Vallecitos School District
5211 Fifth Street • Rainbow, CA 92028 • (760) 728-7092 • FAX (760) 728-7712
"A community school where we learn to achieve our dreams"
Dream • Learn • Achieve

NOTICE IS HEREBY GIVEN that Vallecitos School District, of San Diego County, California, hereinafter referred to as the District, will receive up to, but not later than **3:00 o'clock p.m. of the 25th day of March, 2025,** bids for the award of contract;

Vallecitos New Portable Building Project

Bids shall be received via email prior to the date and time above. Bids shall be sent to msanchez@vallecitossd.net

Project Cost Estimate - $75,000.00 - $85,000.00

Description of Work: The project includes Site Work, Asphalt, Handrails, Fire Alarm, Electrical and Low Voltage connections to owner provided and installed Portable Classroom Building. Signage and ADA upgrades to existing restroom building.

Each bid must conform and be responsive to the contract documents. Documents may be obtained from: https://www.vallecitossd.net/facilities

All Questions and Requests for Clarification will only be accepted in writing via e-mail to ATTN: Meliton Sanchez, Superintendent, msanchez@vallecitossd.net and must be received no later than **March 18, 2025 @ 3:00 PM.**
Bids must be submitted on the Bid form provided by the District and included in the bid documents. Each bid must strictly conform with and be responsive to this Notice Calling for Bids, the Information for Bidders, and other Contract Documents. A Bid bond in the amount of 10% are to be provided with bid proposal. Vallecitos SD reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding.

Except as provided in Public Contract Code Section 5100 *et seq*. no bidder may withdraw a bid for a period of sixty (60) calendar days after the opening of the bids.

In contracts involving expenditure in excess of $25,000.00, Civil Code section 3247(a), the successful bidder shall file a payment bond issued by an admitted Surety approved to conduct business in the State of California approved by the District in the form set forth in the contract documents.

The successful bidder will be required to provide both a performance bond and a separate payment bond, each in an amount equal to 100% of the total contract amount. The forms of the bonds are set forth in the Contract Documents and all bonds must be issued by a California-admitted surety as defined in California Code of Civil Procedure Section 995.120.

The class of California contractor's license(s) required in order to bid on and perform the contract for this Project is**: A or B**

The District may have made a finding that certain brand or trade names are necessary in order to maintain conformity among its campuses, compatibility with existing systems and to streamline maintenance and parts storage. A copy of the resolution is incorporated in the bid documents under Specifications.

MANDATORY PRE-BID CONFERENCE & SITE WALK

DATE: Thursday March 13, 2024 @ 11:00 AM

Contractors shall arrive at the location below by 11:10 am

LOCATION: Vallecitos School District
5211 5th Street
Fallbrook, CA 92028

Vallecitos School District
5211 Fifth Street • Rainbow, CA 92028 • (760) 728-7092 • FAX (760) 728-7712
"A community school where we learn to achieve our dreams"
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Vallecitos School District

Project: New Portable Project

Scope of Work:

1. Provide bid proposals to the District on provided bid form along with bid bond at the specified date on the bid advertisement.
2. Perform all work as shown in DSA Approved Plans and Specifications for project # 04-123455.
3. The contractor is responsible for the installation of 6' tall temporary fencing with fabric around all work and lay down areas.
4. Contractor is responsible for performing Utility Detection prior to performing all underground work. Any damage to existing electrical, low voltage irrigation, water or sewer systems is the responsibility of the contractor to repair at no cost to the District.
5. The contractor is to coordinate the project work so that all infrastructure is complete prior to the delivery and placement of new portable building. Delivery and placement by others.
6. The contractor is to perform final connections of electrical, low voltage and fire alarm per project plans and specifications after the portable building is placed.
7. The contractor is to leave the worksite in a clean and tidy manner for the duration of the project.

***Project is scheduled for board approval on Tuesday April 8th, 2025.

*** District spring break is April 14th – 18th.

BID FORM

Project Name: Vallecitos School District
New Portable Building Project

Bids shall be based on prevailing wage labor rates.
Contractor shall include payment and performance bond cost in base bid.

Submit bids to:
Meliton Sanchez
Superintendent/CBO
msanchez@vallecitossd.net

Bid Date: Tuesday, March 25th @ 3:00 p.m.

BASE BID: The undersigned Bidder, having carefully examined the Bidding Requirements, Owner's Terms and Conditions, Drawings, Specifications and all subsequent Addenda, all as issued by the Owner, having visited the site, and being familiar with all conditions and requirements of the Work. hereby agrees to furnish all labor, equipment, and services as described in the above documents, without exception, necessary to complete the **Vallecitos School District New Portable Building Project** in accordance with the requirements of the Bidding Documents, for the sum of:

**$**_____ Dollars ($_____)
(in words-printed or typed) (In Figures)

The undersigned acknowledge receipt, understanding and full consideration of the following addenda to the Contract Documents.

Addenda Numbers: _____
INCLUDE ALL ADDENDUM RECEIVED ON THIS LINE

ALTERNATE ADD PRICING:

ADD PRICE: Cost to install approximately 2,900 SF of new 4" aphalt paving under portable building.

$_____ Alternate Add Cost.

Company:	California Contractors License Information:
Contact Name:	License #: DIR#:
Title:	Classification:
Signature:	Expiration Date:
Address:	
Phone #:	

BID BOND

KNOW ALL MEN BY THESE PRESENTS: THAT we, _____

_____, as Principal, and

_____, as Surety, are held and

firmly bound unto the **VALLECITOS SCHOOL DISTRICT**, hereinafter called Authority, in the penal sum of TEN PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal submitted to the said Authority for the work described below for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying Proposal **for the Vallecitos School District – New Portable Building Project.**

NOW, THEREFORE. The Principal shall not withdraw said bid within the period specified therein after the opening of the same, or, if no period be specified, within sixty (60) days after said opening; and, if the Principal be awarded the contract, and shall within the period specified therefor, or if no period be specified, within ten (10) consecutive calendar days after the Award of Contract complete the prescribed forms are presented to him for signature enter into a written contract with the Authority in accordance with the bid as accepted and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract and for the payment for labor and materials used for the performance of the contract, or in the event of the withdrawal of said bid within the period specified or the failure to enter into such contract and give such bonds within the time specified. If the Principal shall pay the Authority the difference between the amount specified in said bid and the amount for which the Authority may procure the required work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Authority in again calling for bids, then the above obligation shall be void and of no effect, otherwise to remain In full force and virtue.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract on the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in anywise affect its obligation under this bond, and It does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or to the specifications.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their

several seals this _____ day of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and these presents duly assigned by its undersigned representative, pursuant to authority of Its governing body.

(Corporate Seal)

_____

Principal

By _____

Title _____

_____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public,

personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____
_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

BID BOND

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public,

personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

BID BOND

BID BOND

VALLECITOS ELEMENTARY
40x48 RELOCATABLE CLASSROOM

VALLECITOS SCHOOL DISTRICT

BOARD OF EDUCATION:

Michael Darnley, President
Dr. Martin Kurland, Vice President
Terese Kristensen, Trustee
Chris Howells,Trustee

Meliton Sanchez, Superintendent

ARCHITECT:
MGPA ARCHITECTURE

PROJECT TRACKING NO. 6378-4

STATEMENT OF CONFORMANCE

Example of Statement of General Conformance and Signature Block per IR A-18

Statement of General Conformance

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

(Application No. 04-123455 **File No.** 37-74 **)**

[X] The drawings or sheets listed on the cover or index sheet not marked by asterisk
[ ] This drawing, page of specifications/calculations

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

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and
2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

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

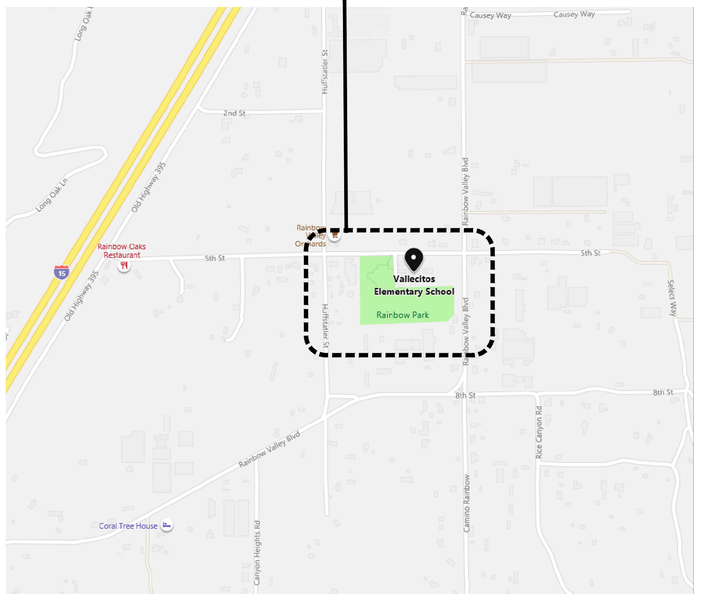
I certify that: [X] All drawings or sheets listed on the cover or index sheet
[ ] This drawing or page

[X] is/are in general conformance and [X] have been coordinated	[ ] is/are in general conformance and [ ] have been coordinated
Fred Gualda 4-2-24	
Signature **Date**	**Signature** **Date**
Architect or Engineer designated to be in general responsible charge	**Architect or Engineer delegated responsibility for this portion of the work.**
Fred Gualda	
Print Name	**Print Name**
C20789 02/28/25	
License Number **Expiration Date**	**License Number** **Expiration Date**

VICINITY MAP

NOT TO SCALE

PROJECT ADDRESS
VALLECITOS ELEMENTARY SCHOOL
5211 5TH STREET
FALLBROOK, CA 92028



NORTH

INDEX OF DRAWINGS (26 SHEETS)

TITLE SHEETS

T-1.1	TITLE SHEET, INDEX, AND GENERAL INFO
T-1.2	GENERAL NOTES, SYMBOLS, ABBREVIATIONS

Grand total: 2

ARCHITECTURAL SITE SHEETS

A-1.0	CODE COMPLIANCE, EXISTING & DEMOLITION SITE PLAN
A-1.1	ENLARGED NEW SITE PLAN & DETAILS
A-2.2	EXISTING RESTROOM DEMO, NEW WORK & DETIALS

Grand total: 3

SITE ELECTRICAL SHEETS

E-0.1	SYMBOL LIST, GENERAL NOTES AND SINGLE LINE DIIAGRAM
E-0.2	ELECTRICAL DETAILS
E-0.3	FIRE ALARM SYMBOLS, NOTES, RISER DIAGRAM AND CALCULATIONS
E-0.4	ELECTRICAL SPECIFICATIONS
E-0.5	PATH OF EGRESS PHOTOMETRICS
ES-1.1	OVERALL SITE ELECTRICAL PLAN
ES-1.2	ENLARGED SITE ELECTRICAL PLAN

Grand total: 7

*A #04-121040 40x48 RELOCATABLE CLASSROOM BUILDING SHEETS

T-1	COVER SHEET
T-2	SERIAL NUMBERS
S-1	MODIFICATION PLAN FOR 48X40 BUILDING
A-1	MODIFICATION PLAN FOR 48X40 BUILDING
E-1	MODIFICATION PLAN FOR 48X40 BUILDINGS
M-1	MODIFICATION PLAN FOR 48X40 BUILDINGS

Grand total: 6

* A #04-122274 FOUNDATION PLAN SHEETS

F-1	FOUNDATION COVER SHEET
F-2	FOUNDATION A- NUMBERS
F-5	FOUNDATION PLANS
F-6	FOUNDATION DETAILS
F-7	FOUNDATION GENERAL SPECIFICAIONS
F-7A	FOUNDATION DSA FORM 103

Grand total: 6

* A #04-122275 RAMP/LANDING MODIFICATION SHEETS

1	RAMP MODIFACATION COVER SHEET
2	TYP RAMP PLAN DETAILS

Grand total: 2

PROJECT DATA

PROJECT NAME:	VALLECITOS ELEMENTARY 40X48 RELOCATABLE CLASSROOM
DISTRICT/OWNER:	VALLECITO UNIFIED SCHOOL DISTRICT
SUPERINTENDENT:	MELITON SANCHEZ
DISTRICT ADDRESS:	5211 5TH STREET, FALLBROOK, CA 92028
ASSESSORS PARCEL NO.:	1024201600
LEGAL DESCRIPTION:	BLK J*STS CLSD&BLKS E&F&I&\
SITE ADDRESS:	5211 5TH STREET, FALLBROOK, CA 92028
ACREAGE:	9.14 AC
CLASSROOM COUNT:	(1) NEW TEACHING STATIONS
SCHOOL CAPACITY:	188 STUDENTS

BUILDING DATA

A# 04-121040 RELO CLASSROOMS	
OCCUPANCY TYPE (PER CBC CH. 3):	E
CONSTRUCTION TYPE (PER CBC CH. 6):	VB (WOOD FRAMING NON-RATED)
ALLOWABLE BUILDING HEIGHT (FEET) PER CBC 504.3:	40'-0" (NOT SPRINKLERED)
ACTUAL BUILDING HEIGHT (FEET):	12'-3"
ALLOWABLE BUILDING HEIGHT (STORIES) PER CBC 504.4:	1
ACTUAL BUILDING HEIGHT (STORIES):	1
PC A# 04-106486 RELO RESTROOM	
OCCUPANCY TYPE (PER CBC CH. 3):	E
CONSTRUCTION TYPE (PER CBC CH. 6):	VB (WOOD FRAMING NON-RATED)
ALLOWABLE BUILDING HEIGHT (FEET) PER CBC 504.3:	40'-0" (NOT SPRINKLERED)
ACTUAL BUILDING HEIGHT (FEET):	12'-3"
ALLOWABLE BUILDING HEIGHT (STORIES) PER CBC 504.4:	1
ACTUAL BUILDING HEIGHT (STORIES):	1
BUILDING AREA:	
1 (N) CLASSROOM RELO @ 40'x48' =	1920 S.F.
1 (E) RESTROOM RELO @ 12'X40' =	480 S.F
TOTAL BUILDING AREA:	= 2,400 S.F.
BASIC ALLOWABLE AREA (PER CBC TABLE 506.2):	9,500 S.F.
TOTAL ALLOWABLE AREA:	9,500 S.F.
	2,400 S.F. < 9,500 S.F. OK

CONSULTANTS

ARCHITECTURAL:
MGPA ARCHITECTURE
ARCHITECT: MGPA ARCHITECTURE
CONTACT: EDDIE MIRAMONTES
PHONE: (951) 775-9363
WEBSITE: mgpaia.com
ADDRESS: 6965 EL CAMINO REAL#105-278 CARLSBAD, CA 92009

ELECTRICAL:
FBA ENGINEERING
ELECTRICAL ENGINEER: FBA ENGINEEERING
CONTACT: ALAN BRAVO
PHONE: (949) 852-9995
FAX: (949) 852-1657
WEBSITE: FBAENGR.COM
ADDRESS: 150 PAULARINO AVENUE # A120 COSTA MESA, CA 92626

RELOCATABLES:
mobile modular
MODULAR DESIGN CONSULTANT: MOBILE MODULAR
CONTACT: DANA JOHNSON
PHONE: (951) 360-5111
EMAIL: dana.johnson@mobilemodular.com
ADDRESS: 2830 BARRETT AVENUE, PERRIS, CA 92571

SURVEYOR:
DJI
SURVEY CONSULTANT: DJI
CONTACT: DENNIS JANDA
PHONE: (951) 699-8874
FAX: (951) 699-8568
EMAIL: dennisj@pmcmap.com
ADDRESS: 42164 REMINGTON AVENUE, TEMECULA, CA 92590

PROJECT SCOPE OF WORK

SCOPE OF WORK:
1) PLACEMENT OF #04-121040 40'X48' MODULAR CLASSROOM BUILDINGS ON #04-122274 WOOD FOUNDATIONS AND #04-122275 RAMP/LANDING. NEW CLASSROOM NUMBER 19.
2) ACCESSIBILITY IMPROVEMENTS TO EXISTING A#04-106486 12'x40' RESTROOM BUILDING R2 AS INDICATED
3) SITE ACCESSIBILITY IMPROVEMENTS AS INDICATED

INSPECTOR OF RECORD NOTE

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

NOTE: PER DSA, THE APPROVAL OF 04-123455 WILL NOT BE CONTINGENT OF THE CERTIFICATION OF 04-106486. THE CERTIFICATION OF THIS APPLICATION DOES NOT REPRESENT THE CERTIFICATION OF 04-106486.

DSA Stamp
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS [X] FLS [X] ACS [X]
DATE: 11/07/2024

Issue Date:
DSA

Revisions:
1
2
3

Consultant Stamp:

Consultant:

VSVES05 40x48 RELO CR

VALLECITO UNIFIED SCHOOL DISTRICT
40X48 RELOCATABLE CLASSROOM
for
VALLECITO UNIFIED SCHOOL DISTRICT
CALIFORNIA
RAINBOW

Job N°.: VSVES05

LICENSED ARCHITECT
FRED HERNANDEZ GUALDA
C-20789
REN. 02-28-25
STATE OF CALIFORNIA

MGPA ARCHITECTURE
An Architectural Corporation
Mailing: 6965 El Camino Real, Suites 105-278
Carlsbad, CA 92009
Tele: (760) 929-1500 Fax: (760) 929-1506

MGPA ARCHITECTURE

Sheet Title:
TITLE SHEET, INDEX & GENERAL INFO.

Sheet Number:
T-1.1

ABBREVIATIONS

#	pound(s)
@	at
A.S.T.M.	American Society for Testing and Materials
A/C	air conditioning
AB	anchor bolt
ABV	above
ACOUST	acoustical
ACP	acoustic ceiling panel
ACP	asphaltic concrete paving
ACT	acoustical tile
AD	area drain
ADD	addendum
ADJ	adjacent
ADJUST	adjustable
AFF	above finished floor
AGG	aggregate
ALT	alternate
ALUM	aluminum
ANOD	anodized
AP	access panel
APPROX	approximate
ARCH	architect(ural)
AUTO	automatic
AWP	acoustical wall panel
BD	board
BEL	below
BIT	bituminous
BLDG	building
BLK	block
BLKG	blocking
BM	bench mark
BOT	bottom
BP	blank panel
BRG	bearing
BS	both sides
BSMT	basement
BTWN	between
BUR	built-up roofing
BW	both ways
C.A.C.	California Administrative Code
C.C.R.	California Code of Regulations
C.F.	cubic foot
C.O.	conduit only
C.Y.	cubic yard
CAB'T	cabinet
CAD	cadmium
CAP	cementitious acoustical planks
CB	catch basin
CEM	cement
CER	ceramic
CGF	ceramic granule flooring
CHBD	chalkboard
CI	cast iron
CIPC	cast-in-place concrete
CJ	control joint
CL	centerline
CLF	chain link fence
CLG	ceiling
CLOS	closet
CMT	ceramic mosaic (tile)
CMU	concrete masonry unit
COL	column
COMB	combination
COMPO	composition
COMPT	compartment
CONC	concrete
CONN	connect(ion),(or)
CONST	construction
CONT	continuous or continue
CONTR	contract(or)
CORRUG	corrugated
CPT	carpet
CRS	course(s)
CS	countersink
CT	ceramic tile
CTR	counter
CTSK	countersink screw
CUST	custodian
CWP	carpet with pad
DBL.ACT.	double acting
DEMO	demolish, demolition
DF	drinking fountain
DH	double hung
DIA	diameter
DIM	dimension
DL	dead load
DN	down
DP	disabled person
DPRF	dampproofing
DPRR	disabled person restroom
DR	door
DS	downspout
DSA	Division of the State Architect
DTA	dovetail anchor
DTL	detail
DTS	dovetail anchor slot
DW	drywall
DWG	drawing
DWR	drawer
E	East
EA	each
EB	expansion bolt
EC	evaporative cooler
EF	each face
EHD	electric hand dryer
EJ	expansion joint
EL	elevation
ELEC	electric(al)
ELEV	elevation
EMER	emergency
EMT	electrical metallic conduit
ENCL	enclose(ure)
EP	electrical panelboard
EQ	equal
EQUIP	equipment
ES	extra strong
EST	estimate
EW	each way
EWC	electric water cooler
EXH	exhaust
EXIST	existing
EXP	exposed
EXT	exterior
FAB	fabrication
FB	face brick
FBD	fiberboard
FBO	furnished by others
FD	floor drain
FDN	foundation
FE	fire extinguisher
FEC	fire extinguisher cabinet
FF	finish floor
FFE	finished floor elevation
FGL	fiberglass
FH	fire hydrant
FHC	fire hose cabinet
FHMS	flathead machine screw
FHWS	flathead wood screw
FIN	finish(ed)
FIN.FLR.	finished floor line
FL	flow line
FLR	floor
FLSH	flashing
FLUR	fluorescent
FND	feminine napkin disposal
FOC	face of concrete
FOF	face of finish
FOM	face of masonry
FOPS	face of plywood sheathing
FOS	face of studs
FP	fireproof
FRM(G)	frame(d),(ing)
FRT	fire-retardant
FT	foot
FTG	footing
FUR	furred(ing)
FUT	future
FV	field verify
FWP	fabric-wrapped acoustic panel
GA	gage, gauge
GALV	galvanized
GBBR	grab bar
GB	gypsum board
GC	general contractor
GCMU	glaze concrete masonry units
GD	gutter drain
GI	galvanized iron
GLB	glued laminated beam
GPL	gypsum plaster
GR	grade(ing)
GRT	grout
GSKT	gasket
GV	gravity vent
GWG	water-resistant gypsum drywall
GWX	type X gypsum drywall
GYP	gypsum
HB	hose bibb
HC	hollow core
HDBD	hardboard
HDR	header
HDW	hardware
HDWD	hardwood
HEX	hexagonal
HM	hollow metal
HORIZ	horizontal
HP	high point
HR	handrail
HT	height
HTG	heating
HVAC	heating, ventilating, and air conditioning
HWH	hot water heater
I.C.B.O.	International Conference of Building Officials
ID	inside diameter
IN	inch
INCL.	include(d),(ing)
INSUL.	insulate(d),(ing)
INT.	interior
IPS	iron pipe size
JC	janitor's closet
JST	joist
JT	joint
KIT	kitchen
KO	knockout
KS	knee space
L	length
L.P.G.	liquified propane gas
LAB	laboratory
LAM	laminate(d)
LAV	lavatory
LB	lag bolt
LBL	label
LLL	live load
LT	light
LT.WT.	lightweight
LVR	louver
M	modified
MAS	masonry
MATL	material(s)
MAX	maximum
MB	machine bolt
MC	medicine cabinet
MECH	mechanic(al)
MED	medium
MFR(S)	manufacturer(s)
MH	manhole
MIN	minimum
MIR	mirror
MISC	miscellaneous
MO	masonry opening
MOD	modular
MOD.BIT.	modified bitumen
MOLD	molding, moulding
MT(d), MTG	mount(ed),(ing)
MTL	metal
MULL	mullion
MWP	membrane waterproofing
N	North
NAT	natural
NIC	not in contract
NOM	nominal
NR	noise reduction
NRC	noise reduction coefficient
OBL	oblique
O/C	on center(s)
OD	outside diameter
OFD	overflow drain
OFS	overflow scupper
OH	overhead
OH	opposite hand
OPG	opening
OPP	opposite
PA	public address system
PAR	parallel
PART.BD.	particle board
PCC	pre-cast concrete
PCF	pounds per cubic foot
PCPL	Portland cement plaster
PH	panic hardware
PKG	parking
PL	property line
PL	plate
PL.GL.	plate glass
PLAM	plastic laminate
PLAS	plaster
PLF	pounds per lineal foot
PLWD	plywood
PNL	panel
PNT	paint(ed)
PSF	pounds per square foot
PSI	pounds per square inch
PT	point
PTD	painted
PTD	paper towel dispenser
PTDF	pressure treated douglas fir
PTF	flat paint
PTG	gloss paint
PTR	paper towel receptacle
PTS	semi-gloss paint
PVC	polyvinyl chloride
PVMT	pavement
PWJ	plywood web joist
QT	quarry tile
R	riser
RAD	radius
RAR	return air register
RB	rubber base
RCB	rubber carpet base
RD	roof drain
RDWD	redwood
REF	reference
REFL	reflect(ed),(ive),(or)
REFR	refrigerator
REG	register
REINF	reinforced (concrete pipe)
RES	resilient
RET	return
REV	revision
RFG	roofing
RFND	recessed feminine napkin disposal
RFNS	recessed feminine napkin dispenser
RH	roof hatch
RHB	recessed hose bibb
RJ	roof jack
RL	roof ladder
RM	room
RO	rough opening
ROD	roof overflow drain
ROW	right-of-way
RPTD	recessed paper towel dispenser
RPTR	recessed paper towel receptacle/disposal
RSCD	recessed seat cover dispenser
RTPD	recessed toilet paper dispenser
RTSB	rubber topset base
RWC	rainwater conductor
S	South
S.F.M.	State Fire Marshal
S.Y.	square yard
SAR	supply air register
SC	solid core
SCB	sheet cove base
SCH	schedule
SD	storm drain
SECT	section
SFGL	safety glass
SHT	sheet
SHTG	sheathing
SIM	similar
SKYLT	skylight
SNT	sealant
SPEC	specification(s)
SQ	square
SS	service sink
SS	stainless steel
STA	station
STC	sound transmission coefficient
STD	standard
STL	steel
STOR	storage
STR	structural
SUSP	suspended
SYST	system
T	tread
TAC	tectum acoustic panel
TEL	telephone
THK	thick(ness)
TOGLB	top of glued laminated beam
TOC	top of concrete
TOP	top of parapet
TOS	top of sheathing
T.O. RC	top of reinforced concrete
T.O. RI	top of rigid insulation
T.O.M.	top of masonry
TOW	top of wall
TO PLY	top of plywood
TPD	toilet paper dispenser
TPTN	toilet partition
TR	transom
TS	top of steel
TSCD	toilet seat cover dispenser
TV	television
TYP	typical
U.B.C.	Uniform Building Code
U.L.	Underwriters' Laboratory
U.N.O.	unless noted otherwise
UC	undercut
UNFIN	unfinished
UR	urinal
VAR	varies
VB	vapor barrier
VCR	video cassette recorder/player
VCT	vinyl composition tile
VERT	vertical
VEST	vestibule
VF	vinyl fabric
VG	vertical grain
VPL	veneer plaster
VS	vent stack
VTS	vinyl wrapped tack surface
VWC	vinyl wall covering
VWP	vinyl wall covering over tackable panels
W	West
W	width, wide
W.I.C.	Woodworking Institute of California
W/	with
W/O	without
WB	wood base
WC	water closet
WD	wood
WDW	window
WG	wired glass
WH	wallhung
WI	wrought iron
WJ	weakened plane joint
WKTP	walk top
WP	wall panel
WP	waterproofing
WPT	working point
WR	water repellent
WSCT	wainscot
WT	weight
WTR	water
WTW	wall to wall
X	factory finish
XG	existing grade
YD	yard

GENERAL NOTES

1. **COORDINATION AND CLARITY:** FOR THE CLARITY OF SEPARATE ITEMS OF WORK, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, CIVIL AND LANDSCAPING ITEMS MAY NOT APPEAR ON THE ARCHITECTURAL DRAWINGS. THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO COMPLEMENT EACH OTHER, AND WHAT REQUIRED BY ONE SHALL BE REQUIRED BY ALL.

2. **JOB SITE OBSERVATIONS:** THE ARCHITECT AND CONSULTANT ENGINEERS WILL MAKE VISITS TO THE JOB SITE TO OBSERVE THE WORK TO DETERMINE, IN GENERAL, IF THE WORK IS BEING PERFORMED IN A MANNER INDICATING THAT THE WORK, WHEN COMPLETED, WILL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE JOB SITE OBSERVATIONS BY THE ARCHITECT AND CONSULTANT ENGINEERS DO NOT RELIEVE THE CONTRACTOR ANY OF HIS RESPONSIBILITY. THE JOB SITE OBSERVATION BY THE ARCHITECT AND CONSULTANT ENGINEERS DO NOT IN ANY WAY MEAN THAT THE ARCHITECT OR ENGINEER IS A GUARANTOR OF THE CONTRACTOR'S WORK, IN CONTROL OF THE SAFETY IN, ON, OR ABOUT THE JOB SITE, IN CONTROL OF THE SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENT, SCAFFOLDING, FORMS, OR OTHER WORK AIDS; OR SUPERINTENDING THE WORK.

3. **DEFECTS IN THE WORK:** IF THE ARCHITECT OR CONSULTING ENGINEERS FIND DEFECTS IN THE WORK, THEY WILL NOTIFY THE CONTRACTOR SO THAT THE DEFECT MAY BE CORRECTED. IT IS NOT THE INTENT, UNDER ANY CIRCUMSTANCES, FOR THE ARCHITECT OR CONSULTING ENGINEER TO BECOME A GUARANTOR OF THE CONTRACTOR'S PERFORMANCE BY THESE ACTIVITIES. THE FACT THAT A CONSTRUCTION DEFECT OR ERROR GOES UNDETECTED DURING A JOB SITE OBSERVATION VISIT SHALL NOT MAKE THE ARCHITECT OR CONSULTING ENGINEERS NEGLIGENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCOVERY AND CORRECTIONS OF CONSTRUCTION DEFECTS AND ERRORS IN THE WORK, AND THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES AND THE SAFETY PRECAUTIONS REQUIRED FOR COMPLETING THE WORK AS INDICATE BY THE CONTRACT DOCUMENTS.

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

5. **EXISTING UTILITIES:** THE LOCATION OF EXISTING UNDERGROUND UTILITIES, IF SHOWN ON THE DRAWINGS, ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE DISTRICT OR ITS REPRESENTATIVES.
SHOULD UNIDENTIFIED UTILITIES BE DISCOVERED BY THE CONTRACTOR IN THE COURSE OF THE WORK, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, AND SHALL UNDERTAKE WHATEVER EMERGENCY PROCEDURES HE DEEMS NECESSARY TO PROTECT PERSONS AND PROPERTY. THE OWNER SHALL REIMBURSE THE CONTRACTOR COST OF SUCH REPAIRS, IN ACCORDANCE WITH THE GENERAL CONDITIONS.
SHOULD THE CONTRACTOR DAMAGE A SITE UTILITY WHICH, BY REASONABLE CARE AND THE PERFORMANCE OF THE ABOVE PROCEDURES, THE CONTRACTOR SHOULD HAVE HAD KNOWLEDGE OF, THE CONTRACTOR SHALL BEAR THE COST OF REPAIR OF SUCH UTILITY, AND ANY COSTS THE DISTRICT MAY INCUR AS A RESULT OF THAT DAMAGE. IN ADDITION, THE DISTRICT MAY ASSESS THE CONTRACTOR FOR LIQUIDATED DAMAGES DUE TO THE DELAY CAUSED BY THE CONTRACTOR'S NEGLIGENCE.

6. **ADDENDA:** CHANGES OR ALTERATIONS OF THE APPROVED PLANS OR SPECIFICATIONS PRIOR TO LETTING A CONSTRUCTION CONTRACT FOR THE WORK INVOLVED SHALL BE MADE BY MEANS OF ADDENDA. ADDENDA SHALL BE MANUALLY SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF PREPARATION OF THE PLANS AND SPECIFICATIONS AND BY THE ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR THE PORTION AFFECTED BY THE ADDENDA AND SHALL BE APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, CCR PRIOR TO CONSTRUCTION OF THE RELEVANT WORK. ONE COPY IS RQUIRED FOR THE FILES OF THE DIVISION OF THE STATE ARCHITECT.

7. **CONSTRUCTION CHANGE DOCUMENT (CCD):** CHANGE OR ALTERATIONS OF THE APPROVED PLANS OR SPECIFICATIONS AFTER A CONTRACT FOR THE WORK HAS BEEN LET SHALL BE MADE BY MEANS OF CONSTRUCTION CHANGE DOCUMENT. CONSTRUCTION CHANGE DOCUMENTS SHALL STATE THE REASON FOR THE CHANGE AND SHALL BE ACCOMPANIED BY SUPPLEMENTARY DRAWINGS WHERE NECESSARY. ALL CONSTRUCTION CHANGE DOCUMENTS SHALL BE MANUALLY SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF THE WORK OF CONSTRUCTION OF THE PROJECT AND BY THE ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR OBSERVATION OF THE PORTION OF THE WORK OF CONSTRUCTION AFFECTED BY THE CONSTRUCTION CHANGE DOCUMENT AND SHALL BEAR THE APPROVAL OF THE SCHOOL BOARD AND THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, CCR PRIOR TO CONSTRUCTION OF THE RELEVANT WORK. ONE COPY OF EACH CONSTRUCTION CHANGE DOCUMENT IS REQUIRED FOR THE FILES OF THE DIVISION OF THE STATE ARCHITECT.

8. **FIRE AUTHORITY:** THE FIRE AUTHORITY HAVING JURISDICTION SHALL BE CONSULTED REGARDING ACCESS ROADS, GATES IN PERIMETER FENCES, LOCATION OF FIRE HYDRANTS, FIRE DEPARTMENT CONNECTIONS, PORTABLE FIRE EXTINGUISHERS, AND FIRE PROTECTION DURING CONSTRUCTION.

9. **PROJECT INSPECTOR:** A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF SATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED SECTION 4-342, PART 1, TITLE 24, CCR. THE PROJECT INSPECTOR SHALL BE CERTIFIED BY DSA TO INSPECT CLASS 3 CONSTRUCTION.

10. **TESTING LABORATORY:** A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

11. **ALL WORK SHALL:** CONFORM TO TITLE 24 AND TITLE 19, 2022 CALIFORNIA CODE OF REGULATIONS (CCR).

12. **ALL WORK SHALL:** CONFORM TO CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION OF A BUILDING, 2022 CALIFORNIA FIRE CODE (CFC), AND CHATER 33 OF THE CALIFORNIA BUILDING CODE (CBC).

13. **MAINTAIN EXIT ROUTES:** REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION

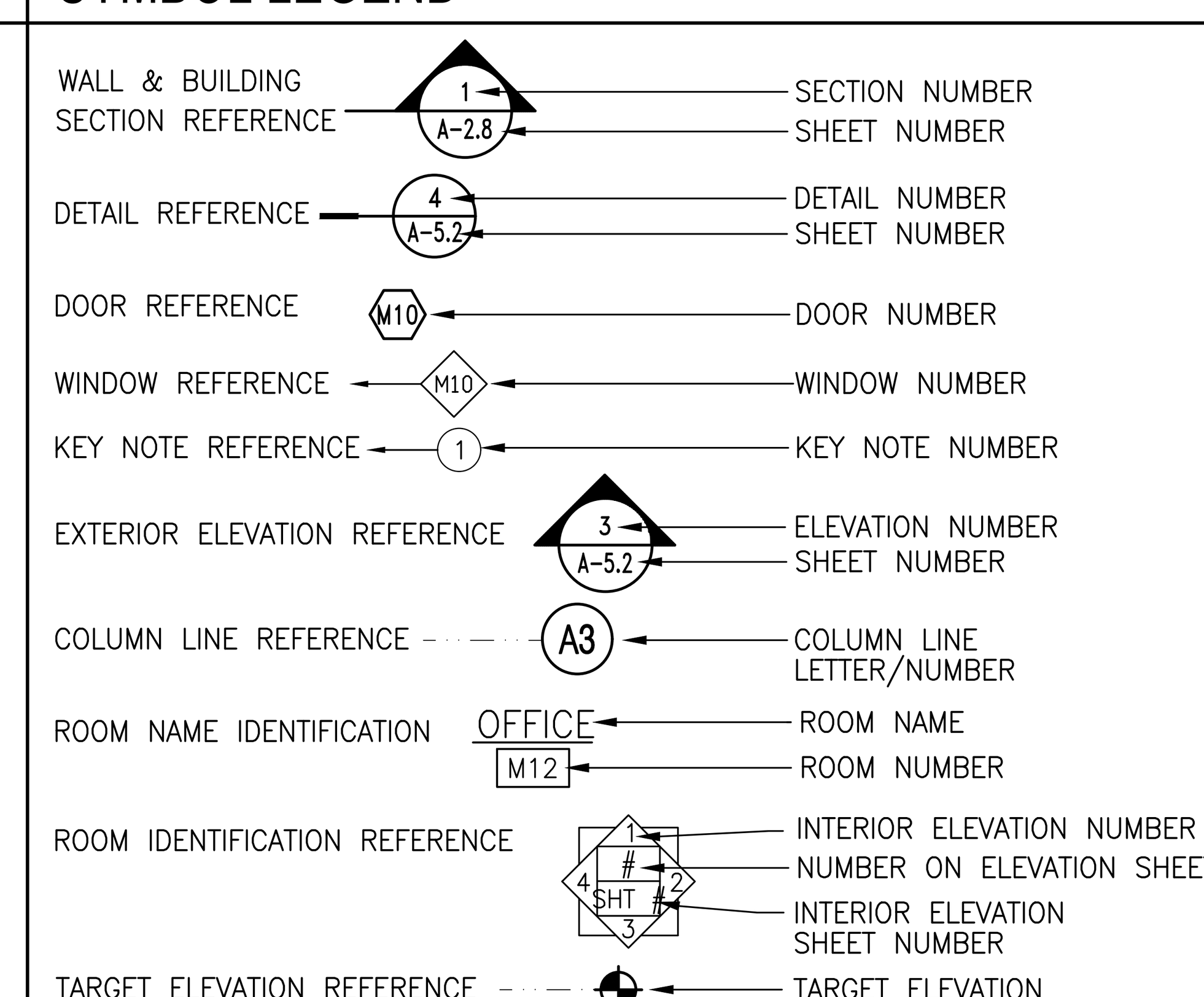
14. **CONTRACTOR OPERATIONS:** SHALL NOT BLOCK, HINDER, IMPEDE OR OTHERWISE INHIBIT THE USE OF REQUIRED EXITS AT ANY TIME. CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO FIRE EXTINGISHERS, FIRE HYDRANTS, TEMEPORARY FIRE PROTECTION FACILITIES, STAIRWAYS AND OTHER ACCESS ROUTES FOR FIRE-FIGHTING EQUIPTMENTAND OR PERSONNEL.

15. **GRADING PLANS:** DRAINAGE IMPROVEMENTS, ROADS AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEATLH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

APPLICABLE CODES AND STANDARDS

PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2023
2022 California Administrative Code, Part 1, Title 24 C.C.R.
2022 California Building Code (CBC), Part 2, Title 24, C.C.R.
(2021 International Building Code Volumes 1-2 and 2016 California Amendments)
2022 California Electrical Code (CEC), Part 3, Title 24 C.C.R.
2022 California Mechanical Code (CMC) Part 4, Title 24 C.C.R.
2022 California Plumbing Code (CPC) Part 5, Title 24 C.C.R.
2022 California Energy Code (CEC), Part 6, Title 24 C.C.R.
2022 California Fire Code, Part 9, Title 24 C.C.R.
2022 California Green Building Standards Code, Part 11, Title 24, C.C.R.
2022 California Referenced Standards, Part 12, Title 24 C.C.R.
Title 19 C.C.R., Public Safety, State Fire Marshal Regulations
2019 ASME A17.1 Safety Code for Elevators and Escalators

SYMBOL LEGEND



NOTE:
ITEMS AND DIMENSION ENCLOSED IN PARENTHISIS ARE (EXISTING).

DSA GENERAL REQUIREMENTS

ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR), CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS.

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

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

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

DSA Stamp
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date:
DSA
Revisions:
1
2
3
Consultant Stamp:
Consultant:

VSVES05 40x48 RELO CR

VALLECITOS UNIFIED SCHOOL DISTRICT
40X48 RELOCATABLE CLASSROOM
for
TEMECULA VALLEY UNIFIED SCHOOL DISTRICT
TEMECULA CALIFORNIA

Job Nº.: **VSVES05**

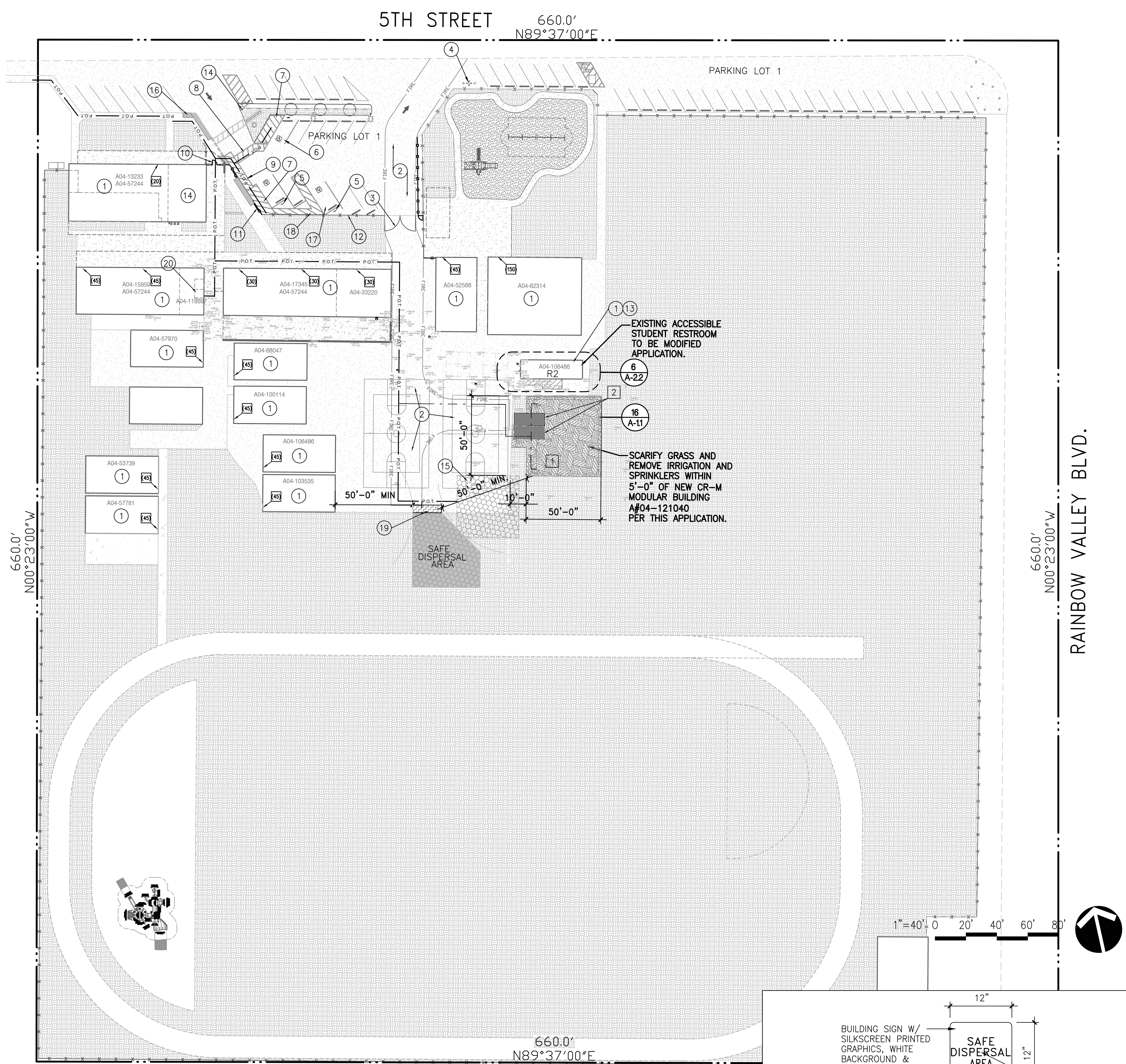
LICENSED ARCHITECT
FRED HERNANDEZ GODINA
No. C20789
REN: 02-28-25
STATE OF CALIFORNIA

MGPA ARCHITECTURE
An Architectural Corporation
Mailing: 6965 El Camino Real, Suites 105-278
Carlsbad, CA 92009
Tele: (760) 929-1500 Fax: (760) 929-1506

MGPA ARCHITECTURE

Sheet Title:
GENERAL NOTES & ABBREVIATIONS

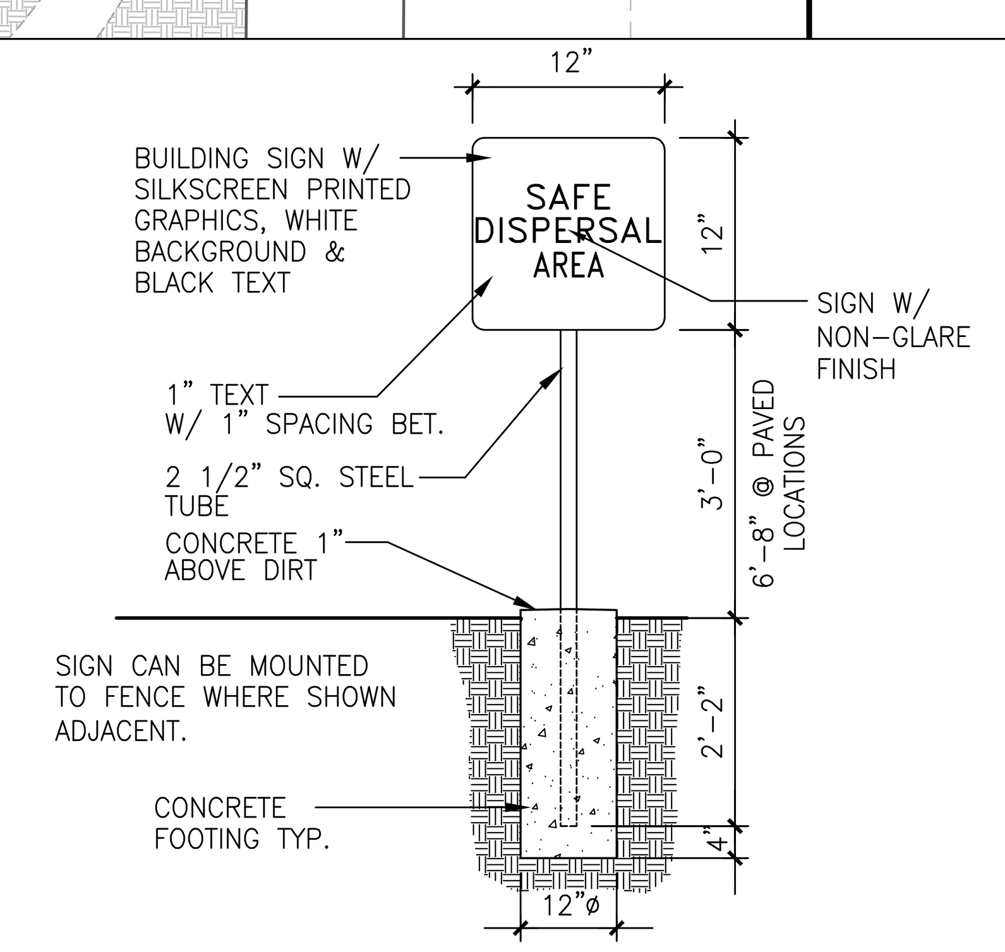
Sheet Number:
T-1.2



NEW SAFE DISPERSAL AREA:
620 OCC. X 3/PERSON = 1860 SF REQUIRED
TOTAL AREA PROVIDED: 1860 SF ACCESSIBLE SAFE DISPERSAL AREA : 5% OF 1860 SF = 93 SF ACCESSIBLE AREA PROVIDED = 93 SF

16 CODE COMPLIANCE, EXISTING AND DEMO SITE PLAN

SCALE: 1" = 40'-0"



18 SAFE DISPERSAL AREA

SCALE: 1/2"=1'-0"

1/2" SignParkng04.dwg

ACCESSIBLE PATH OF TRAVEL:

EXISTING P.O.T PER A#04-118697
NEW P.O.T. THIS APPLICATION

ACCESSIBLE PATH OF TRAVEL (P.O.T.) AS INDICATED IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE (CBC 11B-302 AND 11B-303). SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS-SLOPE DOES NOT EXCEED 2%, AND SLOPE IN THE DIRECTION OFTRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED (CBC 11B-402).

(POT) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (APPENDIX-C) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECT AND CONTRACTOR TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL.

OPENINGS IN GRATINGS AT DRAINS LOCATED IN THE SURFACE OF ANY PEDESTRIAN WAYS OF TRAVEL SHALL BE LIMITED TO 1/2" MAXIMUM IN DIRECTION OF TRAFFIC FLOW. BROOKS NO. 1212 (ADA) OR EQUAL.

THE PRIMARY ACCESSIBLE PATH OF TRAVEL SHALL INCLUDE: (CBC 11B-202.4)
1. PROVIDE ENGINEERED WOOD CHIPS FROM RAMP TO PLAY EQUIPMENT AND SWINGS. COMPRESS AND PROVIDE MIN. THICKNESS PER DSA BU 08-07.

AS INDICATED THE (POT) SHALL PROVIDE GENERAL ACCESSIBILITY AND MAY CONSIST OF A COMBINATION OF THE FOLLOWING CODE COMPLIANT, ACCESSIBLE ELEMENTS:
1. EXISTING RAMP TO PLAY EQUIPMENT.

ELEMENTS ABOVE ARE WITHOUT THE FOLLOWING HAZARDS:
1. WOOD CHIPS TO BE FILLED AS REQUIRED TO THE MAX 4" BELOW CURB/EDGE.
2. OVERHANGING OBJECTS LESS THAN 80" ABOVE THE PEDESTRIAN SURFACE.

THE OWNER SHALL MAINTAIN THESE CONDITIONS, AND CHANGES SHALL NOT REDUCE ACCESSIBILITY.

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

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

DSA 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: Vallecitos Unified School District
Project Name/School: Vallecitos Elementary 40x48 Relocatable Classroom
Project Address: 5211 5th Street, Fallbrook CA 92028

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 ☐		No ☒
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☒
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by CalFire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☒
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☒	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

EXISTING KEYNOTES:

1. (E) BUILDING PER APPROVED A# AS INDICATED
2. (E) 20' WIDE ASPHALT FIRE LANE, PROTECT DURING CONSTRUCTION.
3. (E) 6' HIGH X 20' WIDE CHAIN LINK GATE
4. (E) FIRE HYDRANT
5. (E) VAN ACCESSIBLE PARKING STALL PER A#04-118708
6. (E) ACCESSIBLE PARKING STALL PER A#04-118708
7. (E) ACCESSIBLE PARKING AISLE PER A#04-118708
8. (E) ACCESSIBLE CROSSWALK PER A#04-118708
9. (E) ACCESSIBLE DROP-OFF PER A#04-118708
10. (E) CAMPUS ENTRY PER A#04-118708
11. (E) ORNAMENTAL GATE PER A#04-118708
12. (E) CHAIN LINK FENCE
13. (E) STUDENT RESTROOM
14. (E) TOW AWAY SIGN PER A#04-118708
15. (E) SAFE DISPERSAL SIGN TO BE RELOCATED.
16. (E) TRUNCATED DOMES PER A#04-118708.
17. (E) ACCESSIBLE PARKING PER A#04-121254
18. (E) ACCESSIBLE PARKING AISLE PER A#04-121254
19. RELOCATED SAFE DISPERSAL SIGN PER DET. 18/-
20. (E) STAFF RESTROOM PER A# 04-118697

NOTE:
1. ALL DEMOLITION SHALL COMPLY WITH CH.33 CBC AND CHAPTER 33 CFC.
2. (E) OCCUPANT LOAD (#)

DEMO KEYNOTES:

1. DEMOLISH LANDSCAPING AND REMOVE IRRIGATION AS NEEDED FOR NEW RELO CLASSROOM.
2. RELOCATE (2) 8'x40' STORAGE CONTAINER A MINIMUM 20'-0" AWAY FROM ANY BUILDING AND PER DISTRICT DIRECTION.
3. DEMOLISH ASPHALT ALONG PATH OF TRAVEL AS NECESSARY TO COMPLY WITH 5" MAX SLOPE & 2% MAX SLOPE REQUIREMEINTES.

NOTE:
1. PROTECT-IN-PLACE EXISTING U.O.N.

PARKING SUMMARY:

PARKING LOT 1:	
STANDARD PARKING STALLS:	25
ACCESSIBLE PARKING STALLS:	2
VAN ACCESSIBLE PARKING STALLS:	1
TOTAL PARKING:	28

PARKING LOT 2:	
STANDARD PARKING STALLS:	31
ACCESSIBLE PARKING STALLS:	0
VAN ACCESSIBLE PARKING STALLS:	0
TOTAL PARKING:	31

LEGEND

- PROPERTY LINE
- (E) ORNAMENTAL FENCE
- (E) CHAINLINK FENCE
- (E)FIRE LANE A# 04-118697
- (E)FIRE HYDRANT
- (E) ACCESSIBLE PATH OF TRAVEL PER A#04-118697
- (N) ACCESSIBLE PATH OF TRAVEL
- (E) ASPHALT PAVING
- (E) CONCRETE PAVING
- (E) TURF AREA
- (E) SAFE DISPERSAL AREA PER A#04-118697 TOTAL AREA PROVIDED: 1590 SF
- NEW SAFE DISPERSAL AREA TOTAL AREA PROVIDED: 1860 SF
- NEW ACCESSIBLE PORTION OF THE SAFE DISPERSAL AREA ACCESSIBLE AREA PROVIDED: 950 SF
- GRASS AND IRRIGATION AREA TO BE DEMOLITION FOR PLACEMENT OF NEW 40X48 MODULAR BUILDING.

GENERAL NOTES

1) NEW BUILDING SHALL BE PROVIDED WITH EMERGENCY RESPONDER RADIO COVERAGEIN ACCORDANCE WITH CALIFORNIA FIRE CODE SECTION 510. THE PROJECT ARCHITECT (AOR) SHALL CONTACT THE LOCAL FIRE DEPARTMENT AND /OR EMERGENCY COMMUNICATIONS AUTHORITY TO OBTAIN DESIGN, EQUIPMENT SPECIFICATIONS, TESTING AND ACCEPTANCE CRITERIA. PLANS AND REQUESTED DOCUMENTATION SHALL BE SUBMITTED TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL. UPON COMPLETION, COPIES OF THE APPROVED PLANS, EQUIPMENT DATA SHEETS, TESTING AND ACCEPTANCE DOCUMENTATION SHALL BE PROVIDED TO THE SCHOOL DISTRICT.
– THIS REQUIREMENT IS EXEMPT FOR BUILDINGS AND STRUCTURES THAT ARE THREE STORIES OR LESS PER SAN DIEGO COUNTY FIRE DEPARTMENT OFFICE OF THE FIRE MARSHALL TECHNICAL POLICY #19-002.

DSA Stamp

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date:
DSA

Revisions:
1
2
3

Consultant Stamp:

Consultant:

VSVES05 40x48 RELO CR

VALLECITOS UNIFIED SCHOOL DISTRICT
40X48 RELOCATABLE CLASSROOM
for
TEMECULA VALLEY UNIFIED SCHOOL DISTRICT
TEMECULA CALIFORNIA

Job N°.: VSVES05

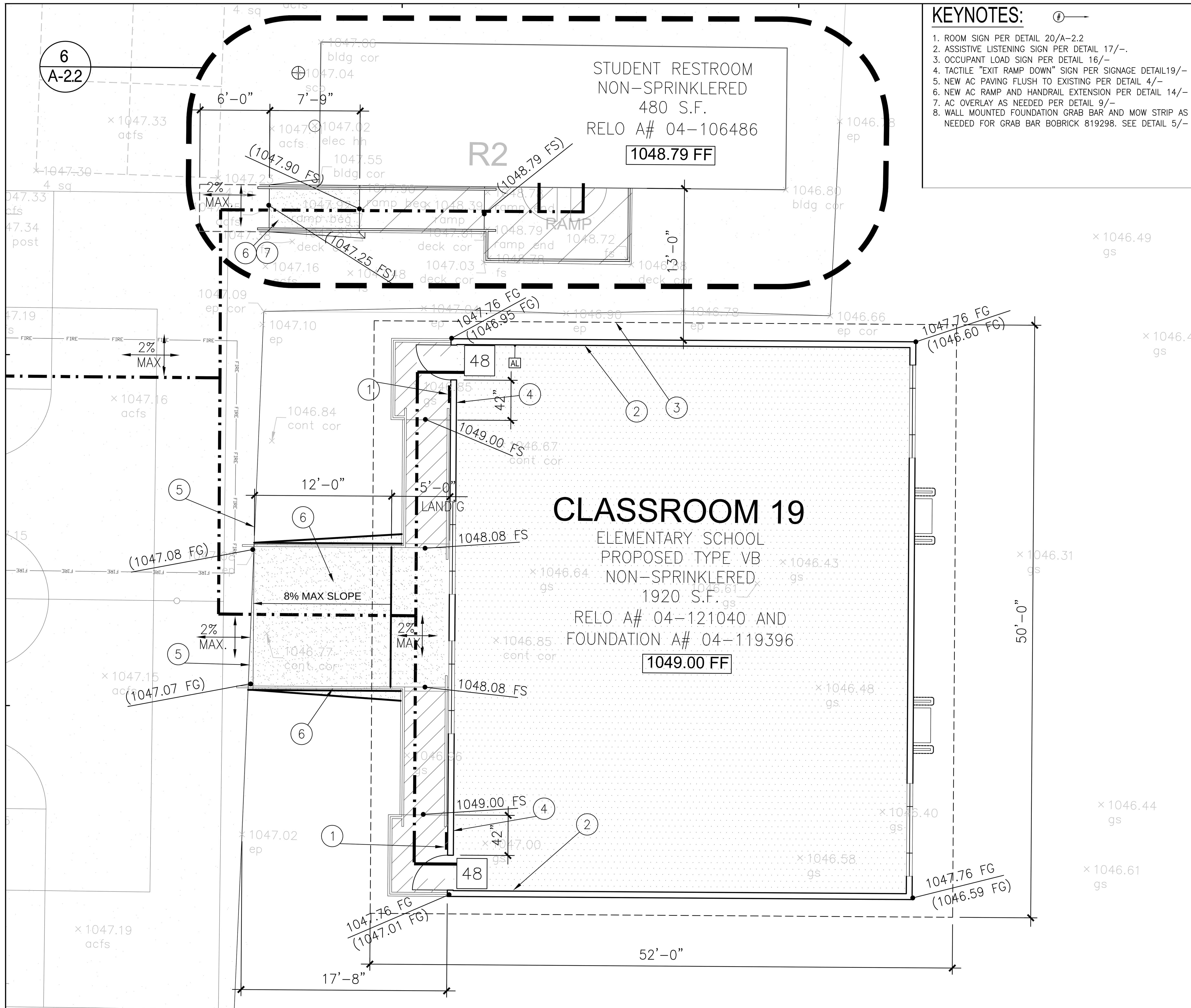
LICENSED ARCHITECT — STATE OF CALIFORNIA — REN. 02-28-25

MGPA ARCHITECTURE
An Architectural Corporation
Mailing: 6965 El Camino Real, Suites 105-278
Carlsbad, CA 92009
Tele: (760) 929-1500 Fax: (760) 929-1506

MGPA ARCHITECTURE

Sheet Title:
CODE COMPLIANCE, EXISTING & DEMO SITE PLAN

Sheet Number:
A-1.0

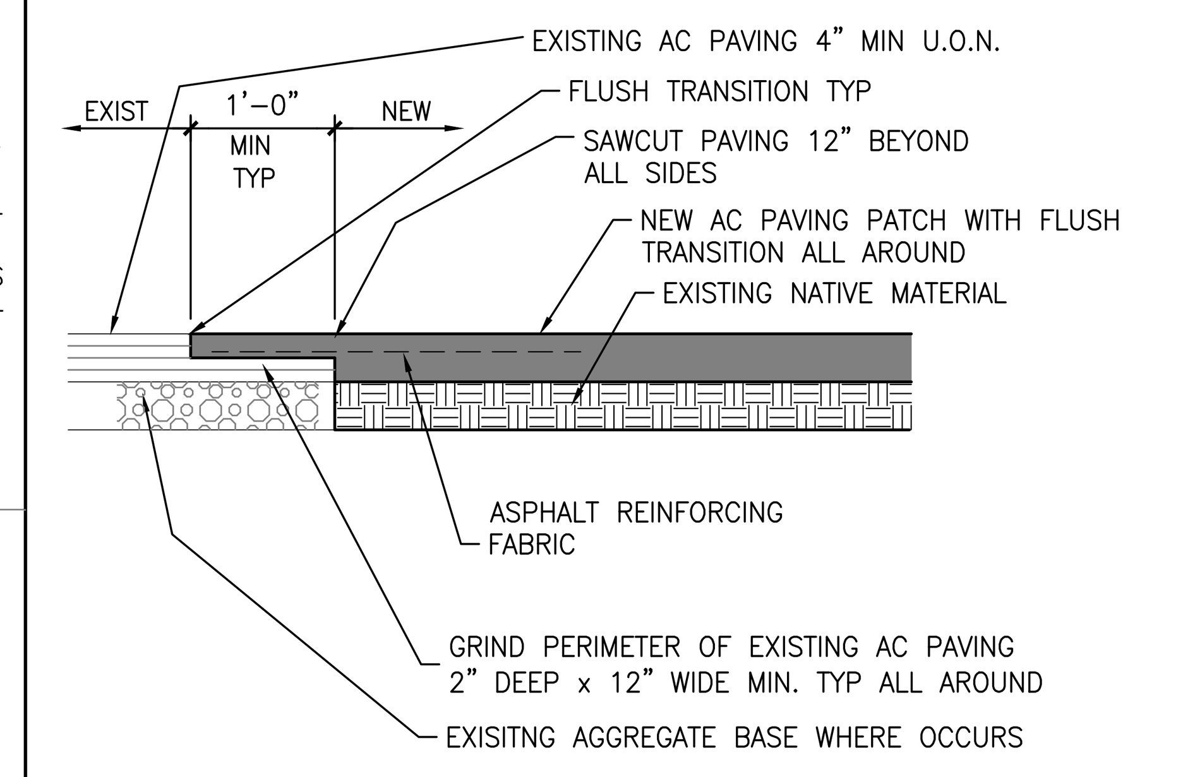


11 ENLARGED SITE PLAN

SCALE: 3/16" = 1'-0"

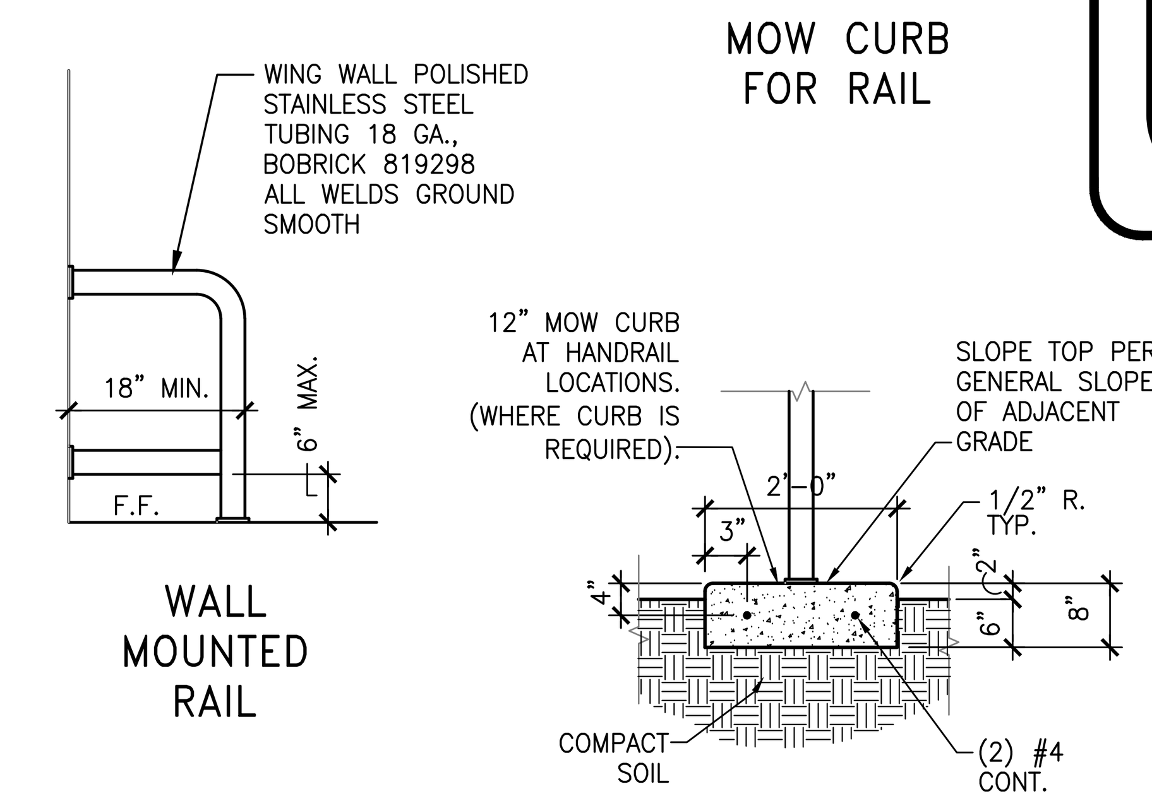
KEYNOTES:

1. ROOM SIGN PER DETAIL 20/A-2.2
2. ASSISTIVE LISTENING SIGN PER DETAIL 17/-.
3. OCCUPANT LOAD SIGN PER DETAIL 16/-
4. TACTILE "EXIT RAMP DOWN" SIGN PER SIGNAGE DETAIL19/-
5. NEW AC PAVING FLUSH TO EXISTING PER DETAIL 4/-
6. NEW AC RAMP AND HANDRAIL EXTENSION PER DETAIL 14/-
7. AC OVERLAY AS NEEDED PER DETAIL 9/-
8. WALL MOUNTED FOUNDATION GRAB BAR AND MOW STRIP AS NEEDED FOR GRAB BAR BOBRICK 819298. SEE DETAIL 5/-



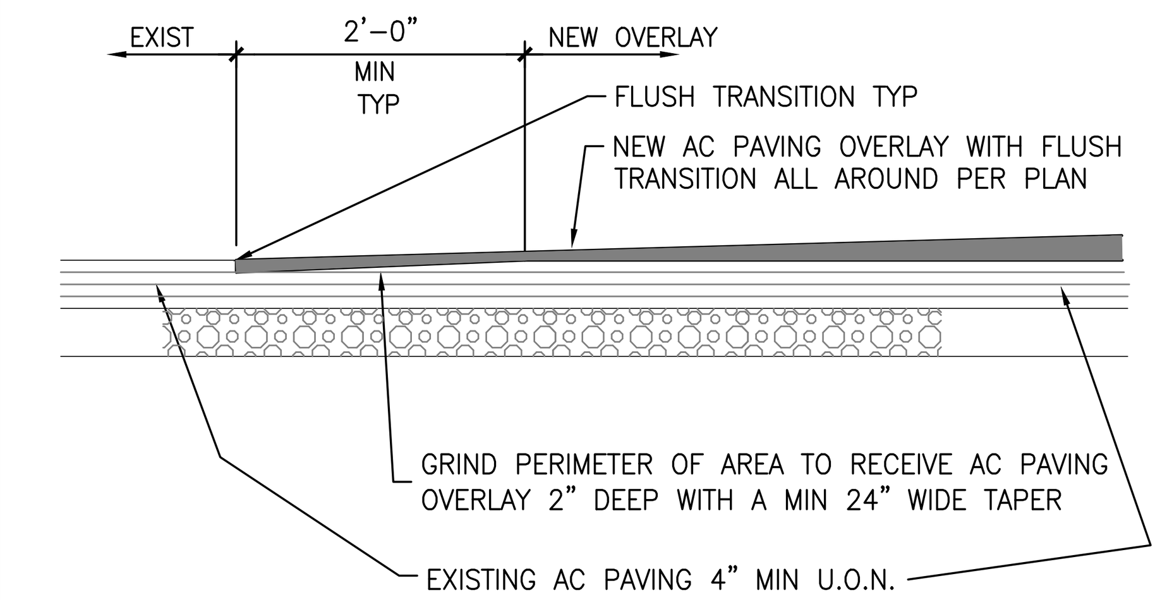
4 AC PAVING TRANSITION

SCALE: 3/4"=1'-0" 3/4" ACtrans01.dwg



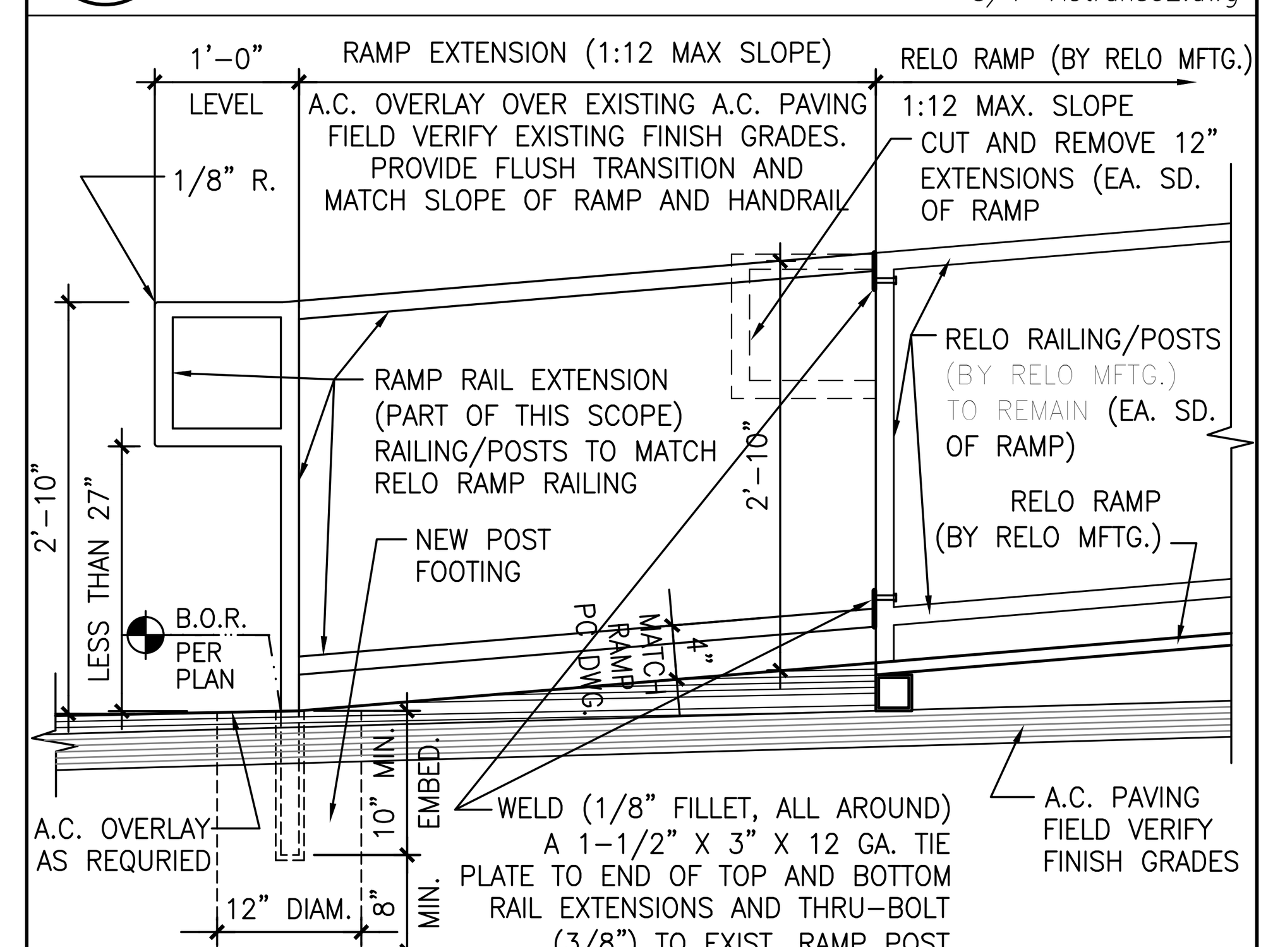
5 RAIL AND MOW CURB

SCALE: 1/2"=1'-0" 1/2" grab bar.dwg



9 AC OVERLAY TRANSITION

SCALE: 3/4"=1'-0" 3/4" ACtrans02.dwg



14 RAMP & HANDRAIL EXTENSION

SCALE: 3/4"=1'-0" 3/4" ConcWalk01.dwg

LEGEND

(E) ASPHALT PAVING

AL — ASSISTIVE LISTENING SYSTEM, COMPLYING WITH CBC 11B-219 & 11B-706. PROVIDE FOUR HEARING AID COMPATIBLE RECEIVERS PER CLASSROOM. SEE ALS RECEIVER SIGN PER DETAIL 17/A-1.1.

ASSISTIVE LISTENING SYSTEM NOTES:

1. ASSISTIVE-LISTENING SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH CBC SECTION 11B-219 AND SHALL COMPLY WITH CBC SECTION 11B-706.
2. THE MINIMUM NUMBER OF RECEIVERS TO BE PROVIDED SHALL BE EQUAL TO 4% OF THE TOTAL NUMBER OF SEATS, BUT IN NO CASE LESS THAN TWO. 25% MINIMUM OF RECEIVERS PROVIDED, BUT NO FEWER THAN TWO, SHALL BE HEARING-AID COMPATIBLE IN ACCORDANCE WITH CBC SECTION 11B-706.3.
3. IF SYSTEM PROVIDED IS LIMITED TO SPECIFIC AREAS OR SEATS, THEN SUCH AREAS OR SEATS SHALL BE WITHIN A 50-FOOT VIEWING DISTANCE OF, AND HAVE A COMPLETE VIEW OF, THE STAGE OR PLAYING AREA PER CBC SECTION 11B-219.4.
4. ALTERNATIVE ALS SYSTEM REQUIREMENTS:
   FOR EACH SCHOOL, PROVIDE 2 PORTABLE ASSISTIVE LISTENING SYSTEMS, EACH WITH A TRANSMITTER AND A MINIMUM OF 2 RECEIVERS, FOR USE IN CLASSROOMS WITHOUT AUDIO AMPLIFICATION. THE ASSISTIVE LISTENING RECEIVERS AND TRANSMITTER SHALL BE STORED IN THE SCHOOL SITE ADMINISTRATION OFFICE UNTIL REQUESTED.
   IN ADDITION, PROVIDE AN ASSISTIVE LISTENING SYSTEM FOR ASSEMBLY AREAS SUCH AS MULTI-PURPOSE ROOMS, CAFETERIAS, LECTURE HALLS OR OTHER ASSEMBLY AREAS. IF THE ROOM HAS NO FIXED SEATING, CALCULATE THE NUMBER OF SEATS USING 7 S.F. PER OCCUPANT. PROVIDE 4% OF ASSISTIVE LISTENING RECEIVERS FOR TOTAL NUMBER OF SEATS IN EACH ASSEMBLY AREA, BUT NO LESS THAN 2. THE ASSISTIVE LISTENING RECEIVERS SHOULD BE STORED IN OR NEAR THE ASSEMBLY AREA.

WALL TYPES

2X6 WALL

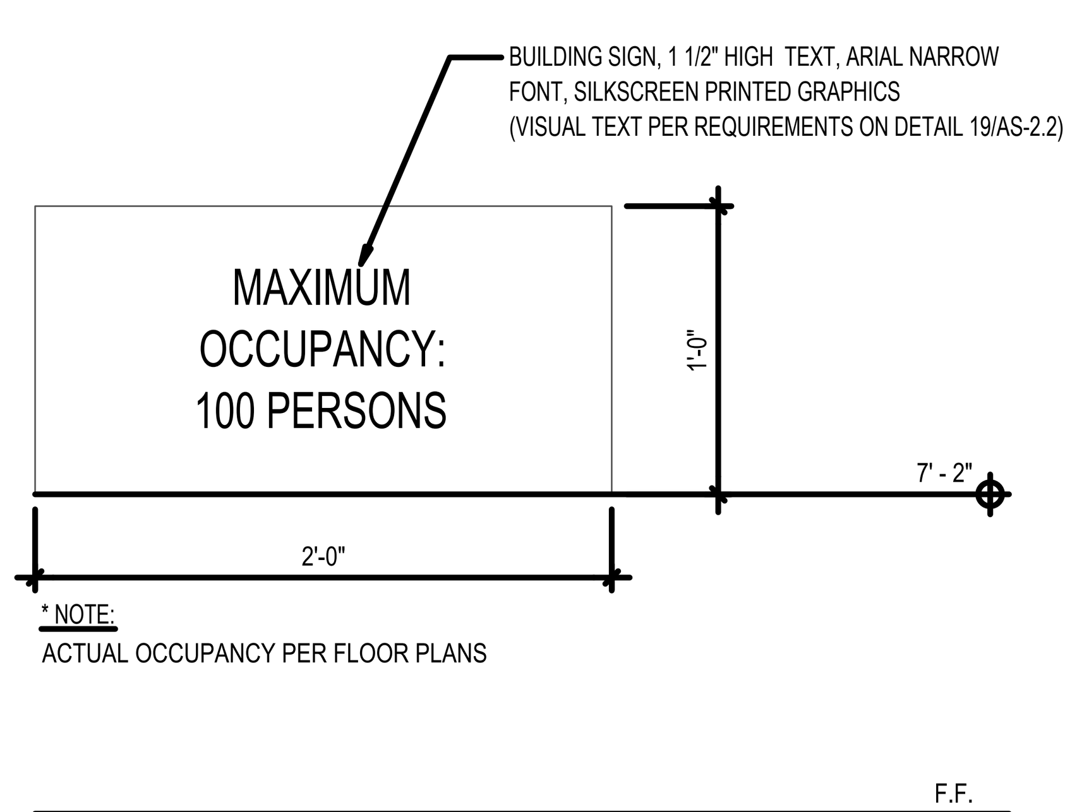
OCCUPANT LOAD CALCULATION

— NEW EXIT OCCUPANT LOAD

MINIMUM REQUIRED EGRESS WIDTH (PER C.B.C 1005.1)
THE TOTAL WIDTH OF MEANS OF EGRESS IN INCHES SHALL NOT BE LESS THAN THE TOTAL OCCUPANT LOAD SERVED BY MEANS OF EGRESS MULTIPLIED BY 0.3 INCHES PER OCCUPANT FOR STAIRWAYS AND 0.2 INCHES PER OCCUPANT FOR OTHER EGRESS COMPONENTS.

MGPA-OCCUPANCY SCHEDULE

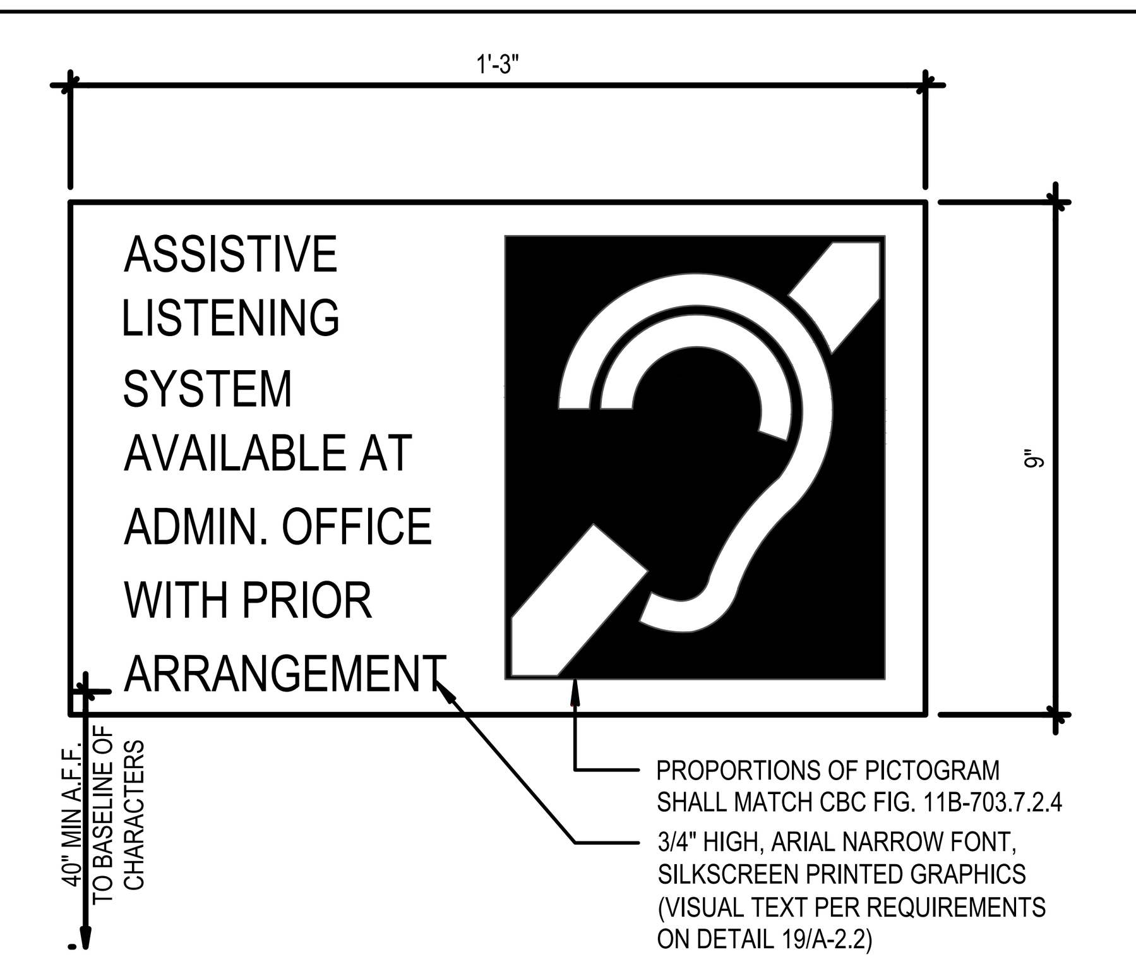
Name	Number	Occupancy	Function	Area	LoadFactor	Occupant Load	# of Exits
CLASSROOM		E	INSTRUCTIONAL SPACE	1920 SF	20	96	2
BOY'S R.R.		E	STUDENT RESTROOM	224 SF	20	6	1
GIRL'S R.R.		E	STUDENT RESTROOM	200 SF	20	6	1



* NOTE:
ACTUAL OCCUPANCY PER FLOOR PLANS

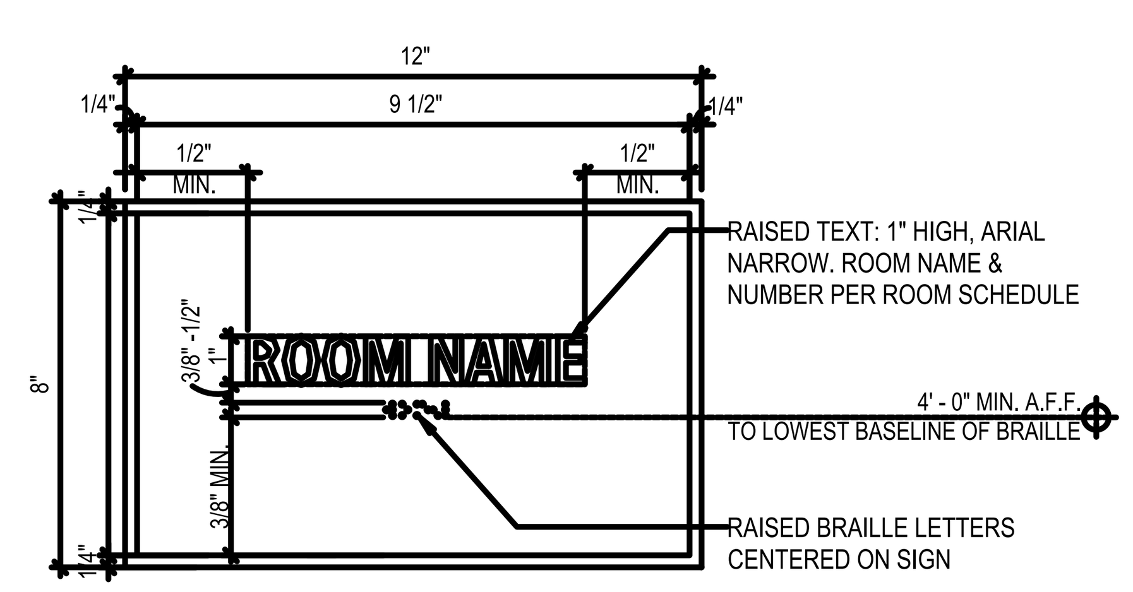
16 ROOM OCCUPANCY SIGN

SCALE: 1 1/2"=1'-0" 1 1/2" SignOccupLoad01.dwg



17 ASSISTIVE LISTENING SIGN

SCALE: N.T.S. N.T.S. SignAsstList01.dwg

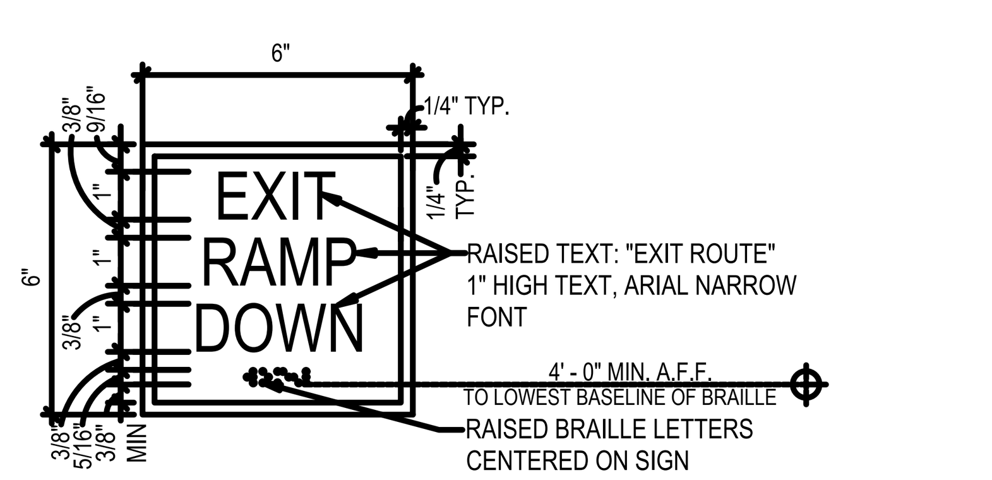


ROOM SIGNAGE AND PICTOGRAMS SHALL BE FABRICATED FROM 1/4" THICK ENGRAVED ALUMINUM WITH PEBBLE BACKGROUND RECESSED 1/16" WITH 1/4" BORDER, PICTOGRAMS AND TEXT. PROVIDE BACKED ENAMEL FINISH CUSTOM COLOR. RAISED SURFACES SHALL BE PAINTED CONTRASTING COLOR. COLORS TO BE SELECTED BY THE DISTRICT.

REFER TO SIGNAGE NOTES, DETAILS 19,20/A-2.2 FOR BRAILLE REQUIREMENTS

18 PERMANENT ROOM ID SIGN

SCALE: N.T.S.

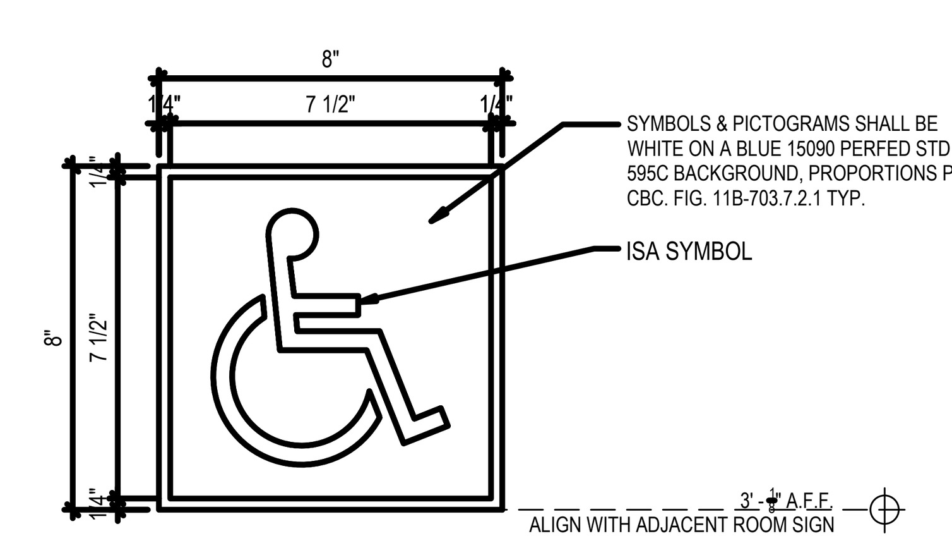


ROOM SIGNAGE AND PICTOGRAMS SHALL BE FABRICATED FROM 1/4" THICK ENGRAVED ALUMINUM WITH PEBBLE BACKGROUND RECESSED 1/16" WITH 1/4" BORDER, PICTOGRAMS AND TEXT. PROVIDE BACKED ENAMEL FINISH CUSTOM COLOR. RAISED SURFACES SHALL BE PAINTED CONTRASTING COLOR. COLORS TO BE SELECTED BY THE DISTRICT.

REFER TO SIGNAGE NOTES, DETAILS 19,20/A-2.2 FOR BRAILLE REQUIREMENTS

19 TACTILE SIGNAGE REQUIREMENT

SCALE: N.T.S.



ROOM SIGNAGE AND PICTOGRAMS SHALL BE FABRICATED FROM 1/4" THICK ENGRAVED ALUMINUM WITH PEBBLE BACKGROUND RECESSED 1/16" WITH 1/4" BORDER, PICTOGRAMS AND TEXT. PROVIDE BACKED ENAMEL FINISH CUSTOM COLOR. RAISED SURFACES SHALL BE PAINTED CONTRASTING COLOR.

20 TACTILE SIGNAGE REQUIREMENT

SCALE: N.T.S.

DSA Stamp

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date: DSA

Revisions:
1
2
3

Consultant Stamp:

Consultant:

VSVES05 40x48 RELO CR

VALLECITOS UNIFIED SCHOOL DISTRICT
40X48 RELOCATABLE CLASSROOM
for
TEMECULA VALLEY UNIFIED SCHOOL DISTRICT
TEMECULA CALIFORNIA

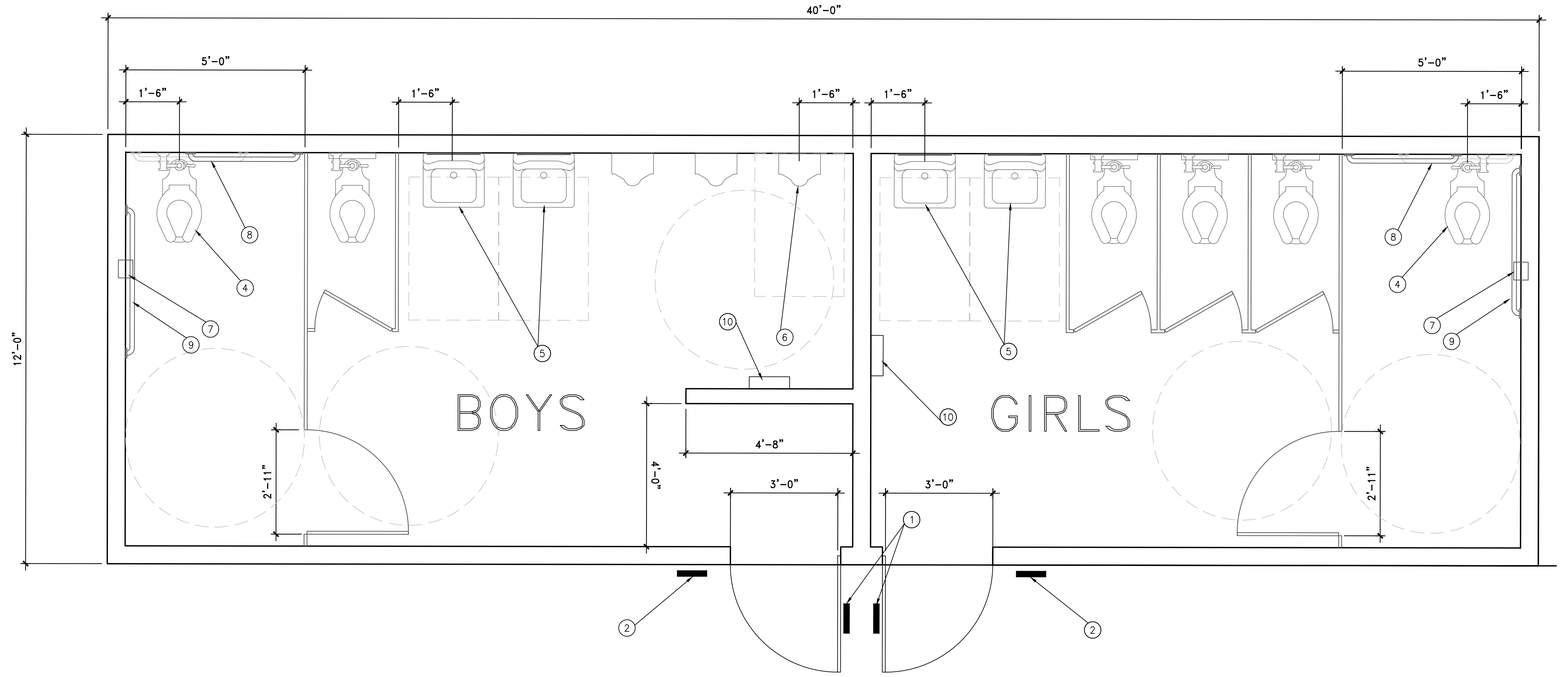
Job Nº.: VSVES05

LICENSED ARCHITECT — FRED HERNANDEZ — No. C20789 — REN: 02-28-25 — STATE OF CALIFORNIA

MGPA ARCHITECTURE
An Architectural Corporation
Mailing: 6965 El Camino Real, Suites 105-278
Carlsbad, CA 92009
Tele: (760) 929-1500 Fax: (760) 929-1506

Sheet Title: ENLARGE SITE PLAN AND SITE DETAILS

Sheet Number: A-1.1

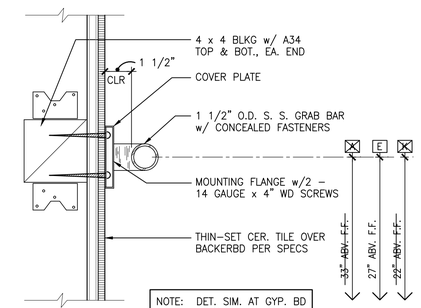


6 EXISTING RESTROOM DEMO AND NEW WORK (PC A#04-106486)

SCALE: 1/2"=1'-0"

KEYNOTES:

1. (N) RESTROOM DOOR SIGN, PER DETAIL 16/-.
2. (N) ROOM SIGNAGE, PER DETAIL 16/-.
3. (E) EXIT SIGNAGE, TYP., TO REMAIN.
4. (E) ACCESSIBLE WATER CLOSET, TO BE REPLACED PER SPEC AND. REF TO DET 11/- & 12/- FOR INSTALATION
5. (E) ACCESSIBLE LAVATORY, ELEMENTARY HEIGHT, TO REMAIN.REF TO DETAILS 13/- & 14/-
6. (E) ACCESSIBLE URINAL TO REMAIN.
7. (E) ACCESSIBLE TOILET PAPER DISP. BOBRICK B667, TO BE RELOCATED. SEE DET 11/- & 12/-
8. (E) GRAB BAR, TO BE RELOCATED PER DET 10/-, 11/- & 12/-
9. (E) GRAB BAR, TO REMAIN. REF TO DET 11/- & 12/-
10. (N) PAPER TOWEL DISPENSER PER DETAIL 15/-.



10 GRAB BAR WALL DETAIL

SCALE: 3"=1'-0"

3" GrabBarWall01.dwg

DSA Stamp

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date: DSA

Revisions: 1 2 3

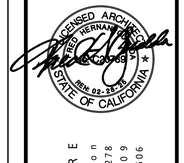
Consultant Stamp:

Consultant:

VSVES05 40x48 RELO CR

VALLECITOS UNIFIED SCHOOL DISTRICT
40X48 RELOCATABLE CLASSROOM
for
TEMECULA VALLEY UNIFIED SCHOOL DISTRICT
TEMECULA CALIFORNIA

Job Nº.: VSVES05



MGPA ARCHITECTURE
An Architectural Corporation
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Carlsbad, CA 92009
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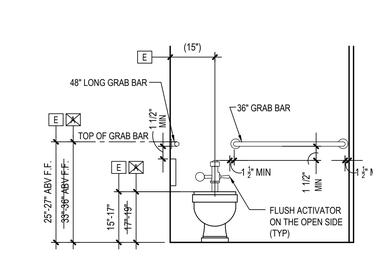
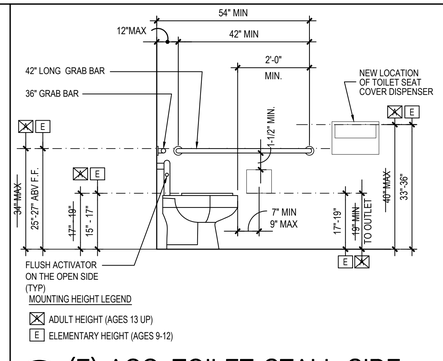
Sheet Title: EXISTING RESTROOM DEMO, NEW WORK AND DETAILS

Sheet Number: A-2.2



11 (E) ACC. TOILET STALL FRONT

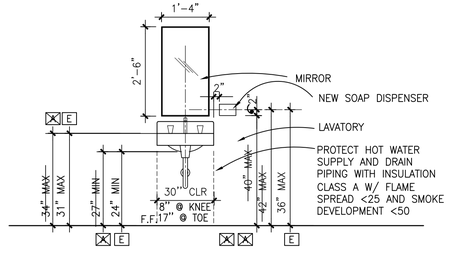
SCALE: 1/2"=1'-0"



12 (E) ACC. TOILET STALL SIDE

SCALE: 1/2"=1'-0"

1/2" DPWCSideElev_REVIT.dwg



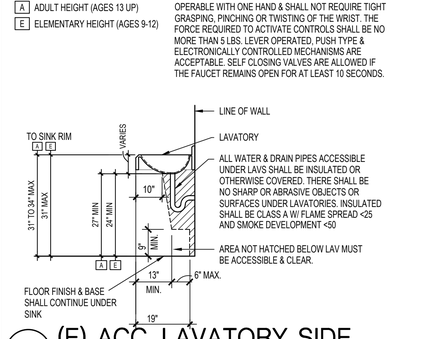
13 (E) ACC. LAVATORY FRONT

SCALE: 1/2"=1'-0"

1/2" DPLavElev01.dwg

MOUNTING HEIGHT LEGEND
A ADULT HEIGHT (AGES 13 UP)
E ELEMENTARY HEIGHT (AGES 9-12)

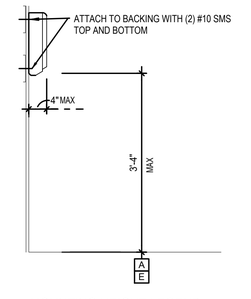
NOTE:
FAUCET CONTROLS & OPENING MECHANISMS SHALL BE OPERABLE WITH ONE HAND & SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO MORE THAN 5 LBS. LEVER OPERATED, PUSH TYPE & ELECTRONICALLY CONTROLLED MECHANISMS ARE ACCEPTABLE. SELF CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.



14 (E) ACC. LAVATORY SIDE

SCALE: 1/2"=1'-0"

N.T.S. DPLavSideElev_REVIT

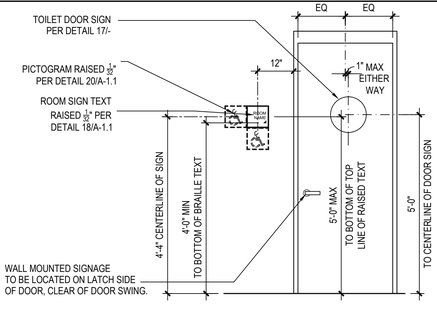


MOUNTING HEIGHT LEGEND
~~A ADULT HEIGHT (AGES 13 UP)~~
E ELEMENTARY SCHOOL HEIGHT (AGES 5-8)

15 PAPER TOWEL DISPENSER

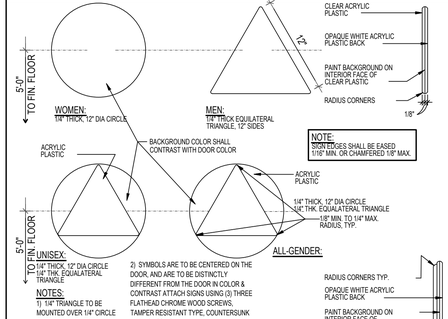
SCALE: –

3/4" DPTrash+Paperdisp_Revit.dwg



16 (E) ROOM SIGNAGE ELEVATION

SCALE: 1/2"=1'-0"



17 (E) TYP. TOILET DOOR SIGNAGE

SCALE: NTS

NTS SIGNDOORRR_ALL-GENDER_REVIT.dwg

11B-703.7.2.6.4 Edges and Vertices on Geometric Symbols

Edges shall be eased or rounded at 1/16 inch (1.59 mm) minimum, or chamfered at 1/8 inch (3.2 mm) maximum. Vertices shall be radiused between 1/8 inch (3.2 mm) minimum and 1/4 inch (6.4 mm) maximum.

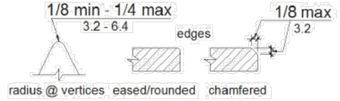


FIGURE 11B-703.7.2.6.4
EDGES AND VERTICES ON GEOMETRIC SYMBOLS

18 SIGNAGE NOTES

SCALE: NTS

11B-703 Requirements for Raised Characters, Braille and Visual Characters

Raised characters shall comply with CBC Section 11B-703.2.
•Characters shall be raised 1/32 inch (0.8 mm) minimum above their background, shall be sans serif uppercase letters, and shall be duplicated in Braille.
•Character height shall be 5/8 inch (15.9 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter 'I". CBC Section 11B-703.2.5
•Characters and their background shall have a non-glare finish. Character shall contrast with their background with either light characters on a dark background or dark characters on a light background. CBC Section 11B-703.5.1
•Characters shall be selected from fonts where the width of the uppercase letter "O" is 60% minimum and 110% maximum of the height of the uppercase letter "I". Stroke thickness of the uppercase letter "I" shall be 15% maximum of the height of the character. CBC Sections 11B-703.2.4 and 11B-703.2.6
•Character spacing between individual raised characters shall comply with
CBC Section 11B-703.2.7 and 11B-703.2.8
•Line Spacing. Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent min. and 170 percent max. of the raised character height. 11B-703.2.9
•Text shall be in a horizontal format. CBC Section 11B-703.2.9

Braille:
•Braille shall be contracted (Grade 2) and shall comply with CBC Sections 11B-703.3 and 11B-703.4. •Braille dots shall have a domed or rounded shape and shall comply with CBC Table and Figure 11B-703.3.1. The indication of an uppercase letter shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.
•11B-703.3.2 Position. Braille shall be positioned below the corresponding text in a horizontal format, flush left or centered. If text is multi-lined, Braille shall be placed below the entire text. Braille shall be separated 3/8" min. and 1/2" max. from any other tactile characters and 3/8" min. from raised borders and decorative elements.

Tactile:
•Tactile characters on signs shall be located 48" minimum to the baseline of the lowest Braille cells and 60" maximum to the baseline of the highest line of raised characters above the finish floor or ground surface. CBC Section and Figure 11B-703.4.1
•Tactile signs shall be located per CBC Section and Figure
11B -703.4.2 as follows:
-alongside a single door at the latch side.
-on the inactive leaf at double doors with one active leaf.
-to the right of the right hand door at double doors with two active leafs.
-on the nearest adjacent wall where there is no wall space at the latch side of a single door or at the right side of double doors with two active leafs.
-so that a clear floor space of 18" x18" minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

Visual Characters:
•Visual characters shall comply with CBC Section 11B-703.5 and shall be 40" minimum above finish floor or ground. Character height shall be determined based upon height above ground and horizontal viewing distance per CBC Table 11B-703.5.5
•Proportions for Visual Characters shall be selected from fonts where the width of the uppercase letter "O" is 60 % minimum and 110 % maximum of the height of the uppercase letter "I". Stroke thickness shall be 10% minimum and 20% maximum of the height of the character. CBC Sections 11B-703.5.4 and 11B-703.5.7
•Pictograms shall comply with CBC Section 11B-703.6.
•Symbols of accessibility shall comply with CBC Section 11B-703.7.
•Variable message signs shall comply with CBC Section 11B-703.8.

19 SIGNAGE NOTES

SCALE: NTS

Braille

11B-703.3 Braille. *Braille shall be contracted (Grade 2) and shall comply with Sections 11B-703.3 and* ***11B-703.4.***

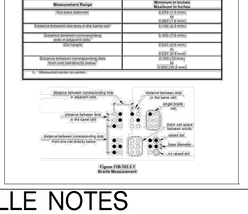
11B-703.3.1 Dimensions and capitalization. *Braille dots shall have a domed or rounded shape and shall comply with Table 11B-703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.*

11B-703.3.2 Position. *Braille shall be positioned below the corresponding textin a horizontal format, flush left or centered. If text is multi-lined, Braille shall beplaced below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum and 1/2 inch (12.7 mm) maximum from any other tactile characters and 3/8 inch (9.5 mm) minimum from raised borders and decorative elements.*

Table 11B-703.3.1 Braille Dimensions1

Measurement Range	Minimum in Inches Maximum in Inches
Dot base diameter	0.059 (1.5 mm) 0.063 (1.6 mm)
Distance between two dots in the same cell	0.090 (2.3 mm) 0.100 (2.5 mm)
Distance between corresponding dots from cell to adjacent cell	0.300 (7.6 mm) 0.400 (10.2 mm)
Dot height	0.025 (0.6 mm) 0.037 (0.9 mm)
Distance between corresponding dots from one cell directly below	0.395 (10.0 mm) 0.400 (10.2 mm)

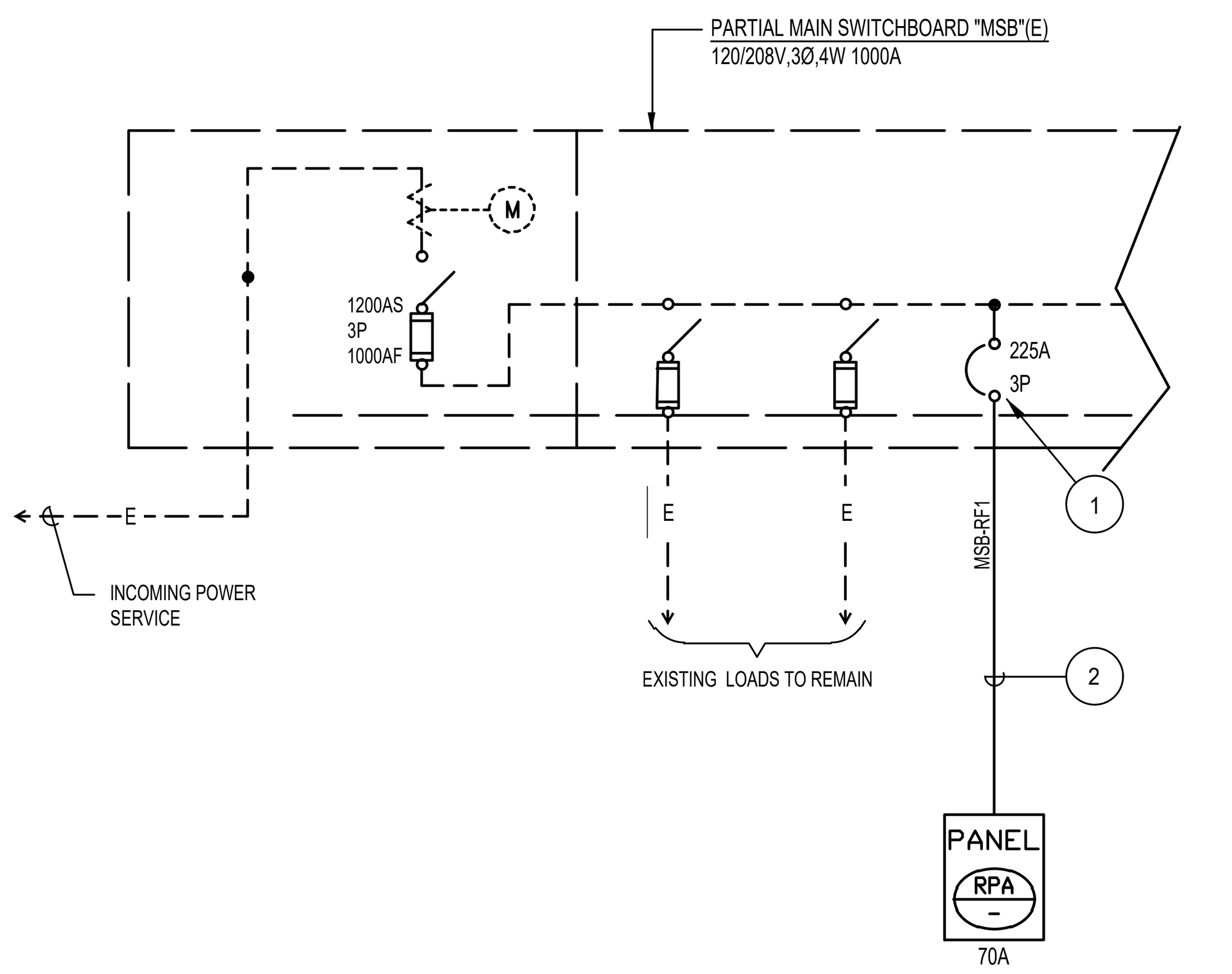
1. Measured center to center



20 BRAILLE NOTES

SCALE: NTS

SINGLE LINE DIAGRAM



SINGLE LINE DIAGRAM NOTES:

1. ALL EXISTING SHOWN DASHED IS EXISTING. ALL OTHER EQUIPMENT SHOWN IN SOLID LINES IS NEW AND SHALL BE PROVIDED AS PART OF THE CONTRACT.
2. THE EXISTING POWER SERVICE HAS BEEN SUFFICIENT CAPACITY TO SUPPORT THE NEW LOAD INDICATED.

PLAN NOTES

1. PROVIDE NEW CIRCUIT BREAKER DEVICE IN SPACE OF EXISTING SWITCHBOARD INCLUDING ALL REQUIRED MOUNTING HARDWARE. AIC RATING OF NEW SHALL MATCH RATING OF EXISTING SWITCHBOARD EQUIPMENT.
2. PROVIDE 4-350MCM, 1 # 4 GRD – 4" C.

TEMECULA VALLEY USD — PROJECT NO. 229.177

VOLTS 120/208 — PANELBOARD RPA (NEMA 3R) — MAIN 225A/3P
PHASE 3PH, 4W — BUS 225A
MTG SURFACE — LOCATION PORTABLE BLDGS — 10KAIC

CKT	A	B	C	LOAD TYPE	BKR	OUTLET QUAN	DESCRIPTION		CKT	A	B	C	LOAD TYPE	BKR	OUTLET QUAN	DESCRIPTION
1	6860	-----	-----	G	100/2	1	PORTABLE PANEL-A	A	2		-----	-----		100/2	1	SPARE
3	-----	5964	-----	-	--	-	--	B	4	-----		-----		--	-	--
5	-----	-----	6680	G	100/2	1	PORTABLE PANEL-B	C	6	-----	-----			100/2		SPARE
7	5964	-----	-----	-	--	-	--	A	8		-----	-----		--		--
9	-----		-----		100/2		SPARE	B	10	-----		-----		100/2		SPARE
11	-----	-----			--		--	C	12	-----	-----			--		--
13		-----	-----				PROVISIONS	A	14		-----	-----				PROVISIONS
15	-----		-----				PROVISIONS	B	16	-----		-----				PROVISIONS
17	-----	-----					PROVISIONS	C	18	-----	-----					PROVISIONS
19		-----	-----				PROVISIONS	A	20		-----	-----				PROVISIONS
21	-----		-----				PROVISIONS	B	22	-----		-----				PROVISIONS
23	-----	-----					PROVISIONS	C	24	-----	-----					PROVISIONS
25		-----	-----				PROVISIONS	A	26		-----	-----				PROVISIONS
27	-----		-----				PROVISIONS	B	28	-----		-----				PROVISIONS
29	-----	-----					PROVISIONS	C	30	-----	-----					PROVISIONS
31		-----	-----				PROVISIONS	A	32		-----	-----				PROVISIONS
33	-----		-----				PROVISIONS	B	34	-----		-----				PROVISIONS
35	-----	-----					PROVISIONS	C	36	-----	-----					PROVISIONS
37		-----	-----				PROVISIONS	A	38		-----	-----				PROVISIONS
39	-----		-----				PROVISIONS	B	40	-----		-----				PROVISIONS
41	-----	-----					PROVISIONS	C	42	-----	-----					PROVISIONS

CONNECTED:

	VA	AMPS
PHASE A =	12824	107
PHASE B =	5964	50
PHASE C =	6680	56
TOTAL =	25468	71

L.C.L. @ 125% =	
RECEPT. (> 10 kVA @ 50%) =	
KITCHEN @ 65% =	
OTHER LOAD @ 100% =	25468
TOTAL VA =	25468
TOTAL AMPS =	71

LOAD TYPE:
G - GENERAL (100%) M - MOTOR (100%)
L - L.C.L. (125%) M1 - MOTOR (125%)
R - RECEPTACLE (50%) (10 kVA @ 100%) X - X-RAY (100%) X1 - X-RAY (50%)
K - KITCHEN (65%)

SYMBOL LIST

(ALL SYMBOLS NOT NECESSARILY USED ON THESE DRAWINGS)
ALL SYMBOL DESCRIPTIONS ARE SUBJECT TO MODIFICATION
AS NOTED ON THE DRAWINGS

AMP, A	AMPERE
A.I.C.	AMPERES INTERRUPTING CAPACITY (SYMMETRICAL)
AF/AT	AMP FRAME, AMP TRIP
CIRC.,CKT.	CIRCUIT
C	CONDUIT
C.O.	CONDUIT ONLY.
E	EXISTING EQUIPMENT OR DEVICE TO REMAIN
R	EXISTING EQUIPMENT OR DEVICE TO BE REMOVED
EMS	ENERGY MANAGEMENT CONTROL SYSTEM
E-O-L	END-OF-LINE CIRCUIT TERMINATOR.
EF	EXHAUST FAN
FT or '	FEET
FA	FIRE ALARM
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER.
GRD	GROUND
HP	HORSEPOWER
TSP	TWISTED (NON SHEILDED) PAIR
IN. or "	INCHES
J-BOX	JUNCTION BOX
KILOVOLT AMPERES	KILOVOLT AMPERES
KW	KILOWATT
LCL	LONG CONTINUOUS LOAD
L.F.	LINEAR FEET
LTG, LTS	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MILS
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NO. or #	NUMBER
PH. OR Ø	PHASE
PROVIDE	FURNISH, INSTALL AND CONNECT.
PUBLIC ADDRESS	PUBLIC ADDRESS
REC, RECEPT	RECEPTACLE
U.N.O.	UNLESS NOTED OTHERWISE

- S 2, P a, b — SINGLE POLE TOGGLE SWITCH, ON FLUSH WALL MOUNTED OUTLET BOX, +45". INSTALL MULTIPLE SWITCHES UNDER COMMON COVER PLATE. SUBSCRIPT OR SUPERSCRIPT AT SWITCH SYMBOL INDICATES THE FOLLOWING:
  - 2 - DOUBLE POLE 4 - FOUR WAY M - MANUAL MOTOR STARTERS
  - 3 - THREE WAY P - PILOT LIGHT K - KEY OPERATED
  - R - SPDT MOMENTARY CONTACT RELAY SWITCH V - VAPOR PROOF
  - a,b,c,d, ETC. - MULTIPLE SWITCHES WITH IDENTIFICATION OF OUTLET CONTROLLED.
- DUPLEX CONVENIENCE RECEPTACLE VERTICAL ON FLUSH WALL MOUNTED OUTLET BOX, +18". STEM INDICATES WALL MOUNTED OUTLET BOX, TYPICAL.
- DUPLEX CONVENIENCE RECEPTACLE HORIZONTAL ON FLUSH WALL MOUNTED OUTLET BOX, +6" ABOVE COUNTER SPLASH.
- DUPLEX CONVENIENCE RECEPTACLE SPLIT WIRED, ON FLUSH WALL MOUNTED OUTLET BOX, +18".
- DOUBLE DUPLEX (FOUR-PLEX) CONVENIENCE RECEPTACLE ON ONE FLUSH WALL MOUNTED OUTLET BOX +18".
- SINGLE RECEPTACLE, NEMA CONFIGURATION PER EQUIPMENT MANUFACTURER REQUIREMENTS, ON FLUSH WALL MOUNTED OUTLET BOX, +18".
- DUPLEX CONVENIENCE RECEPTACLE WITH INTERNAL GROUND FAULT INTERRUPTER, VERTICAL ON FLUSH WALL MOUNTED OUTLET BOX +18".
- DUPLEX CONVENIENCE RECEPTACLE WITH INTERNAL GROUND FAULT INTERRUPTER, HORIZONTAL ON FLUSH WALL MOUNTED OUTLET BOX, +6" ABOVE COUNTER SPLASH.
- WP — DUPLEX CONVENIENCE RECEPTACLE, WITH INTERNAL GROUND FAULT INTERRUPTER, IN FLUSH WALL MOUNTED ENCLOSURE WITH HINGED DOOR, LOCK AND KEY, +18".
- WP — DUPLEX CONVENIENCE RECEPTACLE, WITH INTERNAL GROUND FAULT INTERRUPTER, ON FLUSH WALL MOUNTED OUTLET BOX WITH SPRING DOOR COVER, +18".
- P — DUPLEX CONVENIENCE RECEPTACLE ON FLUSH CEILING MOUNTED OUTLET BOX FOR CEILING MOUNTED PROJECTOR.
- J — JUNCTION BOX, FLUSH WALL MOUNTED, +18".
- J — JUNCTION BOX CONCEALED ABOVE ACCESSIBLE CEILING.
- J — INDICATES CONNECTION TO EQUIPMENT AS REQUIRED, TYPICAL.
- A / E-1 — PANELBOARD, ADJACENT LINE INDICATES PANEL FRONT. ADJACENT BALLOON INDICATES PANEL DESIGNATION "A", SEE DRAWING E-1 FOR PANEL SCHEDULE.
- TERMINAL CABINET OR EQUIPMENT CABINET. ADJACENT LINE INDICATES CABINET FRONT.
- A / E-1 — FLOOR STANDING SWITCHGEAR ADJACENT BALLOON INDICATES EQUIPMENT DESIGNATION "DBA", SEE DRAWING E-1 FOR SINGLE LINE DIAGRAM AND/OR SCHEDULE.
- CIRCUIT BREAKER STATIONARY (NON-DRAWOUT), SECONDARY VOLTAGE.
- WAP — DATA DROP LOCATION WITH TWO (2) CONNECTORS AND 15 FEET OF SLACK CABLE LOCATED IN ACCESSIBLE CEILING SPACE FOR WIRELESS ACCESS POINT EQUIPMENT. CABLE SHALL BE COILED-UP AND BUNDLE AT THE LOCATION INDICATED FOR FUTURE CONNECTION TO WIRELESS ACCESS POINT EQUIPMENT BY THE DISTRICT.
- — AV — AUDIO/VISUAL SYSTEM - 1"C. WITH CONDUCTORS AS SPECIFIED.
- B-5, 7, 9 — HOMERUN TO PANEL "B" FOR CIRCUITS 5, 7, 9 WITH COMMON NEUTRAL.
- UNDERGROUND CONDUIT STUBOUT, STUB 5'-0" FROM BUILDING OR WALKWAY, CAP, MARK AND RECORD.
- CIRCUIT BREAKER WITH ZERO SEQUENCE GROUND FAULT RELAY SYSTEM.
- TRANSFORMER; KVA, LINE AND LOAD VOLTAGE RATINGS AS INDICATED.
- F OR — FUSED SAFETY SWITCH (DISCONNECT), HORSE POWER RATED. MOUNT ON WALL +45", OR ON EQUIPMENT +36". PROVIDE SWITCH AND FUSES SIZED PER EQUIPMENT MANUFACTURER REQUIREMENTS.
- CONDUIT, INSTALLED CONCEALED IN WALL OR IN CEILING SPACE.
  - 3/4" C - 2 #12,1#12 GRD.
  - 3/4" C - 3 #12,1#12 GRD.
  - 3/4" C - 4 #12,1#12 GRD.
  - 3/4" C - 5 #12,1#12 GRD.
  - 3/4" C - 6 #12,1#12 GRD.
  - 1" C - 7 #12,1#12 GRD.
  - 1" C - 8 #12,1#12 GRD.
  - 1 1/4" C - 9 #12,1#12 GRD.
- CONDUIT, INSTALLED CONCEALED IN OR UNDER FLOOR OR BELOW GRADE, 3/4" CONDUIT MINIMUM.
- CONDUIT, INSTALLED EXPOSED.
- C — TELEPHONE OUTLET, ON FLUSH WALL MOUNTED OUTLET BOX +18", WITH DESK MOUNTED DEVICE WITH 1" CONDUIT TO ACCESSIBLE CEILING SPACE. "C" INDICATES HORIZONTAL IN FLUSH WALL MOUNTED OUTLET BOX +6" ABOVE COUNTER SPLASH.
- TELEPHONE OUTLET, ON FLUSH WALL MOUNTED OUTLET BOX +45", WITH WALL MOUNTED DEVICE WITH 1" CONDUIT TO ACCESSIBLE CEILING SPACE.
- BATTERY TYPE ANALOG CLOCK. WALL MOUNTED AT +90".
- INTRUSION DETECTION SYSTEM MOTION SENSOR, ON CEILING MOUNTED OUTLET BOX, +90". WITH 1" CONDUIT TO ACCESSIBLE CEILING SPACE.
- S — SPEAKER, HOUSING & GRILLE, FLUSH CEILING MOUNTED.
- — P1 — PUBLIC ADDRESS SYSTEM - 3/4"C., WITH WITH (1) SET OF CONDUCTORS AS SPECIFIED.
  - P2 - 3/4"C., WITH TWO (2) SETS OF CONDUCTORS AS SPECIFIED.
  - P3 - 1"C., WITH THREE (3) SETS OF CONDUCTORS AS SPECIFIED.
  - P4 - 1"C., WITH FOUR (4) SETS OF CONDUCTORS AS SPECIFIED.
  - P5 - 1 1/4"C., WITH FIVE (5) SETS OF CONDUCTORS AS SPECIFIED.
- — ID — INTRUSION DETECTION SYSTEM - 3/4"C., WITH CONDUCTORS AS SPECIFIED.
- — D1 — COMPUTER/DATA PROCESSING SYSTEM - 1"C. WITH CONDUCTORS AS SPECIFIED.
  - D2 - 1"C. WITH CONDUCTORS AS SPECIFIED.
  - D3 - 1"C. WITH CONDUCTORS AS SPECIFIED.
  - D4 - 1 1/4"C. WITH CONDUCTORS AS SPECIFIED.
  - D5 - 1 1/4"C WITH CONDUCTORS AS SPECIFIED.
- COMPUTER OUTLET WITH ONE (1) COMPUTER CONNECTOR, ON FLUSH WALL MOUNTED OUTLET BOX, +18", UNLESS NOTED OTHERWISE. "C" INDICATES HORIZONTAL FLUSH WALL MOUNTED OUTLET BOX +6" ABOVE COUNTER SPLASH. PROVIDE 1" CONDUIT INTO CEILING SPACE.
- C — COMPUTER OUTLET WITH TWO (2) COMPUTER CONNECTORS, ON FLUSH WALL MOUNTED OUTLET BOX, +18", UNLESS NOTED OTHERWISE. "C" INDICATES HORIZONTAL FLUSH WALL MOUNTED OUTLET BOX + 6" ABOVE COUNTER SPLASH. PROVIDE 1" CONDUIT INTO CEILING SPACE.
- C — COMPUTER OUTLET WITH THREE (3) COMPUTER CONNECTORS, ON FLUSH WALL MOUNTED OUTLET BOX, +18", UNLESS NOTED OTHERWISE. "C" INDICATES HORIZONTAL FLUSH WALL MOUNTED OUTLET BOX + 6" ABOVE COUNTER SPLASH. PROVIDE 1" CONDUIT INTO CEILING SPACE.

SCHOOL EQUIPMENT ANCHORAGE NOTES

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

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

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

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

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH 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 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 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 A PREAPPROVED INSTALLATION GUIDE (e.g., HCAI 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):

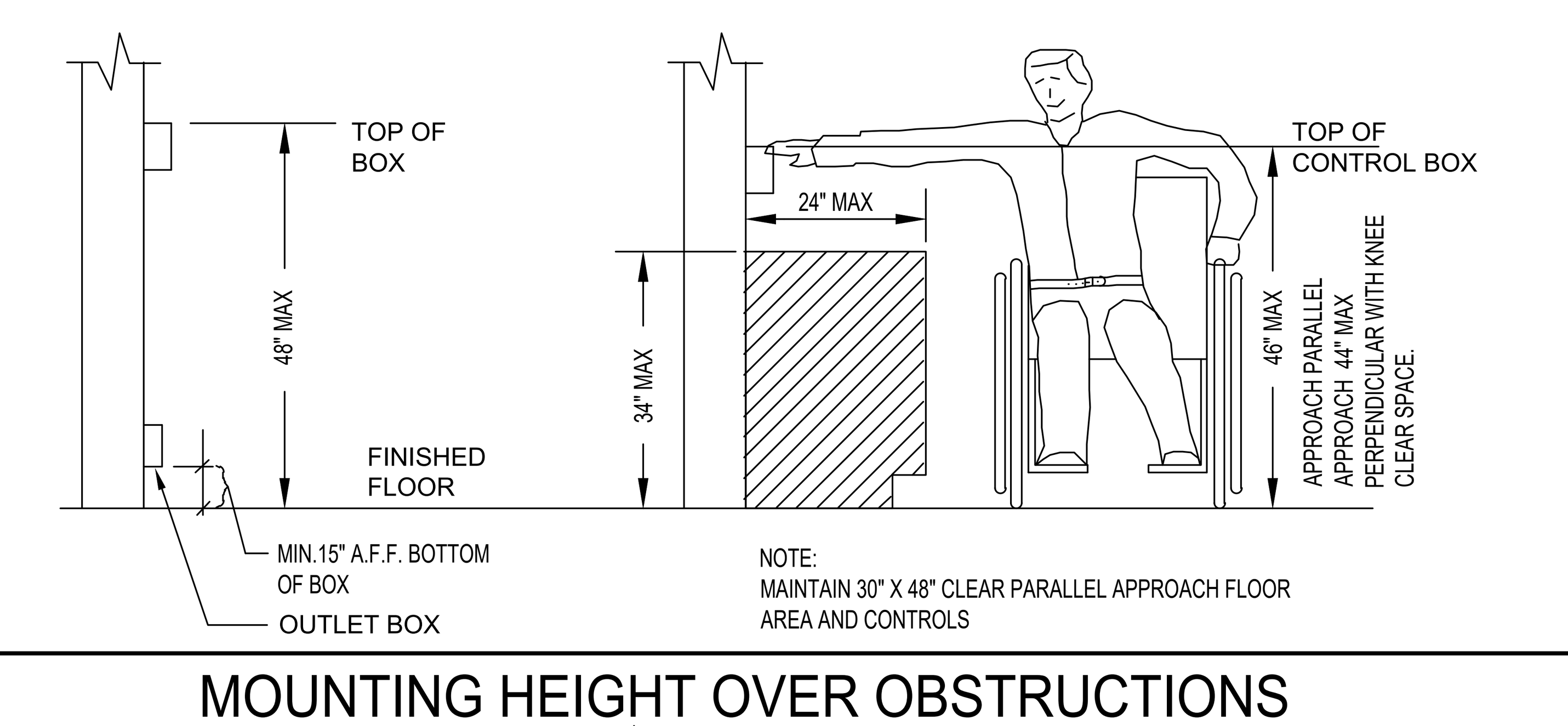
MP☐ MD☐ PP☐ E☒ - OPTION 1:DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ - OPTION 2: SHALL COMPLY WITH APPLICABLE HCAI (OSHPD) PRE-APPROVAL (OPM#) #______________.

GENERAL NOTES

1. THESE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE INSTALLATION OF SYSTEMS. THE OMISSION OR EXPRESSED REFERENCE TO ANY ITEM OF LABOR OR MATERIALS REQUIRED FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH PRESENT PRACTICE OF THE TRADE SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH ADDITIONAL LABOR AND MATERIALS.
2. REFER TO THE ARCHITECTURAL DRAWINGS FOR NOTES AND OTHER ELECTRICAL REQUIREMENTS NOT SHOWN ON THE ELECTRICAL DRAWINGS AND TO DETERMINE EXISTING CONSTRUCTION TO REMAIN AS WELL AS NEW CONSTRUCTION. IF THERE ARE OMISSIONS OR CONFLICTS BETWEEN THE ELECTRICAL DOCUMENTS AND THE DOCUMENTS OF OTHER TRADES, CLARIFY THESE POINTS WITH THE ARCHITECT BEFORE SUBMITTING A BID. NO EXTRA PAYMENT WILL BE ALLOWED FOR FAILURE TO OBTAIN THIS INFORMATION.
3. THESE PLANS, SPECIFICATIONS, AND ALL MATERIALS SHALL BE IN FULL ACCORDANCE WITH ALL LEGAL AND INDUSTRY REQUIREMENTS, AND STANDARDS INCLUDING WITHOUT LIMITATION TO THE FOLLOWING:
   a. CALIFORNIA CODE OF REGULATIONS TITLE 24, PARTS 1 AND 2 (CALIFORNIA BUILDING CODE), 2022 EDITION.
   b. CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 3 (CALIFORNIA ELECTRICAL CODE), 2022 EDITION.
   c. CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 6 (CALIFORNIA ENERGY CODE), 2022 EDITION.
   d. CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 9 (CALIFORNIA FIRE CODE), 2022 EDITION.
   e. OTHER REGULATING AGENCIES WHICH MAY HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES AND STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.
   f. THE ELECTRICAL SYSTEMS FUNCTIONALITY STANDARDS SET FORTH IN TITLE 7 OF THE CALIFORNIA CIVIL CODE (THE "RIGHT TO REPAIR ACT")
   g. THE MANUFACTURER'S REQUIREMENTS OR RECOMMENDATIONS FOR ANY INCORPORATED PRODUCTS.
   h. THE MOST CURRENT APPROVED ISSUES OF ANY NOTED SPECIFICATIONS, CODES AND STANDARDS, INCLUDING SUPPLEMENTS, UNLESS NOTED OTHERWISE.
4. THE PLANS REPRESENT ONLY THE FINISHED ELECTRICAL, FIRE ALARM, AND LOW VOLTAGE SYSTEMS, AND THEY ARE NOT INTENDED TO INDICATE OR REQUIRE ANY CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES.
5. IN USING THE PLANS FOR BIDDING OR CONSTRUCTION PURPOSES, THE CONTRACTOR IS REQUIRED TO REVIEW ALL OF THE PROJECT'S CONSTRUCTION DOCUMENTS AS A WHOLE IN ORDER TO IDENTIFY ALL REQUIREMENTS THAT DIRECTLY OR INDIRECTLY AFFECT ITS PORTION OF THE ELECTRICAL WORK, EVEN REQUIREMENTS LOCATED IN SECTIONS DESIGNATED AS APPLICABLE TO OTHER TRADES. IN CASE OF CONFLICTS, THE CONTRACTOR SHALL EITHER OBTAIN DIRECTION FROM AN APPROPRIATE OWNER REPRESENTATIVE OR OTHERWISE APPLY THE MORE STRINGENT REQUIREMENT.
6. IN INTERPRETATING THE PLANS, THE FOLLOWING GENERAL RULES APPLY:
   a. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.
   b. SCALED DIMENSIONS AND GRAPHICALLY SHOWN LOCATIONS ARE TO BE CONSIDERED ONLY APPROXIMATE. FIELD VERIFY DIMENSIONS PRIOR TO BID.
7. SUBMITTALS WILL BE REVIEWED BY THE ELECTRICAL ENGINEER, IF AT ALL, ONLY PURSUANT TO THE INDUSTRY STANDARD PROTOCOL SET FORTH IN A1A DOCUMENT A201, AND IN NO EVENT WILL THE SUBMITTAL REVIEW PROCESS RELIEVE OR LESSEN THE SUBMITTING CONTRACTOR'S RESPONSIBILITY FOR AN INAPPROPRIATE SUBMITTAL.
8. IN NO EVENT WILL ANY SITE VISITS BY THE ELECTRICAL ENGINEER CONCERN CONSTRUCTION MEANS AND METHODS OR CONSTRUCTION SAFETY, AND ALL SUCH MATTERS SHALL REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL FEATURES OF THE EXISTING BUILDINGS AND SITE, AND ALL DRAWINGS WHICH MAY AFFECT THE EXECUTION OF THE WORK. NO EXTRA PAYMENT WILL BE ALLOWED FOR FAILURE TO OBTAIN THIS INFORMATION.
10. THE DRAWINGS INDICATE IN A DIAGRAMMATIC MANNER, THE DESIRED LOCATIONS OF ARRANGEMENT OF THE COMPONENTS OF ELECTRICAL WORK. DETERMINE EXACT CONDUIT ROUTING, CONDUIT BENDS, AUXILIARY JUNCTION BOXES, SUPPORTS, AND UNDEFINED CONSTRUCTION DETAILS AS A JOB CONDITION TO BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE CODE REQUIREMENTS. PROPER JUDGEMENT MUST BE EXERCISED IN EXECUTING THE WORK SO AS TO SECURE THE BEST POSSIBLE INSTALLATION IN THE AVAILABLE SPACE, AND TO OVERCOME LOCAL DIFFICULTIES DUE TO SPACE LIMITATIONS OR INTERFERENCE OF CONDITIONS ENCOUNTERED.
11. THE DRAWINGS INDICATE APPROXIMATE LOCATIONS OF EXISTING CONDUITS. THE EXACT ROUTING SHALL BE VERIFIED IN FIELD AND LENGTH OF CONDUCTORS SHALL BE ADJUSTED TO THE LENGTH REQUIRED.
12. PERFORM CUTTING AND PATCHING ON THE CONSTRUCTION WORK WHICH MAY BE REQUIRED FOR THE PROPER INSTALLATION OF THE ELECTRICAL WORK. PATCHING SHALL BE OF THE SAME MATERIAL, WORKMANSHIP AND FINISH AS SPECIFIED AND ACCURATELY MATCH SURROUNDING WORK TO SATISFACTION OF THE ARCHITECT.
13. PROVIDE UL LISTED FIRE STOP FOR ALL PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS TO MAINTAIN ALL FIRE RATINGS. THE FIRE STOP MATERIALS SHALL BE RE-ENTERABLE AND REUSABLE.
14. GROUNDING SHALL BE EXECUTED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS, OF THE STATE OF CALIFORNIA
15. COORDINATE MOUNTING HEIGHTS OF RECEPTACLES, SWITCHES, A/V DEVICES, SECURITY DEVICES, ETC. MOUNTED ON COMMON WALLS SO THAT ALL OUTLETS ARE MOUNTED TO ALIGN HORIZONTALLY.
16. NOTIFY THE ARCHITECT IN WRITING WHEN INSTALLATION IS COMPLETE AND THAT A FINAL INSPECTION OF THIS WORK CAN BE PERFORMED. IN THE EVENT DEFECTS OR DEFICIENCIES ARE FOUND DURING THIS FINAL INSPECTION, THEY SHALL BE CORRECTED TO THE SATISFACTION OF THE ARCHITECT BEFORE FINAL ACCEPTANCE CAN BE ISSUED.

NOTE:
FORWARD APPROACH FOR DEVICES MOUNTED ABOVE COUNTER ASSUMES THAT DIRECTLY BELOW THE DEVICE, THE COUNTER HAS A 30" MINIMUM WIDE x 2" MINIMUM HIGH x A DEPTH EQUAL TO THE DEPTH OF THE DEVICE FROM THE COUNTER FRONT CLEAR OPENING. CBC 11B-306 &11B-308



MOUNTING HEIGHT OVER OBSTRUCTIONS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date: DSA
Revisions: 1 2 3

Consultant Stamp: REGISTERED PROFESSIONAL ENGINEER STEPHEN R. ZAJICEK No. E 10372 Exp. 09-30-24 ELECTRICAL STATE OF CALIFORNIA

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Costa Mesa, CA 92626
949.852.9995 • 949.852.1657 (fax)
fbaengr.com
FBA Job Number: 229.177

VSVES06 40x48 RELO CR

VALLECITOS ELEMENTARY PORTABLE BUILDING
for
VALLECITOS UNIFIED SCHOOL DISTRICT
FALLBROOK CALIFORNIA

Job Nº.: **VSVES06**

LICENSED ARCHITECT FRED HERNANDEZ No. C 20769 REN. 02-28-25 STATE OF CALIFORNIA

MGPA ARCHITECTURE
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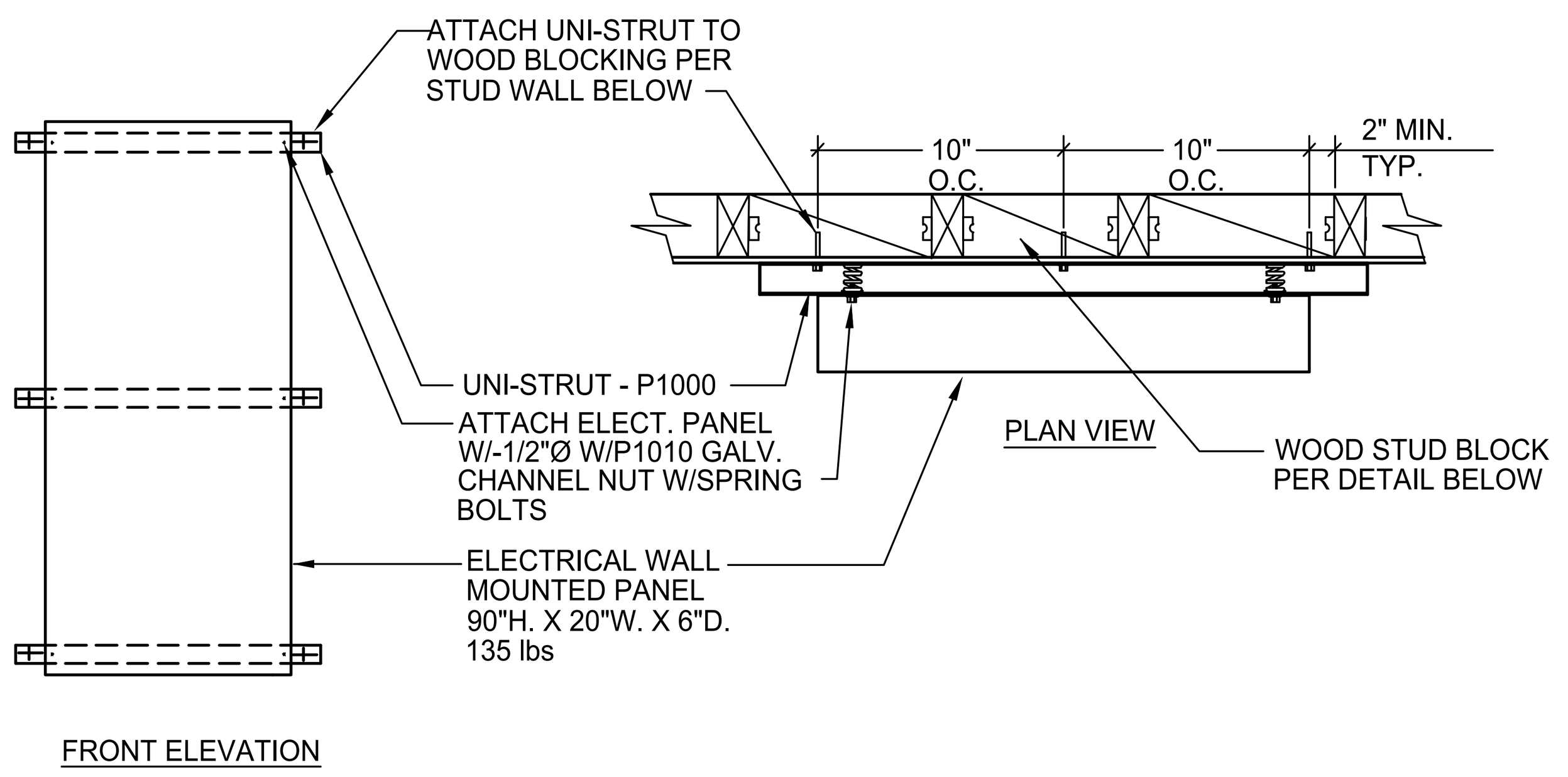
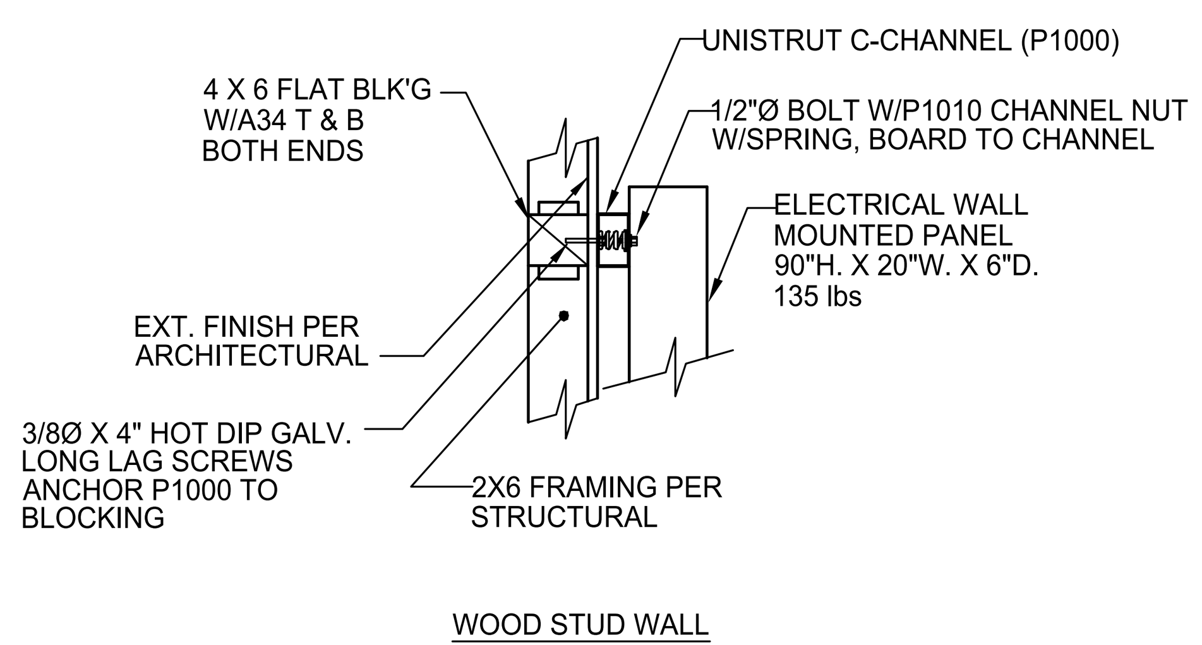
MGPA ARCHITECTURE

Sheet Title: SYMBOL LIST, GENERAL NOTES AND SINGLE LINE DIAGRAM

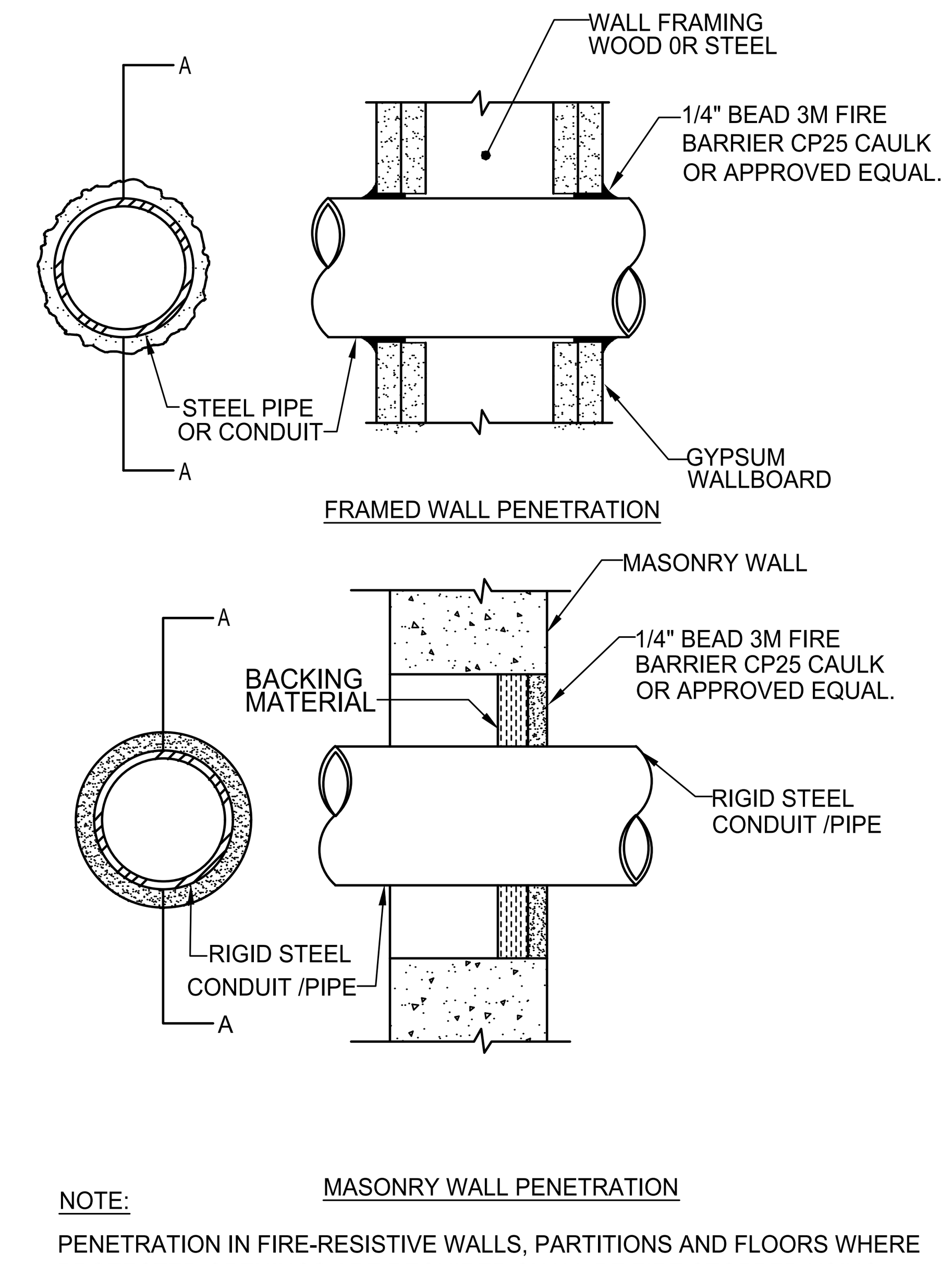
Sheet Number: E-0.1





WALL MOUNTED ELEC EQUIPMENT ANCHORAGE

SCALE: NONE | 5

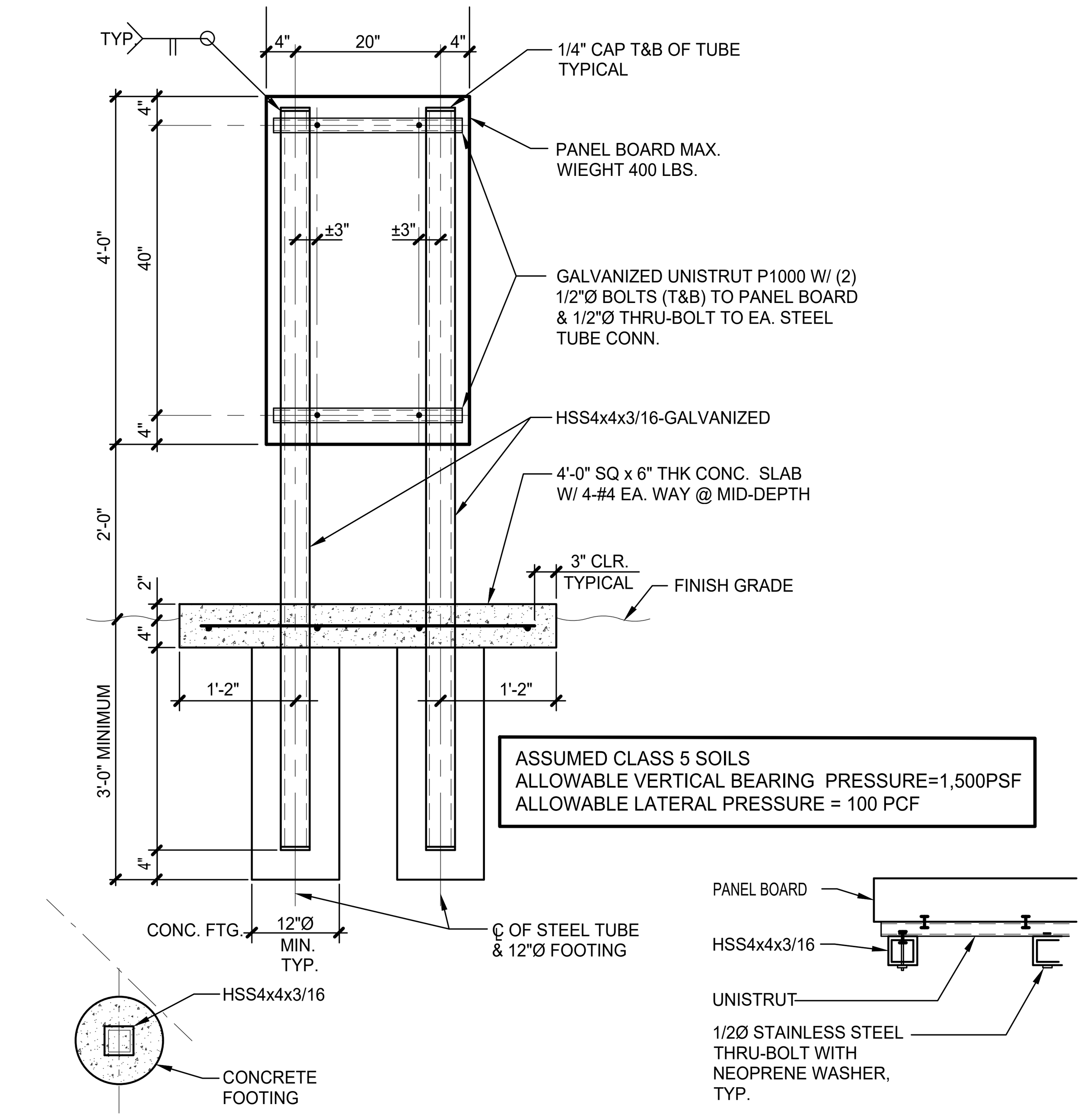


NOTE:

PENETRATION IN FIRE-RESISTIVE WALLS, PARTITIONS AND FLOORS WHERE PROTECTED OPENINGS ARE REQUIRED SHALL BE FIRE STOPPED USING APPROVED MATERIALS, SECURELY INSTALLED AND CAPABLE OF MAINTAINING THEIR INTEGRITY AND PREVENTING THE MOVEMENT OF HOT FLAMES OR GASSES THROUGH THE VOID SPACES BETWEEN PENETRATING MATERIALS AND WALLS, PARTITIONS AND FLOORS WHEN TESTED IN ACCORDANCE WITH ASTM STANDARD E-814 OR UL STANDARD 1479.

CONDUIT PENETRATION DETAIL

SCALE: NONE | 3

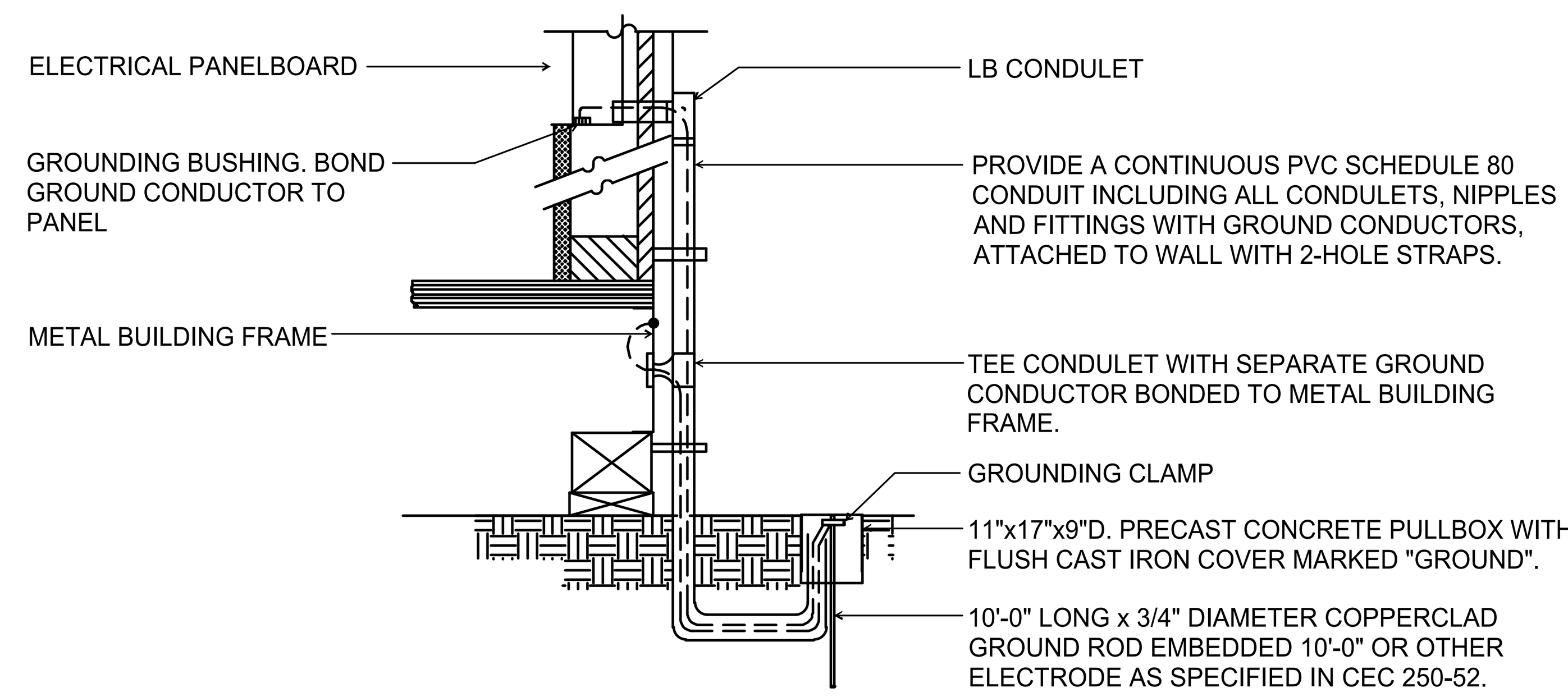


PANELBOARD MOUNTING DETAIL

SCALE: NONE | 1

NOT USED

SCALE: NONE | 6

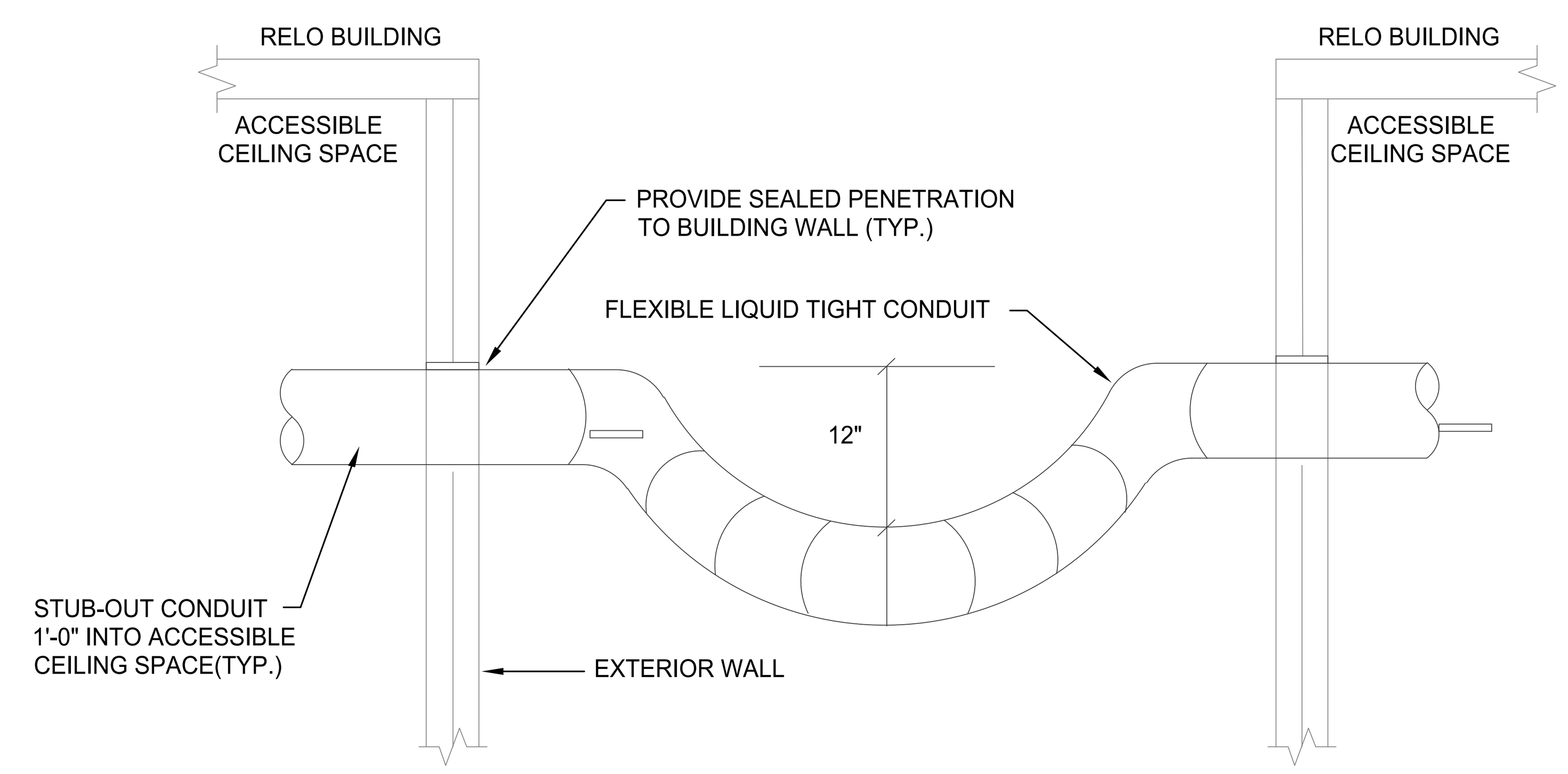


NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC. TABLE 250.66.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME (CEC 250.52). IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER. (BOLTING ONLY IS NOTE ACCEPTABLE BONDING.)
4. GROUNDING EARTH RESISTANCE SHALL NOT EXCEED 25 OHMS IF A SINGLE ROD,PIPE OR PLATE HAS EARTH RESISTANCE IN EXCESS OF 25 OHMS, SUPPLEMENTAL GROUNDING ELECTRODES SHALL BE ADDED AT 6 FEET MINIMUM INTERVALS IN ORDER TO ACHIEVE EARTH RESISTANCE OF LESS THAT 25 OHMS
5. WHERE MODULAR BUILDINGS ARE GROUPED TOGETHER, A GROUND ROD MAY BE INSTALLED AT THE END BUILDINGS AND A GROUND RING MAY BE INSTALLED BETWEEN THEM. EACH INTERMEDIATE MODULAR BUILDING MAY BE BONDED TO THAT GROUND RING. WHERE THIS METHOD IS USED, GROUND RESISTANCE TESTING SHALL NOT BE REQUIRED.
6. WHERE MODULAR BUILDINGS ARE INSTALLED ON CONCRETE FOUNDATIONS, A UFER GROUND SHALL BE INSTALLED IN THE FOOTING PER CEC 250.52 (A)(3).
7. OTHER GROUNDING METHODS IDENTIFIED IN CEC 250 SHALL BE ACCEPTABLE MEANS TO ACHIEVE ADEQUATE GROUNDING OF METAL BUILDINGS IN COMPLIANCE WITH THE ABOVE.
8. SEE SPECIFICATIONS FOR TESTING OF GROUNDING REQUIRED.

MODULAR BUILDING GROUND DETAIL

SCALE: NONE | 4



NOTES:

TO BE USED WHEN CONNECTING TWO BUILDINGS FOR NO MORE THAN 6' SEPARATION. SIZE OF CONDUIT AS REQUIRED. FOR DISTANCES IN EXCESS OF 6' PROVIDE UNDERGROUND INSTALLATION.

CONDUIT SEISMIC SLEEVE

SCALE: NONE | 2

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APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date: DSA
Revisions: 1 2 3
Consultant Stamp:
Consultant:
FBA Engineering
VSVES06 40x48 RELO CR

VALLECITOS ELEMENTARY
PORTABLE BUILDING
for
VALLECITOS UNIFIED SCHOOL DISTRICT
FALLBROOK CALIFORNIA

Job Nº.: VSVES06

MGPA ARCHITECTURE
An Architectural Corporation
Mailing: 6965 El Camino Real, Suites 105-278
Carlsbad, CA 92009
Tele: (760) 929-1500 Fax: (760) 929-1506

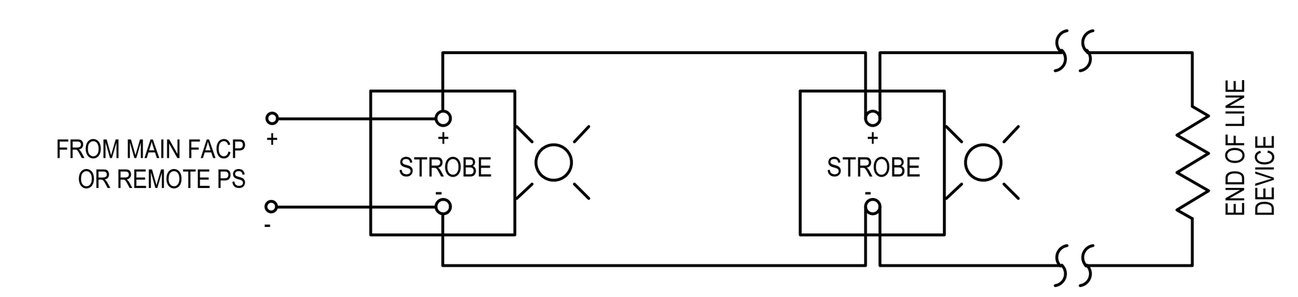
Sheet Title: ELECTRICAL DETAILS
Sheet Number: E-0.2

FIRE ALARM SEQUENCE OF OPERATION

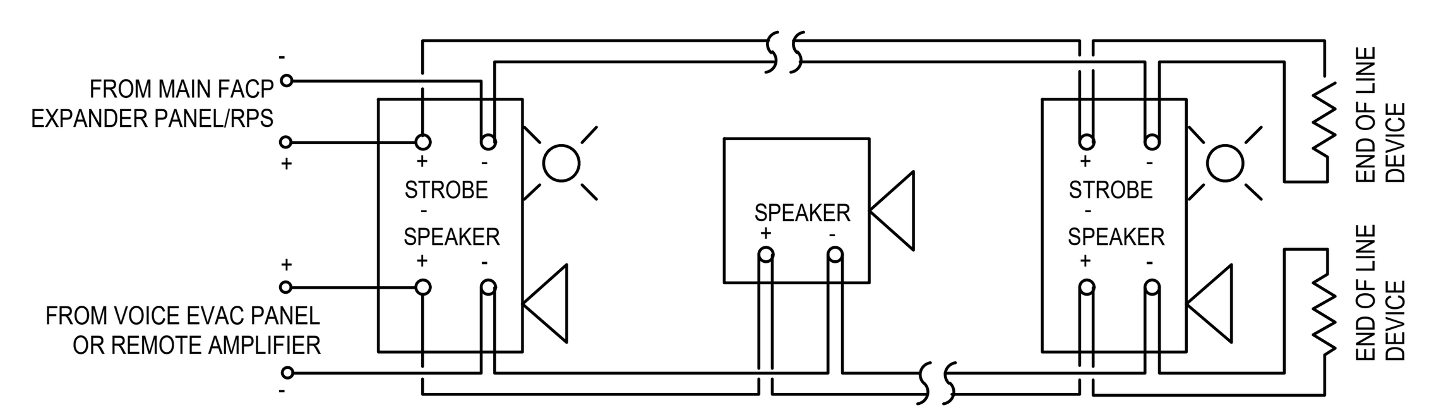
ACTION / DEVICE	AREA SMOKE DETECTOR	ATTIC SPACE HEAT DET.	GROUND FAULT/ SHORT CIRCUIT	LOW BATT	FACP 120VAC POWER FAIL	NOTES
ANNUNCIATE ALARM AT FACP AND REMOTE ANNUNCIATOR	X	X				
ANNUNCIATE SUPERVISORY CONDITION AT FACP AND REMOTE ANNUNCIATOR			X	X		
ANNUNCIATE TROUBLE AT FACP AND REMOTE ANNUNCIATOR	WIRING FAULT	WIRING FAULT	X	X	X	[1]
ACTIVATE AUDIBLE/VISUAL SIGNAL THROUGHOUT SCHOOL (ALARM)	X	X				
CONTACT CENTRAL STATION (UDACT)	X	X	X	X	X	

NOTES:
[1] INDICATE TROUBLE ON WIRING FAULT OR DEVICE AS REQUIRED.

NOTIFICATION APPLIANCE CIRCUIT WIRING



STROBE CIRCUIT



SPEAKER/STROBE CIRCUIT

SYSTEM CALCULATIONS

REMOTE POWER SUPPLY BATTERY CALCULATIONS "RPS1"

QTY	DEVICE	STAND BY CURRENT	ALARM CURRENT
1	S3	0.164	0.184
1	NAC 1 CKT. AV1	0.000	0.440
	TOTAL CURRENT DRAW	0.164	0.624

TOTAL STAND-BY CURRENT X 24 HOURS = 0.164 X 24 = 3.936 A-HR
TOTAL ALARM CURRENT X 15 MINUTES = 0.62 X 0.250 = 0.156 A-HR

TOTAL MINIMUM AMP HOURS OF BATTERIES = 4.092 A-HR
ADDITIONAL 30% DERATING SAFETY FACTOR = 5.320 A-HR

NOTES:
1. BATTERY CALCULATION SHALL BE BASED ON 24 HOURS OF STAND BY AND 15 MINUTES OF ALARM CURRENT
2. PROVIDE MINIMUM OF 8 A-HOURS ADDITIONAL STANDBY BATTERY POWER.

EXISTING FIRE ALARM BATTERY CALCULATIONS

ADDITIONAL LOAD TO EXISTING FIRE ALARM PANEL "EFACP"

QTY	DEVICE	STAND BY CURRENT	ALARM CURRENT
1	EXISTING FIRE ALARM PANEL LOAD	1.501	4.526
4	NEW SMOKE DETECTOR	0.001	0.026
4	NEW HEAT DETECTOR	0.001	0.026
	TOTAL CURRENT DRAW	1.503	4.578

TOTAL STAND-BY CURRENT X 24 HOURS = 1.503 X 24 = 36.082 A-HR
TOTAL ALARM CURRENT X 15 MINUTES = 4.58 X 0.250 = 1.145 A-HR

TOTAL ADDITIONAL MINIMUM AMP HOURS OF BATTERIES = 37.226 A-HR
25% ADDITIONAL LOAD TO MINIMUM AMP HOURS OF BATTERIES = 46.533 A-HR

NOTES:
1. BATTERY CALCULATION SHALL BE BASED ON 24 HOURS OF STAND BY AND 15 MINUTES OF ALARM CURRENT
2. EXISTING BATTERY BACKUP INSTALLED 55 AH.
3. PROVIDE ADDITIONAL FIRE ALARM BATTERY TERMINAL CABINET.

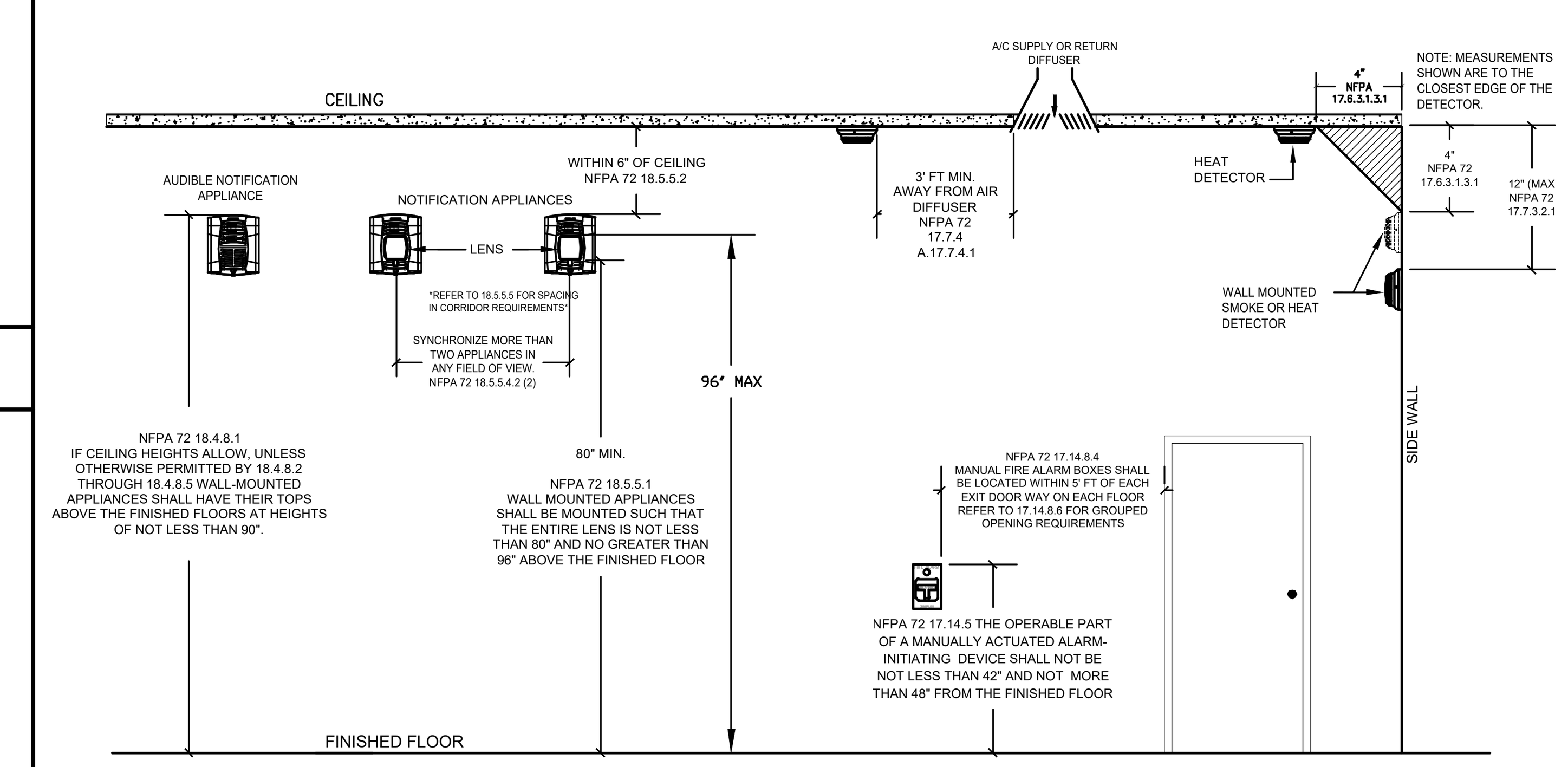
DEVICE	DEVICE CURRENT (AMPS)	CIRCUIT AV1 QTY	FROM RPS1 CURR.	QTY TOTAL
Audible-Strobes				
75cd	0.151	2	0.302	2
WP Horn	0.069	2	0.138	2
TOTAL CURRENT ON CIRCUIT		0.440	CURR. AMPS	
(MAXIMUM) WIRE LENGTH		200	FT.	
% VOLTAGE DROP		1.32	%	
WIRE SIZE	# AWG	12	6530	
CIRCUIT LOCATION				

CIRC. MILS		
18 AWG = 1620	VOLTAGE DROP =	DISTANCE X TOTAL CURR. X 21.6 / CIRCULAR MILS
16 AWG = 2580		
14 AWG = 4110		
12 AWG = 6530	% VOLTAGE DROP =	VOLTAGE DROP X 100 / 70.7 (SPK) 24V (STROBE)

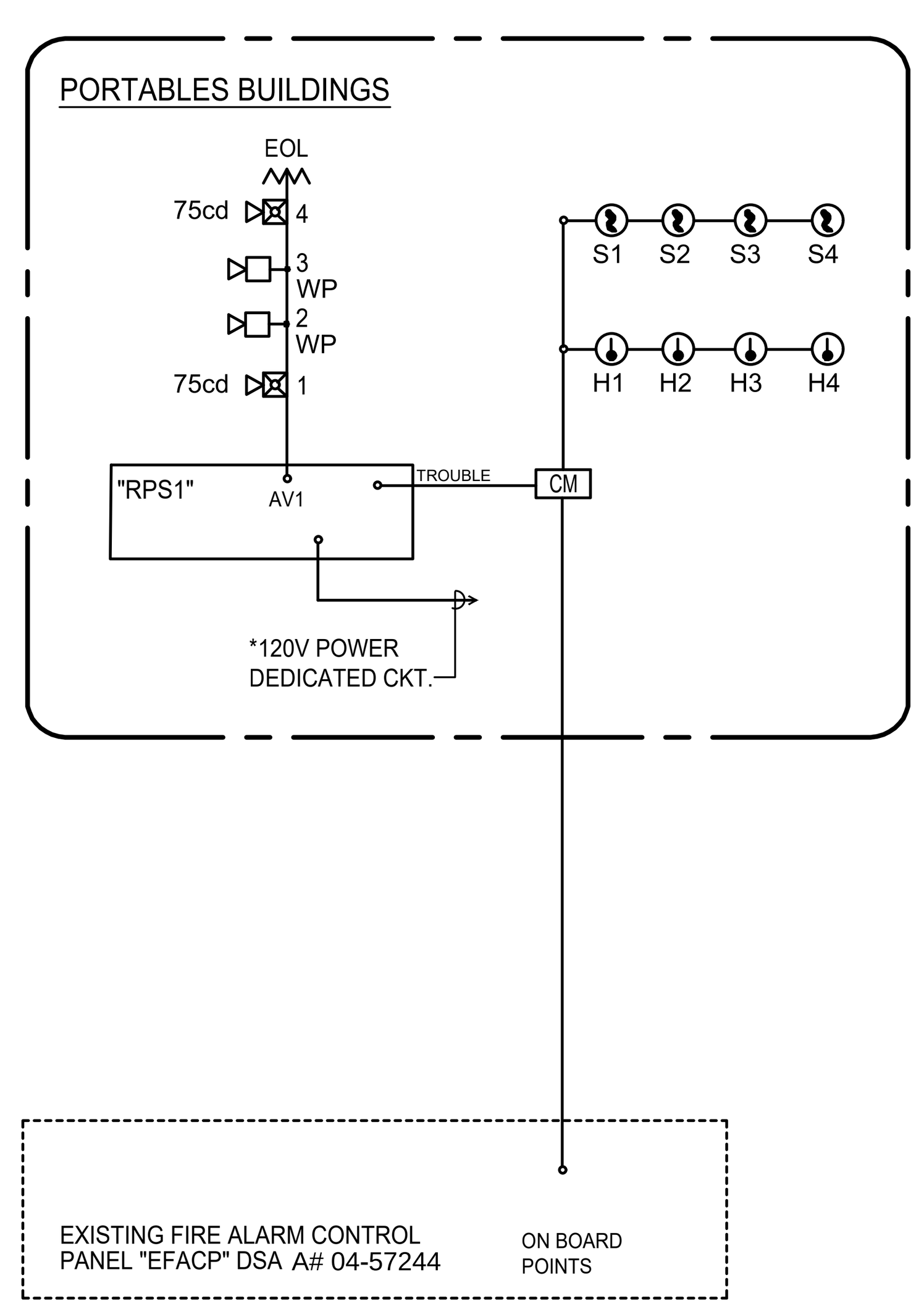
FIRE ALARM EQUIPMENT SCHEDULE

ITEM DESCRIPTION	SYMBOL	MOUNTING REQ'	MODEL NO#	CSFM LISTING#	NOTES
EXISTING FIRE ALARM CONTROL PANEL		EXISTING	GAMEWELL FCI S3 SERIES		
NEW FIRE ALARM EXPANDER PANEL "RSP-1"		+66" A.F.F. TO TOP OF BACKBOX	GAMEWELL/FCI HPF24S8	7315-1637:0102	
PHOTO SMOKE DETECTOR WITH 4 WIRE ADDRESSABLE DETECTOR BASE MOUNTED ON OUTLET BOX		CEILING	GAMEWELL/FCI ASD-PL3	7272-1703:0501	
PHOTO SMOKE WITH 135°F HEAT SENSOR WITH 4 WIRE ADDRESSABLE DETECTOR BASE MOUNTED ON OUTLET BOX		ATTIC SPACE	GAMEWELL/FCI ATD-HL2F	7270-1703:0115	
WEATHERPROOF HORN DEVICE ON FLUSH WALL MOUNTED OUTLET BOX	WP	+90" A.F.F TO TOP OF BOX	SYSTEM SENSOR HRK	7135-1653:0189	
HORNSTROBE DEVICE ON FLUSH MOUNTED OUTLET BOX (#CD DENOTES CANDELA RATING)	#cd	CEILING MOUNTED	SYSTEM SENSOR PC2RL	7135-1653:0503	
ADDRESSABLE CONTROL MODULE	CM	FIELD VERIFY LOC.	GAMEWELL/FCI AOM-2SF	7300-1703:0102	

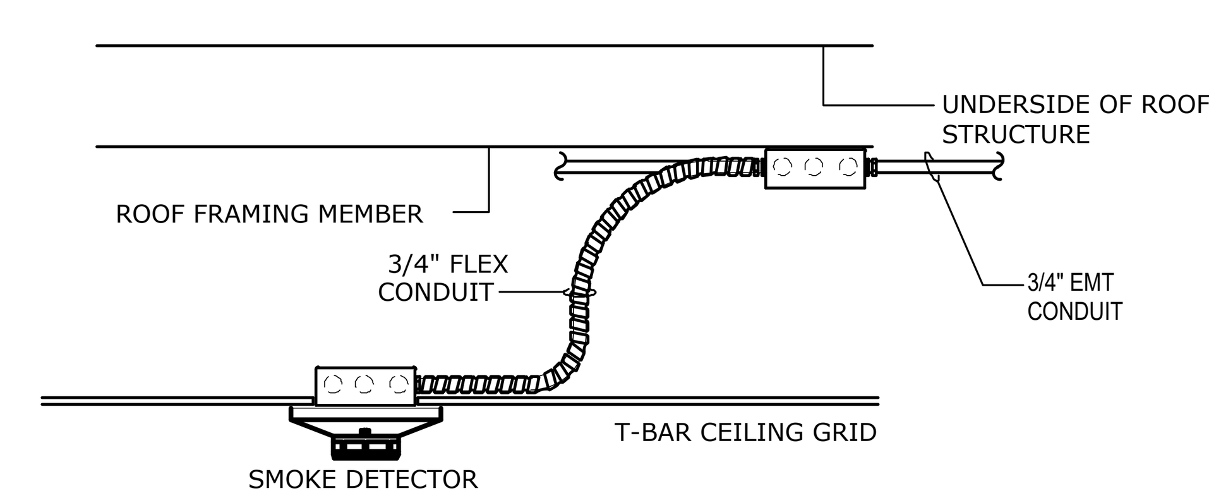
FIRE ALARM DEVICE MOUNTING ELEVATIONS



FIRE ALARM RISER DIAGRAM



DETECTOR DETAIL



FIRE ALARM SYSTEM NOTES

FIRE ALARM COMPLETE PLAN SUBMITTAL

1.0 PROJECT INFORMATION

A. OCCUPANCY GROUP
REFER TO ARCHITECTURAL DRAWINGS.

B. CONSTRUCTION TYPE
REFER TO ARCHITECTURAL DRAWINGS.

FIRE ALARM NOTE:
FIRE ALARM SUBMITTAL IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CFC-901.1 AND 907.1.1.

C. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, PART 2, CHAPTER 7, TITLE 24. REFER TO THE ARCHITECTURAL PLANS FOR FIRE-RATE CORRIDOR(S), OCCUPANCY SEPARATION(S) AND AREA SEPARATION WALL(S).

D. UPON COMPLETION OF SYSTEM INSTALLATION, THE SYSTEM SHALL BE TESTED IN THE PRESENCE OF AND IN A MANNER ACCEPTABLE TO THE ENFORCING AGENCY.

E. PROVIDE A STATEMENT OF COMPLIANCE WHEN REQUESTING INSPECTION CFC 901.2.1

F. THE FIRE ALARM SYSTEM DESIGN FOR THIS PROJECT IS ADDRESSABLE AND FULLY AUTOMATIC MASS NOTIFICATION SYSTEM.

2.0 APPLICABLE CODES AND STANDARDS

A. PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020*

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

B. PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2022 EDITION
UL 268	SMOKE DETECTOR FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2009 EDITION

3.0 UPON RECEIPT OF THE CERTIFICATE OF COMPLIANCE, THE INSTALLER SHALL SUPPLY THE OWNER WITH A WRITTEN OPERATING, TESTING AND MAINTENANCE INSTRUCTIONS, POINT-TO-POINT AS -BUILT DRAWINGS AND EQUIPMENT SPECIFICATIONS.

4.0 NFPA 72 CHAPTER 10,14 INSPECTION TESTING AND MAINTENANCE COMPLETE THE INSPECTION AND TESTING FORM IN ITS ENTIRETY SUBMIT A COPY TO THE DISTRICT, ARCHITECT AND DSA DIVISION OF FIRE AND LIFE SAFETY.

5.0 OCCUPANCY PROHIBITED TO ANY PORTION OF BUILDING UNTIL FIRE ALARM SYSTEM HAS BEEN TESTED AND APPROVED. CBC 901.5; CFC 901.5.1 RECORD DRAWINGS OF ALL INSPECTION, TEST SHALL BE MAINTAINED ON PREMISES MINIMUM THREE YEARS. CFC 901.6.2 (5 YEARS PER TITLE 14) SMOKE DETECTORS TO UTILIZE CALIBRATED MANUFACTURE SENSITIVITY TEST INSTRUMENT. CFC 907.9.4

6.0 CONTRACTOR TO FIELD VERIFY AND PROVIDE DECIBEL METER FOR TESTING OF AMBIENT NOISE LEVELS (MINIMUM 15db ABOVE AMBIENT NOISE LEVELS REQUIRED - SEE NPFA 72 TABLE 14.4.3.2). INSTALL ADDITIONAL AUDIBLE DEVICE AS NEEDED TO ATTAIN REQUIRED NOISE LEVELS AND INTELLIGIBILITY IN ALL REQUIRED AREAS. PROVIDE UPDATED PLANS AND CALCULATIONS THROUGH THE "DSA CONSTRUCTION CHANGE DOCUMENT" PROCESS WHEN INSTALLING ADDITIONAL DEVICES AND OR EQUIPMENT. PROJECT INSPECTOR (PI) TO WITNESS FINAL TEST OF THE SYSTEM. CONTRACTOR(S) TO PROVIDE FINAL TEST RESULTS AND PROVIDE THE "RECORD OF COMPLETION FORM" TO THE ARCHITECT OF RECORD, OWNER, DIVISION OF THE STATE ARCHITECT, PROJECT INSPECTOR (PI) AND LOCAL FIRE AUTHORITY (AHJ).

6.1 FIRE ALARM NOTIFICATION DEVICES WITHIN THE NOTIFICATION ZONE WILL BE SYNCHRONIZED IN ACCORDANCE WITH NFPA 72 18.5.5.7.2

6.2 CONTRACTOR SHALL PROVIDE 24 HOUR FIRE WATCH IN CASE EXISTING CAMPUS FIRE ALARM SYSTEM IS SHUTDOWN OR DURING THE DURATION OF THE CONSTRUCTION PHASE.(IF APPLICABLE TO THE PROJECT). REFER TO DSA DOCUMENT IR F-2 FOR MORE INFORMATION AND REQUIREMENTS.

6.3 EXISTING FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL DURING THE BUILDING MODERNIZATION CONSTRUCTION UNTIL THE NEW FIRE ALARM SYSTEM IS INSTALLED AND FULLY OPERABLE. UPON COMPLETE FINAL TEST AND APPROVAL OF THE NEW SYSTEM, EXISTING SYSTEM AND ITS DEVICES SHALL BE DISCONNECTED AND REMOVED AS REQUIRED.(IF APPLICABLE TO THE PROJECT).

6.4 TESTING OF THE FIRE ALARM SYSTEM SHALL INCLUDE BUT NOT LIMITED THE FOLLOWING:

A) AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBLES (dBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 Dba ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIED SPACE WITHIN THE BUILDING.

B) VISUAL DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISUAL DEVICES WITHING 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.

C) SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.

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DATE: 11/07/2024

Issue Date:
DSA

Revisions:
1
2
3

Consultant Stamp:
REGISTERED PROFESSIONAL ENGINEER STEPHEN R. ZAJICEK No. E 10372 Exp. 09-30-24 ELECTRICAL STATE OF CALIFORNIA

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VALLECITOS ELEMENTARY
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Sheet Title:
FIRE ALARM SYMBOLS, NOTES, RISER DIAGRAM LINE DIAGRAM

Sheet Number:
E-0.3

ELECTRICAL SPECIFICATIONS:

PART 1.00 GENERAL

1.01 RELATED DOCUMENTS

A. The requirements of the General Conditions, Supplementary General Conditions and pertinent provisions of sections in Division One of these specifications apply to the work specified in this section.

1.02 SCOPE

A. Work Included: All labor, materials, appliance, tools, equipment, facilities, transportation and service necessary for, and incidental to, performing all operations in connection with furnishing, delivery and installation of the work of this Section, complete, as shown on the drawings and/or specified herein.

1.03 GENERAL SUMMARY OF ELECTRICAL WORK

A. The specifications and drawings are intended to cover a complete installation of systems. The omission of expressed reference to any item of labor or materials for the proper execution of the work in accordance with present practice of the trade shall not relieve the Contractor from providing such additional labor and materials.

B. Refer to the drawings and shop drawings of other trades for additional details which affect the proper installation of this work.

C. The Electrical Drawings are diagrammatic in many respects. It is not within the scope of these drawings to show all necessary bends, offsets, or pullboxes required. Sizes and locations of equipment and wiring may be distorted for clarity on the drawings. Exact locations of all lighting fixtures, outlets, exit signs, wiring devices, and the like, shall be shown on Architectural Drawings, as dimensioned on plans, or as approved by Architect.

D. Before submitting a bid, the Contractor shall familiarize himself with all features of the existing building, and all building drawings and site drawings which may affect the execution of the work. No extra payment will be allowed for failure to obtain this information.

E. This project is a partial remodel of an existing building. Refer to the Architectural Drawings for notes and other electrical requirements not shown on the Electrical Drawings and to determine existing construction to remain as well as new construction. If there are omissions or conflicts between the Electrical Documents and the documents of other trades or between the Electrical Drawings and Specifications, clarify these points with the Architect before submitting a bid. No extra payment will be allowed for failure to obtain this information.

F. Provide all line voltage electrical work, materials and control equipment required for proper operation of the air conditioning, heating, ventilating and plumbing equipment, as specified by the respective trade. This work may or may not be included on the Electrical Drawings.

1.04 LOCATIONS OF EQUIPMENT

A. The drawings indicate diagrammatically the desired locations of arrangements of conduit runs, outlets, equipment, etc., and are to be followed as closely as possible. Proper judgment must be exercised in executing the work so as to secure the best possible installation in the available space and to overcome local difficulties due to space limitations or interference of structural conditions encountered.

B. In the event changes in the indicated locations or arrangements are necessary, due to developed conditions in the building construction or rearrangement of equipment, such changes shall be made without cost providing the change is ordered before the conduit runs, etc., and work directly connected to same is installed and no extra materials are required.

C. The drawings indicate approximate locations of existing conduits. The exact routing shall be verified in field and length of conductors shall be adjusted to the length required.

D. Coordinate and cooperate in every way with other trades in order to avoid interference and assure a satisfactory job.

1.05 QUALITY ASSURANCE, STANDARDS AND SYMBOLS

A. Work and materials in full accordance with the latest rules and regulations of the California Code of Regulations, Title 24,Title "8 Division of Industrial Safety", California Electrical Code, the National Life Safety Code, pertinent N.F.P.A. Publications and other federal state or other city agencies having jurisdiction.

B. Keep a copy of all applicable codes available at the job site at all times while performing work under this section. Nothing in plans or specifications shall be construed to permit work not conforming to the most stringent of codes.

C. Should any changes be necessary in the drawings or specifications to make the work comply with these requirements, the Contractor shall notify the Architect at once in writing and cease work in parts of the contract which are affected.

1.06 SUBMITTALS

A. Material Lists and Shop Drawings

1. Submit 6 copies of materials list and shop drawings for approval. The materials list of installation materials shall indicate proposed equipment manufacturers. Submittals shall be organized in completed bound groups for materials (i.e., all lighting fixtures or all switchgear, etc.). Departure from the above procedure will result in resubmittals and delays. The Contractor shall verify dimensions of equipment and be satisfied as to fit and that they comply with all code requirements relating to clear working space about electrical equipment prior to submitting shop drawings for approval. Where current limiting fuse devices are specified, submit technical data to indicate fuses adequately protect equipment and that the fuses are selective to the circuit breakers that it protects.

2. Submit shop drawings for all electrical items except installation materials such as conduit, conduit fittings, outlet boxes, 600-volt conductors, wiring devices, etc.

3. Submittals which are intended to be reviewed as a substitution or departure from the contract documents must be specifically noted as such or the requirements of the contract documents will prevail, regardless of the acceptance of the submittal.

4. Shop drawings shall include dimensioned plans, elevations, details, wiring diagrams and descriptive literature of component parts where applicable. Structural calculations and mounting details, signed by a structural engineer registered by the State of California, shall be submitted for all equipment weighing over four hundred pounds, and shall be in compliance with Title 21 of the California Administrative Code.

5. Shop drawings shall include the manufacturer's projected days for shipment from the factory of completed equipment, after the equipment is released for production by the Contractor. It shall be the responsibility of the Contractor to ensure that all material and equipment is ordered in time to provide an orderly progression of the work. The Contractor shall notify the Architect of any changes in delivery which would affect the project completion date.

B. Maintenance and Operation Manuals

1. Contractor shall furnish three copies of typewritten maintenance and operating manuals for all electrical equipment to the Owner and instruct Owner's personnel in correct operation of all equipment at completion of project.

2. Maintenance and operating manuals shall be bound in three-ring, hard-cover, plastic binders and shall be delivered to the Owner with letter of transmittal, carbon copy to the Architect.

C. Portable or Detachable Parts: The contractor shall retain in his possession and be responsible for all portable and detachable parts or portions of the installation such as fuses, keys, locks adapters, locking clips, and inserts until final completion of his work. These parts shall then be delivered to the Owner or his authorized representative and an itemized receipt obtained, with copies of receipt sent to the Architect.

1.07 RECORD DRAWINGS

A. Provide and maintain in good order a complete set of electrical contract prints. Changes to the contract to be clearly recorded on this set of prints. At the end of the project, the Contractor shall transfer all changes to one set reproducible drawings to be delivered unfolded to the Architect.

B. The Contractor shall keep the "as-built" prints up to date current with all work performed.

1.08 CLEANING EQUIPMENT, MATERIALS, PREMISES

A. All parts of the equipment shall be thoroughly cleaned of dirt, rust, cement, plaster, etc., and all cracks and corners scraped out clean. Surfaces to be painted shall be carefully cleaned of grease and oil spots and left smooth, clean and in proper condition to receive paint finish.

1.09 JOB CONDITIONS - PROTECTION

A. Protect all work, materials and equipment from damage from any cause whatever and provide adequate and proper storage facilities during the progress of the work. Provide for the safety and good condition of all the work until final acceptance of the work by the Owner and replace all damaged or defective work, materials and equipment before requesting final acceptance.

B. Provide UL listed fire stop for all penetration through fire rated floor, wall, ceiling and roof assemblies to maintain all fire ratings. The fire stop materials shall be re-enterable and reusable, as manufactured by Nelson, type "FSP", or equal by 3M Company.

1.10 CUTTING AND PATCHING

A. Perform cutting and patching on the construction work which may be required for the proper installation of the electrical work. Patching shall be of the same material, workmanship and finish as specified and accurately match surrounding work to satisfaction of the Architect.

1.11 IDENTIFICATION

A. Panelboards, terminal cabinets, circuit breakers, disconnect switches, starters, relays, time switches, contactors, pushbutton control stations, and other apparatus used for operation of controls of feeders, circuits, appliances, or equipment shall be properly identified by means of descriptive nameplates or tags permanently attached to the apparatus and wiring.

B. Nameplates shall be engraved laminated phenolic. Shop drawings with dimensions and format shall be submitted to the Architect before installation. Attachment to equipment shall be with escutcheon pins, rivets, self-tapping screws or machine screws. Self-adhering or adhesive backed nameplates shall not be used.

C. Provide black-on-white laminated plastic nameplate engraved in minimum 1/4" high letters to correspond with the designations on the drawings. Provide other additional information on nameplates where indicated.

D. For equipment containing or operating on circuits of more than 240 volts nominal, provide red-on-white laminated warning signs engraved in 1/2" high letters to read "CAUTION - 480 (or as applicable) VOLTS".

E. Tags shall be attached to feeder wiring in conduits at every point where runs are broken or terminated and shall include pull wires in empty conduits. Circuit, phase, and function shall be indicated. Branch circuit shall be tagged on panelboards. Tags may be made of pressure sensitive plastic or embossed, self-attached, stainless steel or brass ribbon.

F. Cardholders and cards shall be provided for circuit identification in panelboards. Cardholders shall consist of a metal frame retaining a clear plastic cover permanently attached to the inside of panel door. List of circuits shall be typewritten on card. Circuit description shall include name or number of circuit, area, and connected load.

G. Junction and pullboxes shall have covers stenciled with box number when shown on the drawings, or circuit numbers according to panel schedule. Data shall be lettered in an inconspicuous manner with a color contrasting to finish.

1.12 ELECTRICAL WORK CLOSEOUT

A. Prepare the following items and submit to the Architect before final acceptance.

1. Two copies of all test results as required under this section.

2. Two copies of local and/or state code enforcing authorities final inspection certificates.

3. Copies of as-built record drawings as required under the General Conditions, pertinent Division One Section and Electrical General Provisions.

4. Two copies of all receipts transferring portable or detachable parts to the Owner when requested.

5. Notify the Architect in writing when installation is complete and that a final inspection of this work can be performed. In the event defects or deficiencies are found during this final inspection, they shall be corrected to the satisfaction of the Architect before final acceptance can be issued.

6. Three copies of operating and maintenance instruction books covering all electrical equipment and systems.

1.13 EQUIPMENT SEISMIC REQUIREMENTS

A. Equipment supports and anchorage's provided as part of the contract shall be designed, constructed and installed in accordance with the earthquake regulations of the California Building Code, Title 24, Section 1632A.

B. For equipment weighing over four hundred pounds provide equipment anchorage details, coordinated with the equipment mounting provision, prepared, signed and "stamped" with PE registration by a civil or structural engineer licensed as a Professional Engineer (PE) in the State of California.

C. Mounting recommendations shall be provided by the manufacturer based upon approved shake table tests used to verify the seismic design of that type of equipment.

D. The seismic requirements are typical for each equipment item exceeding 100 pounds.

PART 2 - PRODUCTS

2.01 CONDUIT

A. Rigid metal conduit: Steel, hot-dip galvanized, sherardized or zinc coated.

B. Intermediate Steel Conduit (IMC): Steel, hot-dip galvanized, sherardized or zinc coated. Couplings and connectors shall be threaded and rated "liquid tight".

C. Electrical metallic tubing: Steel, galvanized or sherardized. Couplings and connectors, seamless steel construction and of the set screw or watertight compression type equal to Thomas & Betts Co. #5123 or #5031 Series, complete with insulated throats.

D. Flexible Conduit: Steel, galvanized. Connector shall be equal to Thomas & Betts Co. #3312 and/or #3332 Series, complete with insulated throat.

E. Liquid-tight flexible conduit: Sealtite Type U.A. with Appleton Series "ST" connectors.

F. Rigid Non Metallic Conduit (RNMC):

1. Polyvinyl Chloride (PVC)-RNMC

a. PVC-schedule 40 heavy wall construction.

b. PVC-schedule 80 extra heavy wall construction.

c. PVC-type EB.

2. RNMC fittings connecting to metallic raceways shall be provided with a ground/bond jumper connection.

2.02 WIRE AND CABLE

A. Copper conductors: #12 AWG minimum unless specifically noted otherwise on the drawings. Conductors #10 AWG and smaller shall be solid and #8 AWG and larger shall be stranded. Type of wire as noted on drawings or as follows:

1. Type THWN/THHN insulation used for all conductors unless otherwise noted.

2. Type THHN insulation used for circuit conductors installed in fluorescent lighting fixture raceways, for conductors connected to the secondary of fluorescent or mercury vapor fixture ballast or other hot locations.

3. Type XHHW or THWN insulation shall be used where conductors are installed in conduit exposed to the weather.

4. The following color code for 120/208 volt branch circuits: Neutral - White (Tape feeder neutrals with white tape near connections); Ground - Green; Isolated Ground - Green with yellow stripe; Phase A - Black; Phase B - Red; Phase C - Blue.

5. The following color code for 277/480 volt branch circuits: Neutral - Grey - Tape feeder neutrals with Grey tape near connections); Ground - Green; Phase A - Brown; Phase B - Orange; Phase C - Yellow.

6. When individual neutral conductors are required for each branch circuit, the color code for the neutral conductors shall be as follows: Phase A - White with Black stripe; Phase B - White with Red Stripe; Phase C - White with Blue stripe. All common neutral conductors, when required, shall be White without any stripes.

7. Feeders identified as to phase or leg in each panelboard with printed identifying tape.

8. Color coding for mechanical and plumbing control wiring shall be an agreed upon color code between the Mechanical/Plumbing Contractor

b. PVC-schedule 80 extra heavy wall construction.

2. RNMC fittings connecting to metallic raceways shall

2.03 OUTLET BOXES

A. Outlet boxes and covers to be pressed steel, knockout type or cast iron with drilled, tapped and plugged holes, hot-dipped galvanized or sherardized. Boxes of proper code size for the number of wires or conduits passing through or terminating therein, but in no case shall box be less than 4" square, unless specifically noted as smaller on the drawings or boxes at end of a run and containing a single device may be of the "Handy Box" type. Covers for flush outlets finish flush with plaster or other finished surface.

B. All boxes for data, telephone and combination outlets shall be 4-11/16" square by 2-1/2" deep minimum, with extension ring as required to accommodate the outlet assembly to be installed.

2.04 SWITCHES

A. Switches shall be totally enclosed, specification grade, toggle switch type, color white with 277 volt A.C. rating for full capacity of contacts with incandescent or fluorescent lamp loads. Switch ratings shall be 20 ampere only. Hubbell #CS1221 or equal by P & S or Leviton. Color as selected by Architect.

B. Where switches are mounted in multiple gang assembly and are operating at 277 volts and/or 277 volts and 120 volts mounted in same outlet boxes, there shall be a barrier installed between each switch.

C. Color of switches shall be as selected by Architect.

2.05 RECEPTACLES

A. All receptacles in flush type outlet boxes shall be installed with a bonding jumper for ground between the grounded outlet box and the receptacle ground terminal. Grounding through the receptacle mounting straps is not acceptable. The bonding jumper shall be sized in accordance with the branch circuit protective device as tabulated herein under "grounding". Bonding jumper shall be attached at each outlet to the back of the box using drilled and tapped holes and washer head screws 6-32 or larger. For receptacles in surface mounted outlet boxes direct metal-to-metal contact between receptacle mounting strap (if it is connect to the ground contacts) and outlet boxes may be used.

B. Duplex convenience receptacles shall be specification grade, color white, 120 volt, 15 ampere, NEMA 5-15R grounding type with grounding contact which is internally connected to the frame. Outlet shall accommodate standard parallel blade cap and shall be back and side wired. Hubbell #CR5252 or equal by P & S or Leviton.

C. Where duplex receptacle is supplied by separate 20-ampere, circuit, receptacle shall be NEMA 5-2OR. Hubbell #CR5352 or equal by P & S or Leviton.

D. Ground fault type duplex receptacle shall be 15 ampere outlet with 20 ampere feed through, NEMA 5-15R. Hubbell #GFR5252 or equal by P & S or Leviton.

E. Isolated Ground receptacles shall be identified with an orange triangle on an orange receptacle body. Hubbell #CR5252IG or equal by P&S or Leviton.

F. Weatherproof receptacle: Ground fault type duplex receptacle. On exposed conduit runs, weatherproof ground fault type receptacles as hereinbefore specified, installed in "FS" condulet. Covers shall be one of the following door type covers: Hubbell #WP26M or equal by P&S.

G. Special outlets as indicated on drawings.

H. Color of receptacles shall be as selected by Architect.

2.06 PLATES

A. Provide plates for every switch, receptacle, telephone outlet, data outlet. All plates shall be thermoplastic or nylon on all outlets, unless specifically noted otherwise. Color as selected by Architect.

2.07 CIRCUIT BREAKER

A. Where two or three pole breakers occur in the panels, they shall be common trip units. Single pole breakers with tie-bar between handles will not be accepted.

B. Circuit breakers shall be arranged in the panels so that the breakers on the proper trip settings and numbers correspond to the numbering in the panel schedules on the drawings. Circuit numbers of breakers shall be black-on-white micarta tabs or other previously approved method. Circuit number tabs which can readily be changed from front of panel will not be accepted. Circuit number tabs which can shall not be attached to or be a part of the breaker.

C. Circuit breakers shall be bolt on type.

2.08 DISCONNECTS

A. Disconnect switches shall be 250 volt or 600 volt A.C., NEMA Type HD, quick-made, quick-break, h.p. rated, fusible or non-fusible Class "R", in NEMA Type I enclosure, lockable, with number of poles and amperage as indicated on the drawings. Where enclosure is indicated W.P. (weatherproof) switches shall be in rain-tight NEMA Type 3R enclosure, lockable. Maximum voltage, current and horsepower rating clearly marked on the switch enclosure and switches having dual element fuses shall have rating indicated on the metal plate. Manufactured by GE, Square-D or approved equal.

2.09 PANELBOARDS

A. Panelboards shall be flush or surface mounting as indicated with circuit breakers as shown on panel schedule, hinged lockable doors, index card holders and proper bussing.

B. Where indicated on the drawings, panelboards shall be furnished with subfeed breakers and/or lugs, split bussing, contactors, time switches, relays, etc., as required.

C. All panelboards shall be keyed alike.

D. All panelboards shall be finished with one coat of zinc chromate and coat of primer sealer after a thorough cleaning where exposed to public view (e.g., corridors, covered passages, offices, etc.) and gray in switchboard, janitor's heater and storage rooms. Prime coated panelboard shall be painted to match surroundings after installation. Panelboards shall be fabricated of sheet steel of the following minimum gauges; Door and trim #12; enclosure - code

E. Furnish all panelboards and terminal cabinets with manufacturer flush locks and keys except where indicated otherwise herein. Fasten the trim to panelboards and terminal cabinets by means of concealed, bolted or screwed fasteners accessible only when the door is open.

F. Panelboard 208/120 volt, three phase, 4 wire, S/N or 120/240 volt, single phase, 3 wire, S/N.

Panelboard types as manufactured by:

1. Cutler-Hammer.........Type Pow-R-Line 1
2. General Electric......Type AQ
3. Square D.............Type NQD
4. Siemens..............Type S series

G. Panelboards for 480/277 volt, three phase, 4 wire, S/N.

Panelboard types as manufactured by:

1. Cutler Hammer.........Type Pow-R-Line 1
2. General Electric......Type "A" Series
3. Square D.............Type NEHB

H. Panelboards shown on the drawings with relays, time clocks or other control devices shall have a separate metal barriered compartment mounted above panel with separate hinged locking door to match panelboard. Provide mounting subbase in cabinet for control devices and wiring terminal strips.

I. Panelboard shall have a circuit index card holder removable type, with clear plastic cover. Index card shall have numbers imprinted to match circuit breaker numbers.

J. Bussing shall be rectangular cross section copper, or silver or tin-plated aluminum. Bussing shall be full length of the enclosure.

K. Panelboards indicated to be suitable for non-linear loads shall be U.L. listed for connection to non-linear loads. Neutral bus shall be rated to carry 200% of the phase bus current rating.

L. Isolated ground bus panelboards supplying circuits with isolated ground receptacles or panelboards indicated to contain isolated grounds on the drawings shall be supplied with an additional ground bus electrically isolated from the panelboard interior, the raceway ground and the non-isolated ground equipment ground bus.

PART 3 - EXECUTION

3.01 GROUNDING

A. All grounding shall be in accordance with cec article 250.

B. Grounding shall be executed in accordance with all applicable codes and regulations and local authorities having jurisdiction.

C. Provide ground conductor in all branch circuit conduits serving receptacle loads.

D. Ground conductors for branch circuit wiring shall be attached at each outlet to the back of the box using drilled and tapped holes and washer head screws, 6-32 or larger.

E. Each panelboard, switchboard, pullbox or any other enclosure in which several ground wires are terminated shall be equipped with a ground bus secured to the interior of the enclosure. The bus shall have a separate lug for each ground conductor. No more than one conductor shall be installed per lug.

3.02 CONDUIT

A. The sizes of the conduits for the various circuits as indicated on the drawings and as required by code for the size and number of conductors to be pulled therein. Open ends capped with approved manufactured conduit seals as soon as installed and kept capped until ready to pull in conductors. Where running thread unions are necessary, only approved manufactured conduit unions used. No bends or offsets will be permitted unless absolutely necessary. Conduits to be concealed except as noted otherwise.

B. Rigid steel conduit or intermediate metal conduit shall be used where placed underground in concrete, in brick or masonry walls or exposed on roofs. Rigid steel conduit shall not be installed in direct contact with the earth or sand. Conduits installed in a wet, or exposed location in concrete have threads filled with red lead. For short runs of conduits installed in the ground and with Architect's approval, conduits may be "half" lapped with polyvinyl chloride tape equal to Scotch Wrap. Joints to be "double" wrapped. Tape shall be 10 mil. thick.

C. Electrical metallic tubing up to and including 4 inch may be installed as permitted by codes reference within specification.

D. Flexible conduit may be installed as permitted by codes referenced within specifications. Sealtite, flexible conduit used for final connections to motors and in wet, damp or outdoor areas where drawings indicate the use of flexible conduit.

E. Conduits throughout the work shall be securely and rigidly supported. Supports placed not more than 10' apart and with a support provided not more than 3' from any outlet or bend.

F. RNMC Installation Locations

RNMC conduit and RNMC fittings shall be installed in the following locations containing only "non-hazardous material":

1. Underground, concealed below earth grade, unless specifically noted or specified otherwise.

2. Exposed on utility service poles, for pole risers at 9 feet or higher above finish grade, schedule 80 PVC only.

3. RNMC type "EB" conduit(s) shall be concrete encased along the entire length of the conduits for all installation locations.

G. Conduit over metal channel, lath and plaster ceilings securely tied to the furring channels with #16 gauge galvanized wire ties space not over 4' apart.

H. Conduit placed against concrete above ground fastened to the concrete with pipe straps or one-screw conduit clamps attached to the concrete by means of expansion screw anchors and screws.

I. Conduits which are installed at this time and left empty for future shall have polyvinyl rope left in place for future use.

J. Conduit stub ups shall be provided with insulated throat bushings

K. Conduit exposed shall be run at right angles or parallel to the walls or structures. All changes in direction, either horizontally or vertically shall be made with conduit outlet bodies as manufactured by Crouse Hinds or equal. Conduits run on exposed beams or trellis work shall be painted to match surrounding surfaces. Conduits run exposed on roofs shall be rigid steel or intermediate metal conduit and shall be installed on 4 x 4 redwood sleepers, maximum 5 foot on centers. Sleepers shall be set on non-hardening mastic.

L. Re-route conduit where necessary to clear structural and mechanical obstructions.

M. Provide expansion and deflection fittings, with bonding jumper at all building expansion or seismic joint crossings.

3.03 OUTLET JUNCTION BOXES

A. Flush mounted boxes shall be attached to two studs or structural members by means of metal supports.

B. Boxes located above suspended ceiling shall be attached to structural members. Where boxes are suspended, they shall be supported independently of the conduit system by means of hanger rods and/or preformed steel channels. Boxes shall be supported independent of all piping, duct work, equipment ceiling hanger wires and suspended ceiling grid systems.

C. Boxes installed in common party separation walls, in corridor walls and service walls shall be acoustically sealed on the exterior back and sides of the box, including wall openings around the box, with a 1/8" minimum thickness resilient sound absorbing sealant, as manufactured by Lowry and Assoc., Inc.

3.04 WIRE AND CABLE

A. Branch circuit and fixture joints for #10 AWG and smaller wire shall be made with UL-approved connectors listed for 600 volts, approved for use with copper and/or aluminum wire. Connector to consist of a cone-shaped, expandable coil spring placed opposite each other to serve as a built-in insert, insulated with a nylon shall and 2 wings wrench or shall be molded one-piece as manufactured by "Scotchlok".

B. Branch circuit joints #8 and larger screw pressure

lugs made of high strength structural aluminum alloy and UL-approved for use with both copper and/or aluminum wire as manufactured by Thomas & Betts.

C. Splices insulated with plastic splicing tape, half-lapped and at least the thickness of the wire insulation. Tape shall be fresh and quality equal to Scotch.

D. Correspond each circuit to the branch number indicated on the panel schedule shown on the drawings except where departures are approved by the Architect or the Owner's inspectors.

E. All wiring, including low voltage, shall be installed in conduit, unless otherwise noted. Conduit may be omitted for low voltage interconnect wiring between ceiling mounted occupancy sensors where plenum rated wiring is installed above accessible ceilings.

F. Control wiring to conform to the wiring diagrams shown on the mechanical drawings and the manufacturer's wiring diagrams. Control the equipment in the manner specified under the "Mechanical" section of the specifications. Control wire to be color-coded for each in making final connections. Tag all spare conductors.

G. Wiring within panel enclosures to be neatly grouped and laced with Thomas & Betts "Ty-rap" spaced 3" apart and fanned out to the terminals. Tag all spare conductors.

3.05 PANELBOARD MOUNTING

A. Flush mounted panelboards and terminal cabinets shall be securely fastened to at least two studs or structural members. Trim shall be flush with finished surface.

B. Surface mounted panelboards and terminal cabinets shall be secured to walls by means of preformed steel channels securely fastened to at least two studs or structural members.

C. Panelboards shall be installed to insure the top circuit protective device (including top compartment control devices) are not more than 6'-6' above finish floor in front of the panel and the bottom device is a minimum of 12" above the floor. Manufacturer shall specifically indicate on shop drawing submittals each panel where these conditions can not be met.

3.06 PORTABLE ASSISTIVE LISTENING SYSTEM:

A. Regulatory Requirements

1. Assistive Listening Systems shall be provided in accordance with CBC Section 1B-219 and shall comply with CBC Section 11B-706
2 .Per CBC Section 11B-219.3. The minimum number of receivers to . be provided shall be equal to 4% of the total number of seats, but in no case less than two. 25% minimum of receivers provided, but no fewer than two, shall be hearing-aid compatible in accordance with CBC Section 11B-706.3.
3. If the system provided is limited to specific areas or seats, then such areas or seats shall be within a 50-foot viewing distance of, have a complete view of the stage or playing area CBC Section 11B-219.4.
4. Per April 2020 DSA Code Appeal Interpretation, school facilities may use the following alternate provisions; for each school, provide two Portable Assistive Listening Systems, each with a transmitter and a minimum of two receivers for use in classrooms without audio amplification. The assistive listening receivers and transmitters shall be stored in the school site administration office until requested.
In addition, provide an Assistive Listening System for assembly areas such as multipurpose rooms, cafeterias, lecture halls or other assembly areas. If the room has no fixed seating, calculate the number of seats using 7 SF per occupant. Provide 4% of assistive listening receivers for a total of seats in each assembly area, but no less than two. The assistive listening receivers should be stored in or near the assembly area.

B. The Assistive Listening System shall include the following items

1. Instructor (program source) wireless transmitter units.
2. Student (audience) portable wireless receiver units.
3. Plug-in microphones and earphones, for each unit.
4. Multiple program source inputs for, Instructor's microphone, respective room audio / video A/V system input/output and Instructor's computer audio input/output.
5. System accessories.

C. Function

1. The Assistive Listening System shall provide amplified available audio programs for hearing impaired students/audience, originating from classroom/stage/room instructors and audio/video instructional program source materials, and equipment in respective building spaces, rooms, classrooms, and outdoor areas.
2. The audible program shall be transmitted wireless from the program source to the student/audience, with reception coverage throughout not less than approximately 80% of the respective floor space/area space.
3. Shall provide automatic stereo or mono audio full system operation, depending on program source input.
4. The system in each space shall comply with Federal ADA, State and Local AHJ Requirements for the hearing impaired.

3.07 MATERIAL (INFRARED WIRELESS)

A. General

1. All equipment shall be the product of the same Manufacturer.
2. The receivers and transmitters shall be US Government FCC and Industry Canada-approved.
3. Provide power on-off control on each unit, to extend battery duration.
4. As manufactured by Williams Sound; or PhonicEar; or Listen Technologies; or Centrum Sound.

B. Master (Program Source) Transmitter (Infrared Emitter) Units

1. The infrared emitter/transmitter shall be compact, portable units, self-contained ABS/plastic housing/enclosure.
2. The emitter panel shall be a dual-channel system operating on both 2.3 and 2.8MHz invisible infrared light waves frequencies. The channels shall be designated CHANNEL A for the left and CHANNEL B for the right.
3. The emitter shall provide left and right AUDIO IN jacks to accept an input signal from a sound system, left and right SYNC IN/SYNC OUT jacks for master/slave daisy-chaining with other emitters if desired, and left and right MIC-IN jacks to accept an audio signal from a microphone or Audio/Video preamplifier.
4. The emitter shall provide separate LED input level detectors for each channel which illuminate when the audio signal peaks. Stereo and mono audio processing.
5. The emitter shall be mounted by the following methods:
   a. Portable mounted to a table-top-or floor-stand, using accessory support-stand adapter.
6. Each emitter shall provide an array of not less than 130 infrared LEDs covered by an infrared transparent acrylic lens. The infrared signal from each emitter shall cover not less than 3,000 square feet (32,000 cubic feet) enclosed space. Note: For room sizes smaller than 3,000-square feet, the infrared transmitter/emitter infrared output shall be reduced to accommodate the actual smaller room square feet size and height.
7. 120-volt 60Hz AC input to nominal 24-volt DC output (plug-in power-brick) power supply external transformer shall be UL approved, with cable plug-in connection to emitter/transmitter. Provide remote system master on-off control.

C. Student/Audience Receiver Units

1. Battery Power
   a. Power for each unit operation shall be supplied by internal, changeable rechargeable NiCad batteries and alternately by alkaline disposable batteries. Rechargeable batteries shall be recharged without removal from the unit. Each unit shall have a charging indicator light. The batteries shall be recharged from either a portable charger/organizer and with wall transformer/two-unit chargers. The units shall operate for up to 40-hours with alkaline batteries, and up to 15-hours with NiCad (NiMH) batteries.
   b. Provide power on-off control on each unit, to extend battery duration.
   c. A protection circuit shall prevent battery back-drain if the power to the charger is turned off while the unit is being recharged.
2. The receiver shall be a dual-channel unit for wearing around the neck with an adjustable strap. Stereo and mono audio reception and processing.
3. Compatible with the transmitter (emitter) and operate on 2.3 and 2.8MHz frequencies invisible infrared light waves. Self-contained and switchable from CHANNEL A to CHANNEL B through a switch located on the back of the unit.
4. The receiver shall provide an infrared light-gathering lens on the front of the unit to focus the light signal from the emitter onto the infrared detector element. The receiver shall detect and decode the infrared emitter/transmitter light source within a 160-degree acceptance angle.
5. Audio squelch circuit which turns the output circuit off when the infrared signal is reduced or not received, with on/off and volume control.
6. Output jack, which accepts any of the listening accessories. Headsets shall provide magnetic induction pick-up for hearing impaired, hearing aid interface operation.
7. Shall be compact easily portable units, self-contained ABS/plastic housing/ enclosure with red infrared receiver lens. Shall clip to pocket or belt.
8. The minimum number of receivers, straps and earphones to be provided shall be equal to 4% of the total number of seats, but in no case less than two. 25% minimum of receivers, straps and earphones provided, but no fewer than two, shall be hearing-aid compatible in accordance with CBC Section 11B-706.3.

D. Infrared System Accessories

1. Battery recharger portable charger/organizer pack. Locking, portable case with cover, shall accept a group of not less than twelve plug-in portable transmitters and receivers' units in each pack for simultaneous multi-unit battery recharging. Provide a quantity of one organizer for each quantity group of twelve (or fraction thereof) receivers provided as part of the contract.
2. Stereo audio headset style automatic noise canceling microphones, integral on-off-volume control and with behind the neck support style. Each with 25-feet long extension cables and outlet plug-jacks to match transmitter outlet jacks. Provide two cables for each emitter/transmitter.
3. Equipment wall mount support brackets.
4. Auxiliary audio program source 15-feet long cables with plug-in at both ends to match transmitter jacks. Provide two for each transmitter.
5. Headset style earphones with cable and plug to match receiver jacks. Headsets shall provide magnetic induction pick-up for hearing impaired, hearing aid interface operation. Provide one headset for each receiver.
6. Rechargeable Ni-Cad (NiMH) batteries, one complete set for each unit.
7. Locking auxiliary equipment storage cases for cables, microphones, and headsets. Quantity and capacity as required to store all accessories.
8. Portable floor stand, for infrared emitter/transmitter units mounting and support, with variable height adjustment and tip-resistant weighted base. Provide one floor stand for each infrared emitter/transmitter.
9. Locking, portable case for infrared emitter/transmitter. One for each emitter/ transmitter unit.
10. Provide microphone extension cable with plug to match microphone and infrared emitter/transmitter microphone input jack, 25-feet length. One for each micro-phone.

NOTE:
UNDERGROUND AND EXTERIOR CONDUIT REQUIRED TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATION.

DSA Stamp:

IDENTIFICATION STAMP
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APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date:
DSA

Revisions:
1
2
3

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VSVES06 40x48 RELO CR

VALLECITOS ELEMENTARY
PORTABLE BUILDING
for
VALLECITOS UNIFIED SCHOOL DISTRICT
FALLBROOK CALIFORNIA

Job Nº.: **VSVES06**

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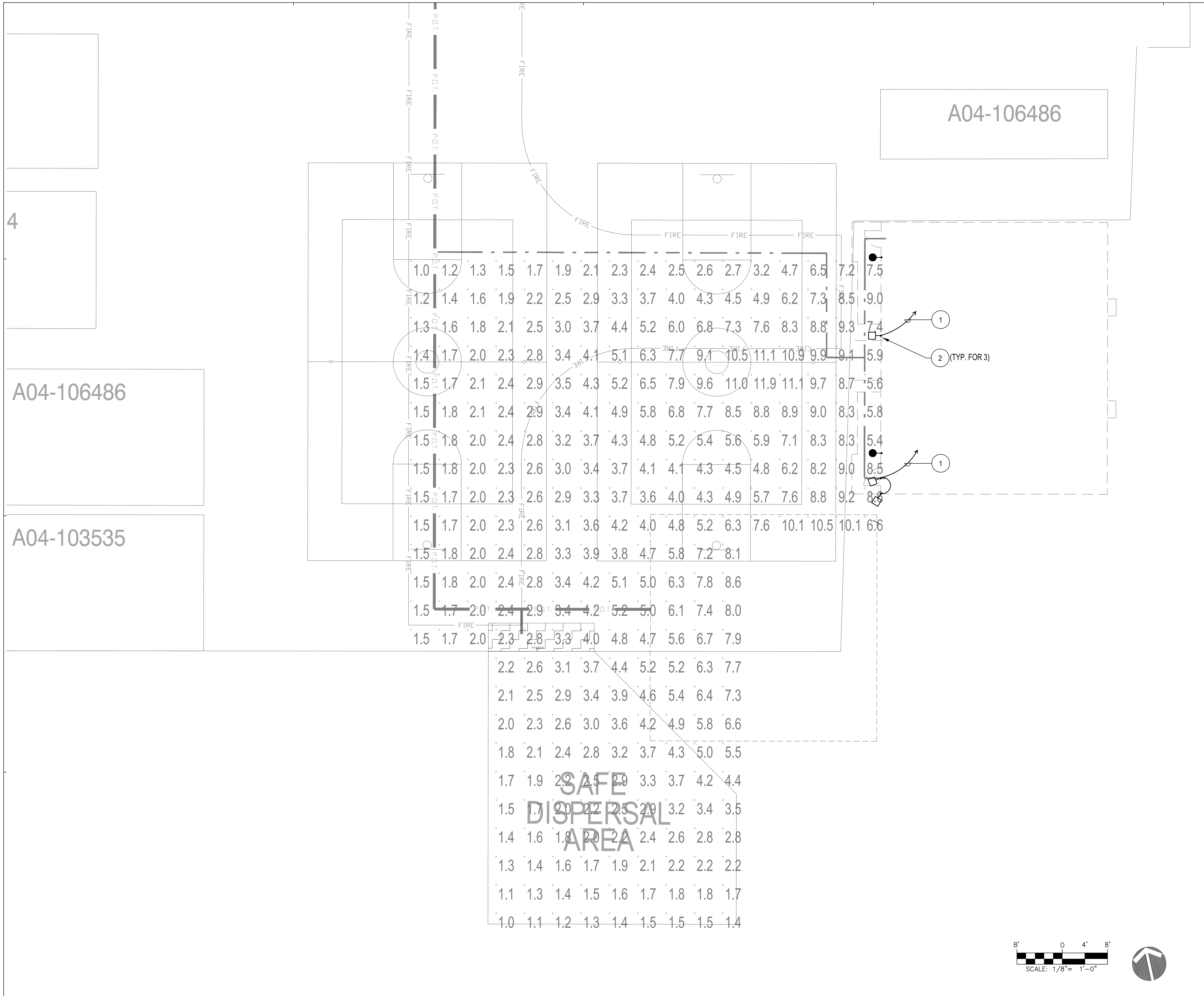
MGPA ARCHITECTURE

Sheet Title:
ELECTRICAL SPECIFICATIONS

Sheet Number:
E-0.4

ELECTRICAL SPECIFICATIONS



PATH OF EGRESS PHOTOMETRICS

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

PLAN NOTES

1. PROVIDE 2#12, 1#12GRD-3/4"C. AND EXTEND TO BUILDING PANELBOARD FOR AVAILABLE SPARE 120V CIRCUIT. PROVIDE 20A/1P CIRCUIT BREAKER WITH REQUIRED MOUNTING HARDWARE IN SPACE OF PANELBOARD TO SERVE NEW EQUIPMENT AS INDICATED. NEW CIRCUIT BREAKER A.I.C. SHALL MEET OR EXCEED RATING OF EXISTING CIRCUIT BREAKERS CURRENTLY USED.

2. PROVIDE LED FLOODLIGHT FIXTURE WITH CAST ALUMINUM HOUSING, IMPACT RESISTANT TEMPERED GLASS LENS, PHOTOCELL, HIGHLY EFFICIENT LED DRIVER AND EMERGENCY BATTERY BACKUP SYSTEM FOR A MINIMUM OF 90 MINUTES OF OPERATION. LITHONIA RSXF3-P4-40K-NFL OR APPROVED EQUAL.

Statistics

Description	Symbol	Avg	Min	Max/Min	Avg/Min	Max
PATH OF EGRESS	+	4.1 fc	1.0 fc	11.9:1	4.1:1	11.9 fc

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Issue Date: DSA

Revisions:
1
2
3

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VSVES06 40x48 RELO CR

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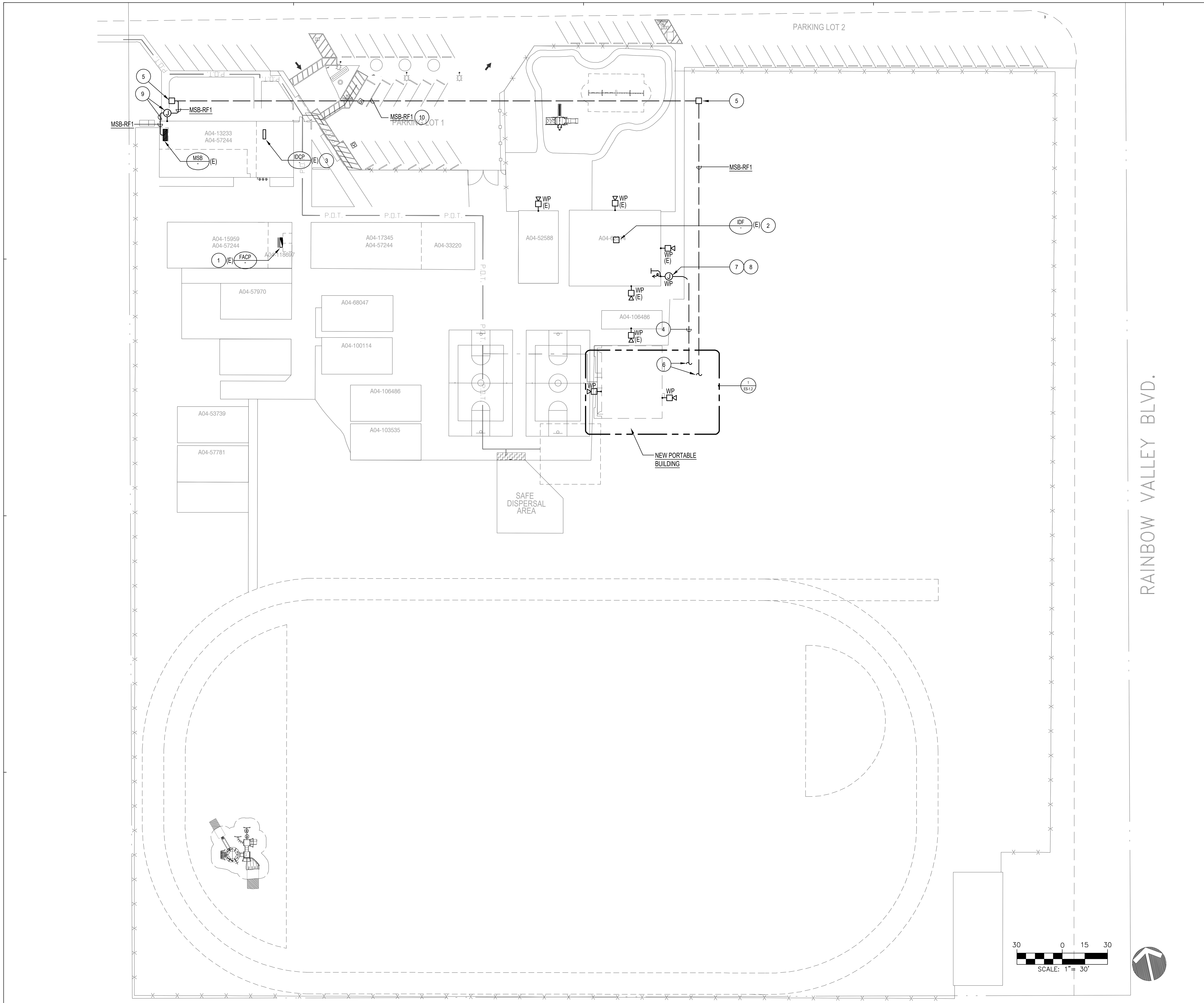
Sheet Title:
PATH OF EGRESS PHOTOMETRICS

Sheet Number:
E-0.5



OVERALL SITE ELECTRICAL PLAN

SCALE 1"=30'-0" | 1

PLAN NOTES:

1. EXISTING FIRE ALARM CONTROL PANEL TO REMAIN SHALL BE MODIFIED, UPGRADED WITH NEW EQUIPMENT, AND REPROGRAMMED AS REQUIRED TO SERVE THE NEW CONSTRUCTION FOR A COMPLETE AND OPERABLE SYSTEM.
2. EXISTING DATA/VOICE NETWORK IDF EQUIPMENT RACK SHALL BE MODIFIED, UPGRADED WITH NEW PATCH PANEL FOR TERMINATION OF NEW CAT 6 CABLES AS REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM FOR THE NEW CONSTRUCTION.
3. EXISTING INTRUSION DETECTION SYSTEM CONTROL PANEL SHALL BE MODIFIED, UPGRADED WITH NEW EQUIPMENT, AND REPROGRAMMED AS REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM FOR THE NEW CONSTRUCTION.
4. PROVIDE THE FOLLOWING SIGNAL SYSTEMS CONDUITS WITH SPECIFIED CONDUCTORS, U.N.O.:
   2" C. DATA/VOICE NETWORK
   1" C. FIRE ALARM
   1" C. INTRUSION DETECTION
   1" C.O. SPARE
5. PROVIDE 2' X 3' X 3' D. CONCRETE PULLBOX WITH BOLT-DOWN TRAFFIC RATED COVER ENGRAVED: "POWER". INSTALL PULLBOX LID AND COVER TO BE FLUSH WITH THE ADJACENT FINISH GRADE.
6. SEE SHEET ES-1.2 FOR CONTINUATION.
7. PROVIDE A 12" X 12" X 6" D. WALL MOUNTED WEATHERPROOF PULLBOX FOR THE DATA/VOICE NETWORK SYSTEM. EXTEND 2" C. FROM PULLBOX AND ROUTE EXPOSED ON EXTERIOR WALL OF PORTABLE BUILDING TO AN ELEVATION ABOVE THE ACCESSIBLE CEILING INSIDE BUILDING. PROVIDE WEATHERPROOF LB FITTING AND PENETRATION THROUGH EXTERIOR WALL AND STUB 2" C. INTO CEILING SPACE. UTILIZE CEILING SPACE FOR ROUTING NEW CAT 6 CABLING EXPOSED AS INDICATED. PROVIDE SEAL FOR WALL PENETRATION.
8. PROVIDE A 12" X 12" X 6" D. WALL MOUNTED WEATHERPROOF PULLBOX FOR THE FIRE ALARM,INTRUSION DETECTION AND SPARE SYSTEMS. EXTEND TWO (2) 1" C. FROM PULLBOX AND ROUTE EXPOSED ON EXTERIOR WALL OF PORTABLE BUILDING TO AN ELEVATION ABOVE THE ACCESSIBLE CEILING INSIDE BUILDING. PROVIDE WEATHERPROOF LB FITTINGS AND PENETRATIONS THROUGH EXTERIOR WALL AND STUB ONE (1) 1" C. INTO CEILING SPACE. FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN CONDUIT AS INDICATED. UTILIZE CEILING SPACE FOR EXTENDING NEW CABLING EXPOSED AS INDICATED TO INTERFACE WITH EXISTING SYSTEM EQUIPMENT/DEVICES WITHIN THE BUILDING AS REQUIRED TO SERVE THE NEW CONSTRUCTION. PROVIDE SEALS FOR WALL PENETRATIONS.
9. INDICATED CONDUIT SHALL RISE UP FROM BELOW GRADE, ROUTE EXPOSED ON SIDE OF BUILDING AND EXTEND TO SWITCHBOARD ENCLOSURE. PROVIDE WEATHERPROOF LB FITTING AND PENETRATE THE EXISTING ENCLOSURE IN ORDER TO EXTEND NEW FEEDER CONDUCTORS INTO SWITCHBOARD FOR TERMINATION ON TO NEW CIRCUIT BREAKER DEVICE AS INDICATED SEAL ENCLOSURE PENETRATION. PAINT EXPOSED CONDUIT TO MATCH SURROUNDING SURFACE COLOR.
10. INDICATED UNDERGROUND CONDUITS MAY BE INSTALLED USING HORIZONTAL DIRECTIONAL BORING OR STANDARD TRENCHING AND PATCHING, AT CONTRACTORS OPTION. ALL STRIPING DISTURBED BY CONSTRUCTION ACTIVITIES IS TO BE RESTORED.

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Consulting Electrical Engineers

VSVES06 40x48 RELO CR

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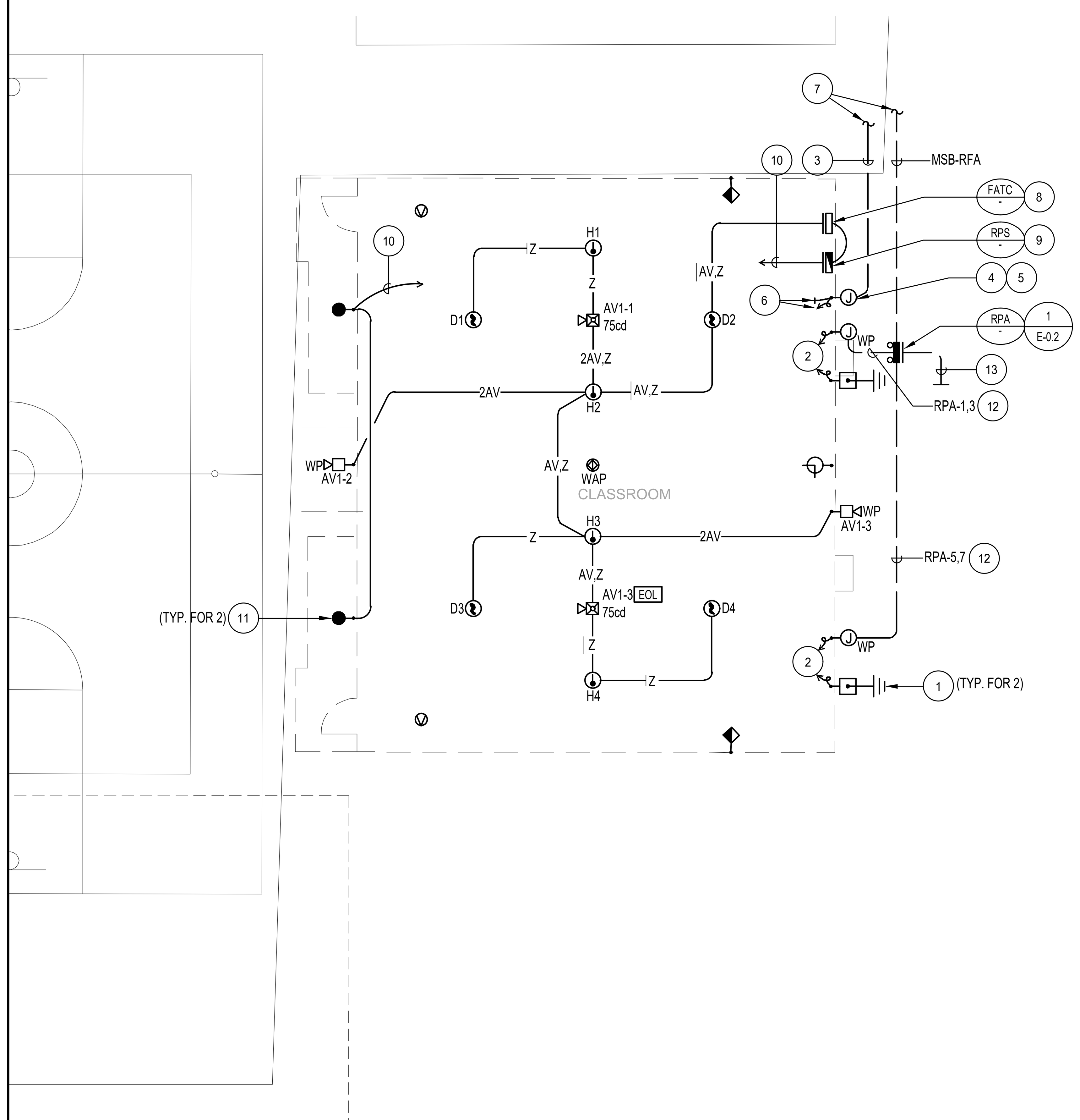
MGPA ARCHITECTURE

Sheet Title:
OVERALL SITE ELECTRICAL PLAN

Sheet Number:
ES-1.1



8' 0 4' 8'
SCALE: 1/8"= 1'-0"

ENLARGED SITE ELECTRICAL PLAN

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

PLAN NOTES:

1. PROVIDE BUILDING GROUNDING SYSTEM. SEE DETAIL "4" ON SHEET E0.2 FOR ADDITIONAL INFORMATION.
2. CONNECT INCOMING POWER CONDUIT AND CONDUCTORS TO PANELBOARD PROVIDED WITH PORTABLE BUILDING.
3. PROVIDE THE FOLLOWING SIGNAL SYSTEMS CONDUITS WITH SPECIFIED CONDUCTORS:
   2" C. DATA/VOICE NETWORK
   1" C. FIRE ALARM
   1" C. INTRUSION DETECTION
   1" C. SPARE
4. PROVIDE A 12" X 12" X 6" D. WALL MOUNTED WEATHERPROOF PULLBOX FOR THE DATA/VOICE NETWORK SYSTEM. EXTEND 2" C. FROM PULLBOX AND ROUTE EXPOSED ON EXTERIOR WALL OF PORTABLE BUILDING TO AN ELEVATION ABOVE THE ACCESSIBLE CEILING INSIDE BUILDING. PROVIDE WEATHERPROOF LB FITTING AND PENETRATION THROUGH EXTERIOR WALL AND STUB 2" C. INTO CEILING SPACE. UTILIZE CEILING SPACE FOR ROUTING NEW FIBER OPTIC CABLING EXPOSED AS INDICATED. PROVIDE SEAL FOR WALL PENETRATION.
5. PROVIDE A 12" X 12" X 6" D. WALL MOUNTED WEATHERPROOF PULLBOX FOR THE FIRE ALARM AND INTRUSION DETECTION SYSTEMS. EXTEND TWO (2) 1" C. FROM PULLBOX AND ROUTE EXPOSED ON EXTERIOR WALL OF PORTABLE BUILDING TO AN ELEVATION ABOVE THE ACCESSIBLE CEILING INSIDE BUILDING. PROVIDE WEATHERPROOF LB FITTINGS AND PENETRATIONS THROUGH EXTERIOR WALL AND STUB ONE (1) 1" C. INTO CEILING SPACE. FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN CONDUIT AS INDICATED. UTILIZE CEILING SPACE FOR ROUTING NEW CABLING EXPOSED AS INDICATED. PROVIDE SEALS FOR WALL PENETRATIONS.
6. EXTEND NEW CONDUCTORS FOR DATA/VOICE NETWORK AND INTRUSION DETECTION SYSTEMS EXPOSED THROUGH CEILING SPACE AND TERMINATE AT RESPECTICE EQUIPMENT, DEVICE AND/OR OUTLET CONNECTORS AS INDICATED. FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN CONDUIT AS INDICATED.
7. SEE SHEET ES-1.1 FOR CONTINUATION.
8. PROVIDE 12" X 12" X 6" D. SURFACE MOUNTED TERMINAL CABINET FOR FIRE ALARM SYSTEM AT +45" AFF.
9. PROVIDE FIRE ALARM SYSTEM NOTICICATION CIRCUIT EXPANDER PANEL AT +45" AFF.
10. PROVIDE 2 # 12, 1 # 12 GRD – 3/4" C. AND EXTEND TO PORTABLE BUILDING PANELBOARD FOR AVAILABLE SPARE 120 VOLT CIRCUIT. PROVIDE NEW 20A/1P CIRCUIT BREAKER WITH REQUIRED MOUNTING HARDWARE IN SPACE OF PANELBOARD TO SERVE NEW EQUIPMENT AS INDICATED. NEW CIRCUIT BREAKER A.I.C. RATING SHALL MEET OR EXCEED RATING OF EXISTING CIRCUIT BREAKERS CURRENTLY USED.
11. PROVIDE LED WALL PACK LIGHT FIXTURE WITH ALUMINUM HOUSING, IMPACT RESISTANT TEMPERED GLASS LENS, PHOTOCELL, HIGHLY EFFICIENT LED DRIVER, AND EMERGENCY BATTERY BACKUP SYSTEM FOR MINIMUM 90 MINUTES OF OPERATION. LITHONIA # TWHLED-20C-40K- T3M-120-PE-ELSW OR APPROVED EQUAL.
12. PROVIDE 3 # 1, 1 # 8 GRD – 1 1/2" C.
13. PROVIDE FOUR (4) 1 1/2" C.O. STUBBED AND CAPPED BELOW GRADE FOR FUTURE USE.

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DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Issue Date:
DSA
Revisions:
1
2
3

Consultant Stamp:

REGISTERED PROFESSIONAL ENGINEER STEPHEN R. ZAJICEK No. E 10372 Exp. 09-30-24

Consultant:

FBA Engineering
Consulting Electrical Engineers
FBA Job Number: 229 177

VSVES06 40x48 RELO CR

VALLECITOS ELEMENTARY
PORTABLE BUILDING
for
VALLECITOS UNIFIED SCHOOL DISTRICT
FALLBROOK CALIFORNIA

Job N°.: VSVES06

LICENSED ARCHITECT STATE OF CALIFORNIA

MGPA ARCHITECTURE
An Architectural Corporation
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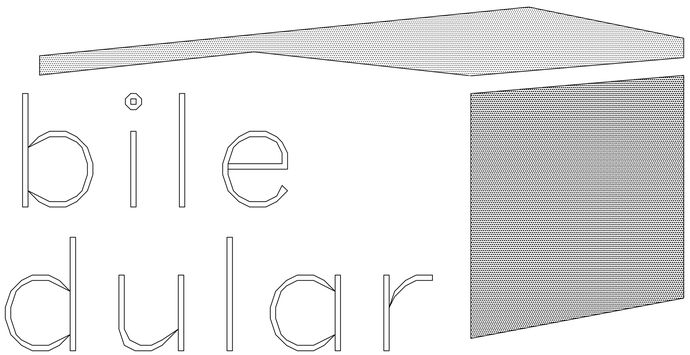
MGPA ARCHITECTURE

Sheet Title:
ENLARGED SITE ELECTRICAL PLAN

Sheet Number:
ES-1.2

FBA Engineering / Plot Date: 4/26/2024 8:41 AM / Plotted by: William Ramirez / Drawing Location: I:\229\177\ES-1.2_229177.dwg



mobile modular

11450 MISSION BLVD.
MIRA LOMA, CA 91752

EXISTING STOCKPILE BUILDINGS MODIFICATION PLANS FOR EXPANSION OF 24'X40' BUILDINGS TO 48'X40' MODIFICATIONS ARE BASED ON DSA-APPROVED STOCKPILE A#65965

NOTE:
ALL THE STOCKPILES LISTED IN THIS PC WERE DESIGNED FOR MAXIMUM SEISMIC LOADS IN CA ACCORDING TO THE CODES UNDER WHICH THEY WERE DESIGNED (1988 – 2007 CBC), AND CAN BE PLACED ANYWHERE IN THE STATE FOR SEISMIC CONSIDERATIONS PER DSA POLICY

SHEET INDEX

OPTIONS	SHEET TITLE	SHEET NUMBER
COVER SHEET	GENERAL NOTES; APPLICABLE CODES; BUILDING DESIGN DATA; WIND DESIGN DATA, EARTHQUAKE DESIGN DATA	T-1
ALL	SERIAL NUMBER / BLDG. ID# / NEW BLDG. SIZE	T-2
~~ALL~~	~~T-24 ENERGY CALCULATIONS~~	~~T-3~~
~~ALL~~	~~T-24 ENERGY CALCULATIONS~~	~~T-4~~
BUILDING SIZE		
48X40	MODIFICATION PLAN / DETAILS FOR 48X40 BLDG	S-1
48X40	MODIFICATION PLAN (ARCHITECTURAL) FOR 48X40 BLDG	A-1
~~ALL~~	~~DOOR, WINDOW & FINISH SCHEDULES~~	~~A-2~~
ALL	ROOF PLAN	A-3
48X40	EXTERIOR ELEVATIONS 48X40 BLDG.	A-4
~~ALL~~	~~GENERAL SPECIFICATIONS~~	~~A-5~~
48X40	ELECTRICAL PLAN FOR486X40 BLDG.	E-1
48X40	MECHANICAL PLAN FOR 48X40 BLDG.	M-1

TITLE 24 CODES:
2022 California Administrative Code (CAC)..... (Part 1, Title 24, CCR)
2019 California Building Code (CBC), Volumes 1 and 2 ..... (Part 2, Title 24, CCR)
(2018 International Building Code with 2021 California amendments)
2019 California Electrical Code ..... (Part 3, Title 24, CCR)
(2017 National Electrical Code with 2022 California amendments)
2019 California Mechanical Code (CMC)..... (Part 4, Title 24, CCR)
(2018 Uniform Mechanical Code with 2019 California amendments)
2019 California Plumbing Code (CPC) ..... (Part 5, Title 24, CCR)
(2018 Uniform Plumbing Code with 2019 California amendments)
2019 California Energy Code ..... (Part 6, Title 24, CCR)
2019 California Fire Code (CFC) ..... (Part 9, Title 24, CCR)
(2018 International Fire Code with 2019 California Amendments)
2019 California Green Building Standards Code.....(Part 11, Title 24, CCR)
2019 California Referenced Standards Code.....(Part 12, Title 24, CCR)
REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2019 CBC, Chapter 35
2019 CFC, Chapter 80

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA

Date Signed: June 30, 2022

NOTES:
1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DIRECTIVE APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR; R.B.I.P.
4. ALL DEMOLITION AND CONSTRUCTION WORK SHALL COMPLY WITH CFC CHAPTER 33.

BUILDING DATA FOR PC 266 / STOCKPILE A#65965	
24'X40' / 48'X40' BLD'G	
OCCUPANCY	E-1 & E-2
TYPE OF CONSTRUCTION	V-N
WIND LOAD	70 MPH EXP "C"
FLOOR LIVE LOAD	50 PSF
ROOF LIVE LOAD	20 PSF
BUILDING AREA	980/1920 SQ. FT.
STRUCTURAL SYSTEM	RIGID FRAME

APPLICABLE CODES FOR PC 266 STOCKPILE/65965

TITLE 24 CODES:
2001 BUILDING STANDARDS ADMINISTRATIVE CODE.....(PART 1, TITLE 24, CCR)
2001 CALIFORNIA BUILDING CODE (CBC).....(PART 2, TITLE 24, CCR)
(1997 UNIFORM BUILDING CODE VOLUMES 1,2,3 WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA ELECTRICAL CODE (CEC).....(PART 4, TITLE 24 CCR)
(1999 NATIONAL ELECTRICAL CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA MECHANICAL CODE (CMC).....(PART 4, TITLE 24, CCR)
(2000 IAPMO UNIFORM MECHANICAL CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA PLUMBING CODE (CPC).....(PART 5, TITLE 24, CCR)
(2000 IAPMO UNIFORM PLUMBING CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA FIRE CODE (CFC).....(PART 9, TITLE 24, CCR)
2001 CALIFORNIA REFERENCE STANDARDS CODE.....(PART 12, TITLE 24, CCR)
1990 TITLE 19, CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
2001 CALIFORNIA ENERGY CODE.....(PART 6, TITLE 24, CCR)
2001 CALIFORNIA ELEVATOR SAFETY CONST. CODE.....(PART 7, TITLE 24, CCR)

APPROVAL – PC ENGINEER OF RECORD

STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710
MEMBER
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DATE: 11/07/2024

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

COVER SHEET

DRAWN
CHECKED
DATE
NOVEMBER 1, 2021
SCALE
JOB NO.

T — 1

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT STOCKPILE MODIFICATION SHEET T.DWG

CLASSROOM SIZE	SERIAL NUMBER	SIDEWALL REMOVAL	SIDEWALL ADDITION	DOOR OPENING INFILL	WINDOW OPENING INFILL	HVAC OPENING INFILL	T-BAR CEILING REALIGNMENT
LIST OF SERIAL NUMBERS APPLICABLE TO THIS STOCKPILE PLAN							
48x40	28432						
48x40	28433	X					X
48x40	27236	X			X		X
48x40	27237			X			
48x40	27188						
48x40	27189	X					X
48x40	28470	X			X		X
48x40	28471			X			
48x40	26988						
48x40	26989	X					X
48x40	27322	X			X		X
48x40	27323			X			
48x40	18586						
48x40	18587	X					X
48x40	27090	X			X		X
48x40	27091			X			
48x40	27126						
48x40	27127	X					X
48x40	27328	X			X		X
48x40	27329			X			
48x40	18584						
48x40	18585	X					X
48x40	26840	X			X		X
48x40	26841			X			
48x40	27380						
48x40	27381	X					X
48x40	27384	X			X		X
48x40	27385			X			
48x40	27144						
48x40	27145	X					X
48x40	27028	X			X		X
48x40	27029			X			
48x40	26792						
48x40	26793	X					X
48x40	20175-MT	X			X		X
48x40	20176-MT			X			
48x40	26774						
48x40	26775	X					X
48x40	27006	X			X		X
48x40	27007			X			
48x40	21793						
48x40	21794	X					X
48x40	27060	X			X		X
48x40	27061			X			
48x40	27034						
48x40	27035	X					X
48x40	27038	X			X		X
48x40	27039			X			
48x40	26936						
48x40	26937	X					X
48x40	26938	X			X		X
48x40	26939			X			
48x40	26808						
48x40	26809	X					X
48x40	21827	X			X		X
48x40	21828			X			
48x40	27000						
48x40	27001	X					X
48x40	27246	X			X		X
48x40	27247			X			
48x40	27050						
48x40	27051	X					X
48x40	27114	X			X		X
48x40	27115			X			
48x40	27004						
48x40	27005	X					X
48x40	27008	X			X		X
48x40	27009			X			
48x40	27194						
48x40	27195	X					X
48x40	27160	X			X		X
48x40	27161			X			
48x40	27148						
48x40	27149	X					X
48x40	26742-MT	X			X		X
48x40	26743-MT			X			
48x40	26962						
48x40	26963	X					X
48x40	21877	X			X		X
48x40	21878			X			

NOTE:
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REGISTERED PROFESSIONAL ENGINEER
JAMES T. SIMPSON
No.3602
STRUCTURAL
STATE OF CALIFORNIA

Date Signed: June 30, 2022

MOBILE MODULAR
MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SERIAL NUMBERS

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STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
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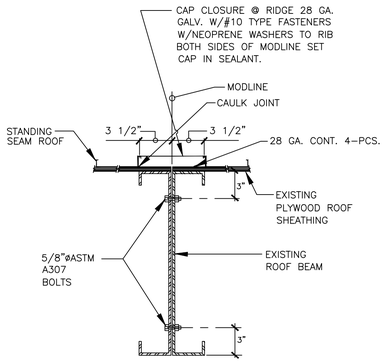
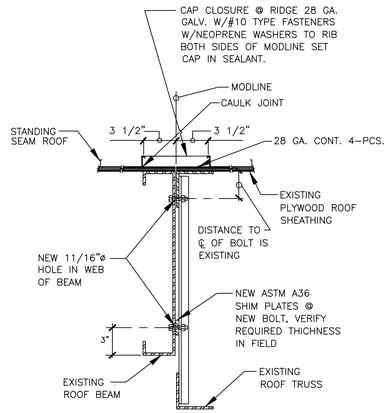


NEW ROOF BEAM TO ROOF BEAM CONNECTION

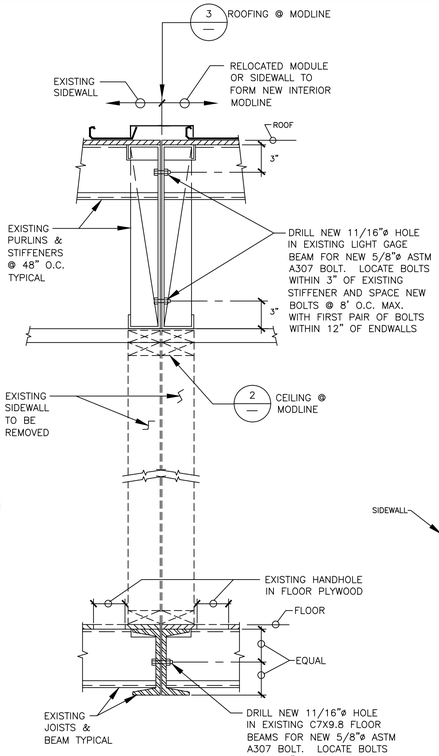


NEW ROOF BEAM TO ROOF TRUSS CONNECTION

ROOFING @ MODLINE

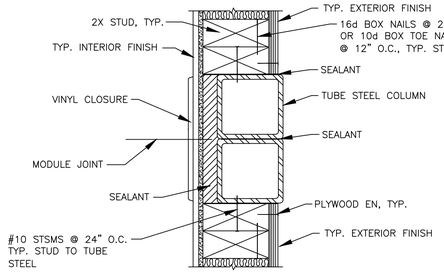
3

1 1/2" = 1'-0"



1

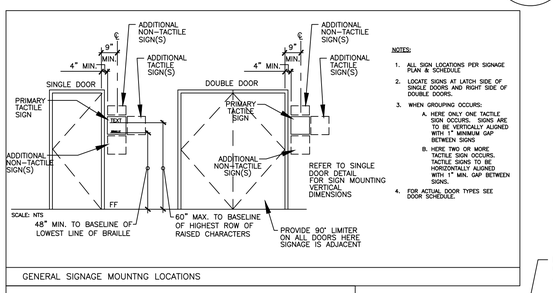
1 1/2" = 1'-0"



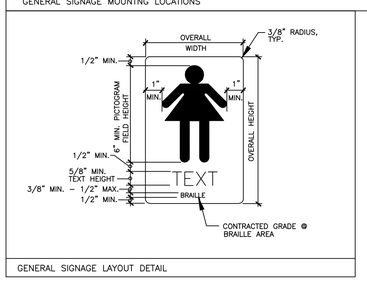
COLUMN @ MODLINE

4

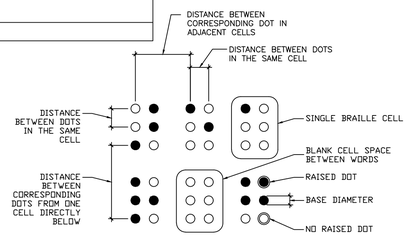
3" = 1'-0"



GENERAL SIGNAGE MOUNTNG LOCATIONS



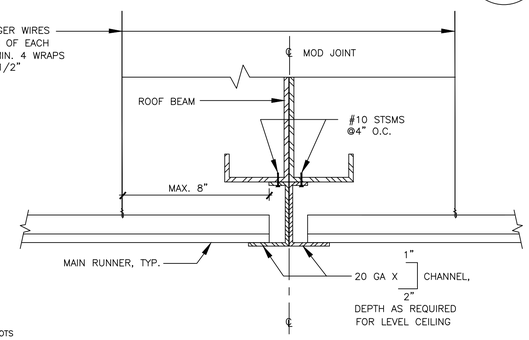
GENERAL SIGNAGE LAYOUT DETAIL



BRAILLE TEMPLATE

BRAILLE DIMENSIONS TABLE 11B-703.3.1	
MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
DOT BASE DIMATER	0.059 (1.5 mm) TO 0.063 (1.6 mm)
DISTANCE BETWEEN TWO DOTS IN THE SAME CELL[1]	0.100 (2.5 mm)
DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS[1]	0.300 (7.6 mm)
DOT HEIGHT	0.025 (0.6 mm) TO 0.037 (0.9 mm)
DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW[1]	0.395 (10 mm) TO 0.400 (10.2 mm)

1. MEASURED CENTER TO CENTER

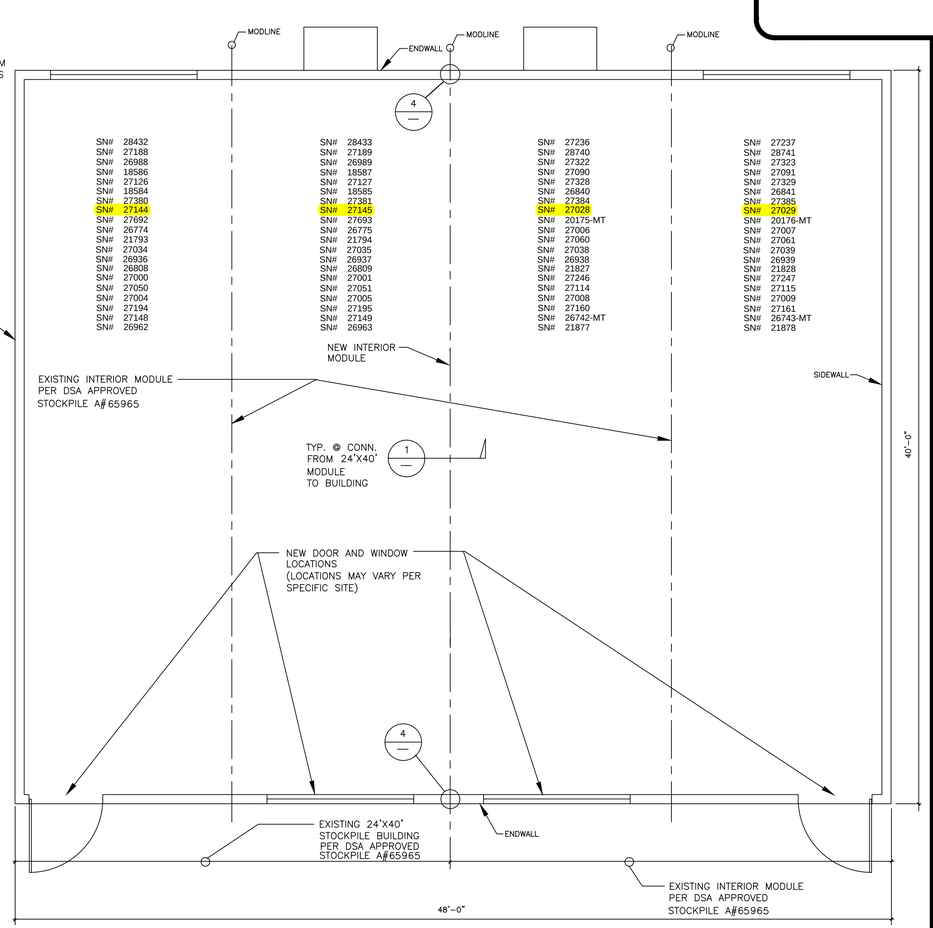


NOTE: LAY-IN CEILING TILE NOT SHOWN FOR CLARITY

GRID AT MOD LINE
FREE SIDE

2

3" = 1'-0"



MODIFICATION PLAN

1/4" = 1'-0"

NOTES:

1. MODIFY EXISTING 24'X40' BUILDINGS, FROM A#65965 TO FORM 48'X40' BUILDING, SEE SERIAL NO. LIST ON SHEET T-2.
2. 24'X40' MODULE ADDED TO 24'X40' BUILDING TO FORM 48'X40' MODULE CAN BE ADDED TO SIDES OR INTERIOR; FLOOR PLAN SHOWN ABOVE MAY BE MIRRORED, ADDED 24'X40' MODULE MAY BE LOCATED AS CENTER MODULE.

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA

Date Signed: June 30, 2022

NOTE:
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11450 MISSION BLVD.
MIRA LOMA, CA 91752

MODIFICATION PLAN FOR 48 X 40 BUILDINGS

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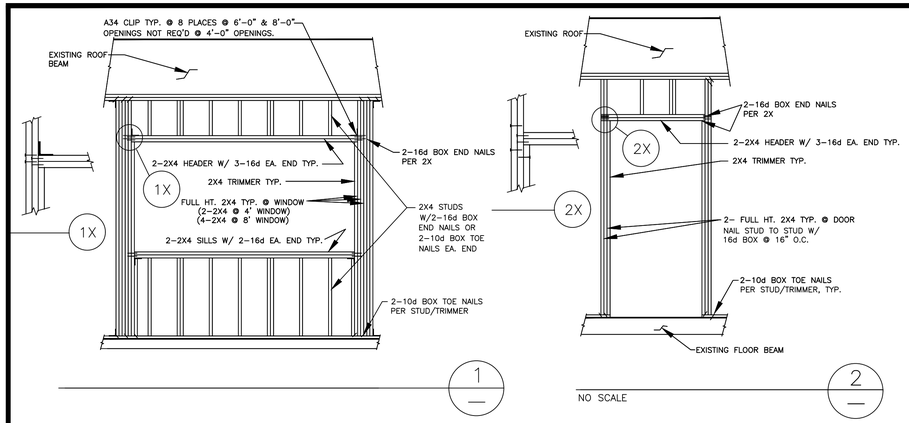
S-1

OF 12 SHEETS

MOBILE MODULAR STOCKPILE MODIFICATION SHEET S-1.DWG



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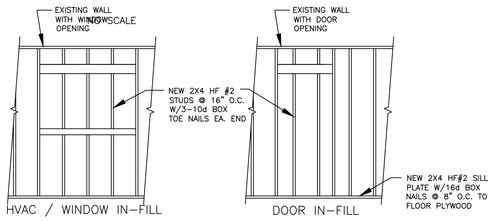


HVAC / WINDOW IN-FILL

DOOR IN-FILL

INFILL DETAILS @ EXISTING WALL

3"=1'-0"

GA FILE NO. WP 3514 — GENERIC

GYPSUM WALLBOARD, WOOD STUDS

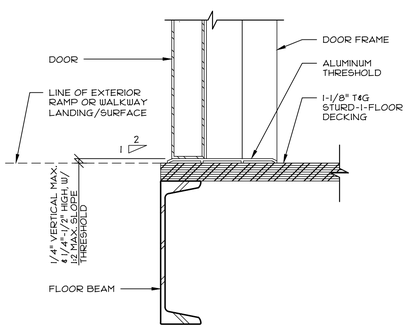
ONE LAYER 5/8" TYPE X GYPSUM WALL BOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 2X4 WOOD STUDS 16" O.C. WITH 1 1/4" TYPE W DRYWALL SCREWS 12" O.C.

JOINTS STAGGERED 16" ON OPPOSITE SIDES. (LOAD-BEARING)

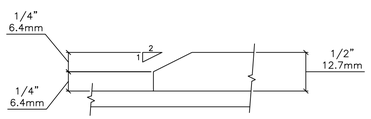
1 HOUR FIRE	35 TO 39 STC SOUND

THICKNESS: 4 3/4"
APPROX. WEIGHT: 7 psf
FIRE TEST: SWRI 01-4511-619(1), 3-94
SOUND TEST: SEE WP 3520 (G&H NG-246FT,7-2-65)

ONE HOUR RATED WALL

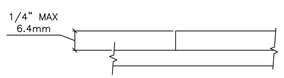


THRESHOLD DETAIL



BEVEL CHANGE IN LEVEL

11B-303.3 BEVELED. CHANGES IN LEVEL BETWEEN 1/4" (6.4mm) HIGH MINIMUM AND 1/2" (12.7mm) HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.



VERTICAL CHANGE IN LEVEL

11B-303.2 VERTICAL. CHANGES IN LEVEL OF 1/4" (6.4mm) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL AND WITHOUT EDGE TREATMENT.

NOTE:
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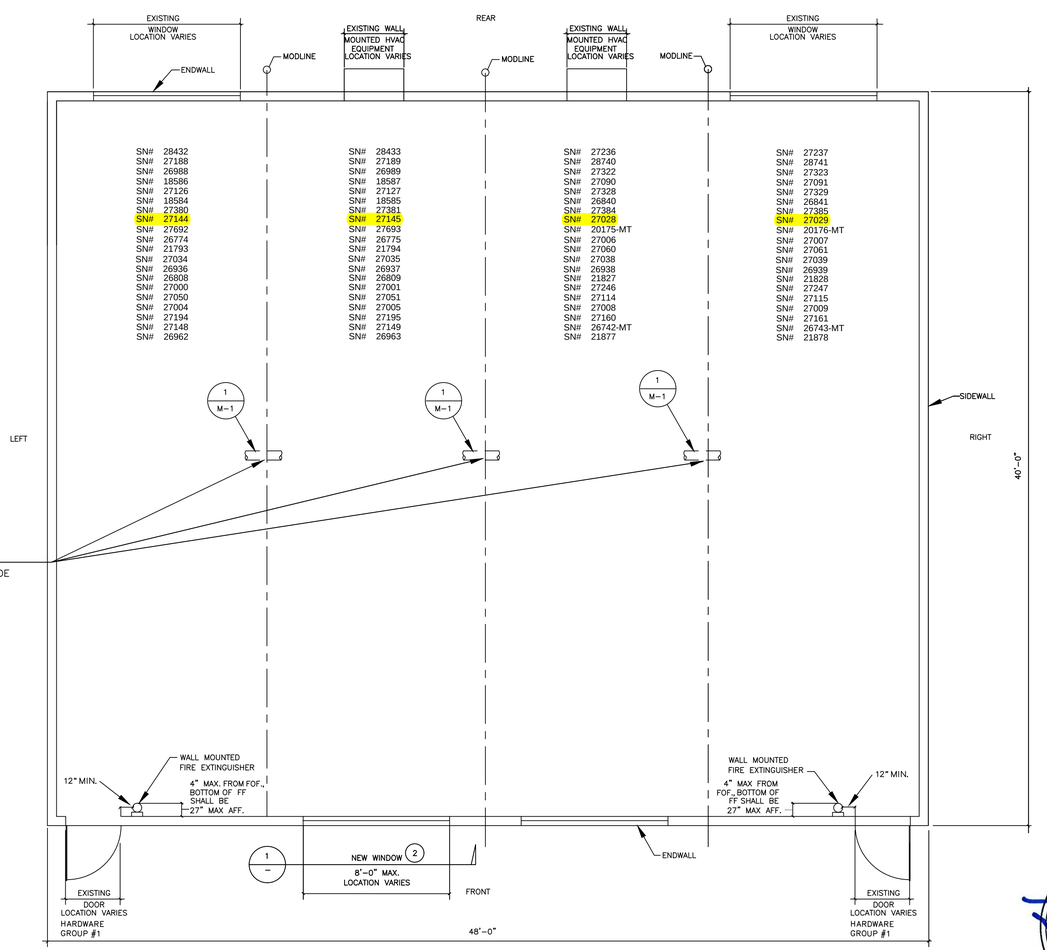

MODIFICATION PLAN

1/4" = 1'-0"

NOTES:

1. NEW DOORS CAN BE LOCATED ON END WALLS. NUMBER OF NEW 3' WIDE BY 7' HIGH DOORS IS NOT LIMITED. SEPARATE DOORS BY 12" MIN.
2. NEW WINDOWS CAN BE LOCATED ON SIDE OR END WALLS. NUMBER OF NEW WINDOWS IS NOT LIMITED. SEPARATE WINDOWS BY 12" MIN.
3. FILL IN ANY ABANDONED DOORS OR WINDOWS PER DETAIL
4. ADJUST DOOR CLOSER 5 LBS AS REQUIRED.

EGRESS NOTES:

1005.5. DISTRIBUTION OF EGRESS CAPACITY.

WHERE MORE THAN ONE EXIT, OR ACCESS TO MORE THAN ONE EXIT, IS REQUIRED, THE MEANS OF EGRESS SHALL BE CONFIGURED SUCH THAT THE LOSS OF ANY ONE EXIT, OR ACCESS TO ONE EXIT, SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50 PERCENT OF THE REQUIRED CAPACITY.

1014.3 COMMON PATH OF EGRESS TRAVEL.

THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED THE COMMON PATH OF EGRESS TRAVEL DISTANCES IN TABLE 1014.3.

1015.2.1 TWO EXITS OR EXIT ACCESS DOORWAYS.

WHERE TWO EXITS OR EXIT ACCESS DOORWAYS ARE REQUIRED FROM ANY PORTION OF THE EXIT ACCESS, THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE-HALF OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED MEASURED IN A STRAIGHT LINE BETWEEN EXIT DOORS OR EXIT ACCESS DOORWAYS. INTERLOCKING OR SCISSOR STAIRS SHALL BE COUNTED AS ONE EXIT STAIRWAY.

1015.2.2 THREE OR MORE EXITS OR EXIT ACCESS DOORWAYS

WHERE ACCESS TO THREE OR MORE EXITS IS REQUIRED, AT LEAST TWO EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL BE ARRANGED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 1015.2.1 ADDITIONAL REQUIRED EXIT OR EXIT ACCESS DOORWAYS SHALL BE ARRANGED A REASONABLE DISTANCE APART SO THAT IF ONE BECOMES BLOCKED, THE OTHERS WILL BE AVAILABLE.

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA

Date Signed: June 30, 2022

APPROVAL – PC ENGINEER OF RECORD

STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

MEMBER
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MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

MODIFICATION PLAN FOR
48 X 40 BUILDINGS

DRAWN
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A — 1

OF 12 SHEETS

MOBILE MODULAR UNIVERSAL ARCHITECTURAL MODIFICATIONS SHEET A-1.DWG

SYMBOL	DESCRIPTION
	2'x4' FLUORESCENT RECESSED FIXTURE, W/DIFFUSED PRISMATIC LENS W/2 BALLAST(S) & (3) T8 TUBES
	CEILING MOUNTED EXHAUST FAN 100 CFM
$	SINGLE SWITCH 20 AMP IN SINGLE GANG BOX
$$$	TRIPLE SWITCH 20 AMP IN TRIPLE GANG BOX
	DUPLEX RECEPT – 20 AMP
WP GFI	DEDICATED DUPLEX RECEPT – 20 AMP W/GROUND FAULT INTERRUPTER AND CLEAR IN-USE COVER
	EXTERIOR MOUNTED LED LIGHT FIXTURE, MERU ACEM DB OR EQUAL, 17 WATTS / EMERGENCY BATTERY BACK UP
	THERMOSTAT-PROGRAMMABLE, "BRAEBURN" #2200 (+48")
J	J-BOX MOUNTED IN CEILING FOR LIGHT FIXTURES, RUN WIRE TO PANEL BOX
F	WATER PROOF J-BOX AT FLOOR LEVEL W/ 3/4" C.O. STUBBED TO ATTIC
+80"S	4S J-BOX W/SINGLE GANG RING FOR FUTURE FIRE ALARM INTERIOR SPEAKER/STROBE W/3/4" CONDUIT STUBBED ABOVE CEILING, NO WIRE, BLANK COVER PLATE (DEVICES, WIRING & INSTALLATION BY OTHERS)
+80"H	4S J-BOX W/SINGLE GANG RING FOR FUTURE FIRE ALARM EXTERIOR SPEAKER W/3/4" CONDUIT STUBBED ABOVE CEILING, NO WIRE, WEATHERPROOF BLANK COVER PLATE (DEVICES, WIRING & INSTALLATION BY OTHERS)
	CLOCK MOUNTED 6" BELOW CEILING LINE
D	DISCONNECT SWITCH BUILT INTO A/C
SD	EMPTY 4S J-BOX W/SINGLE GANG RING FOR FIRE ALARM SMOKE DETECTOR MOUNTED IN CEILING, NO WIRE, BLANK COVER
HD	EMPTY 4S J-BOX W/SINGLE GANG RING FOR FIRE ALARM HEAT DETECTOR MOUNTED IN CEILING, NO WIRE, BLANK COVER
H.W.	INSTA HOT WATER HEATER 120V. (OPTIONAL)
EXIT	WALL MOUNTED ILLUMINATED EXIT SIGN WITH EMERGENCY LIGHTS

NOTE:
1. LOCATE ALL RECEPTACLES & J-BOX'S @ 18" TO CENTERLINE OF BOX AFF
2. LOCATE ALL SWITCHES @ 48" TO TOP OF BOX AFF
3. LOCATE ALL T-STATS @ 48" TO TOP OF BOX AFF
4. WHEN MULTIPLE GFI RECEPTACLES ARE SHOWN ON THE SAME CIRCUIT INSTALL W/ FEED THROUGH GFI RECEPT & PROTECT DOWNSTREAM RECEPTACLE OFF OF FEED THROUGH GFI & LABEL PROPERLY
5. LIGHTING TO BE INSTALLED PER DETAIL #4 OF MMMC SPECS, TITLE 24, PARTS 1 & 2 OF THE CCR & TO IR-47-3 & 47-4 OF THE DSA INTEPRETIVE MANUAL
6. THE INSTALLATION OF ALL LIGHTS & CEILINGS TO BE INSTALLED PER MMM SPECS & PARTS 1 & 2 OF THE CCR & TO #IR-47-3 & #IR-47-4 OF THE DSA INTEPRETIVE MANUAL
7. ALL SUPPLY REGISTERS TO BE POSITIVELY ATTACHED TO THE ROOF RAFTER (2 CORNERS PER REGISTER MIN.)
8. FIRE ALARM SYSTEM IS SITE SPECIFIC AND IS APPROVED AS A SEPARATE DEFERRED APPROVAL.

ELECTRICAL PANEL SCHEDULE: A

VOLTS: 120/240 V | MOUNTING: INTERIOR | VOLTS: 1Ø
MAIN: 100 | SUB: | WIRE: 3

LOCATION	WATTS Aø	WATTS Bø	LTG	REC	MISC	BRK	CIRC	A	B	CIRC	BRK	MISC	REC	LGT	WATTS Aø	WATTS Bø	LOCATION
RECP.	720			4		20	1			2	20			14	896		LIGHT/ EXIT/PORCH
RECP.		360		2		20	3			4	20		1			360	FIRE ALARM (*see note)
HVAC	5244				1	70	5			6							
HVAC		5244				70	7			8							
							9			10							
							11			12							
							13			14							
							15			16							

WATTS/PHASE A= 6,860 | WATTS/PHASE B= 5,964
TOTAL WATTS= 16,144 | AMPS= 67.26 | LCL= 3320

ELECTRICAL PANEL SCHEDULE: B

VOLTS: 120/240 V | MOUNTING: INTERIOR | VOLTS: 1Ø
MAIN: 100 | SUB: | WIRE: 3

LOCATION	WATTS Aø	WATTS Bø	LTG	REC	MISC	BRK	CIRC	A	B	CIRC	BRK	MISC	REC	LGT	WATTS Aø	WATTS Bø	LOCATION
RECP.	540			3		20	1			2	20			14	896		LIGHT/ EXIT/PORCH
RECP.		360		2		20	3			4	20		1			360	FIRE ALARM (*see note)
HVAC	5244				1	70	5			6							
HVAC		5244				70	7			8							
							9			10							
							11			12							
							13			14							
							15			16							

WATTS/PHASE A= 6,680 | WATTS/PHASE B= 5,964
TOTAL WATTS= 15,964 | AMPS= 66.51 | LCL= 3320

ELECTRICAL PANEL

NOTE: UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

NOTE:
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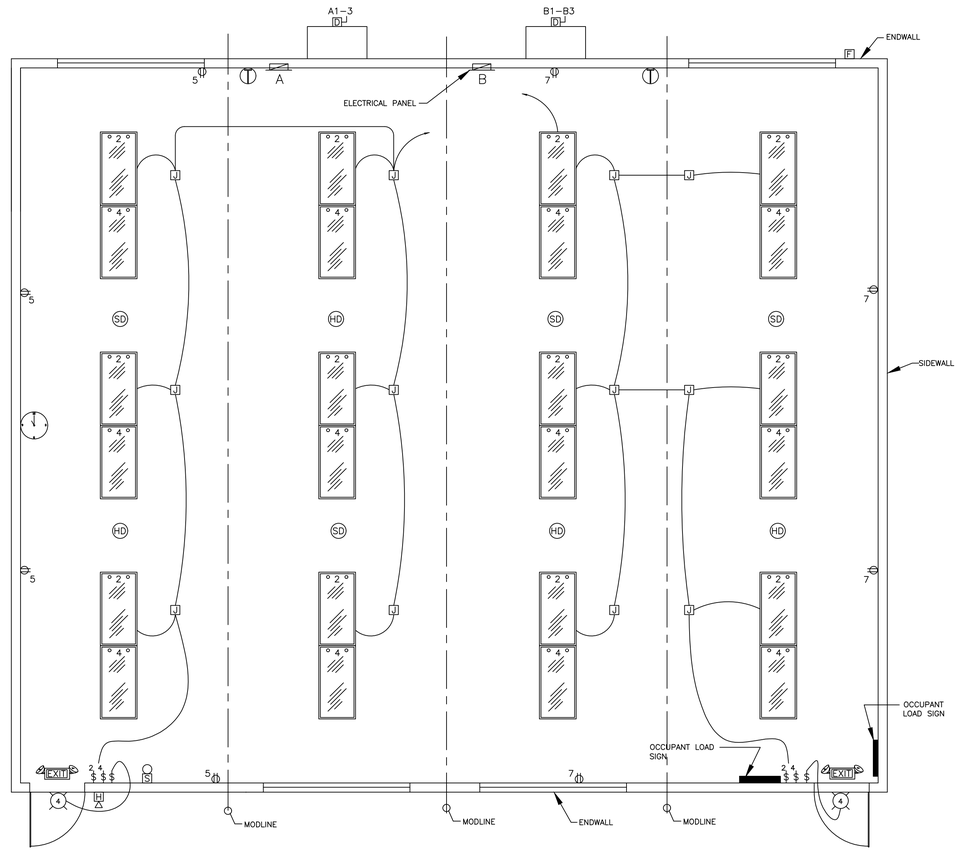
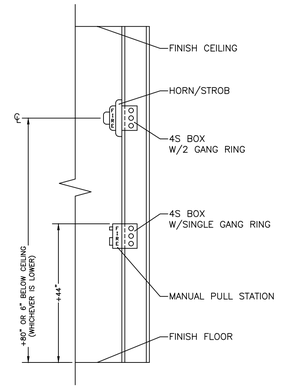


PROVIDE EMERGENCY EGRESS ILLUMINATION TO A SAFE DISPERSAL AREA PER DSA IR 10-1.
COORDINATE EMERGENCY EGRESS ILLUMINATION WITH PROJECT SPECIFIC SITE PLANS.

PHOTOCELL

ELECTRICAL PLAN

1/4" = 1'-0"



A STANDARD FIRE ALARM HEIGHTS

NOTE:
ALL EXISTING F.A. BOXES TO REMAIN WHERE LOCATED

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMS No.3602 STRUCTURAL STATE OF CALIFORNIA

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11450 MISSION BLVD.
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MODIFICATION PLAN FOR
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TABLE OF CONTENTS

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SCALE
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E – 1

OF 12 SHEETS

LEGEND

- 12"x12" SUPPLY AIR GRILLE W/4-WAY CURVED BLADE DIFFUSER "AIRMATE" #204M 12"x12" W/BACK BOX & COLLAR
- 24"x24" RETURN AIR GRILLE PERF. FACE
- THERMOSTAT-PROGRAMMABLE, "BRAEBURN" #2200

MECHANICAL NOTES

MECHANICAL EQUIPMENT INSTALLATION IN OR ON THIS BUILDING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE U.M.C. UNLESS OTHERWISE SPECIFICALLY EXEMPTED OR REQUIRED BY APPROVED STATE REGULATORY AGENCIES.

MECHANICAL AND GRAVITY VENTILATION REQUIREMENTS SHALL COMPLY WITH STATE OF CALIFORNIA CCR TITLE 24, PART 6, SECTION T-20.

RECTANGULAR DUCT SHALL BE 'FIBERGLASS' TYPE LP OR EQUAL U.L. LISTED WITH 1" THICK INSULATED DUCT BOARD WITH JOINTS SEALED WITH DUCTBOARD TAPE.

ROUND FLEX DUCT SHALL BE U.L. LISTED CLASS 1, STANDARD 181 - FACTORY MADE AIR DUCTS AND AIR CONNECTORS. THE MINIMUM THERMAL PERFORMANCE SHALL BE AT 4.2 R-VALUE, AND MEASURED IN ACCORDANCE TO ASTM C 518 OR ASTM C 177 AT 75DEG F MEAN TEMPERATURE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURES INSTALLATION INSTRUCTIONS

THERMOSTAT PROGRAMMING TO BE PERFORMED AND BATTERY TO BE PROVIDED BY OTHERS ON SITE.

ALL HVAC EQUIPMENT LEAVES FACTORY WIRED FOR 240 VOLT OPERATION THE ACCEPTABLE OPERATING RANGE FOR THE 240V & 208V TAPS ARE:

TAP	RANGE
240	253-216
208	220-187

AIR FILTERS IN HVAC UNITS OR SYSTEMS ARE TO BE CHANGED EVERY 30 DAYS BY OTHERS ON SITE.

TEST AND BALANCE OF HVAC SYSTEM TO BE PROVIDED AND PERFORMED BY OTHERS ON SITE.

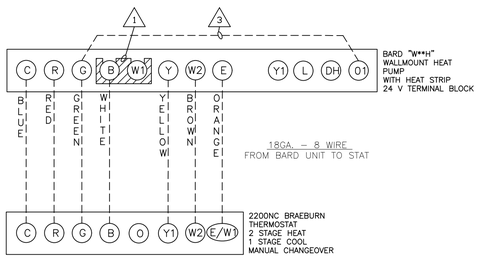
SET UP AND TESTING OF ECONOMIZERS, AND CLASSROOM VENTILATORS TO BE PROVIDED AND PERFORMED BY OTHERS ON SITE.

NOTE: HVAC units operated on generator power must be protected from voltage fluctuation, or voltage variance. Improper voltage may cause short and long range damage to HVAC unit components and may void HVAC unit warranties.

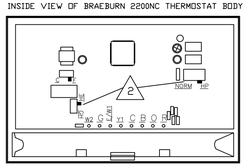
HP 1

4.0 Ton Heat Pump, Bard, R410a, Step Capacity Wallmount,
45,000 Nom Btu Cooling Capacity - 14.5 IPLV
41,000 Nom Btu Heating Capacity from Compressor.
Additional 13,562 Nom Btu Heating Capacity from Heat Strips @ 240V.
MCA 57, MOCP 60, Min. Wire Size #6
1500 CFM @ 0-.5 Esp, Unit Weight 700 lbs.
230 Volt, 60 Cycle, Single Phase
Recuires use of CPB5A-4 Top Discharce Plenum

THERMOSTAT WIRING DIAGRAM

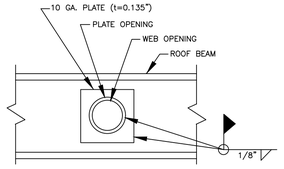


INSIDE VIEW OF BRAEBURN 2200NC THERMOSTAT BODY



NOTES:

1. BARD FACTORY INSTALLED JUMPER PLATE TO ENERGIZE ALL HEAT STRIPS FROM SINGLE STAGE HEATING STAT
2. SET ELEC./GAS SWITCH TO "HE" ON THIS APPLICATION. SET NORM/HP SWITCH TO "HP" ON THIS APPLICATION.
3. FIELD INSTALLED JUMPER (G TO O1) BY UNIT INSTALLER TO ENERGIZE VARIOUS BARD VENTILATION OPTIONS



WEB OPENING	PLATE SIZE	PLATE OPENING
6"ø	12"X12"	6 1/4"ø
8"ø	14"X14"	8 1/4"ø
10"ø	16"X16"	10 1/4"ø

24" MIN. SPACING ℄ OF HOLE TO ℄ OF HOLE.

OPTIONAL BEAM PENETRATION

NTS

1 / M-1

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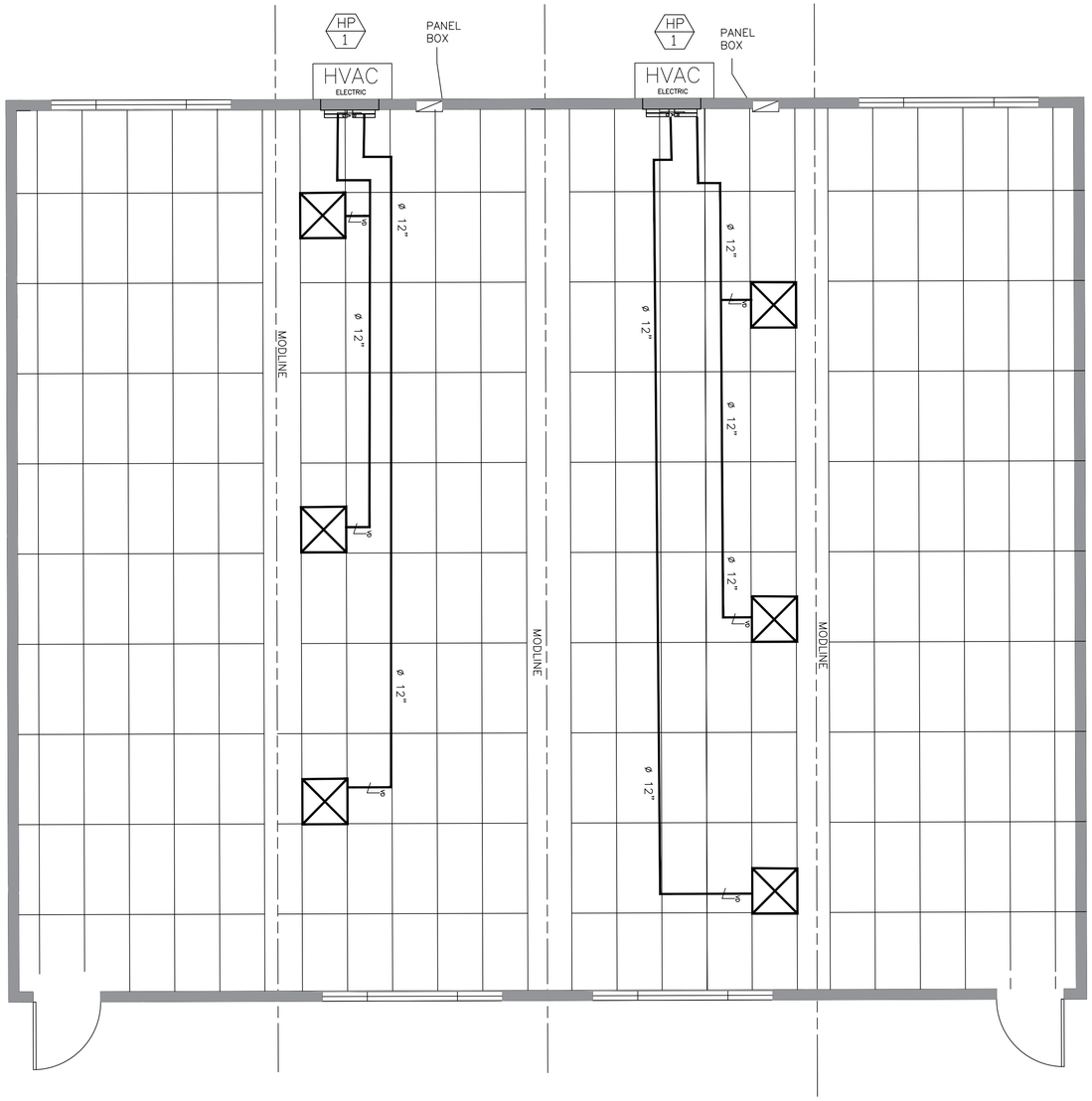

MECHANICAL PLAN

1/4" = 1'-0"

NOTE: UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

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JAMES T. SIMPSON
No.3602
STRUCTURAL
STATE OF CALIFORNIA

Date Signed: June 30, 2022

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

MODIFICATION PLAN FOR 48 X 40 BUILDINGS

TABLE OF CONTENTS

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SCALE
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M - 1

OF 12 SHEETS

mobile modular

11450 MISSION BLVD.
MIRA LOMA, CA 91752

DSA FOUNDATION PLANS

FOR EXISTING STOCKPILE BUILDINGS

(BASED ON PC 04 – 122274)

WITH OPTIONAL S_s = 2.183 AND S_s = 3.08

NOTE: SEE DESIGN DATA TABLE SHEET F-1

TITLE 24 CODES:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) (PART 1, TITLE 24, CCR)

2022 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2, TITLE 24, CCR)

2022 CALIFORNIA ELECTRICAL CODE (CEC) (PART 3, TITLE 24, CCR)

2022 CALIFORNIA MECHANICAL CODE (CMC) (PART 4, TITLE 24, CCR)

2022 CALIFORNIA PLUMBING CODE (CPC) (PART 5, TITLE 24, CCR)

2022 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)

2022 CALIFORNIA FIRE CODE (CFC) (PART 9, TITLE 24, CCR)

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC) (PART 10, TITLE 24, CCR)

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN) (PART 11, TITLE 24, CCR)

2022 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

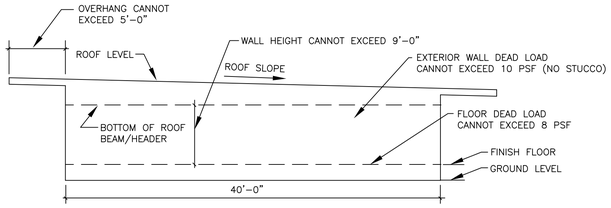
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

FOUNDATION PC ONLY LIMITATIONS

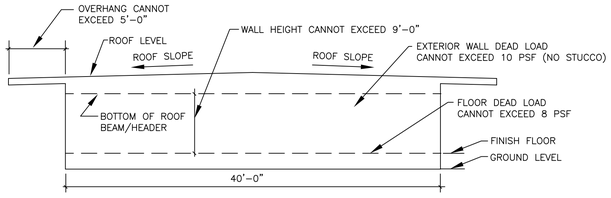
THIS WOOD FOUNDATION ONLY PC HAS BEEN DESIGNED TO SUPPORT THE SUPERSTRUCTURE FOR THE RELOCATABLE BUILDINGS LISTED ON SHEET F–2 OF THESE DRAWINGS. THE DESIGN CALCULATIONS HAVE BEEN BASED ON THE FOLLOWING:

- A ROOF OVERHANG OF 5 FEET MAX
- A WALL HEIGHT OF 9 FEET MAX (FROM FINISH FLOOR IN BUILDING TO BOTTOM OF STEEL ROOF BEAMS/HEADERS)
- WALL DEAD LOAD OF 10 PSF (NO STUCCO)
- FLOOR DEAD LOAD OF 8 PSF
- SEE SEISMIC DESIGN DATA, SHEET F–1, FOR S_{DS} LIMITATIONS FOR SITE.

THE TYPICAL ELEVATIONS BELOW ARE TO CLARIFY THESE LIMITATIONS. DOCUMENTATION SHALL BE PROVIDED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE, WHICH NEEDS TO BE REVIEWED AND APPROVED BY THE DSA STRUCTURAL PLAN REVIEWER.



SINGLE SLOPE BUILDING



DUAL SLOPE BUILDING

SHEET INDEX

OPTIONS	SHEET TITLE	SHEET NUMBER
COVER SHEET	GENERAL NOTES; APPLICABLE CODES; BUILDING DATA; WIND DESIGN DATA, EARTHQUAKE DESIGN DATA	F-1
ALL	DSA A NUMBER LISTING MATRIX	F-2
BUILDING SIZE		
24X40	☐ 50 PSF + 20 PSF (Ss 2.183)	F-3
	☐ 50 PSF (Ss 2.183)	F-3
	☐ 50 PSF + 20 PSF (Ss 3.08)	F-3A
	☐ 50 PSF (Ss 3.08)	F-3A
	☐ 100 PSF (Ss 2.183)	F-3B
	☐ 125 PSF (Ss 2.183)	F-3B
	☐ 100 PSF (Ss 3.08)	F-3C
	☐ 125 PSF (Ss 3.08)	F-3C
36X40	☐ 50 PSF + 20 PSF (Ss 2.183)	F-3
	☐ 50 PSF (Ss 2.183)	F-3
	☐ 50 PSF + 20 PSF (Ss 3.08)	F-4A
	☐ 50 PSF (Ss 3.08)	F-4A
	☐ 100 PSF (Ss 2.183)	F-4B
	☐ 125 PSF (Ss 2.183)	F-4B
	☐ 100 PSF (Ss 3.08)	F-4C
	☐ 125 PSF (Ss 3.08)	F-4C
48X40	☐ 50 PSF + 20 PSF (Ss 2.183)	F-5
	☐ 50 PSF (Ss 2.183)	F-5
	☐ 50 PSF + 20 PSF (Ss 3.08)	F-5A
	☐ 50 PSF (Ss 3.08)	F-5A
	☐ 100 PSF (Ss 2.183)	F-5B
	☐ 125 PSF (Ss 2.183)	F-5B
	☐ 100 PSF (Ss 3.08)	F-5C
	☐ 125 PSF (Ss 3.08)	F-5C
ALL	REFERENCE DETAILS	F-6
ALL	DSA FORM 103	F-7
ALL	GENERAL SPECIFICATIONS	F-7A
ALL	ADJACENT BLDGS DETAILS	F-8
ALL	ADJACENT BLDGS DETAILS	F-9

A			
A			
BB C B		E	
C B BA	D		
AD	C	C E C C AA	
AD	C	E C	
AD	E C C I B A	B A	
A A	E H H		
	H H		
	H H E		
A A			
A	AD	AA	C A
A A	B A		
A A C B C			AA
E A B			B
A C			FG
CC AB A C B ABA			
A			B A
A AB A C B B			
E CC C B C			E
C A			E
			1.03
A B			
C B C B ABA			E
C A			1.222
	E		1.75
	2.36		0.349
RESPONSE COEFFICIENT, Cs (USING REDUCED Sds AS ALLOWED BY ASCE7, SEC. 12.8.1.3)	0.493		E
5. SEISMIC DESIGN CATEGORY:			LIGHT MODULAR STEEL MOMENT FRAME
6. BASIC SEISMIC-FORCE-RESISTANCE-SYSTEM			
7. DESIGN BASE SHEAR: IN EACH DIRECTION (LONGITUDINAL & TRANSVERSE).			
OPTION	3.08		2.183
24'X40'	27085#		19174#
36'X40'	38681#		27383#
48'X40'	55009#		38941#
8. SEISMIC RESPONSE COEFFICIENT (Cs)			
OPTION	3.08		2.183
Cs	0.493		0.349
9. RESPONSE MODIFICATION FACTOR (R)			3.5
10. ANALYSIS PROCEDURE USED:			EQUIVALENT LATERAL FORCE
			NO HORIZONTAL OR VERTICAL IRREGULARITIES PRESENT
11. FLOOD DESIGN DATA:			PROJECT IS NOT LOCATED IN FLOOD ZONE

DSA PC STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

PRE–CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122274 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/01/2023

PC 04–122274

COVER SHEET

SITE SPECIFIC APPROVAL		APPROVAL – PC ENGINEER OF RECORD
	PRE–CHECK (PC) DOCUMENT CODE: 2022 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED	REGISTERED PROFESSIONAL ENGINEER MANNY D. FRANCO No. S3385 Exp. 03/31/24 STRUCTURAL STATE OF CALIFORNIA 10/06/23

TABLE OF CONTENTS

Sheet No	Description	Dated	Revised

DRAWN

CHECKED

DATE
18 MAY 2023

SCALE

JOB NO.

F — 1

OF 19 SHEETS

APPROVED A NUMBERS APPLICABLE TO THIS PC PLAN

MANUFACTURER OF MODULAR BUILDING	DSA A NUMBER OF MODULAR BUILDING	BASED ON PC	YEAR OF APPROVAL OF MODULAR BUILDING	MODULAR BUILDING SIZE	DESIGN FLOOR LIVE LOAD
MB	A04106168	PC 04–104778	2004	48 X 40	50
MB	A04106292	PC 04–104778	2004	48 X 40	50
MB	A04106743	PC 04–104778	2005	24 X 40	50
MB	A04107176	PC 04–104778	2005	48 X 40	50
MB	A04107310	PC 04–104778	2006	24 X 40	50
MB	A101926	04–101244	2000	36 X 40	50
MB	A52938	PC57	1990	24 X 40	50
MB	A04103266	04–101244	2001	48 X 40	50
MB	A04107251	04–104778	2005	36 X 40	50
MB	A04107207	04–104778	2006	36 X 40	50
MT	A54198	PC 121	1990	24 X 40	50
MT	A60811	PC 243	1994	24 X 40	50
MT	A61172	PC 243	1994	24 X 40	50
MT	A65965	PC 266	1997	24 X 40	50
MT	A69746	PC 282	1998	24 X 40	50
MT	A04100727	PC 300	1999	36 X 40	50
MT	A04101194	PC 270	1999	24 X 40	50
MT	A04101767	PC 04–101419	2001	24 X 40	50
MT	A04101891	PC 04–101419	2000	48 X 40	50
MT	A04103044	PC 04–101419	2001	24 X 40	50
MT	A04103205	PC 04–101268	2001	36 X 40	50+20
MT	A04102365	PC 04–101768	2001	24 X 40	50
MT	A04105219	PC 04–101419	2003	24 X 40	50
MT	A04105400	PC 04–104801	2003	48 X 40	50+20
MT	A04105434	PC 04–104796	2003	24 X 40	50
MT	A04105483	PC 04–104796	2004	24 X 40	50
MT	A04106558	PC 04–104801	2004	36 X 40	50+20
MT	A04100726	282	1998	36 X 40	50
MT	A64873	243	1996	36 X 40	50
MT	A02105794	04–104801	2004	36 X 40	50
MT	A04103205	04–101268	2001	36 X 40	50
MT	A54130	79	1991	24 X 40	50
SI	A04108525	PC 04–107557	2007	48 X 40	50
SI	A04108870	PC 04–107557	2008	24 X 40	50
SI	A04108943	PC 04–107557	2007	36 X 40	50 + 20
SI	A04109410	PC 04–107557	2008	48 X 40	50 + 20
SI	A04109518	PC 04–107557	2008	48 X 40	50 + 20
SI	A04109520	PC 04–107557	2008	24 X 40	50 + 20
SI	A04109615	PC 04–107557	2008	48 X 40	50 + 20
SI	A04109640	PC 04–107557	2008	24 X 40	50+20
SI	A04110549	04–109299	2009	24 X 40	50
SI	A04109641	04–107557	2008	36 X 40	50
SI	A04110811	04–109299	2010	36 X 40	50
SI	A04110041	04–107557	2009	24 X 40	50
SI	A04110433	04–109295	2009	24 X 40	50
SI	A04110434	04–109295	2009	24 X 40	50
SI	A04109754	04–107557	2008	36 X 40	50
SI	A04110142	04–109299	2009	24 X 40	50
SI	A04108944	04–107557	2007	48 X 40	50
WS	A04107179	PC 04–105135	2005	24 X 40	50 + 20
GD	A66762	269	1997	24 X 40	50
KS	A68188	PC 266	1997	24 X 40	50
AM	A59780	PC 237	1993	24 X 40	50
AM	A64301	PC 237	1995	24 X 40	50
AM	A65821	PC 264	1996	24 X 40	50
AM	A65821	PC 264	1997	24 X 40	50
AM	A69217	PC 328	1998	24 X 40	50
AM	A02101284	PC 387	1999	24 X 40	50
AM	A02102021	PC 02–101488	2003	24 X 40	50
AM	A02102043	PC 02–101488	2001	24 X 40	50
AM	A02102350	PC 02–101488	2001	24 X 40	50
AM	A02102259	PC 02–101488	2000	24 X 40	50
EN	A02116418	PC 02–113902	2017	24 X 40	65
AM	A68218		1997	24 X 40	50
AM	A02–117941	PC 02–115700	2019	24 X 40	50+15
AM	A02–117120	PC 02–115700	2018	24 X 40	50+15
EN	A02–116418	PC 02–113902	2017	24 X 40	65
EN	A02–117835	PC 02–116094	2019	24 X 40	65
SC	A02–117709	PC 02–104027	2018	24 X 40	50+15
SC	A02–116779	PC 02–104027	2017	24 X 40	50+15
SC	A02–116830	PC 02–104027	2017	24 X 40	50+15

APPROVED A NUMBERS APPLICABLE TO THIS PC PLAN

MANUFACTURER OF MODULAR BUILDING	DSA A NUMBER OF MODULAR BUILDING	BASED ON PC	YEAR OF APPROVAL OF MODULAR BUILDING	MODULAR BUILDING SIZE	DESIGN FLOOR LIVE LOAD
AM	A02103141	PC 02–101837	2001	24 X 40	50
AM	A02105185	PC 02–101837	2003	24 X 40	50
AM	A02105619	PC 02–104915	2003	24 X 40	50
AM	A02105634	PC 02–104915	2003	36 X 40	50
AM	A02106165	PC 02–104915	2004	24 X 40	50
AM	A02106184	PC 02–104917	2004	48 X 40	50
AM	A02106185	PC 02–104925	2004	36 X 40	50
AM	A02106215	PC 02–104925	2004	36 X 40	50
AM	A02106239	PC 02–104925	2004	24 X 40	50
AM	A02106374	PC 02–104915	2004	24 X 40	50
AM	A02106845	PC 02–104915	2005	24 X 40	50
AM	A02107161	PC 02–104915	2005	24 X 40	70 50+20
AM	A02107390	PC 02–104915	2005	24 X 40	50
AM	A02108179	PC 02–104917	2006	48 X 40	50
AM	A02105619	02–104920	2003	24 X 40	50
AM	A02106214	02–104915	2004	24 X 40	50
AM	A02106499	02–101285	2004	48 X 40	50
AM	A02101583	388	1999	48 X 40	50
AU	A65301	PC 253	1996	24 X 40	50
AU	A65601	PC 253	1996	24 X 40	50
AU	A67426	PC 272	1997	36 X 40	50
AU	A03107543	PC 04–104816	2004	24 X 40	50
AU	A04101310	PC 04–100335	2000	24 X 40	50
AU	A04105339	PC 04–104816	2003	24 X 40	50
AU	A04106096	PC 04–104816	2004	24 X 40	50
AU	A04106097	PC 04–104816	2004	24 X 40	50 + 20
AU	A64839	A64839 STOCKPILE	2000	24 X 40	50
AU	A59725	A59725 STOCKPILE	1991	48 X 40	50
AU	A04105948	104816	2004	36 X 40	50
AU	A67425	A67425 STOCKPILE	1999	48 X 40	50
EN	A01100789	PC 271	1999	24 X 40	50
EN	A02101478	PC 271	1999	24 X 40	50
EN	A01102792	PC 02–101236	2000	24 X 40	50
EN	A02102108	PC 02–101236	2000	24 X 40	50
EN	A02102873	PC 02–101236	2002	24 X 40	50
EN	A02103726	PC 02–101236	2002	24 X 40	50
EN	A02104123	PC 02–101236	2003	24 X 40	50
EN	A02105136	PC 02–101236	2003	24 X 40	50
EN	A02105898	PC 02–104899	2003	48 X 40	50
EN	A02105944	PC 02–104899	2004	36 X 40	50
EN	A02105945	PC 02–104899	2004	24 X 40	50+20
EN	A02107272	PC 02–104899	2005	48 X 40	50
EN	A02107937	PC 02–104899	2006	48 X 40	50+20
EN	A02108109	PC 02–104899	2006	36 X 40	50
EN	A02108288	PC 02–104899	2006	24 X 40	50
EN	A02107484	PC 02–104899	2005	24 X 40	50
EN	A02109360	PC 02–104899	2008	24 X 40	50
EN	A02107401	02–104899	2005	36 X 40	50
EN	A01102793	02–101236	2000	48 X 40	50
EN	A02103384	02–101236	2001	48 X 40	50
MB	A52144	PC 307	1989	24 X 40	50
MB	A52350	PC 57	1990	24 X 40	50
MB	A53703	PC 57	1990	24 X 40	50
MB	A53982	PC 57	1990	24 X 40	50
MB	A54553	PC 57	1990	24 X 40	50
MB	A65714	PC 253	1996	24 X 40	50
MB	A68436	PC 323	1997	24 X 40	50
MB	A101905	PC 04–101244	2000	24 X 40	50
MB	A04103407	PC 04–101244	2001	36 X 40	50
MB	A04103659	PC 04–101244	2001	24 X 40	50
MB	A04104262	PC 04–101244	2002	24 X 40	50
MB	A04104623	PC 04–101244	2003	48 X 40	50
MB	A04104624	PC 04–101244	2003	24 X 40	50
MB	A04105648	PC 04–104778	2003	48 X 40	50
MB	A04105913	PC 04–104778	2005	24 X 40	50
MB	A04107230	PC 04–104778	2005	24 X 40	50
MB	A04106102	PC 04–104778	2004	24 X 40	50

DSA PC STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

LEGEND:

AM = AMERICAN MODULAR SYSTEMS, INC.
AU = AURORA MODULAR INDUSTRIES, INC.
EN = ENVIRONOPLEX, INC.
MB = MODULAR STRUCTURES INTERNATIONAL, INC.
MT = MODTECH, INC.
SI = SILVER CREEK INDUSTRIES, INC.
WS = WALDEN STRUCTURES & CONSTRUCTION
GD = GARY DOUPNIK MANUFACTURING, INC.
KC = KARSTON COMPANY

NOTES:

1. ONLY THOSE BUILDINGS BUILT WITH 50# OR 50#+20# PARTITION LOADS AS NOTED IN TABLE WILL BE A PART OF THIS PC.
2. ONLY THOSE BUILDINGS MANUFACTURED BY THE SAME MANUFACTURER AND WITH PLANS AND DETAILS SHOWN ON PLAN SHEETS F–8 AND F–9 MAY BE PLACED ADJACENT TO EACH OTHER.

PRE–CHECK (PC) DOCUMENT
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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122274 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/01/2023

PC 04–122274

A–NUMBERS

SITE SPECIFIC APPROVAL

PRE–CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

APPROVAL – PC ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER
MANNY D. [illegible]
S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
10/06/23

TABLE OF CONTENTS

Sheet No.	Description	Dated	Revised

DRAWN

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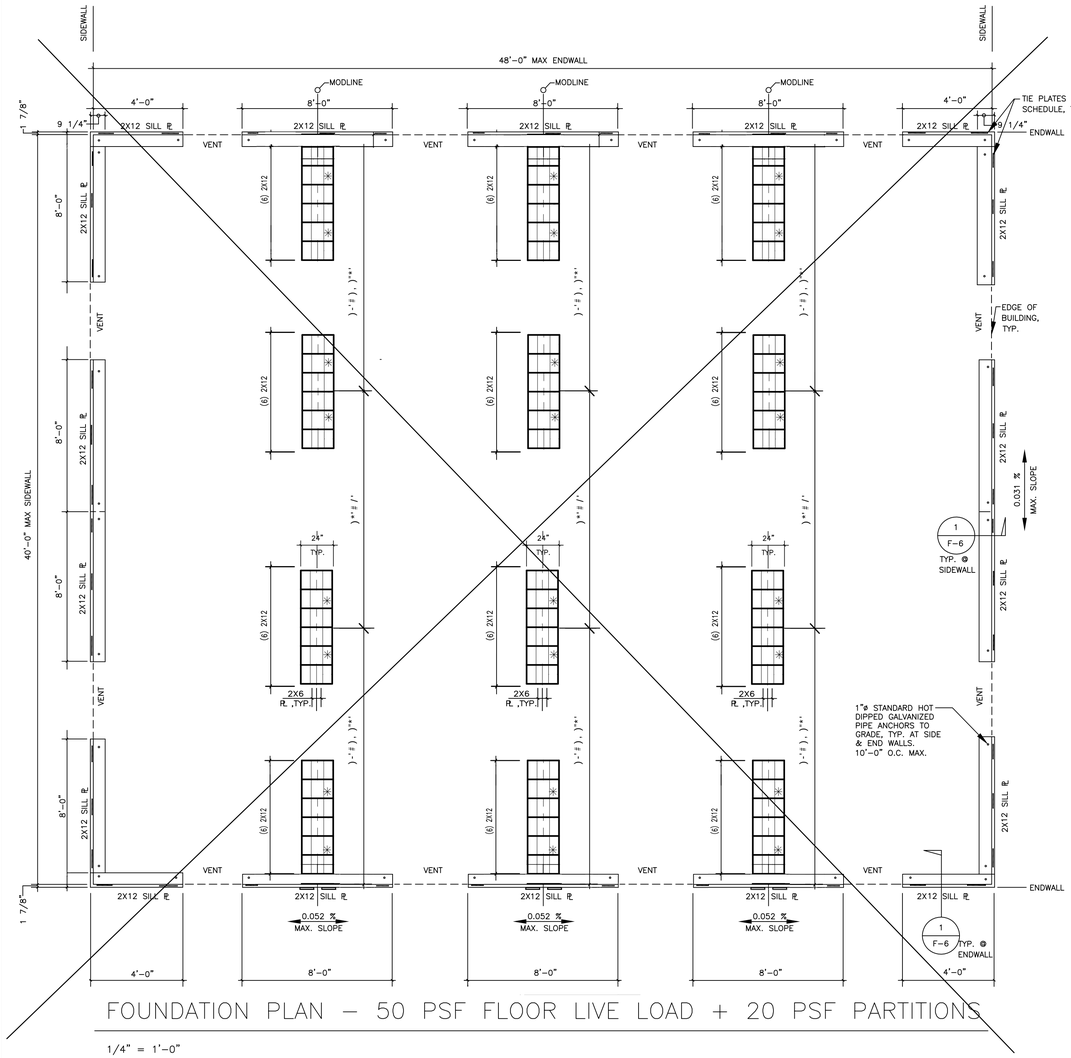
JOB NO.

F — 2

OF 19 SHEETS

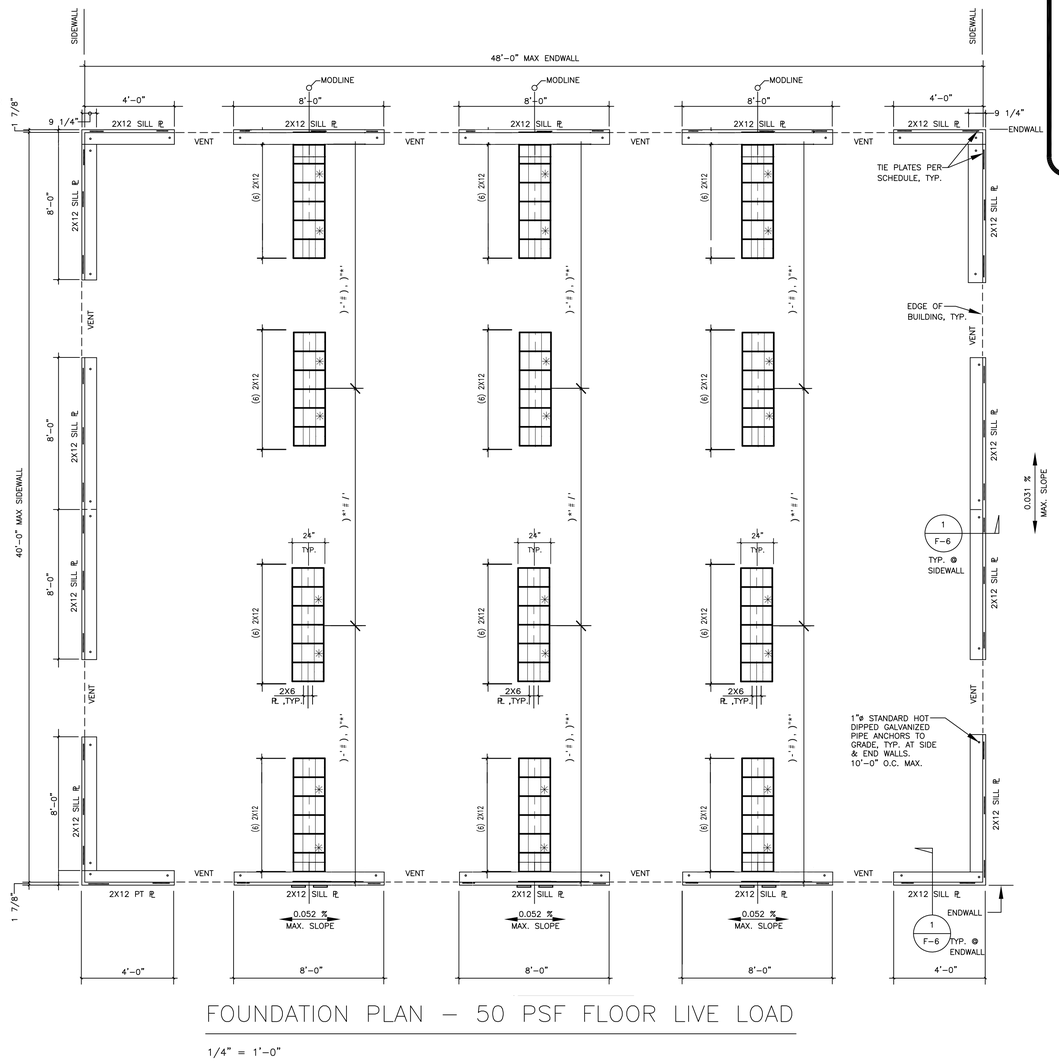
MOBILE MODULAR MANAGEMENT PC – 113193 SHEET_F–2A.DWG

S_S=2.183 (MAPPED VALUE)



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD + 20 PSF PARTITIONS

1/4" = 1'-0"



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD

1/4" = 1'-0"

NOTES:

1. SEE SHEET F–1 FOR GENERAL NOTES.
2. SEE SHEET F–7 FOR TYPICAL NOTES.
3. UNDER FLOOR VENTILATION: (@24'X40' BLDG.)*
   REQUIRED VENT. AREA = 24' X 40'/150 = 6.4 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.25' X (4X4 + 4X 3.385) = 7.38 SQ. FT. (OK)
4. UNDERFLOOR VENTILATION: (@36'X40' BLDG.)*
   REQUIRED VENT. AREA = 36'X40'/150 = 9.6 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (6X4 + 4X3.387) = 14.08 SQ. FT. (OK)
5. UNDERFLOOR VENTILATION: (@48'X40' BLDG.)*
   REQUIRED VENT. AREA = 48'X40'/150 = 12.8 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (8X4 + 4X3.385) = 17.08 SQ. FT. (OK)
6. PROVIDE 2–2X PLATES OR BLOCKS @ 24'X40' BUILDING (MIN. HEIGHT = 3")
   PROVIDE 3–2X PLATES OR BLOCKS @ 36' & 48'X40' BUILDINGS (MIN. HEIGHT = 4 1/2")
7. ALLOWABLE SOIL BEARING = 1000 PSF, PER DSA I.R.16–1.
8. ALL NAILS FOR PLATE TO PLATE NAILING SHALL BE 16d GALV. BOX.
   ALL NAILS FOR PLYWOOD SKIRTING SHALL BE 8d GALV. BOX.
   ALL FOUNDATION NAILS SHALL BE HOT DIPPED GALVANIZED
   WITH A MIN. OF 1 OZ. OF ZINC PER SQ. FT.
9. UNDERFLOOR DRAINAGE SHALL BE PROVIDED TO PREVENT WATER FROM PONDING BENEATH THE STRUCTURE. UNDERFLOOR DRAINAGE SHALL BE NOTED AND DETAILED ON THE PROJECT SPECIFIC SITE PLANS.
10. HEIGHT OF BUILT UP PLATES WITH SILL PLATE IS NOT TO EXCEED 18" MAX.
11. ALL 2X PLATES AT EXTERIOR FOUNDATIONS AND 2X6 PLATES AT MODLINES TO BE 4' OR 8' LONG WITH NO SPLICES. IF SHORTER PIECES OF 2X PLATES ARE TO BE USED, SPLICE PLATES PER DETAIL 9/F–6.

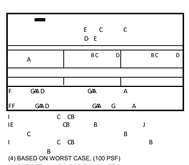
* NOTE: UNDER FLOOR VENTILATION CALCULATION BASED ON 3" OR 4 1/2" HIGH VENTS. CALCULATIONS CAN VARY BASED ON ACTUAL SITE GRADE ELEVATIONS AND VENT HEIGHTS, MIN. VENT HEIGHT = 1 1/2" AND MAX. VENT HEIGHT = 16 1/2". PROVIDE NOTED REQUIRED VENT. AREA FOR EACH SIZE BUILDING.

SYMBOLS LEGEND
* LAG SCREWS

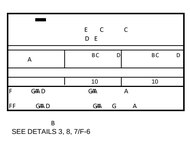
Note: Lags are equally spaces.
Total number are based on Table 3 page F-3

TABLE 3

✳ NUMBER OF LAGS AT MODLINE
NUMBER OF LAGS PER MODELINE
1/2" x 3"
8



(4) BASED ON WORST CASE, (100 PSF)
(5) SEE DETAIL 1/F-6 FOR SILL PLATES
(6) (TIE PLATES EQUALLY SPACED)



SEE DETAILS 3, 8, 7/F-6

2X NAILER TO CHANNEL WEB SCHEDULE

E	C	C
J	F	
A	SPACING OF SCREW OF 2X NAILER PER ENDWALL	SPACING OF SCREW OF 2X NAILER PER SIDEWALL
	B	B
F	GB D	GB A
FF	GB D	GB G A

(1) SEE DETAIL 8/F-6 FOR 2X NAILER
(2) SEE 3/F-6 FOR ADDITIONAL NOTES

(3) 0.131x3" NAIL SCHEDULE (PLATE TO PLATE)

E	C	C
J	F	
A	SPACING OF NAILS PER ENDWALL	SPACING OF NAILS PER SIDEWALL
	B	B
F	GB D	GB A
FF	GB D	GB G A

(1) SEE DETAIL 11/F-6 FOR TYP PLATE TO PLATE FOR WILDLAND URBAN INTERFACE (WUI)
(2) SEE DETAIL 8/F-6 FOR PLATE TO PLATE APPLICABLE TO AMERICAN MODULAR SYSTEMS, INC.
NOTE: BASED ON WORST CASE, (100 PSF)

SITE SPECIFIC APPROVAL		APPROVAL – PC ENGINEER OF RECORD
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TABLE OF CONTENTS

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MIRA LOMA, CA 91752

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DATE: 11/01/2023

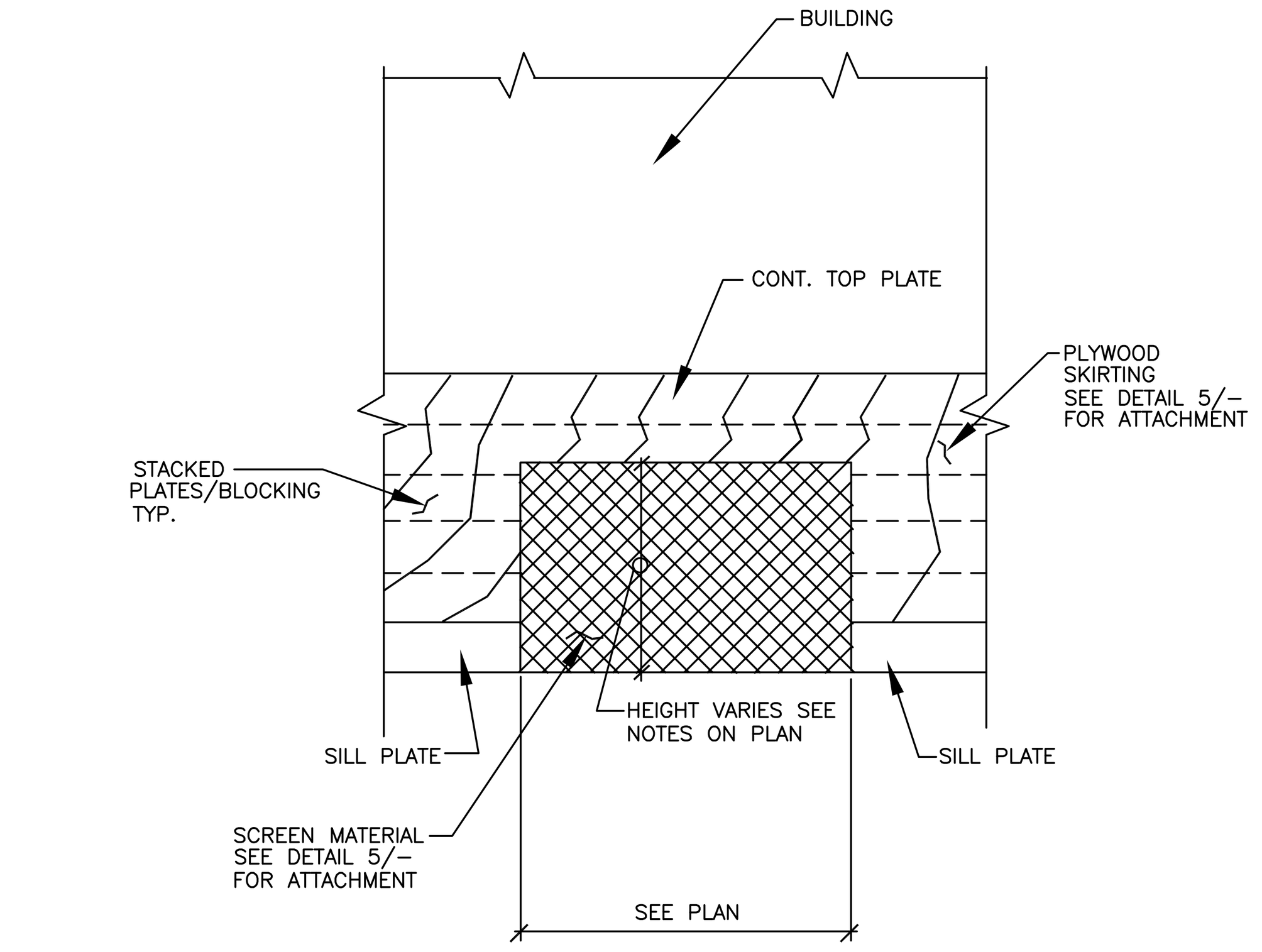
PC 04–122274

FOUNDATION PLANS (48X40)

DRAWN
CHECKED
DATE
18 MAY 2023
SCALE
JOB NO.

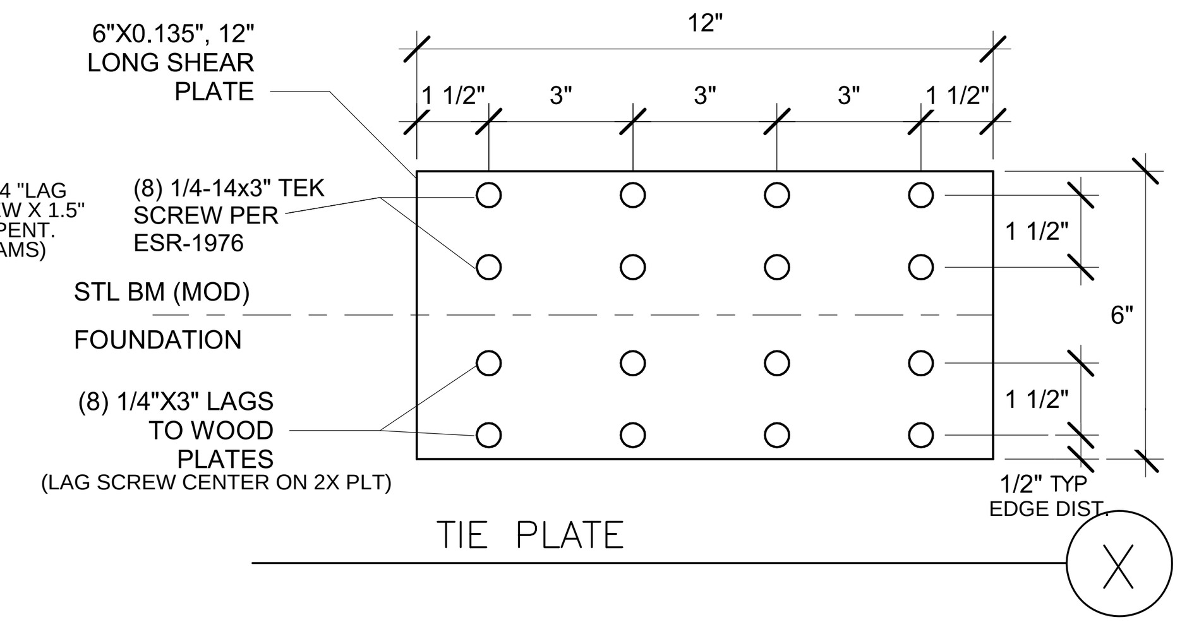
F – 5

OF 19 SHEETS



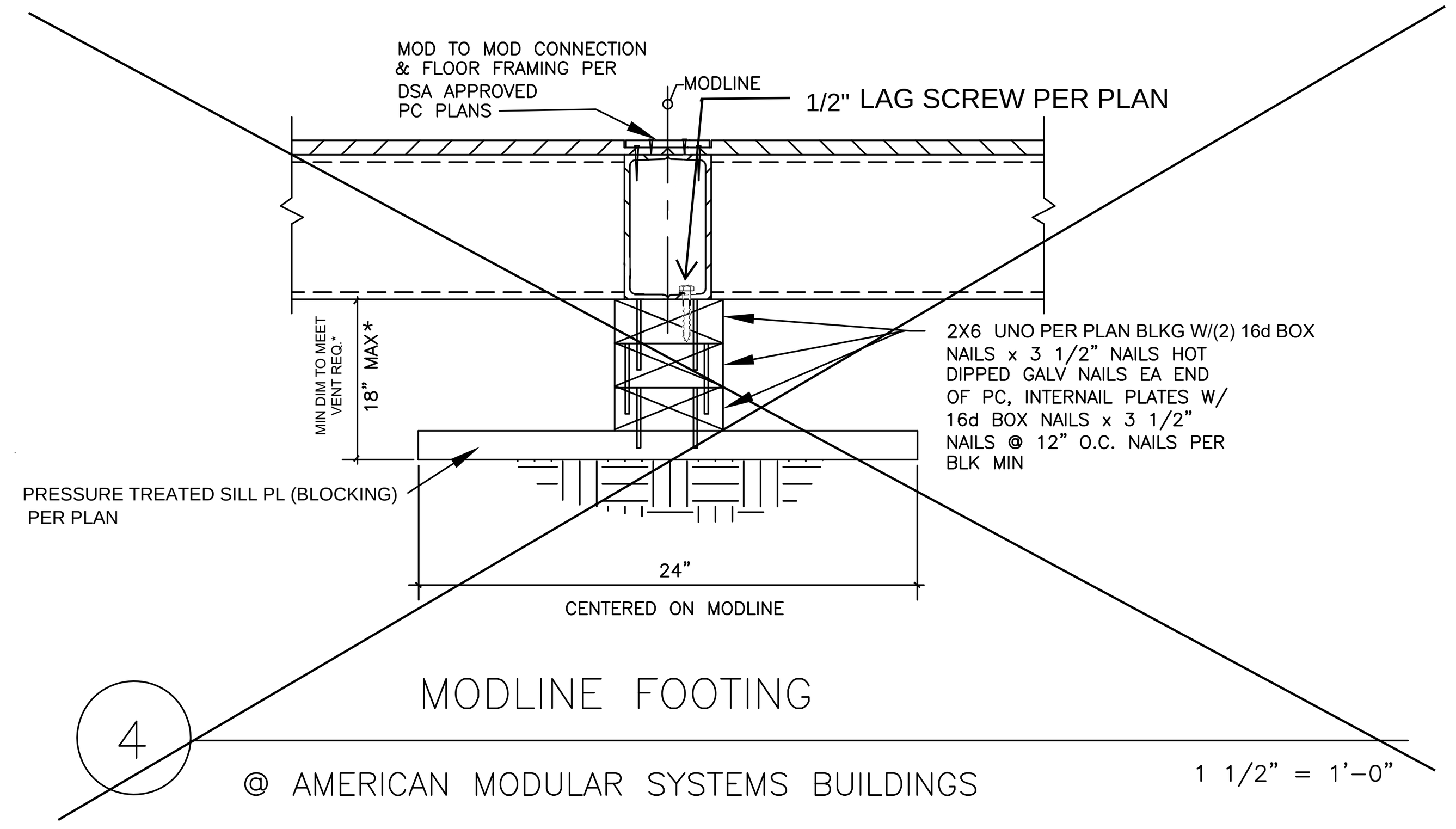
10 SCREEN DETAIL

NTS



TIE PLATE

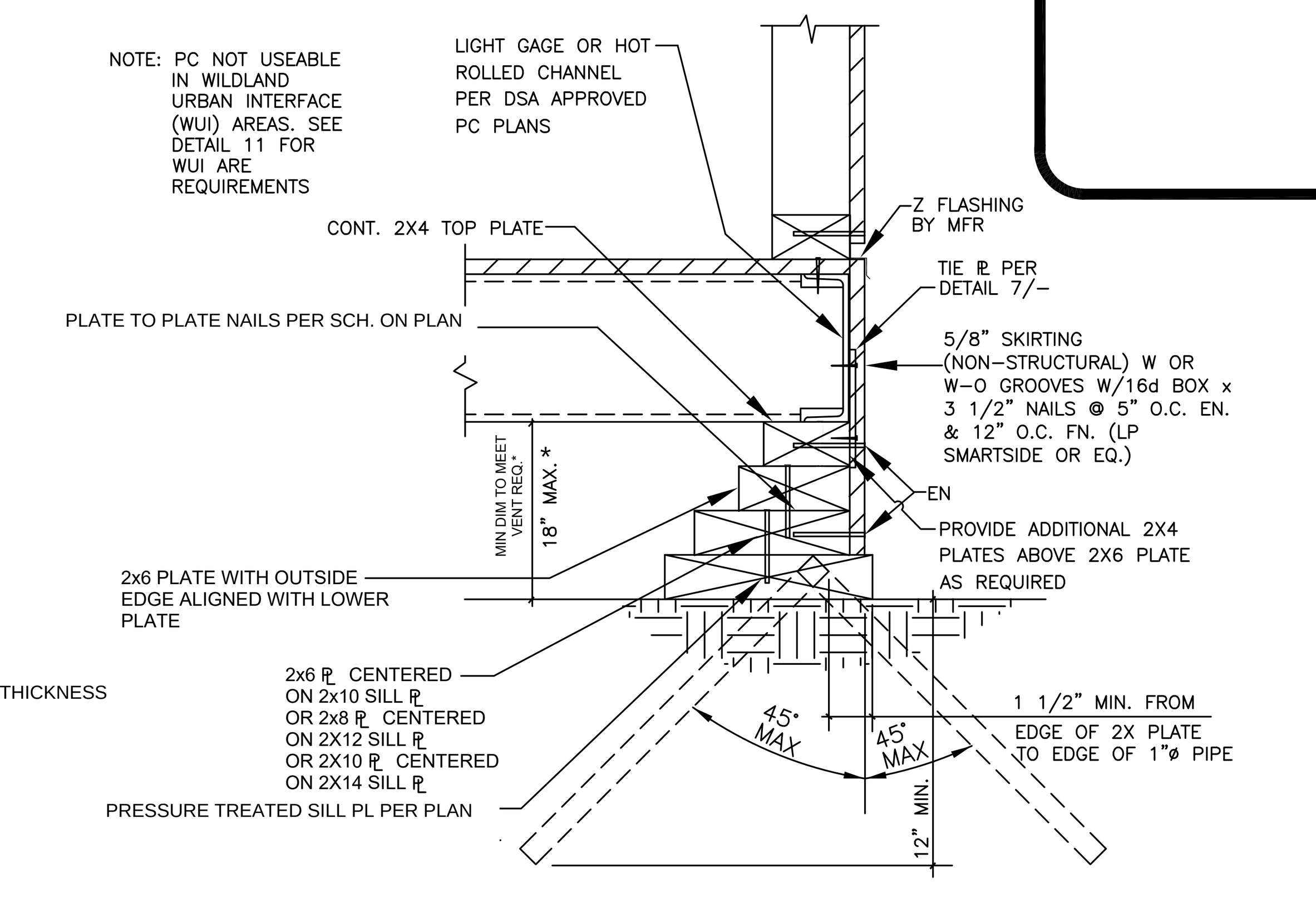
X



4 MODLINE FOOTING

@ AMERICAN MODULAR SYSTEMS BUILDINGS

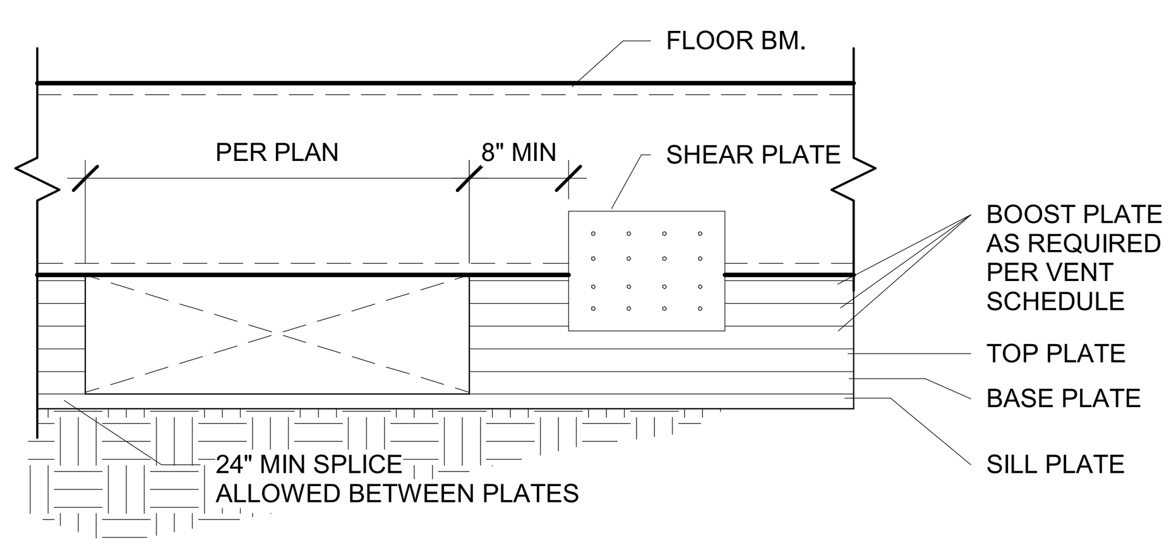
1 1/2" = 1'–0"



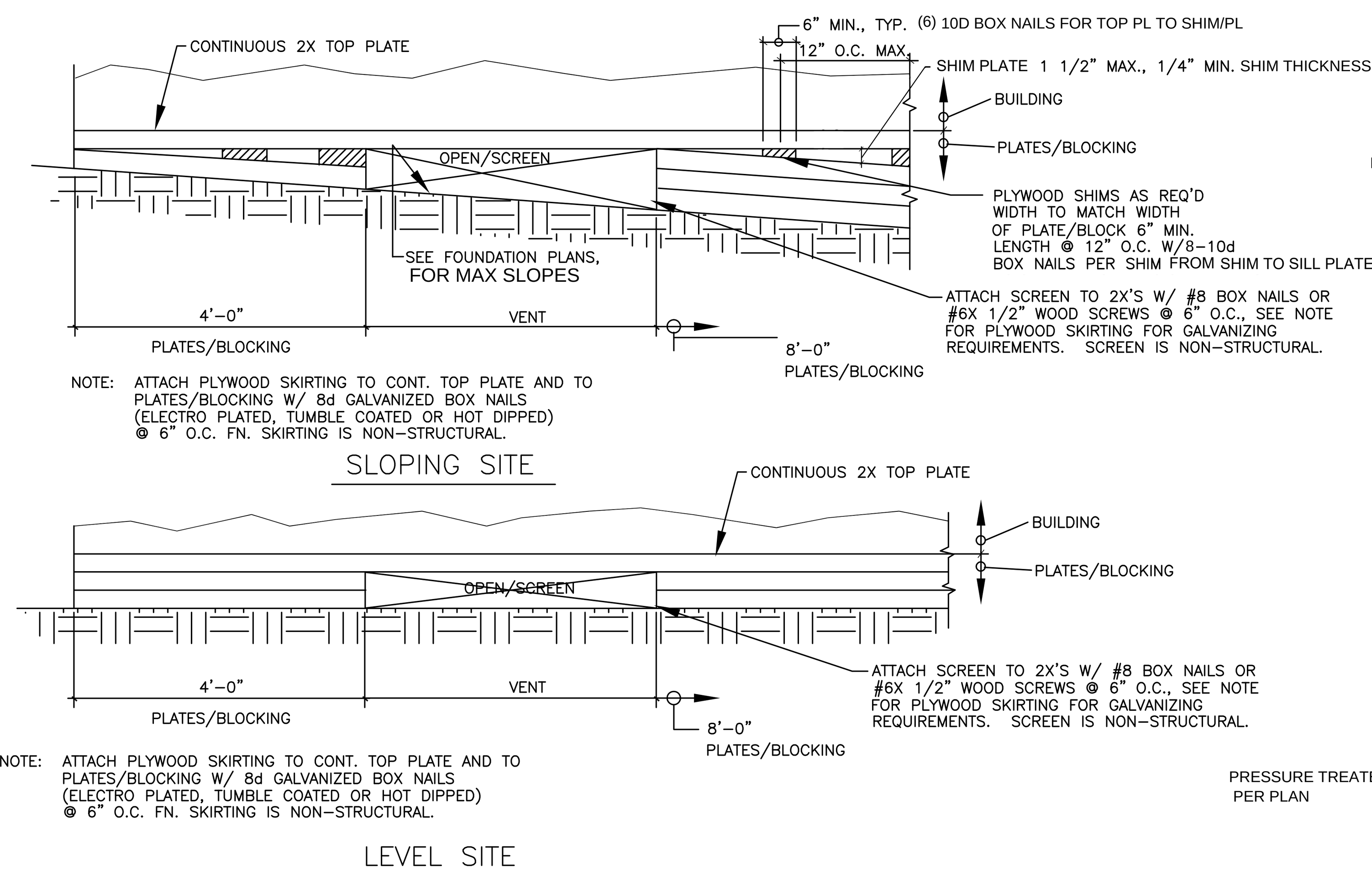
1 END WALL & SIDEWALL SILL ℙ'S

NOTE: SEE SCHEDULE FOR PLATES

1 1/2" = 1'–0"

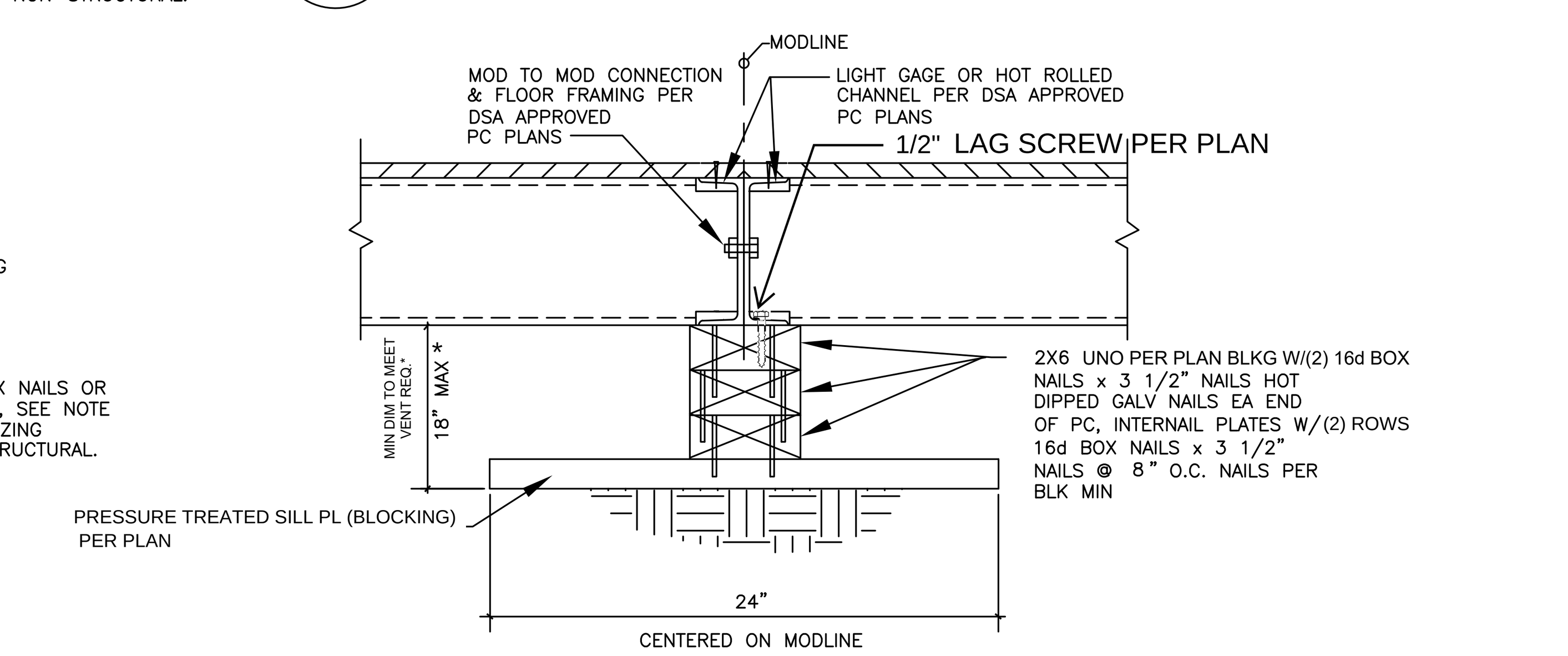


7 TYPICAL ELEVATION FOUNDATION TIE PLATES



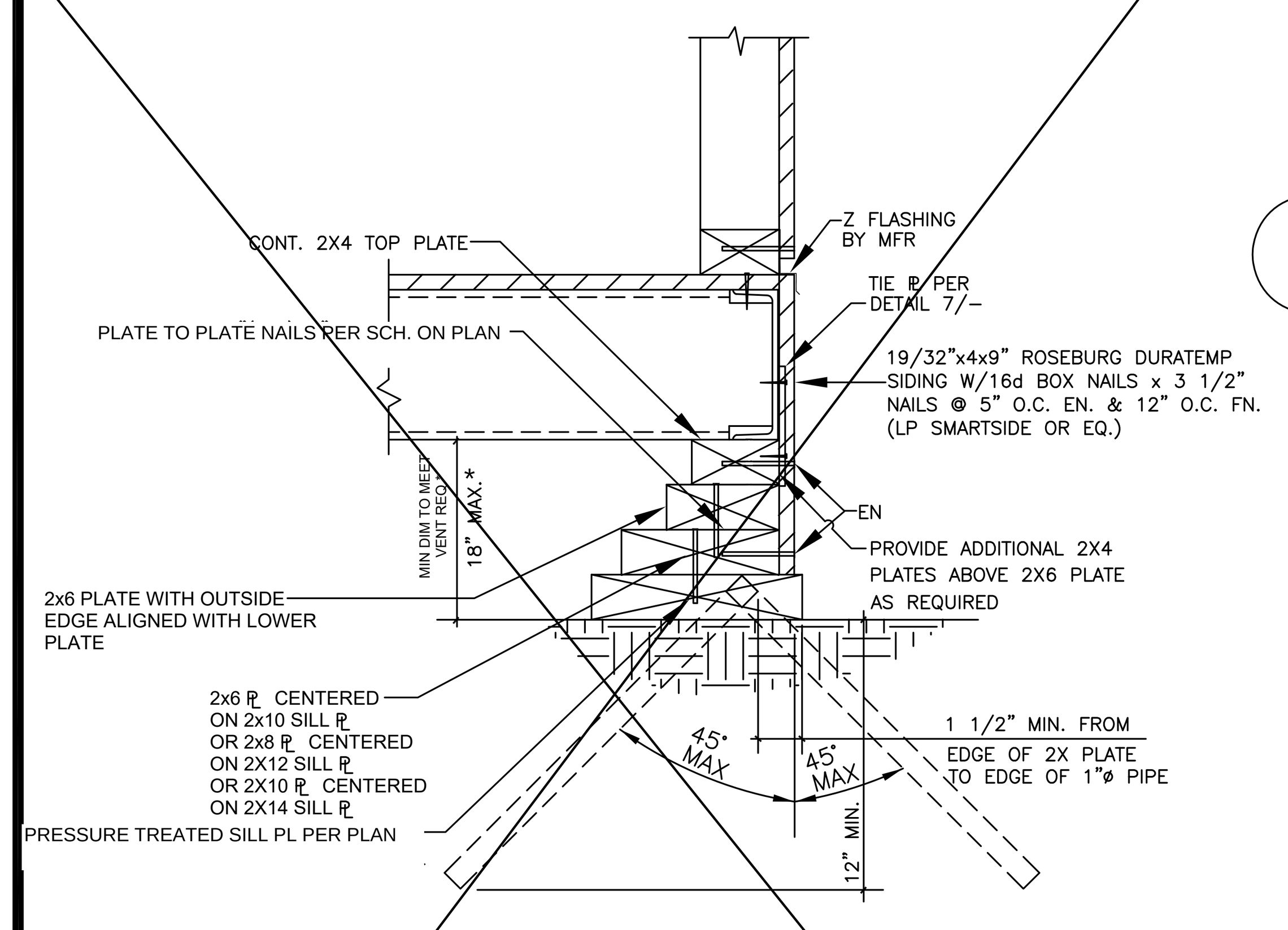
5 PLATE LAYUP @ PERIMETER FTG'S

NTS



2 MODLINE FOOTING

1 1/2" = 1'–0"

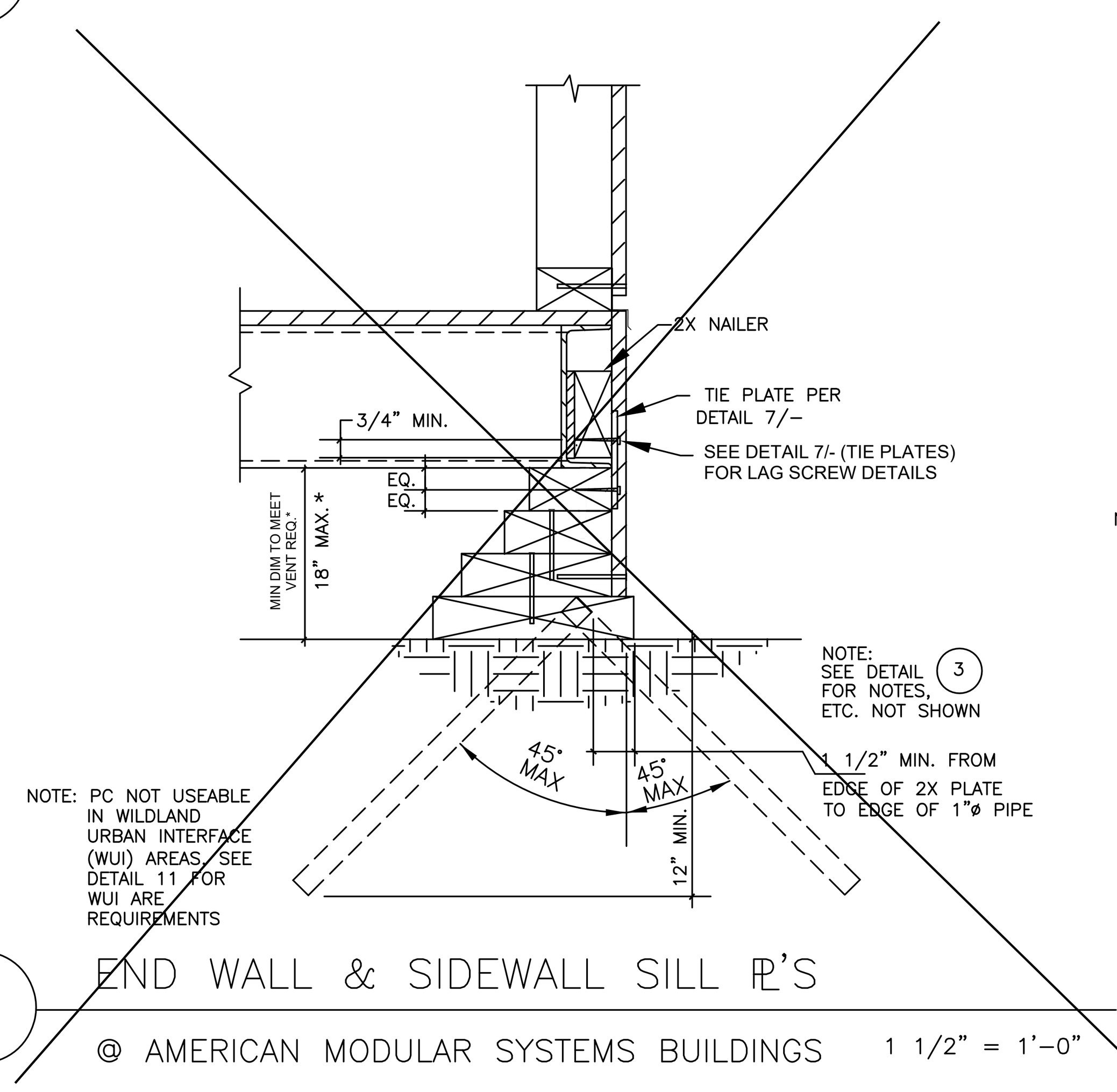


NOTES:
1. EXTERIOR SKIRTING VENTS
- PROTECTED BY CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH OPENING 1/16" TO 1/8"
- MEETS CBC CHAPTER 7A-706A.2 REQUIREMENTS "VENTS – REQUIREMENTS #1 & #2
- CAL-FIRE "LISTING NUMBER" 8165-2192:0100; 8165-2214:0100; 8165-2232:0500 OR EQUIVLANT

2. EXTERIOR SKIRTING (FLOOR LINE TO GRADE)
- 19/32"x4"x9' ROSEBURG DURATEMP SLIDING (UN-GROOVED OR GROOVED @ 8" O.C.)
- MEETS APA 303 SPECIFICATIONS FOR PLYWOOD SLIDING
- COMPLIES WITH SFM 12-7A-1
- CAL-FIRE "LISTING NUMBER 8140-2031:0004"
- MEETS CBC CHAPTER 7A-707A.3.1 "EXTENT OF EXTERIOR WALL COVERING"
- MATERIAL USED SAME AS EXTERIOR SIDING TO MEET WUI REQUIREMENTS

11 END WALL & SIDEWALL SILL ℙ'S @ WILDLAND URBAN INTERFACE (WUI)

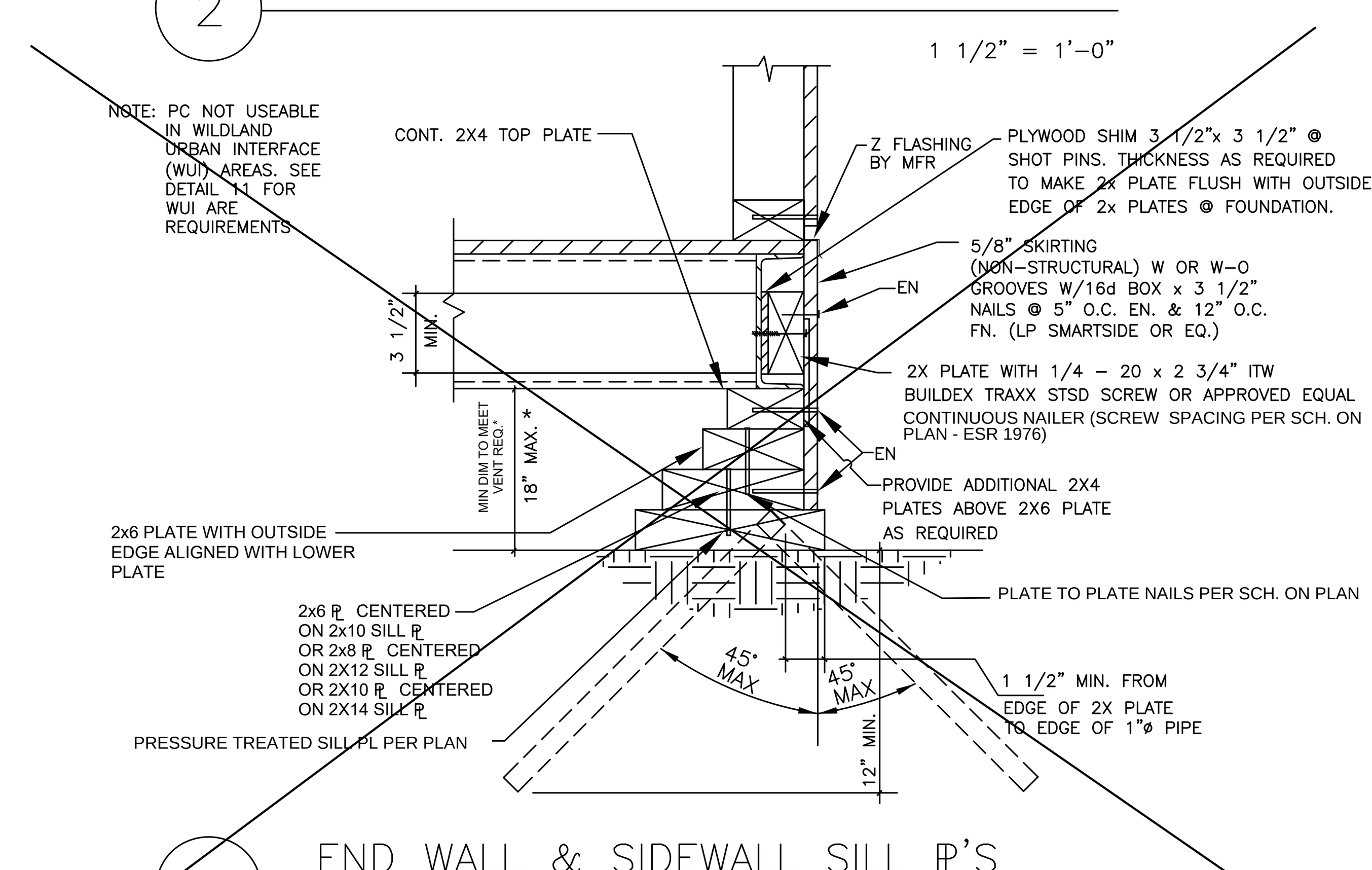
1 1/2" = 1'–0"



8 END WALL & SIDEWALL SILL ℙ'S

@ AMERICAN MODULAR SYSTEMS BUILDINGS

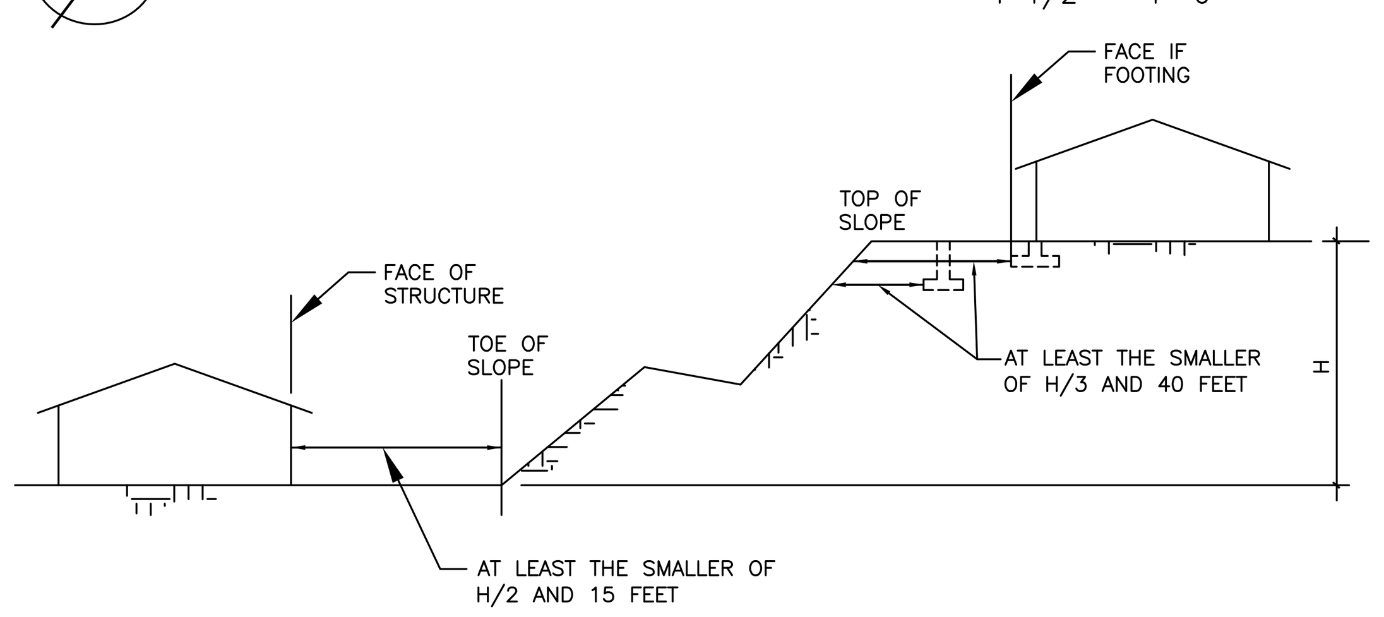
1 1/2" = 1'–0"



3 END WALL & SIDEWALL SILL ℙ'S

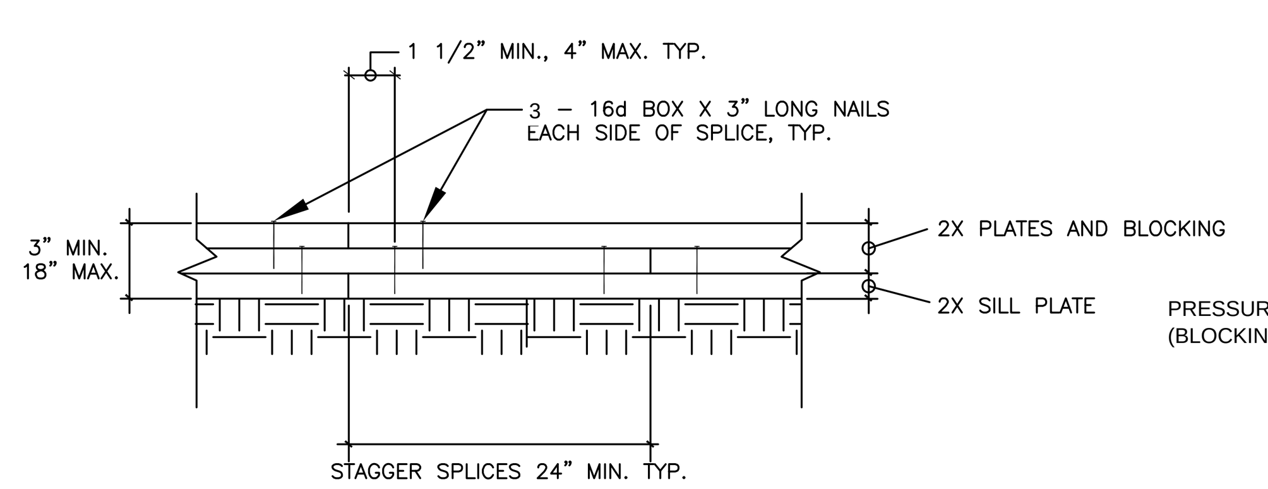
@ AMERICAN MODULAR SYSTEMS BUILDINGS

1 1/2" = 1'–0"



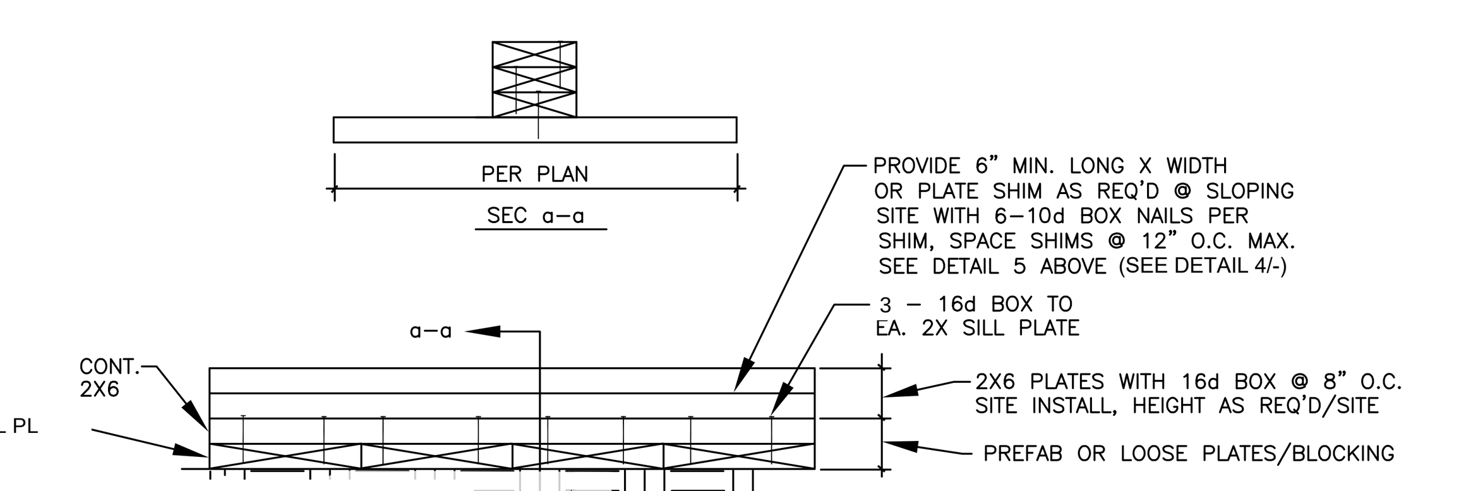
12 FOUNDATION CLEARANCES FROM SLOPES

2019 CBC 1808A.7



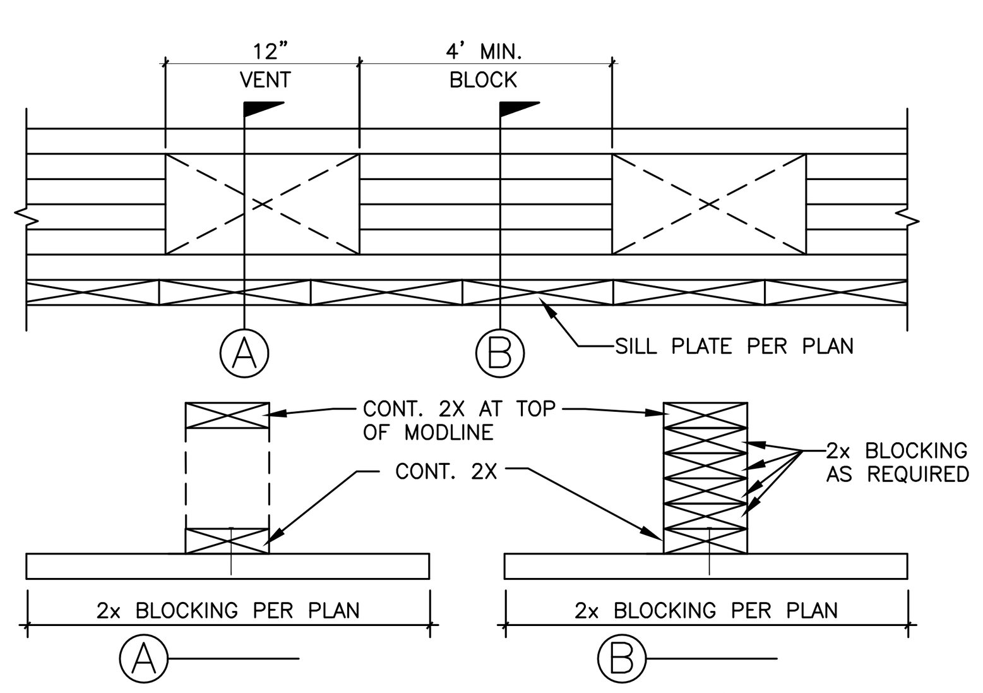
9 TYPICAL 2X PLATE SPLICE

NTS



6 PLATE LAYUP @ MODLINE FTG'S

NTS



13 PLATE LAYUP @ MODLINE FTG'S

NTS

SITE SPECIFIC APPROVAL		APPROVAL – PC ENGINEER OF RECORD
	PRE-CHECK (PC) DOCUMENT CODE: 2022 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED	REGISTERED PROFESSIONAL ENGINEER MANNY D. [illegible] S3380 Exp. 03/31/24 STRUCTURAL STATE OF CALIFORNIA 10/06/23

TABLE OF CONTENTS

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DIV. OF THE STATE ARCHITECT
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SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

PRE-CHECK (PC) DOCUMENT
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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122274 PC
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PC 04-122274

DETAILS

DRAWN
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DATE 18 MAY 2023
SCALE
JOB NO.

F — 6

OF 19 SHEETS

GENERAL SPECIFICATIONS

SECTION 1A

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL REQUIREMENTS APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH SECTION.

B. NAME BRANDS ARE INDICATED TO ESTABLISH A STANDARD OF QUALITY. ITEMS OF EQUAL OR BETTER QUALITY MAY BE SUBSTITUTED FOR THE LISTED BRAND NAMED PRODUCTS.

2. SCOPE OF WORK

A. THE WORK CONSISTS OF MANUFACTURING OFF–SITE IN A PLANT, AND INSTALLING ON–SITE, MODULAR RELOCATABLE BUILDING AS DEFINED HEREIN AND SHOWN AND DETAILED ON DRAWINGS.

B. ALL REQUIREMENTS OF TITLE 19 AND 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS (CCR) RELATING TO INSPECTIONS AND VERIFIED REPORTS SHALL BE COMPLIED WITH AND SHALL INCLUDE:

1. GENERAL RESPONSIBLE CHARGE OF FIELD ADMINISTRATION BY THE ARCHITECT OF RECORD.

2. INSPECTION DURING THE COURSE OF CONSTRUCTION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT. THE INSPECTOR SHALL BE RESPONSIBLE FOR AND APPROVED TO INSPECT THE GENERAL CONSTRUCTION, WELDING, MECHANICAL AND ELECTRICAL WORK. COST OF THESE INSPECTIONS SHALL BE BORNE BY THE SCHOOL DISTRICT.

3. ON SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY OF THE BUILDING INSTALLATION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT.

4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIVISION OF THE STATE ARCHITECT. COST OF THESE INSPETIONS/TESTS SHALL BE BORNE BY THE SCHOOL DISTRICT.

3. WORK NOT INCLUDED

A. ALL ON–SITE OR OFF–SITE UTILITIES AND THE CONNECTION OF THEM TO THE BUILDING UNLESS INDICATED ON THE DRAWINGS.

B. ALL LEVELING, GRADING OR OTHER SITE PREPARATION EXCEPT CONCRETE OR WOOD LEVELING STRIPS, WHERE REQUIRED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

C. FIRE ALARM SYSTEM, FIRE EXTINGUISHER, PROGRAM BELL, CLOCK, PUBLIC ADDRESS SYSTEM, INTERCOM SYSTEM, TV SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

4. WHEELS AND HITCH

SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

5. ACCESSIBILITY OF SITE

THE SCHOOL DISTRICT SHALL PROVIDE ACCESS TO THE SITE FOR THE INSTALLATION OF THE BUILDING. REMOVAL OF TREES, SHRUBS, FENCING, SPRINKLERS, ETC. NECESSARY FOR MOVE–IN AND REMOVAL OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

SECTION 2A SITE ASSEMBLY

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PREPARE THE BUILDING ELEMENTS, TRANSPORT THEM FROM THE PLANT TO THE SITE AND TO COMPLETE THE ASSEMBLY AT THE SITE.

THE CONDITION OF THE SITE, SUCH AS DRAINAGE AND SOIL BEARING CAPACITY, SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

2. ASSEMBLY OF ELEMENTS

A. THE ELEMENTS SHALL BE BROUGHT TO THE SITE ON WHEEL ASSEMBLY AND TRANSFERRED TO THE PREPARED SITE. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ELEMENTS BY RACKING OR BUMPING.

B. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTIONS ON THE DRAWINGS. FLASHING, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER PLANS AND DETAILS OF THE ORIGINAL MANUFACTURER'S DRAWINGS.

SECTION 3A CARPENTRY

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL CARPENTRY.

2. WORKMANSHIP

A. FRAMING– SECURELY NAILED, BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT, FITTED AND ASSEMBLED LEVEL, PLUMB AND TRUE TO LINE. TRIM IN AS LONG LENGTHS AS POSSIBLE WITH ALL STANDING TRIM IN ONE PIECE. TRIM SEALED AT ALL EDGES.

B. NAILING– IN ACCORDANCE WITH TITLE 24 CCR– TABLE 2304.10.1. NAILS SHALL BE CORROSION RESISTANT BOX NAILS.

C. MACHINE APPLIED NAILING– SHALL HAVE PRIOR DEMONSTRATION AND APPROVAL BY DSA FIELD INSPECTOR AND THE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUES SATISFACTORY PERFORMANCE. PLYWOOD SHALL HAVE A MINIMUM THICKNESS OF 3/8". IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

D. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING.

SECTION 4A MATERIAL SPECIFICATIONS

1. STRUCTURAL FRAMING SHALL BE HEM FIR – GRADED IN ACCORDANCE WITH THE STANDARD GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION OR STANDARD GRADING RULES NO. 16 OF THE WEST COAST LUMBER INSPECTION BUREAU, LATEST EDITIONS. GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS. (HEM FIR SOUTH IS NOT ALLOWED.) EACH PIECE SHALL BE GRADE MARKED AND NO PIECE MAY FALL BELOW GRADES INDICATED.
   ALL FRAMING EXCEPT AS NOTED HEM FIR NO. 2.
2. PLYWOOD SHALL BE AS SHOWN ON THESE DRAWINGS WITH EXTERIOR GLUE IN ACCORDANCE WITH U.S. PRODUCT STANDARD DOC PS 1–07 OR DOC PS–04.
   ALL PANELS SHALL BE MARKED WITH AN APA GRADE MARK WITH AN IDENTIFICATION INDEX AS SHOWN ON DRAWINGS. USE 4'x8' PANELS, MINIMUM, EXCEPT AT BOUNDARIES AND FRAMING CHANGES WHERE MINIMUM PANEL DIMENSION SHALL BE 24" AT ROOFS AND FLOORS AND 12" AT WALLS.
3. BOLTS FOR TIMBER CONNECTIONS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1–2012 AND 2018 EDITION OF THE NDS. BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF OF THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION (NDS). BOLT HOLES SHALL BE 1/32 TO 1/16 INCH LARGER THAN BOLT DIAMETER. RE–TIGHTEN BOLTS BEFORE CLOSING IN WORK. BOLTS SHALL BE FULL BODY STEEL BOLTS WITH MINIMUM YIELD STRENGTH OF 45,000 PSI
4. LAG SCREWS SHALL BE STEEL AND CONFORM TO ANSI/ASME STANDARD B18.2.1 AND THE REQUIREMENTS OF THE 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS). HOLES FOR LAG SCREW SHANKS SHALL BE BORED THE SAME DEPTH AND DIAMETER AS THE SHANK. THE REMAINING DEPTH OF PENETRATION OF THE SCREW SHALL BE BORED TO 70% OF THE SHANK DIAMETER. ONE QUARTER INCH (1/4") DIAMETER LAG SCREWS NEED NOT HAVE PRE–DRILLED HOLES IF IT CAN BE SHOWN THAT THE WOOD MEMBERS ARE NOT DAMAGED DURING INSTALLATION. PROVIDE FULL DIAMETER BODY LAG SCREWS WITH BENDING YIELD STRENGTHS PER TABLE 12J AND 12K IN NDS.
5. PROVIDE MALLEABLE IRON WASHERS OR EQUIVALENT CUT PLATE WASHERS (NOT LESS THAN A STANDARD CUT WASHER) UNDER NUTS AND BOLT OR LAG SCREW HEADS WHICH BEAR ON WOOD.
6. WOOD SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.6.1 AND THE REQUIREMENTS OF THE 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION (NDS). GALVANIZED OR OTHER CORROSION RESISTANT COATING WHERE EXPOSED TO WEATHER OR USED IN FOUNDATIONS. SCREWS SHALL BE STEEL WITH CUT THREADS AND BENDING YIELD STRENGTHS PER TABLES 12L AND 12M IN NDS.
7. WOOD MEMBERS SHALL BE CUT OR NOTCHED ONLY AS SHOWN ON STRUCTURAL DRAWINGS.
8. WHEN REQUIRED NAILING TENDS TO SPLIT WOOD MEMBERS, NAIL HOLES SHALL BE PRE–BORED TO 3/4 OF THE NAIL DIAMETER.
9. STRUCTURAL NAILING SHALL BE WITH BOX NAILS PER ALL REQUIREMENTS OF 2018 NDS. NAILING NOT SPECIFICALLY INDICATED SHALL COMPLY WITH CCR TITLE 24, PART 2, TABLE 2304.9.1. ALL NAILS SHALL BE GALVANIZED OR OTHER CORROSION RESISTANT COATING WHERE EXPOSED TO WEATHER, IN FOUNDATIONS AND AS NOTED ON PLANS, PER THE REQUIREMENTS OF CCR TITLE 24, PART 2, WITH MINIMUM BENDING YIELDS PER TABLE 12N, 12P, 12Q AND 12R IN NDS. (SEE NAIL EQUIVALENCE BELOW.)
10. NAIL EQUIVALENCE: (PROVIDE MINIMUM NAIL LENGTHS AS REQUIRED FOR SPECIFIED PENETRATION, TYP. U.O.N.)
    6d EQUALS .113" DIA. – PROVIDE 1.36" MIN POINT PENETRATION
    8d EQUALS .131" DIA. – PROVIDE *1.57" MIN POINT PENETRATION
    10d EQUALS .148" DIA. – PROVIDE *1.78" MIN POINT PENETRATION
    16d EQUALS .162" DIA. – PROVIDE *1.94" MIN POINT PENETRATION
    * 1 1/2" AT 2x MEMBERS
11. PRESSURE PRESERVATIVE TREATMENT SHALL BE PER SECTION 2303.1.9, CCR TITLE 24, PART 2. PROVIDE QUALITY MARK ON ALL TREATED FOUNDATION MEMBERS. PRESSURE TREATED WOOD AND IDENTIFICATION MUST COMPLY WITH CBC 2303.1.9.1. ALL FOUNDATION MEMBERS SHALL BE MARKED AS "FOR GROUND CONTACT (UC4A)" OR "FOR ABOVE GROUND USE (UC3A OR UC3B)" AS APPROPRIATE. TREAT ALL CUT ENDS OF PRESSURE TREATED MEMBERS WITH AN APPROVED PRESERVATIVE. (WILLARD W/B COPPER GREEN 2% OR AN APPROVED EQUIVALENT). WHERE NOTED, MEMBERS BELOW THE SUB FLOOR THAT ARE NOT A PART OF THE FOUNDATION SHALL BE PRESSURE TREATED PER AWPA STANDARD UI.
12. ONLY MATERIAL IN CONTACT WITH GROUND NEEDS TO BE PRESSURE TREATED, ALL OTHER FOUNDATION LUMBER CAN BE DF OR HF#2 OR EQUAL.
13. IF MACHINE NAILING IS UTILIZED FOR THIS PROJECT, CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF CCR TITLE 24, PART 2. MACHINE NAILING IS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER OR ARCHITECT AND THE DIVISION OF THE STATE ARCHITECT.
14. FASTENERS FOR PRESSURE–PRESERVATIVE TREATED AND FIRE–RETARDANT TREATED WOOD SHALL COMPLY WITH SEC. 2304.10 OF CBC.
15. NAILS AND SPIKES USED IN WET OR EXTERIOR LOCATIONS SHALL COMPLY WITH SEC. 2304.10.5.1 OF CBC.
16. SHIM MATERIAL SHALL BE PLYWOOD CD EXP 1 OR EQUAL (NOT P.T.).
17. USED LUMBER IN GOOD CONDITION IS ACCEPTABLE FOR USE IN FOUNDATION SYSTEM.

SITE INSTALLATION REQUIREMENTS CLAUSE:

SITE INSTALLATION REQUIREMENTS FOR DSA CLASSROOM BUILDINGS. IN THE CASE OF EQUIPMENT LOCATED IN THE STATE OF CALIFORNIA, THE LESSEE IS RESPONSIBLE FOR THE SITE BEING CLEARED (FREE OF GRASS, SHRUBS, TREES, ETC.) AND GRADED TO WITHIN 4 1/2" OF LEVEL GRADE FOR EACH BUILDING. IF THE SITE EXCEEDS THE 4 1/2" REQUIREMENT ADDITIONAL COSTS MAY BE CHARGED TO LESSEE. UNDER NO CIRCUMSTANCES SHOULD THE SITE BE GREATER THAN 9" FROM LEVEL GRADE OR HAVE LESS THAN A 1000 PSF MINIMUM SOIL BEARING PRESSURE. PRIOR TO DELIVERY, THE LESSEE SHALL MARK THE FOUR CORNERS OF THE BUILDING ON THE SITE, INCLUDING THE DOOR LOCATION. SHOULD SPECIAL HANDLING BE REQUIRED TO EITHER PLACE, INSTALL OR REMOVE THE CLASSROOM ON THE LESSEE'S SITE DUE TO SITE OBSTRUCTIONS SUCH AS FENCING, LANDSCAPING, OTHER CLASSROOMS, ETC., ADDITIONAL COSTS WILL BE CHARGED TO LESSEE.

TEST AND INSPECTIONS:

1. PROVIDE ELECTRICAL GROUNDING TEST PER DSA IR E–1
2. NO OTHER TESTS AND INSPECTIONS ARE REQUIRED.

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MIRA LOMA, CA 91752

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PC 04–122274

GENERAL SPECIFICATIONS

SITE SPECIFIC APPROVAL

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CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

APPROVAL – PC ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRENCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
10/06/23

TABLE OF CONTENTS

Sheet No.	Description	Dated	Revised

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CHECKED

DATE
18 MAY 2023

SCALE

JOB NO.

F–7

OF 19 SHEETS

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number:	**School Name:**	**School District:**
DSA File Number:	**Increment Number:**	**Date Created:**

2022 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI (Project Inspector) –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI (Special Inspection)** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.
	CONCRETE/MASONRY:
☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.
☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.
	WELDING:
☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2022 CBC

Application Number:	**School Name:**	**School District:**
DSA File Number:	**Increment Number:**	**Date Created:**

Name of Architect or Engineer in general responsible charge:	
Name of Structural Engineer (When structural design has been delegated):	
Signature of Architect or Structural Engineer:	Date:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

NOTE:

THE EXAMPLE FORM DSA–103 SHOWN IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTIRE PROJECT–SPECIFIC FORM DSA–103.

A FORM DSA–103 IS TO BE COMPLETED FOR EACH PROJECT APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND THE EXAMPLE FORM DSA–103 IS TO BE CROSSED OUT ON THIS DRAWING

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DATE: 11/01/2023

PC 04–122274

DSA FORM 103

SITE SPECIFIC APPROVAL		APPROVAL – PC ENGINEER OF RECORD
	PRE–CHECK (PC) DOCUMENT CODE: 2022 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED	REGISTERED PROFESSIONAL ENGINEER MANNY D. FRISCH No. S3380 Exp. 03/31/24 STRUCTURAL STATE OF CALIFORNIA 10/06/23

TABLE OF CONTENTS

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SCALE	
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OF 19 SHEETS

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752
(800) 944-3442 FAX (951) 360-6620

PC 04-122275

ALTERATIONS TO EXISTING STOCKPILES FOR ACCESSIBLE RAMPS – HANDRAIL AND UPRIGHT EXTENSION

STATE OF CALIFORNIA–2021 IBC/2022 CBC

APPROVED STOCKPILE A NUMBERS APPLICABLE TO THIS PC PLAN

Manufacturer	A No.	Manufacturer	A No.	Manufacturer	A No.	Manufacturer	A No.
AM	A01101536	AM	A58704	EN	A02108288	MT	A04102029
AM	A01101842	AM	A59780	EN	A02110147	MT	A04102365
AM	A02100277	AM	A61254	EN	A02110148	MT	A04102339
AM	A02100586	AM	A62111	EN	A02110149	MT	A04102365
AM	A02100727	AM	A62118	EN	A02110281	MT	A04103001
AM	A02100728	AM	A64301	EN	A02110718	MT	A04103044
AM	A02100992	AM	A65821	EN	A57820	MT	A04103186
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AM	A02101106	AM	A69866	EN	A63749	MT	A04103310
AM	A02101284	AMSI	A68218	EN	A65586	MT	A04103621
AM	A02101285	AU	A03107543	MB	A04101905	MT	A04104812
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AM	A02106048	AU	A62105	MB	A04107100	MT	A67332
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AM	A02106949	EN	A02102873	MB	A65714	SI	A04108944
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AM	A02107138	EN	A02104123	MT	A01100906	SI	A04109615
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AM	A02107390	EN	A02105136	MT	A01100908	SI	A04109641
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AM	A02109934	EN	A02105945	MT	A04100727	SI	A04109754
AM	A02110035	EN	A02106008	MT	A04100729	SI	A04110055
AM	A54164	EN	A02106895	MT	A04100730	SI	A04110142
AM	A54592	EN	A02107272	MT	A04100811	SI	A04110549
AM	A55949	EN	A02107401	MT	A04101194	SI	A04110811
AM	A55969	EN	A02107484	MT	A04101767	SI	A04111152
AM	A58499	EN	A02108109	MT	A04101891	WS	A04107179
		EN	A02108132	MT	A04101348		

AM = American Modular Systems AU = Aurora Modular MB = Modular Structures Int'l SI = Silver Creek
AMSI = American Modular Structures EN = Enviroplex MT = Modtech WS = Walden Structures

TITLE 24 CODES:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) (PART 1, TITLE 24, CCR)

2022 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2, TITLE 24, CCR)

2022 CALIFORNIA ELECTRICAL CODE (CEC) (PART 3, TITLE 24, CCR)

2022 CALIFORNIA MECHANICAL CODE (CMC) (PART 4, TITLE 24, CCR)

2022 CALIFORNIA PLUMBING CODE (CPC) (PART 5, TITLE 24, CCR)

2022 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)

2022 CALIFORNIA FIRE CODE (CFC) (PART 9, TITLE 24, CCR)

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC) (PART 10, TITLE 24, CCR)

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN) (PART 11, TITLE 24, CCR)

2022 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

NOTE TO SITE ADAPT ARCHITECT

1. SITE APPLICATION ARCHITECT TO SUBMIT EXISTING DSA APPROVED RAMP FOUNDATION PLAN FOR REINSTALLATION.
2. SITE APPLICATION ARCHITECT TO PROVIDE DSA APPLICATION NUMBER(S) OF THE EXISTING BUILDINGS TO SHOW THAT THE EXISTING RAMPS WERE CONSTRUCTED PER AN APPROVED PC AND TO VERIFY THAT THE ORIGINAL RAMP & LANDING CONSTRUCTION IS CERTIFIED.
3. THIS PC IS ONLY APPLICABLE TO EXISTING RAMP & LANDINGS THAT HAVE CLOSED WITH CERTIFICATION BY DSA.
4. THIS PC MODIFIES EXISTING RAMP & LANDINGS TO ADD A 12" or 32" HANDRAIL EXTENSION AT THE RAMP TO LANDING TRANSITION AND TO CORRECT 34" MIN. HANDRAIL HEIGHT.
5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE SHALL VERIFY BY APPROPRIATE MEANS, SUBJECT TO DSA APPROVAL, AND SUBMIT A STAMPED AND SIGNED LETTER CERTIFYING THAT THE BUILDING CONFORMS TO THE ORIGINALLY APPROVED PLANS AND SPECIFICATIONS AND HAS NOT SUFFERED STRUCTURAL DETERIORATION, INCLUDING BUT NOT LIMITED TO RUST, DRY ROT, TERMITE DAMAGE, ETC. OR HAS BEEN STRUCTURALLY ALTERED.
6. NOTE TO SITE ADAPT ARCHITECT FOR PARTICULAR PROJECT SITE APPLICATION USE OF THESE DRAWINGS.
   a. VERIFY ADDITIONAL STOCKPILE DRAWINGS ARE PROVIDED FOR THE RELOCATED RAMP AND HANDRAIL.
   b. VERIFY THAT THE SPECIFIED A# FOR THE STOCKPILE DRAWING(S) ACCOMPANYING THIS ALTERATION TO STOCKPILE SET OF DRAWINGS FOR THE PARTICULAR PROJECT SITE APPLICATION HAVE BEEN CERTIFIED.
   c. VERIFY THAT RAMP VERTICAL POST MATERIAL DETAILS SHOWN IN ACCOMPANYING A# STOCKPILE DRAWING(S) MEET OR EXCEED THOSE SHOWN IN THIS ALTERATION TO STOCKPILE SET OF DRAWINGS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

PRE-CHECK (PC) DOCUMENT CODE: 2022 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122275 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/07/2023

HANDRAIL EXTENSION OPTION
2022 CALIFORNIA BUILDING CODE
RAMP/LANDING MODIFICATIONS FOR EXISTING RAMP AND LANDINGS

COVER SHEET

SITE SPECIFIC APPROVAL	DSA PC STAMP	APPROVAL – PC ENGINEER OF RECORD
	PRE-CHECK (PC) DOCUMENT CODE: 2022 CBC A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED	REGISTERED PROFESSIONAL ENGINEER MANNY D. F... S3380 Exp. 03/31/24 STRUCTURAL STATE OF CALIFORNIA 11/6/2023

TABLE OF CONTENTS

Sheet No	Description	Dated	Revised
1	COVER SHEET	18 MAY 2023	
2	TYPICAL PLAN, DETAILS & SPECIFICATIONS	18 MAY 2023	
3	~~OPTIONAL RAMP & LANDINGS PLANS~~	~~18 MAY 2023~~	
4	~~DSA 103: LISTING OF STRUCTURAL TEST & SPECIAL INSPECTIONS~~	~~18 MAY 2023~~	

DRAWN

CHECKED

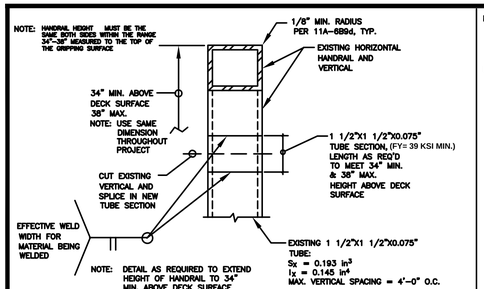
DATE 18 MAY 2023

SCALE

JOB NO.

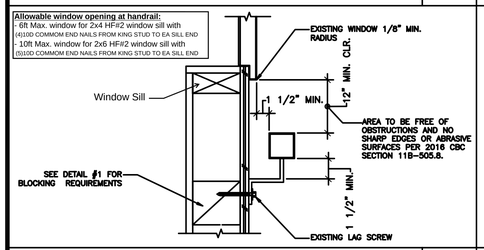
1

OF 4 SHEETS



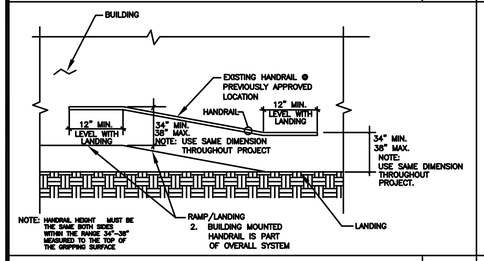
NEW EXTENSION OF EXISTING VERTICALS

SCALE: 1 1/2"=1'-0" | 2



HANDRAIL CLEARANCE DETAIL

4

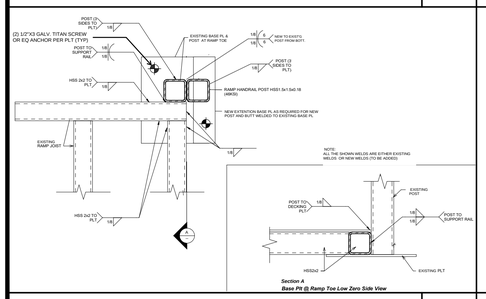


TYPICAL EXISTING WALL MOUNTED HANDRAIL

6

POST BASE CONNECTION W/ REINFORCEMENT-TYP

10

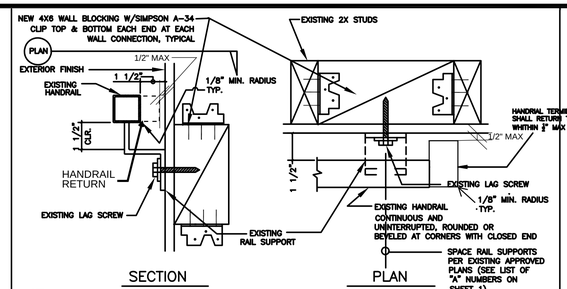


NEW POST/PL AT RAMP TOE

11

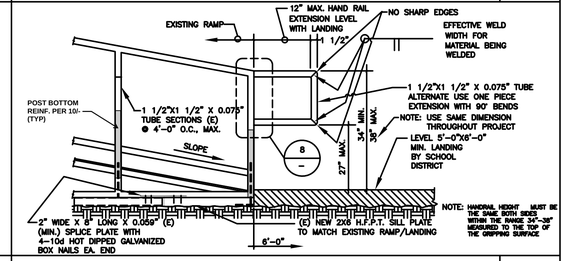
NEW HANDRAIL CONNECTION AT WOOD BLOCKING AS REQUIRED – FIELD VERIFY IF NEEDED

SCALE: 3"=1'-0" | 1



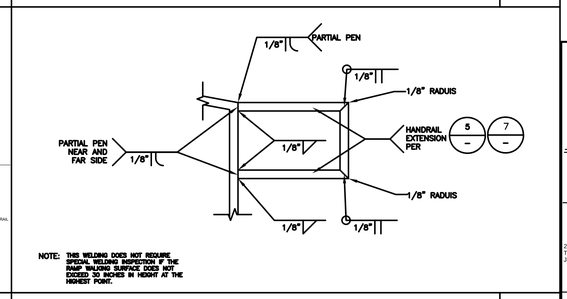
NEW CONNECTION TUBE TO TUBE

3



NEW 32" HANDRAIL EXTENTION

NO SCALE | 7



EXISTING HANDRAIL EXTENSION

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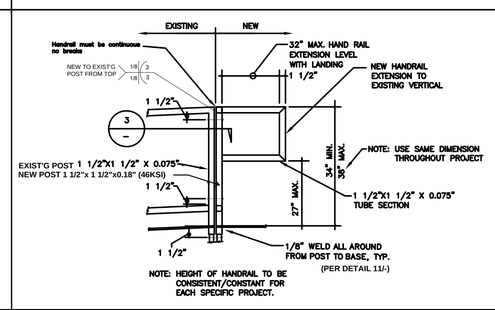


NEW 32" HANDRAIL EXTENTION

NO SCALE | 7

HANDRAIL EXTENTION WELD CONN.

NO SCALE | 8

RAMP/LANDING PLAN – SEE SHEET 1
FOR LIST OF DSA APPLICATION/PC NUMBERS THIS PLAN APPLIES

SCALE: 1/2"=1'=0"

NOTES:

CODES:
2021 INTERNATIONAL BUILDING CODE (IBC)/2022 CALIFORNIA BUILDING CODE (CBC)

DESIGN LOADS:
RAMP LIVE LOAD: 100 PSF
WIND LOAD: 110 MPH EXPOSURE "C", K_{ZT} = 1.0
WIND PER ASCE 7-16 CHAPTER 29, (RISK) CATEGORY II

SEISMIC:
S_s = 2.33 F_a = 1.2
S_1 = 1.0 F_v = 1.5
SITE CLASS = D-DEFAULT SEISMIC DESIGN CATEGORY = E
S_{DS} = 1.31 I = 1.0
S_{D1} = 1.13 R = 1.25

NO SNOW LOADING

NO FLOOD LOADING

HANDRAIL & GUARD RAIL LOADS:
50#/FT
200# POINT LOAD

ALLOWABLE SOIL BEARING = 1000 PSF

MATERIAL SPECIFICATIONS:
STEEL: TYPICAL TUBE STEEL ASTM A500 GRADE A (Fy = 39KS1 FOR SHAPED TUBING & Fy = 33 KSI FOR ROUND TUBING)
TUBE STEEL FOR HANDRAIL POSTS SHALL CONFORM TO ASTM A500 GRADE A
ALL STEEL TO BE COATED WITH A RUST INHIBITIVE COATING
STEEL PLATE ASTM A36

BOLTS: ASTM A307 (GALVANIZED)

WELDS: ALL WELDING SHALL CONFORM TO "AMERICAN WELDING SOCIETY D-1.3-08 FOR SHEET STEEL"
ELECTRODES SHALL BE E70XX.

GENERAL NOTES:
1) RAMPS HAVING SLOPES STEEPER THAN 1 VERTICAL TO 20 HORIZONTAL SHALL HAVE LANDINGS AT TOP AND BOTTOM AND AT LEAST ONE INTERMEDIATE LANDING SHALL BE PROVIDED FOR EACH 30" OF RISE, PER CBC 11B-405.7.

2) LOCATION OF LANDINGS.
LANDINGS SHALL BE PROVIDED AT TOP AND BOTTOM OF EACH RAMP.
INTERMEDIATE LANDINGS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION . LANDINGS ARE NOT CONSIDERED IN DETERMINING THE MAXIMUM HORIZONTAL DISTANCE OF EACH RAMP.

NOTE: EXAMPLES OF RAMP DIMENSIONS ARE:

SLOPE	MAX. RISE (INCHES)	MAX. HORIZONTAL PROJECTION
1:12	30	30'-0"
1:16	30	40'-0"
1:20	30	50'-0"
1:15	30	37'-6"

2. SIZE OF TOP LANDINGS. TOP LANDINGS SHALL NOT BE LESS THAN 60 INCHES WIDE AND SHALL HAVE A LENGTH OF NOT LESS THAN 60 INCHES IN THE DIRECTION OF RAMP RUN, PER CBC 11B-405.7.2 AND .3.

3) DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM DIMENSION OF THE LANDING TO LESS THAN 42" AND SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 3" WHEN FULLY OPENED, CBC 11B-405.7.5.

4) THE SURFACE OF RAMPS SHALL BE ROUGHED OR SHALL BE OF SLIP-RESISTANT MATERIAL, TYP. FOR LANDINGS & STAIRS.

5) RAMPS REQUIREMENTS SHALL BE PER CBC 11B-405.

6) RAMPS AND STAIRWAYS USED AS EXIT SHALL CONFORM TO CBC SEC. 1009 SEC. 1010, CHAPTER 11B AND 11B-405.5.

7) HANDRAILS AND GUARDRAILS SHALL CONFORM TO CBC 11B-405.8 (RAMP), 11B-504 (STAIRS).

Note: Verify the exit width & the number of required exits.

8) LANDING WIDTH. AT BOTTOM AND INTERMEDIATE LANDINGS, THE WIDTH SHALL BE AT LEAST THE SAME AS REQUIRED FOR RAMPS, CBC 11B-405.7.

9) THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48" MIN.

10) SLOPE RAMPS AND LANDINGS AS REQUIRED TO PREVENT ACCUMULATION OF WATER ON WALKING SURFACES.

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

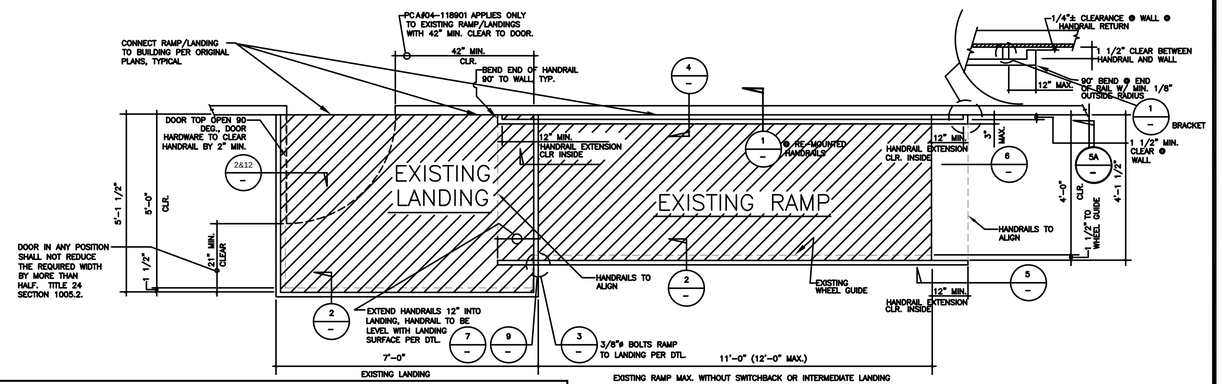
12) CHANGES TO APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR CONSTRUCTION CHANGES APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1 TITLE 24, CCR.

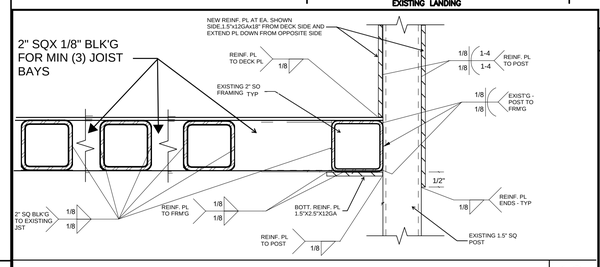
13) A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4.342 PART 1 TITLE 24 CCR.

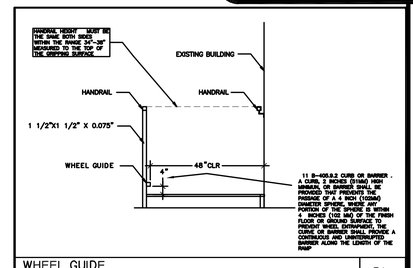
IN PLANT: SHOP WELDING INSPECTION AND MATERIAL VERIFICATION

SITE CONSTRUCTION: CLASS 4

DSA NOTES:
1. ALL WORK SHALL CONFORM TO THE 2022 EDITION OF TITLE 24 CALIFORNIA CODE OF REGULATIONS (CCR) COMPLIANCE WITH TITLE 24 FOR PARTS 1-6 & 9
2. TITLE 24 PARTS 1-5 MUST BE KEPT ON SITE DURING CONSTRUCTION.
3. CHANGE TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
4. SUBSTITUTIONS AFFECTING ACS, FLS AND SS SHALL BE CONSIDERED AS A CONSTRUCTION CHANGE, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION.
   - SUBSTITUTIONS SHALL BE FOR ANY MATERIAL, SYSTEM OR PRODUCT THAT WOULD OTHERWISE BE REVIEWABLE DURING ROUTINE PLAN CHECK BY DSA – SSS, FLS, ACS OR ENERGY.
5. CONSTRUCTION CHANGES CCD'S MUST BE SIGNED BY ALL THE FOLLOWING:
   - A/E OF RECORD
   - OWNER (CONSTRUCTION CHANGES)
   - STRUCTURAL ENGINEER (WHEN APPLICABLE)
   - DELEGATED PROFESSIONAL ENGINEER (WHEN APPLICABLE)
   - DSA
6. A 'DSA CERTIFIED' PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF HT EWORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
   - A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TEST AND INSPECTIONS FOR THE PROJECT.
7. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.

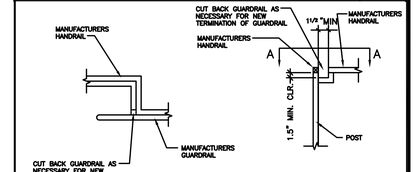






WHEEL GUIDE DETAIL

5A



GUARDRAIL MODIFICATION

NO SCALE | 9

APPROVAL – PC ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER MANNY D. FARHADIEH No. S3380 Exp. 03/31/24 STRUCTURAL STATE OF CALIFORNIA

11/6/2023

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122275 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/07/2023

MOBILE MODULAR MANAGEMENT
11450 MISSION BLVD.
MIRA LOMA, CA 91752

HANDRAIL EXTENSION OPTION
2022 CALIFORNIA BUILDING CODE
RAMP/LANDING MODIFICATIONS FOR
EXISTING RAMP AND LANDINGS

TYPICAL PLAN, DETAILS & SPECIFICATIONS

DRAWN
CHECKED
DATE
18 MAY 2023
SCALE
JOB NO.

2
OF 4 SHEETS

VALLECITOS ELEMENTARY SCHOOL

NEW PORTABLE BUILDING

VALLECITOS SCHOOL DISTRICT

FIRE ALARM SYSTEMS

CSFM Listing and Cut Sheets

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123455 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/07/2024

Electrical Engineers Seal

FBA ENGINEERING
Consulting Engineers
150 Paularino Avenue, Suite A120
Costa Mesa, California 92626
FBA # 229177

HPF24S6 and HPF24S8

Power Supplies with Battery Chargers

Description

The HPF24S6 and HPF24S8 are compact, cost-effective, 6 amp. or 8 amp. remote power supplies with integral battery chargers. These adaptable power supplies may be connected to any 12 or 24 volt Fire Alarm Control Panel (FACP) or the power supplies may stand-alone. Primary applications include the following:

- Notification Appliance Circuits (NAC) expansion to support ADA requirements and NAC synchronization
- Auxiliary power to support 24 volt system accessories

These power supplies provide regulated and filtered 24 VDC power to four (4), notification appliance circuits, configured as either four (4), Class B (Style Y) or Class A (Style A, with ZNAC-4 Option Module). Alternately, the four outputs may be configured as follows:

- all non-resettable
- all resettable
- two non-resettable
- two resettable

The power supplies also contain a battery charger with a charging capacity of up to 18 Amp Hour batteries.

The HPF24S6 and HPF24S8 power supplies comply with the following Agency standards:

- NFPA 72 National Fire Alarm Code,
- UL Standard 864, 9th Edition for control units for Fire Alarm Systems (NAC expander mode).
- UL 1481 Power Supplies for Fire Alarm Systems (stand-alone mode).

HFP24S6/8 dh1061.jpg

Features

- UL® Listed NAC synchronization using System Sensor, Cooper-Wheelock or Gentex (Commander Series) appliances
- Uses a cascade of up to ten (10), power supplies or (four (4), power supplies with Gentex) with strobe timing maintained
- Operates as a sync follower or a sync generator (default)
- Contains two (2), fully -isolated input/control circuits energized from FACP notification appliance circuit (NAC expander mode) or jumpered permanently on (stand-alone mode)
- Configured to internally house an addressable SLC control module for alarm activation
- Supports four (4), Class B (Style Y) or four (4), Class A (Style Z) (with ZNAC-4 Module) notification appliance circuits
- Provides 6.0A or 8.0A (depending on model) full load output (3.0A maximum per circuit) in NAC expander mode (UL Standard 864)
- Uses 4.0A or 6.0A continuous output in the stand-alone mode (UL Standard 1481)

SIGNALING
LISTED
S6677 7315-1637:0102
S6677

UL® is a registered trademark for Underwriter's Laboratories Inc.

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Features (Continued)

- In stand-alone mode, output power circuits are configured as resettable, (using the FACP reset switch), non-resettable, or a combination of both
- Fully regulated and filtered power output (optimal for powering four-wire smoke detectors, annunciators and other system peripherals requiring regulated/filtered power)
- Class 2 Power-Limited technology complies with UL Class 2 Power-Limited requirements
- Includes a normally-closed trouble relay
- Provides fully, supervised power supply, battery and notification appliance circuits
- Selectable earth fault detection
- AC trouble report selectable for immediate or up to an 8 hour delay
- Compatible with any UL Standard 864 fire alarm control panel which uses an industry standard, reverse polarity, and notification circuit (including unfiltered and unregulated bell power)
- Requires input trigger voltage of 9.0 -32 VDC
- Built with a self-contained compact, lockable cabinet 15” H x 14.5” W x 2.75” D (38.1 H x 36.8 W x 7.0 D cm)
- Includes an integral battery charger capable of charging up to 18 AH batteries. The cabinet has the capacity of housing 7.0 AH batteries
- Battery charger may be disabled via a DIP (Dual In-Line Package) switch for applications requiring larger batteries
- Offers fixed, clamp-type terminal blocks that accommodate up to 12 AWG (3.1 mm^2) wire

Specifications

Primary (AC) Power

- HPF24S6: 120 VAC 60 Hz, 3.2A maximum
- HPF24S8: 120 VAC 60 Hz, 3.2A maximum
- Wire size: minimum 14 AWG (2.0 mm²) with 600V insulation

Control Input Circuit

- Input Voltage: 9.0 to 32 VDC
- Input Current: 2.0 mA (16 - 32 V) per input 1.0 mA (9 - 16 V)

Trouble Contact Rating

- 5.0A at 24 VDC

Auxiliary Power Output

- Specific Application Power - 500 mA maximum

Output Circuits

- +24 VDC filtered, regulated
- 3.0A maximum for any one circuit

Specifications (Continued)

Output Circuits (Continued)

- 4.0A maximum total continuous current for all outputs (Stand-alone mode) for the HPF24S6 and 6A for the HPF24S8
- 6A or 8A, depending on the model, maximum total short-term current for all outputs (NAC Expander mode).

Secondary Power (Battery) Charging Circuit

- Supports lead-acid batteries only
- Float Charge Voltage: 27.6 VDC
- Maximum Charge Current: 1.5A
- Maximum Battery Capacity: 18 AH

Ordering Information

Part Number	Description
HPF24S6	Remote charger 6A power supply (120 VAC). Includes the main printed circuit board, transformers, red enclosure, and installation instructions
HPF24S8	Remote charger 8A power supply (120 VAC). Includes the main printed circuit board, transformers, red enclosure, and installation instructions
FCPS-24S6RB	Replacement mother board
ZNAC-4 -	Class A (Style Z) NAC option module
BAT-1270 -	Battery, 12 volt, 7.0 AH (two required)

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No.:	7315-1637:0102
PARENT LISTING No.:	7315-0075:0206
CATEGORY:	7315 - POWER UNITS
LISTEE:	Honeywell International Inc. One Fire-Lite Place, Northford, CT, 06472 Contact: Brant, Lisa (203) 484-6105 Email: lisa.brant@honeywell.com
DESIGN:	Models HPF24S6, HPF24S8, HPFF8, HPFF8E, HPFF8CM, HPFF8CME, HPFF12, HPFF12E, *HPFF12CM and *HPFF12CME power limited power supply/battery chargers used for supervision and expanded power driving capability of up to four Notification Appliance Circuits (FACP Fire Circuits, Signaling Devices) or resettable/non resettable outputs. Model ZNAC-4 Class A converter. Refer to listee's data sheet for additional detailed product description and operational considerations.
RATING:	120 VAC, 24 VDC
INSTALLATION:	In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.
MARKING:	Listee's name, product designation, electrical rating and UL label.
APPROVAL:	Listed as power supply/battery chargers for use with separately listed compatible fire alarm control units.
NOTES:	

*Rev. 10-20-10 bh

This listing is based upon technical data submitted by the applicant. OSFM Fire Engineering staff has reviewed the test resultsand/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not be used to verify correct operational requirements or installation criteria.Refer to listee's data sheet, installation instructions and/or other suitable information sources.

Date Issued: 05/04/2023

Listing Expires: 06/30/2024

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
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FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

Authorized By: **David Castillo** , Program Coordinator
Fire Engineering & Investigations Division

Honeywell | Addressable Devices

Velociti® Series 3 Detectors

Photoelectric Detectors

Description

The Gamewell-FCI, Velociti® Series 3 intelligent photoelectric detectors with integral communication provide point location for alarm communication and selective maintenance. Designed in a modern bright white color, the Velociti Series 3 is aesthetically pleasing for today's contemporary buildings.

The Velociti Series 3 smoke detectors are intelligent addressable detectors with point ID capability that enable each detector address to be set with rotary address switches providing exact device locations. The photoelectric detector continually monitors the detected temperature and reports it to the fire alarm control panel. The modern design and expanded color options support a variety of contemporary aesthetic demands. In addition, each detector is constructed for exceptional installation and maintenance efficiency.

The Gamewell-FCI, ASD-PL3 photoelectric detector's re-designed optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards. The sensitivity of Velociti series detectors can be programmed using the control panel software to suit the environment. The ASD-PL3R photoelectric detector is also remote test capable that may be used with a DNR (DNRW) duct smoke detector housing. The ASD-PTL3 multi-sensor detector offers either photoelectric detection or thermal detection through dual electronic thermistors at 135°F fixed temperature thermal sensing.

For legacy installations, service detectors are available in the classic ivory color that will operate in both Velociti and CLIP protocol for backwards compatibility. Service models are designated by the -IV part number after the detector model.

Note: Although the E3 Series® and S3 Series panels support both the Velociti® and CLIP™ protocols, the GWF-7075 panel does not support the CLIP protocol. To obtain a complete list of panels that are listed to Velociti Series 3 detectors, refer to the Compatibility Addendum for Gamewell-FCI Manuals, P/N:9000-0427-L8.

Photoelectric Detector

FEATURES & BENEFITS

- Complies with UL® Standard 268 7th Edition
- Designed with a new profile to offer modern and improved aesthetics
- Contains a built-in functional test switch activated by external magnet
- Supports a low standby current
- Provides rotary address switches (01-159)
- Supplies optional relay, isolator, or sounder bases (standard or low frequency)
- Includes dual LEDs for 360° visibility
- Offers expanded color options

Ordering Information

NOTE: "-IV" suffix indicates Ivory color model.
NOTE: "-BL" suffix indicates Black color model.
NOTE: "WH" suffix indicates Bright White color model.
ASD-PL3: Photoelectric smoke detector, bright white, Velociti

ASD-PL3R: Photoelectric smoke detector, remote test capable, for use with DNR(W) duct smoke detectors, bright white, Velociti

ASD-PTL3: Photoelectric smoke detector with thermal sensing, bright white, Velociti

ASD-PL3-IV : Photoelectric smoke detector, ivory, Velociti/CLIP

ASD-PL3R-IV: Photoelectric smoke detector, remote test capable, for use with DNR(W) duct smoke detectors, ivory, Velociti/CLIP

ASD-PTL3-IV : Photoelectric smoke detector with thermal sensing, ivory, Velociti/CLIP

Intelligent Bases

For details on intelligent bases, refer to Data Sheet P/N: 9021-60540.

Note: "IV" suffix indicates Flashscan and CLIP devices.

"WH" suffix indicates bright white

B501-WHITE: 4" Flangeless mounting base, bright white

B501-WHITE-BP: 4" Flangeless mounting base bulk pack, bright white

B501-IV: 4" Flangeless mounting base, ivory

B300-6: 6" Flanged mounting base, bright white

B300-6-IV: 6" Flanged mounting base, ivory

B300-6-BP: 6" Flanged mounting base bulk (Pack of 10)

B200SR-WH: Standard sounder base, bright white

B200SR-IV: Standard sounder base, ivory

B200S-WH: Intelligent addressable sounder base, bright white

B200S-IV: Intelligent addressable sounder base, ivory

B200SR-LF-WH: Standard low frequency sounder base, bright white

B200SR-LF-IV: Standard low frequency sounder base, ivory

B200S-LF-WH: Intelligent addressable low frequency sounder base, bright white

B200S-LF-IV: Intelligent addressable low frequency sounder base, ivory

B224RB-WH: Relay base, bright white

B224RB-IV: Relay base, ivory

B224BI-WH: Isolator base, bright white

B224BI-IV: Isolator base, ivory

DNR: Intelligent duct detector housing, non-relay

DNRW: Intelligent duct detector housing, non-relay, watertight

Ordering Information

Accessories

SMB600: Surface Mounting Kit (flanged)

TR300: Accessory Flange Ring for B300 6" Base, bright white

TR300-IV: Accessory Flange Ring for B300 6" Base, ivory

RA100Z: Remote LED annunciator, 3-32 VDC

The annunciator mounts to a U.S. single-gang electrical box. For use with B501 and B300-6.

CK300: Bright White detector kit (Pack of 10)

CK300-IR: White, detector color kit for use with MCS-COF Series Detectors. (Pack of 10)

CK300-IV: Ivory, detector color kit. (Pack of 10)

CK300-IR-IV: Ivory, detector color kit for use with MCSCOF Series detectors. (Pack of 10)

CK300-BL: Black detector kit. (Pack of 10)

CK300-IR-Bl: Black, detector color kit for use with MCSCOF Series detectors. (Pack of 10)

M02-04-01: Detector test magnet.

M02-09-00: Test magnet with telescoping handle.

XR2B: Detector removal tool. Allows the installation and/or removal of the detector heads from the bases in high ceiling applications.

XP-4: Extension pole for XR2B. Shipped with three, 5-foot (1.524,m) sections.

Velociti® Series 3 Detectors Technical Specifications

SYSTEMS

Photoelectric Intelligent Detector:

Physical Specifications

Height: 2.0 inches (51 mm) installed in B300-6 base

Diameter:

6.1 inches (15.49 cm) installed in B300-6 base

4 inches (10.16 cm) installed in B501 base

Shipping Weight: 3.4 oz (96.4 g)

Operating Temperature Range:

Photo: 32° F to 122° F (0° C to 50° C)

Photo in Duct Applications: -4° F to 158° F (-20° C to 70° C)

Photo with Thermal: 32° F to 100° F (0° C to 38° C)

Operating Humidity Range: 10% to 93% non-condensing

Rate-of-Rise Detection: Responds to greater than 15°F/minute or 135°F (8.3° C/minute or 57°C

Air Velocity Range: 0 to 4,000 ft/min (0 to 1219.2 m/min)

Electrical Specifications

Voltage Range: 15 to 32 VDC

Standby Current (@ 24 VDC): 200 UA (one communication every 5 seconds with green LED enabled)

Max Alarm Current (max.): 2 mA @ 24 VDC (one communication every 5 seconds with red LED enabled)

Max Current (max.): 4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED enabled)

Isolator Load Rating: 0.0063

STANDARDS

The Velociti® Series 3 Photoelectric Detectors are designed to comply with the following standard:

UL Standard: UL 268

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL: S2332

FM: 3023594

MEA FDNY: COA-219-02-E Vol. VI

CSFM: 7272-1703:0501

ISO 9001 Certification

For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewell-fci.com/en-US/documentation/Pages/Listings.aspx

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For more information

Learn more about Gamewell-FCI's Velociti® Series 3 Detectors and other products available by visiting www.Gamewell-FCI.com

Honeywell Gamewell-FCI

12 Clintonville Road

Northford, CT 06472-1610

203.484.7161

www.honeywell.com

9020-0617 | K | 04/2018

Honeywell

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No.:	7272-1703:0501
PARENT LISTING No.:	7272-0028:0503
CATEGORY:	7272 - SMOKE DETECTOR-SYSTEM TYPE-PHOTOELECTRIC
LISTEE:	GAMEWELL-FCI 12 Clintonville Road, Northford, CT, 06472 Contact: Brant, Lisa (203) 484-6105 Email: lisa.brant@honeywell.com
DESIGN:	Models ASD-PL3, ASD-PL3R, and ASD-PTL3 analog addressable, photoelectric smoke detectors for open area and duct installations. Model ASD-PTL3 has a complementary heat detector. All models are similarl except for population/depopulation of components on the Printed Wiring Board for the intended features. All above models may be followed by two digit Suffix indicating the color of the detector enclosure: no suffix for white, -IV for ivory, -BL for black. Refer to listee's Installation and Maintenance Instruction for additional detailed product description and operational considerations
RATING:	24 VDC.
INSTALLATION:	In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.
MARKING:	Listee's name, model number, electrical rating, and UL label.
APPROVAL:	Listed as photoelectric smoke detectors. Detectors are for use with separately listed System Sensor base Models *B501, *B210LP (CSFM Listing 7300-1653:0109), B200S and B200SR (CSFM Listing 7300-1653:0213), B200S-LF and B200SR-LF (CSFM Listing 7300-1653:0238), B300-6 and B300-6-IS bases (CSFM Listing 7300-1653:0109), *B224BI and *B224RB (CSFM Listing 7300-1653:0126), System Sensor duct detector housings Models DNR and DNRW (CSFM listing 3240-1653:0209) and separately listed compatible fire alarm control units. Refer to manufacturer's Installation Manual for details. *All models comply with the applicable requirements in ANSI/UL 268, Smoke Detectors for Fire Alarm Systems, 7th Edition, January 11, 2016.
NOTES:	

*Revision
12/17/19 DCC

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
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FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

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Date Issued: 05/04/2023

Listing Expires: 06/30/2024

Authorized By: **David Castillo** , Program Coordinator
Fire Engineering & Investigations Division

Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Velociti® Series
ATD-L2F, ATD-RL2F

Description

The Gamewell-FCI Velociti® Series, addressable plug-in thermal sensors with integral communication provide features that surpass conventional sensors. Point ID capability allows each sensor's address to be set, providing exact locations for pinpointing alarm locations and for selective maintenance. ATD thermal sensors use an innovative thermistor sensing circuit to produce 135°F/57°C fixed-temperature (ATD-L2F). The ATD-RL2F provides a combination 15°/minute rate-of-rise with 135° fixed thermal detection that is included in a low-profile package. The ATD-HL2F provides fixed high-temperature detection at 190°F/88°C. These thermal sensors provide cost-effective, addressable property protection in a variety of applications.

The Velociti® Series uses a communication protocol that substantially increases the speed of communication between the sensors and Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

Installation

ATD plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove sensors without using a ladder.

Mount the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box.
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box.
- Single-gang box (except relay or isolator base).
- With B501BH or B501BHT base, use a 4.0" (10.2 cm) square box.
- With B224RB or B224BI base, use a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 cm) octagonal or square box.

NOTE: Because of the inherent supervision provided by the SLC, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

Addressable Thermal Sensor

ATD-L2F

Features

- Sleek, low-profile design
- Visual rotary switch addressing
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steadily red on alarm*
- Optional relay, isolator, or sounder bases
- Low standby current
- Addressable communication
- Stable communication technique with noise immunity
- Optional remote, single-gang LED accessory (RA-400Z)
- Suitable for installation in ducts

Note: *Only the red LED is operative in panels that do not operate in Velociti® mode.

An ISO 9000-2000 Company

SIGNALING UL LISTED S2332 FM APPROVED 3023594 MEA Approved 219-02-E Vol.VI 07270-0694:256

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Specifications

Size:	2.1" (5.3 cm) high x 4.1" (10.4 cm) diameter installed in B501 base, 6.1" (15.5 cm) diameter installed in ADB-FLF base
Shipping Weight:	4.8 oz. (137 g)
Operating Temperature:	
ATD-L2F or ATD-RL2F	–4° F to 100° F (–20° C to 38°C)
ATD-HL2	–4° F to 150°F (–20 C to 66°C)
Sensor Spacing:	UL® approved for 50 ft. (15.2 m) center to center FM approved for 25 x 25 ft. (7.6 x 7.6 m) spacing
Relative Humidity:	10 – 93% (non-condensing)
ATD-L2F	Fixed-temperature setpoint 135°F (57°C)
ATD-RL2F	Combination 135° F fixed temperature and 15° (8.3°c) per minute rate-of-rise°
ATD-HL2F	Fixed-temperature setpoint 190°F (88°C)

Electrical Specifications

Voltage Range:	15 - 32 volts DC peak
Standby Current:	200 mA @ 24 VDC (without communication)
max. avg.)	.0003 A @ 24 VDC (one communication every 5 seconds with LED enabled)
LED Current (max.)	.0065 A @ 24 VDC (LED lit)
Voltage Range	15 –32 volts DC peak

Specifications

Bases and Options

ADB-FLF	6.1” (15.5 cm) diameter standard base
B501	4.1” (10.4 cm) diameter flangeless base
B501BH or B501BHT	Sounder base assembly (B501BHT produces a Temporal Pattern) includes B501 base
B224RB Relay Base	Up to 14 AWG (2.0 mm2) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive 0.3 A @ 110 VDC inductive 1.0 A @ 30 VDC inductive
B224RB Relay Base Dimensions:	6.2”: (15.7 cm) x 1.2” (3.0 cm)
B224BI Isolator Base Dimensions:	6.2” (15.7 cm) x 1.2” (3.0 cm) Maximum 25 devices between isolator bases
RA-400Z	Remote alarm indicator, LED
BCK-200	Black detector covers (box of 10)

Ordering Information

Model	Description
ATD-L2F	Addressable thermal sensor, fixed, 135° F
ATD-RL2F	Addressable thermal sensor, combination fixed,135° F and 15°/minute rate-of-rise.
ATD-HL2F	Addressable thermal sensor, fixed, 190° F

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BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No.:	7270-1703:0115
CATEGORY:	7270 - HEAT DETECTOR
LISTEE:	GAMEWELL-FCI 12 Clintonville Road, Northford, CT, 06472 Contact: Brant, Lisa (203) 484-6105 Email: lisa.brant@honeywell.com
DESIGN:	Models ATD-L2, *ATD-L2F, ATD-HL2 AND *ATD-HL2F (fixed temperature) and ATD-RL2 *ATD-RL2F (fixed temperature with Rate-of-Rise) electronic heat detectors. Refer to listee's data sheet for additional detailed product description and operational considerations.
RATING:	ATD-L2, *-L2F, ATD-RL2, -*RL2F = 135°F fixed temperature ATD-HL2, *-HL2F = 190°F fixed temperature
INSTALLATION:	In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.
MARKING:	Listee's name, model number, electrical ratings, and UL Label.
APPROVAL:	Listed as heat detectors for use with separately listed compatible fire alarm control units. Refer to listee's Installation Instruction Manual for details.
NOTES:	FORMERLY: 7270-0694:256

Date Issued: 05/05/2023

Listing Expires: 06/30/2024

Authorized By: **David Castillo**, Program Coordinator
Fire Engineering & Investigations Division

Outdoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications

SPECTRAlert ADVANCE from System Sensor

SpectrAlert® Advance outdoor audible visible products are rich with features that cut installation times and maximize profits.

Features

- Weatherproof per NEMA 4X, IP56
- Listed to UL 1638 (strobe) and UL 464 (horn)
- Compatible with System Sensor synchronization protocol and legacy SpectrAlert products
- Field-selectable candela settings: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Rotary switch for horn tone and three volume selections
- Horn rated at 88+ dBA at 16 volts
- Rated from –40°F to 151°F
- Universal mounting plate with an onboard shorting spring that tests wiring continuity before devices are installed
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Listed for ceiling or wall mounting

Agency Listings

SIGNALING UL LISTED
S4011 (chimes, horn strobes, horns)
S3593 (outdoor and alert strobes)

FM APPROVED
3023572

MEA approved
MEA452-05-E

7300-1653:187 (outdoor strobes)
7125-1653:188 (horn strobes, chime strobes)
7135-1653:189 (horns, chimes)

SpectrAlert Advance offers the broadest line of outdoor horns, strobes, and horn strobes in the industry. With white or red plastic housings, wall or ceiling mounting options, and plain or FIRE-printed devices, SpectrAlert Advance can meet virtually any application requirement, including indoor, outdoor, wet, and dry applications in temperatures from –40°F to 151°F.

Like the entire SpectrAlert Advance line, outdoor horns, strobes, and horn strobes for wall applications include a variety of features that increase application flexibility and simplify installation. First, field-selectable settings, including candela, automatic selection of 12- or 24-volt operation, horn tones, and three volume options enable installers to easily adapt devices to meet requirements.

Next, SpectrAlert Advance devices use a universal mounting plate for both wall and ceiling applications. This mounting plate includes an onboard shorting spring that ensures wiring continuity before devices are installed, so installers can verify proper wiring without mounting the devices and exposing them to potential construction damage. Once the plates are mounted, all SpectrAlert Advance devices utilize a plug-in design with a single captured screw to speed installation and virtually eliminate costly ground faults.

Outdoor devices ship with weatherproof plastic back boxes (metal back boxes are available separately) that accommodate in-and-out wiring for daisy chaining devices. Plastic back boxes feature removable side flanges and improved resistance to saltwater corrosion. Knock-outs located on the back eliminate the need to drill holes for screw-in mounting. Plastic and metal weatherproof back boxes come with ¾-inch top and bottom conduit entries and ¾-inch knock-outs at the back. A screw-in NPT plug with an O-ring gasket for a watertight seal is included with each back box.

SpectrAlert Advance Outdoor Horn, Strobe, and Horn Strobe Specifications

Architect/Engineer Specifications

General

SpectrAlert Advance outdoor horns, strobes, and horn strobes shall mount to a weatherproof back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 9 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 17 and 33 volts. Outdoor SpectrAlert Advance products shall operate between –40 and 151 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185.

Strobe

The strobe shall be a System Sensor SpectrAlert Advance Model _____ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The strobe shall be suitable for use in wet environments.

Horn Strobe Combination

The horn strobe shall be a System Sensor SpectrAlert Advance Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have three audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options shall be set by a multiple position switch. On four-wire products, the strobe shall be powered independently of the sounder. The horn or horn strobe models shall operate on a coded or non-coded power supply. The horn strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The horn strobe shall be suitable for use in wet environments.

Physical/Electrical Specifications

Operating Temperature	–40°F to 151°F (–40°C to 66°C)
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12 DC/FWR or regulated 24 DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Wall-Mount Dimensions (including lens)	5.6″L × 4.7″W × 2.5″D (142 mm L × 119 mm W × 64 mm D)
Horn Dimensions	5.6″L × 4.7″W × 1.3″D (142 mm L × 119 mm W × 33 mm D)
Wall-Mount Weatherproof Back Box Dimensions (SA-WBB)	5.7″L × 5.1″W × 2.0″D (145 mm L × 130 mm W × 51 mm D)

Notes:

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12 V nominal only for 15 and 15/75 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

		8–17.5 Volts		16–33 Volts	
	Candela	DC	FWR	DC	FWR
Standard Candela Range	15	123	128	66	71
	15/75	142	148	77	81
	30	NA	NA	94	96
	75	NA	NA	158	153
	95	NA	NA	181	176
	110	NA	NA	202	195
	115	NA	NA	210	205
High Candela Range	135	NA	NA	228	207
	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

UL Max. Horn Current Draw (mA RMS)

		8–17.5 Volts		16–33 Volts	
Sound Pattern	dB	DC	FWR	DC	FWR
Temporal	High	57	55	69	75
Temporal	Medium	44	49	58	69
Temporal	Low	38	44	44	48
Non-Temporal	High	57	56	69	75
Non-Temporal	Medium	42	50	60	69
Non-Temporal	Low	41	44	50	50
Coded	High	57	55	69	75
Coded	Medium	44	51	56	69
Coded	Low	40	46	52	50

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15–115 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15	15/75	15	15/75	30	75	95	110	115
Temporal High	137	147	79	90	107	176	194	212	218
Temporal Medium	132	144	69	80	97	157	182	201	210
Temporal Low	132	143	66	77	93	154	179	198	207
Non-Temporal High	141	152	91	100	116	176	201	221	229
Non-Temporal Medium	133	145	75	85	102	163	187	207	216
Non-Temporal Low	131	144	68	79	96	156	182	201	210
FWR Input									
Temporal High	136	155	88	97	112	168	190	210	218
Temporal Medium	129	152	78	88	103	160	184	202	206
Temporal Low	129	151	76	86	101	160	184	194	201
Non-Temporal High	142	161	103	112	126	181	203	221	229
Non-Temporal Medium	134	155	85	95	110	166	189	208	216
Non-Temporal Low	132	154	80	90	105	161	184	202	211

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, High Candela Range (135–185 cd)

	16–33 Volts					16–33 Volts			
DC Input	135	150	177	185	FWR Input	135	150	177	185
Temporal High	245	259	290	297	Temporal High	215	231	258	265
Temporal Medium	235	253	288	297	Temporal Medium	209	224	250	258
Temporal Low	232	251	282	292	Temporal Low	207	221	248	256
Non-Temporal High	255	270	303	309	Non-Temporal High	233	248	275	281
Non-Temporal Medium	242	259	293	299	Non-Temporal Medium	219	232	262	267
Non-Temporal Low	238	254	291	295	Non-Temporal Low	214	229	256	262

Candela Derating

For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.

Strobe Output (cd)	
Listed Candela	Candela rating at –40°F
15	Do not use below 32°F
15/75	
30	
75	44
95	70
110	110
115	115
135	135
150	150
177	177
185	185

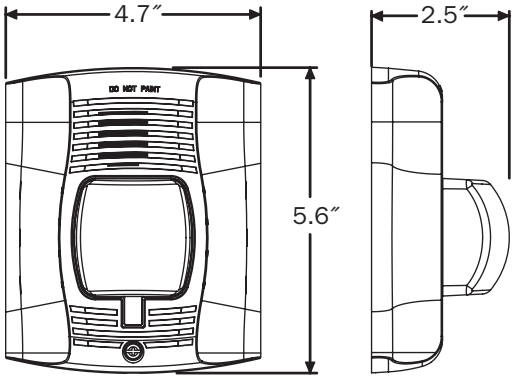
Horn Tones and Sound Output Data

Horn and Horn Strobe Output (dBA)

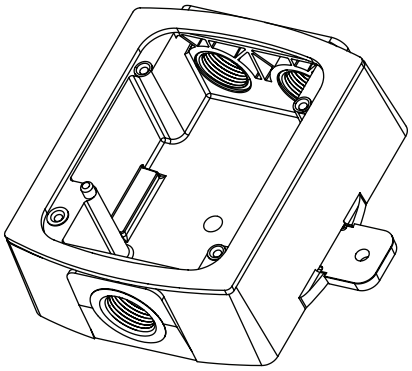
			8–17.5 Volts		16–33 Volts		24-Volt Nominal			
							Reverberant		Anechoic	
Switch Position	Sound Pattern	dB	DC	FWR	DC	FWR	DC	FWR	DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	89
4	Non-Temporal	High	82	82	88	88	93	92	100	100
5	Non-Temporal	Medium	78	78	85	85	90	90	98	98
6	Non-Temporal	Low	75	75	81	81	88	84	96	92
7†	Coded	High	82	82	88	88	93	92	101	101
8†	Coded	Medium	78	78	85	85	90	90	97	98
9†	Coded	Low	75	75	81	81	88	85	96	92

†Settings 7, 8, and 9 are not available on 2-wire horn strobe.

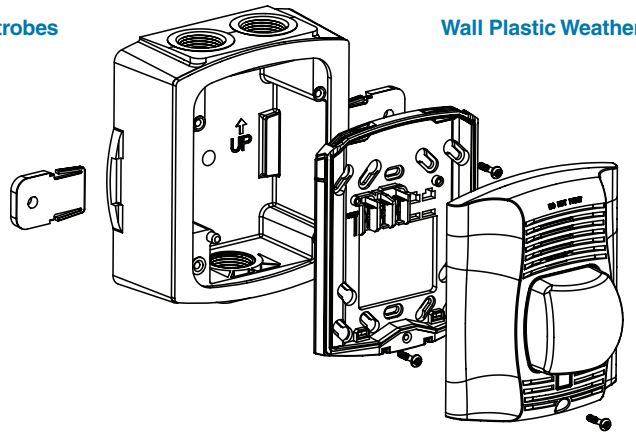
SpectrAlert Advance Diagrams



Wall-Mount Horn Strobes



Wall Plastic Weatherproof Back Box



Wall-Mount Horn Strobe with Plastic Weatherproof Back Box

SpectrAlert Advance Ordering Information

Model	Description
Wall Horn Strobes	
P2RK*†	2-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
P2RHK*†	2-Wire Horn Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
P2WK*†	2-Wire Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
P2WHK*†	2-Wire Horn Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
P4RK†	4-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
P4WK	4-Wire Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
P2RHK-120	2-Wire Horn Strobe, High cd, Red, Outdoor, 120 V (includes plastic weatherproof back box)
Wall Strobes	
SRK*†	Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
SRHK*†	Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
SWK*†	Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
SWHK*†	Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
Horns	
HRK†	Horn, Red, Outdoor (includes plastic weatherproof back box)
Accessories	
SA-WBB	Red, Metal Weatherproof Back Box
SA-WBBW	White, Metal Weatherproof Back Box

Notes:
* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2RK-P.
† Add "-R" to model number for weatherproof replacement device (no back box included), only for use with weatherproof outdoor flush mounting plate, WTP and WTPW.
"Standard cd" refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd" refers to strobes that include 135, 150, 177, and 185 candela settings. **When replacing standard outdoor units both the device and back box must be replaced.**

SYSTEM SENSOR®
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AVDS01201 • 3/12

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No.:	7135-1653:0189
CATEGORY:	7135 - AUDIBLE DEVICES
LISTEE:	System Sensor, Unincorporated Div of Honeywell Int'l Inc. 3825 Ohio Ave, St. Charles, IL, 60174 Contact: Brant,Lisa (203) 484-6105 (203) 484-7309 Email: lisa.brant@honeywell.com
DESIGN:	Models HR, HW Horns and CHR, CHW chimes. Intended for indoor use only unless otherwise indicated. Models may be followed by the suffix “K” indicating indoor or outdoor use. “K” suffice models are suitable for outdoor applications at temperatures from -40°F to +151°F (-40°C to +66°C) and are rated NEMA *4X when used with the System Sensor weather proof back boxes models SA-WBB (Wall), *SA-WBBW (Wall), SA-WBBC (Ceiling) and *SA-WBBCW (Ceiling). Models CHR and CHW are intended for private mode use only. Suitable for wall or ceiling mount. Refer to listee's data sheet for additional detailed product description and operational considerations.
RATING:	8 - 17.5 or 16-33 Vdc/VFWR
INSTALLATION:	In accordance with listee's printed installation instructions, applicable codes and ordinances, and in a manner acceptable to the authority having jurisdiction.
MARKING:	Listee's name, model number, electrical rating, and UL label.
APPROVAL:	Listed as audible devices when used with separately listed compatible fire alarm control units. Units can generate the distinctive three-pulse Temporal Pattern Fire Alarm Evacuation Signal (for total evacuation) in accordance with NFPA 72, 2002 Edition. Refer to listee’s Installation Instruction Manual for details.
NOTES:	

*Rev 12-01-08 bh

This listing is based upon technical data submitted by the applicant. OSFM Fire Engineering staff has reviewed the test results and/or other data but does not make an independent verification of any claims. This listing is not an endorsement or recommendation of the item listed. This listing should not be used to verify correct operational requirements or installation criteria. Refer to listee's data sheet, installation instructions and/or other suitable information sources.

Date Issued: 04/21/2023

Listing Expires: 06/30/2024

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

Authorized By: **David Castillo**, Program Coordinator
Fire Engineering & Investigations Division

Indoor Selectable-Output Strobes and Horn Strobes for Ceiling Applications

System Sensor L-Series audible visible notification products are rich with features guaranteed to cut installation times and maximize profits with lower current draw and modern aesthetics.

Features

- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Universal mounting plate for ceiling units
- Mounting plate shorting spring feature checks wiring continuity before device installation
- Electrically Compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- Listed for ceiling mounting only

The System Sensor L-Series offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draws and modern aesthetics. With white and red plastic housings, wall and ceiling mounting options, System Sensor L-Series can meet virtually any application requirement.

The entire L-Series product line of ceiling-mount strobes and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature a plug-in design with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time-consuming ground faults.

To further simplify installation, the L-Series utilizes a universal mounting plate so installers can mount them to a wide array of back boxes. With an onboard shorting spring, installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to a suit a wide range of application requirements using field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for horn tones with two volume selections.

Agency Listings

SIGNALING UL LISTED
S5512
S4011

FM APPROVED
FM approved except for ALERT models
3057383

7125-1653:0504
7135-1653:0503

L-Series Specifications

Architect/Engineer Specifications

General

L-Series ceiling-mount strobes and horn strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. Two-wire products shall also mount to a single-gang 2 × 4 × 17⁄8-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Ceiling strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 115, 150, and 177.

Strobe

The strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

Horn Strobe Combination

The horn strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize L-Series strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4 11⁄16 × 4 11⁄16 × 2 1⁄8-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

Physical/Electrical Specifications	
Standard Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12 VDC or regulated 24 DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Operating Voltage Range (MDL3)	8.5 to 17.5V (12 V nominal) or 16.5 to 33 V (24V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Ceiling-Mount Dimensions (including lens)	6.8" diameter × 2.5" high (173 mm diameter × 64 mm high)
Ceiling-Mount Surface Mount Back Box Skirt Dimensions (SBBCRL, SBBCWL)	6.9" diameter x 3.4" high (175 mm diameter x 86 mm high)

Notes:

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12 V nominal only for 15 and 30 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

		8–17.5 Volts	16–33 Volts	
	Candela	DC	DC	FWR
Candela Range	15	87	41	60
	30	153	63	86
	75	N/A	111	142
	95	N/A	134	164
	115	N/A	158	191
	150	N/A	189	228
	177	N/A	226	264

UL Max. Horn Current Draw (mA RMS)

		8–17.5 Volts	16–33 Volts	
Sound Pattern	dB	DC	DC	FWR
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

UL Max. Current Draw (mA RMS), Ceiling Horn Strobe, Candela Range (15–177 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15cd	30cd	15cd	30cd	75cd	95cd	115cd	150cd	177cd
Temporal High	103	167	71	90	143	165	187	217	254
Temporal Low	96	165	54	71	137	161	185	211	249
Non-Temporal High	106	173	71	90	141	165	187	230	273
Non-Temportal Low	95	166	54	71	124	161	170	216	258
3.1K Temporal High	111	164	69	94	147	163	184	229	257
3.1K Temporal Low	103	163	54	88	143	155	185	212	252
3.1K Non-Temporal High	111	172	69	94	144	164	202	229	271
3.1K Non-Temporal Low	103	169	54	88	131	155	187	217	259

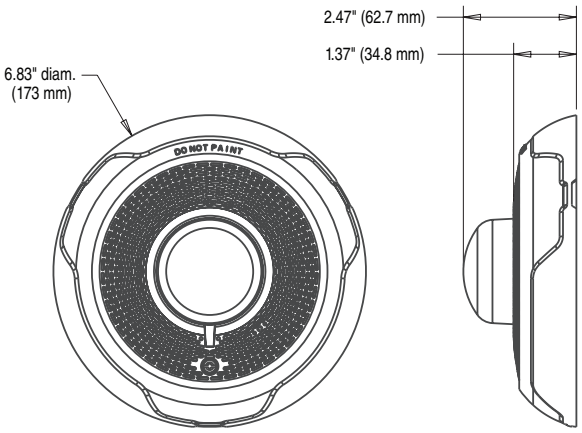
	16–33 Volts						
FWR Input	15cd	30cd	75cd	95cd	115cd	150cd	177cd
Temporal High	107	135	179	198	223	254	286
Temporal Low	78	101	151	172	199	229	262
Non-Temporal High	107	135	179	198	223	254	286
Non-Temportal Low	78	101	151	172	199	229	262
3.1K Temporal High	108	135	179	200	225	255	289
3.1K Temporal Low	79	101	150	171	196	229	260
3.1K Non-Temporal High	108	135	179	200	225	255	289
3.1K Non-Temporal Low	79	101	150	171	196	229	260

Horn Strobe Tones and Sound Output Data

Horn Strobe Output (dBA)

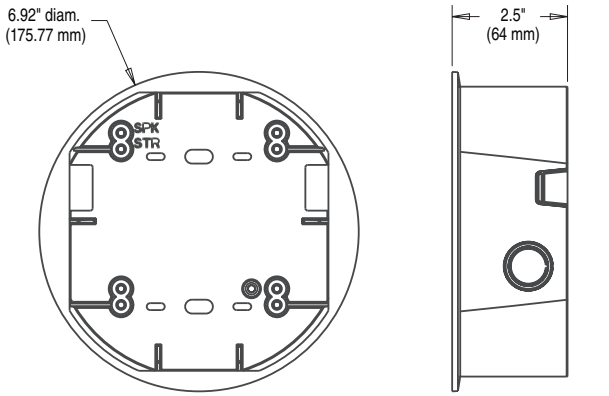
			8–17.5 Volts	16–33 Volts	
Switch Position	Sound Pattern	dB	DC	DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83

L-Series Dimensions



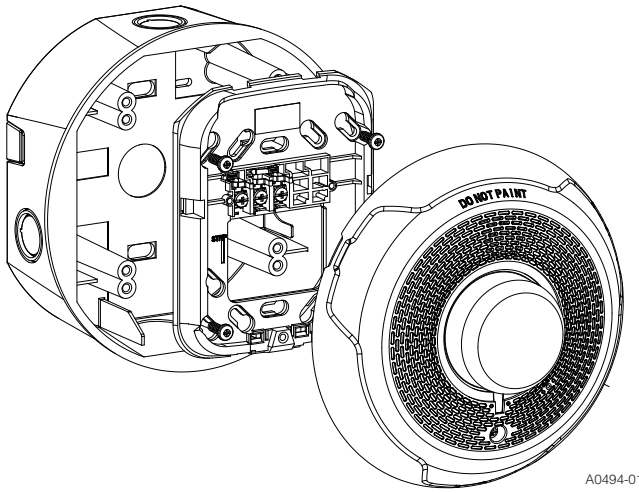
A0545-00

Ceiling-Mount Horn Strobes



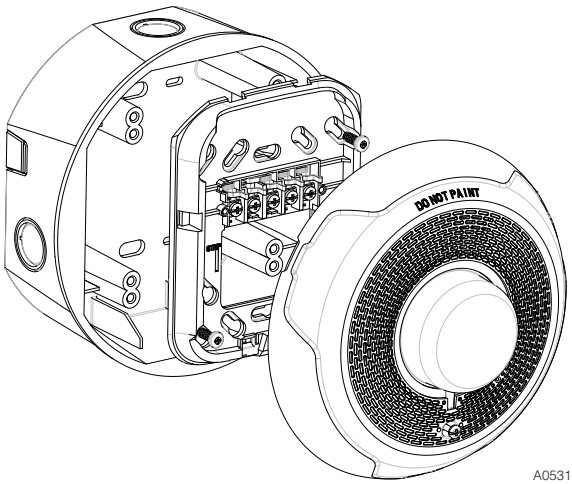
A0546-00

Ceiling Surface Mount Back Box



A0494-01

2-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Back Box



A0531-01

4-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Back Box

L-Series Ordering Information

Model	Description
Ceiling Horn Strobes	
PC2RL	2-Wire, Horn Strobe, Red
PC2WL	2-Wire, Horn Strobe, White
PC4RL	4-Wire, Horn Strobe, Red
PC4WL	4-Wire, Horn Strobe, White

Model	Description
Ceiling Strobes	
SCRL	Strobe, Red
SCWL	Strobe, White
SCWL-CLR-ALERT	Strobe, White, ALERT
Accessories	
TRC-2	Universal Ceiling Trim Ring Red
TRC-2W	Universal Ceiling Trim Ring White
SBBCRL	Ceiling Surface Mount Back Box, Red
SBBCWL	Ceiling Surface Mount Back Box, White

For a ceiling-listed horn-only device, see AVDS865 “Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications”.

SYSTEM SENSOR®

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AVDS868-02 • 12/01/2017

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No.:	7135-1653:0503
CATEGORY:	7135 - AUDIBLE DEVICES
LISTEE:	System Sensor, Unincorporated Div of Honeywell Int'l Inc. 3825 Ohio Ave, St. Charles, IL, 60174 Contact: Brant,Lisa (203) 484-6105 (203) 484-7309 Email: lisa.brant@honeywell.com
DESIGN:	System Sensor Indoor 2-wire and *4-wire Models: HWL, HRL, HGWL and HGRL Horns; CHWL and CHRL Chimes; P2RL, P2WL, P2GRL, P2GWL, P2RL-P, P2WL-P, P2RL-SP, P2WL-SP, *P4RL and *P4WL Wall Horn Strobes; PC2RL, PC2WL, *PC4RL and *PC4WL Ceiling Horn Strobes; CHSRL and CHSWL Wall Chime Strobes; CHSCRL and CHSCWL Ceiling Chime Strobes; Wall Bezel Parts: BZR-F, BZR-AL, BZR-AG, BZR-EV, BZR-P, BZR-SP, BZR-PG, BZW-F, BZW-AL, BZW-AG, BZW-EV, BZW-P, BZW-SP, BZW-PG, BZGR-F, BZGR-AL, BZGR-AG, BZGR-EV, BZGR-P, BZGR-SP, BZGR-PG, BZGW-F, BZGW-AL, BZGW-AG, BZGW-EV, BZGW-P, BZGW-SP and BZGW-PG, Ceiling Bezel Parts: BZRC-F, BZRC-AL, BZRC-AG, BZRC-EV, BZRC-P, BZRC-SP, BZRC-PG, BZWC-F, BZWC-AL, BZWC-AG, BZWC-EV, BZWC-P, BZWC-SP and BZWC-PG. Color Lens: LENS-A2, LENS-B2, LENS-G2, LENS-R2, LENS-AC2, LENS-BC2, LENS-GC2 and LENS-RC2. WallTrim Rings: *TR-2 and *TR-2W

LISTING SERVICE

	CeilingTrim Rings: *TRC-2 and *TRC-2W. Wall Surface Mounted Back Boxes: SBBRL, SBBGRL, SBBWL and SBBGWL, Ceiling Surface Mounted Back Boxes: SBBCRL and SBBCWL MP120KL 120 VAC Adapter Mounting Plate Refer to listee's data sheet for detailed product description and operational considerations.
RATING:	12 VDC regulated and 24 VDC/FWR
INSTALLATION:	In accordance with listee's printed installation instructions, NFPA 72, applicable codes & ordinances and in a manner acceptable to the authority having jurisdiction.
MARKING:	Listee's name, model number, electrical rating, and UL label.
APPROVAL:	Listed as audible devices when used with separately listed compatible fire alarm control units. Suitable for indoor use, wall or ceiling mounted. Authority having jurisdiction should be consulted prior to installation. Refer to listee's Installation Instruction Manual for details.
NOTES:	

Revision 08-21-2017 dcc

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

Date Issued: 04/21/2023

Listing Expires: 06/30/2024

Authorized By: **David Castillo**, Program Coordinator
Fire Engineering & Investigations Division

Addressable Devices

Velociti® Series AOM-2SF

Addressable Output Relay Supervised Control Module

General

The Gamewell-FCI Velociti® Series addressable output supervised control module (AOM-2SF) allows a Gamewell-FCI analog addressable fire alarm control panel to switch an external power supply, such as a DC supply or audio amplifier (up to 80 V_{RMS}) to notification appliances. The AOM-2SF notification appliance circuit can be wired either Class A (Style Z) or Class B (Style Y). It also supervises the wiring to the connected loads and reports their status to the panel as NORMAL, OPEN or SHORT CIRCUIT. The module contains a panel controlled LED.

The Velociti® Series use a communication protocol that substantially increases the speed of communication between the SLC devices and certain Gamewell-FCI analog addressable fire alarm control panels. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net result is a superior response speed up to five times greater than the earlier designs.

The AOM-2SF module is designed for installation in the signaling line circuit of any Gamewell-FCI analog addressable fire alarm control panel. The signaling line circuits of Gamewell-FCI analog addressable fire alarm control panels are designed to accommodate up to 159 modules per circuit. The AOM-2SF is designed to mount in a 4" (10.16 cm) square junction box 2 1/8" (5.5 cm) deep.

AOM-2SF

Table 1 lists the relay contact ratings.

Current Rating	Maximum Voltage	Load Description	Application
3A	30 VDC	Resistive	Non-Coded
2A	30 VDC	Resistive	Coded
0.9A	110 VDC	Resistive	Non-Coded
0.5A	125 VAC	Resistive	Non-Coded
0.5A	30 VDC	Inductive (L/R=5ms)	Coded
1A	30 VDC	Inductive (L/R=2ms)	Coded
0.5A	125 VAC	Inductive (PF=.35)	Non-Coded
0.7A	75 VAC	Inductive	Non-Coded

Table 1: Relay Contact Ratings

Ordering Information

AOM-2SF: Addressable output supervised control module

FEATURES & BENEFITS

- Listed under UL® Standard 864 and UL2572 for Mass Notification
- Designed as a compact size to allow easy installation
- Includes Class A, Style Z, or Class B, Style Y notification appliance circuit
- Accommodates audio amplifiers up to 80 V_{RMS}
- FM Listed as suitable for a releasing device service
- Includes a bi-color LED that flashes green whenever the module is addressed, and lights steady red upon activation*

*Note 1: Only the red LED is operative in panels that do not operate in Velociti® mode
*Note 2: The bi-color LED functionality is not available on the GWF-7075 panel.

Velociti® Series AOM-2SF Technical Specifications

SYSTEM

Supervisory Current: 0.00375 amps
Alarm Current: .0065 amps
Operating Temperature: 32° to 120° F (0° to 49° C)
Relative Humidity: 10 to 93% relative humidity (non-condensing)
Dimensions: 4 1/2" H x 4" W x 1 1/4" D
(11.4 H x 10.2 W x 3.2 D cm)

TEMPERATURE AND HUMIDITY RANGES

This system meets NFPA requirements for operation at 0 – 49°C/32 – 120°F and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15 – 27°C/60 – 80°F.

STANDARDS

The Velociti Series AOM-2SF are designed to comply with the following standard:

UL Standards: UL 864 9th Edition

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL: S1949
FM: 3023594
MEA FDNY: 227-03-E Vol. IV
CSFM: 7300-1703:0102
ISO 9001 Certification

For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewell-fci.com/en-US/documentation/Pages/Listings.aspx

For more information
Learn more about Gamewell-FCI's Velociti® Series AOM-2SF and other products available by visiting www.Gamewell-FCI.com

Honeywell Gamewell-FCI
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Northford, CT 06472-1610
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www.honeywell.com

9020-0627 | | | 08/18

Honeywell

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING & INVESTIGATIONS DIVISION
BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No.:	7300-1703:0102
PARENT LISTING No.:	7300-1653:0103
CATEGORY:	7300 - FIRE ALARM CONTROL UNIT ACCESSORIES/MISC. DEVICES
LISTEE:	GAMEWELL-FCI 12 Clintonville Road, Northford, CT, 06472 Contact: Brant, Lisa (203) 484-6105 Email: lisa.brant@honeywell.com
DESIGN:	Models AMM-4, *AMM-4F, AMM-2 and *AMM-2F monitor modules and Models AOM, AOM-2, AOM-2R, *AOM-2RF, AOM-2S and *AOM-2SF control modules. Refer to listee's data sheet for detailed product description and operational considerations.
RATING:	
INSTALLATION:	In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.
MARKING:	Listee's name, model designation, electrical rating and UL label.
APPROVAL:	Listed as accessories for use with separately listed compatible control units. System Sensor Model SMB500 surface mount box (CSFM Listing No. 7300-1653:103) may be used as an enclosure for these modules
NOTES:	FORMERLY: 7300-0694:178

12-4-07

Date Issued: 05/05/2023

Listing Expires: 06/30/2024

Authorized By: **David Castillo** , Program Coordinator
Fire Engineering & Investigations Division