



THOMAS S. HART MIDDLE SCHOOL NEW SCIENCE BUILDING

INCREMENT 2

4433 WILLOW RD. PLEASANTON, CA 94588

PLEASANTON UNIFIED SCHOOL DISTRICT

DSA FILE NUMBER 01-32
DSA APPLICATION NUMBER 01-119271
OPSC TRACKING NUMBER 75101-

GENERAL NOTES

PRE-BID SITE VISIT

CONTRACTOR SHALL VISIT THE PROJECT AREA IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR MAY CONTACT THE ARCHITECT DURING THE BIDDING PHASE REGARDING CLARIFICATIONS AND PROJECT REQUIREMENTS.

SAFETY

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

DAMAGE TO STRUCTURE OR SYSTEMS TO REMAIN

CONTRACTOR SHALL REIMBURSE THE OWNER FOR REPAIR AND REPLACEMENT, INCLUDING ARCHITECT'S FEES, FOR ANY DAMAGE CAUSED TO STRUCTURES, LANDSCAPE, SITE WORK, OR EXISTING SYSTEMS TO REMAIN, AS THE RESULT OF CONSTRUCTION OPERATIONS.

EXISTING CONDITIONS

ALL EXISTING CONDITIONS ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND BUILDING DATA AT THE JOB SITE. ANY DISCREPANCIES REQUIRING MODIFICATION TO THE CONSTRUCTION DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY. NO MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

CONTRACTOR'S EQUIPMENT

COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTOR'S EQUIPMENT AND MATERIAL STORAGE AREA. SEE SITE PLAN FOR ADDITIONAL NOTES.

UTILITY SHUT-DOWNS AND CONNECTIONS

ALL REQUIRED UTILITY SHUT DOWNS SHALL HAVE PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE. REQUEST SHALL BE SUBMITTED WITH ADEQUATE ADVANCE NOTICE PER PROJECT REQUIREMENTS.

ASBESTOS AND ASBESTOS PRODUCTS

THE OWNER/OPERATOR AND CONTRACTOR SHALL BE AWARE THAT BUILDINGS CONSTRUCTED PRIOR TO 1978 (OR THEREABOUT) POSSIBILITY CONTAIN ASBESTOS IN SOME EXISTING CONSTRUCTION MATERIALS, AND WILL LIKELY BE ENCOUNTERED DURING ALTERATIONS OR REMODELING.

UNDER CALIFORNIA TITLE 8, THE OWNER AND CONTRACTOR BOTH HAVE RESPONSIBILITIES TO DETERMINE THE EXISTENCE OF ASBESTOS CONTAINING MATERIALS IN AREAS TO BE ALTERED OR REMODELED PRIOR TO COMMENCEMENT OF WORK AND TO TAKE APPROPRIATE MEASURES TO PROTECT PERSONNEL. CAL-OSHA HAS JURISDICTION OVER ASBESTOS RELATED WORK. ASBESTOS RELATED WORK SHALL BE DONE IN ACCORDANCE WITH CALIFORNIA GENERAL INDUSTRIAL SAFETY ORDERS, TITLE 8, SECTION 341.6 THROUGH 341.14. ASBESTOS IN THE WORK ENVIRONMENT IS REGULATED BY TITLE 8, SECTION 5208.

THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND DISTRICT REGULATION 11-2-401.3 REQUIRES EVERY RENOVATION INVOLVING THE REMOVAL OF 100 SQ. FT., LN.FT. OR GREATER OF REGULATED ASBESTOS CONTAINING MATERIAL, AND FOR EVERY DEMOLITION (EVEN WHEN NO ASBESTOS IS PRESENT), A NOTIFICATION MUST BE SENT TO THE BAAQMD AT LEAST 10 WORKING DAYS PRIOR TO COMMENCEMENT OF DEMOLITION / RENOVATION.

ALL BUILDING MATERIALS MUST BE ASBESTOS FREE.

THESE DOCUMENTS DO NOT ADDRESS CONTAINMENT FOR EXISTING AREAS OF ASBESTOS WHICH MAY BE DISCOVERED DURING CONSTRUCTION. THE OWNER'S ABATEMENT SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR THE DETECTION, REMOVAL, AND THE DISPOSAL OF ANY EXISTING ASBESTOS MATERIAL, ARCHITECTURAL AND ENGINEERING FEES FOR ADDITIONAL DESIGN EFFORT TO OBTAIN STATE APPROVALS, AS WELL AS THE COST OF ANY REPAIRS, FOR DAMAGE CAUSED OR REPLACEMENT OF EXISTING SYSTEMS TO REMAIN, DUE TO WORK PERFORMED BY THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUBCONTRACTOR, SHALL BE THE RESPONSIBILITY OF SAID SUBCONTRACTOR.

CONSTRUCTION SCHEDULING

CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO SCHEDULING AND START OF THE WORK. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING SPACES AND SYSTEMS WHICH ARE IN USE, ADJOINING THE PROJECT, AND NOT PART OF THE PROJECT.

INTERIOR FINISHES

INTERIOR FINISHES AND ALL WALL COVERING MATERIAL SHALL CONFORM TO CCR TITLE 24, PART 2, CHAPTER 6.

DRILLED-IN EXPANSION ANCHORS

WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.

TITLE 24 COMPLIANCE

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, CALIFORNIA CODE OF REGULATIONS (2019 CBC), SHOULD ANY EXISTING CONDITIONS SUCH AS DETEIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED NOT COVERED BY THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT OR A SEPARATE SET OF PLANS AND SPECIFICATIONS. DETAILING AND SPECIFYING THE REQUIRED WORK, SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.

ADMINISTRATIVE REQUIREMENTS FROM PART 1, TITLE 24, C.C.R.

- CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT, AND APPROVED BY DSA, AS PER SECTION 4-338
- A DSA CERTIFIED PROJECT INSPECTOR EMPLOYED BY THE DISTRICT AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF WORK, PER SECTION 4-342
- A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL REQUIRED TEST AND INSPECTIONS FOR THE PROJECT.
- SPECIAL INSPECTION PER SECTION 4-333 (C)
- CONTRACTOR SHALL SUBMIT VERIFIED REPORT OR SECTION 4-338 & 4-343 (C)
- ADMINISTRATION OR CONSTRUCTION PER PART 1, TITLE 24, C.C.R.
 - DUTIES OF ARCHITECT, STRUCTURAL ENGINEER, OR PROFESSIONAL ENGINEER PER SECTION 4-333 (A) AND 4-341
 - DUTIES OF CONTRACTOR PER SECTION 4-343
 - VERIFIED REPORTS PER SECTION 4-343 AND 4-338
- A COPY OF PARTS 1 TO 5 OF TITLE 24 SHALL BE KEPT AND AVAILABLE IN THE FIELD DURING CONSTRUCTION
- DSA SHALL BE NOTIFIED AT START OF CONSTRUCTION AND PRIOR TO PLACEMENT OF CONCRETE PER SECTION 4-331
- SUPERVISION BY DSA PER SECTION 4-334
- DSA IS NOT SUBJECT TO ARBITRATION

GENERAL NOTES, cont.

ADMINISTRATIVE REQUIREMENTS

- ADDENDA MUST BE SIGNED BY ARCHITECT AND APPROVED BY DSA
- NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEM UNLESS SUCH CHANGES TO REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL
- SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION
- CONSTRUCTION CHANGE DOCUMENTS MUST BE SIGNED BY THE FOLLOWING:
 - ARCHITECT OR ENGINEER OF RECORD
 - STRUCTURAL ENGINEER (WHEN APPLICABLE)
 - DELEGATED PROFESSIONAL ENGINEER
- MATERIALS AND THEIR INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES.
- PER CBC 11B-104.1 ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES EXCEPT WHERE THE REQUIREMENT IS STATED AS A RANGE WITH SPECIFIC MINIMUM AND MAXIMUM END POINTS.

COMPLIANCE WITH LOCAL ORDINANCES

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

ABBREVIATIONS

(REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL ABBREVIATIONS)

A.F.F.	ABOVE FINISHED FLOOR	LAM.	LAMINATE
A.P.	ACCESS PANEL	LAV.	LAVATORY
ACT	ADJUSTABLE	M.B.	MACHINE BOLT
ADJ.	ADJUSTABLE	M.S.	MACHINE SCREW
ALUM.	ALUMINUM	M.H.	MANHOLE
A.B.	ANCHOR BOLT	MFG.	MANUFACTURER
APPROX.	APPROXIMATELY	MATL.	MATERIAL
ARCH.	ARCHITECT	MAX.	MAXIMUM
AC	ASPHALTIC CONCRETE	MECH.	MECHANICAL
@	AT	MTL.	METAL
B.M.	BENCH MARK	MIN.	MINIMUM
BLKG.	BLOCKING	MISC.	MISCELLANEOUS
BD.	BOARD	MTD.	MOUNTED
B.W.	BOTH WAYS	(N)	NEW
BOT.	BOTTOM	NOM.	NOMINAL
BLDG.	BUILDING	N.I.C.	NOT IN CONTRACT
B.U.R.	BUILT-UP ROOFING	N.T.S.	NOT TO SCALE
C.B.	CATCH BASIN	NO. or #	NUMBER
CLG.	CEILING	OCC.	OCCUPANT(CY)
CEM.	CEMENT	ON CENTER	ON CENTER
C.C. or O.C.	CENTER TO CENTER	OPNG.	OPENING
CER. TILE	CERAMIC TILE	OPP.	OPPOSITE
C.O.	CLEANOUT	O.P.	OPPOSITE HAND
C.O.T.G.	CLEANOUT TO GRADE	O.H.	OUTSIDE
CLR.	CLEAR	O.S.	OUTSIDE FACE OF STUD
C.A.H.R.	CLEAR ALL HEART	O.H.W.S.	OVAL HEAD WOOD SCREW
	REDWOOD	O.D.	OVERFLOW DRAIN and/or OUTSIDE DIAMETER
C.W.	COLD WATER	O.F.C.I.	OWNER FURNISHED AND CONTRACTOR INSTALLED
COL.	COLUMN	PR.	PAIR
COM.	COMMON	PART.	PARTITION
CONC.	CONCRETE	PL	PLATE
CONST.	CONSTRUCTION	PENNY (NAILS)	PENNY (NAILS)
C.H.	CONSTRUCTION HEART	PLAS.	PLASTER
CONSTR.	CONSTRUCTION JOINT	PLYWD.	PLYWOOD
CONTR.	CONTRACTOR	P.V.C.	POLY VINYL CHLORIDE
COUNTER	COUNTER	P.T.	PRESSURE TREATED
COUNTER SUNK	COUNTER SUNK	P.L.	PROPERTY LINE
DET.	DETAIL	R or RAD.	RADIUS
DIA. or Ø	DIAMETER	R.W.L.	RAIN WATER LEADER
DIM.	DIMENSION	RWD./R.W.	REDWOOD
D.A.	DISABLED ACCESS	REINF.	REINFORCING
DR.	DOOR	REINQ.	REQUIRED
D.S.	DOWNSPOUT	R.A.G.	RETURN AIR GRILLE
DWG.	DRAWING	R.E.	RM ELEVATION
D.F.	DRINKING FOUNTAIN and/or DOUGLAS FIR	R.D.	ROOF DRAIN
EA.	EACH	RM.	ROOM
E.W.	EACH WAY	R.O.	ROUGH OPENING
ELEC.	ELECTRIC OR ELECTRICAL	RND.	ROUND
EL.	ELEVATION	R.H.M.S.	ROUND HEAD METAL SCREW
ENC.	ENCLOSURE and/or ENCLOSURE	R.H.W.S.	ROUND HEAD WOOD SCREW
EQ.	EQUAL	SSD.	SEE STRUCTURAL DRAWINGS
EQUIP.	EQUIPMENT	S.T.S.M.S.	SELF TAPPING SHEET METAL SCREW
(E)	EXISTING	SHEATH.	SHEATHING
EXP.	EXPANSION	S.M.S.	SHEET METAL SCREW
E.J.	EXPANSION JOINT	S.O.V.	SHUT OFF VALVE
EXT.	EXPOSED	S.Q.	SQUARE
F.O.C.	FACE OF CONCRETE	S.C.	SOLID CORE
F.O.M.	FACE OF MASONRY	SPEC.	SPECIFICATION
F.C.	FACE OF STUD	S.F.	SQUARE FEET
F.O.F.	FACE OF FINISH	STAG.	STAGGERED
FIN.	FINISH	STD.	STANDARD
F.F.	FINISHED FLOOR	STAINLESS STEEL	STAINLESS STEEL
F.S.	FINISH SLAB	STL.	STEEL
F.E.	FIRE EXTINGUISHER	STR.	STORAGE
F.E.C.H.	FIRE EXTINGUISHER CABINET	STRUCTURAL	STRUCTURAL
F.H.	FIRE HYDRANT	S.A.G.	SUPPLY AIR GRILLE
F.H.M.S.	FLAT HEAD METAL SCREW	THRES.	THRESHOLD
F.H.W.S.	FLAT HEAD WOOD SCREW	T&G.	TONGUE & GROOVE
FL. or FLR.	FLOOR	T.J.	TOOLED JOINT
F.D.	FLOOR DRAIN	T.O.B.	TOP OF BEAM
FTG.	FOOTING	T.O.C.	TOP OF CURB OR CONCRETE
FD.	FOUNDATION	T.O.S.	TOP OF STEEL OR SHEATHING
GALV.	GALVANIZED	T.O.W.	TOP OF WALK
G.I.	GALVANIZED IRON	TYPICAL	TYPICAL
G.A.	GAUGE	U.O.N.	UNLESS OTHERWISE NOTED
GL.	GLASS	U.O.S.	UNLESS OTHERWISE SHOWN
GLU-LAM	GLUE-LAMINATED	V.C.T.	VINYL COMPOSITION TILE
GRD.	GRADE	V.V.C.	VINYL WALL COVERING
GYP. BD.	GYPSUM BOARD	V.O.I.P.	VOICE OVER INTERNET PROTOCOL
HDW.	HARDWARE	W.C.	WATER CLOSET
HORIZ.	HORIZONTAL	W.H.	WATER HEATER
H.T.	HOLLOW CORE	WP.	WATERPROOF
H.M.	HOLLOW METAL	INT.	INTERIOR
H.464	HOLLOW METAL	W.W.M.	WELDED WIRE MESH
INSUL.	INSULATION	W.D.	WINDOW DIMENSION
INT.	INTERIOR	W/	WITH
INV.	INVERT	W/O	WITHOUT
JO.	JOIST	WD.	WOOD
JOIST HANGER	JOIST HANGER		
K.D.	KILN DRIED		



BUILDING CODES AND STANDARDS:

2019	CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 2, TITLE 24, C.C.R.
2019	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.
2019	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R.
2019	CALIFORNIA NATIONAL BUILDING CODE (CNBC), PART 3, TITLE 24, C.C.R.
2019	CALIFORNIA NATIONAL ELECTRIC CODE (CNEC), PART 3, TITLE 24, C.C.R.
2019	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.
2019	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.
2019	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.
2019	CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2019	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24, C.C.R.
2019	ADA STANDARDS FOR ACCESSIBLE DESIGN (28 CFR PART 35 FOR TITLE II ENTITIES)

CCR TITLE-19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

NFPA 13	INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	INSTALLATION OF STANDPIPE & HOSE SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEM	2017 EDITION
NFPA 20	STATIONARY FIRE PUMPS TO FIRE PROTECTION	2016 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS (CA AMENDED)	2016 EDITION
NFPA 25	INSPECTION, TESTING AND MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS	2013 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2015 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2016 EDITION
NFPA 117	STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS	2016 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2015 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
ICC 300	STANDARDS FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION
SFM 12-10-1	POWER OPERATED EXIT DOORS	1999/2005 EDITION
SFM 12-10-2	SINGLE POINT LATCHING OR LOCKING DEVICES	2009 EDITION
SFM 12-10-3	EMERGENCY EXIT & PANIC HARDWARE	2009 EDITION
UL 38	MANUAL OPERATING SIGNAL BOXES	1999/2005 EDITION
UL 288	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2009 EDITION
UL 268A	SMOKE DETECTORS DUCT APPLICATIONS	1998/2003 EDITION
UL 300	FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 305	PANIC HARDWARE	2012 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, AND ACCESSORIES	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS (W/ REVISIONS THROUGH DEC. 2014)	2003 EDITION
UL 1971	SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION
	COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.	

SYMBOLS LEGEND

1 A7.1	SECTION / EXTERIOR ELEVATION
4 A8.1	DETAIL
1 A7.1	INTERIOR ELEVATION
CLASSROOM 102	ROOM IDENTIFICATION
3	SPECIFIC NOTE
102A	DOOR DESIGNATION
1	WINDOW DESIGNATION
1	ADDENDUM REVISION
1	CCD REVISION
127	FINISH NUMBER
1	EQUIPMENT LETTER
48'-0"	CEILING HEIGHT
1	WALL TYPE
1	MATCH LINE
48'-0"	ELEV. HEIGHT
1	F.O.S., U.O.N.
1	FACE OF FINISH

PROJECT SUMMARY

INCREMENT 1:
SITE WORK AND UTILITY INFRASTRUCTURE ASSOCIATED WITH THE CONSTRUCTION OF A NEW MODULAR BUILDING, INCLUDING PARKING LOT "A" ALTERATIONS, NEW COURTYARD, NEW FENCING AND GATES.

INCREMENT 2:
NEW MODULAR SCIENCE BUILDING- PC
NEW PRE-MANUFACTURED METAL WALKWAY STRUCTURE- PC
NEW FABRIC SHADE STRUCTURE- PC

INCREMENT 3:
CLASSROOM RENOVATIONS:
-INTERIOR FINISHES
-ELECTRICAL, PLUMBING AND HVAC WORK

THERE ARE NO DEFERRED SUBMITTALS FOR THIS PROJECT.

DESIGN TEAM

ARCHITECT
SUGIMURA FINNEY ARCHITECTS
2155 SOUTH BASCOM AVENUE SUITE 200
CAMPBELL, CALIFORNIA 95008
(408) 879-0600
(408) 377-6066 FAX
ATTN: MARK FINNEY MARK@SUGIMURA.COM

MECHANICAL/PLUMBING ENGINEER
CYPRESS ENGINEERING GROUP
8 HARRIS COURT, SUITE A8
MONTEREY, CALIFORNIA 93940
(408) 510-0906
ATTN: METIN SERTTUNCU metin@cypresseng.com

ELECTRICAL AND FIRE ALARM ENGINEER
AURUM CONSULTING ENGINEERS
300 S. 1ST STREET, SUITE 342
SAN JOSE, CA 95113
(408) 584-7925
ATTN: NAJIB ANWARY NAJIB@ACEMB.COM

DRAWING INDEX

2-T1	TITLE SHEET
2-T3	SITE PLAN - FIRE LIFE SAFETY COMPLIANCE

ARCHITECTURAL

2-A0.3	NEW ENLARGED SITE PLAN
2-A2.1	NEW FLOOR PLANS
2-A2.2	NEW FLOOR PLANS - SHADE STRUCTURES
2-A3.1	REFLECTED CEILING PLAN
2-A4.1	ROOF PLAN
2-A5.1	NEW ENLARGED FLOOR PLANS
2-A6.1	DOOR-WINDOW SCHEDULES AND DOOR SIGNAGE
2-A6.3	FINISH SCHEDULE
2-A7.1	EXTERIOR ELEVATIONS
2-A7.2	INTERIOR ELEVATIONS
2-A8.1	BUILDING SECTIONS

MECHANICAL

2-M0.1	SYMBOL LEGENDS, ABBREVIATIONS, NOTES-MECHANICAL
2-M2.1	NEW FLOOR PLAN- MECHANICAL

PLUMBING

2-P0.1	SYMBOL LEGENDS, ABBREVIATIONS, NOTES-PLUMBING
2-P2.1	NEW FLOOR PLAN- PLUMBING

ELECTRICAL

2-E0.1	SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, NOTES & SHEET INDEX
2-E1.1	ELECTRICAL SINGLE LINE DIAGRAM & PANELBOARD SCHEDULES
2-E4.1	POWER & SYSTEMS PARTIAL FLOOR PLAN
2-E4.2	POWER & SYSTEMS PARTIAL FLOOR PLAN
2-E5.1	LIGHTING PARTIAL REFLECTED CEILING PLAN
2-E5.2	LIGHTING PARTIAL REFLECTED CEILING PLAN
2-E6.1	ELECTRICAL DETAILS
2-E6.2	ELECTRICAL DETAILS
2-E6.3	ELECTRICAL DETAILS
2-FA0.1	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES
2-FA1.1	FIRE ALARM PARTIAL FLOOR PLAN
2-FA4.2	FIRE ALARM PARTIAL FLOOR PLAN

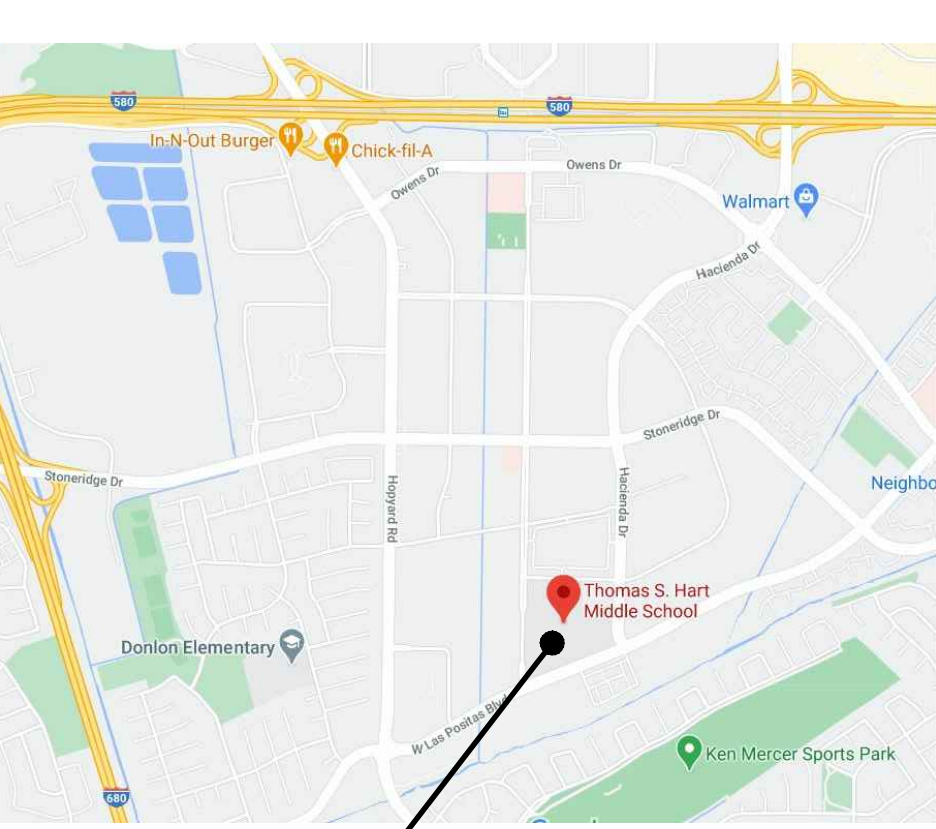
VALLEY SCHOOL SHELTERS PRE-CHECK PC 2019 B.C.B.

S1	FOUNDATION PLANS, GENERAL NOTES, DETAILS
S2	ROOF FRAMING PLANS
S3	SECTION, TYPICAL ELEVATIONS DETAILS
S4	SECTION, DETAIL

P.C.T-1.0 PC TITLE SHEET
P.C.T-2.0 DSA 103 FORMS
15-1000 PRODUCT INFORMATION
15-2000 REACTIONS

USA FABRIC SHADE STRUCTURE DSA P.C. 04-117140

VICINITY MAP



PROJECT LOCATION

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 OTHER CONSULTANTS

APPLICATION NO.: 01-119271 FILE NO.: 01-32

- ☒ 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:

- DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
- 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 81108 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 FIND THAT:
☒ ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET
☒ THIS DRAWING OR PAGE
☒ IS / ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND
☒ HAS / HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

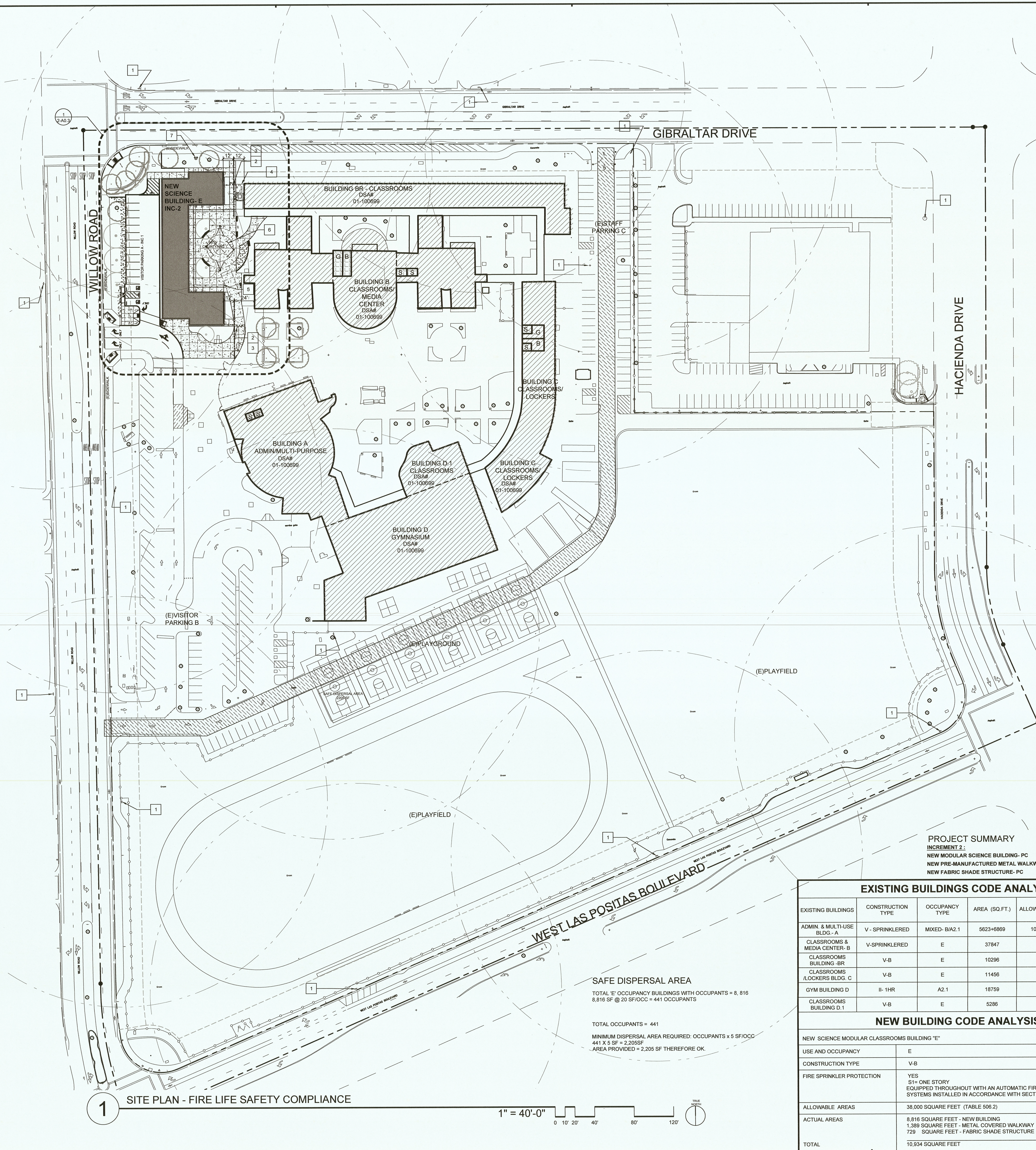
MARK FINNEY
C-24673
LICENSE NUMBER

3/30/2021
DATE
9/30/2021
EXPIRATION DATE

TITLE SHEET

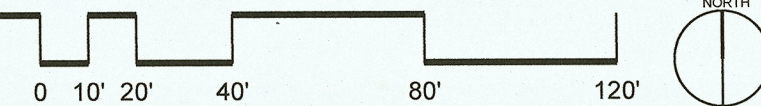
REVISIONS	NO.	ITEM	DATE
	1.	BID SET	3-2021

DRAWN BY: NJ
CHECKED BY: DB
SFA JOB NO: DATE:
2008.03 03/03/2021



SITE PLAN - FIRE LIFE SAFETY COMPLIANCE

1" = 40'-0"



GENERAL NOTES

A. THIS SHEET IS FOR FIRE LIFE SAFETY CODE RELATED ITEMS. FOR SCOPE OF WORK SEE SHEETS 2-A0.3.

SITE PLAN - FIRE LIFE SAFETY NOTES

- (E)FIRE HYDRANT.
- DOUBLE GATES WITH PANIC HARDWARE AND CITY-PROVIDED KNOX BOX. VERIFY MOUNTING HEIGHTS WITH LOCAL JURISDICTION.
- FENCE.
- FENCE ENCLOSURE.
- COURTYARD COVERED WALKWAY.
- COURTYARD FABRIC SHADE STRUCTURE.
- RELOCATED FIRE HYDRANT, COORDINATE LOCATION IN FIELD.



810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply. Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy PL 09-01: Fire Flow for Buildings.

PROJECT INFORMATION			
School District/Owner: PLEASANTON UNIFIED SCHOOL DISTRICT			
Project Name/School: THOMAS S. HART MIDDLE SCHOOL - NEW SCIENCE BUILDING			
Project Address: 4433 WILLOW RD., PLEASANTON CA 94588			
FIRE & LIFE SAFETY INFORMATION			
1.	Has a fire hydrant flow test been performed within the past 12 months? (If yes, provide a copy of the test data.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by CalFire? (If yes, indicate FHSZ classification below.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Refer to the following website for FHSZ locations: http://esds.fire.ca.gov/FHSZ/		Moderate <input type="checkbox"/>	High <input type="checkbox"/> Very High <input type="checkbox"/>
Wildland Interface Area (WIFA) (If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)		WIFA <input type="checkbox"/>	

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 1 of 4

DSA 810
FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

CONDITION MEANS AND METHODS RESOLUTION		ALTERNATE ACCEPTED			
		Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.				<input checked="" type="checkbox"/>
4a.	Acceptable Alternate: Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.				
5.	Fire Hydrants: Number and spacing does not meet CFC requirements.				
5a.	Acceptable Alternate: Number of the hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.	<input checked="" type="checkbox"/>			
6.	Fire Hydrants: Water flow and pressure are less than CFC minimum.				<input checked="" type="checkbox"/>
6a.	Acceptable Alternate: The available flow and pressure is acceptable for providing fire suppression and protection of life and property.				
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.				<input checked="" type="checkbox"/>
7a.	Acceptable Alternate: The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.				

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: JOHN CHUASTYLE Title: Director of Facilities & Capital
Signature: [Signature] Date: 3-18-2021

LOCAL FIRE AUTHORITY (LFA) INFORMATION	
LFA Agency Name:	<u>Livermore-Pleasanton Fire Department</u>
LFA Review Official:	<u>RYAN BUCKER</u>
Title:	<u>Fire Marshal</u>
Work Email:	<u>rbucker@lpfire.org</u>
Work Phone:	<u>925 998-1230</u>
LFA Reviewer's Signature:	<u>[Signature]</u>
Date:	<u>3/23/21</u>

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 2 of 4

GRAPHIC KEY

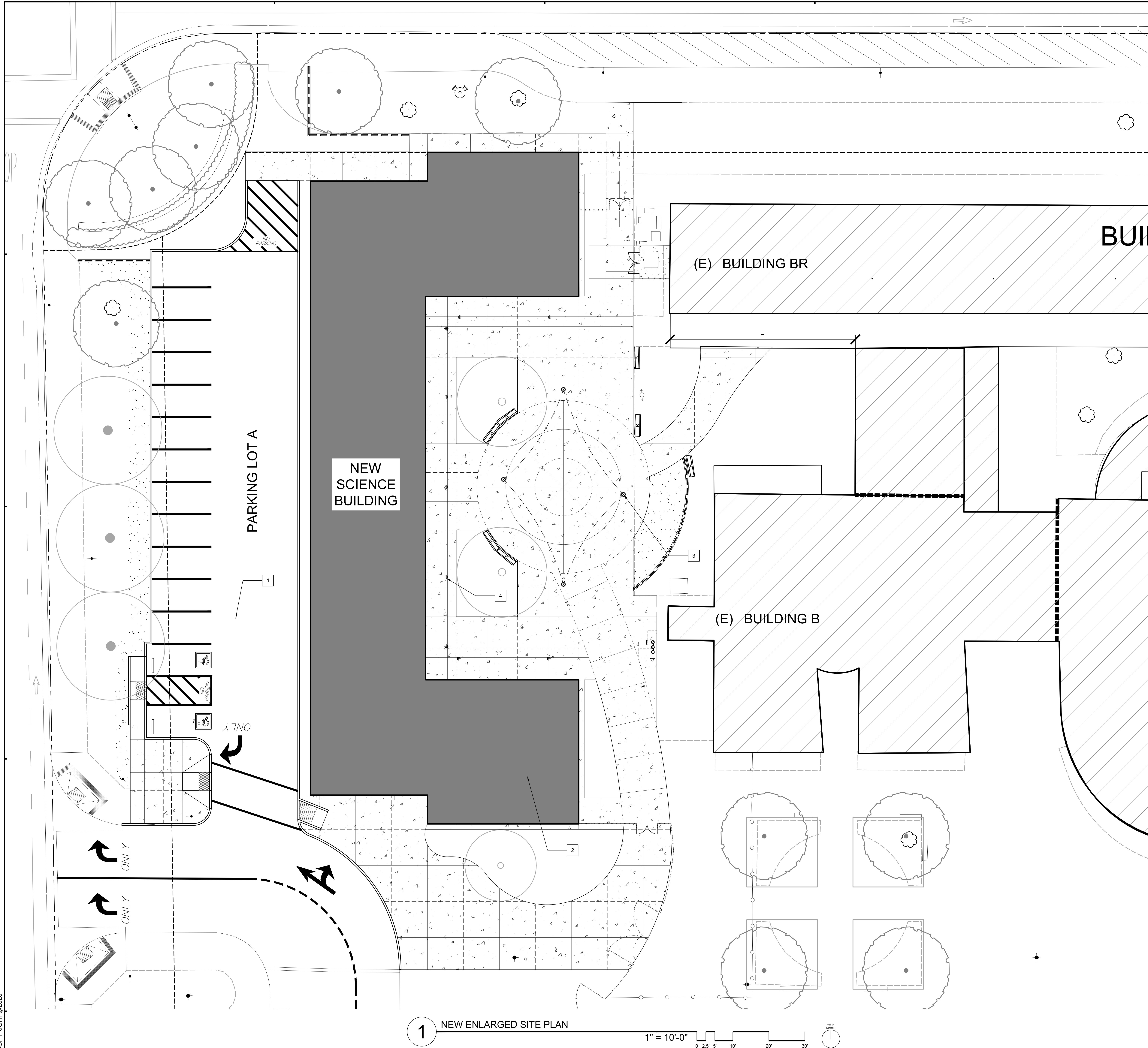
---	EXISTING PROPERTY LINE		FIRE DEPARTMENT ACCESS.
- - - -	ROOF OVERHANG		FIRE DEPARTMENT ACCESS IS 20' OF WIDE AND RATED FOR 90,000 LBS.
- - - -	CHAIN LINK FENCE		
- - - -	WOOD FENCE		
- - - -	DECORATIVE FENCE		
- - - -	EXISTING BUILDING		
- - - -	NEW BUILDING		
		○	(E) DRY STAND PIPE
		⊕	(N) FIRE HYDRANT
		⊕+	(E) FIRE HYDRANT
		⊖	(E) SIGN

SITE PLAN
FIRE LIFE SAFETY COMPLIANCE

REVISIONS	NO.	ITEM	DATE
	1.	DSA SUBMITTAL	XX

DRAWN BY: NJ
CHECKED BY: DB
SFA JOB NO: 20008.03
DATE: 03/03/2021

2-T3



- GENERAL NOTES
- A. REFER TO ELECTRICAL, HVAC/PLUMBING DRAWINGS FOR EXTENT OF OTHER RELATED WORK.
 - B. PROVIDE TEMPORARY FENCING FOR THE ENTIRE AREA OF NEW WORK. COORDINATE IN FIELD WITH ARCHITECT.

- NEW SITE PLAN NOTES
- 1. VISITOR PARKING LOT (N.I.C.)
 - 2. NEW MODULAR SCIENCE BUILDING, SEE SHEET 2-A2.1
 - 3. NEW FABRIC SHADE STRUCTURE SEE SHEET 2-A2.2
 - 4. NEW PREMANUFACTURED SHADE STRUCTURE COLUMN, TYP. SEE SHEET 2-A2.2.

- GRAPHIC KEY
- NEW CHAINLINK FENCE
 - NEW DECORATIVE FENCE
 - EXISTING BUILDING
 - NEW MODULAR BUILDING

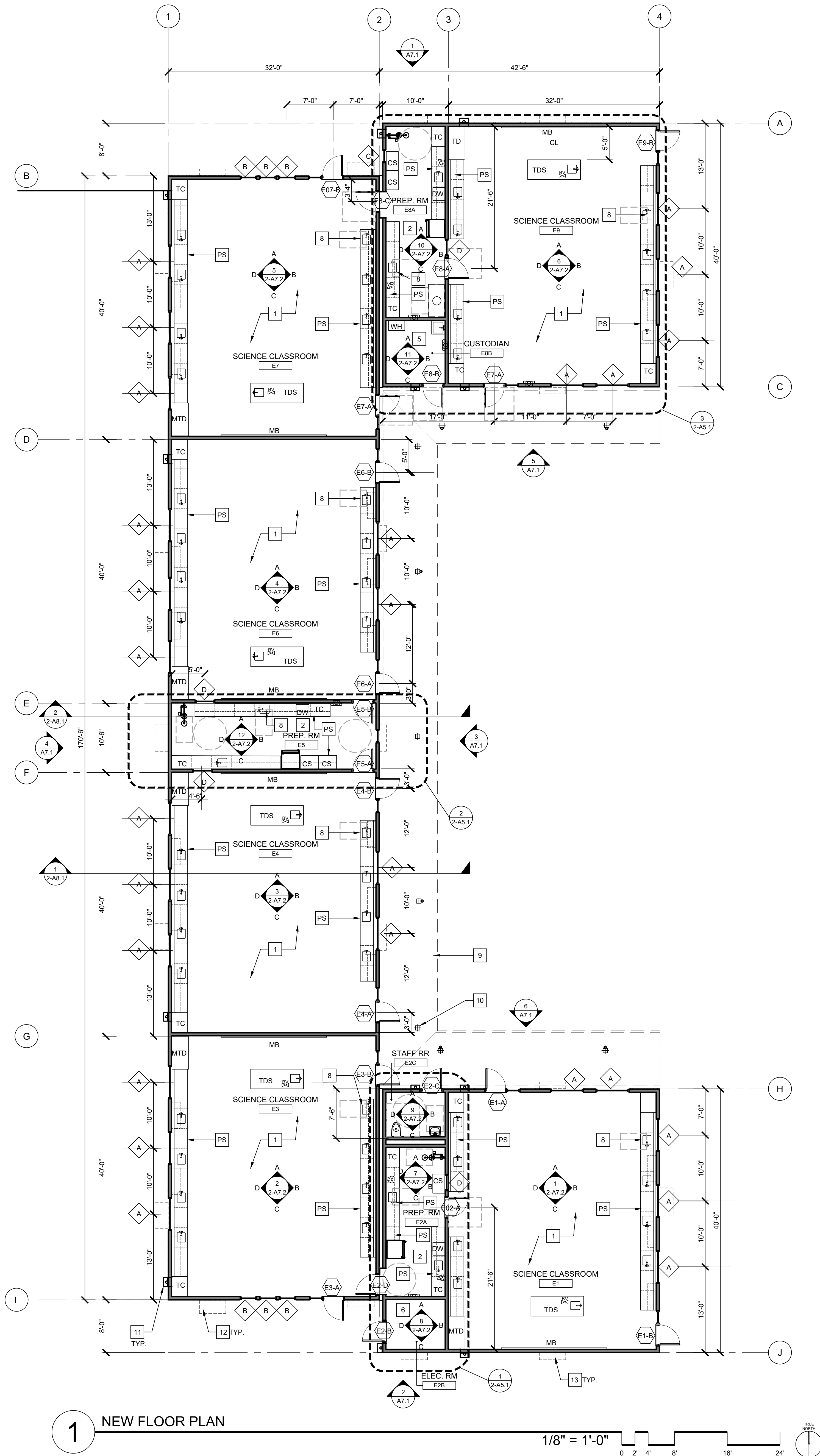


NEW ENLARGED SITE PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS	NO.	ITEM	DATE
	1.	BID SET	3-2021

DRAWN BY: NJ
CHECKED BY: DB
SFA JOB NO: 20008.03
DATE: 03/03/2021



1 NEW FLOOR PLAN

GENERAL NOTES

- A. REFER TO MECHANICAL, PLUMBING, ELECTRICAL, FIRE ALARM DRAWINGS FOR EXTENT OF OTHER RELATED WORK.
- B. ALL EXTERIOR STUD WALLS SHALL HAVE R-19 INSULATION.
- C. ALL INTERIOR STUD WALLS SHALL HAVE R-19 ACOUSTICAL INSULATION.
- D. PROVIDE 'EXIT' SIGNS AT INTERIOR OF ALL CLASSROOMS AT EGRESS EXIT DOOR.
- E. PROVIDE PLUMBING/ELECTRICAL PONY WALL BEHIND CASEWORK, TYP.
- F. CONCRETE FOOTING PER MODULAR MANUFACTURER REQUIREMENTS AND GEOTECHNICAL REPORT.
- G. COORDINATE FINAL LOCATION OF GROUND VENTS AND ACCESS VENTS IN FIELD WITH CIVIL, ARCHITECT AND MODULAR BUILDING MANUFACTURER.
- H. PROVIDE ROLLER SHADES AT ALL EXTERIOR WINDOWS.
- I. CONNECT ALL DOWNSPOUTS TO THE NEAREST UNDERGROUND STORM LINE.
- J. PROVIDE CONC. MOW BAND BUILDING PERIMETER U.O.N., REFER TO CIVIL AND LANDSCAPE DRAWINGS.
- K. PROVIDE A 3" MIN. BUILDING CONCRETE PAD (RAT SLAB) OVER VAPOR BARRIER, AND DRAIN SYSTEM TYP.
- L. REFER TO SHADE STRUCTURES PC DRAWINGS FOR CONCRETE FOOTING REQUIREMENTS, SITE CONTRACTOR TO COORDINATE INSTALLATION.

NEW FLOOR PLAN NOTES

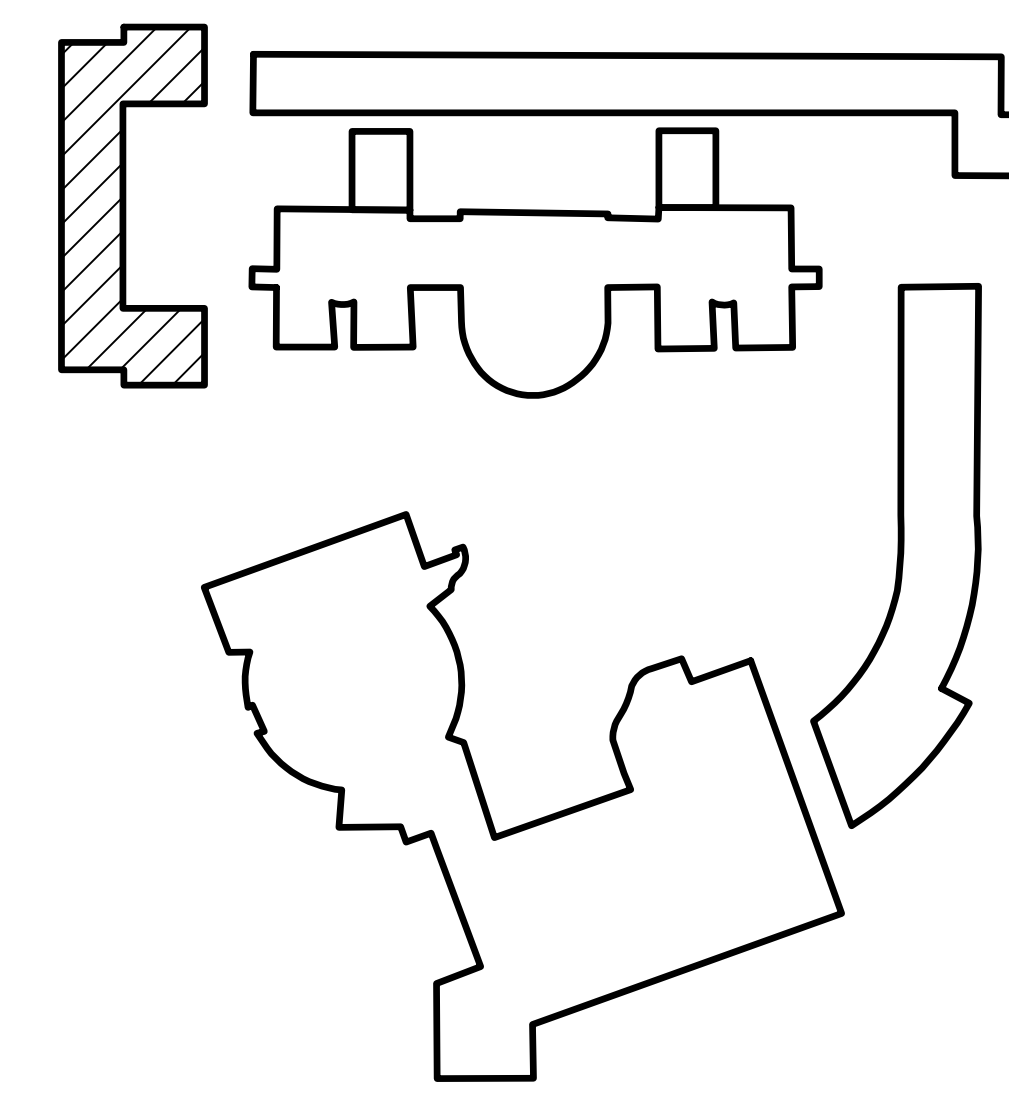
- 1. SCIENCE CLASSROOM TYP., SEE INTERIOR ELEVATIONS, AND ENLARGED FLOOR PLAN 3/2-A5.1 FOR TYPICAL NOTES.
- 2. PREP. ROOM, SEE ENLARGED FLOOR PLANS SHEET 2-A5.1 FOR TYPICAL NOTES.
- 3. 24"x48" VENT WITH METAL GRATE, TYP.
- 4. 12"x48" VENT WITH METAL GRATE, TYP.
- 5. CUSTODIAN ROOM, SEE ENLARGED PLAN 3/2-A5.1.
- 6. ELECTRICAL ROOM, SEE ELECTRICAL DWGS. FOR ELECTRICAL EQUIPMENT IN THIS ROOM.
- 7. ACCESSIBLE STAFF RESTROOM, SEE INTERIOR ELEVATIONS 9/2-A7.2.
- 8. ACCESSIBLE SINK.
- 9. EDGE OF SHADE STRUCTURE, REFER TO MANUFACTURER PC-DRAWINGS.
- 10. SHADE STRUCTURE COLUMN, TYP. SEE MANUFACTURER PC-DRAWINGS.
- 11. SCUPPER/RAIN WATER LEADER, TYP.
- 12. RAIN WATER LEADER, TYP.

GRAPHIC KEY

- TC TALL CABINET
- TDS SCIENCE INSTRUCTOR'S DESK
- MTD MOVABLE TEACHER'S DESK
- CS CHEMICAL STORAGE CABINET
- PS SCIENCE CABINETS
- MB MARKER BOARD

(N) STUD WALL

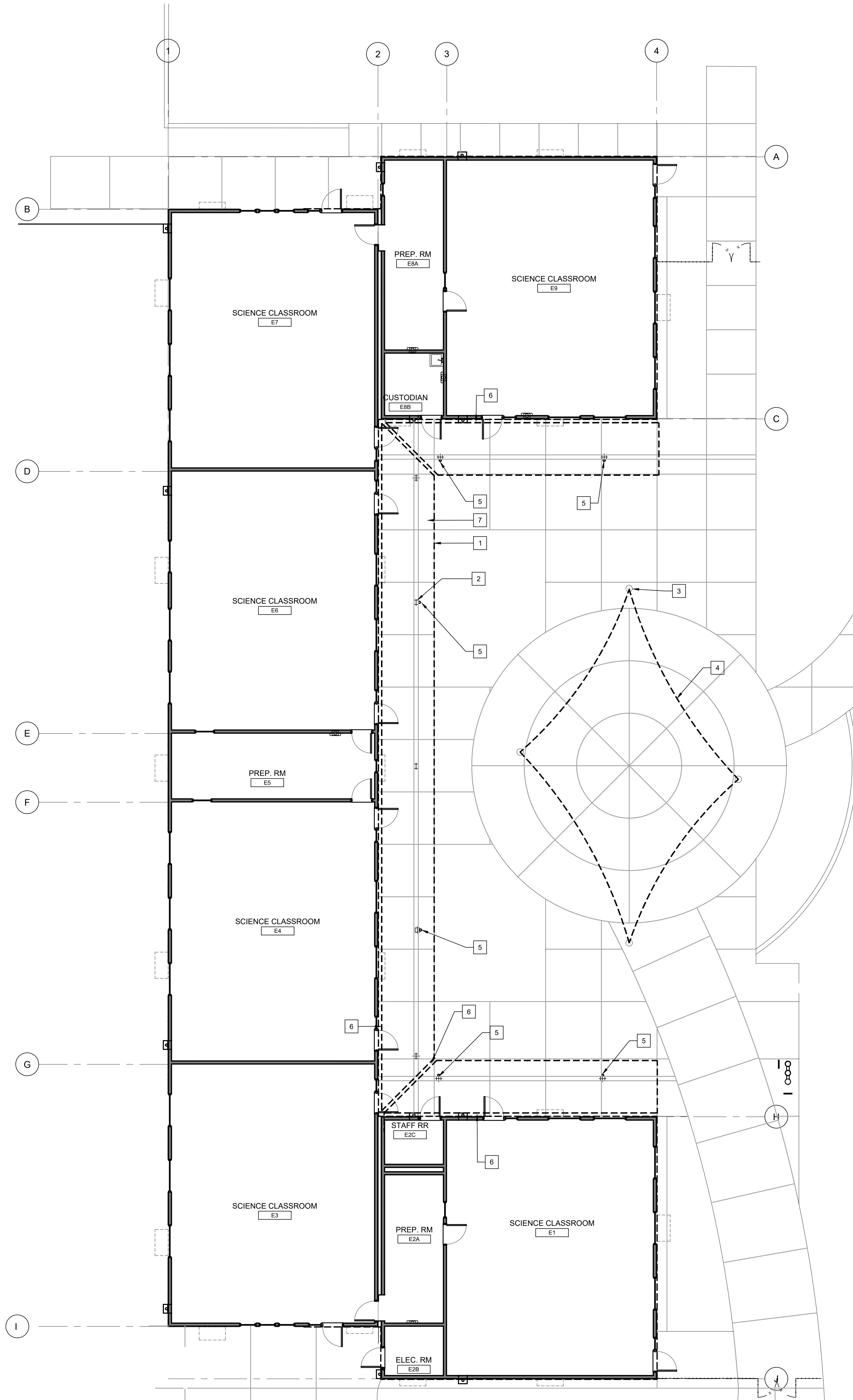
BUILDING KEY



NEW FLOOR PLANS

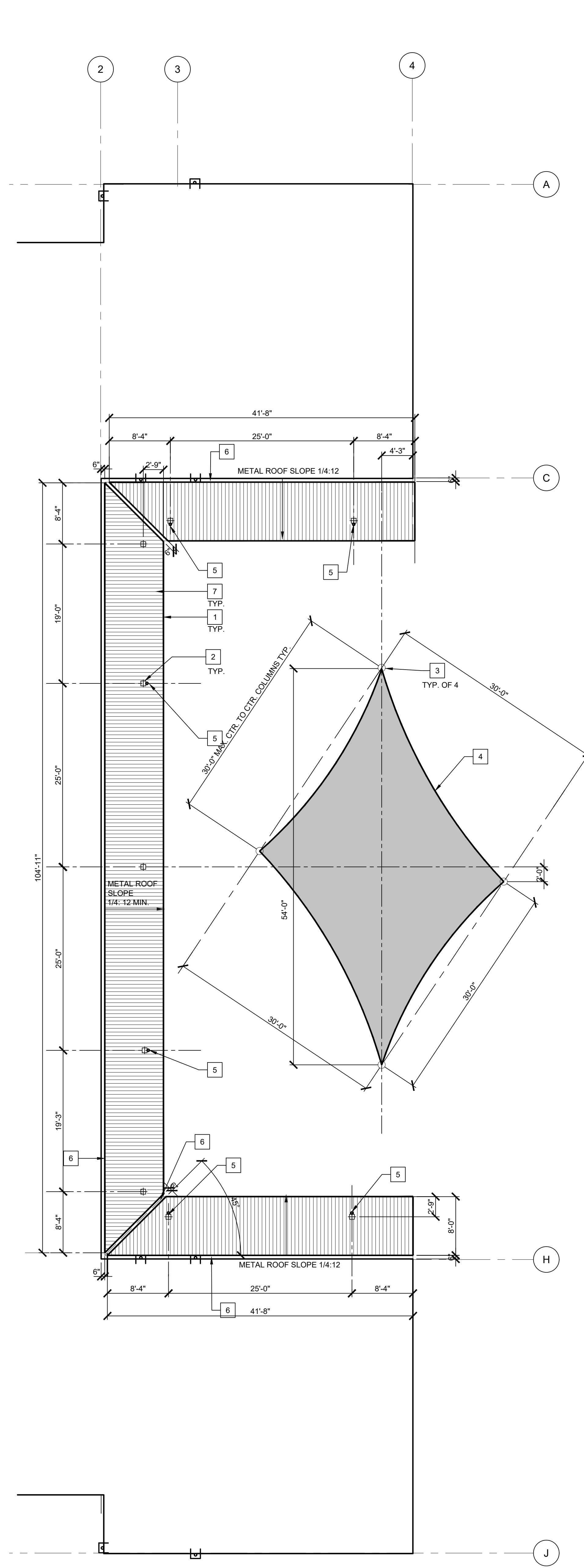
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DRAWN BY:	NJ
CHECKED BY:	DB
SFA JOB NO:	DATE:
20008.03	03/03/2021



1 NEW FLOOR PLAN - SHADE STRUCTURES

1/8" = 1'-0"
0 2' 4' 8' 16' 24'



2 SHADE STRUCTURES LAYOUT PLAN

1/8" = 1'-0"
0 2' 4' 8' 16' 24'

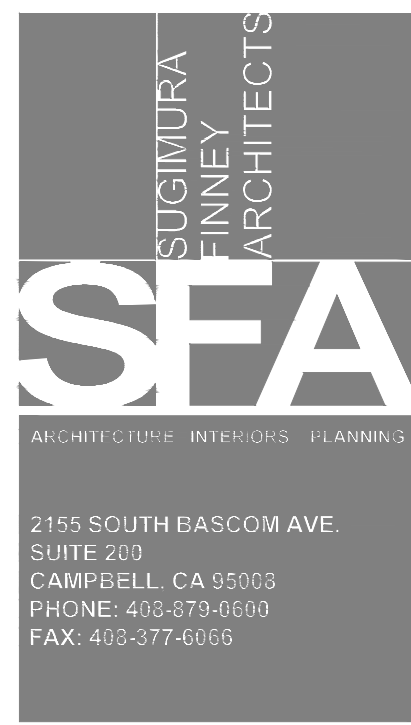
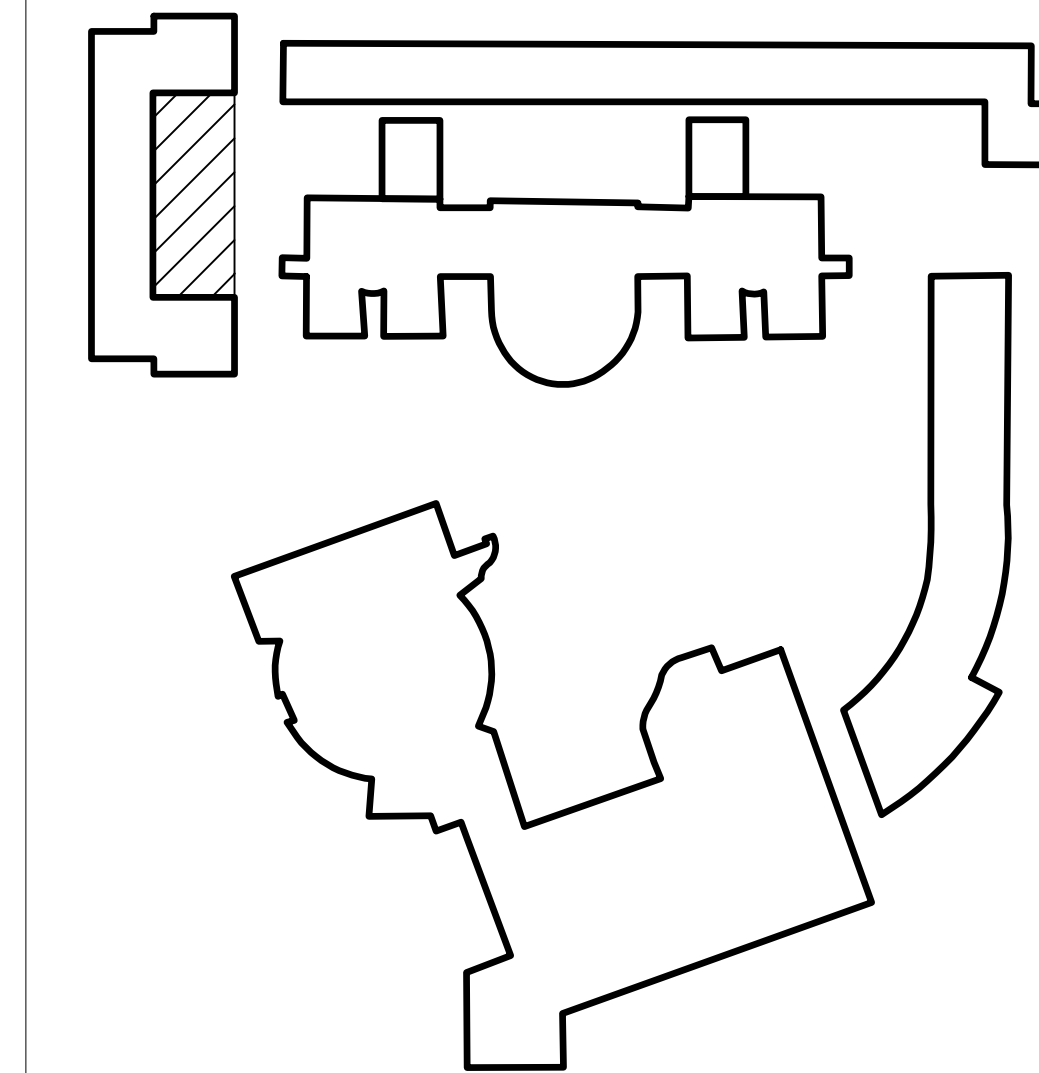
GENERAL NOTES

- REFER TO USA FABRIC SHADE STRUCTURE DSA - PC 04-117140 FOR EXTENT OF WORK. BID ALTERNATE -1.
- REFER TO SINGLE POST WALKWAY COVER BY VALLEY SCHOOL SHELTERS OR EQUAL FOR EXTENT OF WORK.
- ALL SHADE STRUCTURES COMPONENTS TO BE PAINTED INCLUDING COLUMNS, BEAMS, RAIN WATER LEADERS, GUTTERS, FASCIA, METAL DECK, COLORS TO BE SELECTED BY ARCHITECT.
- SHADE STRUCTURES MUST PROVIDE CURRENT CODE DSA APPROVED PC.

NEW FLOOR PLAN NOTES

- SINGLE POST WALKWAY COVER TYP., REFER TO MANUFACTURER VALLEY SCHOOL SHELTERS PC-DRAWINGS.
- HSS COLUMN AND CONCRETE FOOTING REFER. TO MANUFACTURER VALLEY SCHOOL SHELTERS PC-DRAWINGS.
- SHADE STRUCTURE COLUMN AND CONC. FOOTING, TYP. SEE USA MANUFACTURER DSA PC. 04-117140 DRAWINGS.
- FABRIC COVER, COLOR TO BE SELECTED BY OWNER.
- RAIN WATER LEADER, TYP. CONNECT TO NEAREST SS LINE.
- METAL ROOF CONTINUOUS EXPANSION JOINT COVER, TYP.
- BOX GUTTER TYP., BY SHADE STRUCTURE MANUFACTURER.

BUILDING KEY

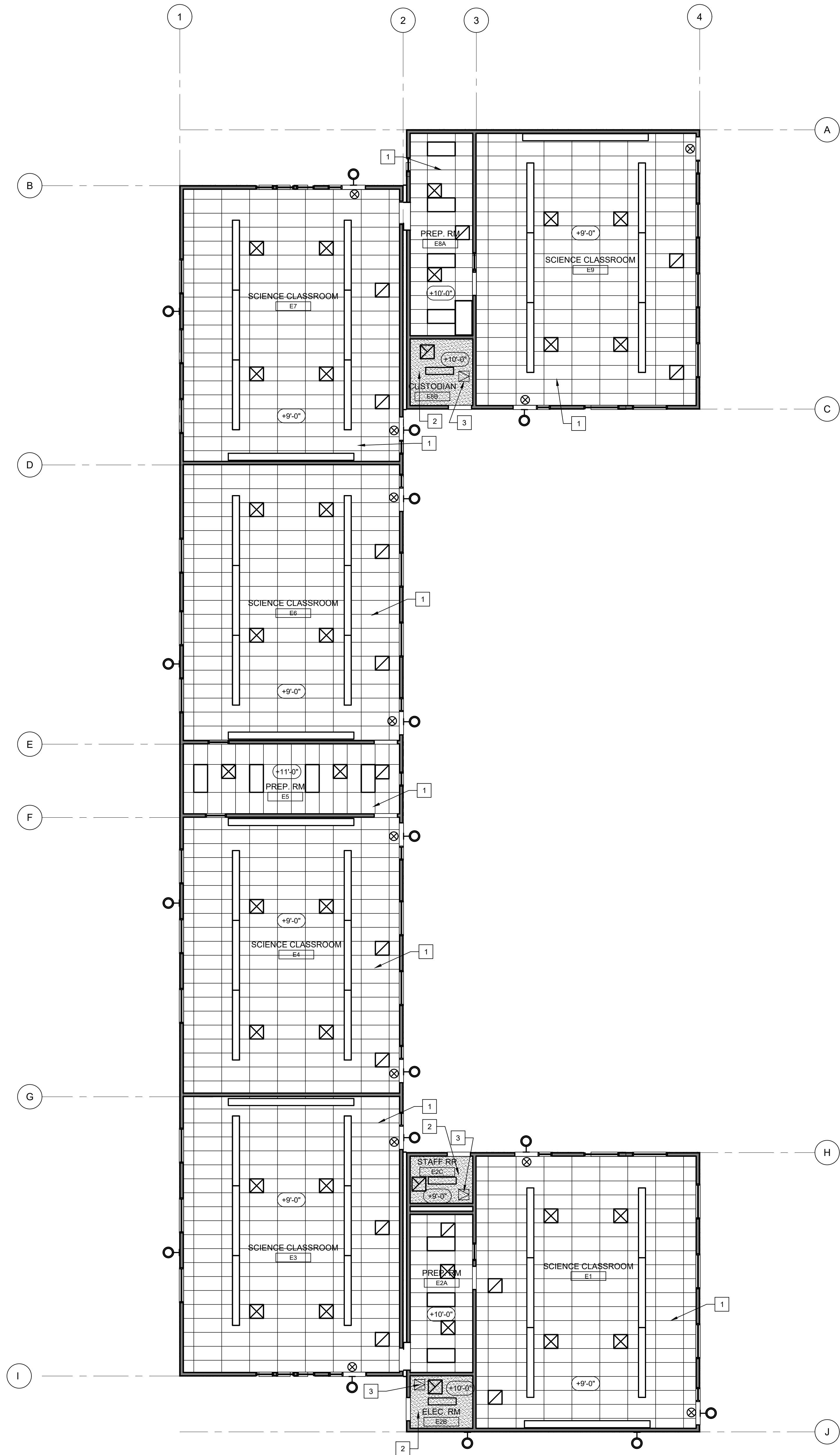


NEW FLOOR PLANS - SHADE STRUCTURES

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

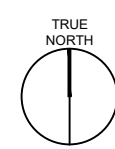
REVISIONS		
NO.	ITEM	DATE
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SFA JOB NO:	20008.03
DATE:	03/03/2021



1 REFLECTED CEILING PLAN

1/8" = 1'-0"



GENERAL NOTES

- A. ALL CEILING / ROOF FRAMING TO HAVE R-30 INSULATION.
B. REFER TO MECHANICAL, PLUMBING, ELECTRICAL DRAWINGS FOR EXTENT AND COORDINATION OF NEW WORK.
C. SEE FINISH SCHEDULE FOR CEILING FINISHES ON SHEET A6.3
D. PROVIDE CEILING ACCESS PANEL AT GYP. BOARD CEILING, TYP. CONTRACTOR TO VERIFY QUANTITIES AND TO COORDINATE LOCATIONS IN FIELD.

REFLECTED CEILING PLAN NOTES

1. SUSPENDED LAY-IN ACOUSTICAL PANEL SYSTEM, TYP.
2. GYP. BOARD PAINTED AT SUSPENDED CEILING SYSTEM, TYP.
3. ACCESS PANEL AT GYP. BOARD CEILING, TYP. COORDINATE LOCATION.

GRAPHIC KEY

24"x24" CEILING ACCESS PANEL TYP. AT GYP. BD. CEILING SYSTEM

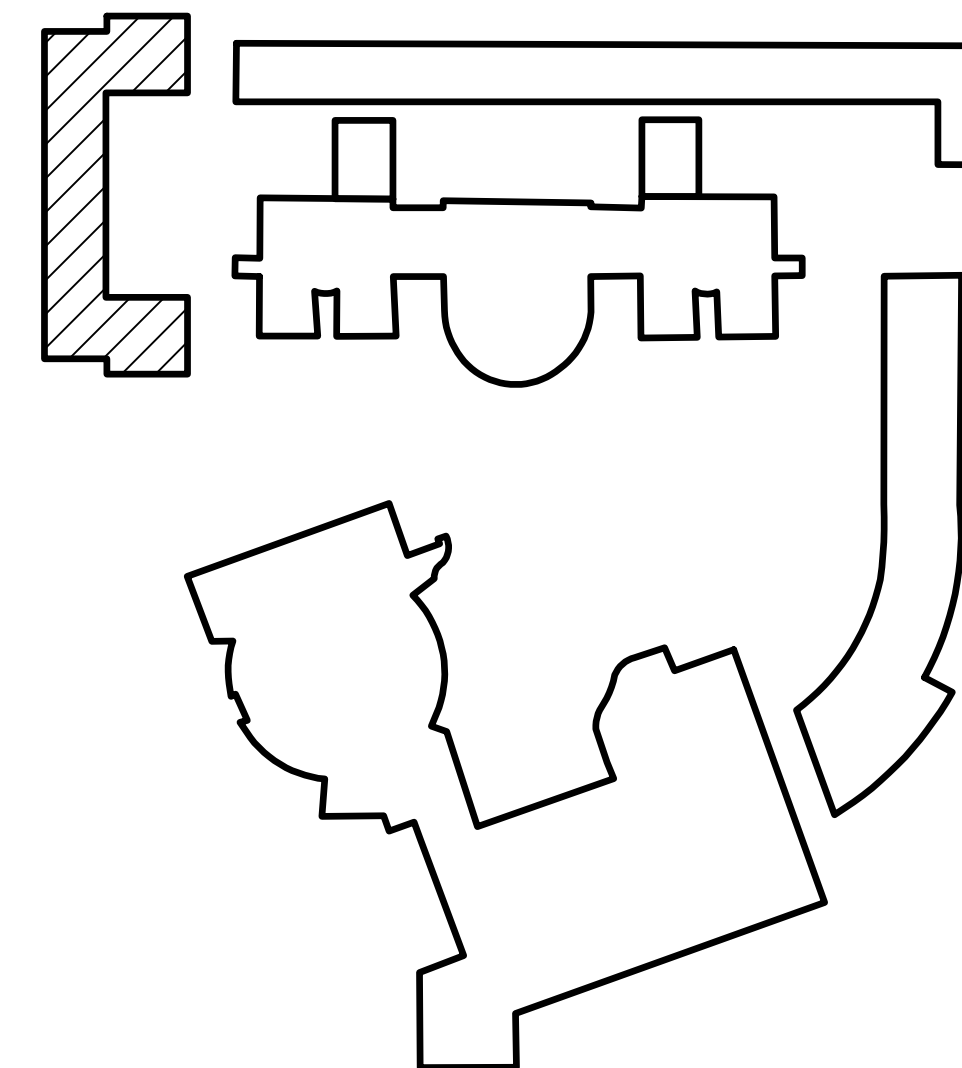
MECHANICAL

- SUPPLY DIFFUSER
RETURN AIR GRILLE
EXHAUST GRILLE

ELECTRICAL

- SUSPENDED LED FIXTURE
2' X 4' LED FIXTURE
SURFACE MOUNT LED FIXTURE
WALL SCONCE LED FIXTURE
EXIT LIGHT

BUILDING KEY



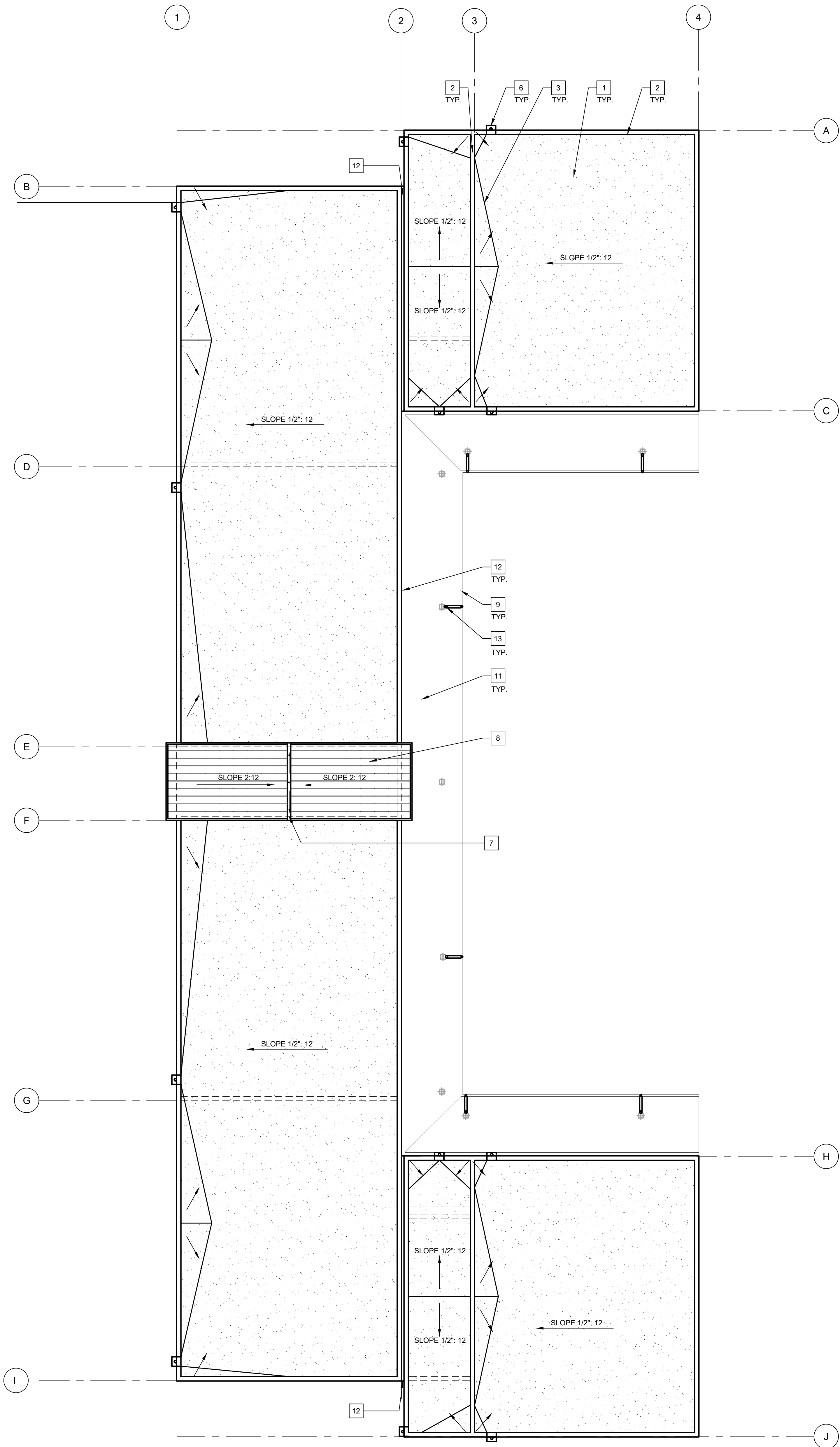
REFLECTED CEILING PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
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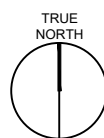




1 ROOF PLAN

1/8" = 1'-0"

0 2' 4' 8' 16' 24'



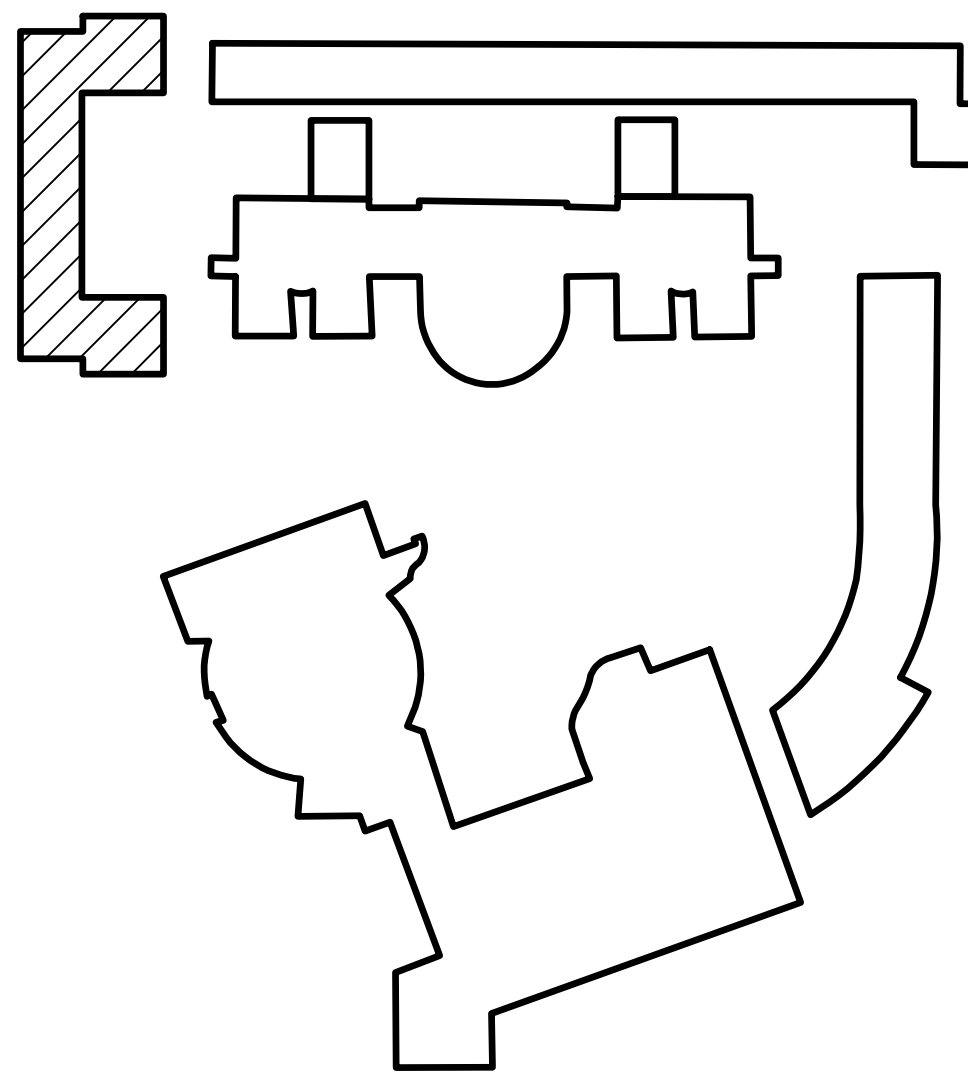
GENERAL NOTES

- A. PROVIDE R-30 INSULATION AT ROOF FRAMING, TYP.
- B. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED.
- C. ALL ROOF SYSTEMS ARE TO BE CLASS "A".
- D. CONNECT ALL RAIN WATER LEADERS/DOWNSPOUTS TO NEAREST STORM DRAIN LINE, TYP.
- E. PROVIDE SPLASH BLOCKS AT INTERSECTION WITH LOWER ROOF, TYP.
- F. PROVIDE ROOF CRICKETS AT HIGH SIDE OF ALL ROOF MOUNTED EQUIPMENT, TYP.
- G. PAINT ALL SCUPPERS, DOWNSPOUTS, GUTTERS, PARAPET COPING, PIPING, TYP.
- H. REFER TO MECHANICAL DWGS. FOR LOCATION OF HVAC ROOFTOP UNITS.

ROOF PLAN NOTES

- 1. BUILT-UP ROOFING SYSTEM, CLASS "A"
- 2. PARAPET CAP FLASHING, TYP.
- 3. CRICKET, TYP.
- 4. MECHANICAL UNIT.
- 5. TRAFFIC PADS, TYP.
- 6. ROOF SCUPPER SYSTEM, TYP.
- 7. BUTTERFLY VALLEY GUTTER.
- 8. STANDING SEAM METAL ROOF SYSTEM.
- 9. SHADE STRUCTURE METAL GUTTER, TYP.
- 10. WALKWAY PADS, TYP.
- 11. COVERED WALKWAY METAL ROOF SYSTEM.
- 12. ROOF EXPANSION JOINT COVERS, TYP.
- 13. RAIN WATER LEADER, TYP.
- 14. ROOF HATCH.

BUILDING KEY



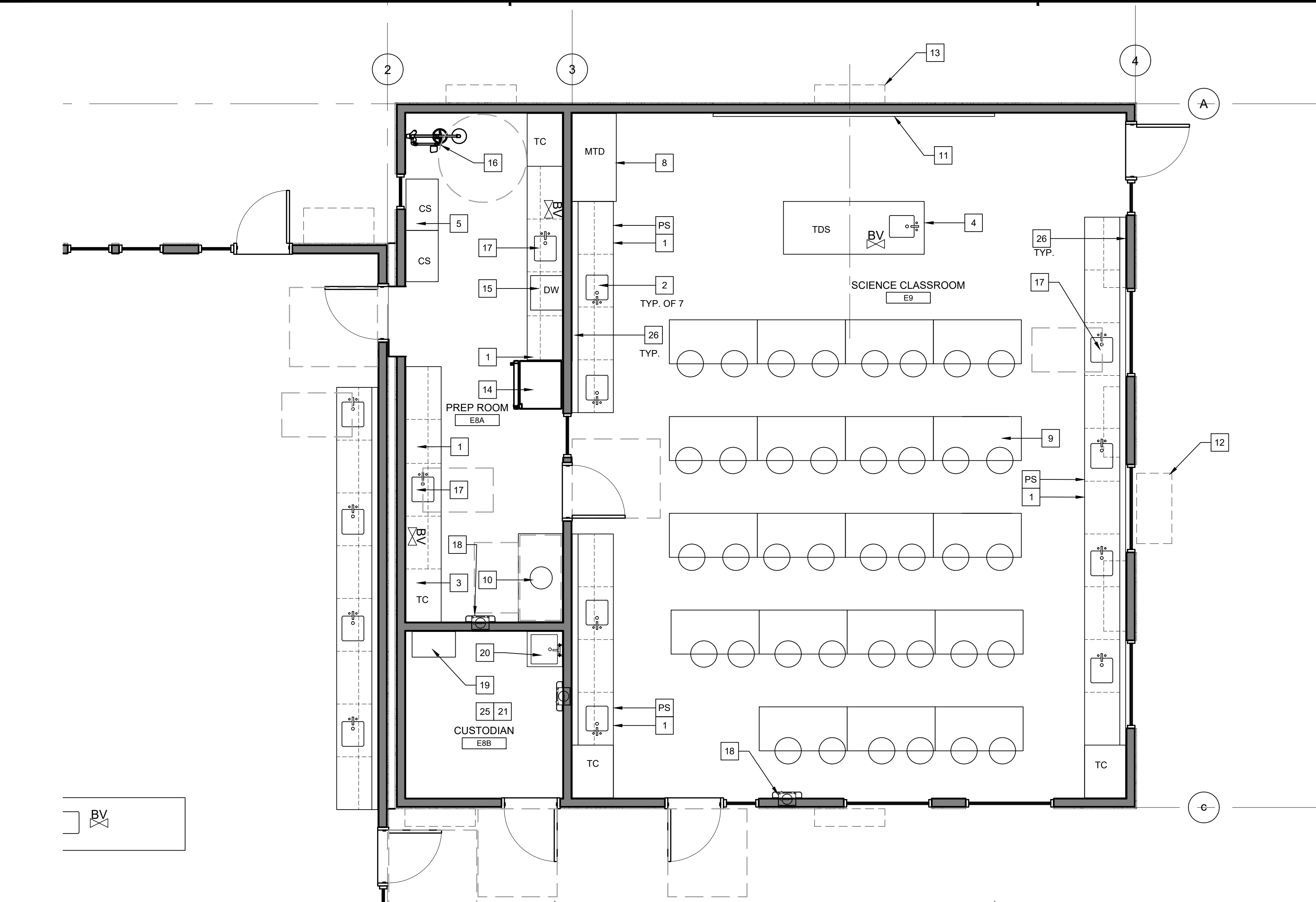
ROOF PLAN

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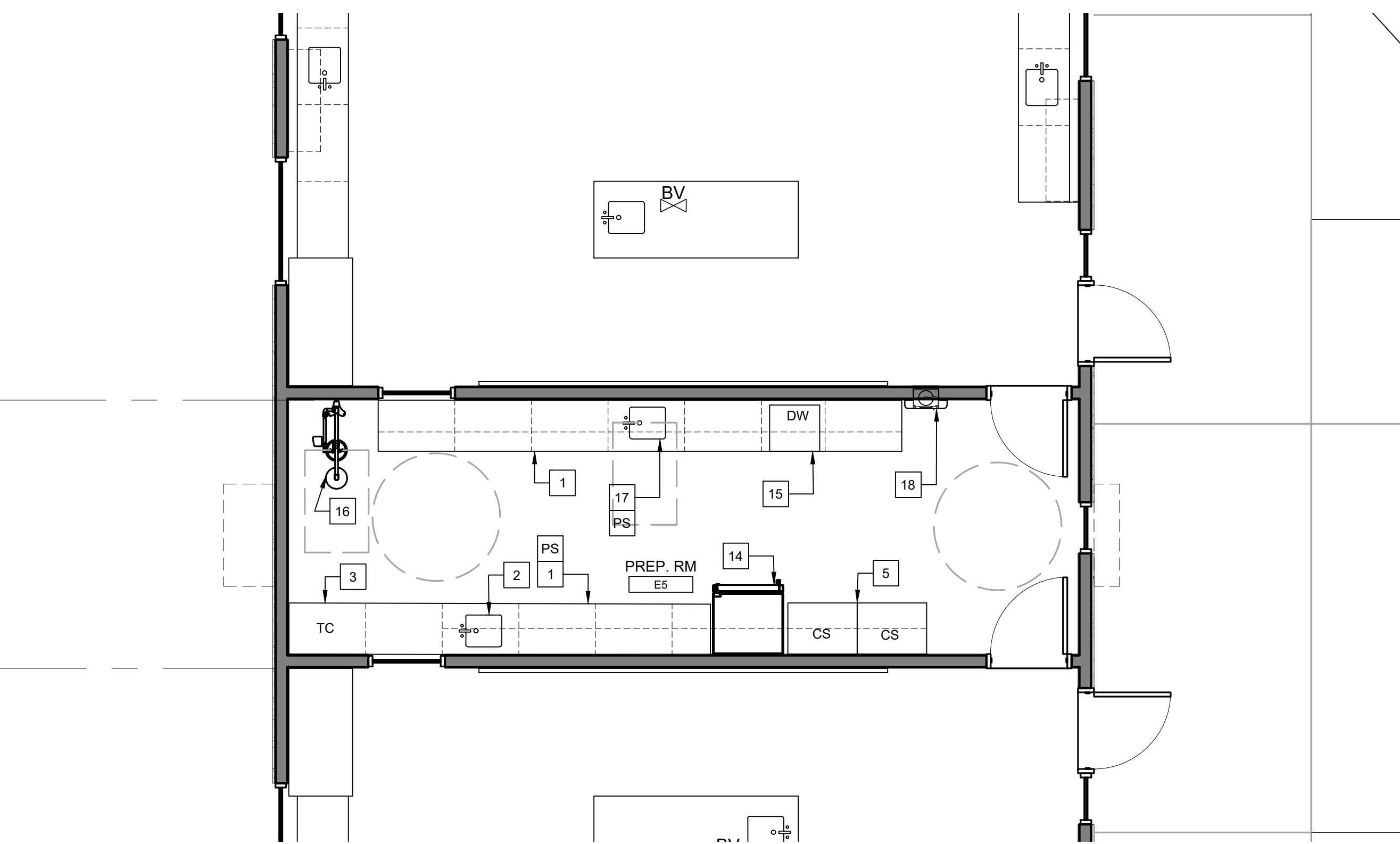
THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT





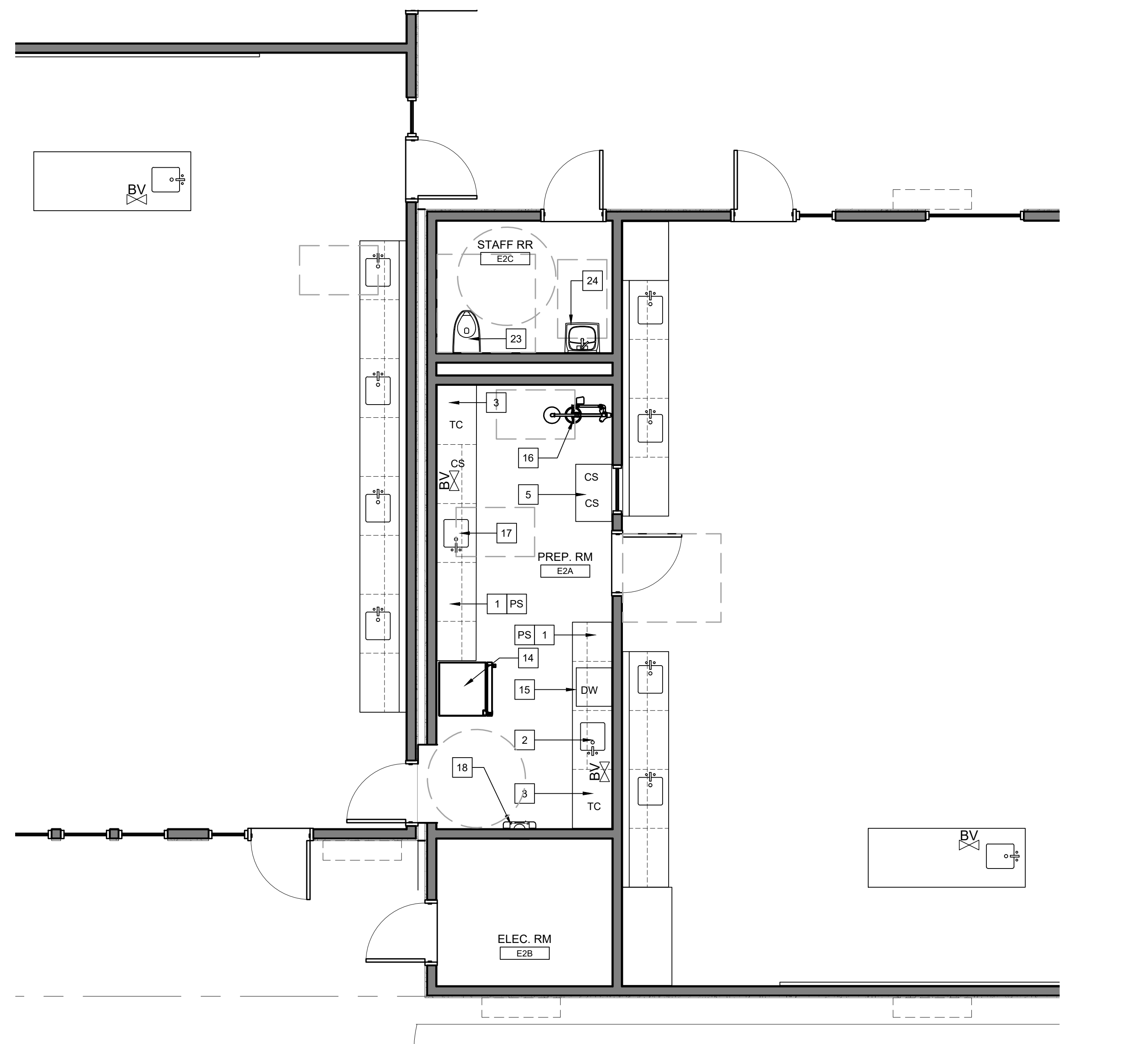
3 TYPICAL CLASSROOM - ENLARGED FLOOR PLAN

1/4" = 1'-0"



2 PREP ROOM E5 - ENLARGED FLOOR PLAN

1/4" = 1'-0"



1 PREP ROOM E2A - ENLARGED FLOOR PLAN

1/8" = 1'-0"

GENERAL NOTES

- REFER TO MECHANICAL, PLUMBING, ELECTRICAL, FIRE ALARM DRAWINGS FOR EXTENT OF OTHER RELATED WORK.
- ALL (N) EXTERIOR STUD WALLS SHALL HAVE R-19 INSULATION.
- ALL (N) INTERIOR STUD WALLS SHALL HAVE R-19 ACOUSTICAL INSULATION.
- ALL (N) INTERIOR WALLS ARE TO EXTEND TO STRUCTURAL DECK ABOVE, WITH FINISHES ON BOTH SIDES.
- PROVIDE 'EXIT' SIGNS AT INTERIOR OF ALL CLASSROOMS AT EGRESS EXIT DOOR.
- PROVIDE PLUMBING/ELECTRICAL PONY WALL BEHIND CASEWORK, TYP.

NEW FLOOR PLAN NOTES

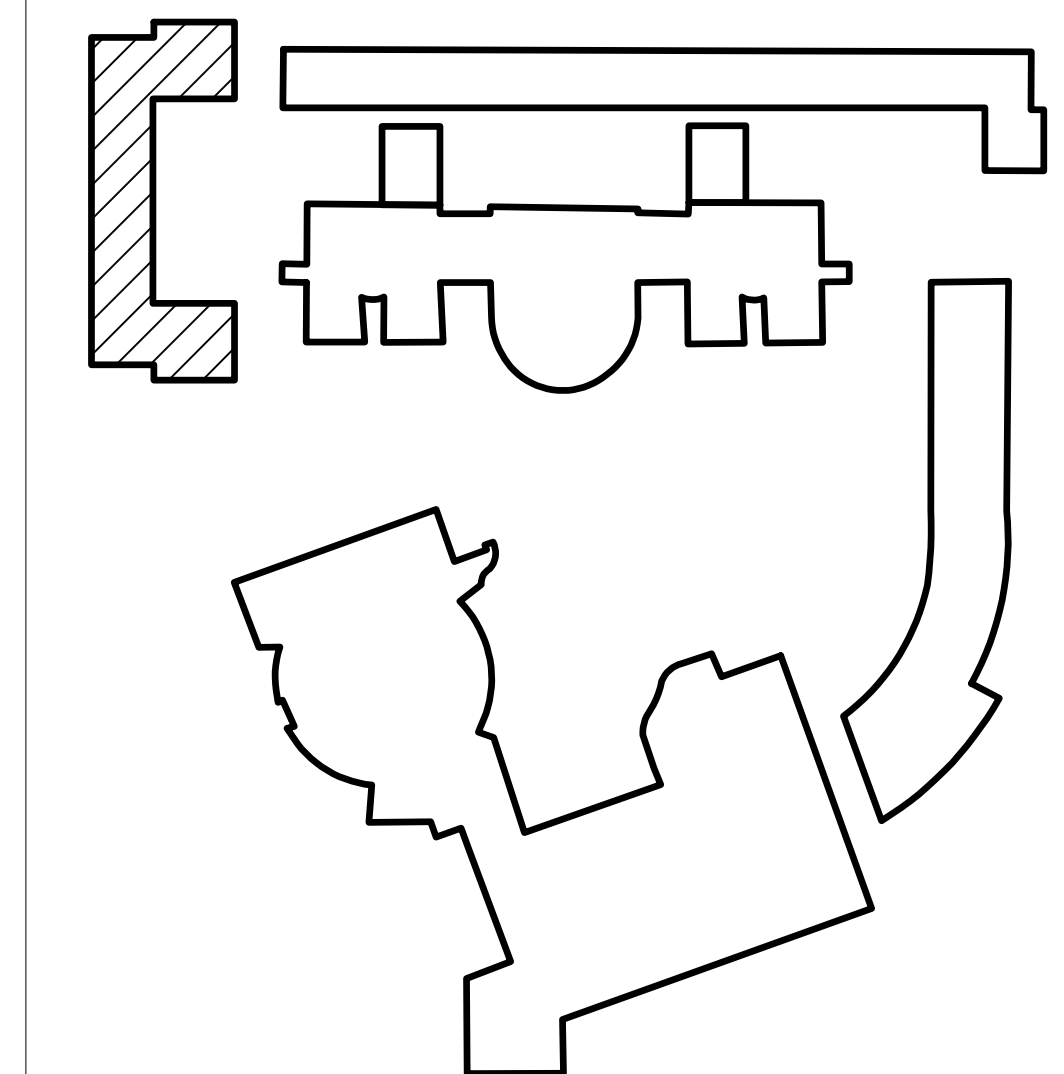
- SCIENCE CASEWORK TYP. - SEE INTERIOR ELEVATIONS.
- SCIENCE COUNTERTOPS AND INTEGRAL EPOXY RESIN SINK, TYP.
- TALL CABINET, (TC)
- SCIENCE INSTRUCTOR'S DESK, H34"xW96"xD30", (TDS).
- CHEMICAL STORAGE CABINET.
- WALL MOUNTED MARKERBOARD.
- RECESSED FIRE EXTINGUISHER CABINET.
- MOVABLE/ADJUSTABLE TEACHER'S DESK, W60"xD30"xH24"-36".
- STUDENT MOVABLE/ADJUSTABLE SCIENCE TABLE W60xD30xH24"-36", (19) TABLES AND (38) SEATING STOOLS PER CLASSROOM TYP.
- (E)RELOCATED FUME HOOD, SEE MECH. DWGS. FOR EXHAUST REQUIREMENTS.
- WALL MOUNTED WHITE BOARDS.
- 24"x48" VENT, TYP.
- 12"x48" VENT, TYP.
- REFRIGERATOR.
- UNDERCOUNTER GLASSWARE.
- BARRIER FREE COMBINATION DRENCH SHOWER/EYEWASH, PROVIDE FLOOR DRAIN, TYP.
- SCIENCE COUNTERTOPS AND ACCESSIBLE EPOXY RESIN SINK.
- RECESSED FIRE EXTINGUISHER CABINET.
- TANKLESS WATER HEATER.
- SERVICE SINK AND MOP RACK.
- SEE ELECTRICAL DWGS. FOR ELECTRICAL EQUIPMENT IN THIS ROOM.
- REFER TO TYPICAL ENLARGED SCIENCE CLASSROOM FLOOR PLAN 4/- FOR TYPICAL NOTES.
- ACCESSIBLE TOILET FIXTURE.
- ACCESSIBLE LAVATORY.
- SEE PLUMBING DRAWINGS FOR FIRE RISER IN THIS ROOM.
- PLUMBING WALL, TYP.

GRAPHIC KEY

- | | |
|-----|---------------------------|
| TC | TALL CABINET |
| TDS | SCIENCE INSTRUCTOR'S DESK |
| MTD | MOVABLE TEACHER'S DESK |
| CS | CHEMICAL STORAGE CABINET |
| PS | SCIENCE CABINETS |
| MB | MARKER BOARD |
| BV | GAS VALVE |

(N) STUD WALL

BUILDING KEY



NEW ENLARGED FLOOR PLANS

REVISIONS	NO.	ITEM	DATE
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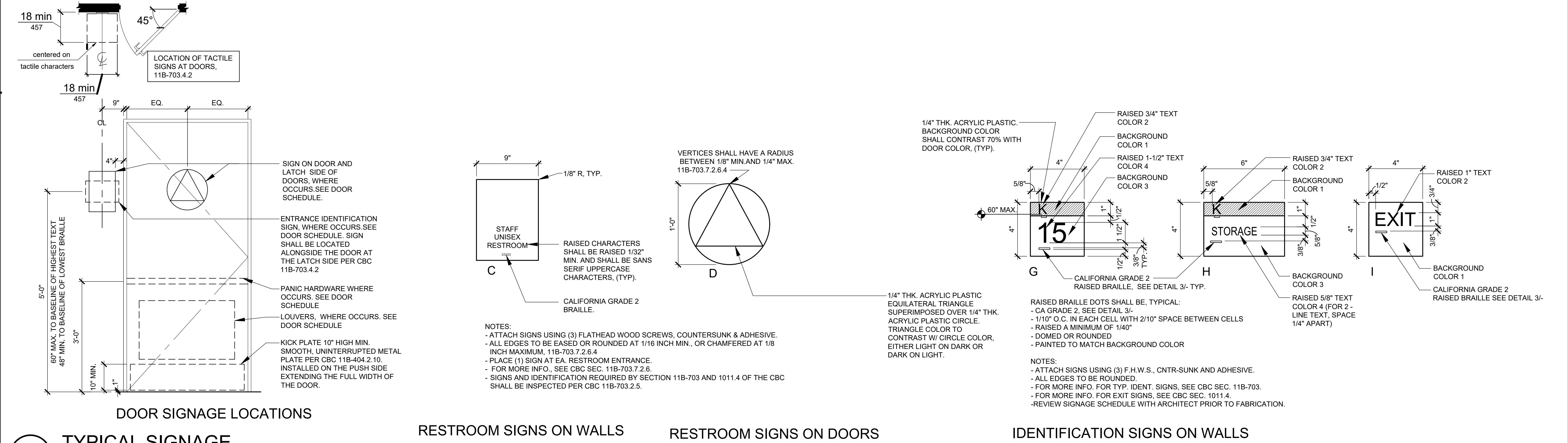
DRAWN BY:	NJ
CHECKED BY:	DB
SFA JOB NO:	DATE:
20008.03	03/03/2021

2-A5.1

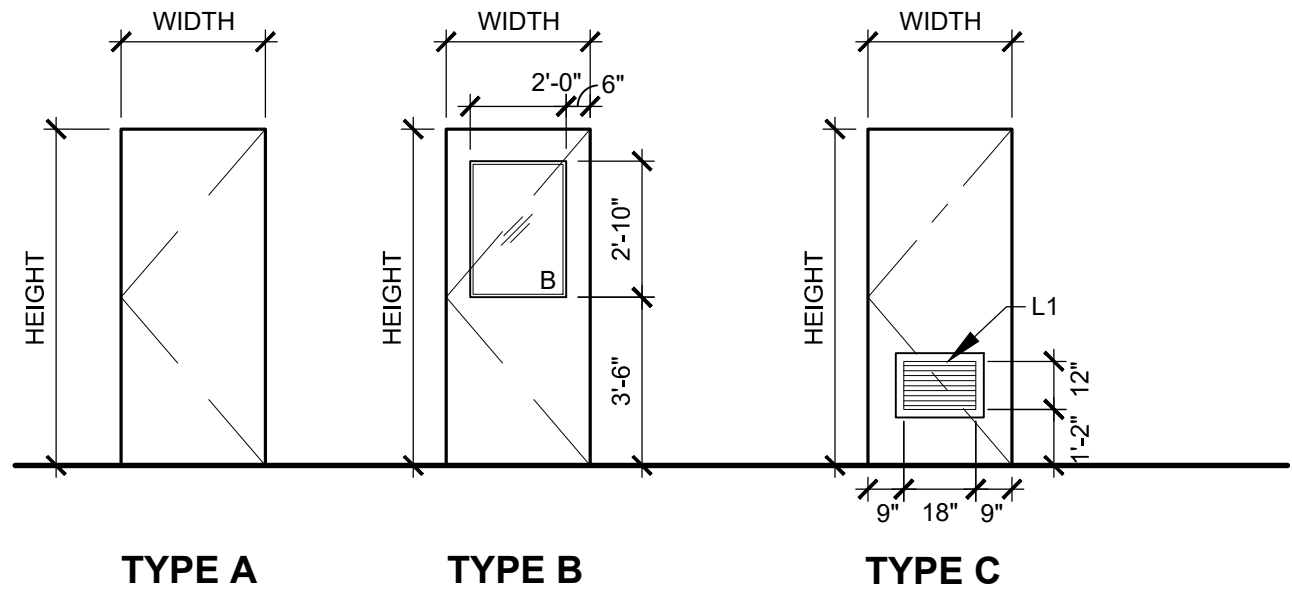
THOMAS S. HART MIDDLE SCHOOL -
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4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT



SIGNAGE TYPES

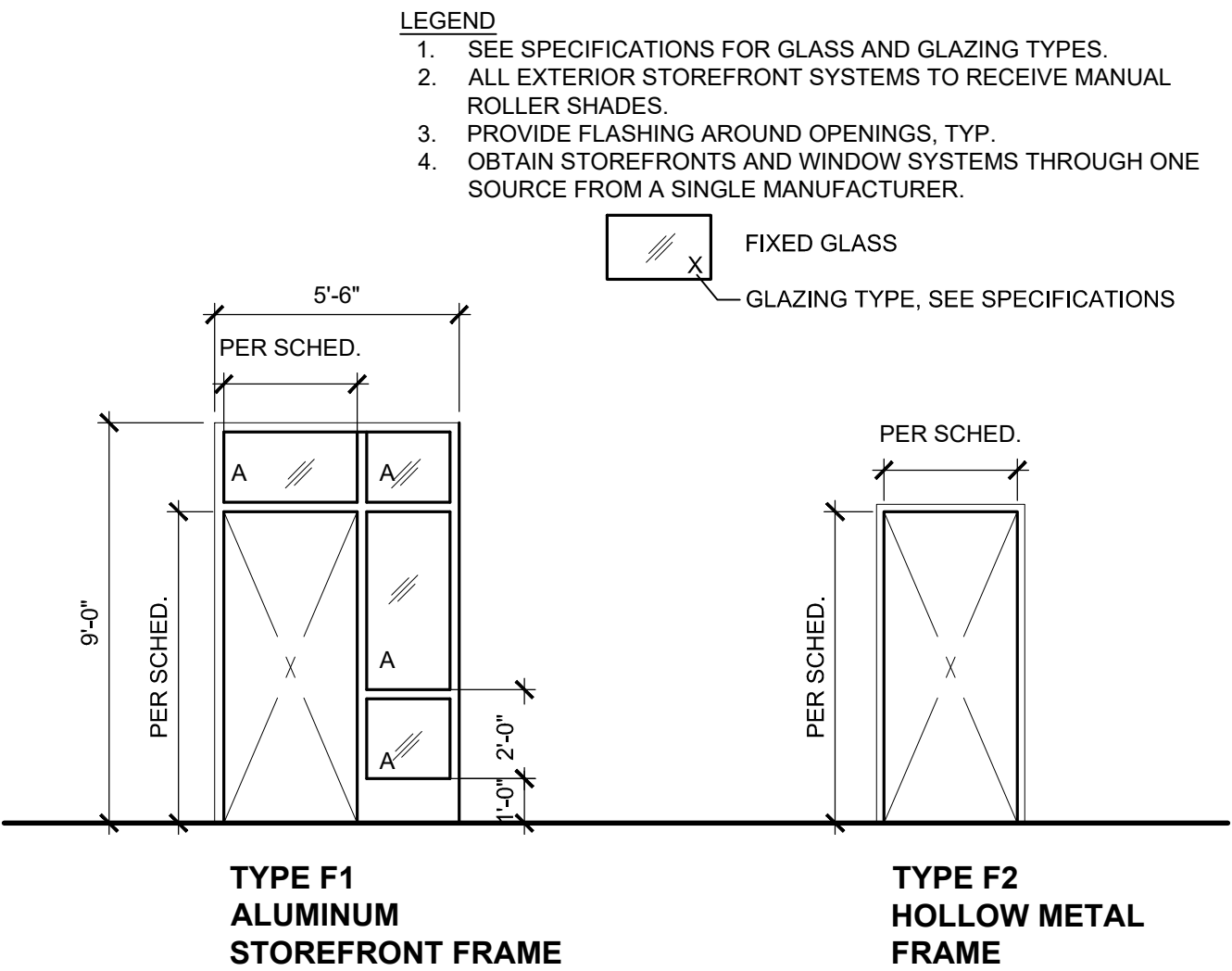


5 TYPICAL SIGNAGE



3 DOOR TYPES

1/4"=1'-0"



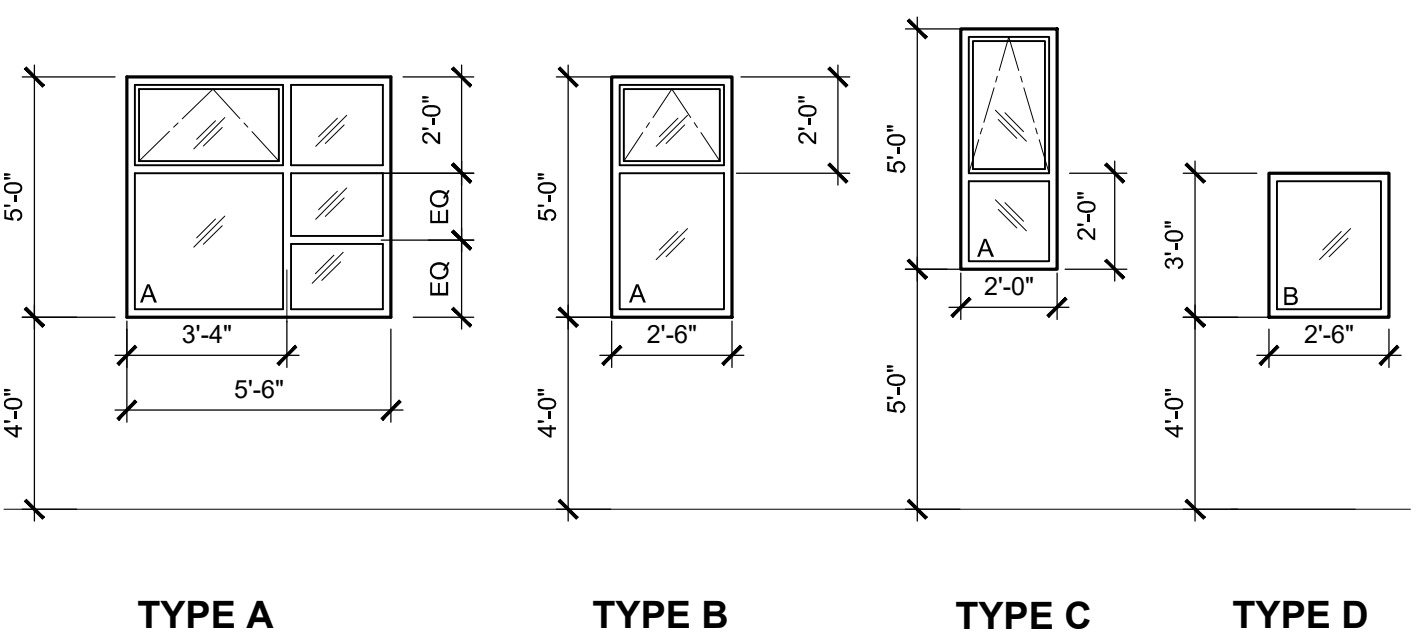
2 DOOR FRAME TYPES

1/4"=1'-0"

RESTROOM SIGNS ON WALLS

RESTROOM SIGNS ON DOORS

IDENTIFICATION SIGNS ON WALLS



4 ALUMINUM-FRAMED STOREFRONT/WINDOW TYPES

1/4"=1'-0"

ROOM	DOOR NO.	TYPE	DOOR SIZE - WIDTH X HEIGHT X THICKNESS	DOOR		FRAME			FIRE RATING (MIN.-)	HARDWARE GROUP	SIGNAGE (SEE DETAIL 5/-)	
				MAT.	FINISH	TYPE	MAT.	FIN.			TYPES	TEXT
E1- SCIENCE CLASSROOM	E1-A	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-01
E1- SCIENCE CLASSROOM	E1-B	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-01
E2A- PREP. ROOM	E2-A	B	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	2	H	PREP. ROOM-2A
E2A- PREP. ROOM	E2-D	B	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	2	H	PREP. ROOM-2A
E2B-ELECTRICAL ROOM	E2-B	C	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	3	H	ELECTRICAL RM
E2C- STAFF RESTROOM	E2-C	A	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	4	C, D	STAFF UNISEX RESTROOM
E3 - SCIENCE CLASSROOM	E3-A	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-3
E3- SCIENCE CLASSROOM	E3-B	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-3
E4- SCIENCE CLASSROOM	E4-A	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-4
E4- SCIENCE CLASSROOM	E4-B	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-4
E5- PREP. ROOM	E5-A	B	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	1	H	PREP. ROOM-E5
E5- PREP. ROOM	E5-B	A	3'-0"x7'-0"	HM	PTD	F1	HM	PTD	---	1	H	PREP. ROOM-E5
E6- SCIENCE CLASSROOM	E6-A	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-6
E6- SCIENCE CLASSROOM	E6-B	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-6
E7- SCIENCE CLASSROOM	E7-A	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-7
E7- SCIENCE CLASSROOM	E7-B	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-7
E8A- PREP. ROOM	E8-A	B	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	2	H	PREP. ROOM-8A
E8A- PREP. ROOM	E8-C	B	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	2	H	PREP. ROOM-8A
E8B-CUSTODIAN ROOM	E8-B	C	3'-0"x7'-0"	HM	PTD	F2	HM	PTD	---	3	H	CUSTODIAN
E9- SCIENCE CLASSROOM	E9-A	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-9
E9- SCIENCE CLASSROOM	E9-B	A	3'-0"x7'-0"	ALUM	C.A.	F1	ALUM	C.A.	---	1	G, I	E-9

1 DOOR SCHEDULE

LEGEND

ALUM - ALUMINUM

PTD - PAINTED

HM - HOLLOW METAL

C.A. - CLEAR ANODIZED

DOOR/WINDOW SCHEDULES AND DOOR SIGNAGE

NO.	ITEM	DATE
1.	BID SET	3-2021

DRAWN BY:	NJ
CHECKED BY:	DB
SFA JOB NO:	DATE:
20008.03	03/03/2021

2-A6.1

SUGIMURA
FINNEY
ARCHITECTS

SFA

ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95003
PHONE: 408-579-6003
FAX: 408-377-6050

REGISTERED ARCHITECT
MARK C. FINNEY
NO. C-24573
STATE OF CALIFORNIA

ROOM NO.	FLOOR		WALLS			CEILING	NOTES	LEGEND
	FIN.	BASE	MAT.	FIN.				
E1- SCIENCE CLASSROOM	1A	2A	3A	3B	3C			FLOORING 1A- VINYL COMPOSITION TILE 1B- CERAMIC TILE O/ BACKER CEMENT BOARD
E2A- PREP. ROOM	1A	2A	3A	3C	3D	3E	4A	
E2B-ELECTRICAL ROOM	1A	2A	3A	3D			4B	BASE 2A- 4" RUBBER TOPSET COVE BASE 2B- 4" CERAMIC TILE COVE BASE
E2C- STAFF RESTROOM	1B	2B	3A	3D	3E		4B	
E3 - SCIENCE CLASSROOM	1A	2A	3A	3B	3C		4A	WALLS 3A- GYPSUM WALL BOARD 3B- VINYL TACKBOARD WALL PANELING 3C- VINYL WALL COVERING 3D- PAINT 3E- CERAMIC TILE OBACKER CEMENT BOARD 3F- FIBERGLASS REINFORCED WALL PANEL
E4- SCIENCE CLASSROOM	1A	2A	3A	3B	3C		4A	
E5- PREP. ROOM	1A	2A	3A	3C	3E		4A	
E6- SCIENCE CLASSROOM	1A	2A	3A	3B	3C		4A	
E7- SCIENCE CLASSROOM	1A	2A	3A	3B	3C		4A	CEILINGS 4A- SUSPENDED ACOUSTICAL PANELS 4B- GYPSUM BOARD PAINTED
E8A- PREP. ROOM	1A	2A	3A	3C	3D	3E	4A	
E8B-CUSTODIAN ROOM	1A	2A	3A	3D	3F		4B	
E9- SCIENCE CLASSROOM	1A	2A	3A		3B	3C	4A	

SUGIMURA
FINNEY
ARCHITECTS

SFA

ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95003
PHONE: 408-873-0000
FAX: 408-377-0000

SEAL OF THE ARCHITECT
MARK C FINNEY
NO. C-24873
EXPIRES 9-30-24
STATE OF CALIFORNIA

FINISH SCHEDULE

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

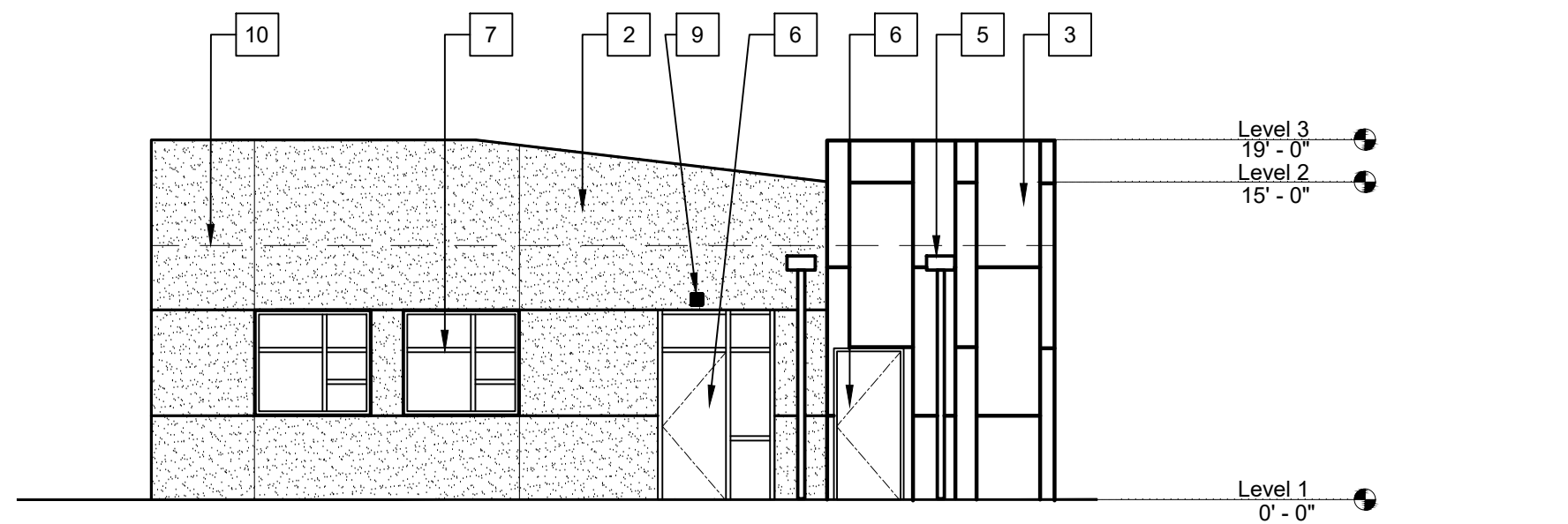
REVISIONS

NO.	ITEM	DATE
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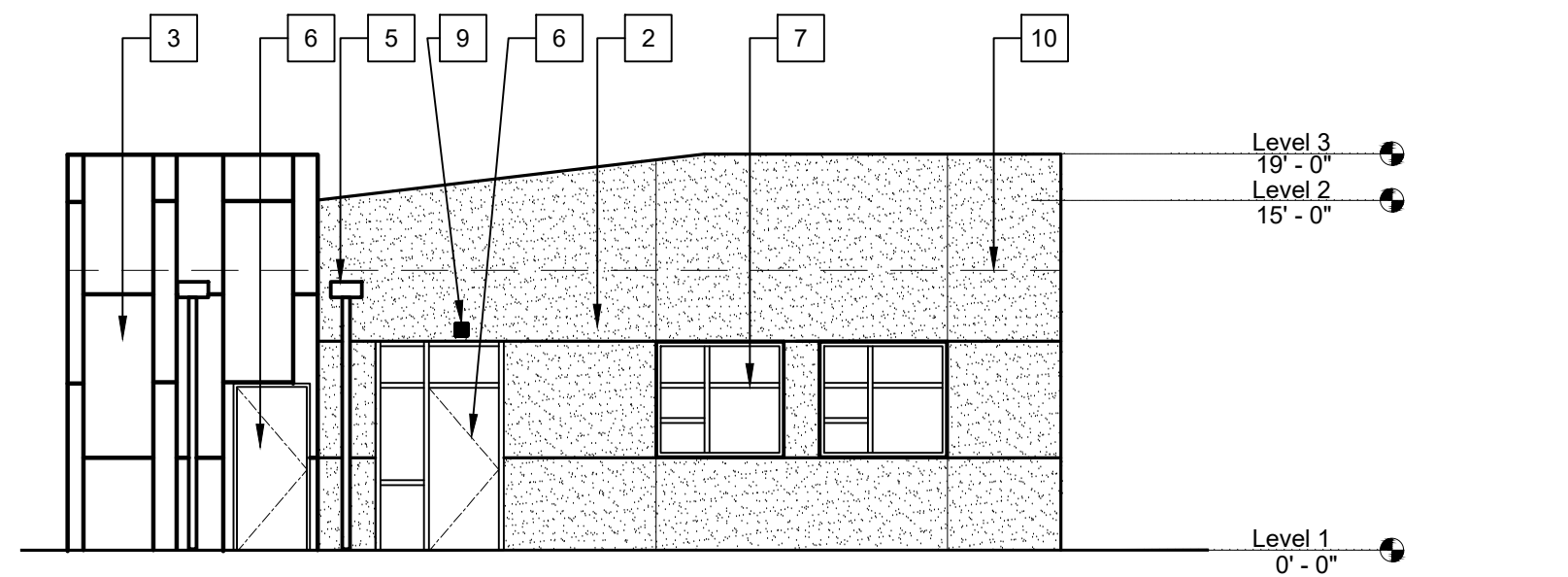
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CHECKED BY: DB
SFA JOB NO: 20008.03
DATE: 03/03/2021

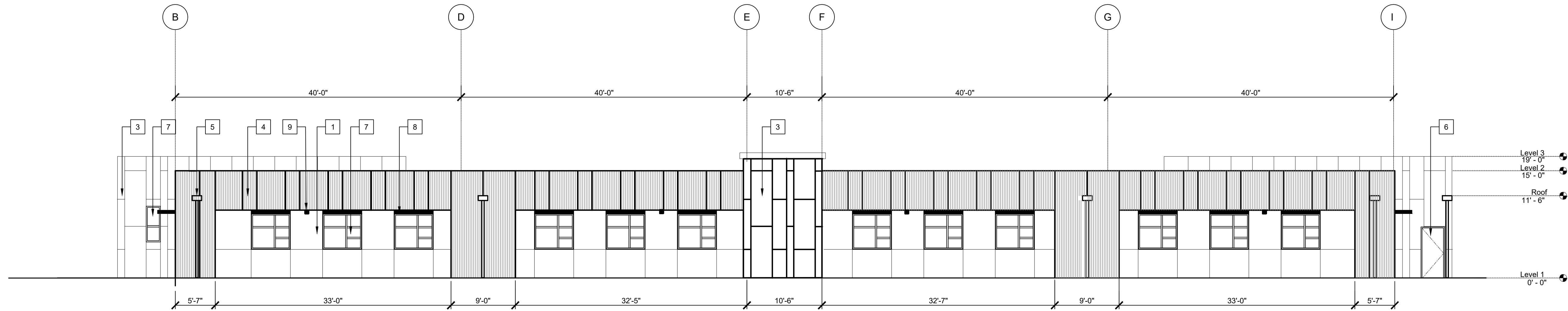
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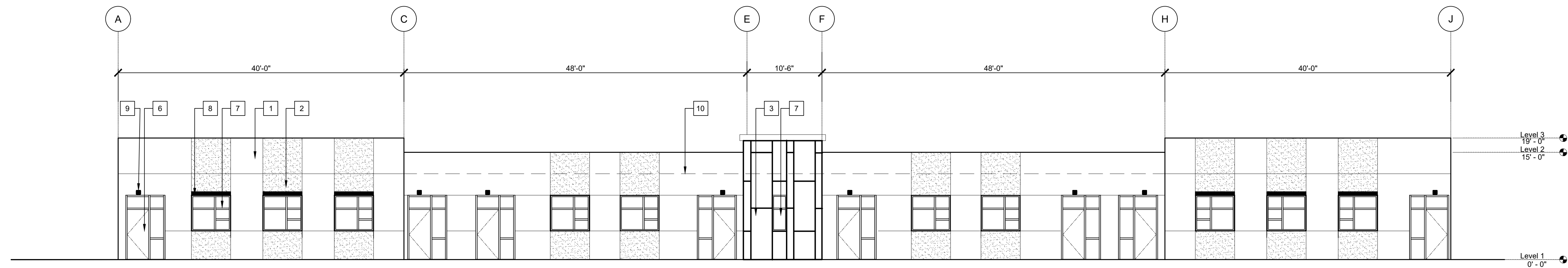
6 COURTYARD ELEVATION



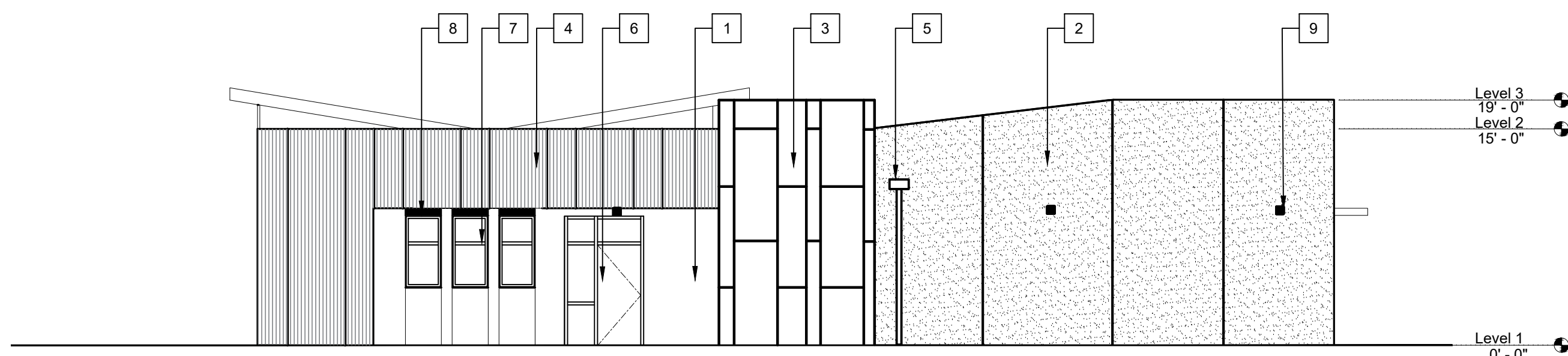
5 COURTYARD ELEVATION



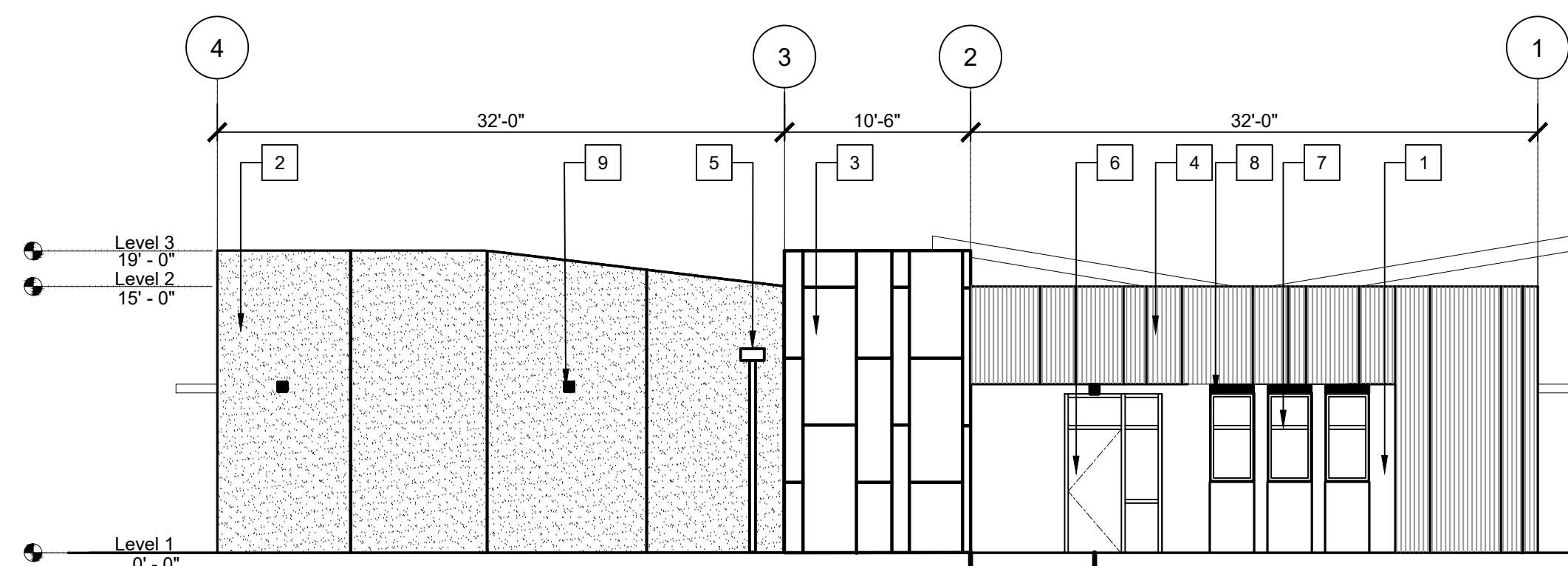
4 WEST ELEVATION



3 EAST ELEVATION



2 SOUTH ELEVATION



1 NORTH ELEVATION

GENERAL NOTES

- SEE FLOOR PLANS FOR WINDOW AND DOOR TYPES.
- PAINT ALL STEEL DOORS, DOOR FRAMES, MTL. FLASHING, PARAPET COPING, TYPICAL.
- PAINT ALL EXTERIOR CEMENT PLASTER WALL FINISH, TYPICAL.
- PAINT ALL EXTERIOR EXPOSED SCUPPERS AND RAIN WATER LEADERS.
- SEE ELECTRICAL DRAWINGS FOR EXTERIOR WALL MOUNTED LIGHT FIXTURE TYPE, COORDINATE LOCATION WITH ARCHITECT.
- PROVIDE DOOR SIGNAGE TO ALL EXTERIOR DOORS, TYP.
- PROVIDE WALL AND ROOF EXPANSION JOINT COVERS AS REQUIRED PER MODULAR BUILDING MANUFACTURER.

EXTERIOR ELEVATION NOTES

- CEMENT PLASTER WALL FINISH PAINTED, FIELD COLOR #1, TYP.
- CEMENT PLASTER WALL FINISH PAINTED, ACCENT COLOR #2, TYP.
- FIBER CEMENT PANELS, ACCENT COLOR #3, (ADD ALTERNATE #1).
- FIBER CEMENT PANELS, ACCENT COLOR #4, (ADD ALTERNATE #1).
- SCUPPER/RAIN WATER LEADER, PAINTED TO MATCH COLOR OF WALL, TYP, CONNECT TO NEAREST STORM DRAIN LINE.
- DOOR TYP., COLOR #5
- ALUMINUM FRAME CLEAR ANODIZED WINDOW, TYP.
- ALUMINUM FIXED CUSTOM SUNSHADE SYSTEM, 6" DEEP RECTANGULAR FRAME WITH 30" PROJECTION, ABOVE WINDOWS TYP.
- LIGHT FIXTURE, TYP.
- LINE OF ROOF COVERED WALKWAY, PER SHADE STRUCTURE PC DRAWINGS.

GRAPHIC KEY

- | | |
|--|--|
| | CEMENT PLASTER COLOR #1
FIELD COLOR |
| | CEMENT PLASTER COLOR #2 |
| | FIBER CEMENT PANEL COLOR #1
AMERICAN FIBER CEMENT CORP. |
| | CEMENT PLASTER COLOR #3
FIBER CEMENT PANEL COLOR #2 (ALTERNATE #1)
AMERICAN FIBER CEMENT CORP.
PATINA IN LINE |



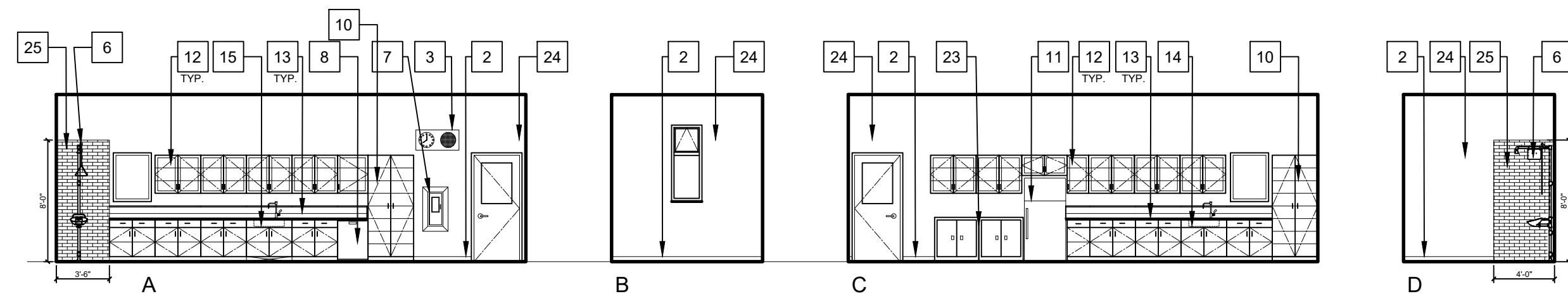
EXTERIOR ELEVATIONS

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

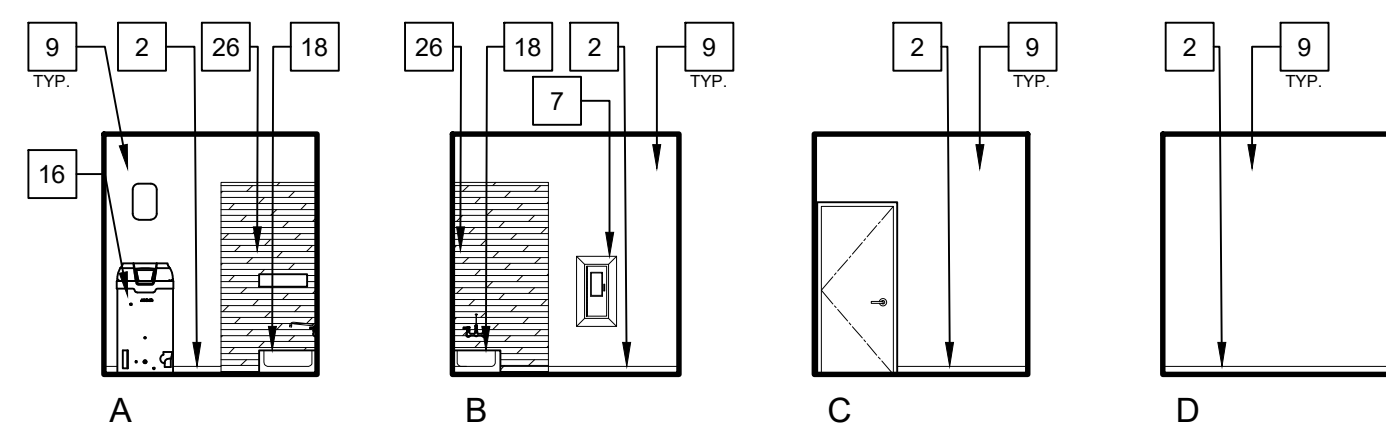
REVISIONS	NO.	ITEM	DATE
	1.	BID SET	3-2021

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20008.03	03/03/2021

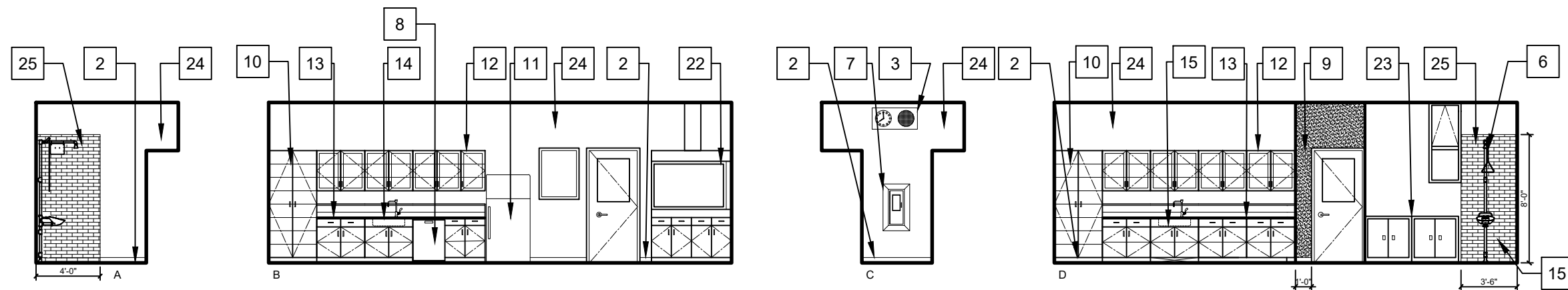
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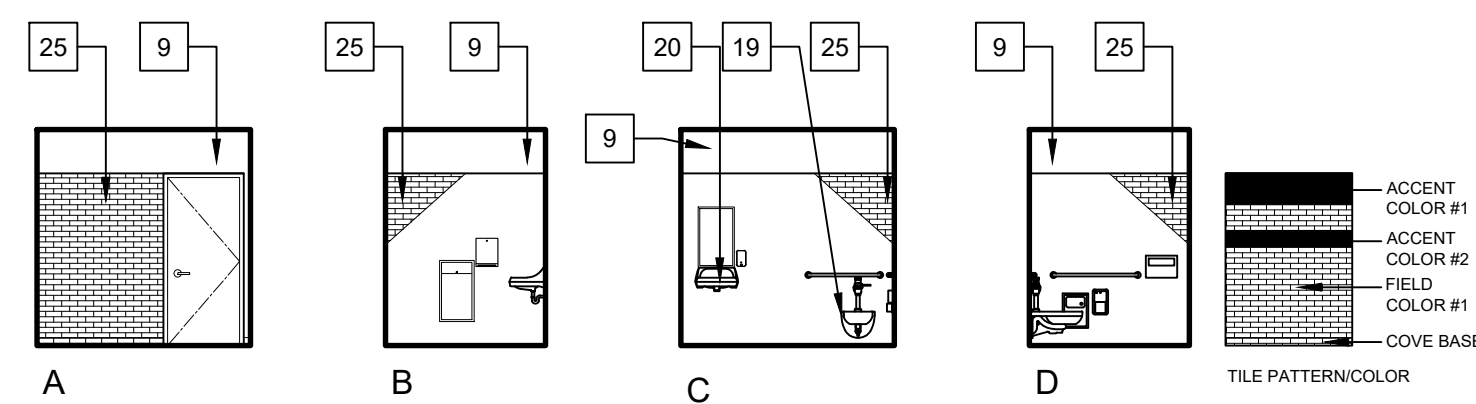
12 PREP ROOM E5 INTERIOR ELEVATIONS
1/8" = 1'-0"



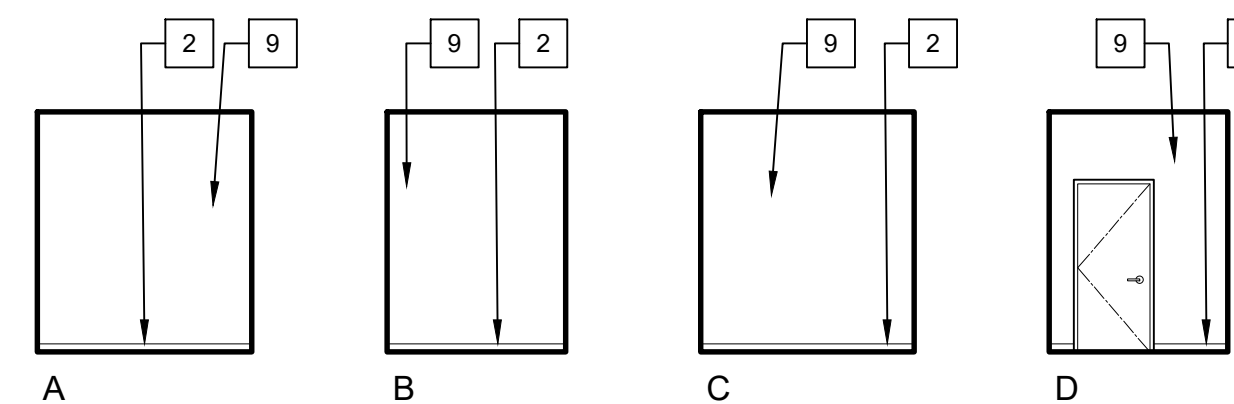
11 CUSTODIAN ROOM E8B INTERIOR ELEVATIONS
1/8" = 1'-0"



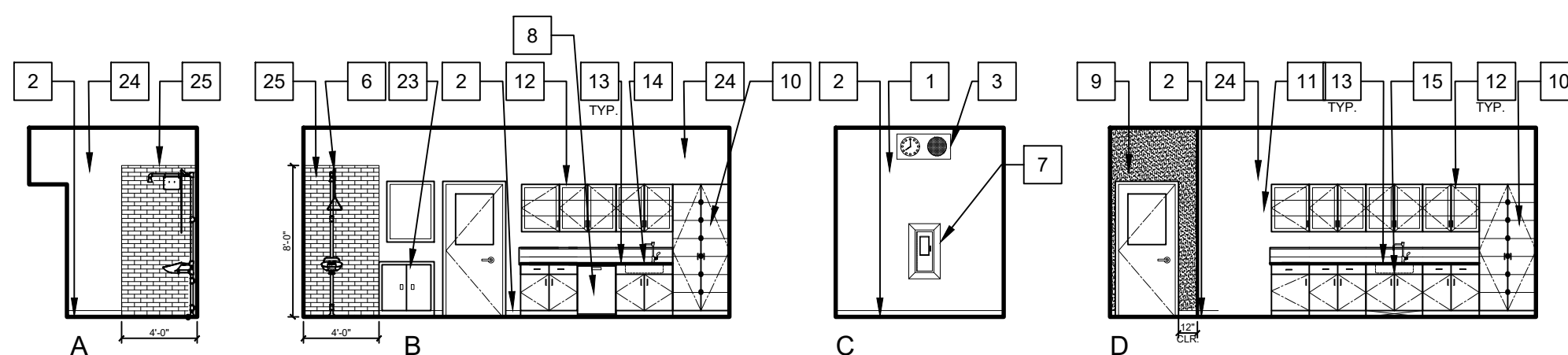
10 PREP ROOM E8A INTERIOR ELEVATIONS
1/8" = 1'-0"



9 RESTROOM E2C INTERIOR ELEVATIONS
1/8" = 1'-0"



8 ELECTRICAL ROOM E2B INTERIOR ELEVATIONS
1/8" = 1'-0"



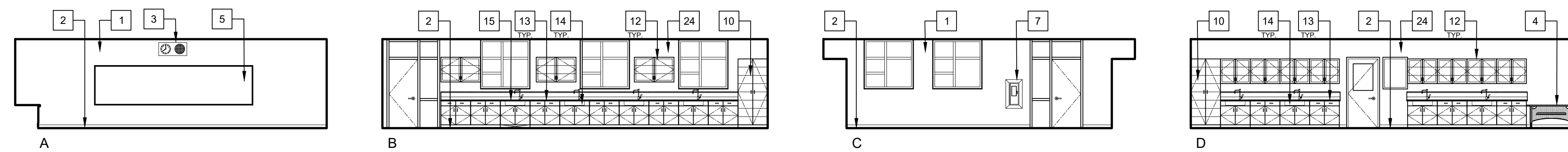
7 PREP ROOM E2A INTERIOR ELEVATIONS
1/8" = 1'-0"

INTERIOR ELEVATION NOTES

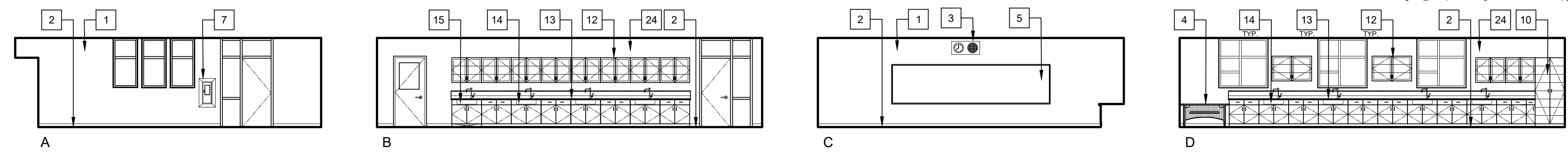
1. VINYL TACKBOARD WALL PANELING.
2. WALL BASE, SEE FINISH SCHEDULE.
3. CLOCK / SPEAKER, SEE ELECTRICAL DRAWINGS.
4. W60"x30"x ADJUSTABLE HEIGHT, MOVABLE TEACHER'S DESK.
5. 4' x 16' CERAMIC STEEL WHITE BOARD.
6. BARRIER FREE COMBINATION DRENCH SHOWER/EYEWASH.
7. RECESSED FIRE EXTINGUISHER CABINET.
8. UNDERCOUNTER GLASSWARE WASHER.
9. GYP BOARD, PAINTED.
10. SCIENCE TALL STORAGE CABINETS WITH CHEMICAL RESISTANT SHELVING, MIDDLE SHELF TO BE FIXED.
11. REFRIGERATOR.
12. SCIENCE GLASS DISPLAY UPPER CABINETS.
13. SCIENCE BASE CABINETS AND COUNTERTOP WITH 10" INTEGRAL BACKSPLASH.
14. EPOXY SINK, SEE PLUMBING DWGS.
15. ACCESSIBLE EPOXY SINK, SEE PLUMBING DWGS.
16. TANKLESS WATER HEATER WITH EXPANSION TANK AND CIRCULATION PUMP, SEE PLUMBING DWGS.
17. DOOR SIGNAGE, SEE DOOR SCHEDULE.
18. SERVICE SINK AND MOP RACK.
19. ACCESSIBLE TOILET FIXTURE.
20. ACCESSIBLE LAVATORY.
21. TANKLESS WATER HEATER, SEE PLUMBING DWGS.
22. FUME HOOD.
23. 22 GALLON SAFETY STEEL CABINET.
24. VINYL WALL COVERING O/GYP. BD.
25. CERAMIC TILE.
26. FIBERGLASS REINFORCED WALL PANEL.

GENERAL NOTES

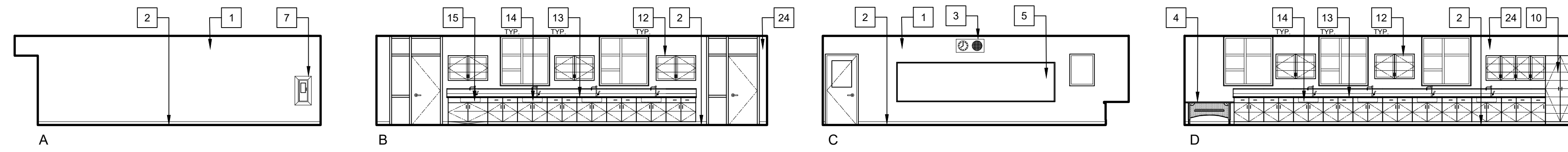
- A. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL, PLUMBING, AND ELECTRICAL WORK.
- B. SEE FINISH SCHEDULE FOR INTERIOR FINISHES NOT SHOWN ON ELEVATIONS.
- C. PAINT ALL INTERIOR STEEL DOORS AND FRAMES, TYPICAL.
- D. CABINET DESIGN BASED ON THE NORTH AMERICAN ARCHITECTURAL WOODWORK STANDARDS.
- E. PROVIDE MANUAL ROLLER SHADES AT ALL EXTERIOR WINDOWS AND DOOR SIDELITES/TRANSOM TYP.
- F. PROVIDE CABINET LOCKS TYP. AT ALL CABINETS DOORS.



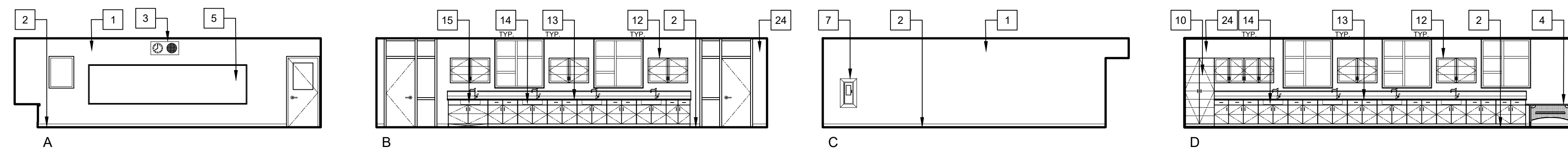
6 SCIENCE CLASSROOM E9 INTERIOR ELEVATIONS
1/8" = 1'-0"



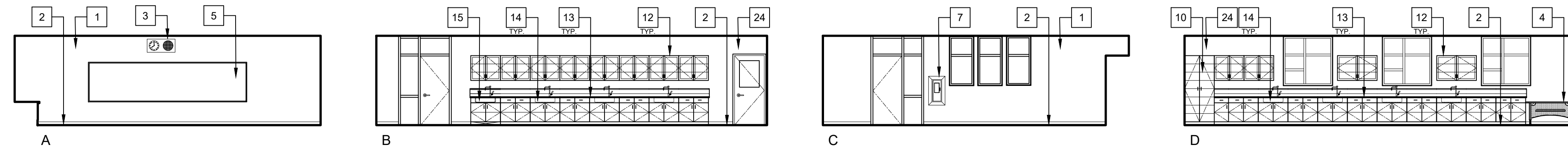
5 SCIENCE CLASSROOM E7 INTERIOR ELEVATIONS
1/8" = 1'-0"



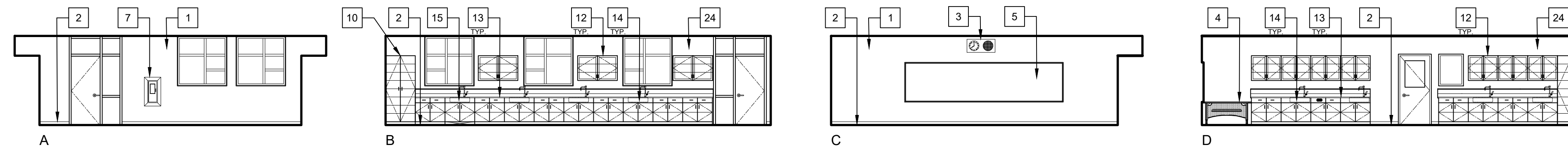
4 SCIENCE CLASSROOM E6 INTERIOR ELEVATIONS
1/8" = 1'-0"



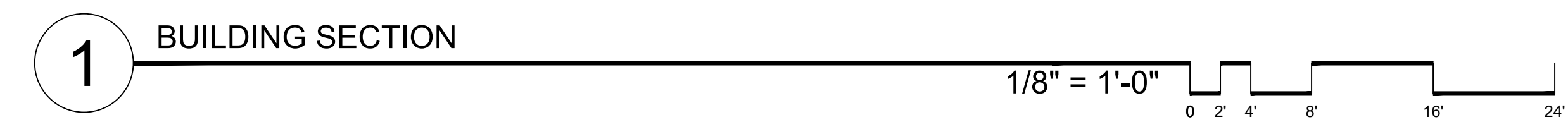
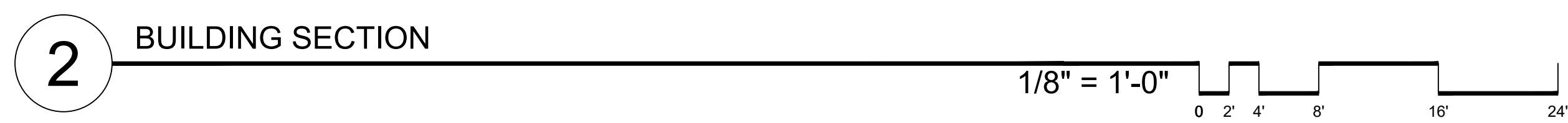
3 SCIENCE CLASSROOM E4 INTERIOR ELEVATIONS
1/8" = 1'-0"



2 SCIENCE CLASSROOM E3 INTERIOR ELEVATIONS
1/8" = 1'-0"



1 SCIENCE CLASSROOM E01 INTERIOR ELEVATIONS
1/8" = 1'-0"



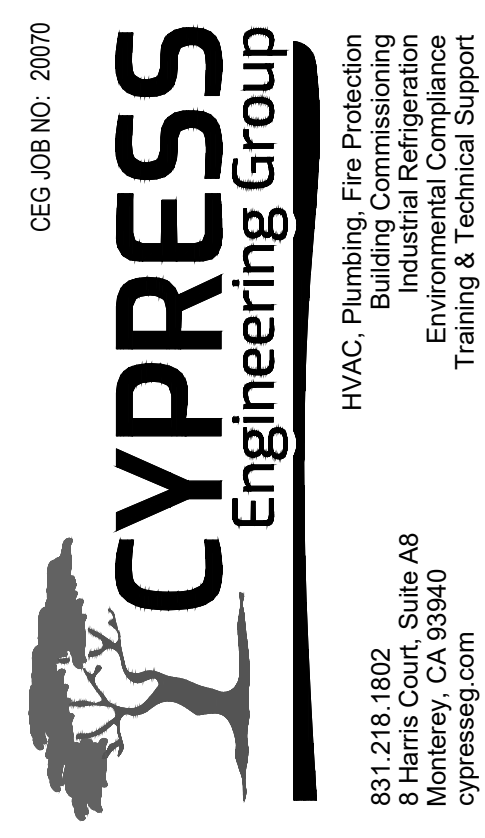
BUILDING SECTIONS

NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE
1.	BID SET	3-2021

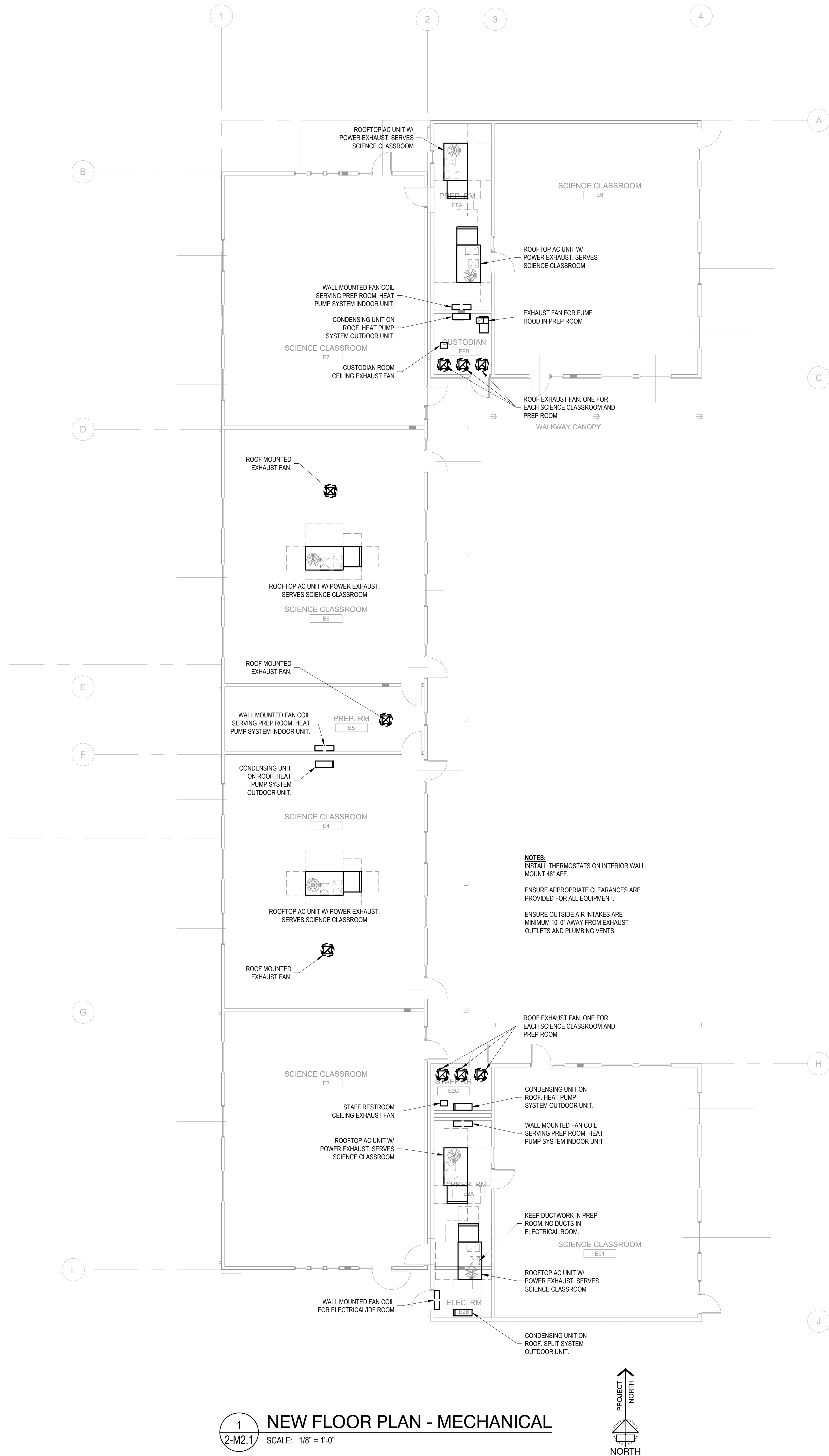
DRAWN BY:	NJ
CHECKED BY:	DB
SFA JOB NO:	DATE:
0008.03	03/03/2021

	<p>1. DRAWINGS INDICATE REQUIRED HVAC SYSTEM TYPE, ZONING AND PERFORMANCE REQUIREMENTS. MODULAR BUILDING MANUFACTURER IS RESPONSIBLE FOR SIZING AND LAYOUT OF ALL MECHANICAL SYSTEMS, DUCTWORK AND PIPING. MODULAR BUILDING MANUFACTURER IS RESPONSIBLE FOR SIZING AND ADAPTING THE MECHANICAL SYSTEM TO BEST FIT WITH THEIR BUILDING CONSTRUCTION WHILE MEETING THE SYSTEM DESIGN INTENT AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS.</p> <p>2. SCIENCE CLASSROOM - ONE (1) ROOF MOUNTED PACKAGED GAS HEATING / ELECTRIC DX COOLING UNIT. HEATING AND COOLING CAPACITIES TO MATCH THE CALCULATED ZONE LOAD. USE 0.5% SUMMER DESIGN CONDITIONS AND WINTER MEDIAN OF EXTREMES FOR LOAD CALCULATION. EQUIPMENT SHALL BE SIZED TO MAINTAIN 74°F ±2°F DB TEMPERATURE FOR COOLING AND 70°F ±2°F DB FOR HEATING. THE SUPPLY AND RETURN DUCTS SHALL BE SIZED FOR 100% AIR VOLUMES WITH 0.075" OF FRICTION FOR 100 FEET OF DUCT. AIR INLETS AND OUTLETS SHALL BE SIZED FOR A MAXIMUM OF 450 PER MINUTE NECK VELOCITY. THE SYSTEM SHALL CONDITION THE SPACE CONTINUOUSLY DURING SCHEDULED HOURS. THE SYSTEM SHALL BE CONTROLLED BY PELICAN WIRELESS T3230 THERMOSTAT. THE UNIT SHALL BE EQUIPPED WITH LOW LEAK ECONOMIZER AND PROVIDED WITH PELICAN WIRELESS PEARL ECONOMIZER CONTROLLER. UNIT SHALL BE EQUIPPED WITH INDEPENDENTLY POWERED POWER EXHAUST FAN CAPABLE OF EXHAUSTING 100% OF THE AIR. POWER EXHAUST SHALL BE CONTROLLED TO MAINTAIN 0.03" OF SPACE PRESSURE.</p> <p>3. SCIENCE CLASSROOM EXHAUST - SCIENCE CLASSROOMS SHALL HAVE ONE (1) ROOF MOUNTED EXHAUST FAN. EXHAUST FAN SHALL BE SIZED FOR 1 CFM PER SQUARE FOOT. FAN SHALL BE CONTROLLED BY WALL SWITCH NEAR TEACHER'S STATION. EXHAUST DUCTS SHALL BE SIZED FOR 100% AIR VOLUMES WITH 0.075" OF FRICTION PER 100 FEET OF DUCT. AIR INLETS AND OUTLETS SHALL BE SIZED FOR A MAXIMUM OF 400 FEET PER MINUTE VELOCITY.</p> <p>4. PREP ROOM - ONE (1) WALL MOUNTED FAN COIL (CASSETTE TYPE CEILING FAN COIL MAY BE USED) AND ROOF MOUNTED HEAT PUMP SPLIT SYSTEM WITH HEATING AND COOLING CAPACITIES TO MATCH THE CALCULATED ZONE LOAD. USE 0.5% SUMMER DESIGN CONDITIONS AND WINTER MEDIAN OF EXTREMES FOR LOAD CALCULATION. EQUIPMENT SHALL BE SIZED TO MAINTAIN 74°F ±2°F DB TEMPERATURE FOR COOLING AND 70°F ±2°F DB FOR HEATING. OUTSIDE AIR SHALL BE PROVIDED BY AN INLINE FAN. OUTSIDE AIR MAY BE TRANSFERRED FROM ADJACENT CLASSROOM. THE SYSTEM SHALL CONDITION THE SPACE CONTINUOUSLY DURING SCHEDULED HOURS AND SHALL BE CONTROLLED BY PELICAN WIRELESS THERMOSTAT.</p> <p>5. PREP ROOM EXHAUST - PREP ROOMS SHALL HAVE EXHAUST FAN SIZED FOR 1 CFM PER SQUARE FOOT. EXHAUST FAN SHALL BE ROOF MOUNTED OR INLINE FAN IN ATTIC SPACE. EXHAUST FAN SHALL OPERATE CONTINUOUSLY DURING SCHEDULED HOURS. EXHAUST DUCTS SHALL BE SIZED FOR 100% AIR VOLUMES WITH 0.075" OF FRICTION PER 100 FEET OF DUCT. AIR INLETS AND OUTLETS SHALL BE SIZED FOR A MAXIMUM OF 400 FEET PER MINUTE VELOCITY.</p> <p>6. ELECTRICAL/OD ROOM - ONE(1) WALL MOUNTED FAN COIL AND ROOF MOUNTED CONDENSING UNIT SPLIT SYSTEM. SYSTEM SHALL BE COOLING ONLY. SYSTEM SHALL BE SIZED FOR A MINIMUM OF 10% GREATER THAN THE HEAT LOAD OF EQUIPMENT IN SPACE. SYSTEM SHALL OPERATE CONTINUOUSLY 24/7 AND SHALL BE CONTROLLED BY PELICAN WIRELESS THERMOSTAT.</p> <p>7. CUSTODIAN ROOM - ONE (1) CEILING EXHAUST FAN. AIR SHALL BE TRANSFERRED FROM OUTSIDE THROUGH DOOR LOUVER. NO HEATING OR COOLING. FAN SHALL BE SIZED FOR A MINIMUM OF EIGHT (8) AIR CHANGES PER HOUR. FAN SHALL BE SWITCHED WITH LIGHTS. DOOR LOUVER SHALL BE SIZED FOR MAXIMUM 400 FEET PER MINUTE VELOCITY. EXHAUST DUCT SHALL BE SIZED FOR 100% AIR VOLUMES WITH 0.075" OF FRICTION PER 100 FEET OF DUCT.</p> <p>8. STAFF RESTROOM - ONE (1) CEILING EXHAUST FAN. AIR SHALL BE TRANSFERRED FROM OUTSIDE THROUGH DOOR LOUVER. NO HEATING OR COOLING. FAN SHALL BE SIZED FOR A MINIMUM OF TWELVE (12) AIR CHANGES PER HOUR. FAN SHALL BE SWITCHED WITH LIGHTS. DOOR LOUVER SHALL BE SIZED FOR MAXIMUM 400 FEET PER MINUTE VELOCITY. EXHAUST DUCT SHALL BE SIZED FOR 100% AIR VOLUMES WITH 0.075" OF FRICTION PER 100 FEET OF DUCT.</p> <p>9. FUME HOOD EXHAUST - FUME HOOD EXHAUST FAN SHALL BE ROOF MOUNTED WITH UPBLAST CONFIGURATION. EXHAUST STACK SHALL BE MINIMUM 7 FEET HIGH. FAN SHALL BE CONTROLLED BY SWITCH ON FUME HOOD. EXHAUST DUCT SHALL BE SIZED FOR 100% AIR VOLUMES WITH 0.075" OF FRICTION PER 100 FEET OF DUCT.</p> <p>10. OUTSIDE AIR QUANTITIES AT ALL UNITS SHALL BE MINIMUM 30% GREATER THAN CODE REQUIRED MINIMUM OUTSIDE AIR QUANTITIES.</p> <p>11. ALL UNITS SHALL BE EQUIPPED WITH MERV 13 FILTERS.</p>	<p>& AND</p> <p>°F DEGREES FAHRENHEIT</p> <p>AAV AUTOMATIC AIR VENT</p> <p>AC AIR CONDITIONER</p> <p>AD ACCESS DOOR</p> <p>AFD ABOVE FINISH FLOOR</p> <p>AFUE ANNUAL FUEL UTILIZATION EFFICIENCY</p> <p>AL ACoustically LINED</p> <p>AMP AMPERE</p> <p>AP ACCESS PANEL</p> <p>APPROX APPROXIMATE</p> <p>ARCH ARCHITECT/ARCHITECTURAL</p> <p>BDD BACK DRAFT DAMPER</p> <p>BFP BACK FLOW PREVENTER</p> <p>BHP BRAKE HORSEPOWER</p> <p>BID BUILDING</p> <p>BOD BOTTOM OF DUCT</p> <p>BOP BOTTOM OF PIPE</p> <p>BTU BRITISH THERMAL UNIT</p> <p>BTUH BRITISH THERMAL UNITS PER HOUR</p> <p>CA COMBUSTION AIR</p> <p>CFH CUBIC FEET PER HOUR</p> <p>CFM CUBIC FEET PER MINUTE</p> <p>CHW CHILLED WATER RETURN</p> <p>CHWS CHILLED WATER SUPPLY</p> <p>CIRC CIRCULATING</p> <p>CLG COOLING, CEILING</p> <p>CLR CLEAR</p> <p>CONC CONCRETE</p> <p>CONN CONNECTION</p> <p>CONT CONTINUED, CONTINUATION</p> <p>COOL COOLING</p> <p>COP COEFFICIENT OF PERFORMANCE</p> <p>DB DRY BULB</p> <p>DF DRINKING FOUNTAIN</p> <p>DIL DOOR LOUVER</p> <p>DN DOWN</p> <p>DP DIFFERENTIAL PRESSURE</p> <p>DWSS DRAWINGS</p> <p>E EXISTING</p> <p>EA EXHAUST AIR</p> <p>EAD EXHAUST AIR DAMPER</p> <p>EAT ENTERING AIR TEMPERATURE</p> <p>ENC ENTERING DRY BULB</p> <p>EER ENERGY EFFICIENCY RATIO</p> <p>EFF EFFICIENCY</p> <p>ELEC ELECTRICAL</p> <p>ELEV ELEVATION</p> <p>ENT ENTERING</p> <p>EQ EQUAL</p> <p>EQUIP EQUIPMENT</p> <p>ESP EXTERNAL STATIC PRESSURE</p> <p>EW ENTERING WATER</p> <p>EWB ENTERING WET BULB</p> <p>EXT ENTERING WATER TEMPERATURE</p> <p>EXT EXTERIOR</p> <p>FD FLOOR DRAIN</p> <p>FIE FINISHED FLOOR ELEVATION</p> <p>FLA FULL LOAD AMPS</p> <p>FLEX FLEXIBLE</p> <p>FPM FEET PER MINUTE</p> <p>FS FLOOR SINK</p> <p>FT FEET</p> <p>FTHD FEET HEAD</p> <p>FTR FLUE THRU ROOF</p> <p>RS RELIEF VALVE</p> <p>GAL GALLON</p> <p>GPM GALLONS PER MINUTE</p> <p>HP HORSEPOWER</p> <p>HR HOUR</p> <p>HTO HEATING</p> <p>HZ HERTZ</p> <p>IE INVERT ELEVATION</p> <p>IN INCH</p> <p>INV INVERT</p> <p>KW KILOWATTS</p> <p>KWH KILOWATT HOUR</p> <p>LAT LEAVING AIR TEMPERATURE</p> <p>LBS POUNDS</p> <p>LVR LOUVER</p> <p>LWT LEAVING WATER TEMPERATURE</p> <p>LWB LEAVING WET BULB</p> <p>MAD, MD MANUAL AIR DAMPER</p> <p>MAV MANUAL AIR VENT</p> <p>MAX MAXIMUM</p> <p>MBH 1000 BTU PER HOUR</p> <p>MCA MINIMUM CIRCUIT AMPS</p> <p>MCP MECHANICAL CONTROL PANEL</p> <p>MECH MECHANICAL</p> <p>MFR MANUFACTURER</p> <p>MIN MINIMUM</p> <p>MOCP MAXIMUM OVERCURRENT PROTECTION</p> <p>(N) NEW</p> <p>NC NORMALLY CLOSED</p> <p>NIC NOT IN CONTRACT</p> <p>NO NORMALLY OPEN</p> <p>NTS NOT TO SCALE</p> <p>OE ELECTRICAL</p> <p>OAD OUTSIDE AIR DAMPER</p> <p>OC ON CENTER</p> <p>OD OUTSIDE DIAMETER</p> <p>PD PRESSURE DROP</p> <p>PH PHASE</p> <p>POC POINT OF CONNECTION</p> <p>PRV PRESSURE REDUCING VALVE</p> <p>PSI (G) (W) POUNDS PER SQUARE INCH (GAUGE) (ABSOLUTE)</p> <p>QTY QUANTITY</p> <p>RA RETURN AIR</p> <p>RAD RETURN AIR DAMPER</p> <p>RH RELATIVE HUMIDITY</p> <p>RL REFRIGERANT LIQUID</p> <p>RM ROOM</p> <p>RPM REVOLUTIONS PER MINUTE</p> <p>RS REFRIGERANT SUCTION</p> <p>RV RELIEF VALVE</p> <p>SA SUPPLY AIR</p> <p>SC SENSIBLE COOLING</p> <p>SEER SEASONAL ENERGY EFFICIENCY RATIO</p> <p>SD SMOKE DAMPER</p> <p>SM SHEET METAL</p> <p>SOV SHUT-OFF VALVE</p> <p>SP STATIC PRESSURE</p> <p>SPEC SPECIFICATION</p> <p>SQ SQUARE</p> <p>SQFT, FT² SQUARE FEET</p> <p>SQIN, IN² SQUARE INCHES</p> <p>STRUCT STRUCTURAL</p> <p>T THERMOSTAT, "X" INDICATES DEVICE CONTROLLED, 48" AFF (TO TOP OF STAT)</p> <p>TC TOTAL COOLING</p> <p>TDH TOTAL DYNAMIC HEAD</p> <p>TEMP TEMPERATURE</p> <p>THRU THROUGH</p> <p>TSP TOTAL STATIC PRESSURE</p> <p>TV TURNING VANES</p> <p>TYP TYPICAL</p> <p>UL UNDERWRITERS LABORATORIES</p> <p>UNLESS OTHERWISE NOTED</p> <p>V VOLT</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>VTR VENT THROUGH ROOF</p> <p>W WATTS</p> <p>WI WITH</p> <p>WB WET BULB</p> <p>WC WATER COLUMN</p> <p>WH WATER HEATER</p> <p>WT WEIGHT</p>	<p>2019 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA FIRE CODE (FC), PART 9, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.</p> <p>2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.</p> <p>TITLE 19, C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.</p> <p>ALL SECTION NUMBERS BELOW REFER TO GROUP 1, CHAPTER 4, PART 1, TITLE 24, C.C.R.</p> <p>1. ADDENDUM, CONSTRUCTION CHANGES PER SECTION 4-338.</p> <p>2. INSPECTOR APPROVED BY DSA. INSPECTOR AND CONTINUOUS INSPECTION OF WORK PER SECTION 4-333(b) AND 4-342.</p> <p>3. TESTS AND TESTING LABORATORY PER SECTION 4-335.</p> <p>4. SPECIAL INSPECTION PER SECTION 4-336(d).</p> <p>5. CONTRACTOR SHALL SUBMIT VERIFIED REPORTS PER SECTION 4-336 AND 4-343(d).</p> <p>6. ADMINISTRATION OF CONSTRUCTION PER PART 1, TITLE 24, C.C.R. - DUTIES OF ARCHITECT, STRUCTURAL ENGINEER OR PROFESSIONAL ENGINEER PER SECTION 4-333(a) AND 4-341.</p> <p>7. GOVERNING CODES: TITLE 24.</p> <p>8. A COPY OF PARTS 1, 2, 3, 4, AND 5 OF TITLE 24 SHALL BE KEPT AVAILABLE IN THE FIELD DURING CONSTRUCTION.</p> <p>9. DSA SHALL BE NOTIFIED OF START OF CONSTRUCTION PER SECTION 4-331.</p> <p>10. SUPERVISION BY THE DIVISION OF THE STATE ARCHITECT PER SECTION 4-334.</p>	<div><div>REGISTERED PROFESSIONAL ARCHITECT MODULAR BID SET 2-18-2020 STATE OF CALIFORNIA</div><div><div>CEG JOB NO. 20070</div><div><div>CYPRESS Engineering Group</div><div>831.218.1802 8-Hours Court, Suite A8 4433 Willow Rd., Pleasanton, CA 94588 cypresseg.com</div></div><div>HVAC, Plumbing, Fire Protection Building Commissioning Engineering Training & Technical Support</div></div></div>
	<p>1. THE INTENT OF THE CONTRACT DOCUMENTS IS TO MODERNIZE THE SCHOOL'S CAMPUS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.</p> <p>2. LATERAL SUPPORT FOR PIPE AND DUCTS TO COMPLY WITH SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING SYSTEMS."</p> <p>3. THE SEISMIC SUPPORT AND ANCHORAGE OF THE EQUIPMENT DESCRIBED ON THESE DRAWINGS HAVE BEEN ENGINEERED BY THE ENGINEER OF RECORD FOR CONFORMANCE WITH APPROPRIATE BUILDING CODES. THE ENGINEER OF RECORD WAS NOT RESPONSIBLE FOR THE EQUIPMENT DESIGN.</p> <p>4. ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE CRITERIA FROM CHAPTER 16A CALIFORNIA BUILDING CODE (CBC) 2019.</p> <p>5. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.</p> <p>6. NO DEMOLITION SHALL BEGIN UNTIL PLANS INCLUDING THE DEMOLITION WORK HAVE BEEN APPROVED BY DSA.</p>	<p>SINGLE LINE SYMBOL DOUBLE LINE SYMBOL DESCRIPTION</p> <p>LONG SWEEP 90° ELBOW - RECTANGULAR, ROUND OR OVAL</p> <p>45° ELBOW - RECTANGULAR, ROUND OR OVAL</p> <p>30° ELBOW - RECTANGULAR, ROUND OR OVAL</p> <p>90° ELBOW - RECTANGULAR DUCT WITH TURNING VANES</p> <p>45° LATERAL - ROUND TO ROUND OR OVAL TO OVAL</p> <p>90° TAKEOFF WITH 45° TAPER - RECTANGULAR TO RECTANGULAR (FOR BRANCH TAKEOFF LONGER THAN 50'-0", USE 15)</p> <p>90° TAKEOFF WITH 45° ELONGATED TEE - ROUND TO ROUND</p> <p>Y BRANCH - ROUND OR OVAL DUCT</p> <p>90° RADIUS SPLIT - RECTANGULAR TO RECTANGULAR TO RECTANGULAR SPLIT, PROVIDE SPLITTER DAMPER, XY PROPORTIONAL SPLIT</p> <p>90° RECTANGULAR SPLIT - RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, XY PROPORTIONAL SPLIT</p> <p>TRANSITION - RECTANGULAR TO ROUND OR RECTANGULAR TO OVAL</p> <p>FLEXIBLE DUCT - ROUND</p> <p>FLEXIBLE DUCT - RECTANGULAR</p> <p>SINGLE LINE SYMBOL DOUBLE LINE SYMBOL DESCRIPTION</p> <p>SECTION AT SUPPLY AIR OR MAKE-UP AIR DUCT UP</p> <p>SECTION AT RETURN AIR OR COMBUSTION AIR DUCT UP</p> <p>SECTION AT EXHAUST AIR OR RELIEF AIR DUCT UP</p> <p>SUPPLY AIR DUCT DOWN</p> <p>RETURN AIR DUCT DOWN</p> <p>EXHAUST AIR DUCT DOWN</p> <p>ROUND DUCT UP - SUPPLY, RETURN OR EXHAUST</p> <p>ROUND DUCT DOWN - SUPPLY, RETURN OR EXHAUST</p> <p>CEILING DIFFUSER - ONE, TWO, THREE AND FOUR WAY THROW</p> <p>CEILING - RETURN AND EXHAUST REGISTERS</p> <p>SIDEWALL - SUPPLY DIFFUSER, RETURN AND EXHAUST REGISTERS</p> <p>MANUAL BALANCE DAMPER WITH DUCT ACCESS DOOR</p> <p>MOTORIZED BALANCE DAMPER WITH DUCT ACCESS DOOR</p> <p>FIRE DAMPER WITH DUCT ACCESS DOOR</p> <p>FIRE/SMOKE DAMPER WITH DUCT ACCESS DOOR</p> <p>ACoustically LINED DUCT. DIMENSIONS ARE INSIDE</p> <p>REGISTER NECK SIZE AND TAG DESIGN CFM</p> <p>PANEL AT 1-BAR CEILING</p>	<p>1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF FINAL BID TO VERIFY ALL EXISTING SITE CONDITIONS WHICH MAY AFFECT THE COMPLETION OF THE INSTALLATION. ALL METHODS AND REQUIREMENTS FOR INSTALLATION SHALL BE DETERMINED PRIOR TO BID DATE. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF RECORD OF ANY REQUIRED MODIFICATIONS WHICH ARE NOT REFERENCED ON THESE PLANS PRIOR TO SUBMITTING BID. SUBMITTAL OF THE CONTRACTOR'S BID DEMONSTRATES THE CONTRACTOR'S AWARENESS OF ALL SITE CONDITIONS AND REQUIRED WORK TO BE PERFORMED.</p> <p>2. CONTRACTOR SHALL INCLUDE AND PROVIDE IN BID ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND OPERATIONAL INSTALLATION OF ALL SYSTEMS.</p> <p>3. THE DRAWINGS INCLUDED IN THIS SET ARE DIAGRAMMATIC. THEY ARE REPRESENTATIVE OF THE ENGINEER OF RECORD'S DESIGN INTENT FOR ALL EQUIPMENT AND RELATED PIPING ETC. INDIVIDUAL POWER NEEDS, CONTROLS AND OTHER CONNECTIONS SHALL BE COORDINATED AND COMPLETED/ PROVIDED FOR COMPLETE SYSTEM OPERATION BY CONTRACTOR.</p> <p>4. EQUIPMENT LOCATIONS AND PIPE ROUTING ARE NOT PRECISE AND SHALL BE COORDINATED, VERIFIED, AND DETERMINED IN THE FIELD. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND ROUTE PIPING IN LOCATIONS WHICH MEET CODE REQUIREMENTS AND DO NOT INTERFERE WITH ANY BUILDING STRUCTURES, UTILITIES, OR OTHER TRADE EQUIPMENT.</p> <p>5. ALL EQUIPMENT, EQUIPMENT CONNECTIONS, PIPING, MOUNTING LOCATIONS ETC. ARE TO BE VERIFIED WITH OWNER'S REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO BEGINNING OF THE ROUGH-IN.</p> <p>6. ALL WORK SHALL BE PERFORMED TO STATE, LOCAL, NATIONAL AND DISTRICT STANDARDS AND CODES. COORDINATE SPECIFIC REQUIREMENTS WITH DISTRICT STANDARDS AND AUTHORITY HAVING JURISDICTION.</p> <p>7. ALL EQUIPMENT SHALL BE NEW AND CLEARLY LABELED AND IDENTIFIED. LABELS SHALL NOT BE COVERED BY OTHER CONSTRUCTION ELEMENTS.</p> <p>8. UNLESS OTHERWISE NOTED IN CONTRACT DOCUMENTS, CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT AND WORK FOR A PERIOD OF ONE YEAR.</p> <p>9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED SAW CUTTING, CORE DRILLING, PATCHING, REFINISHING, ETC. AS REQUIRED FOR INSTALLATION OF SYSTEMS. ANY PENETRATIONS OR OPENINGS MADE IN WALLS OR STRUCTURES SHALL BE PATCHED AND/OR SEALED AS REQUIRED TO MAINTAIN THE INTEGRITY OF THE WALL OR STRUCTURE.</p> <p>10. CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT AND SHALL INCLUDE THE PRICE OF INSTALLING ALL CONNECTIONS AS REQUIRED IN THEIR BIDS.</p> <p>11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE APPROVAL OF THE ENGINEER OF RECORD. ALL APPROVALS BY THE ENGINEER OF RECORD MUST BE SECURED PRIOR TO COMPLETION OF ANY PURCHASE ORDERS OR ROUGH-IN WORK.</p> <p>12. THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS ARE TO BE CONSIDERED CONTRACT DOCUMENTS FOR AGENCY REVIEW/ APPROVAL AND CONTRACTOR BIDDING PURPOSES.</p> <p>13. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS.</p> <p>14. ANY AND ALL WORK THAT REQUIRES AN INTERRUPTION TO BUILDING SERVICE(S) (ELECTRICAL/HVAC/PLUMBING ETC.) MUST BE COORDINATED WITH THE DISTRICT A MINIMUM OF 48 HOURS IN ADVANCE. ANY SERVICE DOWNTIME SHALL NOT OCCUR DURING SCHOOL OPERATION HOURS.</p> <p>15. IN INSTANCES WHERE A CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS AND INSTALLATION MANUALS FOR THE PROJECT EXISTS, THE CONTRACTOR SHALL ADHERE TO THE MORE STRINGENT REQUIREMENT.</p> <p>16. ANY EXISTING BUILDING STRUCTURES OR SURFACES DAMAGED BY DEMOLITION OR DURING INSTALLATION ACTIVITIES SHALL BE REPAIRED, PATCHED, AND/OR REFINISHED TO THE SATISFACTION OF THE OWNER.</p> <p>17. FURNISH AND INSTALL MANUAL AIR DAMPERS AT ALL DUCT BRANCH TAKEOFFS TO A SINGLE SUPPLY DIFFUSER.</p> <p>18. FOR ALL VOLUME DAMPERS LOCATED ABOVE CEILINGS, PROVIDE 12" LONG 1/2" WIDE FLUORESCENT ORANGE TAPE TO MARK DAMPER LOCATIONS.</p> <p>19. ALL DUCTWORK, CONDUITS, BOXES, SURFACE MOUNTED RACEWAYS, SUPPORT DEVICES, AND ASSOCIATED FITTINGS SHALL BE MOUNTED IN CONCEALED LOCATIONS ABOVE CEILINGS, DUCTS, TRUSSES, BEAMS, ETC. WHERE WORK HAS TO BE INSTALLED IN EXPOSED LOCATIONS, IT SHALL BE PAINTED TO MATCH THE ADJACENT SURFACES OR PER ARCHITECT'S DIRECTION.</p> <p>20. CONTRACTOR SHALL PREPARE AND SUBMIT THE CALIFORNIA ENERGY COMMISSION TITLE 24 CERTIFICATE OF ACCEPTANCE FORMS RELATED TO INSTALLED EQUIPMENT AND SYSTEMS.</p> <p>21. SAFETY: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.</p> <p>22. CONTRACTOR'S EQUIPMENT: COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTOR'S EQUIPMENT AND MATERIAL STORAGE AREA. COORDINATE WITH OWNER FOR LOCATION AND PROCEDURES.</p> <p>23. ALL BUILDING MATERIALS MUST BE ASBESTOS FREE.</p> <p>24. CONSTRUCTION SCHEDULING: CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO SCHEDULING AND START OF THE WORK. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING SPACES AND SYSTEMS WHICH ARE IN USE, ADJOINING THE PROJECT, AND NOT PART OF THE PROJECT.</p> <p>25. TITLE 24 COMPLIANCE: THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (2019 CBC). SHOULD ANY CONDITIONS BE DISCOVERED NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK DOES NOT COMPLY WITH 2019 CBC, A CONSTRUCTION CHANGE DOCUMENT OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK, SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.</p>	<div>REVISIONS</div> <div>NO. ITEM DATE</div>
	<p>PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.</p> <p>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 PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 BC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGING AND BRACE LOADS.</p> <p>MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):</p> <p>MP <input type="checkbox"/> MD <input type="checkbox"/> PP <input type="checkbox"/> E <input type="checkbox"/> - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.</p> <p>MP <input checked="" type="checkbox"/> MD <input checked="" type="checkbox"/> PP <input type="checkbox"/> E <input type="checkbox"/> - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #0043-13 "MASON WEST, INC. SEISMIC RESTRAINT GUIDELINES FOR SUSPENDED DISTRIBUTION SYSTEMS" OR #0052-13 "B-LINE/TOLCO SEISMIC RESTRAINT SYSTEMS GUIDELINES"</p>	<p>SYMBOL ABBRV. IDENTIFICATION</p> <p>CAP</p> <p>CONT</p> <p>UNION</p> <p>LINE BREAK</p> <p>CKV</p> <p>T&PRV</p> <p>TEMP. & PRESS. RELIEF VALVE</p> <p>VALVE</p> <p>CONCENTRIC & ECCENTRIC REDUCERS</p> <p>AD, AP</p> <p>ACCESS DOOR, ACCESS PANEL</p> <p>MAV</p> <p>MANUAL AIR VENT</p> <p>T</p> <p>THERMOSTAT MOUNTED @ 48" AFF. MAX.</p> <p>CO2</p> <p>CARBON DIOXIDE (CO2) SENSOR</p> <p>SYMBOL ABBRV. IDENTIFICATION</p> <p>P.O.C.</p> <p>POINT OF CONNECTION</p> <p>REMOVE EXISTING</p> <p>TEE DOWN</p> <p>90 DOWN</p> <p>EQUIPMENT DESIGNATION</p> <p>TAG NUMBER</p> <p>SECTION 1 / SHEET M2.1</p>	<p>2-M0.1 SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL</p> <p>2-M0.2 NEW FLOOR PLAN - MECHANICAL</p>	
				<div>DRAWN BY: J.L.</div> <div>CHECKED BY: CS</div> <div>SFA JOB NO: 20006.02 DATE: 12/18/2020</div>
				2-M0.1

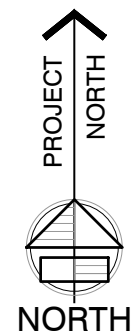


SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL

THOMAS S. HART MIDDLE SCHOOL - NEW MODULAR SCIENCE BUILDING - INCREMENT 2 4433 WILLOW RD., PLEASANTON, CA 94588 PLEASANTON UNIFIED SCHOOL DISTRICT



1
2-M2.1
NEW FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"



NEW FLOOR PLAN - MECHANICAL

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE

DRAWN BY: JL
CHECKED BY: CS
SFA JOB NO: 20006.02
DATE: 12/18/2020

2-M2.1

REGISTERED PROFESSIONAL
ENGINEER
ELECTRICAL
STATE OF CALIFORNIA
12-18-2020
MODULAR
BID SET

CYPRESS
Engineering Group
CEG JOB NO: 20070
HVAC - Plumbing, Fire Protection
Building Commissioning
Mechanical & Electrical
Environmental Compliance
Training & Technical Support
831.218.1802, Suite A8
Pleasanton, CA 94588
cypressseg.com

SUGIMURA
FINNEY
ARCHITECTS
SFA
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.278.9019
FAX: 408.278.9010

GENERAL CONSTRUCTION NOTES

- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
- CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL. PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
- CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
- ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
- CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
- CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
- ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
- ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
- ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRED CIRCUITS IS NOT ALLOWED.
- ALL 120/277V LIGHT SWITCHES AND WALL OCCUPANT SENSORS SHALL HAVE A NEUTRAL. INSTALLED TO THE DEVICE BOX EXCEPT WHERE A CONDUIT OR SURFACE RACEWAY SYSTEM IS INSTALLED.
- COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
- SEE ARCHITECTURAL DOCUMENTS FOR EXACT PLACEMENT OF LIGHTING FIXTURES AND DEVICES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF CEILING TYPES FROM ARCHITECTURAL DOCUMENTS AND PROVIDE AND INSTALL ALL REQUIRED FIXTURE MOUNTING HARDWARE. PROVIDE AND INSTALL U.L. LISTED FIRE STOP ENCLOSURES FOR ALL RECESSED FIXTURES IN FIRE RATED CEILINGS.
- FROM ALL NEW FLUSH MOUNT PANELS, THE CONTRACTOR SHALL STUB UP INTO ACCESSIBLE CEILING SPACE A MINIMUM OF FOUR (4) 3/4" CONDUITS FOR FUTURE USE.
- CONTRACTOR SHALL, PRIOR TO BID, FIELD VERIFY ALL REQUIREMENTS FOR MODIFYING THE EXISTING CLOCK, DATA, AND INTERCOM SYSTEMS TO ACCOMMODATE ADDITIONS NOTED. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS NEEDED TO MAKE A FULLY OPERATIONAL SYSTEM AT THE CONCLUSION OF PROJECT WORK.
- CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
- ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NECESSARY TO CUT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE EXISTING CONDUIT WHERE POSSIBLE.
- WHERE IT IS NOT POSSIBLE TO REUSE EXISTING CONDUIT OR RUN NEW CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UNDERGROUND SYSTEMS (GAS, WATER, TELEPHONE, ELECTRICAL, SEWER, ETC.). THE CONTRACTOR SHALL REPAIR & PAY ALL EXPENSES FOR DAMAGE TO EXISTING UNDERGROUND SYSTEMS AS A RESULT OF NEW WORK. REPAIR TO DAMAGED UNDERGROUND SYSTEMS SHALL BE TO THE OWNERS SATISFACTION WITHOUT EXTRA EXPENSE TO THE OWNER.
- EXISTING WIRING SHOWN HAS BEEN TAKEN FROM OLD PLANS AND IS ASSUMED TO BE CORRECT. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS AND MAKE ADJUSTMENTS TO SUIT ACTUAL CONDITIONS AND TO MEET THE INTENT OF THE CONTRACT DOCUMENTS.
- WHERE NON-METALLIC SHEATHED CONDUCTORS ARE FOUND, THE CONTRACTOR SHALL REMOVE TO FULLEST EXTENT PER THE GENERAL DEMOLITION NOTES AND REPLACE WITH CONDUIT. METAL CLAD CABLE WILL BE PERMITTED ON A CASE-BY-CASE BASIS ONLY BY WRITTEN APPROVAL FROM THE ARCHITECT.
- ALL INSTALLATION OF EXPOSED SURFACE MOUNTED RACEWAY IN PUBLIC AREAS SHALL BE REVIEWED BY ARCHITECT BEFORE ROUGH-IN. CONTRACTOR IS TO DETERMINE THE ACCESSIBILITY OF ATTIC, FURRED SPACE, HOLLOW MULLIONS, ETC. IN EACH AREA AND REVIEW WITH ARCHITECT. IF SYSTEM CAN BE ROUTED CONCEALED EITHER BY FISHING OR ACCESSIBILITY, CONTRACTOR IS TO DO SO. IF INACCESSIBILITY IS DETERMINED, CONTRACTOR SHALL INSTALL SURFACE MOUNTED RACEWAY IN THE MOST AESTHETICALLY PLEASING MEANS AS DETERMINED BY THE ARCHITECT. NO ALLOWANCE FOR ADDITIONAL COMPENSATION DUE TO ROUTING AS DIRECTED BY THE ARCHITECT WILL BE MADE.

LIGHT FIXTURE SCHEDULE

FIXTURE NOTES:

- ALL LED LIGHT FIXTURE DRIVERS SHALL BE ELECTRONIC TYPE, 10% TOTAL HARMONIC DISTORTION MAXIMUM.
- ALL LED LIGHT MODULES SHALL BE ENERGY SAVING 3500° K, 80 CRI MINIMUM, U.O.N. (SEE SPECIFICATIONS FOR MORE INFORMATION).
- ALL LED DRIVERS (AND ASSOC. FIXTS.) SHALL HAVE MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH CALIFORNIA ENERGY COMMISSION STANDARDS AND REQUIREMENTS, WHERE SUCH ARE USED IN CONDITIONED SPACES.
- EXIT SIGNS, EMERGENCY LIGHTS AND LIGHT FIXTURES WITH EMERGENCY BATTERY BACK-UP SHALL SUPPLY A MINIMUM DURATION OF 90 MINUTES OF POWER IN THE EVENT OF A POWER OUTAGE/FAILURE.
- ALL RECESSED LIGHT FIXTURES SHALL BE U.L. APPROVED FOR ZERO CLEARANCE INSULATION COVER WHEN INSTALLED IN INSULATED CEILINGS.

TYPE	DESCRIPTION	LAMPS	MANUFACTURER	
A1	4" APERTURE DIRECT/INDIRECT LINEAR SUSPENDED LED FIXTURE, STANDARD OUTPUT UP, VERY HIGH OUTPUT DOWN, UPLIGHT TOP GLOW OPTIC, DOWNLIGHT FLUSH OPTIC, WIDESPREAD OPTICS, FINISH PER ARCHITECT, 0-10V DIMMING DRIVER, 120V. [F] SEE LIGHTING PLANS FOR DIFFERENT LENGTHS. SEE LIGHTING PLANS FOR 4" SECTION WITH EMERGENCY BATTERY BACK-UP.	12.9W/FT LED 1354LM/FT	FINELITE HP4 ID SERIES	5 E6.2
				4 E6.2
				3 E6.2
				2 E6.2
A2	SAME AS FIXTURE TYPE "A1" EXCEPT SURFACE MOUNT AND WALL WASH.	LED	FINELITE	2 E6.2
B	2" x 4" RECESSED LED FIXTURE, ANGLED DOOR STYLE, DIFFUSE CENTER OPTIC, HIGH OUTPUT, 0-10V DIMMING DRIVER, 277V. FINISH PER ARCHITECT.	40.6W LED 5416 LUMENS	FINELITE HPR LED SERIES	1 E6.2
BE	SAME AS FIXTURE TYPE "B" EXCEPT WITH EMERGENCY BATTERY BACK-UP OPTION.	40.6W LED 5416 LUMENS	FINELITE HPR LED SERIES	1 E6.2
C	4" L x 11" W x 2 1/2" DEEP VANDAL WRAP SURFACE LED FIXTURE, STANDARD WIDTH, FROSTED RIBBED ACRYLIC SHIELDING, FINISH PER ARCHITECT, 0-10V DIMMING DRIVER, 120V.	31W LED 3600 LUMENS	HE WILLIAMS AVX SERIES	6 E6.2
CE	SAME AS FIXTURE TYPE "D1" EXCEPT WITH EMERGENCY BATTERY BACK-UP OPTION.	31W LED 3600 LUMENS	HE WILLIAMS AVX SERIES	6 E6.2
XAE	WALL SCONCE LED FIXTURE WITH EMERGENCY BATTERY BACK-UP, VISUAL COMFORT WIDE, 120V.	.	TBD	WEIGHT IS LESS THAN 25 LBS

ELECTRICAL SYMBOLS & ABBREVIATIONS

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

	FLUORESCENT OR LED LUMINAIRE - SEE SCHEDULE		SECURITY DOOR CONTACTS		PANELBOARD - FLUSH MOUNTED		DETAIL NOTE REFERENCE SYMBOL. SEE ASSOCIATED NOTE ON SAME DETAIL.
	EMERGENCY OR NIGHT LIGHT		SECURITY MOTION DETECTOR		EQUIPMENT PANEL - FLUSH MOUNTED		DETAIL OR SECTION REFERENCE SHEET NUMBER
	STRIP FLUORESCENT OR LED LUMINAIRE - SEE SCHEDULE		CCTV CAMERA		PANELBOARD - SURFACE MOUNTED		FEEDER DESIGNATION. SEE ASSOCIATED NOTE ON SAME DETAIL.
	LUMINAIRE - RECESSED - SEE SCHEDULE		SECURITY SYSTEM KEYPAD		METER W/ CURRENT TRANSFORMER		ABBREVIATIONS
	RECESSED WALL WASHER		DOOR BELL PUSHBUTTON		JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES		GROUND FAULT INTERRUPTING
	LUMINAIRE - SURFACE MOUNTED - SEE SCHEDULE		DOOR CHIME WITH LED		MOTOR CONNECTION		GROUND
	LUMINAIRE - POLE OR POST MOUNTED - SEE SCHEDULE		RECEPTACLE - DUPLEX *		NON-FUSED DISCONNECT SWITCH		GROUND
	LUMINAIRE - WALL MOUNTED SEE SCHEDULE		DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		FUSED DISCONNECT SWITCH; FUSED WITH DUAL-ELEMENT FUSES SIZED PER EQUIPMENT MFG'S NAMEPLATE DATA		GROUND
	BOLLARD OR PATH LIGHT - SEE SCHEDULE		GFCI CONVENIENCE RECEPTACLE - DUPLEX *		COMBINATION STARTER/FUSED DISCONNECT SWITCH; FUSED DISCONNECT SWITCH ELEMENT FUSES SIZED PER EQUIPMENT MFG'S NAMEPLATE DATA		GROUND
	EXIT LIGHT - DIRECTIONAL ARROWS AS INDICATED - SEE SCHEDULE		RECEPTACLE DOUBLE DUPLEX *		MAGNETIC STARTER - NEMA SIZE INDICATED NEMA 3R ENCLOSURE UNLESS OTHERWISE SPECIFIED		GROUND
	TRACK LIGHTING - SEE SCHEDULE		HALF SWITCHED DUPLEX RECEPTACLE *		CIRCUIT BREAKER		GROUND
	EMERGENCY LIGHT		SINGLE RECEPTACLE *		GROUND ROD WITH GROUNDWELL BOX		GROUND
	DIGITAL DUAL TECHNOLOGY OCC. SENSOR		DUPLEX RECEPTACLE - CEILING MOUNTED		GROUND ELECTRODE		GROUND
	LIGHTING CONTROL OCCUPANCY SENSOR CORNER MOUNTED		LETTER INDICATES DUPLEX HALF CONTROLLED RECEPTACLE *		NORMALLY OPEN CONTACT		GROUND
	DIMMER ROOM CONTROLLER		LETTER INDICATES DUPLEX FULLY CONTROLLED RECEPTACLE *		NORMALLY CLOSED CONTACT		GROUND
	PLUG LOAD CONTROLLER		FLOOR MOUNTED DUPLEX RECEPTACLE		TRANSFORMER - SEE SINGLE LINE FOR SIZE		GROUND
	ROOM LIGHTING CONTROLLER		FLOOR MOUNTED BOX		FULLBOX		GROUND
	LIGHTING CONTROL PANEL		FLEX CONDUIT WITH CONNECTION		CONDUIT - UP		GROUND
	DIGITAL DAYLIGHT SENSOR		CONDUIT - DOWN		CONDUIT EMERGENCY SYSTEM		GROUND
	SINGLE POLE SWITCH **		CONDUIT EMERGENCY SYSTEM		LOW VOLTAGE WIRING		GROUND
	SINGLE POLE SWITCH **		SURFACE METAL OR NON-METALLIC RACEWAY		CONDUIT - CONCEALED IN WALLS OR CEILING		GROUND
	THREE WAY SWITCH **		CONDUIT - EXISTING		CONDUIT - BELOW SLAB OR UNDERGROUND, 3/4" MIN.		GROUND
	FOUR WAY SWITCH **		CONDUIT - CAPPED OR STUB-OUT CONDUIT		CONDUIT CONTINUATION		GROUND
	MANUAL MOTOR STARTER		WIRELESS ACCESS POINT (WAP) - CEILING MOUNTED		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	KEY OPERATED SWITCH **		WIRELESS ACCESS POINT (WAP) - WALL MOUNTED - FIELD VERIFY HEIGHT		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	LIGHTING DIMMER **		VOICE/DATA OUTLET - FLOOR MOUNTED		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	DIGITAL ON/OFF SWITCH **		TV OUTLET *		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	DIGITAL DIMMER SWITCH **		VOICE/DATA OUTLET - CEILING MOUNTED		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	DIGITAL MULTI SCENE LIGHTING SWITCH **		INTERIOR SPEAKERS CEILING MOUNTED		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	DIGITAL DUAL TECHNOLOGY WALL OCC. SENSOR **		INTERIOR SPEAKERS WALL MOUNTED		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	WALL OCCUPANCY SENSOR **		CLOCK - 8-0-8 OFF U.O.N. VERIFY BEFORE INSTALLATION		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	DIMMING DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR **		SHEET NOTE REFERENCE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND
	2-BUTTON DIMMING DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR **		SCHEDULE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET		CONDUIT - HOME RUN TO PANEL TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.		GROUND

EQUIPMENT ANCHORAGE

M/E/P COMPONENT ANCHORAGE NOTES:

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

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

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

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

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

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.5.5, 13.6.5, 13.6.7, 13.6.8 AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

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

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E);
MP □ MD □ PP □ E ■ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
MP □ MD □ PP □ E □ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM) # _____

APPLICABLE CODES & STANDARDS

CODES:

- 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
- 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
- 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
- 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- NATIONAL FIRE ALARM CODE (NFPA 72) 2016.

STANDARDS:

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
- INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
- NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
- UNDERWRITER LABORATORIES (UL)
- CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)

SHEET INDEX

2-E0.1	SYMBOLS, ABBREVIATIONS, LIGHT FIXTURE SCHEDULE, CODES, STANDARDS, NOTES & SHEET INDEX.
2-E0.2	CALIFORNIA ENERGY COMPLIANCE TITLE 24 - INDOOR.
2-E0.3	CALIFORNIA ENERGY COMPLIANCE TITLE 24 - OUTDOOR.
2-E1.1	ELECTRICAL SINGLE LINE DIAGRAM, DETAILS & PANELBOARD SCHEDULES.
2-E2.1	ELECTRICAL SITE PLAN.
2-E2.2	ELECTRICAL PARTIAL SITE PLAN.
2-E4.1	POWER & SYSTEMS PARTIAL FLOOR PLAN.
2-E4.2	POWER & SYSTEMS PARTIAL FLOOR PLAN.
2-E5.1	LIGHTING PARTIAL FLOOR PLAN.
2-E5.2	LIGHTING PARTIAL FLOOR PLAN.
2-E6.1	ELECTRICAL DETAILS.
2-E6.2	ELECTRICAL DETAILS.
2-E6.3	ELECTRICAL DETAILS.
2-FA0.1	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES.
2-FA1.1	FIRE ALARM RISER DIAGRAM, BATTERY & VOLTAGE DROP CALCULATIONS.
2-FA2.1	FIRE ALARM SITE PLAN.
2-FA2.2	FIRE ALARM PARTIAL SITE PLAN.
2-FA4.1	FIRE ALARM PARTIAL FLOOR PLAN.
2-FA4.2	FIRE ALARM PARTIAL FLOOR PLAN.

SYMBOLS, ABBREVIATIONS, LIGHT FIXTURE SCHEDULE, CODES, STANDARDS, NOTES & SHEET INDEX

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

DRAWN BY:	CADD
CHECKED BY:	NA
SFA JOB NO:	DATE:
20008.02	12/09/2020

2-E0.1



PANELBOARD SCHEDULES	
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Project No. 20-074.02
60 Garden Court • Suite 210 • Monterey, CA 93940
F.831.646.3330 • F.831.646.3336 • www.xcemb.com

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ELECTRICAL SINGLE LINE DIAGRAM, DETAILS & PANELBOARD SCHEDULES

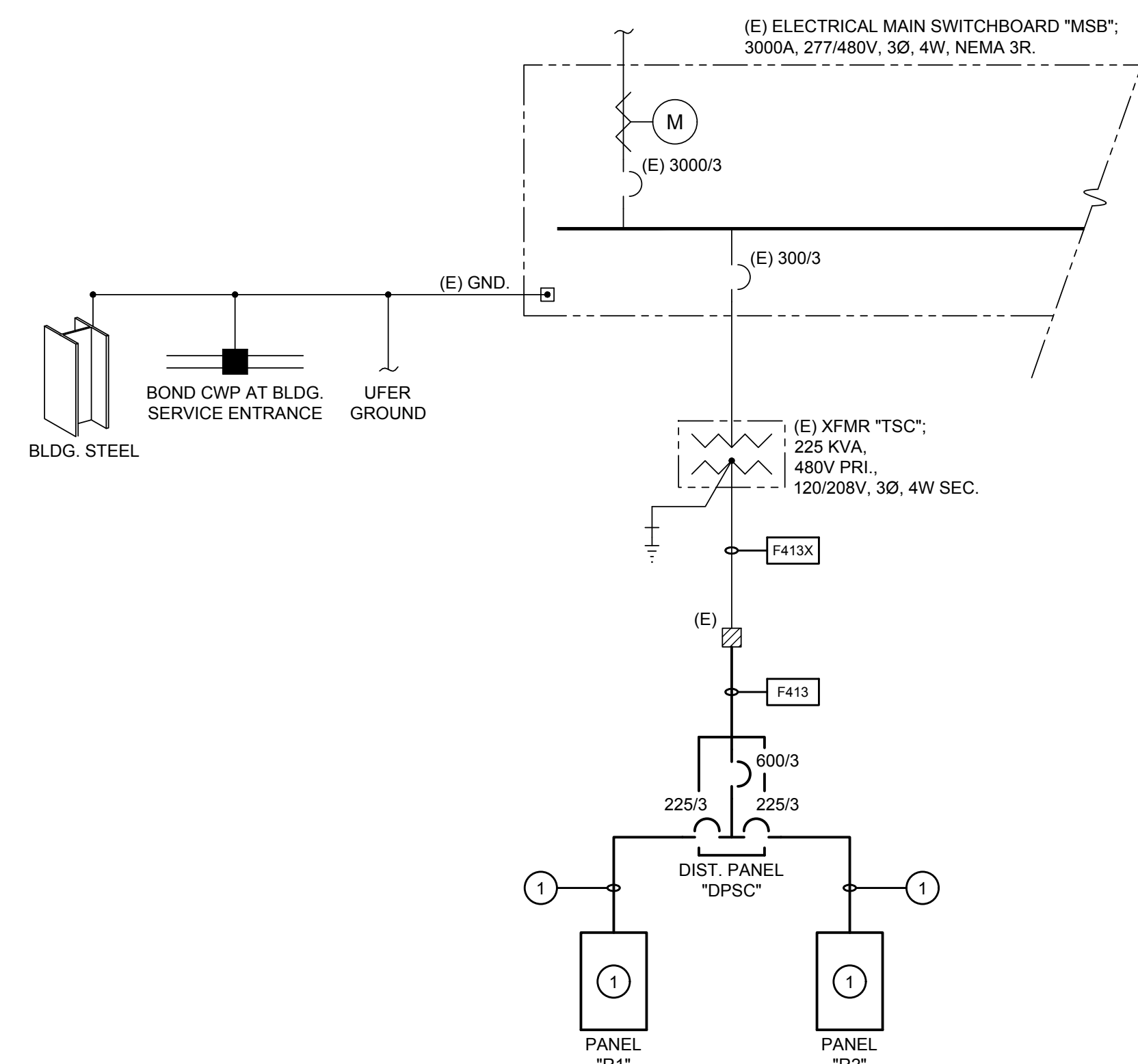
THOMAS S. HART MIDDLE SCHOOL -
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4433 WILLOW RD., PLEASANTON, CA 94588
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REVISIONS		
NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020



DRAWN BY:	CADD
CHECKED BY:	NA
SFA JOB NO:	DATE:
20008.02	12/09/2020

2-E1.1



○ DETAIL NOTES:

1. BY MODULAR MANUFACTURER.

FEEDER SCHEDULE		
DESIGNATION	AMPACITY	CONDUIT & CONDUCTORS SIZES
F413X	600	(E) (2) 3 1/2" C., EACH WITH NEW 4 #350kcm & NEW 1 #1/0 GND (PARALLEL).
F413	600	(2) 3 1/2" C., EACH W/4 #350kcm & 1 #1/0 GND (PARALLEL).

SINGLE LINE DIAGRAM LEGEND

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

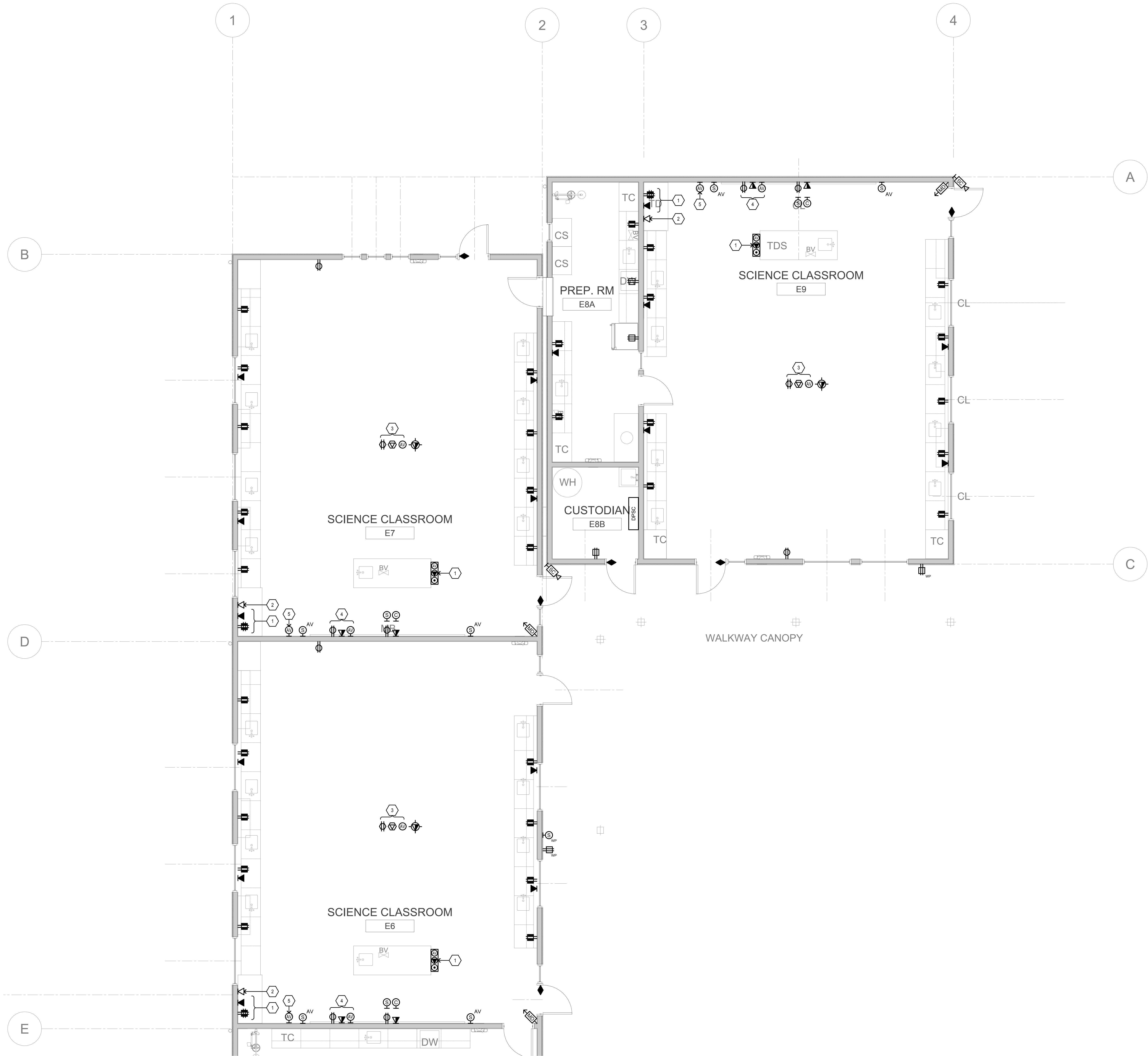
1 ELECTRICAL SINGLE LINE DIAGRAM

NO SCALE

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SHEET NOTES

1. FOR TEACHING STATION.
2. FOR CEILING MOUNTED PROJECTOR.
3. FOR TELEPHONE.
4. FOR TELEVISION. VERIFY EXACT LOCATION WITH ARCHITECT.
5. FOR TELEVISION CONTROLS.

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

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

GENERAL NOTE:
SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH ARCHITECT FOR EXACT REQUIREMENTS.



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POWER & SYSTEMS PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

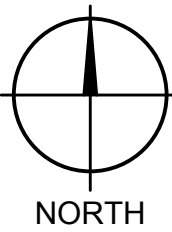
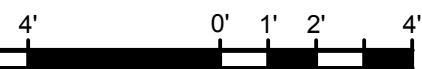
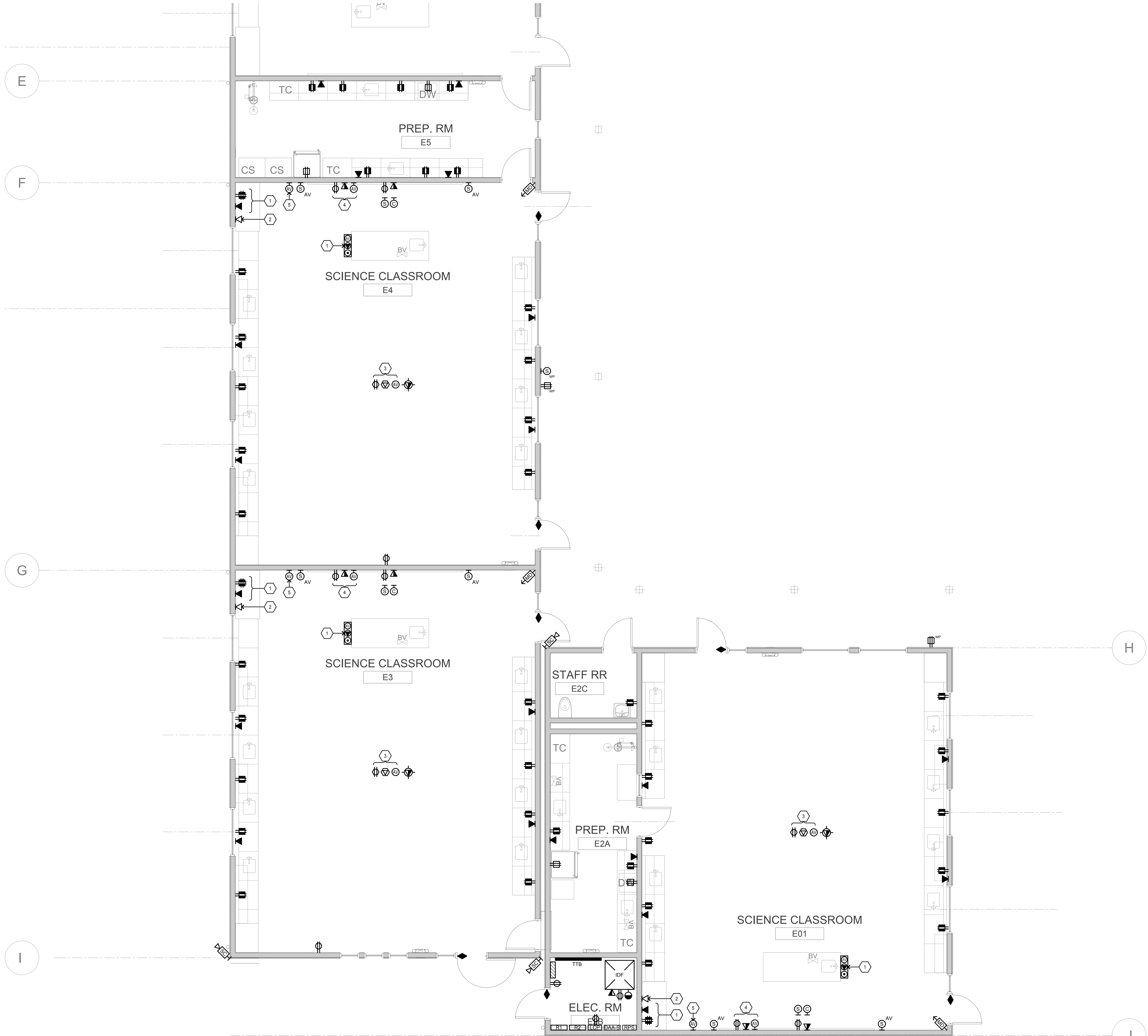
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20008.02	12/09/2020

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1 POWER & SYSTEMS PARTIAL FLOOR PLAN
SCALE: 1/4"=1'-0"



SHEET NOTES

1. FOR TEACHING STATION.
2. FOR CEILING MOUNTED PROJECTOR.
3. FOR TELEPHONE.
4. FOR TELEVISION. VERIFY EXACT LOCATION WITH ARCHITECT.
5. FOR TELEVISION CONTROLS.

BRANCH CIRCUIT CONDUCTOR SIZING TABLE

CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	REQUIREMENT
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20/277	206'-330'	1/2" C., 2 #8 & 1 #10 GND.

NOTE:
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GENERAL NOTE:

SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS. CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH ARCHITECT FOR EXACT REQUIREMENTS.



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POWER & SYSTEMS PARTIAL FLOOR PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

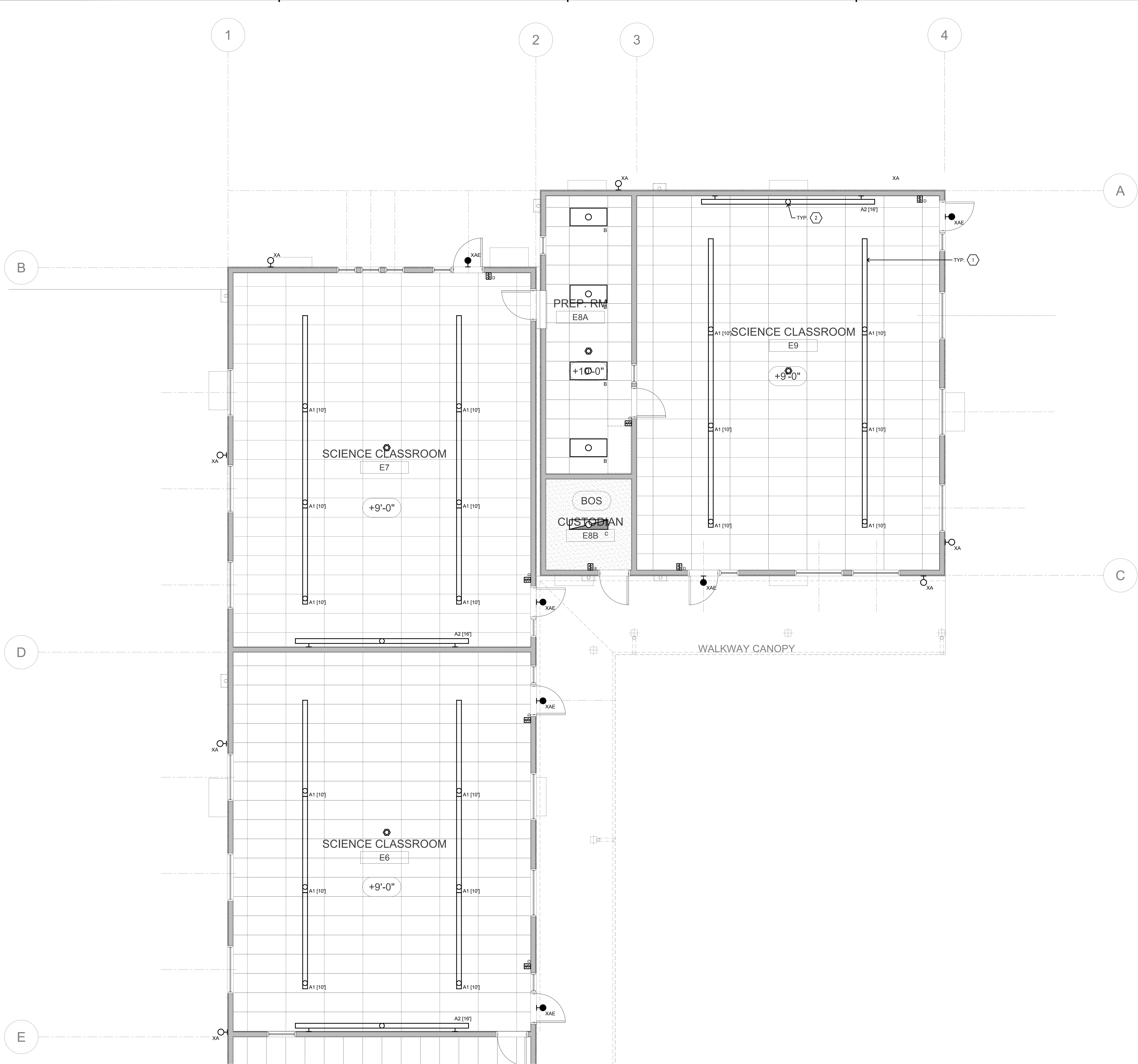


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SHEET NOTES

- SUSPENDED LIGHT FIXTURE, MOUNT AT 10'-0" ABOVE FINISH FLOOR.
- WALLWASH LIGHT FIXTURE FOR WHITEBOARD.

BRANCH CIRCUIT CONDUCTOR SIZING TABLE

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

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

GENERAL NOTE:
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LIGHTING PARTIAL REFLECTED CEILING PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

1

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20008.02	12/09/2020

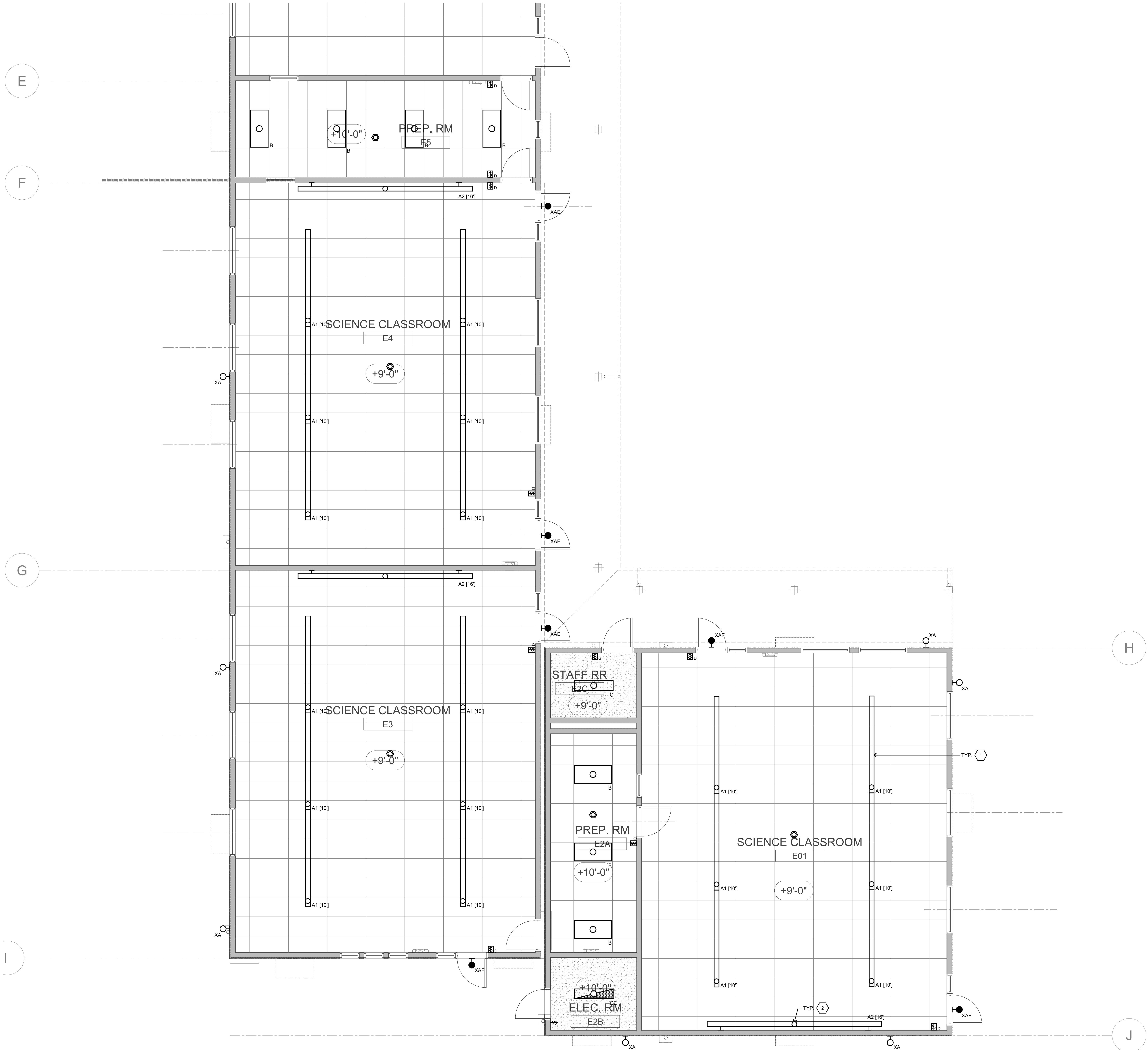
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1 LIGHTING PARTIAL REFLECTED CEILING PLAN

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



SHEET NOTES

- SUSPENDED LIGHT FIXTURE, MOUNT AT 10'-0" ABOVE FINISH FLOOR.
- WALLWASH LIGHT FIXTURE FOR WHITEBOARD.

BRANCH CIRCUIT CONDUCTOR SIZING TABLE

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20/120	91'-140'	1/2" C., 2 #8 & 1 #10 GND.
20/277	131'-205'	1/2" C., 2 #10 & 1 #10 GND.
20/277	206'-330'	1/2" C., 2 #8 & 1 #10 GND.

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

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LIGHTING PARTIAL REFLECTED CEILING PLAN

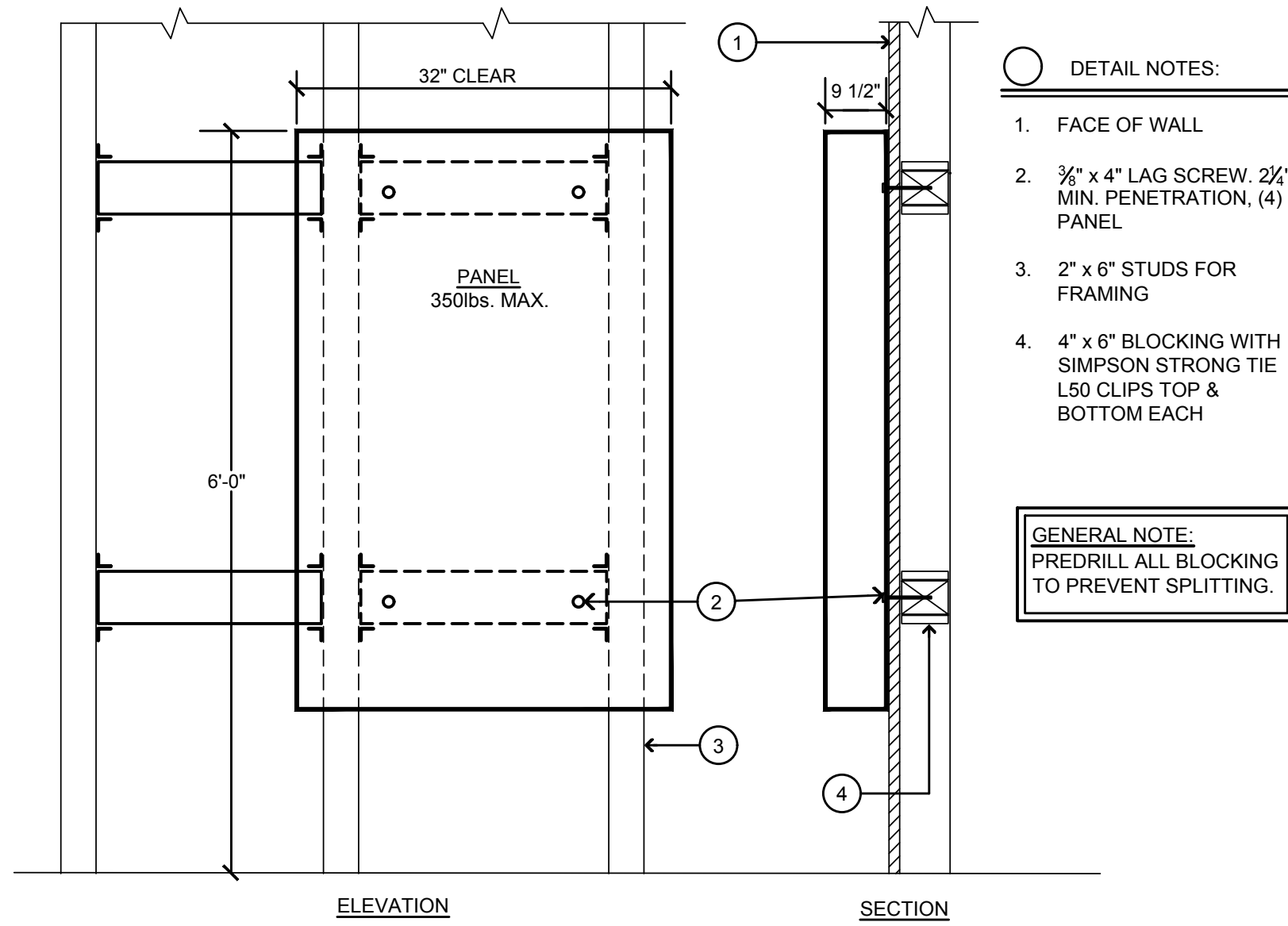
THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
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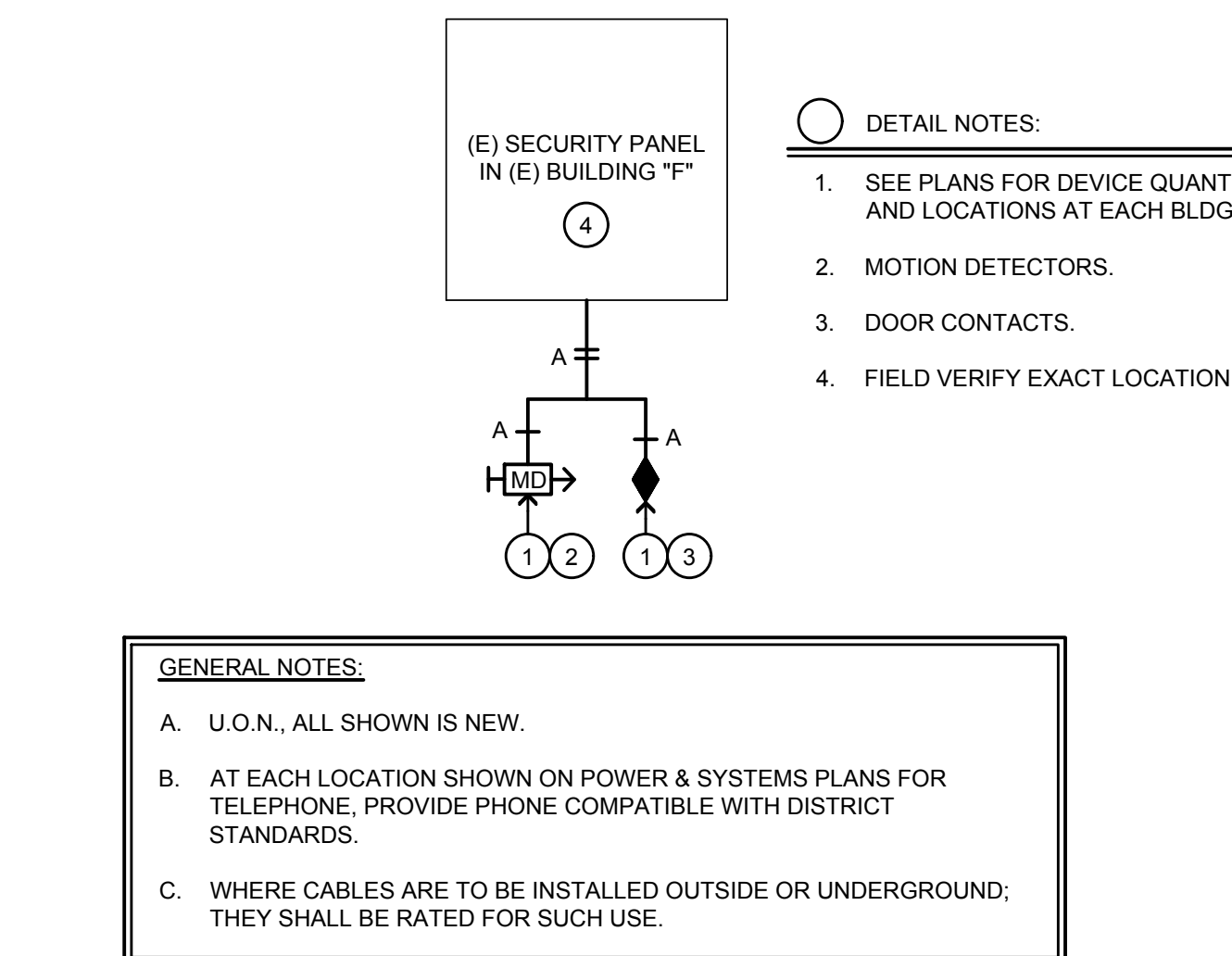
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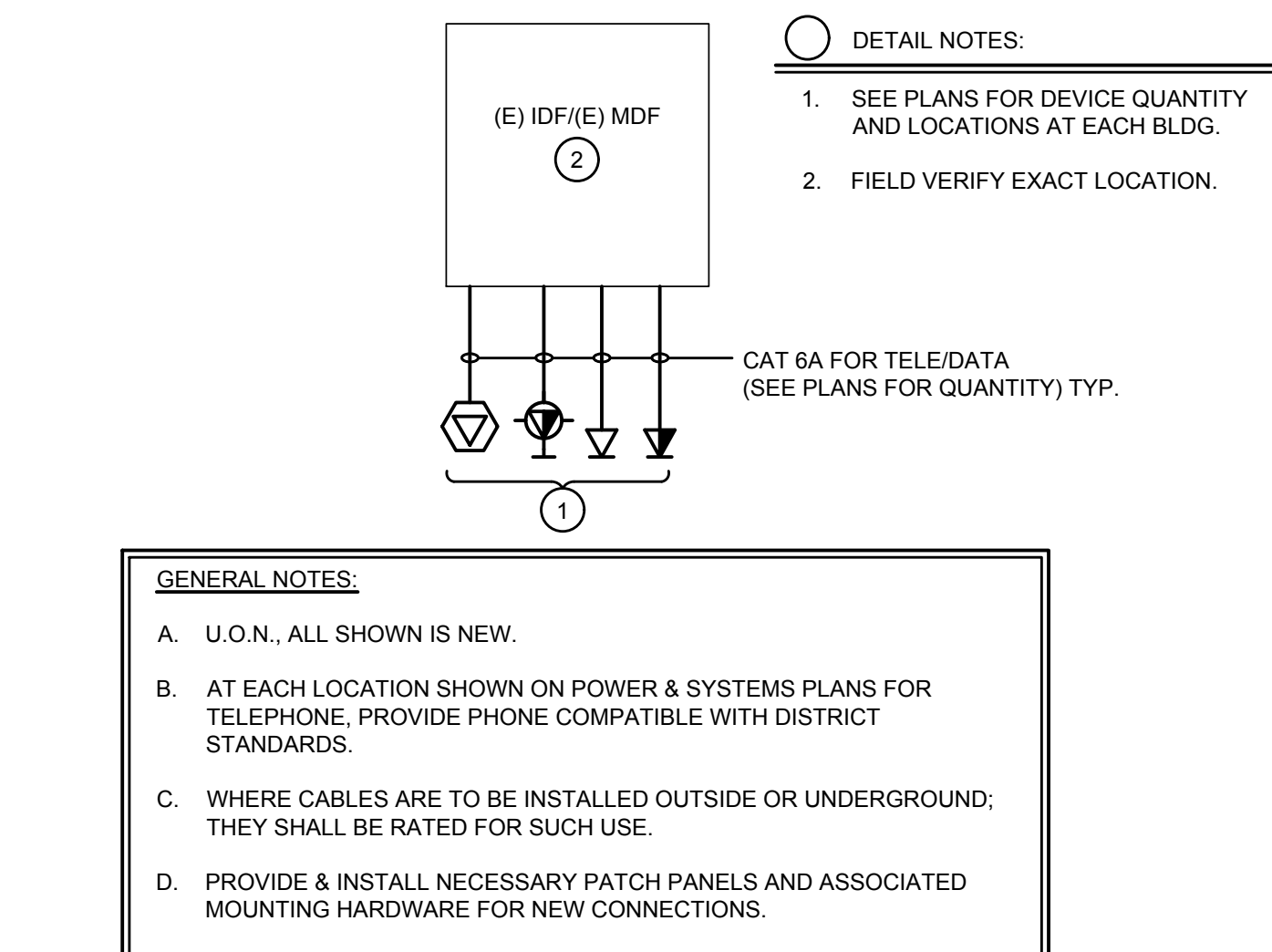


9 SURFACE MOUNTED PANEL DETAIL
NO SCALE

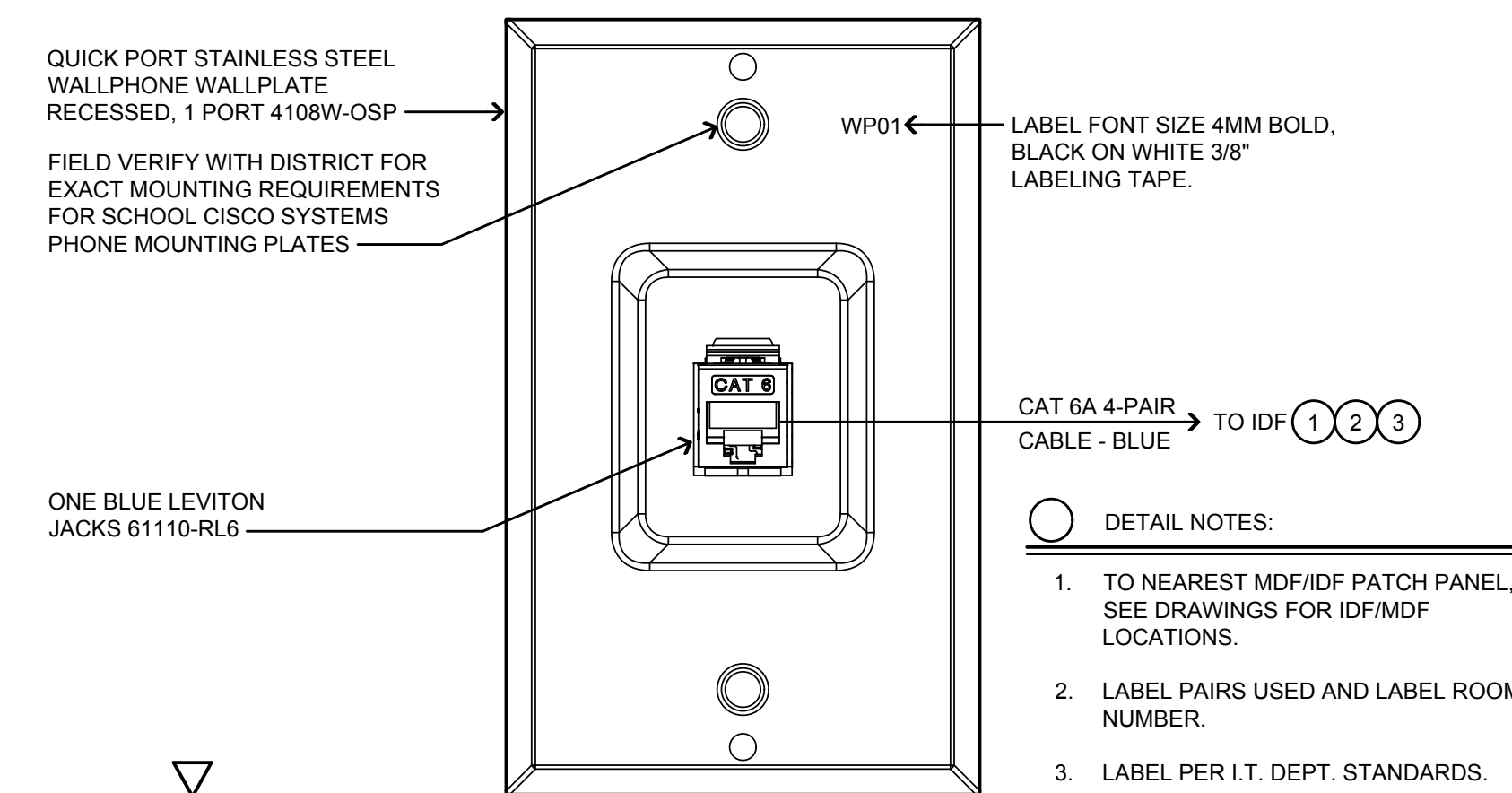
SIGNAL CABLE SCHEDULE			
I.D.	USE	DESCRIPTION	REMARKS
A	INTRUSION	#16/4 CONDUCTOR	FROM IA PANEL TO KEYPAD



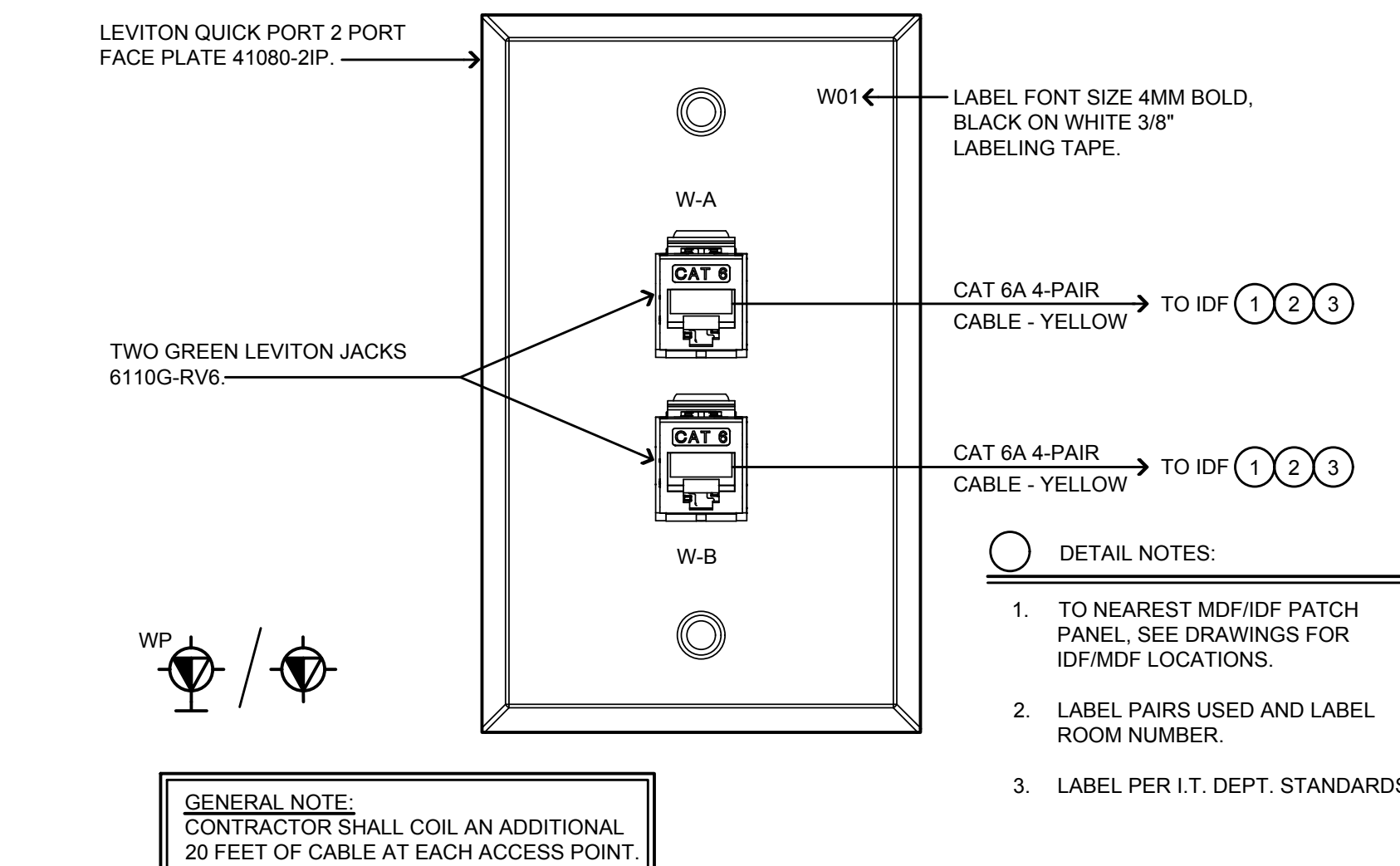
8 SECURITY RISER DIAGRAM
NO SCALE



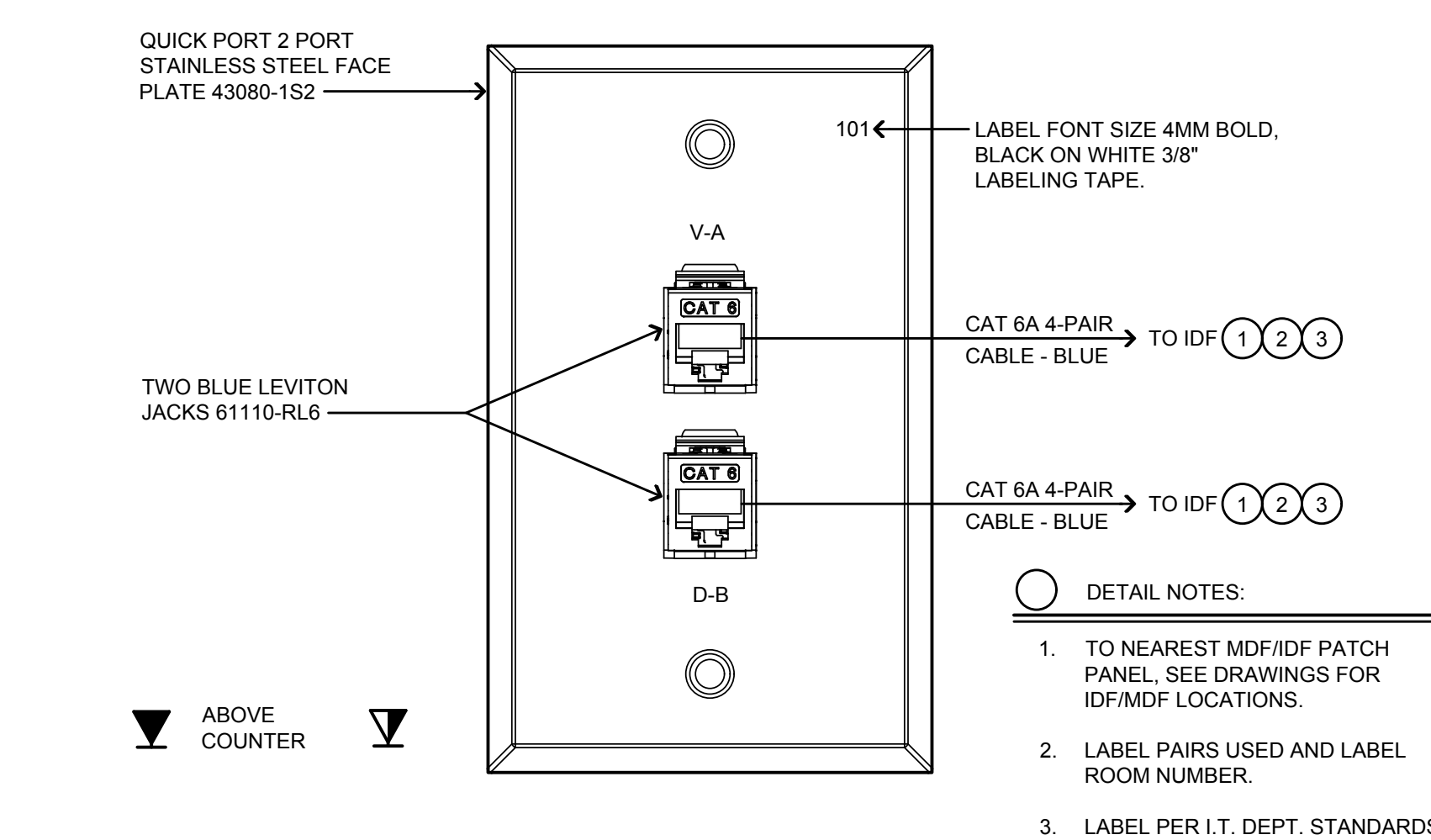
7 TELE/DATA RISER DIAGRAM
NO SCALE



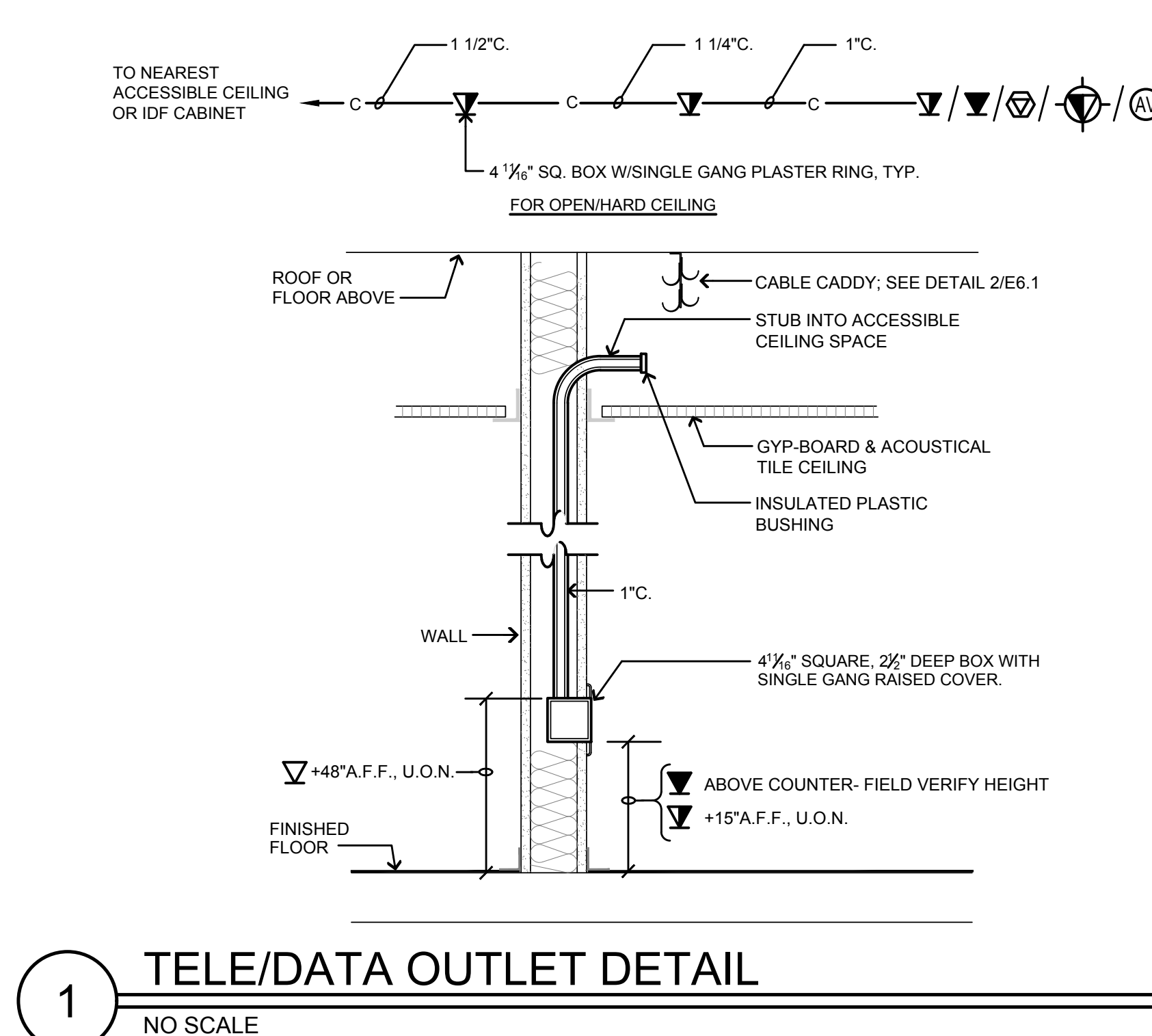
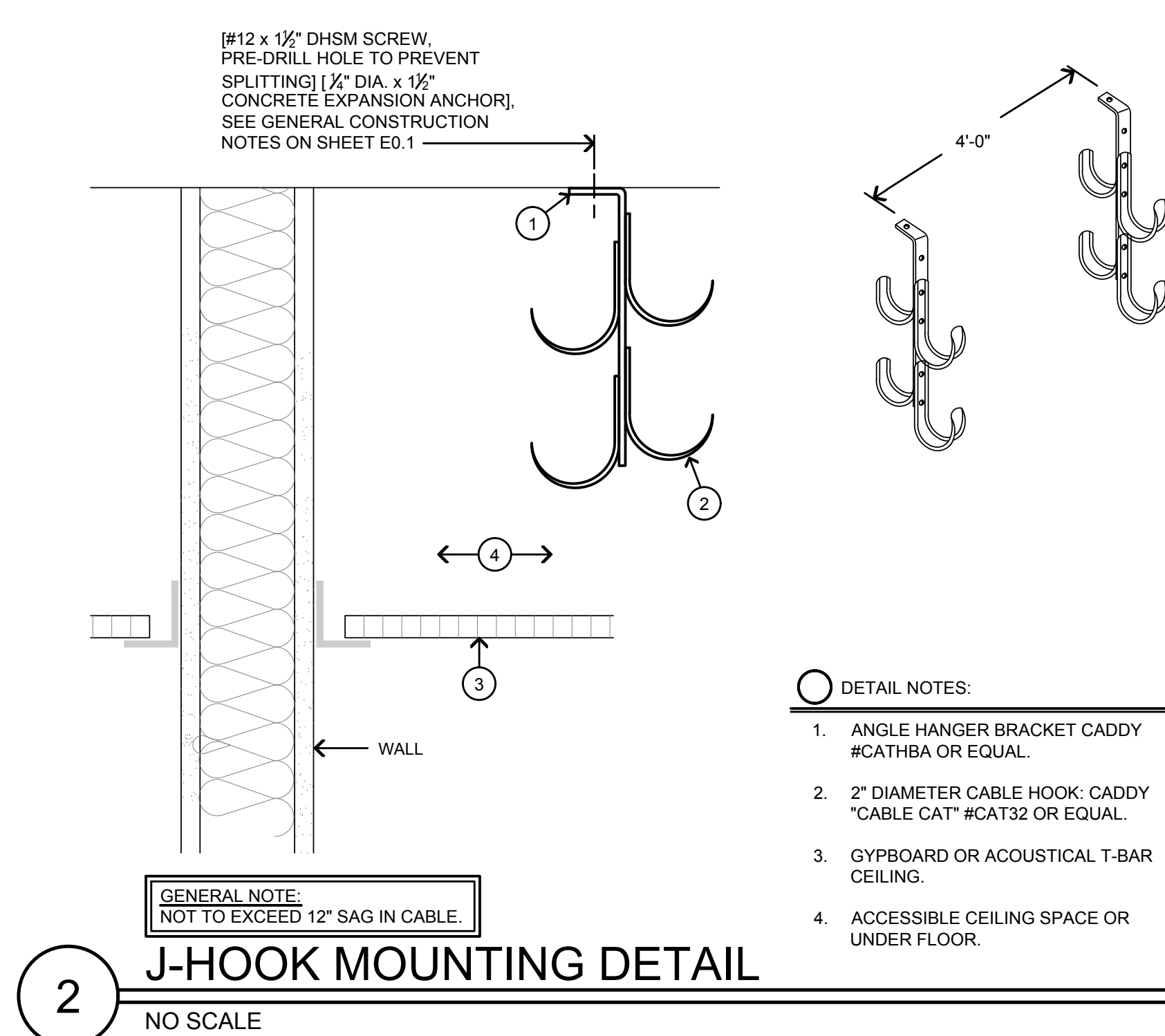
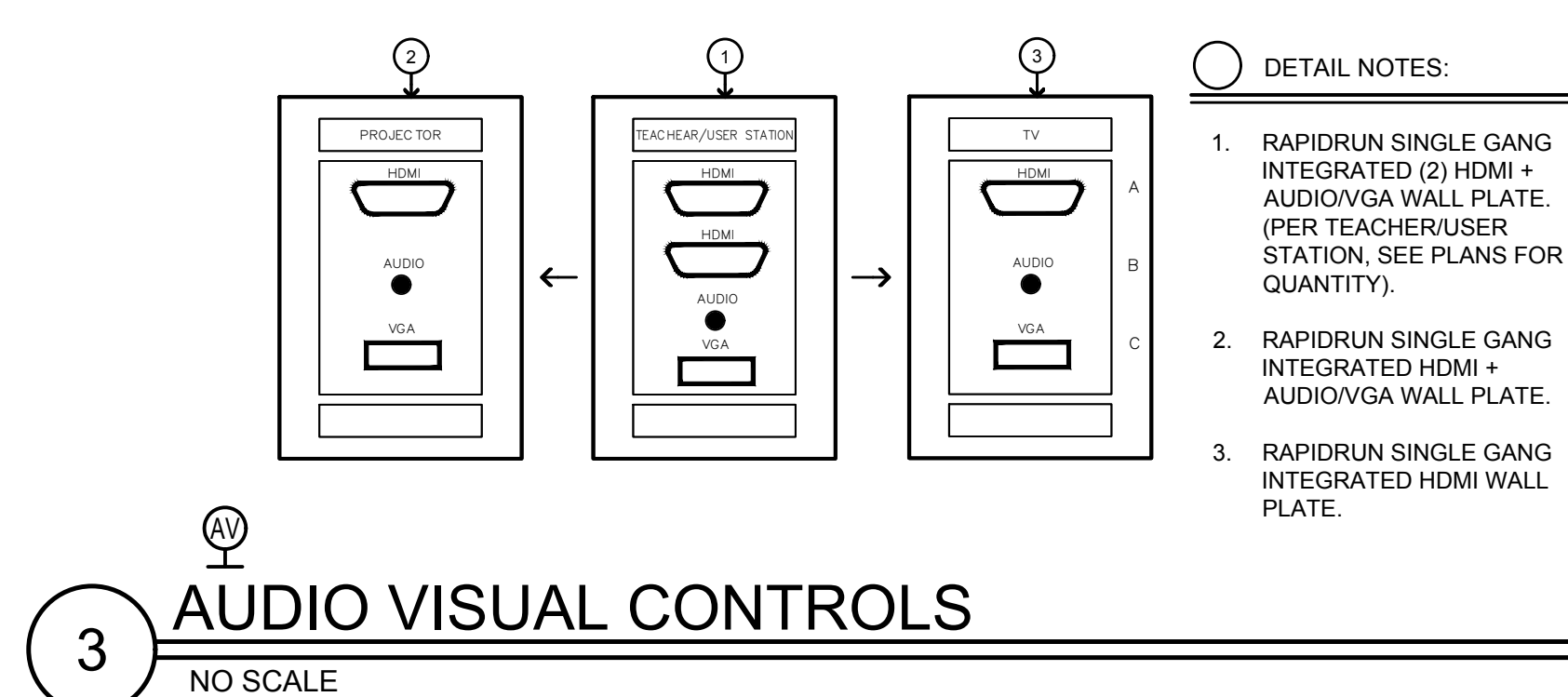
6 WALL PHONE OUTLET
NO SCALE



5 WIRELESS OUTLET
NO SCALE

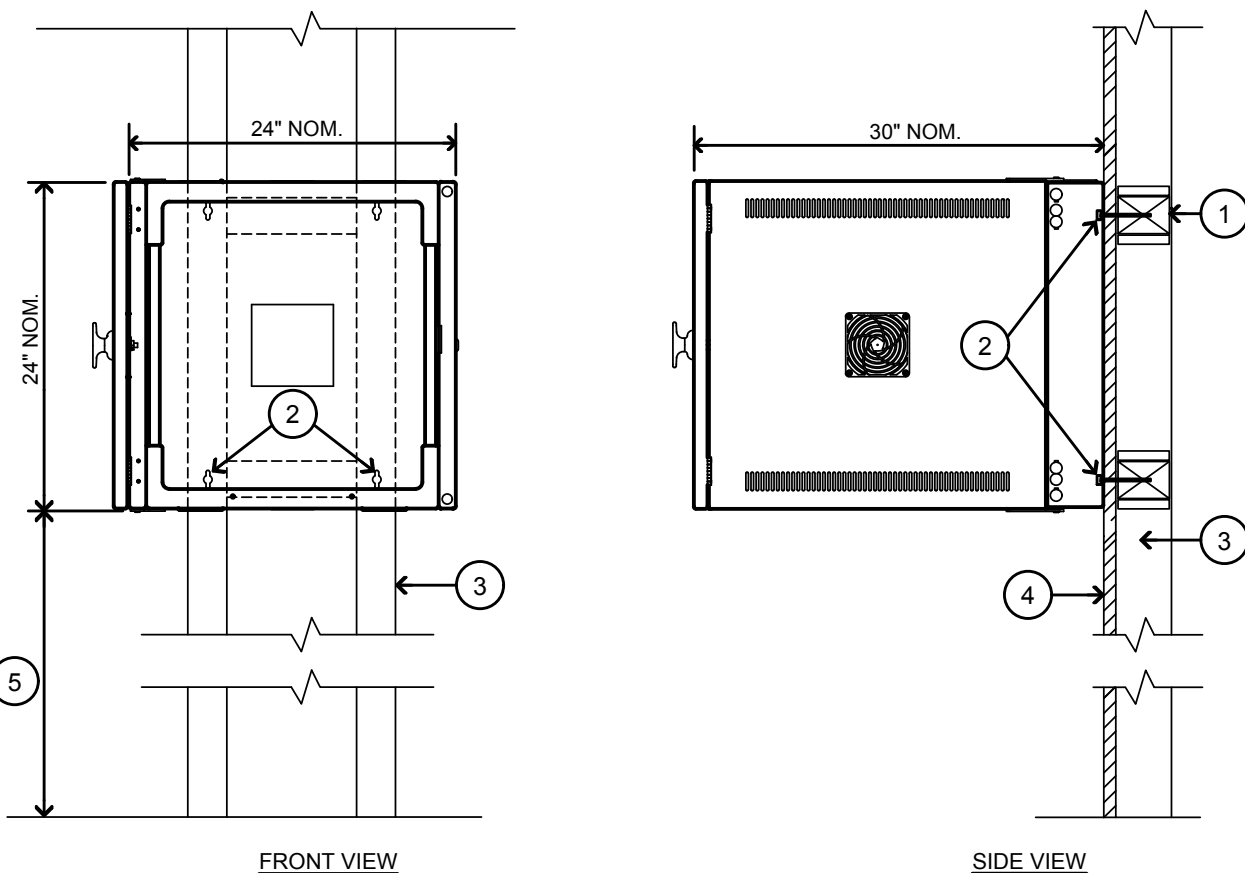


4 WORKSTATION OUTLET
NO SCALE

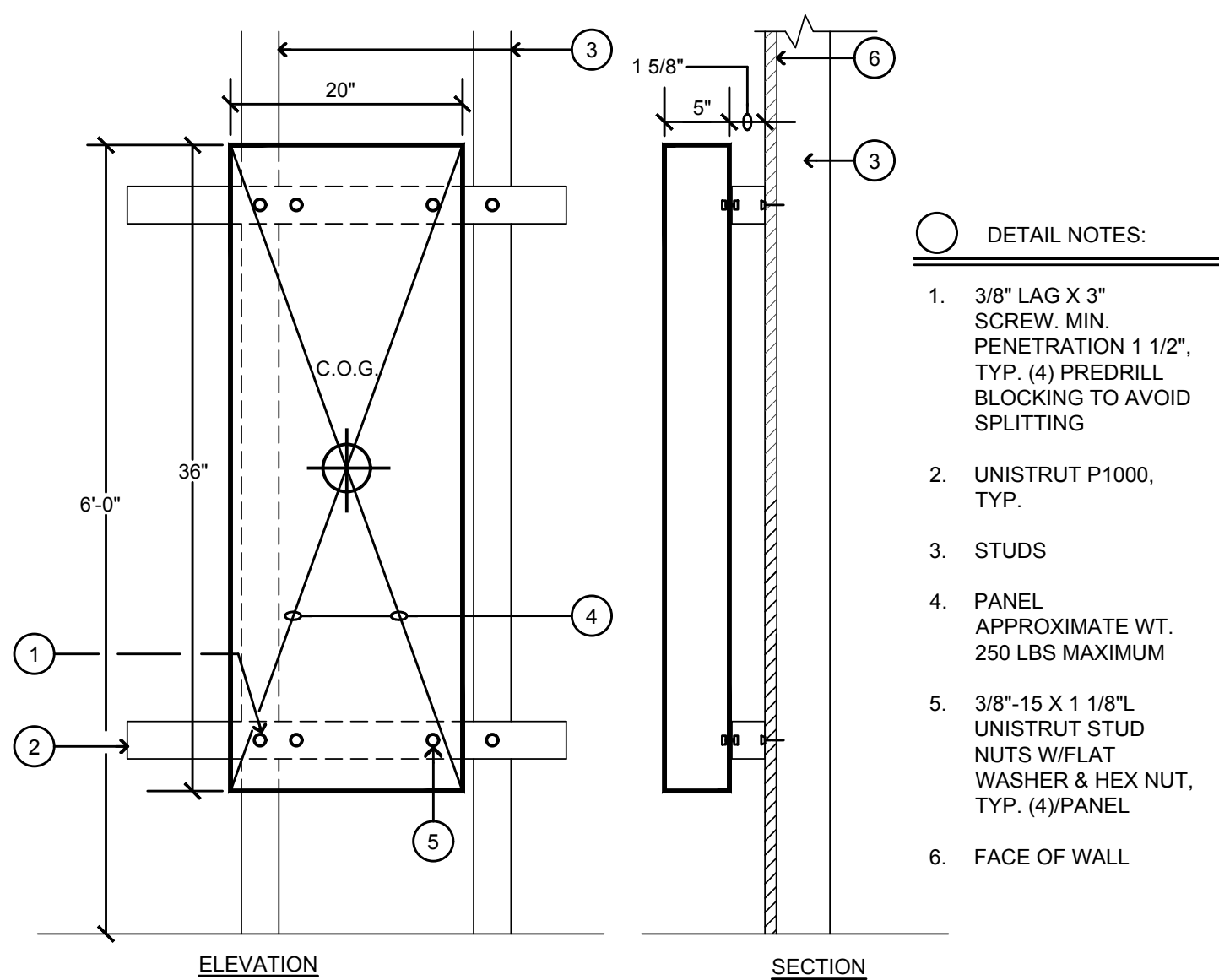


1 TELE/DATA OUTLET DETAIL
NO SCALE

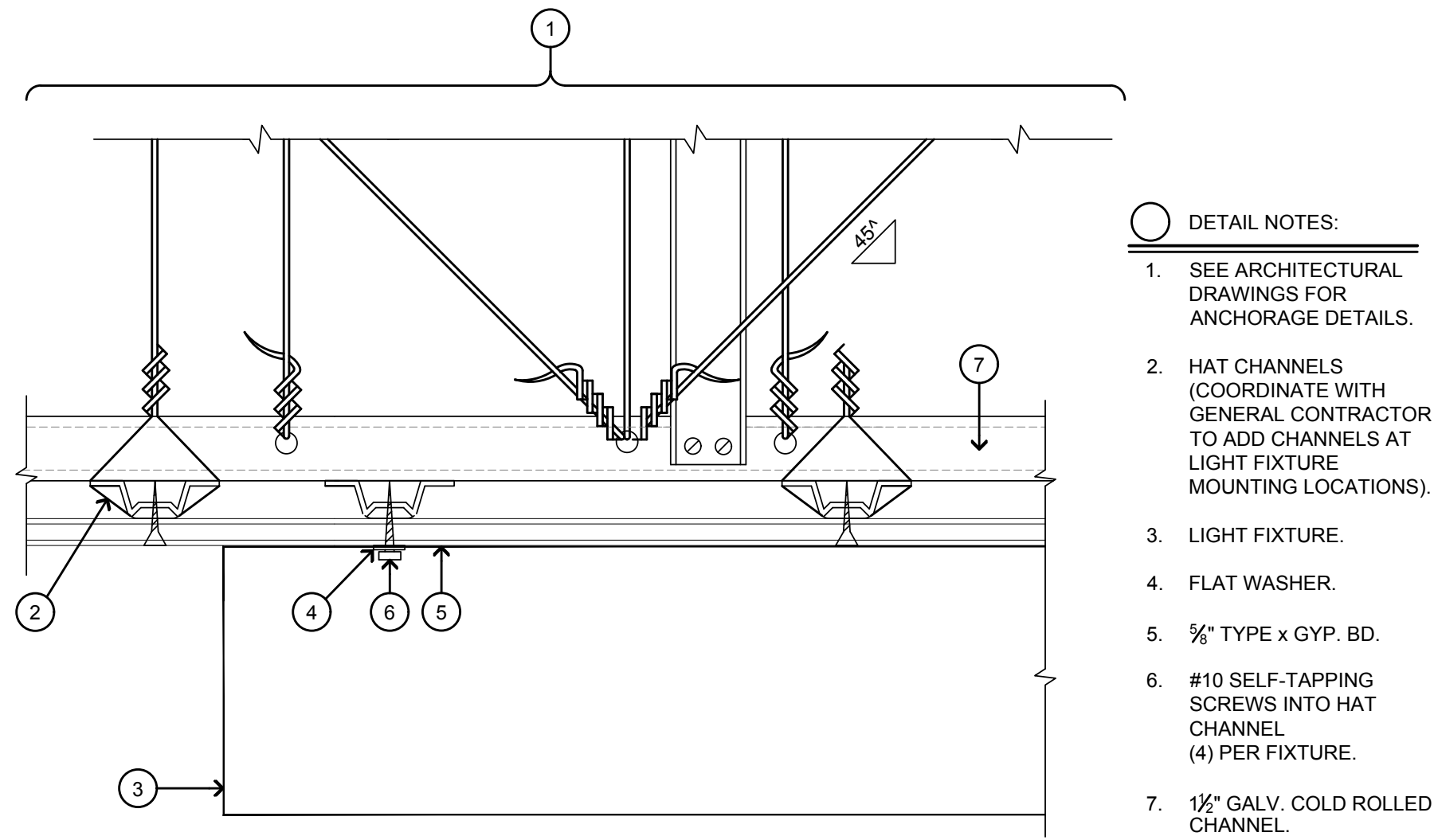
- DETAIL NOTES:**
- 4" x 4" BLOCKING AS REQUIRED WITH SIMPSON L50 CLIPS.
 - 3/8" x 2" LAG SCREW AS RECOMMENDED BY MANUFACTURER. (6) PER CABINET. PRE-DRILL STUDS OR BLOCKING TO AVOID SPLITTING.
 - 2x STUD BUILDING FRAME.
 - FACE OF WALL.
 - FIELD VERIFY MOUNTING HEIGHT.
 - LEAVE ADEQUATE CABLE LENGTH TO ALLOW DOOR TO SWING OPEN FULLY.
 - WEIGHT OF CABINET = 200 LBS (MAX).



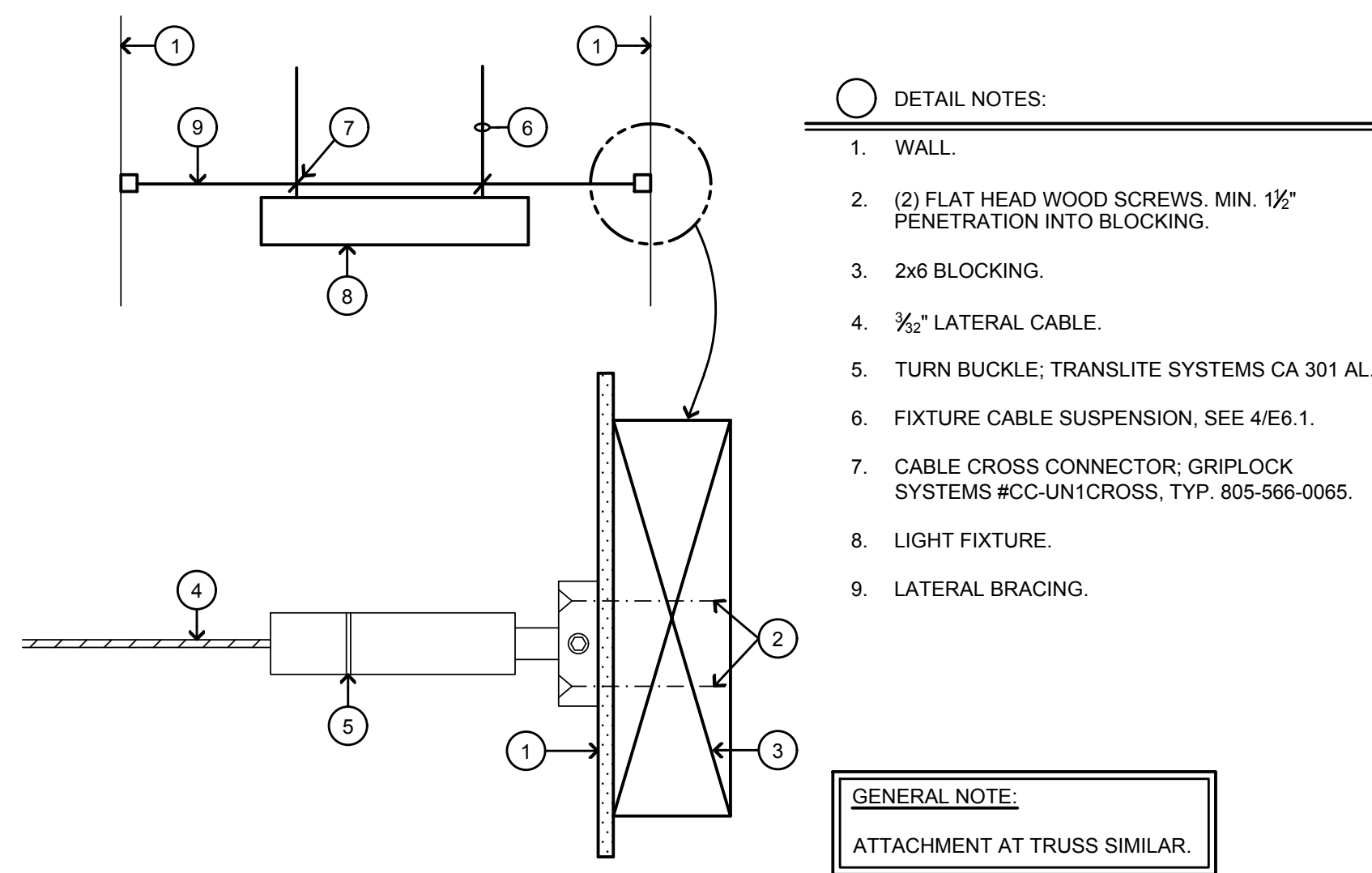
11 WALL CABINET MOUNTING DETAIL
NO SCALE



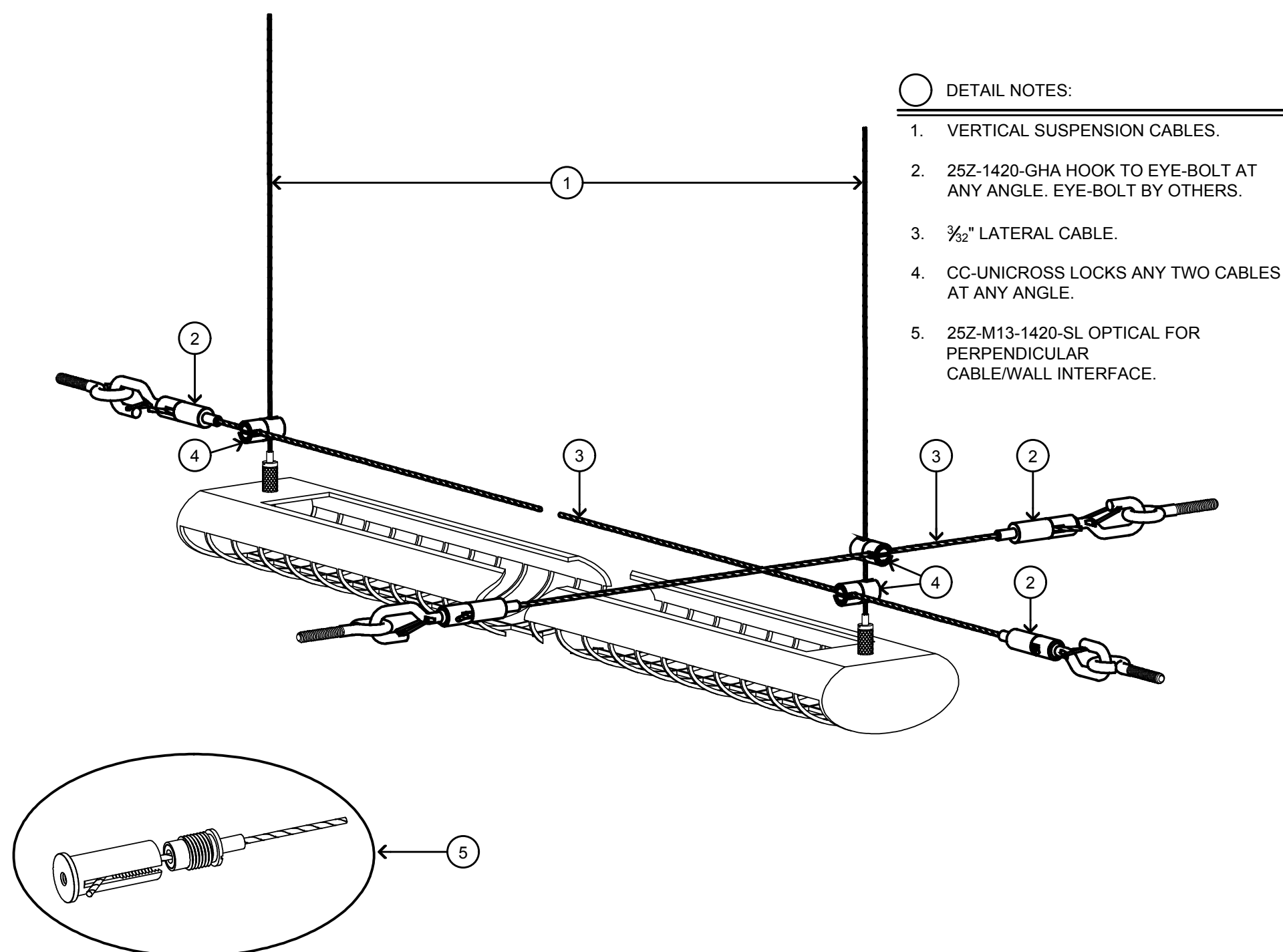
10 SURFACE MOUNTED PANEL DETAIL
NO SCALE



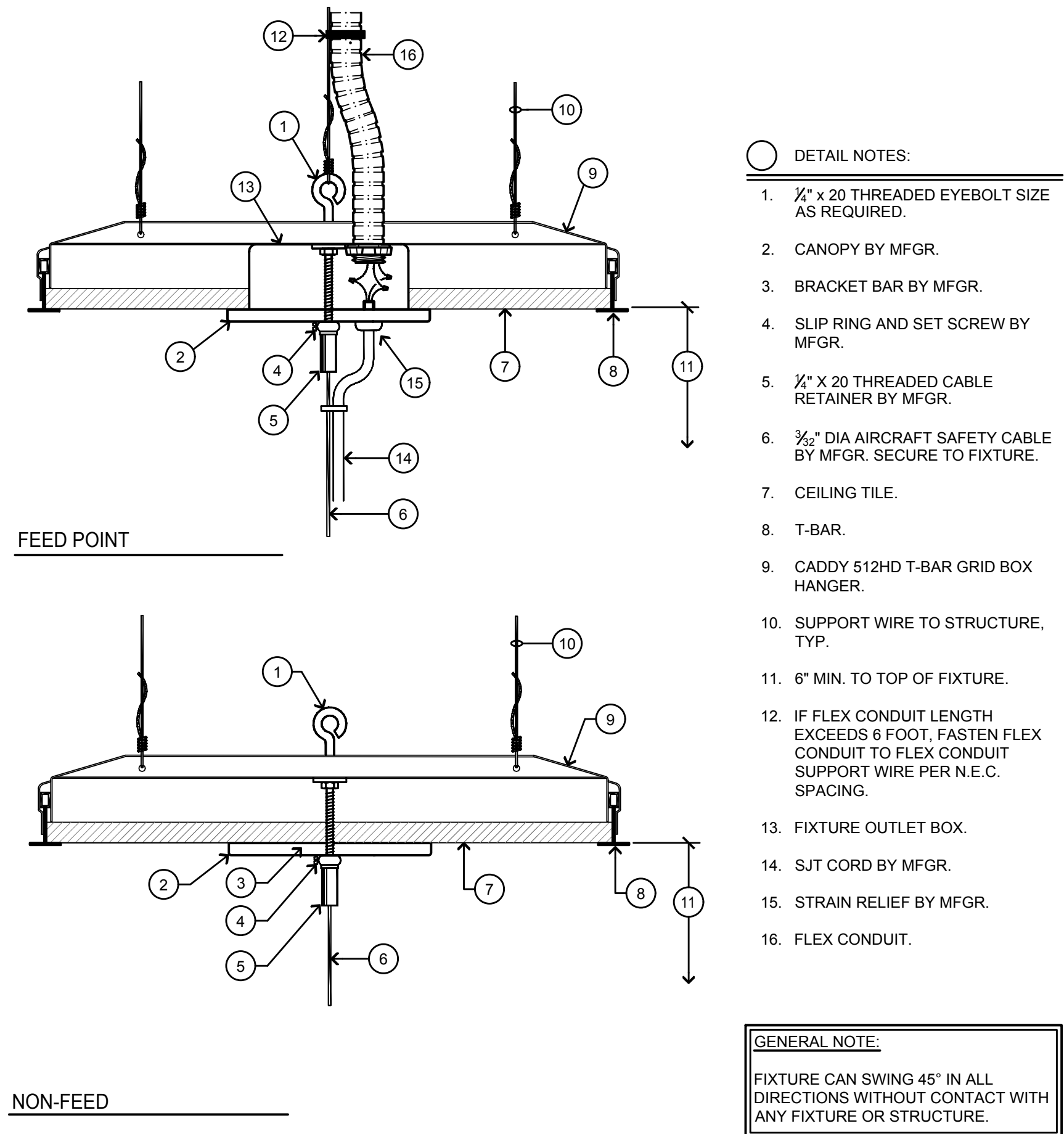
6 SURFACE MOUNTED FIXTURE
NO SCALE



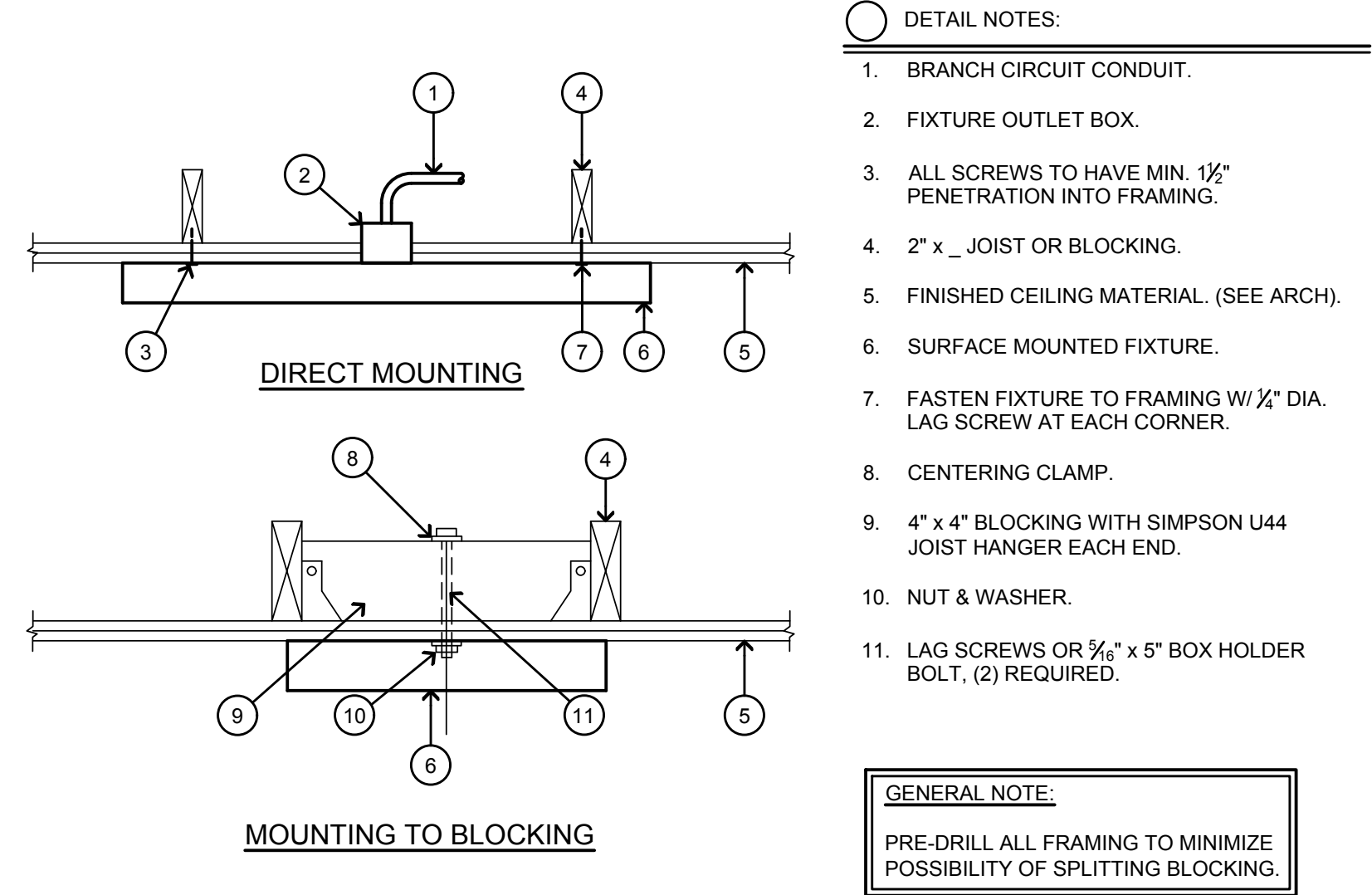
5 GRIPLOCK SEISMIC SYSTEM LATERAL BRACING
NO SCALE



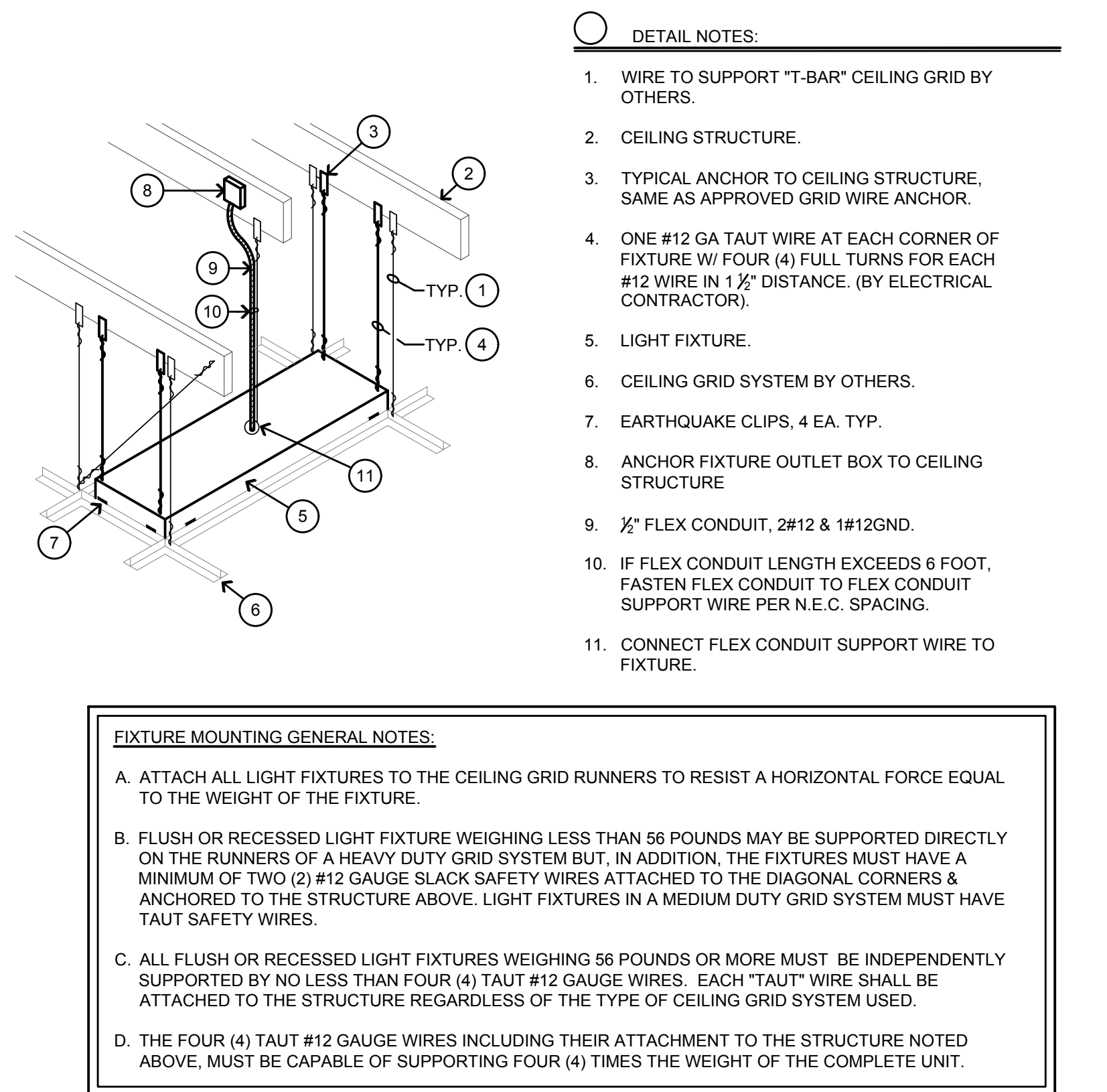
4 GRIPLOCK SEISMIC SYSTEM
NO SCALE



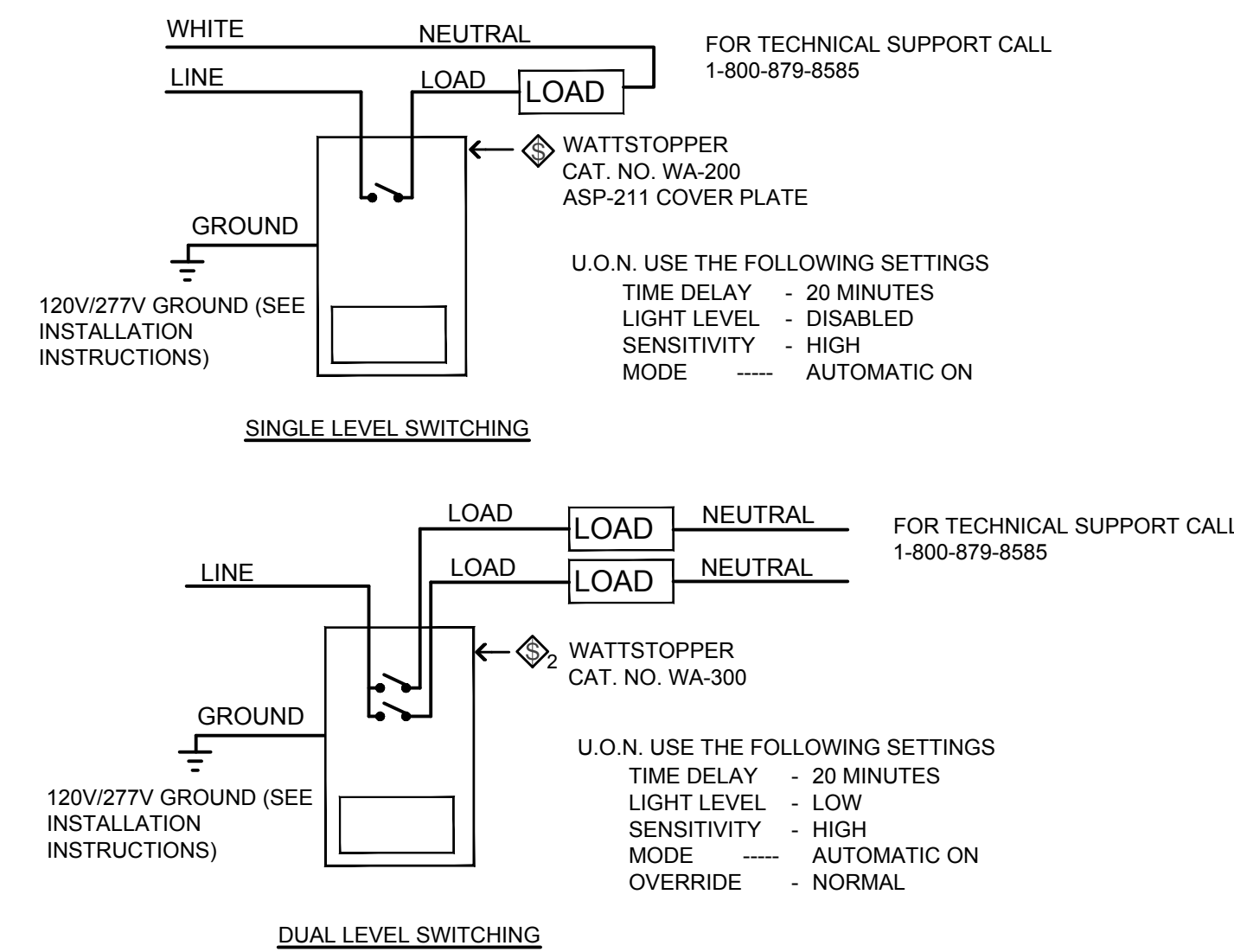
3 LIGHT FIXTURE - CABLE MOUNTED
NO SCALE



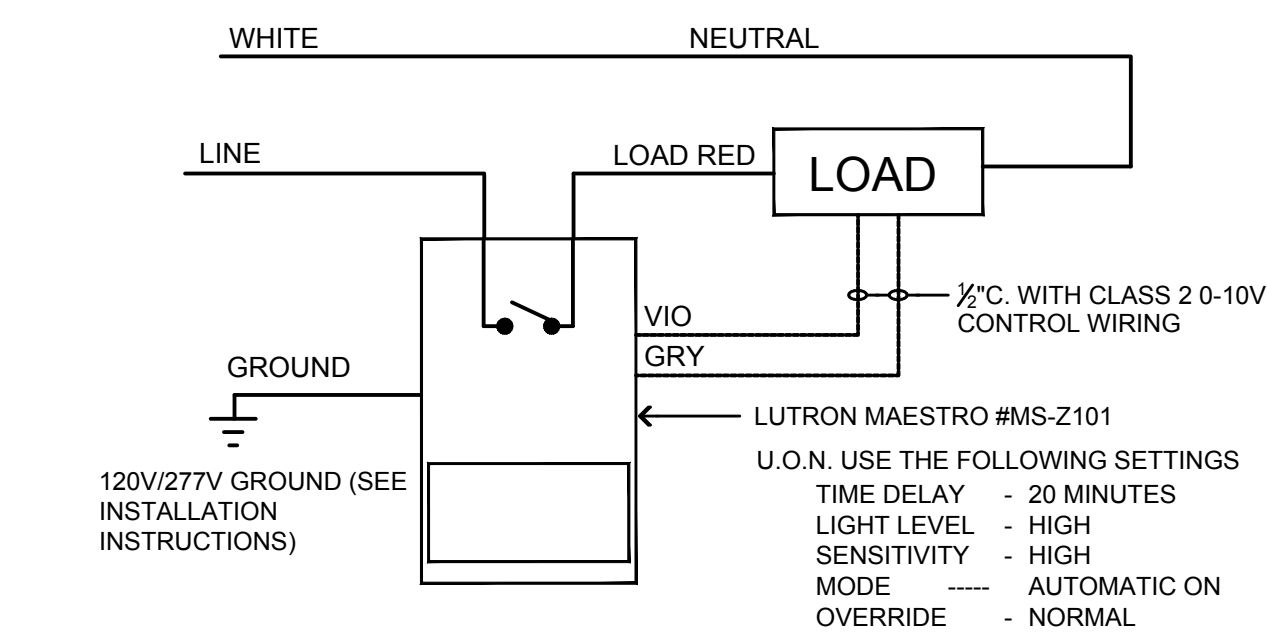
2 SURFACE MOUNTED FIXTURE DETAIL
NO SCALE



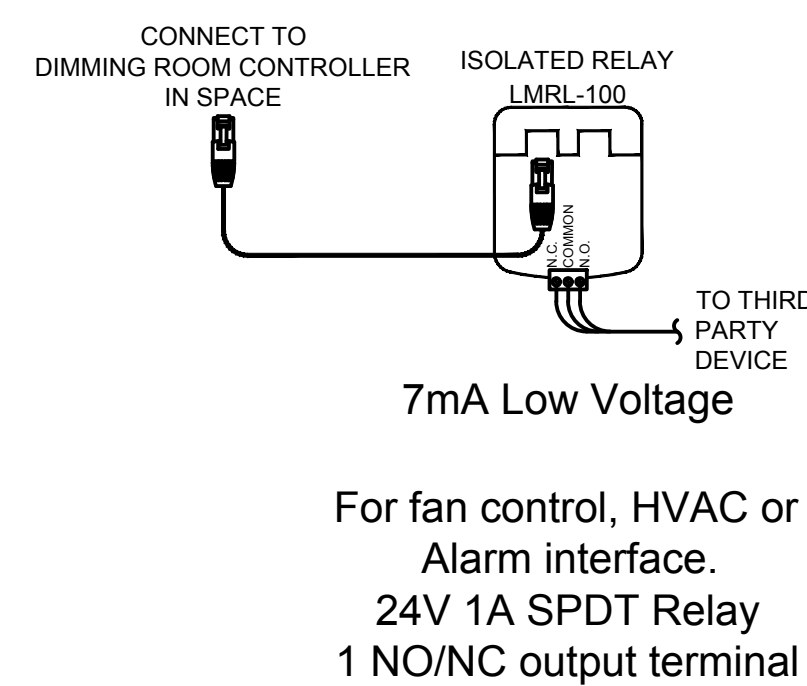
1 T-BAR MOUNTING FIXTURE DETAIL
NO SCALE



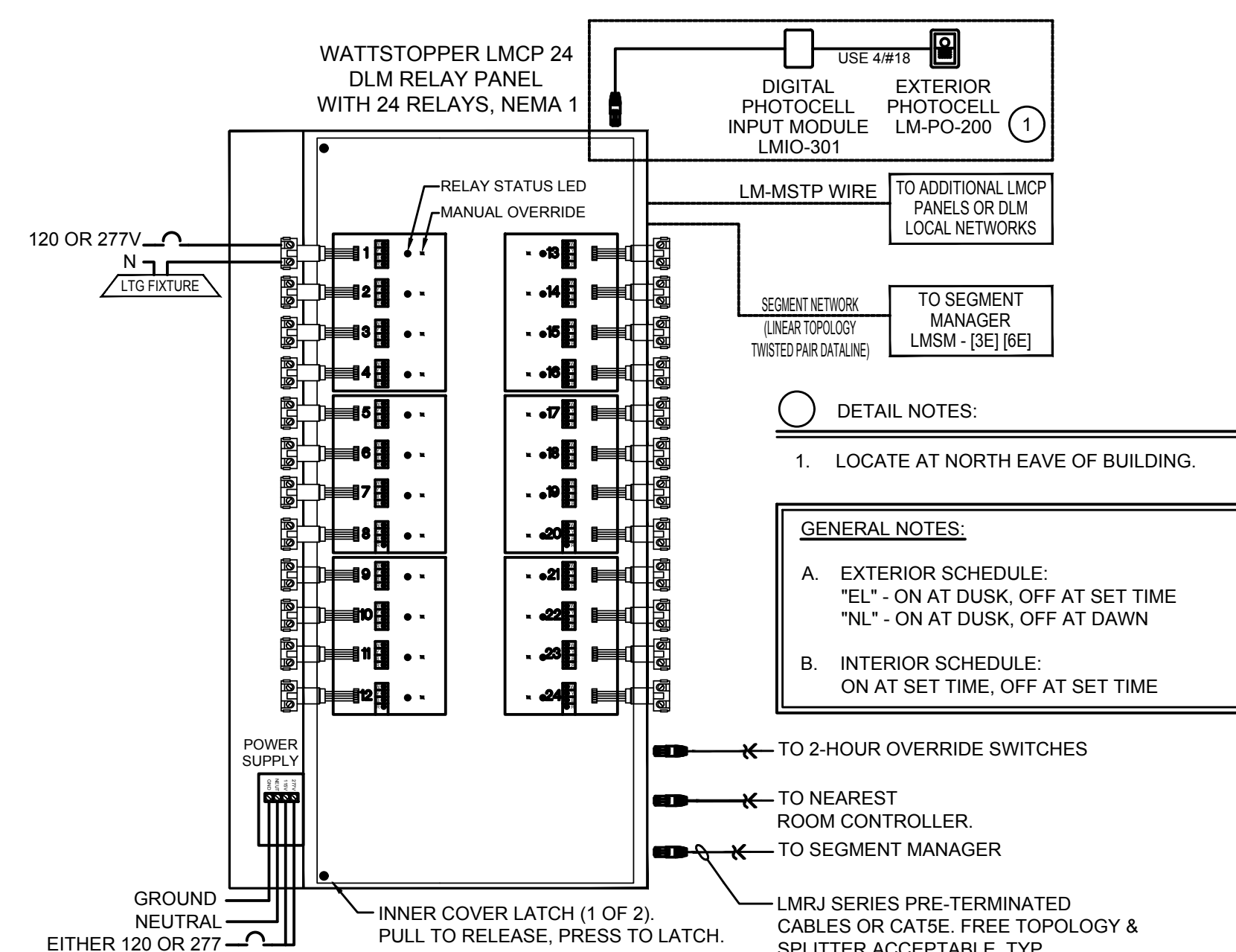
7 WALL OCCUPANCY SENSOR WIRING



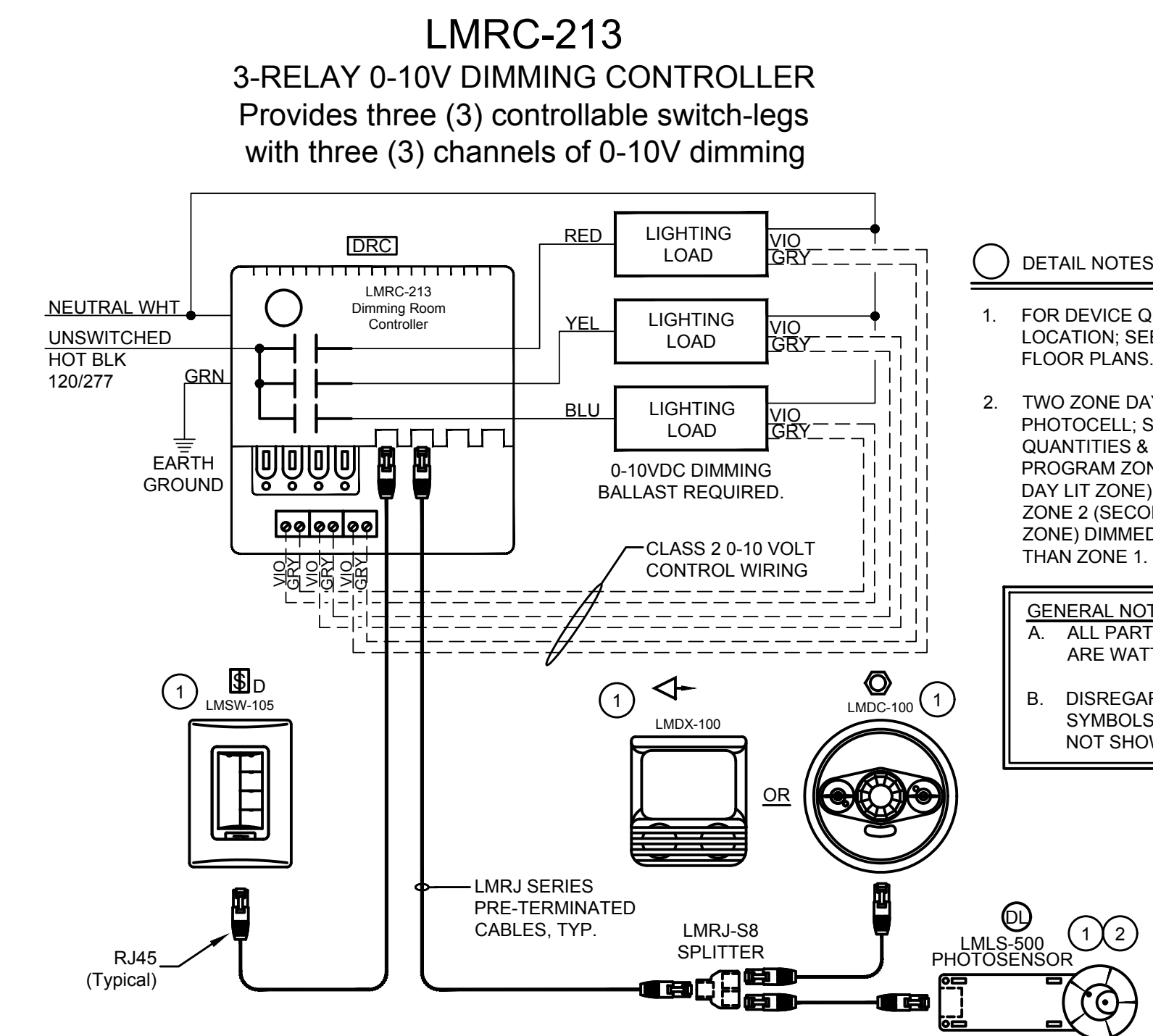
6 WALL OCCUPANCY SENSOR WIRING



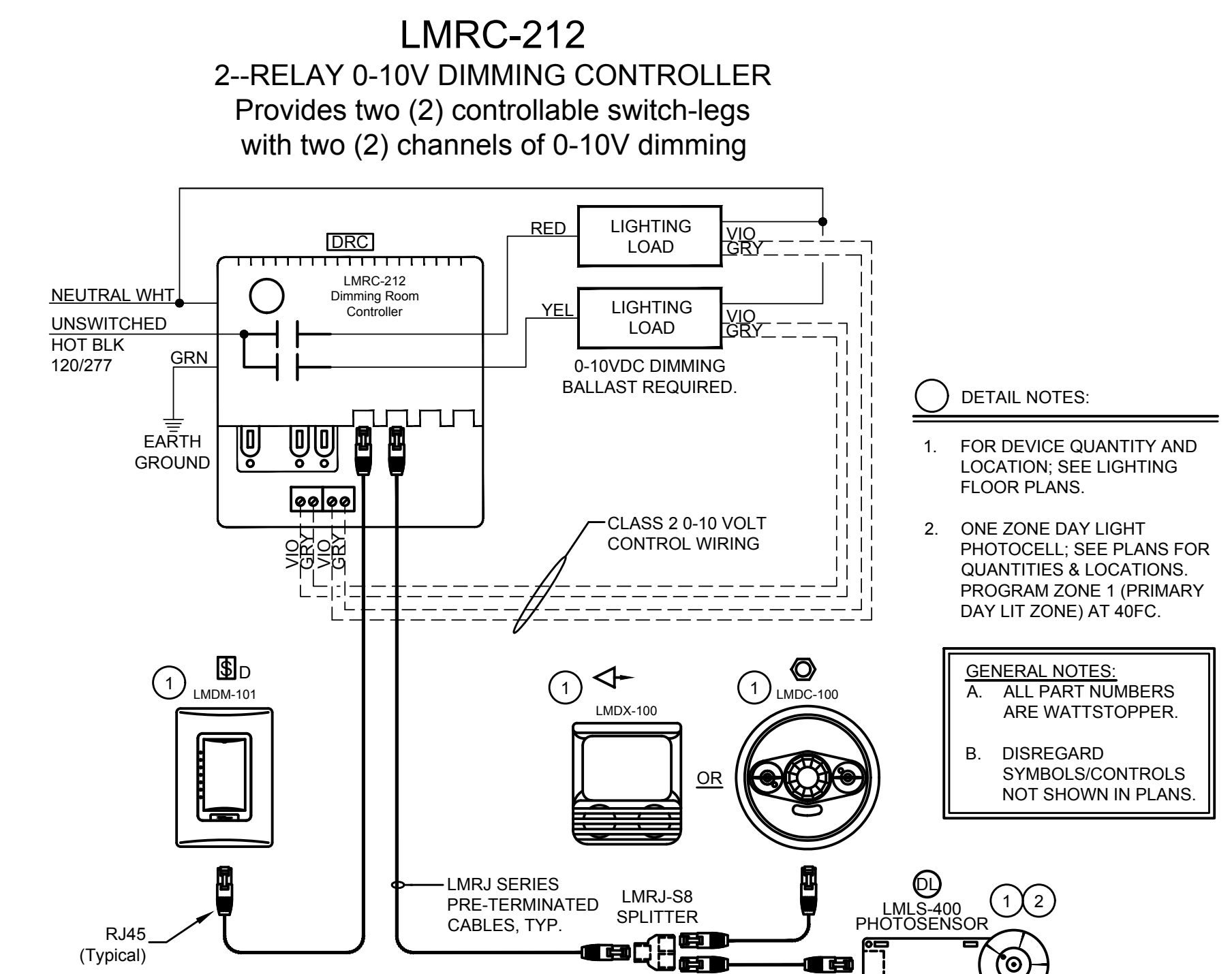
9 ISOLATED RELAY FOR HVAC INTERFACE
NO SCALE



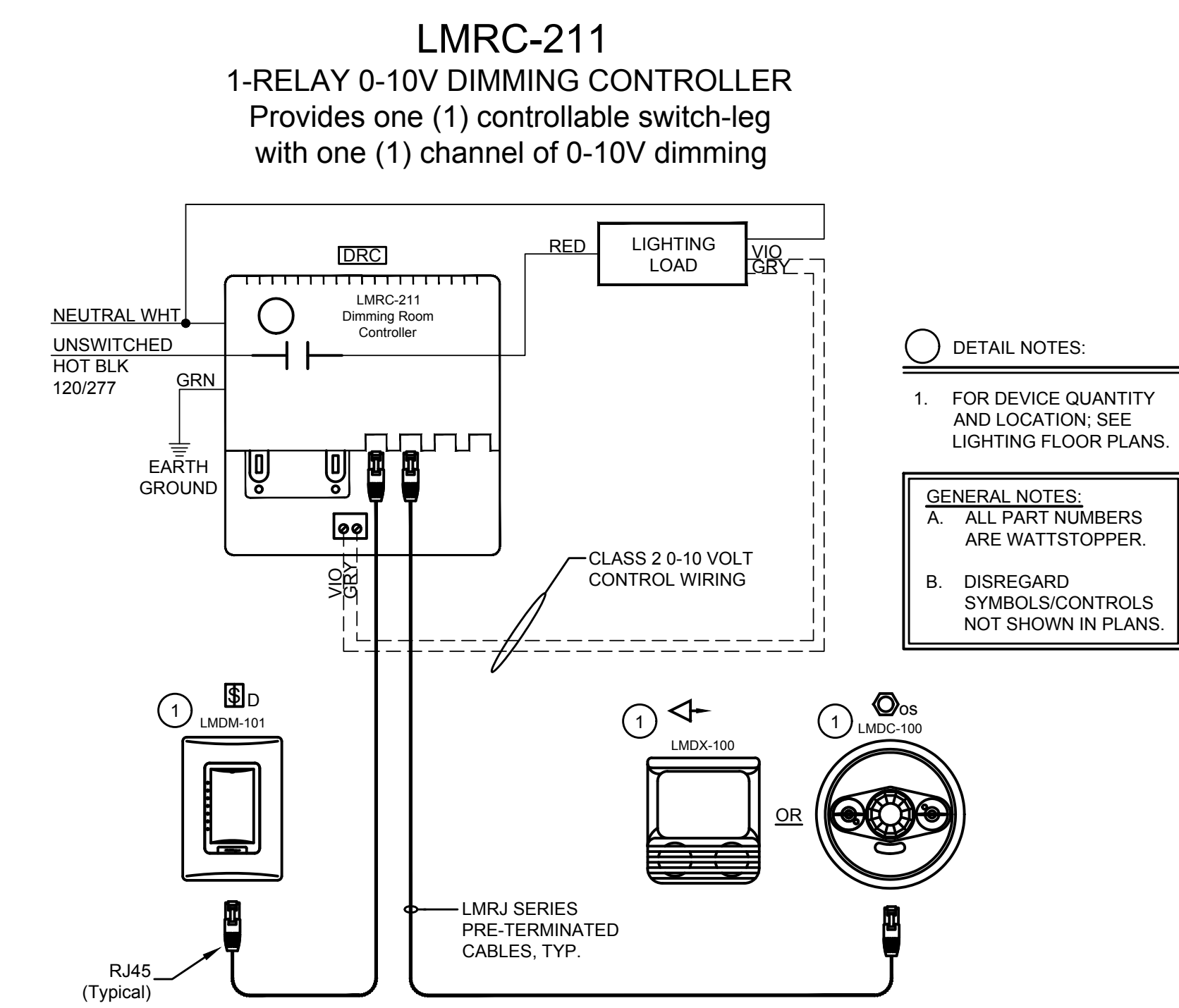
8 OUTDOOR LIGHTING CONTROL PANEL
NO SCALE



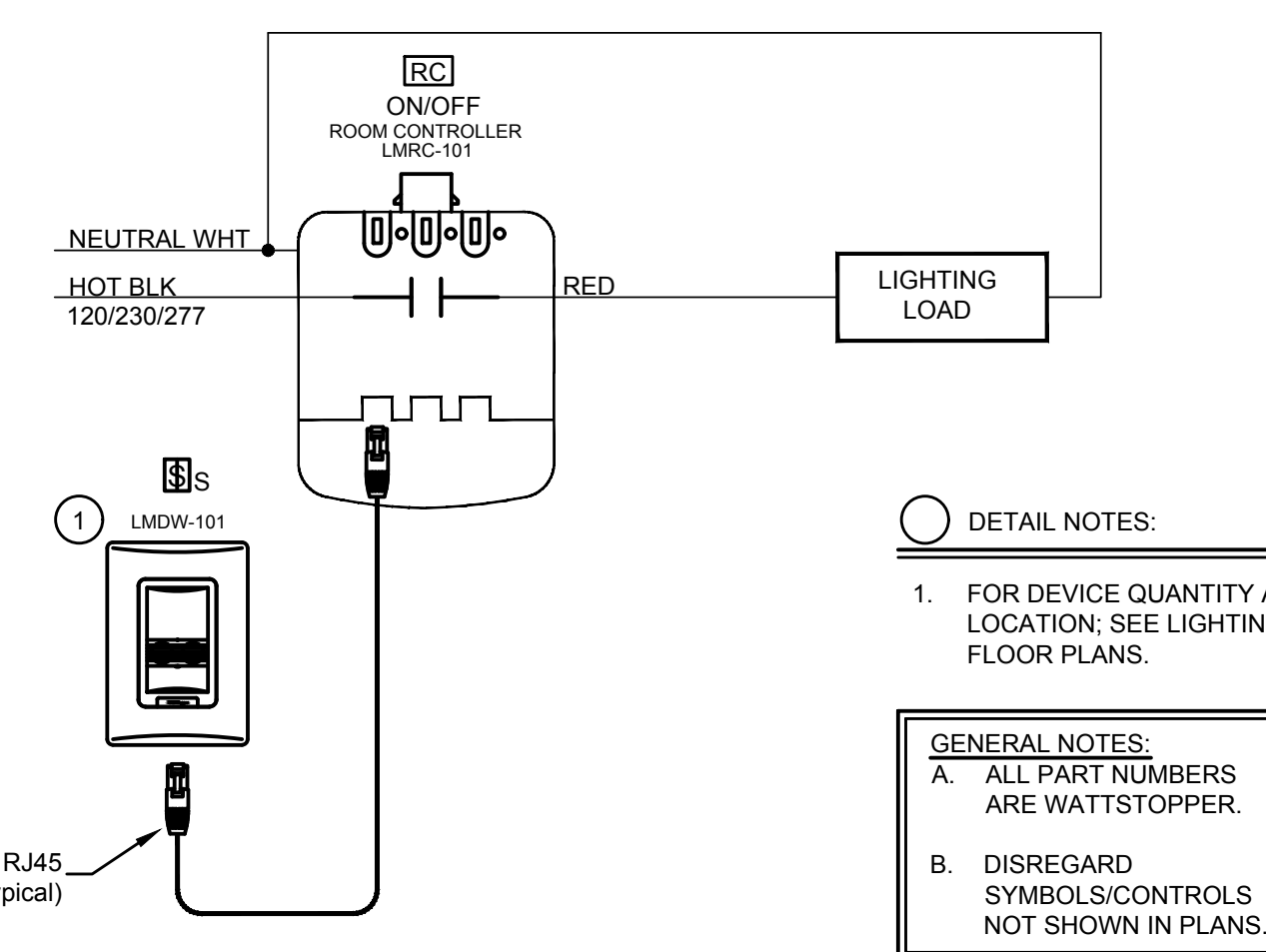
3 3-ZONE DIMMING LIGHTING CONTROLS



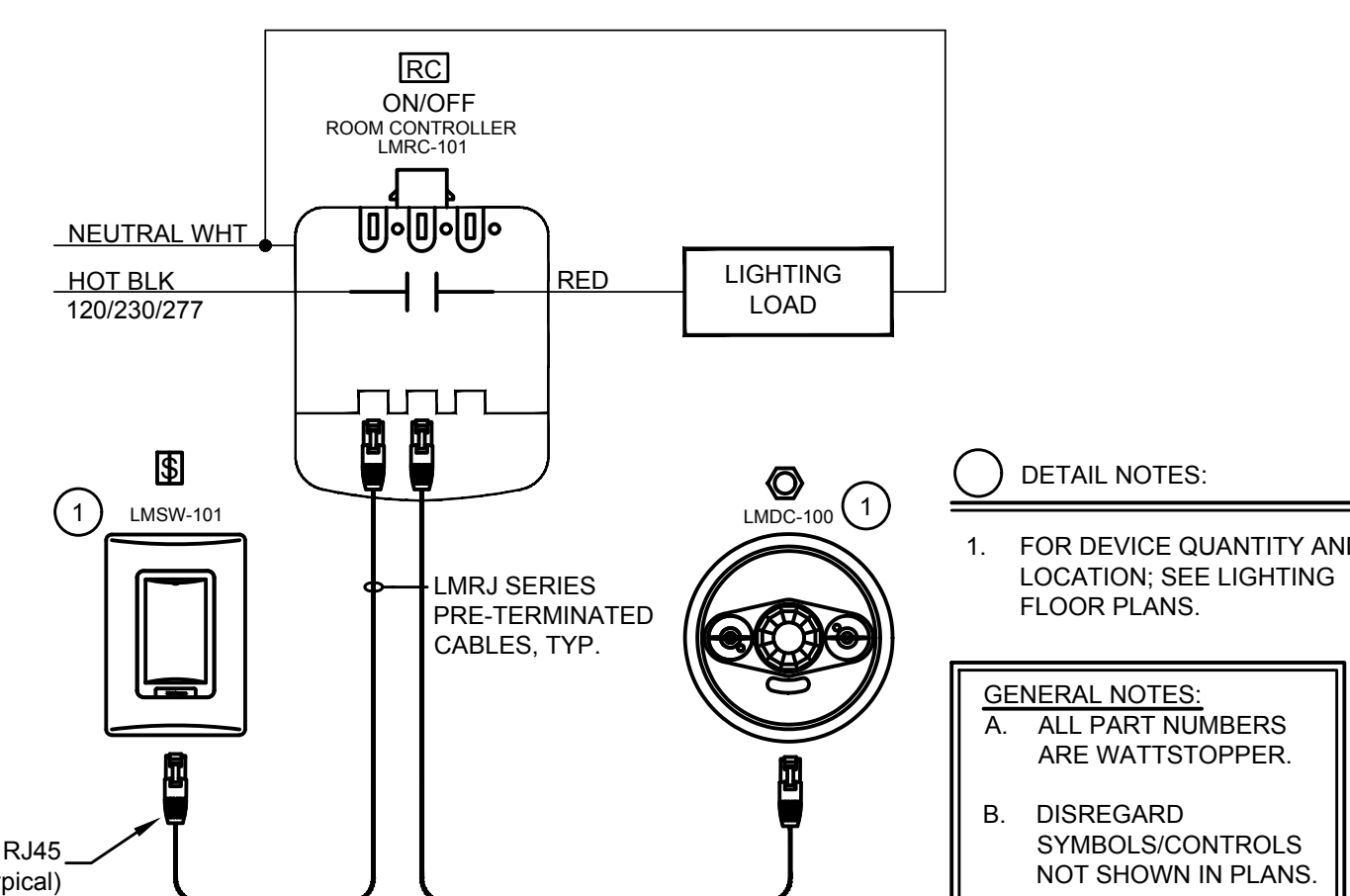
2 2-ZONE DIMMING LIGHTING CONTROLS



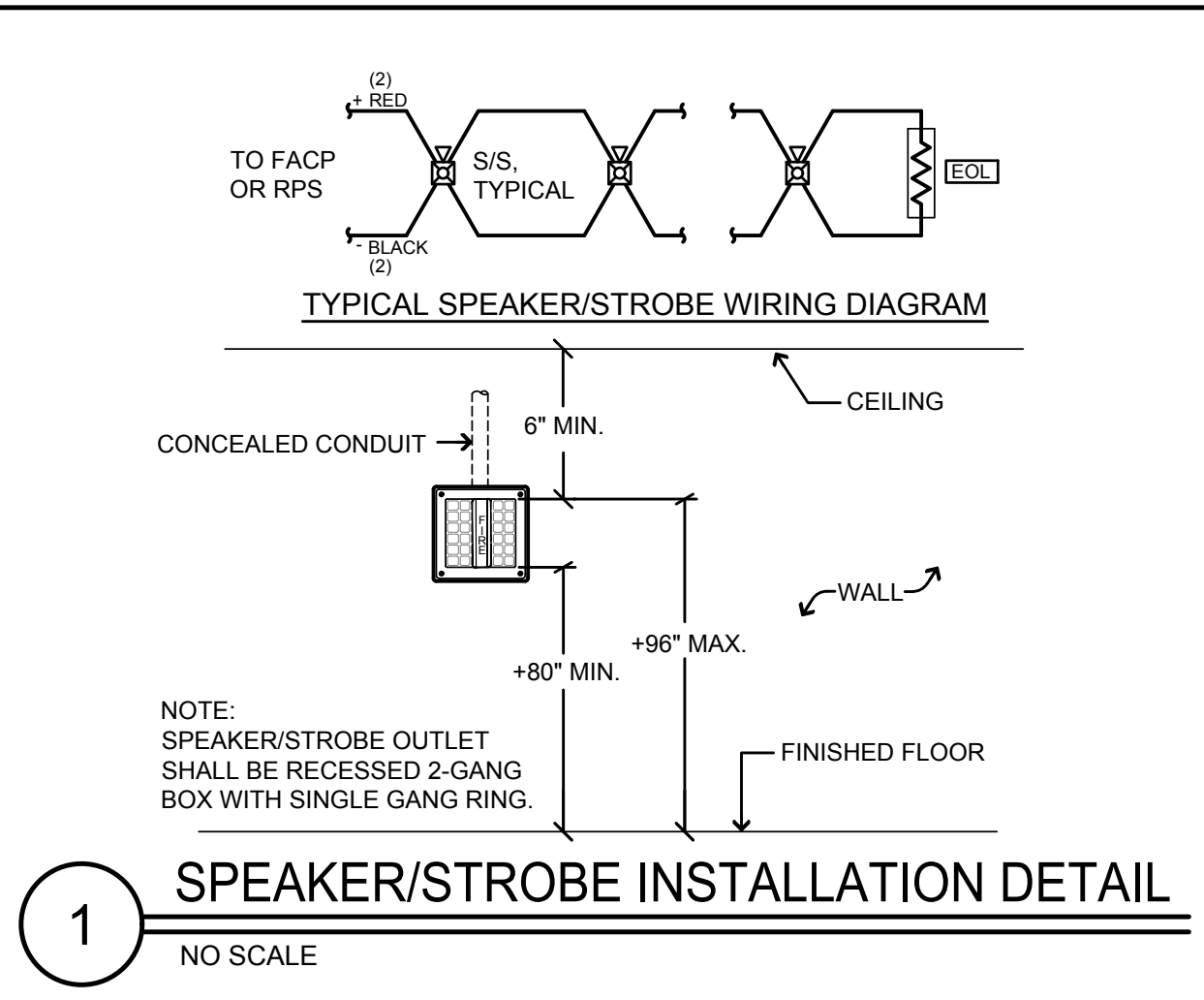
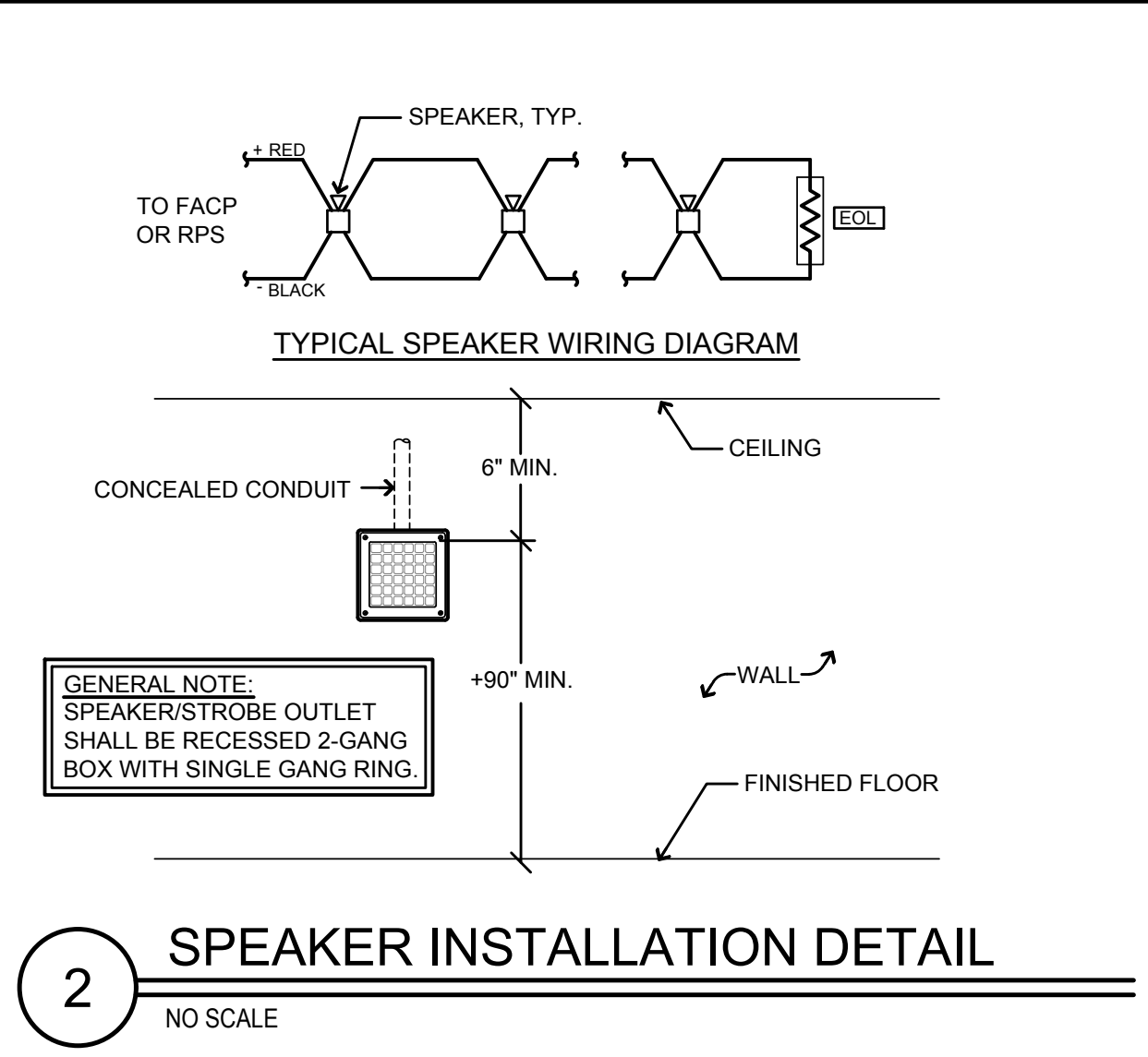
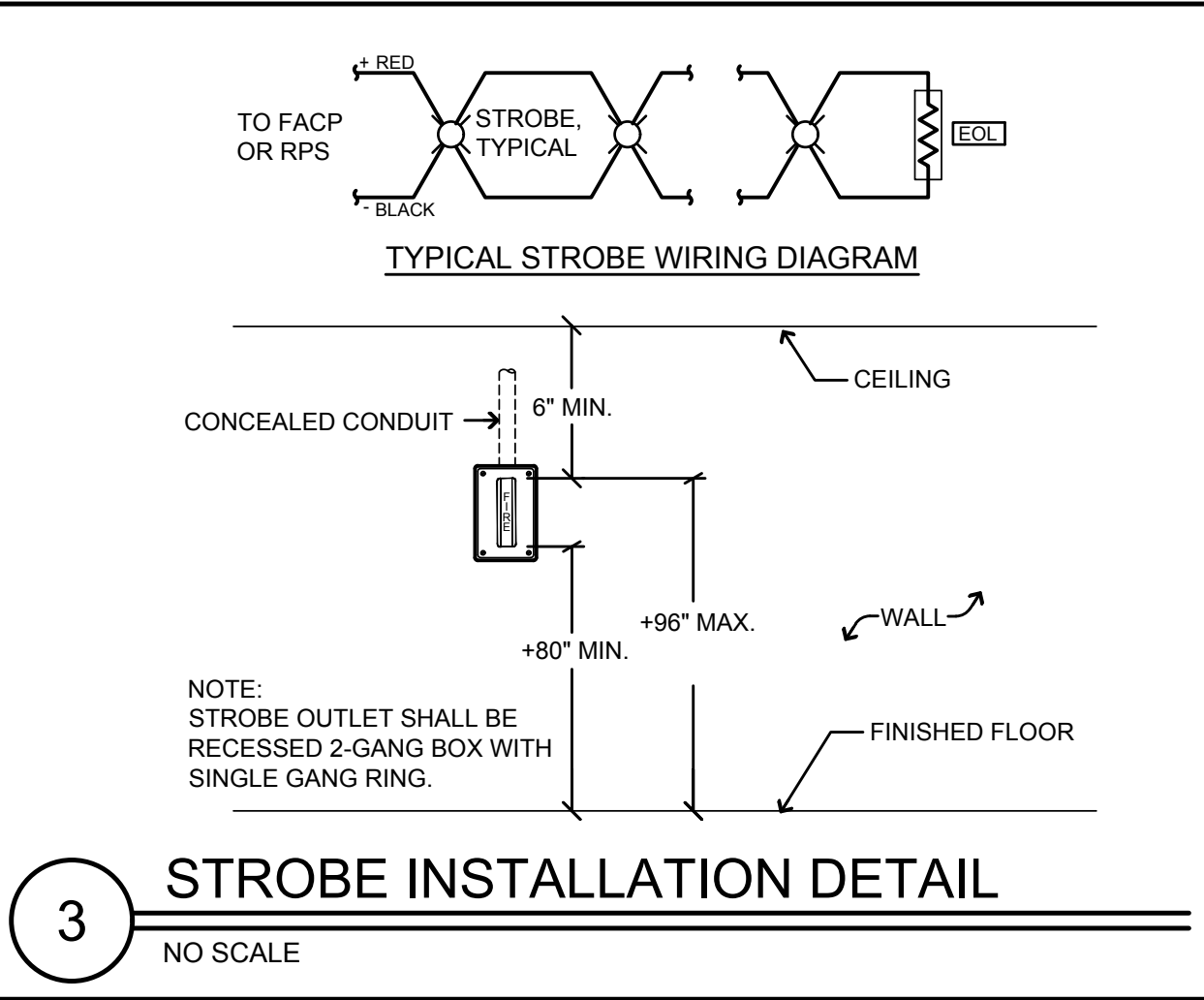
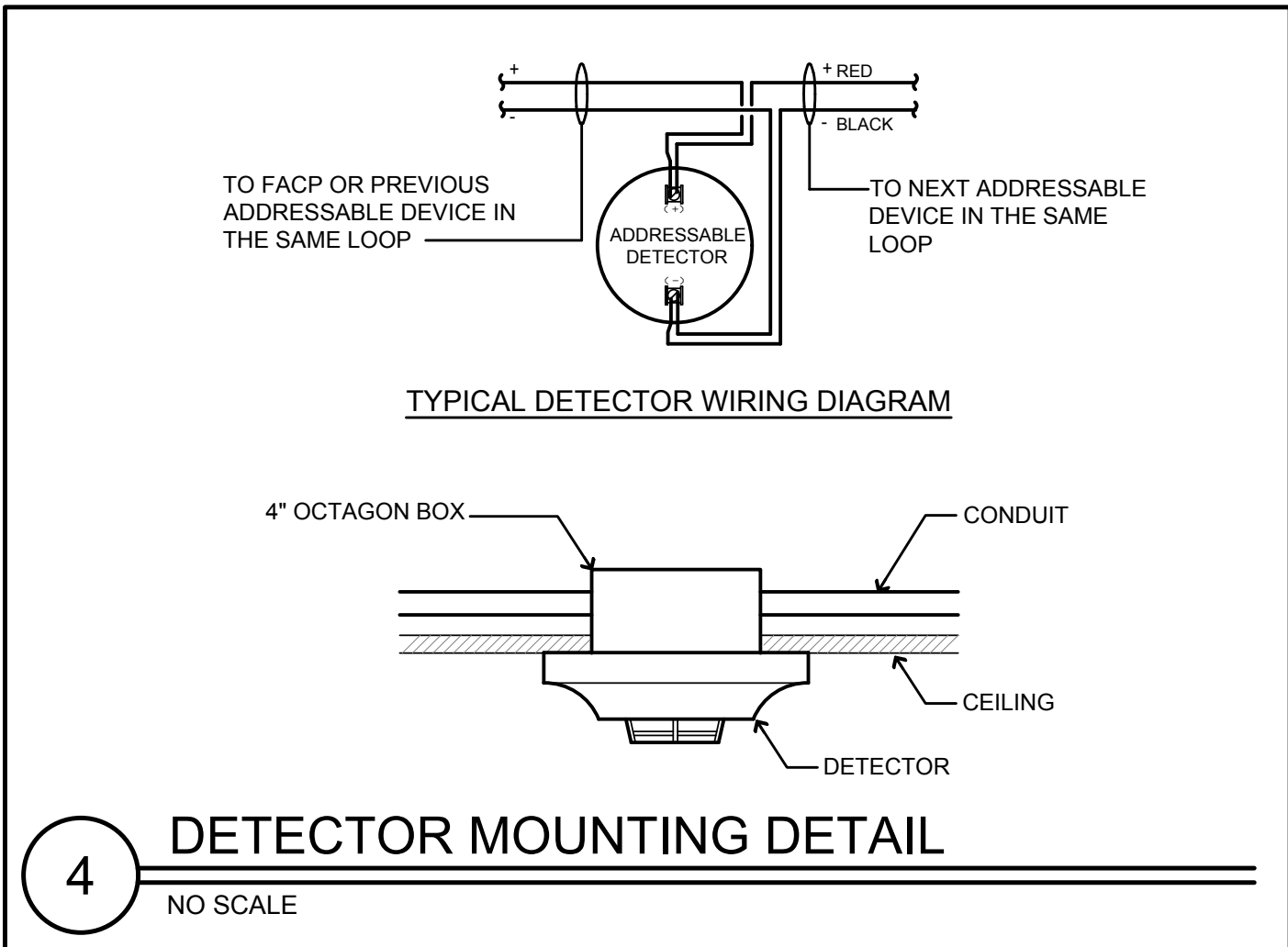
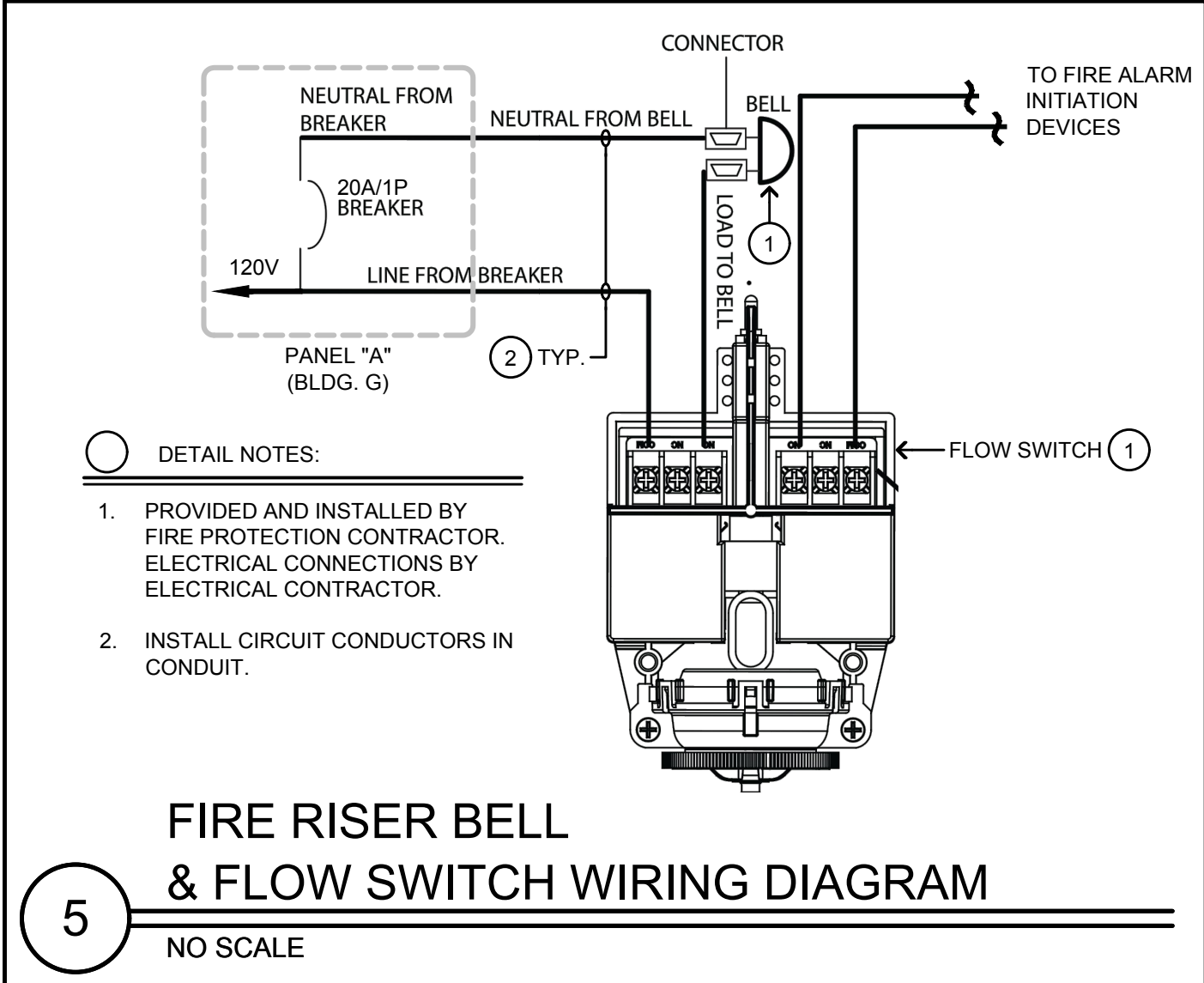
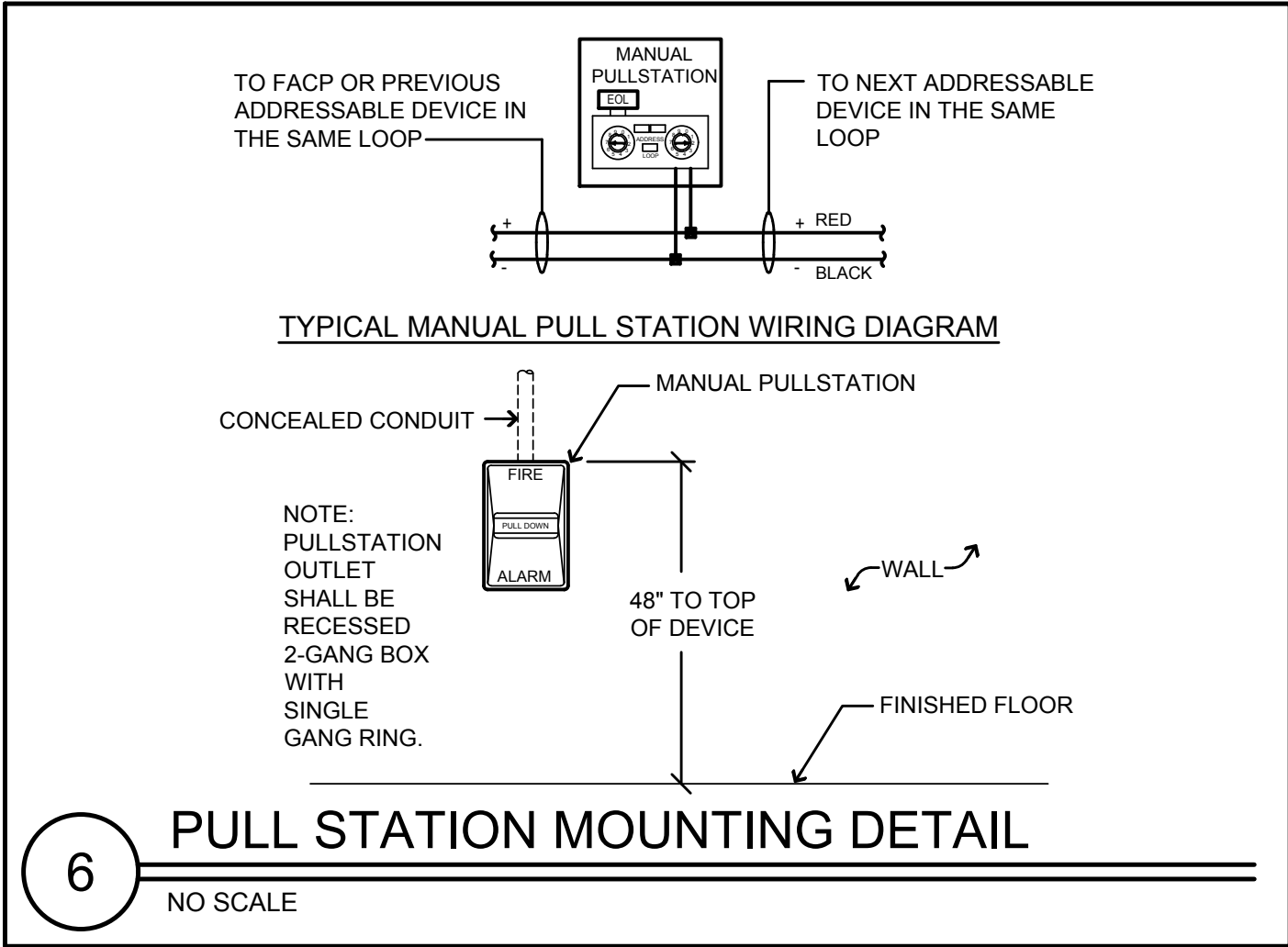
1-ZONE DIMMING LIGHTING CONTROLS



5 ON/OFF CONTROL SWITCH WITH OCC. SENSOR
NO SCALE



4 NON-DIMMING LIGHTING CONTROLS



FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGR'S PART No.	CSFM LISTING
[FACP]	EXISTING ADDRESSABLE FIRE ALARM CONTROL PANEL AND EMERGENCY MASS NOTIFICATION SYSTEM, SILENT KNIGHT 6520EVS SERIES. (SEE BATTERY CALCULATIONS FOR SIZE OF BATTERIES REQUIRED.)	6820EVS	7165-0559-0500
[ANN]	EXISTING FIRE ALARM REMOTE ANNUNCIATOR, SILENT KNIGHT EVS SERIES.	6860-EVS	7165-0559-0500
[VAMP]	VOICE EVACUATION SYSTEM, SILENT KNIGHT EVS-125W SERIES.	EVS-125W	7165-0559-0500
[RPS]	POWER MODULE SUPPLY, SILENT KNIGHT 5495 SERIES.	5495	7300-0559-0123
[P]	ADDRESSABLE MANUAL PULLSTATION, SILENT KNIGHT SK-PULL-DA SERIES.	SK-PULL-DA	7150-0559-0161
[P]	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR AND BASE, SILENT KNIGHT SK-PHOTO SERIES.	SK-PHOTO	7272-0559-0149
[P]	ADDRESSABLE THERMAL HEAT DETECTOR AND BASE, SILENT KNIGHT SK-HEAT SERIES.	SK-HEAT	7270-0559-0147
[P]	ADDRESSABLE ADVANCED MULTI-CRITERIA SMOKE AND CARBON MONOXIDE DETECTOR WITH SOUNDER BASE SILENT KNIGHT SK-FIRE-CO-W SERIES.	SK-FIRE-CO-W B200S-WH (BASE)	7272-0559-0517 7300-1653-0213
[M]	ADDRESSABLE MONITOR MODULE, SILENT KNIGHT SK-MONITOR SERIES.	SK-MONITOR	7300-0559-0155
[C]	ADDRESSABLE CONTROL MODULE, SILENT KNIGHT SK-RELAY SERIES.	SK-RELAY	7300-0559-0155
[X]	WALL MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15/30/75/110cd, SYSTEM SENSOR SPECTRALERT SERIES.	SR	7125-1653-0186
[X]	WALL MOUNTED MULTI-CANDELA SPEAKER/STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15/30/75/110cd, SYSTEM SENSOR SPECTRALERT SERIES.	SPSR	7320-1653-0201
[X]	WALL MOUNTED WEATHERPROOF SPEAKER, SYSTEM SENSOR SPECTRALERT SERIES.	SPRK	7320-1653-0201
[EOL]	END OF LINE DEVICE.	-	-

- ### FIRE ALARM GENERAL NOTES
1. WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 2. WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-10-8, T24/CEC (I.E. THHW OR EQUAL).
 3. UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 4. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 5. THE CONDUIT AND WIRE SHOWN ON THESE PLANS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. "AS-BUILT" PLANS SHALL BE MAINTAINED AND BE PROVIDED AS REQUIRED BY THE PROJECT INSPECTOR OF RECORD.
 6. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF THROUGH PENETRATION FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
 7. ALL DEVICES SHALL BE "CSFM" LISTED.
 8. EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM."
 9. AUDIBLE ALARM PRODUCED BY "FACP" SHALL SOUND THE CALIFORNIA UNIFORM SIGNAL IN TEMPORAL MODE.
 10. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 11. AUDIBLE SIGNALS INTENDED FOR OPERATION IN THE PUBLIC SHALL HAVE A SOUND LEVEL OF NOT LESS THAN 75DBA AT 10 FEET OR MORE THAN 110DBA AT THE MINIMUM HEARING DISTANCES FROM THE AUDIBLE APPLIANCE.
 12. WHERE VISUAL DEVICES ARE REQUIRED, VISUAL DEVICE SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELA. NO PLACE IN ANY ROOM SHALL BE MORE THAN 50 FEET FROM A DEVICE.
 13. APPROVED BY THE "DIVISION OF THE STATE ARCHITECT/OFFICE OF REGULATION SERVICES," CONTRACTOR SHALL PROVIDE COPIES OF APPROVED PLANS TO THE PROJECT INSPECTOR OF RECORD PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING TO ENGINEER PRIOR TO PURCHASE FOR REVIEW. THE FIRE PROTECTION SYSTEM SHALL NOT BE INSTALLED UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED TO AND RECEIVED BY THE ENGINEER OF RECORD.
 14. FINAL ALARM TEST SHALL BE WITNESSED BY THE DSA INSPECTOR OF RECORD (IOR), BOTH THE DSA INSPECTOR OF RECORD (IOR) AND THE LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING BY THE FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL PROVIDE "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TEST.
 15. POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 16. AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC CHAPTER 80. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UULX OR UULS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.

SYMBOLS & ABBREVIATIONS

SYMBOLS

- CONDUIT - CONCEALED IN WALLS OR CEILING.
- CONDUIT - IN OR BELOW FLOOR: 3/4" MIN.
- CONDUIT CONTINUATION.
- ROOM NUMBER.
- SHEET NOTE REFERENCE SYMBOL: SEE ASSOCIATED NOTE ON SAME SHEET.
- DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

ARCH.	ARCHITECT	FSD	FIRE SMOKE DAMPER
AWG	AMERICAN WIRE	IDC	INITIATING DEVICE CIRCUITS
BKR	GAUGE BREAKER	(N)	NEW
C	CONDUIT	NAC	NOTIFICATION APPLIANCE CIRCUITS
CB	CIRCUIT BREAKER	NIC	NOT IN CONTRACT
CKT	CIRCUIT	NO	NUMBER
CLG	CEILING	SLC	SIGNALING LINE CIRCUITS
(E)	EXISTING	SLC	SIGNALING LINE CIRCUITS
EOL	END OF LINE	TYP	TYPICAL
FA	FIRE ALARM	UON	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	WP	WEATHERPROOF
FBO	FURNISHED BY OTHERS		

TYPICAL ZONE NOMENCLATURE

"S2" DENOTES SIGNAL CIRCUIT #2

"75CD" DENOTES CANDELA RATING

"4" DENOTES DEVICE #4

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

"1" DENOTES LOOP#

"5" DENOTES DEVICE #5

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

PROJECT DESCRIPTION

SCOPE OF WORK:

EXTENSION OF EXISTING ADDRESSABLE FIRE ALARM SYSTEM AND EM VOICE EVAC SYSTEM AT NEW SCIENCE BUILDINGS.

SYSTEM DESCRIPTION:

SLC = CLASS B

IDC = CLASS B

NAC = CLASS B

DESIGN BY:

NAJIB ANWARY, PE.

FIRE ALARM SYSTEM OPERATIONAL MATRIX																	
		ALARM				TROUBLE				SUPERVISORY				MISC.			
CAUSE		EFFECT	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
SMOKE DETECTORS		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
HEAT DETECTORS		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
CARBON MONOXIDE DETECTORS		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
FLOW SWITCH		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
TAMPER SWITCH		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
SIGNAL SILENCE		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
SYSTEM RESET		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
AC POWER FAILURE		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE
TROUBLE (OPEN, SHORTS, GROUNDS) ON INITIATION OR SIGNAL CIRCUITS		ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	ALARM AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE	TROUBLE AT TROUBLE

SUGIMURA FINNEY ARCHITECTS

SFA

ARCHITECTURE INTERIOR PLANNING

2155 SOUTH BASCOM AVE. SUITE 300 CAMPBELL, CA 95008 PHONE: 408-274-0000 FAX: 408-274-0000

REGISTERED PROFESSIONAL ENGINEER

SD SET

SEAL

AURUM CONSULTING ENGINEERS MONTEREY BAY, INC.

Project No. 20-074-02

60 Garden Court • Suite 210 • Monterey, CA 93940
T 831.546.3330 • F 831.546.3330 • www.auremb.com

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

THOMAS S. HART MIDDLE SCHOOL - NEW MODULAR SCIENCE BUILDING - INCREMENT 2

4433 WILLOW RD., PLEASANTON, CA 94588

PLEASANTON UNIFIED SCHOOL DISTRICT

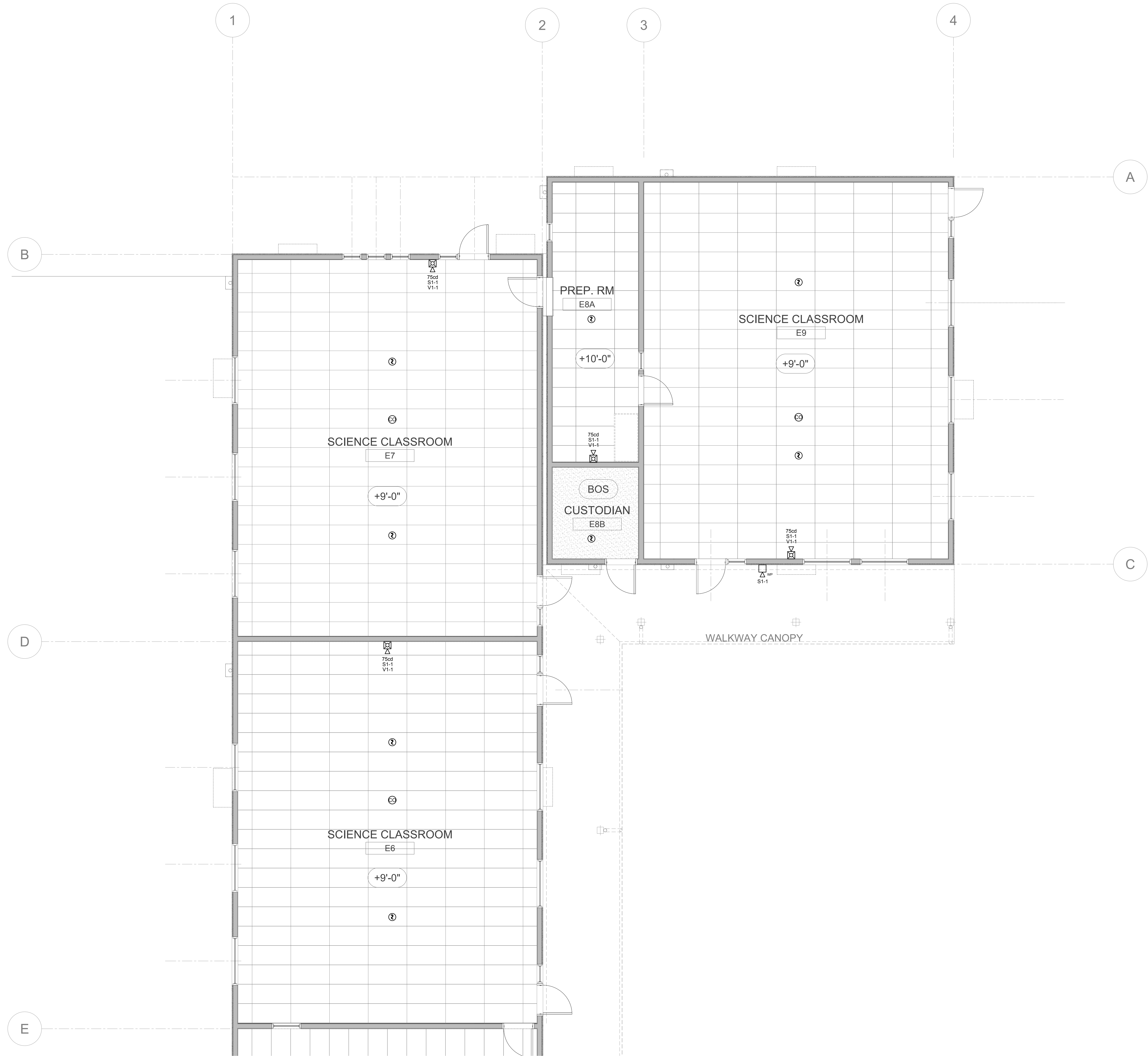
NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

DRAWN BY:	CADD
CHECKED BY:	NA
SFA JOB NO:	DATE:
20008.02	12/09/2020

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SHEET NOTES

1.

CABLE LEGEND

TYPE A =

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

TYPE B =

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

SUGIMURA
FINNEY
ARCHITECTS

SFA

ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.297.9209
FAX: 408.297.4666



AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.

Project No. 20-074-02
60 Garden Court • Suite 210 • Monterey, CA 93940
T: 831.546.3330 • F: 831.546.3338 • www.aecmb.com

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FIRE ALARM PARTIAL FLOOR PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

1

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CHECKED BY:

NA

SFA JOB NO:

20008.02

DATE:

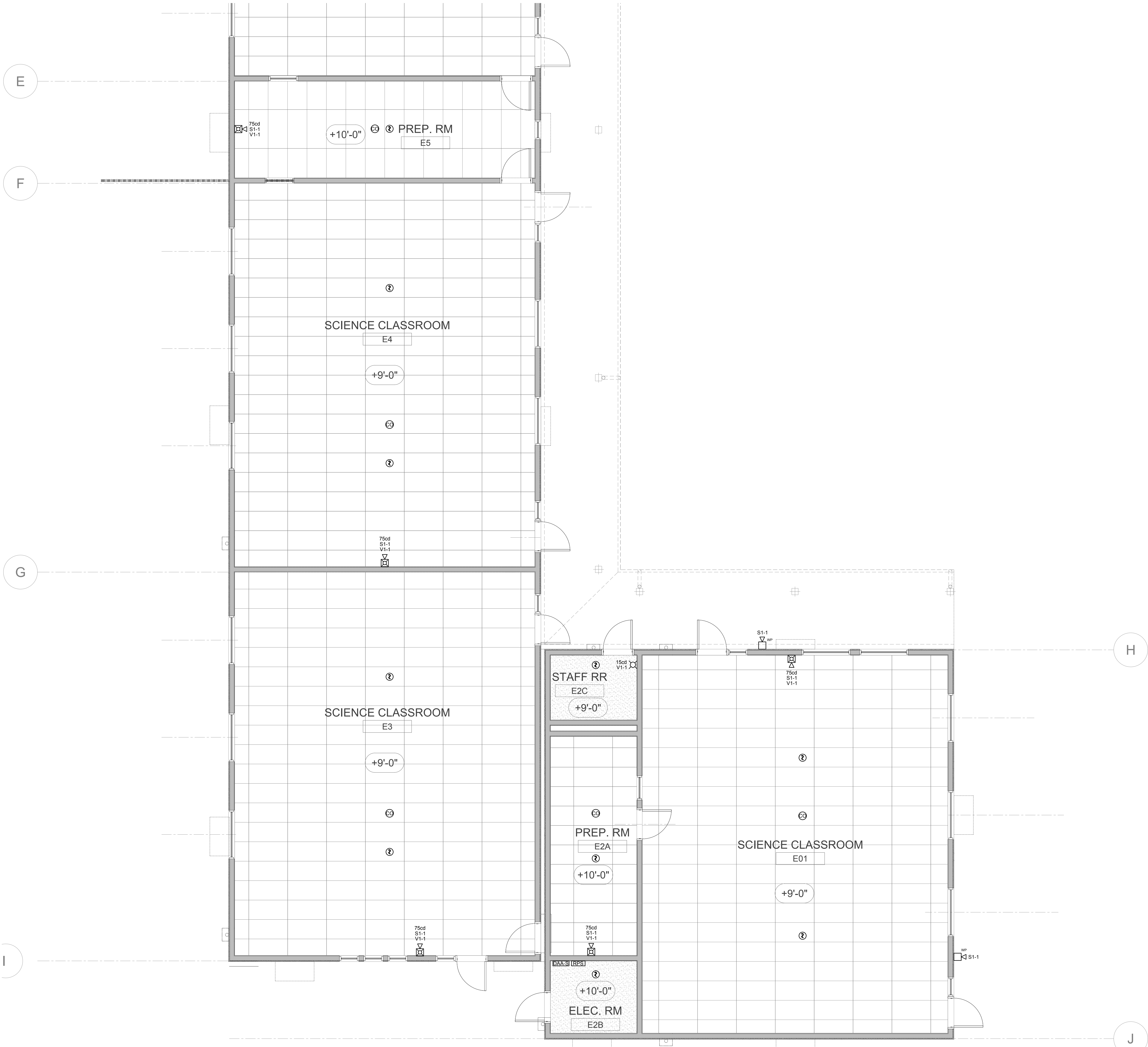
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1 FIRE ALARM PARTIAL FLOOR PLAN
SCALE: 1/4"=1'-0"



SHEET NOTES

1. .

CABLE LEGEND

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

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



FIRE ALARM PARTIAL FLOOR PLAN

THOMAS S. HART MIDDLE SCHOOL -
NEW MODULAR SCIENCE BUILDING - INCREMENT 2
4433 WILLOW RD., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE
1.	DSA SUBMITTAL	12/08/2020

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20008.02	12/09/2020

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GENERAL NOTES

1. ALL DIMENSIONS, CONDITIONS AND ELEVATIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY DISCREPANCIES ARE FOUND OR IF ANY CONDITION EXISTS NOT AS SHOWN ON THE DRAWINGS THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

2. THE CONTRACTOR WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE ENGINEER, AND HIS CONSULTANTS, AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGES ARISING OR ALLEGED TO ARISE FROM THE PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, THE ENGINEER AND HIS CONSULTANTS, AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

3. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE DESIGN INTENT. UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE CONSTRUCTION SAFETY REQUIREMENTS OF O.S.H.A. AND ANY OTHER GOVERNMENTAL ENTITY HAVING JURISDICTION.

4. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE.

5. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER OR HIS REPRESENTATIVES DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER WHETHER OF MATERIAL OR WORK AND WHETHER PERFORMED PRIOR TO, DURING, OR AFTER COMPLETION OF CONSTRUCTION ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS AND SPECIFICATION, BUT THEY DO NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

6. ANY CHANGES TO THE APPROVED SET OF PLANS WITHOUT NOTIFYING THE ENGINEER PRIOR TO SUCH CHANGES ABSOLVES SAID ENGINEER FROM ANY AND ALL RESPONSIBILITY WITH RESPECT TO LIABILITY, DAMAGE OR EXTRA WORK RESULTING FROM SAID CHANGES.

7. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.

8. THE TYPICAL DETAILS SHOWN ON THESE SHEETS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE NO DETAIL IS SHOWN, CONSTRUCTION SHALL BE AS SHOWN FOR OTHER SIMILAR WORK.

9. DESIGN LOADS: RISK CATEGORY II OR RISK CATEGORY III
ROOF LIVE LOAD: 20 PSF ROOF DEAD LOAD: 3 PSF
SNOW LOAD: P_s = P_s = 20 PSF & 30 PSF C_s = 1.1 C_t = 1.2 C_s = 1.0
I_e = 1.1 RISK CATEGORY II I_e = 1.1 RISK CATEGORY III

SEISMIC: I_e = 1.0 AT RISK CATEGORY II I_e = 1.25 AT RISK CATEGORY III
SEISMIC DESIGN CATEGORY = E ρ = 1.3 FOR OFFSET CONFIGURATION

STRUCTURE IS A STEEL ORDINARY CANTILEVERED COLUMN SYSTEM (G2 PER ASCE7-16)
R = 1.25/0.7 (FOR WORKING STRESS)
C_u = 1.25 C_u = 1.25
BASE SHEAR: V = C_s x W
SOIL SITE CLASS = D
FOR 12' COLUMN HEIGHT T = 0.361 RISK CATEGORY II V = 0.728W (ASD) FOR S_{DS} = 1.0
FOR 14' COLUMN HEIGHT T = 0.45 LOW SEISMIC & RC III V=0.728W (ASD) FOR S_{DS} = 0.8
FOR 16' COLUMN HEIGHT T = 0.497 RISK CATEGORY II V = 1.82W (ASD) FOR S_{DS} = 2.5
HIGH SEISMIC & RC III V=1.82W (ASD) FOR S_{DS} = 2.0

WIND LOAD: 135 MPH, EXPOSURE C RISK CATEGORY II OR RISK CATEGORY III
K_z = 0.85 K_z = 0.90 K_z = 1.0 K_e = 1.00
q_h = 21.42 (q_h = 0.00256 x K_z x K_e x K_z x K_d x V² x 0.6 (FOR WORKING STRESS))

MAXIMUM BASIC WIND LOAD FOR PROJECT LOCATED IN SPECIAL WIND REGIONS SHALL BE EQUAL TO OR LESS THAN 135 mph AND CONFORM WITH THE ADOPTED ORDINANCE OF THE CITY, COUNTY OR CITY AND COUNTY IN WHICH THE PROJECT SITE IS LOCATED AND SHALL BE APPROVED BY DSA-SS.

10. GOVERNING CODE: 2019 CBC

11. ALLOWABLE SOIL BEARING IS BASED ON 1500 PSF & 100 PCF OF PASSIVE PRESSURE PER CBC TABLE 1806A.2 & SECTION 1806A.3.4. SKIN FRICTION IS PER 1810A.3.3.1.4 & IS EQUAL TO 1500/6=250 PSF. FOR UPLIFT SKIN FRICTION SHALL BE 125 PSF (S.F. OF 2). 1/3 INCREASE WAS NOT USED FOR ANY VALUES.

12. ALL WORK TO BE PERFORMED UNDER THE CONTINUOUS INSPECTION OF A D.S.A. APPROVED INSPECTOR.

13. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

14. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR AND THE ENGINEER.

15. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE OFFICE 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.

FOUNDATION NOTES

1. ALL FOOTINGS SHALL EXTEND TO FIRM BEARING IN UNDISTURBED SOIL OR ENGINEERED FILL.

2. NOMINAL TOP OF FLOOR SLAB ELEVATION = DATUM +0'-0" UNLESS OTHERWISE NOTED.

3. ANY EXISTING FILL AT THE BUILDING PAD SHALL MEET THE 92% COMPACTION REQUIREMENTS. ALL ORGANIC MATERIAL, RUBBLE, OR OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE.

4. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF EXTERIOR WALKWAYS.

5. ALL REINFORCING STEEL, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED IN THE FORMS PRIOR TO POURING OF CONCRETE.

6. SHORING AND BRACING: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING, BRACING, AND FORM WORK AS REQUIRED FOR THE CONSTRUCTION OF THIS BUILDING. PROVIDE TEMPORARY BRACING AS REQUIRED TO HOLD THE VARIOUS ELEMENTS IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.

7. EXCAVATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION PROCEDURES AND FOR PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.

8. BACKFILL: DO NOT BACKFILL AROUND THE EXTERIOR PERIMETER WALL UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. IF THE FLOOR SLABS ARE CONCRETE, DO NOT BACKFILL UNTIL 7 DAYS MINIMUM AFTER COMPLETION OF THE FLOOR SLABS. DO NOT BACKFILL UNTIL AFTER COMPLETION AND INSPECTION OF DAMP-PROOFING.

CONCRETE NOTES

1. ALL MOLDS, ORNAMENTS, GROOVES, ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE PROVIDED FOR IN THE FORM WORK BEFORE THE CONCRETE IS POURED.

2. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER EMBEDS SHALL BE IN PLACE AND SECURED TO FORM WORK PRIOR TO POURING OF CONCRETE.

3. REFER TO BOTH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION OF PLUMBING FIXTURES.

4. NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE WALLS OR STRUCTURAL SLABS UNLESS SPECIFICALLY DETAILED.

5. CONSTRUCTION JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE SO MADE AND LOCATED AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. PROVISION SHALL BE MADE FOR TRANSFER OF SHEAR AND OTHER FORCES THROUGHOUT THE JOINTS. THE CONTRACTOR SHALL OBTAIN THE ARCHITECT'S APPROVAL OF CONSTRUCTION JOINT LOCATION IN ALL STRUCTURAL SLAB, BEAMS AND SHEAR WALLS.

6. SIDES OF FOOTINGS MAY BE POURED AGAINST STABLE EARTH.

7. THE QUALITY AND DESIGN OF CONCRETE SHALL COMPLY WITH TITLE 24 PART 2 EXCEPT ITEMS NOT SPECIFICALLY COVERED THEREIN. SHALL CONFORM TO ACI 318.

8. ALL REINFORCING SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A615.

A. #4 BARS AND SMALLER..... GRADE 40 OR 60
B. #5 BARS AND LARGER..... GRADE 60
C. SEPARATE BARS 1-1/2" DIAMETERS CLEAR OR 1-1/2" CLEAR, WHICHEVER IS LARGER.

9. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE AS FOLLOWS:
CAST AGAINST EARTH (EXCEPT SLABS ON GRADE)..... 1-1/2"
SLABS ON GRADE..... 1-1/2"
EXPOSED TO EARTH OR WEATHER..... 1-1/2"
#5 BARS AND SMALLER..... 1-1/2"
#6 BARS AND LARGER..... 2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND SLABS, WALLS, JOISTS
#11 BARS AND SMALLER..... 3/4"
#14 AND #18 BARS..... 1-1/2"
BEAMS, GIRDERS, COLUMNS
PRINCIPAL REINFORCING, TIES
STIRRUPS, OR SPIRALS..... 1-1/2"
SHELLS AND FOLDED PLATE MEMBERS
#5 BARS AND SMALLER..... 1/2"
#6 BARS AND LARGER..... 3/4"

10. CONCRETE SHALL HAVE FOLLOWING MINIMUM REQUIREMENTS.
F1- 3000 PSI AT 28 DAYS & MAXIMUM WATER TO CEMENT RATIO OF 0.5.
F2- 4500 PSI AT 28 DAYS & MAXIMUM WATER TO CEMENT RATIO OF 0.45 & MINIMUM AIR CONTENT OF 7%.

11. THE ENGINEER DOES NOT PROVIDE CONTRACT ADMINISTRATION FOR THE PROJECT, INCLUDING REVIEW OF CONCRETE MIXES.

12. PER ACI SECTION 19.3.2.1. FOOTING SHALL NOT BE EXPOSED TO FREEZING AND THAWING CYCLES. SHALL NOT BE EXPOSED TO WATER-SOLUBLE SULFATE IN SOIL BY PERCENT OF MASS 20.10% SHALL NOT BE EXPOSED TO EXTERNAL SOURCE OF CHLORIDES.

STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL EXCEPT W SHAPES SHALL CONFORM TO ASTM A-36 AND SHALL BE FABRICATED AND ERECTED AS PER AISC SPECIFICATIONS FOR BUILDINGS. W SHAPES SHALL CONFORM TO ASTM A992.

2. STRUCTURAL PIPE SHALL CONFORM TO ASTM A-53 GRADE "B" AND STRUCTURAL TUBING SHALL CONFORM TO ASTM A-500 GRADE "B", F_y=46KSI.

3. ALL LIGHT GAGE STEEL TO CONFORM TO ASTM A653 GRADE 55 FOR ALL STRUCTURAL SHAPES, A653 GRADE 33 FOR ALL BLOCKING, FLASHINGS, MISCELLANEOUS CONNECTION PLATES, AND ANGLES.

4. ALL UNFINISHED BOLTS SHALL BE ASTM A-307 UNLESS NOTED OTHERWISE.

5. USE AISC USUAL GAGES FOR BOLT HOLES IN ALL STEEL SECTIONS UNLESS OTHERWISE NOTED.

6. THE STEEL FABRICATOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ERECTION.

7. ALL BOLT HOLES ARE TO BE 1/16" OVERSIZED. ALL BOLTS SHALL HAVE WASHERS INSTALLED UNDER BOTH HEAD & NUT.

8. ALL STEEL SHALL BE PROTECTED FROM WEATHER AS FOLLOWS: STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153, CLASS D) OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE AA-1, CP 90 COATING DESIGNATION.

ALL EXPOSED STEEL FASTENERS, INCLUDING CAST-IN-PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GALVANIZED (ASTM A153, CLASS D MINIMUM), OR PROTECTED WITH CORROSION-PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT DO COMPLY WITH THE 1,000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUIK GUARD BY SIMPSON, KOW-KOTE BY HILTI, STALGARD BY ELO, VISTACORR BY SFS INTEG, ETC.)

GOVERNING CODES:

1. 2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).

2. 2019 CALIFORNIA BUILDING CODE, VOLUMES 1 & 2 (PART 2, TITLE 24, CCR).

3. 2019 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR).

4. 2019 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR).

NOTES

1. COVERS ARE NOT DESIGNED TO BE ENCLOSED OR FOR STORAGE OF COMBUSTIBLE MATERIALS.

2. WALKWAY COVER HAS BEEN CHECKED FOR OBSTRUCTED WIND FLOW CONDITION & CAN BE WITHIN 6" MIN. FROM AN EXISTING BUILDING.

3. WALKWAY PIER FOOTING HAS BEEN CHECKED FOR D.S.A. BULLETIN 09-06 REV.

4. ALL WORK SHALL COMPLY WITH C.F.C. CHAPTER 33 DURING CONSTRUCTION.

TESTING & INSPECTIONS REQUIREMENTS

1. INSPECTOR CLASS (MINIMUM REQUIREMENTS)
CLASS 2

2. SELECTION OF THE PROJECT INSPECTOR AND TESTING AGENCY
BY THE SCHOOL DISTRICT AND APPROVED BY D.S.A. A/E OF RECORD AND STRUCTURAL ENGINEER

3. COST OF THE PROJECT INSPECTOR (CA ADMIN. CODE 4-333(B) AND TESTING AGENCY (CA ADMIN. CODE 4-335)
BY THE SCHOOL DISTRICT

4. COPIES OF THE REPORT TO
ARCHITECT; STRUCTURAL ENGINEER; SCHOOL DISTRICT; D.S.A. (ORIGINAL); IOR; MANUFACTURER

NOTICE OF DISCLAIMER FOR STRUCTURAL ENGINEERING RESPONSIBILITY

1. PER TITLE 24, PART 1, SECTION 4-316 (D & E) OF THE CALIFORNIA CODE OF REGULATIONS, THE DISTRICT SHALL HIRE AN ARCHITECT OR STRUCTURAL ENGINEER TO BE IN GENERAL RESPONSIBLE CHARGE OF SITE SPECIFIC PROJECT.

2. FOR SITE SPECIFIC PROJECT GERARD HOMER & ASSOCIATES IS NOT THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE.

3. FOR SITE SPECIFIC PROJECT GERARD HOMER & ASSOCIATES RESPONSIBILITY IS LIMITED TO THE PREPARATION OF PLANS AND SPECIFICATIONS FOR A PORTION OF THE PROJECT AS DESIGNED BY THE ARCHITECT FOR INCORPORATION INTO THE PROJECT.

4. STRUCTURAL OBSERVATION OF CONSTRUCTION IS SPECIFICALLY EXCLUDED FROM GERARD HOMER & ASSOCIATES RESPONSIBILITY FOR SITE SPECIFIC PROJECT.

SHADE STRUCTURE TESTING & INSPECTION GUIDELINE

THE EXAMPLE FORM DSA-103 SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT-SPECIFIC FORM DSA-103. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND THE EXAMPLE FORM DSA-103 IS TO BE CROSSED OUT ON THIS DRAWING.

DSA 103-19 LIST OF STRUCTURAL TESTS & SPECIAL INSPECTIONS – 2019 CBC

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SOILS

1. GENERAL:

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. MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.

4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):

a. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER.

b. VERIFY PIER LOCATIONS, DIAMETERS, PLUMBNESS & LENGTHS. RECORD CONCRETE OR GROUT VOLUMES.

c. CONCRETE PIERS

7. CAST IN PLACE CONCRETE

MATERIAL VERIFICATION AND TESTING:

a. VERIFY USE OF REQUIRED DESIGN MIX.

b. IDENTIFY, SAMPLE & TEST REINFORCING STEEL.

c. DURING CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, SLUMP & AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.

d. TEST CONCRETE (COMPRESSION), F_c

INSPECTION:

a. BATCH PLANT INSPECTION – PERIODIC, DESIGN COMPLIES WITH 1705A.3.3.1 ITEM 2.

STEEL

12. STRUCTURAL STEEL, COLD-FORMED STEEL & ALUMINUM USED FOR STRUCTURAL PURPOSES

MATERIAL VERIFICATION & TESTING:

a. VERIFY IDENTIFICATION OF ALL MATERIALS AND: MILL CERTIFICATES INDICATE MATERIAL PROPERTIES THAT COMPLY WITH REQUIREMENTS. MATERIAL SIZES, TYPES AND GRADES COMPLY WITH REQUIREMENTS.

b. TEST UNIDENTIFIED MATERIALS

c. EXAMINE BEAM WELDS OF HSS SHAPES

d. VERIFY AND DOCUMENT STEEL FABRICATION PER DSA-APPROVED CONSTRUCTION DOCUMENTS.

REVISIONS

NO.	DATE	BY	DESCRIPTION

PRE-CHECK (PC) DOCUMENT
CODE: 2019 C.B.C.
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SHEET INDEX

S1 FOUNDATION PLANS, GENERAL NOTES, DETAILS

S2 ROOF FRAMING PLANS

S3 SECTION, TYPICAL ELEVATION, DETAILS

S4 SECTION, DETAIL

BUILDING DATA

A-3 OCCUPANCY

I-B CONSTRUCTION

ALLOW. AREA = 4500 SQ.FT. TALBE 509

HEIGHT = 0'-0" MIN. TO 16'-0" MAX. COLUMN HEIGHT

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2. THE CONTRACTOR WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE ENGINEER, AND HIS CONSULTANTS, AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGES ARISING OR ALLEGED TO ARISE FROM THE PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, THE ENGINEER AND HIS CONSULTANTS, AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

3. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE DESIGN INTENT. UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE CONSTRUCTION SAFETY REQUIREMENTS OF O.S.H.A. AND ANY OTHER GOVERNMENTAL ENTITY HAVING JURISDICTION.

4. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE.

5. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER OR HIS REPRESENTATIVES DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER WHETHER OF MATERIAL OR WORK AND WHETHER PERFORMED PRIOR TO, DURING, OR AFTER COMPLETION OF CONSTRUCTION ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS AND SPECIFICATION, BUT THEY DO NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

6. ANY CHANGES TO THE APPROVED SET OF PLANS WITHOUT NOTIFYING THE ENGINEER PRIOR TO SUCH CHANGES ABSOLVES SAID ENGINEER FROM ANY AND ALL RESPONSIBILITY WITH RESPECT TO LIABILITY, DAMAGE OR EXTRA WORK RESULTING FROM SAID CHANGES.

7. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.

8. THE TYPICAL DETAILS SHOWN ON THESE SHEETS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE NO DETAIL IS SHOWN, CONSTRUCTION SHALL BE AS SHOWN FOR OTHER SIMILAR WORK.

9. DESIGN LOADS: RISK CATEGORY II OR RISK CATEGORY III
ROOF LIVE LOAD: 20 PSF ROOF DEAD LOAD: 3 PSF
SNOW LOAD: P_s = P_s = 20 PSF & 30 PSF C_s = 1.1 C_t = 1.2 C_s = 1.0
I_e = 1.1 RISK CATEGORY II I_e = 1.1 RISK CATEGORY III

SEISMIC: I_e = 1.0 AT RISK CATEGORY II I_e = 1.25 AT RISK CATEGORY III
SEISMIC DESIGN CATEGORY = E ρ = 1.3 FOR OFFSET CONFIGURATION

STRUCTURE IS A STEEL ORDINARY CANTILEVERED COLUMN SYSTEM (G2 PER ASCE7-16)
R = 1.25/0.7 (FOR WORKING STRESS)
C_u = 1.25 C_u = 1.25
BASE SHEAR: V = C_s x W
SOIL SITE CLASS = D
FOR 12' COLUMN HEIGHT T = 0.361 RISK CATEGORY II V = 0.728W (ASD) FOR S_{DS} = 1.0
FOR 14' COLUMN HEIGHT T = 0.45 LOW SEISMIC & RC III V=0.728W (ASD) FOR S_{DS} = 0.8
FOR 16' COLUMN HEIGHT T = 0.497 RISK CATEGORY II V = 1.82W (ASD) FOR S_{DS} = 2.5
HIGH SEISMIC & RC III V=1.82W (ASD) FOR S_{DS} = 2.0

WIND LOAD: 135 MPH, EXPOSURE C RISK CATEGORY II OR RISK CATEGORY III
K_z = 0.85 K_z = 0.90 K_z = 1.0 K_e = 1.00
q_h = 21.42 (q_h = 0.00256 x K_z x K_e x K_z x K_d x V² x 0.6 (FOR WORKING STRESS))

MAXIMUM BASIC WIND LOAD FOR PROJECT LOCATED IN SPECIAL WIND REGIONS SHALL BE EQUAL TO OR LESS THAN 135 mph AND CONFORM WITH THE ADOPTED ORDINANCE OF THE CITY, COUNTY OR CITY AND COUNTY IN WHICH THE PROJECT SITE IS LOCATED AND SHALL BE APPROVED BY DSA-SS.

10. GOVERNING CODE: 2019 CBC

11. ALLOWABLE SOIL BEARING IS BASED ON 1500 PSF & 100 PCF OF PASSIVE PRESSURE PER CBC TABLE 1806A.2 & SECTION 1806A.3.4. SKIN FRICTION IS PER 1810A.3.3.1.4 & IS EQUAL TO 1500/6=250 PSF. FOR UPLIFT SKIN FRICTION SHALL BE 125 PSF (S.F. OF 2). 1/3 INCREASE WAS NOT USED FOR ANY VALUES.

12. ALL WORK TO BE PERFORMED UNDER THE CONTINUOUS INSPECTION OF A D.S.A. APPROVED INSPECTOR.

13. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

14. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR AND THE ENGINEER.

15. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE OFFICE 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.

FOUNDATION NOTES

1. ALL FOOTINGS SHALL EXTEND TO FIRM BEARING IN UNDISTURBED SOIL OR ENGINEERED FILL.

2. NOMINAL TOP OF FLOOR SLAB ELEVATION = DATUM +0'-0" UNLESS OTHERWISE NOTED.

3. ANY EXISTING FILL AT THE BUILDING PAD SHALL MEET THE 92% COMPACTION REQUIREMENTS. ALL ORGANIC MATERIAL, RUBBLE, OR OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE.

4. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF EXTERIOR WALKWAYS.

5. ALL REINFORCING STEEL, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED IN THE FORMS PRIOR TO POURING OF CONCRETE.

6. SHORING AND BRACING: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING, BRACING, AND FORM WORK AS REQUIRED FOR THE CONSTRUCTION OF THIS BUILDING. PROVIDE TEMPORARY BRACING AS REQUIRED TO HOLD THE VARIOUS ELEMENTS IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.

7. EXCAVATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION PROCEDURES AND FOR PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.

8. BACKFILL: DO NOT BACKFILL AROUND THE EXTERIOR PERIMETER WALL UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. IF THE FLOOR SLABS ARE CONCRETE, DO NOT BACKFILL UNTIL 7 DAYS MINIMUM AFTER COMPLETION OF THE FLOOR SLABS. DO NOT BACKFILL UNTIL AFTER COMPLETION AND INSPECTION OF DAMP-PROOFING.

CONCRETE NOTES

1. ALL MOLDS, ORNAMENTS, GROOVES, ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE PROVIDED FOR IN THE FORM WORK BEFORE THE CONCRETE IS POURED.

2. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER EMBEDS SHALL BE IN PLACE AND SECURED TO FORM WORK PRIOR TO POURING OF CONCRETE.

3. REFER TO BOTH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION OF PLUMBING FIXTURES.

4. NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE WALLS OR STRUCTURAL SLABS UNLESS SPECIFICALLY DETAILED.

5. CONSTRUCTION JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE SO MADE AND LOCATED AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. PROVISION SHALL BE MADE FOR TRANSFER OF SHEAR AND OTHER FORCES THROUGHOUT THE JOINTS. THE CONTRACTOR SHALL OBTAIN THE ARCHITECT'S APPROVAL OF CONSTRUCTION JOINT LOCATION IN ALL STRUCTURAL SLAB, BEAMS AND SHEAR WALLS.

6. SIDES OF FOOTINGS MAY BE POURED AGAINST STABLE EARTH.

7. THE QUALITY AND DESIGN OF CONCRETE SHALL COMPLY WITH TITLE 24 PART 2 EXCEPT ITEMS NOT SPECIFICALLY COVERED THEREIN. SHALL CONFORM TO ACI 318.

8. ALL REINFORCING SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A615.

A. #4 BARS AND SMALLER..... GRADE 40 OR 60
B. #5 BARS AND LARGER..... GRADE 60
C. SEPARATE BARS 1-1/2" DIAMETERS CLEAR OR 1-1/2" CLEAR, WHICHEVER IS LARGER.

9. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE AS FOLLOWS:
CAST AGAINST EARTH (EXCEPT SLABS ON GRADE)..... 1-1/2"
SLABS ON GRADE..... 1-1/2"
EXPOSED TO EARTH OR WEATHER..... 1-1/2"
#5 BARS AND SMALLER..... 1-1/2"
#6 BARS AND LARGER..... 2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND SLABS, WALLS, JOISTS
#11 BARS AND SMALLER..... 3/4"
#14 AND #18 BARS..... 1-1/2"
BEAMS, GIRDERS, COLUMNS
PRINCIPAL REINFORCING, TIES
STIRRUPS, OR SPIRALS..... 1-1/2"
SHELLS AND FOLDED PLATE MEMBERS
#5 BARS AND SMALLER..... 1/2"
#6 BARS AND LARGER..... 3/4"

10. CONCRETE SHALL HAVE FOLLOWING MINIMUM REQUIREMENTS.
F1- 3000 PSI AT 28 DAYS & MAXIMUM WATER TO CEMENT RATIO OF 0.5.
F2- 4500 PSI AT 28 DAYS & MAXIMUM WATER TO CEMENT RATIO OF 0.45 & MINIMUM AIR CONTENT OF 7%.

11. THE ENGINEER DOES NOT PROVIDE CONTRACT ADMINISTRATION FOR THE PROJECT, INCLUDING REVIEW OF CONCRETE MIXES.

12. PER ACI SECTION 19.3.2.1. FOOTING SHALL NOT BE EXPOSED TO FREEZING AND THAWING CYCLES. SHALL NOT BE EXPOSED TO WATER-SOLUBLE SULFATE IN SOIL BY PERCENT OF MASS 20.10% SHALL NOT BE EXPOSED TO EXTERNAL SOURCE OF CHLORIDES.

STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL EXCEPT W SHAPES SHALL CONFORM TO ASTM A-36 AND SHALL BE FABRICATED AND ERECTED AS PER AISC SPECIFICATIONS FOR BUILDINGS. W SHAPES SHALL CONFORM TO ASTM A992.

2. STRUCTURAL PIPE SHALL CONFORM TO ASTM A-53 GRADE "B" AND STRUCTURAL TUBING SHALL CONFORM TO ASTM A-500 GRADE "B", F_y=46KSI.

3. ALL LIGHT GAGE STEEL TO CONFORM TO ASTM A653 GRADE 55 FOR ALL STRUCTURAL SHAPES, A653 GRADE 33 FOR ALL BLOCKING, FLASHINGS, MISCELLANEOUS CONNECTION PLATES, AND ANGLES.

4. ALL UNFINISHED BOLTS SHALL BE ASTM A-307 UNLESS NOTED OTHERWISE.

5. USE AISC USUAL GAGES FOR BOLT HOLES IN ALL STEEL SECTIONS UNLESS OTHERWISE NOTED.

6. THE STEEL FABRICATOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ERECTION.

7. ALL BOLT HOLES ARE TO BE 1/16" OVERSIZED. ALL BOLTS SHALL HAVE WASHERS INSTALLED UNDER BOTH HEAD & NUT.

8. ALL STEEL SHALL BE PROTECTED FROM WEATHER AS FOLLOWS: STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153, CLASS D) OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE AA-1, CP 90 COATING DESIGNATION.

ALL EXPOSED STEEL FASTENERS, INCLUDING CAST-IN-PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GALVANIZED (ASTM A153, CLASS D MINIMUM), OR PROTECTED WITH CORROSION-PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT DO COMPLY WITH THE 1,000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUIK GUARD BY SIMPSON, KOW-KOTE BY HILTI, STALGARD BY ELO, VISTACORR BY SFS INTEG, ETC.)

GOVERNING CODES:

1. 2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).

2. 2019 CALIFORNIA BUILDING CODE, VOLUMES 1 & 2 (PART 2, TITLE 24, CCR).

3. 2019 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR).

4. 2019 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR).

NOTES

1. COVERS ARE NOT DESIGNED TO BE ENCLOSED OR FOR STORAGE OF COMBUSTIBLE MATERIALS.

2. WALKWAY COVER HAS BEEN CHECKED FOR OBSTRUCTED WIND FLOW CONDITION & CAN BE WITHIN 6" MIN. FROM AN EXISTING BUILDING.

3. WALKWAY PIER FOOTING HAS BEEN CHECKED FOR D.S.A. BULLETIN 09-06 REV.

4. ALL WORK SHALL COMPLY WITH C.F.C. CHAPTER 33 DURING CONSTRUCTION.

TESTING & INSPECTIONS REQUIREMENTS

1. INSPECTOR CLASS (MINIMUM REQUIREMENTS)
CLASS 2

2. SELECTION OF THE PROJECT INSPECTOR AND TESTING AGENCY
BY THE SCHOOL DISTRICT AND APPROVED BY D.S.A. A/E OF RECORD AND STRUCTURAL ENGINEER

3. COST OF THE PROJECT INSPECTOR (CA ADMIN. CODE 4-333(B) AND TESTING AGENCY (CA ADMIN. CODE 4-335)
BY THE SCHOOL DISTRICT

4. COPIES OF THE REPORT TO
ARCHITECT; STRUCTURAL ENGINEER; SCHOOL DISTRICT; D.S.A. (ORIGINAL); IOR; MANUFACTURER

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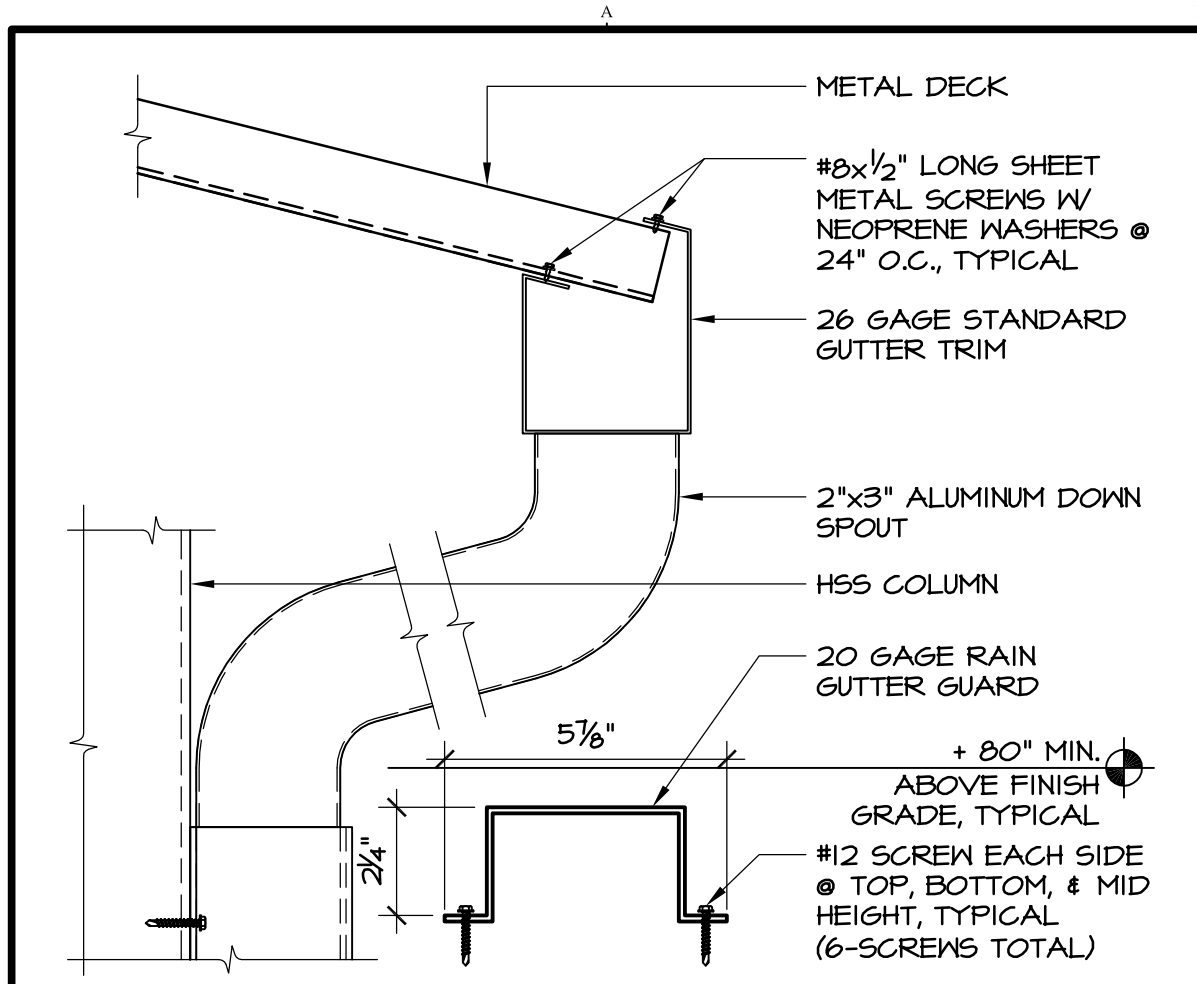
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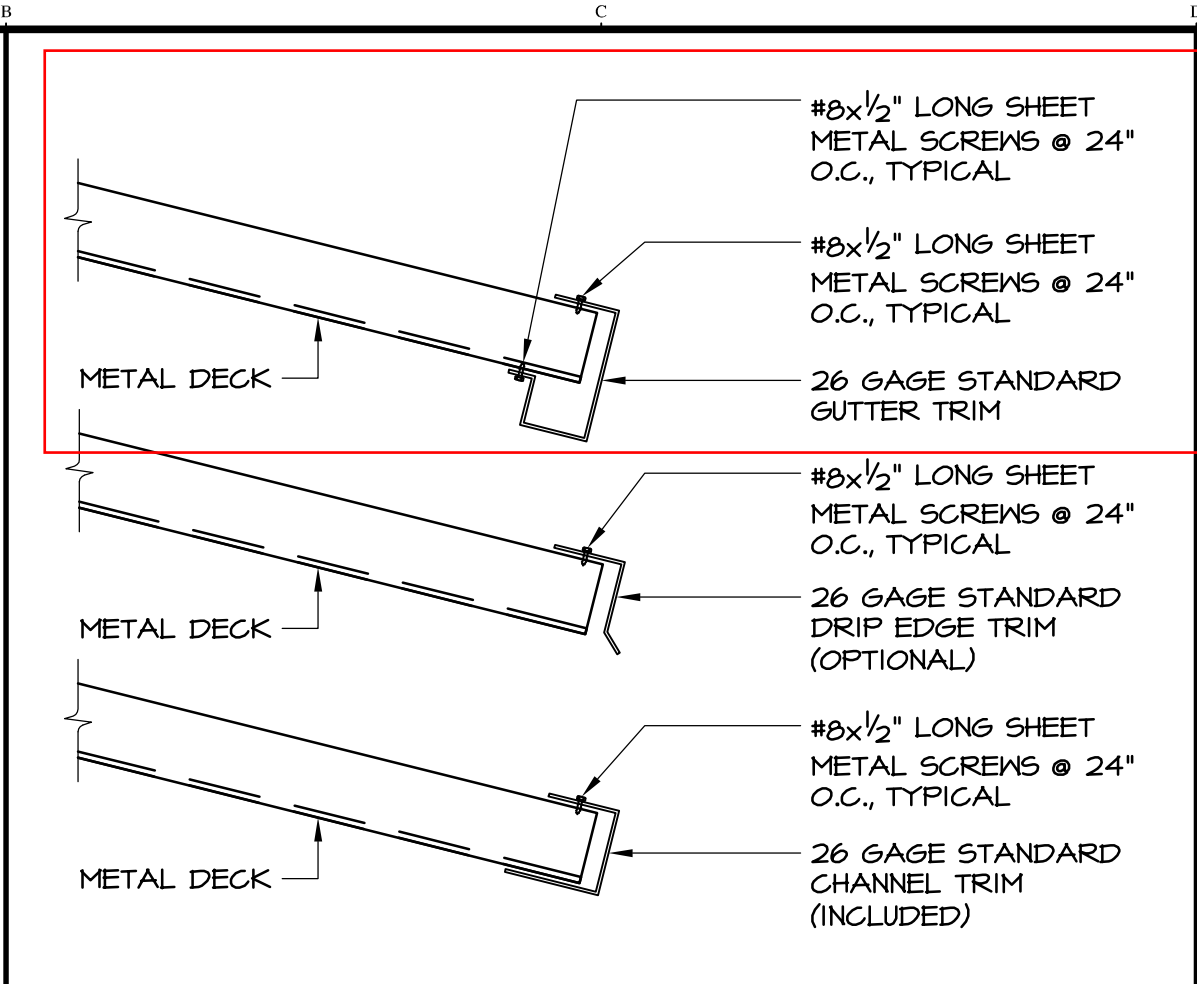
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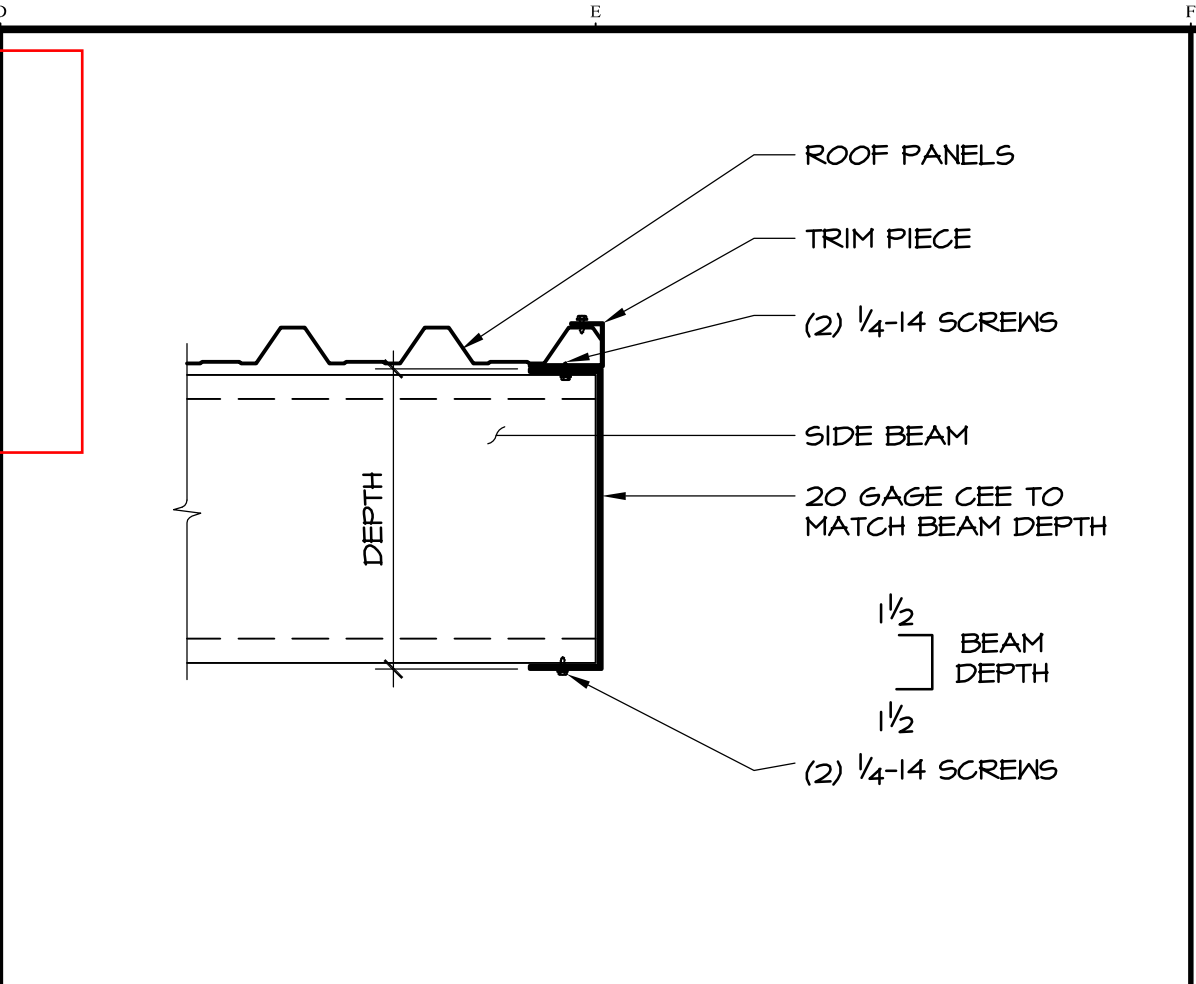
ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE CONSTRUCTION SAFETY REQUIRE



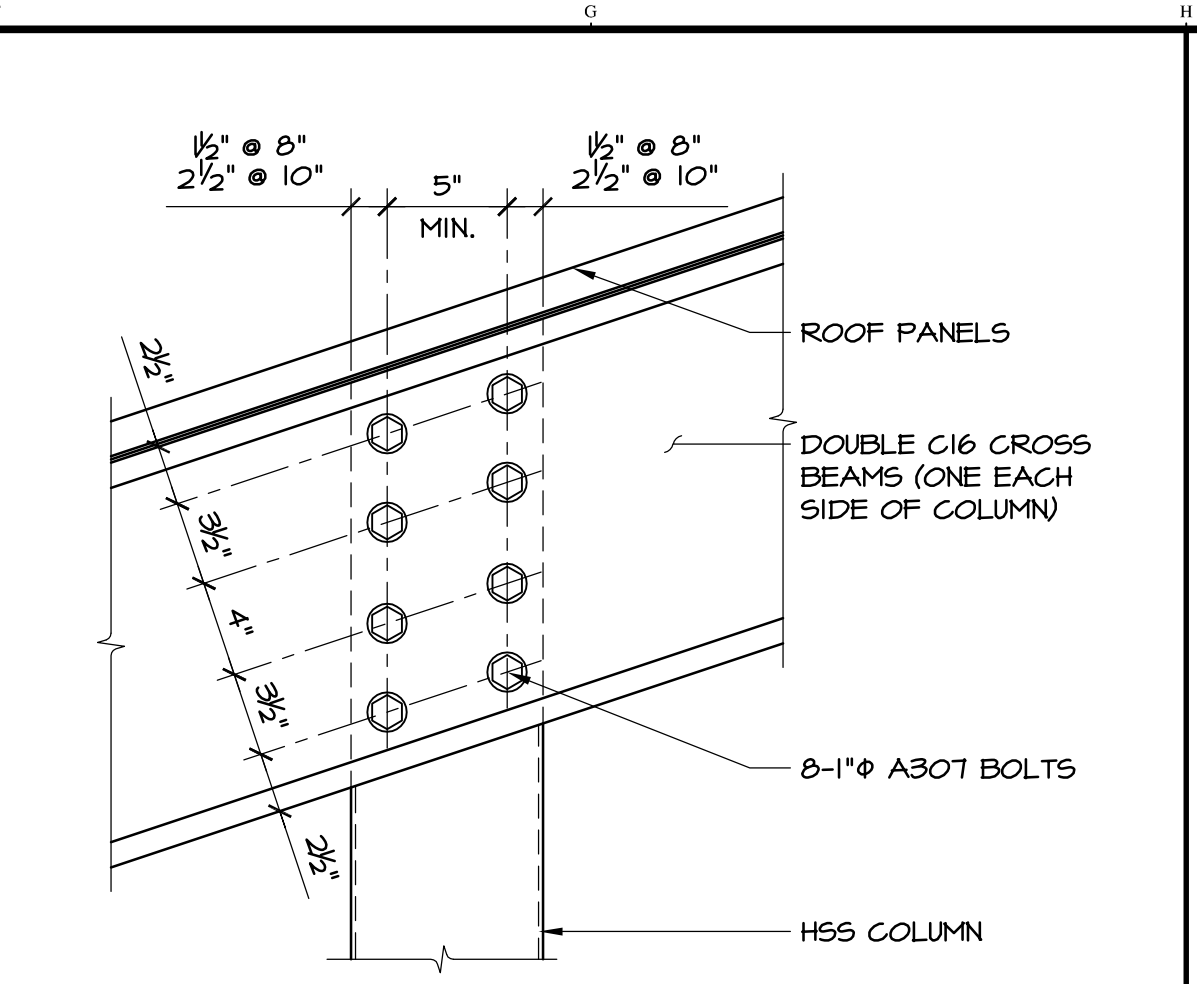
BOX GUTTER SCALE 3" = 1'-0" **2B**



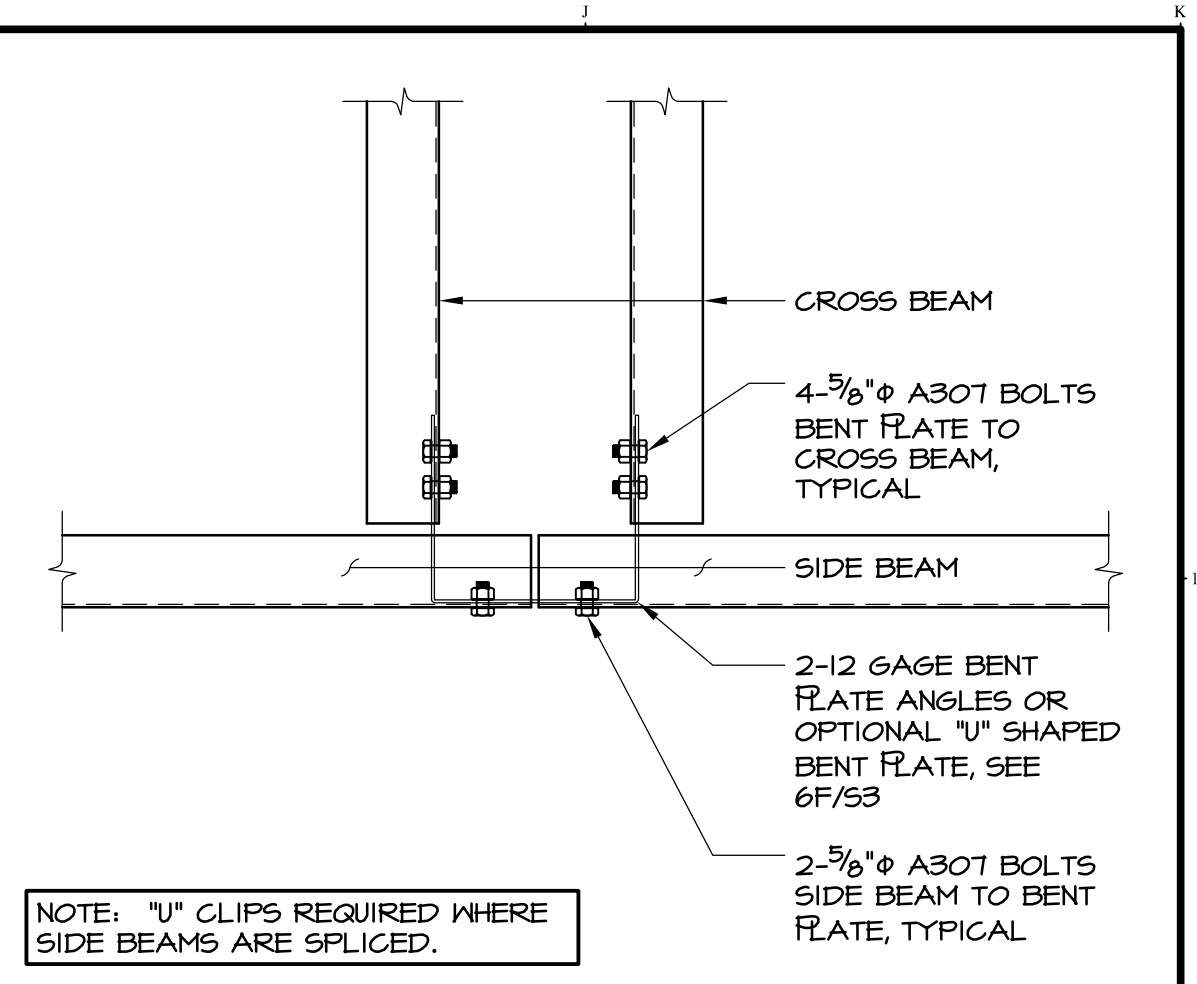
FASCIA OPTIONS SCALE 3" = 1'-0" **2D**



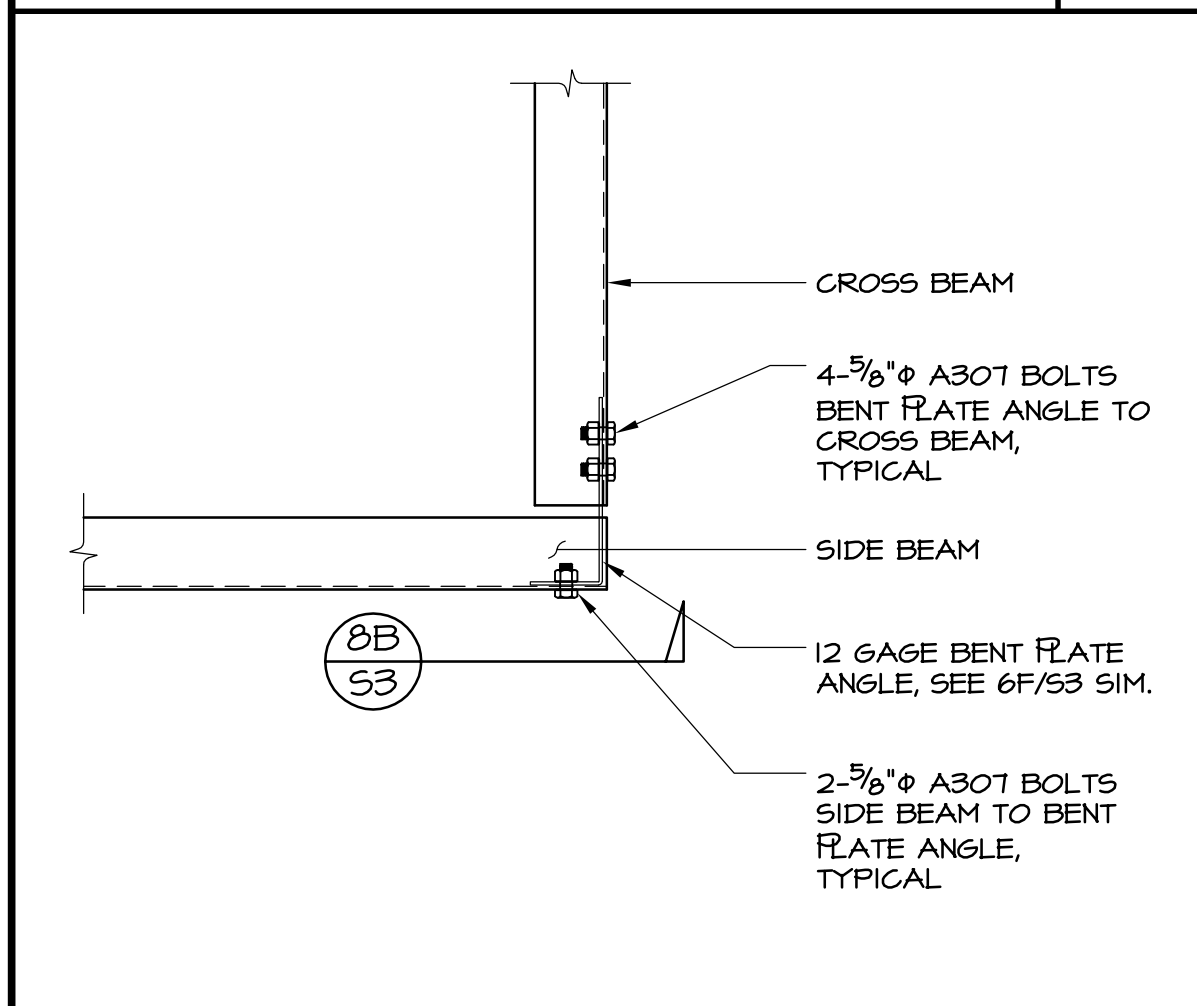
BEAM END SCALE 1 1/2" = 1'-0" **2F**



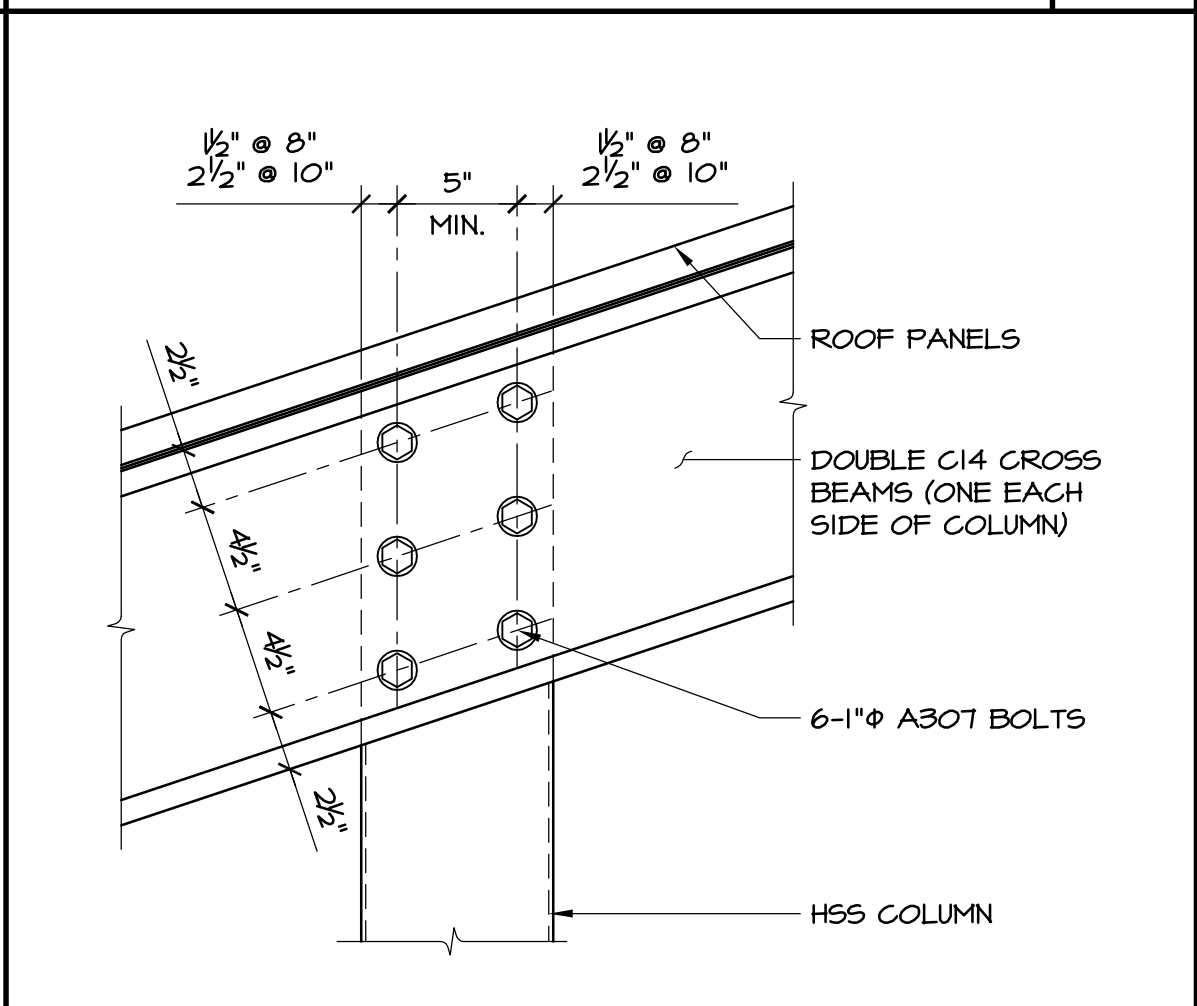
16" CROSS BEAM TO COLUMN SCALE 1 1/2" = 1'-0" **2H**



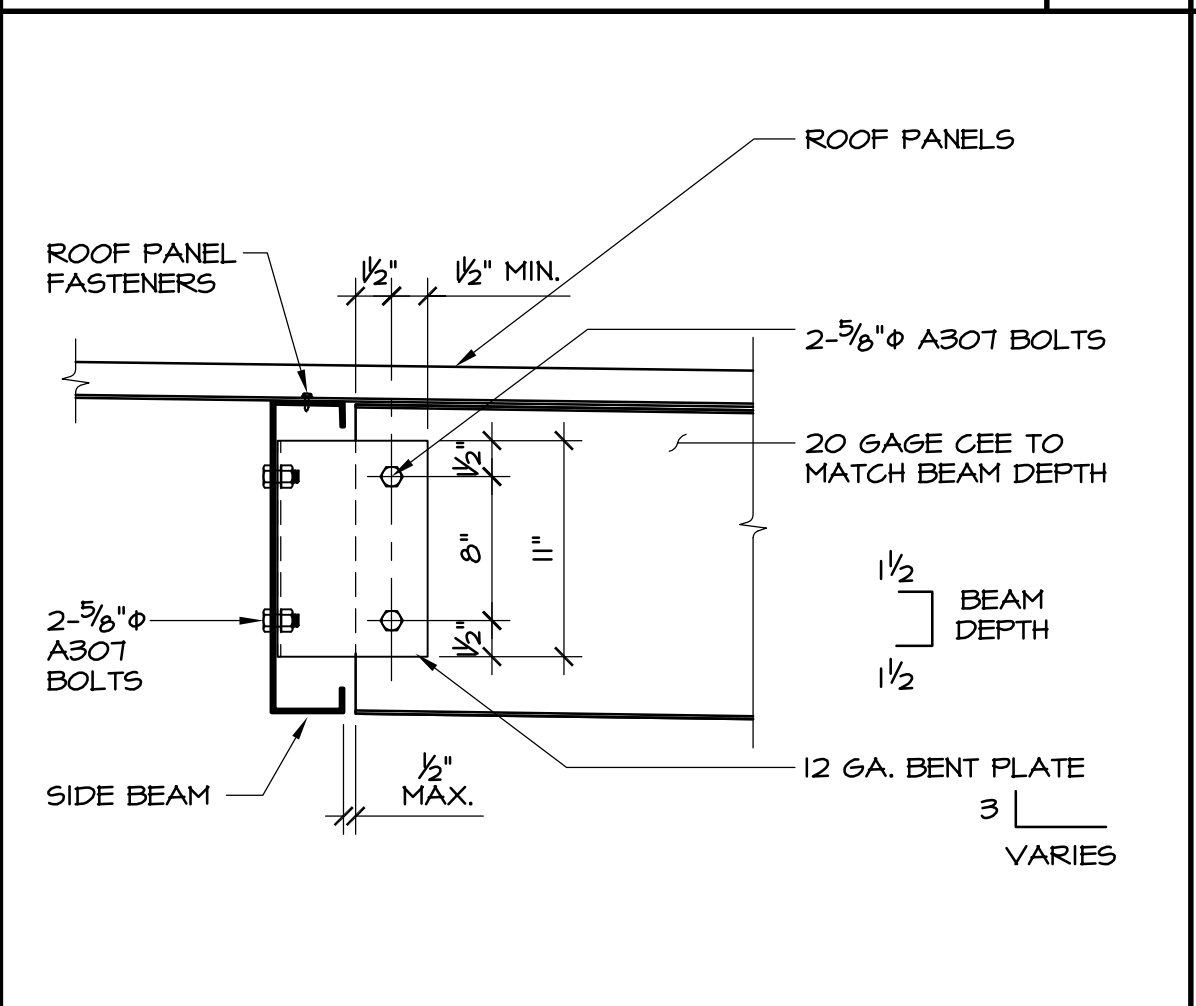
SIDE BEAMS TO CROSS BEAMS SCALE 1 1/2" = 1'-0" **2K**



BEAM TO BEAM SCALE 1 1/2" = 1'-0" **4B**



14" CROSS BEAM TO COLUMN SCALE 1 1/2" = 1'-0" **4D**



BRACE TO BEAM SCALE 1 1/2" = 1'-0" **4F**

5TH SCREW @ PITCHES > 2:12 ONLY

3'-0" NET COVERAGE

F_y = 80,000 PSI PER ASTM A653 OR ASTM A792
F_y = 50,000 PSI @ 24 GAUGE PANELS ONLY

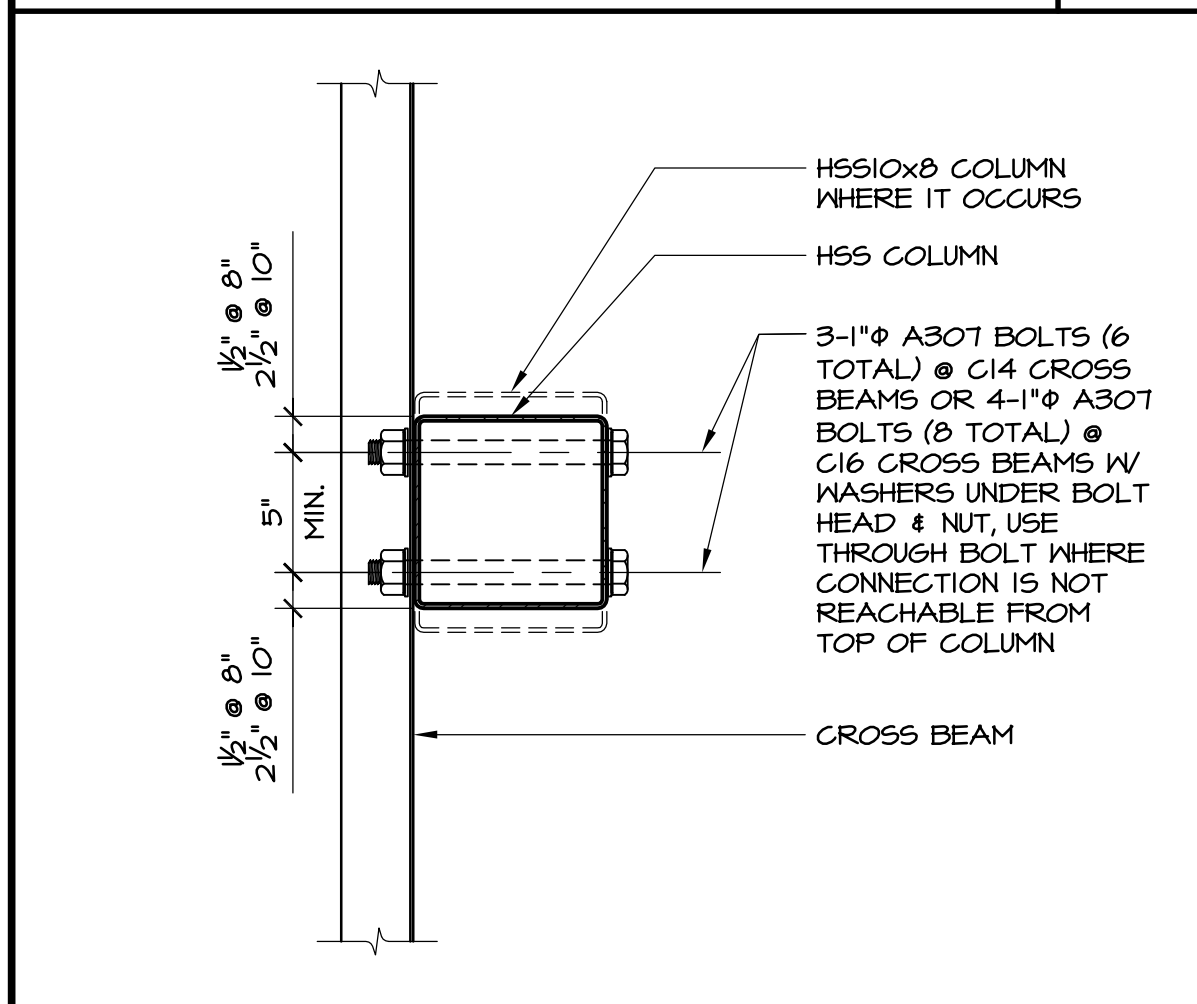
GAUGE	Wt. (lbs./ft.)	I _x (in. ⁴ /ft.)	S _x (in. ³ /ft.)	I _y (in. ⁴ /ft.)	S _y (in. ³ /ft.)
24	1.2	0.116	0.1234	0.1141	0.1156
26	0.98	0.0825	0.0845	0.0838	0.0834

GAUGE	Wt. (lbs./ft.)	I _x (in. ⁴ /ft.)	S _x (in. ³ /ft.)	I _y (in. ⁴ /ft.)	S _y (in. ³ /ft.)
24	1.22	0.1038	0.1228	0.1038	0.1228
26	0.98	0.0761	0.0841	0.0761	0.0841

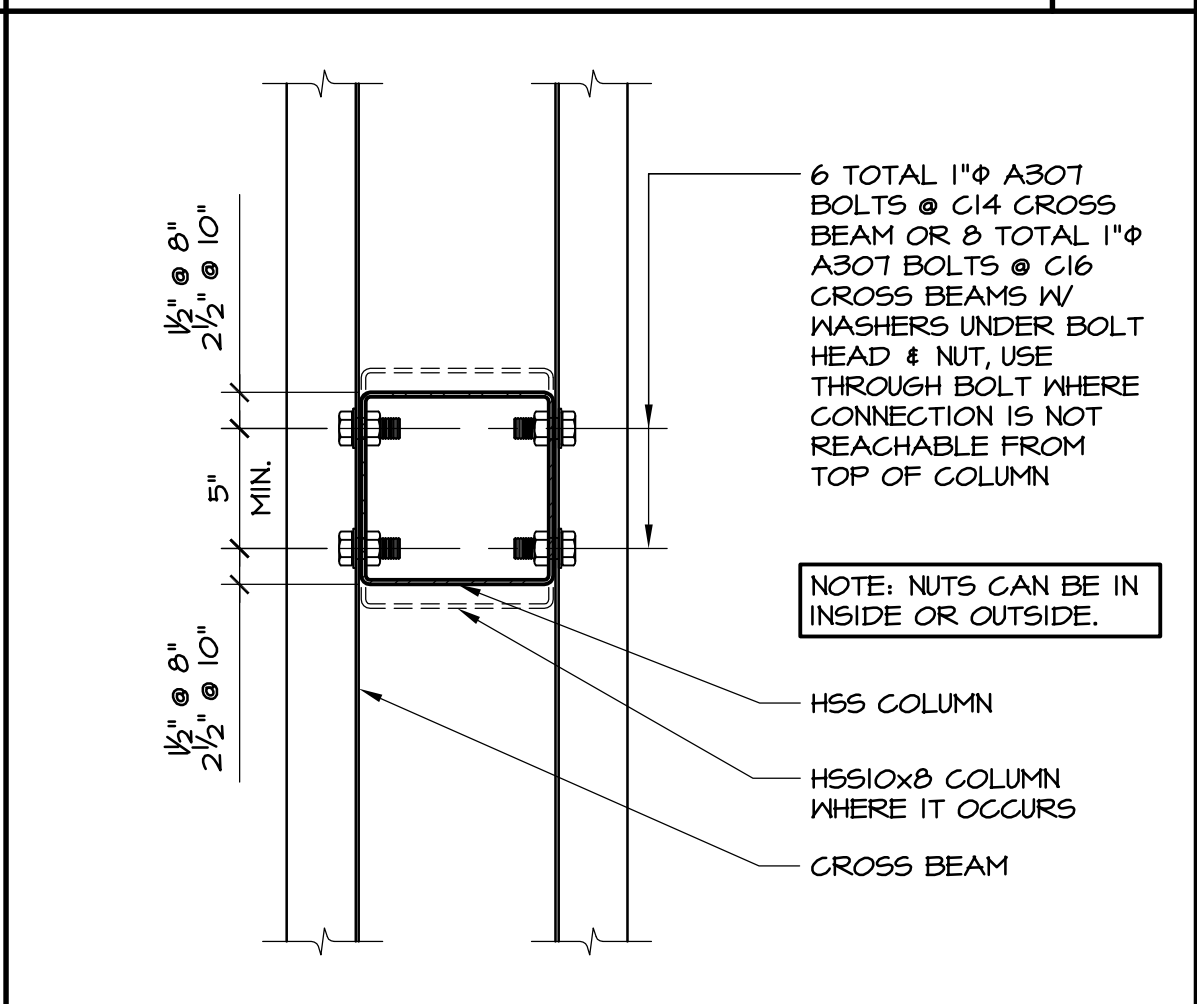
SECTION PROPERTIES ARE EFFECTIVE SECTION PROPERTIES TYP.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

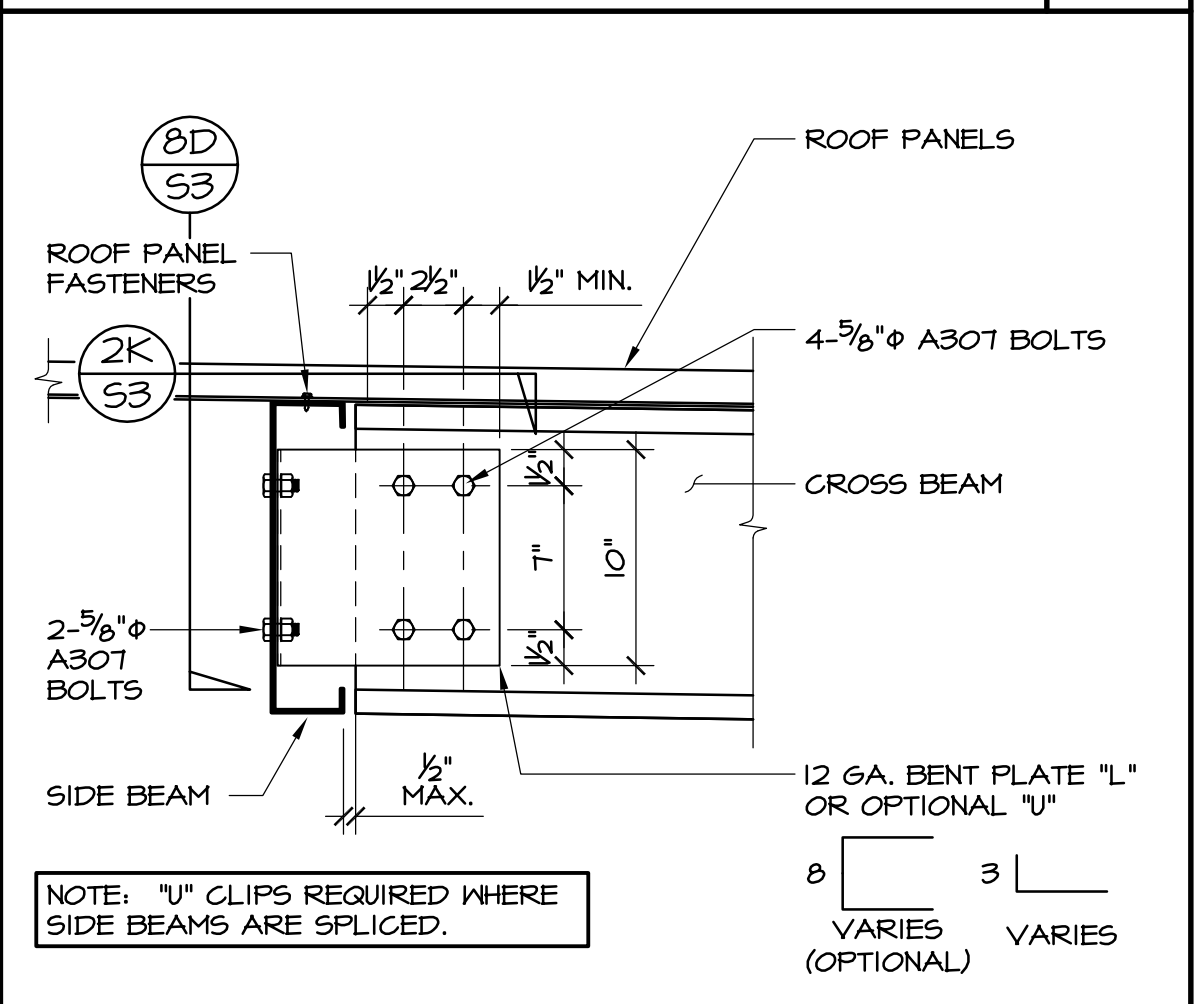
PRE-CHECK (PC) DOCUMENT
CODE: 2019 C.B.C.
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.



BEAM TO COLUMN SCALE 1 1/2" = 1'-0" **6B**



BEAM TO COLUMN SCALE 1 1/2" = 1'-0" **6D**



BEAM TO BEAM SCALE 1 1/2" = 1'-0" **6F**

20 GAGE
BLOCKING
F_y = 33 KSI
MIN.,
F_v = 45 KSI

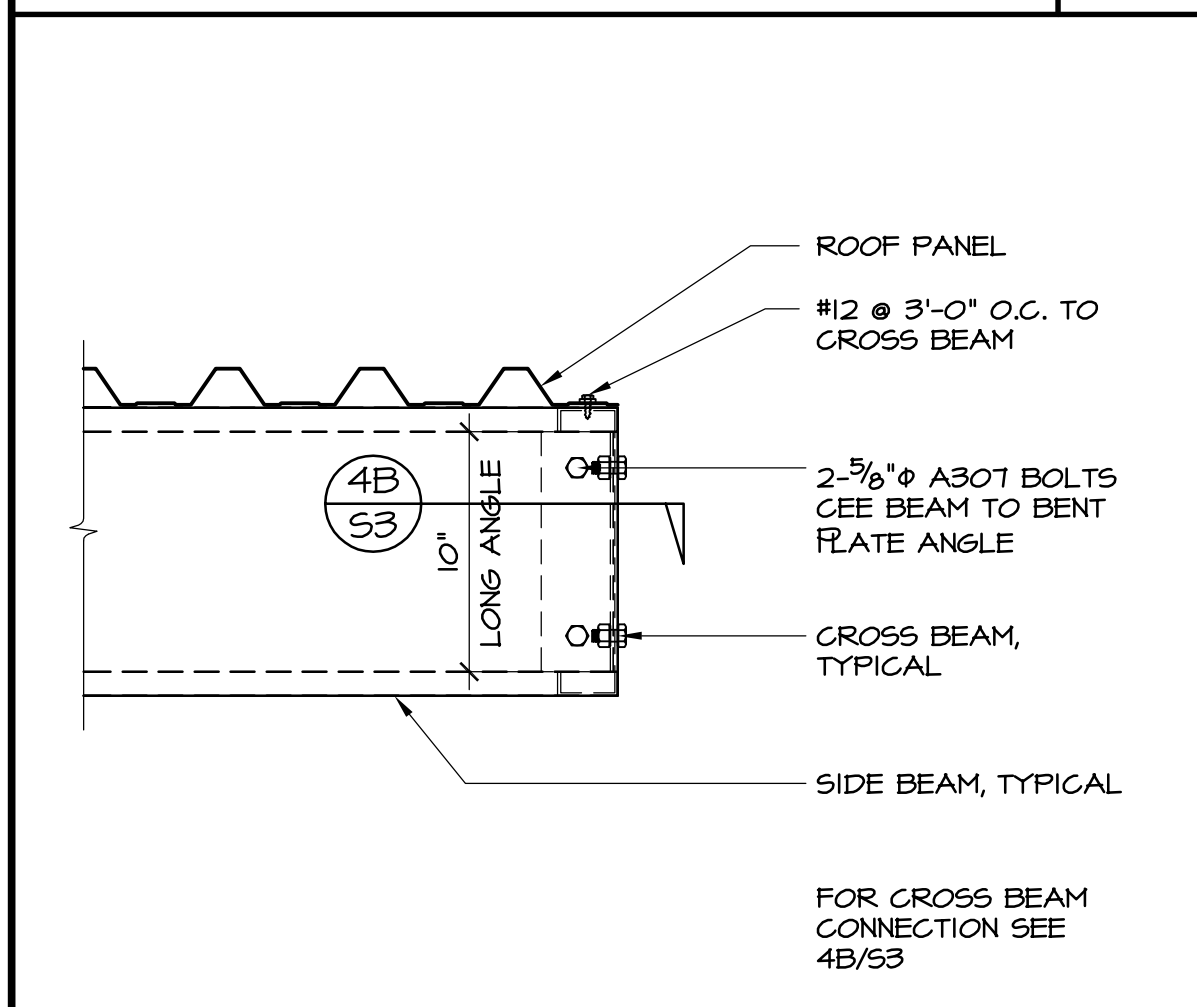
A technical drawing of a C-channel section. The overall height is labeled 'D', the overall width of the flanges is labeled 'B', and the thickness of the web is labeled 'J'. The section is shown in a side view with arrows indicating the dimensions.

10 # 12 GAGE
STRUCTURAL
BEAMS
F_y = 55 KSI MIN.
ASTM A653,
F_v = 70 KSI

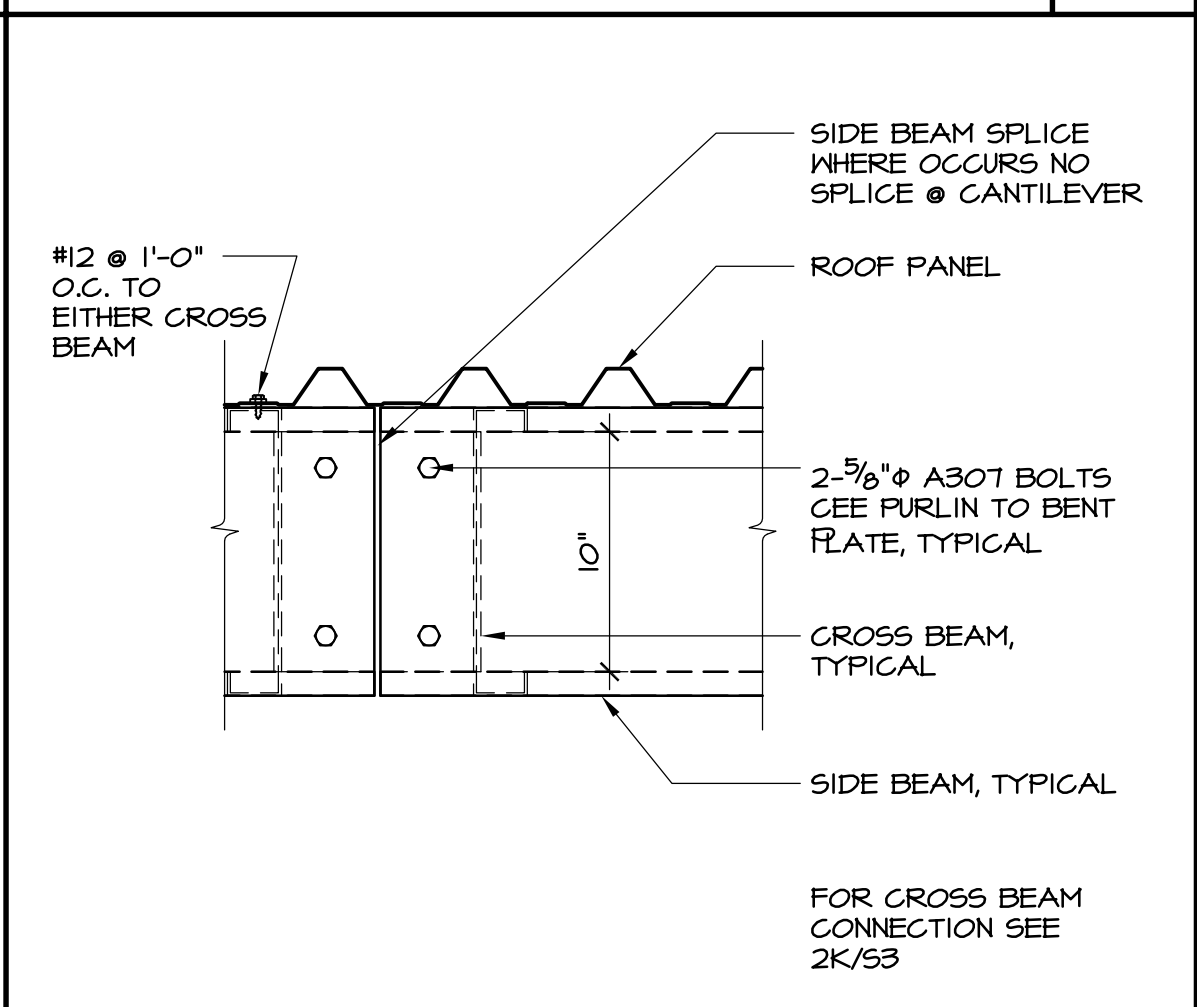
CEE SECTION PROPERTIES

SECTION	DxB	GAUGE	WEIGHT lb/ft.	A _g in. ²	AXIS X-X		AXIS Y-Y		L in.
					I _x in. ⁴	S _x in. ³	I _y in. ⁴	S _y in. ³	
C14x1½	20	2.05	0.117	7.093	0.742	0.068	0.05	-	
C14x2½	12	7.14	1.14	53.354	7.622	1.414	0.715	0.916	
C16x1½	20	2.24	0.1172	4.442	0.853	0.069	0.051	-	
C16x3½	10	11.02	1.8	112.26	13.517	4.32	1.582	0.984	
C18x2½	10	10.54	1.619	118.0	12.233	1.84	0.847	0.916	
C18x1½	20	2.54	0.1174	12.261	0.964	0.07	0.051	-	
C18x2½	12	8.57	1.149	100.08	9.8	1.49	0.725	0.916	

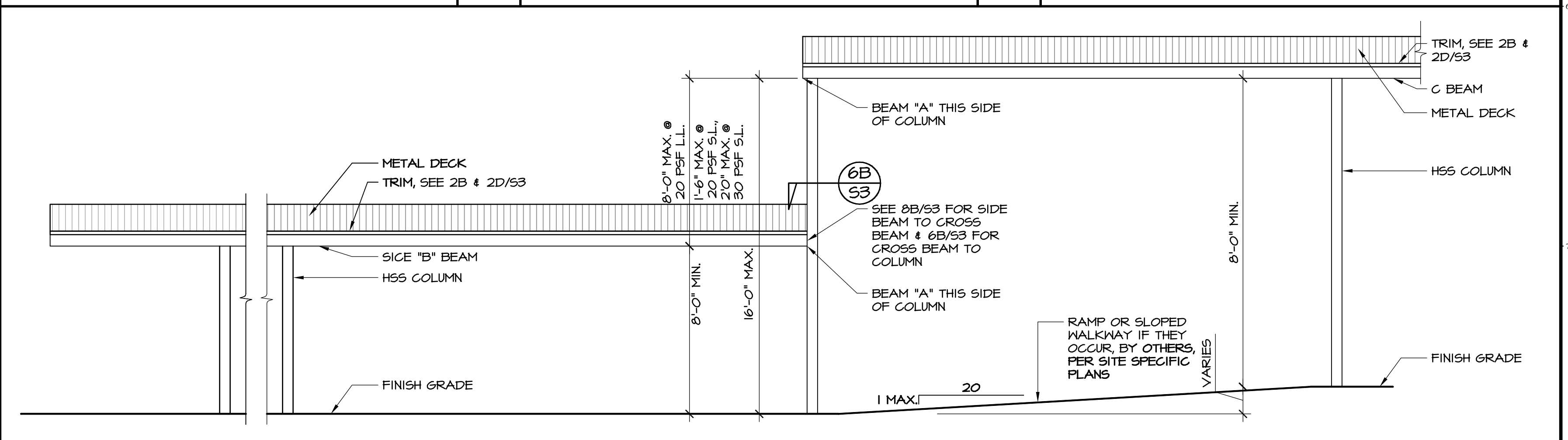
MATERIAL PROPERTIES SCHEDULES **6H**



BEAM TO BEAM SCALE 1 1/2" = 1'-0" **8B**



SIDE BEAM SPLICE SCALE 1 1/2" = 1'-0" **8D**



ELEVATION SCALE 1/4" = 1'-0" **8K**

PROJECT: SINGLE POST WALKWAY COVER VALLEY SCHOOL SHELTERS

16785 SYPERT SCHOOL RD.
HOLLAND, TX. 76634

Glenn and Associates
STRUCTURAL ENGINEERS
PH: (659) 734-6675
Email: glennsese@gmail.com

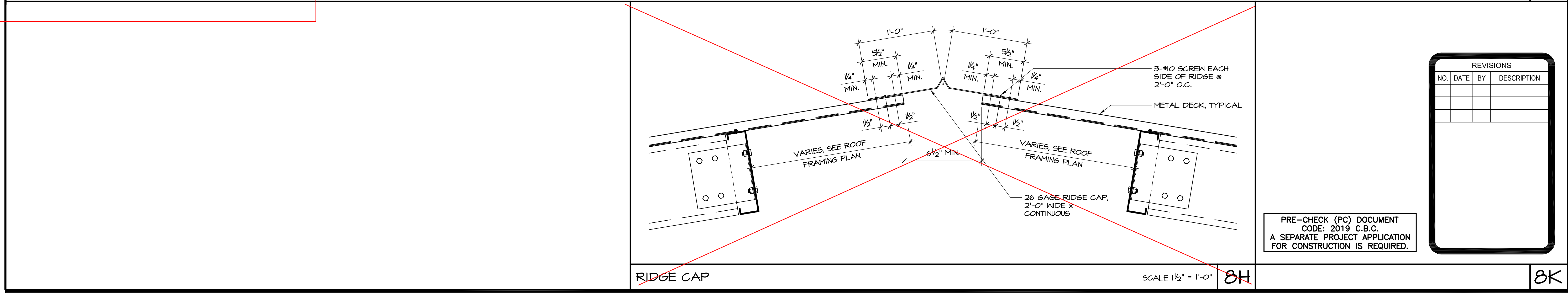
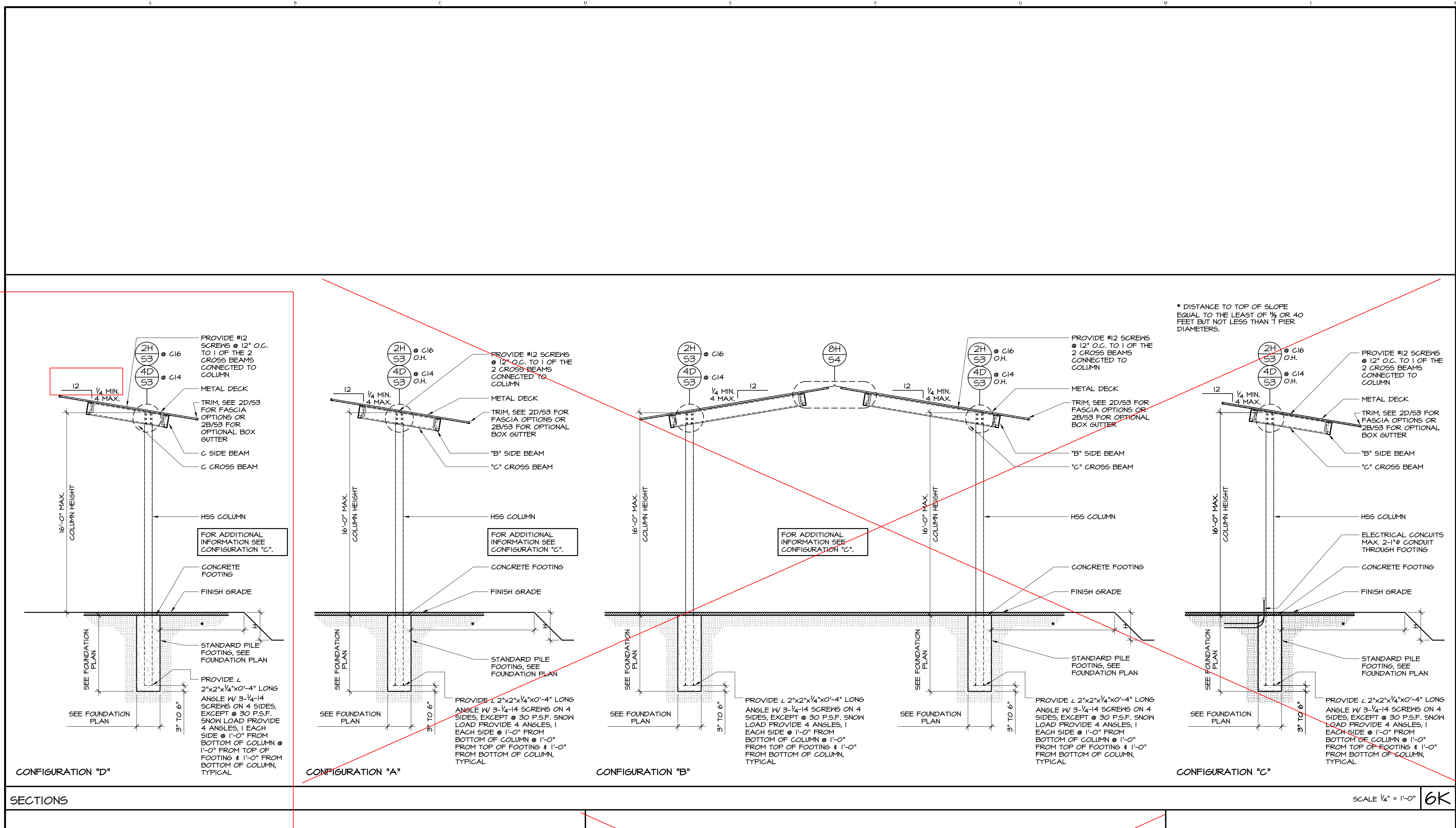
DWN BY: B.G.H. CHKD BY: G.B.H.

DATE: 12/30/20

PROJECT NO: 19246

DRAWING TITLE
SECTION TYPICAL ELEVATION DETAILS

SHEET NUMBER
S3
OF 4 SHEETS



PROJECT:
**SINGLE POST
WALKWAY COVER
VALLEY SCHOOL SHELTERS**

16785 SYPERT SCHOOL RD.
HOLLAND, TX. 76534
Gerard Homer and Associates
STRUCTURAL ENGINEERS
PH: (659) 734-6675
Email: ghomerse@gmail.com

DWN BY:
B.G.H.
CHKD BY:
G.B.H.
DATE: 12/30/20
PROJECT NO: 19246
DRAWING TITLE
SECTION
TYPICAL ELEVATION
DETAILS
SHEET NUMBER
S4
OF 4 SHEETS



FABRIC SHADE STRUCTURE

DSA P.C. 04-117140

SITE SPECIFIC APPLICATION SITE PLAN SHALL INCLUDE:

1. ACTUAL DIMENSIONS OF SHADE STRUCTURES.
2. DIMENSIONS FROM ADJACENT STRUCTURES AND PROXIMITY OF ASSUMED OR ACTUAL PROPERTY LINES.
3. PROVIDE CODE ANALYSIS INCLUDING ACTUAL SHADE STRUCTURE AREA (SQ. FT.), OCCUPANCY TYPE (A-3), AND TYPE OF CONSTRUCTION (V-B). INDICATE OCCUPANT LOAD FACTOR per 2016 CBC, SECTION 1004.
4. INDICATE LOCATIONS OF FIRE EXTINGUISHER WITHIN 75 FEET.
5. SHOW LOCATIONS OF AUDIBLE FIRE ALARM.
6. INDICATE DIMENSIONS FROM THE ROOF TO THE HIGHER STRUCTURE OR TERRAIN FEATURE. MINIMUM DIMENSION OF 20' FOR SNOW LOAD MODEL (ASCE 7-10).
7. ACTUAL SITE ELEVATION (FT.) TO DETERMINE SITE OCCURS AT OR BELOW THE UPPER ELEVATION LIMIT FOR THE GROUND SNOW LOAD SHOWN IN ASCE 7-10 (FOR SNOW LOAD MODEL).
8. FOR RECESSED BASE PLATE (RBP) OPTION: ARCHITECT/ENGINEER OF RECORD TO SPECIFY THE LOWEST ANTICIPATED SERVICE TEMPERATURE (LAST), AS DEFINED IN AISI 341-10 SECTION A.3.4b, A4.1 AND A4.2 PER NOTE ON EACH INDIVIDUAL MODEL ENGINEERING DRAWING WHICH RELATES TO DEMAND CRITICAL WELD AND "L.A.S.T." TEMPERATURE (EITHER STRUCTURAL STEEL NOTE #14).
9. COMPLETE SCOPE OF WORK INCLUDING THE SHADE STRUCTURE MODEL NUMBER, P.C. NUMBER, AND SPECIFIC SIZE OF SHADE STRUCTURE.
10. ALL SADDLES, CLAMPS AND FITTINGS SHALL CONFORM TO THE GUIDELINES AS SPECIFIED IN APPENDICES "A, B & C" RESPECTIVELY IN ASCE 19-10, "STRUCTURAL APPLICATIONS OF STEEL CABLES FOR BUILDINGS."
11. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN MAPPED GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.



CORPORATE HEADQUARTERS
8505-A CHANCELLOR ROW
DALLAS, TX, 75247
800-966-5005

CERTIFICATIONS:
IAS CERTIFICATION No: FA-428
CLARK COUNTY MANUFACTURER
CERTIFICATION NUMBER (NEVADA): 355

DSA PC APPLICATION STAMP:

FILE NUMBER: PC-SS
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117140 INCR :
AC _ DF _ FLS _ DS _ SS _ VN _
DATE _ 08/14/2018 _

CODE UPDATE FOR 04-113245

PRE-CHECK (PC) DOCUMENT
Code : 2016 CBC
A separate project application for construction is required.

GENERAL NOTES

SITE SPECIFIC APPLICATION TITLE SHEET SHALL INCLUDE:

APPLICABLE CODES

- 2016 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R. *
- 2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2015 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2014 NATIONAL ELECTRICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2015 UNIFORM MECHANICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2015 UNIFORM PLUMBING CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R. *
- 2016 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2015 INTERNATIONAL FIRE CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
- 2016 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
- 2013 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	AUTOMATIC FIRE SPRINKLER SYSTEMS	2016 EDITION
NFPA 14	STANDPIPE AND HOSE SYSTEMS	2013 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2013 EDITION
NFPA 17a	WET CHEMICAL EXTINGUISHING SYSTEMS	2013 EDITION
NFPA 20	STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	PRIVATE FIRE MAINS & THEIR APPURTENANCES	2016 EDITION
NFPA 25	STANDARD FOR INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS	2013 EDITION
NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2015 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2015 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
ICC 300	ICC STANDARDS ON BLEACHERS, FOLDING AND TELESCOPING SEATING, AND GRAND STANDS	2012 EDITION
UL 300	FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS	2005 EDITION
UL 464	FOR PROTECTION OF RESTAURANT COOKING AREAS	
UL 521	AUDIBLE SIGNAL APPLIANCES	2003 EDITION
	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION

REFERENCE CODE SECTION FOR NFPA STANDARDS-2016 CBC (SFM) CHAPTER 35. SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

SEE INDIVIDUAL STRUCTURAL DRAWINGS FOR SPECIFIC DESIGN NOTES AND LOADING.

ALL WORK SHALL CONFORM TO 2016 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (C.C.R.)

MODEL: DSA4012030-16 STRUCTURE: 20'X30'X12' (MAX) HIP UNIT MAX. AREA = 600 SQ. FT. MAX. OCCUPANCY = 40	MODEL: DSA4013030-16 STRUCTURE: 30'X30'X12' HIP UNIT MAX. AREA = 900 SQ. FT. MAX. OCCUPANCY = 60	MODEL: DSA4013040-16 STRUCTURE: 30'X40'X12' HIP UNIT MAX. AREA = 1200 SQ. FT. MAX. OCCUPANCY = 80	MODEL: DSA401S2030-1 STRUCTURE: 20'X30'X12' HIP (20 PSF SNOW LOAD) MAX. AREA = 600 SQ. FT. MAX. OCCUPANCY = 40
MODEL: DSA4070600-16 STRUCTURE: 60'X60'X12' MARINER PEAK QUAD MAX. AREA = 3600 SQ. FT. MAX. OCCUPANCY = 120	MODEL: DSA3022060-16 STRUCTURE: 30'X60'X14' FULL CANTH HIP JOINED MAX. AREA = 1200 SQ. FT. MAX. OCCUPANCY = 80	MODEL: DSA3052060-16 STRUCTURE: 30'X60'X14' TRI TRUSS HIP JOINED MAX. AREA = 1200 SQ. FT. MAX. OCCUPANCY = 80	MODEL: DSA4182020-16 STRUCTURE: 30'X20'X14' TENSION SAILS JOINED MAX. AREA/SAIL = 400 SQ. FT./SAIL MAX. OCCUPANCY / SAIL = 25 /SAIL
NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS
MODEL: DSA4070600-16 STRUCTURE: 60'X60'X12' MARINER PEAK QUAD MAX. AREA = 3600 SQ. FT. MAX. OCCUPANCY = 120	MODEL: DSA407J3060-16 STRUCTURE: 20'X60'X12' MARINER PEAK JOINED MAX. AREA = 1800 SQ. FT. MAX. OCCUPANCY = 120	MODEL: DSA4183030-16 STRUCTURE: 30'X30'X14' TENSION SAILS JOINED MAX. AREA/SAIL = 400 SQ. FT./SAIL MAX. OCCUPANCY / SAIL = 60 /SAIL	MODEL: DSA40730-16 STRUCTURE: 30'X30'X12' TENSION SAILS JOINED MAX. AREA/SAIL = 400 SQ. FT./SAIL MAX. OCCUPANCY / SAIL = 120
NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS

DRAWING NUMBER	DRAWING DESCRIPTION	STRUCTURE TYPE	MAX SIZE	MODEL NUMBER
P.C. T-1.0	P.C. TITLE SHEET			
P.C. T-2.0	DSA 103 FORMS			
1.1-1000	PRODUCT INFORMATION	HIP	20 X 30	DSA4012030-16
1.2-2000	REACTIONS	HIP	20 X 30	DSA4012030-16
2.1-1000	PRODUCT INFORMATION	HIP	30 X 30	DSA4013030-16
2.2-2000	REACTIONS	HIP	30 X 30	DSA4013030-16
3.1-1000	PRODUCT INFORMATION	HIP	30 X 40	DSA4013040-16
3.2-2000	REACTIONS	HIP	30 X 40	DSA4013040-16
4.1-1000	PRODUCT INFORMATION	HIP (20# SNOW LOAD)	20 X 30	DSA401S2030-16
4.2-2000	REACTIONS	HIP (20# SNOW LOAD)	20 X 30	DSA401S2030-16
5.1-1000	PRODUCT INFORMATION	SINGLE POST PYRAMID	14 X 14	DSA1031414-16
5.2-2000	REACTIONS	SINGLE POST PYRAMID	14 X 14	DSA1031414-16
6.1-1000	PRODUCT INFORMATION	MARINER	30 X 30	DSA4073030-16
6.2-2000	REACTIONS	MARINER	30 X 30	DSA4073030-16
7.1-1000	PRODUCT INFORMATION	JOINED MARINER	30 X 200	DSA407J3060-16
7.2-2000	REACTIONS	JOINED MARINER	30 X 200	DSA407J3060-16
8.1-1000	PRODUCT INFORMATION	QUAD MARINER	60 X 60	DSA407Q6060-16
8.2-2000	REACTIONS	QUAD MARINER	60 X 60	DSA407Q6060-16
9.1-1000	PRODUCT INFORMATION	FULL CANTILEVER	20 X 30	DSA2022030-16
9.2-2000	REACTIONS	FULL CANTILEVER	20 X 30	DSA2022030-16
10.1-1000	PRODUCT INFORMATION	FULL CANTILEVER JOINED	20 X 300	DSA3022060-16
10.2-2000	REACTIONS	FULL CANTILEVER JOINED	20 X 300	DSA3022060-16
11.1-1000	PRODUCT INFORMATION	TRI TRUSS CANTILEVER	20 X 30	DSA2062030-16
11.2-2000	REACTIONS	TRI TRUSS CANTILEVER	20 X 30	DSA2062030-16
12.1-1000	PRODUCT INFORMATION	TRI TRUSS CANTILEVER JOINED	20 X 300	DSA3052060-16
12.2-2000	REACTIONS	TRI TRUSS CANTILEVER JOINED	20 X 300	DSA3052060-16
13.1-1000	PRODUCT INFORMATION	THREE POINT SAILS	30 X 200	DSA30730-16
13.2-2000	REACTIONS	THREE POINT SAILS	30 X 200	DSA30730-16
14.1-1000	PRODUCT INFORMATION	FOUR-POINT SAILS	20 X 300	DSA4182020-16
14.2-2000	REACTIONS	FOUR-POINT SAILS	20 X 300	DSA4182020-16
15.1-1000	PRODUCT INFORMATION	FOUR POINT SAILS	30 X 200	DSA4183030-16
15.2-2000	REACTIONS	FOUR POINT SAILS	30 X 200	DSA4183030-16

SHEET INDEX - P.C. DRAWINGS

HIGGINSON ARCHITECTS INCORPORATED

707 Brookside Avenue
Redlands, CA 92373
(909)375-3030
www.haarchinc.com

08/10/2018 10:19:20 AM

Mark Lowe, S.E.
Structural Engineer

19471 Misty Ridge Lane
Trabuco Canyon, California 923679
949-400-1265
malowe@me.com

SCALE: AS NOTED

DRAWING SIZE:

SITE PROJECT NAME:	DISTRICT/OWNER:	LOCATON/ADDRESS:	DESCRIPTION
Thomas S. Hart MS	Pleasanton USD	4433 Willow Road Pleasanton, CA 94588	
REV			

Eng. By :	DWH	08/07/18
Design By :	DWH	08/07/18
Approved By :	DWH	08/07/18

DRAWING DESCRIPTION:	
P.C. TITLE SHEET	
DWG.	
SHEET	P.C. T-1.0
REV.	

BUILDING CODE DATA

UNIT SELECTION AND DESCRIPTION

ARCHITECT OF RECORD

ENGINEER OF RECORD

[illegible]

<p>Credentialed - Indicates that a credentialed special inspector is required</p> <p>Periodic - Indicates that a periodic special inspection is required</p> <p>Test - Indicates that a test is required</p>	<p>AC - Indicates that the Special Inspection is to be performed by a Registered Professional Engineer or a Registered Architect</p> <p>LAB - Indicates that the test or inspection is to be performed by a testing laboratory designated in the CCA Laboratory Connection and Connection List Projects. See section 6.05, 2015 CCA Title 24, Part 1</p> <p>MS - Indicates that this special inspection is to be performed by a special inspector</p>
<p>Name of Inspector or Engineer in general responsible design</p> <p>Name of Architect or Engineer (for structural design see see attached)</p> <p>Signature of Architect or Structural Engineer</p> <p>date</p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>IDENTIFICATION STAMP DIV OF THE STATE ARCHITECT APP: _____ AC, <u>NA</u>, FLS, <u>NA</u>, SS _____ DATE: _____</p> </div>

1. THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD.
2. THE SITE PROJECT INSPECTOR SHALL BE CLASS 2 (CLASS 3 MAY BE SELECTED FOR STRUCTURES OF COVERED AREAS LESS THAN 2000 SQ. FT.)
3. THE COSTS OF THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE BORNE BY THE SCHOOL DISTRICT.
4. THE PROJECT INSPECTOR SHALL REPORTS SHALL BE SUBMITTED TO DSA, THE ARCHITECT, THE SCHOOL DISTRICT, THE CONTRACTOR, AND THE PROJECT INSPECTOR.
5. THE IN-PLANT INSPECTOR SHALL BE WELLING SPECIAL INSPECTOR FOR MATERIAL VERIFICATION AND WELDING.
6. THE INSPECTION REPORTS SHALL BE CLASS 3.2 (CLASS 3.1, BATCH PLANT INSPECTION MAY BE WAIVED WHEN THE FOLLOWING REQUIREMENTS ARE MET:
 - A. LICENSED WEIGHTMASTER SHALL POSITIVELY IDENTIFY QUANTITIES OF MATERIALS AND CERTIFY EACH LOAD BY BATCH.
 - B. BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY ANY LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH A LOAD CERTIFICATE THEREON.
 - C. THE INSPECTOR SHALL NOT BE ALLOWED TO REMOVE ANY MATERIALS FROM THE LOAD.
7. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK'S LOAD, AND THE RECEIPT AT THE JOBSITE AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL PROVIDE A COPY OF THE DAILY RECORD TO THE ARCHITECT OF RECORD.

THE EXAMPLE DSA-103 FORM SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT SPECIFIC FORM DSA-103'S. A CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING.

REV.ENGINEER

ADDITIONAL TESTING AND INSPECTION NOTES:

THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD.

THE SITE PROJECT INSPECTOR SHALL BE CLASS 2 (CLASS 3 MAY BE SELECTED FOR STRUCTURES OF 100,000 SQ. FT. OR MORE).

THE COSTS OF THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE BORN BY THE SCHOOL DISTRICT. COPIES OF VERIFIED REPORTS SHALL BE SENT TO DSA, THE ARCHITECT, THE SCHOOL DISTRICT, THE CONTRACTOR, AND THE PROJECT INSPECTOR.

THE IN-PLANT INSPECTOR SHALL BE WELDING SPECIAL INSPECTOR FOR MATERIAL VERIFICATION AND WELDING.

SECTION 1705A.01B, SECTION 1705A.3.2 & 1705A.3.3.1, BATCH-PLANT INSPECTION MAY BE WAIVED WHEN THE FOLLOWING REQUIREMENTS ARE MET:

1. A LICENSED WEIGHTMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET
2. BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE SUBMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFICATION THEREON
3. THE LOAD SHALL NOT BE LOADED WITHOUT A BATCH TICKET IDENTIFYING THE MIX, THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK'S LOAD, AND TIME OF RECEIPT, THE JOB SITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.

THE EXAMPLE DSA-103 FORM SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT SPECIFIC FORM DSA-103'S.

CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS SPECIFICATION IS INCORPORATED INTO AND ALL EXAMPLE DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING.

THE EXAMPLE DSA-103 FORM SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT SPECIFIC FORM DSA-103'S. A CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING.

STATEMENT OF STRUCTURAL TESTS AND INSPECTION FORMS FOR ALL UNITS EXCEPT CANTILEVER AND SINGLE POST

ENVELOPE JOINT REACTIONS											
Shear resultant = $\sqrt{P_x^2 + P_y^2 + P_z^2}$ Moment resultant = $\sqrt{M_x^2 + M_y^2 + M_z^2}$											
ASD REACTIONS											
Node		Support Forces (kip)			Support Moments (kip-ft)			Support Forces (kip)	Support Moments (kip-ft)	Support Forces (kip)	Support Forces (kip)
No.		P_x	P_y	P_z	M_x	M_y	M_z	SHEAR RESULTANT	MOMENT RESULTANT	UPLIFT	AXIAL
MAXIMUM REACTIONS											
								6.621	118.082	1.848	-5.129
Node		Support Forces (kip)			Support Moments (kip-ft)						
No.		P_x	P_y	P_z	M_x	M_y	M_z				
1	Max	4.635	3.425	0.555	0.000	73.219	0.260				
	Min	0.000	0.000	-2.348	-45.538	0.000	-0.330				
	Max P_x	4.635	2.365	-2.348	-38.047	73.219	-0.200	CO 10	5.204		-2.348
	Min P_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_y	2.359	3.425	-2.299	-43.847	37.898	-0.024	CO 15	4.306		-2.299
	Min P_y	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_z	3.855	2.333	0.555	-34.985	60.678	-0.206	CO 5	4.506	70.041	0.555
	Min P_z	4.635	2.365	-2.348	-38.047	73.219	-0.200	CO 10	5.204	82.514	-2.348
	Max M_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Min M_x	4.068	2.914	-2.317	-45.538	65.413	0.089	CO 11	5.004	79.703	-2.317
	Max M_y	4.635	2.365	-2.348	-38.047	73.219	-0.200	CO 10	5.204	82.514	-2.348
	Min M_y	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max M_z	3.162	2.230	0.467	-35.073	47.856	0.260	CO 33	3.869	59.384	0.467
	Min M_z	3.885	1.617	-1.608	-26.074	60.789	-0.330	CO 31	4.208	66.145	-1.608
6	Max	3.192	1.960	0.197	72.268	45.425	0.007				
	Min	0.000	-3.544	-4.562	-13.656	0.000	-0.082				
	Max P_x	3.192	-1.906	-3.279	38.752	45.275	0.005	CO 14	3.718	59.621	-3.279
	Min P_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_y	0.456	1.960	-0.740	-13.656	3.179	0.004	CO 19	2.012	16.454	-0.740
	Min P_y	2.341	-3.544	-3.886	72.268	45.425	-0.047	CO 10	4.247	85.359	-3.886
	Max P_z	1.786	-2.390	0.197	47.001	32.241	-0.002	CO 4	2.884	56.996	0.197
	Min P_z	1.558	-2.272	-4.562	49.433	32.235	0.005	CO 11	2.755	59.015	-4.562
	Max M_x	2.341	-3.544	-3.886	72.268	45.425	-0.047	CO 10	4.247	85.359	-3.886
	Min M_x	0.456	1.960	-0.740	-13.656	3.179	0.004	CO 19	2.012	16.454	-0.740
	Max M_y	2.341	-3.544	-3.886	72.268	45.425	-0.047	CO 10	4.247	85.359	-3.886
	Min M_y	0.456	1.960	-0.740	-13.656	3.179	0.004	CO 19	2.012	16.454	-0.740
	Max M_z	3.162	2.230	0.467	-35.073	47.856	0.260	CO 33	3.869	59.384	0.467
	Min M_z	3.885	1.617	-1.608	-26.074	60.789	-0.330	CO 31	4.208	66.145	-1.608
11	Max	3.217	1.329	-2.414	-24.319	34.755	0.026	CO 16	3.481	42.418	2.414
	Min	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_x	1.821	6.366	-4.342	-116.429	19.690	0.068	CO 11	6.621	118.082	-4.342
	Min P_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_y	2.272	4.579	1.848	-79.287	29.522	-0.160	CO 5	5.112	84.605	1.848
	Min P_y	0.910	4.750	-5.115	88.031	37.940	-0.151	CO 19	5.371	95.819	-5.115
	Max P_z	2.212	1.329	-2.414	-24.319	34.755	0.026	CO 16	3.481	42.418	2.414
	Min P_z	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max M_x	1.821	6.366	-4.342	-116.429	19.690	0.068	CO 11	6.621	118.082	-4.342
	Min M_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max M_y	2.212	1.329	-2.414	-24.319	34.755	0.026	CO 16	3.481	42.418	2.414
	Min M_y	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max M_z	3.217	1.329	-2.414	-24.319	34.755	0.026	CO 16	3.481	42.418	2.414
	Min M_z	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
17	Max	2.291	1.430	1.848	112.166	24.072	0.204				
	Min	-6.209	-6.047	-5.064	-5.228	-38.329	-0.222				
	Max P_x	1.329	-1.324	-0.612	24.375	24.043	-0.007	CO 18	2.646	34.238	-0.612
	Min P_x	-2.699	-2.260	-3.709	43.589	-38.329	-0.222	CO 32	3.452	-57.985	-3.709
	Max P_y	-0.462	1.430	-0.604	-5.228	-5.445	0.014	CO 19	1.503	7.549	-0.604
	Min P_y	-1.496	-4.648	-4.993	112.275	-15.881	0.132	CO 10	6.229	113.393	-4.993
	Max P_z	-1.867	-4.264	1.848	74.958	24.716	-0.132	CO 4	4.655	79.932	1.848
	Min P_z	-2.578	-4.648	-4.993	112.275	-33.866	-0.090	CO 11	5.129	91.052	-4.993
	Max M_x	-1.496	-6.047	-4.993	112.275	-15.881	0.132	CO 10	6.229	113.393	-4.993
	Min M_x	-0.462	1.430	-0.604	-5.228	-5.445	0.014	CO 19	1.503	7.549	-0.604
	Max M_y	-2.291	-2.230	-2.427	24.359	24.063	-0.007	CO 16	2.646	34.238	-2.427
	Min M_y	-2.699	-2.260	-3.709	43.589	-38.329	-0.222	CO 32	3.452	-57.985	-3.709
	Max M_z	-0.776	-5.077	-5.186	94.139	-6.611	0.258	CO 31	5.136	97.982	-5.186
	Min M_z	-2.629	-2.260	-3.709	43.589	-38.329	-0.222	CO 32	3.452	-57.985	-3.709
23	Max	3.215	6.370	1.833	0.000	41.264	0.237				
	Min	0.000	0.000	-5.129	-116.543	0.000	-0.243				
	Max P_x	3.215	1.329	-2.414	-24.311	34.736	0.006	CO 16	3.479	42.398	-2.414
	Min P_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_y	1.677	6.370	-4.361	-116.543	17.181	-0.123	CO 11	6.587	117.487	-4.361
	Min P_y	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max P_z	2.181	4.578	1.833	-79.289	28.022	-0.128	CO 5	5.071	84.095	1.833
	Min P_z	2.781	4.749	-5.129	88.025	35.660	-0.103	CO 19	5.503	94.974	-5.129
	Max M_x	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Min M_x	1.677	6.370	-4.361	-116.543	17.181	-0.123	CO 11	6.587	117.803	-4.361
	Max M_y	2.918	2.634	-3.873	-48.373	41.954	-0.283	CO 31	3.931	63.488	-3.873
	Min M_y	0.000	0.000	0.000	0.000	0.000	0.000		0.000		
	Max M_z	1.006	5.464	-3.058	-99.016	8.230	0.237	CO 32	5.556	99.357	-3.058
	Min M_z	2.918	2.634	-3.873	-48.373	41.264	-0.243	CO 31	3.931	63.488	-3.873
29	Max	2.291	1.430	1.848	112.166	24.072	0.204				
	Min	-2.716	-6.043	-5.050	-5.227	-40.004	0.265				
	Max P_x	1.329	-1.324	-0.612	24.345	24.043	-0.007	CO 18	2.646	34.238	-0.612
	Min P_x	-2.716	-2.258	-3.697	43.556	-40.004	-0.265	CO 32	3.532	59.139	-3.697
	Max P_y	-0.462	1.430	-0.604	-5.227	-5.436	-0.013	CO 19	1.503	7.541	-0.604
	Min P_y	-1.635	-6.043	-4.374	112.166	-18.298	0.080	CO 10	6.260	113.649	-4.374