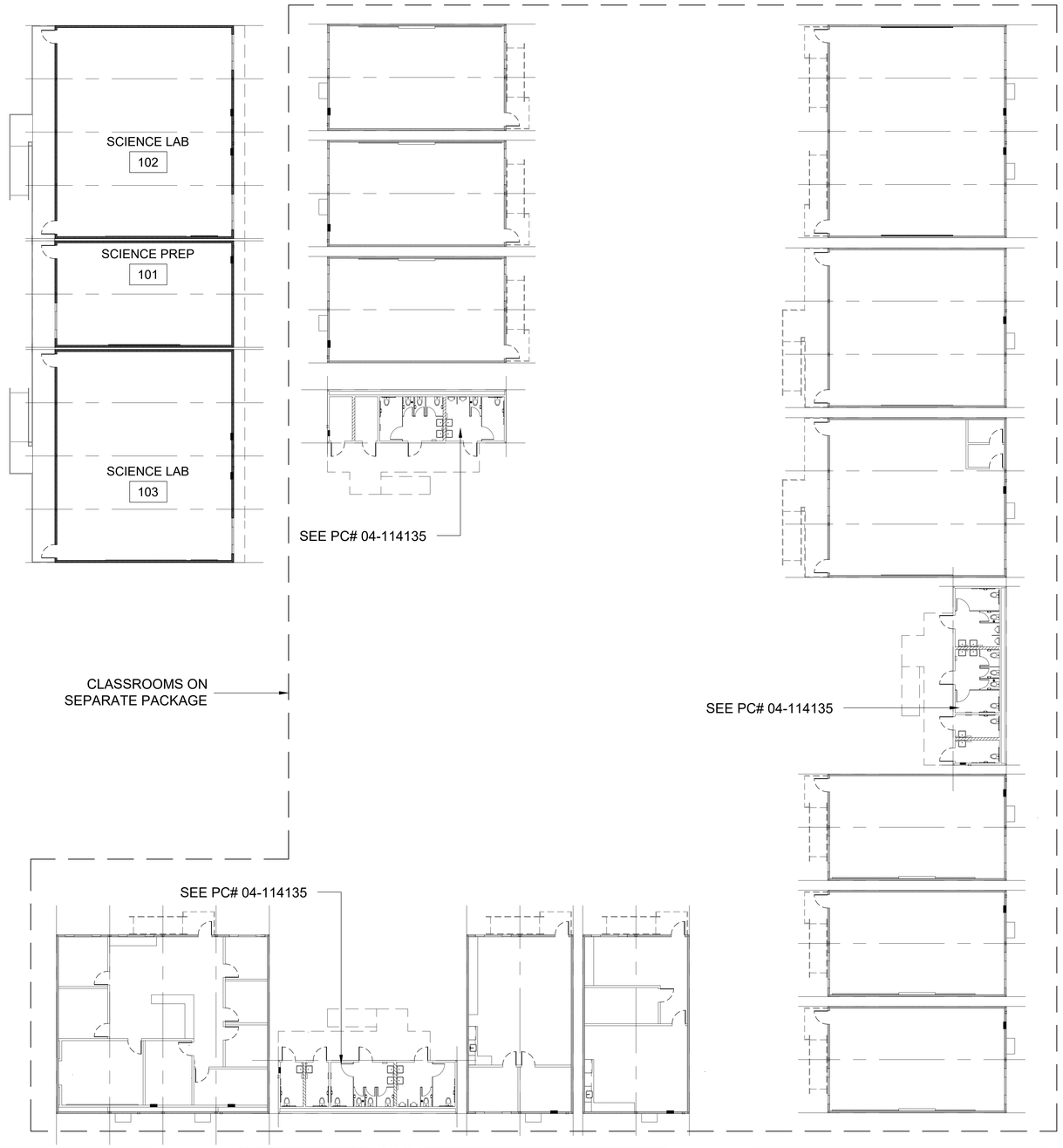
SILVER CREEK INDUSTRIES

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

SHEET NUMBER
A-0.2N



KEY PLAN

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"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
KEY PLAN

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33457
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
2
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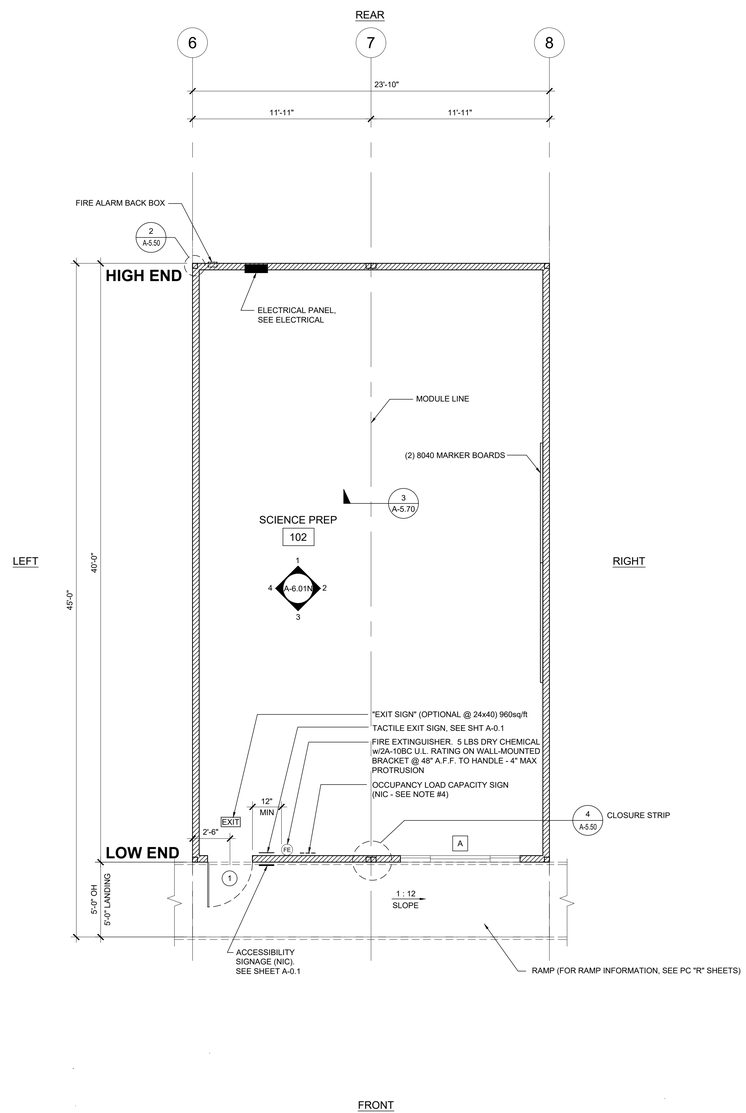
SILVER CREEK INDUSTRIES
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

SHEET NUMBER
A-1.00N



NOTES

SEE PC
SHEET A-1.01

DETAIL SCHEDULE

FINISH:	SHEET #:
✖ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50

WALL LEGEND

- NOMINAL 4" WALL STUD ✖
- NOMINAL 6" WALL STUD ✖
- NOMINAL 8" WALL STUD ☐

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"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR PLAN
24' x 40'

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33462
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
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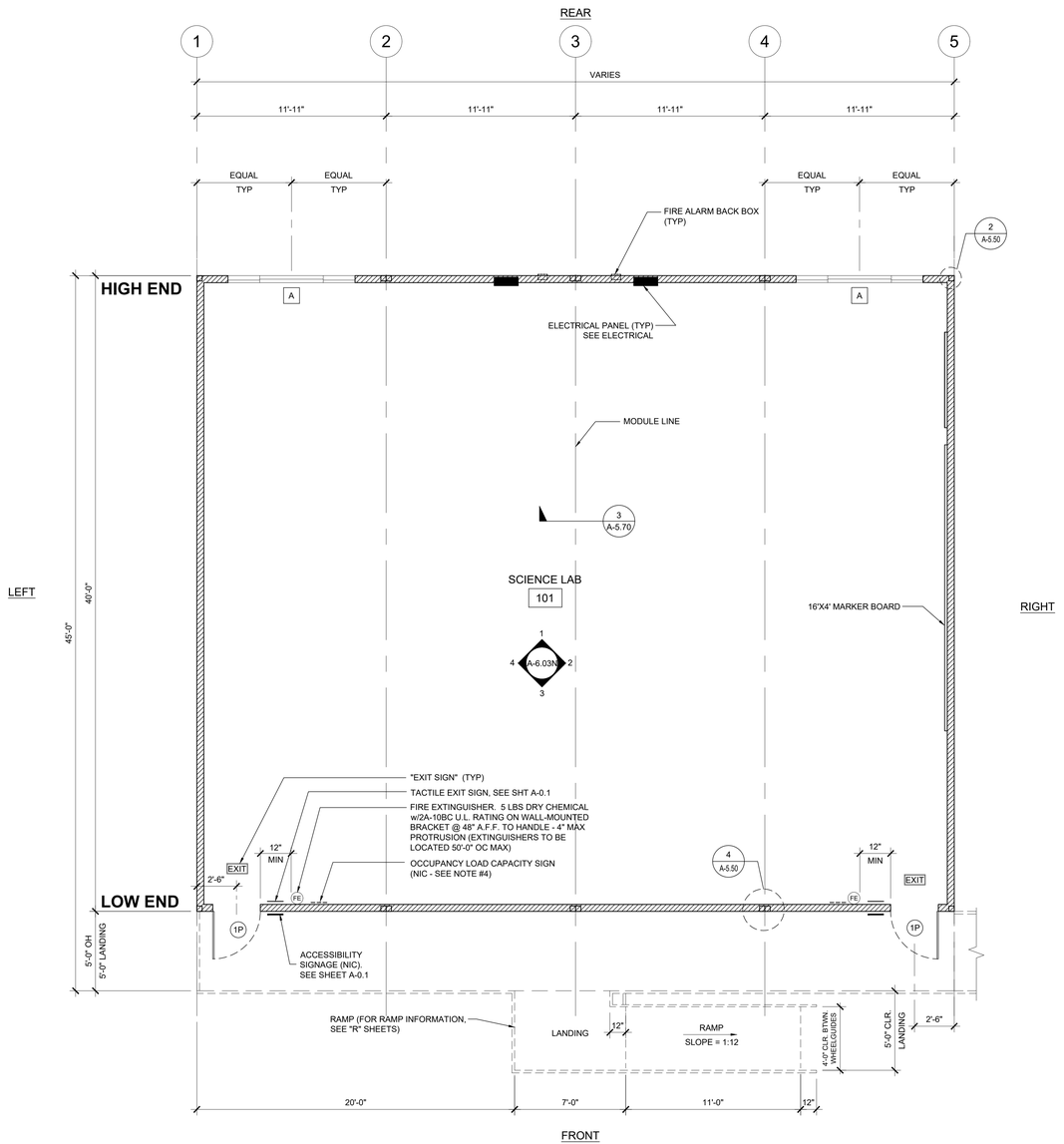
SILVER CREEK INDUSTRIES

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	

SHEET NUMBER
A-1.01N

24x40 SCIENCE PREP

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



NOTES

SEE PC
SHEET A-1.03

DETAIL SCHEDULE

FINISH:	SHEET #:
✖ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50

WALL LEGEND

- NOMINAL 4" WALL STUD ✖
- NOMINAL 6" WALL STUD ✖
- NOMINAL 8" WALL STUD ☐

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR PLAN
48' TO 120' x 40'

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33467
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
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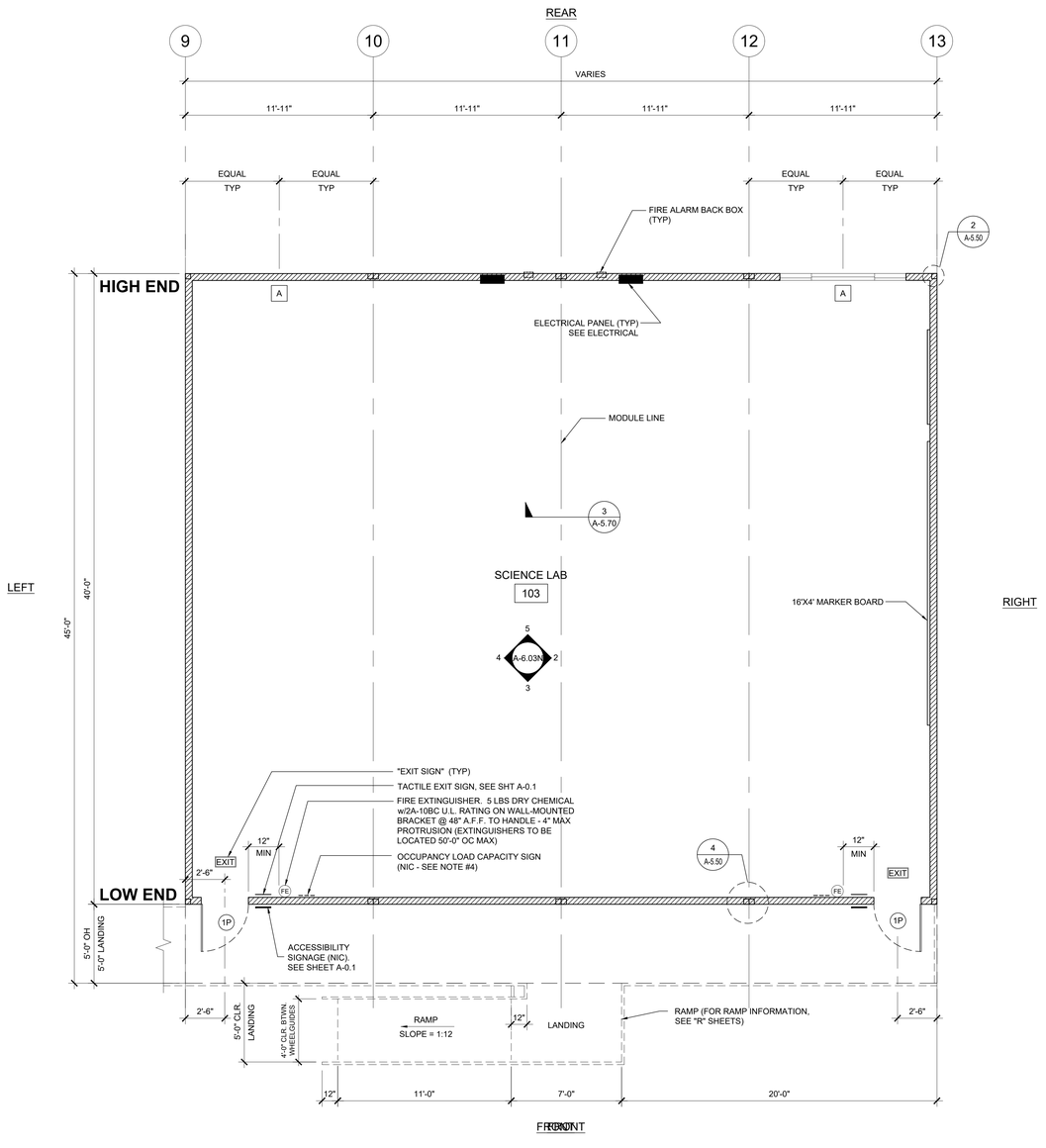
SILVER CREEK INDUSTRIES

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

SHEET NUMBER
A-1.03N

48x40 SCIENCE LAB

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



48x40 SCIENCE LAB

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

NOTES

SEE PC
SHEET A-1.03

DETAIL SCHEDULE

FINISH:	SHEET #:
✖ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50

WALL LEGEND

- NOMINAL 4" WALL STUD ✖
- NOMINAL 6" WALL STUD ✖
- NOMINAL 8" WALL STUD ☐

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR PLAN
48' TO 120' x 40'

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33467
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
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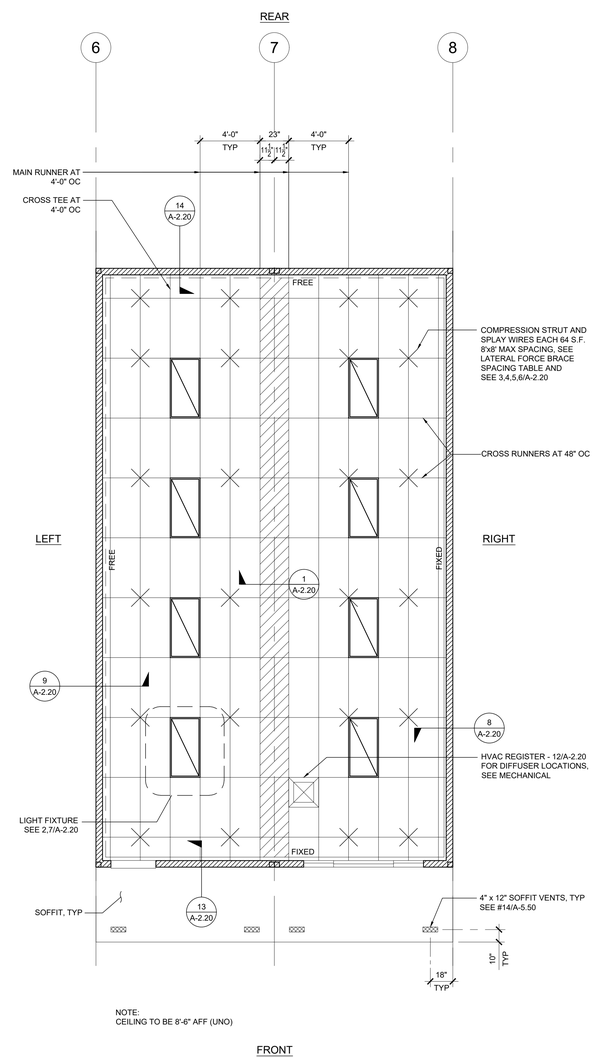
SILVER CREEK INDUSTRIES
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

SHEET NUMBER
A-1.03.1N



LEGEND

SEE PC
SHEET A-2.01
FOR LEGEND
AND NOTES

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
REFLECTED CEILING PLAN
24' x 40'

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33467
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
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SILVER CREEK INDUSTRIES

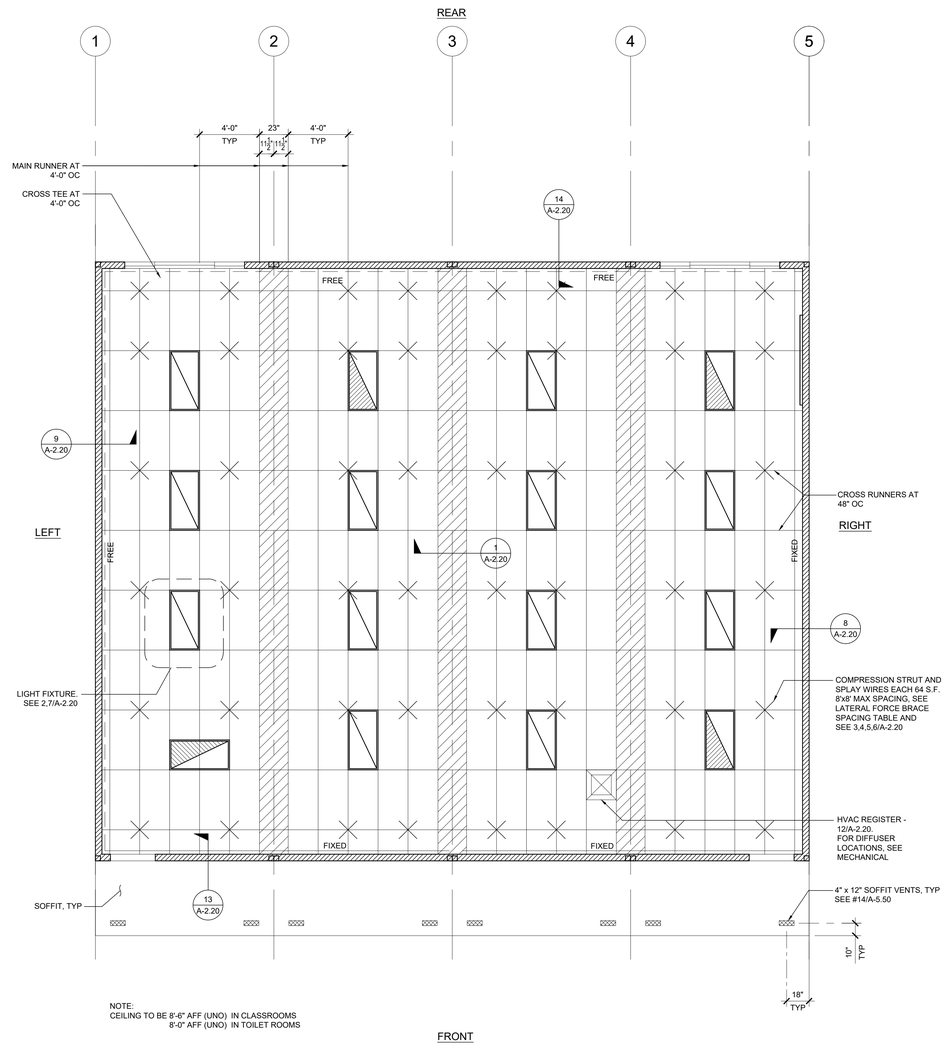
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	

SHEET NUMBER
A-2.01N

REFLECTED CEILING PLAN - SCIENCE PREP

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

1



REFLECTED CEILING PLAN - SCIENCE LAB

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

LEGEND

SEE PC
SHEET A-2.03
FOR LEGEND
AND NOTES

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE
SCIENCE BUILDING

SHEET TITLE:
REFLECTED CEILING PLAN

ARCHITECT OF RECORD
SUBMISSION DATE
RICK E. SHARPE
No. C-34687
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
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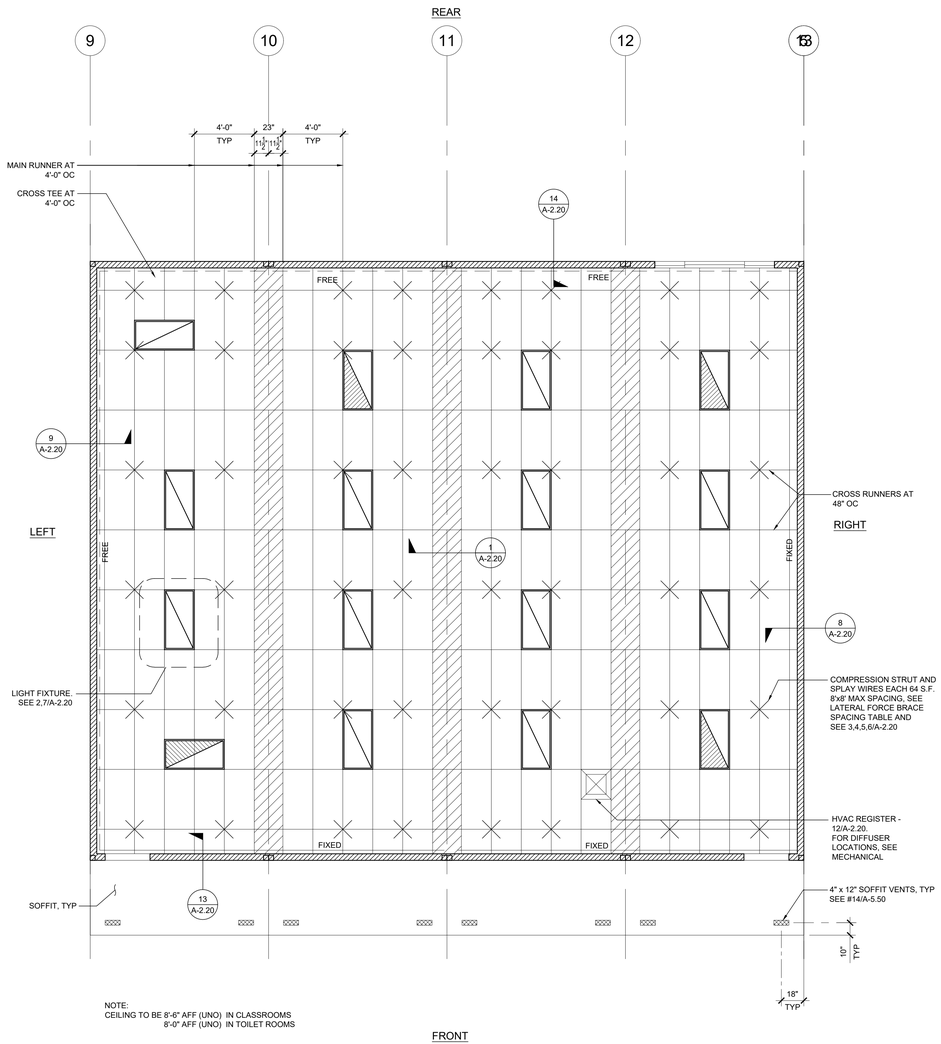
SILVER CREEK INDUSTRIES

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

SHEET NUMBER
A-2.03N



NOTE:
CEILING TO BE 8'-6" AFF (UNO) IN CLASSROOMS
8'-0" AFF (UNO) IN TOILET ROOMS

FRONT

REFLECTED CEILING PLAN - SCIENCE LAB

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

LEGEND

SEE PC
SHEET A-2.03
FOR LEGEND
AND NOTES

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
REFLECTED CEILING PLAN

ARCHITECT OF RECORD
SUBMISSION DATE
No. C-33457
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
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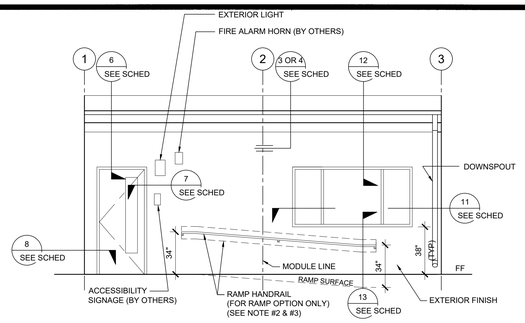
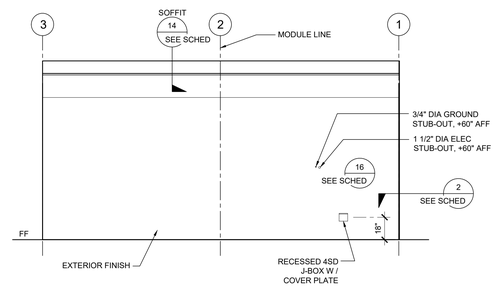
SILVER CREEK INDUSTRIES

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

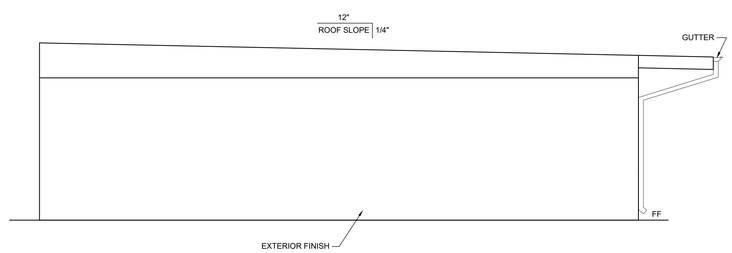
SHEET NUMBER
A-2.03.1N



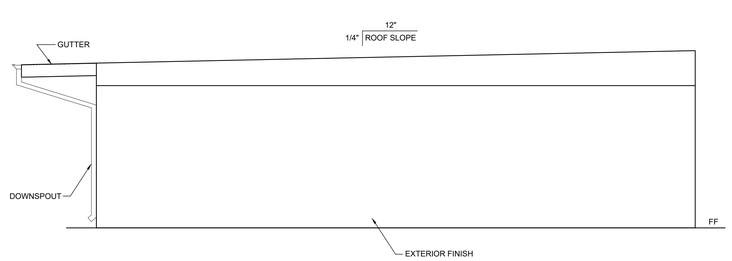
EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" | 1



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" | 2



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" | 3



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" | 4

NOTES (EXTERIOR ELEVATION)

SEE PC
SHEET A-4.01

DETAIL SCHEDULE

EXTERIOR FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
EXTERIOR ELEVATION

ARCHITECT OF RECORD SUBMISSION DATE
REGISTERED PROFESSIONAL ENGINEER
No. C-33467
REN. 01.31.2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
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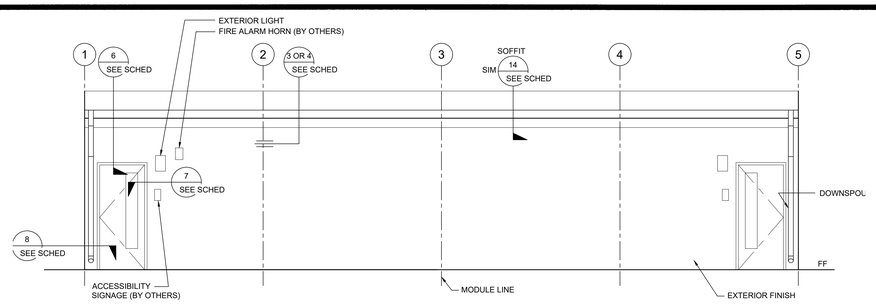
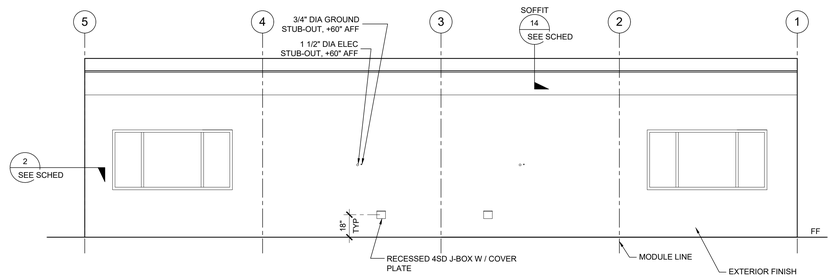
SILVER CREEK INDUSTRIES

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	

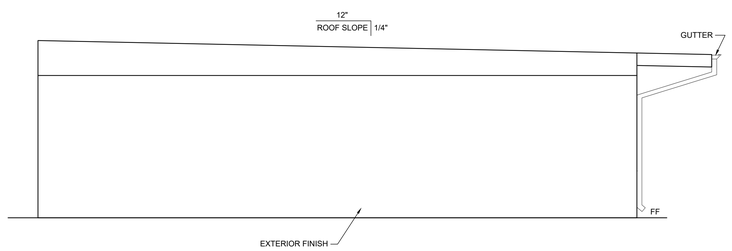
SHEET NUMBER
A-4.01N



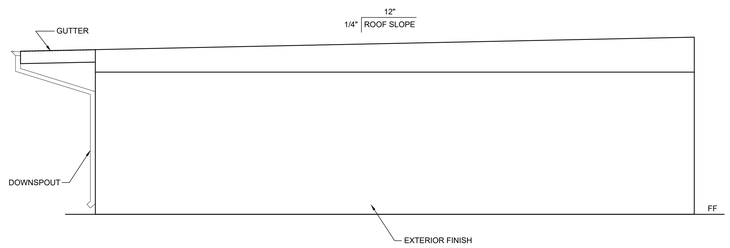
EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 1



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 2



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 3



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 4

NOTES (EXTERIOR ELEVATION)

SEE PC
SHEET A-4.04

DETAIL SCHEDULE

EXTERIOR FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50

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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
EXTERIOR ELEVATION

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33487
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
2
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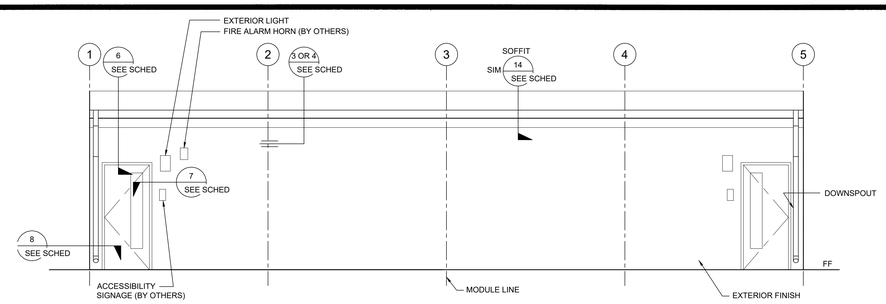
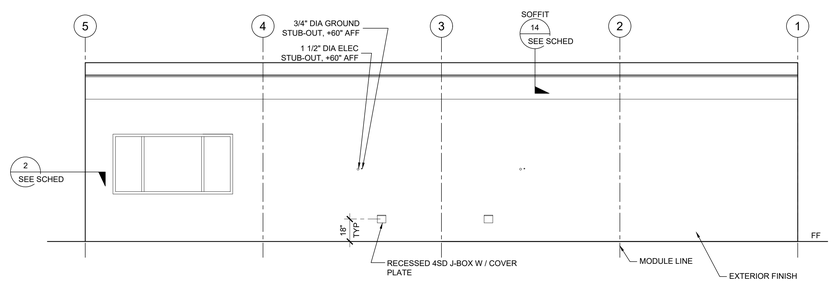
SILVER CREEK INDUSTRIES

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	

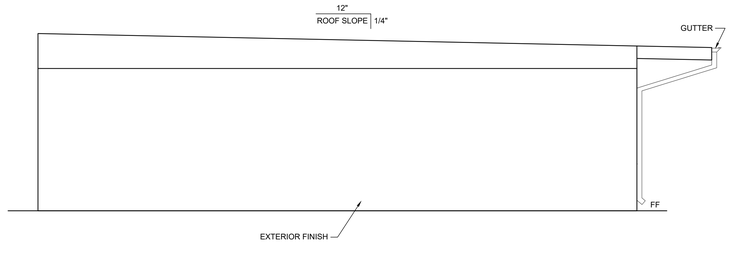
SHEET NUMBER
A-4.03N



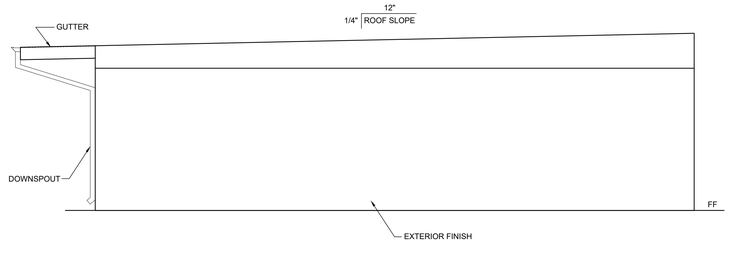
EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 1



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 2



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 3



EXTERIOR ELEVATION — SCALE: 1/4" = 1' - 0" — 4

NOTES (EXTERIOR ELEVATION)

SEE PC
SHEET A-4.04

DETAIL SCHEDULE

EXTERIOR FINISH:	SHEET #:
✖ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50

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2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE
SCIENCE BUILDING

SHEET TITLE:
EXTERIOR ELEVATION

ARCHITECT OF RECORD
SUBMISSION DATE
No. C-33487
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
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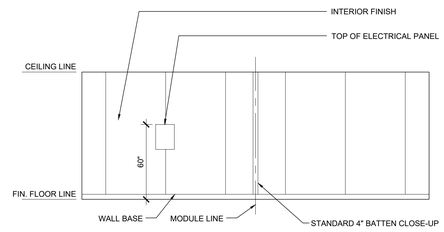
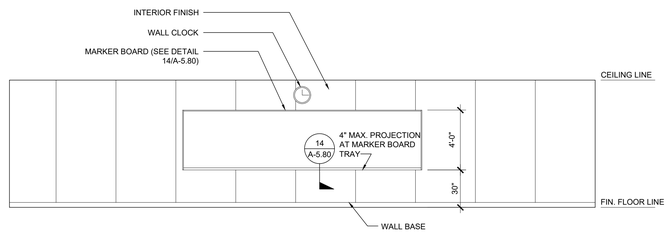
SILVER CREEK INDUSTRIES
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

SHEET NUMBER
A-4.03.1N



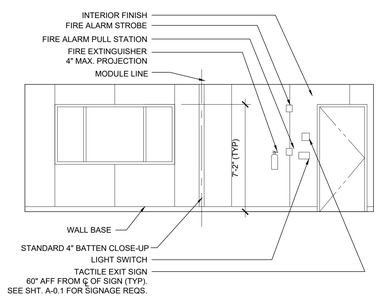
INTERIOR ELEVATION

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



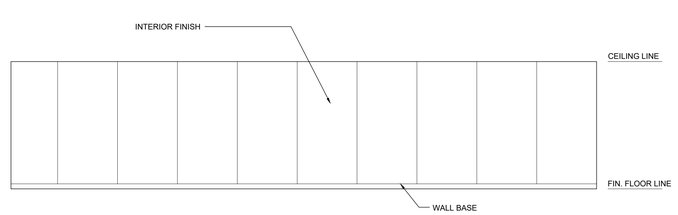
INTERIOR ELEVATION

SCALE: 1/4" = 1' - 0" | 2



INTERIOR ELEVATION

SCALE: 1/4" = 1' - 0" | 3



INTERIOR ELEVATION

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

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"BUILDING FOR THE NEXT GENERATION"
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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
INTERIOR ELEVATION

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33467
REN. 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

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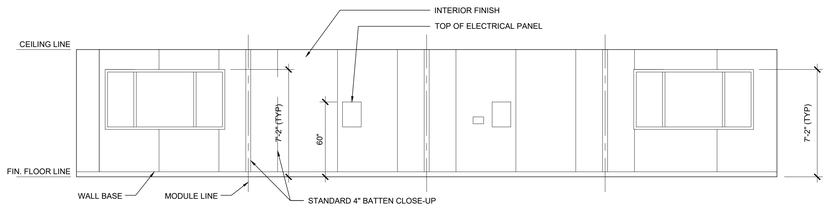

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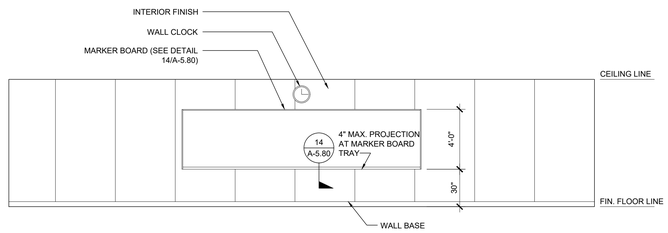
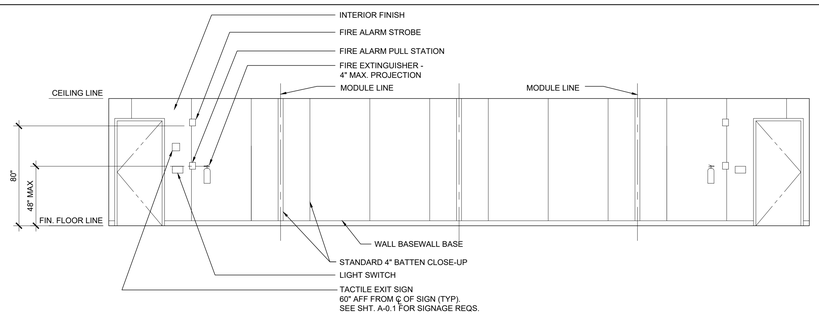
SCALE: 1/4" = 1' - 0" | 1



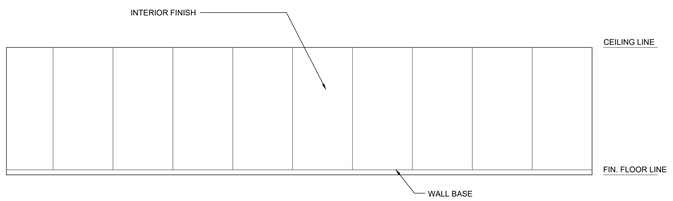
INTERIOR ELEVATION

SCALE: 1/4" = 1' - 0" | 2



INTERIOR ELEVATION

SCALE: 1/4" = 1' - 0" | 3



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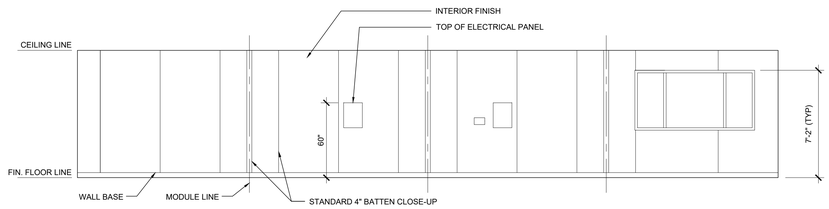

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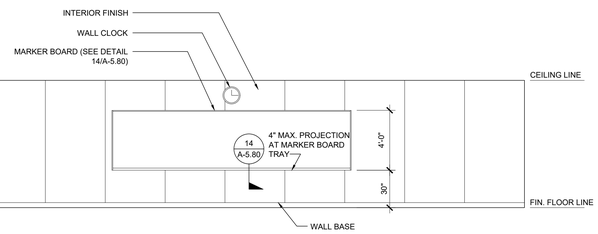

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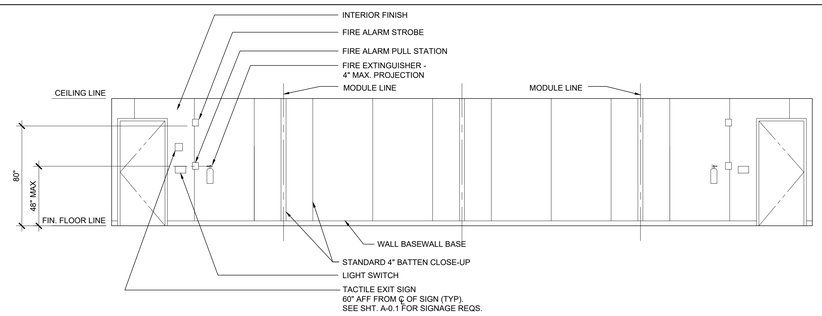

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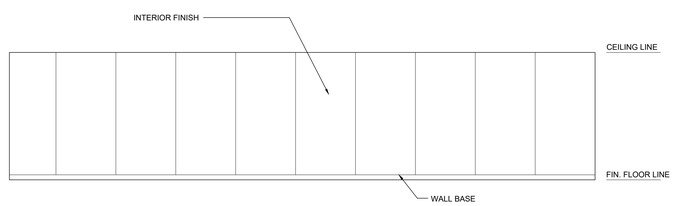

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SCALE: 1/4" = 1' - 0" | 4

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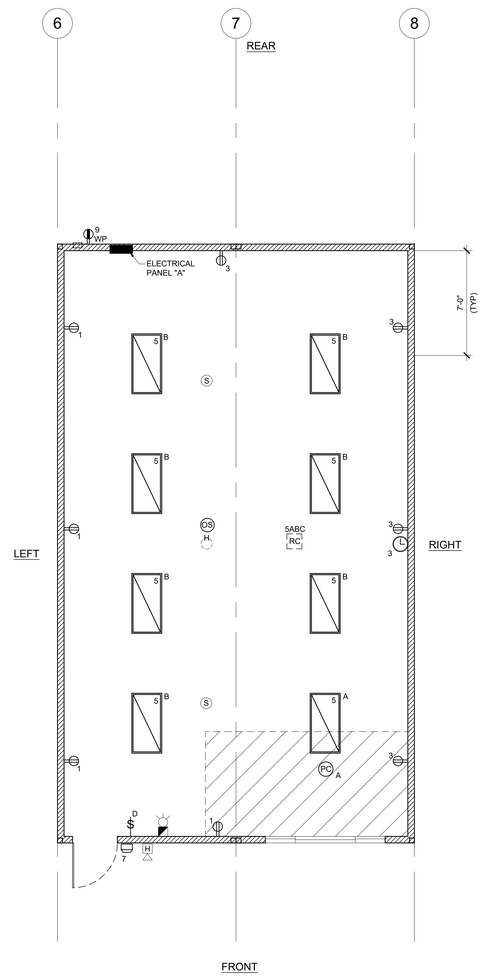

LEGEND:

- DUPLEX POWER RECEPTACLE +18" U.O.N.
- DOUBLE DUPLEX RECEPTACLE +18" U.O.N.
- POWER FLOOR BOX WITH 6'-0" POWER WHIP
- DUPLEX POWER RECEPTACLE MOUNTED IN CEILING TILE
- SINGLE GANG JUNCTION BOX +18" U.O.N. WITH 3/4"C. STUBBED INTO CEILING FOR BOOK DETECTION
- RECEPTACLE MOUNTED 6" ABOVE COUNTER BACKSPALSH
- GROUND FAULT INTERRUPTER TYPE RECEPTACLE
- DUPLEX RECEPTACLE FOR FLAT PANEL DISPLAY.
- FUME HOOD CONNECTION.
- DUPLEX GFI RECEPTACLE WITH WEATHERPROOF COVER FOR EXTERIOR VENDING MACHINE.
- RECESSED FLOOR RECEPTACLE.

SEE PC SHEET E-1.01 FOR ELECTRICAL LEGEND

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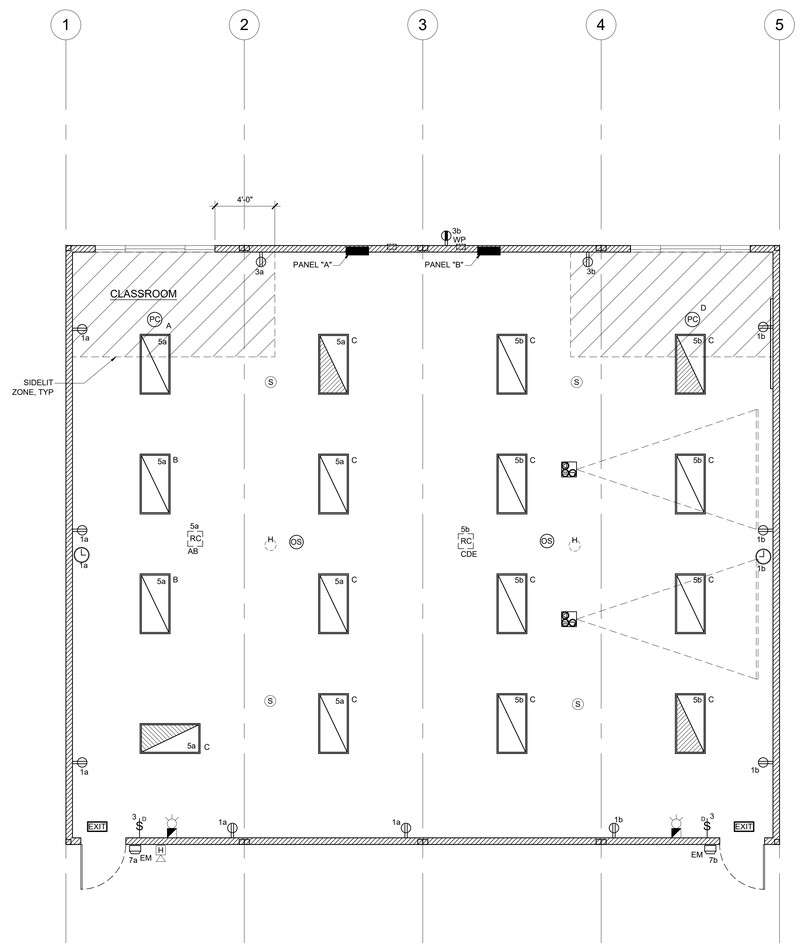
24x40 SCIENCE PREP

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



ELECTRICAL PLAN - 48x40 SCIENCE LAB

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

1

LEGEND

SEE PC
SHEET E-1.03
FOR
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LEGEND

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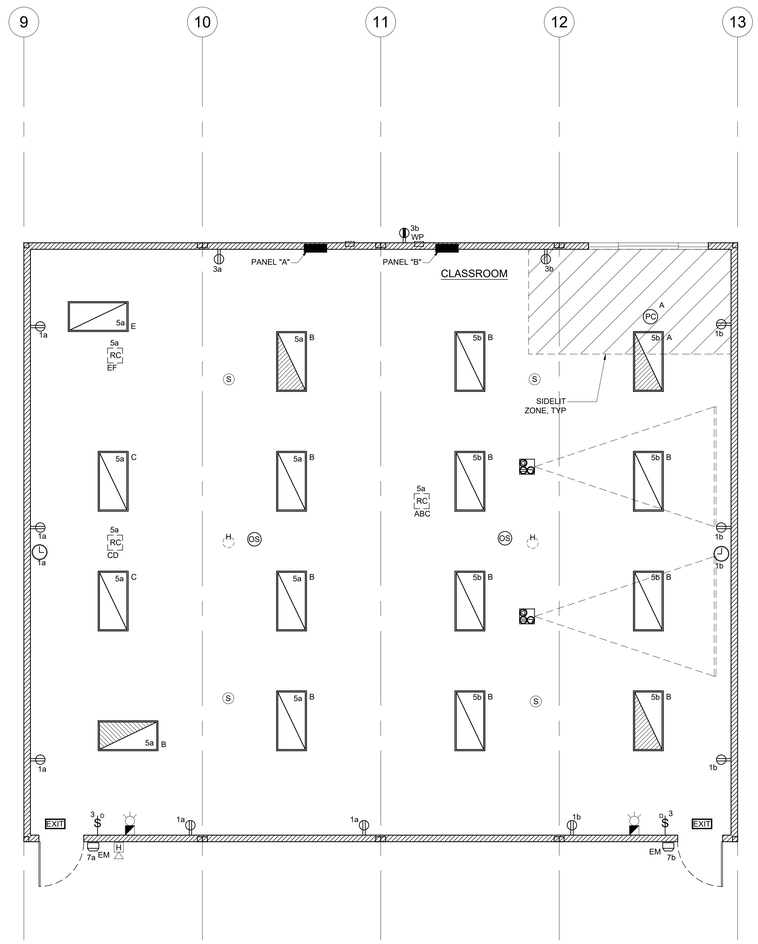

ELECTRICAL PLAN - 48x40 SCIENCE LAB

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

LEGEND

SEE PC
SHEET E-1.03
FOR
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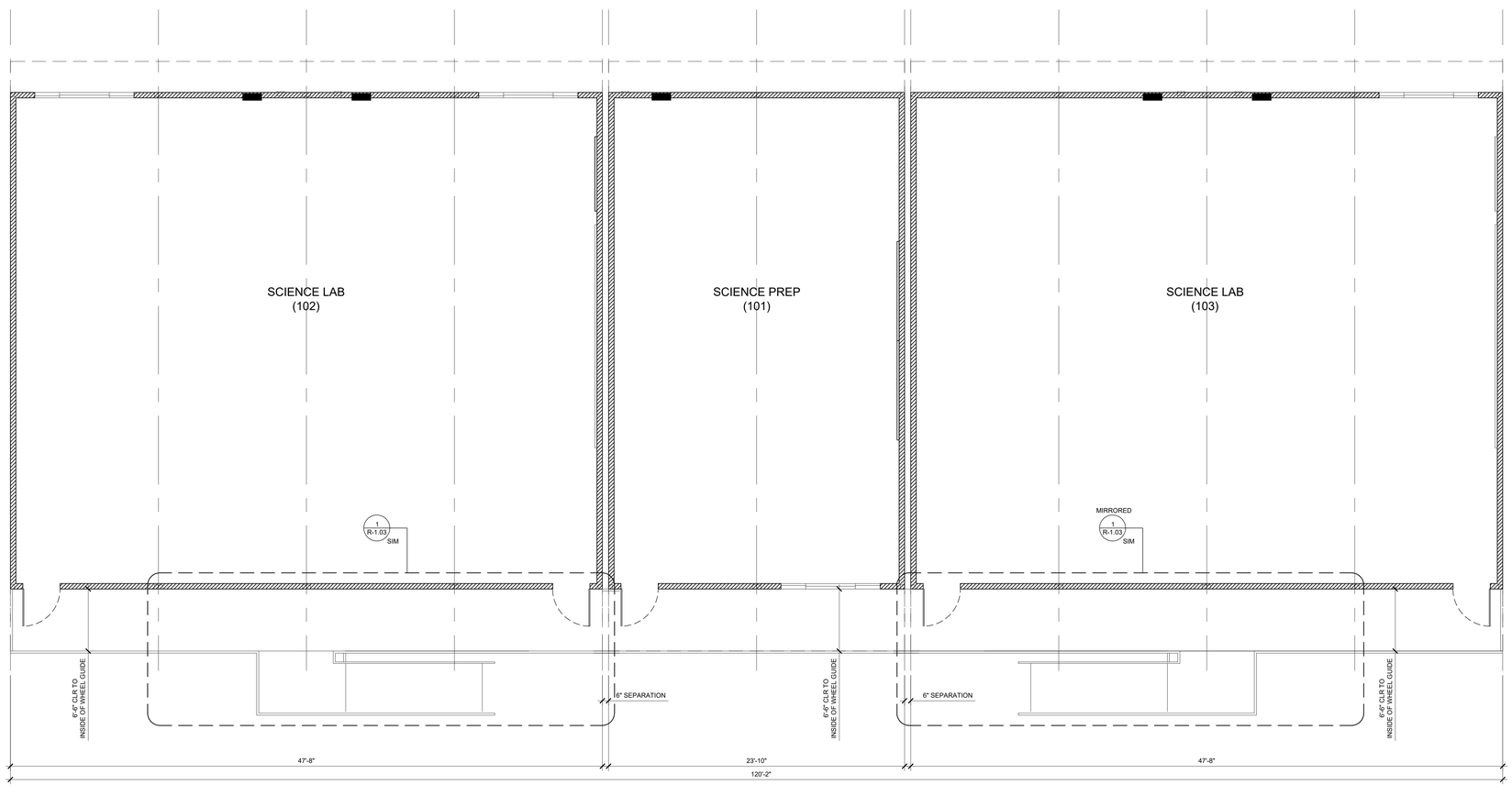

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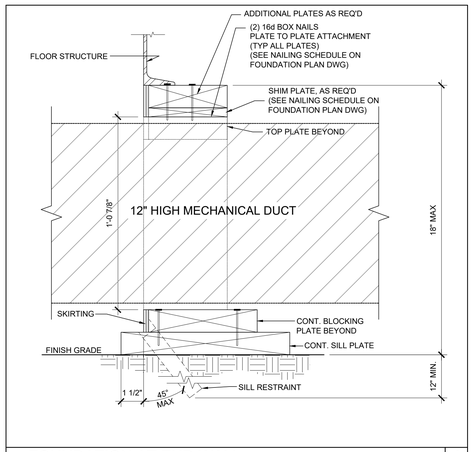


FOUNDATION AT END WALL SCALE : 3"=1'-0" A

WOOD FOUNDATION PLATE SCHEDULE

100 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT END/WALL		SEPARATION PAD AT INTERIOR	
					☐ SEPARATE BLDGS	☐ ONE BLDG	☐ SEPARATE BLDGS	☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x14 (2x16)[3]	2x14 (2x16)[15]	(10) 2x12 x 2'-0"	(11) 2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 2'-6" x 6" = 1.25 S.F. VENTILATION

"VENT OPENING AT SILL AND BLOCK PLATES"

VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION

(OPTIONAL AT MULTPLE BLDG SETS)

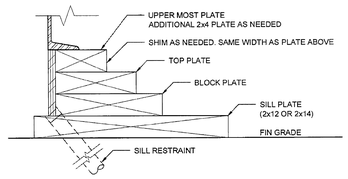
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): 2'-9" x 6" = 1.375 S.F. VENTILATION

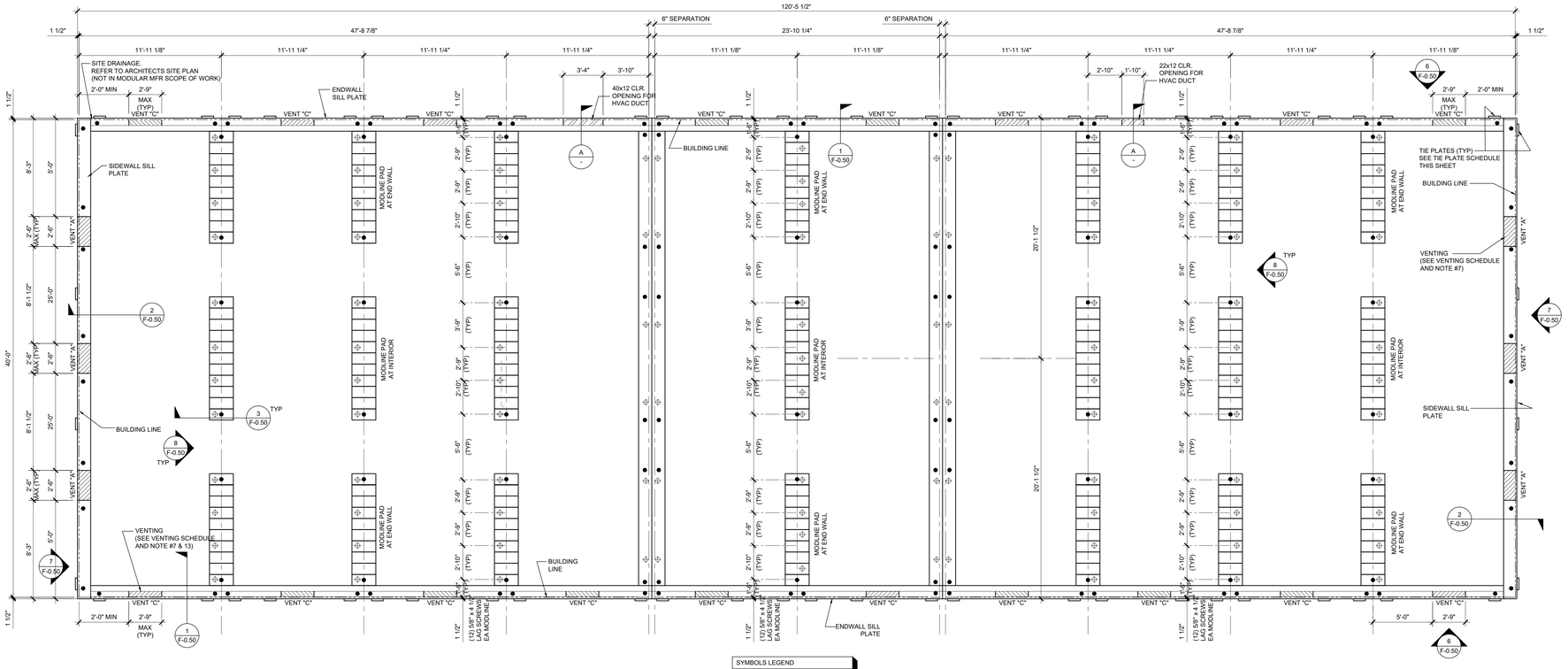
(OPTIONAL AT MULTPLE BLDG SETS)

"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

FOUNDATION PLATE DESCRIPTION



120'-6" x 40' BUILDING: 4820 SF / 150 =32.13 SF VENT REQ'D
(6) - "A" VENT = 7.5 SF
(18) - "C" VENT = 24.75 SF
32.25 SF TOTAL VENTILATION (> 32.13 SF)
(VAPOR BARRIER REQUIRED)



SYMBOLS LEGEND
- LAG SCREWS
- SILL RESTRAINTS (SEE NOTE #5)

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

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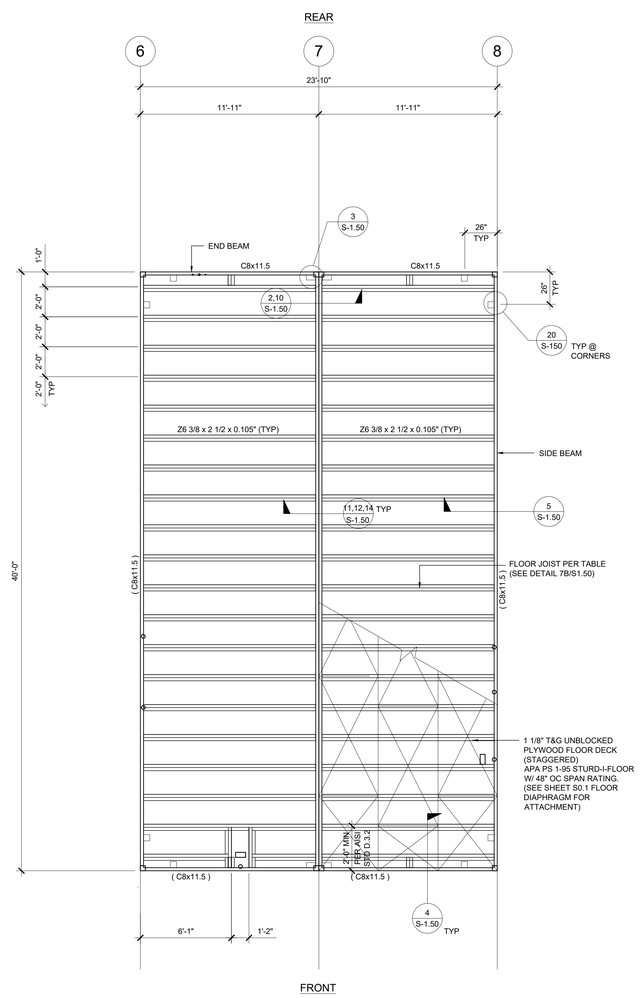
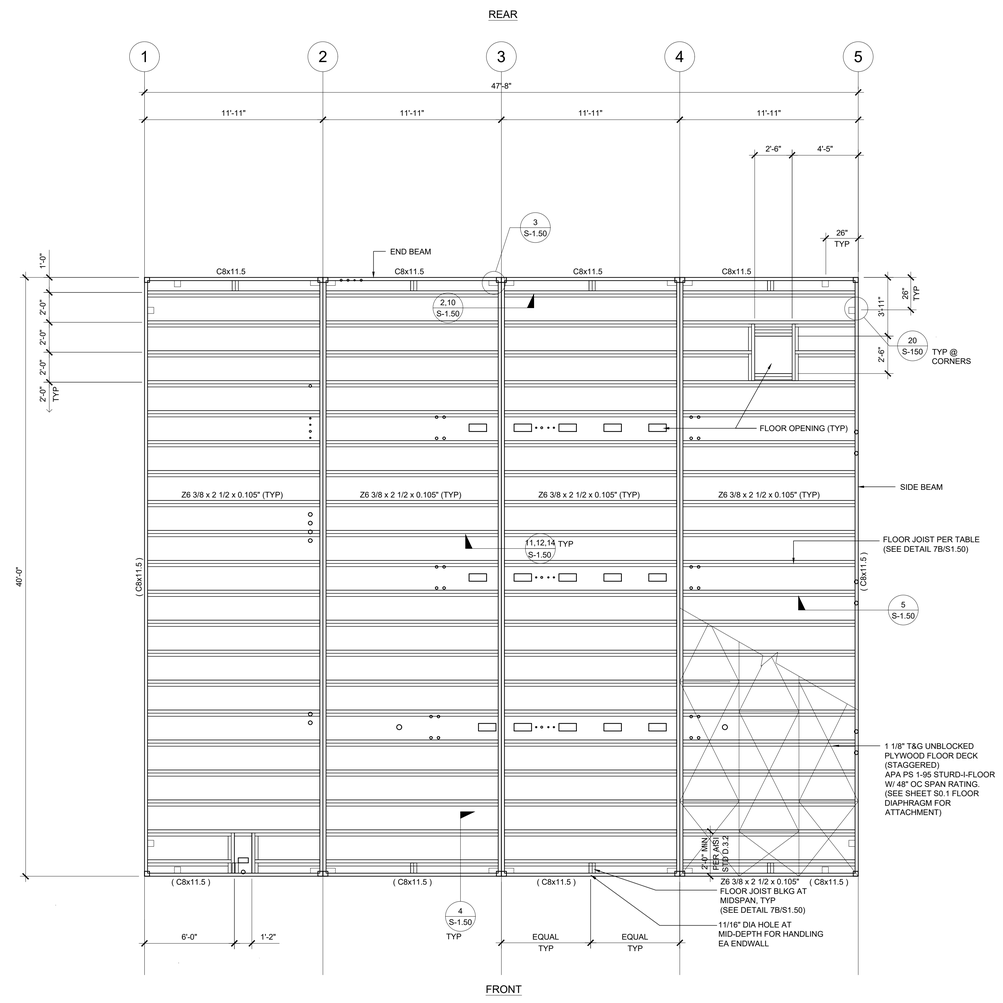


FLOOR FRAMING PLAN 24x40 SCIENCE PREP (101) SCALE: 1/4" = 1'-0" 1



FLOOR FRAMING PLAN 48x40 SCIENCE LAB (102) SCALE: 1/4" = 1'- 0" 2

NOTES:

1. FOR FLOOR BLOCKING SEE DETAILS
   4.7B / S-1.50 (STD),
   4.7A / S-1.50 (ALT)
2. FOR BUILDINGS ON WOOD FOUNDATION SYSTEMS, PROVIDE 11/16" DIA. HOLE AT BOTTOM FLANGE OF FLOOR BEAM FOR LAG SCREW ATTACHMENT TO FOUNDATION PLATES BELOW. FOR EXACT HOLE LOCATIONS, SEE FOUNDATION PLAN.
3. FLOOR SHEATHING SHALL BE PRESSURE TREATED WOOD OR NATURAL DURABLE IF BOTTOM OF WOOD IS LESS THAN 18" CLEAR FROM TOP OF FINISHED GROUND SURFACE.
4. HSS COLUMN SCHEDULES ON SHEETS S-3.01 THRU S-3.04

FLOOR JOIST TABLE

	LIVE LOAD PSF	JOIST SPACING
☐	50	48"
☐	50 + 15	32"
☒	100	24"
☐	150	16"

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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR FRAMING PLAN
WOOD FLOOR

ARCHITECT OF RECORD
SUBMISSION DATE
LICENSED ARCHITECT
No. C-33467
REN: 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
2
3
4
5
6
7
8

SILVER CREEK INDUSTRIES
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:

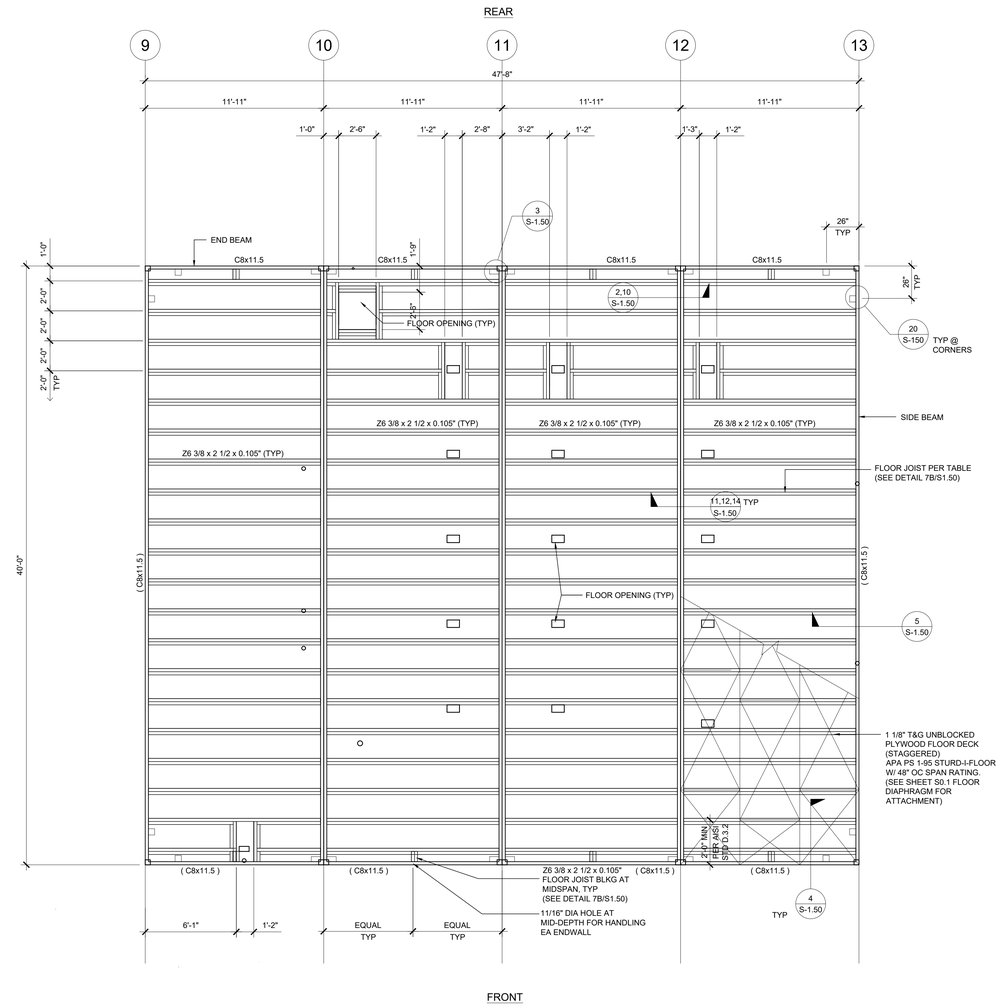
SHEET NUMBER
S-1.01N

NOTES:

1. FOR FLOOR BLOCKING SEE DETAILS
   4.7B / S-1.50 (STD),
   4.7A / S-1.50 (ALT)
2. FOR BUILDINGS ON WOOD FOUNDATION SYSTEMS, PROVIDE 11/16" DIA. HOLE AT BOTTOM FLANGE OF FLOOR BEAM FOR LAG SCREW ATTACHMENT TO FOUNDATION PLATES BELOW. FOR EXACT HOLE LOCATIONS, SEE FOUNDATION PLAN.
3. FLOOR SHEATHING SHALL BE PRESSURE TREATED WOOD OR NATURAL DURABLE IF BOTTOM OF WOOD IS LESS THAN 18" CLEAR FROM TOP OF FINISHED GROUND SURFACE.
4. HSS COLUMN SCHEDULES ON SHEETS S-3.01 THRU S-3.04

FLOOR JOIST TABLE

	LIVE LOAD PSF	JOIST SPACING
☐	50	48"
☐	50 + 15	32"
☒	100	24"
☐	150	16"



FLOOR FRAMING PLAN 48x40 SCIENCE LAB (103)

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

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR FRAMING PLAN
WOOD FLOOR

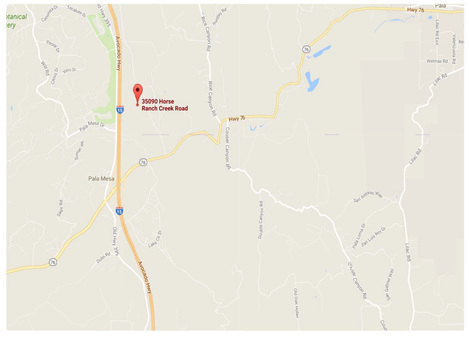
ARCHITECT OF RECORD SUBMISSION DATE

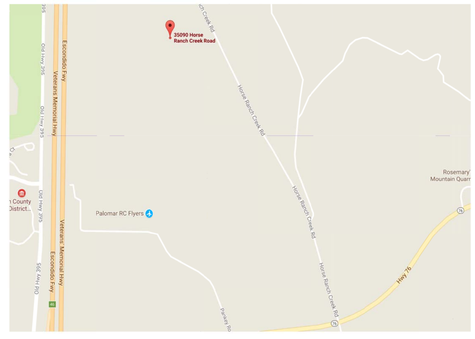
PROJECT SPECIFIC STATE AGENCY APPROVAL

REVISIONS
1
2
3
4
5
6
7
8

SILVER CREEK INDUSTRIES
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE:
SHEET NUMBER
S-1.02N

Palomar College
Modular Fire Sprinkler Plans





9/6/2017 Design Maps Summary Report

USGS Design Maps Summary Report

User-Specified Input

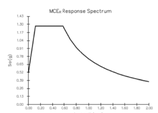
Report Title	Palomar College Thu September 7, 2017 02:10:09 UTC
Building Code Reference Document	2012/2015 International Building Code (which utilizes USGS hazard data available in 2008)
Site Coordinates	33.3417N, 117.1517W
Site Soil Classification	Site Class D - "Stiff Soil"
Risk Category	I/II/III

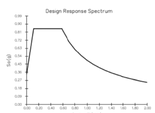
USGS-Provided Output

S_s = 1.275 g S_{ms} = 1.275 g S_{ds} = 0.850 g

S_1 = 0.492 g S_{m1} = 0.741 g S_{d1} = 0.494 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.





Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

https://earthquake.usgs.gov/cgi-bin/designmaps/us/summary.php?template=minimal&latitude=33.3418&longitude=-117.1518&siteclass=3&riskcategory=0&e... 1/1

J.G. Tate Fire Protection Systems Inc.
13771 Danielson St., Ste F, Poway, CA 92064
858-486-0900 fax-858-486-0950
License #800609

July 12, 2017

Consulting & Inspection Services LLC
P.O. Box 2017
San Marcos, CA 92079

Attn: Gerald Schafer
Re: Fire Flow Test at Palomar College NEC Project

Dear Gerald,

On July 10, 2017 at 1:30pm, we conducted a fire hydrant flow test for the NEC project at Palomar College located at Horse Ranch Creek Rd. in Fallbrook CA. The test was witnessed by a representative from North County Fire Protection District and CIS with the following results:

Static Pressure: 132 psi
Residual Pressure: 119 psi
Pitot Reading: 100 psi
Orifice size: 2 ½" LFD 250
Flow: 1528 gpm
Flow calculated at 20 psi (res): 4856 gpm

The flowed and gauged hydrants were per your direction. The hydrants were at approximately the same elevation. Please do not hesitate to contact me if you have any questions or require any other services.

Regards,

Tom Meiss
Superintendent
J.G. Tate Fire Protection Systems, Inc.
858-486-0900 (o)
858-602-5780 (m)

Fire Protection Scope of Work

Install new Automatic Fire Sprinkler System per NFPA 13 2013 Edition and CFC 2013 edition
Work to begin 6" above Finished Floor.
All work to be performed by C-16 contractor.
Fire Sprinkler System in to be installed off site in Modular Factory
Final connection to fire service underground an tie-ins to be performed on building site.
All testing of Sprinkler System to be performed on building site.
Fire Service Main, FDC and Back Flow preventer provided by others
Fire Alarm System provided by others

Project Design Data:

Occupancy Type:	E
Construction Type:	VB
Hazard:	Light
Building Height:	11-2
Building Area:	4800 SQ. FT.
Building Size:	40' x 120'

Sheet Index

SHEET	DESCRIPTION
FS 1	Cover Sheet/Project Data
FS 2	Fire Sprinkler Plans
FS 3	Details
FS 4	Site Plan

SILVER CREEK
Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:

LICENSED ARCHITECT
JACK F. SHIVELY III
EXPIRATION DATE 12-31-2017
RENEWAL DATE
STATE OF CALIFORNIA

ENGINEER STAMP:

REGISTERED PROFESSIONAL ENGINEER
CAL B. SAHGAL
NO. 26885
EXP. 9-30-18
MECHANICAL
STATE OF CALIFORNIA

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92705
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

LICENSED FIRE PROTECTION CONTRACTOR
Classification
License No. 898658
STATE OF CALIFORNIA

PROJECT NAME:

Palomar College
35090 Horse Ranch Creek Rd
Fallbrook, CA 92028

ISSUE DATES:

DESCRIPTION:	DATE:
Cover	09/10/17

PROJECT NO: 1nnnn

DRAWN BY: Kris Michel

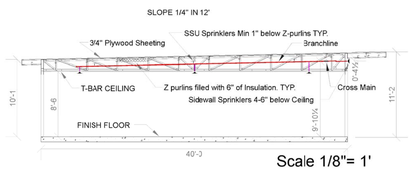
CHECKED BY:

1nnnn

SHEET TITLE:
Project Data

SHEET NUMBER:

FS 1N



Scale 1/8"= 1'

Sectional

Riser Tag	
Design Basis	
Occupancy:	Light Hazard
Total Sprinklers:	118
Number Of Sprinklers Calculated:	7
K-Factor:	5.6
Orifice Size:	0.5
Design Density:	0.100gpm/ft²
Average Density:	0.122gpm/ft²
Area of Application:	900.00ft² (Actual 1385.69ft²)
Demand at Base Of Riser or Point Of Connection	
Total Demand Flow(gpm):	132.95
Pressure(psi):	27.478
Water Supply Information At Time Of Design	
Static Pressure(psi):	132.000
Residual Pressure(psi):	119.000
Supply Flow(gpm):	1520.00
Total Demand Flow(gpm):	232.95
Total Demand Pressure(psi):	29.847

HYDRAULIC SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System

Location CLASSROOM

Sprinkler Information

NUMBER OF SPRINKLERS FLOWING	7
MANUFACTURER	TYCO
MODEL	TY-323
155 PENDANT 1/2" ORIFACE	QUICK RESPONSE K- FACTOR 5.6

Basis of Design

STANDARD	NFPA 2016 EDITION
HAZARD GROUP	LIGHT HAZARD
DENSITY	0.1
DESIGNED AREA OF DISCHARGE	900

System Demand

DEMAND FLOW	133
DESIGN PRESSURE AT THE SYSTEM RISER	27.5
DEMAND FLOW AT SOURCE	233
DESIGN PRESSURE AT THE SOURCE	29.9
HOSE STREAM ALLOWANCE	9 100 100
REMOTE SPRINKLER FLOW	18 GPM @ 10.33

Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
◉	Tyco	TY323		64	5.6	Pendent	½	Quick	Chrome	155°F	
◀	Tyco	TY3331		20	5.6	Sidewall	½	Quick	Teflon	155°F	
○	Tyco	TY313		34	5.6	Upright	½	Quick	Brass	200°F	
				Total = 118							

Sway Brace Zone Legend						
Diameter	Description	Unit Quantity	Quantity	Unit Weight	Cp =	Net Weight
2	Pipe, Eddy Flow (BMT)	(4)9'-11+2'-10+(3)2'-0	48'-6	4lb	0.61	118lb
					Total Net Weight	118lb
					Total Load (x 1.15)	135½lb

Sway Brace Zone Legend						
Diameter	Description	Unit Quantity	Quantity	Unit Weight	Cp =	Net Weight
2	Pipe, Eddy Flow (BMT)	(2)9'-11+(2)2'-0	23'-10	4lb	0.61	57¾lb
1	Pipe, Eddythread 40 (BMT)	(2)11'-4¾+(2)0'-3¾+(2)0'-6¾	4'-10½	2lb	0.61	6¾lb
1¼	Pipe, Eddythread 40 (BMT)	(2)11'-8+(2)21'-0	65'-4	2¼lb	0.61	112¾lb
					Total Net Weight	176¾lb
					Total Load (x 1.15)	203¾lb

Overhead Notes

All design and installation shall be in accordance with NFPA 13, 2016 Edition and local authority.

System is designed for Light Hazard occupancy @ 0.10 gpm/sq. ft. over the hydraulically most remote 900sq. ft. including 100gpm outside hose stream allowance.). Above ceiling heads are spaced @ maximum 130 sq. ft.. Below ceiling sprinklers are @ maximum 400 sq. ft. spacing.

All pipe 1"-1/2" to be Eddy Thread and 175 lb. WWP cast iron fittings (ANSI-B16.9).

All pipe 2" and larger to be Eddy Flow with grooved coupling, and style #750 reducing coupling.

Propriety and central station monitoring to be provided by others.

All wiring to be provided by others.

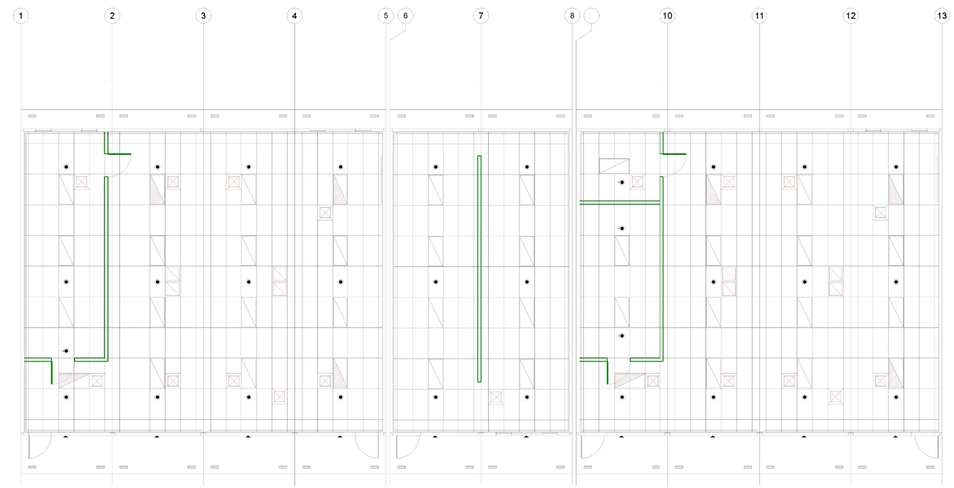
Install earthquake bracing as shown per NFPA 13 using 1" schedule 40 piping to support all earthquake braces.

The length of an unsupported arm over to a sprinkler shall not exceed 12"..

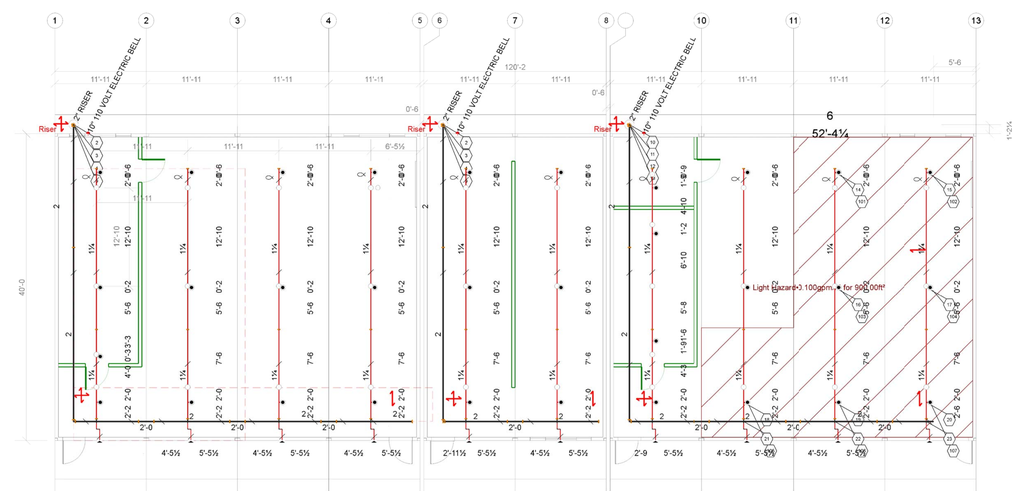
All new systems including yard shall be hydraulically tested at not less than 200 psi (13.8 bars) pressure for two hours, or at 50 psi (3.4 bars) in excess of the maximum pressure, when maximum pressure is in excess of 150 psi.

Install surge protection at end of all branch lines.

Lateral Bracing not required where Hargers are less than 6".



Reflected Ceiling Plan



Floor Plan

N

Scale 1/8"= 1'

120' x 40' MODULAR BUILDING
4800 SQ. FT.

SILVER CREEK

Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:

LICENSED ARCHITECT JACK F. SHIVELY III EXPIRATION DATE 2-28-2017 RENEWAL DATE STATE OF CALIFORNIA

ENGINEER STAMP:

REGISTERED PROFESSIONAL ENGINEER CAL B. SANGAL NO. 26885 EXP. 9-30-18 MECHANICAL STATE OF CALIFORNIA

CONSULTANT:

So Cal Fire Inc.

14102 Holt Avenue
North Tustin, CA 92705
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

LICENSED FIRE PROTECTION CONTRACTOR Classification C-16 898658 STATE OF CALIFORNIA

PROJECT NAME:

Palomar College
35090 Horse Ranch Creek Rd
Fallbrook, CA 92028

ISSUE DATES:

DESCRIPTION:	DATE:
FSP	09/28/17

PROJECT NO: 1nnnn

DRAWN BY: Kris Michel

CHECKED BY:

1nnnn

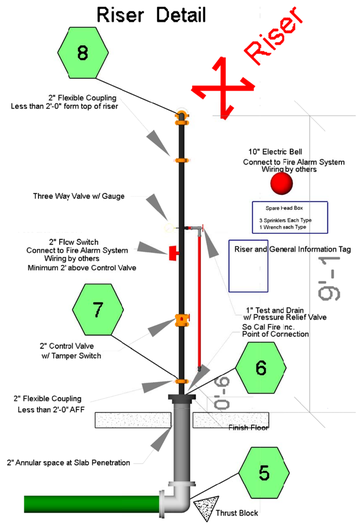
SHEET TITLE:

FSP

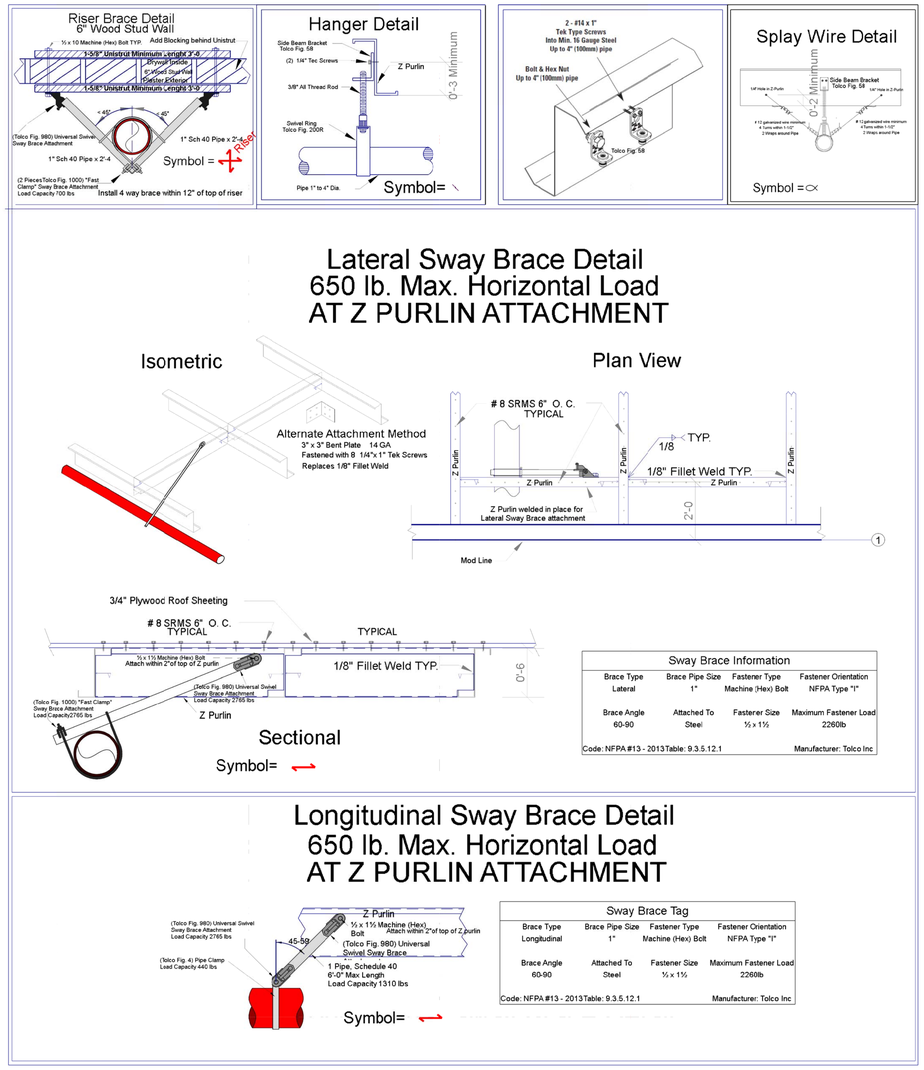
SHEET NUMBER:

FS 2N

Riser Detail



Underground work by others



SILVER CREEK
Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:

LICENSED ARCHITECT JACK F. SHIVELY III EXP. 12-31-17 RENEWAL DATE STATE OF CALIFORNIA

ENGINEER STAMP:

REGISTERED PROFESSIONAL ENGINEER CAL B. SANGAL NO. 26885 EXP. 9-30-18 MECHANICAL STATE OF CALIFORNIA

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92705
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

LICENSED FIRE PROTECTION CONTRACTOR Contractor Classification C-16 898658 STATE OF CALIFORNIA

PROJECT NAME:

Palomar College
35090 Horse Ranch Creek Rd
Fallbrook, CA 92028

ISSUE DATES:

DESCRIPTION:	DATE:
Details	09/10/17

PROJECT NO: 1nnnn

DRAWN BY: Kris Michel

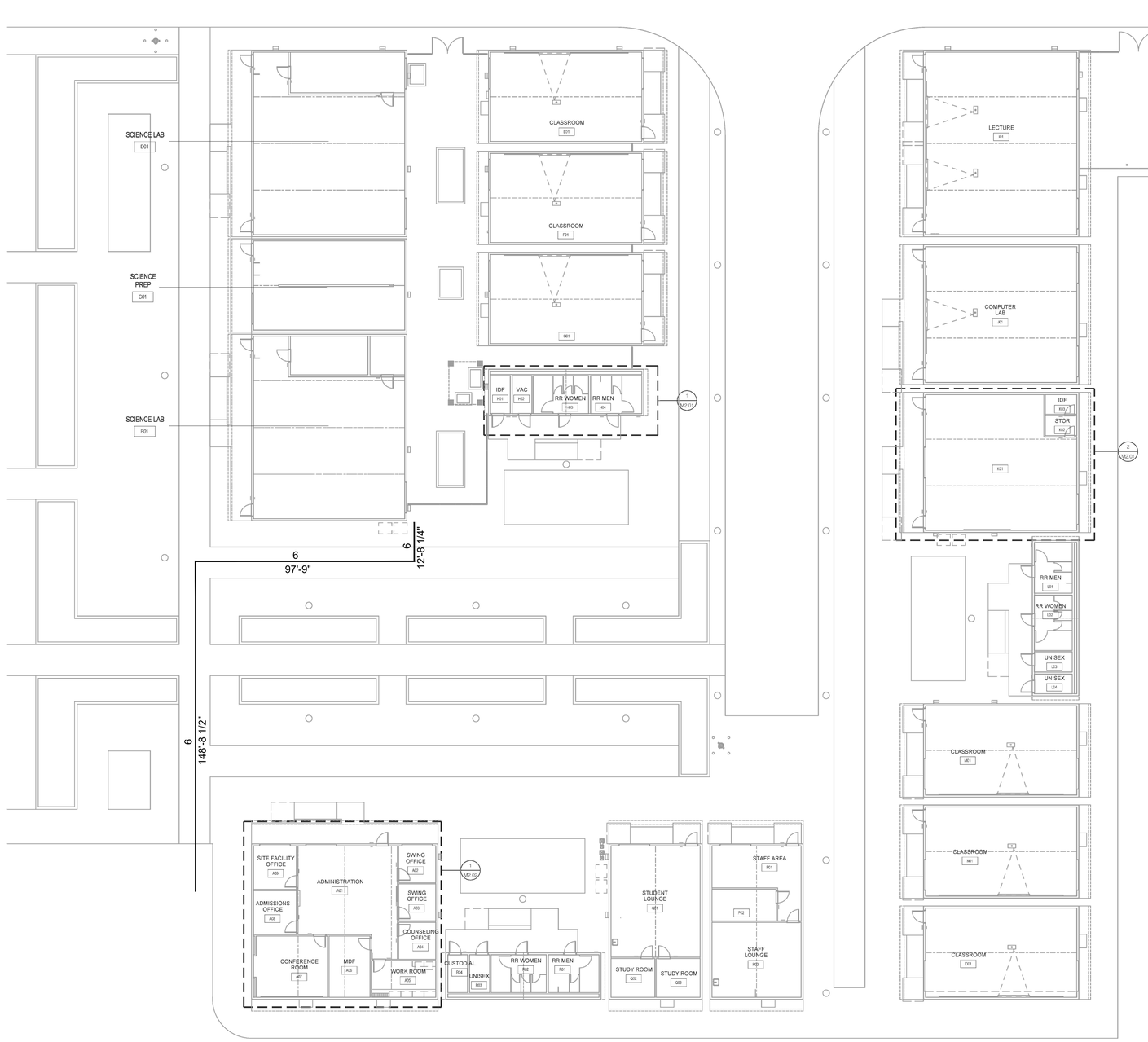
CHECKED BY:

1nnnn

SHEET TITLE:
Details

SHEET NUMBER:

FS 3N



SILVER CREEK

Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:

LICENSED ARCHITECT
JACK F. SHIVELY III
No. 6607
EXP. 12-31-2017
GENERAL ORDER
STATE OF CALIFORNIA

ENGINEER STAMP:

REGISTERED PROFESSIONAL ENGINEER
LAL B. SAHGAL
NO. 26885
EXP. 12-31-17
MECHANICAL
STATE OF CALIFORNIA

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92705
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

FIRE PROTECTION CONTRACTOR
Classification
C-16
No. 898658
STATE OF CALIFORNIA

PROJECT NAME:

Palomar College
35090 Horse Ranch Creek Rd
Fallbrook, CA 92028

ISSUE DATES:

DESCRIPTION:	DATE
Site Utility	09/10/17

PROJECT NO: 1nnnn

DRAWN BY: Kris Michel

CHECKED BY:

1nnnn

SHEET TITLE:

Site Utility

SHEET NUMBER:

FS 4N

MODULAR CLASSROOM BUILDINGS

BUILDING SIZE: 24' X 40'

EXPANDABLE TO 120' X 40'

PC 04-114027 HIGH SEISMIC

BY

SILVER CREEK INDUSTRIES, INC.
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE : (951) 943-5393 FAX : (951) 943-2211

PALOMAR COLLEGE EDUCATION CTR.

PALOMAR COLLEGE SCIENCE BUILDING

GENERAL NOTES

1. FIRE ALARM IS NOT PART OF THIS APPROVAL
2. ALLOWABLE AREA IS BASED ON 10' SET BACK FROM IMAGINARY ASSUMED LINE PER 2013 CBC 705.3
3. THIS PC IS DESIGNED STRUCTURALLY TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM.
4. PC IS DESIGNED AS A SINGLE STORY MODULAR BUILDING
5. FOR SOILS TYPES / DESIGN BEARING STRENGTH, SEE STRUCTURAL SPECIFICATIONS
6. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
7. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USES
8. EXTERIOR WALL OPENINGS TO COMPLY W/ 705.8, 2013 CBC.
9. EXTERIOR PROJECTIONS ARE TO BE FIRE PROTECTED WHERE REQUIRED BY SECTIONS 705.2 & 1406.
10. SEE SHEETS A-0.6, A-0.7 FOR REQUIRED BUILDING ENVELOPE ASSEMBLIES AND HVAC SYSTEM.
11. PURSUANT TO D.S.A. APPROVAL ALL PRODUCTS CAN BE SUBSTITUTED BY AN "EQUAL"
12. BUILDING(S) TO BE LOCATED IN ANY FIRE HAZARD SEVERITY ZONE OR ANY WILDLAND - URBAN INTERFACE FIRE AREA SHALL COMPLY WITH CBC CHAPTER 7A.
13. WHEN THE PRE-CHECKED BUILDING IS SITE ADAPTED, THE BUILDING AND SITE FEATURES NEED TO COMPLY WITH CALGREEN CODE, SECTION 5.507.4 FOR THE SITE SPECIFIC LOCATION
14. IN THE EVENT THAT A PC CLASSROOM IS DESIGNED TO CONNECT TO THE SAME PC CLASSROOM, INTERIOR SOUND TRANSMISSION IN THE INTERIOR ADJOINING WALL AND FLOOR-CEILING SHALL MEET THE MINIMUM REQUIREMENTS OF THE STC RATING OF 40 PER CALGREEN CODE, SECTION 5.507.4.3.

APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS	2013 EDITION
NFPA 72	NAT. FIRE ALARM CODE (CALIF. AMENDED)	2013 EDITION
(NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")		

APPLICABLE CODES (AS OF JANUARY 1, 2014)

LIST OF 2013 CALIFORNIA CODE OF REGULATIONS

2013 BUILDING ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
2013 CALIFORNIA BUILDING CODE (CBC), PART 2 TITLE 24 C.C.R.
(2012 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2011 NATIONAL ELECTRICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
(2012 UNIFORM MECHANICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
(2012 UNIFORM PLUMBING CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
2013 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2012 INTERNATIONAL FIRE CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
2013 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
2007 ASME A17.1 (w/A17.1a/CSA B44a-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS

BUILDING DATA

NUMBER OF STORIES:	1 - STORY
OCCUPANCY:	E 24' - 120' x 40' BUILDINGS
TYPE OF CONSTRUCTION:	VB
FLOOR LIVE LOAD:	☐ 50 PSF ☐ 50+15 PSF PARTITION LOAD ☒ 100 PSF ☐ 150 PSF
ROOF LIVE LOAD:	20 PSF ROOF SNOW LOAD: 0 PSF
FLOOR DEAD LOAD:	☒ WOOD FLOOR - 11 PSF ☐ CONC FLOOR - 33 PSF
ROOF DEAD LOAD:	17 PSF (INCLUDING SPRINKLER LOAD)
RAMP LIVE LOAD:	100 PSF
BUILDING AREA: (AREA WITHOUT OVERHANGS / AREA WITH OVERHANGS)	☒ 24'x40' BLDG - 960 SF/1140 SF; ☐ 36'x40' BLDG - 1440 SF/1710 SF; ☒ 48'x40' BLDG - 1920 SF/2280 SF; ☐ 60'x40' BLDG - 2400 SF/2850 SF; ☐ 72'x40' BLDG - 2880 SF/3420 SF; ☐ 84'x40' BLDG - 3360 SF/3990 SF; ☐ 96'x40' BLDG - 3840 SF/4560 SF; ☐ 108'x40' BLDG - 4320 SF/5130 SF; ☐ 120'x40' BLDG - 4800 SF/5700 SF
ALLOWABLE BLDG. AREA = 9,500 SF	
FOUNDATION:	☒ WOOD ☐ CONCRETE
CEC CLIMATE ZONES:	1- 16
SNOW LOAD:	Pg = 0.0 PSF

WIND DESIGN DATA SECTION 1603.A.1.4

1. ULTIMATE DESIGN WIND SPEED, 3 SEC GUST (MPH) V_{ULT}			129 / Kzt = 1.0
2. RISK CATEGORY:			II
3. WIND EXPOSURE :			"C"
4. APPLICABLE INTERNAL PRESSURE COEFFICIENT :			± 0.18
5. COMPONENTS AND CLADDING :			
ZONE 1 =	38.5	ZONE 4 =	38.1
ZONE 2 =	64.5	ZONE 5 =	46.9
ZONE 3 =	97.1	PARAPET =	131.7

EARTHQUAKE DESIGN DATA SECTION 1603.A.1.5

1. SEISMIC IMPORTANCE FACTOR :		1
2. MAPPED SPECTRAL RESPONSE :		
DESIGN S_S = 2.24 (FOR Cs)	S^1_1 = 1.0	
MAPPED S_S = 2.80 (FOR ARCHITECTURAL COMPONENTS)		
3. SITE CLASS		D
4. SPECTRAL RESPONSE COEFFICIENTS :		
S_{DS} = 1.49 (=1.87ARCH'L)	S_{D1} = 1.00	
5. SEISMIC DESIGN CATEGORY :		E
6. BASIC SEISMIC-FORCE-RESISTING-SYSTEM :		OMF
7. DESIGN BASE SHEAR (kips) : PER MODULAR (12x40)		

CONC FLOOR	PLY FLOOR	LL<100	LL=150	
X		X		20.17
	X	X		15.66
X			X	27.85
	X		X	19.55

8. SEISMIC RESPONSE COEFFICIENT, Cs :	0.427
9. RESPONSE MODIFICATION FACTOR, R :	3.5
10. ANALYSIS PROCEDURE USED :	EQUIVALENT LATERAL FORCE
11. MINIMUM SEISMIC SEPARATION FROM OTHER EXISTING OR FUTURE BUILDINGS	6" SEP.

THIS PC DOES NOT COVER ANY SITE SPECIFIC FLOOD DESIGN. ANY SITE SPECIFIC CONDITION OF FLOODING SHOULD BE BE ADDRESSED WITH ADDITIONAL CALCULATIONS.

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A-0.2	SCHEDULES
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A-3.02	ROOF PLAN - 0.018" METAL DECK - MONO OR DUAL SLOPE - 36' x 40'
A-3.03	ROOF PLAN - 0.018" METAL DECK - MONO SLOPE - 48' TO 120' x 40'
A-3.04	ROOF PLAN - 0.018" METAL DECK - DUAL SLOPE - 48' TO 120' x 40'
A-3.11	ROOF PLAN - 0.030" METAL DECK - MONO OR DUAL SLOPE - 24' x 40'
A-3.12	ROOF PLAN - 0.030" METAL DECK - MONO OR DUAL SLOPE - 36' x 40'
A-3.13	ROOF PLAN - 0.030" METAL DECK - MONO SLOPE - 48' TO 120' x 40'
A-3.14	ROOF PLAN - 0.030" METAL DECK - DUAL SLOPE - 48' TO 120' x 40'
A-3.21	ROOF PLAN - BUILT UP ROOF - MONO OR DUAL SLOPE - 24' x 40'
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A-3.23	ROOF PLAN - BUILT UP ROOF - MONO SLOPE - 48' TO 120' x 40'
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A-3.31	ROOF PLAN - PARAPET - MONO OR DUAL SLOPE - 24' x 40'
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A-5.03	CROSS SECTION - MONO SLOPE - 0.030" ROOF DECK
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A-5.51	ARCHITECTURAL DETAILS - WOOD STUD - PLASTER
A-5.52	ARCHITECTURAL DETAILS - WOOD STUD - WOOD SIDING - 1 HOUR RATED
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A-5.60	ARCHITECTURAL DETAILS - STEEL STUD - WOOD SIDING
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A-5.62	ARCHITECTURAL DETAILS - STEEL STUD - WOOD SIDING - 1 HOUR RATED
A-5.63	ARCHITECTURAL DETAILS - STEEL STUD - PLASTER - 1 HOUR RATED
A-5.64	ARCHITECTURAL DETAILS - 1 HOUR RATED OPTIONS
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A-6.03	INTERIOR ELEVATIONS - 48' TO 120' x 40'

SHT NO.	FOUNDATION - - SEISMIC Ss UP TO 2.80g - -
F-0.01	WOOD FOUNDATION PLAN - 24' x 40' (50 PSF)
F-0.02	WOOD FOUNDATION PLAN - 24' x 40' (50+15 PSF)
F-0.03	WOOD FOUNDATION PLAN - 24' x 40' (100 PSF)
F-0.04	WOOD FOUNDATION PLAN - 24' x 40' (150 PSF)
F-0.11	WOOD FOUNDATION PLAN - 36' x 40' (50 PSF)
F-0.12	WOOD FOUNDATION PLAN - 36' x 40' (50+15 PSF)
F-0.13	WOOD FOUNDATION PLAN - 36' x 40' (100 PSF)
F-0.14	WOOD FOUNDATION PLAN - 36' x 40' (150 PSF)
F-0.21	WOOD FOUNDATION PLAN - 48' x 40' (50 PSF)
F-0.22	WOOD FOUNDATION PLAN - 48' x 40' (50+15 PSF)
F-0.23	WOOD FOUNDATION PLAN - 48' x 40' (100 PSF)
F-0.24	WOOD FOUNDATION PLAN - 48' x 40' (150 PSF)
F-0.50	FOUNDATION DETAILS - WOOD
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S-1.50	FLOOR FRAMING DETAILS - WOOD FLOOR
S-1.60	FLOOR FRAMING DETAILS - CONCRETE FLOOR
S-2.01	ROOF FRAMING PLAN - 0.018", BUILT UP, OR TPO ROOF - MONO SLOPE
S-2.02	ROOF FRAMING PLAN - 0.030" - MONO SLOPE
S-2.03	ROOF FRAMING PLAN - PARAPET - MONO SLOPE
S-2.11	ROOF FRAMING PLAN - 0.018", BUILT UP, OR TPO ROOF - DUAL SLOPE
S-2.12	ROOF FRAMING PLAN - 0.030" - DUAL SLOPE
S-2.13	ROOF FRAMING PLAN - PARAPET - DUAL SLOPE
S-2.50	ROOF FRAMING DETAILS - MONO SLOPE
S-2.51	ROOF FRAMING DETAILS - DUAL SLOPE
S-2.60	ROOF FRAMING DETAILS
S-2.70	ROOF FRAMING DETAILS - PARAPET
S-2.90	ROOF FRAMING DETAILS - TRUSS
S-3.01	BUILDING SECTION - MONO SLOPE ROOF
S-3.02	BUILDING SECTION - DUAL SLOPE ROOF
S-3.03	BUILDING SECTION - 0.030" MONO SLOPE ROOF
S-3.04	BUILDING SECTION - 0.030" DUAL SLOPE ROOF
S-5.00	WALL FRAMING ELEVATIONS - WOOD STUDS
S-5.10	WALL FRAMING DETAILS - WOOD STUDS
S-5.11	WALL FRAMING DETAILS - WOOD STUDS
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S-5.30	WALL FRAMING DETAILS - STEEL STUDS
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SHT NO.	PLUMBING
P-1.01	PLUMBING DETAILS AND SCHEDULE

SHT NO.	MECHANICAL
M-0.1	MECHANICAL NOTES, SCHEDULES, AND DETAILS
M-1.01	MECHANICAL PLAN - WALL MOUNT - 24' x 40'
M-1.02	MECHANICAL PLAN - WALL MOUNT - 36' x 40'
M-1.03	MECHANICAL PLAN - WALL MOUNT - 48' TO 120' x 40'
M-2.01	MECHANICAL PLAN - ROOF MOUNT - 24' x 40'
M-2.02	MECHANICAL ROOF PLAN - ROOF MOUNT - 24' x 40'
M-3.01	MECHANICAL PLAN - ROOF MOUNT - 36' x 40'
M-3.02	MECHANICAL ROOF PLAN - ROOF MOUNT - 36' x 40'
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SHT NO.	ELECTRICAL
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R-1.03	RAMP LANDING
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R-3.01	CONCRETE RAMP

SHT NO.	RELOCATABLE SHEETS
REL-101	BUILDING RELOCATION DETAILS
REL-102	BUILDING RELOCATION DETAILS

SHT NO.	FIRE SPRINKLERS
FS-1	FIRE SPRINKLER SECTION AND SPECS
FS-2	TYPICAL FIRE SPRINKLER PLANS - 120' x 40' Right Data
FS-3	TYPICAL FIRE SPRINKLER PLANS - 120x40 - Left Bathroom
FS-4	TYPICAL FIRE SPRINKLER PLANS 40 x 24-BU
FS-5	Fire Sprinkler 8x36 + 40 x108
FS-6	Fire Sprinkler Details

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
COVER SHEET

LICENSED ARCHITECT — PATRICK EARL FELLIN — No. C-33467 — REN 01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
A SEPARATE VISIBLE PC APPLICATION
1 DSA CONSTRUCTION REFERENCED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
ACCEPTED FLS SS JJ
DATE APR 14 2015
ACST'L Schaber
PLD: E springs

REVISIONS
1
2
3
4
5
6
7
8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0

The example form DSA 103s shown on this sheet are for illustration purposes only. A form DSA 103 is to be completed for each application that this PC is being incorporated into and all example form DSA-103s ar to be crossed out on this drawing.

DSA-103 rev 12/20/13
Statement of Structural Tests & Special Inspections - 2013 CBC

INCREMENT # | DSA File No.: | Application No.: | Date Submitted: | Revised: | Revised:

School Name | District

IMPORTANT: This form is only a summary list of structural tests and special inspections required for the project. The actual tests and inspections must be performed as detailed on the DSA approved documents. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A. NOTE: This form is also available for projects submitted for review under the 2007 and 2010 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. An "X" before a listed test or inspection indicates it is a mandatory requirement. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. Note: A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests finally selected. For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2013 edition of the California Building Code (CBC) unless otherwise noted.

REQUIRED	TEST OR SPECIAL INSPECTION	TYPE 1	PERFORMED BY 2	CODE REFERENCE AND NOTES
-	SOILS			
	1. GENERAL:	Table 1705A.6		
X	a. Verify that: • site has been prepared properly prior to placement of controlled fill and/or excavations for foundations, • foundation excavations are extended to proper depth and have reached proper material, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative.
-	2. COMPACTED FILLS:	Table 1705A.6		
X	a. Perform qualification testing of fill materials.	Test	Lab*	* Under the supervision of the geotechnical engineer.
X	b. Verify use of proper materials and inspect lift thicknesses, placement, and compaction during placement of fill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
X	c. Test compaction of fill.	Test	Lab*	* Under the supervision of the geotechnical engineer.
+	3. DRIVEN DEEP FOUNDATIONS (PILES):	Table 1705A.7		
+	4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):	Table 1705A.7		
+	5. RETAINING WALLS:			
+	6. OTHER SOILS:			
-	CONCRETE	Table 1705A.3		
-	7. CAST IN PLACE CONCRETE			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI & PI*	* To be performed by batch-plant special inspector and project inspector.
X	c Perform slump, temperature, and (where required) air content tests.	Test	Lab	ASTM C172, ASTM C31.
X	d. Test concrete (compression).	Test	Lab	ACI 318 Section 5.6 and 1905A.1.2 (1913.3.1+). ASTM C39.
	Inspection:			
X	f. Batch plant inspection - design complies with 1705A.3.3 item 2			
X	g Inspect placement of formwork, reinforcing steel, embedded items and concrete. Inspect curing and form removal.	Continuous	PI*	* May be performed by a special inspector when specifically approved by DSA.
+	8. PRESTRESSED CONCRETE (in addition to Cast in Place Concrete tests and inspections):			
+	9. PRECAST CONCRETE (in addition to Cast in Place Concrete tests and inspections):			
+	10. SHOTCRETE (in addition to Cast in Place Concrete tests and inspections):			
-	11. POST-INSTALLED ANCHORS:			
X	a. Inspect installation of post-installed anchors	Continuous	SI	Table 1705A.3 * May be performed by the project inspector when specifically approved by DSA.
X	b. Test post-installed anchors.	Test	Lab	1913A.7 (1913.2.11+).
+	12. OTHER CONCRETE:			
+	MASONRY	TMS 402-11/ACI 530-11/ASCE 5-11 Table 1.19.3		
-	STEEL	Table 1705A.2.1		
-	17. STRUCTURAL STEEL AND COLD-FORMED STEEL USED FOR STRUCTURAL PURPOSES			
	Material Verification:			
X	a. Verify that all materials are appropriately marked and that: • Mill certificates indicate material properties that comply with requirements, • Material sizes, types and grades comply with requirements.	Periodic	*	* By special inspector when performed off-site; by project inspector for steel shipped directly to project site without welding or fabrication.
X	b. Test unidentified materials	Test	Lab	2203A.1 (2203.1+). ASTM A370.
X	c. Examine seam welds of structural tubes and pipes	Periodic	SI*	* DSA IR 17-3.
	Inspection:			
X	d. Verify member locations, bracing and all details constructed in the field.	Continuous	PI	
X	e. Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	Periodic	SI	
+	18. HIGH STRENGTH BOLTS:			
-	19. WELDING:			DSA IR 17-3, AWS D1.1 and AWS D1.8 (AWS D1.3 for cold formed steel).
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3
-	19.1 SHOP WELDING:			
X	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	c. Inspect welding of stairs and railing systems.	Periodic	SI	1705A.2.2.1 Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
-	19.2 FIELD WELDING:1, 2			
X	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
		Periodic	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
		Periodic	SI*	* May be performed by the project inspector when specifically approved by DSA. DSA IR 17-3. 1705A.2.2.1.1 and 1705A.2.2.5
X	f. Inspect welding of stairs and railing systems	Periodic	SI*	* May be performed by the project inspector when specifically approved by DSA. DSA IR 17-3. 1705A.2.2.1.1 and 1705A.2.2.5
-	20. NONDESTRUCTIVE TESTING:3			
X	a. Ultrasonic	Test	Lab	AISC 341, App. Q 5.2. AWS D1.1, D1.8.- ANSI/ASNT CP-189, SNT-TC-1A. - ASTM E543,
X	b. Magnetic Particle	Test	Lab	E1444, E164 - DSA IR 17-2.
+	21. STEEL JOISTS AND TRUSSES:			
X	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable), verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.2.3 AND DSA IR 22-3 for steel joist only. 1705a.2.2.4 for steel trusses.
+	22. SPRAY APPLIED FIRE-PROOFING:			
-	23. OTHER STEEL:			
X	a. SHOP WELDING OF COLD FORMED STEEL	Periodic	SI	
X	b. SHOP WELD, INSPECT WELDING OF STEEL FLOOR DECK WELDS	Periodic	SI	

SUMMARY
1 Soils testing and Inspection: Geotechnical Verified Report - Form DSA-293
2 All Structural Testing: Laboratory Verified Report - Form DSA-291
3 Concrete Batch Plant Inspection: Special Inspection Verified Report - Form DSA-292
4 Shop Welding Inspection: Special Inspection Verified Report - Form DSA-292
5 Field Welding Inspection: Special Inspection Verified Report - Form DSA-292
6 Steel Joist Fabrication Inspection: Special Inspection Verified Report - Form DSA-292

NOTE:
THE DIFFERENCE BETWEEN "TESTS" AND "SPECIAL INSPECTIONS" IS ADDRESSED IN IR 17-4

FOOT NOTES / OPTIONS
1. THIS TEST INSPECTION REQUIREMENT OCCURS AT FIELD WELDING. MOD TO MOD OPTION ONLY. SEE 12/S1.50 OR 12/S1.60
2. THIS TEST INSPECTION REQUIREMENT OCCURS AT FIELD WELDING. BUILDING TO CONCRETE FOUNDATION OPTION ONLY, SEE 2/F1.50 OR 2/F2.50 AND 10/F2.51
3. THIS TEST INSPECTION / IS TBD BY AOR / DSA PER PROJECT SPECIFIC REQUIREMENTS. UT TESTING SHALL BE PERFORMED ON 100% CJP GROOVE WELDS WHEN THE COLUMNS PER SCHEDULE ON SHEETS S-3.01 THRU S-3.04 HAVE A THICKNESS OF 5/16" OR GREATER - MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN CJP GROOVE WELDS

CONSTRUCTION OF (Diaphragm material-foundation material)

CONCRETE FLOOR - CONCRETE FOUNDATION

DSA-103 rev 12/20/13
Statement of Structural Tests & Special Inspections - 2013 CBC

INCREMENT # | DSA File No.: | Application No.: | Date Submitted: | Revised: | Revised:

School Name | District

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-	2. COMPACTED FILLS:	Table 1705A.6		
X	a. Perform qualification testing of fill materials.	Test	Lab*	* Under the supervision of the geotechnical engineer.
X	b. Verify use of proper materials and inspect lift thicknesses, placement, and compaction during placement of fill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
X	c. Test compaction of fill.	Test	Lab*	* Under the supervision of the geotechnical engineer.
+	3. DRIVEN DEEP FOUNDATIONS (PILES):	Table 1705A.7		
+	4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):	Table 1705A.7		
+	5. RETAINING WALLS:			
+	6. OTHER SOILS:			
-	CONCRETE	Table 1705A.3		
-	7. CAST IN PLACE CONCRETE			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI & PI*	* To be performed by batch-plant special inspector and project inspector.
	OKAY to waive testing of reinforcing steel.			IR 17-10
X	c. Perform slump, temperature, and (where required) air content tests.	Test	Lab	ASTM C172, ASTM C31.
X	d. Test concrete (compression).	Test	Lab	ACI 318 Section 5.6 and 1905A.1.2 (1913.3.1+). ASTM C39.
	Inspection:			
X	f. Batch plant inspection - design complies with 1705A.3.3 item 2	Periodic	SI	1705A.3.3, Item 2. Requires first batch inspection, weighmaster, and batch tickets.
X	g. Inspect placement of formwork, reinforcing steel, embedded items and concrete. Inspect curing and form removal.	Continuous	PI*	* May be performed by a special inspector when specifically approved by DSA.
+	8. PRESTRESSED CONCRETE (in addition to Cast in Place Concrete tests and inspections):			
+	9. PRECAST CONCRETE (in addition to Cast in Place Concrete tests and inspections):			
+	10. SHOTCRETE (in addition to Cast in Place Concrete tests and inspections):			
-	11. POST-INSTALLED ANCHORS:			
X	a. Inspect installation of post-installed anchors	Continuous	SI	Table 1705A.3 * May be performed by the project inspector when specifically approved by DSA.
X	b. Test post-installed anchors.	Test	Lab	1913A.7 (1913.2.11+).
+	12. OTHER CONCRETE:			
+	MASONRY	TMS 402-11/ACI 530-11/ASCE 5-11 Table 1.19.3		
-	STEEL	Table 1705A.2.1		
-	17. STRUCTURAL STEEL AND COLD-FORMED STEEL USED FOR STRUCTURAL PURPOSES			
	Material Verification:			
X	a. Verify that all materials are appropriately marked and that: • Mill certificates indicate material properties that comply with requirements, • Material sizes, types and grades comply with requirements.	Periodic	*	* By special inspector when performed off-site; by project inspector for steel shipped directly to project site without welding or fabrication.
X	b. Test unidentified materials	Test	Lab	2203A.1 (2203.1+). ASTM A370.
X	c. Examine seam welds of structural tubes and pipes	Periodic	SI*	* DSA IR 17-3.
	Inspection:			
X	d. Verify member locations, bracing and all details constructed in the field.	Continuous	PI	
X	e. Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	Periodic	SI	
+	18. HIGH STRENGTH BOLTS:			
-	19. WELDING:			DSA IR 17-3, AWS D1.1 and AWS D1.8 (AWS D1.3 for cold formed steel).
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3
-	19.1 SHOP WELDING:			
X	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	c. Inspect welding of stairs and railing systems.	Periodic	SI	1705A.2.2.1 Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
-	19.2 FIELD WELDING:1, 2			
X	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	f. Inspect welding of stairs and railing systems	Periodic	SI*	* May be performed by the project inspector when specifically approved by DSA. DSA IR 17-3. 1705A.2.2.1.1 and 1705A.2.2.5
-	20. NONDESTRUCTIVE TESTING:3			
X	a. Ultrasonic	Test	Lab	AISC 341, App. Q 5.2. AWS D1.1, D1.8.- ANSI/ASNT CP-189, SNT-TC-1A. - ASTM E543,
X	b. Magnetic Particle	Test	Lab	E1444, E164 - DSA IR 17-2.
+	21. STEEL JOISTS AND TRUSSES:			
X	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable), verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.2.3 AND DSA IR 22-3 for steel joist only. 1705a.2.2.4 for steel trusses.
+	22. SPRAY APPLIED FIRE-PROOFING:			
-	23. OTHER STEEL:			
X	a. SHOP WELDING OF COLD FORMED STEEL	Periodic	SI	

SUMMARY
1 Soils testing and Inspection: Geotechnical Verified Report - Form DSA-293
2 All Structural Testing: Laboratory Verified Report - Form DSA-291
3 Concrete Batch Plant Inspection: Special Inspection Verified Report - Form DSA-292
4 Shop Welding Inspection: Special Inspection Verified Report - Form DSA-292
5 Field Welding Inspection: Special Inspection Verified Report - Form DSA-292
6 Steel Joist Fabrication Inspection: Special Inspection Verified Report - Form DSA-292

NOTE:
THE DIFFERENCE BETWEEN "TESTS" AND "SPECIAL INSPECTIONS" IS ADDRESSED IN IR 17-4

FOOT NOTES / OPTIONS
1. THIS TEST INSPECTION REQUIREMENT OCCURS AT FIELD WELDING. MOD TO MOD OPTION ONLY. SEE 12/S1.50 OR 12/S1.60
2. THIS TEST INSPECTION REQUIREMENT OCCURS AT FIELD WELDING. BUILDING TO CONCRETE FOUNDATION OPTION ONLY, SEE 2/F1.50 OR 2/F2.50 AND 10/F2.51
3. THIS TEST INSPECTION / IS TBD BY AOR / DSA PER PROJECT SPECIFIC REQUIREMENTS. UT TESTING SHALL BE PERFORMED ON 100% CJP GROOVE WELDS WHEN THE COLUMNS PER SCHEDULE ON SHEETS S-3.01 THRU S-3.04 HAVE A THICKNESS OF 5/16" OR GREATER - MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN CJP GROOVE WELDS

CONSTRUCTION OF (Diaphragm material-foundation material)

PLYWOOD FLOOR - CONCRETE FOUNDATION 2

DSA-103 rev 12/20/13
Statement of Structural Tests & Special Inspections - 2013 CBC

INCREMENT # | DSA File No.: | Application No.: | Date Submitted: | Revised: | Revised:

School Name | District

IMPORTANT: This form is only a summary list of structural tests and special inspections required for the project. The actual tests and inspections must be performed as detailed on the DSA approved documents. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A. NOTE: This form is also available for projects submitted for review under the 2007 and 2010 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. An "X" before a listed test or inspection indicates it is a mandatory requirement. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. Note: A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests finally selected. For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2013 edition of the California Building Code (CBC) unless otherwise noted.

REQUIRED	TEST OR SPECIAL INSPECTION	TYPE 1	PERFORMED BY 2	CODE REFERENCE AND NOTES
+	SOILS			
+	CONCRETE	Table 1705A.3		
+	MASONRY	TMS 402-11/ACI 530-11/ASCE 5-11 Table 1.19.3		
-	STEEL	Table 1705A.2.1		
-	17. STRUCTURAL STEEL AND COLD-FORMED STEEL USED FOR STRUCTURAL PURPOSES			
	Material Verification:			
X	a. Verify that all materials are appropriately marked and that: • Mill certificates indicate material properties that comply with requirements, • Material sizes, types and grades comply with requirements.	Periodic	*	* By special inspector when performed off-site; by project inspector for steel shipped directly to project site without welding or fabrication.
X	b. Test unidentified materials	Test	Lab	2203A.1 (2203.1+). ASTM A370.
X	c. Examine seam welds of structural tubes and pipes	Periodic	SI*	* DSA IR 17-3.
	Inspection:			
X	d. Verify member locations, bracing and all details constructed in the field.	Continuous	PI	
X	e. Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	Periodic	SI	
+	18. HIGH STRENGTH BOLTS:			
-	19. WELDING:			DSA IR 17-3, AWS D1.1 and AWS D1.8 (AWS D1.3 for cold formed steel).
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	19.1 SHOP WELDING:			
	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	c. Inspect welding of stairs and railing systems.	Periodic	SI	1705A.2.2.1 Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
-	19.2 FIELD WELDING:1, 2			
X	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	f. Inspect welding of stairs and railing systems	Periodic	SI*	* May be performed by the project inspector when specifically approved by DSA. DSA IR 17-3. 1705A.2.2.1.1 and 1705A.2.2.5
	20. NONDESTRUCTIVE TESTING:3			
X	a. Ultrasonic	Test	Lab	AISC 341, App. Q 5.2. AWS D1.1, D1.8.- ANSI/ASNT CP-189, SNT-TC-1A. - ASTM E543,
X	b. Magnetic Particle	Test	Lab	E1444, E164 - DSA IR 17-2.
+	21. STEEL JOISTS AND TRUSSES:			
X	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable), verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.2.3 AND DSA IR 22-3 for steel joist only. 1705a.2.2.4 for steel trusses.
+	22. SPRAY APPLIED FIRE-PROOFING:			
-	23. OTHER STEEL:			
X	a. SHOP WELDING OF COLD FORMED STEEL	Pending	SI	
+	WOOD			
+	OTHER			

SUMMARY
1 All Structural Testing: Laboratory Verified Report - Form DSA-291
2 Shop Welding Inspection: Special Inspection Verified Report - Form DSA-292
3 Field Welding Inspection: Special Inspection Verified Report - Form DSA-292
4 Steel Joist Fabrication Inspection: Special Inspection Verified Report - Form DSA-292

NOTE:
THE DIFFERENCE BETWEEN "TESTS" AND "SPECIAL INSPECTIONS" IS ADDRESSED IN IR 17-4

FOOT NOTES / OPTIONS
1. THIS TEST INSPECTION REQUIREMENT OCCURS AT FIELD WELDING. MOD TO MOD OPTION ONLY. SEE 12/S1.50 OR 12/S1.60
2. THIS TEST INSPECTION REQUIREMENT OCCURS AT FIELD WELDING. BUILDING TO CONCRETE FOUNDATION OPTION ONLY, SEE 2/F1.50 OR 2/F2.50 AND 10/F2.51
3. THIS TEST INSPECTION / IS TBD BY AOR / DSA PER PROJECT SPECIFIC REQUIREMENTS. UT TESTING SHALL BE PERFORMED ON 100% CJP GROOVE WELDS WHEN THE COLUMNS PER SCHEDULE ON SHEETS S-3.01 THRU S-3.04 HAVE A THICKNESS OF 5/16" OR GREATER - MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN CJP GROOVE WELDS

CONSTRUCTION OF (Diaphragm material-foundation material)

PLYWOOD FLOOR - WOOD FOUNDATION 1

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"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
T & I FORMS

LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC — FLS SS
DATE APR 14 2015

REVISIONS
1
2
3
4
5
6
7
8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0A

BUILDING OPTIONS SCHEDULE

ROOF FRAMING PLANS

ROOF FRAMING PLANS		SHEET NUMBER
ROOF FRAMING DETAILS:	[X] MONO SLOPE	S-2.50
	[ ] DUAL SLOPE	S-2.51
ROOF MISCELLANEOUS DETAILS:		S-2.60
ROOF FRAMING DETAILS:	[ ] PARAPET - DETAILS	S-2.70
ROOF TRUSS:		S-2.90

BUILDING SECTION

BUILDING SECTION		SHEET NUMBER
BUILDING SECTION:	[X] MONO SLOPE ROOF	S-3.01
	[ ] DUAL SLOPE ROOF	S-3.02
	[ ] 0.030" MONO SLOPE ROOF	S-3.03
	[ ] 0.030" DUAL SLOPE ROOF	S-3.04

WALL FRAMING

WALL FRAMING		SHEET NUMBER
FRAMING ELEVATIONS:	[X] WOOD STUDS	S-5.00
	[ ] STEEL STUDS	S-5.20
FRAMING DETAILS:	[X] WOOD STUDS	S-5.10
	[X] WOOD STUDS	S-5.11
	[ ] STEEL STUDS	S-5.30
	[ ] STEEL STUDS	S-5.31

PLUMBING

PLUMBING	SHEET NUMBER
[X] PLUMBING DETAILS AND SCHEDULES	P-1.01

MECHANICAL

MECHANICAL		SHEET NUMBER
[X] MECHANICAL NOTES, SCHEDULES, AND DETAILS:		M-0.1
[X] 24' x 40' - WALL MOUNT	[X] 4 LIGHT CONFIGURATION	M-1.01
[ ] 36' x 40' - WALL MOUNT	[ ] 4 LIGHT CONFIGURATION	M-1.02
[X] 48' TO 120' x 40' - WALL MOUNT	[X] 4 LIGHT CONFIGURATION	M-1.03
[ ] 24' x 40' - ROOF MOUNT	[ ] 4 LIGHT CONFIGURATION	M-2.01
[ ] 24' x 40' MECHANICAL ROOF PLAN		M-2.02
[ ] 36' x 40' - ROOF MOUNT	[ ] 4 LIGHT CONFIGURATION	M-3.01
[ ] 36' x 40' MECHANICAL ROOF PLAN		M-3.02
[ ] 48' TO 120' x 40' - ROOF MOUNT	[ ] 4 LIGHT CONFIGURATION	M-4.01
[ ] 48' TO 120' x 40' MECHANICAL ROOF PLAN		M-4.02

ELECTRICAL

ELECTRICAL			SHEET NUMBER
ELECTRICAL PLAN:	[X] 24' x 40'	[X] 4 LIGHT CONFIGURATION	E-1.01
	[ ] 36' x 40'	[ ] 4 LIGHT CONFIGURATION	E-1.02
	[X] 48' TO 120' x 40'	[X] 4 LIGHT CONFIGURATION	E-1.03

RAMP

RAMP		SHEET NUMBER
RAMP PLANS:	[X] STANDARD RAMP PLAN	R-1.01
	[ ] OFFSET RAMP PLAN	R-1.02
	[X] RAMP LANDING	R-1.03
	[ ] STANDARD LANDING WITH STEPS	R-1.04
	[ ] SWITCHBACK RAMP PLAN	R-1.05
	[X] RAMP DETAILS	R-2.01
	[ ] CONCRETE RAMP	R-3.01

BUILDING RELOCATABLE DETAILS

BUILDING RELOCATABLE DETAILS	
[ ] BUILDING RELOCATION DETAILS	REL-101 REL-102

FIRE SPRINKLERS

FIRE SPRINKLERS	
[X] FIRE SPRINKLER SECTIONS AND SPECS	FS-1
[X] TYPICAL FIRE SPRINKLER PLANS - 120' X 40'	FS-2
[X] TYPICAL FIRE SPRINKLER PLANS - 24'-84' X 40'	FS-3
[X] TYPICAL FIRE SPRINKLER PLANS - 96'-108' X 40'	FS-4

EXTERIOR ELEVATION (CONTINUED)

EXTERIOR ELEVATION (CONTINUED)			SHEET NUMBER
EXTERIOR ELEVATIONS:	[ ] 36' x 40'	[ ] MONO SLOPE	A-4.02
		[ ] DUAL SLOPE	A-4.03
		[ ] PARAPET ROOF - MONO SLOPE	A-4.22
		[ ] PARAPET ROOF - DUAL SLOPE	A-4.22
EXTERIOR ELEVATIONS:	[X] 48' TO 120' x 40'	[X] MONO SLOPE	A-4.04
		[ ] DUAL SLOPE	A-4.05
		[ ] PARAPET ROOF - MONO SLOPE	A-4.23
		[ ] PARAPET ROOF - DUAL SLOPE	A-4.23

CROSS SECTIONS

CROSS SECTIONS		SHEET NUMBER
CROSS SECTIONS:	[X] MONO SLOPE - 0.018", BUILT UP, OR TPO ROOF DECK	A-5.01
	[ ] DUAL SLOPE - 0.018", BUILT UP, OR TPO ROOF DECK	A-5.02
	[ ] MONO SLOPE - 0.030" ROOF DECK	A-5.03
	[ ] DUAL SLOPE - 0.030" ROOF DECK	A-5.04
	CROSS SECTION	A-5.05

ARCHITECTURAL DETAILS

ARCHITECTURAL DETAILS			SHEET NUMBER
WALL DETAILS:	[X] WOOD STUDS	[X] EXTERIOR WOOD SIDING	A-5.50
		[ ] EXTERIOR PLASTER FINISH	A-5.51
		[ ] EXTERIOR WOOD SIDING - 1 HOUR RATED	A-5.52
		[ ] EXTERIOR PLASTER FINISH - 1 HOUR RATED	A-5.53
	[ ] STEEL STUDS	[ ] EXTERIOR WOOD SIDING	A-5.60
		[ ] EXTERIOR PLASTER FINISH	A-5.61
		[ ] EXTERIOR WOOD SIDING - 1 HOUR RATED	A-5.62
		[ ] EXTERIOR PLASTER FINISH - 1 HOUR RATED	A-5.63
[ ] 1-HOUR RATED OPTIONS			A-5.64
FLOOR DETAILS:			A-5.70

MISCELLANEOUS DETAILS

MISCELLANEOUS DETAILS		SHEET NUMBER
MISCELLANEOUS:	[X] CASEWORK, TV, AND PROJECTION SCREEN DETAILS	A-5.80
	[X] WATER HEATER, DRINKING FOUNTAIN, AND FOLDING WALL DETAILS	A-5.81

INTERIOR ELEVATIONS

INTERIOR ELEVATIONS	SHEET NUMBER
[X] 24' x 40' INTERIOR ELEVATION	A-6.01
[ ] 36' x 40' INTERIOR ELEVATION	A-6.02
[X] 48' TO 120' x 40' INTERIOR ELEVATION	A-6.03

FOUNDATIONS

FOUNDATIONS		SHEET NUMBER
[X] WOOD FOUNDATION PLAN	[ ] 24' x 40' (50 PSF)	[ ] F-0.01
	[ ] 24' x 40' (50+15 PSF)	[ ] F-0.02
	[ ] 24' x 40' (100 PSF)	[ ] F-0.03
	[X] 24' x 40' (150 PSF)	[ ] F-0.04
	[ ] 36' x 40' (50 PSF)	[ ] F-0.11
	[ ] 36' x 40' (50+15 PSF)	[ ] F-0.12
	[ ] 36' x 40' (100 PSF)	[ ] F-0.13
	[ ] 36' x 40' (150 PSF)	[ ] F-0.14
	[ ] 48' x 40' (50 PSF)	[ ] F-0.21
	[ ] 48' x 40' (50+15 PSF)	[ ] F-0.22
	[ ] 48' x 40' (100 PSF)	[ ] F-0.23
	[X] 48' x 40' (150 PSF)	[ ] F-0.24
[X] WOOD FOUNDATION DETAILS:		[ ] F-0.50
[ ] CONCRETE FOUNDATION PLAN - ABOVE GRADE	[ ] WOOD FLOOR - (50, 50+15, 100, OR 150PSF)	[ ] F-1.01
	[ ] CONCRETE FLOOR - (50, 50+15, 100, OR 150PSF)	[ ] F-1.11
[ ] CONCRETE FOUNDATION DETAILS - ABOVE GRADE:		[ ] F-1.50
[ ] CONCRETE FOUNDATION PLAN - BELOW GRADE	[ ] WOOD FLOOR - (50, 50+15, 100, OR 150PSF)	[ ] F-2.01
	[ ] CONCRETE FLOOR - (50, 50+15, 100, OR 150PSF)	[ ] F-2.11
[ ] CONCRETE FOUNDATION DETAILS - BELOW GRADE:		[ ] F-2.50
[ ] FOUNDATION DETAILS - CONCRETE		[ ] F-2.51

GENERAL STRUCTURAL SHEETS

GENERAL STRUCTURAL SHEETS	SHEET NUMBER
STRUCTURAL SPECS:	S-0.1

FLOOR FRAMING PLANS

FLOOR FRAMING PLANS		SHEET NUMBER
FLOOR FRAMING:	[X] WOOD FLOOR	S-1.01
	[ ] CONCRETE FLOOR	S-1.11
FLOOR FRAMING DETAILS:	[X] WOOD FLOOR	S-1.50
	[ ] CONCRETE FLOOR	S-1.60

ROOF FRAMING PLANS

ROOF FRAMING PLANS		SHEET NUMBER
ROOF FRAMING:	[X] 0.018", BUILT UP, OR TPO - MONO SLOPE	S-2.01
	[ ] 0.030" - MONO SLOPE	S-2.02
	[ ] PARAPET - MONO SLOPE	S-2.03
	[ ] 0.018", BUILT UP, OR TPO - DUAL SLOPE	S-2.11
	[ ] 0.030" - DUAL SLOPE	S-2.12
	[ ] PARAPET - DUAL SLOPE	S-2.13

GENERAL ARCHITECTURAL SHEETS

GENERAL ARCHITECTURAL SHEETS	SHEET NUMBER
COVER SHEET:	A-0
T & I FORMS	A-0A & B
BUILDING OPTIONS SCHEDULE SHEET:	A-0.0
SYMBOLS, LEGEND, ABBREVIATION, ADA SIGNAGE SHEET:	A-0.1
SCHEDULE SHEET:	A-0.2
KEY PLAN: 24' TO 120' x 40'	A-0.3
ENERGY CALCS	A-0.5A-C
ENERGY CALCS	A-0.6A-F
DESIGN ENERGY VALUES BY ZONE AND CALGREEN SPECIFICATIONS	A-0.7

FLOOR PLANS

FLOOR PLANS		SHEET NUMBER
FLOOR PLANS:	[X] FLOOR PLAN - 24' x 40'	A-1.01
	[ ] FLOOR PLAN - 36' x 40'	A-1.02
	[X] FLOOR PLAN - 48' TO 120' x 40'	A-1.03
	[ ] TOILET END MODULE - 12' x 40' (FLOOR PLAN & ELEVATIONS)	A-1.04
	[ ] TOILET END MODULE - 12' x 40' (PLUMBING PLANS)	A-1.05
	[ ] TOILET BUILDING - 24' x 40' (FLOOR PLAN & ELEVATIONS)	A-1.06
	[ ] TOILET BUILDING - 24' x 40' (PLUMBING PLANS)	A-1.07

CEILING

CEILING			SHEET NUMBER
REFLECTED CEILING PLANS:	[X] 24' x 40'	[X] 4 LIGHT CONFIGURATION	A-2.01
	[ ] 36' x 40'	[ ] 4 LIGHT CONFIGURATION	A-2.02
	[X] 48' TO 120' x 40'	[X] 4 LIGHT CONFIGURATION	A-2.03
CEILING DETAILS:	[X] T-GRID		A-2.20
	[ ] HARD LID		A-2.21

ROOF PLAN

ROOF PLAN			SHEET NUMBER
ROOF PLANS:	[X] 24' x 40'	[X] 0.018" ROOF - METAL DECK - MONO SLOPE	A-3.01
		[ ] 0.018" ROOF - METAL DECK - DUAL SLOPE	A-3.01
		[ ] 0.030" ROOF - METAL DECK - MONO SLOPE	A-3.11
		[ ] 0.030" ROOF - METAL DECK - DUAL SLOPE	A-3.11
		[ ] BUILT UP ROOF - MONO SLOPE	A-3.21
		[ ] BUILT UP ROOF - DUAL SLOPE	A-3.21
		[ ] PARAPET ROOF - MONO SLOPE	A-3.31
		[ ] PARAPET ROOF - DUAL SLOPE	A-3.31
		[ ] TPO ROOF - MONO SLOPE	A-3.41
		[ ] TPO ROOF - DUAL SLOPE	A-3.41
	[ ] 36' x 40'	[ ] 0.018" ROOF - METAL DECK - MONO SLOPE	A-3.02
		[ ] 0.018" ROOF - METAL DECK - DUAL SLOPE	A-3.02
		[ ] 0.030" ROOF - METAL DECK - MONO SLOPE	A-3.12
		[ ] 0.030" ROOF - METAL DECK - DUAL SLOPE	A-3.12
		[ ] BUILT UP ROOF - MONO SLOPE	A-3.22
		[ ] BUILT UP ROOF - DUAL SLOPE	A-3.22
		[ ] PARAPET ROOF - MONO SLOPE	A-3.32
		[ ] PARAPET ROOF - DUAL SLOPE	A-3.32
		[ ] TPO ROOF - MONO SLOPE	A-3.42
		[ ] TPO ROOF - DUAL SLOPE	A-3.42
	[X] 48' TO 120' x 40'	[X] 0.018" ROOF - METAL DECK - MONO SLOPE	A-3.03
		[ ] 0.018" ROOF - METAL DECK - DUAL SLOPE	A-3.04
		[ ] 0.030" ROOF - METAL DECK - MONO SLOPE	A-3.13
		[ ] 0.030" ROOF - METAL DECK - DUAL SLOPE	A-3.14
		[ ] BUILT UP ROOF - MONO SLOPE	A-3.23
		[ ] BUILT UP ROOF - DUAL SLOPE	A-3.24
		[ ] PARAPET ROOF - MONO SLOPE	A-3.33
		[ ] PARAPET ROOF - DUAL SLOPE	A-3.34
		[ ] TPO ROOF - MONO SLOPE	A-3.43
		[ ] TPO ROOF - DUAL SLOPE	A-3.44
ROOF DETAILS:	[X] 0.018" STANDING SEAM ROOF DECK		A-3.50
	[ ] 0.030" STANDING SEAM ROOF DECK		A-3.60
	[ ] 0.030" STANDING SEAM ROOF DECK		A-3.61
	[ ] BUILT UP ROOF		A-3.70
	[ ] PARAPET		A-3.80
	[ ] TPO		A-3.90

EXTERIOR ELEVATION

EXTERIOR ELEVATION			SHEET NUMBER
EXTERIOR ELEVATIONS:	[X] 24' x 40'	[X] MONO SLOPE	A-4.01
		[ ] DUAL SLOPE	A-4.01
		[ ] PARAPET ROOF - MONO SLOPE	A-4.21
		[ ] PARAPET ROOF - DUAL SLOPE	A-4.21

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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
BUILDING OPTIONS SCHEDULE

LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
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8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0.0

REFLECTED CEILING NOTES

METAL SUSPENSION FOR LAY-IN PANEL CEILING:

A. 12GA. (MIN.) HANGER WIRES MAY BE USED FOR UP TO THE INCLUDING 4'-0" X 4'-0" GRID SPACING, ALONG MAIN RUNNER. SPLICES WILL NOT BE PERMITTED IN ANY HANGER WIRES UNLESS SPECIFICALLY APPROVED BY DSA.

B. PROVIDE 12GA. HANGER WIRES WITHIN 8" OF THE ENDS OF ALL MAIN & CROSS RUNNERS OR AT 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS AT THE PERIMETER OF THE CEILING AREA.

C. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAINTAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT THE CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREAS. HANGER WIRES THAT ARE MORE THAN 1 IN 6 PLUMB ARE TO HAVE COUNTER SLOPING WIRES.

D. CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 3/4" CLEAR OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYS. RUNNERS, THE MAIN AND CROSS RUNNERS SHOULD BE FREE & A MIN. OF 3/4" CLEAR OF WALL.

E. AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16GA. WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNERS MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNERS IS 8" OR LESS, THIS INTERLOCK IS NOT REQ'D.

F. PROVIDE BRACING ASSEMBLY CONSISTING OF A COMPRESSION STRUT (COMPRESSION STRUTS SHALL BE ADEQUATE TO RESIST THE VERTICAL COMPONENT INDUCED BY THE BRACING WIRES, AND SHALL NOT BE MORE THAN 1 (HORIZONTAL) IN 6 (VERTICAL) OUT OF PLUMB) AND (4) 12GA. SPLAYED WIRES ORIENTED 90° FROM EA. OTHER AT THE FOLLOWING SPACING.
(A). PLACE BRACING ASSEMBLIES AT A SPACING NOT MORE THAN 8'-0" X 8"-0" ON CENTER.
(B). PROVIDE BRACING ASSEMBLIES AT LOCATIONS NOT MORE THAN 1/2 THE ABOVE SPACING FROM EA. PERIMETER WALL OR AT THE EDGE OF VERTICAL CEILING OFFSETS. THE SLOPE OF THESE WIRES SHALL NOT EXCEED 45° FROM THE PLANE OF THE CEILING AND SHOULD BE TAUT WITHOUT CAUSING THE CEILING TO LIFT. SPLICES IN BRACING WIRES ARE NOT PERMITTED WITHOUT SPECIAL DSA APPROVAL.

G. FASTEN #12 HANGER WIRES WITH NOT LESS THAN THREE (3) TIGHT TURNS IN 3 INCHES. HANGER WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION OF THE MEMBER WITHIN THE LOOPS (SEE ASTM E580, SECTION 5.2.7.2). FASTEN SPLAY WIRES WITH 4 TIGHT TURNS. HANGER OR BRACING WIRE ANCHORS TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHOR ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE WIRE.

H. SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6" FROM ALL UNBRACED DUCTS, PIPES, CONDUITS, ETC.
HANGER WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO TYPICAL HANGER SPACING. SEE FIGURE 3A, DETAIL F OF DSA IR 25-2.10. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS, OR DISCONTINUOUS AREAS.

I. CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR DEVICES.
ATTACH ALL LIGHT FIXTURES CEILING MOUNTED AIR TERMINALS AND ALL OTHER DEVICES TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURES. SCREWS OR APPROVED FASTENERS ARE REQUIRED. MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH LIGHT FIXTURE PER ASTM E580 SECTION 5.3.1.
RECESSED OR DROP-IN LIGHT FIXTURES, GRILLES, MECHANICAL TERMINALS, AND FLEXIBLE SPRINKLER HOSE FITTINGS OR OTHER SERVICES BE SUPPORTED DIRECTLY ON RUNNERS CLASSIFIED AS ASTM HEAVY DUTY, BUT THEY MUST ALSO HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRES ATTACHED TO THE FIXTURE AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.

J. ALL FLUSH OR RECESSED LIGHT FIXTURES, MECHANICAL TERMINALS, AND FLEXIBLE SPRINKLER HOSE FITTINGS OR OTHER SERVICES WEIGHING 56 LBS. OR MORE MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE WIRES ATTACHED TO THE HOUSING AND TO THE STRUCTURE ABOVE. THE FOUR (4) TAUT #12 GAGE WIRES, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, MUST BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE UNIT.
ALL 4 ft. x 4 ft. LIGHT FIXTURES MUST HAVE SLACK SAFETY WIRES AT EACH CORNER. SURFACE-MOUNTED FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES MADE OF MATERIAL WITH A MINIMUM #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SUSPENSION WIRE SHALL BE ATTACHED TO EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE 8 ft. OR LONGER. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED 8 FEET.
SUPPORT PENDANT-MOUNTED LIGHT FIXTURES DIRECTLY FROM THE STRUCTURE ABOVE WITH HANGER WIRES OR CABLES PASSING THROUGH EACH PENDANT HANGER AND CAPABLE OF SUPPORTING TWO (2) TIMES THE WEIGHT OF THE FIXTURE. A BRACING ASSEMBLY, PER FIGURE 1, IS REQUIRED WHERE THE PENDANT HANGER PENETRATES THE CEILING. SPECIAL DETAILS ARE REQUIRED TO ATTACH THE PENDANT HANGER TO THE BRACING ASSEMBLY TO TRANSMIT HORIZONTAL FORCE. IF THE PENDANT MOUNTED LIGHT FIXTURE IS DIRECTLY AND INDEPENDENTLY BRACED BELOW THE CEILING, I.E. AIRCRAFT CABLES TO WALLS, THEN BRACE ASSEMBLY IS NOT REQUIRED ABOVE THE CEILING. SEE IR 16-9 FOR ADDITIONAL REQUIREMENT FOR PENDENT MOUNTED FIXTURES.
ALL LIGHT-WEIGHT MISCELLANEOUS DEVISES, SUCH AS STROBE LIGHTS, SPEAKERS, ETC., SHALL BE ATTACHED TO THE CEILING GRID PER SECTION 7.1 OF DSA IR 25-2.10. IN ADDITION, DEVICES WEIGHING MORE THAN 10 LBS SHALL HAVE A #12 SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHTING MORE THEN 20 LBS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE PER SECTION 7.3 OF DSA IR 25-2.10.
PENETRATIONS THROUGH THE CEILING FOR SPRINKLER HEADS AND OTHER SIMILAR DEVICES THAT ARE NOT INTEGRALLY TIED TO THE CEILING SYSTEM IN THE LATERAL DIRECTION SHALL HAVE A TWO (2) INCH OVERSIZED RING, SLEEVE OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FREE MOVEMENT OF ONE (1) INCH IN ALL HORIZONTAL DIRECTIONS. ALTERNATIVELY, PER ASTM E580 SECTION 5.2.8.8, A FLEXIBLE SPRINKLER HOSE FITTING THAT CAN ACCOMMODATE 1 INCH OF CEILING MOVEMENT SHALL BE PERMITTED TO BE USED IN LIEU OF THE OVERSIZED RING, SLEEVE OR ADAPTER.

K. CLASSIFICATION OF CEILING GRID:
CLASSIFICATION OF CEILING GRID SHALL BE "HEAVY DUTY"
MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328
2" WALL ANGLE: 7810
ARMSTRONG PER ASTM C635 AND C636.
PERIMETER SUPPORTING CLOSURE ANGLE SHALL BE NOT LESS THAN 2". ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE AND CBC CLASS C FLAME-SPREAD 76-200; SMOKE-DEVELOPED 0-450.

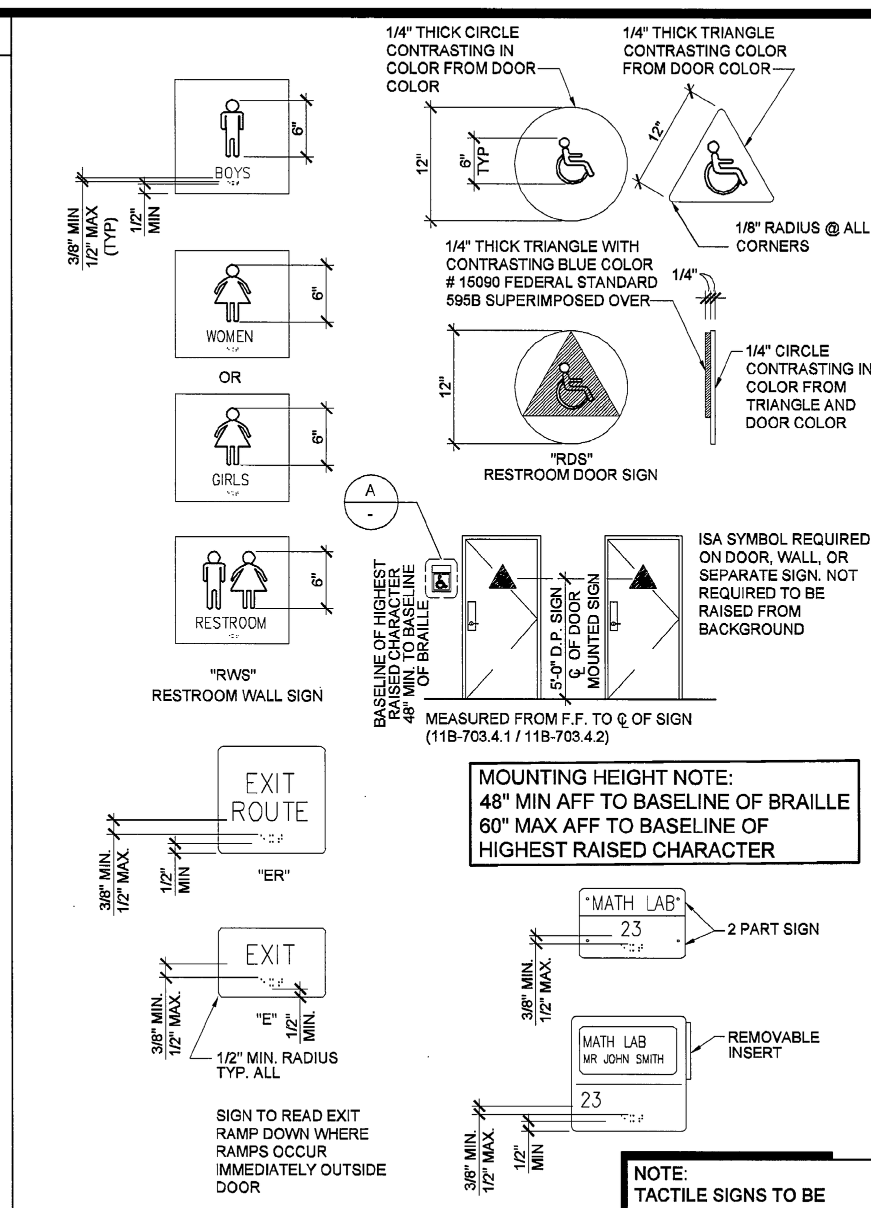
L. FOR CEILING AREAS EXCEEDING 2500 SQUARE FEET, A SEISMIC SEPARATION JOINT SHALL BE PROVIDED IN ACCORDANCE WITH DSA IR 25-2.10 SECTION 8, FIGURE 7, DETAIL A TO DIVIDE THE CEILING INTO AREAS NOT EXCEEDING 2500 SQUARE FEET. ALTERNATIVELY, COMPLY WITH ASTM E580-08 SECTION 5.2.9. - SEE 20/A-2.20

2. NOTE FOR FIRE BLK CONSTRUCTION: SECTION 718

PER CBC SECTION 718.2.1. FIRE BLOCKS MAY BE OF GYPSUM BOARD, CEMENT FIBER BOARD, BATTS OR MINERAL OR GLASS FIBER, OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIRE BLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES. (SECTION 718.2.1). FLAME SPREAD - 25 SMOKE DEVELOPMENT - 50 MAX
FIRE BLOCKING IS NOT REQUIRED WITHIN CONCEALED SPACES CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS

3. DUCTWORK SHALL BE RIGIDLY ATTACHED TO BUILDING AND SHALL NOT BE CLOSER THAN 6" TO HANGER WIRES

4. HANGER WIRES MORE THAN 1-IN-6 OUT OF PLUMB SHALL HAVE COUNTER SLOPING WIRES



NOTE:
TACTILE SIGNS TO BE PROVIDED AND INSTALLED ON SITE BY OTHERS, NOT SCI. AND SHALL COMPLY W/ CBC 1011.4

SIGNAGE TEMPLATES

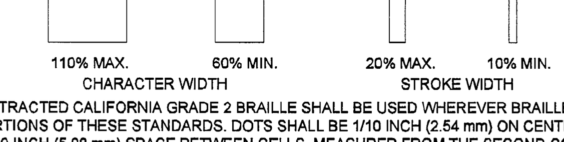
COORDINATE WITH NOTES 1 THROUGH 5 ON THIS SHEET.

TACTILE EXIT SIGNS

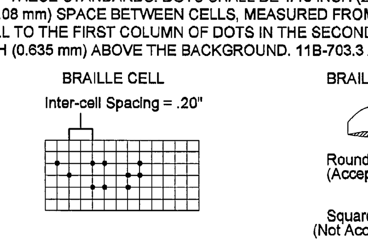
1. CHARACTER TYPE: CHARACTERS ON SIGNS SHALL BE RAISED 1/32 INCH (0.794 mm) MINIMUM AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED GRADE 2 BRAILLE (SEE NOTE 5 BELOW).
2. CHARACTER SIZE: RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8 INCH (15.9 mm) AND A MAXIMUM OF 2 INCHES (51 mm) HEIGHT BASED ON THE HEIGHT OF THE UPPERCASE "I".
3. FINISH AND CONTRAST: CONTRAST BETWEEN CHARACTERS, SYMBOLS AND THEIR BACKGROUND MUST BE 70% MINIMUM AND HAVE A NON-GLARE FINISH. 11B-703.5.1 / 11B-703.6.2 / 11B-703.7.1
4. PROPORTIONS: CHARACTERS ON SIGNS SHALL HAVE A WIDTH-TO HEIGHT RATIO OF BETWEEN 60% MIN. AND 110% MAX. AND A STROKE WIDTH-TO-HEIGHT RATIO OF BETWEEN 10% MIN. AND 20% MAX. OF THE CHARACTER HEIGHT. 11B-703.2.4, 11B-703.2.6, 11B-703.5.7.

ALL LETTERS MEASURED MUST BE UPPERCASE. AFTER CHOOSING A TYPE STYLE TO TEST, BEGIN BY PRINTING THE LETTERS "O", AND "I" AT 1 INCH HIGH. PLACE THE TEMPLATE'S 110% SQUARE OVER "O",IF THE CHARACTER IS NOT WIDER THAN 110% SQUARE, NOR NARROWER THAN THE 60% RECTANGLE, THE PROPORTIONS ARE CORRECT. USE THE 20% RECTANGLE TO DETERMINE IF THE STROKE OF THE "I" IS TOO BROAD, AND THE 10% RECTANGLE TO SEE IF ITS IS TOO NARROW. IF ALL THE TESTS ARE PASSED, THE TYPE STYLE IS COMPLIANT WITH PROPORTION CODE.

TEMPLATE FOR CHECKING CHARACTER AND STROKE WIDTH TO HEIGHT PROPORTIONS:

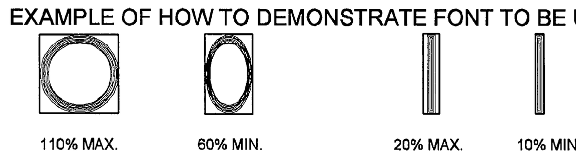


5. BRAILLE: CONTRACTED CALIFORNIA GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS. DOTS SHALL BE 1/10 INCH (2.54 mm) ON CENTERS IN EACH CELL WITH 2/10 INCH (5.08 mm) SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40 INCH (0.635 mm) ABOVE THE BACKGROUND. 11B-703.3 / 11B-703.3.1.

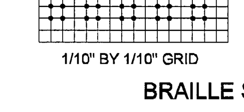


REQUIRED ROUNDED OR DOMED CALIFORNIA BRAILLED DOTS, EACH DISTINCT AND SEPARATE. DOTS WITH STRAIGHT SIDES AND FLAT TOPS ARE NOT READABLE FOR MANY BRAILLE USERS.

EXAMPLE OF HOW TO DEMONSTRATE FONT TO BE USED

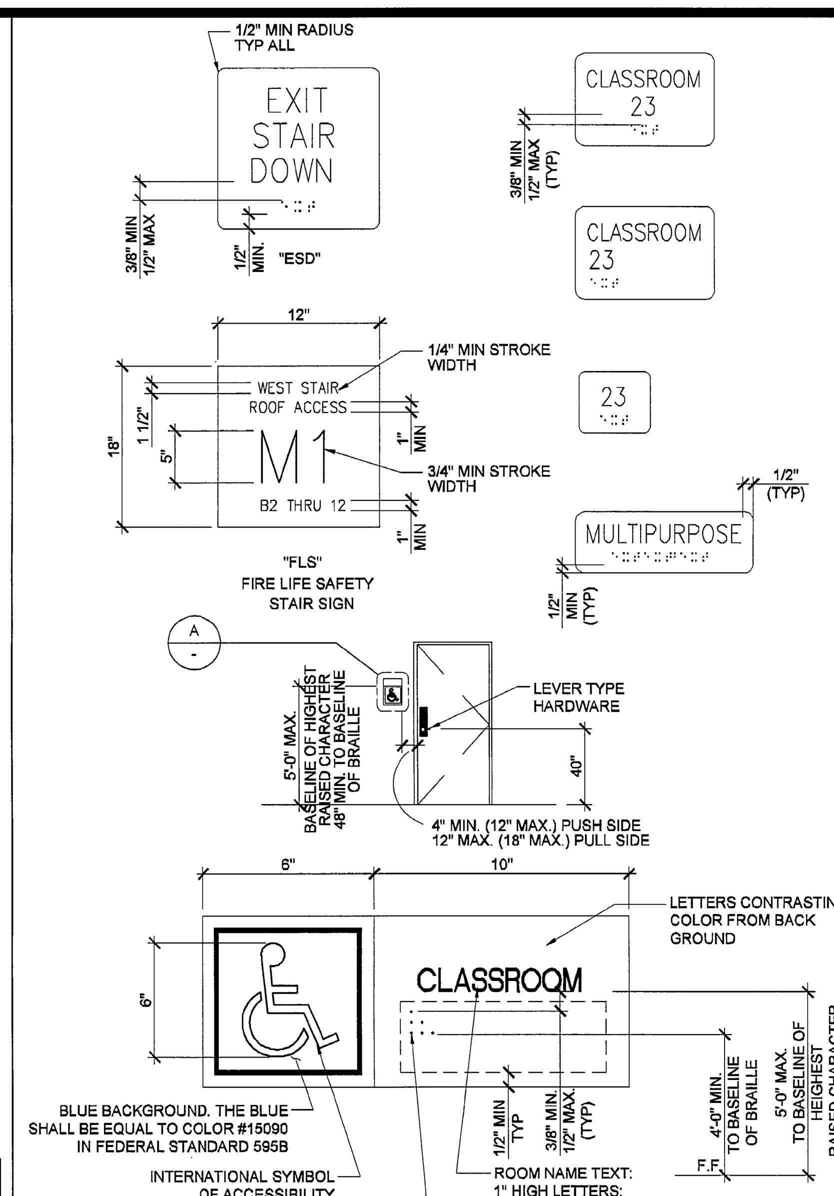


WIDTH-TO-HEIGHT PROPORTIONS TEMPLATE



CALIFORNIA CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED. INDIVIDUAL BRAILLE DOTS SHALL BE DISTINCT AND SEPARATE. EACH DOT SHALL BE ROUNDED OR DOMED IN LIEU OF SQUARE SIDED AND FLAT TOPPED.

BRAILLE SPACING TEMPLATE PER TITLE 24



NOTE:
PROVIDE ONE SIGN WHERE INDICATED ON PLANS. LOCATE SIGN MAX. 12" AWAY FROM THE DOOR STRIKE SIDE.

NOTE:
SIGN MATERIAL TO BE 1/8" THK. E.S. PLASTIC, W/ 1.32" RAISED BORDER, GRAPHICS AND LETTERS. PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTENERS. CBC SECTION 11B-703.

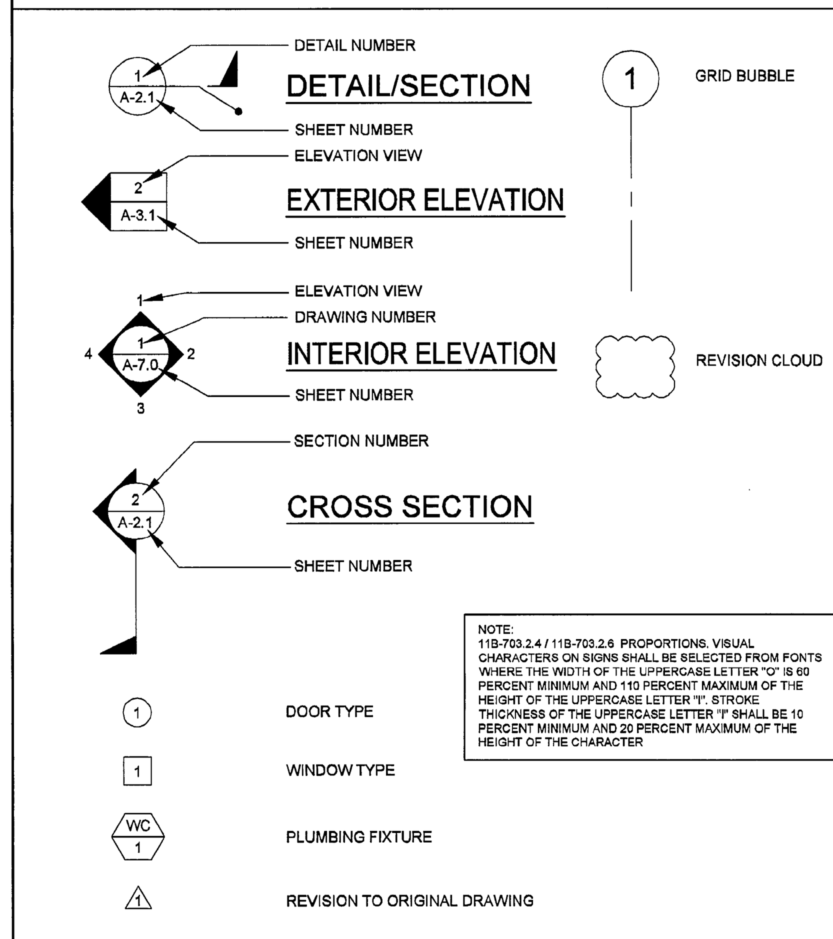
(A) ROOM IDENTIFCATION ROOM SIGNAGE (BY DISTRICT)

FOR SITE SPECIFIC LOCATIONS ARCHITECT TO PROVIDE BUILDING / ROOM IDENTIFICATION SIGNS. DETAILS AND LOCATIONS OF SIGNAGE TO BE INDICATED.

COORDINATE WITH NOTES 1 THROUGH 5 ON THIS SHEET.

THIS DETAIL FOR REFERENCE ONLY

SYMBOLS LEGEND



NOTE:
11B-703.2.4 / 11B-703.2.6 PROPORTIONS. VISUAL CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER

ABBREVIATIONS

AB	ANCHOR BOLT	FA	FIRE ALARM	℘ OR PL	PLATE
ABS	ABSOLUTE	FCO	FLOOR CLEAN OUT	PC	PRE-CHECKED
ABV	ABOVE	FF	FINISH FLOOR	PLAS	PLASTER
ACC	ACCESS	FG	FINISH GRADE	PLYWD	PLYWOOD
ADDL	ADDITIONAL	FIN	FINISH	PNL	PANEL
ADJ	ADJACENT	FLR	FLOOR	PNT	PAINT
AFF	ABOVE FINISH FLOOR	FN	FIELD NAILING	POC	POINT OF CONNECTION
AFG	ABOVE FINISH GRADE	FND	FOUNDATION	POT	PATH OF TRAVEL
AGC	ABOVE GRADE CONCRETE	FOC	FACE OF CONCRETE	PSF	POUNDS PER SQUARE FOOT
ALT	ALTERNATE	FOS	FACE OF STUD	PSI	POUNDS PER SQUARE INCH
AOR	ARCHITECT OF RECORD	FTG	FOOTING	PT	PRESSURE TREATED
APPROX	APPROXIMATE	FOF	FACE OF FINISH		
ARCH	ARCHITECTURAL / ARCHITECT			RAG	RETURN AIR GRILLE
		GA	GAUGE	RD	ROOF DRAIN
BD	BOARD	GALV	GALVANIZE	REF	REFERENCE
BGC	BELOW GRADE CONCRETE	GC	GENERAL CONTRACTOR	REG	REGISTER
BLDG	BUILDING	GR	GRADE	REINF	REINFORCE
BLK	BLOCK	GYP	GYPSUM	REQ'D	REQUIRED
BLKG	BLOCKING	GYP BD	GYPSUM BOARD	REV	REVISION
BM	BEAM			RF	ROOF
BOT	BOTTOM			RM	ROOM
BTWN	BETWEEN	HB	HOSE BIBB	RO	ROUGH OPENING
BU	BUILT UP	HD	HEAVY DUTY	ROH	ROOF OVERHANG
		HDR	HEADER		
CAB	CABINET	HDW	HARDWARE	SCHED	SCHEDULE
CBC	CALIFORNIA BUILDING CODE	HF	HEM FIR	SEC	SECTION
CI	CAST IRON	HORIZ	HORIZONTAL	SHT	SHEET
CJ	CONTROL JOINT	HT	HEIGHT	SHTG	SHEATHING
CJP	COMPLETE JOINT PENETRATION	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	SIM	SIMILAR
				SPEC	SPECIFICATION
℄	CENTER LINE			SQ	SQUARE
CLG	CEILING	INCL	INCLUDED	SST	STAINLESS STEEL
CO	CLEAN OUT	INFO	INFORMATION	STD	STANDARD
COL	COLUMN	INT	INTERIOR	STIFF	STIFFENER
CONC	CONCRETE			STL	STEEL
CONN	CONNECTION	J-BOX	JUNCTION BOX	STS	SELF-TAPPING SCREW
CONST	CONSTRUCTION	JST	JOIST	STSMS	SELF-TAPPING SHEET METAL SCREW
CONT	CONTINUOUS	JT	JOINT		
CPT	CARPET				
CSK	COUNTERSINK	KO	KNOCK OUT		
CTR	CENTER			T&B	TOP AND BOTTOM
		LAB	LABORATORY	T&G	TONGUE AND GROOVE
DBL	DOUBLE	LAM	LAMINATED	TEL	TELEPHONE
DET	DETAIL	LAV	LAVATORY	THK	THICK
DF	DOUGLAS FIR	LB	POUNDS	TOC	TOP OF COLUMN
DIA OR Ø	DIAMETER	LT	LIGHT	TOS	TOP OF STEEL
DIAG	DIAGONAL	LT WT	LIGHT WEIGHT	TS	TUBE STEEL
DIM	DIMENSION	LVR	LOUVER	TV	TELEVISION
DSA	DIVISION OF THE STATE ARCHITECT			TYP	TYPICAL
		MAX	MAXIMUM		
DWG	DRAWING	MB	MACHINE BOLT	UBC	UNIFORM BUILDING CODE
		MED	MEDIUM	UON	UNLESS OTHERWISE NOTED
(E)	EXISTING	MFR	MANUFACTURER		
EA	EACH	MIN	MINIMUM		
EJ	EXPANSION JOINT	MISC	MISCELLANEOUS	UR	URINAL
ELEV	ELEVATION	MOD	MODULE		
EN	END NAIL	MTL	METAL	VERT	VERTICAL
EQ	EQUAL			VCT	VINYL COMPOSITION TILE
EQUIP	EQUIPMENT	(N)	NEW		
EW	EACH WAY	N	NORTH	W/	WITH
EXT	EXTERIOR	NIC	NOT IN CONTRACT (NOT IN SILVER CREEK'S SCOPE OF WORK	WC	WATER CLOSET
				WCO	WALL CLEAN OUT
				WD	WOOD
		NL	NAIL	WH	WATER HEATER
		NO	NUMBER	WIC	WOODWORK INSTITUTE OF CALIFORNIA
		NTS	NOT TO SCALE		
		OC	ON CENTER	WND	WINDOW
		OD	OUTSIDE DIAMETER	W/O	WITHOUT
		OH	OPPOSITE HAND	WP	WATER PROOF
		OPNG	OPENING		
		OPP	OPPOSITE		

SPECIFICATIONS

DIVISION 5 - METALS
05720 RAILINGS AND HANDRAILS:
ALL WELDED JOINTS AND SURFACES SHALL BE GROUND SMOOTH, NO SHARP OR ABRASIVE CORNERS EDGES OR SURFACES. WALL SURFACES ADJACENT TO HANDRAIL SHALL BE SMOOTH.

DIVISION 8 - DOORS
08710 DOOR HARDWARE:
- IF THE DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LANDING SIDE OF THE DOOR. 11B-404.2.7 / 11B-309.4.
ALL HARDWARE SHALL MEET THE REQUIREMENTS OF CBC SECTIONS CHAPTER 10, SECTION 1008.1.9 / 11B-404.2.7 AND 11B-309.4
- THRESHOLDS SHALL COMPLY WITH CBC SECTIONS 1008.1.7 AND 11B-404.2.5.
- FLOOR STOPS SHALL NOT BE LOCATED IN THE PATH OF TRAVEL AND 4" MAXIMUM FROM WALLS POLICY 99-08

08712 EXIT DEVICES: (WHERE APPLICABLE)
MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LB (22.2 N) FOR EXTERIOR AND INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, 5LBS MAX OR THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MAXIMUM ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBF (66.72 N) PER CBC SECTIONS 1008.1.3 AND 11B-404.2.9.
HAND-ACTIVATED DOOR OPENING HARDWARE, HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. MOUNTING HEIGHT OF LATCHING HARDWARE SHALL BE CENTERED BETWEEN 34 INCHES MIN AND 48 INCHES MAX ABOVE THE FLOOR PER CBC SECTION 1008.1.9.2. LATCHING AND LOCKING DOORS THAT ARE HAND-ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER-TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE. LOCKED EXIT DOOR SHALL OPERATE AS ABOVE IN EGRESS DIRECTION PER CBC SECTION 1008.1.2

PANIC HARDWARE SHALL NOT BE PROVIDED WITH "NIGHT LATCH" FUNCTION FOR ANY ACCESSIBLE DOORS OR GATES UNLESS THE FOLLOWING CONDITIONS ARE MET PER DSA INTERPRETATION 10-08 DSA/AC. SUCH CONDITIONS MUST BE CLEARLYDEMONSTRATED AND INDICATED IN THE SPECIFICATIONS:
- SUCH HARDWARE HAS A 'DOGGING' FEATURE.
- IT IS DOGGED DURING THE TIME THE FACILITY IS OPEN.
- SUCH 'DOGGING' OPERATION IS PERFORMED ONLY BY EMPLOYEES AS THEIR JOB FUNCTION (NON-PUBLIC USE).

DIVISION 9 - FINISHES
09650 RESILIENT FLOORING:
RESILIENT FLOORING DEMONSTRATING A COEFFICIENT OF FRICTION OF AT LEAST 0.6 PER ASTM D2047, WILL BE ACCEPTED AS MEETING THE INTENT OF SLIP RESISTANCE.
09680 CARPETING:
CARPET SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL-CUT, OR LEVEL-CUT/UNCUT PILE TEXTURE AND MAXIMUM PILE HEIGHT OF 1/2" PER CBC SECTION 11B-302.2.
CARPET EDGES SHALL COMPLY WITH CBC 11B-303.

DIVISION 10 - SPECIALTIES
10155 TOILET COMPARTMENTS: CBC SECTION 11B-604.8.1.2
TOILET STALLS FOR DISABLED PERSONS SHALL HAVE SLIDE BOLT DOOR LATCH, U-SHAPE OR WIRE PULLS BOTH SIDES OF THE DOOR AND SELF-CLOSING HINGES. DOORS HARDWARE SHALL BE MOUNTED AT 34" MIN TO 44" MAX ABOVE FINISHED FLOOR. DOORS AT FRONT ENTRY STALLS SHALL HAVE 32" MINIMUM CLEAR WIDTH WHEN THE DOOR IS OPEN 90°. DOORS AT SIDE ENTRY STALLS SHALL HAVE 34" MINIMUM CLEAR WIDTH WHEN THE DOOR IS OPEN 90°.
10800 TOILET ACCESSORIES:
TOILET ACCESSORIES REQUIRED TO BE ACCESSIBLE SHALL BE MOUNTED AT HEIGHTS ACCORDING TO CBC SECTION 11B-213.3. THE GRAB BAR CAN NOT PROJECT MORE THAN 3" INTO THE 48" MINIMUM CLEAR SPACE IN FRONT OF THE WATER CLOSET 11B-604.5 / 11B-604.8.1.5 / 11B-604.8.2.3. TOILET PAPER AND FEMININE NAPKIN DISPENSERS LOCATED ON THE GRAB BAR SIDE OF AN ACCESSIBLE TOILET ROOM OR STALL SHALL PROJECT MORE THAN THE GRAB BAR. THE ACCESSORY SHALL NOT BE LOCATED CLOSER THAN 1 1/2" CLEAR OF THE TANGENT POINT OF THE GRAB BAR. ACCESSORIES SURFACE MOUNTED ABOVE GRAB BAR WILL RESTRICT USABILITY.

DIVISION 15 - MECHANICAL
15400 PLUMBING FIXTURES:
ACCESSIBLE PLUMBING FIXTURES SHALL COMPLY WITH ALL OF THE REQUIREMENTS OF CBC SECTION 11B-213.2 / 11B-603.2. HEIGHTS AND LOCATION OF ALL FIXTURES SHALL BE ACCORDING TO CBC TABLE 11B-604.9. FIXTURE CONTROLS SHALL COMPLY WITH CBC SECTION 11B-213.2 / 11B-603.2.

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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
SYMBOLS LEGEND, ABBREVIATIONS & ADA SIGNAGE

LICENSED ARCHITECT
JACK F. SHIVELY
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

A-0.1

WINDOW SCHEDULE

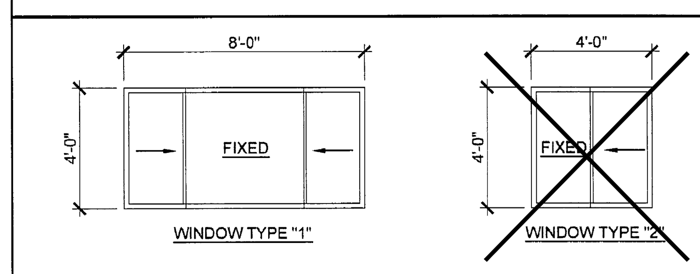
WINDOW NO.	QTY	TYPE	WIDTH	HEIGHT	FUNCTION	FRAME MATERIAL	GLASS MATERIAL	WALL THICKNESS	NOTES
A		1	8'-0"	4'-0"	XOX	ANOD	DP		
~~B~~		~~2~~	~~4'-0"~~	~~4'-0"~~	~~XO~~	~~ANOD~~	~~DP~~		

WINDOW FINISH

ANOD: CLEAR ANODIZED ALUMINUM FRAME
BRONZ: BRONZE ANODIZED ALUMINUM FRAME
PAINT: PAINTED FRAME
WF: 16GA WELDED FRAME
FRW: FIRE RATED WINDOW
FRAME: MIN 0.048" THICK WELDED FRAME
FRG: FIRE RATED GLAZING: 1/4" WIRED GLASS. LABELED TO MEET THE REQUIREMENTS FOR A 3/4 HOUR FIRE WINDOW ASSEMBLY PER CBC SECTION/TABLE 715.5

DP: 3/16" MINIMUM DUAL PANE TEMPERED GLASS OF SOLAR GRAY - 3/16" ENERGYSHIELD, ALL OPERABLE SASH SHALL HAVE SCREENS. (U-FACTOR = .510 MAX, VT = 0.500 MIN., SHGC = .350 MAX, STC = 36 MIN.)

WINDOW TYPE



DOOR SCHEDULE

DOOR NO	WIDTH	HEIGHT	DOOR TYPE	QTY	DOOR MAT/FIN	FRAME MAT/FIN	HARDWARE SET	WALL THICKNESS	NOTES*
1	3'-0"	7'-0"	A		HM	KD	HW - 1	5 1/4"	
1P	3'-0"	7'-0"	A1		HM	KD	HW - 2	5 1/4"	
2	3'-0"	7'-0"	A		SCL	KD	HW - 3	5 1/2"	
~~3~~	~~3'-0"~~	~~7'-0"~~	~~B~~		~~HM~~	~~KD~~	~~HW - 4~~	~~4 7/8"~~	
4	3'-0"	7'-0"	B		HM	KD	HW - 5	4 7/8"	NO CLOSER REQ'D.
~~5~~	~~2'-0"~~	~~7'-0"~~	~~C~~		~~HM~~	~~KD~~	~~HW - 6~~	~~4 1/8"~~	

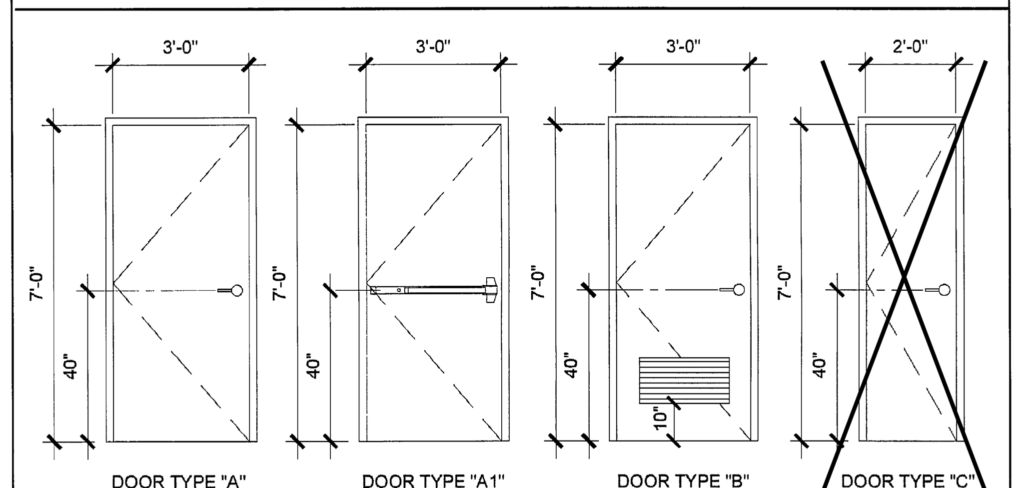
DOOR MATERIAL AND FINISH ABBREVIATIONS

HM: 18GA HOLLOW METAL
WF: 16GA WELDED FRAME
AL: ALUMINUM
SST: STAINLESS STEEL

KD: KNOCK DOWN FRAME
SCL: SOLID CORE WOOD LEGACY
HC: HOLLOW CORE WOOD
PT: PAINTED

*EXTERIOR DOORS TO BE UNINSULATED SINGLE LAYER DOORS W/ U-FACTOR OF 0.500 MAX

DOOR TYPES & NOTES



1. DOOR HANDLE FOR LOCKSETS AND PANIC HARDWARE TO BE CENTERED AT 40" AFF. HARDWARE TO BE OPENED FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. LEVERS TO RETURN TO WITHIN 1/2" OF DOOR.
2. ALL DOORS SHALL BE 1 3/4" THICK U.N.O.
3. CLOSER SHALL BE SET FOR MAXIMUM OPENING PRESSURE OF 5 LBS AT EXTERIOR AND INTERIOR DOORS.
4. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER. CBC 1008.1.10
5. ALL HARDWARE SHALL COMPLY WITH SILVER CREEK'S SPEC'S ON THIS SHEET AND CBC SECTIONS 11B-206.5, 11B-404.1 AND 1008.
6. DOOR CLOSER SHALL BE ADJUSTED TO SO THAT FROM AN OPEN POSITION OF 70°, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LANDING SIDE OF THE DOOR
7. PANIC AND FIRE EXIT HARDWARE. WHERE THIS TYPE HARDWARE IS INSTALLED, IT SHALL COMPLY WITH THE FOLLOWING:
 - THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH.
 - THE MAXIMUM UNLATCHING FORCE SHALL NOT EXCEED 5LBS PER THE 2013 CBC
 APPROVED BY AUTHORITY W/ JURISDICTION, PANIC HARDWARE SHALL COMPLY WITH CBC SECTION 1008.1.10
8. THE FIRE PROTECTION FOR EXTERIOR WALL IS DETERMINED BASED UPON THE FIRE SEPARATION DISTANCE IN WHICH THE WALL IS LOCATED. SEE CBC TABLE 705.8 OR TABLE 602

FINISH SCHEDULE

ROOM NAME	FLOORING		WALL FINISH				CEILING		NOTES
	FLOOR	BASE	FRONT	LEFT	REAR	RIGHT	CEILING	CEILING HT	
CLASSROOM 101	CARP	4" TS	TACK	TACK	TACK	TACK	CP	8'-6"	
~~CLASSROOM 102~~	~~CARP~~	~~4" TS~~	~~TACK~~	~~TACK~~	~~TACK~~	~~TACK~~	~~CP~~	~~8'-6"~~	
~~TOILET 103~~	~~SV~~	~~6" TS~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~CP~~	~~8'-0"~~	
~~GIRLS 104~~	~~SV~~	~~SC~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	
~~BOYS 105~~	~~SV~~	~~SC~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	
~~STAFF 106~~	~~SV~~	~~SC~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	
~~STAFF 107~~	~~SV~~	~~SC~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	
~~PLUMBING CHASE~~									

FLOOR, WALL, CEILING MATERIALS

FLOORING
CARP: CARPET PER STATE OF CALIFORNIA SPECIFICATIONS COMPLYING WITH GROUP 1; TYPE "A" OR TYPE "B"; CLASS 2; DENSITY 4600; DIRECT GLUE DOWN
SV: SHEET VINYL FLOORING
VCT: VINYL COMPOSITION TILE

BASE
4" TS: 4" TOP SET BASE
6" TS: 6" TOP SET BASE
SC: 6" SELF-COVE BASE

WALLS
TACK: 1/2" VINYL TACKBOARD CLASS 1 OVER ½" GYPSUM BOARD BACKING
FRP: 1/8" FIBER REINFORCED PANEL OVER ½" WATER RESISTANT GYPSUM BOARD
GYP: 1/2" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH
PLY: 1/2" PLYWOOD FINISH
NF: NO FINISH

CEILING
CP: ACOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATION NOTES ON REFLECTED CEILING PLAN)
HC: 5/8" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH (HARD LID CEILING)
GBP: 1/2" GYPSUM BOARD WASHABLE PANELS (PAINTED)

INSULATION SPECIFICATIONS

MOISTURE PROTECTION INSULATION:

DESCRIPTION OF WORK: THE FURNISHING AND INSTALLING OF ALL INSULATION FOR ALL CEILING, FLOOR AREAS, AND EXTERIOR WALLS. (CLASS A = 0-25 FLAME SPREAD:) SMOKE DEVELOPMENT DENSITY LESS THAN 450.

MATERIAL: INSULATING MATERIAL FOR WALLS, CEILINGS, AND FLOORS SHALL BE FIBERGLASS BATTS (UNFACED) AND SHALL COMPLY WITH CBC 719.2+719.3. INSULATION SHALL BE AS MANUFACTURED BY OWENS-CORNING FIBERGLASS CORPORATION, JOHNS-MANVILLE, CERTAINTIES, OR EQUAL.

INSULATION VALUES
SEE SHEETS A-0.7 FOR MINIMUM REQUIRED INSULATION VALUES FOR SPECIFIC BUILDING SIZE AND CONFIGURATION.

EXTERIOR WALL INSULATION (MIN.)
- [ ] R-13 (2x4)
- [x] R-19 (2x6)
- [ ] R-30 (2x8)

INTERIOR WALL INSULATION (MIN.)
R-13

FLOOR INSULATION (MIN.)
- [x] NONE
- [ ] R-13
- [ ] R-19

ROOF INSULATION (MIN.)
- [ ] R-19
- [x] R-30
- [ ] R-38
- [ ] R-19 BETWEEN JOISTS AND R-19 BELOW JOISTS

STEEL STUD EXTERIOR WALL
- [ ] R-13 (2X4) W/ R-4 CONT. RIGID INSULATION

FINISH NOTES

1. ALL FINISHES SHALL COMPLY WITH CBC, CFC AND TITLE 19 CCR.
2. PREPARATION FOR SUB-FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. PLYWOOD SUB-FLOOR IS 2.4.1. PLYWOOD. OUTER PLYWOOD IS PLUGGED AND TOUCH SANDED. ANY DEFORMITIES DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR. THE JOINT AT THE MODLINE SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR.
3. RESILIENT FLOORING DEMONSTRATING A COEFFICIENT OF FRICTION OF AT LEAST 0.6 PER ASTM D2047, WILL BE ACCEPTED AS MEETING THE INTENT OF SLIP RESISTANCE.
4. CARPET SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT, OR LEVEL CUT / UNCUT PILE TEXTURE AND MAXIMUM PILE HEIGHT OF 1/2" PER THE 2013 CBC. CARPET EDGED SHALL COMPLY WITH THE 2013 CBC
5. INTERIOR WALL AND CEILING FINISHES SHALL HAVE A MIN. CLASS 'C' RATING. FLAME SPREAD INDEX 76-200 & SMOKE DEVELOPED INDEX 0-450 PER 2013 CBC 803.

DOOR HARDWARE

CLASSROOM - EXTERIOR DOOR HW-1

LOCKSET	SCHLAGE ND75PDRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER BB1191 4 1/2" x 4 1/2" NRP	Finish 26D	or equal
CLOSER	NORTON 8501 BFDA	Finish 689	or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum	or equal
THRESHOLD	HAGER 413SA 36	Finish Alum	or equal
DOOR BOTTOM	HAGER 783SAV 35N	Finish Alum	or equal

DOOR W/ PANIC HARDWARE - EXTERIOR DOOR HW-2

EXIT DEVICE	VON DUPRIN 99L-PA-2 w/ SCHLAGE rim cylinder	Finish Alum	or equal
BUTTS	HAGER BB1191 4 1/2" x 4 1/2" NRP	Finish 26D	or equal
CLOSER	NORTON 8501 BFDA	Finish 689	or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum	or equal
THRESHOLD	HAGER 413SA 36	Finish Alum	or equal
DOOR BOTTOM	HAGER 783SAV 35N	Finish Alum	or equal
LOCK	VON DUPRIN NL-OP		

EMERGENCY EXIT AND PANIC HARDWARE IS TO COMPLY WITH SFM STANDARD 12-10-3, SECTION 12-10-302:
a) THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR/GATE.
d) THE ENDS OF THE CROSS-BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS.

STAFF RESTROOM / SINGLE-OCCUPANCY - INTERIOR DOOR HW-3

LOCKSET	SCHLAGE ND40SRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER 1279 4 1/2" x 4 1/2"	Finish 26D	or equal

BOYS & GIRLS RESTROOM - EXTERIOR DOOR HW-4

LOCKSET	SCHLAGE ND70PDRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER BB1191 4 1/2" x 4 1/2" NRP	Finish 26D	or equal
CLOSER	NORTON 8501 BFDA (OPTIONAL)	Finish 689	or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum	or equal
THRESHOLD	HAGER 413SA 36	Finish Alum	or equal
DOOR BOTTOM	HAGER 783SAV 35N	Finish Alum	or equal
LOUVER	ANEMO 24 x 12	Finish Bronze	or equal

STAFF RESTROOM - EXTERIOR DOOR HW-5

LOCKSET	SCHLAGE ND85PDRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER BB1191 4 1/2" x 4 1/2" NRP	Finish 26D	or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum	or equal
THRESHOLD	HAGER 413SA 36	Finish Alum	or equal
DOOR BOTTOM	HAGER 783SAV 35N	Finish Alum	or equal
LOUVER	ANEMO 24 x 12	Finish Bronze	or equal

PLUMBING CHASE DOOR - INTERIOR DOOR HW-6

LOCKSET	SCHLAGE ND70PDRHO626 (cylindrical)	Finish 26D	or equal
BUTTS	HAGER BB1191 4 ½" x 4 ½" NRP	Finish 26D	or equal

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
SCHEDULES

LICENSED ARCHITECT
JACK A. SHIVELY III
C-33467
REN 01-31-2015
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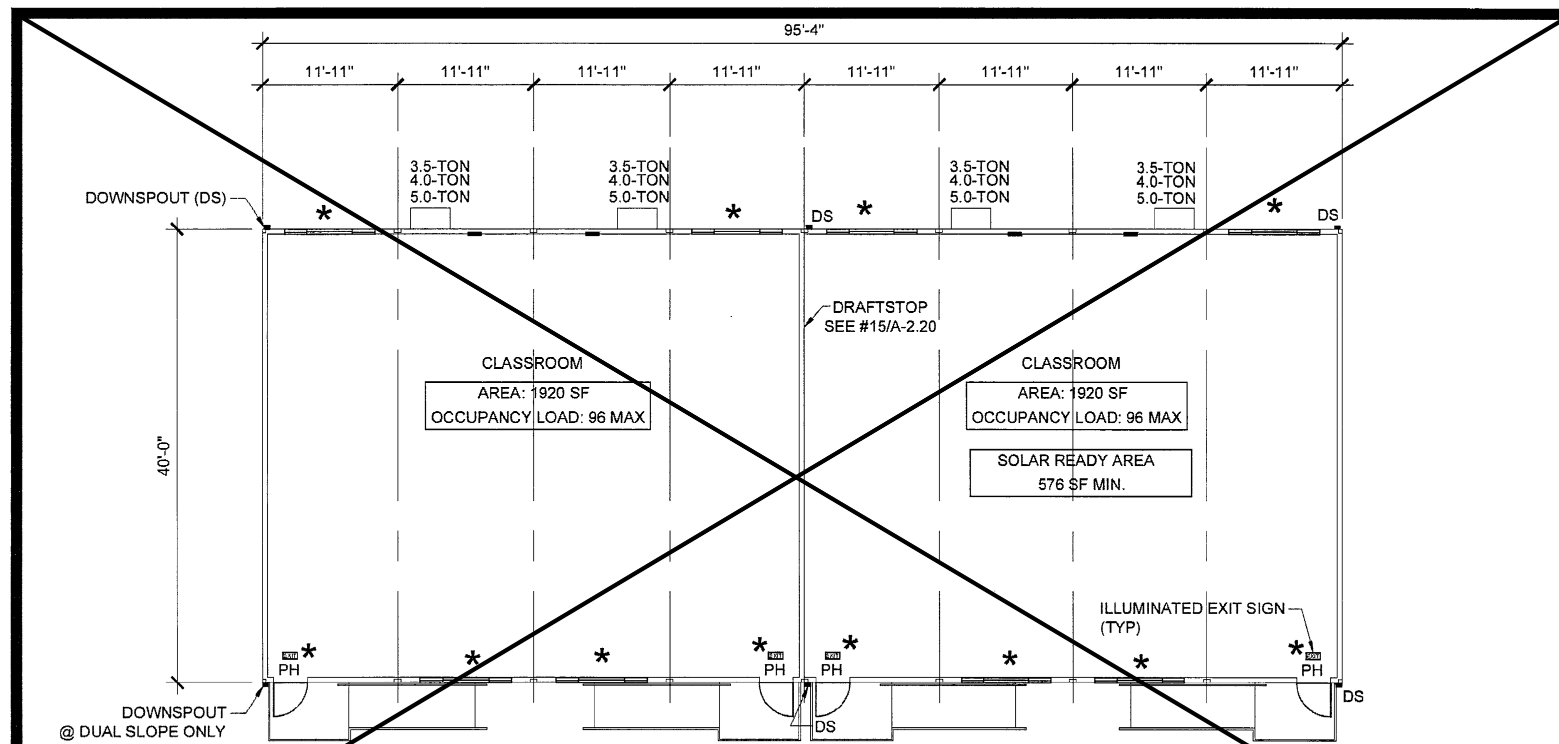
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

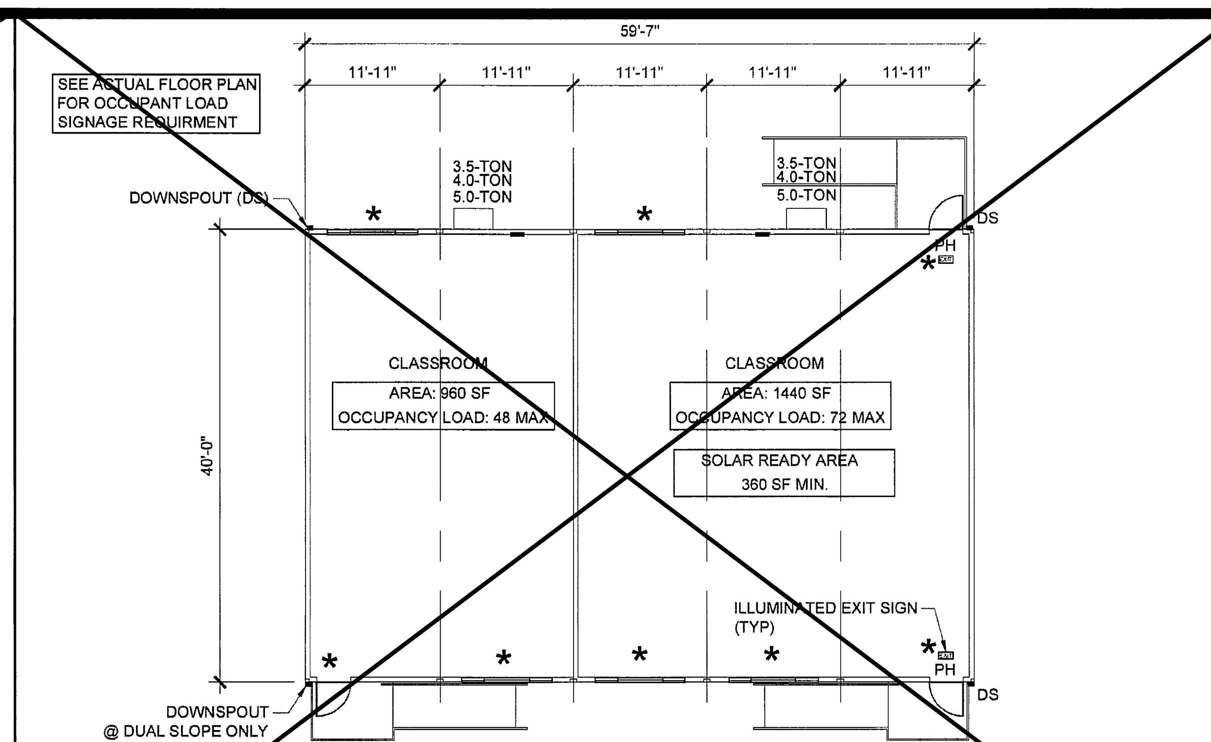
P.C. SHEET NUMBER
A-0.2



* NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY.
   IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

96' x 40' KEY PLAN (TOTAL AREA - 3840 SF)

SCALE: 3/32" = 1' - 0" | 7



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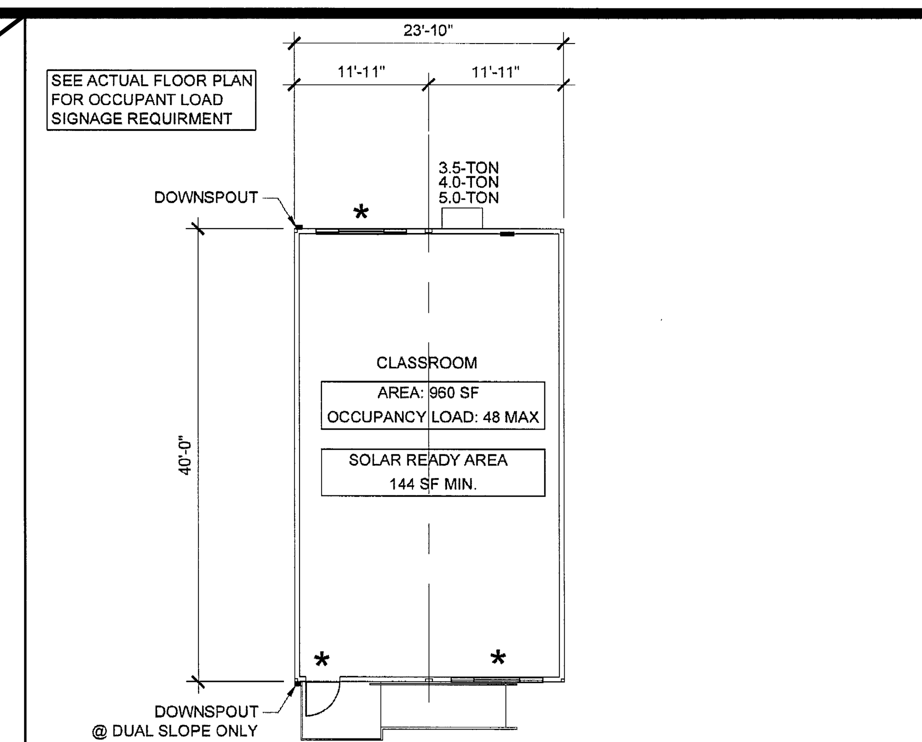
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

60' x 40' KEY PLAN (TOTAL AREA - 2400 SF)

SCALE: 3/32" = 1' - 0" | 4



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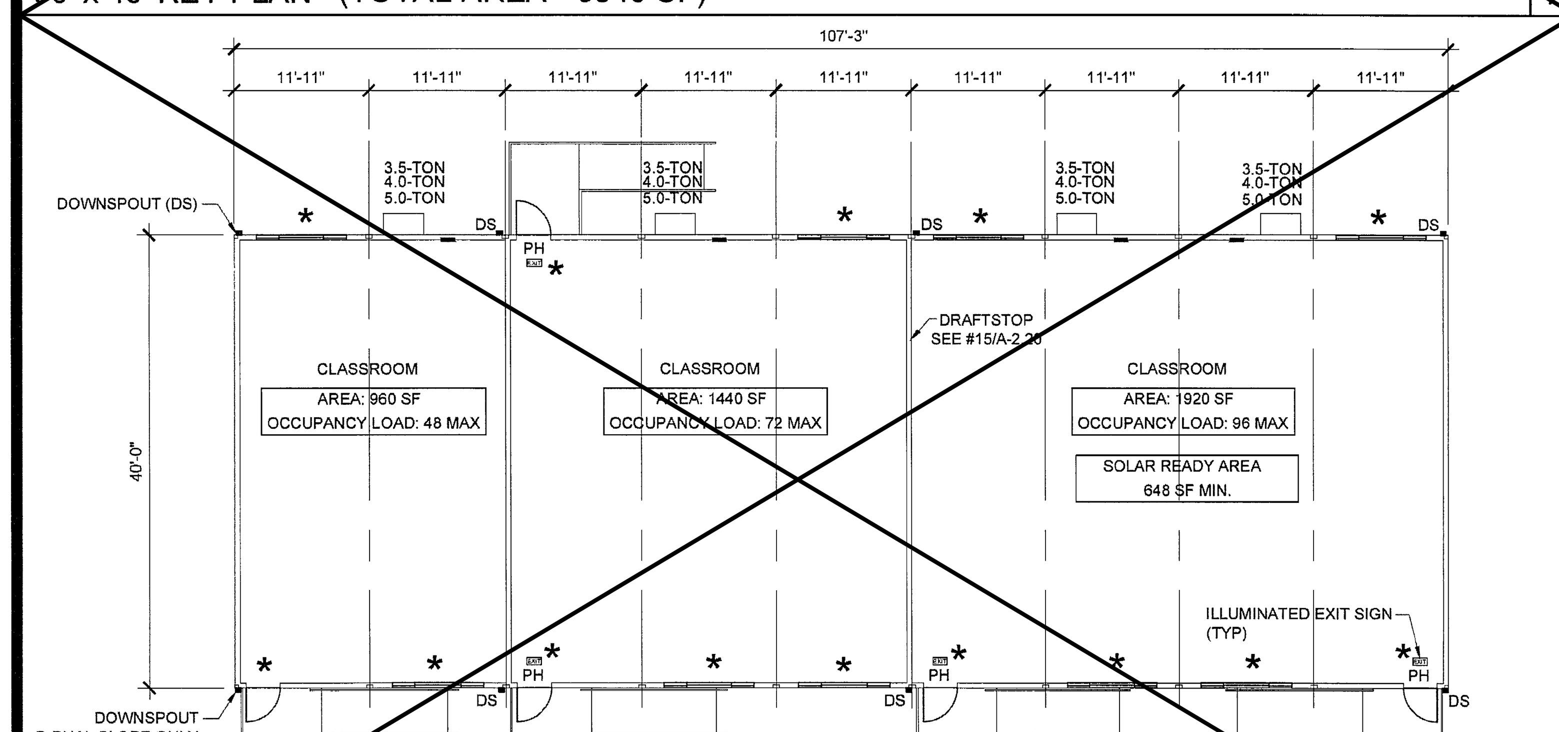
24' x 40' KEY PLAN (TOTAL AREA - 960 SF)

SCALE: 3/32" = 1' - 0" | 1



* NOTE:
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   IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA
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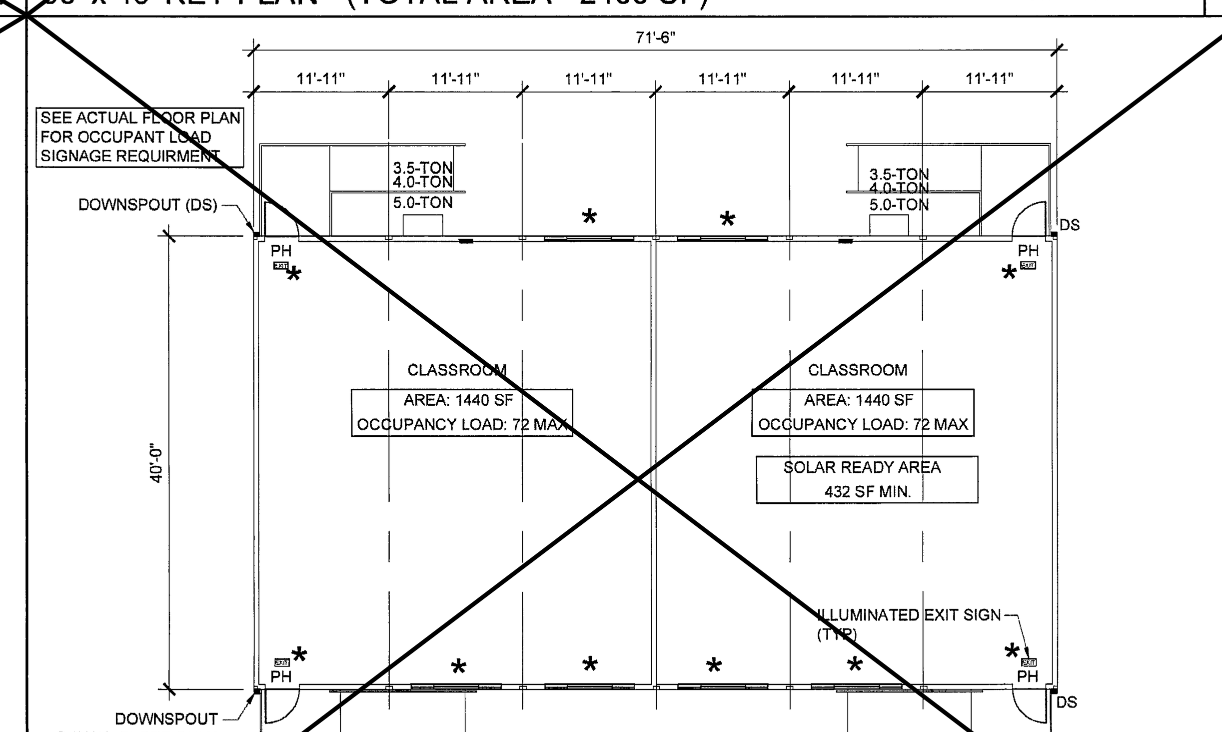
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

108' x 40' KEY PLAN (TOTAL AREA - 4320 SF)

SCALE: 3/32" = 1' - 0" | 8



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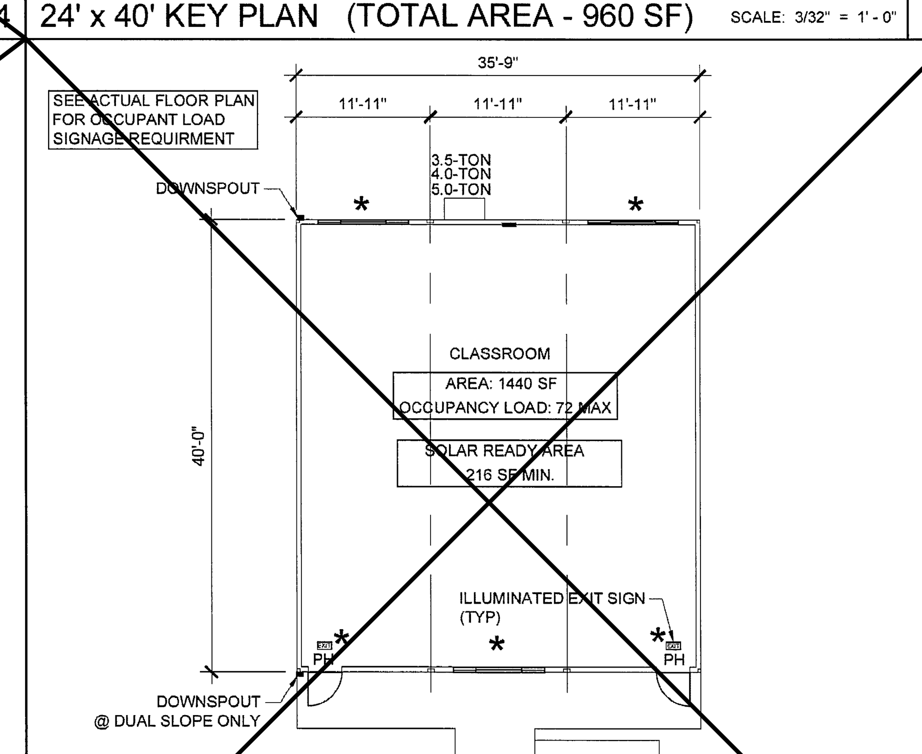
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

72' x 40' KEY PLAN (TOTAL AREA - 2880 SF)

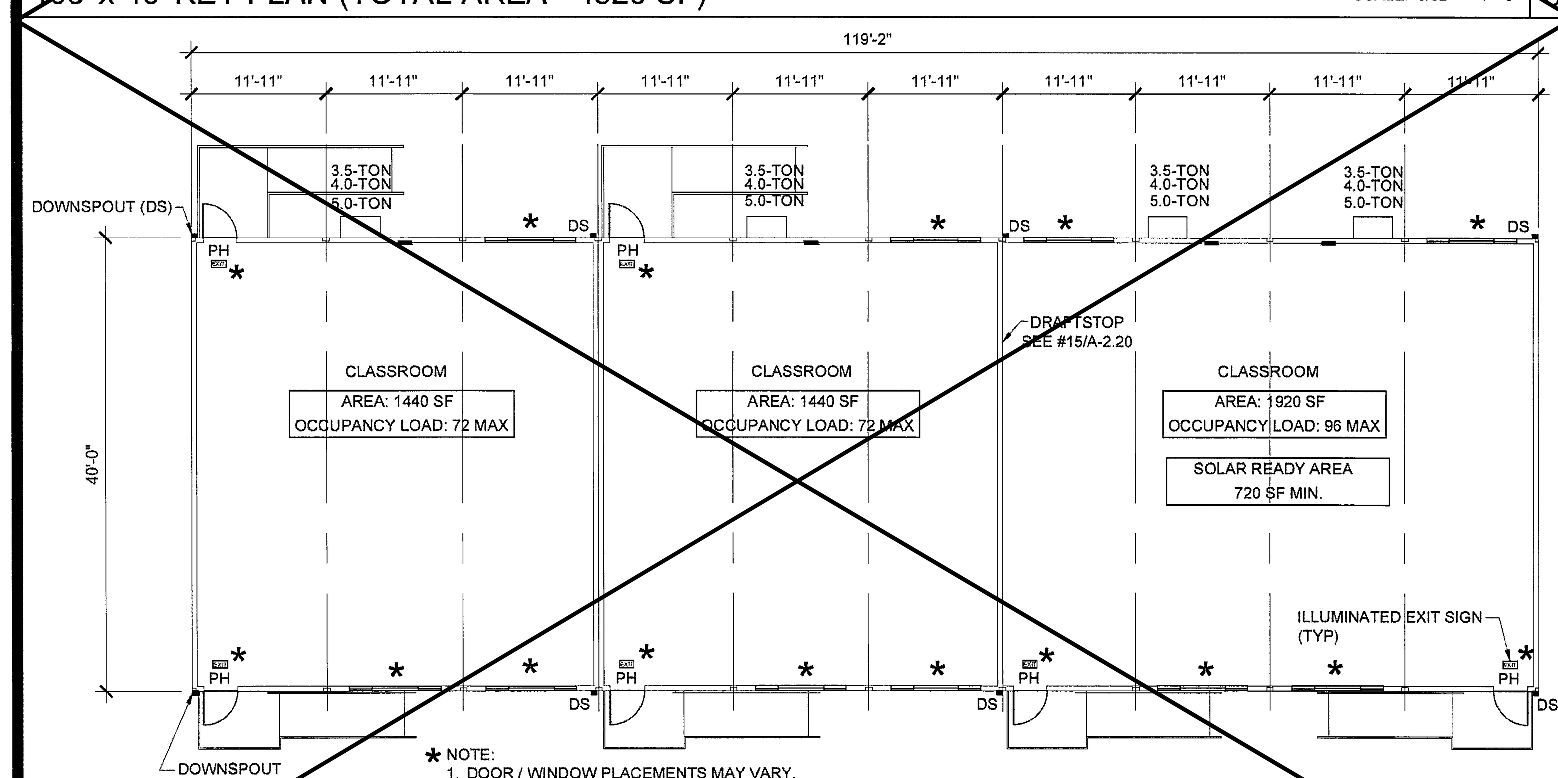
SCALE: 3/32" = 1' - 0" | 5



* NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY.
   IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

36' x 40' KEY PLAN (TOTAL AREA - 1440 SF)

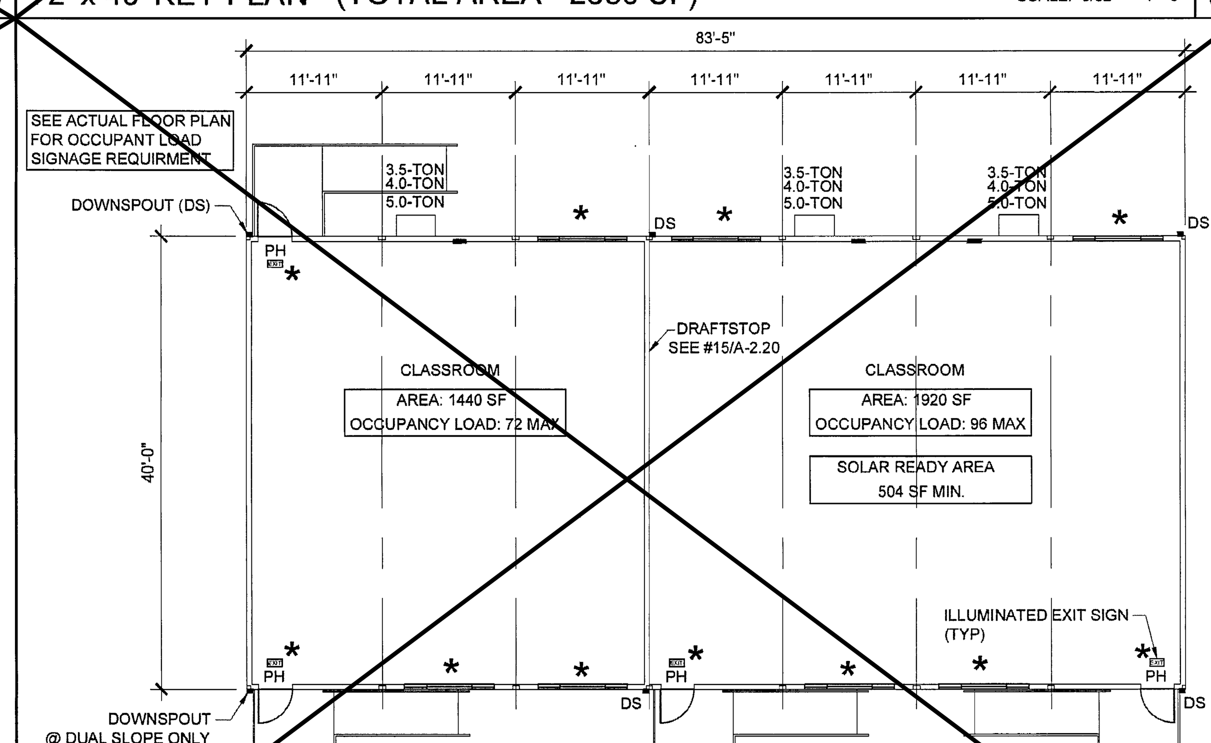
SCALE: 3/32" = 1' - 0" | 2



* NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY.
   IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

120' x 40' KEY PLAN (TOTAL AREA - 4800 SF)

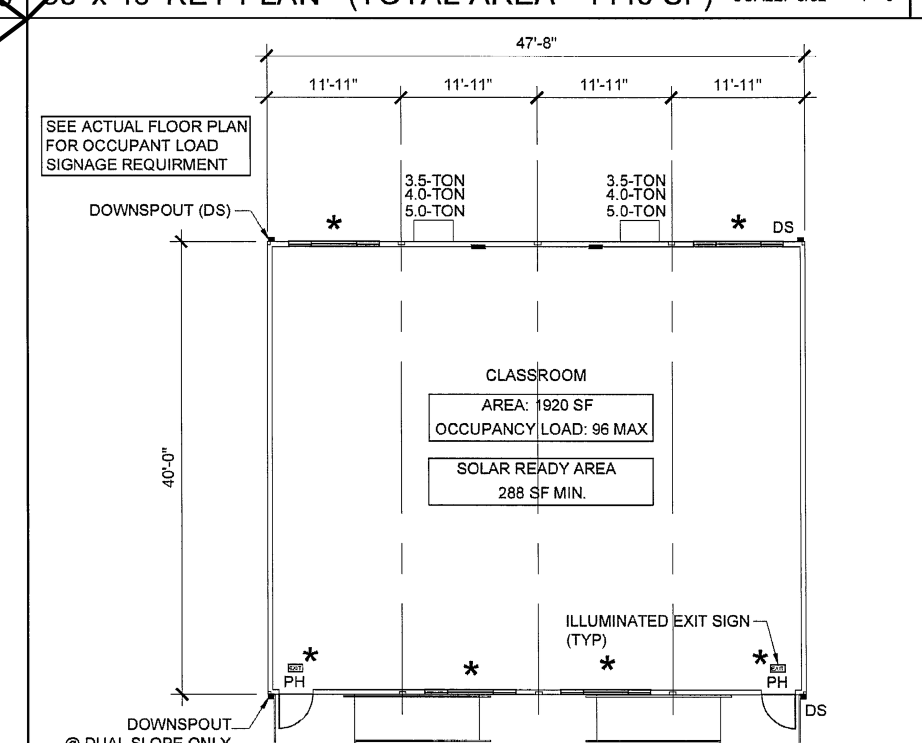
SCALE: 3/32" = 1' - 0" | 9



* NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY.
   IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

84' x 40' KEY PLAN (TOTAL AREA - 3360 SF)

SCALE: 3/32" = 1' - 0" | 6



* NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY.
   IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP)

48' x 40' KEY PLAN (TOTAL AREA - 1920 SF)

SCALE: 3/32" = 1' - 0" | 3

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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:

TYPICAL KEY PLANS
24' - 120' x 40'

LICENSED ARCHITECT
JACK A SHIVELY III
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD
SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 1 4 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

A-0.3

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 1 of 6

Compliance Scope: New Complete Building Including Envelope, Lighting and HVAC — Input File Name:

A. GENERAL INFORMATION

01	Project Address	ZONE 14	21	Compliance Software	CBECC-Com 2013-3a (687)
02	City	ZONE 14	22	Compliance Manager Version	BEMCmpMgr 2013-3a (687)
03	Zip code		23	Rule Set Filename	CA 2013 Nonresidential, Vers. 2.0 (CEC 2013 NonRes.bin)
04	Climate Zone	ClimateZone14	24	Building Type	Nonresidential
05	Building Front Orientation	330	25	Construction Type	
06	Number of Above Grade Stories	1	26	North Wall Area (ft2)	264
07	Number of Below Grade Stories	0	27	East Wall Area (FT2)	440
08	Number of Dwelling Units	0	28	South Wall Area (ft2)	264
09	Total Conditioned Floor Area (ft2)	960	29	West Wall Area (ft2)	440
10	Total Unconditioned Floor Area (ft2)		30	Total Exterior Wall Area (ft2)	1,408
11	Addition Conditioned Floor Area (ft2)		31	North Glazing Area (ft2) / Glazing Ratio	32 / 12%
12	Addition Unconditioned Floor Area(ft2)		32	East Glazing Area (ft2) / Glazing Ratio	0 / 0%
13	Number of Thermal Zones	1	33	South Glazing Area (ft2) / Glazing Ratio	32 / 12%
14	Number of Thermal Zones (conditioned)	1	34	West Glazing Area (ft2) / Glazing Ratio	0 / 0%
15	Number of Air Systems	1	35	Total Glazing Area (ft2) /Glazing Ratio	64 / 5%
16	Number of Zonal Systems	0	36	Roof Area (ft2)	960
17	Number of Terminal Units	0	37	Skylight Area (ft2) / Skylight-Roof-Ratio	0 / 0%
18			38		
19			39		
20			40		

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 2 of 6

Compliance Scope: New Complete Building Including Envelope, Lighting and HVAC — Input File Name:

B. COMPLIANCE RESULTS

01	BUILDING COMPLIES
02	Special Features are Required -TBD
03	HERS Verification is Required - TBD

ANNUAL TDV ENERGY USE SUMMARY (kBtu/ft2/yr)

	04	05	06	07
Energy Component	Standard Design	Proposed Design	Compliance Margin	Percent Better than Standard*
Space Heating	99.2	97.3	1.9	1.9%
Space Cooling	207.9	262.9	-55.0	-26.5%
Indoor Fans	143.8	84.5	59.3	41.2%
Heat Rejection	-	-	-	-
Pumps & Misc.	-	-	-	-
Domestic Hot Water	-	-	-	-
Lighting	52.1	24.5	27.6	53.0%
COMPLIANCE TOTAL	503.0	469.2	33.8	6.7%
Receptacle	66.6	66.6		0.0%
Process	-	-		-
Process Lighting	-	-		-
TOTAL	569.6	535.8		5.9%

C. OCCUPANCY SUMMARY INFORMATION -

01	02	03	04	05	06	07	08
				Allowed (Baseline) Lighting Power			
					Additional (Custom) Allowances		
Occupancy Type	Floor Area	Installed Lighting Power	Lighting Control Credits	General Lighting Power Allowance	Area Category	Tailored Method	Total Allowed Lighting Power
	(ft2)	(Watts)	(Watts)	(Watts)	(Watts)	(Watts)	(Watts)
Classrooms, Lecture, Training, Vocational Areas	960	744	186	1,152			1,152

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 3 of 6

Compliance Scope: New Complete Building Including Envelope, Lighting and HVAC — Input File Name:

D. ENVELOPE SUMMARY INFORMATION

01	02	03	04	05	06	07	08
			Assembly Layers				
Surface Name	Surface Type	U-Factor / F-Factor / C-Factor		Framing Type	Framing Spacing	R-value	Certified Cool Roof
SCI ROOF	Roof	U-0.05	Metal Standing Seam - 1/16 in. Fiber cement board - 63 lb/ft3 - 1/3 in. Plywood - 3/4 in. Composite Framing Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	Metal	Roof24inOC	R-0 R-0.24 R-0.94 R-30 Cavity R-0.92 R-1.26	
SCI PLYWD FLOOR	ExteriorFloor	U-0.07	Air - Cavity - Wall Roof Ceiling - 4 in. or more Composite Framing Plywood - 1 in. Carpet - 3/4 in.	Metal	Floor24inOC	R-0.92 R-19 Cavity R-1.25 R-2.38	
2x4 T111 WALL	ExteriorWall	U-0.08	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. Composite Framing Gypsum Board - 1/2 in Acoustic Tile - 1/2 in.	Wood	Wall16inOC	R-0.8 R-0.01 R-13 Cavity R-0.45 R-1.26	

E. FENESTRATION SUMMARY INFORMATION

01	02	03	04	05	06	07	08
Name	Fenestration Type	Certification Method	Assembly Method	Frame Type	U-value	SHGC	VT
SCI - IWC 0200 - SLIDER - S800 / CLR	Sliding	NFRCRated	Manufactured	- specify -	0.51	0.35	0.63

F. MECHANICAL SYSTEM SUMMARY INFORMATION

01	02	03	04				05						
			Cooling				Heating						
Equipment Name	Equipment Type	Qty	Type	SEER	EER	Rated Output kBtuh	Type	AFUE	HSPF	Thermal Eff.	Rated Output kBtuh	Supplemental Heat Source	Supplemental Rated Output kBtuh
AirSystem 1	SZHP	1	DirectExpansion	13.0	9.0	53	HeatPump				50.2		

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 4 of 6

Compliance Scope: New Complete Building Including Envelope, Lighting and HVAC — Input File Name:

G. MECHANICAL SYSTEM ECONOMIZER AND FAN SUMMARY INFORMATION

01	02	03	04				05			
		Outside Air	Supply Fan				Return Fan			
Equipment Name	EconomizerType	CFM	CFM	HP	BHP	Control	CFM	HP	BHP	Control
AirSystem 1	NoEconomizer	720	1875.0	0.75	0.75	ConstantVolume				

H. CHILLER SUMMARY INFORMATION

Not Applicable

I. COOLING TOWER SUMMARY INFORMATION

Not Applicable

J. BOILER SUMMARY INFORMATION

Not Applicable

K. CENTRAL MECHANICAL SYSTEM - PUMP SUMMARY INFORMATION

Not Applicable

L. TERMINAL UNIT SUMMARY INFORMATION

Not Applicable

L-1. ZONAL SYSTEM SUMMARY INFORMATION

Not Applicable

M-1. DHW SUMMARY INFORMATION: FLUID SYSTEMS

Not Applicable

M-2. DHW SUMMARY INFORMATION: RECIRCULATION DHW SYSTEMS

Not Applicable

N. EXCEPTIONAL CONDITIONS COMPLIANCE CHECKLIST

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 5 of 6

Compliance Scope: New Complete Building Including Envelope, Lighting and HVAC — Input File Name:

Not Applicable.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 6 of 6

Compliance Scope: New Complete Building Including Envelope, Lighting and HVAC — Input File Name:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:Ryan McIntosh	Documentation Author Signature:
Company:Silver Creek	Signature Date: 12/31/14
Address:2830 Barrett Ave - Perris CA 92571	CEA Identification (if applicable):
City/State/Zip:	Phone:951-943-5393

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or I am a licensed architect.
2. I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
3. I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.

Building Owner's Name:SILVER CREEK	Building Owner's Signature:
Address:2830 Barrett Ave - Perris CA 92571	Date Signed: 12/31/14
City/State/Zip:	Phone:951-943-5393
Responsible Designer Name:Silver Creek	Responsible Designer Signature:
Company:Silver Creek	Date Signed: 12/31/14
Address:2830 Barrett Ave - Perris CA 92571	License: B552[illegible]
City/State/Zip:	Phone:951-943-5393
Responsible Lighting Designer Name:Silver Creek	Responsible Lighting Designer Signature:
Company:Silver Creek	Date Signed: 12/31/14
Address:2830 Barrett Ave - Perris CA 925714	License: B55255
City/State/Zip:	Phone:951-943-5393
Responsible Mechanical Designer Name:Silver Creek	Responsible Mechanical Designer Signature:
Company:Silver Creek	Date Signed: 12/31/14
Address:2830 Barrett Ave - Perris CA 925714	License: B55255
City/State/Zip:	Phone:951-943-53935

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:22:30 -08'00'

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ENERGY CALC'S.
PRF FORMS
ZONE 14 WORST CASE

LICENSED ARCHITECT — JACK F SHIVELY III — C-33467 — REN 01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC___ FLS___ SS___
DATE APR 14 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

A-0.5A

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 1 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

A. GENERAL INFORMATION					
01	Project Address	ZONE 15	21	Compliance Software	CBECC-Com 2013-3a (687)
02	City	ZONE 15	22	Compliance Manager Version	BEMCmpMgr 2013-3a (687)
03	Zip code		23	Rule Set Filename	CA 2013 Nonresidential, Vers. 2.0 (CEC 2013 NonRes.bin)
04	Climate Zone	ClimateZone15	24	Building Type	Nonresidential
05	Building Front Orientation	150	25	Construction Type	
06	Number of Above Grade Stories	1	26	North Wall Area (ft2)	264
07	Number of Below Grade Stories	0	27	East Wall Area (FT2)	440
08	Number of Dwelling Units	0	28	South Wall Area (ft2)	264
09	Total Conditioned Floor Area (ft2)	960	29	West Wall Area (ft2)	440
10	Total Unconditioned Floor Area (ft2)		30	Total Exterior Wall Area (ft2)	1,408
11	Addition Conditioned Floor Area (ft2)		31	North Glazing Area (ft2) / Glazing Ratio	32 / 12%
12	Addition Unconditioned Floor Area(ft2)		32	East Glazing Area (ft2) / Glazing Ratio	0 / 0%
13	Number of Thermal Zones	1	33	South Glazing Area (ft2) / Glazing Ratio	32 / 12%
14	Number of Thermal Zones (conditioned)	1	34	West Glazing Area (ft2) / Glazing Ratio	0 / 0%
15	Number of Air Systems	1	35	Total Glazing Area (ft2) /Glazing Ratio	64 / 5%
16	Number of Zonal Systems	0	36	Roof Area (ft2)	960
17	Number of Terminal Units	0	37	Skylight Area (ft2) / Skylight-Roof-Ratio	0 / 0%
18			38		
19			39		
20			40		

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — Report Version: PRF01-06032014-687 — Report Generated at: 2014-12-31T09:11:22

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 2 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

B. COMPLIANCE RESULTS				
01	BUILDING COMPLIES			
02	Special Features are Required -TBD			
03	HERS Verification is Required - TBD			
ANNUAL TDV ENERGY USE SUMMARY (kBtu/ft2/yr)				
	04	05	06	07
Energy Component	Standard Design	Proposed Design	Compliance Margin	Percent Better than Standard*
Space Heating	30.4	30.6	-0.2	-0.7%
Space Cooling	268.5	334.7	-66.2	-24.7%
Indoor Fans	134.7	82.5	52.2	38.8%
Heat Rejection	-	-	-	-
Pumps & Misc.	-	-	-	-
Domestic Hot Water	-	-	-	-
Lighting	62.5	24.6	28.0	53.3%
COMPLIANCE TOTAL	486.1	472.3	13.8	2.8%
Receptacle	66.6	66.6		0.0%
Process	-	-		-
Process Lighting	-	-		-
TOTAL	552.7	538.9		2.5%

C. OCCUPANCY SUMMARY INFORMATION -							
01	02	03	04	05	06	07	08
				Allowed (Baseline) Lighting Power			
					Additional (Custom) Allowances		
Occupancy Type	Floor Area	Installed Lighting Power	Lighting Control Credits	General Lighting Power Allowance	Area Category	Tailored Method	Total Allowed Lighting Power
	(ft2)	(Watts)	(Watts)	(Watts)	(Watts)	(Watts)	(Watts)
Classrooms, Lecture, Training, Vocational Areas	960	744	188	1,152			1,152

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — Report Version: PRF01-06032014-687 — Report Generated at: 2014-12-31T09:11:22

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 3 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

D. ENVELOPE SUMMARY INFORMATION							
01	02	03	04	05	06	07	08
			Assembly Layers				
Surface Name	Surface Type	U-Factor / F-Factor / C-Factor		Framing Type	Framing Spacing	R-value	Certified Cool Roof
SCI ROOF	Roof	U-0.05	Metal Standing Seam - 1/16 in. Fiber cement board - 83 lb/ft3 - 1/3 in. Plywood - 3/4 in. Composite Framing Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	Metal	Roof24inOC	R-0 R-0.24 R-0.94 R-30 Cavity R-0.92 R-1.26	
SCI PLYWD FLOOR	ExteriorFloor	U-0.06	Air - Cavity - Wall Roof Ceiling - 4 in. or more Composite Framing Plywood - 1 in. Carpet - 3/4 in.	Metal	Floor24inOC	R-0.92 R-30 Cavity R-1.25 R-2.38	
2x4 T111 WALL	ExteriorWall	U-0.08	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. Composite Framing Gypsum Board - 1/2 in Acoustic Tile - 1/2 in.	Wood	Wall16inOC	R-0.8 R-0.01 R-13 Cavity R-0.45 R-1.26	

E. FENESTRATION SUMMARY INFORMATION							
01	02	03	04	05	06	07	08
Name	Fenestration Type	Certification Method	Assembly Method	Frame Type	U-value	SHGC	VT
SCI - IWC 6200 - SLIDER - SB60 / CLR	Sliding	NFRCRated	Manufactured	- specify -	0.51	0.35	0.63

F. MECHANICAL SYSTEM SUMMARY INFORMATION														
01	02	03	04				05							
			Cooling				Heating							
Equipment Name	Equipment Type	Qty	Type	SEER	EER	Rated Output kBtuh	Type	AFUE	HSPF	Thermal Eff.	Rated Output kBtuh	Supplemental Heat Source	Supplemental Rated Output kBtuh	
AirSystem 1	SZHP	1	DirectExpansion	13.0	0.0	53	HeatPump				50.2			

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — Report Version: PRF01-06032014-687 — Report Generated at: 2014-12-31T09:11:22

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 4 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

G. MECHANICAL SYSTEM ECONOMIZER AND FAN SUMMARY INFORMATION										
01	02	03	04				05			
		Outside Air	Supply Fan				Return Fan			
Equipment Name	EconomizerType	CFM	CFM	HP	BHP	Control	CFM	HP	BHP	Control
AirSystem 1	NoEconomizer	720	1875.0	0.75	0.75	ConstantVolume				

H. CHILLER SUMMARY INFORMATION — Not Applicable

I. COOLING TOWER SUMMARY INFORMATION — Not Applicable

J. BOILER SUMMARY INFORMATION — Not Applicable

K. CENTRAL MECHANICAL SYSTEM - PUMP SUMMARY INFORMATION — Not Applicable

L. TERMINAL UNIT SUMMARY INFORMATION — Not Applicable

L-1. ZONAL SYSTEM SUMMARY INFORMATION — Not Applicable

M-1.. DHW SUMMARY INFORMATION: FLUID SYSTEMS — Not Applicable

M-2.. DHW SUMMARY INFORMATION: RECIRCULATION DHW SYSTEMS — Not Applicable

N. EXCEPTIONAL CONDITIONS COMPLIANCE CHECKLIST

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — Report Version: PRF01-06032014-687 — Report Generated at: 2014-12-31T09:11:22

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 5 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

Not Applicable.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — Report Version: PRF01-06032014-687 — Report Generated at: 2014-12-31T09:11:22

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 6 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:SILVER CREEK	Documentation Author Signature:
Company:SILVER CREEK	Signature Date: 12/3/14
Address:2830 Barrett Ave - Perris CA 92571	CEA Identification (If applicable):
City/State/Zip:	Phone:951-943-5393

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or I am a licensed architect.
2. I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
3. I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.

Building Owner's Name:SILVER CREEK	Building Owner's Signature:
Address:2830 Barrett Ave - Perris CA 92571	Date Signed: 12/3/14
City/State/Zip:	Phone:951-943-5393
Responsible Designer Name:Ryan McIntosh	Responsible Designer Signature:
Company:SILVER CREEK	Date Signed: 12/3/14
Address:2830 Barrett Ave - Perris CA 92571	License: 855257
City/State/Zip:	Phone:951-943-5393
Responsible Lighting Designer Name:SILVER CREEK	Responsible Lighting Designer Signature:
Company:SILVER CREEK	Date Signed: 12/3/14
Address:2830 Barrett Ave - Perris CA 92571	License: 855257
City/State/Zip:	Phone:951-943-5393
Responsible Mechanical Designer Name:SILVER CREEK	Responsible Mechanical Designer Signature:
Company:SILVER CREEK	Date Signed: 12/3/14
Address:2830 Barrett Ave - Perris CA 92571	License: 855257
City/State/Zip:	Phone:951-943-5393

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — Report Version: PRF01-06032014-687 — Report Generated at: 2014-12-31T09:11:22

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:23:26 -08'00'

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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:

PALOMAR COLLEGE EDUCATION CTR.

PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:

ENERGY CALC'S.
PRF FORMS
ZONE 15 WORST CASE

LICENSED ARCHITECT — JACK F SHIVELY III — C-33467 — REN 01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT — CODE 2013 CBC — A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 1 4 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

A-0.5B

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 1 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

A. GENERAL INFORMATION					
01	Project Address	ZONE 16	21	Compliance Software	CBECC-Com 2013-3a (687)
02	City	ZONE 16	22	Compliance Manager Version	BEMCmpMgr 2013-3a (687)
03	Zip code		23	Rule Set Filename	CA 2013 Nonresidential, Vers. 2.0 (CEC 2013 NonRes.bin)
04	Climate Zone	ClimateZone16	24	Building Type	Nonresidential
05	Building Front Orientation	330	25	Construction Type	
06	Number of Above Grade Stories	1	26	North Wall Area (ft2)	264
07	Number of Below Grade Stories	0	27	East Wall Area (FT2)	440
08	Number of Dwelling Units	0	28	South Wall Area (ft2)	264
09	Total Conditioned Floor Area (ft2)	960	29	West Wall Area (ft2)	440
10	Total Unconditioned Floor Area (ft2)		30	Total Exterior Wall Area (ft2)	1,408
11	Addition Conditioned Floor Area (ft2)		31	North Glazing Area (ft2) / Glazing Ratio	32 / 12%
12	Addition Unconditioned Floor Area(ft2)		32	East Glazing Area (ft2) / Glazing Ratio	0 / 0%
13	Number of Thermal Zones	1	33	South Glazing Area (ft2) / Glazing Ratio	32 / 12%
14	Number of Thermal Zones (conditioned)	1	34	West Glazing Area (ft2) / Glazing Ratio	0 / 0%
15	Number of Air Systems	1	35	Total Glazing Area (ft2) /Glazing Ratio	64 / 5%
16	Number of Zonal Systems	0	36	Roof Area (ft2)	960
17	Number of Terminal Units	0	37	Skylight Area (ft2) / Skylight-Roof-Ratio	0 / 0%
18			38		
19			39		
20			40		

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 2 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

B. COMPLIANCE RESULTS				
01	BUILDING COMPLIES			
02	Special Features are Required -TBD			
03	HERS Verification is Required - TBD			
	ANNUAL TDV ENERGY USE SUMMARY (kBtu/ft2/yr)			
	04	05	06	07
Energy Component	Standard Design	Proposed Design	Compliance Margin	Percent Better than Standard*
Space Heating	238.1	277.2	-39.1	-16.4%
Space Cooling	96.8	121.0	-24.2	-25.0%
Indoor Fans	150.9	89.8	61.1	40.5%
Heat Rejection	--	--	-	-
Pumps & Misc.	--	--	-	-
Domestic Hot Water	--	--	-	-
Lighting	51.6	24.3	27.3	52.9%
COMPLIANCE TOTAL	537.4	512.3	25.1	4.7%
Receptacle	66.8	66.8		0.0%
Process	--	--		-
Process Lighting	--	--		-
TOTAL	604.2	579.1		4.2%

C. OCCUPANCY SUMMARY INFORMATION -							
01	02	03	04	05	06	07	08
				Allowed (Baseline) Lighting Power			
					Additional (Custom) Allowances		
Occupancy Type	Floor Area	Installed Lighting Power	Lighting Control Credits	General Lighting Power Allowance	Area Category	Tailored Method	Total Allowed Lighting Power
	(ft2)	(Watts)	(Watts)	(Watts)	(Watts)	(Watts)	(Watts)
Classrooms, Lecture, Training, Vocational Areas	960	744	186	1,152			1,152

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 3 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

D. ENVELOPE SUMMARY INFORMATION							
01	02	03	04	05	06	07	08
			Assembly Layers				
Surface Name	Surface Type	U-Factor / F-Factor / C-Factor		Framing Type	Framing Spacing	R-value	Certified Cool Roof
SCI ROOF	Roof	U-0.05	Metal Standing Seam - 1/16 in. Fiber cement board - 63 lb/ft3 - 1/3 in. Plywood - 3/4 in. Composite Framing Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	Metal	Roof24inOC	R-0 R-0.24 R-0.94 R-30 Cavity R-0.92 R-1.26	
SCI PLYWD FLOOR	ExteriorFloor	U-0.06	Air - Cavity - Wall Roof Ceiling - 4 in. or more Composite Framing Plywood - 1 in Carpet - 3/4 in.	Metal	Floor24inOC	R-0.92 R-30 Cavity R-1.25 R-2.38	
2x4 T111 WALL	ExteriorWall	U-0.08	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. Composite Framing Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	Wood	Wall16inOC	R-0.8 R-0.01 R-13 Cavity R-0.45 R-1.26	

E. FENESTRATION SUMMARY INFORMATION							
01	02	03	04	05	06	07	08
Name	Fenestration Type	Certification Method	Assembly Method	Frame Type	U-value	SHGC	VT
SCI - IWC 6200 - SLIDER - SB60 / CLR	Sliding	NFRCRated	Manufactured	- specify -	0.61	0.35	0.63

F. MECHANICAL SYSTEM SUMMARY INFORMATION														
01	02	03	04				05							
			Cooling				Heating							
Equipment Name	Equipment Type	Qty	Type	SEER	EER	Rated Output kBtuh	Type	AFUE	HSPF	Thermal Eff.	Rated Output kBtuh	Supplemental Heat Source	Supplemental Rated Output kBtuh	
AirSystem 1	SZAC	1	DirectExpansion	13.0	9.0	53	Furnace				68.0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 4 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

G. MECHANICAL SYSTEM ECONOMIZER AND FAN SUMMARY INFORMATION										
01	02	03	04				05			
		Outside Air	Supply Fan				Return Fan			
Equipment Name	EconomizerType	CFM	CFM	HP	BHP	Control	CFM	HP	BHP	Control
AirSystem 1	NoEconomizer	720	1875.0	0.75	0.75	ConstantVolume				

H. CHILLER SUMMARY INFORMATION
Not Applicable

I. COOLING TOWER SUMMARY INFORMATION
Not Applicable

J. BOILER SUMMARY INFORMATION
Not Applicable

K. CENTRAL MECHANICAL SYSTEM - PUMP SUMMARY INFORMATION
Not Applicable

L. TERMINAL UNIT SUMMARY INFORMATION
Not Applicable

L-1. ZONAL SYSTEM SUMMARY INFORMATION
Not Applicable

M-1.. DHW SUMMARY INFORMATION, FLUID SYSTEMS
Not Applicable

M-2.. DHW SUMMARY INFORMATION: RECIRCULATION DHW SYSTEMS
Not Applicable

N. EXCEPTIONAL CONDITIONS COMPLIANCE CHECKLIST

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 5 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

Not Applicable.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-01-E

Project Name: 24 x 40 SCI PC — Calculation Date/Time: — Page 6 of 6

Compliance Scope: New Complete Building including Envelope, Lighting and HVAC — Input File Name:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 12/31/14
Address: 2830 Barrett Ave - Perris CA 92571	CEA Identification (If applicable):
City/State/Zip:	Phone: 951-943-5393

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or I am a licensed architect.
2. I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
3. I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.

Building Owner's Name: SILVER CREEK	Building Owner's Signature:
Address: 2830 Barrett Ave - Perris CA 92571	Date Signed: 12/31/14
City/State/Zip:	Phone: 951-943-5393
Responsible Designer Name: Ryan McIntosh	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 12/31/14
Address: 2830 Barrett Ave - Perris CA 92571	License: 855255
City/State/Zip:	Phone: 951-943-5393
Responsible Lighting Designer Name: SILVER CREEK	Responsible Lighting Designer Signature:
Company: SILVER CREEK	Date Signed: 12/31/14
Address: 2830 Barrett Ave - Perris CA 92571	License: 855255
City/State/Zip:	Phone: 951-943-5393
Responsible Mechanical Designer Name: SILVER CREEK	Responsible Mechanical Designer Signature:
Company: SILVER CREEK	Date Signed: 12/31/14
Address: 2830 Barrett Ave - Perris CA 92571	License: 855255
City/State/Zip:	Phone: 951-943-5393

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:24:40 -08'00'

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ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH SCI Inc SHALL BE THE PROPERTY OF SCI Inc

SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ENERGY CALC'S. PRF FORMS ZONE 16 WORST CASE

LICENSED ARCHITECT — JACK F SHIVELY III — C-33467 — REN 01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC — FLS — SS
DATE APR 14 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0.5C

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 1 of 9)

Project Name: 24' x 40' SCI PC — Date Prepared: 10/15/14

Project Address:	Climate Zone: 1-15	Conditioned Floor Area: 960
		Unconditioned Floor Area:
General Information		
Building Type: ☑ Nonresidential	☐ High Rise Residential	☐ Hotel/Motel
☑ Schools	☑ Relocatable Public Schools ☑ Conditioned Spaces	☐ Unconditioned Spaces
Phase of Construction: ☑ New Construction	☐ Addition	☐ Alteration

A. Electrical Service Metering

☑ Each newly installed electrical service (in both existing and newly constructed buildings) is required to be metered, as set out in Table 130.5-A, which is reproduced below

☐ Fill out a separate line for each electrical service that is connected to the building.

Electrical Service Schedule	Electrical Service Rating	Metering Capabilities (check all that are present)				Field Inspector	
A	B	C	D	E	F	G	
Designation/location in building/description	kVA	Instantaneous (at the time) kW demand	Historical peak demand (kW)	Resettable kWh	kWh per rate period	Pass	Fail

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 2 of 9)

Project Name: — Date Prepared:

(Handwritten across the continuation rows, all checkboxes empty:) N/A OWNER TO PROVIDE METER INFO AS PART OF SITE SUBMITTAL

Table 130.5-A - MINIMUM REQUIREMENTS FOR METERING OF ELECTRICAL LOAD

Meter Rating (kVA)	50 kVA or less	More than 50kVA and less than or equal to 250 kVA	More than 250 kVA and less than or equal to 1000kVA	Services rated more than 1000kVA
Instantaneous (at the time) kW demand	Required	Required	Required	Required
Historical peak demand (kW)	Not required	Not required	Required	Required
Resettable kWh	Required	Required	Required	Required
kWh per rate period	Not required	Not required	Not required	Required

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 3 of 9)

Project Name: — Date Prepared:

B. Disaggregation of Electrical Circuits

☐ Each newly installed switchboard, panel, and motor control center (in both existing and newly constructed buildings) is required to be disaggregated according to the requirements of Table 130.5-B, shown on the next page.

☐ Individual branch circuits, taps or disconnects that require overcurrent protection devices rated 60A or greater are exempt.

☐ As an alternative, current transformers can be added for individual branch circuits and loads throughout the building, and a permanent measurement system can be installed. In this case, disaggregated wiring would not be required as long as the metering system allows the equivalent disaggregated measurements.

☐ Fill out a separate line for each switchboard, motor control center, panelboard and subpanel.

Switchboard, motor control center, panelboard or subpanel	Electrical Service that supplies that switchboard or panel	Electrical Service Rating	Field Inspector Pass	Field Inspector Fail

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 4 of 9)

Project Name: — Date Prepared:

A	B	C	D	
Designation/location in building/description	Designation/location in building/description	kVA	☐	☐
IN EACH CLASSRM	N/A - PER SITE PACKAGE	<50	☐	☐

OR

Current transformers have been attached to individual branch circuits and loads throughout the building, and a permanent measurement system is installed that allows an equivalent degree of disaggregated measurement as required by the Standards. ☐ ☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 5 of 9)

Project Name: — Date Prepared:

B. Disaggregation of Electrical Circuits (continued)

Table 130.5-B - MINIMUM REQUIREMENTS FOR SEPARATION OF ELECTRICAL LOAD

Table 130.5 – B sets the upper limit on how many load(s) of each type can be supplied by each feeder. A feeder may not supply loads of more than one type unless the service is rated at 50 kVA or less. For instance, on the fifth row of the table, one feeder on a service >50 kVA could be used to supply all the plug loads on a floor of a building, provided that there are no areas in which more than 25kVA of plug load is supplied to a space less than 5000sf

Load Type	Services rated 50 kVA or less	Services rated more than 50kVA and less than or equal to 250 kVA	Services rated more than 250 kVA and less than or equal to 1000kVA	Services rated more than 1000kVA
Lighting including exit and egress lighting and exterior lighting	Not required	All lighting in aggregate	All lighting disaggregated by floor, type or area	All lighting disaggregated by floor, type or area
HVAC systems and components including chillers, fans, heaters, furnaces, package units, cooling towers, and circulation pumps associated with HVAC	Not required	All HVAC in aggregate	All HVAC in aggregate and each HVAC load rated at least 50 kVA	All HVAC in aggregate and each HVAC load rated at least 50kVA
Domestic and service water system pumps and related systems and components	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Plug load including appliances rated less than 25 kVA	Not required	All plug load in aggregate Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug loads separated by floor, type or area. All groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf
Elevators, escalators, moving walks, and transit systems	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Other individual non-HVAC loads or appliances rated 25kVA or greater	Not required	All	Each	Each
Industrial and commercial load centers 25 kVA or greater including theatrical lighting installations and commercial kitchens	Not required	All	Each	Each
Renewable power source (net or total)	Each group	Each group	Each group	Each group
Loads associated with renewable power source	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Charging stations for electric vehicles	All loads in aggregate	All loads in aggregate	All loads in aggregate	All loads in aggregate

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 6 of 9)

Project Name: — Date Prepared:

C. Voltage Drop

☐ Attach voltage drop worksheet to this form,

☐ Field inspector has discretion to approve the worksheets; the tables shown below in this section are advisory only

☐ Feeder conductors and branch circuits that are dedicated to emergency services are exempt from these requirements.

☐ An advisory table of typical power factors is shown below

	Field Inspector Pass	Field Inspector Fail
Feeders. Feeder conductors shall be sized for a maximum voltage drop of 2 percent at design load.	☐	☐
Branch Circuits. Branch circuit conductors shall be sized for a maximum voltage drop of 3 percent at design load.	☐	☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 7 of 9)

Project Name: — Date Prepared:

Compliance Manual, Chapter 8, Table 8 2: Typical Power Factors for Voltage Drop Calculations

Load Type	Default Power Factor at 120 volts	Default Power Factor at 277 volts	Clarifying Notes
Fluorescent lighting	0.55	0.95	
Compact fluorescent lighting	0.9 (hardwired) 0.5 (GU-24)	0.9 (hardwired) 0.3 (GU-24)	NPF magnetic ballasts use GU-24 values
LED lighting	0.7	0.5	May be higher if specifications call for high power factor drivers
Incandescent lighting	1.0	1.0	
HID lighting	0.9	0.9	May be lower if NPF ballasts are specified
HVAC packages	0.85	0.9	
Other motors <5 HP	0.8	0.8	
Other motors >5 HP	0.85	0.85	
Kitchen equipment	0.9	N/A	
Receptacles	0.6	N/A	For dedicated receptacles, may be rated according to the load
Electric heating including hot water	1.0	1.0	
Other	0.85	0.85	

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 8 of 9)

Project Name: — Date Prepared:

D. Circuit Controls for 120-Volt Receptacles

☐ Controlled 120 volt receptacles shall be provided, as required by Section 130.5(d) of the Standards.

☐ In open office areas, controlled circuit receptacles are not required if, at time of final permit, workstations are installed, and each workstation is equipped with an occupant sensing control that is permanently mounted in each workstation, and which controls a hardwired, nonresidential-rated power strip. Plug-in strips and other plug-in devices that incorporate an occupant sensor shall not be used for this exception.

☐ Receptacles that are only for the following purposes are exempt:

-Receptacles specifically for refrigerators and water dispensers in kitchenettes.
-Receptacles located a minimum of six feet above the floor that are specifically for clocks.
-Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.

	Field Inspector Pass	Field Inspector Fail
1. At least one controlled receptacle is installed within 6 feet of each uncontrolled receptacle, or split-wired duplex receptacles are installed, that have one controlled and one uncontrolled receptacle. This applies in all of the following spaces: • Private offices, open office areas • Receptions and lobbies • Conference rooms • Kitchenettes in office spaces • Copy room	☐	☐
2. Electric circuits serving controlled receptacles are equipped with automatic shut-OFF controls following the requirements prescribed in Section 130.1(c)1 through 5 (in many cases this will mean that the receptacles are connected to the same automatic shut-OFF system as the general lighting of the space).	☐	☐
3. Controlled receptacles shall have a permanent marking to differentiate them from uncontrolled receptacles.	☐	☐
4. For open office areas, controlled circuits shall be provided and marked to support installation and configuration of office furniture with receptacles that comply with Section 130.1(a)130.5(d) 1, 2, and 3.	☐	☐
5. For hotel and motel guest rooms at least one-half of the 120-volt receptacles in each guest room are controlled receptacles that comply with Section 130.5(d)1, 2, and 3 (see numbers 1,2 and 3 above). Electric circuits serving controlled receptacles have captive card key controls, occupancy sensing controls, or automatic controls such that, no longer than 30 minutes after the guest room has been vacated, power is switched off.	☐	☐
6. Plug-in strips and other plug-in devices that incorporate an occupant sensor are not used to comply with any of these requirements.	☐	☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-ELC-01-E
Electrical Power Distribution — (Page 9 of 9)

Project Name: — Date Prepared: 10/15/14

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: RYAN McINTOSH	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 10/16/14
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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: SILVER CREEK	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 10/16/14
Address:	License: 865257
City/State/Zip:	Phone:

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:26:02 -08'00'

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ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH SCI Inc SHALL BE THE PROPERTY OF SCI Inc

SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ENERGY CALC'S. ELC FORMS 24' x 40' BLDG'S

LICENSED ARCHITECT JACK F SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0.6A

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 1 of 4)
Project Name: 24' x 40' SCI PC	Date Prepared: 10/15/14

Project Address:	Total Illuminated Hardscape Area
General Information	
Phase of Construction: ☐ New Construction ☐ Addition ☐ Alteration	
Outdoor Lighting Zone (OLZ) ☐ OLZ-1 ☐ OLZ-2 ☑ OLZ-3 ☐ OLZ-4	
I have confirmed with the AHJ which OLZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114	

LIGHTING COMPLIANCE DOCUMENTS (check box for each document included)	
For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.	
☑ NRCC-LTO-01-E	Certificate of Compliance
☐ NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
☑ NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance

Summary of Allowed Outdoor Lighting Power			Watts
1.	Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1	=	30
	Complies ONLY if Installed ≤ Allowed		↕
2.	Sum Total INSTALLED Outdoor lighting Wattage from NRCC-LTO-01-E, page 3		30

Declaration of Required Installation Certificates – Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)	
☑ NRCI-LTO-01-E - Must be submitted for all buildings	☐ Field Inspector
☐ NRCI-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)	
☒ NRCA-LTO-02-A - Must be submitted for outdoor lighting controls.	☐ Field Inspector

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 2 of 4)
Project Name:	Date Prepared:

Schedule of luminaires exempt from the outdoor lighting power requirements in §140.7	
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

Schedule of luminaires exempt from the cutoff requirements in §130.2(b)	
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

Schedule of luminaires exempt from the outdoor lighting control requirements in §130.2(c)	
Name or Symbol	Description of exempt luminaire in accordance with the exemptions
TYP EXT LIGHT	< 30W, NO PART LOAD REQUIREMENT

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 3 of 4)
Project Name:	Date Prepared:

A. OUTDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts					Location	Cutoff	Field Inspector	
A	B	C	D		E	F	G	H	I	
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	How wattage was determined: CEC Default from NA8	According to §130.0(c)	Number of Luminaires	Total Installed Watts in this area (C x E)	Primary Function area in which these luminaires are installed	BUG Rating	Pass	Fail
TYP	30 W (MAX) LED WALL PACK	30	☐	☑	1	30	ENTRY DOOR	FULL CUTOFF	☐	☐
			INSTALLED WATTS PAGE TOTAL:			30	Enter sum total of all pages (Sum Total INSTALLED Outdoor lighting wattage) into NRCC-LTO-01-E; Page 1		30	

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2013

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 4 of 4)
Project Name:	Date Prepared: 10/15/14

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: RYAN MCINTOSH	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 10/15/14
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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: SILVER CREEK	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 10/16/14
Address:	License: C55259
City/State/Zip:	Phone:

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2013

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 1 of 3)
Project Name: 24' x 40' SCI PC	Date Prepared: 10/15/14

MECHANICAL COMPLIANCE FORMS & WORKSHEETS (indicate if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, refer to the 2013 Nonresidential Manual Note: The Enforcement Agency may require all forms to be incorporated onto the building plans. Forms NRCC-MCH-04-E and NRCC-MECH-05-E are alternative forms to NRCC-MCH-01-E, NRCC-MCH-02-E and NRCC-MCH-03-E for projects using only single zone packaged HVAC systems.

YES	NO	Form	Title
X		NRCC-MCH-04-E (1 of 2)	Certificate of Compliance. Required on plans when used.
X		NRCC-MCH-04-E (2 of 2)	Mechanical Acceptance Tests. Required on plans when used.
	X	NRCC-MCH-05-E (1 of 2)	HVAC Prescriptive Requirements. It is required on plans when used.
X		NRCC-MCH-05-E (2 of 2)	Mechanical SWH Equipment Summary is required for all submittals with service water heating, pools or spas. It is required on plans where applicable.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 2 of 3)
Project Name:	Date Prepared:

Designer:

This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the applicable boxes by all acceptance tests that apply and list all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems. The NA number designates the Section in the Appendix of the Nonresidential Reference Appendices Manual that describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Enforcement Agency:

Systems Acceptance. Before occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.

Systems Acceptance. Before occupancy permit is granted. All newly installed HVAC equipment must be tested using the Acceptance Requirements.

The NRCC-MCH-04-E form is not considered a completed form and is not to be accepted by the building department unless the correct boxes are checked. The equipment requiring testing, person performing the test (Example: HVAC installer, TAB contractor, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following checked-off forms are required for ALL newly installed and replaced equipment. In addition a Certificate of Acceptance forms shall be submitted to the building department that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of Section 10-103(b) and Title 24 Part 6. The building inspector must receive the properly filled out and signed forms before the building can receive final occupancy.

Test Description		MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-11-A	MCH-12-A	MCH-14-A	MCH-18-A	Test Performed By:
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation (DCV)	Supply Fan VAV	Automatic Demand Shed Control	FDD for Packaged DX Units	Distributed Energy Storage DX AC Systems	Energy Management Control System	
ALL HPs	ALL	✓	✓	✓		✓						

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 3 of 3)
Project Name:	Date Prepared: 10/15/16

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: RYAN MCINTOSH	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 10/16/14
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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).
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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: SILVER CREEK	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 10/16/14
Address:	License: C55259
City/State/Zip:	Phone:

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:27:00 -08'00'

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ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH SCI Inc SHALL BE THE PROPERTY OF SCI Inc

SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ENERGY CALC'S.
LTO / MCH FORMS
24' x 40' BLDG'S

LICENSED ARCHITECT JACK F. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0.6B

STATE OF CALIFORNIA
INDOOR LIGHTING
(NRCC-LTI-01-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
NRCC-LTI-01-E
(Page 1 of 5)
CALIFORNIA ENERGY COMMISSION

Project Name: 24 x 40 SCI PC
Date Prepared: 10/15/14

Climate Zone: 1-15	Conditioned Floor Area: 960				
	Unconditioned Floor Area:				
General Information					
Building Type:	☑ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel		
☑ Schools	☐ Relocatable Public Schools	☐ Conditioned Spaces	☐ Unconditioned Spaces		
Phase of Construction:	☐ New Construction	☐ Addition	☐ Alteration		
Method of Compliance:	☐ Complete Building	☑ Area Category	☐ Tailored		

LIGHTING COMPLIANCE DOCUMENTS (Initial yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	FORM	TITLE
✓		NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
✓		NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
	✓	NRCC-LTI-03-E	Indoor Lighting Power Allowance
	✓	NRCC-LTI-04-E	Tailored Method Worksheets
	✓	NRCC-LTI-05-E	Low Voltage Track Lighting Worksheets

Summary of Allowed Lighting Power

Conditioned and Unconditioned spaces Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
1.	Installed Lighting NRCC-LTI-02-E, page 4	744	Installed Lighting NRCC-LTI-02-E, page 4	+	
2.	POSTABLE ONLY FOR OFFICES NRCC-LTI-02-E, page 3	-			
3.	Minus Lighting Control Credits NRCC-LTI-02-E, page 5	- 186	Minus Lighting Control Credits NRCC-LTI-02-E, page 5	-	
4.	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	= 558	Adjusted Installed Lighting Power (row 1 minus row 3)	=	

STATE OF CALIFORNIA
INDOOR LIGHTING
(NRCC-LTI-01-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
NRCC-LTI-01-E
(Page 2 of 5)
CALIFORNIA ENERGY COMMISSION

Project Name:
Date Prepared:

3.	Complies ONLY if Installed ≤ Allowed	Complies ONLY if Installed ≥ Allowed	
4.	Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1	1152	Allowed Lighting Power Unconditioned NRCC-LTI-03-E, page 1

Declaration of Required Installation Certificates – Declare by selecting yes for all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
✓		NRCC-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
✓		NRCC-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
	✓	NRCC-LTI-03-E Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
	✓	NRCC-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.	☐ Field Inspector
✓		NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
	✓	NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
✓		NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
✓		NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
	✓	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
(NRCC-LTI-01-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
NRCC-LTI-01-E
(Page 3 of 5)
CALIFORNIA ENERGY COMMISSION

Project Name:
Date Prepared:

A separate Lighting Schedule Must be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☑ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

A. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST
☐ The actual indoor lighting power listed on this page and on the next page includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, for each different type of luminaire be each different function area on separate lines
☑ Also include track lighting in schedule, and submit the track lighting compliance form (NRCC-LTI-05-E) when line-voltage track lighting is installed.

B. Installed Portable Luminaires In Offices – Exception to Section 140.6(a)
☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance form.
☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule		Office Installed Portable Luminaire Watts Per Square Foot						Row H ≤ 0.3 W/ft²	Office Location	Field Inspector
A		B	C	D	E	F	G	H	I	J
Complete Luminaire Description (i.e., LED., under cabinet, furniture mounted desk/bulletin)	Watts per Luminaire	Quantity of Luminaires	Installed portable luminaire watts in this office (B x C)	Enter the square feet of the office	Watts per square foot (D / E)	If F > 0.3, enter zero (if F ≤ 0.3, (F x 0.3)	E + G		Identify Office area in which these portable luminaires are installed	Pass / Fail
										☐ ☐
										☐ ☐
										☐ ☐
										☐ ☐
										☐ ☐
Total installed portable luminaire watts that are greater than 0.3 watts per square foot per office									Enter sum total of all pages into NRCC-LTI-01-E, Page 1	

STATE OF CALIFORNIA
INDOOR LIGHTING
(NRCC-LTI-01-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
NRCC-LTI-01-E
(Page 4 of 5)
CALIFORNIA ENERGY COMMISSION

Project Name:
Date Prepared:

A separate Lighting Schedule Must be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☑ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

C. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts				Location	Field Inspection	
A	B	C	D	E	F	G	H	
Number for Fixture Type	Complete Luminaire Description (e.g. 8 lamp fluorescent troffer, T32T8, use flammable electronic ballast)	Luminaire watts per lamp	Lamps per luminaire	Ballasts per luminaire	Watts per luminaire (C x D x E)	Primary Function area in which these luminaires are installed	Pass	Fail
Type	2x4 Surface Mount Lay-in	75	4	1	300	Classroom	☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
	INSTALLED WATTS PAGE TOTAL:				744	Enter sum total of all pages into NRCC-LTI-01-E, Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
(NRCC-LTI-01-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
NRCC-LTI-01-E
(Page 5 of 5)
CALIFORNIA ENERGY COMMISSION

Project Name:
Date Prepared: 10/15/14

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that 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 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.

Documentation Author Name: Elias Mylonas	Documentation Author Signature:		
Company: SILVER CREEK	Signature Date: 10/15/14		
Address: - -	CEA/HERS Certification Identification (if applicable): - -		
City/State/Zip: - -	Phone: - -		

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 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: SILVER CREEK	Responsible Designer Signature:		
Company: SILVER CREEK	Date Signed: 10/15/14		
Address: - -	License: 352-2029		
City/State/Zip: - -	Phone: - -		

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
(NRCC-LTI-02-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting – Lighting Controls
NRCC-LTI-02-E
(Page 1 of 3)
CALIFORNIA ENERGY COMMISSION

Project Name: 24 x 40 SCI PC
Date Prepared: 10/15/14

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
✓		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
✓		Lighting shall be controlled by a lighting control a system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	✓	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
	✓	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 130.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
✓		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
✓		All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
	✓	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled, in accordance with Section 130.1(d).
✓		The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multilevel lighting control requirements in accordance with Section 130.1(b).
✓		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
✓		Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	✓	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
✓		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or she is operated for normal use, indoor lighting controls serving the building, area, or she shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4 (a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
(NRCC-LTI-02-E (Revised 08/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting – Lighting Controls
NRCC-LTI-02-E
(Page 2 of 3)
CALIFORNIA ENERGY COMMISSION

Project Name:
Date Prepared:

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☐ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule			Standards Complying With [1] (√ all that apply, or enter "E" if Exempted)								PAF Credit Calculation [2]				Field Inspection	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Location in Dwelling	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§130.1(f)	Standards Complying With	Watts per Luminaire	PAF	Lighting Control Credit (1 - PAF)	Watts Controlled	Pass	Fail
Class Rm	Occ. Auto-Switch Auto	8	X	On	Off	E		X		744	.25	186		☐	☐
														☐	☐
														☐	☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 1 of 9)
Project Name: 120' x 40' SCI PC	Date Prepared: 10/15/14

Project Address:	Climate Zone: 1-15	Conditioned Floor Area: 4800 / Unconditioned Floor Area:
General Information		
Building Type: ☑ Nonresidential ☐ High-Rise Residential ☐ Hotel/Motel		
☑ Schools ☑ Relocatable Public Schools ☑ Conditioned Spaces ☐ Unconditioned Spaces		
Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration		

A. Electrical Service Metering

☑ Each newly installed electrical service (in both existing and newly constructed buildings) is required to be metered, as set out in Table 130.5-A, which is reproduced below.

☐ Fill out a separate line for each electrical service that is connected to the building.

Electrical Service Schedule	Electrical Service Rating	Metering Capabilities (check all that are present)				Field Inspector	
A	B	C	D	E	F	G	
Designation/location in building/description	kVA	Instantaneous (at the time) kW demand	Historical peak demand (kW)	Resettable kWh	kWh per rate period	Pass	Fail

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 2 of 9)
Project Name:	Date Prepared:

N/A OWNER TO PROVIDE METER INFO AS PART OF SITE SUBMITTAL

		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐
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		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐

Table 130.5-A - MINIMUM REQUIREMENTS FOR METERING OF ELECTRICAL LOAD

Meter Rating (kVA)	50 kVA or less	More than 50kVA and less than or equal to 250 kVA	More than 250 kVA and less than or equal to 1000kVA	Services rated more than 1000kVA
Instantaneous (at the time) kW demand	Required	Required	Required	Required
Historical peak demand (kW)	Not required	Not required	Required	Required
Resettable kWh	Required	Required	Required	Required
kWh per rate period	Not required	Not required	Not required	Required

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 3 of 9)
Project Name:	Date Prepared:

B. Disaggregation of Electrical Circuits

☐ Each newly installed switchboard, panel, and motor control center (in both existing and newly constructed buildings) is required to be disaggregated according to the requirements of Table 130.5-B, shown on the next page.

☐ Individual branch circuits, taps or disconnects that require overcurrent protection devices rated 60A or greater are exempt.

☐ As an alternative, current transformers can be added for individual branch circuits and loads throughout the building, and a permanent measurement system can be installed. In this case, disaggregated wiring would not be required as long as the metering system allows the equivalent disaggregated measurements.

☐ Fill out a separate line for each switchboard, motor control center, panelboard and subpanel

Switchboard, motor control center, panelboard or subpanel	Electrical Service that supplies that switchboard or panel	Electrical Service Rating	Field Inspector Pass	Fail

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 4 of 9)
Project Name:	Date Prepared:

A	B	C	D	
Designation/location in building/description	Designation/location in building/description	kVA	☐	☐
IN EACH CLASSRM	N/A - PER SITE PACKAGE	< 50	☐	☐
			☐	☐
			☐	☐
			☐	☐

OR

Current transformers have been attached to individual branch circuits and loads throughout the building, and a permanent measurement system is installed that allows an equivalent degree of disaggregated measurement as required by the Standards.. ☐ ☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 5 of 9)
Project Name:	Date Prepared:

B. Disaggregation of Electrical Circuits (continued)

Table 130.5-B - MINIMUM REQUIREMENTS FOR SEPARATION OF ELECTRICAL LOAD

Table 130.5 – B sets the upper limit on how many load(s) of each type can be supplied by each feeder. A feeder may not supply loads of more than one type unless the service is rated at 50 kVA or less. For instance, on the fifth row of the table, one feeder on a service >50 kVA could be used to supply all the plug loads on a floor of a building, provided that there are no areas in which more than 25kVA of plug load is supplied to a space less than 5000sf

Load Type	Services rated 50 kVA or less	Services rated more than 50kVA and less than or equal to 250 kVA	Services rated more than 250 kVA and less than or equal to 1000kVA	Services rated more than 1000kVA
Lighting including exit and egress lighting and exterior lighting	Not required	All lighting in aggregate	All lighting disaggregated by floor, type or area	All lighting disaggregated by floor, type or area
HVAC systems and components including chillers, fans, heaters, furnaces, package units, cooling towers, and circulation pumps associated with HVAC	Not required	All HVAC in aggregate	All HVAC in aggregate and each HVAC load rated at least 50 kVA	All HVAC in aggregate and each HVAC load rated at least 50kVA
Domestic and service water system pumps and related systems and components	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Plug load including appliances rated less than 25 kVA	Not required	All plug load in aggregate Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug loads separated by floor, type or area. All groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf
Elevators, escalators, moving walks, and transit systems	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Other individual non-HVAC loads or appliances rated 25kVA or greater	Not required	All	Each	Each
Industrial and commercial load centers 25 kVA or greater including theatrical lighting installations and commercial kitchens	Not required	All	Each	Each
Renewable power source (net or total)	Each group	Each group	Each group	Each group
Loads associated with renewable power source	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Charging stations for electric vehicles	All loads in aggregate	All loads in aggregate	All loads in aggregate	All loads in aggregate

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 6 of 9)
Project Name:	Date Prepared:

C. Voltage Drop

☐ Attach voltage drop worksheet to this form,

☐ Field inspector has discretion to approve the worksheets; the tables shown below in this section are advisory only

☐ Feeder conductors and branch circuits that are dedicated to emergency services are exempt from these requirements.

☐ An advisory table of typical power factors is shown below

	Field Inspector Pass	Fail
Feeders. Feeder conductors shall be sized for a maximum voltage drop of 2 percent at design load.	☐	☐
Branch Circuits. Branch circuit conductors shall be sized for a maximum voltage drop of 3 percent at design load.	☐	☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 7 of 9)
Project Name:	Date Prepared:

Compliance Manual, Chapter 8, Table 8 2: Typical Power Factors for Voltage Drop Calculations

Load Type	Default Power Factor at 120 volts	Default Power Factor at 277 volts	Clarifying Notes
Fluorescent lighting	0.95	0.95	
Compact fluorescent lighting	0.9 (hardwired) 0.5 (GU-24)	0.9 (hardwired) 0.3 (GU-24)	NPF magnetic ballasts use GU-24 values
LED lighting	0.7	0.5	May be higher if specifications call for high power factor drivers
Incandescent lighting	1.0	1.0	
HID lighting	0.9	0.9	May be lower if NPF ballasts are specified
HVAC packages	0.85	0.9	
Other motors <5 HP	0.8	0.8	
Other motors >5 HP	0.85	0.85	
Kitchen equipment	0.9	N/A	
Receptacles	0.6	N/A	For dedicated receptacles, may be rated according to the load
Electric heating including hot water	1.0	1.0	
Other	0.85	0.85	

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 8 of 9)
Project Name:	Date Prepared:

D. Circuit Controls for 120-Volt Receptacles

☐ Controlled 120 volt receptacles shall be provided, as required by Section 130.5(d) of the Standards.

☐ In open office areas, controlled circuit receptacles are not required if, at time of final permit, workstations are installed, and each workstation is equipped with an occupant sensing control that is permanently mounted in each workstation, and which controls a hardwired, nonresidential-rated power strip. Plug-in strips and other plug-in devices that incorporate an occupant sensor shall not be used for this exception.

☐ Receptacles that are only for the following purposes are exempt:

-Receptacles specifically for refrigerators and water dispensers in kitchenettes.
-Receptacles located a minimum of six feet above the floor that are specifically for clocks.
-Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.

	Field Inspector Pass	Fail
1. At least one controlled receptacle is installed within 6 feet of each uncontrolled receptacle, or split wired duplex receptacles are installed, that have one controlled and one uncontrolled receptacle. This applies in all of the following spaces: • Private offices, open office areas • Receptions and lobbies • Conference rooms • Kitchenettes in office spaces • Copy room	☐	☐
2. Electric circuits serving controlled receptacles are equipped with automatic shut-OFF controls following the requirements prescribed in Section 130.1(c)1 through 5 (in many cases this will mean that the receptacles are connected to the same automatic shut-OFF system as the general lighting of the space).	☐	☐
3. Controlled receptacles shall have a permanent marking to differentiate them from uncontrolled receptacles.	☐	☐
4. For open office areas, controlled circuits shall be provided and marked to support installation and configuration of office furniture with receptacles that comply with Section 130.1(a)130.5(d) 1, 2, and 3.	☐	☐
5. For hotel and motel guest rooms at least one-half of the 120-volt receptacles in each guest room are controlled receptacles that comply with Section 130.5(d)1, 2, and 3 (see numbers 1,2 and 3 above). Electric circuits serving controlled receptacles have captive card key controls, occupancy sensing controls, or automatic controls such that, no longer than 30 minutes after the guest room has been vacated, power is switched off.	☐	☐
6. Plug-in strips and other plug-in devices that incorporate an occupant sensor are not used to comply with any of these requirements.	☐	☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 9 of 9)
Project Name:	Date Prepared: 10/15/14

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: RYAN McINTOSH	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 10/16/14
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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: SILVER CREEK	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 10/16/14
Address:	License: 855251
City/State/Zip:	Phone:

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:30:24 -08'00'

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ENERGY CALC'S.
ELC FORMS
120' x 40' BLDG'S

LICENSED ARCHITECT JACK F SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC — FLS / SS
DATE APR 14 2015

REVISIONS
1
2
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8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14
P.C. SHEET NUMBER	

A-0.6D

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 1 of 4)
Project Name: 120' x 40' SCI PC	Date Prepared: 10/15/14

Project Address:	Total Illuminated Hardscape Area

General Information
Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration
Outdoor Lighting Zone (OLZ) ☐ OLZ-1 ☐ OLZ-2 ☑ OLZ-3 ☐ OLZ-4
I have confirmed with the AHJ which OLZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114

LIGHTING COMPLIANCE DOCUMENTS (check box for each document included)		
For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.		
☑	NRCC-LTO-01-E	Certificate of Compliance
☐	NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
☑	NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance

Summary of Allowed Outdoor Lighting Power			Watts
1.	Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1	=	150
	Complies ONLY if Installed ≤ Allowed		
2.	Sum Total INSTALLED Outdoor lighting Wattage from NRCC-LTO-01-E, page 3		150

Declaration of Required Installation Certificates – Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)
- ☑ NRCI-LTO-01-E - Must be submitted for all buildings ☐ Field Inspector
- ☐ NRCI-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance. ☐ Field Inspector

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)
- ☒ NRCA-LTO-02-A - Must be submitted for outdoor lighting controls. ☐ Field Inspector

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 2 of 4)
Project Name:	Date Prepared:

Schedule of luminaires exempt from the outdoor lighting power requirements in §140.7	
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

Schedule of luminaires exempt from the cutoff requirements in §130.2(b)	
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

Schedule of luminaires exempt from the outdoor lighting control requirements in §130.2(c)	
Name or Symbol	Description of exempt luminaire in accordance with the exemptions
MP EXT LIGHT	< 30W, NO PART LOAD REQUIREMENT

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 3 of 4)
Project Name:	Date Prepared:

A. OUTDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts					Location	Cutoff	Field Inspector	
A	B	C	D		E	F	G	H	I	
			How wattage was determined							
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	CEC Default from NA8	According to §130.0(c)	Number of Luminaires	Total Installed Watts in this area (C x E)	Primary Function area in which these luminaires are installed	BUG Rating	Pass	Fail
TYP	30W (MAX) LED WALL PACK	30	☐	☑	5	150	ENTRY DOOR	FULL CUTOFF	☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
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			☐	☐					☐	☐
			☐	☐					☐	☐
INSTALLED WATTS PAGE TOTAL:						150	Enter sum total of all pages (Sum Total INSTALLED Outdoor lighting wattage) into NRCC-LTO-01-E; Page 1	150		

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2013

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 4 of 4)
Project Name	Date Prepared: 10/15/14

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: RYAN MCINTOSH	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 10/16/14
Address:	CEA/ HERS Certification Identification (If applicable):
City/State/Zip:	Phone:

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: SILVER CREEK	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 10/16/14
Address	License: C35259
City/State/Zip	Phone:

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2013

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 1 of 3)
Project Name: 120' x 40' SCI PC	Date Prepared: 10/15/14

MECHANICAL COMPLIANCE FORMS & WORKSHEETS (indicate if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, refer to the 2013 Nonresidential Manual Note: The Enforcement Agency may require all forms to be incorporated onto the building plans. Forms NRCC-MCH-04-E and NRCC-MECH-05-E are alternative forms to NRCC-MCH-01-E, NRCC-MCH-02-E and NRCC-MCH-03-E for projects using only single zone packaged HVAC systems.

YES	NO	Form	Title
X		NRCC-MCH-04-E (1 of 2)	Certificate of Compliance. Required on plans when used.
X		NRCC-MCH-04-E (2 of 2)	Mechanical Acceptance Tests. Required on plans when used.
	X	NRCC-MCH-05-E (1 of 2)	HVAC Prescriptive Requirements. It is required on plans when used.
X		NRCC-MCH-05-E (2 of 2)	Mechanical SWH Equipment Summary is required for all submittals with service water heating, pools or spas. It is required on plans where applicable.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 2 of 3)
Project Name:	Date Prepared:

Designer:

This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the applicable boxes by all acceptance tests that apply and list all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems. The NA number designates the Section in the Appendix of the Nonresidential Reference Appendices Manual that describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Enforcement Agency:

Systems Acceptance. Before occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.

Systems Acceptance. Before occupancy permit is granted. All newly installed HVAC equipment must be tested using the Acceptance Requirements..

The NRCC-MCH-04-E form is not considered a completed form and is not to be accepted by the building department unless the correct boxes are checked. The equipment requiring testing, person performing the test (Example: HVAC installer, TAB contractor, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following checked-off forms are required for ALL newly installed and replaced equipment. In addition a Certificate of Acceptance forms shall be submitted to the building department that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of Section 10-103(b) and Title 24 Part 6. The building inspector must receive the properly filled out and signed forms before the building can receive final occupancy.

Test Description		MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-11-A	MCH-12-A	MCH-14-A	MCH-18-A	Test Performed By:
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation (DCV)	Supply Fan VAV	Automatic Demand Shed Control	FDD for Packaged DX Units	Distributed Energy Storage DX AC Systems	Energy Management Control System	
ALL HPs	ALL	✓	✓	✓		✓						

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

STATE OF CALIFORNIA
REQUIRED ACCEPTANCE TESTS
CEC-NRCC-MCH-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 3 of 3)
Project Name:	Date Prepared: 10/15/15

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: RYAN MCINTOSH	Documentation Author Signature:
Company: SILVER CREEK	Signature Date: 10/16/14
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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: SILVER CREEK	Responsible Designer Signature:
Company: SILVER CREEK	Date Signed: 10/16/14
Address:	License: C35259
City/State/Zip:	Phone:

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance June 2014

Lydia Barron

Digitally signed by Lydia Barron
DN: st=California, l=Sacramento, o=California Department of General Services, ou=Division of the State Architect, ou=www.verisign.com/repository/CPS Incorp. by Ref.,LIAB.LTD(c)99, title=Architectural Associate, cn=Lydia Barron, email=lydia.barron@dgs.ca.gov
Date: 2015.02.26 15:31:39 -08'00'

THESE DRAWINGS AND ALL MATERIAL CONTAINED HEREIN ARE THE PROPERTY OF SILVERCREEK INDUSTRIES, INC (SCI Inc) AND SHALL NOT BE REPRODUCED, COPIED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN PART TO ASSIST IN THE MAKING OF OR FOR THE PURPOSE OF FURNISHING ANY INFORMATION FOR THE MAKING OF DRAWINGS, PRINTS, APPARATUS OR PARTS THEREOF WITHOUT THE FULL KNOWLEDGE AND WRITTEN CONSENT OF SCI Inc.
ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH SCI Inc SHALL BE THE PROPERTY OF SCI Inc

SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ENERGY CALC'S.
LTO / MCH FORMS
120' x 40' BLDG'S

LICENSED ARCHITECT JACK F SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC___ FLS___ SS___
DATE APR 14 2015

REVISIONS
1
2
3
4
5
6
7
8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-0.6E

STATE OF CALIFORNIA
INDOOR LIGHTING
(DEC-MECC-LTG-E (Revised 06/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: No x 40 Sci Inc
Date Prepared: 10/15/14
CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 1 of 5)

Climate Zone: 1-15	Conditioned Floor Area: 4800		
	Unconditioned Floor Area: —		
General Information			
Building Type:	☒ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel
☒ Schools	☒ Relocatable Public Schools	☐ Conditioned Spaces	☐ Unconditioned Spaces
Phase of Construction:	☒ New Construction	☐ Addition	☐ Alteration
Method of Compliance:	☐ Complete Building	☒ Area Category	☐ Tailored

LIGHTING COMPLIANCE DOCUMENTS (select yes for each document included)
For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	FORM	TITLE
✓		NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
✓		NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
	✓	NRCC-LTI-03-E	Indoor Lighting Power Allowance
	✓	NRCC-LTI-04-E	Tailored Method Worksheets
	✓	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets

Summary of Allowed Lighting Power
Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces	Watts
1.	Installed Lighting NRCC-LTI-01-E, page 4	3720	Installed Lighting NRCC-LTI-01-E, page 4	—
2.	+ PORTABLE ONLY FOR OFFICES NRCC-LTI-01-E, page 3	—		
3.	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	750	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	—
4.	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	2970	Adjusted Installed Lighting Power (row 1 minus row 3)	—

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance
June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
(DEC-MECC-LTG-E (Revised 06/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name:
Date Prepared:
CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 2 of 5)

5.	Complies ONLY if Installed ≤ Allowed	Complies ONLY if Installed ≥ Allowed	
6.	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1: 5700	**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1:	

Declaration of Required Installation Certificates – Declare by selecting yes for all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
✓		NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
✓		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.	☐ Field Inspector
	✓	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
	✓	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.	☐ Field Inspector
✓		NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
	✓	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
	✓	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
	✓	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
	✓	NRCA-ETC-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance
June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
(DEC-MECC-LTG-E (Revised 06/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name:
Date Prepared:
CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 3 of 5)

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☒ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

A. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST
☒ The actual indoor lighting power listed on this page and on the next page includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire for each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance form (NRCC-LTI-05-E) when line-voltage track lighting is installed.

B. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)
☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance form.
☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire Watts Per Square Foot						TOTAL WATTS	Office Location	Field Inspector
A	B	C	D	E	F	G	H	I	J
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (B x C)	Square Feet of Office	Watts per square foot (D / E)	IF F > 0.3, enter zero; IF F ≤ 0.3, D-0.3	E x G	Identify Office area in which these portable luminaires are installed	Pass / Fail
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
Total Installed portable luminaire watts that are greater than 0.3 watts per square foot per office:								Enter sum total of all pages into NRCC-LTI-01-E, Page 1	

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance
June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
(DEC-MECC-LTG-E (Revised 06/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name:
Date Prepared:
CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 4 of 5)

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

C. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts					Location	Field Inspector
A	B	C	D	E	F		G	H
Luminaire Tag No.	Complete Luminaire Description (e.g. 8 lamp fluorescent troffer, T8/T8, one downspoke electronic ballast)	Number of Luminaires	Watts per Luminaire (Watts per Ballast)	Watts per Luminaire (Watts per Lamp)	Number of Lamps	Total Watts (E x F x G) or (E x G)	Primary Function area in which these luminaires are installed	Pass / Fail
Typ	2x4 STYLE T-8 (2) Down Body	95	☐ ☒	☐ ☒	2	380	Classroom	☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
	INSTALLED WATTS PAGE TOTAL					380	Enter sum total of all pages into NRCC-LTI-01-E, Page 2	

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance
June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
(DEC-MECC-LTG-E (Revised 06/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting - Lighting Controls
Project Name: No x 40 Sci Inc
Date Prepared: 10/15/14
CALIFORNIA ENERGY COMMISSION
NRCC-LTI-02-E
(Page 1 of 3)

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)		
YES	**NO**	**Control Requirements**
✓		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
✓		Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	✓	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b)
	✓	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
✓		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
✓		All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a)
	✓	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled in accordance with Section 130.1(a).
✓		The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
✓		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
✓		Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	✓	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
✓		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4 (a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance
June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
(DEC-MECC-LTG-E (Revised 06/14))
CERTIFICATE OF COMPLIANCE
Indoor Lighting - Lighting Controls
Project Name: No x 40 Sci Inc
Date Prepared: 10/15/14
CALIFORNIA ENERGY COMMISSION
NRCC-LTI-02-E
(Page 2 of 3)

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☒ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule			Standards Complying With [1] (√ all that apply, or enter 'S' if exempted)						PAF Credit Calculation [2]					Field Inspector	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc.)	# of Units	130.1(a)1 Manual ON	130.1(a)2 Manual OFF	130.1(b) Multi-level	130.1(c) Shut-OFF	130.1(d) Daylit	130.1(e) Demand Response	Area Controlled	Area Controlled	PAF	Credit (K x L x 0.3)	Total Credit	Pass	Fail
Classroom	Sch. Auto Time Clock - Manu	40	X	X	X	X		X	3720	.25	930			☐	☐
														☐	☐
														☐	☐

24'x40' BUILDING - WOOD STUDS - WOOD FLOOR - WALL MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	30	30	30
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. EER	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9**	9**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

120'x40' BUILDING - WOOD STUDS - WOOD FLOOR - WALL MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. EER	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9**	9**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

LEGEND

Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTE

Buildings utilizing exterior wall constucted of steel stud framing shall have Min. R4 Continuous Rigid Insulation (EPS or EPX material) on interior side of wall.
Windows shall be IWC 6200 horizontal slider (SB 60 / Clr) or erqual (Min), U-Factor - .510 (Max), SHGC .350 (Max), Visual Transmittance = 0.500 (Min)
Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 0.500 (Max)

24'x40' BUILDING - WOOD STUDS - CONCRETE FLOOR - WALL MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. EER	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9**	9**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

120'x40' BUILDING - WOOD STUDS - CONCRETE FLOOR - WALL MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. EER	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9**	9**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

LEGEND

Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTE

Buildings utilizing exterior wall constucted of steel stud framing shall have Min. R4 Continuous Rigid Insulation (EPS or EPX material) on interior side of wall.
Windows shall be IWC 6200 horizontal slider (SB 60 / Clr) or erqual (Min), U-Factor - .510 (Max), SHGC = .350 (Max), Visual Transmittance = 0.500 (Min)
Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 0.500 (Max)

24'x40' BUILDING - WOOD STUDS - WOOD FLOOR - ROOF MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. Seer	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14**	14**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

120'x40' BUILDING - WOOD STUDS - WOOD FLOOR - ROOF MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. Seer	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14**	14**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

LEGEND

Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTE

Buildings utilizing exterior wall constucted of steel stud framing shall have Min. R4 Continuous Rigid Insulation (EPS or EPX material) on interior side of wall.
Windows shall be IWC 6200 horizontal slider (SB 60 / Clr) or erqual (Min), U-Factor - .510 (Max), SHGC = .350 (Max), Visual Transmittance = 0.500 (Min)
Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 0.500 (Max)

24'x40' BUILDING - WOOD STUDS - WOOD FLOOR - ROOF MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
Wall (min. R value)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. Seer	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14**	14**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

120'x40' BUILDING - WOOD STUDS - WOOD FLOOR - ROOF MOUNTED HEAT PUMP - ANY ROOF TYPE
SINGLE-ZONE (MINIMUM DESIGN)

ZONE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	ALL ZONES (MIN.DESIGN) 1 - 16
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Floor (min. R value)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Roof (min. R value)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
HVAC																	
Max. Tonnage	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5**	5**
Min. Seer	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14**	14**
Occupancy Sensor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DCV	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

LEGEND

Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
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NOTE

Buildings utilizing exterior wall constucted of steel stud framing shall have Min. R4 Continuous Rigid Insulation (EPS or EPX material) on interior side of wall.
Windows shall be IWC 6200 horizontal slider (SB 60 / Clr) or erqual (Min), U-Factor - .510 (Max), SHGC = .350 (Max), Visual Transmittance = 0.500 (Min)
Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 0.500 (Max)

DESIGN ENERGY VALUES BY ZONE 1

CONSTRUCTION WASTE MANAGEMENT PLAN

A. DEFINITIONS
1. CONSTRUCTION AND DEMOLITION (C&D) WASTE: INCLUDES ALL NON-HAZARDOUS SOLID WASTES RESULTING FROM CONSTRUCTION, REMODELING, ALTERATIONS, REPAIR, AND DEMOLITION. INCLUDES MATERIAL THAT IS RECYCLED, REUSED, SALVAGED OR DISPOSED AS GARBAGE.
2. RECYCLING: THE PROCESS OF SORTING, CLEANING, TREATING, AND RECONSTITUTING MATERIALS FOR THE PURPOSE OF USING THE MATERIAL IN THE MANUFACTURE OF A NEW PRODUCT.
3. CO-MINGLED C&D RECYCLING: THE PROCESS OF COLLECTING MIXED RECYCLABLE MATERIALS IN ONE CONTAINER ON-SITE. THE CONTAINER IS TAKEN TO A MATERIAL RECOVERY FACILITY WHERE MATERIALS ARE SEPARATED FOR RECYCLING.

B. PERFORMANCE REQUIREMENTS
1. GENERAL: WASTE MATERIAL GENERATED DURING PROJECTS SHALL BE RECYCLED OR REUSED WHENEVER PRACTICABLE. DIVERT A MINIMUM OF 90% C&D WASTE, BY WEIGHT, FROM THE LANDFILL BY A CO-MINGLED C&D RECYCLING FACILITY.
   I. C&D WASTE MATERIALS THAT SHALL BE SALVAGED, REUSED OR RECYCLED INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
   CONCRETE, METALS, WINDOW GLASS, WOOD, GYPSUM BOARD, CARPETING AND PAD, CEILING TILES

C. QUALITY ASSURANCE
1. PRECONSTRUCTION CONFERENCE: REVIEW METHODS AND PROCEDURES RELATED TO WASTE MANAGEMENT INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
   I. REVIEW AND DISCUSS WASTE MANAGEMENT PLAN INCLUDING RESPONSIBILITIES OF WASTE MANAGEMENT COORDINATOR.
   II. REVIEW REQUIREMENTS FOR DOCUMENTING QUANTITIES OF EACH TYPE OF MATERIALS THAT WILL BE SALVAGED, RECYCLED OR DISPOSED OF AS WASTE.
   III. REVIEW PROCEDURES FOR PERIODIC WASTE COLLECTION AND TRANSPORTATION TO RECYCLING AND DISPOSAL FACILITIES.
   IV. REVIEW WASTE MANAGEMENT REQUIREMENTS FOR EACH TRADE.

D. WASTE MANAGEMENT PLAN
1. INDENTIFY AND CONTRACT WITH A WASTE MANAGEMENT SERVICES PROVIDER OR ASSIGN RESPONSIBILITY TO INHOUSE WASTE MANAGEMENT PROJECT ADMINISTRATOR
2. RESPONSIBLE PARTY SHALL DEVELOP AND PROVIDE A PLAN WHICH INCLUDES THE FOLLOWING INFORMATION:
   I. TYPES OF C&D WASTE EXPECTED TO BE GENERATED DURING DEMOLITION AND CONSTRUCTION.
   II. PROPOSED METHODS FOR C&D WASTE SALVAGE, REUSE, RECYCLING AND DISPOSAL.
   III. PROPOSED METHODS FOR SALVAGE, REUSE, RECYCLING AND DISPOSAL DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, ONE OR MORE OF THE FOLLOWING:
   A. REQUIRING SUBCONTRACTORS TO TAKE THEIR C&D WASTE TO A RECYCLING FACILITY,
   B. CONTRACTING WITH A RECYCLING HAULER TO HAUL RECYCLABLE C&D WASTE TO AN APPROVED RECYCLING OR MATERIAL RECOVERY FACILITY,
   C. PROCESSING AND REUSING MATERIALS ON-SITE

E. WASTE MANAGEMENT REPORT
1. WASTE MANAGEMENT SERVICES PROVIDER OR ADMINISTRATOR SHALL SUBMIT A CUMULATIVE WASTE MANAGEMENT REPORT ON A REGULAR BASIS WHICH INCLUDES:
   I. A RECORD OF THE TYPE AND QUANTITY, BY WEIGHT, OF EACH MATERIAL SALVAGED, REUSED, RECYCLED OR DISPOSED.
   II. TOTAL QUANTITY OF WASTE RECYCLED AS A PERCENTAGE OF TOTAL WASTE.
   III. DISPOSAL RECEIPTS: COPY OF RECEIPTS ISSUED BY A DISPOSAL FACILITY FOR C&D WASTE THAT IS DISPOSED IN A LANDFILL.
   IV. RECYCLING RECEIPTS: COPY OF RECEIPTS ISSUED BY APPROVED RECYCLING FACILITIES FOR COMINGLED MATERIALS. INCLUDE WEIGHT TICKETS FROM THE RECYCLING HAULER OR MATERIAL RECOVERY FACILITY AND VERIFICATION OF THE RECYCLING RATE FOR CO-MINGLED LOADS AT THE FACILITY.
   V. SALVAGED MATERIALS DOCUMENTATION: TYPES AND QUANTITIES, BY WEIGHT, FOR MATERIALS SALVAGED FOR REUSE ON SITE, SOLD OR DONATED TO A THIRD PARTY.

F. CONSTRUCTION WASTE MANAGEMENT, GENERAL REQUIREMENTS
1. USE DETAILED MATERIAL ESTIMATES TO REDUCE RISK OF UNPLARMED AND POTENTIALLY WASTEFUL CUTS.
2. TO THE GREATEST EXTENT POSSIBLE, INCLUDE IN MATERIAL PURCHASING AGREEMENTS A WASTE REDUCTION PROVISION REQUESTING THAT MATERIALS AND EQUIPMENT BE DELIVERED IN PACKAGING MADE OF RECYCLABLE MATERIAL, THAT THEY REDUCE THE AMOUNT OF PACKAGING, THAT PACKAGING BE TAKEN BACK FOR REUSE OR RECYCLING, AND TO TAKE BACK ALL UNUSED PRODUCT. INSURE THAT SUBCONTRACTORS REQUIRE THE SAME PROVISIONS IN THEIR PURCHASE AGREEMENTS.
3. CONDUCT REGULAR VISUAL INSPECTIONS OF DUMPSTERS AND RECYCLING BINS TO REMOVE CONTAMINANTS.

G. REMOVAL OF CONSTRUCTION WASTE MATERIALS, GENERAL REQUIREMENTS
1. REMOVE C&D WASTE MATERIALS FROM PROJECT SITE ON A REGULAR BASIS. DO NOT ALLOW C&D WASTE TO ACCUMULATE ON-SITE.
2. TRANSPORT C&D WASTE MATERIALS OFF PROPERTY AND LEGALLY DISPOSE OF THEM.
3. BURNING OF C&D WASTE IS NOT PERMITTED.

IEQ PLAN

A. CONSTRUCTION PHASE:
1. FILTERS
   I. ALL MECHANICAL EQUIPMENT WHICH REQUIRES A FILTER SHALL NOT BE OPERATED WITHOUT A FILTER IN PLACE.
   II. ALL FILTERS SHALL HAVE A MERV RATING OF 8 OR GREATER.
   III. A PRESSURE GAUGE SHALL BE INSTALLED AT ALL MECHANICAL EQUIPMENT REQUIRING FILTERS WHICH MEASURES THE PRESSURE DROP ACROSS THE FILTER AND WHICH IS MARKED TO INDICATE WHEN THE FILTER REQUIRES CLEANING OR REPLACEMENT
2. PROTECTION OF MATERIALS
   I. ALL BUILDING MATERIALS SHALL BE PROTECTED FROM WEATHER AND OTHER MOISTURE SOURCES WHEN RECOMMEND BY THE MANUFACTURER.
   II. ANY POROUS MATERIAL WITH VISIBLE MICROBIAL GROWTH SHALL NOT BE INSTALLED.
   III. ANY OTHER MATERIAL WITH VISIBLE MICROBIAL GROWTH SHALL BE THOROUGHLY CLEAN AND DECONTAMINATED PRIOR TO INSTALLATION.
3. PROTECTION OF INTERIOR ENVIRONMENT
   I. WHENEVER POSSIBLE ALL SANDING, CUTTING GRINDING OR OTHER ACTIVITIES WHICH WILL GENERATE AIRBORNE PARTICLES SHALL BE PERFORMED AWAY FROM THE BUILDING.
   II. WHERE AIRBORNE PARTICLE GENERATING ACTIVITIES CANNOT BE PERFORMED AWAY FROM THE BUILDING PROTECTIVE MEASURES SHALL BE TAKE TO SEAL INTERIOR AREAS TO REDUCE OR ELIMINATE PARTICLE TRANSFER.
   III. ANY TEMPORARILY UNFILLED EXTERIOR OPENINGS SHALL BE PROTECTED WITH PLASTIC SHEETING, OR OTHER BARRIER, TO PREVENT THE MOISTURE AND OTHER CONTAMINANTS FROM ENTERING THE BUILDING.
   IV. ALL WELDING SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF EXTERIOR WALLS WHEREVER POSSIBLE.
4. DUCT SYSTEM CONSTRUCTION
   I. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED PER THE SMACNA HV AC DUCT CONSTRUCTION STANDARDS FOR METAL AND FLEXIBLE DUCTWORK.
   II. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED PER THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS.
   III. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED NFPA 90A & NFPA 90B.
   IV. ALL OPEN DUCTS AND REGISTERS SHALL BE PROTECTED WITH PLASTIC SHEETING, OR OTHER BARRIER, UNTIL THE BUILDING HAS BEEN COMPLETELY INSTALLED AND ENCLOSED AND THE MECHANICAL SYSTEM IS READY TO BE STARTED.
   V. ALL OIL FILM SHALL BE REMOVED FROM DUCTS PRIOR TO INSTALLATION.
   VI. ALL DUST AND DIRT SHALL BE REMOVED FROM BOTH THE INTERIOR AND EXTERIOR OF ALL DUCTS PRIOR TO INSTALLATION.
5. MATERIALS INSTALLATION
   I. NATURAL OR TEMPORARY MECHANICAL VENTILATION SHALL BE PROVIDED WHEN MATERIALS WHICH EMIT VOLATILE ORGANIC COMPOUNDS (VOC) ARE INSTALLED.
   II. NATURAL OR TEMPORARY MECHANICAL VENTILATION SHALL BE CONTINUED UNTIL SUCH A TIME THAT THE VOE EMISSIONS HAVE DISSIPATED.
   III. ANY TEMPORARY VENTILATION SHALL BE EXHAUSTED TO THE EXTERIOR OF THE BUILDING.
   IV. WHEN TEMPORARY MECHANICAL VENTILATION IS USED A CONSTRUCTION FILTER SHALL BE INSTALLED WITH MERV RATING OF NOT LESS THAN 8. THE CONSTRUCTION FILTER SHALL BE REPLACED PRIOR TO OCCUPANCY.
   V. MATERIALS INSTALLATION SHALL BE SEQUENCED WHENEVER POSSIBLE TO ALLOW FOR THE INSTALLATION OF VOE EMITTING MATERIALS PRIOR TO THE INSTALLATION OF POROUS AND FIBROUS MATERIALS.
   VI. MATERIALS WHICH EMIT A SIGNIFICANT AMOUNT OF VOCS OR ODORS SHALL BE STORED IN A MANNER WHICH ALLOWS FOR OFF-GASSING, IN A DRY AND WELL VENTILATION AREA, PRIOR TO INSTALLATION.
   VII. CARPETED SURFACES SHALL BE VACUUMED PER THE CRJ/GREEN LABEL VACUUM CLEANER PROGRAM REQUIREMENTS AT COMPLETION OF CONSTRUCTION AND PRIOR TO OCCUPANCY.

ACOUSTICAL CONTROL

ALL REGULARLY OCCUPIED BUILDINGS CONSTRUCTED PER THIS PC SHALL MEET THE REQUIREMENTS OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.507.4. THE ARCHITECT OF RECORD FOR THE PROJECT SITE THE PC BUILDING IS TO BE INSTALLED UPON SHALL IDENTIFY IF ANY NOISE TRANSMISSION MEASURES ARE REQUIRED BASED UPON THE NOISE LEVEL PRESENT AT THE PROJECT SITE. IF NECESSARY WALL, ROOF AND WINDOW ASSEMBLIES MEETING THE STC AND OR OITC RATINGS SPECIFIED IN SECTIONS 5.507.4.1 + 5.507.4.1.1 SHALL BE UTILIZED.

LOW EMITTING MATERIALS + MOISTURE MANAGEMENT

SEALANTS AND CAULKS
ALL ADHESIVES, SEALANTS AND CAULKS APPLIED IN THE PROJECT'S INTERIOR SHALL MEET THE REQUIREMENTS OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.1. PRODUCTS IN THIS CATEGORY INCLUDE BUT ARE NOT LIMITED TO CARPET, RESILIENT AND WOOD FLOORING ADHESIVES; BASE COVE ADHESIVES; CERAMIC TILE ADHESIVES; DRYWALL AND PANEL ADHESIVES; AEROSOL ADHESIVES; ADHESIVE PRIMERS; ACOUSTICAL SEALANTS; FIRE STOP SEALANTS; HVAC DUCT SEALANTS, SEALANT PRIMERS; AND CAULKS.

PAINTS & COATINGS
ALL PAINTS AND ARCHITECTURAL COATINGS APPLIED IN THE PROJECT'S INTERIOR SHALL MEET THE REQUIREMENTS OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.3. PRODUCTS IN THIS CATEGORY INCLUDE BUT ARE NOT LIMITED TO SEALERS, STAINS, CLEAR WOOD FINISHES, FLOOR SEALERS AND COATINGS, WATERPROOFING SEALERS, PRIMERS, FLAT PAINTS AND COATINGS, NON-FLAT PAINTS AND COATINGS, AND RUST PREVENTATIVE COATINGS.

RESILIENT FLOORING SYSTEMS
ALL FLOORING SYSTEMS SHALL MEET THE REQUIREMENTS OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.6.

COMPOSITE WOOD
ALL OF THE COMPOSITE WOOD PRODUCTS INSTALLED IN THE PROJECT SHALL MEET THE REQUIREMENTS OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.5. COMPOSITE WOOD PRODUCTS IN THIS CATEGORY ARE DEFINED IN THE CALIFORNIA AIR RESOURCES BOARD (CARE) AIRBORNE TOXIC CONTROL MEASURE (ATCM) TO REDUCE FORMALDEHYDE EMISSIONS FROM COMPOSITE WOOD PRODUCTS (SECTIONS 93120-93120.12, TITLE 17, CALIFORNIA CODE OF REGULATIONS. THE AFFECTED PRODUCTS INCLUDE HARDWOOD PLYWOOD, PLYWOOD WITH DECORATIVE SOFTWOOD VENEER, LAMINATED PRODUCTS WITH A COMPOSITE WOOD CORE OR PLATFORM, PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF), AND FINISHED GOODS FABRICATED FROM.

CEILING & WALL SYSTEMS
ALL CEILING AND WALL SYSTEMS INSTALLED IN THE PROJECT'S INTERIOR TOTALING 90% OR MORE OF THE TOTAL AREAS OF SUCH PRODUCTS SHALL MEET THESE REQUIREMENTS. CEILING AND WALL SYSTEMS INCLUDE BUT ARE NOT LIMITED TO CEILING INSULATION INSTALLED WITHIN THE STRUCTURAL ENVELOP, WALL INSULATION, ACOUSTICAL CEILING PANELS, GYPSUM BOARD WALL PANELS, TACKABLE WALL PANELS, AND WALL COVERINGS. CERAMIC TILE AND OTHER ORGANIC-FREE METAL- OR MINERAL-BASED WALL COVERINGS ARE AVAILABLE FOR CREDIT WITHOUT ANY TESTING REQUIREMENTS. SITE APPLIED ADHESIVES AND SEALANTS AND SITE APPLIED PAINTS AND COATINGS ASSOCIATED WITH CEILING AND WALL SYSTEMS ARE TREATED UNDER OPTIONS 1 AND 2, RESPECTIVELY. CEILING AND WALL SYSTEMS SHALL BE TESTED AND EVALUATED FOR EMISSIONS OF VOCS OF CONCERN WITH RESPECT TO CHRONIC INHALATION EXPOSURES FOLLOWING THE SPECIFICATIONS OF THE CDPH STANDARD METHOD V1.1. THE SEPARATE COMPONENTS OR DISTINCT LAYERS OF THESE SYSTEMS SHALL BE MODELED TO THE STANDARD PRACTICE SCHOOL CLASSROOM USING THE CLASSROOM CEILING AREA AND/OR WALL AREA AS APPROPRIATE. FOR SYSTEMS CONSISTING OF MORE THAN ONE DISTINCT LAYER (E.G., WALLS COMPRISED OF INSULATION, WALL PANEL AND WALL COVERING), ALL LAYERS SHALL INDIVIDUALLY MEET THE REQUIREMENTS OF THE STANDARD PRACTICE.

CARPET SYSTEMS
ALL CARPET SYSTEMS SHALL MEET THE REQUIREMENTS OF THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.4. ALL CARPET SHALL BE PER THE CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM OR SHALL BE LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE. ALL CARPET PAD SHALL BE PER THE CARPET AND RUG INSTITUTE GREEN LABEL PROGRAM.

PRIMARY EXTERIOR DOORS
ALL WALL AND FLOOR SURFACES WITHIN 24" OF A PRIMARY EXTERIOR DOOR SHALL BE NON-ABSORBANT. ALL PRIMARY EXTERIOR DOORS SHALL BE PROTECTED BY AN OVERHANG, AWNING OR SIMILAR ELEMENT NOT LESS THAN 48" IN DEPTH.

OUTDOOR AIR QUALITY

HVAC, REFRIGERATION AND FIRE SUPPRESSION SYSTEMS SHALL NOT CONTAIN CFCs OR HALONS.

CALGREEN SPECIFICATIONS 2

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
DESIGN ENERGY VALUES BY ZONE & CALGREEN SPEC'S

LICENSED ARCHITECT
JACK A. SHIVELY III
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD
SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
1
2
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4
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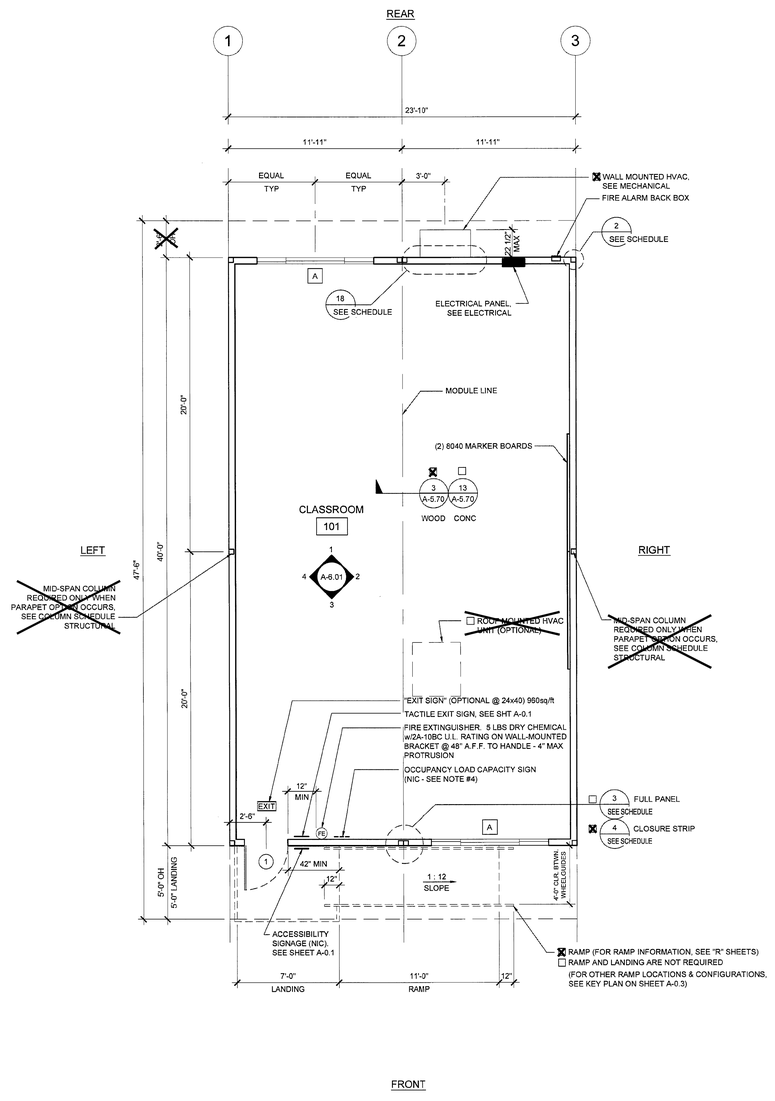
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14
P.C. SHEET NUMBER
A-0.7



NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. (PER IR 16-1.130

   (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURERS NAME AND SERIAL NUMBER. DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, WIND SPEED, EXPOSURE CATEGORY, Kzt = 1.0 2013 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_S
2. VINYL TACKBOARD INTERIOR FINISH SHALL COMPLY WITH CBC SECTION 803.7.
3. LOCATIONS OF DOORS AND WINDOWS MAY VARY PER JOB. (IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA)
4. POSTING OF OCCUPANCY LOAD SIGNS SHALL COMPLY WITH CBC 1004.3 (NOT IN MODULAR MANUFACTURER'S SCOPE OF WORK)
5. IF BUILDING IS TO BE RELOCATED, SEE RELOCATION SHEETS REL-101 & REL-102.
6. FOR BUILDINGS THAT ARE MANUFACTURED IN-PLANT, THE IN-PLANT INSPECTOR IS TO ATTACH A VERIFIED REPORT INSIDE EACH BUILDING, WHICH SHALL INDICATE THE MANUFACTURER'S NAME AND THE SERIAL NUMBER FOR EACH BUILDING MODULE AS WELL AS THE DSA FILE AND APPLICATION NUMBERS. PER IR-16-1.13

DETAIL SCHEDULE

FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

MARKING & IDENTIFICATION OF FIRE RATED CONSTRUCTION. (CBC 703.7)
FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL:

1. BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES;
2. BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND
3. INCLUDE LETTERING NOT LESS THAN 3" IN HEIGHT AND A MIN. 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING. "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER SIMILAR WORDING.

WALL LEGEND

- NOMINAL 4" WALL STUD ☒
- NOMINAL 6" WALL STUD ☒
- NOMINAL 8" WALL STUD ☐
- A WINDOW PER SCHEDULE SHEET A-0.2
- # DOOR PER SCHEDULE SHEET A-0.2

NOTE:
IF PARAPET IS USED & HIGHER THAN 18", END WALLS MUST BE 2x6 @ 24" O.C.

THIS PLAN MAY INCLUDE TO VARIOUS EXERCISABLE OPTIONS APPLICABLE TO THE PC, SUCH AS PARTITION WALLS, PLUMBING, ETC. FOR REFERENCE PURPOSES. OPTIONS CAN BE APPLIED AS REQUIRED TO THE PC'S BUILDING SIZES

FLOOR PLAN

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

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5303 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR PLAN
24' x 40'

LICENSED ARCHITECT NICK MANIVELLI III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE DSA APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
ACCEPTED FLS SS
DATE APR 1 4 2015

REVISIONS
1
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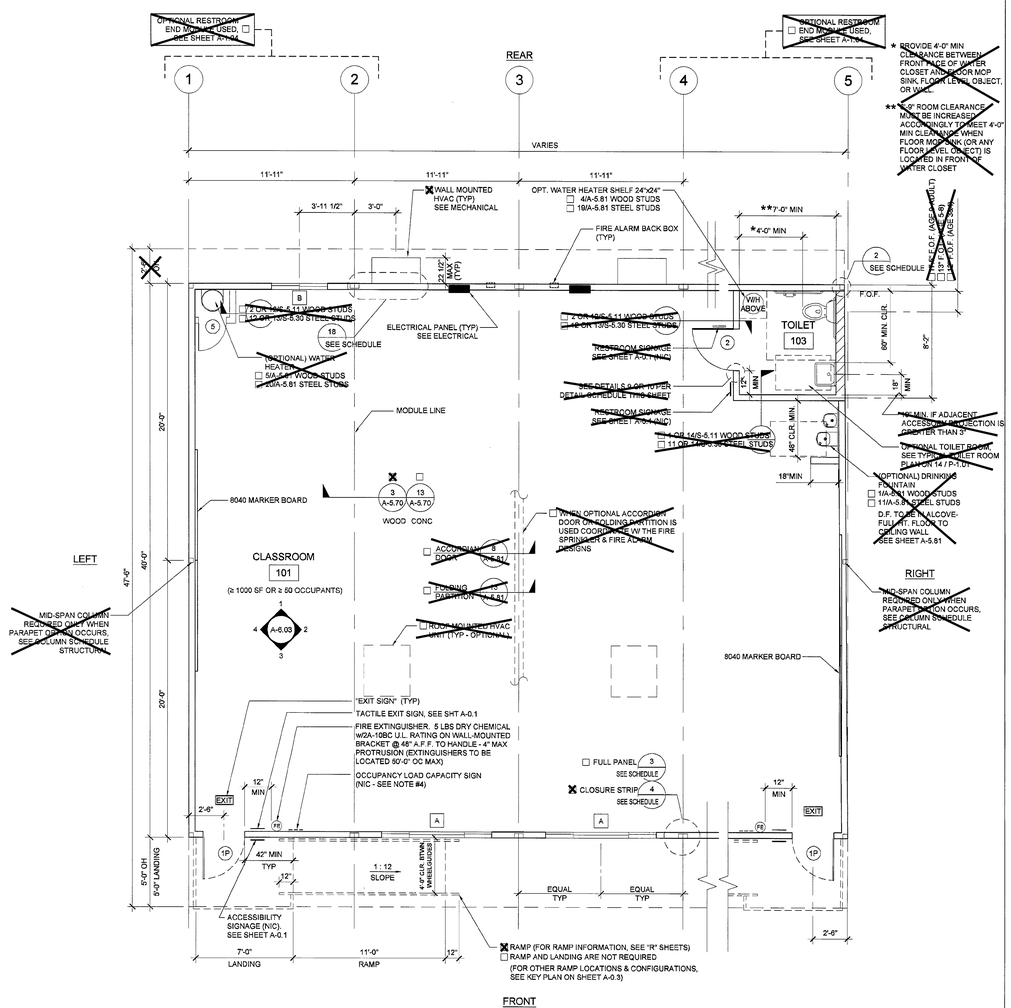
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

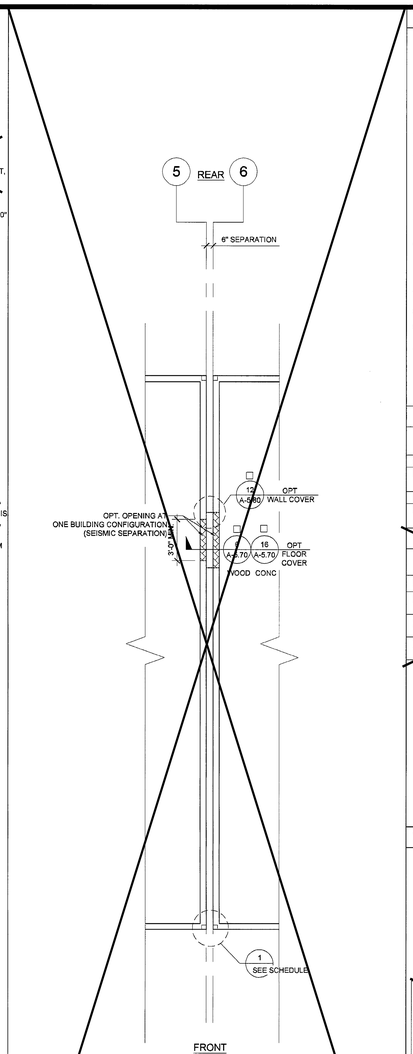
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-1.01



NOTE:
- HOT WATER LINE INSULATION TO BE INSTALLED AT FIRST 8' FROM THE WATER HEATER ON NON-RECIRCULATING SYSTEMS
- ALL HOT WATER LINES TO BE INSULATED WHEN RE-CIRCULATING SYSTEMS ARE USED.

FLOOR PLAN SCALE: 1/4" = 1'-0" 2



FLOOR SEPARATION PLAN OPTION SCALE: 1/4" = 1'-0" 1

NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. (PER IR 16-1.130

   (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURERS NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, WIND SPEED, EXPOSURE CATEGORY, Kzt = 1.0 2013 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_{ds}
2. VINYL TACKBOARD INTERIOR FINISH SHALL COMPLY WITH CBC SECTION 803.7.
3. LOCATIONS OF DOORS AND WINDOWS MAY VARY PER JOB. (IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA)
4. POSTING OF OCCUPANCY LOAD SIGNS SHALL COMPLY WITH CBC 1004.3 (NOT IN MODULAR MANUFACTURER'S SCOPE OF WORK)
5. IF BUILDING IS TO BE RELOCATED, SEE RELOCATION SHEETS REL-101 & REL-102.
6. FOR BUILDINGS THAT ARE MANUFACTURED IN-PLANT, THE IN-PLANT INSPECTOR IS TO ATTACH A VERIFIED REPORT INSIDE EACH BUILDING, WHICH SHALL INDICATE THE MANUFACTURER'S NAME AND THE SERIAL NUMBER FOR EACH BUILDING MODULE AS WELL AS THE DSA FILE AND APPLICATION NUMBERS. PER IR-16-1.13
7. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION.
8. INTERIOR WALLS MAY BE ADDED TO FLOOR PLAN. SEE STRUCTURAL
9. FOR CASEWORK, TEACHER WALL, OR TV BLOCKING OPTIONS, SEE SHEET A-5.80
10. IF AN INTERIOR PARTITION WALL IS REMOVED, 2 EXITS ARE REQUIRED AND MUST BE SEPARATED BY A DISTANCE APART EQUAL TO OR NOT LESS THAN ONE-HALF OF THE MAXIMUM OVERALL DIAGONAL DIMENSION FOR UNSPRINKLERED BUILDINGS AND ONE-THIRD THE MAXIMUM OVERALL DIAGONAL DIMENSION FOR SPRINKLERED BUILDING PER CBC SECTION 1015.2.1

DETAIL SCHEDULE

FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS(WUI COMPLIANT DURATEMP)	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
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☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

MARKING & IDENTIFICATION OF FIRE RATED CONSTRUCTION. (CBC 703.7)
FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL:
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2. BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND
3. INCLUDE LETTERING NOT LESS THAN 3" IN HEIGHT AND A MIN. 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING, "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER SIMILAR WORDING.

WALL LEGEND

- NOMINAL 4" WALL STUD ☒
- NOMINAL 6" WALL STUD ☒
- NOMINAL 8" WALL STUD ☐
- A WINDOW PER SCHEDULE SHEET A-0.2
- # DOOR PER SCHEDULE SHEET A-0.2

NOTE:
IF PARAPET IS USED & HIGHER THAN 18", END WALLS MUST BE 2x6 @ 24" O.C.

THIS PLAN MAY INCLUDE THE VARIOUS EXERCISABLE OPTIONS APPLICABLE TO THE PC SUCH AS PARTITION WALLS, PLUMBING, ETC. FOR REFERENCE PURPOSES. OPTIONS CAN BE APPLIED AS REQUIRED TO THE PC'S BUILDING SIZES

SYMBOLS LEGEND

A = ADULT DIMENSIONS
E = ELEMENTARY DIMENSIONS
K = KINDERGARTEN DIMENSIONS

60" CIRCLE CLEAR SPACE

30"x48" CLEAR SPACE

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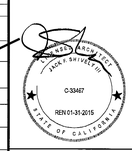
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR PLAN
48' TO 120' x 40'



ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
DSA-881 (REV. 10/08)
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AP FLS SS
DATE APR 14 2015

REVISIONS
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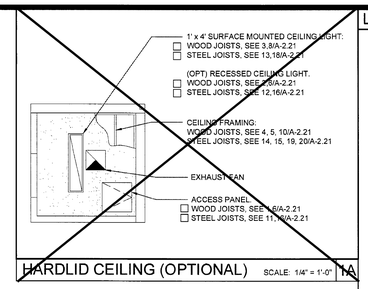
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

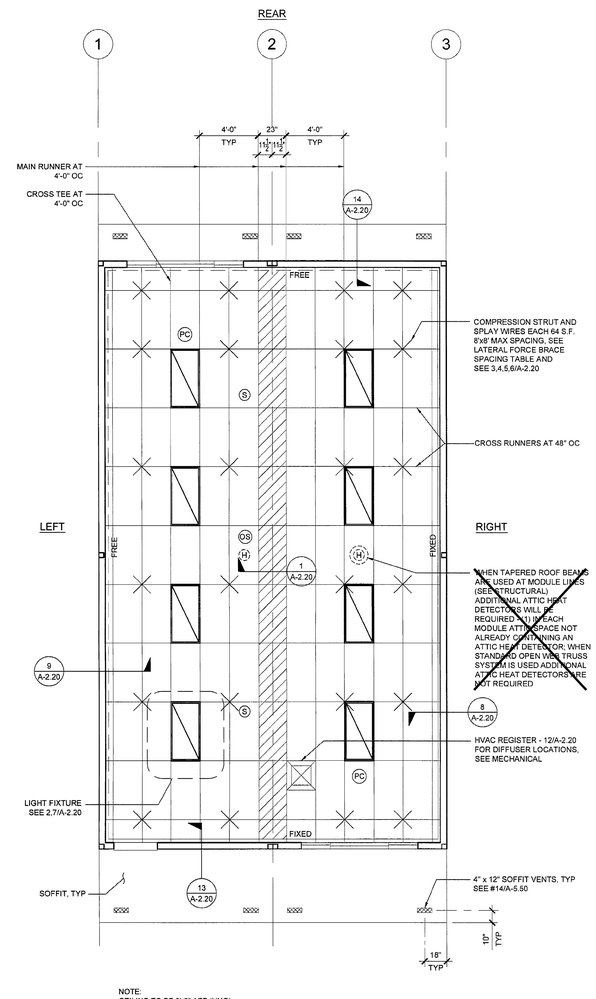
P.C. SHEET NUMBER
A-1.03

NOT USED | 2

NOT USED | 3



HARDLID CEILING (OPTIONAL) SCALE: 1/4" = 1'-0" | 4



NOTE:
CEILING TO BE 8'-6" AFF (UNO)

REFLECTED CEILING PLAN SCALE: 1/4" = 1' - 0" | 1

LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2' x 4' RECESSED LIGHT FIXTURE
- "OPTIONAL" 1' x 4' RECESSED LIGHT FIXTURE
- SPLAY WIRE
- RETURN AIR REGISTER
- SUPPLY AIR REGISTER
- CEILING EXHAUST FAN
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- PC — CEILING MOUNTED PHOTOCELL
- S — CEILING MOUNTED SMOKE DETECTOR
- H — ATTIC MOUNTED HEAT DETECTOR

NOTE:
FOR ALL REFLECTED CEILING NOTES SEE SHEET A-0.1

LATERAL FORCE BRACE SPACING

DESIGN SPECTRAL ACCELERATION PARAMETER (S_{DS})	BRACE ASSEMBLY SPACING
LESS THAN OR EQUAL TO 1.15	12' X 12' - FULL BUILDING HEIGHT
GREATER THAN 1.15 AND LESS THAN OR EQ. TO 1.73	8' X 12' - FOR z/h GREATER THAN 0.5 12'X12' FOR z/h LESS THAN OR EQUAL TO 0.5
GREATER THAN 1.73	8'X8' FOR z/h GREATER THAN 0.5 8'X12' FOR z/h LESS THAN OR EQUAL TO 0.5

z = HEIGHT IN STRUCTURE OF POINT OF ATTACHMENT OF CEILING W/ RESPECT TO BASE.
h = AVERAGE ROOF HEIGHT OF THE STRUCTURE WITH RESPECT TO THE BASE.

T-BAR SCHEDULE

ARMSTRONG PART NUMBERS PA-041

MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328

STANDARD 2" WALL ANGLE WITH BERC-2 CLIP (ICC #ESR-1308)

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
REFLECTED CEILING PLAN
24' x 40'

REGISTERED ARCHITECT
JACK BANIVET
C-33487
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
NOT FOR CONSTRUCTION
(A SEPARATE STRUCT APPLICATION IS REQUIRED FOR CONSTRUCTION)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC. ___ SL ___ SS ___
DATE APR 14 2015

REVISIONS
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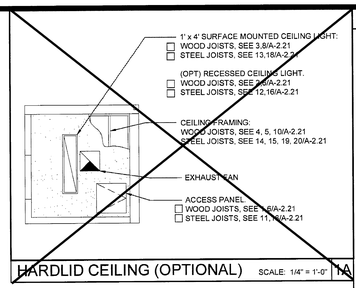
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

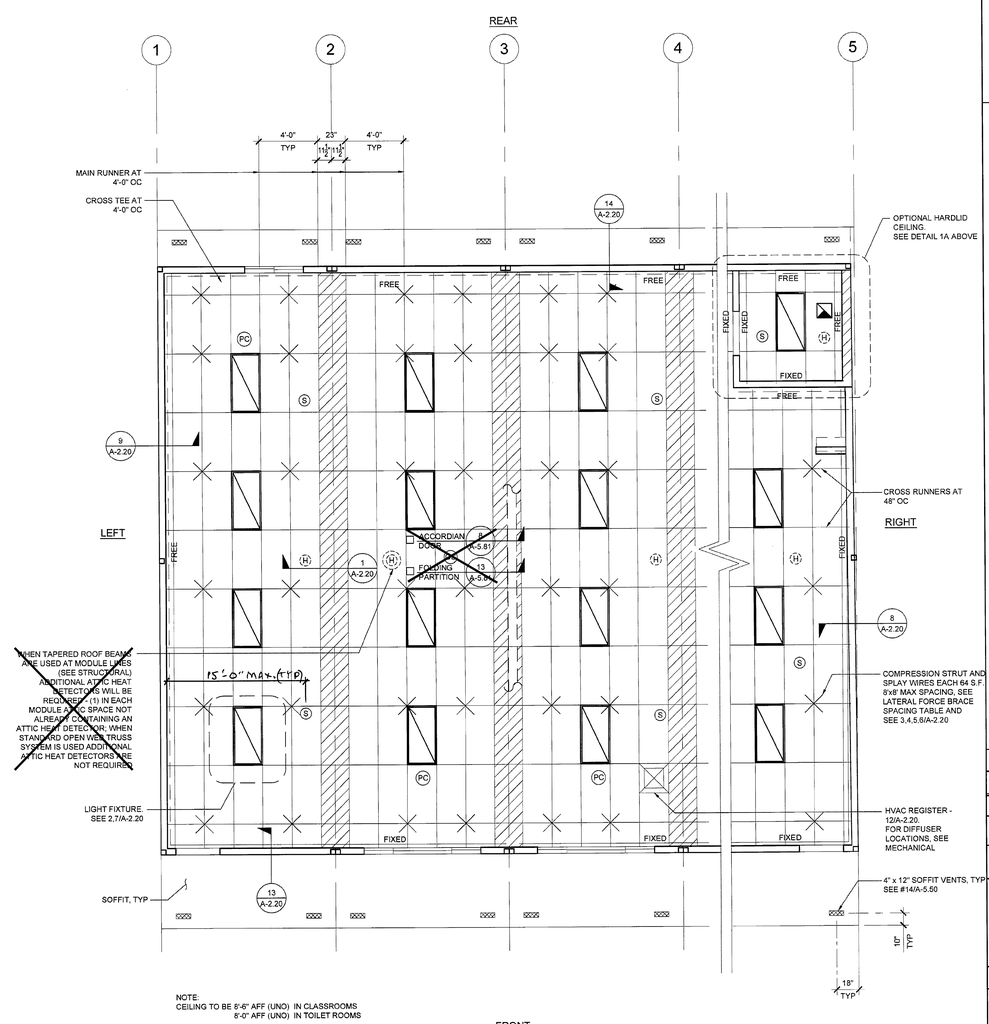
P.C. SHEET NUMBER
A-2.01

NOT USED | 2

NOT USED | 3



HARDLID CEILING (OPTIONAL) SCALE: 1/4" = 1'-0" | 1A



NOTE:
CEILING TO BE 8'-6" AFF (UNO) IN CLASSROOMS
8'-0" AFF (UNO) IN TOILET ROOMS

REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 1

LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2' x 4' RECESSED LIGHT FIXTURE
- "OPTIONAL" 1' x 4' RECESSED LIGHT FIXTURE
- SPLAY WIRE
- RETURN AIR REGISTER
- SUPPLY AIR REGISTER
- CEILING EXHAUST FAN
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- PC — CEILING MOUNTED PHOTOCELL
- S — CEILING MOUNTED SMOKE DETECTOR
- H — ATTIC MOUNTED HEAT DETECTOR

NOTE:
FOR ALL REFLECTED CEILING NOTES
SEE SHEET A-0.1

LATERAL FORCE BRACE SPACING

DESIGN SPECTRAL ACCELERATION PARAMETER (S_{DS})	BRACE ASSEMBLY SPACING
LESS THAN OR EQUAL TO 1.15	12' X 12' - FULL BUILDING HEIGHT
GREATER THAN 1.15 AND LESS THAN OR EQ. TO 1.73	8' X 12' - FOR z/h GREATER THAN 0.5 12'X12' FOR z/h LESS THAN OR EQUAL TO 0.5
GREATER THAN 1.73	8'X8' FOR z/h GREATER THAN 0.5 8'X12' FOR z/h LESS THAN OR EQUAL TO 0.5

z = HEIGHT IN STRUCTURE OF POINT OF ATTACHMENT OF CEILING W/ RESPECT TO BASE.
h = AVERAGE ROOF HEIGHT OF THE STRUCTURE WITH RESPECT TO THE BASE.

T-BAR SCHEDULE

ARMSTRONG PART NUMBERS PA-041

MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328

STANDARD 2" WALL ANGLE WITH BERC-2 CLIP (ICC #ESR-1308)

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
REFLECTED CEILING PLAN
48' TO 120' x 40'

LICENSED ARCHITECT PATRICK A. ANTI-PELLIZZI C-33497 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PERMIT IS REQUIRED FOR CONSTRUCTION OF FOUNDATION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC. — FLS. SS-300
DATE APR. 14 2015

REVISIONS
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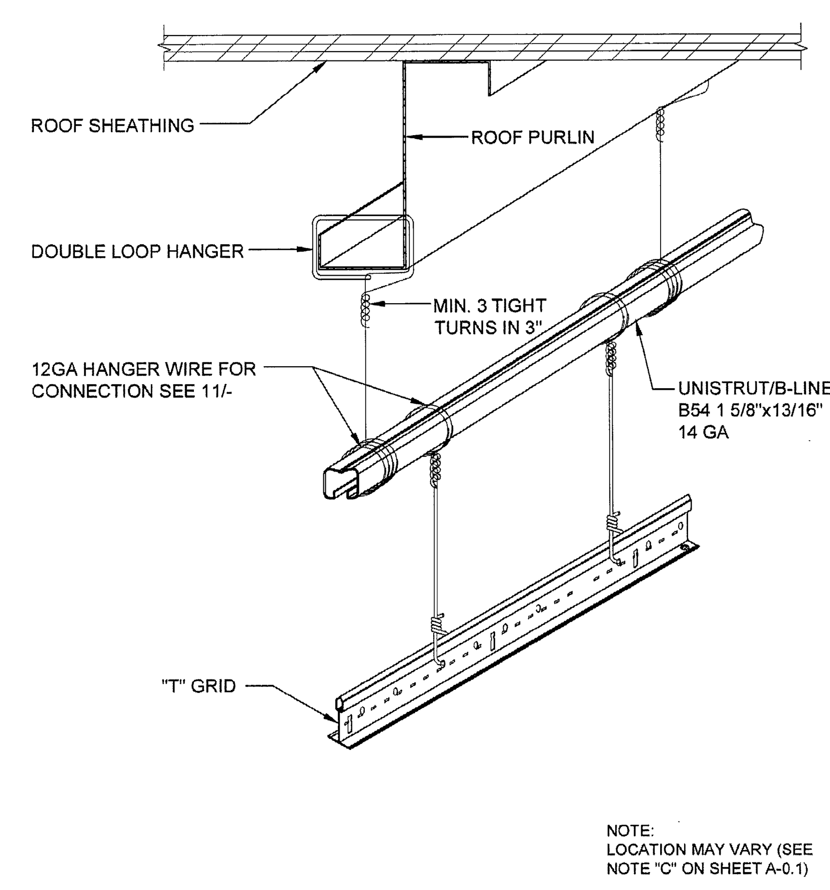
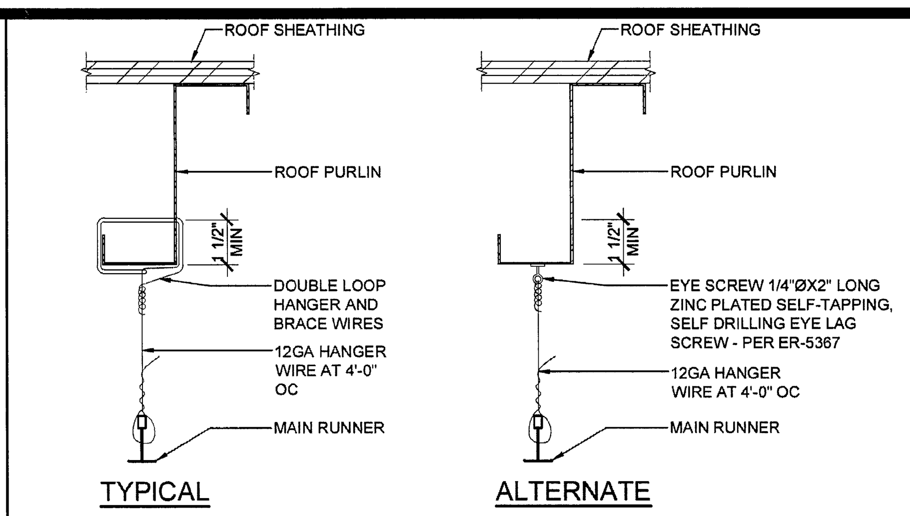
'SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

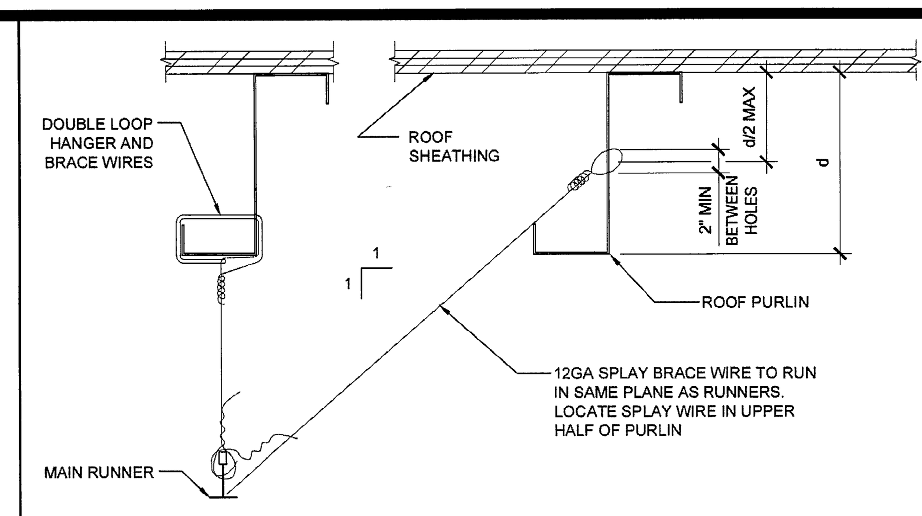
P.C. SHEET NUMBER
A-2.03



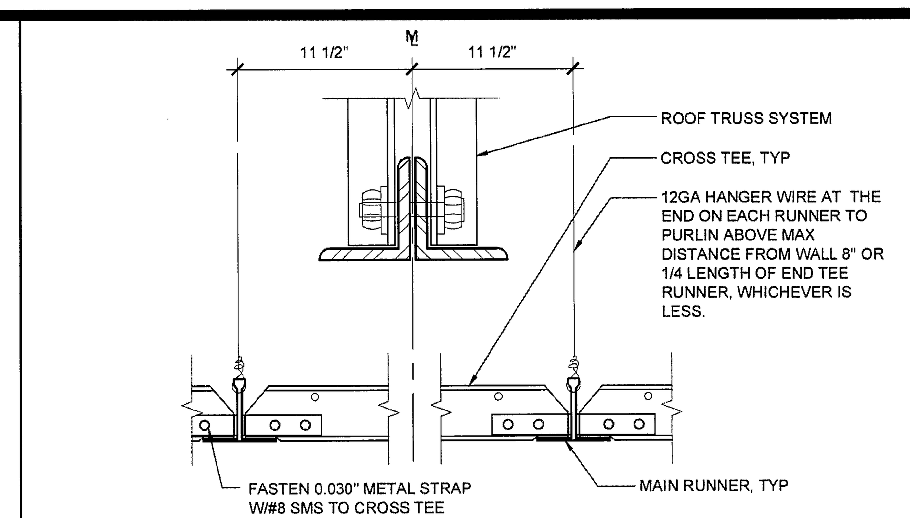
TRAPEZE DETAIL 17



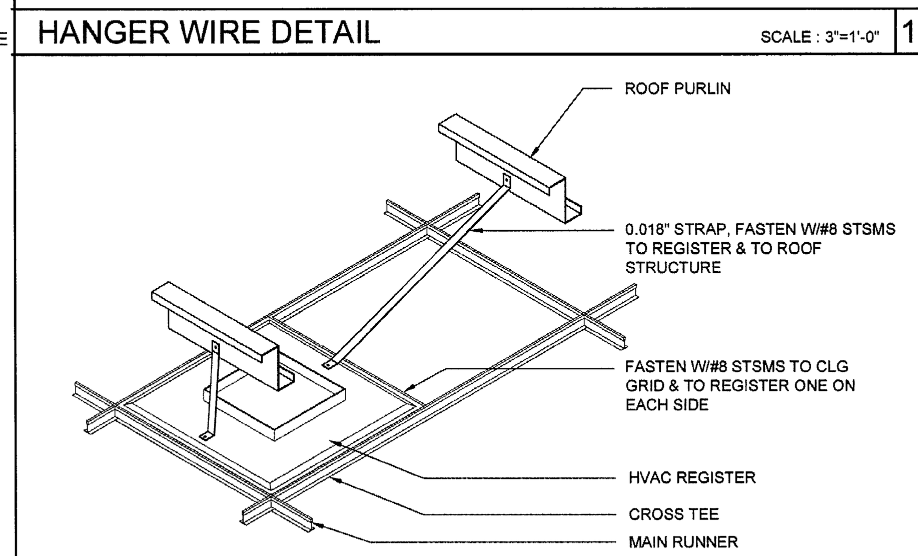
HANGER WIRE DETAIL SCALE : 3"=1'-0" 11



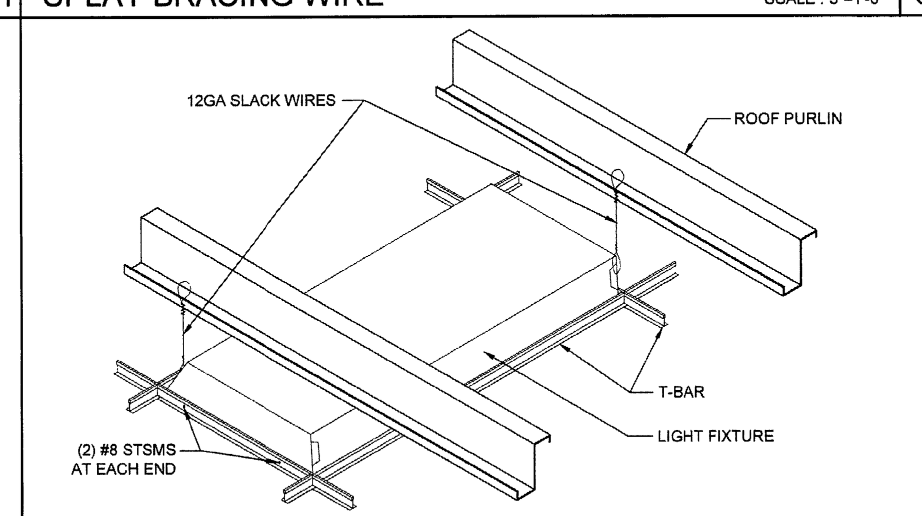
SPLAY BRACING WIRE SCALE : 3"=1'-0" 6



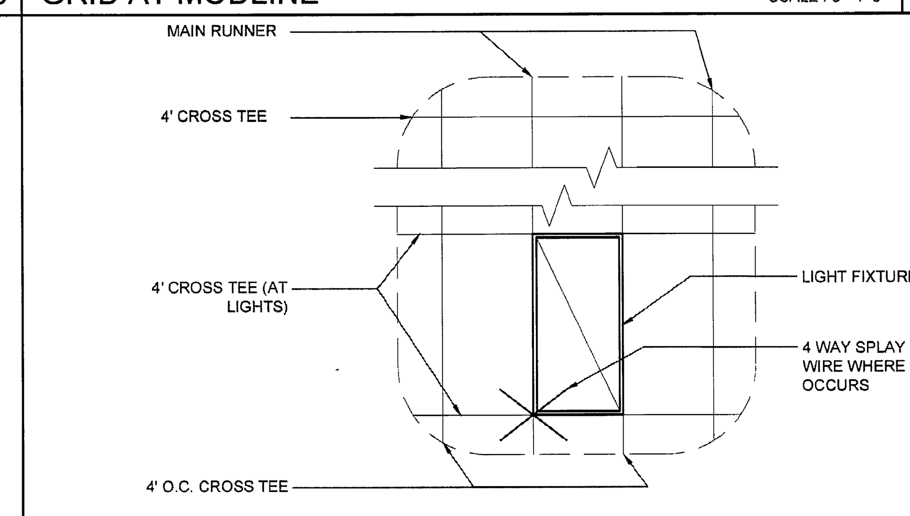
GRID AT MODLINE SCALE : 3"=1'-0" 1



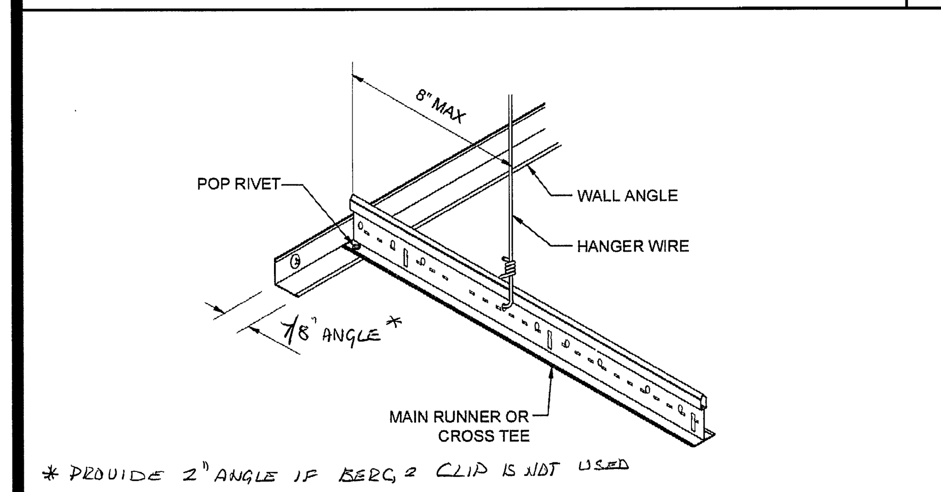
HVAC REGISTER MOUNTING SCALE : NTS 12



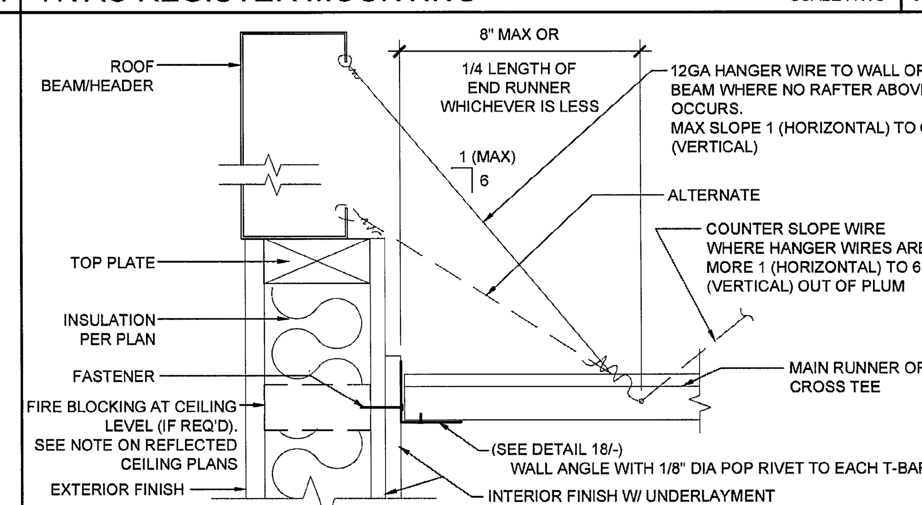
LIGHT FIXTURE MOUNTING SCALE : NTS 7



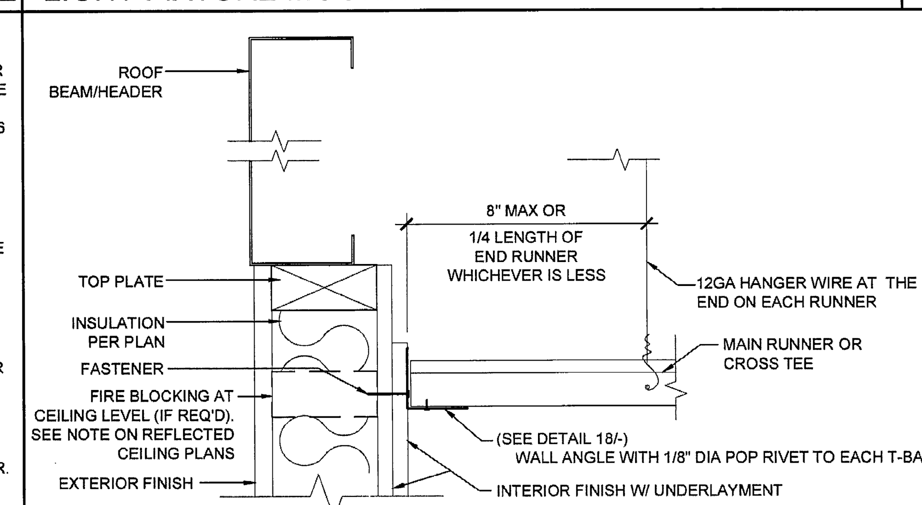
4' CROSS TEE AT LIGHTS SCALE : 3/8"=1'-0" 2



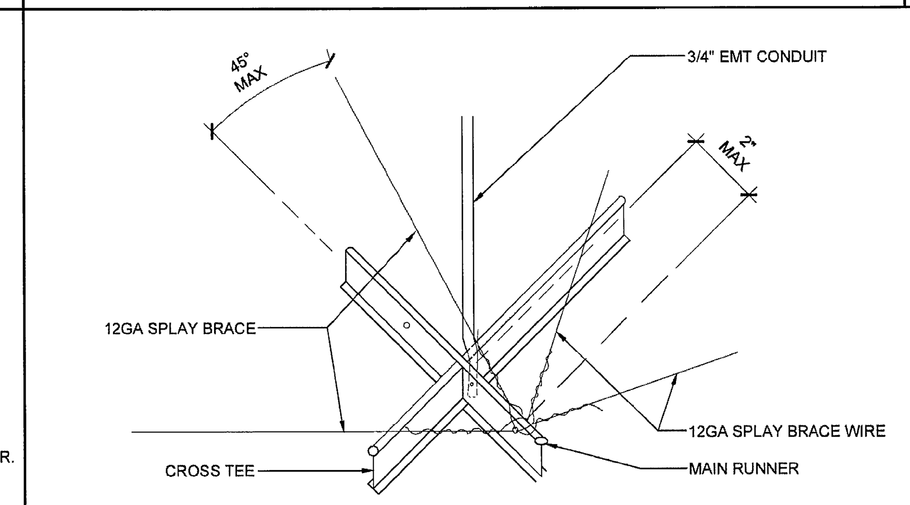
FIXED SIDE SCALE : NTS 18



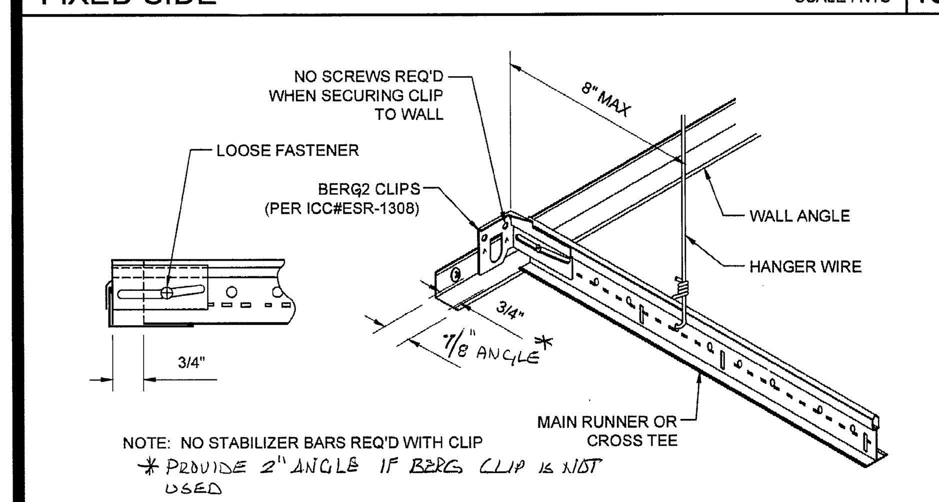
FIXED SIDE (ENDWALL) SCALE : 3"=1'-0" 13



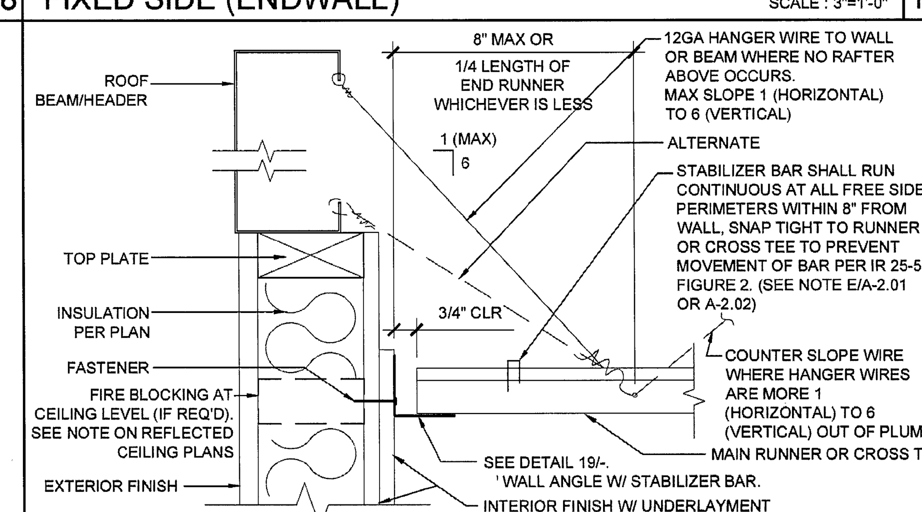
FIXED SIDE (SIDEWALL) SCALE : 3"=1'-0" 8



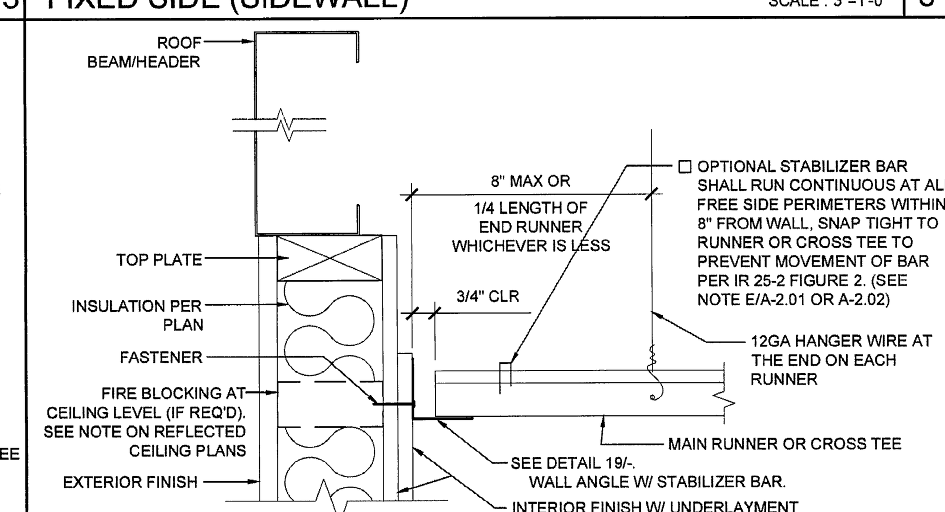
SEISMIC SPLAY - 4 WAY SCALE : NTS 3



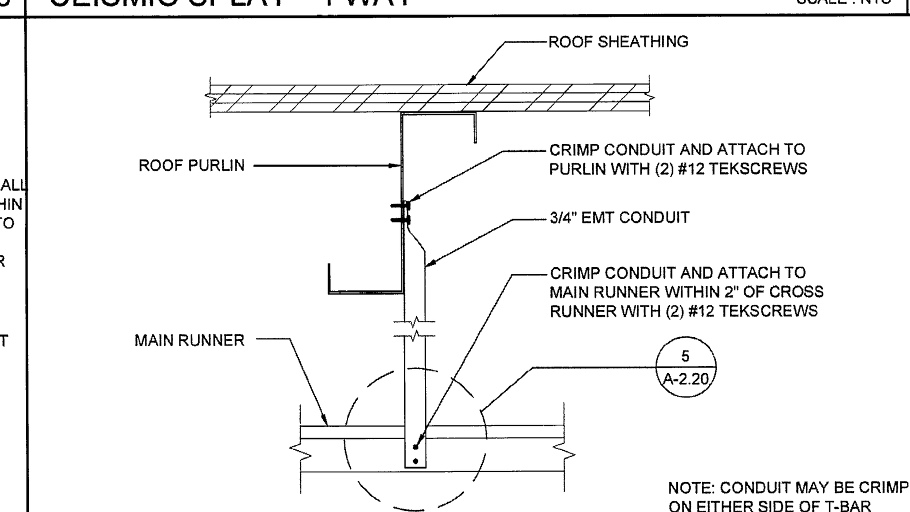
FREE SIDE SCALE : NTS 19



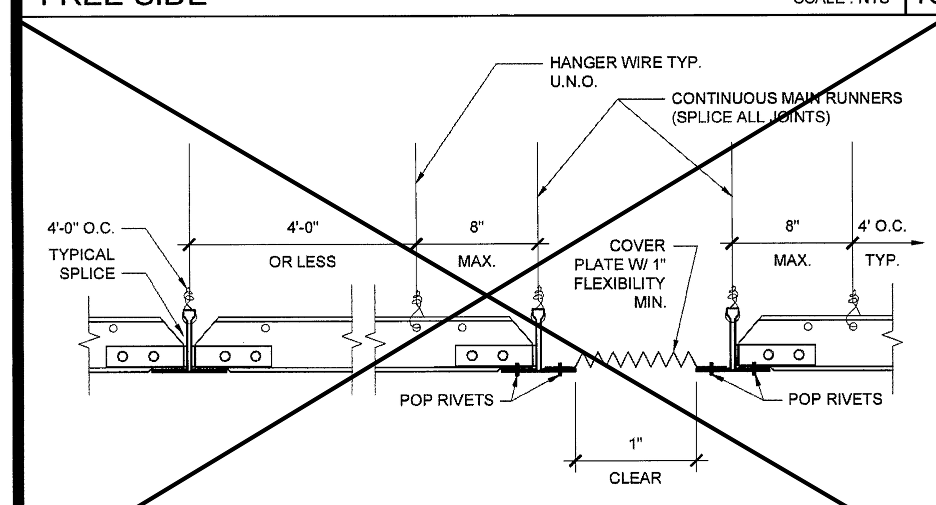
FREE SIDE (ENDWALL) SCALE : 3"=1'-0" 14



FREE SIDE (SIDEWALL) SCALE : 3"=1'-0" 9



COMPRESSION STRUT SCALE : 3"=1'-0" 4

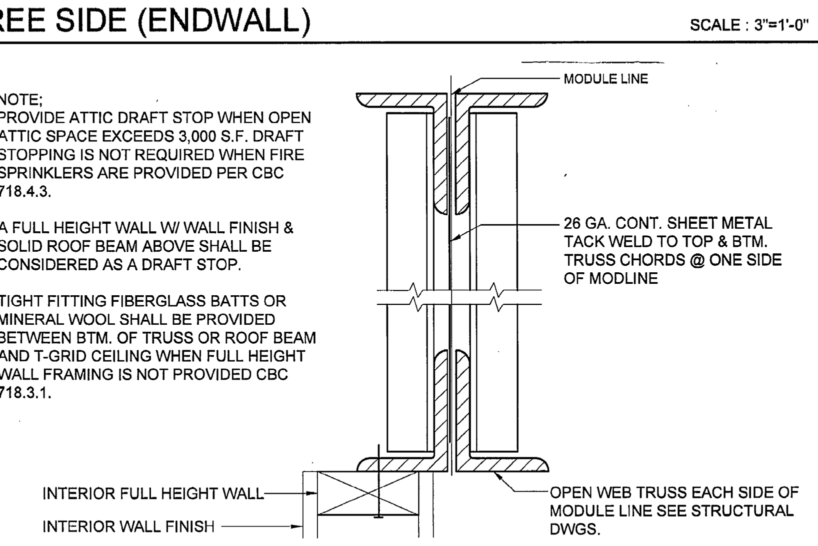


GRID SEISMIC SEPARATION JOINT SCALE : 3"=1'-0" 20

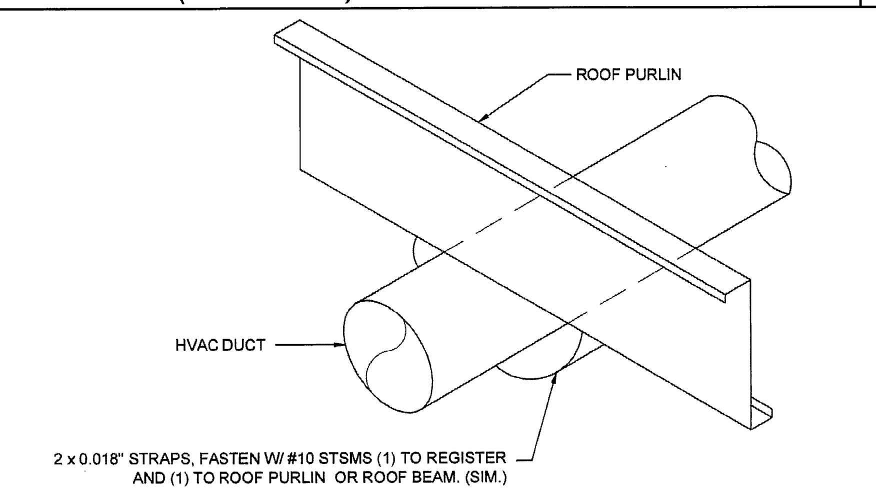
NOTE;
PROVIDE ATTIC DRAFT STOP WHEN OPEN ATTIC SPACE EXCEEDS 3,000 S.F. DRAFT STOPPING IS NOT REQUIRED WHEN FIRE SPRINKLERS ARE PROVIDED PER CBC 718.4.3.

A FULL HEIGHT WALL W/ WALL FINISH & SOLID ROOF BEAM ABOVE SHALL BE CONSIDERED AS A DRAFT STOP.

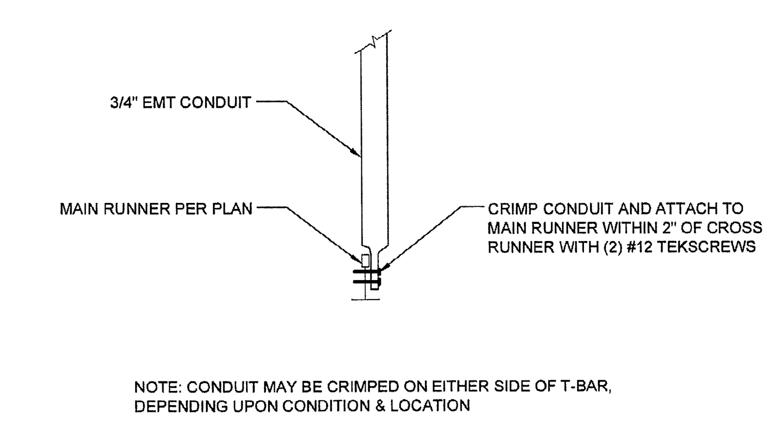
TIGHT FITTING FIBERGLASS BATTS OR MINERAL WOOL SHALL BE PROVIDED BETWEEN BTM. OF TRUSS OR ROOF BEAM AND T-GRID CEILING WHEN FULL HEIGHT WALL FRAMING IS NOT PROVIDED CBC 718.3.1.



ATTIC DRAFT STOP SCALE : 3"=1'-0" 15



HVAC DUCTWORK MOUNTING SCALE: NTS 10



COMPRESSION STRUT SCALE : 3"=1'-0" 5

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
CEILING DETAILS
T-GRID

LICENSED ARCHITECT
JACK A. SHIVELY III
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS

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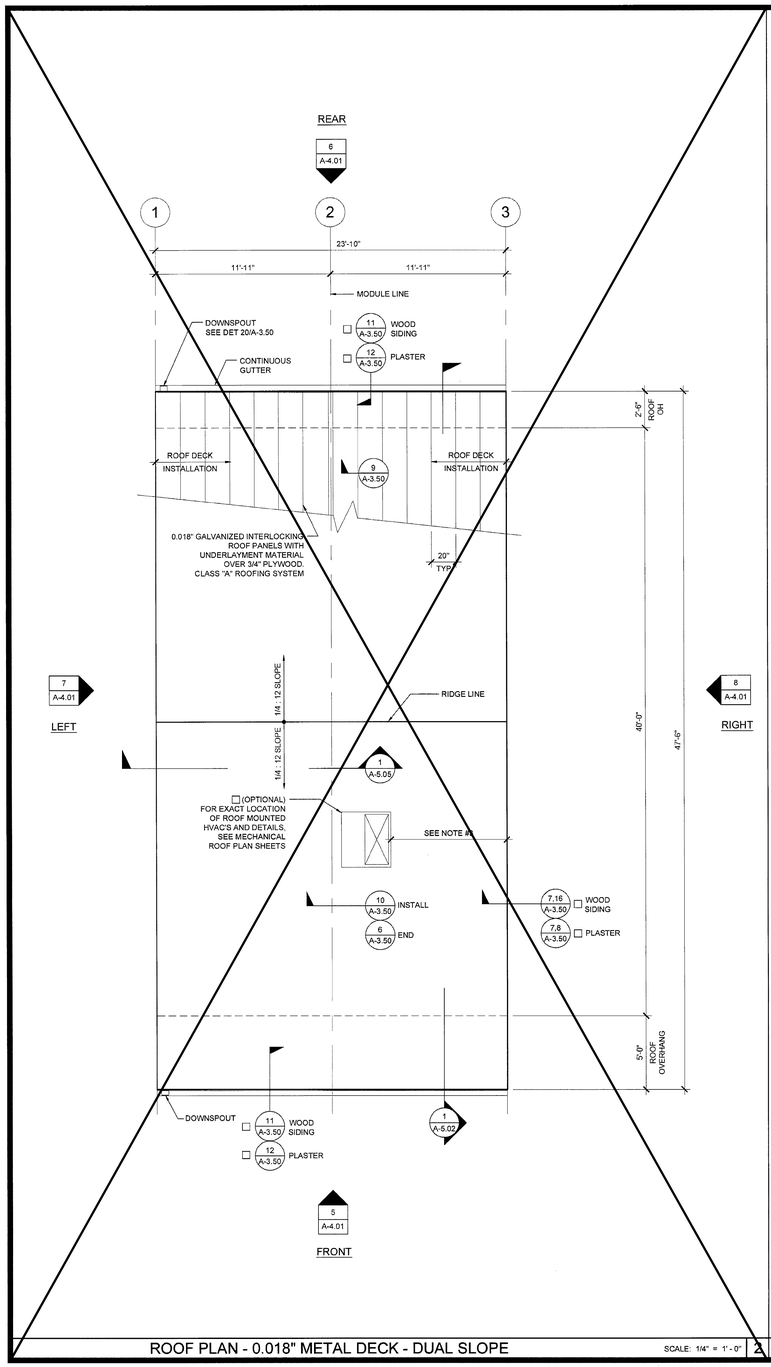
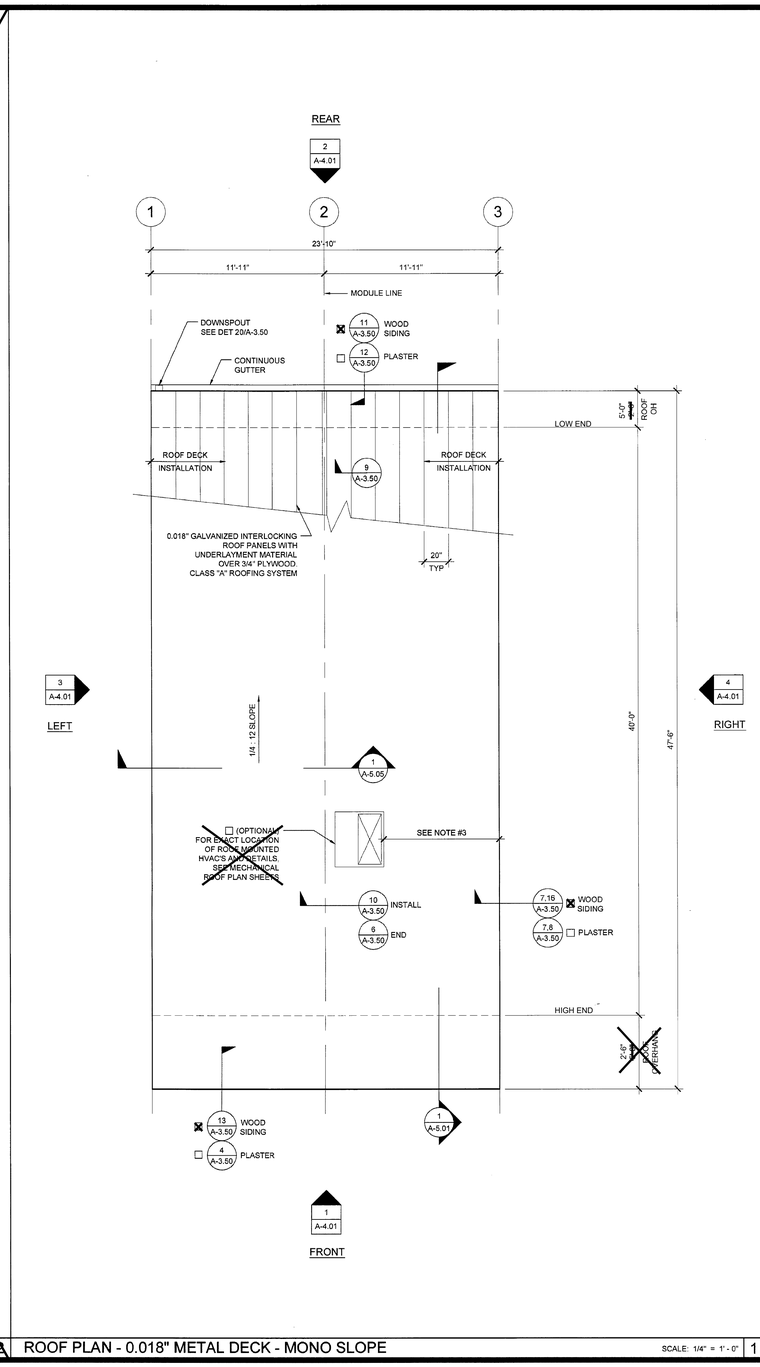
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-2.20



ROOF PLAN - 0.018" METAL DECK - DUAL SLOPE SCALE: 1/4" = 1' - 0" 2



ROOF PLAN - 0.018" METAL DECK - MONO SLOPE SCALE: 1/4" = 1' - 0" 1

NOTES

1. GROUP E OCCUPANCIES - BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR PROVIDE 42" MIN. PARAPET OR GUARDRAIL CBC 2013 SECTIONS 1013.6 & 1013.7.
4. FOR SPECIFIC DOWNSPOUT LOCATIONS FOR VARIOUS BUILDING SIZES, SEE KEY PLANS ON SHEET A-0.3. LOCATE ONE (1) DOWNSPOUT FOR EVERY THREE (3) MODULES (TYP).
5. ANY BUILDING OVER 3,000 SQ/FT REQUIRES A DRAFT STOP UNLESS BUILDING IS EQUIPPED WITH FIRE SPRINKLERS.

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE
SCIENCE BUILDING

SHEET TITLE:
ROOF PLAN
24'x40' - 0.018" METAL DECK
MONO OR DUAL SLOPE

LICENSED ARCHITECT
FRANK SPIVELLO
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD
SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE 2013 CBC
A REFERENCE DOCUMENT FOR FOUNDATION
FOR CONSTRUCTION IS REQUIRED

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AC. FLS SS.MW
DATE APR 1 4 2015

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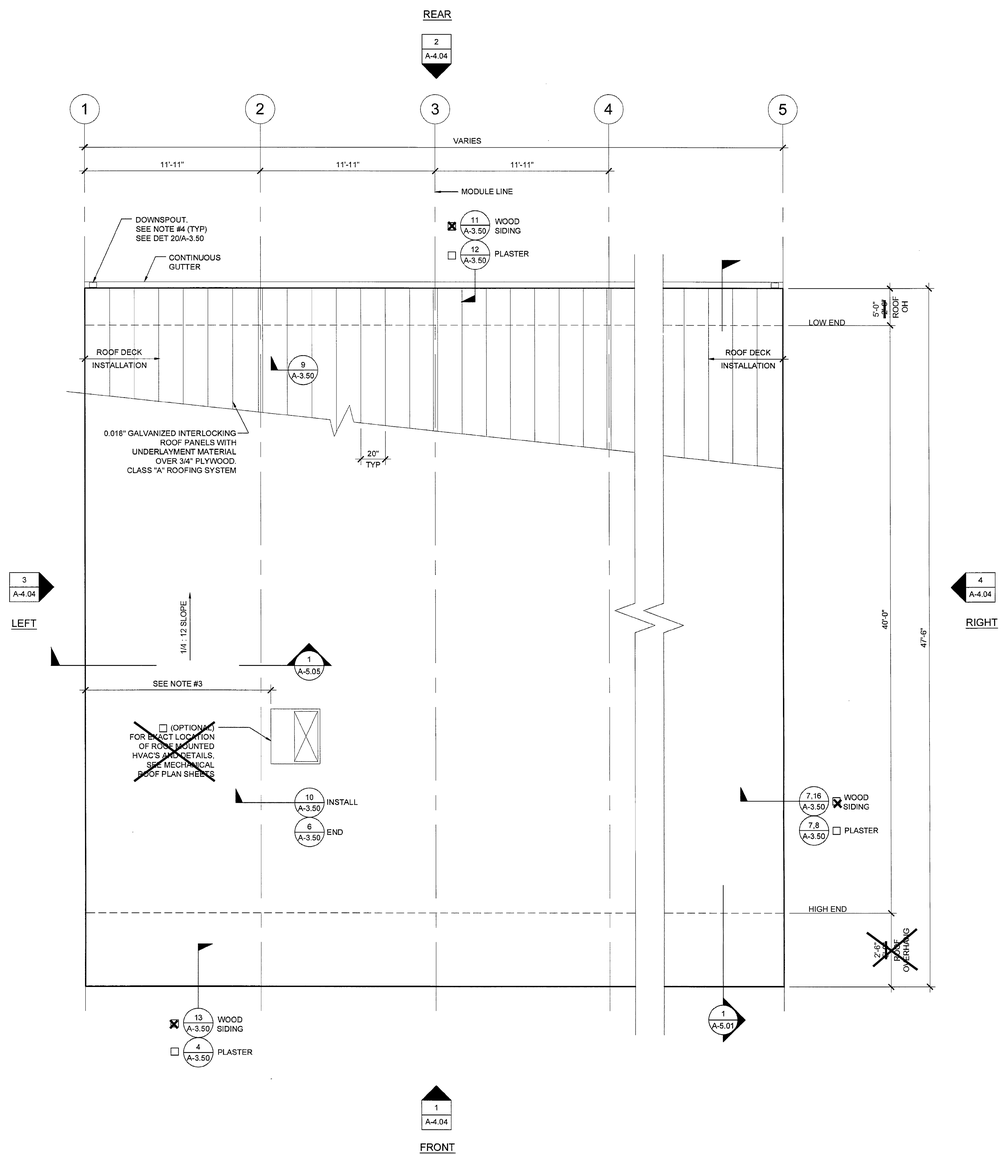
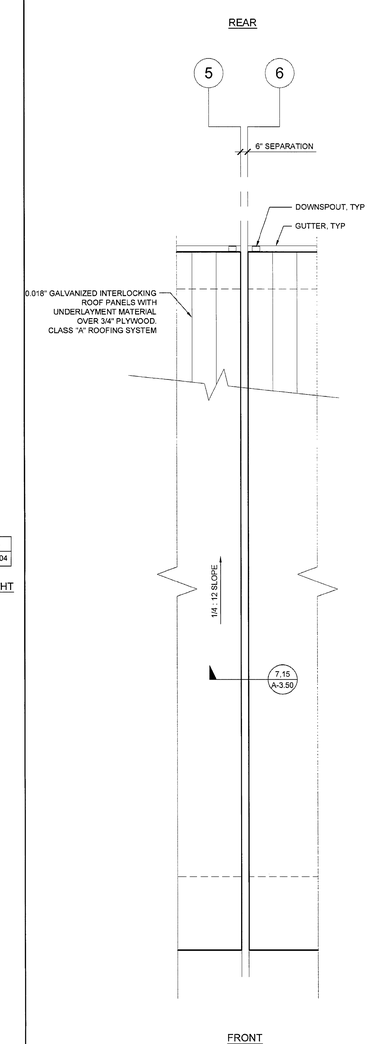
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-3.01



ROOF PLAN - 0.018" METAL DECK - MONO SLOPE SCALE: 1/4" = 1' - 0" 2



ROOF SEP. PLAN OPTION SCALE: 1/4" = 1' - 0" 1

NOTES

1. GROUP E OCCUPANCIES - BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
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3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES, OR PROVIDE 42" MIN. PARAPET OR GUARDRAIL. CBC 2013 SECTIONS 1013.6 & 1013.7.
4. FOR SPECIFIC DOWNSPOUT LOCATIONS FOR VARIOUS BUILDING SIZES, SEE KEY PLANS ON SHEET A-0.3. LOCATE ONE (1) DOWNSPOUT FOR EVERY THREE (3) MODULES (TYP)
5. ANY BUILDING OVER 3,000 SQ/FT REQUIRES A DRAFT STOP UNLESS BUILDING IS EQUIPPED WITH FIRE SPRINKLERS.

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ROOF PLAN
48' TO 120' x 40'
0.018" METAL DECK
MONO SLOPE

LICENSED ARCHITECT
PATRICK A. SHIRLEY III
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE CONSTRUCTION AND CONSTRUCTION IS REQUIRED

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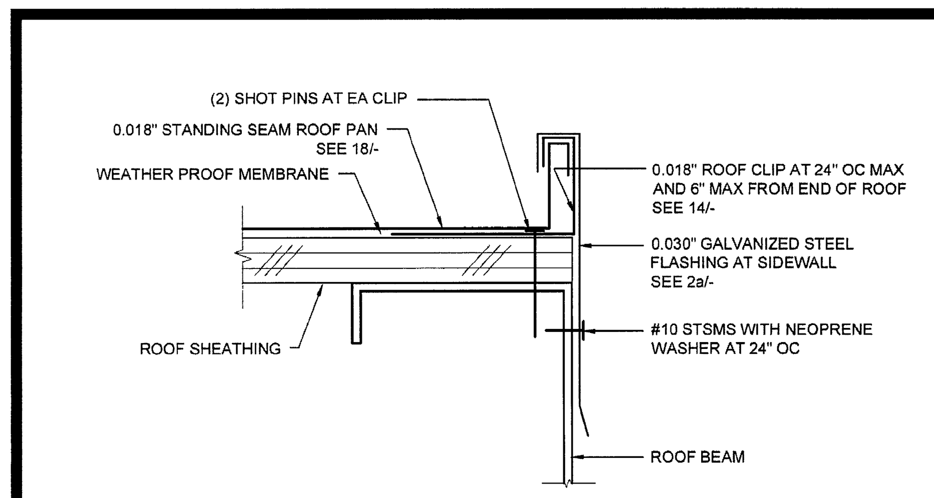
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

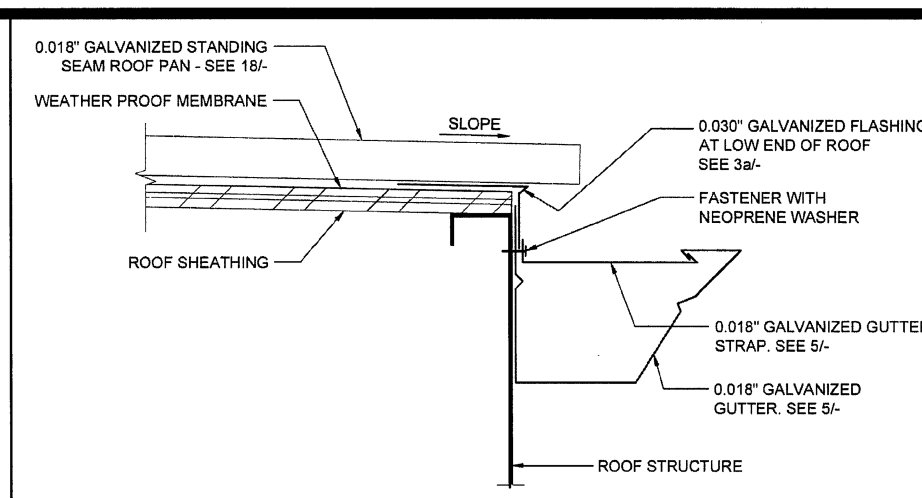
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
A-3.03



REF: A3.01, A3.02, A3.03, A3.04

ROOF FLASHING AT SIDEWALL SCALE : 6"=1'-0" | 16



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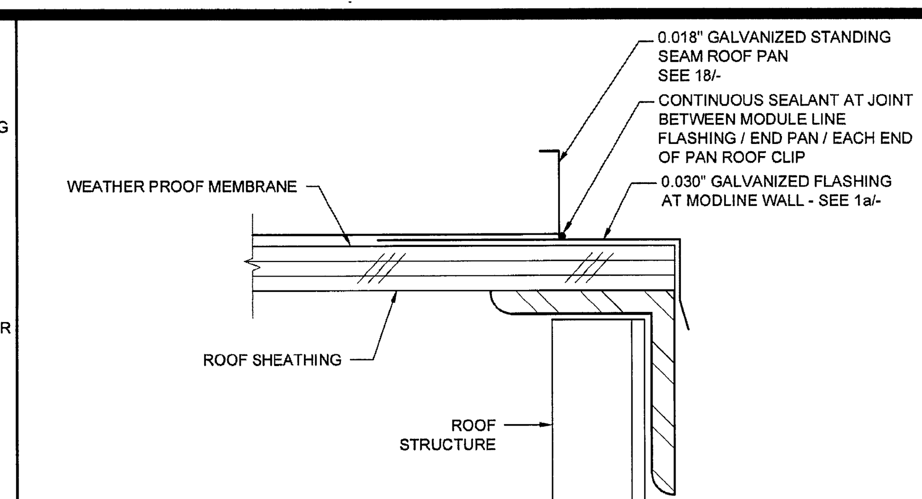
GUTTER AT ROOF FASCIA BEAM SCALE : 3"=1'-0" | 11



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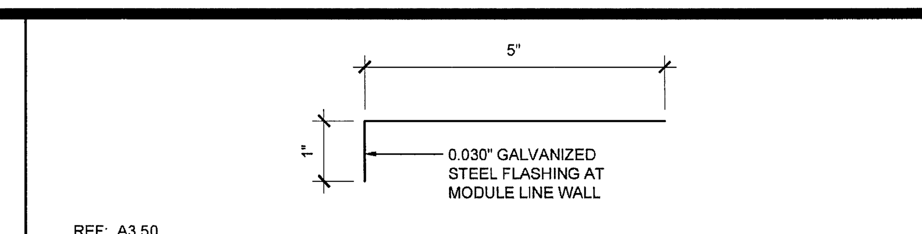
END ROOF PAN CONNECTION SCALE : 6"=1'-0" | 6



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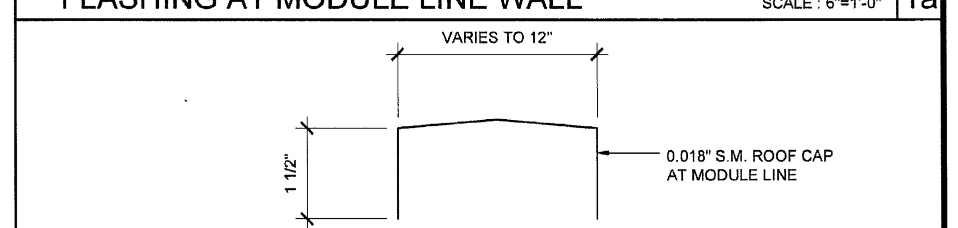
FLASHING AT MODULE LINE WALL SCALE : 6"=1'-0" | 1a



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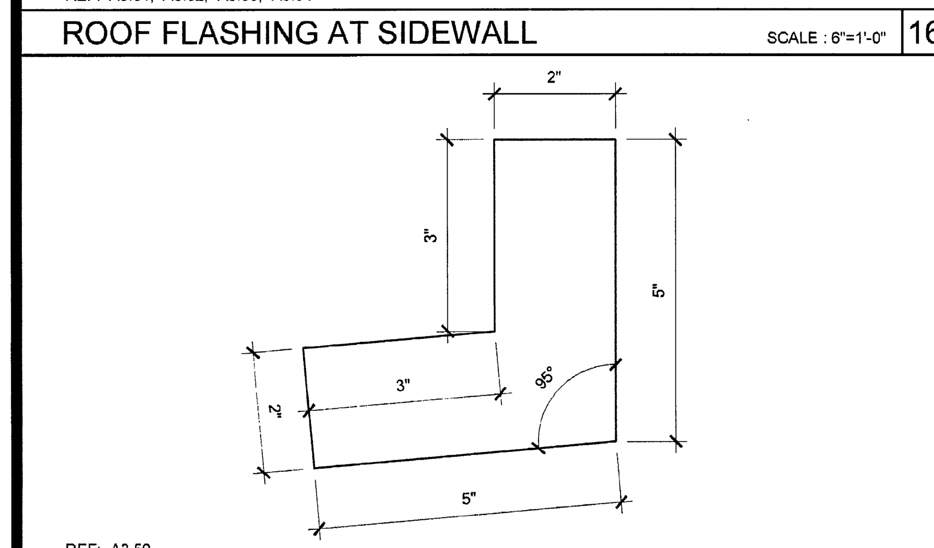
0.018" ROOF CAP AT MODULE LINE SCALE : 6"=1'-0" | 1b



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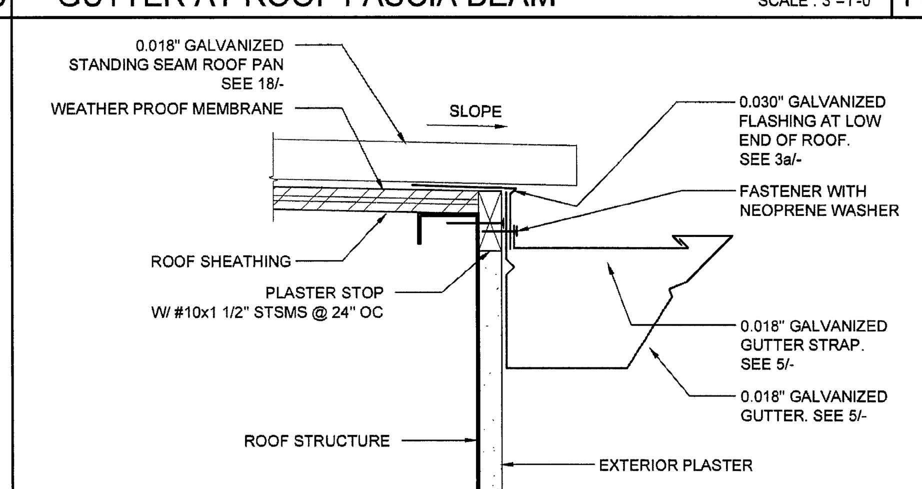
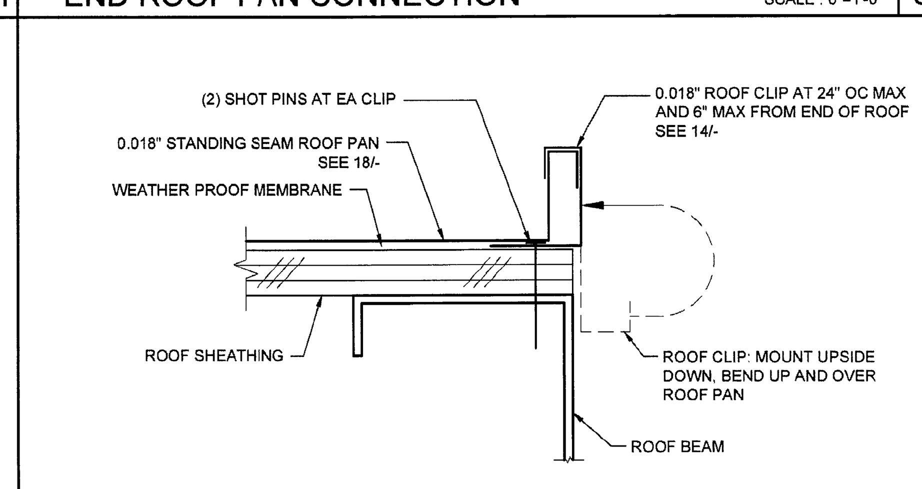
DOWNSPOUT ATTACHMENT SCALE : 6"=1'-0" | 17



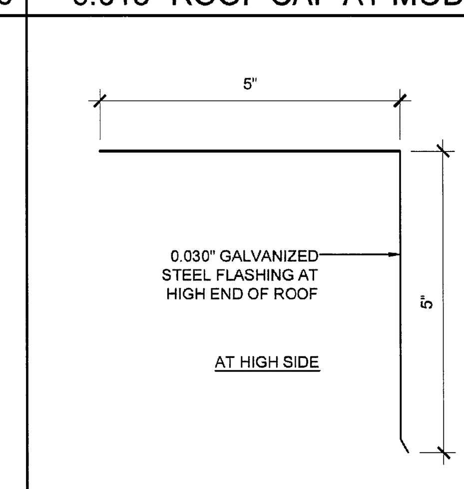
REF: A3.01, A3.02, A3.03, A3.04

GUTTER AT ROOF FASCIA BEAM SCALE : 3"=1'-0" | 12



REF: A3.01, A3.02, A3.03, A3.04

STARTER ROOF PAN CONNECTION SCALE : 6"=1'-0" | 7



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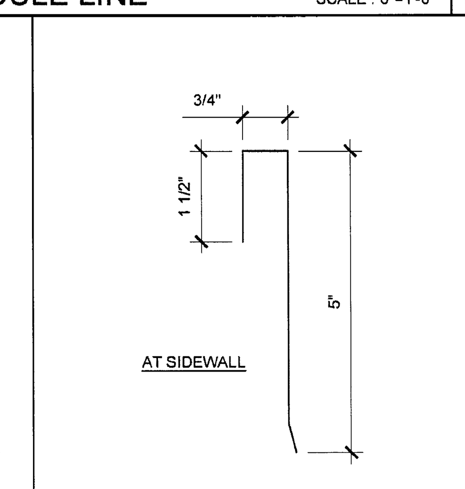
ROOF FLASHING SCALE : 6"=1'-0" | 2b



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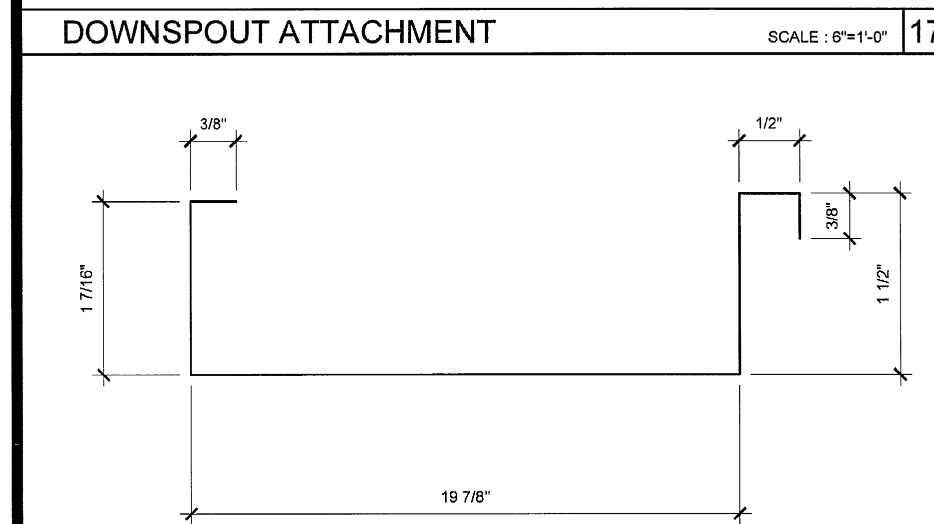
ROOF FLASHING SCALE : 6"=1'-0" | 2a



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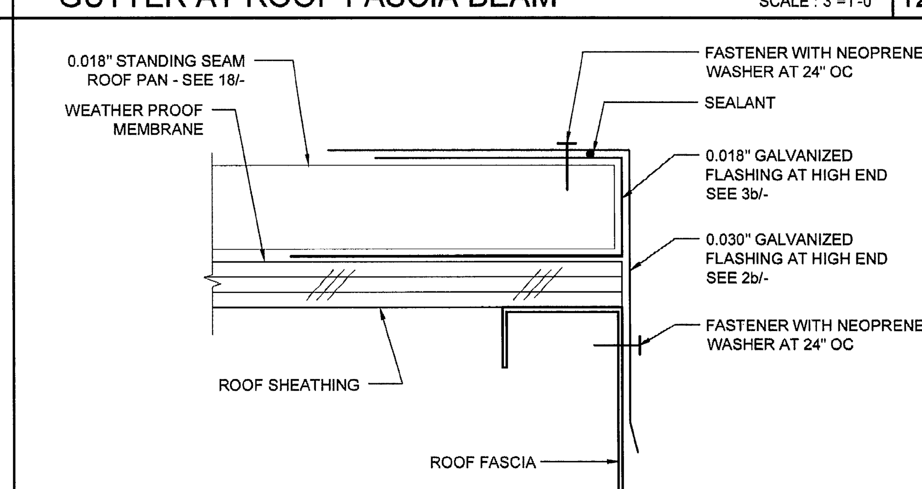
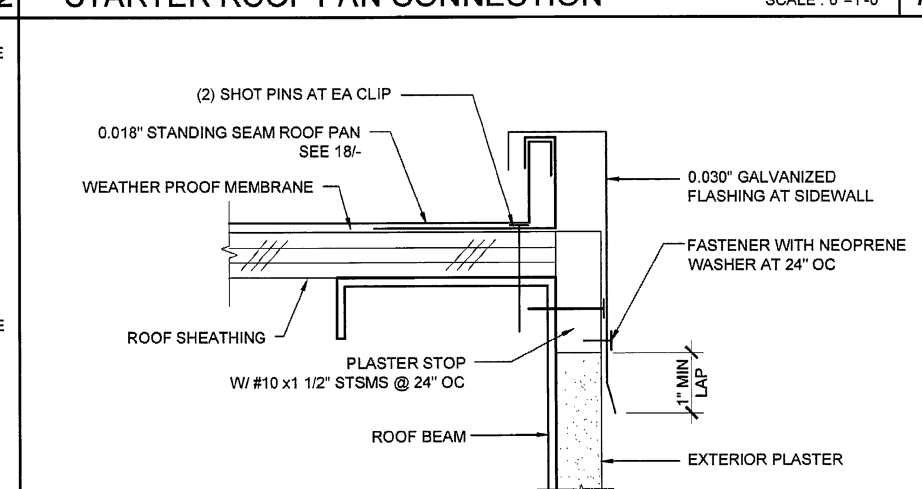
ROOF DECK PROFILE SCALE : 6"=1'-0" | 18



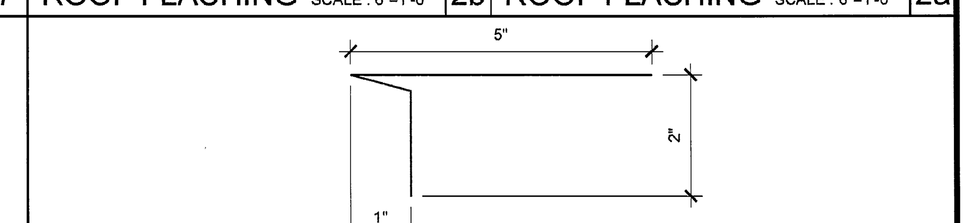
REF: A3.01, A3.02, A3.03

ROOF FLASHING AT HIGH SIDE SCALE : 6"=1'-0" | 13



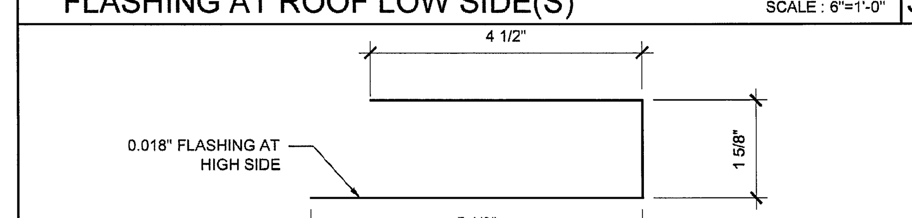
REF: A3.01, A3.02, A3.03, A3.04

ROOF FLASHING AT SIDEWALL SCALE : 6"=1'-0" | 8



REF: A3.50

FLASHING AT ROOF LOW SIDE(S) SCALE : 6"=1'-0" | 3a



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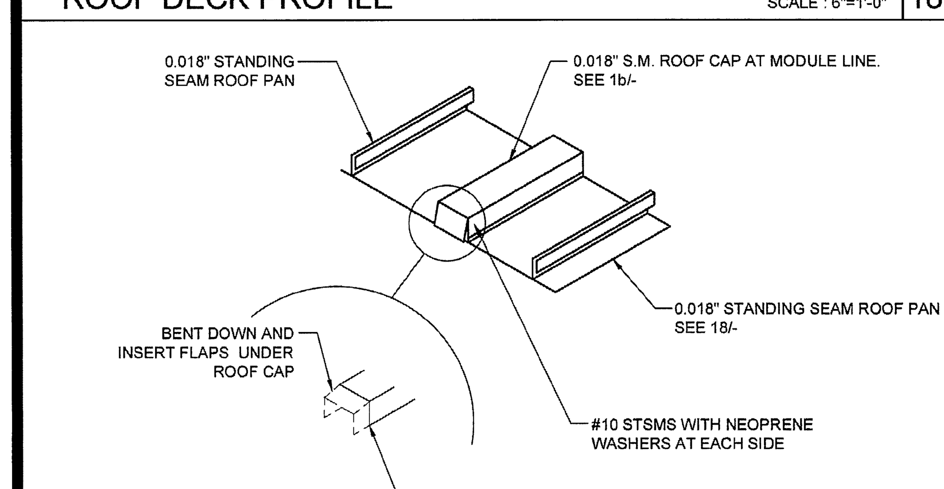
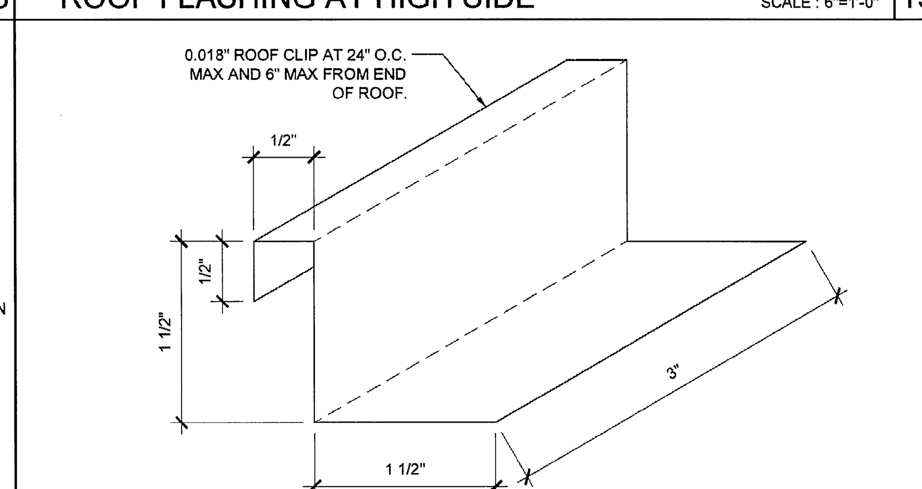
FLASHING AT ROOF HIGH SIDE SCALE : 6"=1'-0" | 3b



REF: A3.50

MODULE LINE ROOF CAP SCALE : NTS | 19



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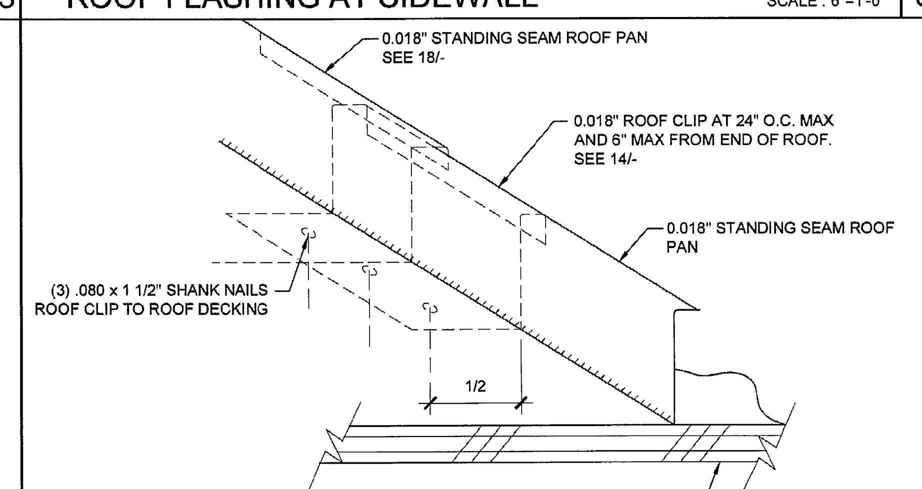
ROOF CLIP SCALE : 1'-0"=1'-0" | 14



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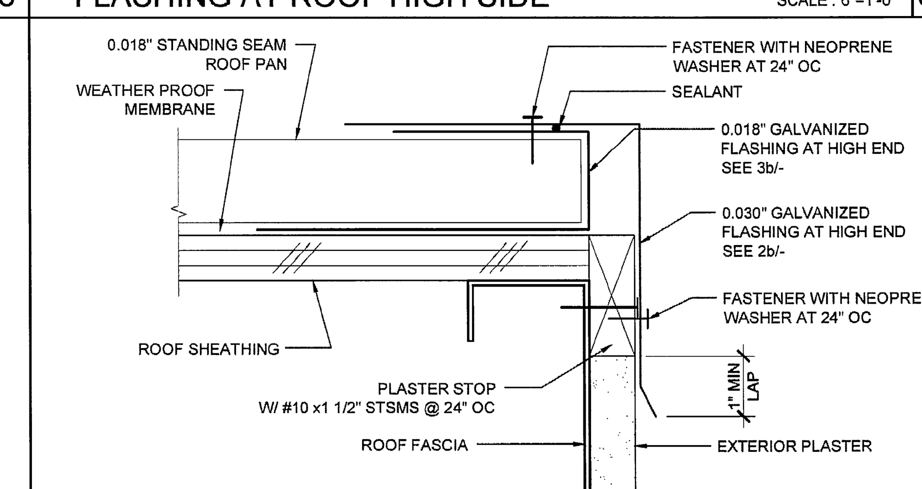
ROOF STANDING SEAM SCALE : NTS | 9



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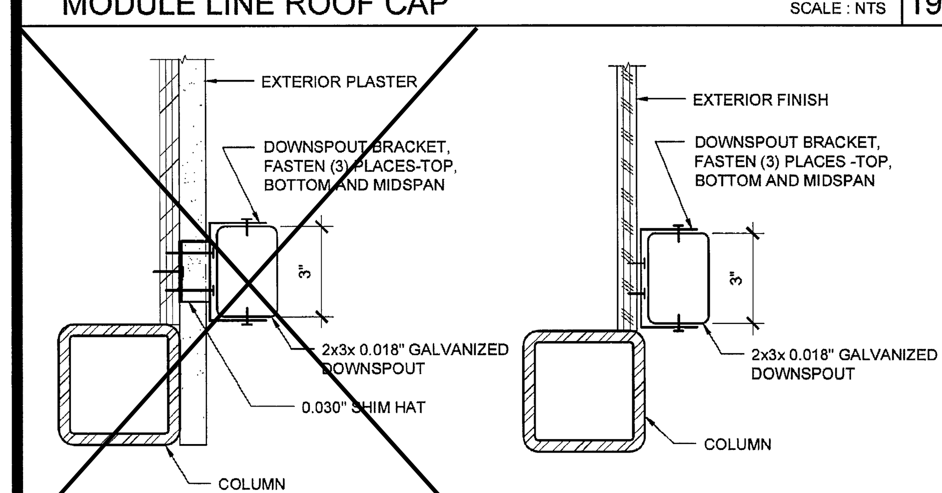
ROOF FLASHING AT HIGH SIDE SCALE : 6"=1'-0" | 4



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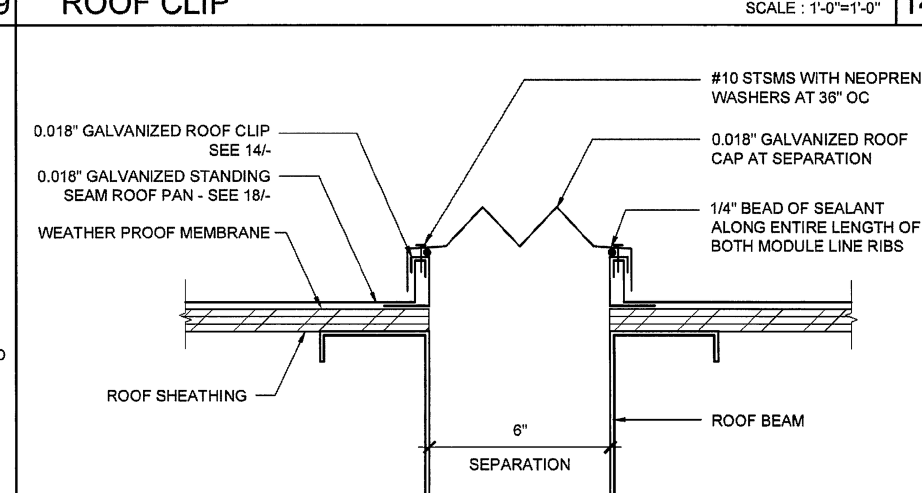
DOWNSPOUT ATTACHMENT SCALE : 3"=1'-0" | 20



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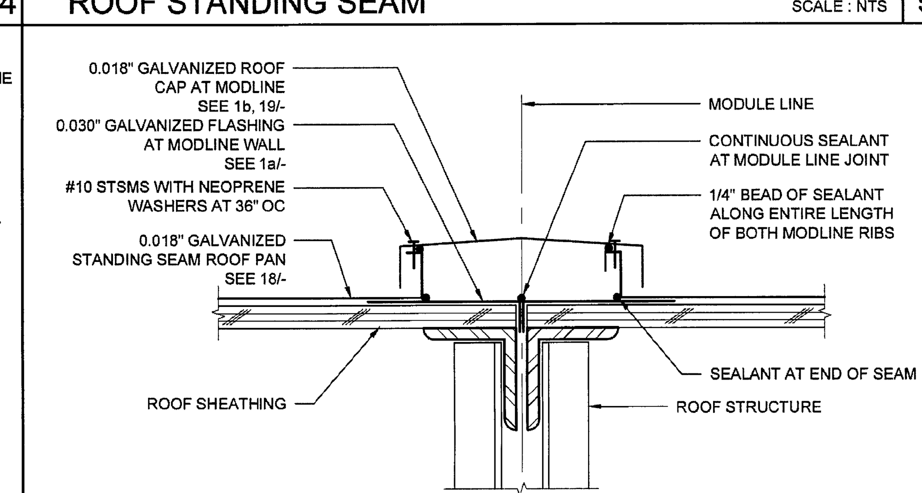
ROOF CAP AT SEPARATION SCALE : 3"=1'-0" | 15



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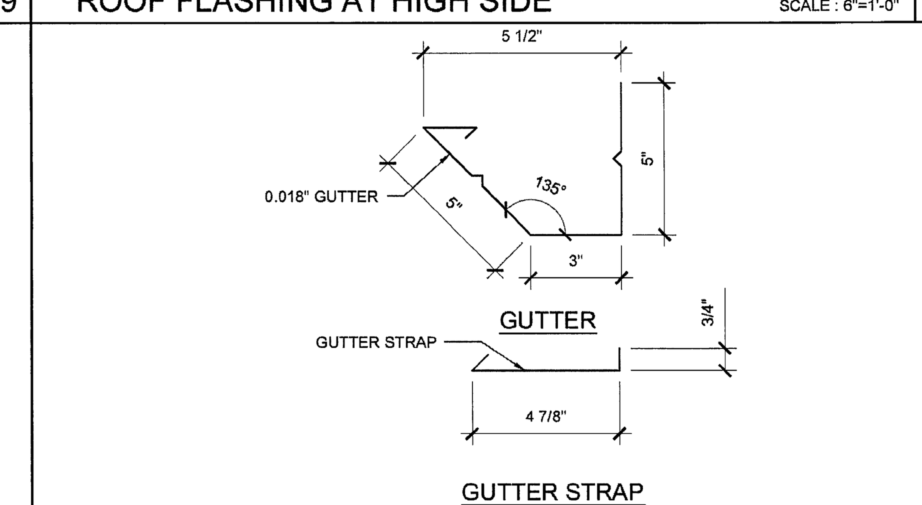
MODULE LINE ROOF CAP - 0.018" ROOF SCALE : 3"=1'-0" | 10



REF: A3.50

0.018" GUTTER AND GUTTER STRAP SCALE : 3"=1'-0" | 5

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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:

PALOMAR COLLEGE EDUCATION CTR.

PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:

ROOF DETAILS
0.018" STANDING SEAM ROOF DECK

LICENSED ARCHITECT
JACK A. SHIVELY III
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC — FLS ___ SS ___
DATE APR 1 4 2015

REVISIONS

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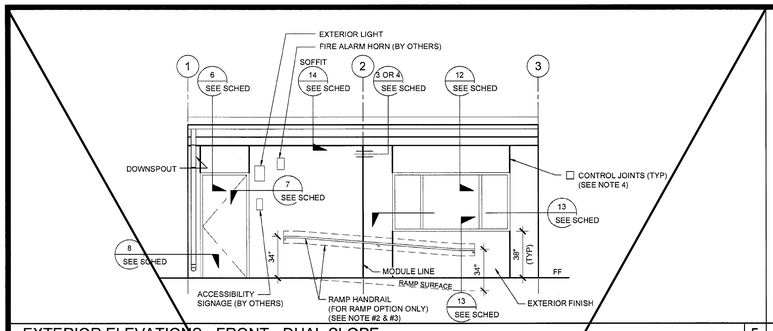
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

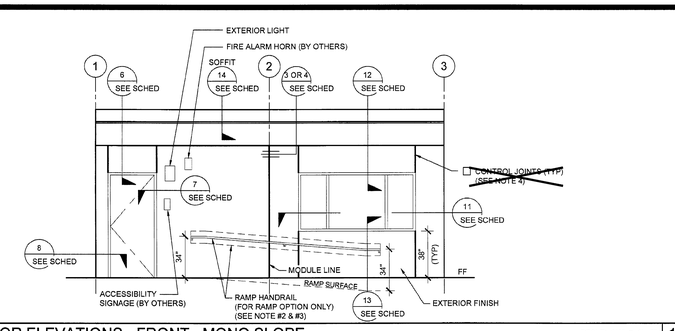
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

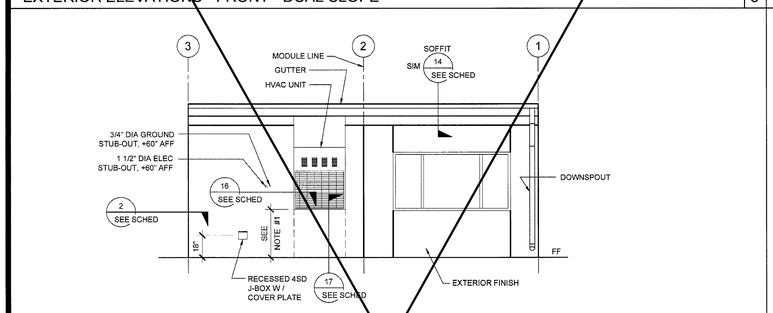
A-3.50



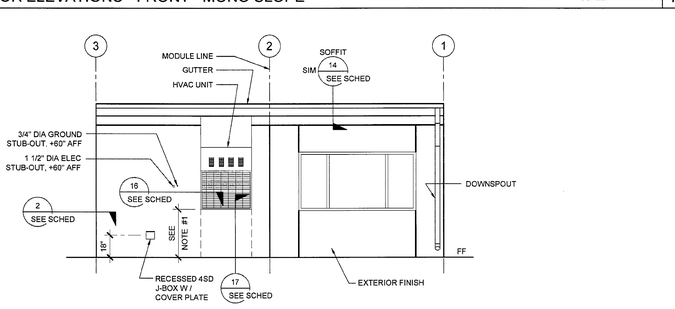
EXTERIOR ELEVATIONS - FRONT - DUAL SLOPE SCALE: 1/4" = 1' - 0" 5



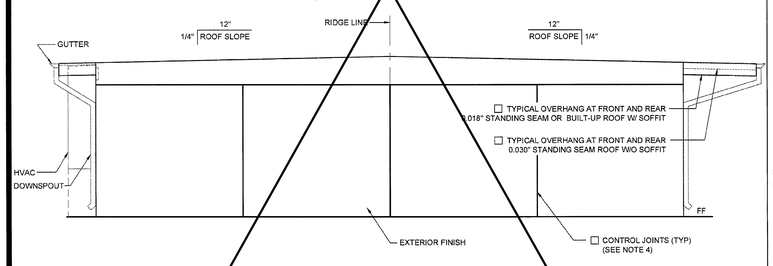
EXTERIOR ELEVATIONS - FRONT - MONO SLOPE SCALE: 1/4" = 1' - 0" 1



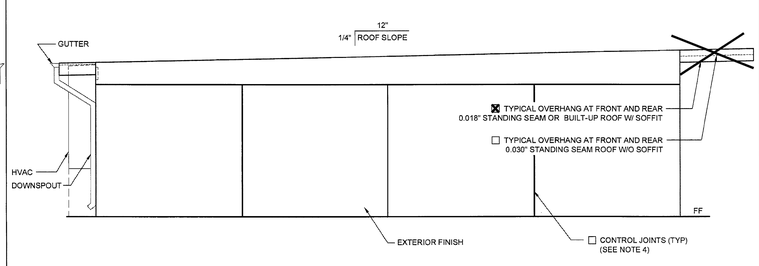
EXTERIOR ELEVATIONS - REAR - DUAL SLOPE SCALE: 1/4" = 1' - 0" 6



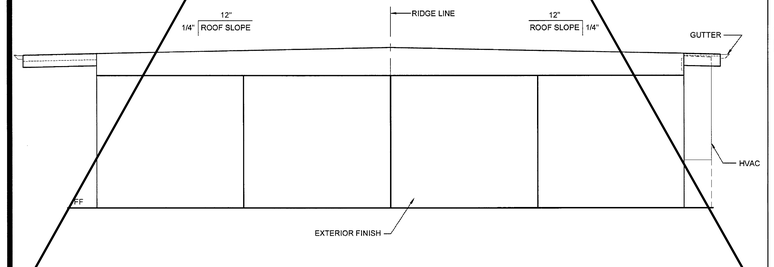
EXTERIOR ELEVATIONS - REAR - MONO SLOPE SCALE: 1/4" = 1' - 0" 2



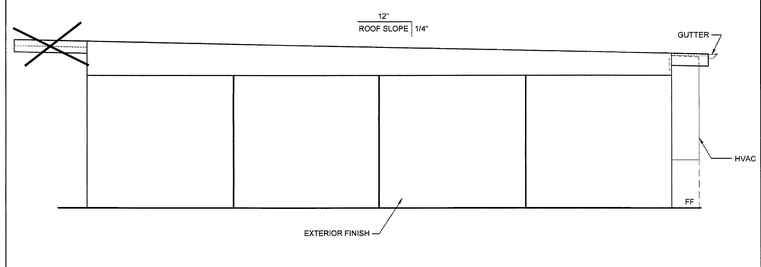
EXTERIOR ELEVATIONS - LEFT - DUAL SLOPE SCALE: 1/4" = 1' - 0" 7



EXTERIOR ELEVATIONS - LEFT - MONO SLOPE SCALE: 1/4" = 1' - 0" 3



EXTERIOR ELEVATIONS - RIGHT - DUAL SLOPE SCALE: 1/4" = 1' - 0" 8



EXTERIOR ELEVATIONS - RIGHT - MONO SLOPE SCALE: 1/4" = 1' - 0" 4

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 8" ABOVE HANDRAIL)
4. FOR PLASTER ONLY, PROVIDE CONTROL JOINT AT EACH MODLINE, ON END WALLS, 10'-0" OC AT SIDE WALLS, AND / OR ABOVE AND BELOW OPENINGS. WHERE FIRE RATED WALLS ARE REQUIRED, MATERIALS AND METHODS OF CONSTRUCTION USED TO PROTECT JOINTS WILL COMPLY WITH CBC SECTION 703.2 AND 705.
5. HANDRAIL IS NOT ALLOWED AT PLASTER OPTION WHERE RAMP IS AGAINST THE WALL. SEE DETAIL 1/R-2.01 FOR SIMILAR APPLICATION

DETAIL SCHEDULE

EXTERIOR FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
EXTERIOR ELEVATION
24' X 40'
MONO / DUAL SLOPE

REGISTERED ARCHITECT
RICHARD A. SHIVELY III
C-33487
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
NOT FOR CONSTRUCTION
A SEPARATE PROJECT APPLICATION IS REQUIRED FOR CONSTRUCTION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
A FLS SS
DATE APR 14 2015

REVISIONS
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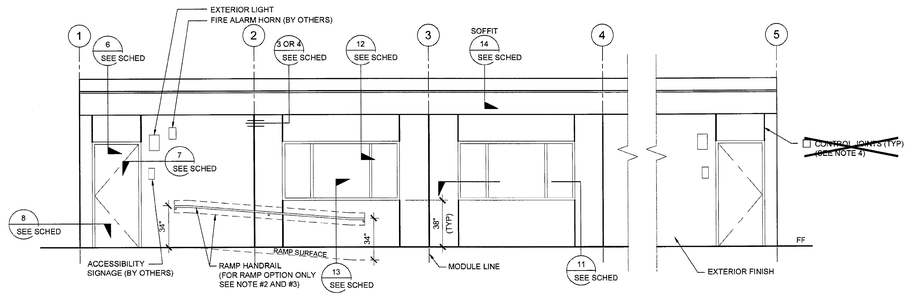
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

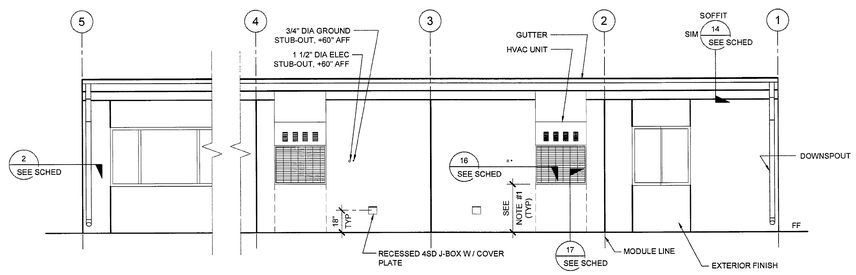
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
A-4.01



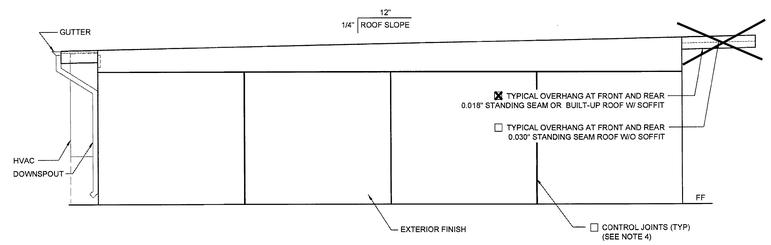
EXTERIOR ELEVATIONS - FRONT - MONO SLOPE

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



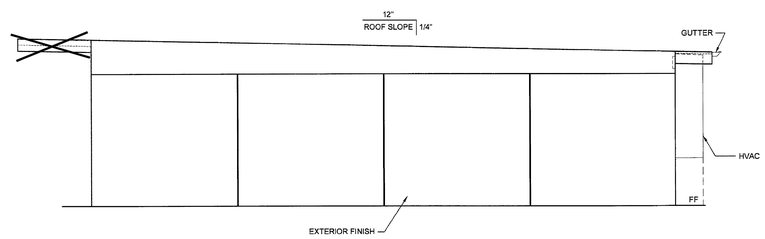
EXTERIOR ELEVATIONS - REAR - MONO SLOPE

SCALE: 1/4" = 1' - 0" | 2



EXTERIOR ELEVATIONS - LEFT - MONO SLOPE

SCALE: 1/4" = 1' - 0" | 3



EXTERIOR ELEVATIONS - RIGHT - MONO SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
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DETAIL SCHEDULE

EXTERIOR FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

~~FIRE RATED DETAIL SCHEDULE~~

~~FIRE PROTECTION:~~	~~SHEET #:~~
~~☐ 1 HOUR - SIDING OVER WOOD STUDS~~	~~A-5.52~~
~~☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.53~~
~~☐ 1 HOUR - SIDING OVER STEEL STUDS~~	~~A-5.62~~
~~☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.63~~

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:

PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:

EXTERIOR ELEVATION
48' TO 120' X 40'
MONO SLOPE

LICENSED ARCHITECT
JOHN SHIVELY
C-33487
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT SUPPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS SS
DATE APR 1 8 2015

REVISIONS

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

A-4.04

DETAIL SCHEDULE

FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

~~FIRE RATED DETAIL SCHEDULE~~

FINISH:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

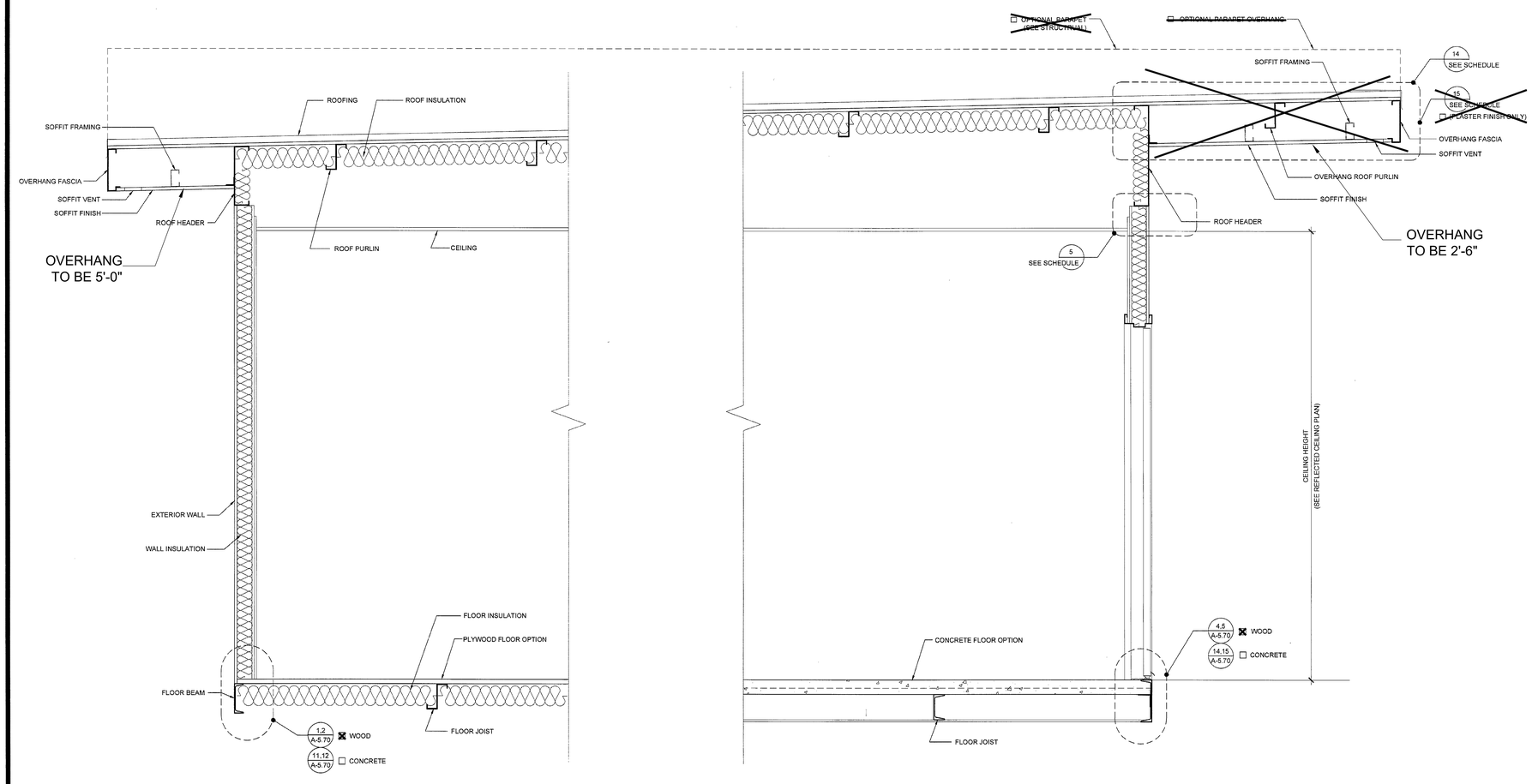
FLOOR OPTION

☒ WOOD FLOOR

☐ CONCRETE FLOOR

NOTES

MOISTURE PROTECTION AND CAULKING:
GENERAL: FURNISH AND INSTALL ALL CAULKING AS REQUIRED TO PROVIDE A WEATHERTIGHT BUILDING.
MATERIALS: SEALANT SHALL BE AN ACRYLIC LATEX OR SILICONE CAULKING.
APPLICATIONS: AT JOINTS WHERE SHOWN, APPLY SEALANT AS FOLLOWS - JOINTS SHALL BE CLEAN, DRY, AND FREE FROM DUST, WAX, AND FOREIGN MATERIALS. SEALANT SHALL BE APPLIED WITH A GUN IN A STRICT COMPLIANCE WITH MANUFACTURER'S DIRECTIONS. COMPLETELY FILL THE JOINT AND FIRMLY TOOL AGAINST THE BACKING, MAKING A SMOOTH CONVEX BEAD.
COLOR: COLOR OF MATERIAL SHALL MATCH THAT OF ADJACENT FINISHED SURFACES.



BUILDING SECTION

SCALE: 1" = 1'-0" | 1

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"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
CROSS SECTION
MONO SLOPE
0.018" OR BUILT UP ROOF DECK OR PARAPET

LICENSED ARCHITECT
ARCHITECT
C-33487
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
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2. FOR CONSTRUCTION IS REGARDED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC. ___ FLS. ___ SS. ___
DATE APR 1 4 2015

REVISIONS
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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
A-5.01

DETAIL SCHEDULE

FINISH:	SHEET #:
☒ SIDING OVER WOOD STUDS (WUI COMPLIANT DURATEMP)	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

~~FIRE RATED DETAIL SCHEDULE~~

FINISH:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

FLOOR OPTION

☒ WOOD FLOOR

☐ CONCRETE FLOOR

NOTES

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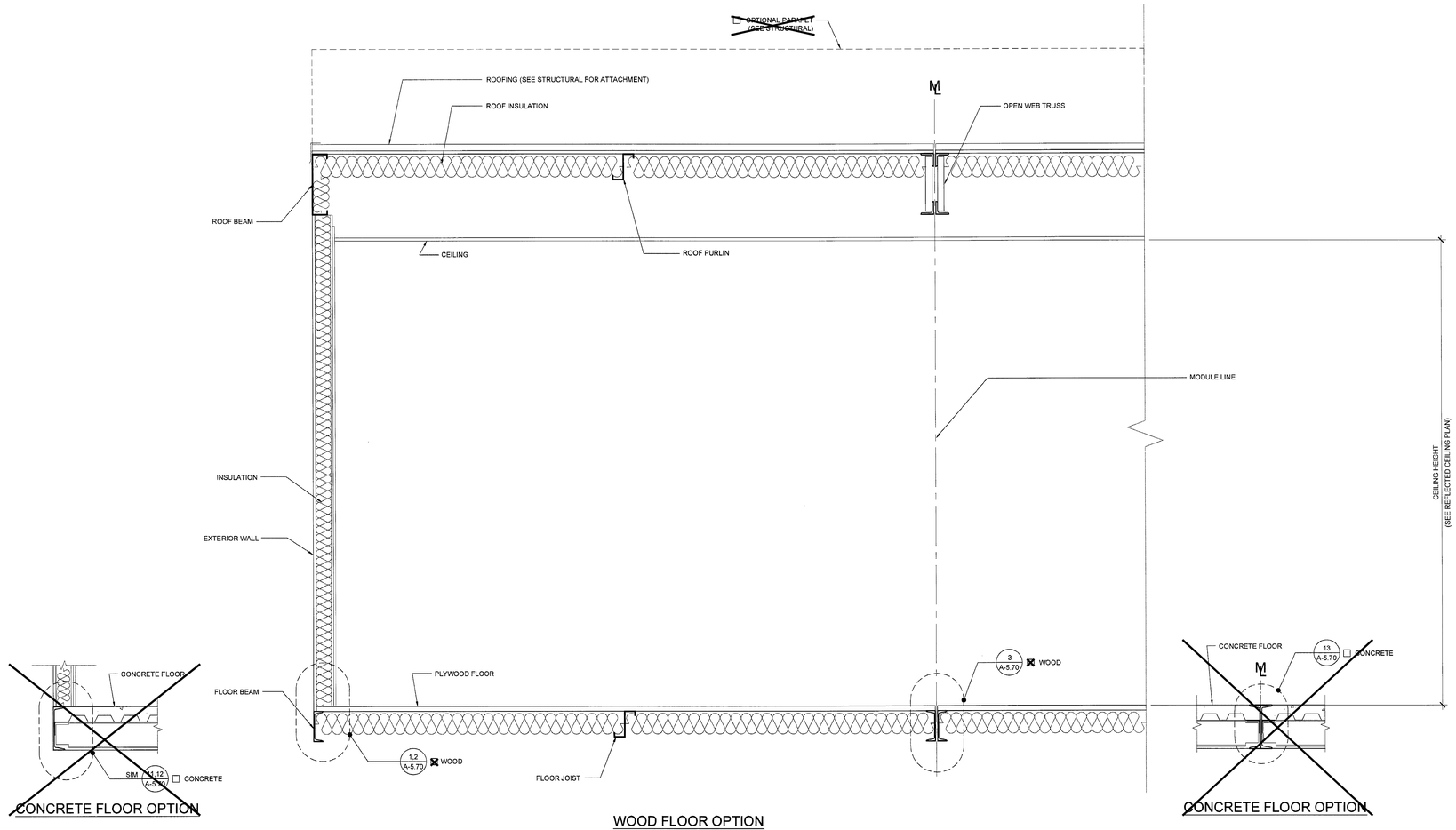

BUILDING SECTION

SCALE: 1" = 1' - 0" | 1

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
CROSS SECTION

LICENSED ARCHITECT
JACK BOTVELLI III
C-33402
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SUBSEQUENT PLAN REVIEW WITH FULL CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC. ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
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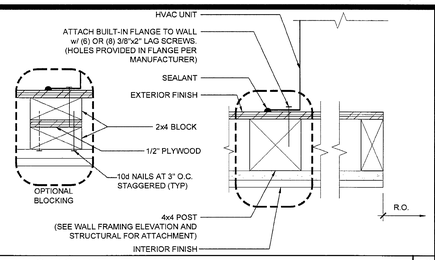
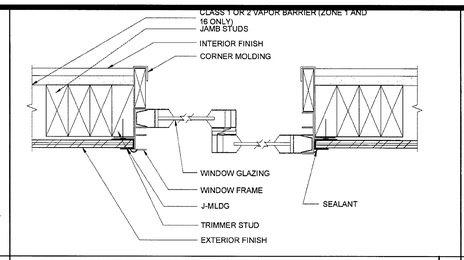
SCALE:	AS NOTED
DATE:	09-10-14

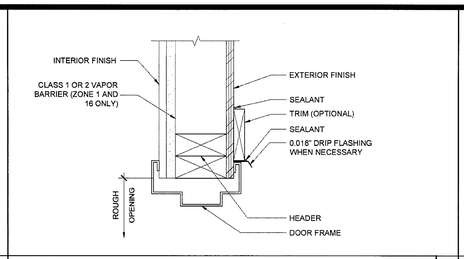
P.C. SHEET NUMBER
A-5.05



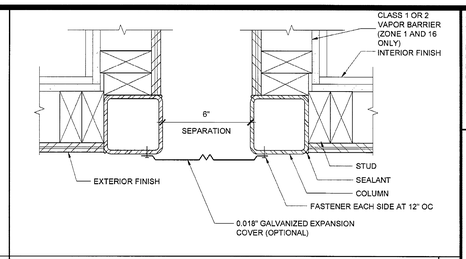
HVAC MOUNT AT JAMBS SCALE : 3"=1'-0" 16



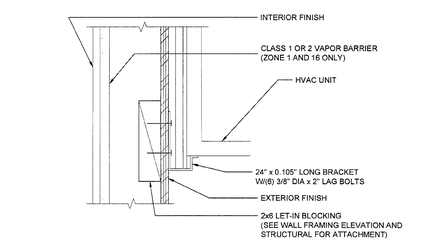
WINDOW SECTION AT JAMBS SCALE : 3"=1'-0" 11



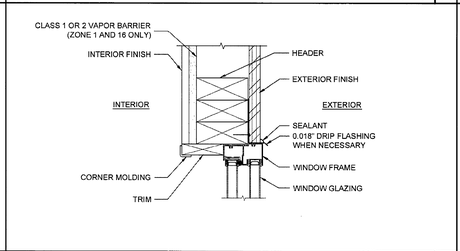
EXTERIOR DOOR HEADER SCALE : 3"=1'-0" 6



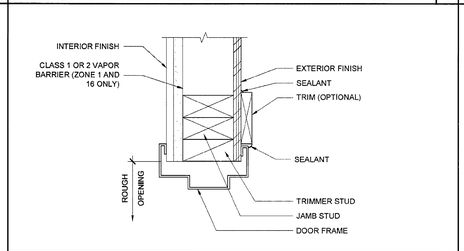
CLOSURE BETWEEN BUILDINGS SCALE : 3"=1'-0" 1



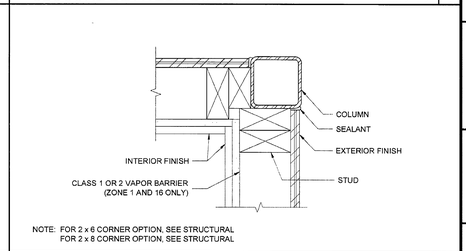
HVAC UNIT AT BOTTOM SCALE : 3"=1'-0" 17



WINDOW HEADER SCALE : 3"=1'-0" 12

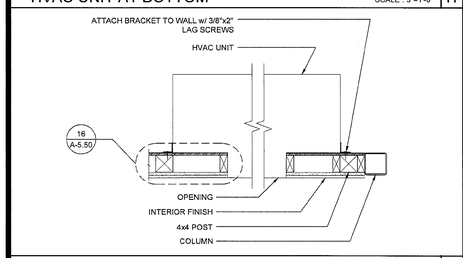


EXTERIOR DOOR JAMB SCALE : 3"=1'-0" 7

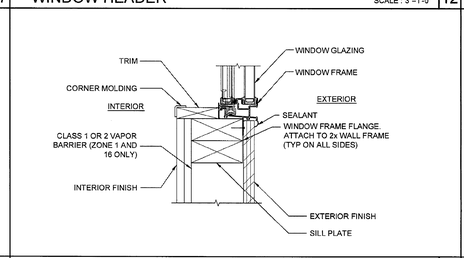


NOTE: FOR 2 x 6 CORNER OPTION, SEE STRUCTURAL
FOR 2 x 8 CORNER OPTION, SEE STRUCTURAL

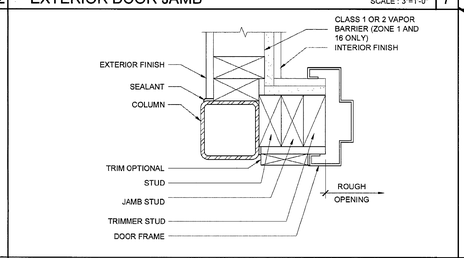
COLUMN AT CORNER SCALE : 3"=1'-0" 2



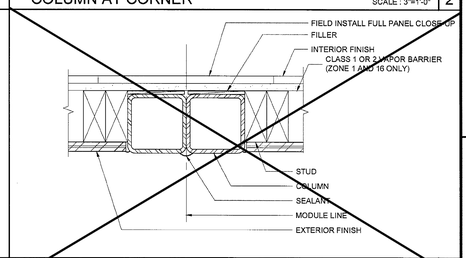
HVAC UNIT (PLAN) SCALE : 1"=1'-0" 18



WINDOW SILL SCALE : 3"=1'-0" 13

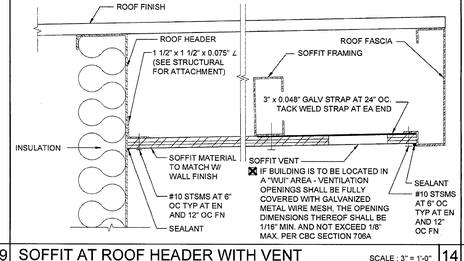


EXTERIOR DOOR JAMB SCALE : 3"=1'-0" 8

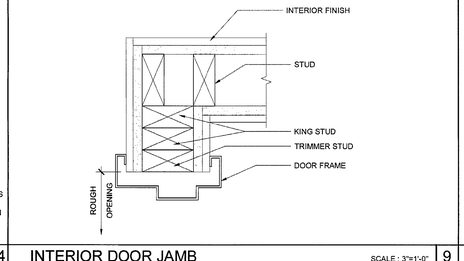


COLUMN AT MODULE LINE (FULL PANEL CLOSE-UP) SCALE : 3"=1'-0" 3

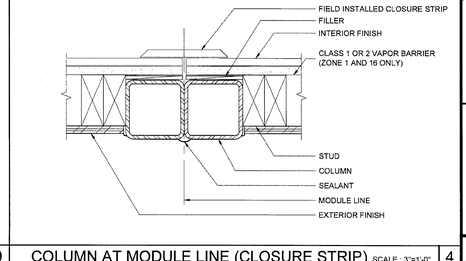
NOT USED 19



SOFFIT AT ROOF HEADER WITH VENT SCALE : 3" = 1'-0" 14



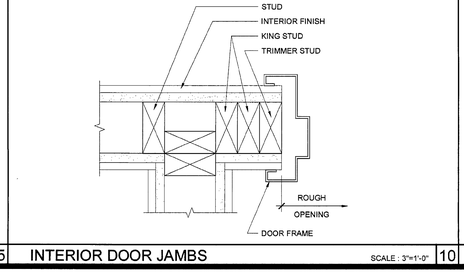
INTERIOR DOOR JAMB SCALE : 3"=1'-0" 9



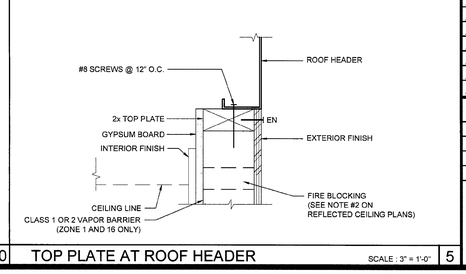
COLUMN AT MODULE LINE (CLOSURE STRIP) SCALE : 3"=1'-0" 4

NOT USED 20

NOT USED 15



INTERIOR DOOR JAMBS SCALE : 3"=1'-0" 10



TOP PLATE AT ROOF HEADER SCALE : 3" = 1'-0" 5

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2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ARCHITECTURAL DETAILS
WOOD STUD - SHTG

LICENSED ARCHITECT
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK FOR DOCUMENT CONF. 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC____ FLS____ SS____
DATE APR 14 2015

REVISIONS
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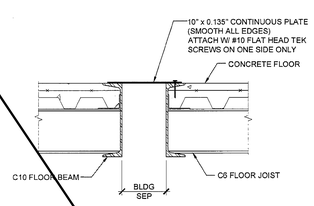
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

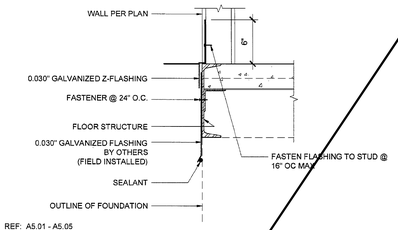
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
A-5.50



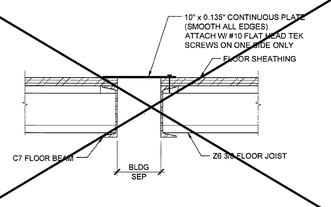
REF: A1.03

FLOOR AT SEPARATION (CONCRETE FLR) SCALE : 1 1/2"=1'-0" 16



REF: A5.01 - A5.05

SKIRT FLASHING (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" 11



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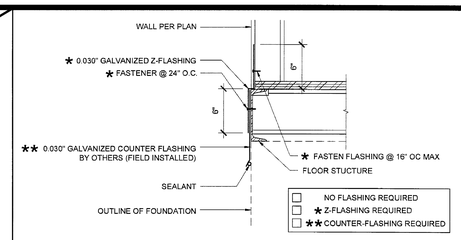
FLOOR AT SEPARATION (WOOD FLOOR) SCALE : 1 1/2"=1'-0" 6



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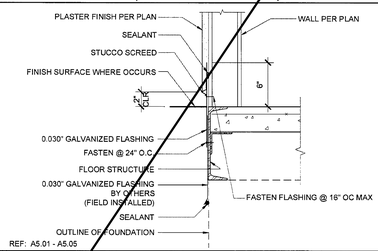
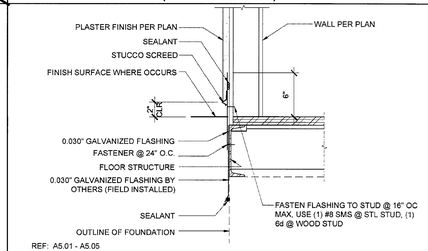
SKIRT FLASHING (WOOD FLOOR) SCALE : 1 1/2"=1'-0" 1



REF: A5.01 - A5.05

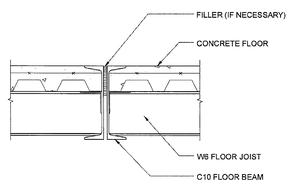
17 SKIRT FLASHING (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" 12

7



REF: A5.01 - A5.05

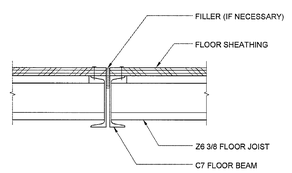
SKIRT FLASHING (WOOD FLOOR) SCALE : 1 1/2"=1'-0" 2



REF: A1.01 - A1.03

18 FLOOR AT MODLINE (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" 13

8



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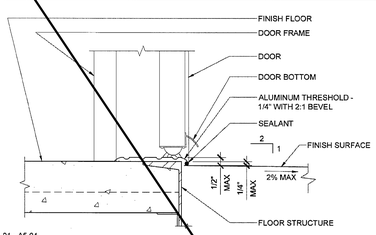
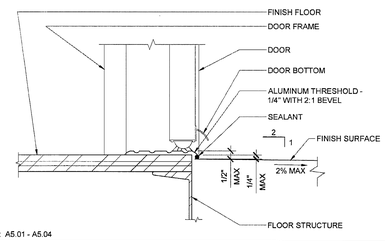
FLOOR AT MODLINE (WOOD FLOOR) SCALE : 1 1/2"=1'-0" 3



REF: A5.01 - A5.04

19 THRESHOLD SCALE : 3"=1'-0" 14

9



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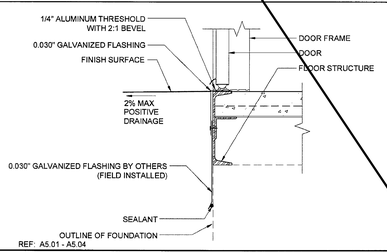
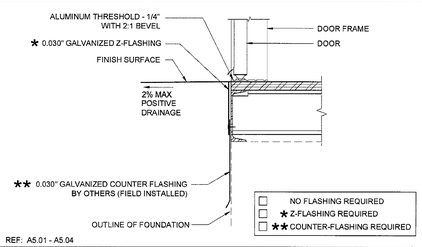
THRESHOLD SCALE : 3"=1'-0" 4



REF: A5.01 - A5.04

20 TYPICAL SILL AT FLOOR (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" 15

10



REF: A5.01 - A5.04

TYPICAL SILL AT FLOOR (WOOD FLOOR) SCALE : 1 1/2"=1'-0" 5

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SILVER CREEK
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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
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PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ARCHITECTURAL DETAILS
FLOOR

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IDENTIFICATION STAMP
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AC FLS SS
DATE APR 14 2015

REVISIONS
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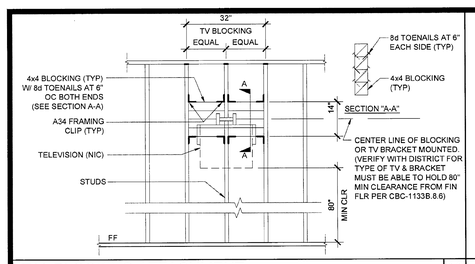
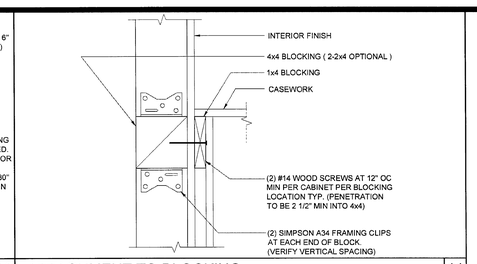
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

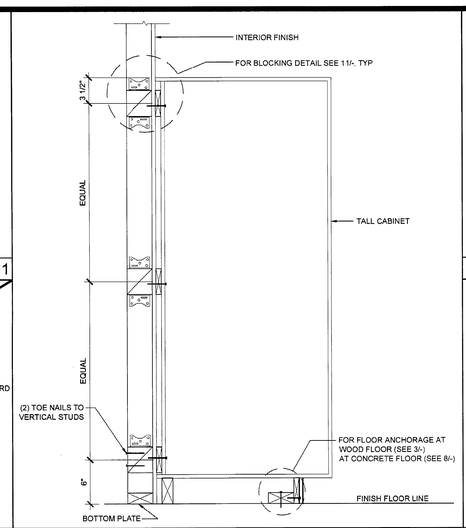
P.C. SHEET NUMBER
A-5.70

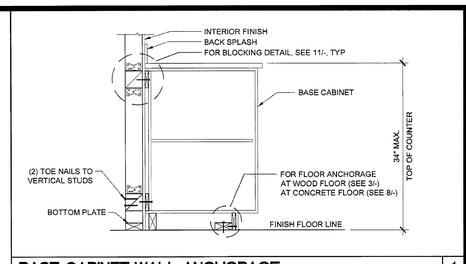


T.V. BLOCKING ATTACHMENT AT WOOD STUD SCALE : 1/2" = 1'-0" 16

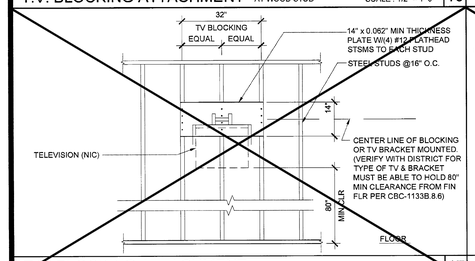


ATTACHMENT TO BLOCKING AT WOOD STUD SCALE : 3" = 1'-0" 11

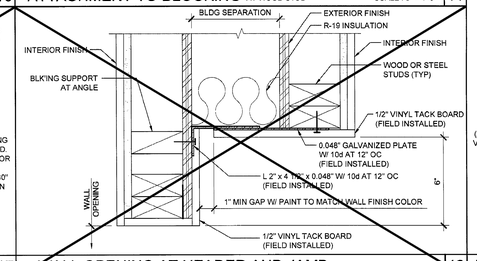




BASE CABINET WALL ANCHORAGE AT WOOD STUD SCALE : 1" = 1'-0" 1

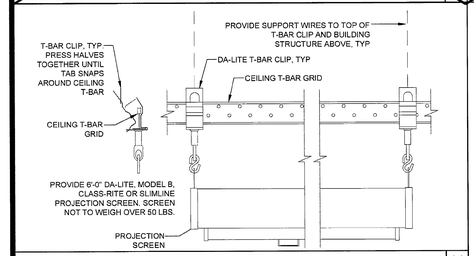


T.V. BLOCKING ATTACHMENT AT STEEL STUD SCALE : 1/2" = 1'-0" 17

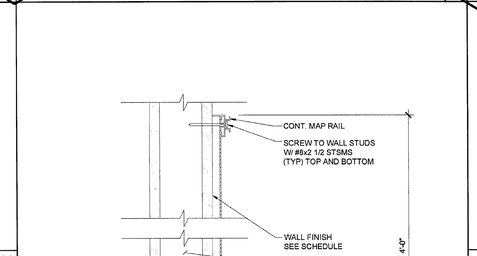


WALL OPENING AT HEADER AND JAMB SCALE : 3"=1'-0" 12

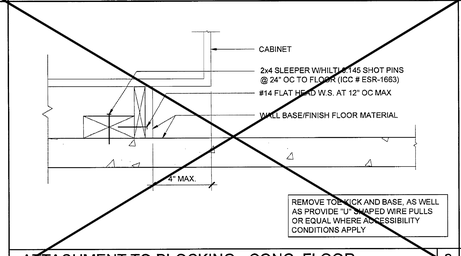
WALL HUNG ANCHORAGE CABINET AT WOOD STUD SCALE : 1 1/2" = 1'-0" 2



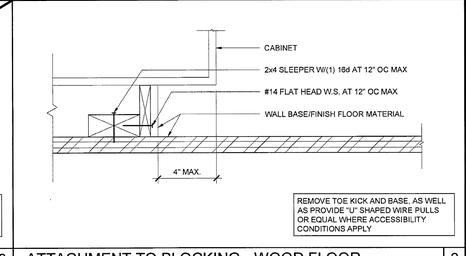
PROJECTION SCREEN MOUNTING SCALE : NTS 18



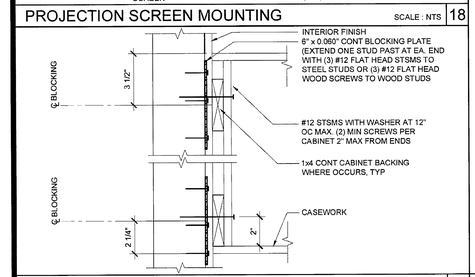
MARKER BOARD ATTACHMENT SCALE : 3" = 1'-0" 14



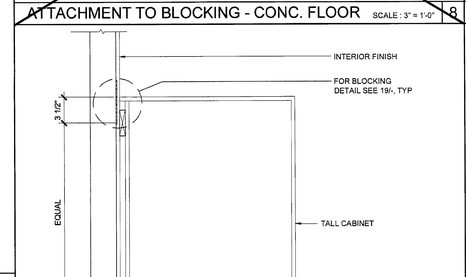
ATTACHMENT TO BLOCKING - CONC. FLOOR SCALE : 3" = 1'-0" 8



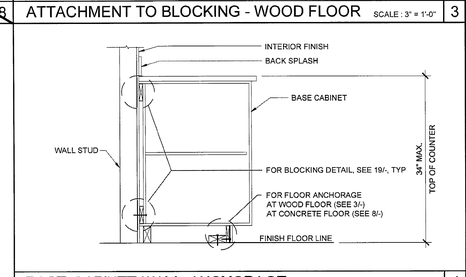
ATTACHMENT TO BLOCKING - WOOD FLOOR SCALE : 3" = 1'-0" 3



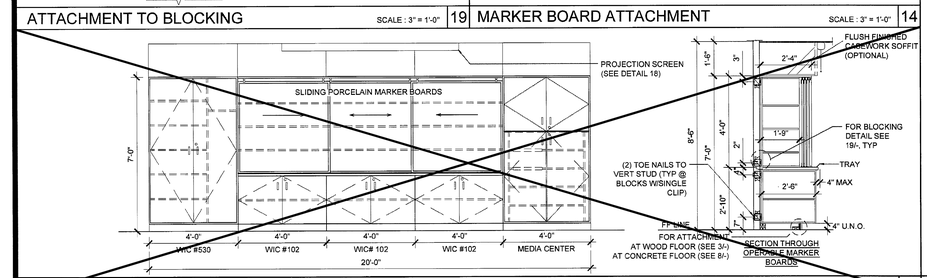
ATTACHMENT TO BLOCKING SCALE : 3" = 1'-0" 19



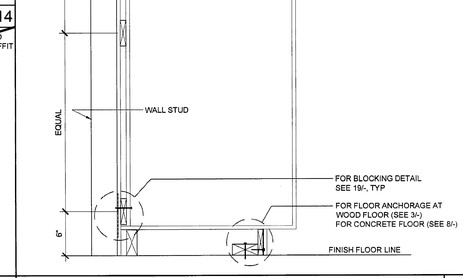
TALL CABINET WALL ANCHORAGE SCALE : 1 1/2" = 1'-0" 10



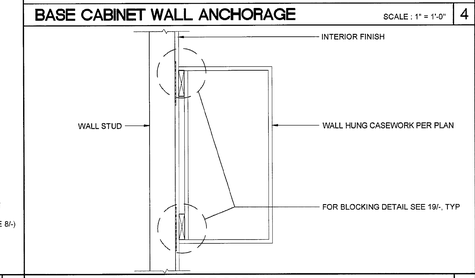
BASE CABINET WALL ANCHORAGE SCALE : 1" = 1'-0" 4



TEACHING WALL - ELEVATION / SECTION - OPTION SCALE : 3/8" = 1'-0" 15



TALL CABINET WALL ANCHORAGE SCALE : 1 1/2" = 1'-0" 10



WALL HUNG ANCHORAGE CABINET SCALE : 1 1/2" = 1'-0" 5

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ARCHITECTURAL DETAILS
MISCELLANEOUS/OPTIONS

LICENSED ARCHITECT
DAVID A. MITCHELL III
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD
SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
NOT FOR CONSTRUCTION
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS SS
DATE APR 1 4 2015

REVISIONS
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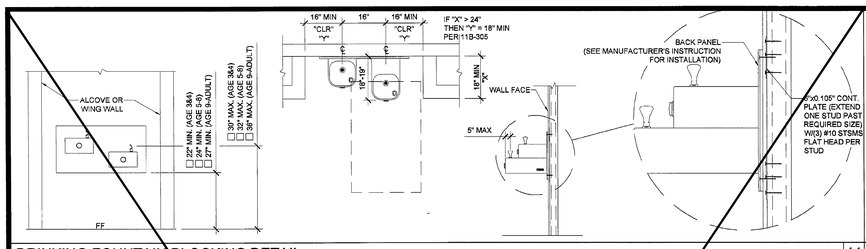
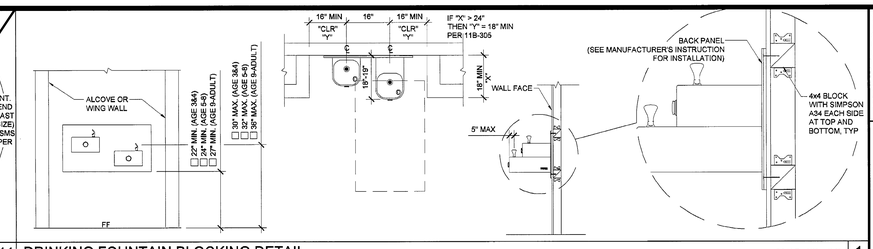
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

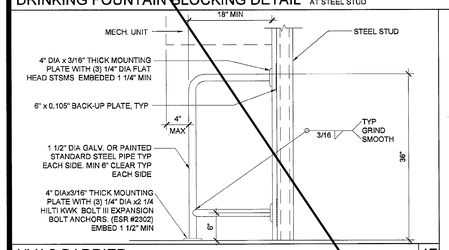
P.C. SHEET NUMBER
A-5.80



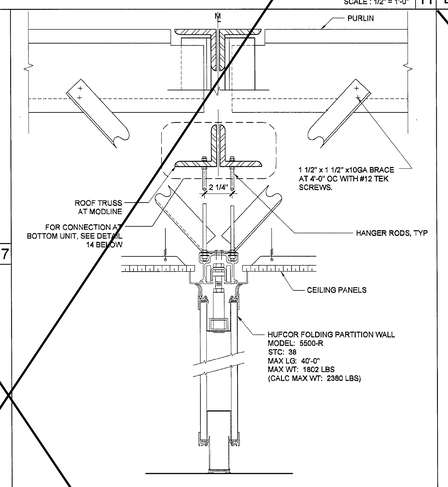
DRINKING FOUNTAIN BLOCKING DETAIL AT STEEL STUD SCALE : 1/2" = 1'-0" 11



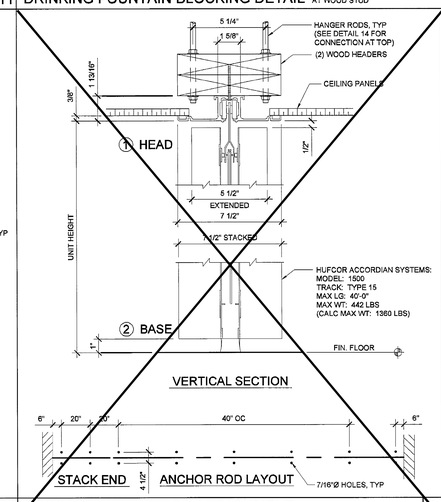
DRINKING FOUNTAIN BLOCKING DETAIL AT WOOD STUD SCALE : 1/2" = 1'-0" 1



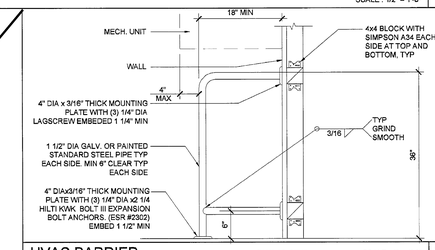
HVAC BARRIER AT STEEL STUD SCALE : 1" = 1'-0" 17



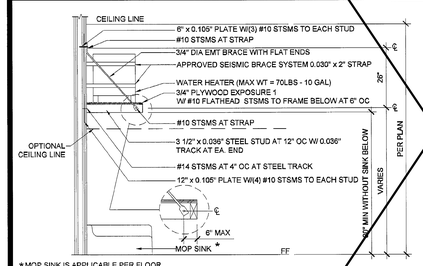
FOLDING WALL PARTITION ATTACH @ TOP UNIT SCALE : 3" = 1'-0" 13



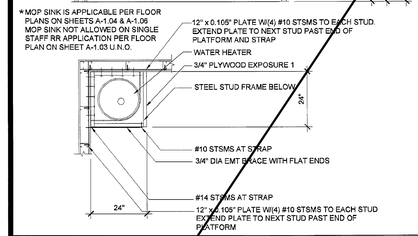
ACCORDIAN PARTITION ATTACHMENT SCALE : 3" = 1'-0" 8



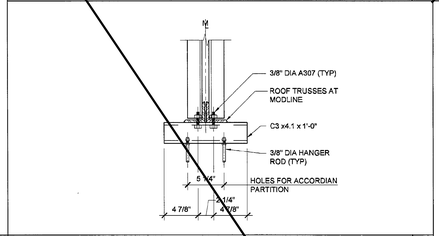
HVAC BARRIER AT WOOD STUD SCALE : 1" = 1'-0" 2



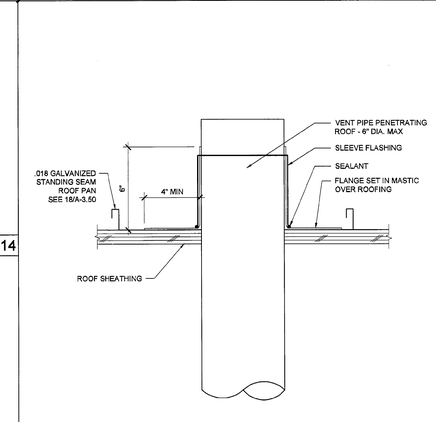
*MOP SINK IS APPLICABLE PER FLOOR PLANS ON SHEETS A-1.04 & A-1.06
MOP SINK NOT ALLOWED ON SINGLE STAFF RR APPLICATION PER FLOOR PLAN ON SHEET A-1.03 U.N.O.



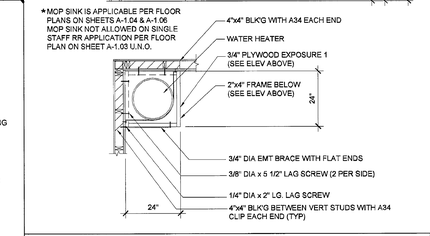
WATER HEATER SHELF AT STEEL STUD SCALE : 1/2" = 1'-0" 19



ACCORDIAN DOOR - TOP CONN AT TRUSS SCALE : 1 1/2" = 1'-0" 14

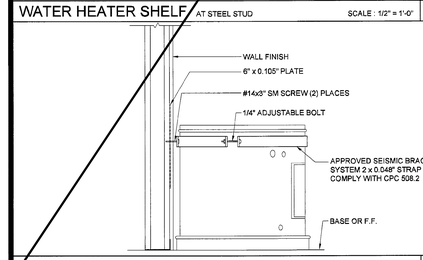


PIPE PENETRATION THROUGH ROOF SCALE : 3"=1'-0" 10



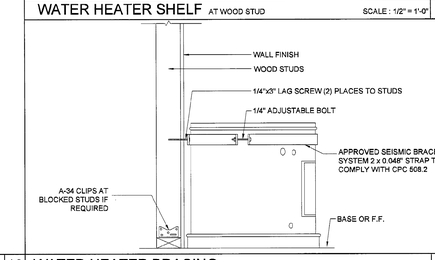
*MOP SINK IS APPLICABLE PER FLOOR PLANS ON SHEETS A-1.04 & A-1.06
MOP SINK NOT ALLOWED ON SINGLE STAFF RR APPLICATION PER FLOOR PLAN ON SHEET A-1.03 U.N.O.

WATER HEATER SHELF AT WOOD STUD SCALE : 1/2" = 1'-0" 4



WATER HEATER BRACING AT STEEL STUD SCALE : 1 1/2" = 1'-0" 20

NOT USED 15



WATER HEATER BRACING AT WOOD STUD SCALE : 1 1/2" = 1'-0" 5

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ARCHITECTURAL DETAILS
MISCELLANEOUS/OPTIONS

C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PERMIT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
APPROVED FLS 55
DATE APR 1 4 2015

REVISIONS
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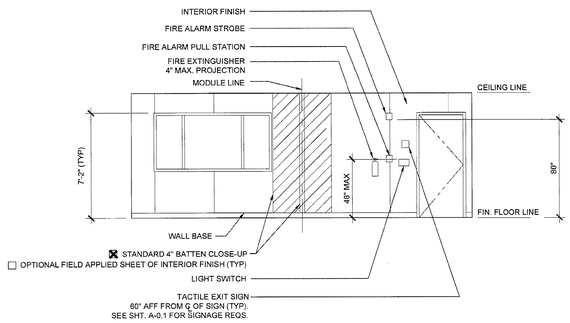
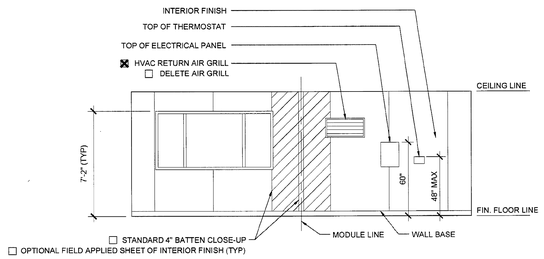
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

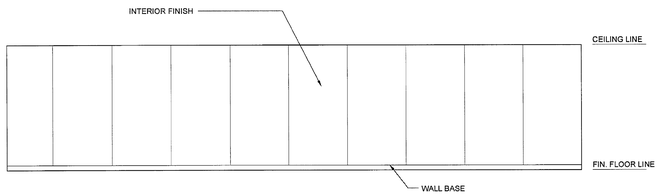
P.C. SHEET NUMBER
A-5.81



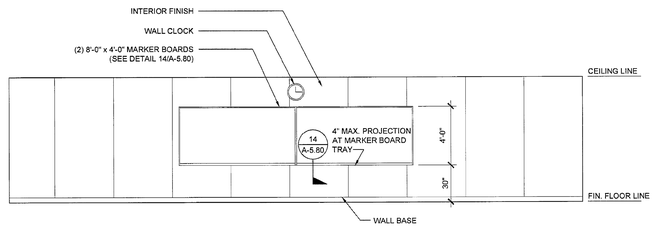
FRONT ELEVATION SCALE: 1/4" = 1' - 0" 3



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



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



SIDE ELEVATION SCALE: 1/4" = 1' - 0" 2

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
INTERIOR ELEVATION
24' x 40'

LICENSED ARCHITECT
PATRICK SAVI FELTIS
C-33467
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
BOOK: 2013 EBC
A SEPARATE PERMIT APPLICATION FOR CONSTRUCTION IS REQUIRED

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS SS
DATE APR 1 1 2015

REVISIONS
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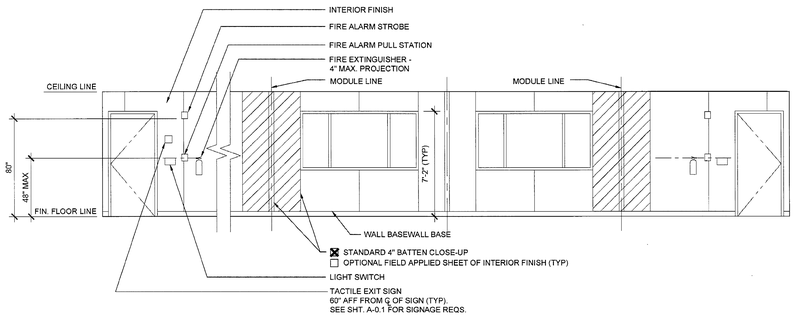
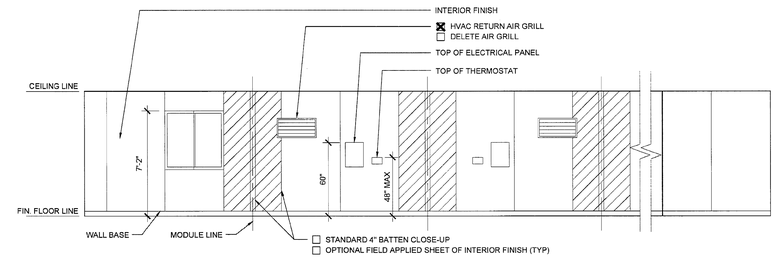
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY::	
SCALE:	AS NOTED
DATE:	09-10-14

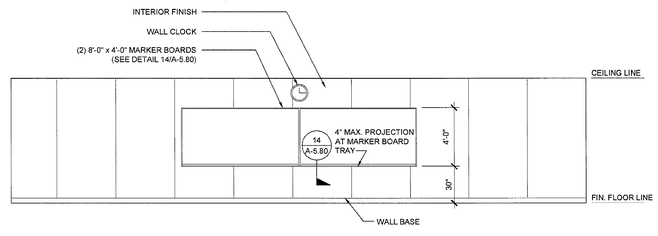
P.C. SHEET NUMBER
A-6.01



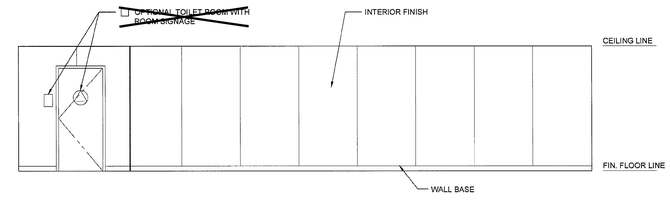
FRONT ELEVATION — SCALE: 1/4" = 1' - 0" | 3



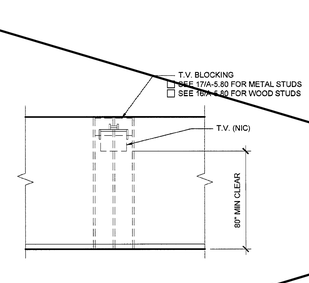
REAR ELEVATION — SCALE: 1/4" = 1' - 0" | 1



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" | 4

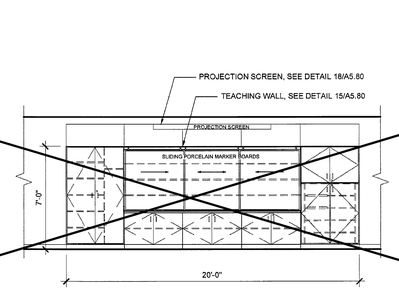


SIDE ELEVATION — SCALE: 1/4" = 1' - 0" | 2



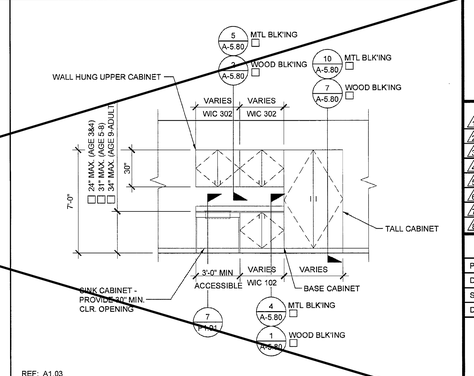
REF: A1.03

TELEVISION BLOCKING OPTION — SCALE: 1/4" = 1' - 0" | C



REF: A1.03

TEACHING WALL OPTION — SCALE: 1/4" = 1' - 0" | B



REF: A1.03

CASEWORK OPTION — SCALE: 1/4" = 1' - 0" | A

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SILVER CREEK
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
INTERIOR ELEVATION
48' TO 120' x 40'

LICENSED ARCHITECT — NICK KASHIMIRI — C-33467 — REN:01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SUPPLEMENTAL SUBMITTAL FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC R.S. SS.11
DATE APR 14 2015

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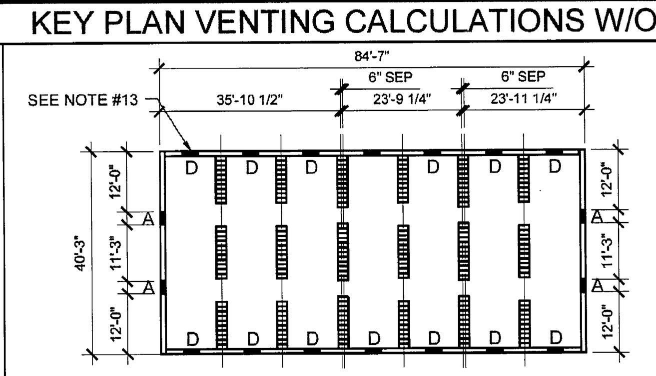
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

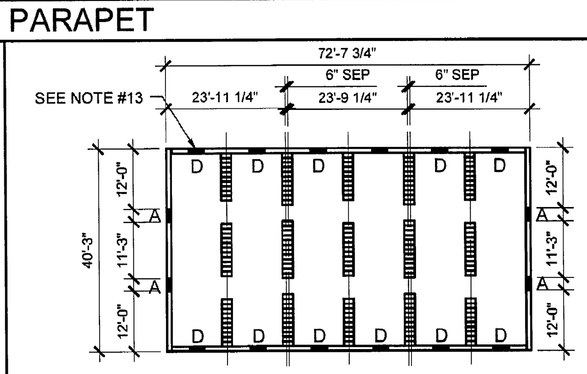
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
A-6.03

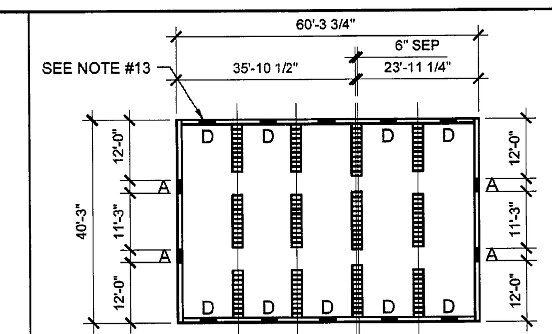
KEY PLAN VENTING CALCULATIONS W/O PARAPET



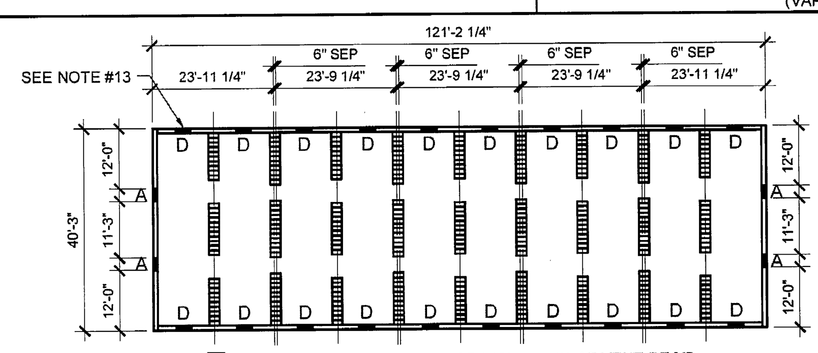
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(13) - "D" VENT = 17.81 SF
22.81 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



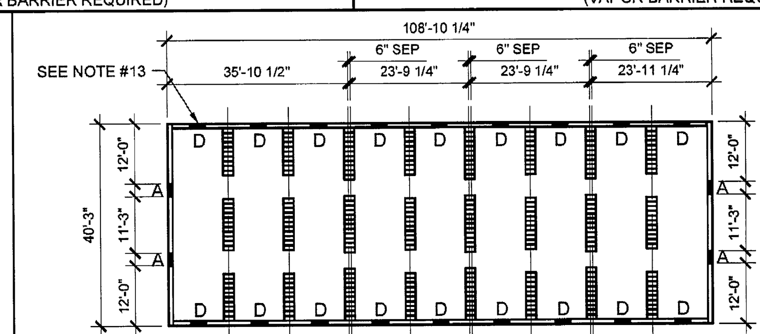
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(11) - "D" VENT = 15.07 SF
20.07 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



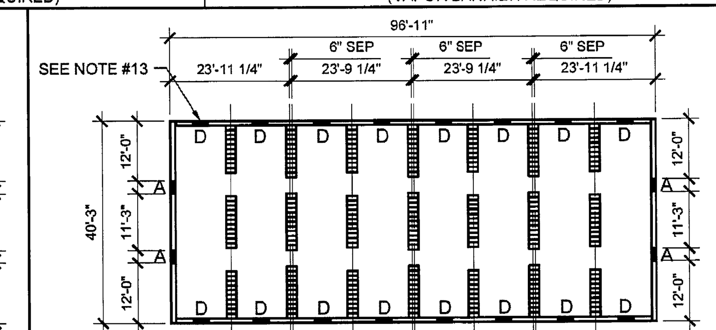
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(9) - "D" VENT = 12.33 SF
17.33 SF TOTAL VENTILATION (> 16.13 SF)
(VAPOR BARRIER REQUIRED)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(20) - "D" VENT = 27.5 SF
32.5 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(18) - "D" VENT = 24.66 SF
29.66 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(16) - "D" VENT = 21.92 SF
26.92 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

100 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE BLDGS	SEPARATION PAD AT ENDWALL ☐ ONE BLDG	SEPARATION PAD AT INTERIOR ☐ SEPARATE BLDGS	SEPARATION PAD AT INTERIOR ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x14 (2x16)[15]	2x14 (2x16)[15]	(10) 2x12 x 2'-0"	(11) 2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 2'-6" x 6" = 1.25 S.F. VENTILATION

"VENT OPENING BELOW CONT UPPER PLATE"

VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

VENT "C" (ENDWALL): 2'-9" x 4 1/2" = 1.03 S.F. VENTILATION

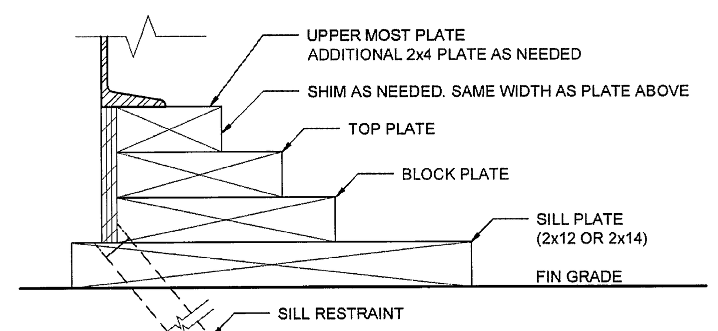
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): 2'-9" x 6" = 1.37 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 3'-6" TO 3'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50A.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50A
12. CRAWLSPACE VAPOR RETARDERS (OPTIONAL):
THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1203.3.2(2).
MATERIALS:
GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
INSTALLATION RECOMMENDATIONS:
OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50A; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION
15. IF PARAPET IS HIGHER THAN 18". COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OPTION
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
B. VENTS ARE A MAXIMUM OF 6" LONG x 3" MIN. HIGH.
C. VENTS ARE SPACED A MINIMUM OF 8" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.

NAILING SCHEDULE

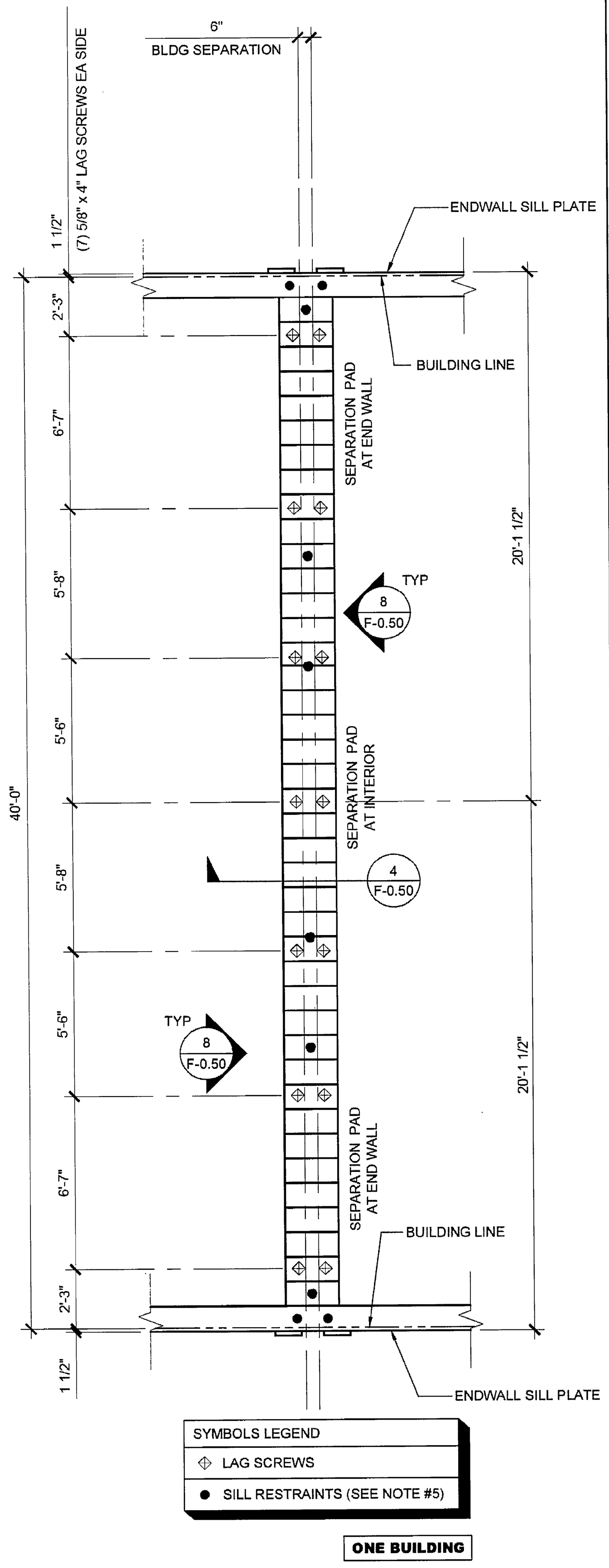
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
24' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 12" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

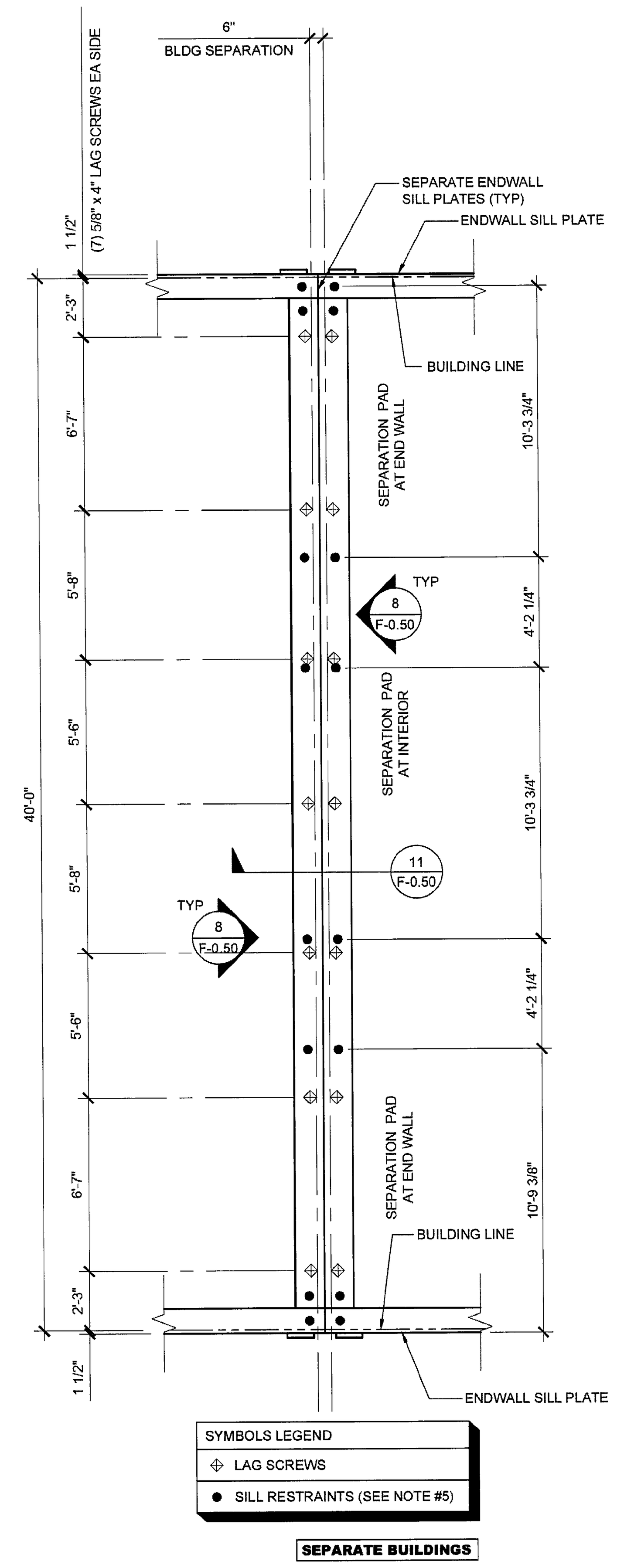
BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
24' x 40'	960 SF	6.4 SF (1/150)	2'-6" x 6" = (4) 1.25 SF/ EA (5 SF TOTAL)	2'-9" x 3" = (3) 0.68 SF/ EA (2.04 SF TOTAL)	7.04 SF SEE NOTE #8

TIE PLATE SCHEDULE

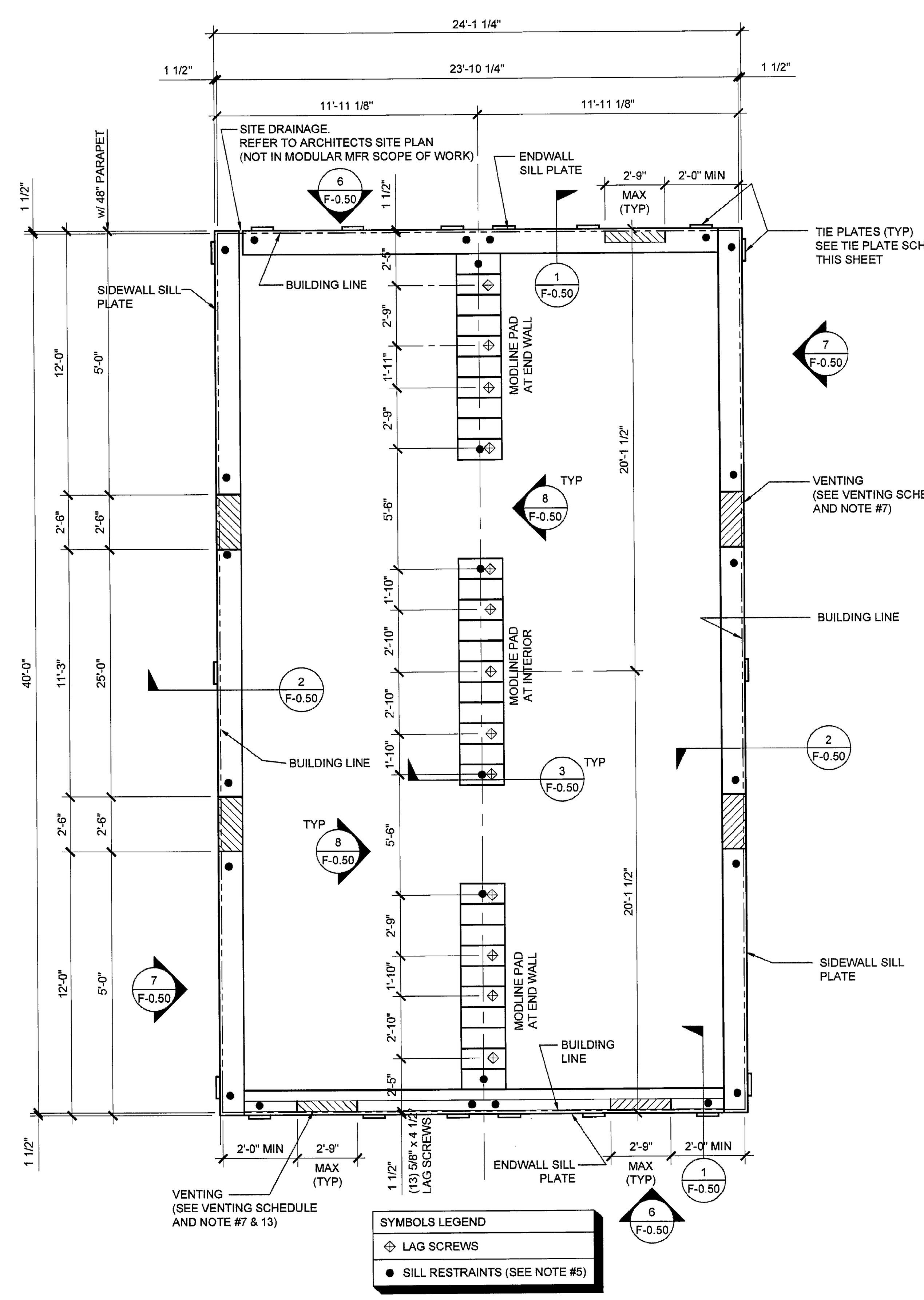
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
24' x 40'	3	6	18



FOOTING AT SEPARATION SCALE: 1/4" = 1'-0" 3



FOOTING AT SEPARATION SCALE: 1/4" = 1'-0" 2



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

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
WOOD FOUNDATION PLAN
24x40
(100 PSF)

R&S TAVARES ASSOCIATES
DESIGN • CONSULTING • PROJECT MGT
16875 W. BERNARDO DR. SUITE 285
SAN DIEGO, CA 92127 858.444.3344
WWW.RSTAVARES.COM

LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER D. FRISCH No. S3380 STRUCTURAL STATE OF CALIFORNIA
04/01/2015
RST#14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
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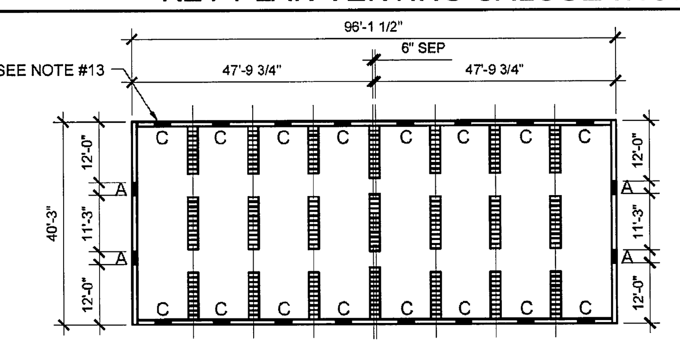
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

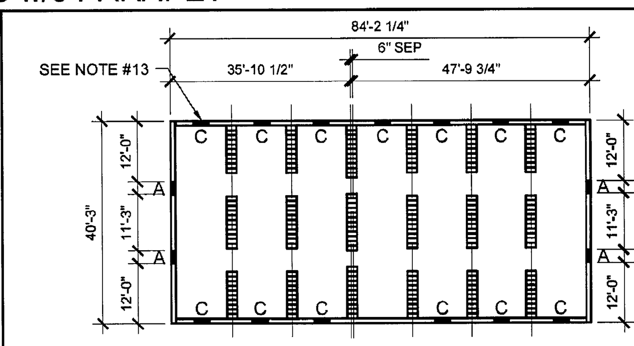
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
F-0.03
- - HIGH SEISMIC - -

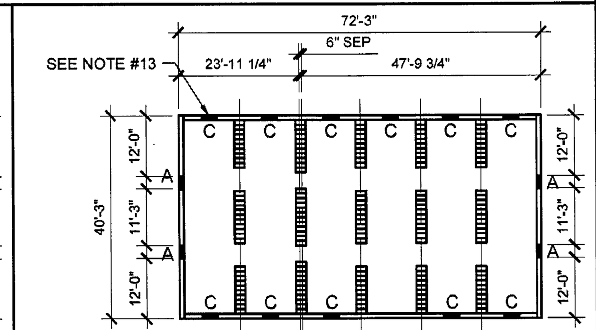
KEY PLAN VENTING CALCULATIONS w/o PARAPET



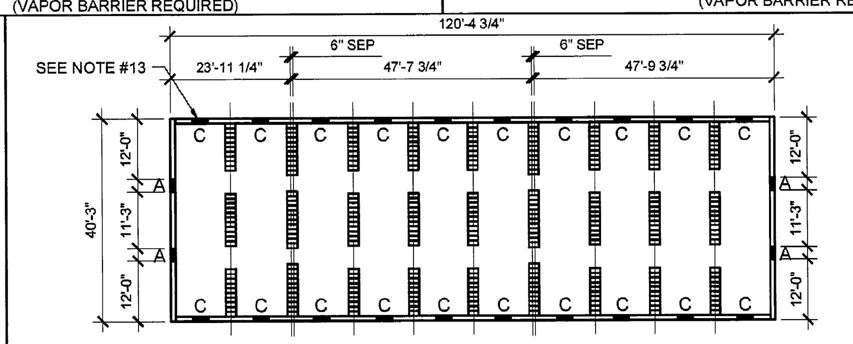
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(16) - "C" VENT = 22 SF
27 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)



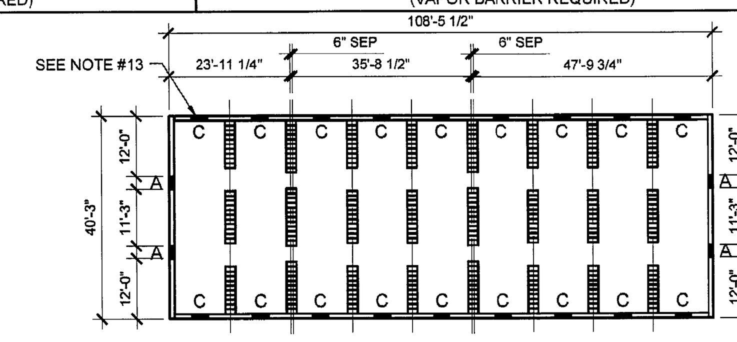
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(13) - "C" VENT = 17.875 SF
22.875 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



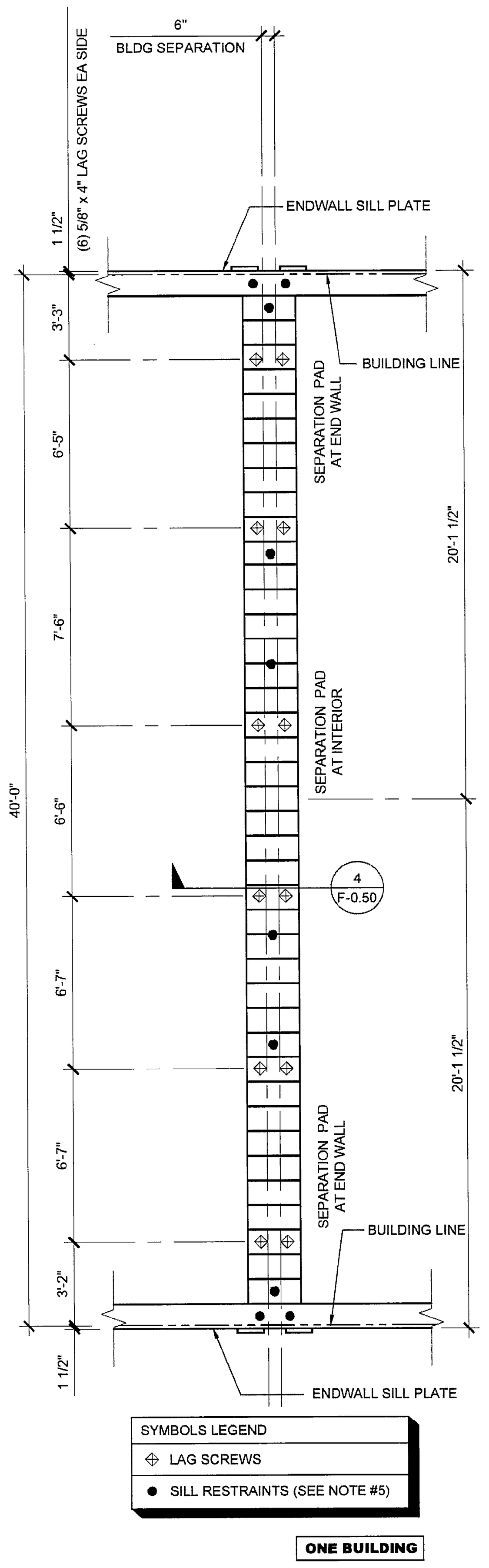
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(11) - "C" VENT = 15.125 SF
20.125 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



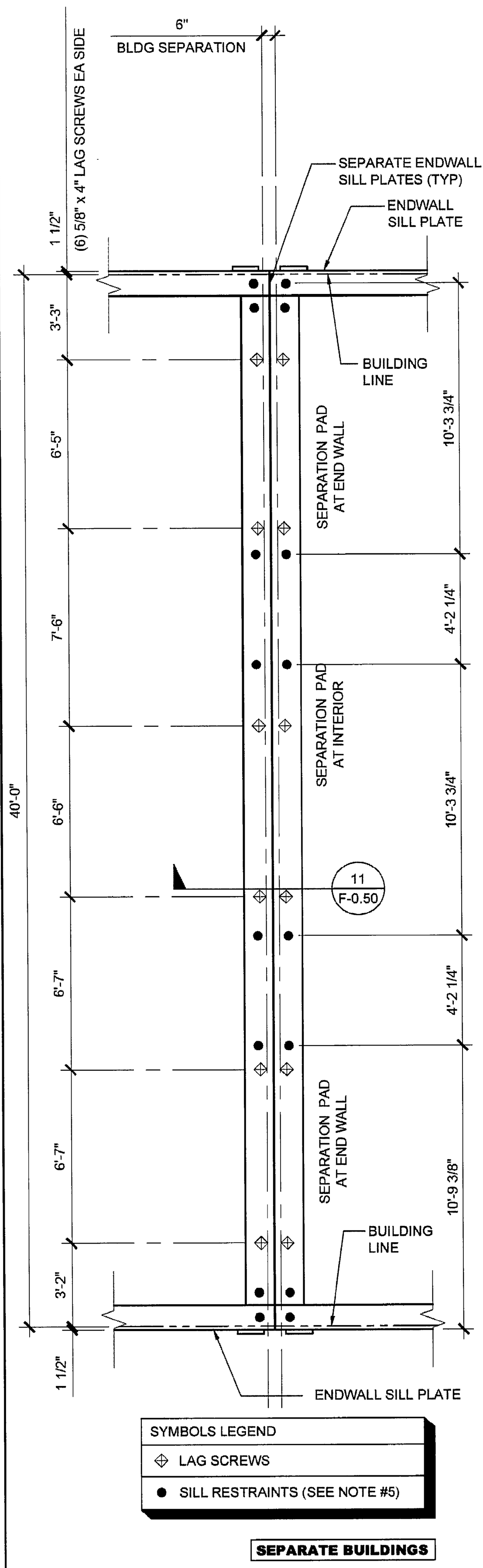
☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.5 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(20) - "C" VENT = 27.5 SF
32.5 SF TOTAL VENTILATION (> 32.5 SF)
(VAPOR BARRIER REQUIRED)



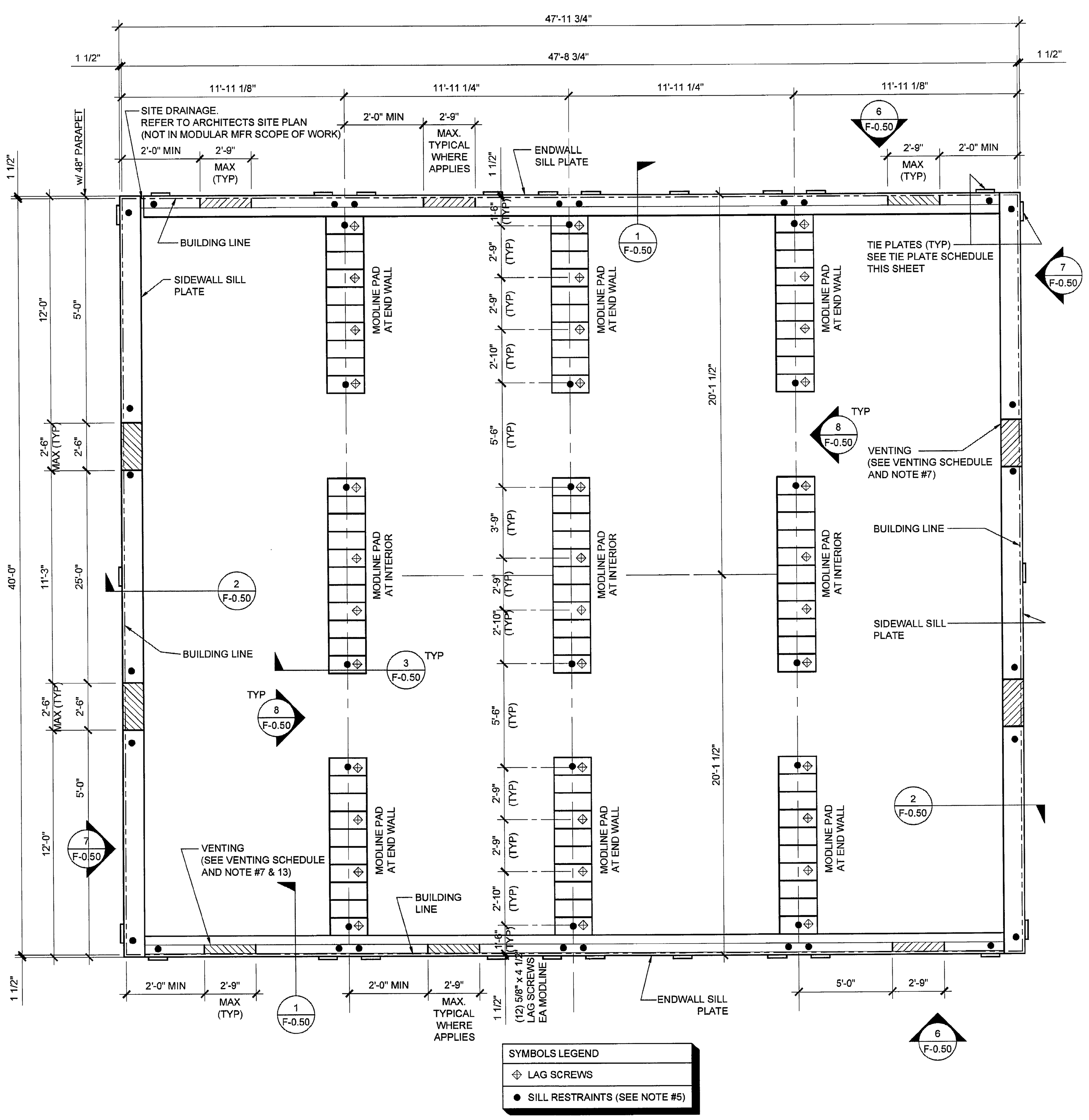
☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(18) - "C" VENT = 24.75 SF
29.75 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



FOOTING AT SEP SCALE: 1/4" = 1'-0" 3



FOOTING AT SEP SCALE: 1/4" = 1'-0" 2



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

WOOD FOUNDATION PLATE SCHEDULE

100 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE BLDGS	SEPARATION PAD AT ENDWALL ☐ ONE BLDG	SEPARATION PAD AT INTERIOR ☐ SEPARATE BLDGS	SEPARATION PAD AT INTERIOR ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x14 (2x16)[15]	2x14 (2x16)[15]	(10) 2x12 x 2'-0"	(11) 2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 2'-6" x 6" = 1.25 S.F. VENTILATION

"VENT OPENING AT SILL AND BLOCK PLATES"

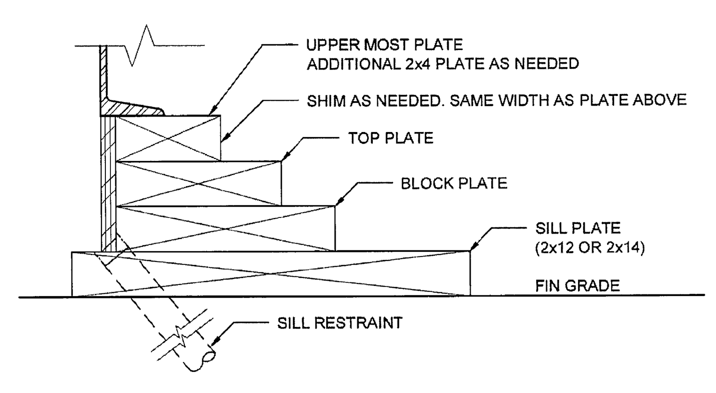
VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION

(OPTIONAL AT MULTPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): 2'-9" x 6" = 1.375 S.F. VENTILATION

(OPTIONAL AT MULTPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50A.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50A
12. CRAWLSPACE VAPOR RETARDERS (OPTIONAL):
THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1203.3.2(2).
MATERIALS:
GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
INSTALLATION RECOMMENDATIONS:
OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50A; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION
15. IF PARAPET IS HIGHER THAN 18". COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OPTION
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
B. VENTS ARE A MAXIMUM OF 6" LONG x 3" MIN. HIGH.
C. VENTS ARE SPACED A MINIMUM OF 8" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.

NAILING SCHEDULE

BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
48' x 40'	7" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 12" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
48' x 40'	1920 SF	12.8 SF (1/150)	2'-6" x 6" = (4) 1.25 SF/ EA (5 SF TOTAL)	2'-9" x 4 1/2" = (8) 1.031 SF/ EA (8.24 SF TOTAL)	13.24 SF SEE NOTE #8

TIE PLATE SCHEDULE

BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
48' x 40'	3	10	26

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SILVER CREEK INDUSTRIES, INC.
SILVER CREEK
"BUILDING FOR THE NEXT GENERATION"
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
WOOD FOUNDATION PLAN
48x40
(100 PSF)

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
16875 W. BERNARDO DR. SUITE 285 SAN DIEGO, CA 92127 858.444.3344
WWW.RSTAVARES.COM

LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER ... D. FRISCH No. S3380 STRUCTURAL STATE OF CALIFORNIA
04/01/2015
RST#14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 1 4 2015

REVISIONS

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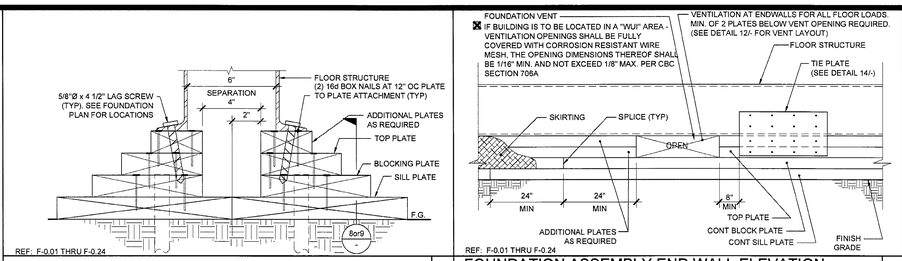
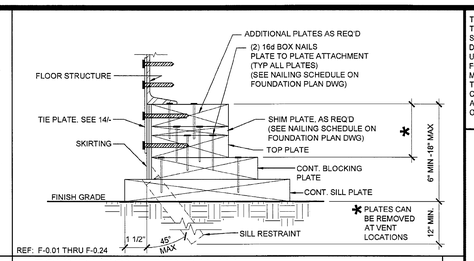
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

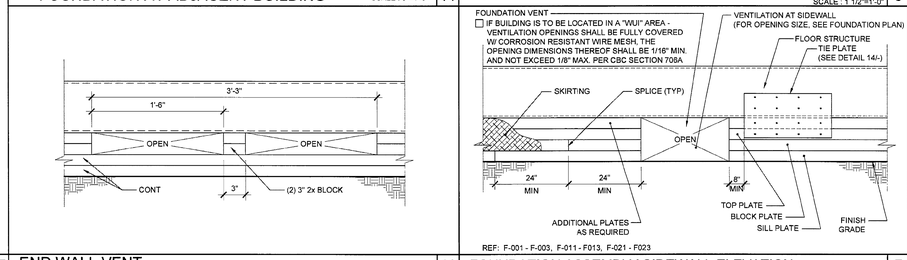
P.C. SHEET NUMBER
F-0.23
- - HIGH SEISMIC - -



FOUNDATION ASSEMBLY END WALL ELEVATION SCALE : 1 1/2"=1'-0" 6



FOUNDATION AT END WALL SCALE : 3"=1'-0" 1



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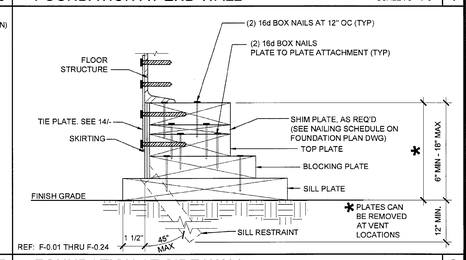
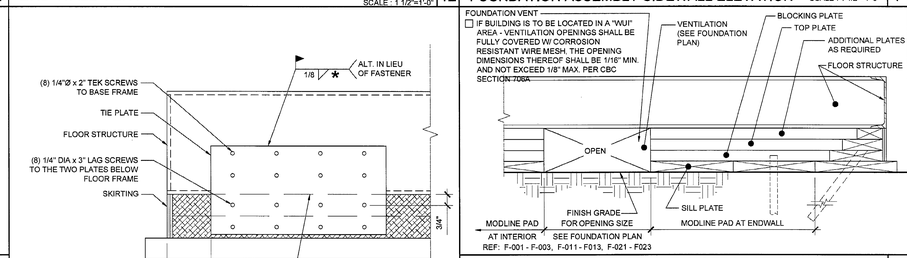
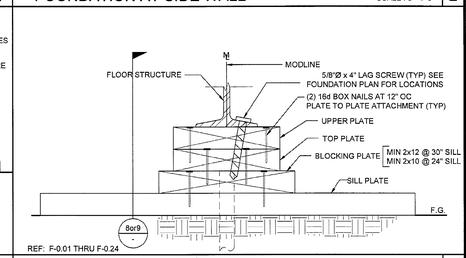


FOUNDATION AT SIDE WALL SCALE : 3"=1'-0" 2

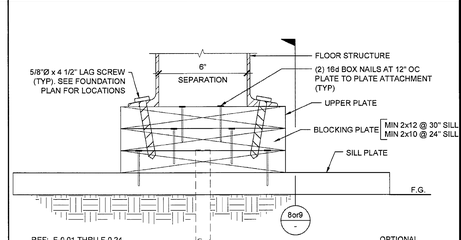


FOUNDATION AT MODLINE & SEPARATION SCALE : 1 1/2"=1'-0" 8



FOUNDATION AT MODLINE SCALE : 3"=1'-0" 3

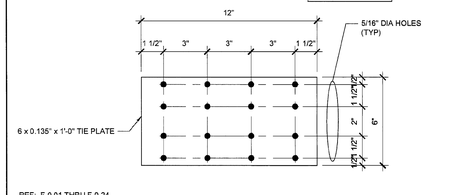
VENT ELEV. AT MODLINE & SEP FOR 150 PSF SCALE : 3"=1'-0" 9



FOUNDATION AT ADJACENT BUILDING SCALE : 3"=1'-0" 4

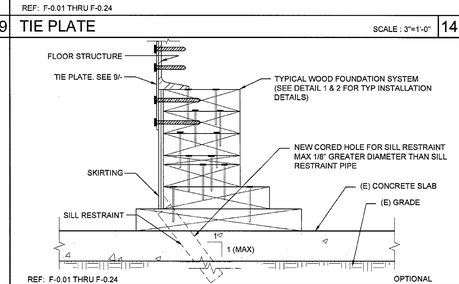
END WALL VENT SCALE : 1 1/2"=1'-0" 17

TIE PLATE SCALE : 3"=1'-0" 18



FOUNDATION ANCHORAGE AT CONCRETE PAD SCALE : 3"=1'-0" 19

CRAWLSPACE VAPOR RETARDER SCALE : 3"=1'-0" 10



FOUNDATION SPLICE SCALE : NTS 5

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SILVER CREEK INDUSTRIES, INC.

"BUILDING FOR THE NEXT GENERATION"

SILVER CREEK

2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:

PALOMAR COLLEGE EDUCATION CTR.

PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:

FOUNDATION DETAILS

WOOD

TAVARES ASSOCIATES
DESIGN/CONSULTING/PROJECT MGT
LARTA M. TAVARES, PROJECT MGR
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LICENSED ARCHITECT — LARTA M. TAVARES — No. C-33487 — REN 01-31-2015 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — RICHARD D. DEVANEY — No. S3380 — STRUCTURAL — STATE OF CALIFORNIA

04/01/2015

RSI Ref: 14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT — NOT FOR CONSTRUCTION — A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC. ___ FLS. ___ SS. ✓
DATE APR 1 4 2015

REVISIONS

1 2 3 4 5 6 7 8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER

F-0.50

- - HIGH SEISMIC - -

STRUCTURAL SPECIFICATIONS

FOUNDATIONS:

GEOTECHNICAL INVESTIGATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH SECTIONS 1803A.3 THROUGH 1803A.8. EXCEPTIONS, 1) GEOTECHNICAL REPORTS ARE NOT REQUIRED FOR ONE-STORY, WOOD-FRAME AND LIGHT-STEEL-FRAME BUILDINGS OF TYPE II OR TYPE V CONSTRUCTION AND 4,000 SQUARE FEET OR LESS IN FLOOR AREA, NOT LOCATED WITHIN EARTHQUAKE FAULT ZONES OR SEISMIC HAZARD ZONES AS SHOWN IN THE MOST RECENTLY PUBLISHED MAPS FROM THE CALIFORNIA GEOLOGICAL SURVEY (CGS) OR IN SEISMIC HAZARD ZONES AS DEFINED IN THE SAFETY ELEMENT OF THE LOCAL GENERAL PLAN, 2) A PREVIOUS REPORT FOR A SPECIFIC SITE MAY BE RESUBMITTED, PROVIDED THAT A REEVALUATION IS MADE AND THE REPORT IS FOUND TO BE CURRENTLY APPROPRIATE. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1806A.2 PER CBC SECTION 1803A.2

CONCRETE

PROVIDE NECESSARY SHIMS ON FOOTINGS NOT LEVEL WITHIN THE 1/2" ALLOWABLE TOLERANCE. THE DISTRICT SHALL PROVIDE CLEAR AND UNOBSTRUCTED ACCESS TO THE SITE. THE DISTRICT IS RESPONSIBLE FOR ALL SURVEYING, STAKING THE BUILDING CORNERS, SETTING THE FINISH FLOOR ELEVATION, RIGGING, CRANING, EXCAVATION, SPOIL REMOVAL, AND BACKFILL.

THE FOUNDATION AND THE METHOD OF FASTENING THE UNITS SHALL BE AS SHOWN ON DRAWINGS WHERE APPLICABLE. HIGH STRENGTH GROUT SHALL BE EMBECO 885 NON-SHRINK, METALLIC AGGREGATE GROUT OR A DSA APPROVED EQUAL.

THE DESIGN OF CONRETE FOUNDATIONS WILL BE AS FOLLOWS:

1. FURNISH AND INSTALL ALL CONCRETE WORK AS SHOWN ON THE DRAWINGS AND AS SPECIFIED.
2. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN AND / OR THE DETAILS ON THE DRAWINGS, ALL WORK INCLUDED IN THIS SECTION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF CODES AND STANDARDS.
   a) ALL WORK AND MATERIALS SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS, AND CHAPTER 19A.
   b) AMERICAN CONCRETE INSTITUTE (ACI): BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI318-11.
   c) SOCIETY FOR TESTING AND MATERIALS (ASTM): THE SPECIFICATIONS AND STANDARDS HEREINAFTER REFERENCED TO SHALL BE OF THE LATEST EDITION.
3. CONCRETE FOUNDATION TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT AND OR INSPECTOR.
4. DESIGN MIXES SHALL BE AS SPECIFIED IN TITLE 24. CONCRETE STRENGTH AT 28 DAYS SHALL BE AS FOLLOWS: (UNLESS REQUIRED OTHERWISE PER ACI 318-11 TABLE 4.3.1).
   CONCRETE COMPRESSIVE STRENGTH F'C= 3500 PSI
   WATER-CEMENT RATIO SHALL NOT EXCEED 0.60 BY WEIGHT
   PORTLAND CEMENT TYPE I
   NORMAL WEIGHT
5. FORMS SHALL BE SUBSTANTIAL, PLUMB, LEVEL, SQUARE, TRUE TO LINE, WATER TIGHT AND ACCURATE TO THE DIMENSIONS REQUIRED.
6. THE ARCHITECT SHALL APPROVE LOCATION OF:
   a) OPENINGS FOR MECHANICAL AND ELECTRICAL: PROVIDE FOR OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED AND INSTALL SLEEVES AS MAY BE REQUIRED.
   b) OPENINGS FOR VENT WELLS FOR UNDER FLOOR VENTILATION: PROVIDE FOR ALL OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED. INSTALL ALL SLEEVES AS MAY BE REQUIRED.
7. VARIANCE IN CONCRETE SLAB SURFACE SHALL BE NO MORE THAN 1/16" IN 10 FEET
8. ALL CEMENT SHALL BE TYPE 1 OR 11 PER ASTM C-150. (UNLESS REQUIRED OTHERWISE PER CBC 1802A.2.3
9. WATER CONTENT SHALL NOT EXCEED 7 1/4 GALLONS PER SACK OF CEMENT (UNLESS REQUIRED OTHERWISE PER ACI 318-11 TABLE 4.3.1)
10. AGGREGATE SHALL BE 3/4" TO 1 1/2" MAXIMUM SIZE BUT NOT MORE THAN 3/4" OF MINIMUM CLEAR BAR SPACING
11. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, AND EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED "WET SETTING" IS NOT ALLOWED.
12. REFER TO ARCHITECTURAL, ELECTRICAL, AND MECHANICAL PLANS FOR SLEEVES, INSERTS CURBS, DEPRESSED AREAS, AND ETC.
13. CONCRETE MIX REQUIRED: CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN FOR FOOTINGS TO PROFESSIONAL OF RECORD FOR APPROVAL PRIOR TO POURING CONCRETE.

1705A.3.3. WAIVER OF BATCH PLAN INSPECTION.

A. WHEN BATCH PLANT INSPECTION IS WAIVED, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCHING AT THE START OF DAY.
2. LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTITY AND CERTIFY TO EACH LOAD BY A TICKET.
3. BATCH TICKETS, INCLUDING ACTUAL MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD AND SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR WILL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK , IT'S LOAD, TIME OF RECEIPT AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.

REINFORCING STEEL:

1. MATERIAL: ALL REINFORCING STEEL SHALL BE BILLET STEEL PER ASTM A-615 MIN. GRADE 40. EXCEPT #3 ANCHOR REINFORCEMENT SHALL BE GRADE 60.
2. SPLICES: ALL SPLICES SHALL BE LAPPED A MINIMUM 48" #5 BARS AND 30" #4 BARS UNLESS OTHERWISE DETAILED.
3. REINFORCING FABRICATION AND PLACEMENT: FABRICATION AND PLACING OF REINFORCING SHALL CONFORM TO THE "CODE OF STANDARD PRACTICE AND SPECIFICATIONS FOR PLACING REINFORCEMENT OF THE CONCRETE REINFORCING STEEL INSTITUTE".
4. MINIMUM COVERAGE: ALL REINFORCING SHALL HAVE THE FOLLOWING MINIMUM COVERAGE WITH CONCRETE:

LOCATION	AMOUNT
FORMED EARTH	2"
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
WALL-EXPOSED FACE	
#5 OR SMALLER	2"
#6 OR LARGER	2"
WALL-UNEXPOSED FACE	3/4"

STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL OTHER THAN TUBE AND PIPE COLUMNS SHALL CONFORM TO ASTM A-36.
2. TUBE COLUMNS SHALL CONFORM TO ASTM A500 GRADE B, OR A1085
3. PIPE COLUMNS SHALL CONFORM TO ASTM A501 OR ASTM A53, TYPE E OR S, GRADE B. OR A1085
4. TUBE STEEL USED FOR RAMPS & STAIRS SHALL CONFORM TO ASTM A513 GRADE MT1020 OR BETTER

STEEL FRAME BUILDING/STEEL FRAME CONSTRUCTION SHALL MEET THE MINIMUM DESIGN REQUIREMENTS OF STUD SPACING, ETC. PER LATEST EDITION OF 2013 CALIFORNIA BUILDING CODE. ALL WORK AND MATERIALS SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," AMERICAN INSTITUTE OF STEEL CONSTRUCTION: TITLE 24, CCR, AND UNIFORM BUILDING CODE. STRUCTURAL STEEL SHALL BE MADE EITHER THE OPEN-HEARTH OR ELECTRIC FURNACE PROCESS ONLY AND SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL STEEL" ASTM DESIGNATION A36, CURRENT EDITION.

ROOF FRAMING, FLOOR FRAMING, AND WALL FRAMING SHALL BE PER MANUFACTURER'S PC PLANS AND PER APPLICABLE CODES.

ALL STRUCTURAL MEMBERS BELOW THE SUB-FLOOR, IE, GIRDERS, JOISTS, HEADERS, BLOCKING, SHALL BE STEEL. MINIMUM JOIST SPACING SHALL BE PER PLAN.

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AISC STANDARD SPECIFICATIONS, THE APPLICABLE REGULATORY AGENCY AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OR LIGHT GAUGE STEEL STRUCTURAL MEMBERS. WELDING: SHALL COMPLY WITH THE PERTINENT PROVISIONS OF THE APPLICABLE REGULATORY AGENCY. ALL WELDING SHALL BE DONE BY OPERATORS WHO ARE QUALIFIED AS PRESCRIBED IN THE "QUALIFICATION PROCEDURE" OF THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPE OF WORK REQUIRED.

STEEL SHALL BE COATED WITH ONE SHOP COAT OF MANUFACTURER'S STANDARD CHASSIS PAINT OR EQUAL.

BOLTS:

ALL COMMON BOLTS AND ANCHOR BOLTS SHALL CONFORM TO ASTM A-307.

STRUCTURAL WELDING: SPECIAL INSPECTOR REQUIRED

GENERAL: DURING THE WELDING OF ANY MEMBER OR CONNECTION THAT IS DESIGNED TO RESIST LOADS AND FORCES REQUIRED BY THIS CODE.

ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT/LBS AT MINUS 20 DEGREES F AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

ALL STRUCTURAL WELDING SHALL BE BY "ELECTRIC ARC PROCESS" PER AWS STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. ALL LIGHT GAUGE STEEL (SHEET STEEL) SHALL BE WELDED PER AWS D1.3. ALL REINFORCING STEEL SHALL BE WELDED WITH LOW HYDROGEN RODS PER AWS D1.4, OR REINFORCING STEEL SHALL CONFORM TO ASTM A-706. ALL SHOP WELDED MUST BE PERFORMED BY "APPROVED" WELDERS IN A SHOP OF A LICENSED FABRICATOR. ALL FIELD WELDING SHALL BE PERFORMED BY "APPROVED" WELDERS. ELECTRODES SHALL BE E70XX FOR STRUCTURAL STEEL AND REBAR AND SHALL BE E60XX FOR LIGHT GAUGE STEEL. * (SEE OPTIONAL PROCESS)

THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE MATERIALS, WELDING PROCEDURES AND QUALIFICATION OF WELDERS ARE VERIFIED PRIOR TO THE START OF WORK: PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS, AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO SHIPMENT OF SHOP WELDING.

a) FLOOR AND ROOF DECK WELDING.
b) WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGM OR COMPOSITE SYSTEMS.
c) WELDED SHEET STEEL FOR COLD-FRAMED STEEL FRAMING MEMBERS SUCH AS STUDS AND JOISTS WHICH ARE NOT PART OF AN ORDINARY MOMENT FRAME.
d) SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16".

MATERIAL SHALL BE IDENTIFIED BY MARKING OR STAMPING THE I.D. NUMBER ON STRUCTURAL STEEL COMPONENTS BY LICENSED FABRICATION SHOP.

ALL BUTT, BEVEL, GROOVE, VEE, U AND J WELDS SHALL BE PREQUALIFIED COMPLETE PENETRATION WELDS.

FILLER MATERIAL FOR WELDING: SHIELDED METAL-ARC: AWS A5.1 OR 15.5 E70XX ELECTRODES.

HOLES IN STRUCTURAL STEEL SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.

STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED BY SCRAPING OR WIRE BRUSHING AND SHOP PRIMED.

ALL STEEL WORK, INCLUDING WELD AND CONNECTIONS EXCEPT WHERE ENTIRELY ENCASED IN CONCRETE SHALL BE GIVEN ONE COAT OF ACCEPTABLE METAL PROTECTION WELL WORKED INTO JOINTS AND OPEN SPACES.

* OPTIONAL USE OF: FCAW PROCESS: E71T-8 FOR STRUCTURAL/REBAR (MEETS ALL CHARPY REQUIREMENTS) E71T-11 FOR METAL DECKING

COLD-FORMED STEEL FRAMING:

STRUCTURAL LIGHT GAUGE STEEL FRAMING AND ACCESSORIES SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A-1011/A GRADE AS LISTED BELOW, SEE PLAN FOR MINIMUM YIELD.
MATERIAL THICKNESS 0.120" OR LESS: ASTM A-1011/A GRADE 33 (UNO)
MATERIAL THICKNESS 0.135" : ASTM A-1011/A GRADE 40

SHEET STEEL DESIGNATION THICKNESS (INCHES)	MINIMUM DELIVERED THICKNESS (INCHES)
0.018	0.017
0.030	0.029
0.036	0.034
0.048	0.046
0.060	0.057
0.075	0.071
0.105	0.100
0.120	0.114
0.135	0.128

LIGHT GAUGE STEEL STUDS AND TRACKS SHALL COMPLY WITH ASTM A-1003 STRUCTURAL GRADE 33 TYPE H

ALL WELDING SHALL BE IN CONFORMANCE WITH AWS D1.3, "STRUCTURAL WELDING CODE - SHEET STEEL". QUALIFICATION OF WELDERS SHALL BE IN ACCORDANCE WITH AWS D1.1, CHAPTER 5, PART C, "WELDER QUALIFICATIONS".

BOLTS, SCREWS, ETC. EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED

MACHINE BOLTS USED SHALL CONFORM TO SPECIFICATIONS OF ASTM STANDARD A-307.

NTD:
(b) CJP GROOVE WELD NDT
ULTRASONIC TESTING SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16 in. (8mm) THICK OR GREATER. ULTRASONIC TESTING IN MATERIALS LESS THAN 5/16 in. (8 mm) THICK IS NOT REQUIRED. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS.

WOOD:

FRAMING: ALL FRAMING LUMBER SHALL BE GRADE MARKED BY AN APPROVED GRADING AGENCY AND SHALL BE OF THE FOLLOWING MINIMUM GRADES OR BETTER, PER WCLB RULES #16.
PLATES AND BLOCKING - STANDARD GRADE OR BETTER (DF #2 OR BETTER)
STUDS AND HEADER = DF #2 OR BETTER

SHEATHING:

AMERICAN PLYWOOD ASSOCIATION PS 1-07. EACH SHEET SHALL BE GRADE MARKED BY THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL CONFORM TO THE REQUIREMENTS OF STANDARD GRADE GROUP 1 OR BETTER GRADE STAMPED AND IDENTIFIED UNDER THE PROCEDURES AND QUALIFICATIONS SET FORTH BY PS 1-07.

1. PLYWOOD SUB FLOOR: 1 1/8" T&G UNBLOCKED PLYWOOD. PROVIDE SEAMLESS WOVEN POLYFLEX BOTTOM BOARD FOR MOISTURE PROTECTION
2. OPTIONAL PLYWOOD ROOF DECK: APA RATED 3/4" T&G OSB OR EQUIVALENT RATED SHEATHING WITH APPROVAL FROM DSA
3. EXTERIOR WALL SIDING:
   i. STANDARD: 5/8" DURATEMP OR 5/8" SMART PANEL
   ii. OPTIONAL: 5/8" MDO
   iii. OPTIONAL: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO FINISH
4. EXTERIOR WALL SIDING ATTACHMENT:
   FASTENERS USED FOR THE ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE HOT-DIPPED GALVANIZED, MECHANICALLY DEPOSITED ZINC-COATED, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC SECTION 2304.9.1.1

TREATED WOOD:

ALL WOOD INCLUDING WOOD SHEATHING IN CONTACT WITH CONCRETE OR MASONRY AND LOCATED WITHIN 18" OF EXPOSED EARTH SHALL BE "PRESERVATIVE TREATED" OR SHALL BE "NATURALLY DURABLE" MATERIAL (CBC SECTION 2304.11.2.2).

1. ALL ROUGH LUMBER SHALL BE DF #2 OR BETTER.
2. FASTEN WOOD BESIDES USING SCREWS.
   ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, AND RAMSET POWER DRIVEN FASTENERS (ICC# ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.
3. FASTENERS, INCLUDING NUTS AND WASHERS, IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC 2304.9.5.1

CONTINUOUS INSPECTION:

PROJECT INSPECTOR TO PROVIDE CONTINUOUS FIELD INSPECTION.

IN-PLANT INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION IN-PLANT

METALS, STRUCTURAL, AND MISC. STEEL:

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND SERVICES REQUIRED FOR STRUCTURES AND MISCELLANEOUS STEEL AS SPECIFIED AND INDICATED IN THE DRAWINGS.

STEEL SHEETS: STEEL SHEETS FOR LIGHT GAUGE STEEL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-1011/A, GRADE 40 U.O.N. SHEET METAL GRAVEL STOPS AND FLASHINGS SHALL BE MINIMUM 0.030 THICKNESS AND SHALL BE GALVANIZED.

ERECTION:
ALL STRUCTURAL STEEL SHALL BE ERECTED TRUE, STRAIGHT, PLUMB AND TO ITS DESIGNED LOCATION. TEMPORARY BRACING OR SHORING SHALL BE INSTALLED WHEREVER NECESSARY TO TAKE CARE OF LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING ERECTION EQUIPMENT AND THE OPERATION OF SAME. CONNECTIONS SHALL BE ADEQUATE TO WITHSTAND STRESSES TO WHICH THEY ARE NORMALLY SUBJECTED. CONNECTIONS SHALL BE STEEL, EXCEPT AS OTHERWISE NOTED. FIELD CONNECTIONS SHALL BE BOLTED OR WELDED AS SHOWN ON THE DRAWINGS.

SHOP PAINT:

* EXPOSED STEEL COATED WITH ONE SHOP COAT OF PRIMER.
* NON-EXPOSED STEEL COATED WITH ON SHOP COAT OF PRIMER.
* ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.

POWER DRIVEN FASTENERS FOR SILL PLATE, WOOD NAILERS TO STEEL COLUMNS, AND SHEET METAL TO STRUCTURAL STEEL:

ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, OR RAMSET POWER DRIVEN FASTENERS (ICC# ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.

WOOD ROUGH CARPENTRY:

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS AND STEPS NECESSARY TO PROTECT ALL COMPLETED, SEMI-COMPLETED, AND TEMPORARY WORK FROM COMMENCEMENT OF PROJECT TO COMPLETE, SEMI-COMPLETION OF SAME ANY PORTION OF THE WORK DAMAGED OR DISFIGURED SHALL BE SATISFACTORILY REPAIRED OR REPLACED AND THE WORK AS A WHOLE LEFT WITHOUT BLEMISH AT FINAL ACCEPTANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY MEASUREMENTS AT THE BUILDING, THE ACCURATE FITTING OF ALL WORK AND PROPER ACCOMMODATION OF OTHER TRADES.

DESCRIPTION OF WORK:
THIS SECTION INCLUDES FURNISHING OF ALL LABOR, MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION, AND FACILITIES TO COMPLETE ROUGH CARPENTRY AS INDICATED IN THE DRAWINGS AND AS SPECIFIED HEREIN.

WORKMANSHIP:
ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE BEST PRACTICE, SHALL BE ACCURATE AS TO MEASUREMENT AND SHALL BE CAREFULLY DONE. PLYWOOD SHEATHING SUBFLOOR SHALL PROVIDE A SMOOTH UNIFORM SURFACE CAPABLE PROPERLY ACCEPTING A CARPET FINISH.

ROOF DIAPHRAGM:
3/4" T&G APA RATED SHEATHING - STRUCTURE 1 EXPOSURE 1
SPAN RATING 48/24 MIN.
FASTEN TO SHEET METAL SUPPORTS W/ #8 x 1 1/4" LG. SELF DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 4" OC AT BOUNDARIES, 6" OC AT EDGES, AND 12" OC FIELD NAILS. MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.
ALTERNATE TO T&G SHEATHING: PANEL EGDE CLIPS (ONE MIDWAY BETWEEN EACH SUPPORT, EXCEPT TWO EQUALLY SPACED BETWEEN SUPPORTS 48" O.C.) PER TABLE 2304.7(3)

FLOOR DIAPHRAGM:
1 1/8" PLYWOOD - STURD-I-FLOOR
EXTERIOR - TONGUE AND GROOVE EDGES
SPAN RATING: 48"
FASTEN TO SHEET METAL SUPPORTS W/ #8 - 24 x 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 6" OC AT BOUNDARIES, AT 6" OC AT EDGES, AND 12" OC AT INTERMEDIATE SUPPORTS. MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.

@ 150-PSF BLOCKED PER AISI S213-07 TABLE D2-1
FASTEN TO SHEET METAL SUPPORTS W/ #8 - 24 x 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 4" O.C. BOUNDARIES + CONT. PANEL EDGES, 6" O.C. @ ALL OTHER PANEL EDGES 12" O.C. INTERMEDIATE.
ALL EDGES OF ALL PANELS SHALL BE ATTACHED TO FRAMING MEMBERS OR STRAPPING , FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33 MILS WITH A MINIMUM WIDTH OF 1.5 INCHES. SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR
STRENGTH: 3500 PSI or 4000 PSI
TYPE: I OR II
DENSITY: 110 PCF - MAX

DIMENSION LUMBER ATTACHMENT TO STEEL FRAMING:
2 x STUDS AT CORNER STEEL COLUMNS (NAILING STUD)
USE: #10 - 24 x 2 1/2" LG. SELF-DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD WITH WASHER ZINC COATED TEK SCREWS AT 24" O.C.

REFERENCE STANDARDS NOTES:

INTENT OF DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE STATE OF CALIFORNIA, CALIFORNIA CODE OF REGULATIONS, PART 1, 2, 3, 4, 5, 6, 9, AND 12, SUB-CHAPTER 1. CALIFORNIA BUILDING CODE, 2013 EDITION, MANUAL OF STEEL CONSTRUCTION, (AISC) 14TH EDITION, AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, AWS D1.1, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION STANDARD, (AITC) 109 ARCHITECTURAL SHEET METAL MANUAL, AIA FILE NO. 12-L (SMACNA) LATEST ADOPTED EDITION UNLESS OTHERWISE NOTED.

WORKMANSHIP:
WORKMANSHIP AND MATERIALS SHALL BE SUCH THAT BUILDING WILL BE WEATHERTIGHT AND WATERTIGHT.

INSPECTIONS:
A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

CHANGES:
CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

NAILING NOTES:
1. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED
2. MACHINE APPLIED 16d FASTENERS SHALL HAVE AN EMBEDMENT OF NOT LESS THAN 1 1/2" INTO THE SECOND MEMBER, AND SHALL BE NOT LESS THAN 3" IN OVERALL LENGTH. THE ABOVE NAILS SHALL ALSO BE ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIRED EMBEDMENT IS MAINTAINED.

CONNECTION AND FASTENERS:
ALL CONNECTIONS AND FASTENERS AS STATED ON THESE DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT PRODUCT WITH ICC REPORTS AND APPROVAL BY DSA.

CONNECTION OF LAG SCREWS:
AS REQUIRED PER ANSI / AF&FA NDS-2012, LAG SCREWS MUST BE INSTALLED INTO A PRE-DRILLED PILOT HOLE WITH A STANDARD WASHER AND TURNED WITH A WRENCH. DO NOT DRIVE IN WITH A HAMMER. OVER-TORQUING CAN SIGNIFICANTLY REDUCE THE LATERAL RESISTANCE OF THE LAG SCREW AND SHOULD BE AVOIDED.

FASTENING SCHEDULE
CBC - TABLE 2304.9.1

CONNECTION	FASTENING[a,m]	LOCATION
1. JOIST TO SILL OR GIRDER	3 - 8d COMMON 3 - 3" x 0.131" NAILS	TOENAIL
2. BRIDGING TO JOIST	2 - 8d COMMON (2 1/2" x .131") 2 - 3" x 0.31" NAILS	TOENAIL EACH END
3. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2 - 8d COMMON (2 1/2" x .131")	FACE NAIL
4. WIDER THAN 1" x 6" SUBFLOOR TO EACH JOIST	3 - 8d COMMON (2 1/2" x .131")	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER	2 - 16d COMMON	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING	16d(3 1/2" x .135") AT 16" O.C. 3"x0.131" NAILS AT 8" O.C.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLKING AT BRACED WALL PANEL	3 - 16d(3 1/2" x .135") AT 16" O.C. 4 - 3"x0.131" NAILS AT 16" O.C.	BRACED WALL PANELS
7. TOP PLATE TO STUD	2 - 16d COMMON (3 1/2" x 0.162") 3 - 3"x0.031" NAILS	END NAIL
8. STUD TO SOLE PLATE	4 - 8d COMMON (2 1/2"x0.131") 4 - 3"x0.131" NAILS	TOENAIL
	2 - 16d COMMON (3 1/2"x0.162") 3 - 3"x0.131" NAILS	END NAIL
9. DOUBLE STUDS	16d (3 1/2"x0.135") AT 24" O.C. 3"x0.131" NAILS AT 12" O.C.	FACE NAIL
10. DOUBLE TOP PLATES	16d (3 1/2"x0.135") AT 16" O.C. 3"x0.131" NAILS AT 12" O.C.	TYPICAL FACE NAIL
DOUBLE TOP PLATES	8 - 16d COMMON (3 1/2"x0.162") 12 - 3"x0.131" NAILS	LAP SPLICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3 - 8d COMMON (2 1/2"x0.131") 3 - 3"x0.131" NAILS	TOENAIL
12. RIM JOIST TO TOP PLATE	8d (2 1/2"x0.131") AT 6" O.C. 3"x0.131" NAIL AT 6" O.C.	TOENAIL
13. TOP PLATES, LAPS, AND INTERSECTIONS	2 - 16d COMMON (3 1/2"x0.162") 3 - 3"x0.131" NAILS	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON (3 1/2"x0.162")	16" OC ALONG EDGE
15. CEILING JOISTS TO PLATE	3 - 8d COMMON (2 1/2"x0.131") 5 - 3"x0.131" NAILS	TOENAIL
16. CONTINUOUS HEADER TO STUD	4 - 8d COMMON (2 1/2"x0.131")	TOENAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3 - 16d COMMON (3 1/2"x0.162") MIN TABLE 2308.10.4.1 4 - 3"x0.131" NAILS	FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3 - 16d COMMON (3 1/2"x0.162") MIN TABLE 2308.10.4.1 4 - 3"x0.131" NAILS	FACE NAIL
19. RAFTER TO PLATE (SEE SECTION 2308.10.1, TABLE 2308.10.1	3 - 8d COMMON (2 1/2"x0.131") 3 - 3"x0.131" NAILS	FACE NAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	2 - 8d COMMON (2 1/2"x0.131") 2 - 3"x0.131" NAILS	FACE NAIL
21. 1" x 8" SHEATHING TO EACH BEARING	3 - 8d COMMON (2 1/2"x0.131")	FACE NAIL
22. WIDER THAN 1" x 8" SHEATHING TO EACH BEARING	3 - 8d COMMON (2 1/2"x0.131")	FACE NAIL
23. BUILT-UP CORNER STUDS	16d COMMON (3 1/2"x0.162") 3"x0.131" NAILS	24" O.C. 16" O.C.
24. BUILT-UP GIRDER AND BEAMS	20d COMMON (4"x0.192")32" O.C. 3"x0.131" NAIL AT 24" O.C	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	2 - 20d COMMON (4" x0.192") 3 - 3"x0.131" NAILS	FACE NAIL AT ENDS AND AT EACH SPLICE
25. 2" PLANKS	16d COMMON (3 1/2"x0.162")	AT EACH BEARING
26. COLLAR TIE TO RAFTER	3 - 10d COMMON (3"x0.148") 4 - 3"x0.131" NAILS	FACE NAIL
27. JACK RAFTER TO HIP	3 - 10d COMMON (3"x0.148") 4 - 3"x0.131" NAILS	TOE NAIL
	2 - 16d COMMON (3 1/2"x0.162") 3 - 3"x0.131" NAILS	FACE NAIL
28. ROOF RAFTERS TO 2-BY RIDGE BEAM	2 - 16d COMMON (3 1/2"x0.162") 3 - 3"x0.131" NAILS	TOE NAIL
	2 - 16d COMMON (3 1/2"x0.162") 3 - 3"x0.131" NAILS	FACE NAIL
29. JOIST TO BAND JOIST	3 - 16d COMMON (3 1/2"x0.162") 4 - 3"x0.131" NAILS	FACE NAIL
30. LEDGER STRIP	3 - 16d COMMON (3 1/2"x0.162") 4 - 3"x0.131" NAILS	FACE NAIL AT EACH JOIST
31. WOOD STRUCTURAL PANELS AND PARTICLEBOARD[b] SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)	1/2" AND LESS 6d[c,l] 2 3/8"x0.113" NAIL[n] 1 3/4" 16d GAGE[o] 19/32" TO 3/4" 8d[d] or 6d[e] 2 3/8"x0.113" NAIL 2" 16d GAGE[p] 7/8" TO 1" 8d[c] 1 1/8" TO 1 1/4" 10d[d] or 8d[e]	
SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING)	3/4" AND LESS 6d[e] 7/8" TO 1" 8d[e] 1 1/8" TO 1 1/4" 10d[d] OR 8d[e]	
32. PANEL SIDING (TO FRAMING)	1/2" AND LESS 6d[f] 5/8" 8d[f]	
33. FIBERBOARD SHEATHING[g]	1/2" NO. 11 GA ROOFING NAIL[h] 6d COMMON NAIL (2"x0.113") 25/32" NO. 11 GA ROOFING NAIL[h] 8d COMMON NAIL (2 1/2"x 0.131")	
34. INTERIOR PANELING	1/4" 4d[j] 3/8" 6d[k]	

FOOTNOTES:
a. COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED.
b. NAILS SPACED AT 6" ON CENTER AT EDGES, 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX, OR CASING.
c. COMMON OR DEFORMED SHANK (6d - 2" x 0.113" ; 8d - 2 1/2" x 0.131" ; 10d - 3" x 0.148").
d. COMMON (6d - 2" x 0.113" ; 8d - 2 1/2" x 0.131" ; 10d - 3" x 0.148").
e. DEFORMED SHANK (6d - 2" x 0.113" ; 8d - 2 1/2" x 0.131" ; 10d - 3" x 0.148").
f. CORROSION-RESISTANT SIDING (6d - 1 7/8" x 0.106" ; 8d - 2 3/8" x 0.128") OR CASING (6d - 2" x 0.099" ; 8d - 2 1/2" x 0.113") NAIL.
g. FASTENERS SPACED 3" ON CENTER AT EXTERIOR EDGES AND 6" ON CENTER AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6" ON CENTER ON THE EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS.
h. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 25/32" SHEATHING.
i. CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/8" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED). STAPLES ARE NOT PERMITTED FOR WOOD SHEAR WALLS AND DIAPHRAGMS (2305.1.2-4).
j. CASING (1 1/2" x 0.080") OR FINISH (1 1/2" x 0.072") NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.
k. PANEL SUPPORTS AT 24". CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.
l. FOR ROOF SHEATHING APPLICATIONS, 8d NAILS (2 1/2" x 0.113") ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.
m. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16". STAPLES ARE NOT PERMITTED FOR WOOD SHEAR WALLS AND DIAPHRAGMS (2305.1.2-4).
n. FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE SUPPORTS.
o. FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE SUPPORTS FOR SUBFLOOR AND WALL SHEATHING AND 3" ON CENTER AT EDGES, 6" AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.
p. FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE SUPPORTS.

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2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
STRUCTURAL SPECIFICATIONS

R&S TAVARES ASSOCIATES
DESIGN◆CONSULTING◆PROJECT MGT
16875 W. BERNARDO DR. SUITE 285
SAN DIEGO, CA 92127 858.444.3344
WWW.RSTAVARES.COM

LICENSED ARCHITECT JACK R. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER D. FRISCH No. S3380 STRUCTURAL STATE OF CALIFORNIA
04/01/2015
RST#14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS

1
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4
5
6
7
8

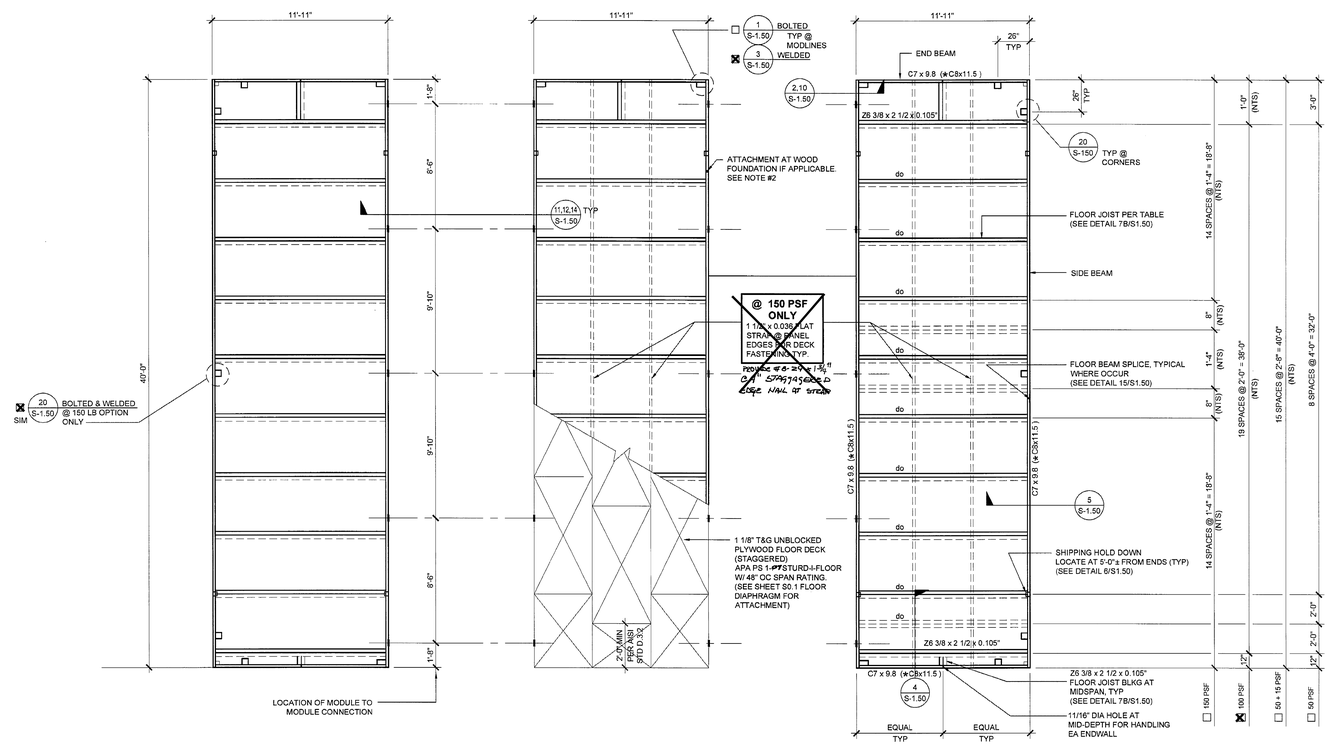
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
S-0.1
- - HIGH SEISMIC - -

NOTE:
* PERIMETER BEAM SHALL BE C8x11.5 FOR OVER 9' COLUMN HEIGHTS AND AT 48" ROOF PARAPET OPTIONS

REAR



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

FRONT

NOTES:

1. FOR FLOOR BLOCKING SEE DETAILS 4.7B / S-1.50 (STD), 4.7A / S-1.50 (ALT)
2. FOR BUILDINGS ON WOOD FOUNDATION SYSTEMS, PROVIDE 11/16" DIA. HOLE AT BOTTOM FLANGE OF FLOOR BEAM FOR LAG SCREW ATTACHMENT TO FOUNDATION PLATES BELOW. FOR EXACT HOLE LOCATIONS, SEE FOUNDATION PLAN.
3. FLOOR SHEATHING SHALL BE PRESSURE TREATED WOOD OR NATURAL DURABLE IF BOTTOM OF WOOD IS LESS THAN 18" CLEAR FROM TOP OF FINISHED GROUND SURFACE.
4. HSS COLUMN SCHEDULES ON SHEETS S-3.01 THRU S-3.04

FLOOR JOIST TABLE

	LIVE LOAD PSF	JOIST SPACING
☐	50	48"
☐	50 + 15	32"
☒	100	24"
☐	150	16"

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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR FRAMING PLAN
WOOD FLOOR

S TAVARES ASSOCIATES
REGISTERED PROFESSIONAL ENGINEER
REN 01-31-2015
No. S3380
STRUCTURAL
STATE OF CALIFORNIA
04/01/2015
REGIT14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

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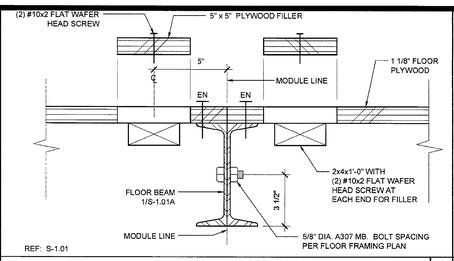
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

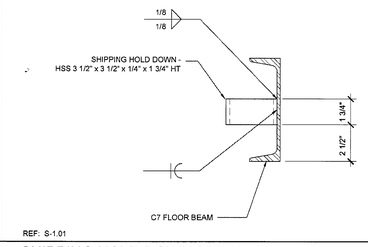
P.C. SHEET NUMBER
S-1.01
- - HIGH SEISMIC - -

FLOOR FRAMING PLAN

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



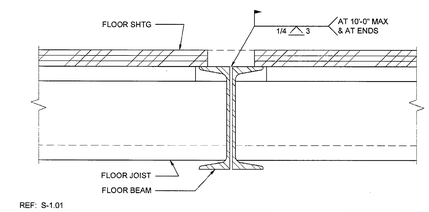
16 MODULE LINE - BOLTED CONNECTION SCALE : 3" = 1'-0"



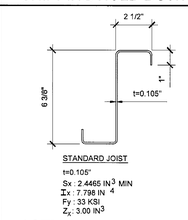
11 SHIPPING HOLD DOWN DETAIL SCALE : 3"=1'-0"

6

1



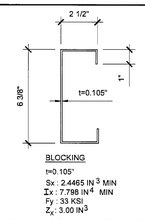
17 MODULE LINE CONNECTION (OPTION 1) SCALE : 3"=1'-0"



ASTM A-1011, GRADE 33

12 FLOOR JOIST SCALE : 3" = 1'-0"

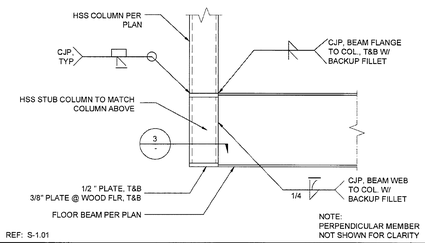
7B



ASTM A-1011, GRADE 33

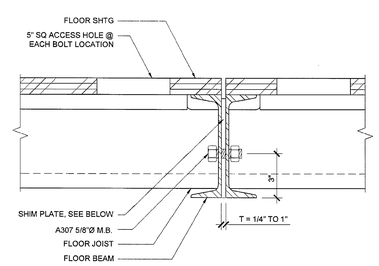
BLOCKING SCALE : 3" = 1'-0"

7A



FLOOR BEAM TO COLUMN CONNECTION SCALE : 1 1/2" = 1'-0"

2



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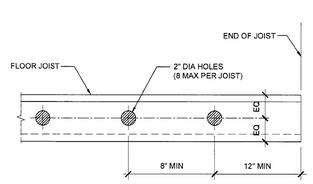
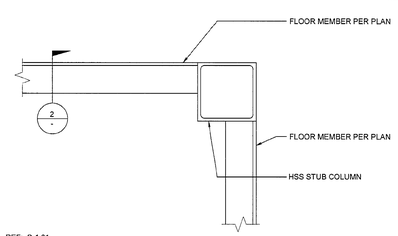


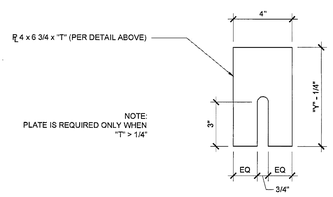
FLOOR JOIST HOLES (OPTIONAL) SCALE : 1/8" = 1'-0"

8



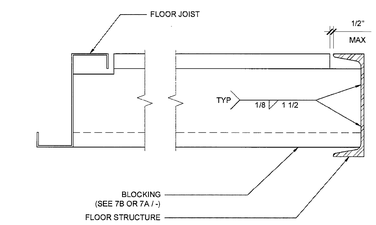
CORNER CONNECTION SCALE : 3" = 1'-0"

3



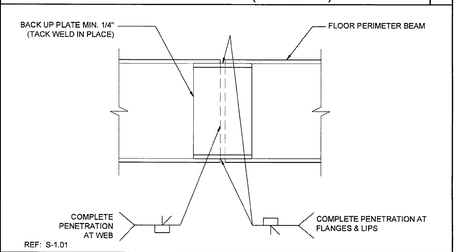
19 MODULE LINE CONNECTION (OPTION 2) SCALE : 3"=1'-0"

14



BLOCKING TO END BEAM SCALE : 3" = 1'-0"

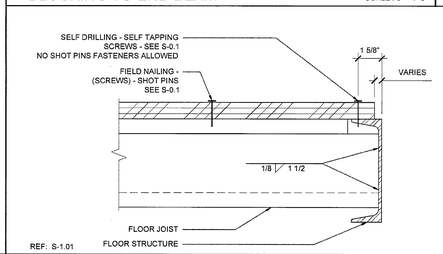
4



20 FLOOR BEAM SPLICE SCALE : 3" = 1'-0"

15

10



JOIST TO SIDE BEAM SCALE : 3" = 1'-0"

5

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
FLOOR FRMING DETILS
WOOD FLOOR

TAVARES ASSOCIATES
STRUCTURAL ENGINEERS
REN 01-31-2015
STRUCTURAL
04/01/2015

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT ONLY - NOT FOR CONSTRUCTION
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC. FLS. SS.
DATE APR 1 1 2015

REVISIONS
1
2
3
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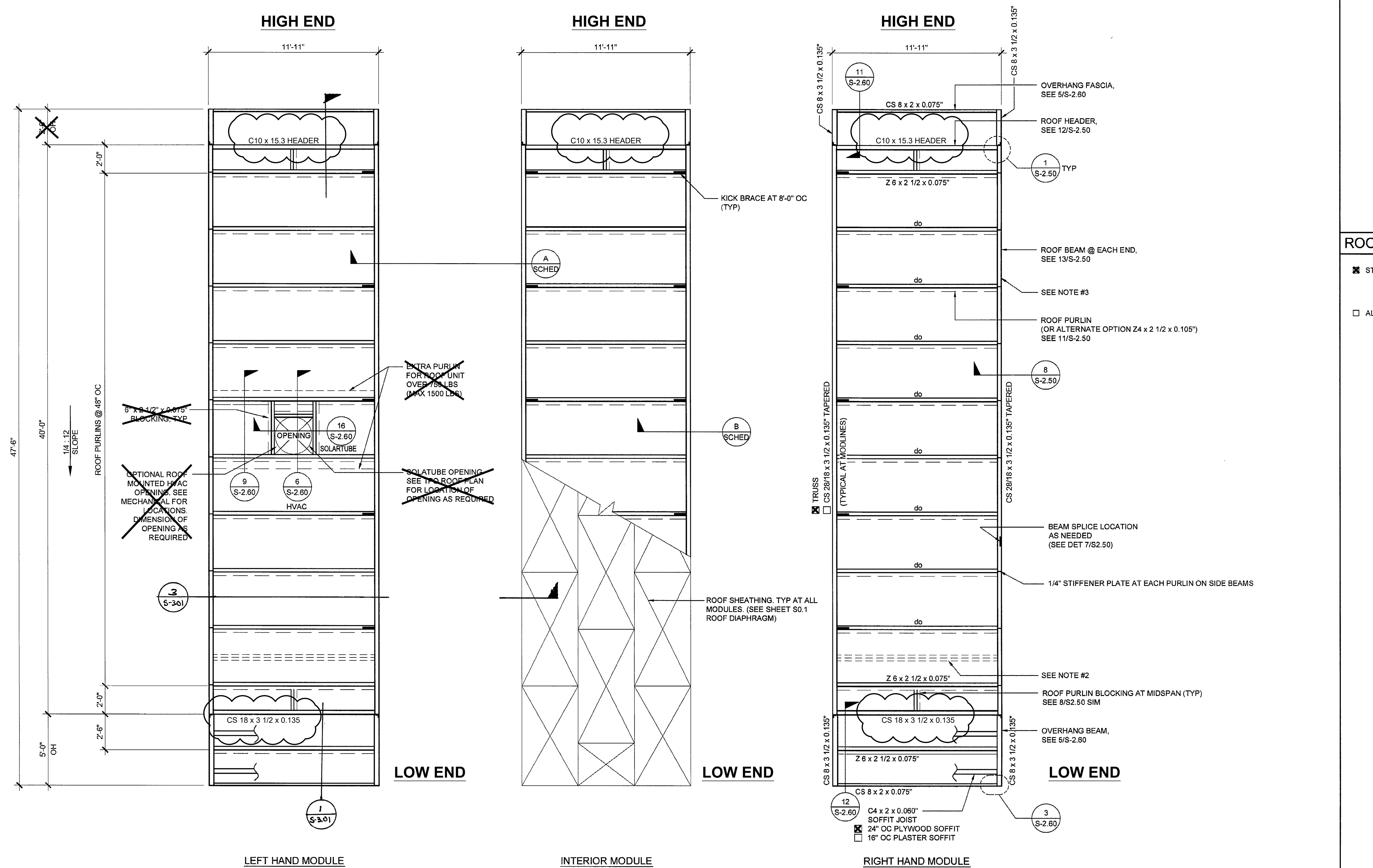
5
6
7
8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
S-1.50
- - HIGH SEISMIC - -



ROOF FRAMING PLAN — SCALE: 1/4" = 1'-0" — 1

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION. SEE 5,15 / S-2.50 OR 5,15 / /S-2.51 FOR DETAILS.
2. OPTIONAL PURLIN FOR FIRE SPRINKLER LINE AS NEEDED. LOCATION OF FIRE SPRINKLER PURLIN TO BE DETERMINED BY SITE STIFFENER PLATE OR ANGLE BRACE REQUIRED AT THIS LOCATION. FOR FIRE SPRINKLER LINE SIDE BEAM PENETRATION, SEE 14 / S2.50 OR 14 / S2.51 DETAILS
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 OR 10, 15/S-2.51 FOR DETAILS.

ROOF FRAME SCHEDULE AT MODLINES

- [x] STANDARD TRUSS
  "A" SEE DETAIL 7 / S-2.90
  "B" SEE DETAIL 8 / S-2.90
- [ ] ALTERNATE OPTION - TAPERED ROOF BEAM
  "A" SEE DETAIL 9 / S-2.50
  "B" SEE DETAIL 8 / S-2.50

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ROOF FRAMING PLAN
0.018", B.U.R., OR TPO
MONO SLOPE

R&S TAVARES ASSOCIATES
16875 W. BERNARDO DR. SUITE 280 SAN DIEGO, CA 92127 858.444.3344
WWW.RSTAVARES.COM

LICENSED ARCHITECT JACK F. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER D. FRISCH No. S3380 STRUCTURAL STATE OF CALIFORNIA
04/01/2015
RST# 14001

ARCHITECT OF RECORD SUBMISSION DATE
LICENSED ARCHITECT JACK F. SHIVELY No. C-33467 REN: 01-31-2019 STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL
PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
1. PROJECT SPECIFIC REVISION
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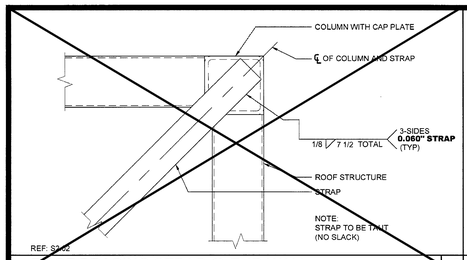
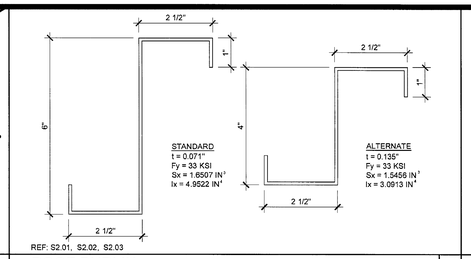
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

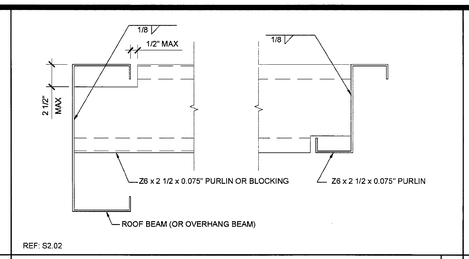
P.C. SHEET NUMBER
S-2.01
- - HIGH SEISMIC - -



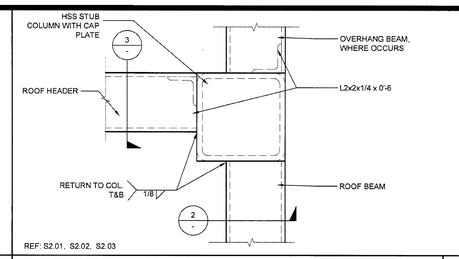
ROOF BRACING STRAP @ END WALL SCALE : 3"=1'-0" 16



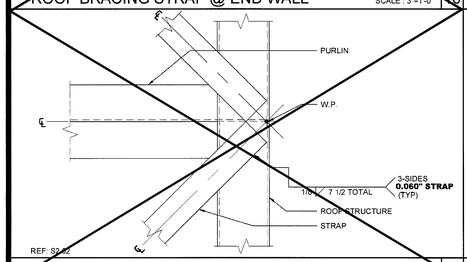
ROOF PURLIN SCALE : 6"=1'-0" 11



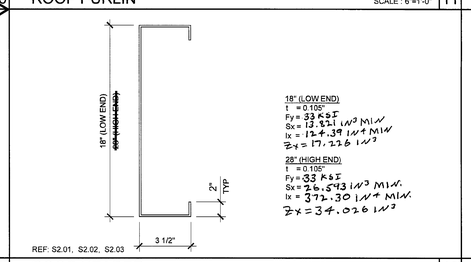
TYPICAL PURLIN CONNECTION DETAIL SCALE : 3" = 1'-0" 6



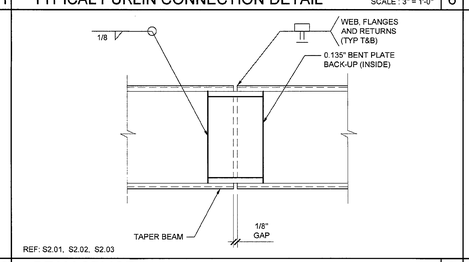
COLUMN AT ROOF - PLAN SCALE : 3" = 1'-0" 1



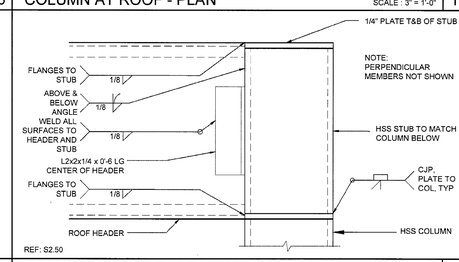
ROOF BRACING STRAP @ SIDE WALL SCALE : 3"=1'-0" 17



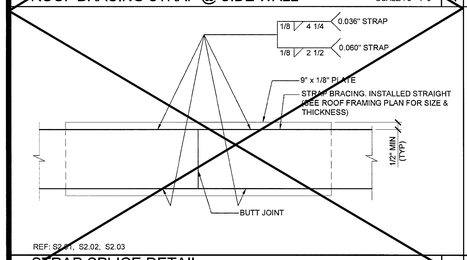
ROOF HEADER SCALE : NTS 12



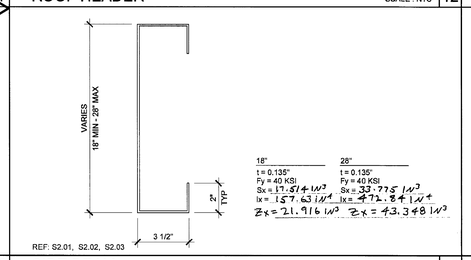
BEAM SPLICE SCALE: 3" = 1'-0" 7



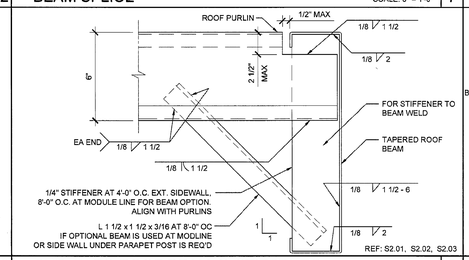
COLUMN AT ROOF - SECTION SCALE : 3" = 1'-0" 2



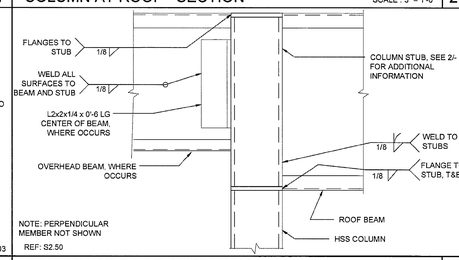
ROOF BRACING STRAP @ SIDE WALL SCALE : 3"=1'-0" 17



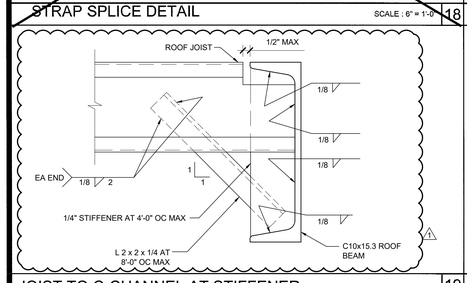
ROOF HEADER SCALE : NTS 12



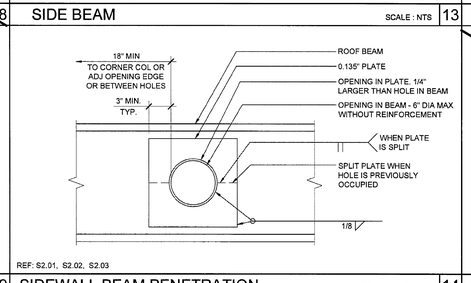
BEAM SPLICE SCALE: 3" = 1'-0" 7



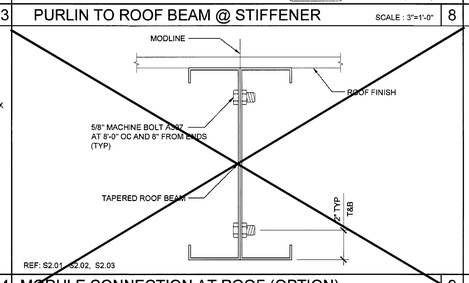
COLUMN AT ROOF - SECTION SCALE : 3" = 1'-0" 2



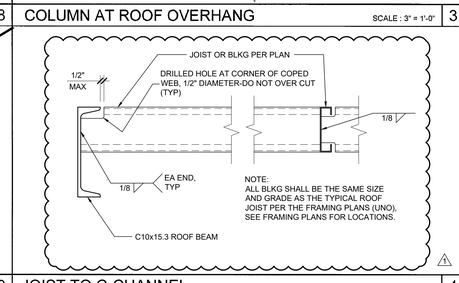
STRAP SPLICE DETAIL SCALE : 6" = 1'-0" 18



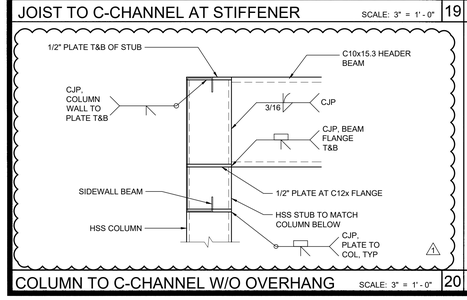
SIDE BEAM SCALE : NTS 13



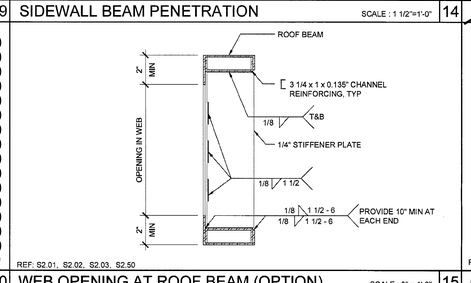
PURLIN TO ROOF BEAM @ STIFFENER SCALE : 3"=1'-0" 8



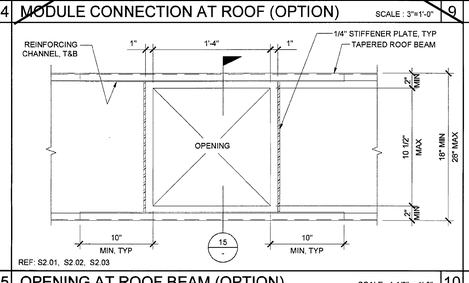
COLUMN AT ROOF OVERHANG SCALE : 3" = 1'-0" 3



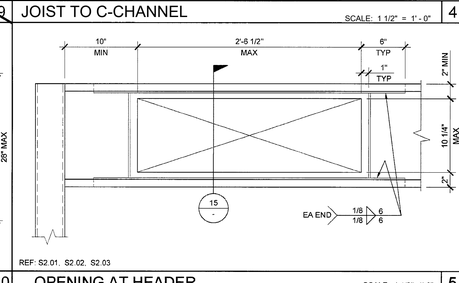
JOIST TO C-CHANNEL AT STIFFENER SCALE: 3" = 1' - 0" 19



SIDEWALL BEAM PENETRATION SCALE : 1 1/2"=1'-0" 14



MODULE CONNECTION AT ROOF (OPTION) SCALE : 3"=1'-0" 9



JOIST TO C-CHANNEL SCALE: 1 1/2" = 1' - 0" 4

COLUMN TO C-CHANNEL W/O OVERHANG SCALE: 3" = 1' - 0" 20

WEB OPENING AT ROOF BEAM (OPTION) SCALE : 3" = 1'-0" 15

OPENING AT ROOF BEAM (OPTION) SCALE : 1 1/2" = 1'-0" 10

OPENING AT HEADER SCALE : 1 1/2"=1'-0" 5

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PROJECT NAME:
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PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ROOF FRAMING DETAILS
MONO SLOPE

TAVARES ASSOCIATES
REGISTERED STRUCTURAL ENGINEERS
26475 W. RANCHERO RD., SUITE 205
LAKE ELSINORE, CALIFORNIA 92530
951-674-8300 FAX 951-674-8301
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RICK A. TAVARES
No. S-2360
REN 01-31-2015
STATE OF CALIFORNIA
04/01/2015
RST#14001

ARCHITECT OF RECORD
SUBMISSION DATE
RICK E. THIMESCH
No. C-34642
REN 01-31-2019
STATE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL

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OFFICE OF REGULATION SERVICES
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AC___ APPS___ FLS___ SSM___
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1 PROJECT SPECIFIC REVISION
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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
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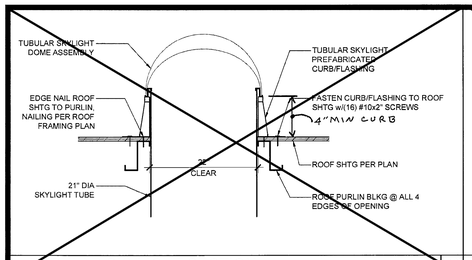
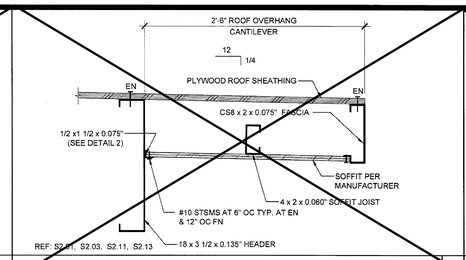
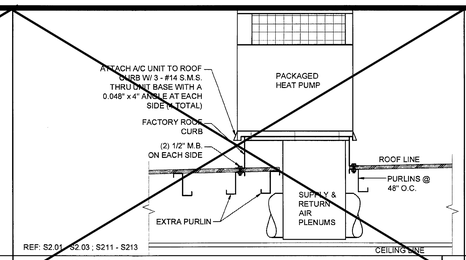
- - HIGH SEISMIC - -



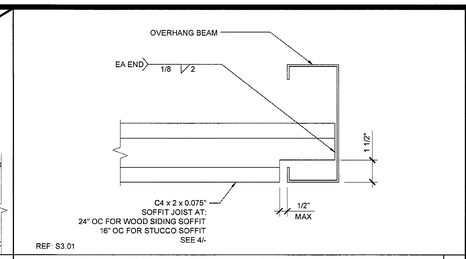
TUBULAR SKYLIGHT SECTION SCALE : 1" = 1'-0" 16



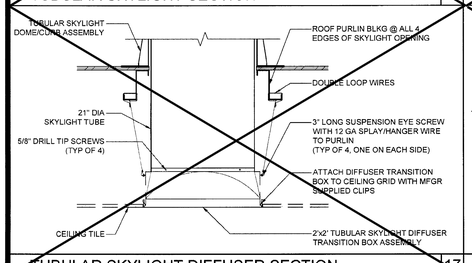
REAR OVERHANG SECTION SCALE : 1 1/2" = 1'-0" 11



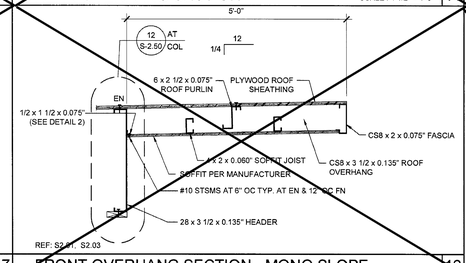
HVAC CURB ATTACHMENT SCALE : 3/4" = 1'-0" 6



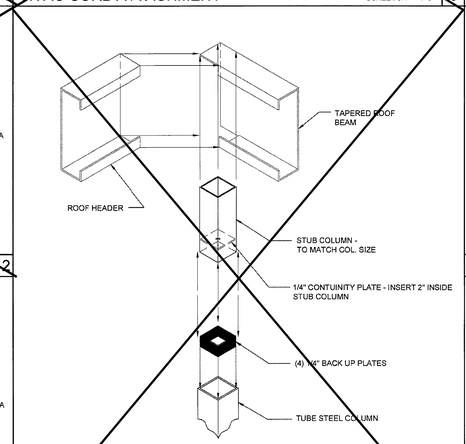
SOFFIT JOIST TO OVERHANG BEAM SCALE : 3"=1'-0" 1



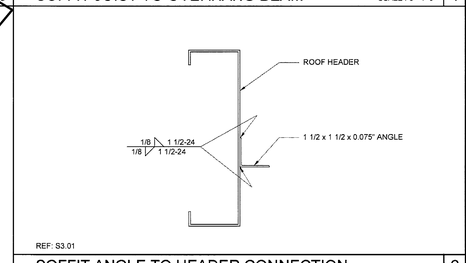
TUBULAR SKYLIGHT DIFFUSER SECTION SCALE : 1" = 1'-0" 17



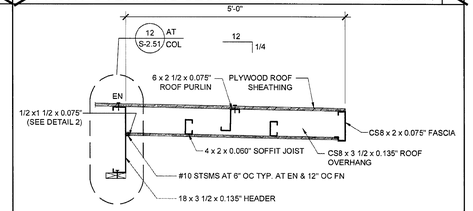
FRONT OVERHANG SECTION - MONO SLOPE SCALE: 3/4" = 1'-0" 12



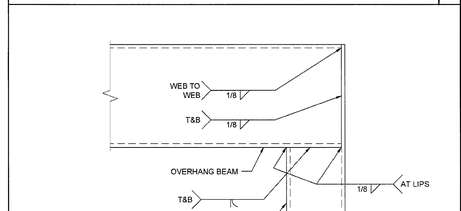
COLUMN CONNECTION AT ROOF SCALE : NTS 8



SOFFIT ANGLE TO HEADER CONNECTION SCALE : 3"=1'-0" 2

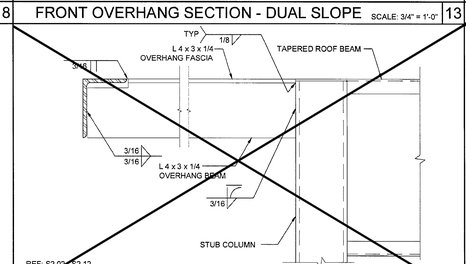


FRONT OVERHANG SECTION - DUAL SLOPE SCALE: 3/4" = 1'-0" 13

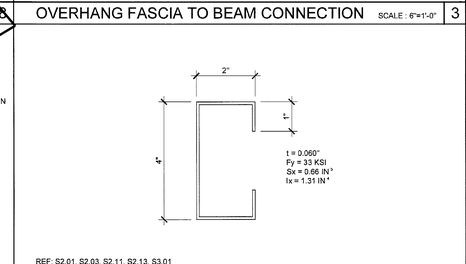


OVERHANG FASCIA TO BEAM CONNECTION SCALE : 6"=1'-0" 3

5'-0" ROOF OVERHANG AT 0.030" ROOF SCALE : 3"=1'-0" 14

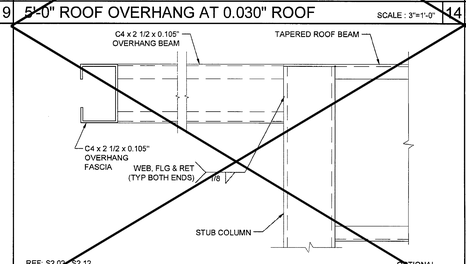


DOUBLE PURLINS AT HVAC SCALE: 1 1/2" = 1'-0" 9

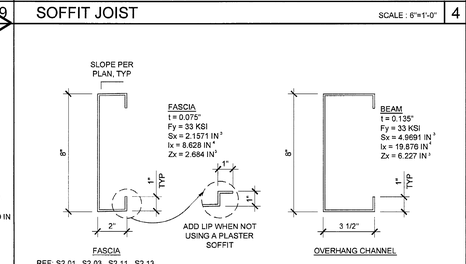


SOFFIT JOIST SCALE : 6"=1'-0" 4

5'-0" ROOF OVERHANG AT 0.030" ROOF SCALE : 3" = 1'-0" 20



OVERHANG SUPPORT TO ROOF HDR @ STIFFENER SCALE : 3"=1'-0" 10



OVERHANG FASCIA & BEAM SCALE : 3"=1'-0" 5

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ROOF FRAMING DETAILS

TAVARES ASSOCIATES
STRUCTURAL ENGINEERS
REN 01-31-2015
04/01/2015
RSI #14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
NOT FOR CONSTRUCTION
A SEPARATE PROJECT APPLICATION IS FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC___ ELS___ SS___
DATE APR 14 2015

REVISIONS
1
2
3
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6
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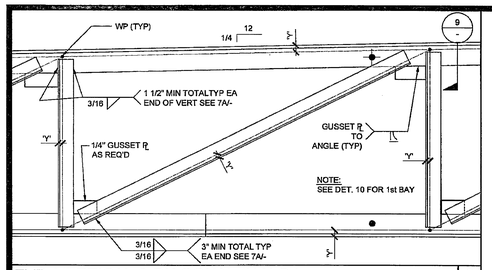
8

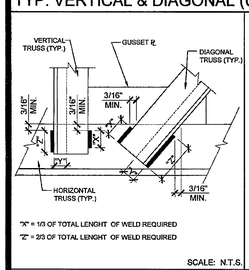
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
S-2.60
- - HIGH SEISMIC - -

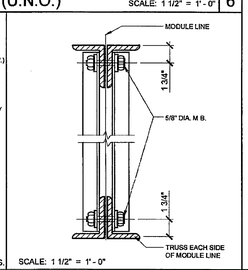


TYP. VERTICAL & DIAGONAL (U.N.O.) SCALE: 1 1/2" = 1' - 0" 6



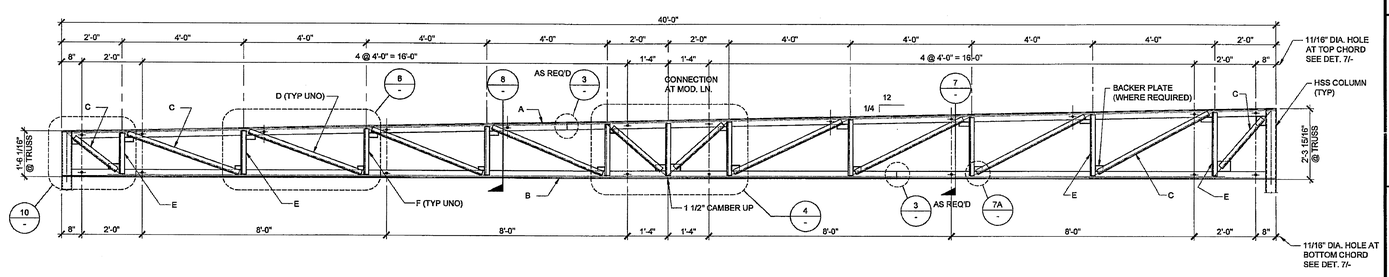
SCALE: N.T.S.

FILLET WELD TERMINATION 7A



SCALE: 1 1/2" = 1' - 0"

CONNECTION @ MODULE LINE 7



NOTES:

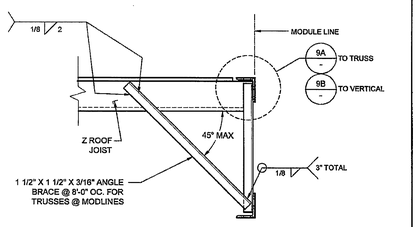
1. ALL STEEL GRADES TO BE A-36 WITH 36 K.S.I. MIN. YEILD
2. REQUIRED ELECTRODES FOR ALL WELDS TO BE E-70
3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURERS SPECIFICATIONS
4. BOLTS AND NUTS GRADES TO BE A307

REF: ROOF FRAMING PLAN

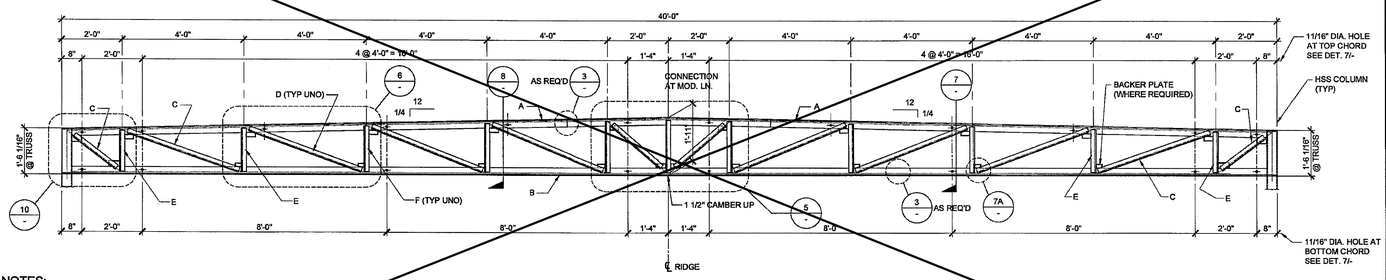
TRUSS MARK:			Y=
A	TOP CHORD	4" x 3" x 1/4" (LLV)	1 1/4
B	BOTTOM CHORD	4" x 3" x 1/4" (LLV)	1 1/4
C	END DIAGONALS (2 EACH END)	2" x 2" x 3/16"	9/16
D	TYPICAL DIAGONALS	1 1/2" x 1 1/2" x 3/16"	7/16
E	END VERTICAL (2 EACH END)	1 1/2" x 1 1/2" x 3/16"	7/16
F	TYPICAL VERTICALS	1 1/2" x 1 1/2" x 3/16"	7/16

NOTE; "Y" MAY BE 1/4" MAX. OUT OF ALIGNMENT

MONO SLOPE TRUSS SCALE: 1/2" = 1' - 0" 1



BRACE @ TRUSS & MATING LINE SCALE: 1 1/2" = 1' - 0" 8



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3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURERS SPECIFICATIONS
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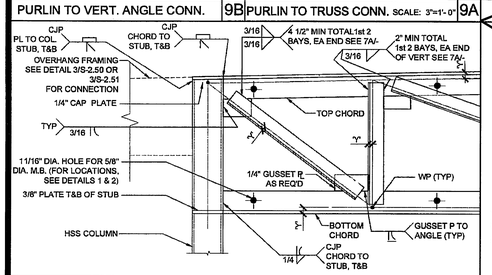
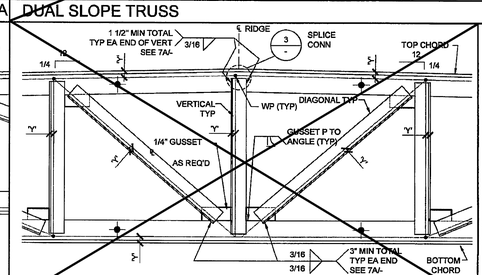
F	TYPICAL VERTICALS	1 1/2" x 1 1/2" x 3/16"	7/16

NOTE; "Y" MAY BE 1/4" MAX. OUT OF ALIGNMENT

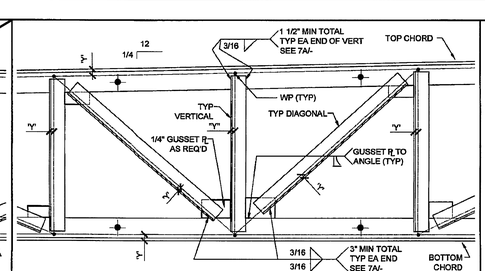
DUAL SLOPE TRUSS SCALE: 1/2" = 1' - 0" 2



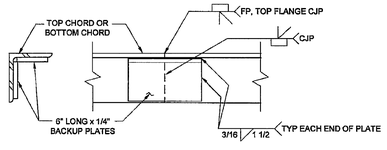
TRUSS TO COLUMN / OH FRAME CONN. SCALE: 1 1/2" = 1' - 0" 10



VERT. & DIAG. AT MID-POINT SCALE: 1 1/2" = 1' - 0" 5



VERT. & DIAG. AT MID- POINT SCALE: 1 1/2" = 1' - 0" 4

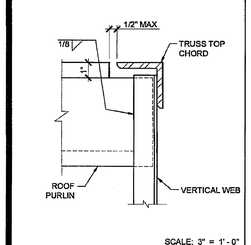


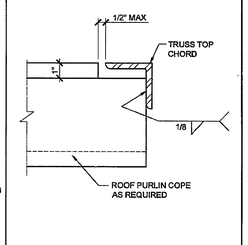
OPTIONAL

NOTE:
CHORD SPLICE MAY OCCUR AT ANY POINT ON THE TOP OR BOTTOM CHORD AS LONG AS FULL PENETRATION WELD AND BACKUP PLATES ARE USED

TRUSS CHORD SPLICE SCALE: 3" = 1' - 0" 3

PURLIN TO VERT. ANGLE CONN. 9B





PURLIN TO TRUSS CONN. SCALE: 3"=1'- 0" 9A

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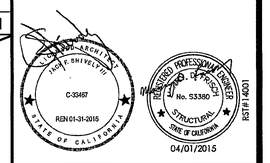
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ROOF FRAMING DETAILS
TRUSS



ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STAMP REVISED

PRE-CHECK (PC) DOCUMENT
CCR, Title 24, Part 1, Sec. 4-315
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ____ FLS ____ SS ____
DATE SEP 08 2015

REVISIONS
1
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7
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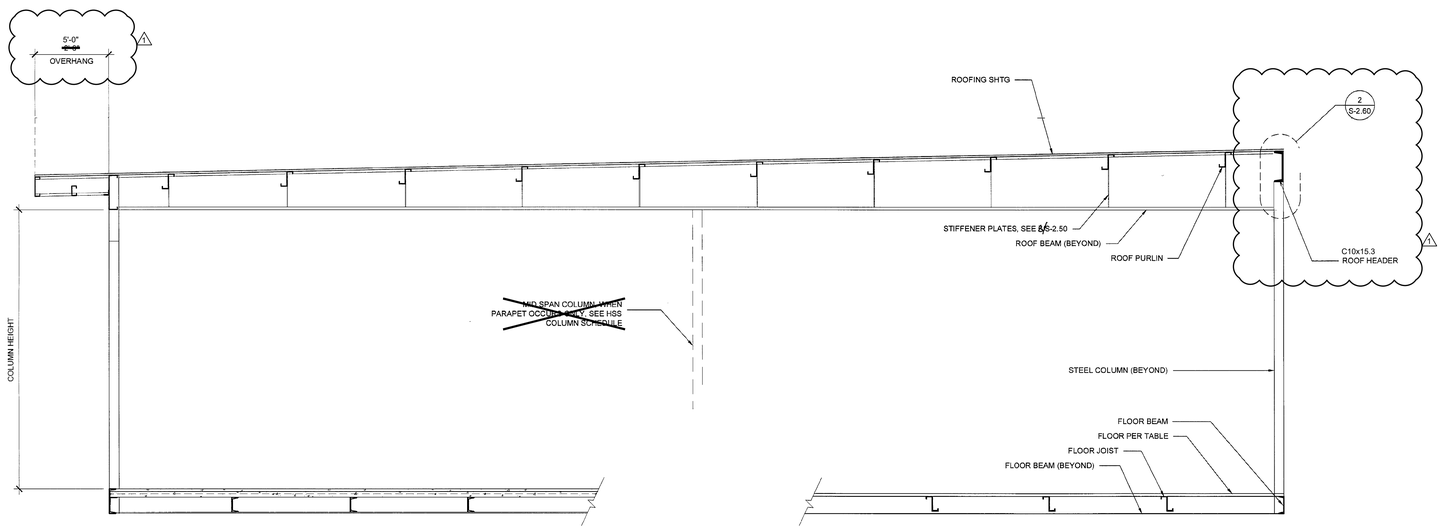
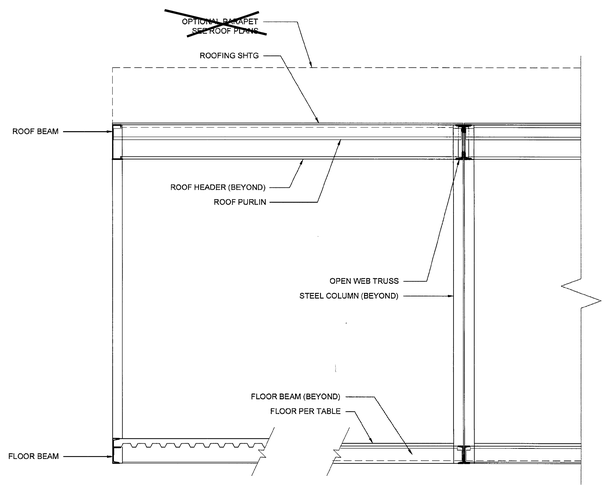
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14
P.C. SHEET NUMBER
S-2.90
- - HIGH SEISMIC - -



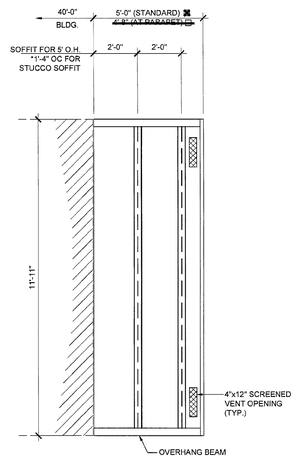
BUILDING SECTION

SCALE: 1/2" = 1'-0" | 1



BUILDING SECTION

SCALE: 1/2" = 1'-0" | 3



ENCL. SOFFIT PLAN-OPT.

SCALE: 3/8" = 1'-0" | 2

NOTES

1. ALL INFORMATION SUCH AS DETAILS, SECTIONS, CONNECTIONS, AND MATERIAL ATTACHMENT SHALL BE REFERENCED FROM OTHER SHEETS WITHIN THIS SET WHERE IT APPLIES.

FLOOR CONSTRUCTION

- [x] WOOD FLOOR
- [ ] CONCRETE FLOOR

HSS COLUMN SCHEDULE

COL HT	METAL ROOF	B.U.R OR UP TO 18" PARAPET	UP TO 48" PARAPET
[ ] 9'-0"	[ ] 5 x 5 x 1/4	[ ] 6 x 6 x 1/4	[/] 6 x 6 x 1/4
[x] UP TO 10.5'	[x] 6 x 6 x 1/4	[/] 6 x 6 x 1/4	[/] 6 x 6 x 1/4

FLOOR BEAM

- [ ] = C7x9.8
- [/] = C8x11.5

NOTE: CONCRETE FLOOR REQUIRES C10x15.3 FLOOR BEAMS

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
BUILDING SECTIONS
MONO SLOPE

TAVARES & ASSOCIATES
STRUCTURAL ENGINEERS
LICENSED ARCHITECT
REN 01-31-2015
No. S3380
STRUCTURAL ENGINEER
STATE OF CALIFORNIA
04/01/2015
BSI # 14001

ARCHITECT OF RECORD SUBMISSION DATE
No. C-33467
REN: 01-31-2019

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL
PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
CONSTRUCTION SHALL COMPLY WITH CURRENT CODE REQUIREMENTS
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
04-114027
AC.___ FLS.___
DATE APR 14 2015

REVISIONS
1 PROJECT SPECIFIC REVISION
2
3
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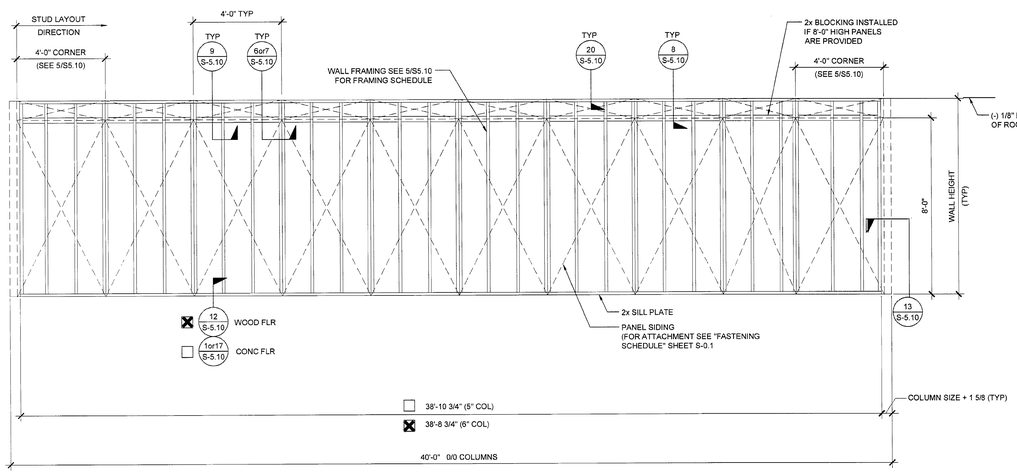
6
7
8

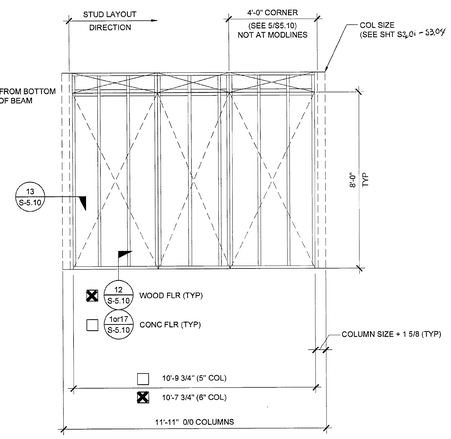
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

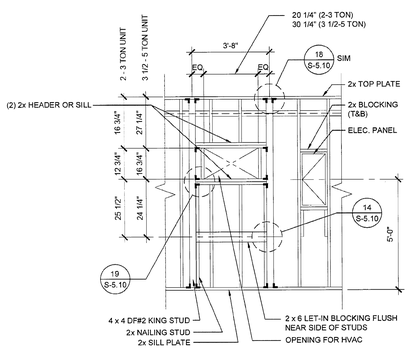
P.C. SHEET NUMBER
S-3.01
- - HIGH SEISMIC - -



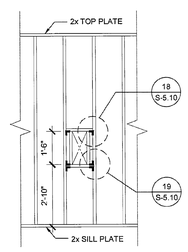
TYPICAL SIDE WALL



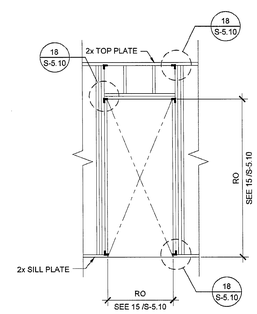
TYPICAL END WALL



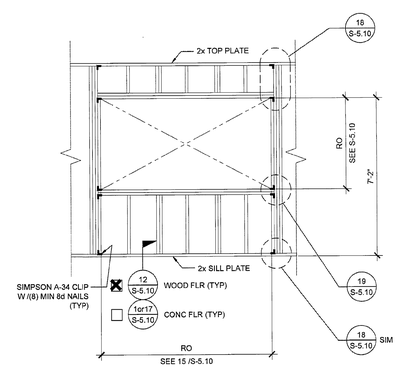
TYPICAL HVAC



FIRE EXTINGUISHER CABINET BLOCKOUT



TYPICAL DOOR



TYPICAL WINDOW

NOTES

WALL HEIGHT SCHEDULE

COLUMN HEIGHT	☐ 9'-0"	☒ 9'-6"	☐ 10'-0"	☐ 10'-6"
☐ CONCRETE FLOOR	8'-11 7/8"	9'-5 7/8"	9'-11 7/8"	10'-5 7/8"
☒ WOOD FLOOR	8'-10 3/4"	9'-4 3/4"	9'-10 3/4"	10'-4 3/4"

NOTE:
IF PARAPET IS USED & HIGHER THAN 18",
END WALLS MUST BE 2x6 @ 24" O.C.

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SILVER CREEK
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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
WALL FRAMING ELEVATIONS
WOOD STUDS

TAVARES ASSOCIATES
DESIGN & CONSULTING PROJECT MGT
LAETITIA M. TAVARES, AIA, CSI, CCS
LICENSED ARCHITECT
REN 01-31-2015
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
No. S3380
STRUCTURAL
STATE OF CALIFORNIA
04/01/2015
RST # 1.4001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A REPRESENTATIVE OF THE STATE AGENCY IS TO BE NOTIFIED FOR CONSTRUCTION IS REQUESTED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-1140027
AC ___ ELS ___ SS ___
DATE APR 14 2015

REVISIONS
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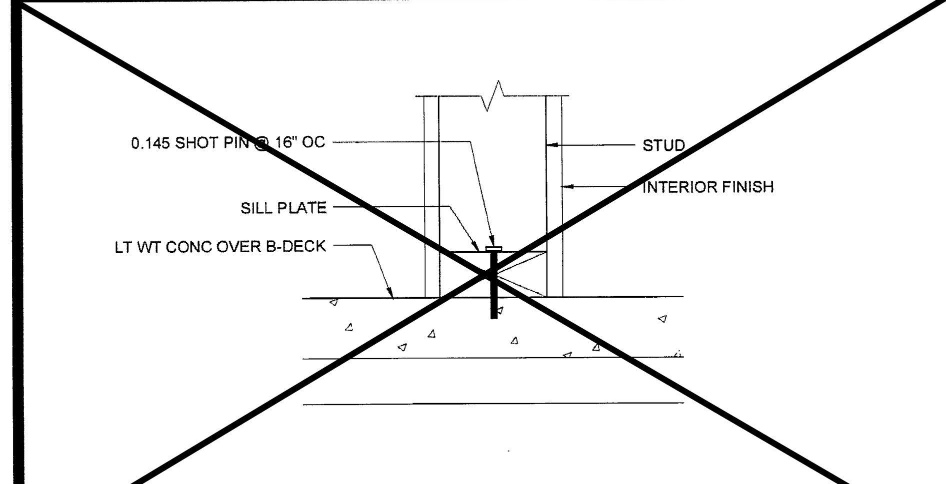
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

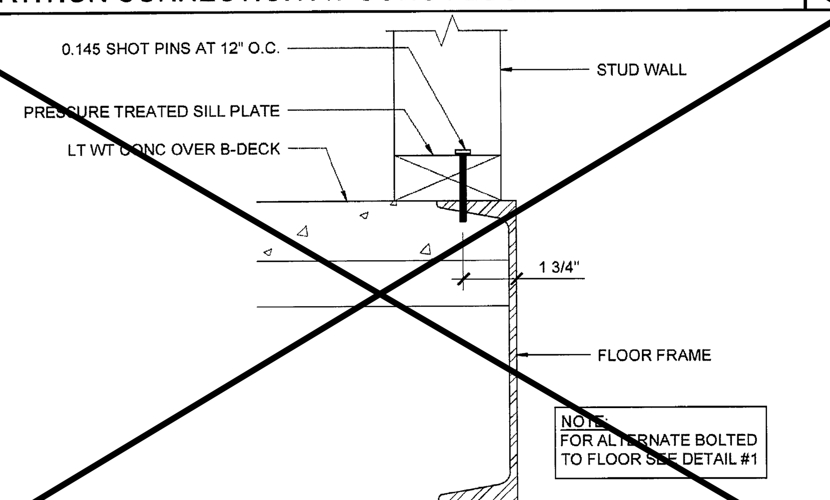
P.C. SHEET NUMBER
S-5.00
- - HIGH SEISMIC - -

FRAMING ELEVATIONS

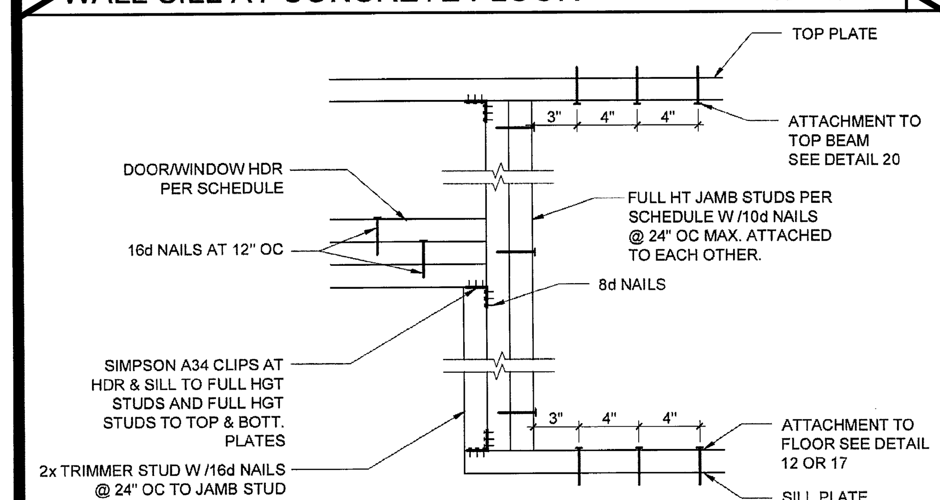
SCALE: 3/8" = 1' - 0" | 1



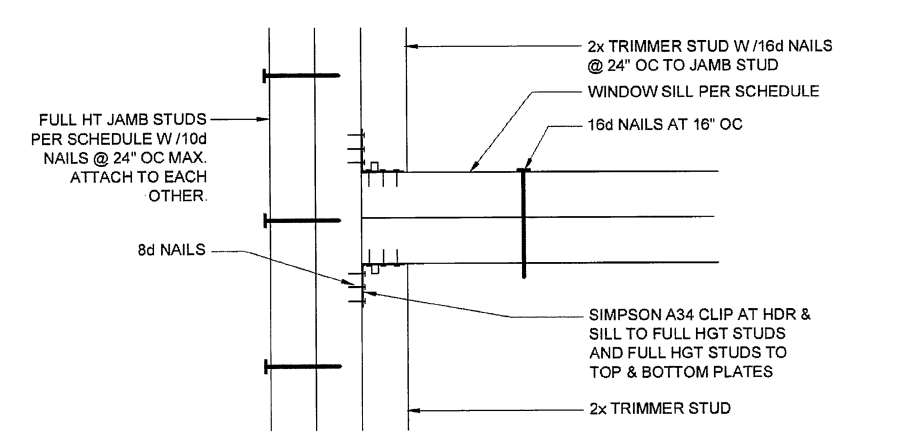
PARTITION CONNECTION AT CONC FLOOR SCALE : 3"=1'-0" 16



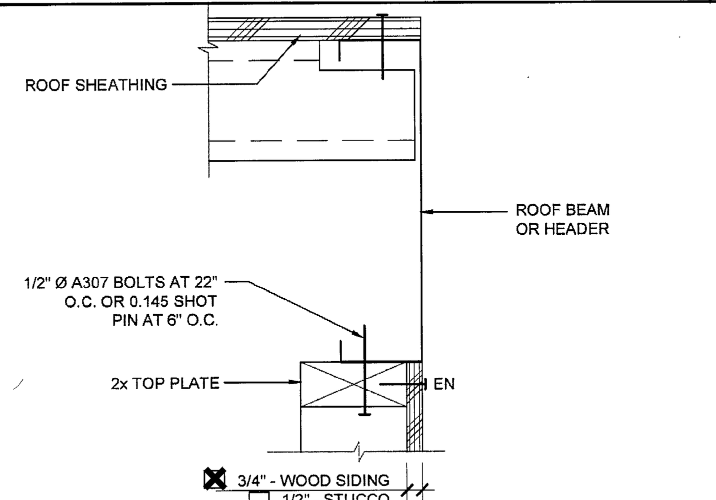
WALL SILL AT CONCRETE FLOOR SCALE : 3"=1'-0" 17



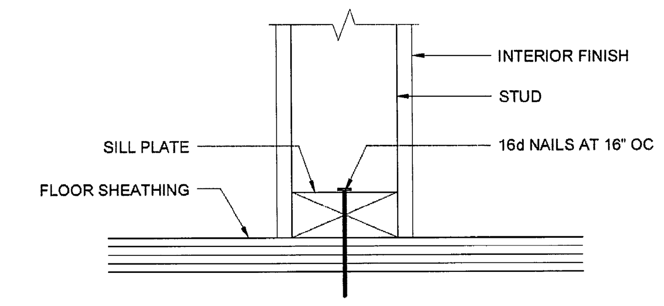
DOOR/WINDOW HEADER AND JAMB SCALE : 1 1/2"=1'-0" 18



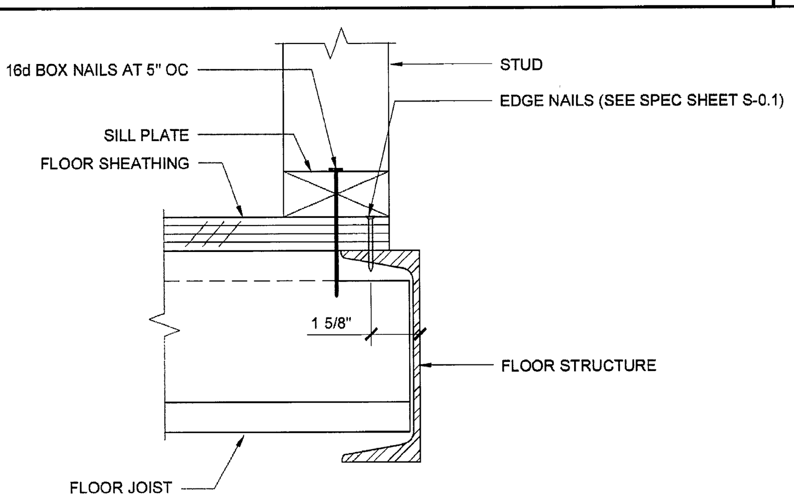
WINDOW SILL AND JAMB SCALE : 3"=1'-0" 19



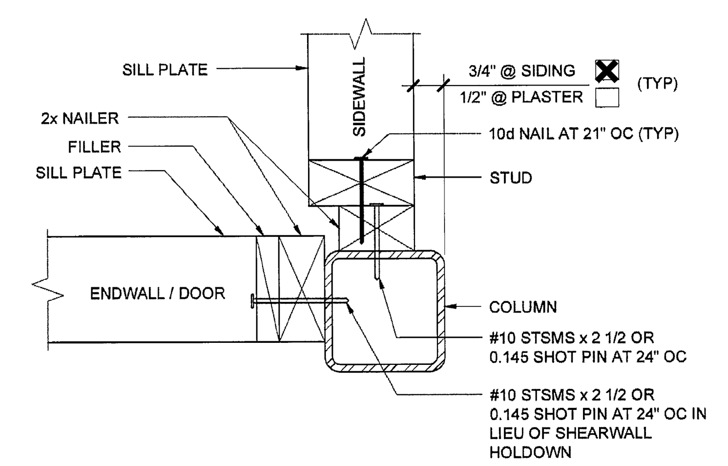
TOP PLATE AT ROOF BEAM SCALE : 3" = 1'-0" 20



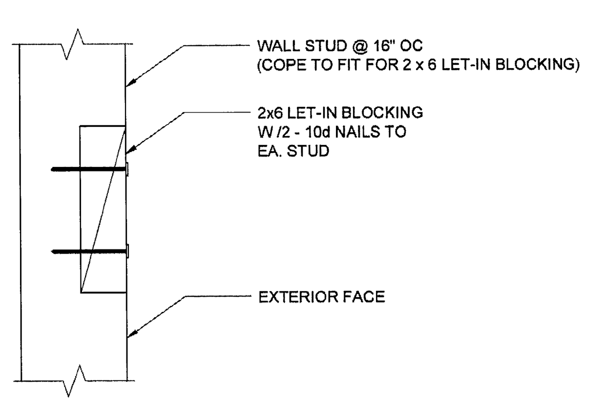
PARTITION CONNECTION AT WOOD FLOOR SCALE : 3"=1'-0" 11



WALL SILL AT WOOD FLOOR SCALE : 3"=1'-0" 12



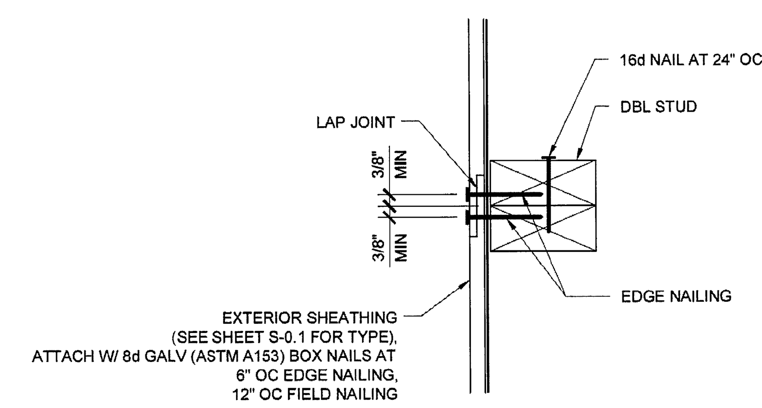
COLUMN AT ENDWALL SCALE : 3"=1'-0" 13



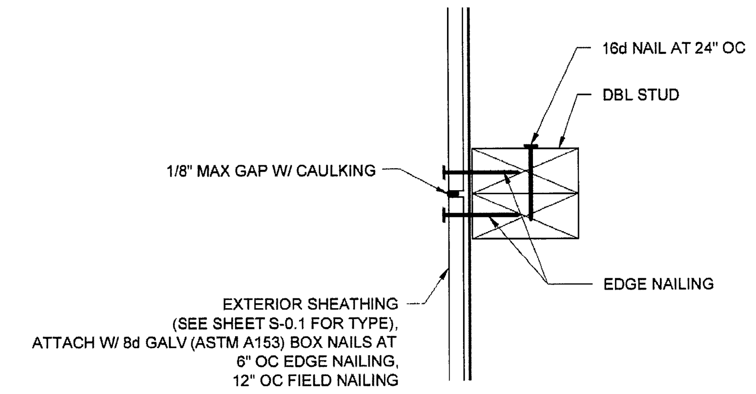
LET-IN BLOCK ATTACHMENT SCALE : 3"=1'-0" 14

DOOR	WINDOW	☐ STANDARD		☐ WELDED FRAME	
2070		26"	85"	28 1/4"	86 1/4"
3070		38"	85"	40 1/4"	86 1/4"
4070		50"	85"	52 1/4"	86 1/4"
6070		74"	85"	76 1/4"	86 1/4"
	4040	47 3/4"	47 5/8"	52 1/4"	52 1/4"
	6040	71 3/4"	47 5/8"	76 1/4"	52 1/4"
	8040	95 3/4"	47 5/8"	100 1/4"	52 1/4"
	6020	71 3/4"	23 5/8"	76 1/4"	28 1/4"
	8020	95 3/4"	23 5/8"	100 1/4"	28 1/4"

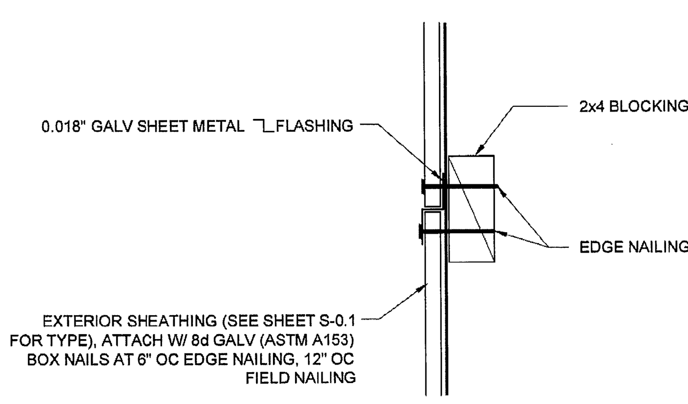
ROUGH OPENING SCHEDULE 15



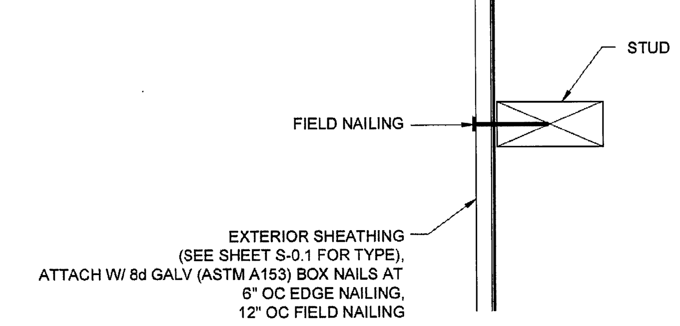
VERTICAL SHEATHING LAP JOINT SCALE : 3"=1'-0" 6



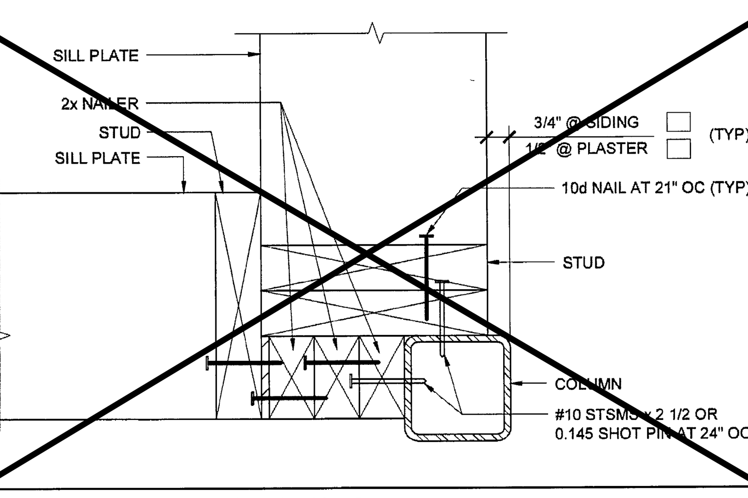
VERTICAL SHEATHING BUTT JOINT SCALE : 3"=1'-0" 7



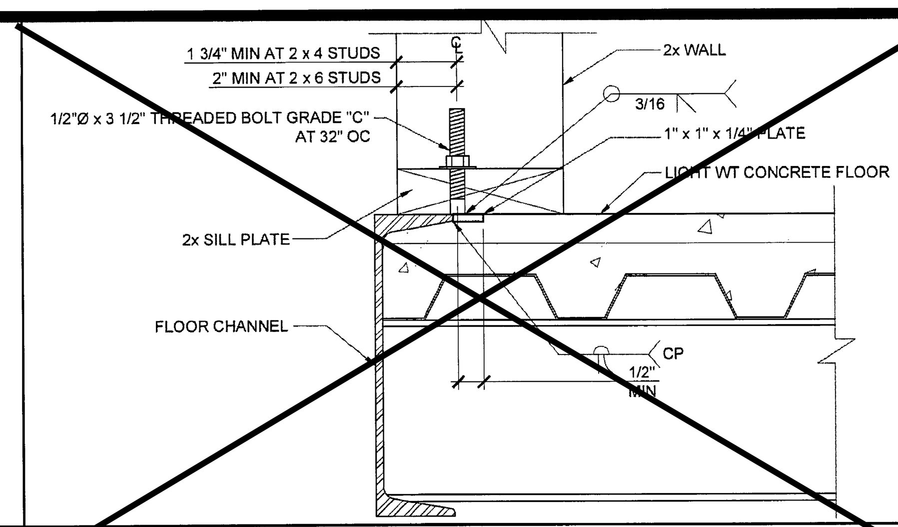
HORIZONTAL SHEATHING JOINT SCALE : 3"=1'-0" 8



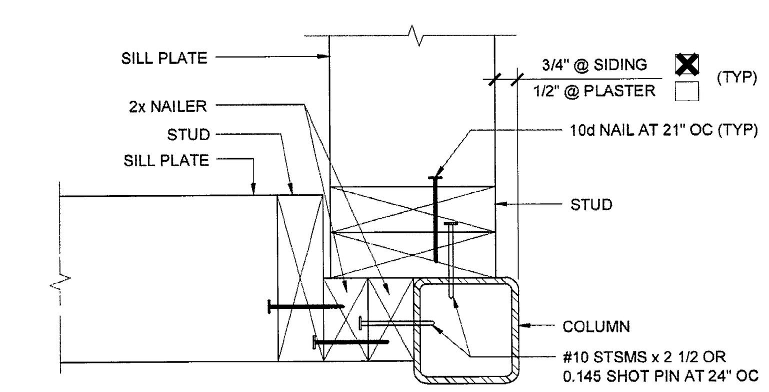
SECTION AT SHEATHING TO STUD ATTACHMENT SCALE : 3"=1'-0" 9



COLUMN AT ENDWALL (2x8) SCALE : 3"=1'-0" 10



OPTIONAL BOLTED WALL TO FLOOR SCALE : NTS 1



COLUMN AT ENDWALL (2x6) SCALE : 3"=1'-0" 2

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
LESS THAN 9'-6"	3070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2
	4070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2
	6040	NO PLASTER	(2)	2X4	HF	#2	(2)	2X4	HF	#2	(2)	2X4	HF	#2
		NO PLASTER (OPT)	(2)	2X4	DF	#2	(2)	2X4	DF	#2	(2)	2X4	DF	#2
	8040	NO PLASTER	(2)	2X4	HF	#2	(2)	2X4	HF	#2	(3)	2X4	HF	#2
		NO PLASTER (OPT)	(2)	2X4	DF	#2	(2)	2X4	DF	#2	(2)	2X4	DF	#2

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
9'-6" TO 10'-6"	3070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2
	4070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2
	6040	NO PLASTER	(2)	2X4	HF	#2	(2)	2X4	HF	#2	(3)	2X4	HF	#2
		NO PLASTER (OPT)	(2)	2X4	DF	#2	(2)	2X4	DF	#2	(3)	2X4	DF	#2
	8040	NO PLASTER	(3)	2X4	HF	#2	(3)	2X4	HF	#2	(4)	2X4	HF	#2
		NO PLASTER (OPT)	(3)	2X4	DF	#2	(3)	2X4	DF	#2	(3)	2X4	DF	#2

NOTE:
2X4 WALL FRAMING NOT ALLOWED WITH PLASTER WALL FINISH

OPENING STUDS SCHEDULE 4

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4' CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
LESS THAN 9'-6"	NO PLASTER	(1)	2X4	HF	#2	16" OC	(1)	2X4	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	16" OC
9'-6" TO 10'-6"	NO PLASTER	(1)	2X4	HF	#2	16" OC	(1)	2X4	HF	#2	12" OC
	NO PLASTER (OPT)	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	16" OC

NOTE:
2X4 WALL FRAMING NOT ALLOWED WITH PLASTER WALL FINISH

WALL FRAMING SCHEDULE - 100 MPH 5

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
WALL FRAMING DETAILS
WOOD STUDS

R&S TAVARES ASSOCIATES
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LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER No. S3380 STRUCTURAL STATE OF CALIFORNIA
04/01/2015
RST#14001

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL
PRE-CHECK (PC) DOCUMENT CODE 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
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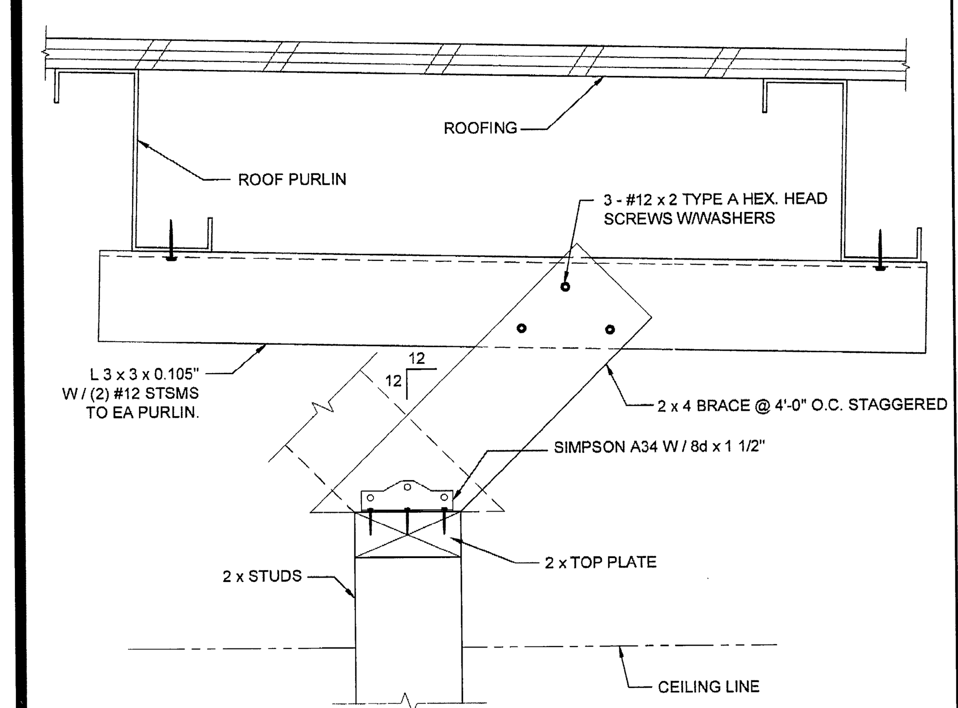
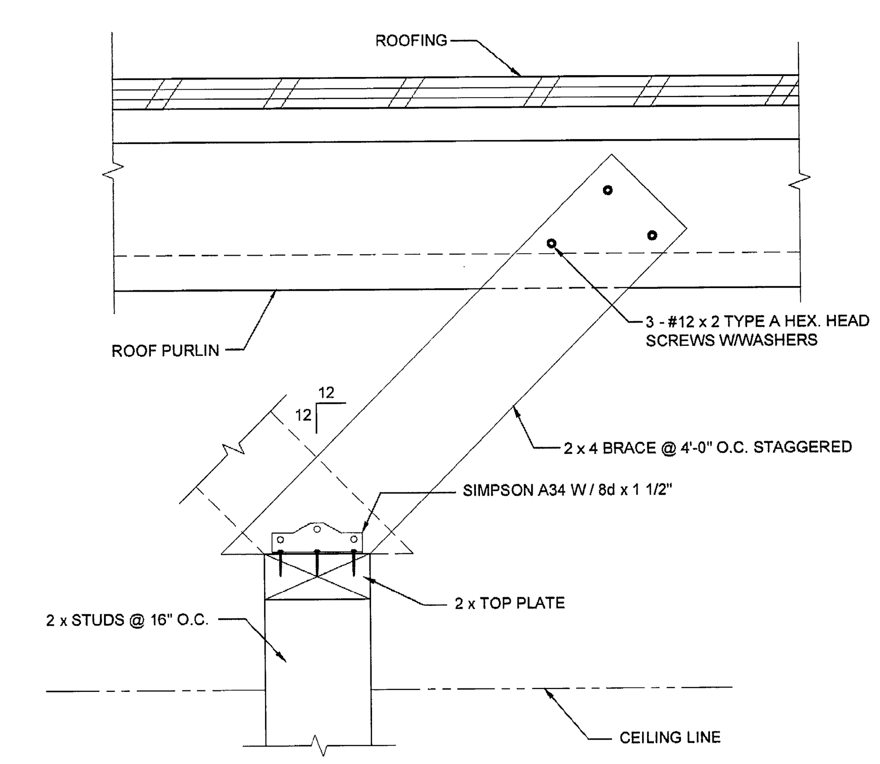
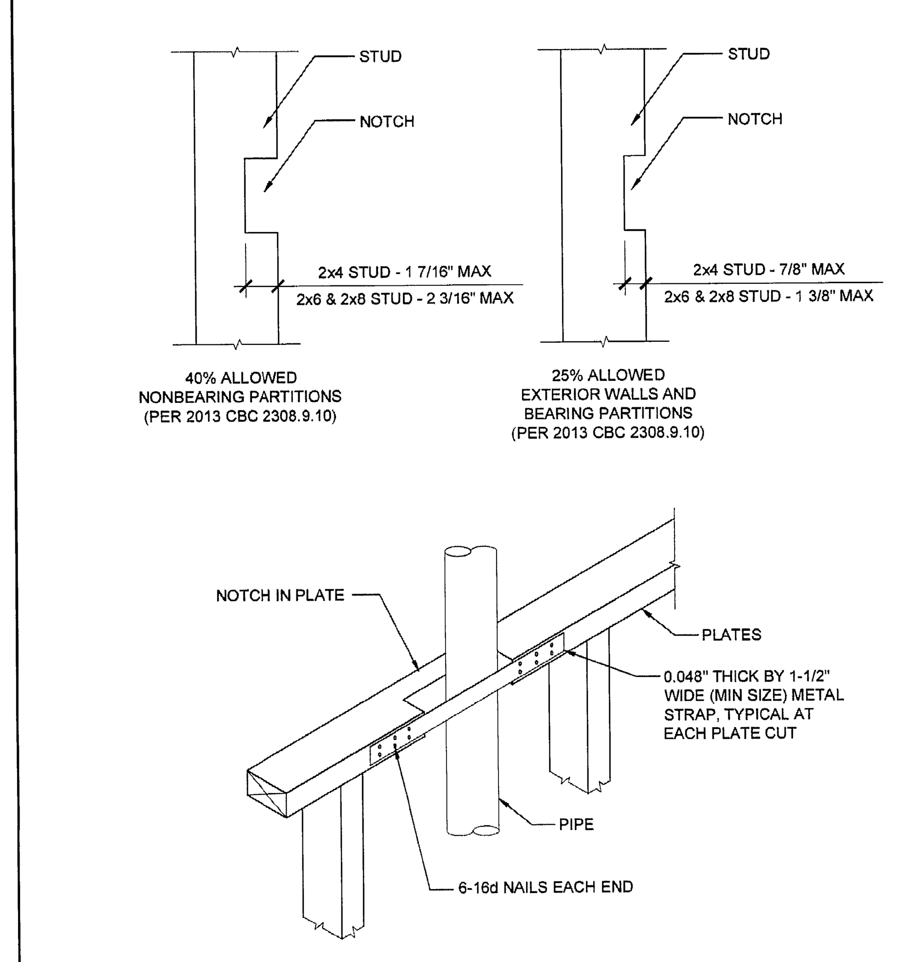
24' x 40' PC (HIGH SEISMIC)
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14
P.C. SHEET NUMBER
S-5.10
- - HIGH SEISMIC - -



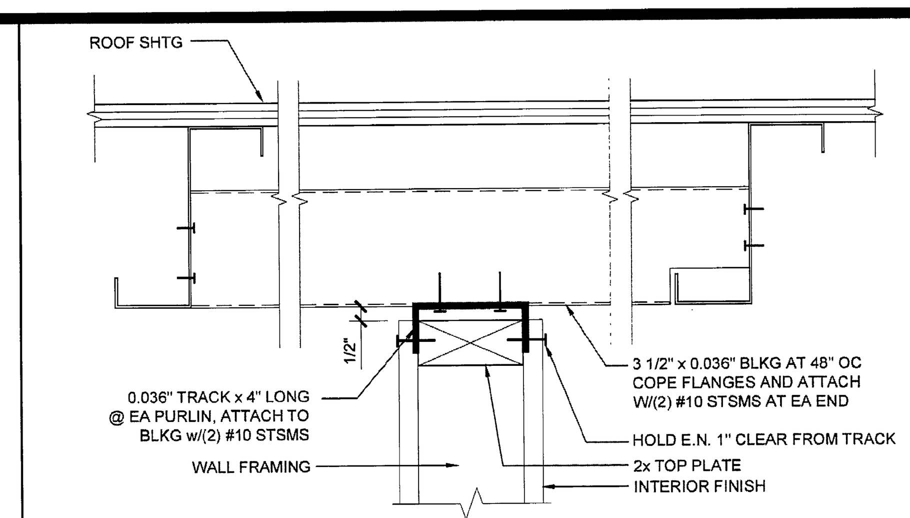
INTERIOR PARTITION SCALE : 3" = 1'-0" 14



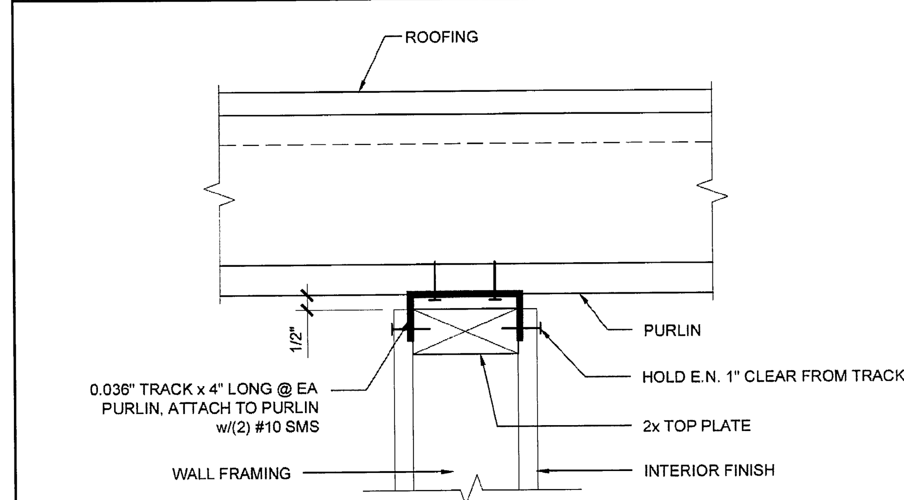
INTERIOR PARTITION SCALE : 3" = 1'-0" 12



CUTTING AND NOTCHING SCALE : 1 1/2" = 1'-0" 7



FULL HEIGHT INTERIOR PARTITION SCALE : 3" = 1'-0" 1



FULL HEIGHT INTERIOR PARTITION SCALE : 3" = 1'-0" 2

INTERIOR PARTITION SCALE : 3" = 1'-0" 14

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER NUMBER **	HEADER SIZE **	HEADER LUMBER	HEADER TYPE	SILL NUMBER **	SILL SIZE **	SILL LUMBER	SILL TYPE	FULL HEIGHT KING STUD NUMBER **	FULL HEIGHT KING STUD SIZE **	FULL HEIGHT KING STUD LUMBER	FULL HEIGHT KING STUD TYPE
LESS THAN 9'-6"	3070	NO PLASTER	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
		W/ PLASTER	(1)	2X6	HF	#2		N/A			(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
	4070	NO PLASTER	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
		W/ PLASTER	(1)	2X6	HF	#2		N/A			(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
	6040	NO PLASTER	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(1)	2X6	DF	#2
		W/ PLASTER	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
	8040	NO PLASTER	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
		W/ PLASTER	(2)	2X6	HF	#2	(2)	2X6	HF	#2	(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER NUMBER **	HEADER SIZE **	HEADER LUMBER	HEADER TYPE	SILL NUMBER **	SILL SIZE **	SILL LUMBER	SILL TYPE	FULL HEIGHT KING STUD NUMBER **	FULL HEIGHT KING STUD SIZE **	FULL HEIGHT KING STUD LUMBER	FULL HEIGHT KING STUD TYPE
9'-6" TO 10'-6"	3070	NO PLASTER	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
		W/ PLASTER	(1)	2X6	HF	#2		N/A			(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(2)	2X6	DF	#2
	4070	NO PLASTER	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
		W/ PLASTER	(1)	2X6	HF	#2		N/A			(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2		N/A			(2)	2X6	DF	#2
	6040	NO PLASTER	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
		W/ PLASTER	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		W/ PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
	8040	NO PLASTER	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		NO PLASTER (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
		W/ PLASTER	(2)	2X6	HF	#2	(2)	2X6	HF	#2	(3)	2X6	HF	#2
		W/ PLASTER (OPT)	(2)	2X6	DF	#2	(2)	2X6	DF	#2	(2)	2X6	DF	#2

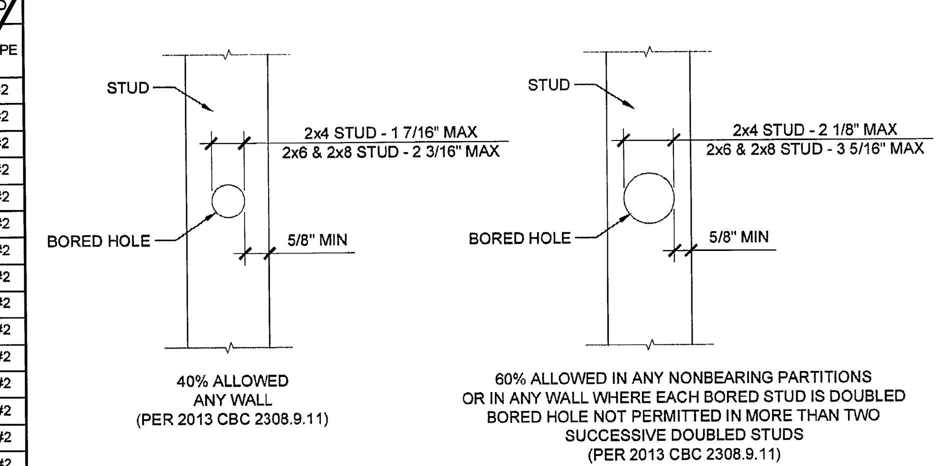
**2x6 AND 2x8 STUD OPTIONS MAY BE SUBSTITUTED IN LIEU OF 2x4 - NUMBER OF STUDS DO NOT CHANGE AND SHALL REMAIN THE SAME AS SHOWN ON SCHEDULE. SEE DETAILS 2 OR 10/-

2x6 OPENING STUDS SCHEDULE 19

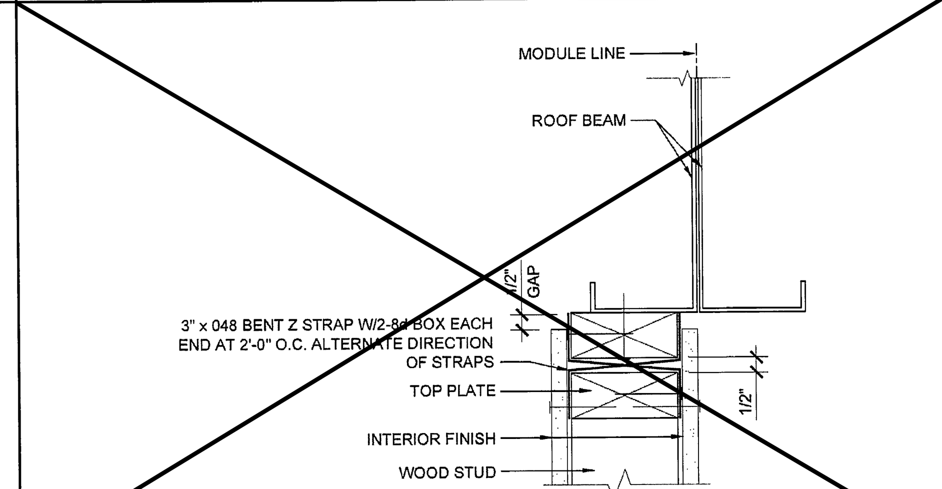
COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER NUMBER **	HEADER SIZE **	HEADER LUMBER	HEADER TYPE	SILL NUMBER **	SILL SIZE **	SILL LUMBER	SILL TYPE	FULL HEIGHT KING STUD NUMBER **	FULL HEIGHT KING STUD SIZE **	FULL HEIGHT KING STUD LUMBER	FULL HEIGHT KING STUD TYPE
LESS THAN 9'-6"	3070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	4070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	6040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
	8040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER NUMBER **	HEADER SIZE **	HEADER LUMBER	HEADER TYPE	SILL NUMBER **	SILL SIZE **	SILL LUMBER	SILL TYPE	FULL HEIGHT KING STUD NUMBER **	FULL HEIGHT KING STUD SIZE **	FULL HEIGHT KING STUD LUMBER	FULL HEIGHT KING STUD TYPE
9'-6" TO 10'-6"	3070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	4070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	6040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
	8040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
		W/ PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(2)	2X8	HF	#2
		W/ PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2

**2x6 AND 2x8 STUD OPTIONS MAY BE SUBSTITUTED IN LIEU OF 2x4 - NUMBER OF STUDS DO NOT CHANGE AND SHALL REMAIN THE SAME AS SHOWN ON SCHEDULE. SEE DETAILS 2 OR 10/-

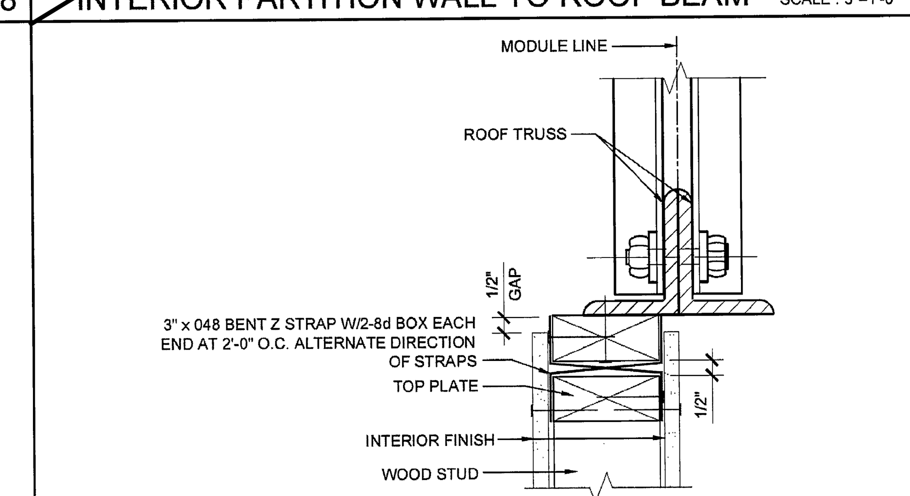
2x8 OPENING STUDS SCHEDULE 14



BORED HOLES SCALE : 1 1/2" = 1'-0" 8



INTERIOR PARTITION WALL TO ROOF BEAM SCALE : 3"=1'-0" 3



NOT USED 9

INTERIOR PARTITION WALL TO ROOF TRUSS SCALE : 3"=1'-0" 4

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING NUMBER **	SIZE **	LUMBER	TYPE	OC	4' CORNER OF WOOD WALL FRAMING (ZONE 5) NUMBER **	SIZE **	LUMBER	TYPE	OC
LESS THAN 9'-6"	NO PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC
	W/ PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC
9'-6" TO 10'-6"	NO PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC
	W/ PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC

**2x6 AND 2x8 STUD OPTIONS MAY BE SUBSTITUTED IN LIEU OF 2x4 - NUMBER OF STUDS DO NOT CHANGE AND SHALL REMAIN THE SAME AS SHOWN ON SCHEDULE.

NOTE: 2x6 & 2x8 SPACING MAY BE 24" O.C. OPTIONAL

2x6 WALL FRAMING SCHEDULE 20

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING NUMBER **	SIZE **	LUMBER	TYPE	OC	4' CORNER OF WOOD WALL FRAMING (ZONE 5) NUMBER **	SIZE **	LUMBER	TYPE	OC
LESS THAN 9'-6"	NO PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC
	W/ PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC
9'-6" TO 10'-6"	NO PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC
	W/ PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC

**2x6 AND 2x8 STUD OPTIONS MAY BE SUBSTITUTED IN LIEU OF 2x4 - NUMBER OF STUDS DO NOT CHANGE AND SHALL REMAIN THE SAME AS SHOWN ON SCHEDULE.

NOTE: 2x6 & 2x8 SPACING MAY BE 24" O.C. OPTIONAL

2x8 WALL FRAMING SCHEDULE 15

NOT USED 10

5

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
WALL FRAMING DETAILS
WOOD STUDS

R&S TAVARES ASSOCIATES
DESIGN♦CONSULTING♦PROJECT MGT
16875 W. BERNARDO DR. SUITE 285
SAN DIEGO, CA 92127 858.444.3344
WWW.RSTAVARES.COM

LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER No. S3380 STRUCTURAL STATE OF CALIFORNIA
RST#14001
04/01/2015

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 14 2015

REVISIONS
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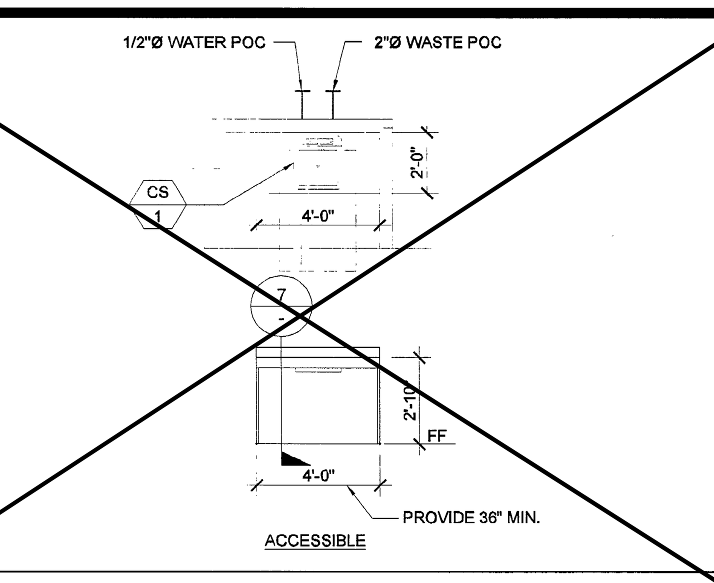
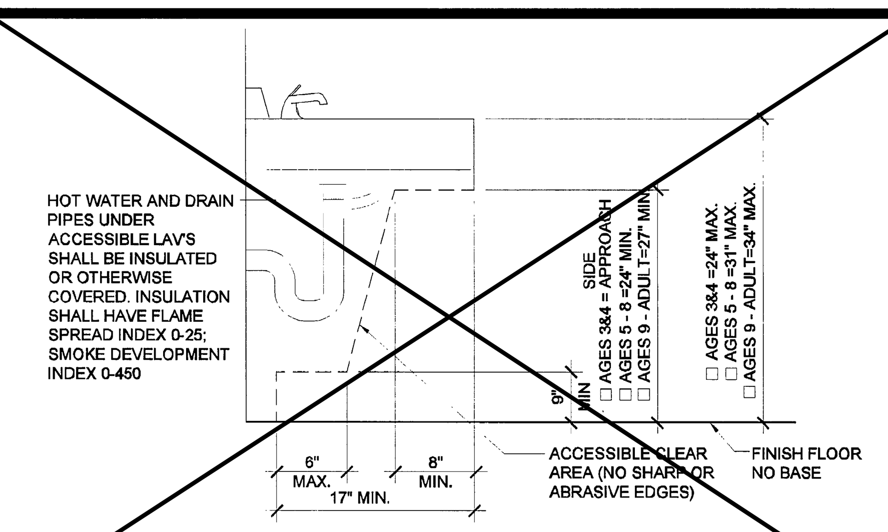
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
S-5.11
- - HIGH SEISMIC - -



TYPICAL SINK CABINET 11



ACCESSIBLE LAV CLEARANCE SCALE: N.T.S. 6

THE DIVISION OF THE STATE ARCHITECT, OFFICE OF REGULATION SERVICES ACCEPTS THE FOLLOWING DIMENSIONS AS ADEQUATELY SERVING THE NEEDS OF CHILDREN IN PROJECTS UNDER THEIR JURISDICTION. THESE DIMENSIONS ARE BASED ON CBC TABLE 11B-604.9 SUGGESTED DIMENSIONS FOR WATER CLOSETS SERVING CHILDREN AGES 3 TO 12.

ACCESSIBILITY DIMENSIONS	11B-604.9 SUGGESTED DIMS			
	ADULT	AGES 9 THROUGH 12	AGES 5 THROUGH 8	AGES 3 AND 4
TOILET CENTERING FROM WALL	17" - 18"	15" - 18"	12" - 15"	12"
TOILET SEAT HEIGHT (DIM TO TOP OF SEAT)	17" - 19"	15" - 17"	12" - 15"	11" - 12"
GRAB BAR HEIGHT (TO TOP)	33" - 36"	25" - 27"	20" - 25"	18" - 20"
TOILET PAPER IN FRONT OF TOILET	7" - 9"	7" - 9"	7" - 9"	7" - 9"
NAPKIN DISPOSAL IN FRONT OF TOILET	12" MAX.	12" MAX.	N/A	N/A
MIRROR HEIGHT (TO BOTTOM OF GLASS)	40" MAX.	40" MAX.	36" MAX.	32" MAX.
DISPENSER HEIGHT	19" MIN.	17" - 19"	14" - 17"	14"
LAVATORY/SINK TOP HEIGHT	34" MAX.	34" MAX.	31" MAX.	24" MAX.
LAVATORY/SINK KNEE CLEARANCE	27" MIN.	27" MIN.	24" MIN	SIDE APPROACH
URINAL LIP HEIGHT	17" MAX.	17" MAX.	15" MAX	13" MIN.
URINAL FLUSH HANDLE HEIGHT	44" MAX.	44" MAX.	37" MAX. *	32" MAX. *
DRINKING FOUNTAIN BUBBLER HT. (LOW)	36" MAX.	30" MAX.	30" MAX	30" MAX.
DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	SIDE APPROACH	SIDE APPROACH	SIDE APPROACH
RAMP/STAIR HANDRAIL HEIGHT (TO TOP)	34" - 38"	34" - 38"	34" - 38"	34" - 38"

STANDARD DIMENSIONS	ALTERNATE HEIGHT (DIMS)			
	ADULT	AGES 9 THROUGH 12	AGES 5 THROUGH 8	AGES 3 AND 4
TOILET CENTERING FROM WALL/PARTITION	15" MIN	15" MIN	15" MIN	15" MIN
TOILET SEAT HEIGHT/DIM TO TOP OF SEAT	15"	15"	15"	15"
TOILET CLEARANCE/FRONT	24"	24"	24"	24"
URINAL LIP HEIGHT	24"	24"	18"	16"
URINAL CENTER FROM WALL/PARTITION	12"	12"	12"	12"

PLUMBING ACCESSORIES (REF. ONLY - MODELS FURNISHED AND INSTALLED BY DISTRICT U.N.O.)

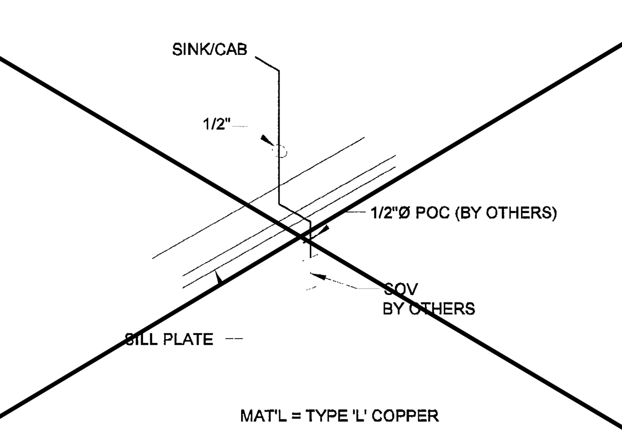
- [A] SOAP DISPENSER: LIQUID SOAP DISPENSER 4" MAX. PROJECTION
- [B] PAPER TOWEL DISPENSER/TRASH BIN COMBO: SURFACE MOUNTED 4" MAX. PROJECTION-CANNOT ENCROACH INTO 30x48 CLEAR SPACE OF FIXTURE
- [C] TOILET PAPER HOLDER: SINGLE ROLL SEMI-RECESSED OR 3" MAX PROJECTION
- [D] TOILET SEAT DISPENSER: SURFACE MOUNTED

* 44" MAX. PER CODE
[A] = ADULT; [E] = AGES 9-12; [K] = AGES 3-8

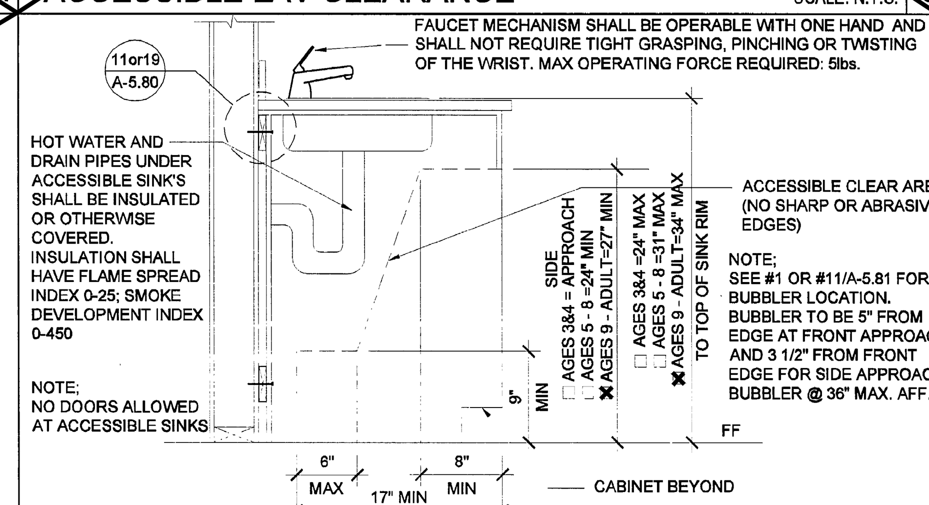
2

PLUMBING FIXTURE SCHEDULE

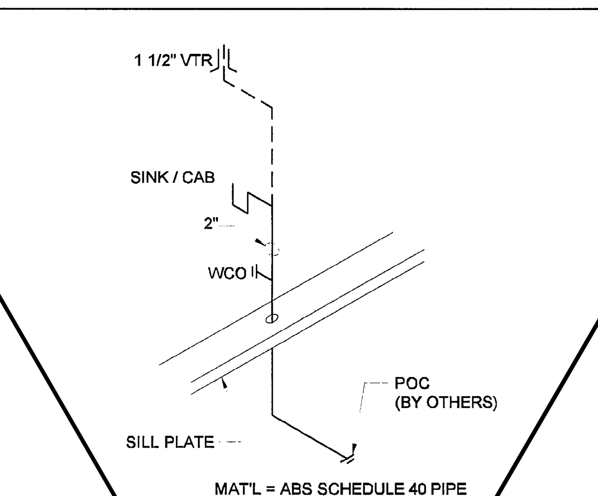
SYMBOL	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT	FIXTURE DESCRIPTION (AS CALLED OUT OR APPROVED EQUAL)
WC 1	[ADULT] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO ADA PF9403, (1.28 GPF) ALT: AMERICAN STANDARD ADA 2758.128, 17 HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 2	[AGE 9-12] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO STANDARD PF9300 (1.28 GPF) ALT: AMERICAN STANDARD 2832.128, 16" HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 3	[AGE 3-4] WATER CLOSET TANK TYPE (ACCESSIBLE & NON-ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO PF1704BB (1.28 GPF) ALT: AMERICAN STANDARD 2315.016 BABY DEVORO 10" HIGH, 10" ROUGH-IN, VITREOUS CHINA ELONGATED RIM, TANK TYPE; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 4	[AGE 9 TO ADULT] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO ADA PF1723 (1.28 GPF) ALT: AMERICAN STD ADA 3043.001 "MADERA" 16 3/4" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 10" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
WC 5	[AGE 5-12] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1721 (1.28 GPF) ALT: AMERICAN STANDARD 2234.001 MADERA 15" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
WC 6	[AGE 3 & 4] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE & NON-ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO PF1700BB (1.28 GPF) ALT: AMERICAN STANDARD BABY DEVORO 2282.010 VITREOUS CHINA ELONGATED RIM, 10" ROUGH-IN LOW CONSUMPTION CLOSET BOWL; OLSONITE 126CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSH VALVE
LAV 1	LAVATORY (ACCESSIBLE)	1/2"	-	2"	1 1/2"	STD: AMERICAN STANDARD 0355.012 LUCERNE ALT: CRANE 1412-20 "HARWICH" 20X18" VITREOUS CHINA; JAY R SMITH #722 CONCEALED HANGER; OLYMPIA #L6161 SINGLE HANDLE FAUCET (AMERICAN STANDARD 9141.011 TO BE USED @ KINDER & ELEMENTARY APPLICATIONS ONLY) (0.5 GPM)
FD 1	FLOOR DRAIN	-	-	2"	1 1/2"	JAY R SMITH #2005YA-02-P050-NB. FLOOR DRAIN TAPPED FOR PRIMER. 5" NICKEL BRONZE STRAINER w/ 1/2" MAX STRAINER OPENINGS IN ALL DIRECTIONS
TP 1	TRAP PRIMER	1/2"	-	-	-	PR-500 WITH 8"X12" LOCKABLE BOX, 1/2" BALL SHUT-OFF VALVE, AND PPP DU-U FRESH WATER DISTRIBUTION SYSTEM
GB 1	GRAB BAR	-	-	-	-	BOBRICK B-6806-1-1/2 CC STAINLESS STEEL GRAB BAR - SATIN FINISH; 36" LONG ON BACK AND 42" ON SIDE
MR 1	MIRROR	-	-	-	-	SERIES 530 RETURNED MIRRORS STAINLESS STEEL - 18GA 18"X24" - "J" SHEET METAL MANUFACTURED OR APPROVED EQUAL
CS 1	CLASSROOM SINK	1/2"	1/2"	2"	1 1/2"	JUST CRA-1725-A-GR 17"x25" w/ 4 1/2" BOWL DEPTH, WITH CHICAGO FAUCET #350 AND BUBBLER JSB-10
WH 1	WATER HEATER	3/4"	3/4"	-	-	☐ A.O. SMITH #DEL-6 (6 GALLON) ☐ A.O. SMITH #DEL-10 (10 GALLON)
WH 2	INSTANT WATER HEATER	1/2"	1/2"	-	-	EEMAX #SP3012, 120V, 3.0KW, 25A
DF 1	DRINKING FOUNTAIN	1/2"	-	2"	1 1/2"	HALSEY-TAYLOR / BI-LEVEL HAC8FSBL-Q / COOLING TYPE



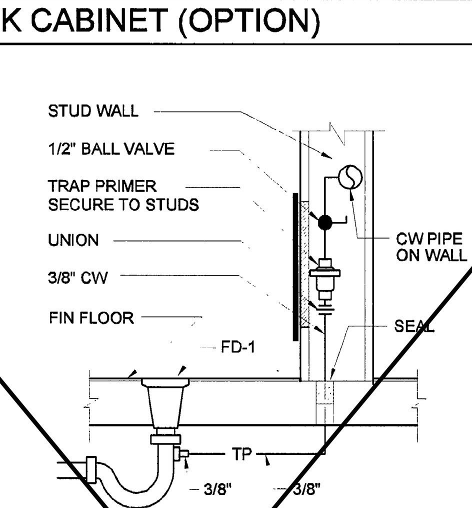
SINK CABINET COLD WATER SUPPLY SCALE: N.T.S. 12



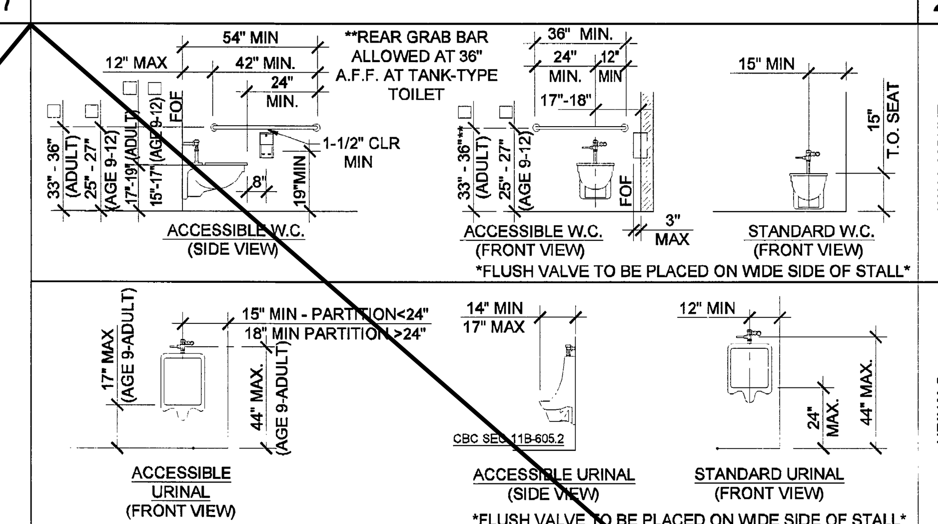
ACCESSIBLE SINK CABINET (OPTION) SCALE: N.T.S. 7



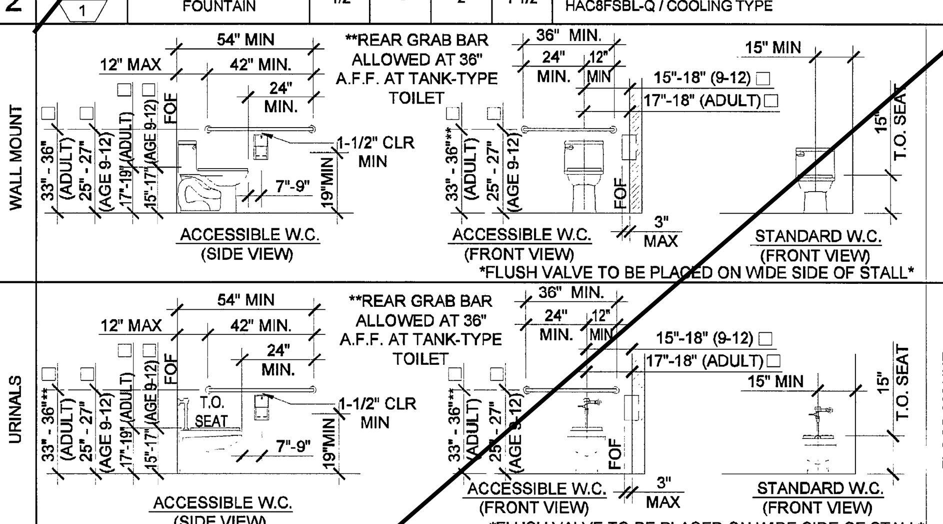
SINK CABINET WASTE 13



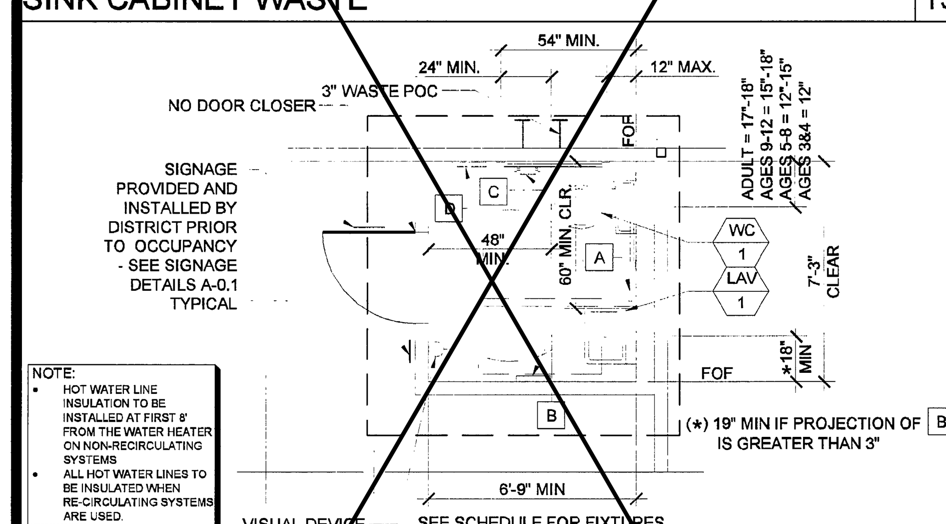
TRAP PRIMER TO FLOOR DRAIN SCALE: N.T.S. 8



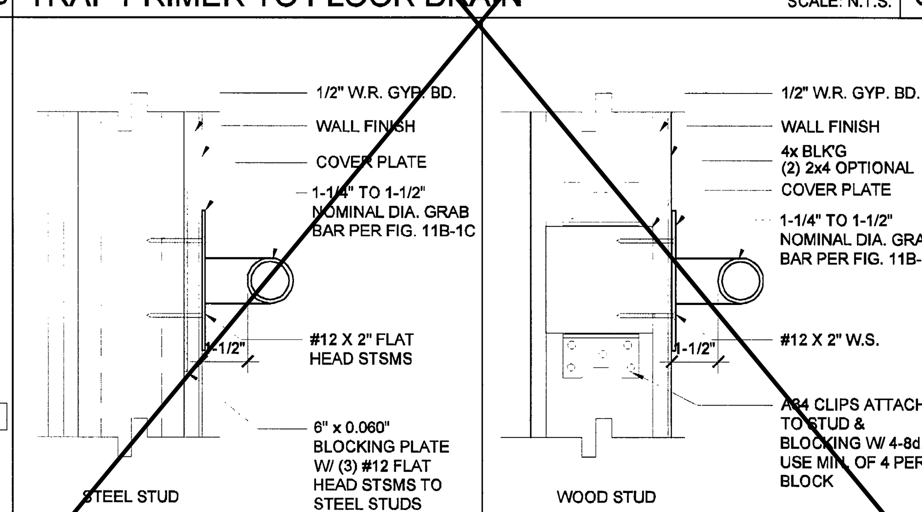
TOILET FIXTURE MOUNTING HEIGHTS(AGES 9 TO ADULT) 3



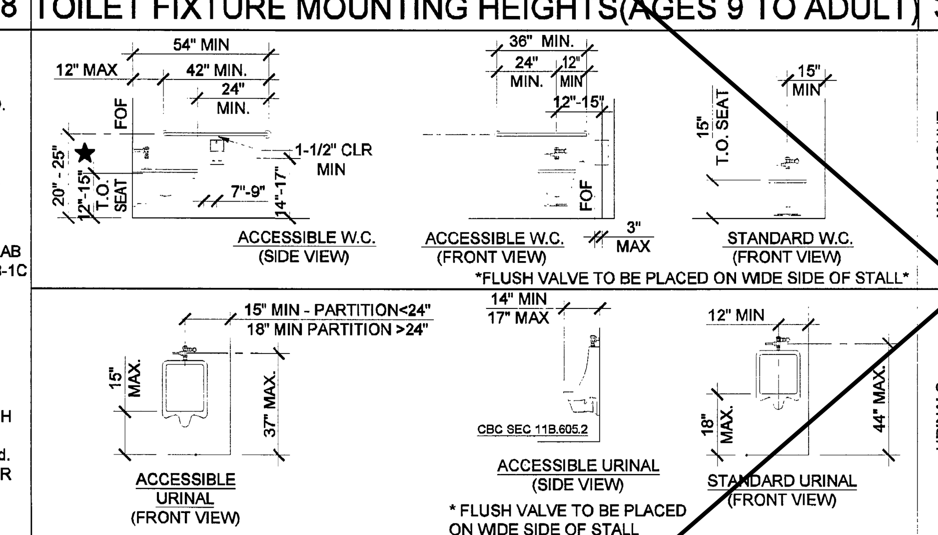
TOILET FIXTURE MOUNTING HEIGHTS(AGES 9 TO ADULT) 16



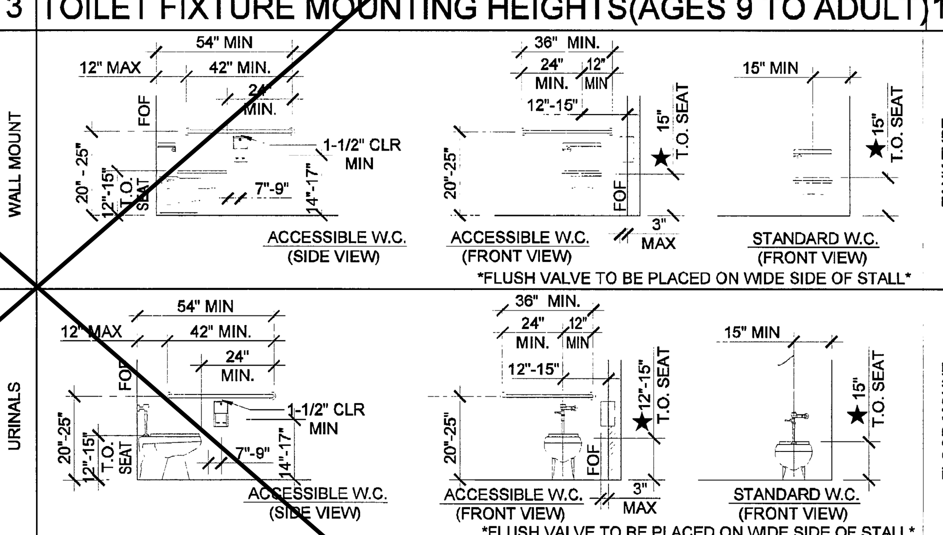
TYPICAL TOILET ROOM PLAN 14



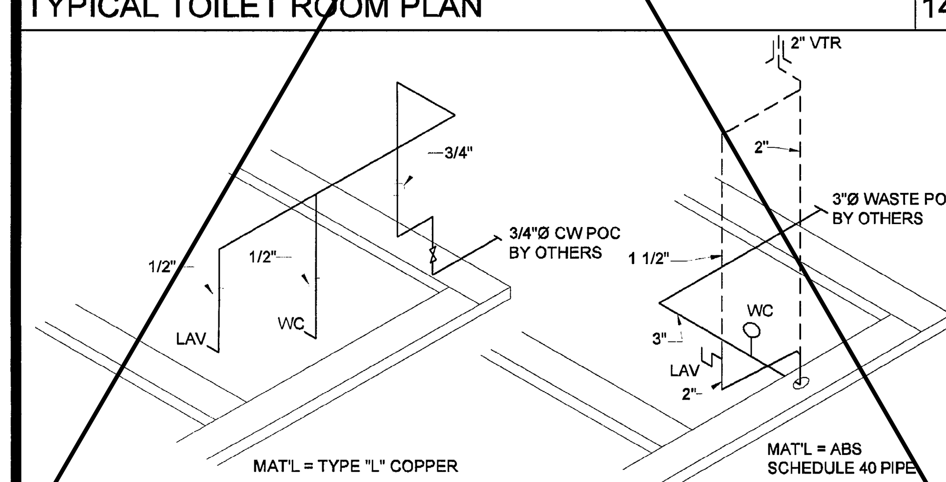
GRAB BAR CONNECTION DETAIL 9



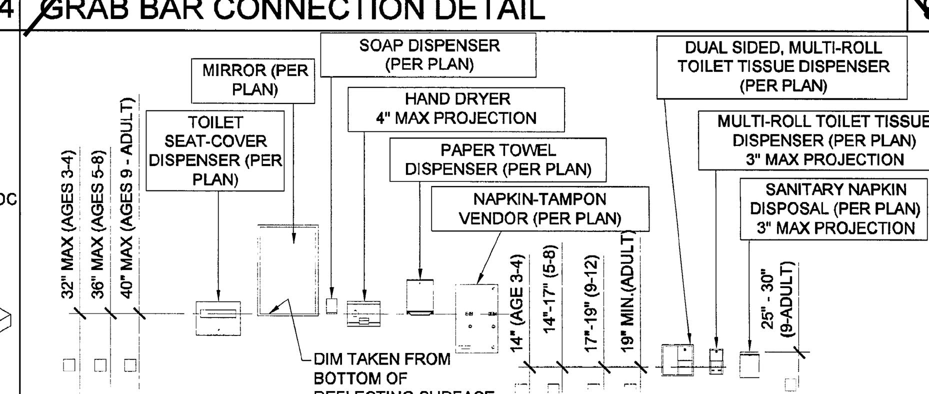
TOILET FIXTURE MOUNTING HEIGHTS (AGES 5 THRU 8) 4



TOILET FIXTURE MOUNTING HEIGHTS (AGES 5 THRU 8) 17



TOILET ROOM COLD WATER SUPPLY AND WASTE 15

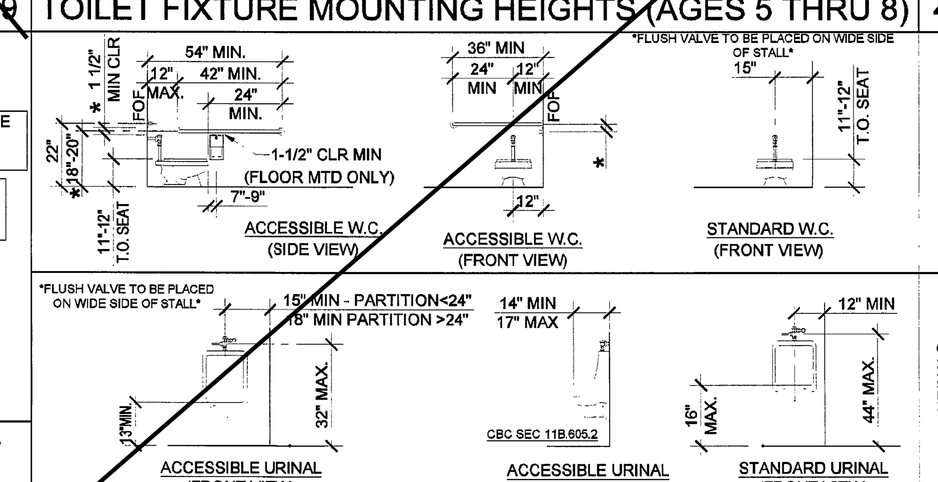


* MOUNTING HEIGHTS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE

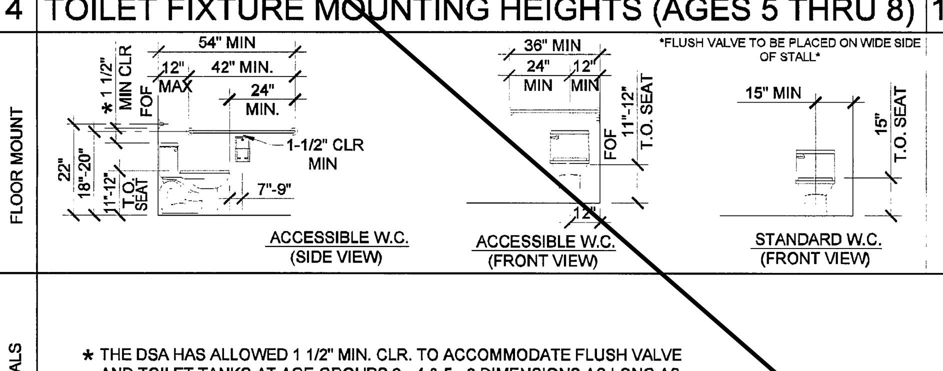
MAXIMUM 4" PROJECTION FOR ALL ACCESSORIES (UNO)

NOTE: ACCESSORIES SHOWN FOR REFERENCE ONLY - MODELS FURNISHED AND INSTALLED BY DISTRICT. "DISTRICT" MUST SUBMIT CUT SHEETS TO D.S.A. FOR REVIEW/COMMENT/APPROVAL.

TOILET ACCESSORIES MOUNTING HEIGHTS 10



TOILET FIXTURE MOUNTING HEIGHTS (AGES 3 AND 4) 5



* THE DSA HAS ALLOWED 1 1/2" MIN. CLR. TO ACCOMMODATE FLUSH VALVE AND TOILET TANKS AT AGE GROUPS 3 - 4 & 5 - 8 DIMENSIONS AS LONG AS THE SIDE GRAB BAR IS MOUNTED AT THE HEIGHT PRESCRIBED IN TABLE 11B-604.9

TOILET FIXTURE MOUNTING HEIGHTS (AGES 3 AND 4) 18

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
PLUMBING DETAILS AND SCHEDULE

LICENSED ARCHITECT JACK F. SHUBERT C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ FLS ___ SS ___
DATE APR 1 4 2015

REVISIONS
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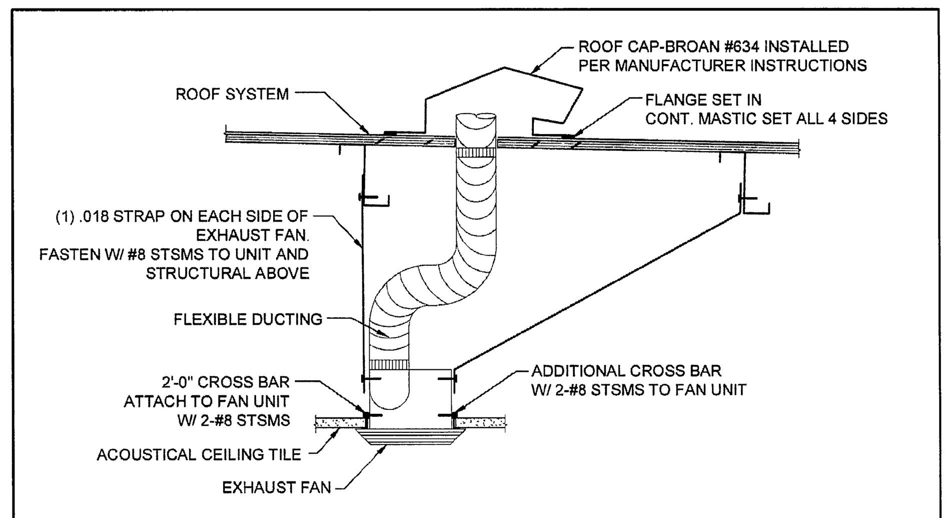
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
P-1.01

LEGEND

SYMBOL	ABB.	DESCRIPTION
	SAD	SUPPLY AIR DUCT
	RAD	RETURN AIR DUCT
	EAD	EXHAUST AIR DUCT
	(L)	LINED DUCTWORK
	CD	SUPPLY CEILING DIFFUSER
	CR	RETURN CEILING REGISTER
	ER	EXHAUST CEILING REGISTER
	VTR	VENT THRU ROOF
	FD	FIRE DAMPER
	MVD	MANUAL VOLUME DAMPER
UC	UC	UNDERCUT DOOR
T	STAT	THERMOSTAT
BT	BT	BYPASS TIMER
	P.O.C	POINT OF CONNECTION



EXHAUST FAN INSTALLATION — SCALE : 1"=1'-0"

CEILING MOUNTED EXHAUST FAN SCHEDULE

SYM.	LOCATION	SERVICE	MANUF.	MODEL	CFM	SONES	SP	ELECTRICAL			WGT.	REMARKS
								VOLTS	Ø	POWER		
EF 1	CEILING	TOILET EXHAUST	BROAN*	676	100	4.0	0.25	120	1	156 WATTS	7 LBS.	WITH BROAN ROOF CAP #636. PROVIDE 4" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 2	CEILING	TOILET EXHAUST	BROAN*	L100	109	1.0	0.25	120	1	87 WATTS	22.80 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 6" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 3	CEILING	TOILET EXHAUST	BROAN*	L200	210	2.0	0.25	120	1	127 WATTS	23.0 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 4	CEILING	TOILET EXHAUST	BROAN*	L300	308	2.8	0.25	120	1	212 WATTS	23.10 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.

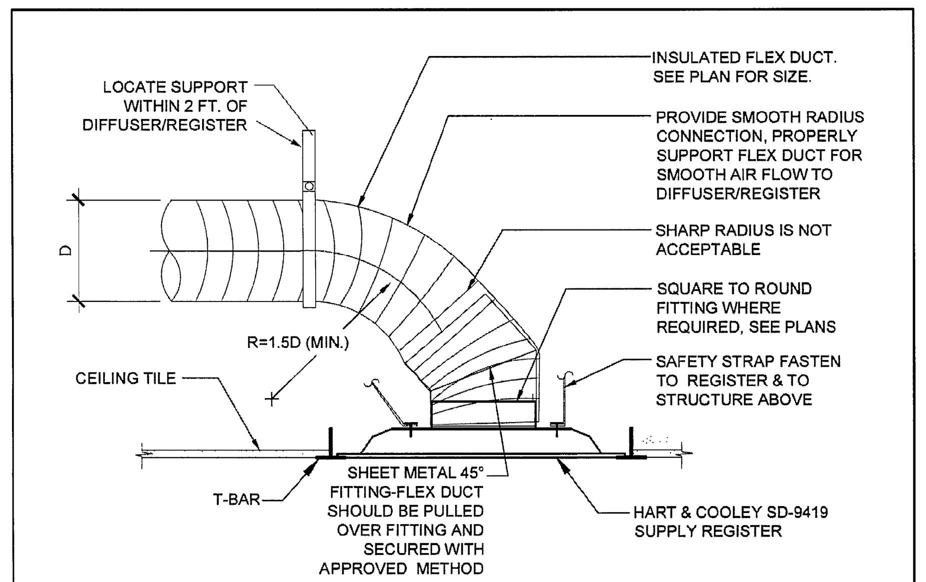
* OR APPROVED EQUAL.

PERFORATED FACE GRILLE SCHEDULE (SUPPLY)

ITEM	NECK SIZE	RANGE CFM	MFG & MODEL #
T-BAR SUPPLY (16X16-4W)	6"Ø	0 - 150	Fixed Curve Blade, 4-way throw
	8"Ø	150 - 230	For lay-in T-bar ceilings use Harth & Cooley SD-9419 . (Sizes as shown on Mech Plan)
	10"Ø	230 - 350	
	12"Ø	350 - 460	
	14"Ø	460 - 640	

PERFORATED FACE GRILLE SCHEDULE (RETURN)

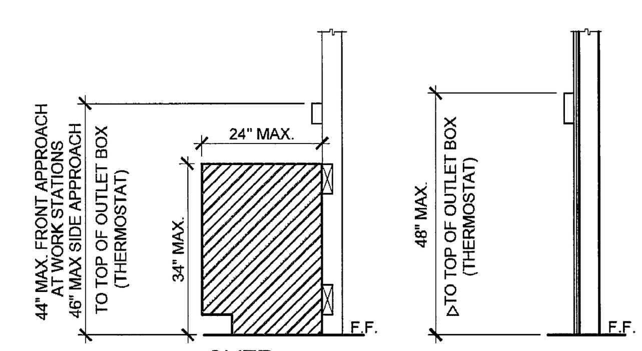
ITEM	NECK SIZE	RANGE CFM	MFG & MODEL #
T-BAR RETURN	6"Ø	0 - 230	Perforated face
	10"Ø	230 - 460	For lay-in T-bar ceilings use Shoemaker 105P with 24 ga., 45 deg. angle. (Sizes as shown on Mech Plan.)
	14"Ø	460 - 710	



T-BAR SUPPLY REGISTER AND SIDE OUTLET BOX DETAIL

N.T.S.

SUPPLY CEILING DIFFUSER MOUNTING — SCALE NONE — D



OVER OBSTRUCTION

MOUNTING HEIGHTS

△ PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION

GENERAL 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 2013 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

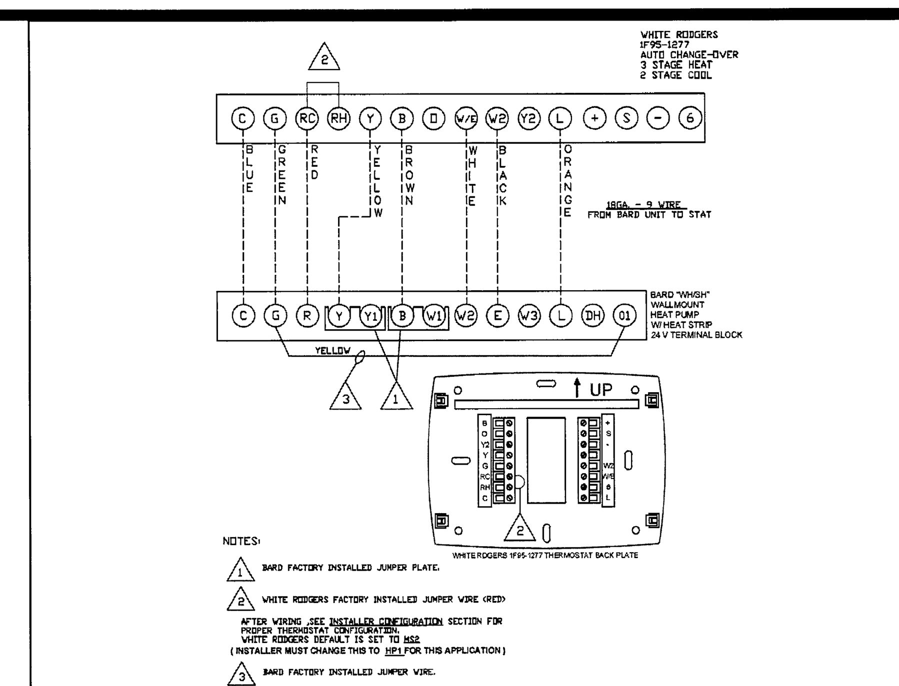
PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, 13.6.5.6 AND 2013 CBC SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26.

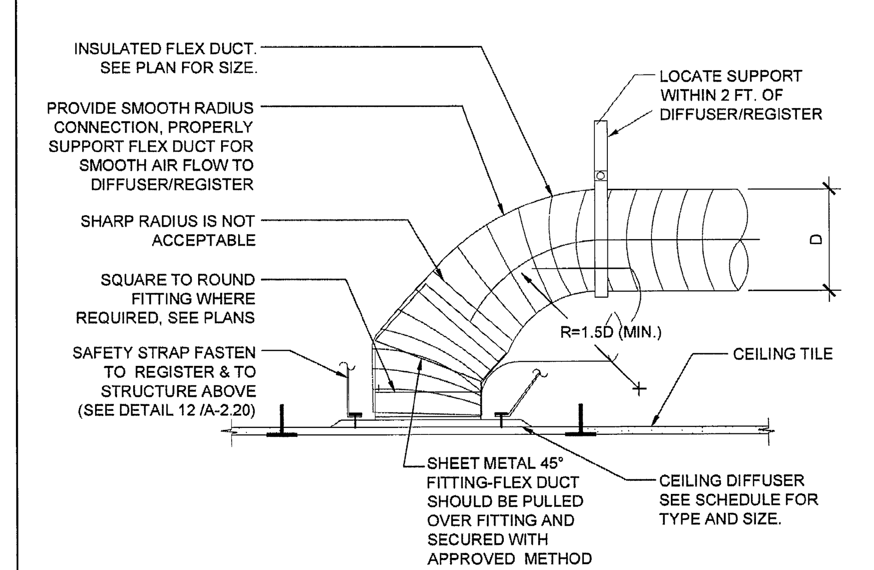
THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPA #).

COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AN BRACING OF THE PIPE, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS.

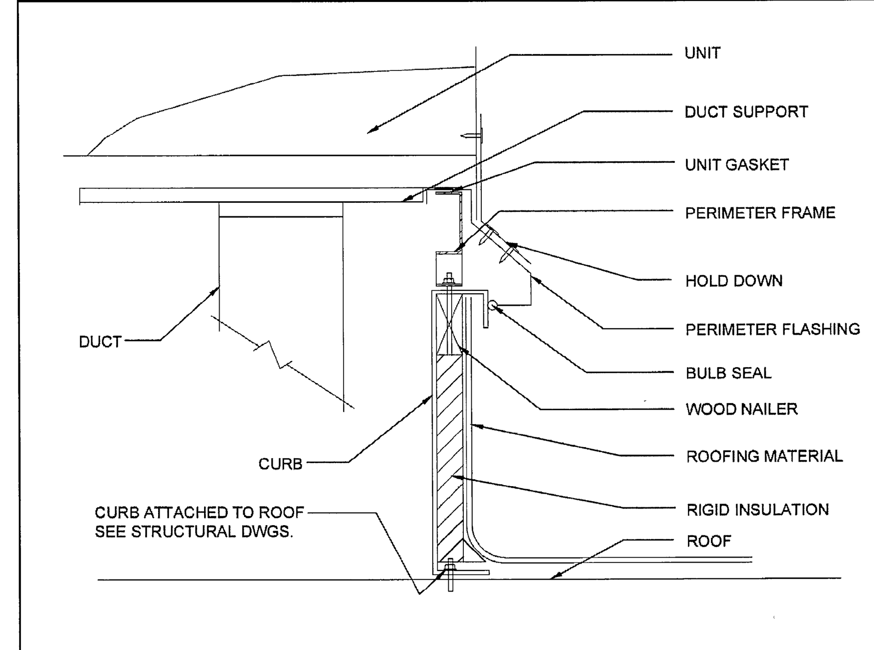
THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.



UNIT TO THERMOSTAT WIRING — SCALE NONE — A



RETURN CEILING DIFFUSER MOUNTING — SCALE NONE — B



A/C UNIT MOUNTING — SCALE NONE — C

BUILDING SIZES VARY. SEE KEY PLANS ON SHEET A-0.3 FOR APPROPRIATE HVAC TONNAGE PER BUILDING SIZE.

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
MECHANICAL NOTES, SCHEDULES, & DETAILS

LICENSED ARCHITECT JACK A. SHIVELY III C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS SS
DATE APR 14 2015

REVISIONS
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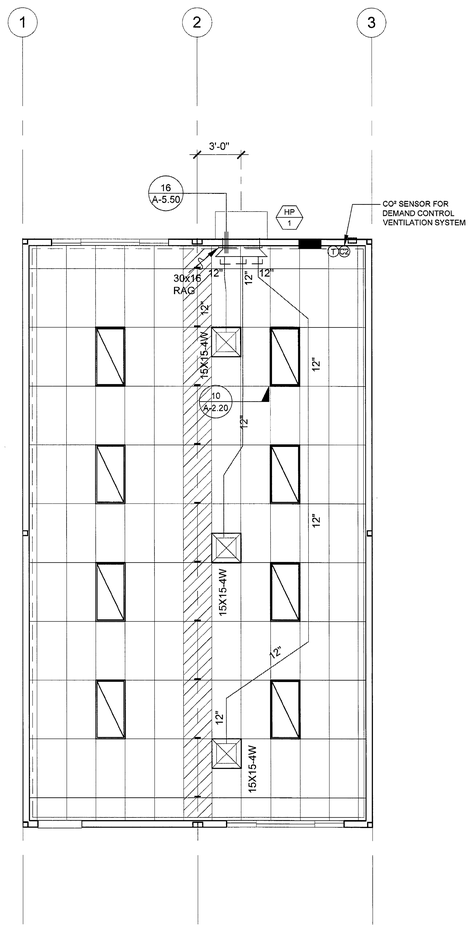
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
M-0.1



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

9 EER

SINGLE PACKAGE VERTICAL HEAT PUMP SCHEDULE

	STANDARD	OPTION #1	OPTION #2
TAG	HP-1	HP-1	HP-1
NOMINAL TONNAGE	4.0 TONS	5 TONS	3.5 TONS
MANUFACTURER	BARD	BARD	BARD
MODEL#	W48H2-A04	W60H2-A05	W42H2-A04
CFM	1550	1700	1400
STATIC PRESSURE	0.3	0.3	0.3
DRIVE	DIRECT	DIRECT	DIRECT
MCA	58	67	57
MOCP	60	80	60
VOLTAGE	208/230-1	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#4/#8	#6/#10
DESIGN RETURN AIR (DB/WB)	80/67	80/67	80/67
SENSIBLE COOLING @ 95° F	35,600	39,600	32,700
TOTAL COOLING @ 95° F	46,000	54,000	42,000
HEATING CAP. BTUH @ 47° F	44,000	54,000	42,000
HEATING CAP. BTUH @ 17° F	26,000	32,000	25,000
OPERATING WEIGHT	520#	580#	550#
EER	9.00	9.00	9.00
COP @ 47° F	3.00	3.00	3.00
COP @ 17° F	2.00	2.00	2.00

NOTES:
PROVIDE SET-BACK THERMOSTAT.
MODEL# SHOWN IS FOR UNIT WITH OPTIONAL AUXILIARY HEAT STRIP, IF HEAT STRIP IS NOT USED THE MCA AND MOCP MUST BE REVISED. HEAT STRIPS LARGER THAN THE SIZE SHOWN MAY NOT BE USED.
MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT LOAD.
THE UNIT SHALL UTILIZE DEMAND CONTROL VENTILATION. THE CO2 SENSOR SHALL BE LOCATED SO THAT IT IS NOT EXPECTED TO BE OBSTRUCTED BY FURNITURE OR EQUIPMENT AND SHALL BE INSTALLED NO LESS THAN 36" AFF AND NO MORE THAN 72" AFF.
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE DOES NOT EXCEED 5 TONS AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.

10 EER

SINGLE PACKAGE VERTICAL HEAT PUMP SCHEDULE

	STANDARD	OPTION #1	OPTION #2
TAG	HP-1	HP-1	HP-1
NOMINAL TONNAGE	4.0 TONS	5 TONS	3.5 TONS
MANUFACTURER	BARD	BARD	BARD
MODEL#	S49H2-A05	S61H2-A05	S43H2-A04
CFM	1400	1450	1250
STATIC PRESSURE	0.2	0.2	0.15
DRIVE	DIRECT	DIRECT	DIRECT
MCA	65	69	55
MOCP	70	80	60
VOLTAGE	208/230-1	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#4/#8	#6/#10
DESIGN RETURN AIR (DB/WB)	80/67	80/67	80/67
SENSIBLE COOLING @ 95° F	34,400	37,900	31,200
TOTAL COOLING @ 95° F	48,000	55,000	41,500
HEATING CAP. BTUH @ 47° F	45,000	52,000	39,000
HEATING CAP. BTUH @ 17° F	28,000	30,000	23,000
OPERATING WEIGHT	520#	580#	550#
EER	10.00	10.40	10.50
COP @ 47° F	3.00	3.00	3.20
COP @ 17° F	2.00	2.00	2.10

NOTES:
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MODEL# SHOWN IS FOR UNIT WITH OPTIONAL AUXILIARY HEAT STRIP, IF HEAT STRIP IS NOT USED THE MCA AND MOCP MUST BE REVISED. HEAT STRIPS LARGER THAN THE SIZE SHOWN MAY NOT BE USED.
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9 EER (GAS ALTERNATE)

SINGLE PACKAGE VERTICAL AIR CONDITIONER WITH GAS FURNACE

	STANDARD	OPTION #1	OPTION #2
TAG	AC-1	AC-1	AC-1
NOMINAL TONNAGE	4.0 TONS	5 TONS	3.5 TONS
MANUFACTURER	BARD	BARD	BARD
MODEL#	W48G2-AXB	W60G2-AXB	W42G2-AXB
CFM	1600	1750	1300
STATIC PRESSURE	0.2	0.2	0.2
DRIVE	DIRECT	DIRECT	DIRECT
MCA	38	40	32
MOCP	50	60	50
VOLTAGE	208/230-1	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#6/#10	#6/#10
DESIGN RETURN AIR (DB/WB)	80/67	80/67	80/67
SENSIBLE COOLING @ 95° F	35,300	40,700	30,500
TOTAL COOLING @ 95° F	46,000	57,000	40,500
HEATING INPUT	75,000	75,000	75,000
HEATING OUTPUT	61,500	61,500	61,500
OPERATING WEIGHT	710#	725#	700#
EER	9.7	9.8	9.8
THERMAL EFFICIENCY (TE)	82	82	82

NOTES:
PROVIDE SET-BACK THERMOSTAT.
MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT LOAD.
THE UNIT SHALL UTILIZE DEMAND CONTROL VENTILATION. THE CO2 SENSOR SHALL BE LOCATED SO THAT IT IS NOT EXPECTED TO BE OBSTRUCTED BY FURNITURE OR EQUIPMENT AND SHALL BE INSTALLED NO LESS THAN 36" AFF AND NO MORE THAN 72" AFF.
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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
MECHANICAL PLAN
WALL MOUNT
24' x 40'

STATE OF CALIFORNIA
REGISTERED ARCHITECT
PAUL A. MIHIVELY III
13387
REN 01-31-2015

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PERMIT APPLICATION FOR CONSTRUCTION IS REQUIRED

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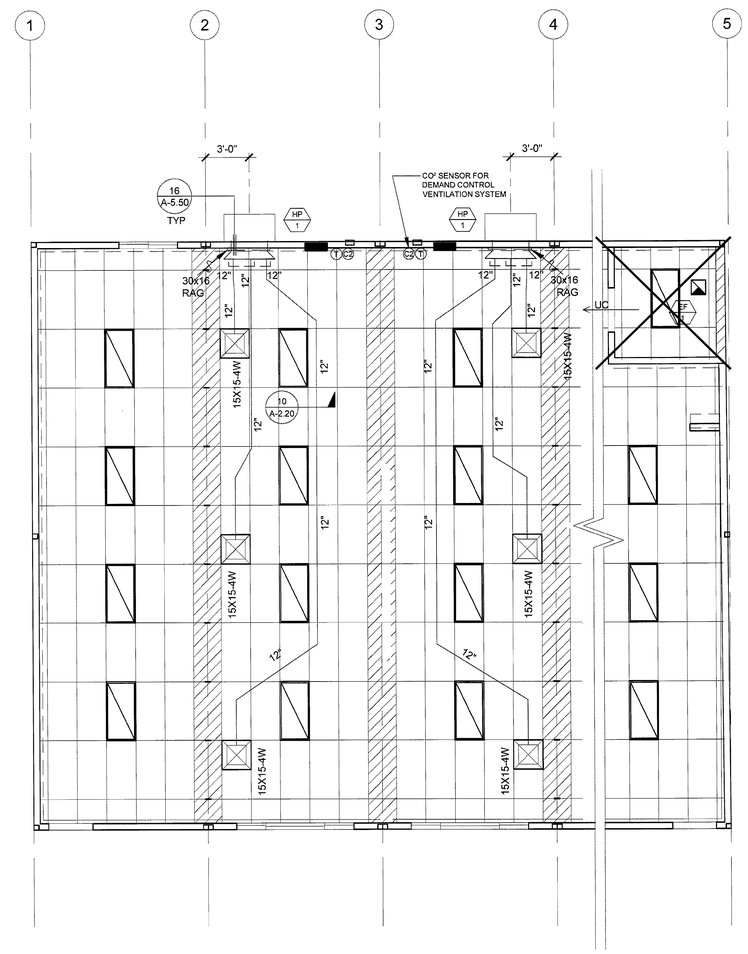
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
M-1.01



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

1

9 EER

SINGLE PACKAGE VERTICAL HEAT PUMP SCHEDULE

	STANDARD	OPTION #1	OPTION #2
TAG	HP-1	HP-1	HP-1
NOMINAL TONNAGE	4.0 TONS	5 TONS	3.5 TONS
MANUFACTURER	BARD	BARD	BARD
MODEL#	W48H2-A04	W60H2-A05	W42H2-A04
CFM	1550	1700	1400
STATIC PRESSURE	0.3	0.3	0.3
DRIVE	DIRECT	DIRECT	DIRECT
MCA	58	67	57
MOCP	60	80	60
VOLTAGE	208/230-1	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#4/#8	#6/#10
DESIGN RETURN AIR (DB/WB)	80/67	80/67	80/67
SENSIBLE COOLING @ 95° F	39,600	39,600	32,700
TOTAL COOLING @ 95° F	46,000	54,000	42,000
HEATING CAP. BTUH @ 47° F	44,000	54,000	42,000
HEATING CAP. BTUH @ 17° F	26,000	32,000	25,000
OPERATING WEIGHT	550#	580#	550#
EER	9.00	9.00	9.00
COP @ 47° F	3.00	3.00	3.00
COP @ 17° F	2.00	2.00	2.00

NOTES:
PROVIDE SET-BACK THERMOSTAT.
MODEL# SHOWN IS FOR UNIT WITH OPTIONAL AUXILIARY HEAT STRIP. IF HEAT STRIP IS NOT USED THE MCA AND MOCP MUST BE REVISED. HEAT STRIPS LARGER THAN THE SIZE SHOWN MAY NOT BE USED.
MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT LOAD.
THE UNIT SHALL UTILIZE DEMAND CONTROL VENTILATION. THE CO2 SENSOR SHALL BE LOCATED SO THAT IT IS NOT EXPECTED TO BE OBSTRUCTED BY FURNITURE OR EQUIPMENT AND SHALL BE INSTALLED NO LESS THAN 36" AFF AND NO MORE THAN 72" AFF.
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE DOES NOT EXCEED 5 TONS AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.

10 EER

SINGLE PACKAGE VERTICAL HEAT PUMP SCHEDULE

	STANDARD	OPTION #1	OPTION #2
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CFM	1400	1450	1250
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MCA	65	69	55
MOCP	70	80	60
VOLTAGE	208/230-1	208/230-1	208/230-1
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HEATING CAP. BTUH @ 47° F	45,000	52,000	39,000
HEATING CAP. BTUH @ 17° F	26,000	30,000	23,000
OPERATING WEIGHT	550#	580#	550#
EER	10.00	10.40	10.50
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9 EER (GAS ALTERNATE)

SINGLE PACKAGE VERTICAL AIR CONDITIONER WITH GAS FURNACE

	STANDARD	OPTION #1	OPTION #2
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MANUFACTURER	BARD	BARD	BARD
MODEL#	W48G2-AXB	W60G2-AXB	W42G2-AXB
CFM	1600	1750	1300
STATIC PRESSURE	0.2	0.2	0.2
DRIVE	DIRECT	DIRECT	DIRECT
MCA	38	40	32
MOCP	50	60	50
VOLTAGE	208/230-1	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#6/#10	#6/#10
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HEATING INPUT	75,000	75,000	75,000
HEATING OUTPUT	61,500	61,500	61,500
OPERATING WEIGHT	710#	725#	700#
EER	9.7	9.8	9.8
THERMAL EFFICIENCY (TE)	82	82	82

NOTES:
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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
MECHANICAL PLAN
WALL MOUNT
48' TO 120' x 40'

ARCHITECT OF RECORD
SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
CCR Title 24, Part 1, Section 4-317
A SEPARATE PERMIT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC ___ ES ___ SS ___
DATE APR 14 2015

REVISIONS
1
2
3
4
5
6
7
8

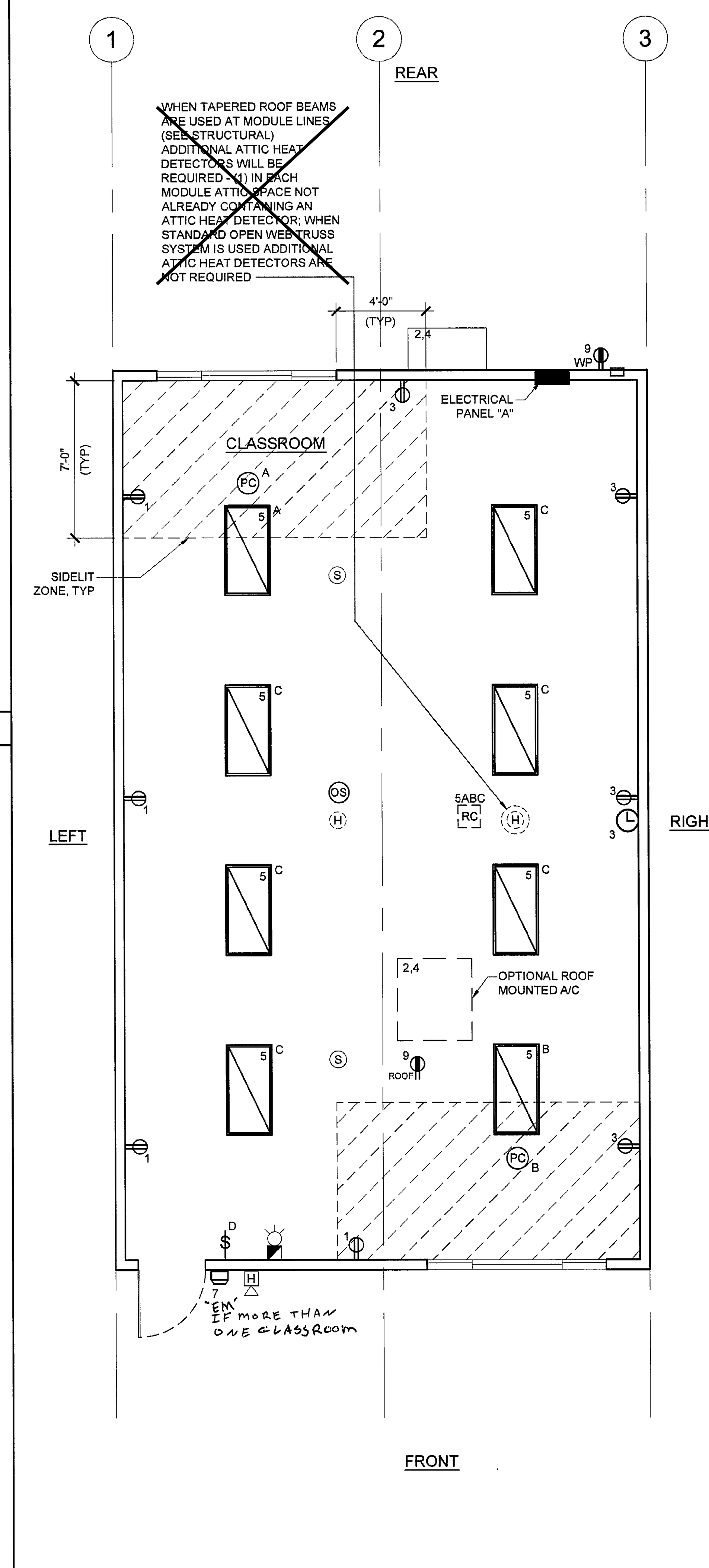
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14

P.C. SHEET NUMBER
M-1.03

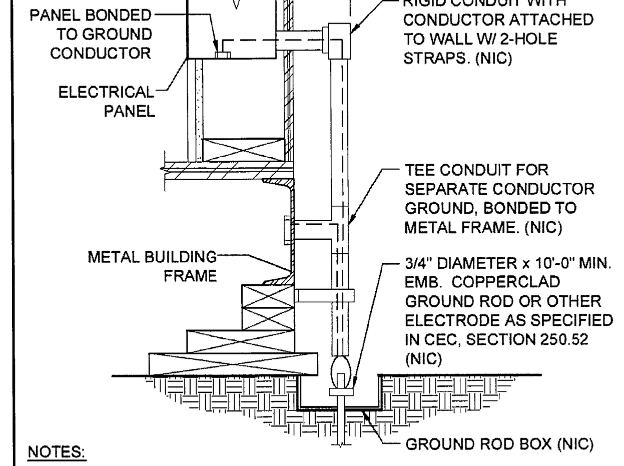
NOT USED — 5

NOT USED — 6



ELECTRICAL PLAN — 4

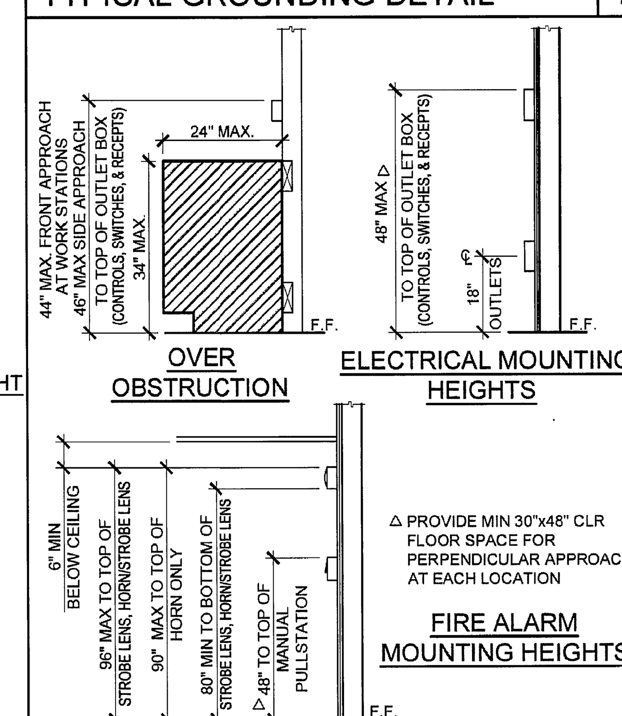
SCALE: 1/4" = 1'-0"



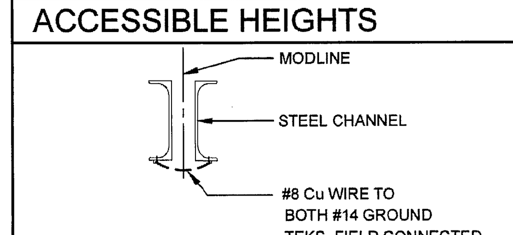
NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
3. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
4. ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
5. CHECK RESISTANT TO GROUND ROD, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).

TYPICAL GROUNDING DETAIL — 1



ACCESSIBLE HEIGHTS — 2



GROUND JUMPER AT MODLINE — 3

GENERAL GROUNDING NOTES

EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD. X 8' COPPERCLAD STEEL GROUND ROD, WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS. INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCES TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR. ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

SCHOOL EQUIPMENT ANCHORAGE

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 2013 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. 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 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, 13.6.5.6 AND 2013 CBC SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPA #).

COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AN BRACING OF THE PIPE, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

FIRE ALARM NOTES

1. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM
2. PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72, 10.6.5.2.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 75 DEG. C. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED 1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS #12	#10	#8	#6
4SS	1 1/4" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING LIGHT WITH (3) T-8 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH DIMMABLE BALLAST ORACLE LIGHTING - MODEL 24.OT.332.2.T8A12.L41KC4 WATTAGE: 32W T8 (48"LG) OR EQUAL
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ~~ROOF MOUNTED HVAC UNIT SEE MECHANICAL DWGS~~
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT
- (OS) CEILING MOUNTED OCCUPANCY SENSOR. WATTSTOPPER #LMPC-100 OR EQUAL.
- (PC) CEILING MOUNTED PHOTOCELL, WATTSTOPPER #LMLS-500
- (US) ULTRASONIC CEILING OCCUPANCY SENSOR. WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- WS-1 SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT.
- RC LIGHTING MANAGEMENT SYSTEM ROOM CONTROLLER, INSTALLED ABOVE CEILING, LOCATION AND # OF LOADS/ZONES TO BE VERIFIED, WATTSTOPER # LMRC-2XX
- $D SINGLE BUTTON DIMMER SWITCH, AT +48" AFF. TO TOP OF OUTLET BOX, WATTSTOPPER #LMDM-101
- $ LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $3 3-WAY LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24 " AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
- GFI GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EM EXTERIOR LED LIGHT FIXTURE W/ 90 MIN. EMERGENCY BATTERY BACKUP WHEN 'EM' IS DESIGNATED NEXT TO FIXTURE W/ PHOTOCELL W/ 30w MAX. MOUNT AT +93" AFF
- CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
- EXIT EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL)
- 4SD J-BOX FOR FIRE ALARM PULLSTATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING
- 4SD J-BOX FOR FIRE ALARM STROBE (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 80" AND 96" AFF WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING
- H 4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULLSTRING
- RECESSED 4SD J-BOX W / COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING
- (S) 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- (H) 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- (WH) 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING LIGHT WITH (3) T-8 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH DIMMABLE BALLAST ORACLE LIGHTING - MODEL 24.OT.332.2.T8A12.L41KC4 WATTAGE: 32W T8 (48"LG) OR EQUAL
  EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE EQUIPPED WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.

NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

ELECTRICAL PANEL

VOLTS: 120/208 V — PANEL: "A" WALL MOUNTED HVAC — FEED: REAR
MAIN: 100 A — LOCATION: INTERIOR ACCESS — MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	P	Circuit	Circuit	BREAKER Amps	P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1	2	60	2	6670		1	4 TON HVAC - WALL MOUNT (4 KW)
RECEPTACLES/CLOCK	5		900	20	1	3	4	-	-		6670		-
INTERIOR LIGHTING	8	960		20	1	5	6						
EXTERIOR LIGHTING	1		40	20	1	7	8						
WALL RECEPTACLE (GFI)	1	180		20	1	9	10						
DED - SOLAR READY						11	12	20	1		40		FIRE ALARM (NOTE #2)
DED - SOLAR READY						13	14						
A = 8530 WATTS / PHASE		1860	940							6670	6710		B = 7650 WATTS / PHASE
TOTAL = 16,180 WATTS		78 AMPS		120/208 VOLTS				1 Ø					3 WIRE

ELECTRICAL PANEL

VOLTS: 120/208 V — PANEL: "A" ROOF MOUNTED HVAC — FEED: REAR
MAIN: 100 A — LOCATION: INTERIOR ACCESS — MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	P	Circuit	Circuit	BREAKER Amps	P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1	2	70	2	7360		1	4 TON HVAC - ROOF MOUNT (5 KW)
RECEPTACLES/CLOCK	5		900	20	1	3	4	-	-		7360		-
INTERIOR LIGHTING	8	960		20	1	5	6						
EXTERIOR LIGHTING	1		40	20	1	7	8						
ROOF RECEPTACLE (GFI)	1	180		20	1	9	10						
DED - SOLAR READY						11	12	20	1		40		FIRE ALARM (NOTE #2)
DED - SOLAR READY						13	14						
A = 9220 WATTS / PHASE		1860	940							7360	7400		B = 8340 WATTS / PHASE
TOTAL = 17560 WATTS		84 AMPS		120/208 VOLTS				1 Ø					3 WIRE

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SILVER CREEK INDUSTRIES, INC.
SILVER CREEK
"BUILDING FOR THE NEXT GENERATION"
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ELECTRICAL PLAN AND SCHEDULE 24' x 40'

LICENSED ARCHITECT — JACK A SHIVELY III — C-33467 — REN 01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE 2013 CBC — A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
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REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8

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24' x 40' PC (HIGH SEISMIC)

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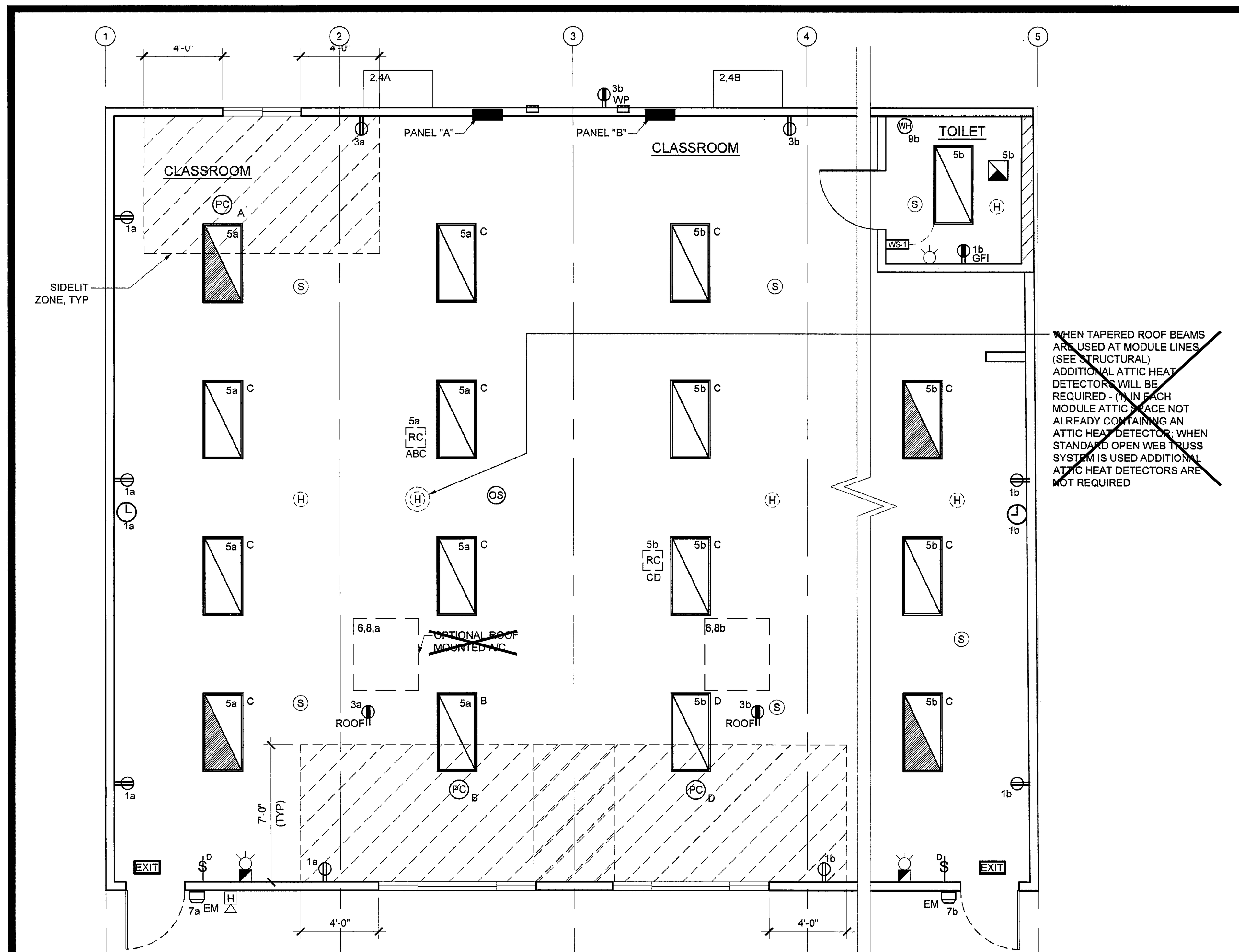

ELECTRICAL PLAN — SCALE: 1/4" = 1'-0" — 4

NOT USED — 6

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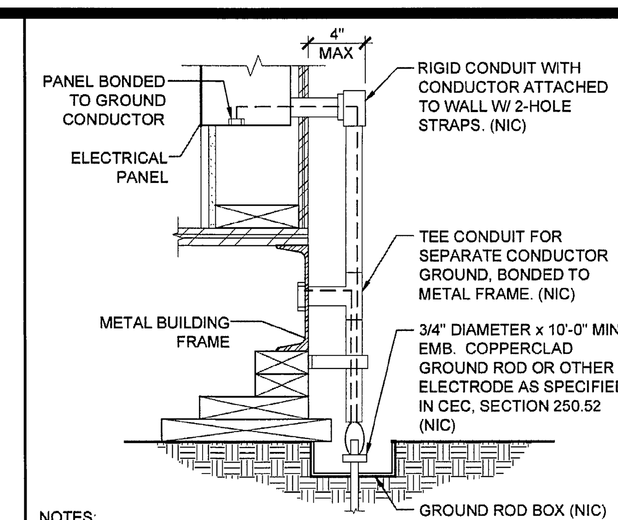

NOTES:

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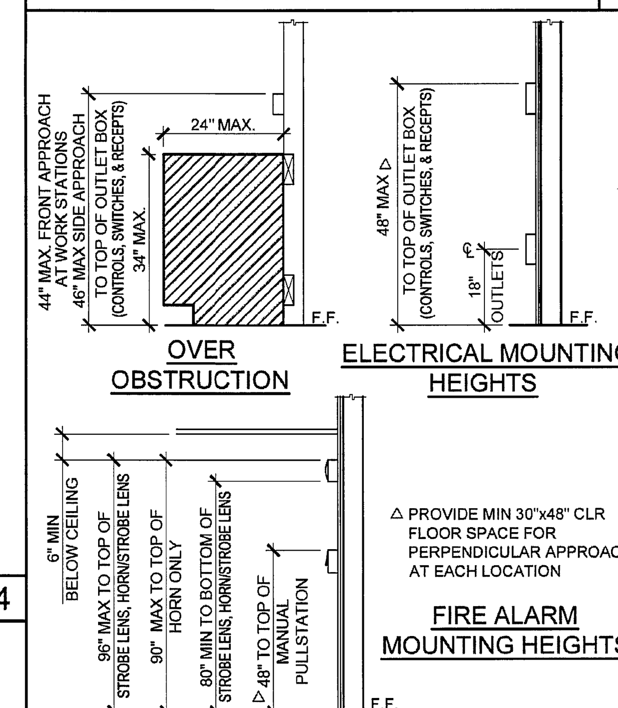

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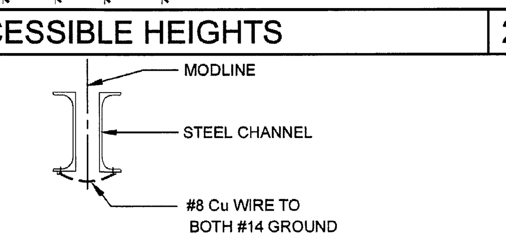

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APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

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4SS	1 1/4" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING LIGHT WITH (3) T-8 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH DIMMABLE BALLAST ORACLE LIGHTING - MODEL 24.OT.332.2.T8A12.L41KC4 WATTAGE: 32W T8 (48"LG) OR EQUAL
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ~~ROOF MOUNTED HVAC UNIT SEE MECHANICAL DWGS~~
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT
- OS — CEILING MOUNTED OCCUPANCY SENSOR. WATTSTOPPER #LMPC-100 OR EQUAL.
- PC — CEILING MOUNTED PHOTOCELL, WATTSTOPPER #LMLS-500
- US — ULTRASONIC CEILING OCCUPANCY SENSOR. WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- WS-1 — SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT.
- RC — LIGHTING MANAGEMENT SYSTEM ROOM CONTROLLER, INSTALLED ABOVE CEILING, LOCATION AND # OF LOADS/ZONES TO BE VERIFIED, WATTSTOPER # LMRC-2XX
- $D — SINGLE BUTTON DIMMER SWITCH, AT +48" AFF. TO TOP OF OUTLET BOX, WATTSTOPPER #LMDM-101
- $ — LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $3 — 3-WAY LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP — EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24 " AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
- GFI — GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF — ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EM — EXTERIOR LED LIGHT FIXTURE W/ 90 MIN. EMERGENCY BATTERY BACKUP WHEN 'EM' IS DESIGNATED NEXT TO FIXTURE W/ PHOTOCELL W/ 30w MAX. MOUNT AT +93" AFF
- CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
- EXIT — EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL)
- 4SD J-BOX FOR FIRE ALARM PULLSTATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING
- 4SD J-BOX FOR FIRE ALARM STROBE (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 80" AND 96" AFF WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING
- H — 4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULLSTRING
- RECESSED 4SD J-BOX W / COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING
- S — 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- H — 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- WH — 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING LIGHT WITH (3) T-8 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH DIMMABLE BALLAST ORACLE LIGHTING - MODEL 24.OT.332.2.T8A12.L41KC4 WATTAGE: 32W T8 (48"LG) OR EQUAL EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE EQUIPPED WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.

NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

ELECTRICAL PANEL

VOLTS: 120/208 V — PANEL: "A" — FEED: REAR
MAIN: 100 A — LOCATION: INTERIOR ACCESS — MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	P	Circuit	A	B	Circuit	BREAKER Amps	P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES/CLOCK	5	900		20	1	1			2	60	2	6670		1	4 TON HVAC - WALL MOUNT (4 KW)
RECEPTACLES/ROOF RECEPT GFI	2		360	20	1	3			4	-	-		6670		-
INTERIOR LIGHTING	8	960		20	1	5			6	70	2	7360		1	4 TON HVAC - ROOF MOUNT (OPT.)
EXTERIOR LIGHTING	1		40	20	1	7			8	-			7360		-
						9			10						
DED - SOLAR READY						11			12	20	1		40	1	FIRE ALARM (NOTE #2)
DED - SOLAR READY						13			14						
A = 9,220 WATTS / PHASE		1860	400									7360	7400		B = 7,800 WATTS / PHASE

TOTAL = 17,020 WATTS — 82 AMPS — 120/208 VOLTS — 1 Ø — 3 WIRE

ELECTRICAL PANEL

VOLTS: 120/208 V — PANEL: "B" — FEED: REAR
MAIN: 100 A — LOCATION: INTERIOR ACCESS — MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	P	Circuit	A	B	Circuit	BREAKER Amps	P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES/CLOCK	5	900		20	1	1			2	60	2	6670		1	4 TON HVAC - WALL MOUNT (4 KW)
RECEPTACLES/ROOF RECEPT OR EXT GFI	2		360	20	1	3			4	-	-		6670		-
INTERIOR LIGHTING/FAN	9	786		20	1	5			6	70	2	7360		1	4 TON HVAC - ROOF MOUNT (OPT.)
EXTERIOR LIGHTING	1		40	20	1	7			8	-	-		7360		-
WATER HEATER (OPT.)	1	1500		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40	1	FIRE ALARM (NOTE #2)
DED - SOLAR READY						13			14						
A = 10,546 WATTS / PHASE		3186	400									7360	7400		B = 7,800 WATTS / PHASE

TOTAL = 18,346 WATTS — 88 AMPS — 120/208 VOLTS — 1 Ø — 3 WIRE

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SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
ELECTRICAL PLAN AND SCHEDULE 48' TO 120' x 40'

LICENSED ARCHITECT — JACK A SHIVELY III — C-33467 — REN 01-31-2015 — STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS SS
DATE APR 1 4 2015

REVISIONS
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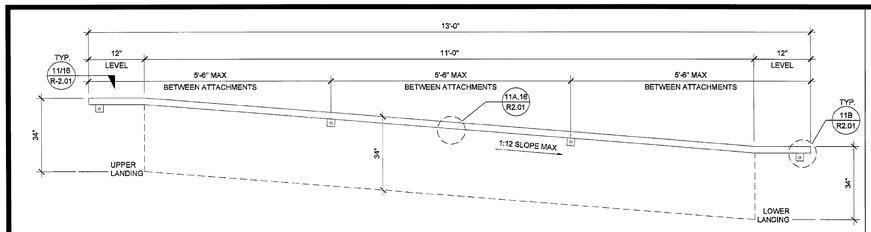
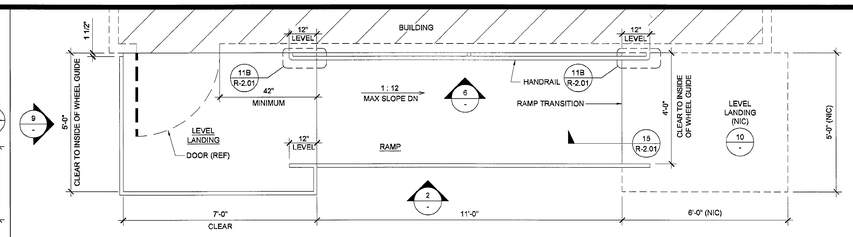
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

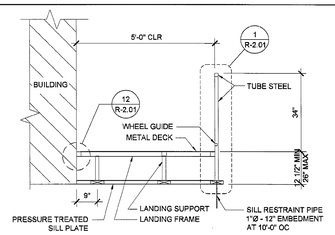
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14
P.C. SHEET NUMBER
E-1.03



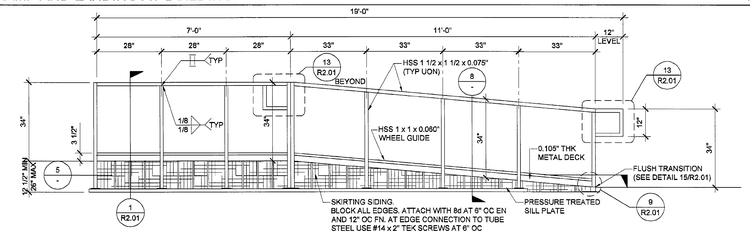
HANDRAIL ATTACHMENT TO BUILDING — SCALE : 1" = 1'-0" | 6



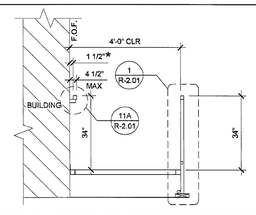
RAMP AND LANDING AT BUILDING — SCALE : 1/2" = 1'-0" | 1



11 SECTION AT LANDING — SCALE : 1/2" = 1'-0" | 7

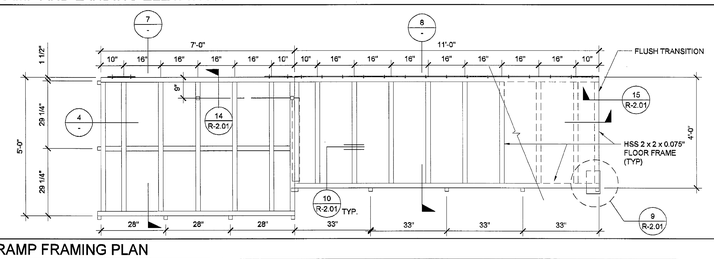


RAMP AND LANDING ELEVATION — SCALE : 1/2" = 1'-0" | 2

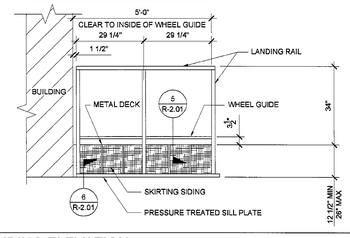


NOTE (a)
1. ALL HANDRAIL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

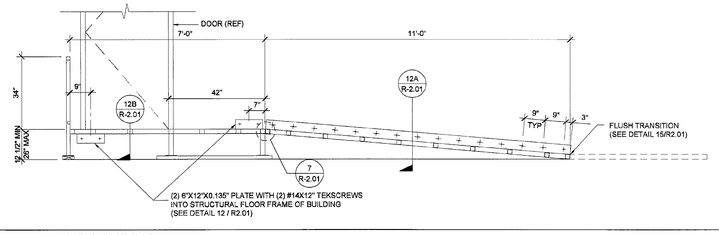
12 SECTION AT RAMP — SCALE : 1/2" = 1'-0" | 8



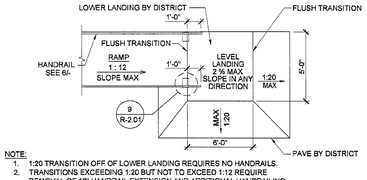
RAMP FRAMING PLAN — SCALE : 1/2" = 1'-0" | 3



13 LANDING ELEVATION — SCALE : 1/2" = 1'-0" | 9

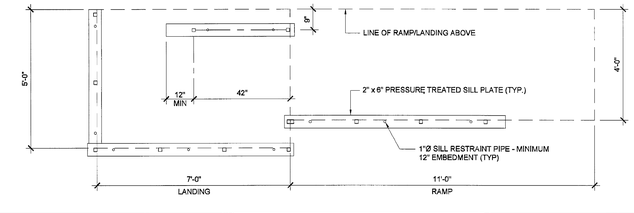


SECTION AT RAMP AND LANDING — SCALE : 1/2" = 1'-0" | 4



NOTE:
1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT.
(THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMONSTRATE ACCESSIBLE RAMP.)

14 RAMP TRANSITION — SCALE: NTS



10 SILL PLAN FOR RAMP AND LANDING — SCALE : 1/2" = 1'-0" | 5

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PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
RAMP LANDING

C-33487
REN 01-31-2015
STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
NOT FOR CONSTRUCTION
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS NEEDED (C)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
PLS. 88
DATE APR 14 2015

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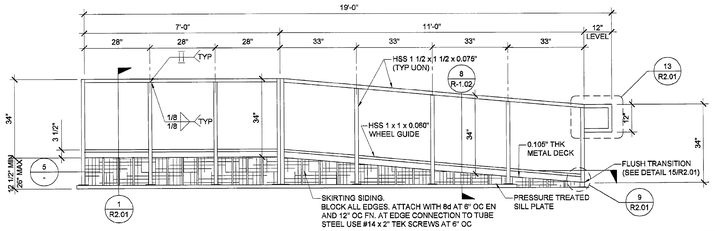
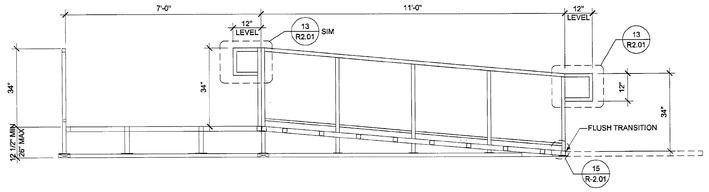
SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

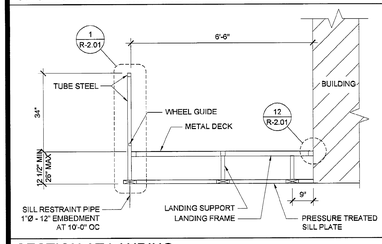
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09-10-14
P.C. SHEET NUMBER	R-1.01



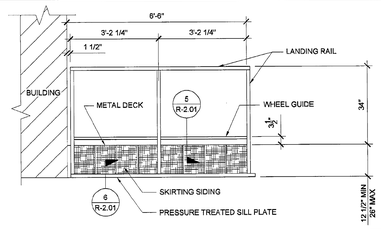
RAMP AND LANDING ELEVATION — SCALE : 1/2" = 1'-0" — 4



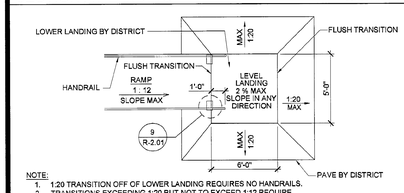
SECTION AT RAMP AND LANDING — SCALE : 1/2" = 1'-0" — 5



SECTION AT LANDING — SCALE : 1/2" = 1'-0" — 9

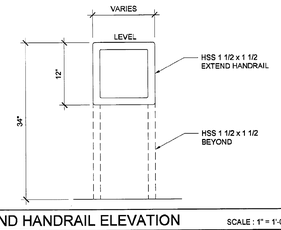


LANDING ELEVATION — SCALE : 1/2" = 1'-0" — 6

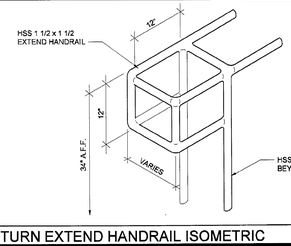


NOTE:
1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT.
(THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMONSTRATE ACCESSIBLE RAMP.)

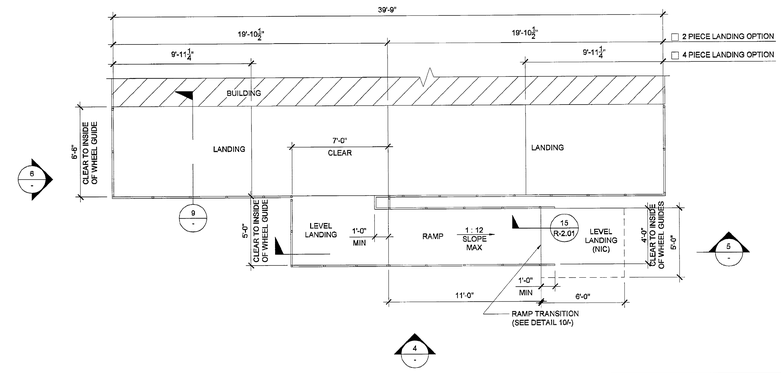
RAMP TRANSITION — SCALE: NTS — 10



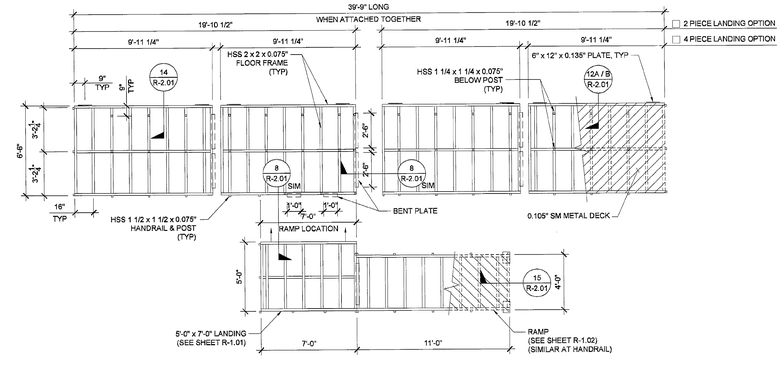
RETURN EXTEND HANDRAIL ELEVATION — SCALE : 1" = 1'-0" — 7



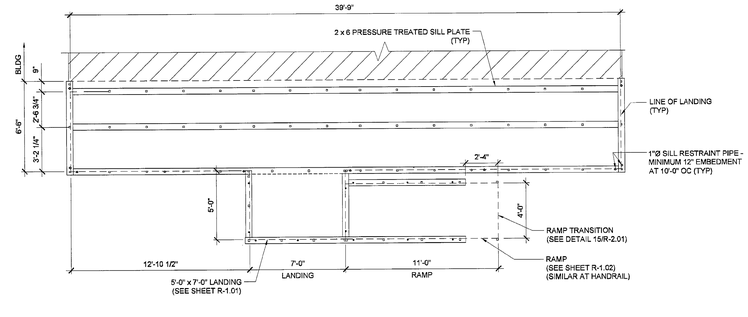
RETURN EXTEND HANDRAIL ISOMETRIC — SCALE : NTS — 8



LANDING PLAN — SCALE : 1/4" = 1'-0" — 1



LANDING FRAME — SCALE : 1/4" = 1'-0" — 2



SILL PLAN FOR RAMP AND LANDING — SCALE : 1/4" = 1'-0" — 3

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PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
RAMP LANDING

REGISTERED ARCHITECT JAMES R. SMITH C-33467 REN 01-31-2015 STATE OF CALIFORNIA

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
NOT FOR CONSTRUCTION
A SEPARATE PERMIT APPLICATION FOR CONSTRUCTION IS REQUIRED

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SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

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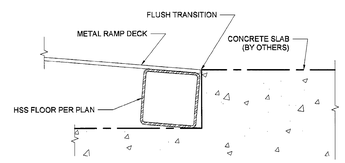
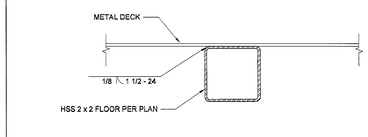
SCALE:	AS NOTED
DATE:	09-10-14

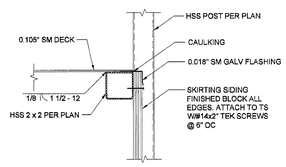
P.C. SHEET NUMBER
R-1.03



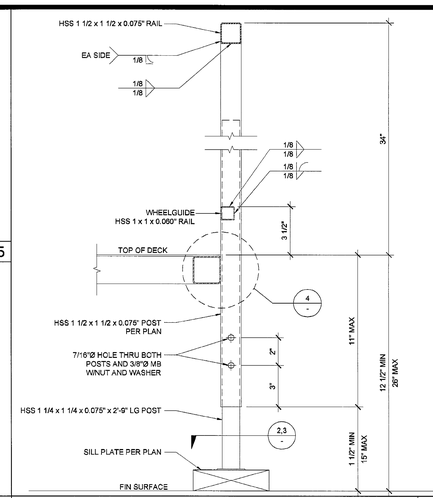
FLUSH TRANSITION AT BOTTOM OF RAMP SCALE : 6" = 1'-0" | 15



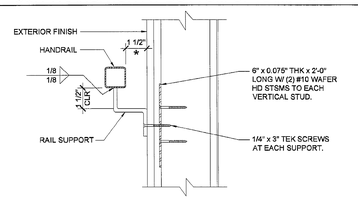
DECK TO FRAME SCALE : 6" = 1'-0" | 10



SKIRT FLASHING SCALE : 3" = 1'-0" | 5

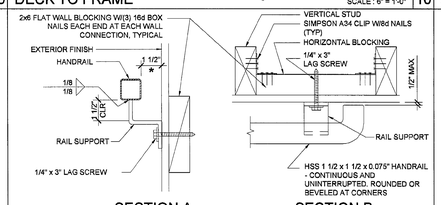


ADJUSTABLE LEG SCALE : 3" = 1'-0" | 1



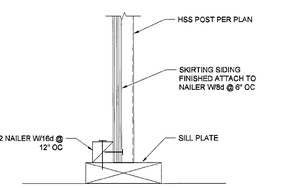
NOTE (*)
1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 1133B.5.5 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

HANDRAIL CONNECTION AT SHEETMETAL BLKG SCALE : 3" = 1'-0" | 16

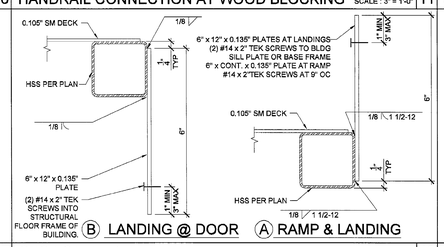


NOTE (*)
1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 1133B.5.5 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

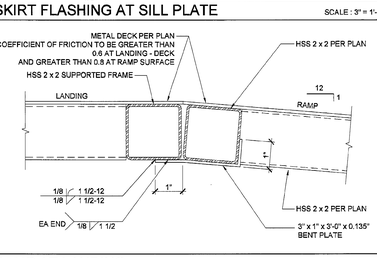
HANDRAIL CONNECTION AT WOOD BLOCKING SCALE : 3" = 1'-0" | 11



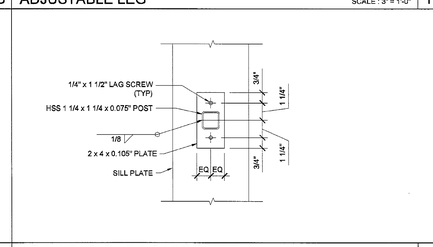
SKIRT FLASHING AT SILL PLATE SCALE : 3" = 1'-0" | 6



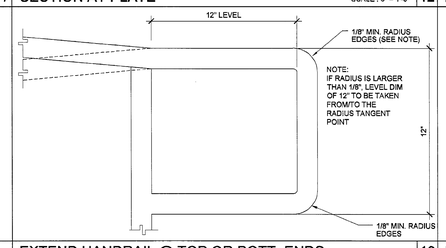
SECTION AT PLATE SCALE : 6" = 1'-0" | 12



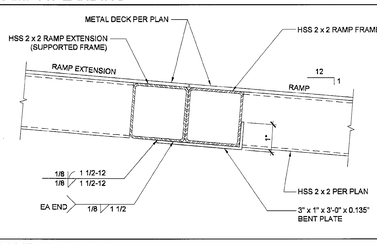
RAMP AT LANDING SCALE : 6" = 1'-0" | 7



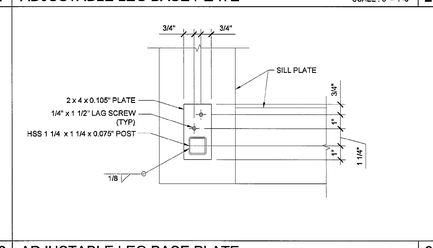
ADJUSTABLE LEG BASE PLATE SCALE : 3" = 1'-0" | 2



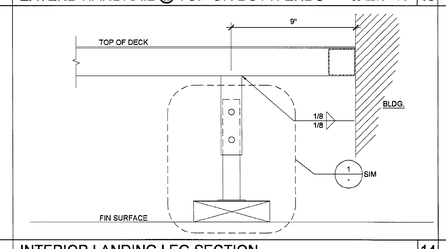
EXTEND HANDRAIL @ TOP OR BOTT. ENDS SCALE : 3" = 1'-0" | 13



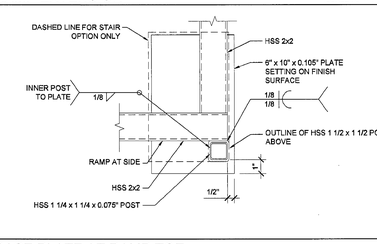
RAMP EXTENSION SCALE : 6" = 1'-0" | 8



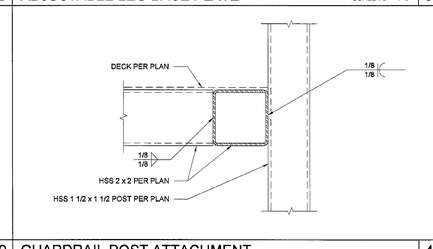
ADJUSTABLE LEG BASE PLATE SCALE : 3" = 1'-0" | 3



INTERIOR LANDING LEG SECTION SCALE : 3" = 1'-0" | 14



BASE PLATE AT RAMP TOE SCALE : 3" = 1'-0" | 9



GUARDRAIL POST ATTACHMENT SCALE : 6" = 1'-0" | 4

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SILVER CREEK INDUSTRIES, INC.
"BUILDING FOR THE NEXT GENERATION"
SILVER CREEK
2830 BARRETT AVE. PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

PROJECT NAME:
PALOMAR COLLEGE EDUCATION CTR.
PALOMAR COLLEGE SCIENCE BUILDING

SHEET TITLE:
RAMP DETAILS

C-33487
REN 01-31-2015

ARCHITECT OF RECORD SUBMISSION DATE

PROJECT SPECIFIC STATE AGENCY APPROVAL

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT ONLY - NOT FOR CONSTRUCTION
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AT FLS. SS.
DATE APR 14 2015

REVISIONS
1
2
3
4
5
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7
8

SILVER CREEK INDUSTRIES
24' x 40' PC (HIGH SEISMIC)

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 09-10-14

P.C. SHEET NUMBER
R-2.01

40' PC Classroom Fire Sprinkler Plans

Classroom Sizes:

40 x 24, 40 x 36, 40 x 48, 40 x 60, 40 x 72, 40 x 84
40 x 96, 40 x 108, 40 x 120 and 40 x 12 Rest Room

This PC has a "Pre-Designed" Automatic Fire Sprinkler System (AFSS) installed.

IT IS THE BUYERS'S RESPONSIBLILITY TO ENSURE THE MINIMUM FLOW (GPM) AND PRESSURE (PSI) CAN BE ATTAINED AT THE BASE OF THE RISER AT THE PROPOSED SITE FOR EACH PROPOSED BUILDING.

THIS PC REQUIRES:
MINIMUM GPM: 250
MINIMUM PSI: 44.9

Failure to attain the minim GPM/PSI may necessitate the installation of one or more of the Following items/equipment.

A. Water Tank – Sized to meet minimum requirements
   1. Fire Pump
   2. Back-up Power Supply
B. Additional Underground Fire Line Taps
C. All or any combination of the above or any others as required to ensure proper operation of the AFSS.

The following must be supplied to DSA at the time of submittal with the Site Plan for each proposed building with an AFSS:

1. Minimum GPM/PSI required.
2. Water Flow Data (See DSA Fire Sprinkler Submittal Guideline)
3. Site Plan showing the location of the "Flow" and "Test" hydrants (fully dimensioned).
4. All (new and existing) underground fire lines/piping – length and size showing location and method of underground piping restraints to test hydrant.
5. The Locations of all (new and existing):
   a. Fire Hydrants
   b. Post Indicator Valves
   c. Fire Department Connections
   d. Pressure Reducers
   e. Back-Flow Prevention/Detector Check Valves
   f. Other fire related items/equipment as applicable.
6. Hydraulic Calculations for the Underground piping with the available "GPM/PSI" at the base of each AFSS Riser (must meet or exceed minimum requirement).
7. Any changes to the configuration (walls, ceilings, construction type) or Occupancy of the PC will necessitate additional/revised hydraulic calculations.

* Clearly indicate the sprinkler system requirements at the Base of the Riser calculated in GPM and PSI.
* No substitution of the Fire Sprinkler System components (piping, sprinkler type, hangars, fittings ect.) which differs from the PC Material Submittal shall be allowed.
* Any modification of wall layout or the addition of softs or other Fire Sprinkler coverage obstructions will require this project to be resubmitted as a standard project and will not be conducted as an over the counter review.
* The Automatic Fire Sprinkler System for this PC has been designed for Light Hazard Occupancys only. The building shall be limited to Lecture Classroom uses without Special Hazards. Any variation of use which may affect the Sprinkler Hydraulic Design shall not be allowed. (Prohibited uses include but are not limited to stages, science labs, vocational shops, library book stackareas, and campus kitchens.)
* C-16 contractors shall onlydesign sprinkler systems which they install. Design intended for general bids shall be prepared by a licensed Fire Protection Engineer or Mechanical Engineer.
* Any substitution of sprinkler contractor from that indicated on the project drawings for instalation of this design will suspend the approval of this PC. Re submittal, review and approval of the reviewed
* Riser Flow and Tamper Switches and Back flow Preventer Tamper switches shall be interconnected to Fire Alarm System per CFC 903.4.
* Fire Service Underground shall be reviewed as a site specific Application. Water supply shall be designed to meet PC Sprinkler demand requirements plus a 10% cushion.
* Provide a site specific Fire Flow letter of certification from an approved water purveyor or local Fire Authority.
* Identify the Hydraulic Design Area on the Sprinkler piping plans for all PC options. Where used provide the design area reduction calculation on the plans.
* Provide corosion resistant sprinklers on the exterior of building.

Fire Protection Scope of Work

Install new Automatic Fire Sprinkler System per NFPA 13 2013 Edition and CFC 2013 edition
Work to begin 6" above Finished Floor.
Fire Sprinkler System in Classroom units to be installed off site in Modular Factory
Final connection to fire service underground an tie-ins to be performed on building site.
All testing of Sprinkler System to be performed on building site.
Fire Service Main, FDC and Back Flow preventer provided by others
Fire Alarm System provided by others

Project Design Data:

Occupancy Type:	E	
Construction Type:	VB	
Hazard:	Light	
Building Height:	Single Slope=12"-2, Duel Slope=10'-7	
Floor Area:		
24 x 40	953	SQ. FT.
36 x 40	1430	SQ. FT.
48 x 40	1906	SQ. FT.
60 x 40	2380	SQ. FT.
72 x 40	2860	SQ. FT.
84 x 40	3336	SQ. FT.
96 x 40	3813	SQ. FT.
108 x 40	4290	SQ. FT.
120 x 2800	4766	SQ. FT.
Restroom	476	SQ. FT.

This PC is for *lecture classrooms* any modification of interior wall layout, change of door location, the addition of soffits or other item will require this project to be resubmitted.

DSA–OVERHEAD FIRE SPRINKLER SYSTEM GENERAL NOTES

1. 2013 NFPA 13, Sec.8.16.4.1.5 THE DESIGNER SHALL INDICATE ON THE PLANS, ALL PIPING SUBJECT TO FREEZING (WHERE WATER TEMPERATURE CAN NOT BE MAINTAINED ABOVE 40-DEGRESS FAHRENHEIT) AND PROVIDE APPROVED PROTECTION
2. 2013 NFPA 13, Sec. 10.10.2.1.1: UNDERGROUND MAINS AND LEAD-IN CONNECTIONS TO SYSTEM RISERS SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO THE OVERHEAD SPRINKLER PIPING. WHERE UNDERGROUND PIPING IS FLUSHED AND NOT IMMEDIATELY CONNECTED TO THE OVERHEAD PIPING, THE RISER SHALL BE CAPPED OR OTHERWISE PROTECTED TO PREVENT DEBRIS, DIRT, OR ANIMALS FROM ENTERING INTO THE UNDERGROUND PIPING. (THIS MUST BE WITNESSED BY THE PROJECT INSPECTOR)
3. PROVIDE "WET SIGNED" WATER FLOW TEST INFORMATION NO MORE THAN 6-MONTHS OLD, AND INDICATE THE LOCATIONS AND HEIGHT ELEVATION(S) OF THE TEST AND RESIDUAL FLOW HYDRANTS. WATER FLOW TEST INFORMATION MUST BE PROVIDED BY, OR WITNESSED BY, THE LOCAL WATER PURVEYOR, UTILITY COMPANY OR LOCAL FIRE DEPARMENT.
4. ARCHITECT OF RECORD (AOR), MECHANICAL ENGINEER (ME) AND FIRE PROTECTION CONTRACTOR (C-16) SHALL AFFIX THEIR SEAL, STAMP AND SIGN ALL SUBMITTALS, OR PROVIDE DOCUMENTATION PER DSA IR-18.
5. 2013 NFPA 13, Sec. 6.2.9: PROVIDE A SPARE SPRINKLER HEAD CABINET, SPRINKLER WRENCH, AND NO FEWER THAN SIX (6) SPRINKLER HEADS MATCHING THE TYPES AND TEMPURATURE RATING IN EACH PROTECTED AREA FOR SYSTEMS LESS THAN 300 SPRINKLERS (12 SPARE SPRINKLER HEADS FOR SYSTEMS OF 300 TO 1000 SPRINKLERS)
6. 2013 NFPA 13,SEC. 8.17.2.4.7: SIGNAGE SHALL BE PROVIDED AS REQUIRED, INCLUDING "RISER ROOM" IDENTIFICATION.
7. 2013 NFPA 13, Sec. 9.3.6.3: THE END (LAST) SPRINKLER ON EACH LINE SHALL BE RESTRAINED AGAINST EXCESSIVE VERTICAL AND LATERAL MOVEMENT.
8. 2013 NFPA 13, FIGURE 10.10.1: A COPY THE COMPLETED AND SIGNED "CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR UNDERGROUND PIPING" SHALL BE INCLUDED WITH THE SUBMITTAL.
9. 2010 NFPA 13, Sec. 10.10.2.2: ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200-PSI, OR 50-PSI IN EXCESS OF SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR 2-HOURS. (TEST TO BE WITNESSED BY THE PROJECT INSPECTOR)
10. 2013 NFPA 13, FIGURE 25.1: SPRINKLER CONTRACTOR SHALL COMPLETE AND SIGN THE CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR THE ABOVEGROUND PIPING. THIS FORM SHALL BE GIVEN TO THE PROJECT INSPECTOR WHO WILL FORWARD IT TO DSA FOR FILING IN PROJECT RECORDS.
11. 2013 NFPA 13, Sec. 24.5-6 A PERMANENT HYDRAULIC CALCULATION DESGN INFORMATION PLACARD SHALL BE ATTACHED TO EACH RISER.
12. 2013 NFPA 72Sec.17.12.2 THE SPRINKLER FLOW SWITCH SHALL BE TESTED TO CONFIRM THAT WHEN THE INSPECTOR'S TEST VALVE IS OPENED, AN ALARM WILL SOUND NO MORE THAN 90-SECONDS AFTER THE INTIAL FLOW. (TEST TO BE WITNESSED BY THE PROJECT INSPECTOR)
13. 2013 CBC, SEC. 903.4.1: THE MAIN FIRE ALARM PANEL VALVE MONITORING, WATER-FLOW AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT, AND SHALL AUTOMATICALLY BE TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY.
14. 2013 NFPA 13, SEC. 6.9.1, AND 2013 CBC, 903.4.2: THE FLOW SWITCH SHALL BE CONNECTED TO TO AN APPROVED EXTERIOR ALARM BELL OR OTHER AUDIBLE ALARM DEVICE (SIZE NOT MANDATED BY CODE) AT EACH RISER. APPROVED IDENTIFICATION SIGNS STATING "SPRINKLER FIRE ALARM – WHEN ALARM SOUNDS CALL 911/FIRE DEPARTMENT " SHALL BE INSTALLED ON THE EXTERIOR ALARM BELL.
15. 2013 CBC, SEC. 904.4.3: CONNECTIONS TO PROTECTED PREMISES AND SUPERVISING STATION FIRE ALARM SYSTEMS SHALL BE TESTED TO VERIFY PROPER INDENTIFICATION AND TRANSMISSION OF ALARM SIGNALS FROM AUTOMATIC FIRE EXTINGUISHING SYSTEMS. (TEST TO BE WITNESSED BY THE PROJECT INSPECTOR.)
16. 2013 CBC, 903.4.2, AND 2013 NFPA 13, SEC.8.17.4.2.1 THROUGH 8.17.4.2.4: THE INSPECTOR'S TEST VALVE LOCATION SHALL BE INSTALLED IN ANY LOCATION DOWNSTREAM OF FLOW SWITCH. THE PIPE SIZE SHALL BE NO LESS THAN 1-INCH, WITH A SMOOTH BORE, CORROSION-RESISTANT ORIFICE, PROVIDING EQUIVALENT FLOW OF THE SMALLEST ORIFICE OF THE SPRINKLER TYPES INSTALLED ON THE SYSTEM.THE DISCHARGE SHALL BE TO THE EXTERIOR OF THE BUILDING.
17. CCR TITLE -19 (PUBLIC SAFETY), ARTICLE 906 (A): A LABEL OF THE SELF-ADHESIVE TYPE SHALL BE PLACED ON THE FIRE DEPARTMENT CONNECTION (FDC) OR ON THE RISER FOR THE FIRE SPRINKLER SYSTEM, INDICATING THE DATE OF INSTALLATION AND/OR THE DATE SERVICE WAS PERFORMED, AND THE LICENSE NUMBER OF THE PERSON PERFORMING THE SERVICE WORK.

Sheet Index

SHEET	DESCRIPTION
FS 1	Cover Sheet/Project Data
FS 2	Fire Sprinkler Plans w/ Right Restroom
FS 3	Fire Sprinkler Plans w/ Left Restroom
FS 4	Building Sizes 40'x 24'- 40'x 84'
FS 5	Building Sizes 40'x 96' and 40'x 108'
FS 6	Details

SILVER CREEK
Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:
LICENSED ARCHITECT JACK F. SHIVELY III No. C-33467 01/31/17 RENEWAL DATE STATE OF CALIFORNIA

ENGINEER STAMP:
REGISTERED PROFESSIONAL ENGINEER LAL B. SAHGAL NO. 26885 EXP. 9-30-16 MECHANICAL STATE OF CALIFORNIA

CONSULTANT:
So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92715
714 368 0230
C-16 # 898658

CONSULTANT STAMP:
LICENSED FIRE PROTECTION CONTRACTOR THOMAS ... SO CAL FIRE PROTECTION INC. Classification C-16 License No. 898658 STATE OF CALIFORNIA

PROJECT NAME: **40' PC Fire Sprinkler Plans**

ISSUE DATES:

DESCRIPTION:	DATE:
Cover Sheet	04/13/15

PROJECT NO: PC 1

DRAWN BY: Kris Michel

CHECKED BY:

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE: 2013 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS SS DATE APR 14 2015

SHEET TITLE: **Project Data**

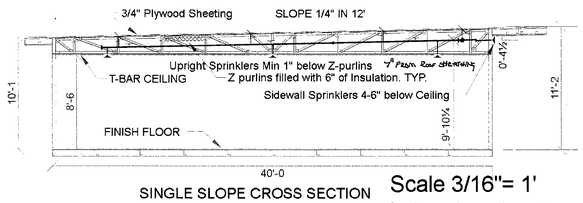
SHEET NUMBER: **FS 1**

Riser Tag

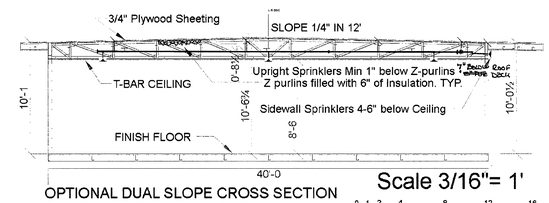
Design Basis
- Occupancy:Light Hazard
- Total Sprinklers:82
- Number Of Sprinklers Calculated: 7
- K-Factor:5.6
- Orifice Size:0.5
- Design Density:0.100gpm/ft²
- Average Density:0.109gpm/ft²
- Area of Application:900.00ft² (Actua 1070.65 FT²)

Demand at Base Of Riser or Point Of Connection
- Total Demand Flow(gpm): 116.58
- Pressure(psi): 30.187

Water Supply Information At Time Of Design
- Static Pressure(psi):45.000
- Residual Pressure(psi):44.900
- Supply Flow(gpm):250.00
- Total Demand Flow(gpm): 216.38
- Total Demand Pressure(psi) 30.187



SINGLE SLOPE CROSS SECTION Scale 3/16"= 1'



OPTIONAL DUAL SLOPE CROSS SECTION Scale 3/16"= 1'

Sprinkler Legend

Symbol	Manufacturer	SIN/Model	Quantity	K-Factor	Type	Size	Response	Orifice	Finish	Temperature	Note
	TYCO	TY323	35	5.6	Pendent	½	Quick	½"	Chrome	155°F	
	TYCO	TY3331	10	5.6	Sidewall	½	Quick	½"	Teflon	155°F	
	TYCO	TY313	37	5.6	Upright	½	Quick	½"	Brass	200°F	
			Total = 82								

Sway Brace # 2 Zone Legend Lateral

Diameter	Description	Unit Quantity	Quantity	Unit Weight	Wp	Weight
2	Pipe, Dyna-Flow/Super Flo	(3)9'-11+(3)2'-0	35'-9	3.76lb	1.3	174.58lb
1	Pipe, Schedule 40	(2)0'-3½+(2)0'-9½+(2)1'-4½	4'-11	2.05lb	1.3	13.1lb
1¼	Pipe, Schedule 40	(3)11'-8+(3)21'-0	98'-0	2.93lb	1.3	373.28lb
					Total Weight (x Wp)	560.97lb
					Total Load (Fp x 1.15)	645.11lb

Sway Brace Zone Legend

Diameter	Description	Unit Quantity	Quantity	Unit Weight	Wp	Weight
2	Pipe, Dyna-Flow/Super Flo	6'-4½+3'-8+4'-2+22'-6+5'-2½+(3)9'-11+(3)2'-0	77'-8	3.76lb	1.3	380.69lb
					Total Weight (x Wp)	380.69lb
					Total Load (Fp x 1.15)	437.8lb

HYDRAULIC SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System

Location CLASSROOM ATTIC

Sprinkler Information

NUMBER OF SPRINKLERS FLOWING	7
MANUFACTURER	TYCO
MODEL	TY 3131
155 UPRIGHT	QUICK RESPONSE
1/2" ORIFACE	K- FACTOR 5.6

Basis of Design

STANDARD	NFPA 2013 EDITION
HAZARD GROUP	LIGHT HAZARD
DENSITY	0.1 GPM/SQ. FT.
DESIGNED AREA OF DISCHARGE	916 SQ. FT. Area Reduced by: NFPA 13 11.2.3.2.1 Ceilings < 10'

System Demand

DEMAND AT THE RISER OR NOZZLE	116.58 GPM
RESIDUAL PRESSURE AT THE RISER OR NOZZLE	30.187 PSI
DEMAND AT THE WATER SUPPLY SOURCE	216.38 GPM
RESIDUAL PRESSURE AT THE WATER SUPPLY SOURCE	30.187 PSI
HOSE STREAM ALLOWANCE	0 GPM INSIDE; 100 GPM OUTSIDE; 100 GPM TOTAL
REMOTE SPRINKLER FLOW	15.8 GPM @ 7.96PSI

GENERAL OVERHEAD NOTES

All design and installation shall be in accordance with NFPA 13, 2013 Edition and local authority.

System is designed for Light Hazard occupancy @ 0.10 gpm/sq. ft. over the hydraulically most remote 900 sq. ft. including 100gpm outside hose stream allowance.). Above ceiling heads are spaced @ maximum 168 sq. ft. due to the structure being in the category of "combustible obstruction" with joists spaced more than 3'-0" apart per NFPA 13. Table 8.6.2.2.1(a). Below ceiling sprinklers are @ maximum 225 sq. ft. spacing.

All pipe 1"-1½" to be Sch 30 Dyna-Thread or Sch 40 and 175 lb. WWP cast iron fittings (ANSI-B16.9). (Sch 40 used in Hydraulic Calculations.)

All pipe 2" and larger to be schedule 10 Dyna Flow with grooved coupling, and style #750 reducing coupling.

Propriety and central station monitoring to be provided by others.

All wiring to be provided by others.

Install earthquake bracing as shown per NFPA 13 using 1" schedule 40 piping to support all earthquake braces.

The length of an unsupported arm over to a sprinkler shall not exceed 24". 12" if subject to > 100 PSI static pressure.

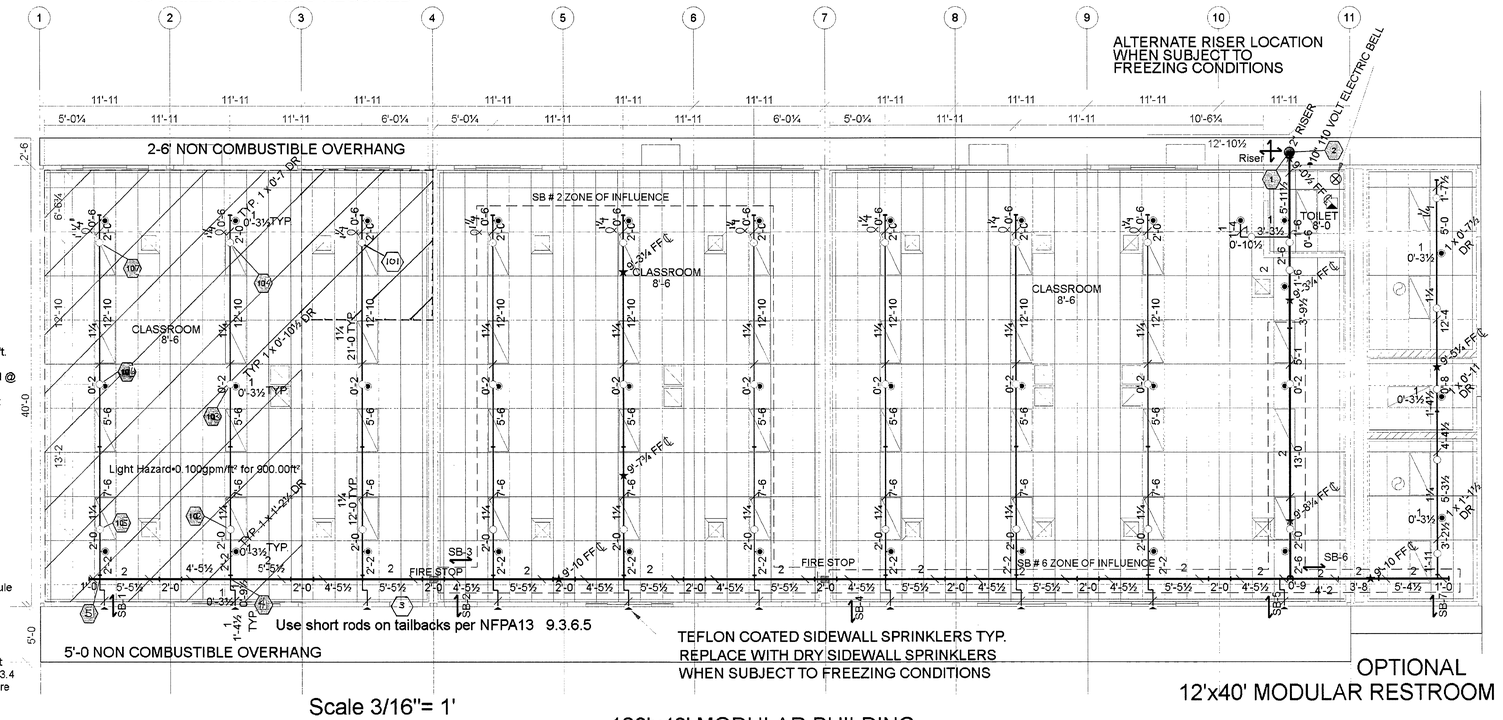
All new systems including yard shall be hydraulically tested at not less than 200 psi (13.8 bars) pressure for two hours, or at 50 psi (3.4 bars) in excess of the maximum pressure, when maximum pressure is in excess of 150 psi.

Install surge protection at end of all branch lines.

Attach splay wire to ends of branch lines. Splay wires not required where hangers are less than 6" from point of attachment to top of pipe. NFPA13 9.3.6.5

ALL WALLS ARE FULL HEIGHT UNLESS OTHERWISE NOTED

1-1/4" BRANCH LINES HOLD 2.56 GALLONS OF TRAPPED WATER EACH. NO AXILLARY DRAINS REQUIRED



Scale 3/16"= 1'

120'x40' MODULAR BUILDING
4800 SQ. FT.

OPTIONAL
12'x40' MODULAR RESTROOM

SILVER CREEK

Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:

ENGINEER STAMP:

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92715
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

PROJECT NAME:

40' PC Fire Sprinkler Plans

ISSUE DATES:

DESCRIPTION:	DATE:
40' PC	04/13/15

PROJECT NO: PC 1

DRAWN BY: Kris Michel

CHECKED BY:

ORIGINAL PC STATE AGENCY APPROVAL

FOR CITY/ PTO DOCUMENT CODE 2013 CBC A.3 AND 1612A.1 AND 1612A.3 ESTABLISHED FLOOD ELEVATION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC
DATE APR 14 2015

SHEET TITLE:
120 x 40+Right Bath

SHEET NUMBER:

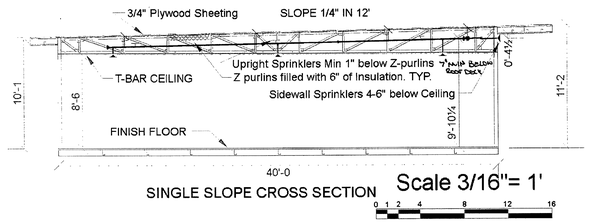
FS 2

Riser Tag

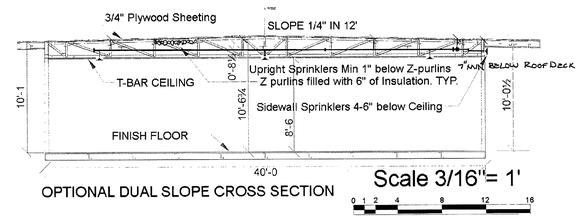
Design Basis
- Occupancy:Light Hazard
- Total Sprinklers:82
- Number Of Sprinklers Calculated:8
- K-Factor:5.6
- Orifice Size:0.5
- Design Density:0.100gpm/ft²
- Average Density:0.149gpm/ft²
- Area of Application:900.00ft² (Actual 916.22ft²)

Demand at Base Of Riser or Point Of Connection
- Total Demand Flow(gpm):136.92
- Pressure(psi):40.373

Water Supply Information At Time Of Design
- Static Pressure(psi):45.000
- Residual Pressure(psi):44.900
- Supply Flow(gpm):250.00
- Total Demand Flow(gpm):236.92
- Total Demand Pressure(psi):40.373



SINGLE SLOPE CROSS SECTION



OPTIONAL DUAL SLOPE CROSS SECTION

Sprinkler Legend

Symbol	Manufacturer	SIN/Model	Quantity	K-Factor	Type	Size	Response	Orifice	Finish	Temperature	Note
	TYCO	TY323	35	5.6	Pendent	½	Quick	½"	Chrome	155°F	
	TYCO	TY3331	10	5.6	Sidewall	½	Quick	½"	Teflon	155°F	
	TYCO	TY313	37	5.6	Upright	½	Quick	½"	Brass	200°F	
			Total = 82								

Sway Brace # 4 Zone Legend Lateral

Diameter	Description	Unit Quantity	Quantity	Unit Weight	Wp	Weight
2	Pipe, Dyna-Flow/Super Flo	(3)9'-11+(3)2'-0	35'-9	3.76lb	1.3	174.58lb
1	Pipe, Schedule 40	(2)0'-3½+(2)0'-9½+(2)1'-4½	4'-11	2.05lb	1.3	13.1lb
1¼	Pipe, Schedule 40	(3)11'-8+(3)2'1'-0	98'-0	2.93lb	1.3	373.28lb
					Total Weight (x Wp)	560.97lb
					Total Load (Fp x 1.15)	645.11lb

Sway Brace #8 Zone Legend Longitudinal

Diameter	Description	Unit Quantity	Quantity	Unit Weight	Wp	Weight
2	Pipe, Dyna-Flow/Super Flo	(3)9'-11+22'-6+5'-2½+(3)2'-0	63'-5½	3.76lb	1.3	310.83lb
					Total Weight (x Wp)	310.83lb
					Total Load (Fp x 1.15)	357.46lb

HYDRAULIC SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System

Location: CLASSROOM ATTIC

Sprinkler Information

NUMBER OF SPRINKLERS FLOWING	8
MANUFACTURER	TYCO
MODEL	TY 3131
1.55 UPRIGHT	QUICK RESPONSE
1/2" ORIFACE	K- FACTOR 5.6

Basis of Design

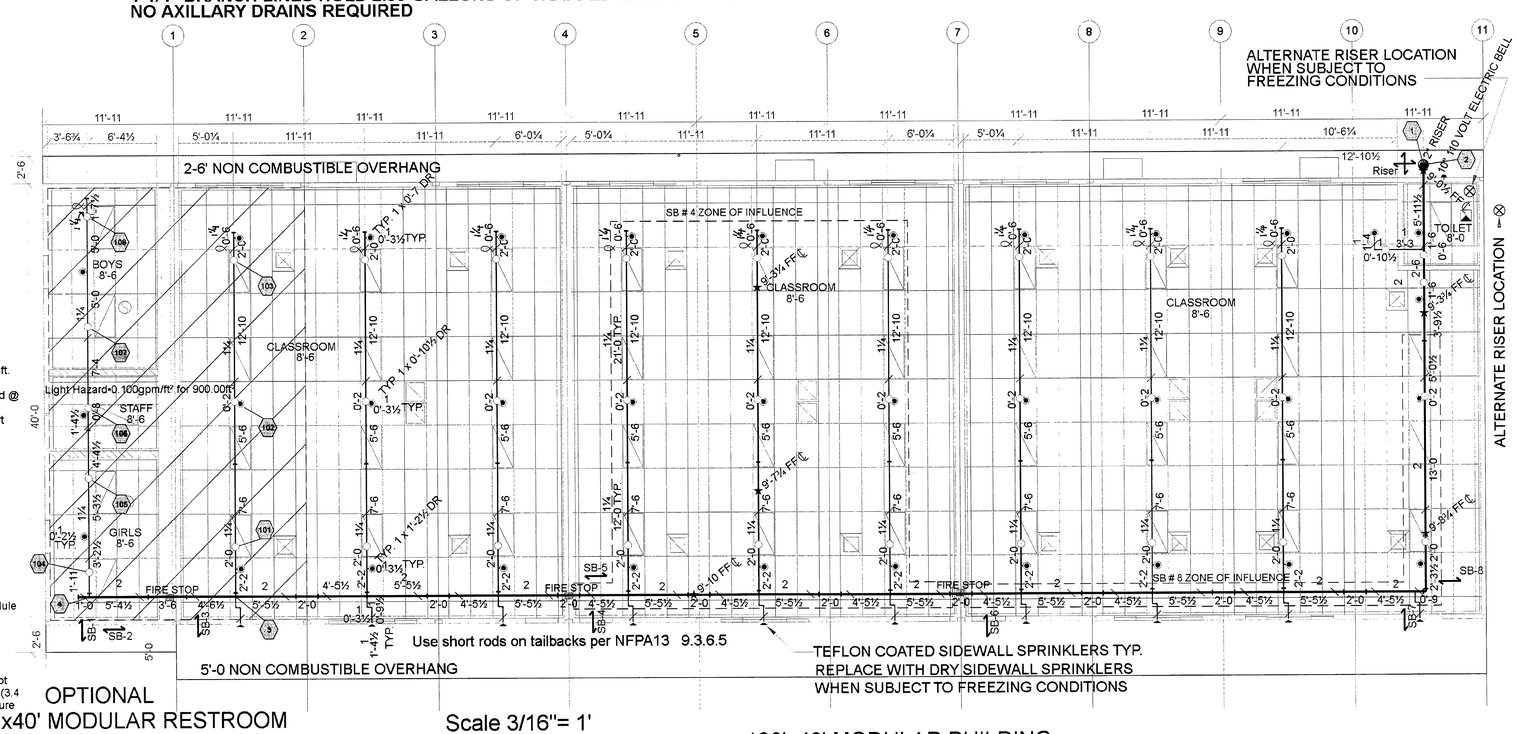
STANDARD	NFPA 2013 EDITION
HAZARD GROUP	LIGHT HAZARD
DENSITY	0.1 GPM SQ. FT.
DESIGNED AREA OF DISCHARGE	916 SQ. FT. Area Reduced by: NFPA 13 11.2.3.2.1 Ceilings < 10'

System Demand

DEMAND AT BASE OF RISER	136.92 GPM
RESIDUAL PRESSURE AT THE BASE OF RISER	39.364 PSI
DEMAND AT WATER SUPPLY SOURCE	136.92 GPM
RESIDUAL PRESSURE AT THE WATER SUPPLY SOURCE	39.364 PSI
HOSE STREAM ALLOWANCE	0 GPM INSIDE; 100 GPM OUTSIDE; 100 GPM TOTAL
REMOTE SPRINKLER FLOW	14.82 GPM @ 7 PSI

ALL WALLS ARE FULL HEIGHT UNLESS OTHERWISE NOTED

1-1/4" BRANCH LINES HOLD 2.56 GALLONS OF TRAPPED WATER EACH. NO AXILLARY DRAINS REQUIRED



OPTIONAL 12'x40' MODULAR RESTROOM

Scale 3/16"= 1'

120'x40' MODULAR BUILDING 4800 SQ. FT.

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SILVER CREEK
Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITECT STAMP:
LICENSED ARCHITECT JACK F. SINVELY III No. C-23467 RENEWAL DATE STATE OF CALIFORNIA

ENGINEER STAMP:
REGISTERED PROFESSIONAL ENGINEER K. N. BARDEL NO. 26885 EXP. 9-30-14 MECHANICAL STATE OF CALIFORNIA

CONSULTANT:
So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92715
714 368 0230
C-16 # 898658

CONSULTANT STAMP:
FIRE PROTECTION SYSTEMS CONTRACTOR Thomas Gray Bennett License No. 898658 STATE OF CALIFORNIA

PROJECT NAME:

40' PC Fire Sprinkler Plans

ISSUE DATES:

DESCRIPTION:	DATE:
40' PC	04/13/15

PROJECT NO: PC 1

DRAWN BY: Kris Michel

CHECKED BY:

ORIGINAL PC STATE AGENCY APPROVAL

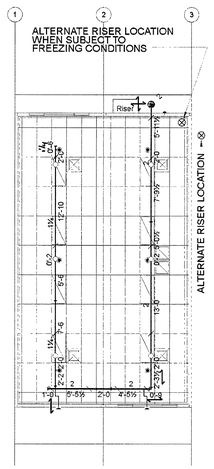
PRECHECK PROJECT DOCUMENT NOT FOR CONSTRUCTION A SEPARATE PERMIT APPLICATION IS REQUIRED FOR CONSTRUCTION

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 04-114027
AC FLS
DATE APR 1 1 2015

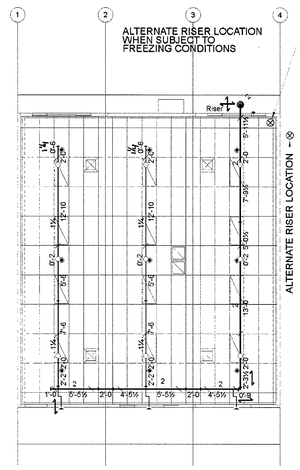
SHEET TITLE:
120 x 40+Left Bath

SHEET NUMBER:

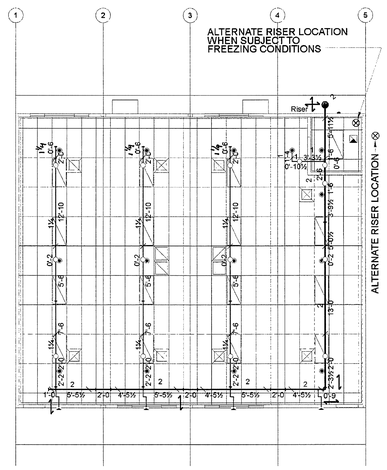
FS 3



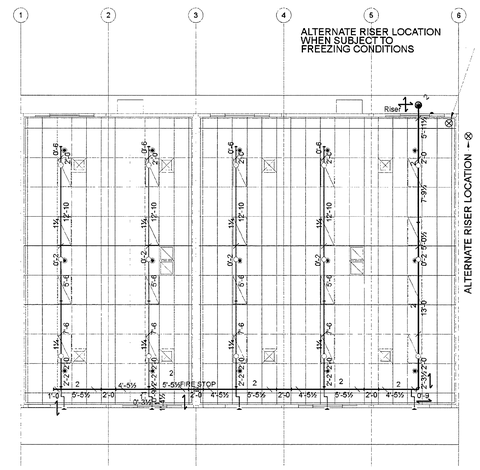
24'x40' MODULAR BUILDING
960 SQ.FT.



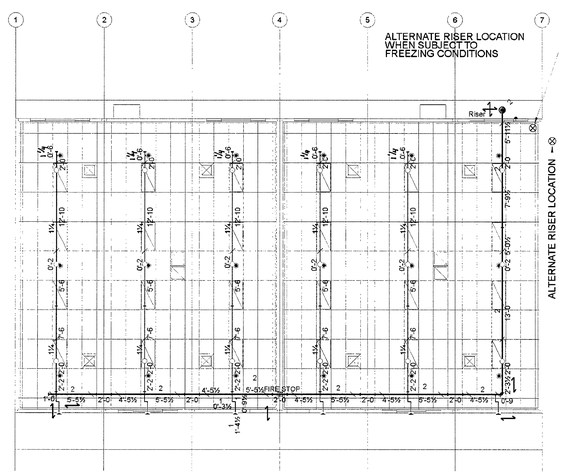
36'x40' MODULAR BUILDING
1440 SQ.FT.



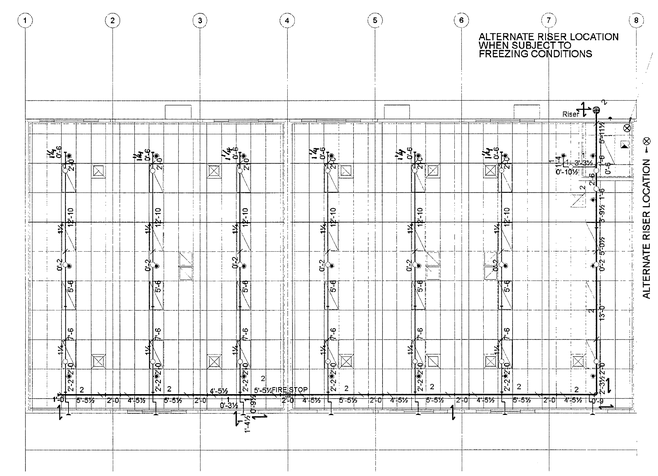
48'x40' MODULAR BUILDING
1920 SQ.FT.



60'x40' MODULAR BUILDING
2400 SQ.FT.



72'x40' MODULAR BUILDING
2800 SQ.FT.



84'x40' MODULAR BUILDING
3360 SQ.FT.

Scale 1/8"= 1'

THIS SHEET SHOWS THE VARIOUS SIZE BUILDINGS FOR THE PURPOSE OF SHOWING THE LOCATION AND PLACEMENT OF SWAY BRACES FOR EACH ONE INDIVIDUALLY.

SEE REFERENCE SHEETS FS-2 AND FS-3 FOR COMPLETE FIRE SPRINKLER SYSTEM DESIGN, SIZING AND HYDRAULIC CALCULATIONS INFORMATION WHICH IS APPLICABLE TO EACH OF THESE BUILDING SIZES.

SILVER CREEK

Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITECT STAMP:

JACK F. SHIVELY III
No. C-39487
RENEWAL DATE
STATE OF CALIFORNIA

ENGINEER STAMP:

REGISTERED PROFESSIONAL ENGINEER
NO. 26985
EXP. 6-30-16
MECHANICAL
STATE OF CALIFORNIA

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92715
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

FIRE PROTECTION ENGINEER
THOMAS
License No. 898658
STATE OF CALIFORNIA

PROJECT NAME:

40' PC Fire Sprinkler Plans

ISSUE DATES:

DESCRIPTION:	DATE:
Mod Group 1	04/05/15

PROJECT NO: PC 1

DRAWN BY: Kris Michel

CHECKED BY:

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK PC1 DOCUMENT
A SEPARATE PERMIT APPLICATION
IS REQUIRED FOR THIS WORK

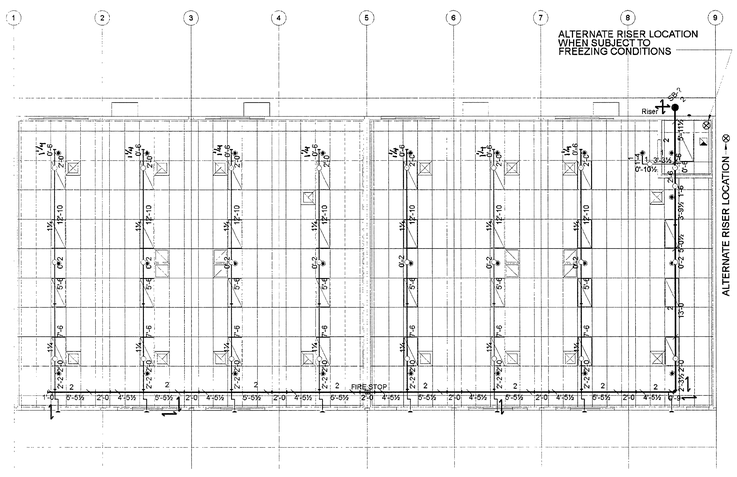
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC
DATE APR 1 1 2015

SHEET TITLE:

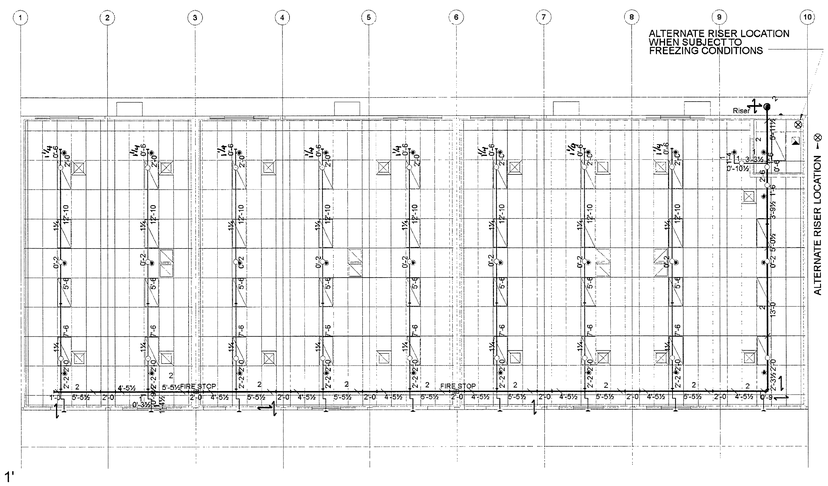
40' x24'-84'

SHEET NUMBER:

FS 4



96'x40' MODULAR BUILDING
3840 SQ. FT.



108'x40' MODULAR BUILDING
3840 SQ. FT.

Scale 1/8"= 1'

THIS SHEET SHOWS THE VARIOUS SIZE BUILDINGS FOR THE PURPOSE OF SHOWING THE LOCATION AND PLACEMENT OF SWAY BRACES FOR EACH ONE INDIVIDUALLY.

SEE REFERENCE SHEETS FS-2 AND FS-3 FOR COMPLETE FIRE SPRINKLER SYSTEM DESIGN, SIZING AND HYDRAULIC CALCULATIONS INFORMATION WHICH IS APPLICABLE TO EACH OF THESE BUILDING SIZES.

SILVER CREEK

Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITECT STAMP:

LICENSED ARCHITECT
JACK F. SHIVELY III
No. C-29467
RENEWAL DATE
STATE OF CALIFORNIA

ENGINEER STAMP:

REGISTERED PROFESSIONAL ENGINEER
CAL R. SANDEK
NO. 26885
EXP. 9-30-16
MECHANICAL
STATE OF CALIFORNIA

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92715
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

FIRE PROTECTION CONTRACTOR
THOMAS E. SCHAU
License No.
Expires
STATE OF CALIFORNIA

PROJECT NAME:

40' PC Fire Sprinkler Plans

ISSUE DATES:

DESCRIPTION:	DATE:
Mod Group 2	04/05/15

PROJECT NO: 1

DRAWN BY: Kris Michel

CHECKED BY:

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT
A SEPARATE PROJECT APPLICATION
IS REQUIRED FOR CONSTRUCTION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC
DATE APR 1 1 2015

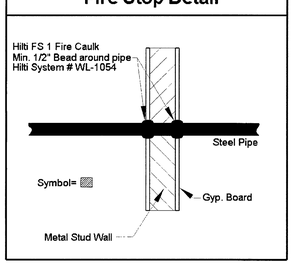
SHEET TITLE:

40 x96' and 40'x108'

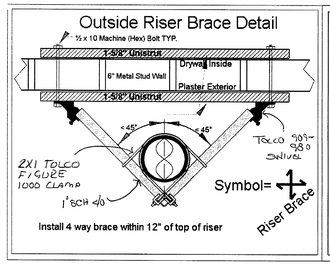
SHEET NUMBER:

FS 5

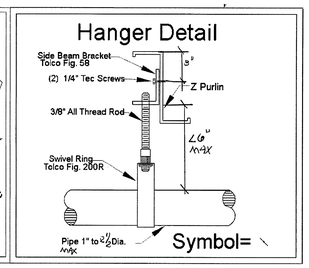
Fire Stop Detail

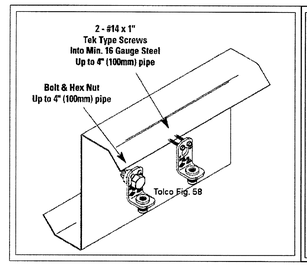


Outside Riser Brace Detail

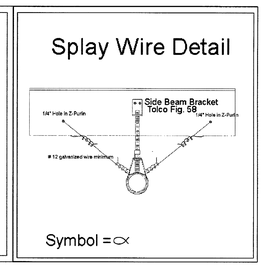


Hanger Detail

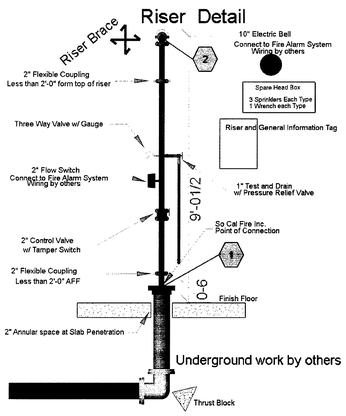


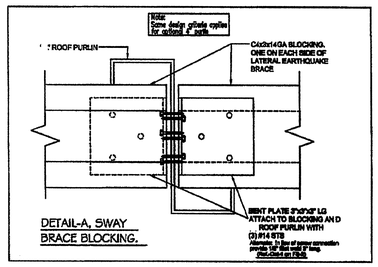


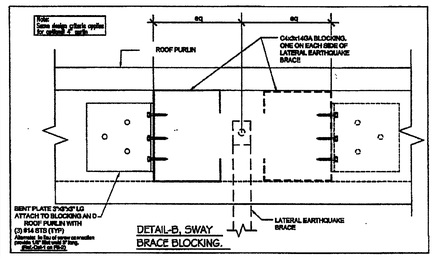
Splay Wire Detail

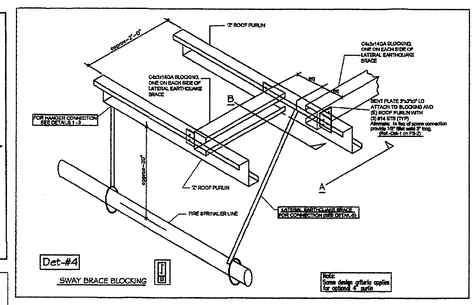


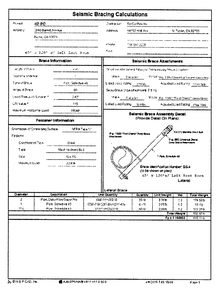
Riser Detail

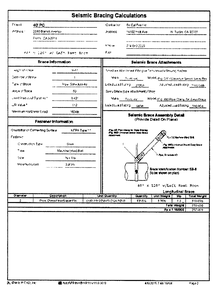


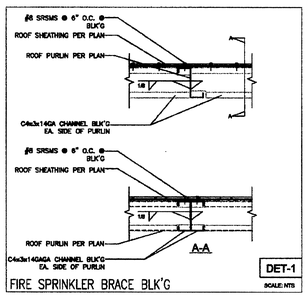


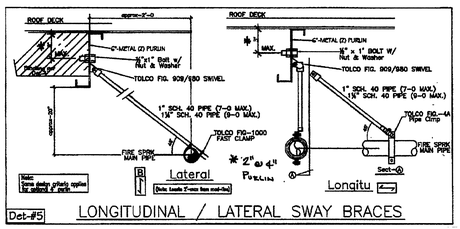












SILVER CREEK

Building for the Next Generation
2380 Barret Avenue
Perris, CA 92571

ARCHITEC STAMP:

ENGINEER STAMP:

CONSULTANT:

So Cal Fire Inc.
14102 Holt Avenue
North Tustin, CA 92715
714 368 0230
C-16 # 898658

CONSULTANT STAMP:

PROJECT NAME:

40' PC Fire Sprinkler Plans

ISSUE DATES:

DESCRIPTION:	DATE:
Details	04/08/15

PROJECT NO: PC 1

DRAWN BY: Kris Michel

CHECKED BY:

ORIGINAL PC STATE AGENCY APPROVAL

PRE-CHECK (PC) DOCUMENT CODE 3012.6C
VERIFY ALL DIMENSIONS AND CONDITIONS IN FIELD BEFORE FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-114027
AC F.S. SS
DATE APR 1 4 2015

SHEET TITLE:
Details

SHEET NUMBER:

FS 6