NOTE: CERTIFICATION OF THE SUBJECT PROJECT A#01-120767 IS CONTINGENT UPON CERTIFICATION OF A#01-119221 AND A#01-120337

TERRA LINDA HIGH SCHOOL
SHADE STRUCTURE & ENTRY CANOPY

320 Nova Albion Way, San Rafael, CA 94903

SAN RAFAEL CITY SCHOOLS

DSA FILE NO: 21-H1 **DSA APPLICATION NO: 01-120767** **PTN:** 65466-45

PROJECT TEAM

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LICENSED ARCHITECT
AARON JOBSON
LICENSE # C30620
EXP. OCTOBER 31, 2023
STATE OF CALIFORNIA

SIGNED: JANUARY 23, 2023

TERRA LINDA HIGH SCHOOL

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DSA APP NO. 01-120767
ARCH PROJECT NO: 2068.00
DRAWN BY:
DRAWING SCALE:
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CD
APRIL 18, 2023
SHEET TITLE

COVER SHEET

SHEET NUMBER

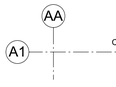
G-0.1

ABBREVIATIONS

&	AND	GA	GAUGE	S	SOUTH
L	ANGLE	GALV	GALVANIZED	S.A.D.	SEE ARCHITECTURAL DRAWINGS
@	AT	GB	GRAB BAR	S.AV.D.	SEE AUDIOVIDEO DRAWINGS
℄	CENTERLINE	GC	GENERAL CONTRACTOR	SC	SOLID CORE
'	FEET	GI	GALVANIZED IRON	S.C.D.	SEE CIVIL DRAWINGS
"	INCHES	GL	GLASS/ GLAZING	SCHED	SCHEDULE
d	PENNY	GLB	GLUE LAMINATED BEAM	SD	STORM DRAIN
#	POUND/ NUMBER	GND	GROUND	SECT	SECTION
		GR	GRADE	S.E.D.	SEE ELECTRICAL DRAWINGS
AB	ANCHOR BOLT	GYP BD	GYPSUM BOARD	SEP	SEPARATION
ABBREV	ABBREVIATION			S.F.PD.	SEE FIRE PROTECTION DRAWINGS
AC	ASPHALT CONCRETE	HB	HOSE BIBB	SHTG	SHEATHING
A/C	AIR CONDITIONING	HC	HOLLOW CORE	SIM	SIMILAR
ACC	ACCESSIBLE	HDR	HEADER	SL	SLIDING
ACOUS	ACOUSTICAL	HDWD	HARDWOOD	S.L.D.	SEE LANDSCAPE DRAWINGS
AC T	ACOUSTICAL TILE	HDWR	HARDWARE	SM	SHEET METAL
AD	AREA DRAIN	HM	HOLLOW METAL	S.M.D.	SEE MECHANICAL DRAWING
ADJ	ADJUSTABLE	HOR	HORIZONTAL	SOV	SHUT OFF VALVE
A.F.F.	ABOVE FINISH FLOOR	HP	HIGH POINT	S.P.D.	SEE PLUMBING DRAWINGS
AGG	AGGREGATE	HR	HOUR	SPEC	SPECIFICATION
ALUM	ALUMINUM	HSS	HOLLOW STEEL SECTION	SPKR	SPEAKER
ANOD	ANODIZED	HT	HEIGHT	SQ	SQUARE
APPROX	APPROXIMATE	HTG	HEATING	SS	STAINLESS STEEL
ARCH	ARCHITECTURAL	HVAC	HEATING, VENTILATING,	S.S.D.	SEE STRUCTURAL DRAWINGS
ASPH	ASPHALT		AIR-CONDITIONING	S.TH.D.	SEE THEATER DRAWINGS
				STA	STATION
BD	BOARD	ID	INSIDE DIAMETER	STD	STANDARD
BITUM	BITUMINOUS	INSUL	INSULATION	STL	STEEL
BLDG	BUILDING	INT	INTERIOR	STOR	STORAGE
BLK	BLOCK	INTEG	INTEGRAL	STRUCT	STRUCTURAL
BLKG	BLOCKING	INTERMED	INTERMEDIATE	SUSP	SUSPENDED
BM	BEAM	INV	INVERT	SYM	SYMMETRICAL
BOT	BOTTOM				
BO	BY OWNER	JH	JOIST HANGER	T	TREAD
BRK	BREAK	JST	JOIST	T&B	TOP & BOTTOM
BRG	BEARING	JT	JOINT	TC	TOP OF CURB
BTWN	BETWEEN			TEL	TELEPHONE
BU	BUILT-UP	KIT	KITCHEN	TER	TERRAZZO
BUR	BUILT-UP ROOFING	KP	KICK PLATE	T&G	TONGUE & GROOVE
				TH	THICK
CAB	CABINET	LAB	LABORATORY	THRU	THROUGH
CB	CATCH BASIN	LAM	LAMINATE	TJ	TOOL JOINT
CBC	CALIFORNIA BUILDING CODE	LAV	LAVATORY	TN	TOE NAIL
CEM	CEMENT	LL	LIVE LOAD	T.O.D.	TOP OF DECK
CER	CERAMIC	LP	LOW POINT	T.O.P.	TOP OF PLATE
CI	CAST IRON	LT	LIGHT	T.O.R.	TOP OF ROOF
CIR	CIRCLE			T.O.W.	TOP OF WALL
CJ	CONTROL JOINT	MAT	MATERIAL	T.P.	TOP OF PAVEMENT
CORR	CORRIDOR	MAX	MAXIMUM	TRN	TRANSOM
CL	CLOSET/ CENTER LINE	MB	MACHINE BOLT	TRANS	TRANSPARENT
CLG	CEILING	MC	MEDICINE CABINET	TS	TUBE STEEL
CLR	CLEAR	MECH	MECHANICAL	TUB	TUBULAR
CLS	CLOSURE	MED	MEDIUM	TV	TELEVISION
CMU	CONCRETE MASONRY UNIT	MEMB	MEMBRANE	TW	TACKWALL
CO	CLEANOUT	MFR	MANUFACTURER	TYP	TYPICAL
COL	COLUMN	MH	MANHOLE		
COMB	COMBINATION	MIN	MINIMUM	UNF	UNFINISHED
COMP	COMPOSITION	MIR	MIRROR	U.O.N.	UNLESS OTHERWISE NOTED
CONC	CONCRETE	MISC	MISCELLANEOUS	UR	URINAL
CONN	CONNECTION	MO	MASONRY OPENING	UTIL	UTILITY
CONST	CONSTRUCTION	MOD	MODULAR		
CONT	CONTINUOUS	MR	MOISTURE RESISTANT	VB	VAPOR BARRIER
CONTR	CONTRACTOR	MTD	MOUNTED	VCT	VINYL COMPOSITION TILE
CT	CERAMIC TILE	MTL	METAL	VERT	VERTICAL
CTR	CENTER	MUL	MULLION	VEST	VESTIBULE
CTSK	COUNTERSINK			V.I.F.	VERIFY IN FIELD
CUST	CUSTODIAN	N	NORTH	VTR	VENT THROUGH ROOF
CW	COLD WATER	(N)	NEW	VWC	VINYL WALL COVERING
		NAT	NATURAL		
DBL	DOUBLE	N.I.C.	NOT IN CONTRACT	W	WEST
DEPT	DEPARTMENT	NO	NUMBER	W/	WITH
DET	DETAIL	NOM	NOMINAL	WC	WATER CLOSET
DF	DRINKING FOUNTAIN	N.T.S.	NOT TO SCALE	WD	WOOD
DG	DECOMPOSED GRANITE	O/	OVER	WDW	WINDOW
DI	DRAIN INLET	OA	OVERALL	WH	WATER HEATER
DIA	DIAMETER	OBS	OBSCURE	W/O	WITHOUT
DIAG	DIAGONAL	OC	ON CENTER	WP	WATER PROOF
DIM	DIMENSION	OD	OUTSIDE DIAMETER	W.P.	WORK POINT
DISP	DISPOSAL	OF	OVERFLOW	WR	WATER RESISTANT
DIV	DIVISION	OFCI	OWNER FURNISHED/ CONTRACTOR INSTALLED	WSCT	WAINSCOT
DN	DOWN	O.L.F.	OCCUPANT LOAD FACTOR	WT	WEIGHT
DO	DOOR OPENING	OFF	OFFICE	YD	YARD
DIR	DIRECTLY	OPNG	OPENING		
DR	DOOR	OPP	OPPOSITE		
DSA	DIVISION OF STATE ARCHITECT	OVHD	OVERHEAD		
DS	DOWN SPOUT				
DSP	DRY STAND PIPE	PC	PORTLAND CEMENT		
DT	DRAIN TILE	P.C.F.	POUNDS PER CUBIC FOOT		
DW	DISHWASHER	PDA	POWER DRIVEN ANCHOR		
DWG	DRAWING	PERF	PERFORATED		
DWR	DRAWER	PH	PLATE HEIGHT		
		PL	PLATE		
E	EAST	P/L	PROPERTY LINE		
(E)	EXISTING	PLAM	PLASTIC LAMINATE		
EA	EACH	PLAS	PLASTER/ PLASTIC		
EB	EXPANSION BOLT	PLF	POUNDS PER LINEAL FOOT		
EE	EACH END	PLYWD	PLYWOOD		
EF	EXHAUST FAN	P.O.C.	POINT OF CONTACT		
EJ	EXPANSION JOINT	PR	PAIR		
EL	ELEVATION GRADE	PROP	PROPERTY		
ELEC	ELECTRICAL	PSF	POUNDS PER SQUARE FOOT		
ELEV	ELEVATION	PSI	POUNDS PER SQUARE INCH		
EMER	EMERGENCY	PT	POINT		
EMT	ELECTRIC METALLIC TUBING	PTDF	PRESSURE TREATED DOUGLAS FIR		
ENCL	ENCLOSURE	PTN	PARTITION		
EP	ELECTRIC PANEL	PTR	PAPER TOWEL RECEPTACLE		
EQ	EQUAL	PVC	POLYVINYL CHLORIDE		
EQUIP	EQUIPMENT	PVMT	PAVEMENT		
EQUIV	EQUIVALENT				
ES	EACH SIDE	R	RISER		
EW	EACH WAY	R / RAD	RADIUS		
EXH	EXHAUST	RCP	REFLECTED CEILING PLAN		
EXIST	EXISTING	RD	ROOF DRAIN		
EXP	EXPANSION	REF	REFERENCE		
EXT	EXTERIOR	REFR	REFRIGERATOR		
		REG	REGULAR		
F	FACE	REQD	REQUIRED		
FA	FIRE ALARM	REINF	REINFORCED		
FCO	FLOOR CLEAN OUT	RH	ROOF HATCH		
FD	FLOOR DRAIN	RHMS	ROUND HEAD MACHINE SCREW		
FDN	FOUNDATION	RHWS	ROUND HEAD WOOD SCREW		
FE	FIRE EXTINGUISHER	RM	ROOM		
FEC	FIRE EXTINGUISHER CABINET	RO	ROUGH OPENING		
FF	FINISH FLOOR	RWL	RAIN WATER LEADER		
FG	FINISH GRADE	RWD	REDWOOD		
FGL	FIBERGLAS				
FH	FIRE HYDRANT				
FHMS	FLAT HEAD MACHINE SCREW				
FHS	FIRE HOSE STATION				
FHWS	FLAT HEAD WOOD SCREW				
FIN	FINISH				
FIXT	FIXTURE				
FL	FLOOR LINE				
FLASH	FLASHING				
FLUOR	FLUORESCENT				
FLR	FLOOR				
FM / FOM	FACE OF MASONRY				
FN	FACE NAIL				
FOC	FACE OF CONCRETE				
FOF	FACE OF FINISH				
FOS	FACE OF STUD				
FRMG	FRAMING				
FR	FIRE-RESISTANT				
FRP	FIBERGLASS REINFORCED PANEL				
FT	FEET				
FTG	FOOTING				
FURR	FURRING				

LEGEND

ALL NOTES AND SYMBOLS ARE INTENDED TO APPLY AT ALL OTHER LOCATIONS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY. NO LIMITATION OF APPLICATION IS INTENDED EXCEPT AS SPECFICALLY NOTED.



COLUMN GRIDS A AND 1 IN BUILDING A

DIMENSION TO FACE OF STUD OR MASONRY

DIMENSION TO FACE OF FINISH

DIMENSION TO CENTER LINE OR COLUMN LINE

RELATIVE ELEVATION DIMENSION

DETAIL NUMBER 11 ON SHEET NUMBER A-9.12

SECTION NUMBER 3 ON SHEET NUMBER A-B6.2

ELEVATION NUMBER 2 ON SHEET NUMBER A-B5.3

KEYNOTE NUMBER 33

PROJECT DESCRIPTION

WORK IN BASE BID
· PROVIDE AND INSTALL NEW SHADE STRUCTURE (PC #04-120012) WITH LIGHTING AND ELECTRICAL OUTLETS
· PROVIDE ASPHALT CONCRETE SLOPED WALK WITH CONCRETE CURB
· MODIFY (E) FENCING AND CONSTRUCT NEW FENCING TO ENCLOSE SHADE STRUCTURE AREA
· INSTALL NEW ENTRY CANOPY AT (E) ADMINISTRATION BUILDING
· CONSTRUCT SITE FENCING AND ASSOCIATED PEDESTRIAN AND VEHICULAR GATES WHERE SHOWN ON PLAN

DSA DEFFERRED ITEMS

1) NONE

Statement of General Conformance

BY ARCHITECT UTILIZING PLANS (INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS) PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

DSA Application No **01-120767** File No **21-H1**

These drawings (Civil, Structural, Mechanical, Plumbing, Electrical, and Fire Alarm) and/or specifications and/or calculations for the items listed, 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.

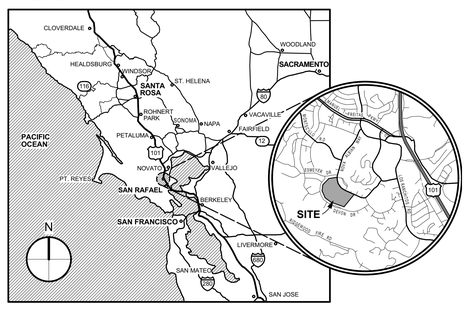
The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341, and 4-344* of Title 24, Part 1. (Title 24, Part 1, Section 4-317 (b))

Signature 04.19.2023 Date

Architect or Engineer designated to be in general responsible charge

Aaron Jobson	C30620	October 31, 2023
Print Name	License Number	Expiration Date

VICINITY MAP



GENERAL NOTES

1. ALL WORK IS SHOWN, DESCRIBED OR SPECIFIED IN THE DRAWINGS INDEXED ON THIS PAGE OR IN THE SPECIFICATIONS.

   ALL WORK NOT INDICATED AS EXISTING (E) IS NEW.

2. ALL FRAMING DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE.
   - DO NOT SCALE DRAWINGS.
   - VERIFY ALL DIMENSIONS WHERE WORK INVOLVES FRAMING FOR WINDOWS, DOORS, OR CABINETS.

3. ONLY WORK SO NOTED IS NOT IN CONTRACT (N.I.C.) ALL N.I.C. ITEMS ARE NOT PART OF DSA APPROVAL

4. GOVERNING CODES: A COPY OF TITLE 24 PARTS 1-5 AND PART 9 SHALL BE KEPT ON THE JOB AT ALL TIMES.
   CALIFORNIA CODE OF REGULATIONS TITLE 24 BUILDING STANDARDS CODE:
   PART 1 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
   PART 2 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
   (2021 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, 2022 CALIFORNIA AMENDMENTS)
   PART 3 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
   (2020 NATIONAL ELECTRICAL CODE, 2022 CALIFORNIA AMENDMENTS)
   PART 4 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
   (2021 IAPMO UNIFORM MECHANICAL CODE, 2022 CALIFORNIA AMENDMENTS)
   PART 5 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
   (2021 IAPMO UNIFORM PLUMBING CODE, 2022 CALIFORNIA AMENDMENTS)
   PART 6 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
   PART 9 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
   (2021 INTERNATIONAL FIRE CODE, 2022 CALIFORNIA AMENDMENTS)
   PART 10 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
   (2021 INTERNATIONAL EXISTING BUILDING CODE, 2022 CALIFORNIA AMENDMENTS)
   PART 11 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CAL-GREEN), PART 11, TITLE 24 CCR
   PART 12 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
   TITLE 19 CCR, PUBLIC SAFETY CODE, STATE FIRE MARSHAL REGULATIONS
   2010 ADA STANDARDS FOR ACCESSIBILITY DESIGN
   2016 ASME A17.1-16/CSA B44-16 SAFETY CODE FOR ELEVATORS AND ESCALATORS
   NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME 17.1 BY ADOPTION

5. STANDARD AND GUIDES:

NFPA 13	INSTALLATION OF FIRE SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	INSTALLATION OF STANDPIPE AND HOSE SYSTEMS	2016 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	WET CHEMICAL FIRE EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 20	INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES	2016 EDITION
NFPA 25	CALIFORNIA EDITION - TESTING, MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS	2013 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2016 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2016 EDITION
NFPA 170	STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS	2018 EDITION
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2003 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2008 EDITION
UL 2034	STANDARD FOR SINGLE AND MULTIPLE CARBON MONOXIDE ALARMS	2017 EDITION
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION

6. ALL WORK SHALL CONFORM TO 2022 TITLE 24, CALIFORNIA CODE OF REGULATIONS (C.C.R.)
   IN ACCORDANCE WITH TITLE 24 PART 1 CHAPTER 4: THE ADMINISTRATIVE REGULATIONS FOR THE DIVISION OF THE STATE ARCHITECT STRUCTURAL SAFETY (DSA/SS)
   - 4-331 DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION.
   - 4-332 WHEN CONSTRUCTION IS SUSPENDED FOR MORE THAN ONE MONTH, THE PROJECT INSPECTOR SHALL INFORM DSA.
   - 4-333(a) OBSERVATION OF THE WORK SHALL BE BY ARCHITECT OR REGISTERED ENGINEER.
   - 4-333(b) A DSA CERTIFIED PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
   - 4-334 SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH THIS SECTION.
   - 4-335 A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT IN ACCORDANCE WITH THIS SECTION. COSTS OF RE-TEST MAY BE BACKCHARGED TO THE CONTRACTOR. ALL TESTS AND TESTING LAB SHALL CONFORM TO THE REQUIREMENTS OF SECTION 4-335 AND APPROVED T & I SHEET (DSA-103)
   - 4-336 VERIFIED REPORTS SHALL BE SUBMITTED BY CONTRACTORS (DSA 006-C), INSPECTORS (DSA 006-PI), ARCHITECTS AND ENGINEERS (DSA 006-AE) IN ACCORDANCE WITH SECTIONS 4-336 AND 4-343.
   - 4-337 SEMI-MONTHLY REPORTS SHALL BE SUBMITTED BY INSPECTORS (DSA - 155), IN ACCORDANCE WITH SECTIONS 4-337.
   - 4-338 WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE APPROVED PLANS, ADDENDA AND CONSTRUCTION DOCUMENTS.
     CHANGES TO THE APPROVED PLANS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR. ADDENDA AND CHANGE DOCUMENTS SHALL BE STAMPED AND SIGNED BY THE ARCHITECT OR REGISTERED ENGINEER IN CHARGE
   - 4-341(a) THE ARCHITECT AND THE REGISTERED ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTIONS 4-333(a) AND 4-341.
   - 4-343 THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH THIS SECTION.

7. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, C.C.R. SHOULD ANY EXISTING CONDITIONS BE DISCOVERED WHICH ARE NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH SAID TITLE 24 C.C.R. A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK. (TITLE 24 PART 1, SECTION 4-338(c))

8. COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION SHALL BE ENFORCED.

9. EMERGENCY VEHICLE ACCESS ROADS AND ON-SITE FIRE HYDRANTS SHALL BE IN SERVICE AND OPERABLE PRIOR TO LOADING THE SITE WITH COMBUSTIBLE MATERIALS.

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

11. SUBSTITUTIONS OF PRODUCTS OR CONSTRUCTION PROCESSES THAT AFFECT THE STRUCTURAL SAFETY, FIRE AND LIFE-SAFETY, OR ACCESSIBILITY OF THIS PROJECT SHALL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL AS AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT.

12. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
   - LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
   - MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
   - A LISTING OF CERTIFIED ATT CAN BE FOUND AT HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE
   - THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
   - PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

SHEET INDEX : TOTAL OF 22 SHEETS

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(707) 576-0829

LICENSED ARCHITECT
AARON JOBSON
LICENSE # C30620
EXP. OCTOBER 31, 2023
STATE OF CALIFORNIA

SIGNED: JANUARY 23, 2023

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SHADE STRUCTURE & ENTRY CANOPY

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ABBREVIATIONS AND NOTES

SHEET NUMBER

G-0.2

P:\2068.00 - Terra Linda HS CTE, SRCS\Drawings\04-CD\2068.00 - TERRA LINDA HS CTE 25.pln;4/19/2023;7:08 AM

04-17-23 erickson \2528\dwg\2528 15\2528.15 NOTE.dwg

TAB: C0 NOTE

ABBREVIATIONS

AB	AGGREGATE BASE
ABAN	ABANDONED
ABS	ACRYLONITRILE–BUTADIENE–STYRENE
AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
AD	ALGEBRAIC DIFFERENCE
ADA	AMERICANS WITH DISABILITIES ACT
ADPT	ADAPTER
AGG	AGGREGATE
ALUM	ALUMINUM
ANG	ANGLE
AP	ANGLE POINT
APN	ASSESSORS PARCEL NUMBER
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
AVE	AVENUE
AVG	AVERAGE
BC	BEGIN HORIZONTAL CURVE
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCHMARK
BO	BLOWOFF
BOC	BACK OF CURB
BV	BUTTERFLY VALVE
BVC	BEGIN VERTICAL CURVE
BSW	BACK OF SIDEWALK
BT	BOTTOM OF TAPER
B&R	BRELJE & RACE
C	CONDUIT
CAV	COMBINATION AIR AND VACUUM RELEASE VALVE
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
CDF	CONTROLLED DENSITY FILL
CHK	CHECK
CIP	CAST IRON PIPE
CIPP	CAST–IN–PLACE PIPE
℄	CENTERLINE
CL	CENTERLINE
CL	CLASS
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COAX	COAXIAL CABLE
CONC	CONCRETE
COND	CONDUIT
CONST	CONSTRUCTION
CONT	CONTINUOUS
COTG	CLEANOUT TO GRADE
CP	CONTROL POINT
CPLG	COUPLING
CR	CURB RETURN
CSP	CORRUGATED STEEL PIPE
CT	COURT
CTB	CEMENT TREATED BASE
CTR	CENTER
CY	CUBIC YARD
C/C	CENTER TO CENTER
C&G	CURB AND GUTTER
DBL	DOUBLE
DCDC	DOUBLE CHECK DETECTOR CHECK
DCV	DETECTOR CHECK VALVE
DDC	DOUBLE DETECTOR CHECK
DET	DETECTOR
DH	DETECTOR HANDHOLE
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DLC	DETECTOR LOOP CONDUIT
DR	DRIVE
DS	DOWNSPOUT
DS	DOWNSTREAM
DWG	DRAWING
DWR	DASHED WHITE PAVEMENT MARKER
DWY	DRIVEWAY
DY	DOUBLE YELLOW
DYR	DASHED YELLOW RAISED PAVEMENT MARKER
E	EAST
EA	EACH
EC	END HORIZONTAL CURVE
ECC	ECCENTRIC
EFFL	EFFLUENT (SEWER)
EG	EXISTING GROUND
EL	ELEVATION
ELEC	ELECTRICAL
ELL	ELBOW
EP	EDGE OF PAVEMENT
EQ	EQUAL
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EW	EACH WAY
EX	EXISTING
F	FIRE
FA	FIRE ALARM
FC	FACE OF CURB
FCA	FLANGED COUPLING ADAPTER
FDC	FIRE DEPARTMENT CONNECTION
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
℄ (FL)	FLOWLINE
FL	FLOWLINE
FLG	FLANGE
FLSO	FLOWLINE OF SIDE OPENING
FLEX	FLEXIBLE
FM	FORCE MAIN (PRESSURE)
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FEET
FTG	FOOTING
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GPM	GALLONS PER MINUTE
GRD	GROUND
GSP	GALVANIZED STEEL PIPE
GV	GAS VALVE
GV	GATE VALVE
HB	HOSE BIBB
HB	HEADER BOARD
HDG	HOT DIPPED GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ	HORIZONTAL
HP	HIGH POINT
HPG	HIGH PRESSURE GAS
HPS	HIGH PRESSURE SODIUM
HT	HEIGHT
HWY	HIGHWAY
IC	INTERCONNECT
ICV	IRRIGATION CONTROL VALVE
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE
IPS	IRON PIPE SIZE
IRR	IRRIGATION
ISA	INTERNATIONAL SYMBOL OF ACCESSIBILITY
JB	JUNCTION BOX
JP	JOINT POLE
JT	JOINT TRENCH
KV	KILOVOLT
L	ARC LENGTH
L	LENGTH
LAT	LATERAL
LF	LINEAL FEET
LG	LIP OF GARAGE
LG	LIP OF GUTTER
LL	LANE LINE
LMA	LUMINAIRE MAST ARM
LN	LANE
LP	LOW POINT
LT	LEFT
LUM	LUMINAIRE
MAX	MAXIMUM
MB	MAILBOX
MBGR	METAL BEAM GUARD RAIL
MFR	MANUFACTURE
MG	MILLION GALLONS
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MON	MONUMENT
MSL	MEAN SEA LEVEL
N	NORTH
NG	NATURAL GROUND
NO.	NUMBER
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NPT	NATIONAL PIPE THREAD
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OZ	OUNCE
PA	PLANTER AREA
PB	PULL BOX
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PD	PLANTER DRAIN
PE	PLAIN END
PEC	PHOTOELECTRIC CELL
PED	PEDESTRIAN
PG	PAD GRADE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
ℙ (PL)	PROPERTY LINE
PN	PAVING NOTCH
POC	POINT OF CONNECTION
POC	POINT ON CURVE
POCC	POINT OF COMPOUND CURVE
POVC	POINT ON VERTICAL CURVE
POS	PRIVATE OPEN SPACE
POT	POINT ON TANGENT
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PRV	PRESSURE REDUCING VALVE
PSD	PERFORATED SUBDRAIN
PSI	POUND PER SQUARE INCH
PSV	PRESSURE SUSTAINING VALVE
PT	POINT
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PWE	PUBLIC WATER EASEMENT
R	RADIUS
RAW	RAW WATER
RC	RELATIVE COMPACTION
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RD	ROOF DRAIN
RED	REDUCER
REF	REFERENCE
ROW	RIGHT OF WAY
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	RAISED PAVEMENT MARKER
RSC	REMOTE SUPERVISORY CONTROL
RT	RIGHT
RT	RING TIGHT
RW	RECYCLED WATER
RWL	RAIN WATER LEADER
R/W	RIGHT OF WAY
S	SOUTH
S	SLOPE
S.A.D.	SEE ARCHITECTURAL DRAWINGS
SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
SCH	SCHEDULE
SD	STORM DRAIN
SDCB	STORM DRAIN CATCH BASIN
SDCO	STORM DRAIN CLEANOUT
SDDI	STORM DRAIN DROP INLET
SDE	STORM DRAIN EASEMENT
SDMH	STORM DRAIN MANHOLE
SE	SEWER EASEMENT
S.E.D.	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SG	SUBGRADE
SIG	SIGNAL
SL	STREET LIGHT
S.L.D.	SEE LANDSCAPE DRAWINGS
SOF	SLIP ON FLANGE
SO	SIDE OPENING (SD)
S.P.D.	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
S.S.D.	SEE STRUCTURAL DRAWINGS
SSMH	SANITARY SEWER MANHOLE
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
SVC	SERVICE
SWE	SIDEWALK EASEMENT
SY	SQUARE YARDS
SW	SIDEWALK
SWL	SOLID WHITE LINE
T	TANGENT
TAN	TANGENT
TB	TOP OF BOX
TBM	TEMPORARY BENCHMARK
TC	TOP OF CONCRETE
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TD	TOP OF DIKE
TEL	TELEPHONE
TEMP	TEMPORARY
TF	TOP OF FOUNDATION
TG	TOP OF GRATE
THD	THREADED
TP	TOP OF PIPE
TS	TOP OF SLAB
TS	TRAFFIC SIGNAL
TT	TOP OF TAPER
TW	TOP OF WALL
TWLTL	TWO WAY LEFT TURN LANE
TYP	TYPICAL
UC	UTILITY CHASE
UFFG	UNDER FLOOR FINISHED GRADE
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VG	VALLEY GUTTER
VLT	VAULT
W	WEST
W	WATER
WBD	WALL BACK DRAIN
WM	WATER METER
WNF	WELD NECK FLANGE
WS	WATER SERVICE
WSS	WATER SAMPLING STATION
WT	WEIGHT
WTR	WATER
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
YD	YARD
°	DEGREES
'	MINUTES
"	SECONDS
Δ	DELTA
&	AND
@	AT
#	NUMBER
#	POUNDS
%	PERCENT

LEGEND

LINES

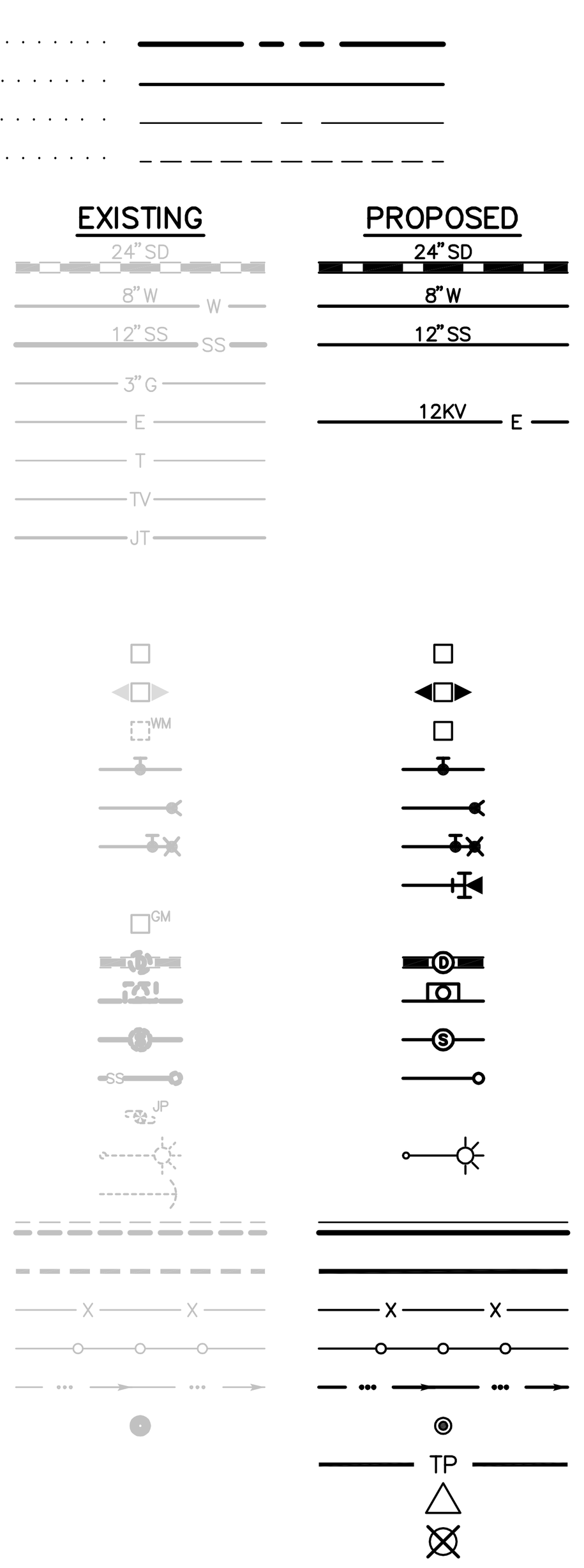
BOUNDARY
PARCEL
CENTER
EASEMENT

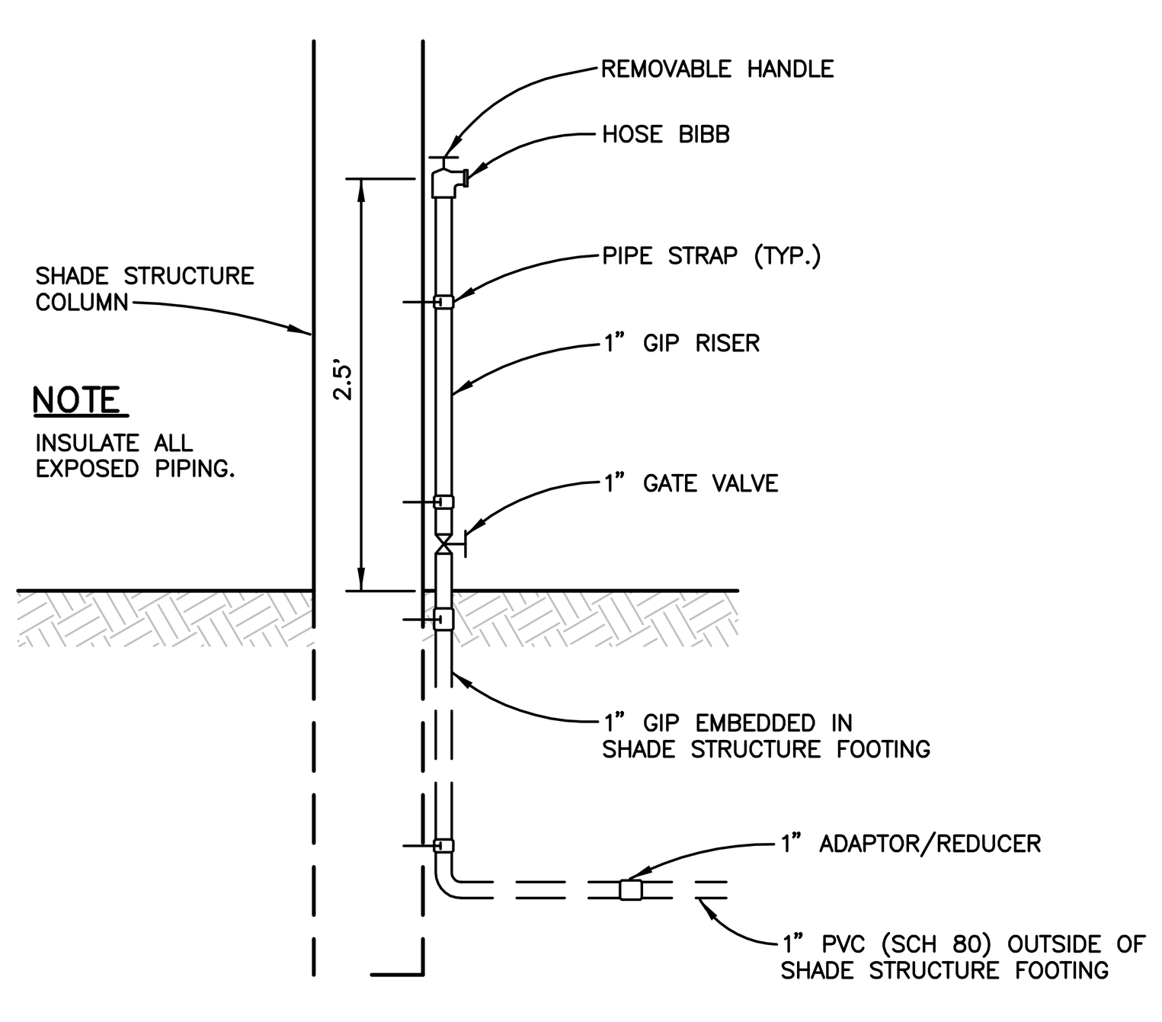
UTILITY LINES — EXISTING — PROPOSED

STORM DRAIN
WATER
SEWER
GAS
ELECTRICAL
TELEPHONE
TELEVISION
JOINT TRENCH

TOPOGRAPHY

DROP INLET
DROP INLET WITH SIDE OPENINGS
WATER METER
WATER VALVE
BLOWOFF
FIRE HYDRANT
THRUST BLOCK
GAS METER
STORM DRAIN MANHOLE
STORM DRAIN CATCH BASIN
SEWER MANHOLE
SEWER CLEANOUT
JOINT POLE
LIGHT STANDARD
GUY/ANCHOR
CURB & GUTTER
AC DIKE
FENCE
CHAIN LINK FENCE
DITCH/SWALE
MONUMENT
TREE PROTECTION
TREE TO BE SAVED
TREE TO BE REMOVED





NOTE
INSULATE ALL EXPOSED PIPING.

FREE STANDING

HOSE BIBB

NOT TO SCALE

GENERAL NOTES

1. ANY DISCREPANCY DISCOVERED BY CONTRACTOR IN THESE PLANS OR ANY FIELD CONDITIONS DISCOVERED BY CONTRACTOR THAT MAY DELAY OR OBSTRUCT THE PROPER COMPLETION OF THE WORK PER THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY UPON DISCOVERY. SAID NOTIFICATION SHALL BE IN WRITING.
2. ALL MATERIAL WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS AND STANDARD PLANS DATED JULY 2006 EXCEPT AS NOTED ON PLANS AND THE STANDARD SPECIFICATIONS OF CITY OF SAN RAFAEL.
3. CONTRACTOR SHALL OBTAIN ALL AGENCIES' REQUIRED PERMITS AND PAY ALL FEES PRIOR TO COMMENCEMENT OF ANY WORK, EXCEPT THOSE REQUIRED BY DSA.
4. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, GENERAL CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE ARCHITECT AND HIS CONSULTANTS, AND THE DISTRICT, AND EACH OF THEIR OFFICERS, EMPLOYEES AND AGENTS.
5. ANY EXCESS MATERIALS SHALL BE CONSIDERED THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
6. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING NOISE, ODORS, DUST AND DEBRIS TO MINIMIZE IMPACTS ON SURROUNDING ROADWAYS AND PROPERTIES.
7. CONTRACTOR SHALL BE RESPONSIBLE THAT ALL CONSTRUCTION EQUIPMENT IS EQUIPPED WITH MANUFACTURER APPROVED MUFFLERS/BAFFLES.

GENERAL UNDERGROUND NOTES

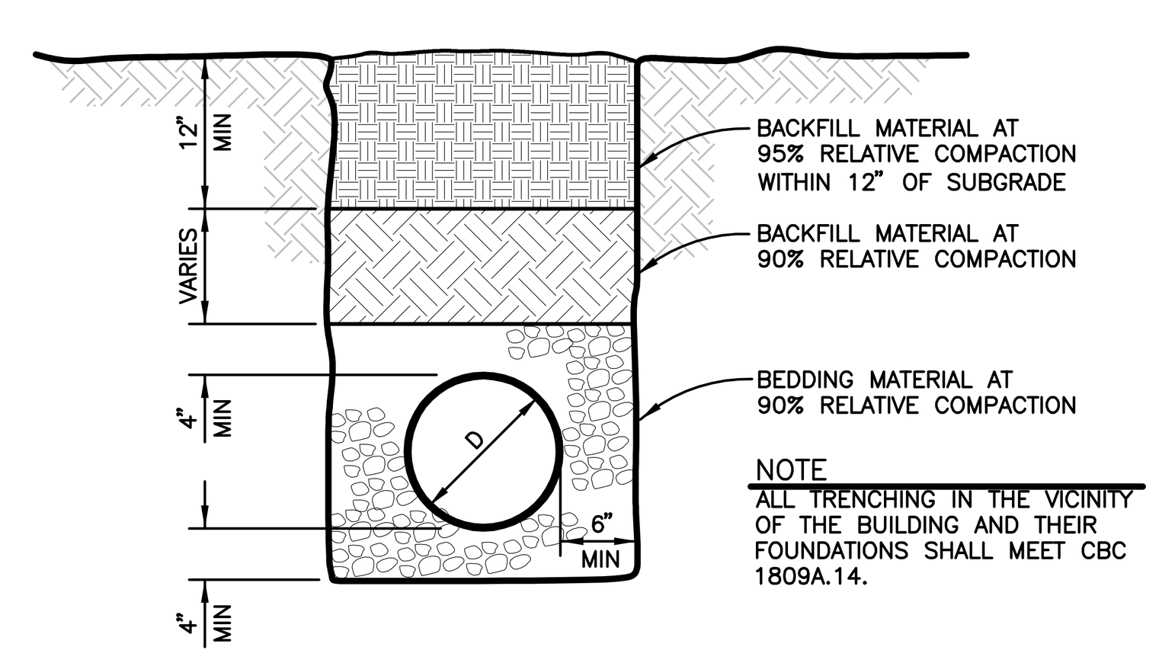
1. NO GUARANTEE IS INTENDED THAT UNDERGROUND OBSTRUCTIONS, NOT SHOWN ON THESE PLANS, MAY BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE AND THE CONTRACTOR IS CAUTIONED THAT THE OWNER, THE ENGINEERS AND THE ARCHITECT ASSUME NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY COMPANIES WORKING WITHIN THE LIMITS OF THIS PROJECT.
2. CONTRACTOR SHALL NOT BEGIN EXCAVATION UNTIL ALL EXISTING UTILITIES HAVE BEEN MARKED IN THE FIELD BY THE APPLICABLE ENTITY RESPONSIBLE FOR THAT PARTICULAR UTILITY. THE CONTRACTOR SHALL NOTIFY EACH APPLICABLE ENTITY AT LEAST 48 HOURS BEFORE STARTING WORK.
3. UNDERGROUND SERVICE ALERT: CALL TOLL FREE (800) 642–2444 AT LEAST 48 HOURS PRIOR TO EXCAVATION.
4. CONTRACTOR SHALL UNCOVER EXISTING BURIED UTILITIES AT PROPOSED POINTS OF CONNECTION AND NOTIFY ENGINEER OF FINDINGS VIA THE RFI PROCESS PRIOR TO THE CONSTRUCTION OF ANY UTILITIES. BURIED UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER MAINS AND LATERALS, SEWER LINES, STORM DRAINS, GAS MAINS AND LATERALS, ELECTRICAL DISTRIBUTION LINES AND TELEPHONE LINES. ALL UTILITIES CONFLICTING WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED, ABANDONED IN PLACE BY FILLING WITH CONCRETE SLURRY OR BE RELOCATED PRIOR TO THE START OF CONSTRUCTION.
5. THE CONTRACTOR SHALL VERIFY EXISTING INVERTS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. THE PROJECT AND/OR DESIGN ENGINEER MAY ADJUST THE GRADE OF NEW STORM DRAIN OR SEWER CONSTRUCTION ACCORDINGLY WITH CONCURRENCE FROM THE ENGINEER.
6. DISTANCES AND INVERTS ARE TO AND AT THE CENTER OF THE MANHOLES, CLEANOUTS, DROP INLETS, CATCH BASINS, AND YARD DRAINS OR AS MARKED ON THE DRAWINGS.
7. ALL UNDERGROUND IMPROVEMENTS SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

GRADING NOTES

1. ALL GRADING SHALL CONFORM TO THE REQUIREMENTS OF THE GEOTECHNICAL INVESTIGATION AND GEOLOGIC HAZARDS STUDY REPORT RECOMMENDATIONS – KILN ADDITION PREPARED FOR THIS PROJECT BY, A3GEO, INC. DATED DECEMBER 22, 2021.
2. SEE SPECIFICATION SECTIONS 31 1000 AND 31 2000 FOR SPECIFIC REQUIREMENTS.

FEMA INFORMATION

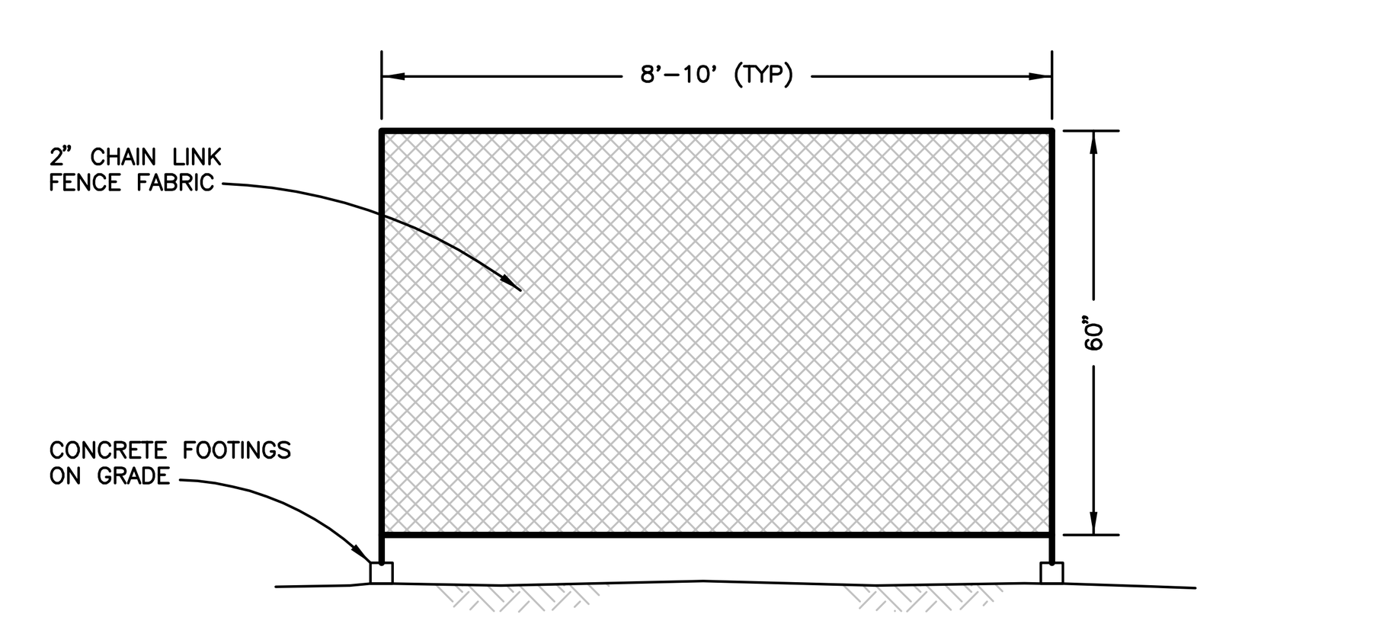
THE APPLICABLE FIRMS FOR THIS SITE ARE PANEL NOS. 06041C0293E AND 06041C0456F, DATED MARCH 16, 2016. THIS SITE IS LOCATED IN ZONE X (NO HATCH), WHICH REPRESENTS AREA OUTSIDE THE 1% ANNUAL CHANGE FLOOD HAZARD AREA.



NOTE
ALL TRENCHING IN THE VICINITY OF THE BUILDING AND THEIR FOUNDATIONS SHALL MEET CBC 1809A.14.

STANDARD TRENCH

NOT TO SCALE



NOTE
INSTALL PORTABLE CHAIN LINK FENCE PANELS AS TEMPORARY TREE PROTECTION FENCING AT LOCATIONS SHOWN ON PLANS.

TEMPORARY TREE PROTECTION FENCE

NOT TO SCALE

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO OCTOBER 15TH AND ARE TO BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL PERMANENT VEGETATION IS ESTABLISHED AND HAS ACHIEVED AT LEAST 70% COVERAGE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FORM THE FINAL PROPOSED DRAINAGE PATTERN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING CONSTRUCTION SHALL BE REPORTED TO THE OWNER/ENGINEER IMMEDIATELY.
2. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF APPENDIX CHAPTER J OF THE CALIFORNIA BUILDING CODE, APPLICABLE MARIN COUNTY REGULATIONS, AND SECTION 21 OF THE CALTRANS STANDARD SPECIFICATIONS.
3. THE APPROVED PLANS SHALL CONFORM WITH THE EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES CONTAINED IN THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS OR AN EQUIVALENT BEST MANAGEMENT PRACTICE:

   EROSION AND SEDIMENT CONTROL FIELD MANUAL BY THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD.
   MANUAL OF STANDARDS FOR EROSION & SEDIMENT CONTROL MEASURES BY THE ASSOCIATION OF BAY AREA GOVERNMENTS.
   CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL BY CALTRANS.
   STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK BY THE CALIFORNIA STORMWATER QUALITY ASSOCIATION.
4. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES, MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.
5. SOME ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY THE PROJECT ENGINEER AND/OR INSPECTOR OF RECORD.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER FUNCTIONING PER BEST MANAGEMENT PRACTICES.
7. THE OWNER IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. CAS000002 WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY DISTURBING LAND EQUAL TO OR GREATER THAN ONE ACRE. CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, GRADING, EXCAVATION, STOCKPILING, AND RECONSTRUCTION OF EXISTING FACILITIES INVOLVING REMOVAL AND REPLACEMENT.
8. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED FOR THIS PROJECT. NO CONSTRUCTION ACTIVITY, INCLUDING ANY GRADING, SHALL BEGIN UNTIL COVERAGE UNDER THE REGIONAL WATER QUALITY CONTROL BOARD GENERAL PERMIT HAS BEEN OBTAINED BY FILING THE NOI AND APPROPRIATE FEES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL ASPECTS OF THE SWPPP INCLUDING PROVIDING A QUALIFIED SWPPP PRACTITIONER (QSP) TO MONITOR AND REPORT TO THE WATER QUALITY CONTROL BOARD AS REQUIRED UNDER THE GENERAL PERMIT. A COPY OF THE SWPPP AND NOI SHALL BE KEEP ON THE SITE AT ALL TIMES. THE CONTRACTOR'S QSP SHALL UPDATE THE WATER POLLUTION CONTROL DRAWINGS (WPCDS) BASED ON WINTER CONDITIONS. THE WPCDS SHALL BE KEPT UP TO DATE BY THE CONTRACTOR'S QSP THROUGHOUT ALL PHASES OF CONSTRUCTION.
9. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED.
10. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.
11. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS DURING THE RAINY SEASON (OCTOBER 15 – APRIL 15).
12. THE CONTRACTOR SHALL HAVE EROSION AND SEDIMENT CONTROL MEASURES ON SITE ADEQUATE TO PROTECT THE ENTIRE SITE PRIOR TO THE OCTOBER 15TH DATE SUCH THAT IT IS IMMEDIATELY AVAILABLE IN PREPARATION OF THE UPCOMING WINTER SEASON OR IN THE EVENT OF AN EARLY RAIN.
13. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE FORECASTED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. STORM EVENTS PRODUCE AT LEAST 1 INCH OF PRECIPITATION IN A 24 HOUR PERIOD. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.
14. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS. CHANGES SHALL BE NOTED ON THE PLAN WHEN MADE.
15. DISCHARGES OF POTENTIAL POLLUTANTS FROM CONSTRUCTION SITES SHALL BE PREVENTED USING SOURCE CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT, TRASH, NUTRIENTS, PATHOGENS, PETROLEUM HYDROCARBONS, METALS, CONCRETE, CEMENT, ASPHALT, LIME, PAINT, STAINS, GLUES, WOOD PRODUCTS, PESTICIDES, HERBICIDES, CHEMICALS, HAZARDOUS WASTE, SANITARY WASTE, VEHICLE OR EQUIPMENT WASH WATER AND CHLORINATED WATER.
16. PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARKED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
17. PRIOR TO ANY OTHER CONSTRUCTION A STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXITING FROM THE SITE. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY, THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT, ALL MATERIAL SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR STORM DRAIN MUST BE REMOVED IMMEDIATELY.
18. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
19. THE CONTRACTOR IS TO MAINTAIN AN ON–SITE DAILY LOG OF ALL MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES. THE LOG SHALL BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.
20. SILT FENCES SHALL BE LOCATED ON SITE PER THE APPROVED EROSION CONTROL PLAN TO PREVENT SEDIMENT AND EROSION FROM LEAVING THE PROPERTY LIMITS.
21. EROSION CONTROL MEASURES TO BE PLACED AT DOWNSLOPE TOE OF ALL CUT AND FILL SLOPES.
22. EXPOSED SLOPES SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES TO THE MAXIMUM EXTENT PRACTICABLE, SUCH AS ESTABLISHING 70% VEGETATION COVERAGE, HYDROSEEDING, STRAW MULCH, GEOTEXTILES, PLASTIC COVERS, BLANKETS OR MATS.
23. WHENEVER IT IS NOT POSSIBLE TO UTILIZE EROSION PREVENTION MEASURES, EXPOSED SLOPES SHALL EMPLOY SEDIMENT CONTROL DEVICES, SUCH AS FIBER ROLLS AND SILT FENCES. FIBER ROLLS AND SILT FENCES SHALL BE TRENCHED AND KEYED INTO THE SOIL AND INSTALLED ON CONTOUR. SILT FENCES SHALL BE INSTALLED APPROXIMATELY 2 TO 5 FEET FROM TOE OF SLOPE.
24. AS A MINIMUM, ALL GRADED AREAS AND EXPOSED SOIL WITHIN THIS PROJECT SHALL BE SEEDED FOR EROSION CONTROL BY THE CONTRACTOR. SEED AND MULCH WILL BE APPLIED BY OCTOBER 1ST TO ALL EXPOSED SOIL WITHIN OR ADJACENT TO THE PROJECT. HYDROSEEDING SHALL BE CONDUCTED IN A THREE STEP PROCESS. FIRST, EVENLY APPLY SEED MIX AND FERTILIZER TO THE EXPOSED SOIL. SECOND, EVENLY APPLY MULCH OVER THE SEED AND FERTILIZER. THIRD, STABILIZE THE MULCH IN PLACE.

    APPLICATIONS SHALL BE BROADCASTED MECHANICALLY OR MANUALLY AT THE RATES SPECIFIED BELOW. SEED MIX AND FERTILIZER SHALL BE WORKED INTO THE SOIL BY ROLLING OR TAMPING. IF STRAW IS USED AS MULCH, STRAW SHALL BE DERIVED FROM WHEAT, RICE OR BARLEY AND BE APPROXIMATELY 6 TO 8 INCHES IN LENGTH. STABILIZATION OF MULCH SHALL BE DONE HYDRAULICALLY BY APPLYING AN EMULSION OR MECHANICALLY BY CRIMPING OR PUNCHING THE MULCH INTO THE SOIL. EQUIVALENT METHODS AND MATERIALS MAY BE USED ONLY IF THEY ADEQUATELY PROMOTE VEGETATION GROWTH AND PROTECT EXPOSED SLOPES.

MATERIALS	APPLICATION RATE (POUNDS PER ACRE)
SEED MIX	
BROMUS MOLLIS (BLANDO BROME)	40
TRIFOLIUM HIRTUM (HYKON ROSE CLOVER)	20
FERTILIZER	
16–20–0 & 15% SULPHUR	500
MULCH	
STRAW	4000
HYDRAULIC STABILIZING*	
M–BINDER OR SENTINEL	75–100
EQUIVALENT MATERIAL	PER MANUFACTURER

*NON–ASPHALTIC, DERIVED FROM PLANTS

25. THE OWNER SHALL PROTECT STORM DRAIN INLETS FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING OUT ALL STORM DRAIN STRUCTURES AND PIPE PRIOR TO FINAL COMPLETION.
26. ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY STORM WATER FLOW LEADING TO SOIL EROSION.
27. SOIL AND MATERIAL STOCKPILES SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.
28. CONTRACTOR IS RESPONSIBLE FOR MONITORING DOWNSTREAM CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD AND FOR CLEARING ANY DEBRIS AND SEDIMENT CAUSED BY THE CONSTRUCTION.
29. DURING THE RAINY SEASON (OCTOBER 15TH THROUGH APRIL 15TH) ALL SEDIMENT BARRIERS ARE TO BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY AND IN ADDITION AFTER EACH STORM. THE CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL MEASURES AND INLETS AFTER EACH SIGNIFICANT RAINFALL AND DAILY DURING PROLONGED STORM EVENTS. REMOVE SEDIMENTS WHEN ACCUMULATIONS REACH ONE THIRD THE HEIGHT OF THE BARRIER AND REPLACE FILTER DEVICES AS NECESSARY TO ENSURE PROPER FUNCTION.
30. SOLID WASTE, SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY, OR AS NECESSARY, AND REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE ARRANGED.
31. A CONCRETE WASHOUT AREA, SUCH AS A TEMPORARY PIT, SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER WATERWAYS SUCH AS CREEKS OR STORM DRAINS.
32. PROPER APPLICATION, CLEANING AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.
33. WHEN UTILIZED, TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED TO PREVENT THE DISCHARGE OF POLLUTANTS.
34. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.
35. THESE EROSION PREVENTION AND SEDIMENT CONTROL NOTES ASSIGN RESPONSIBILITY TO THE OWNER FOR VARIOUS ACTIVITIES ASSOCIATED WITH NPDES PERMITTING, IMPLEMENTATION & MONITORING. ALTHOUGH THE OWNER IS ESTABLISHED AS THE RESPONSIBLE PARTY BY THE VARIOUS AGENCIES CHARGED WITH ADMINISTERING NPDES REGULATIONS, THE CONTRACTOR SHALL ESTABLISH A CONTRACT PRICE FOR PERFORMING ALL NPDES PERMITTING, IMPLEMENTATION & MONITORING ACTIVITIES AND SHALL BE HELD RESPONSIBLE BY THE OWNER FOR THE PERFORMANCE OF SUCH ACTIVITIES FOR THE DURATION OF THE CONSTRUCTION CONTRACT.

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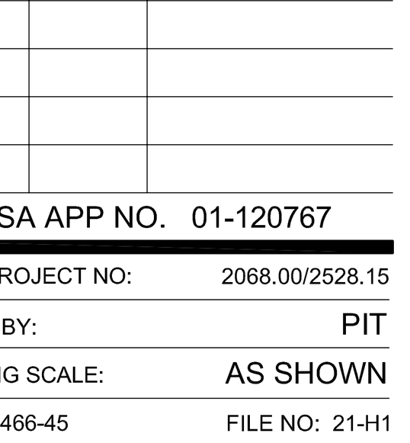


TERRA LINDA HIGH SCHOOL

SHADE STRUCTURE & ENTRY CANOPY

320 Nova Albion Way
San Rafael, CA 94903

SAN RAFAEL CITY SCHOOLS

REVISIONS

DSA APP NO. 01-120767

ARCH PROJECT NO:	2068.00/2528.15
DRAWN BY:	PIT
DRAWING SCALE:	AS SHOWN
PTN: 65466-45	FILE NO: 21-H1

CD

APRIL 18, 2023

SHEET TITLE

ABBREVIATIONS, LEGEND, NOTES & DETAILS

SHEET NUMBER

C0

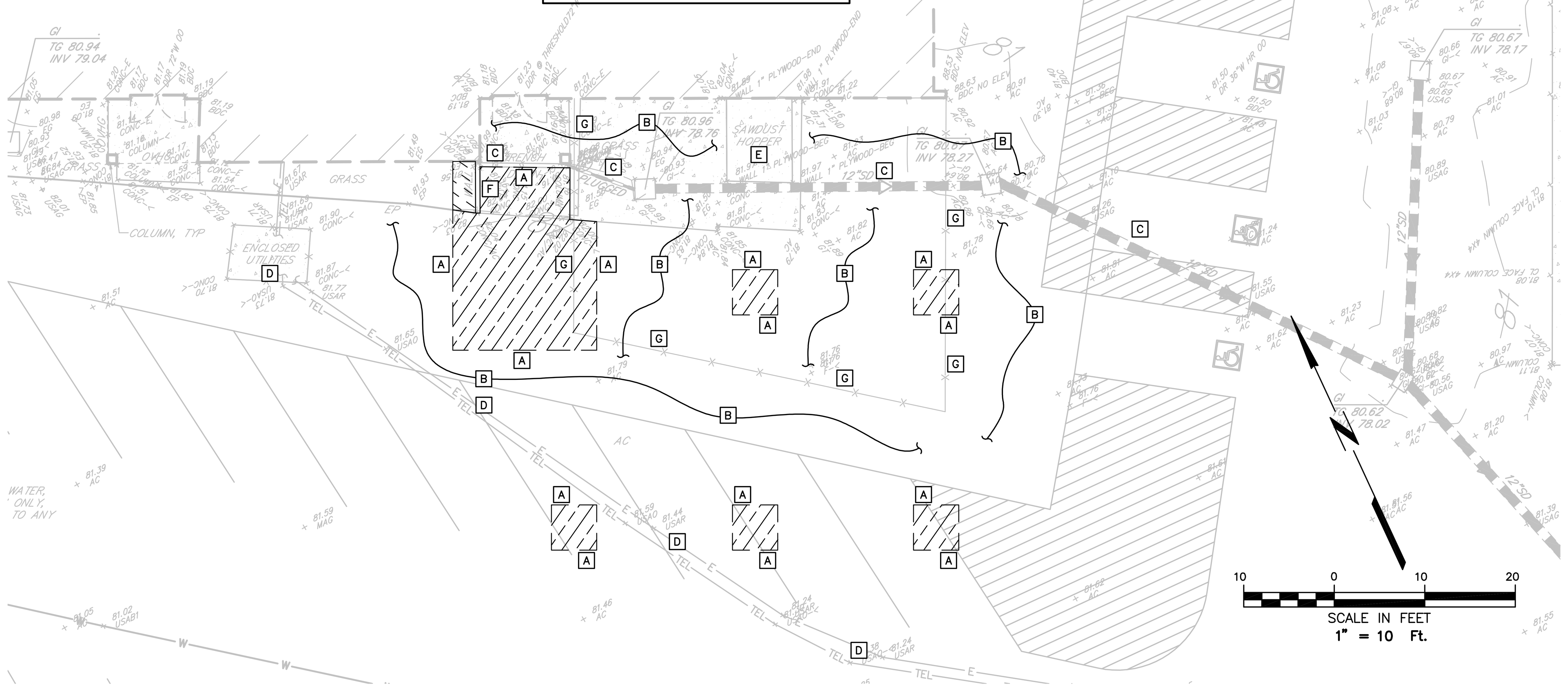
DEMOLITION NOTES

- [A] SAWCUT EXISTING IMPROVEMENTS.
- [B] EXISTING HARDSCAPE TO REMAIN. PROTECT IN PLACE.
- [C] EXISTING STORM DRAIN/TRENCH DRAIN TO REMAIN. PROTECT IN PLACE.
- [D] EXISTING ELECTRICAL/TELEPHONE LINES TO REMAIN. PROTECT IN PLACE.
- [E] EXISTING SAWDUST HOPPER TO REMAIN. PROTECT IN PLACE.
- [F] REMOVE EXISTING WALL, INCLUDING FOOTING, AND PROPERLY DISPOSE OF OFFSITE.
- [G] REMOVE EXISTING FENCE/GATE, INCLUDING FOOTINGS, AND PROPERLY DISPOSE OF OFFSITE. REFER TO ARCHITECTURAL DRAWINGS FOR LIMITS OF DEMOLITION, SALVAGE OF EXISTING MATERIALS, AND ADDITIONAL DEMOLITION REQUIREMENTS/DETAILS.

LEGEND

- REMOVE ALL EXISTING SURFACE IMPROVEMENTS, INCLUDING, BUT NOT LIMITED TO, ASPHALT AND CONCRETE, CURBS, BASE MATERIAL, RAMPS, ETC WITHIN THE LIMITS OF THE HATCHING IDENTIFIED HEREON AND PROPERLY DISPOSE OF OFFSITE, UNLESS OTHERWISE NOTED. AT THE CONTRACTORS OPTION, NON-CONTAMINATED BASE MATERIAL MAY BE REUSED.
- REMOVE ALL VEGETATION, INCLUDING, BUT NOT LIMITED TO GRASS, PLANTS, SHRUBS, ETC, WITHIN THE LIMITS OF THE HATCHING IDENTIFIED HEREON AND PROPERLY DISPOSE OF OFFSITE, UNLESS OTHERWISE NOTED.
- △ TREE TO BE SAVED.
- —TP— INSTALL TREE PROTECTION FENCING PER DETAIL SHEET C0.

REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.



SCALE IN FEET 1" = 10 Ft.

DEMOLITION PLAN

PAVEMENT NOTES

1. GRIND/SANDBLAST EXISTING PARKING STALL STRIPING.
2. PAINT 4" WIDE, WHITE STRIPE.

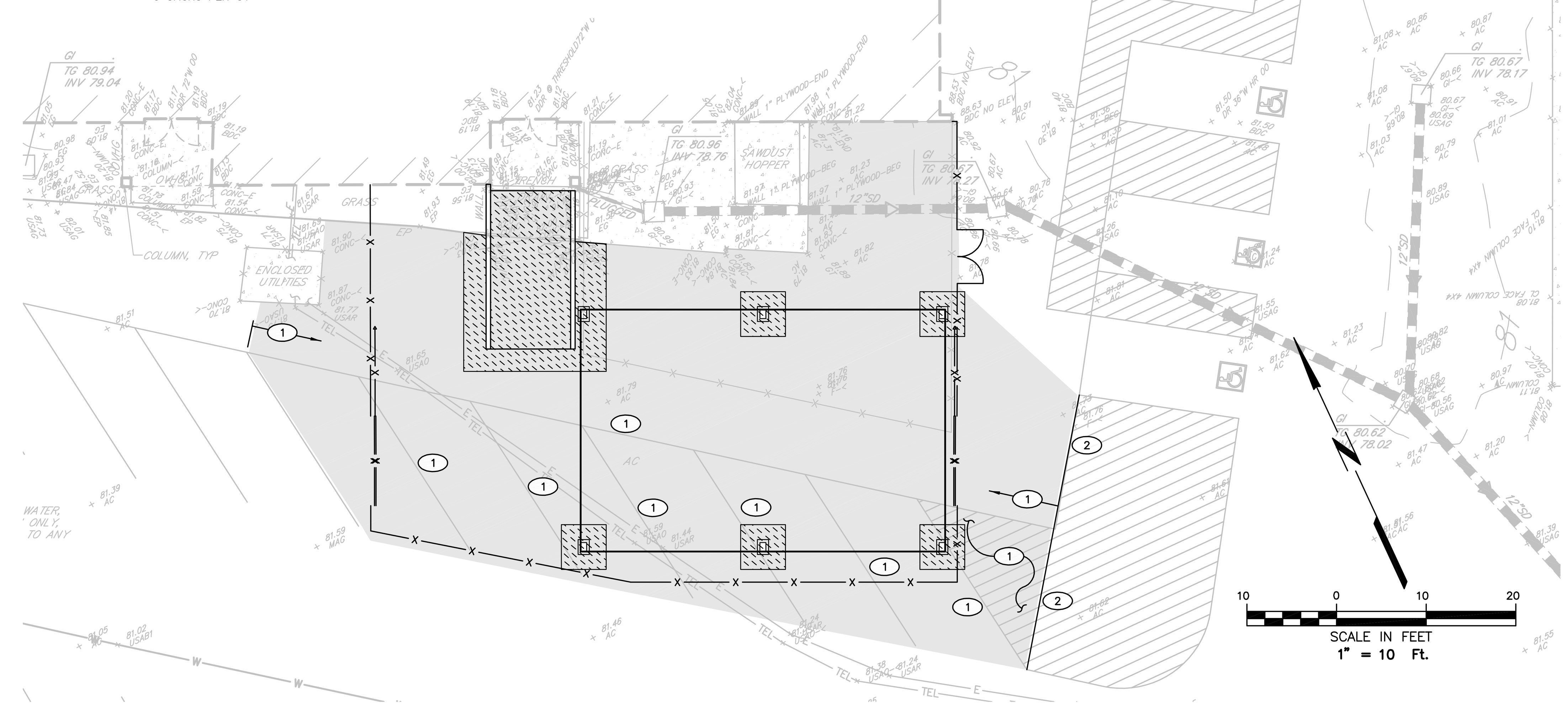
PAVEMENT STRUCTURAL SECTION

LOCATION	AC*	CL2 AB**	PCC***
ASPHALT PAVING	0.25'	0.67'	–
SEAL COAT	–	–	–

* TYPE A 1/2 MAX MEDIUM ASPHALT

** COMPACTED TO 95% RELATIVE COMPACTION

*** 5 SACKS PER CY

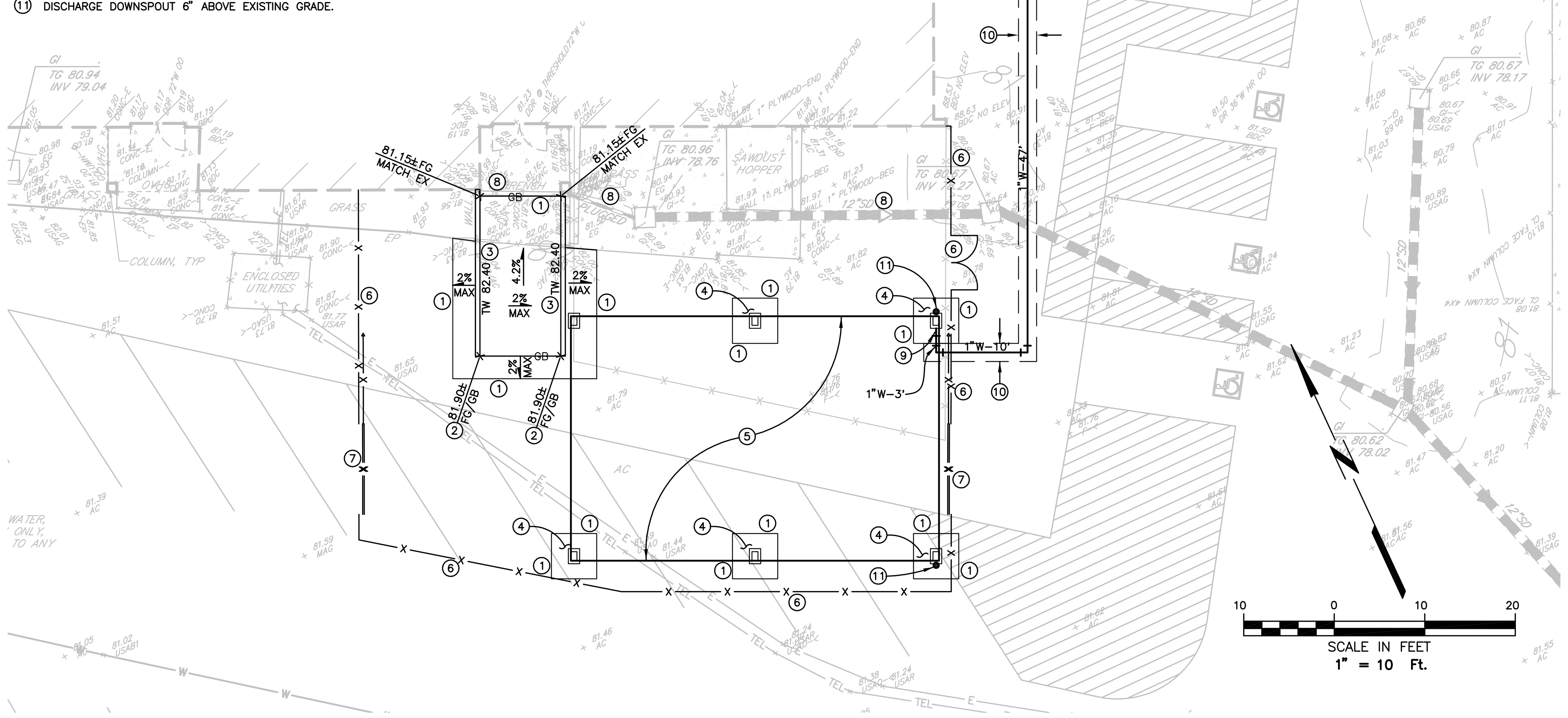


SCALE IN FEET 1" = 10 Ft.

PAVEMENT STRUCTURAL PLAN

GRADING AND UTILITY NOTES

1. MATCH EXISTING IMPROVEMENTS.
2. THE GRADE AT THE TOP OF RAMP SHALL BE SET TO MAINTAIN A 2% SLOPE FROM TOP OF RAMP TO EXISTING GRADE TO THE SOUTH.
3. INSTALL WALL. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
4. PATCH PAVE AREA AROUND SHADE STRUCTURE COLUMN AT 2% MAXIMUM CROSS-SLOPE IN ALL DIRECTIONS.
5. INSTALL SHADE STRUCTURE. REFER TO SHADE STRUCTURE DRAWINGS FOR DETAILS.
6. INSTALL FENCE/GATE. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
7. INSTALL ROLLING GATE. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
8. CONTRACTOR SHALL CLEAN/FLUSH EXISTING TRENCH DRAIN/STORM DRAIN OF DIRT/DEBRIS TO NEAREST DOWNSTREAM STRUCTURE (60'±). NO DIRT/DEBRIS IS ALLOWED TO BE WASHED DOWNSTREAM.
9. INSTALL HOSE BIBB PER DETAIL, SHEET C0.
10. SAWCUT EXISTING ASPHALT PAVEMENT. REMOVE ASPHALT AND AGGREGATE BASE AND PROPERLY DISPOSE OF OFFSITE. TRENCH AND INSTALL UTILITY, INCLUDING BED, BACKFILL AND TRENCH PATCH (0.25' ASPHALT OVER 0.83' OF CLASS 2 AGGREGATE BASE).
11. DISCHARGE DOWNSPOUT 6" ABOVE EXISTING GRADE.



SCALE IN FEET 1" = 10 Ft.

GRADING & UTILITY PLAN

LEGEND

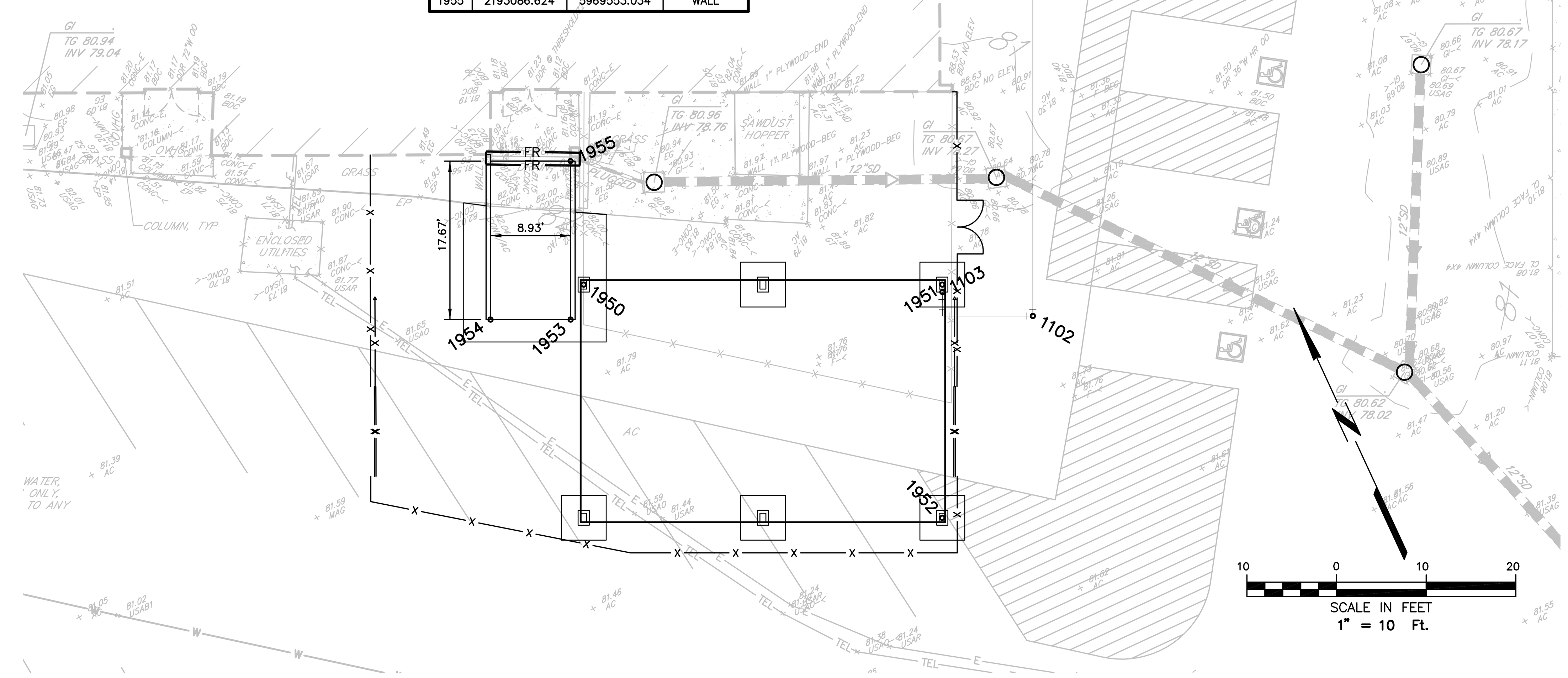
- —FR— FIBER ROLL, PER DETAIL, SHEET C0
- ○ MINOR INLET PROTECTION, PER DETAIL, SHEET C0

WATER STRUCTURE COORDINATE TABLE

NO	NORTHING	EASTING	TYPE
1100	2193097.921	5969628.149	ELL
1101	2193092.162	5969612.436	ELL
1102	2193049.271	5969592.552	ELL
1103	2193055.935	5969584.518	HOSE BIBB

LAYOUT COORDINATE TABLE

NO	NORTHING	EASTING	TYPE
1950	2193073.521	5969548.565	CL COLUMN
1951	2193056.697	5969584.855	CL COLUMN
1952	2193033.109	5969573.920	CL COLUMN
1953	2193070.597	5969545.602	WALL
1954	2193074.353	5969537.500	WALL
1955	2193086.624	5969553.034	WALL



SCALE IN FEET 1" = 10 Ft.

LAYOUT & EROSION CONTROL PLAN

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f: 707-576-0469
www.brce.com

REGISTERED PROFESSIONAL ENGINEER PAUL V. BARTHOLOM No. 43512 Exp. 3-31-25 CIVIL STATE OF CALIFORNIA 4-18-23

TERRA LINDA HIGH SCHOOL

SHADE STRUCTURE & ENTRY CANOPY

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SAN RAFAEL CITY SCHOOLS

REVISIONS

DSA APP NO. 01-120767

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PTN: 65466-45	FILE NO: 21-H1

CD

APRIL 18, 2023

SHEET TITLE

DEMOLITION, GRADING, UTILITY, PAVEMENT, LAYOUT & EROSION

SHEET NUMBER

C1

TAB: C1 CIVIL

04-17-23 erickson \2528\dwg\2528 15\2528.15 PLAN.dwg

(E) PARKING ANALYSIS

COUNTS PER DSA APP NO. 01-119221, 106489 & 117586
NOTE* ALL PARKING IS (E) AND DSA APPROVED

	TOTAL PARKING SPACES	ACC SPACES REQUIRED *	ACC SPACES PROVIDED
NORTH PARKING	130	5 (1 VAN)*	10 (3 VAN) **
EAST PARKING	86	4 (1 VAN)*	6 (1 VAN) **
SOUTH PARKING	46	2 (1 VAN)*	3 (1 VAN) **
TOTAL	262		

* CBC SECTION 11B-208.2 & TABLE 11B-208.2
** PER 11B-208.2.4: 1 VAN ACC SPACE REQUIRED PER 6 ACC SPACES

DOES NOT INCLUDE ACC EV SPACES
FOR EV SPACES SEE CALCULATION BELOW

(E) ELECTRICAL VEHICLE CHARGING STATION ANALYSIS

	NORTH PARKING LOT	EAST PARKING LOT	SOUTH PARKING LOT
NEW EV CAPABLE	0 (0 REQ)	0 (0 REQ)	0 (0 REQ)
(E) EV INSTALLED	0 (0 REQ)	16	0 (0 REQ)
STANDARD ACCESSIBLE EV SPOTS	0 (0 REQ)	1 (1 REQ)	0 (0 REQ)
AMBULATORY EV SPOTS	0 (0 REQ)	1 (1 REQ)	0 (0 REQ)
VAN ACCESSIBLE EV SPOTS	0 (0 REQ)	1 (1 REQ)	0 (0 REQ)

GENERAL NOTES

1. FOR BUILDING CODE ANALYSIS SEE A-1.1 AND A-1.2
2. PAVING MATERIALS NOT OTHERWISE NOTED SHALL BE CONCRETE.
   - CONCRETE SHALL SLOPE MIN. 1/8" PER FOOT AWAY FROM BUILDINGS, S.C.D.
   - EXTERIOR DOOR LANDINGS SHALL SLOPE 1/4" PER FOOT MAX. AWAY FROM BUILDING FOR DRAINAGE.
3. REFER TO CIVIL ENGINEERING DWGS FOR SIDEWALK GRADES AND SITE FEATURES NOT OTHERWISE INDICATED.
4. PARKING AND PEDESTRIAN SITE SIGNAGE SHALL COMPLY WITH CBC SECTIONS 11B-502.6 & 11B-703.7.2.1
5. BUILDING SIGNAGE SHALL COMPLY WITH CBC 11B-703
6. PEDESTRIAN GATES SHALL COMPLY WITH CBC 1010.2 & 11B-206.5

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE ARCHITECT VERIFIES THAT THERE ARE NO BARRIERS IN THE ACCESSIBLE ROUTE SERVING THE AREA OF WORK.

THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT THE P.O.T. WAS EXAMINED AND ANY ELEMENT, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT

1) HAVE BEEN IDENTIFIED AND

2) 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 ELEMENT, COMPONENT, OR PORTION OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE-COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOUCMENT.

THE BARRIER FREE PATH OF TRAVEL INDICATED HAS BEEN PROVIDED IN ACCORDANCE WITH IR 11B-10 AND SHALL COMPLY WITH THE FOLLOWING:

- 1:20 MAXIMUM SLOPE WITHOUT A RAMP
- 1:48 MAXIMUM CROSS SLOPE
- NO ABRUPT VERTICAL CHANGES EXCEEDING 1/4". CHANGES BETWEEN 1/4" TO 1/2" VERTICAL CAN BE AT 1:2 MAX SLOPE. CHANGES LESS THAN 1/4" CAN BE VERTICAL
- 48" MIN. CLEAR IN WIDTH (60" MIN PASSING SPACE)
- NON-SLIP SURFACE -HEAVY BROOM FINISH AT EXTERIOR CONCRETE PAVING WHERE SLOPED >6%, MEDIUM BROOM FINISH AT SLOPES <6%
- MAINTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MIN
- PROTRUDING OBJECTS NOT GREATER THAN 4" SHALL BE MOUNTED BETWEEN 27" AND 80" A.F.F.
- WHERE A DRAIN INLET IS IN THE PATH OF TRAVEL, THE GRATE SHALL BE ORIENTED SO THAT MAX OPENING IS 1/2" & LONG DIM IS PERPENDICULAR TO THE PREDOMINANT DIRECTION OF PEDESTRIAN TRAVEL
- CONTRACTOR TO VERIFY THAT NO BELOW-GRADE PULL BOXES OCCUR WITHIN THE AREA OF TRUNCATED DOMES

CAMPUS PLAN KEYNOTES

1. SHADE STRUCTURE W/ 12-FT HIGH COLUMNS, SEE PC DRAWINGS
2. (E) P.I.V. & F.D.C.
3. (E) FIRE HYDRANT
4. PARKING ENTRANCE TOW-AWAY SIGN; INC 2; #01-119221
5. BICYCLE PARKING, INC 2; #01-119221
6. DISTRICT OFFICE SIGN, INC 2; #01-119221
7. ENTRANCE SIGN, INC 2; #01-119221
8. STRIPING AND RAMPS; INC 2; #01-119221
9. ACCESSIBLE DROP OFF; INC 2; #01-119221
10. ADMINISTRATION ENTRY CANOPY

CAMPUS PLAN LEGEND

- SHADE STRUCTURE
- ADMINISTRATION ENTRY CANOPY
- (E) BUILDING TO REMAIN
- (E) PROPERTY LINE
- (E) 20' WIDE EMERGENCY VEHICLE ACCESS 60,000# ALL WEATHER
- ACCESSIBLE PATH OF TRAVEL
- ACCESSIBLE MEANS OF EGRESS
- (E) FENCES
- FH (E) FIRE HYDRANT
- FDC (E) FIRE DEPARTMENT CONNECTION
- PIV (E) POST INDICATOR VALVE
- BS (E) PUBLIC BUS STOP
- D (E) ACCESSIBLE DRINKING FOUNTAIN DSA# 01-117738
- B (E) MULTI BOYS RESTROOM - DSA# 01-117738
- G (E) MULTI GIRLS RESTROOM - DSA# 01-117738
- S (E) STAFF RESTROOM - DSA# 01-117738

FIRE FLOW DATA

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 *PI, 09-01: Fire Flow for Buildings.*

PROJECT INFORMATION

School District/Owner: San Rafael City Schools

Project Name/School: Shade Structure & Entry Canopy / Terra Linda High School

Project Address: 310 Nova Albion Way, San Rafael, CA 94903

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 Cal-Fire? *(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 ☐

DSA 810
FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

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

School District Acceptance of Acceptable Design Alternates

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

Accepted by: Dan Dietch Title: Senior Director

Signature: Date: 1/10/23

LOCAL FIRE AUTHORITY (LFA) INFORMATION

LFA Agency Name: San Rafael Fire Department

LFA Review Official: Robert Sinnott

Title: Deputy Chief Work Phone: (415) 485-5067

Work Email: robert.sinnott@cityofsanrafael.org

LFA Reviewer's Signature: Robert Sinnott Digitally signed by Robert Sinnott Date: 2023.01.10 13:38:59 -08'00' Date: 01/10/23

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LICENSED ARCHITECT
AARON JOBSON
LICENSE # C30020
EXP. OCTOBER 31, 2023
STATE OF CALIFORNIA

SIGNED: JANUARY 23, 2023

TERRA LINDA HIGH SCHOOL

SHADE STRUCTURE & ENTRY CANOPY

320 Nova Albion Way
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SAN RAFAEL CITY SCHOOLS

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CD
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SHEET TITLE

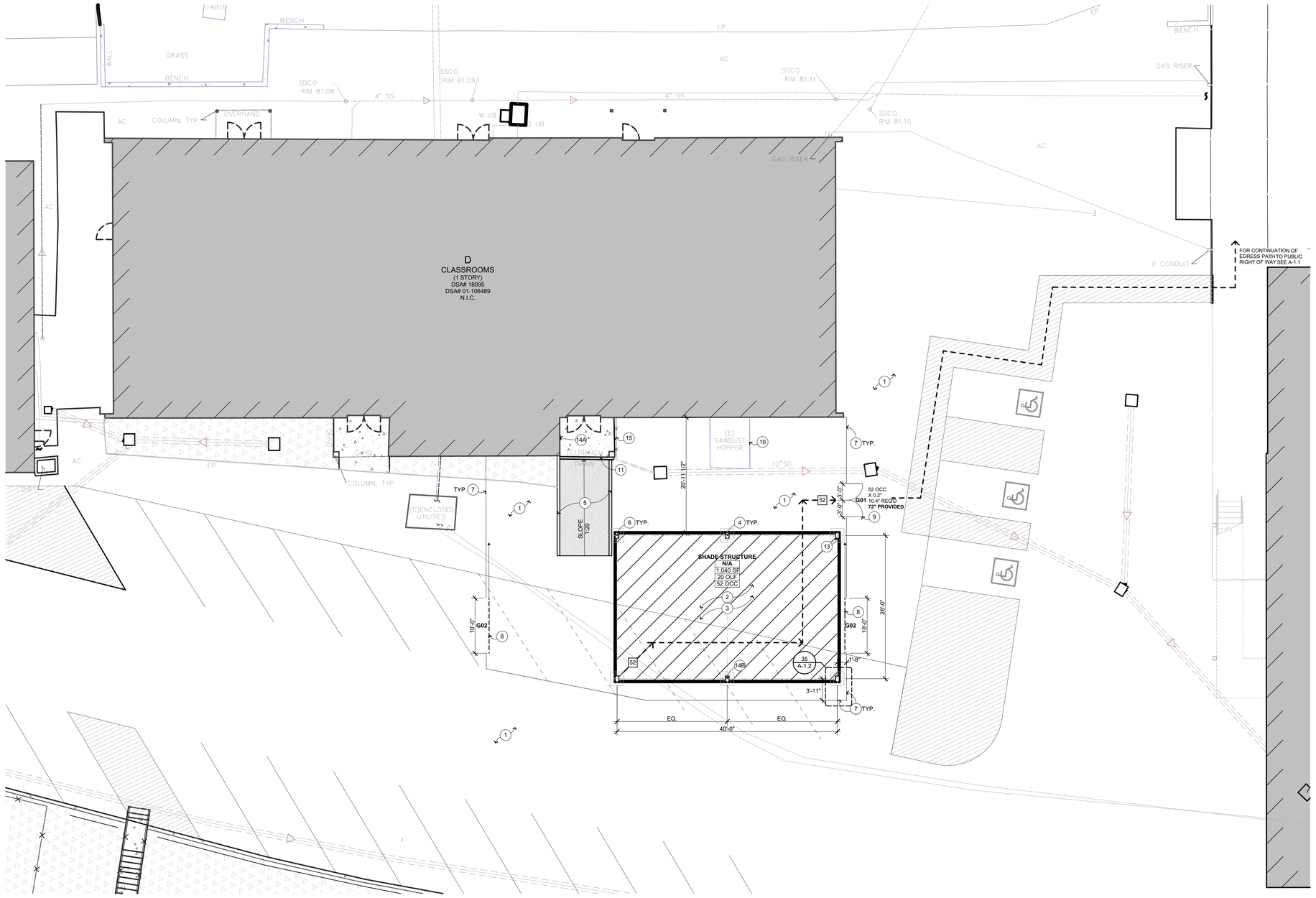
CAMPUS SITE PLAN

SHEET NUMBER

A-1.1

CAMPUS SITE PLAN

1:720



ENLARGED SITE PLAN - SHADE STRUCTURE

1/8" = 1'-0"

ENLARGED SITE PLAN KEYNOTES

1. (E) AC PAVING TO REMAIN
2. SHADE STRUCTURE W/ 12-FT HIGH COLUMNS, SEE PC DRAWINGS
3. FOR ELECTRICAL FIXTURE(S) TYPE AND LOCATION, S.E.D.
4. FOR ELECTRICAL OUTLET(S) TYPE AND LOCATION, S.E.D.
5. INSTALL AC SLOPED WALK WITH CONCRETE CURB — 26 A-1.3 / 27 A-1.3
6. TYP. COLUMN LOCATION. SEE PC DRAWINGS FOR SIZE
7. REMOVE (E) FENCE AND REPLACE WITH 8'-0" TALL PERIMETER CHAINLINK FENCE — 15 A-1.2
8. INSTALL 8'-0" X 10'-0" SLIDING CHAINLINK VEHICULAR GATE WITH LOCKABLE LATCH — 25 A-1.2
9. INSTALL DOUBLE SWING GATE WITH PANIC HARDWARE — 10 A-1.2
10. (E) SAWDUST HOPPER TO REMAIN, PROTECT
11. (E) TRENCH DRAIN TO REMAIN, PROTECT
12. (E) ELECTRICAL OUTLET TO BE RELOCATED, S.E.D.
13. INSTALL HOSE BIB, S.C.D.
14A. RELOCATE (E) 220V OUTLET TO LOCATION INDICATED, S.E.D.
14B. RELOCATED 220V OUTLET LOCATION, S.E.D. FOR ROUTING, PAINT ANY EXPOSED CONDUIT TO MATCH (E) BUILDING COLOR)
15. SECTION OF (E) FENCE TO REMAIN, PROTECT

GENERAL NOTES

1. CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT (E) CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND WARRANTY REQUIREMENTS.

2. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF (E) CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.

3. EXTERIOR CONCRETE FLATWORK SHALL HAVE A MAXIMUM SLOPE OF 1:20, U.N.O.: EXTERIOR DOOR LANDINGS SHALL SLOPE 1/4" PER FOOT FOR 60" PERPENDICULAR TO DOOR FACE, MAXIMUM FOR DRAINAGE. CONCRETE SHALL SLOPE MINIMUM 1/8" PER FOOT AWAY FROM BUILDINGS. S.C.D.

4. REFER TO CIVIL ENGINEERING DRAWINGS AND SITE PLAN FOR SITE FEATURES NOT OTHERWISE INDICATED. INCLUDING BUT NOT LIMITED TO EXTENT AND LOCATION OF ASPHALT PAVING AND SEAL COAT.

5. REPAIR AND REPLACE ALL EXISTING SURFACES AND FINISHES TO EXISTING UNDISTURBED WORK.

6. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATIONS OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.

7. TO ACCOMPLISH THE FULL SCOPE OF WORK, ADDITIONAL WORK MAY BE REQUIRED BEYOND THE INDICATED SITE WORK. REFER TO ALL CONSTRUCTION DOCUMENTS. ALL SUCH WORK SHALL BE PATCHED AND REPAIRED TO ORIGINAL CONDITION.

CODE REVIEW

	SHADE STRUCTURE
OCCUPANCY	E (20 OLF)
CONSTRUCTION TYPE	N/A
ALLOWABLE AREA	9,500 SQ FT
STRUCTURE AREA (SQ FT)	26 X 40 = 1,040 SQ FT
TOTAL AREA (SQ FT)	1,040 SQ FT
	1,040 SQ FT < 9,500 SQ FT

- SHADE STRUCTURE IS ONE-STORY AND APPROXIMATELY 15'-0" TALL
- NO SPRINKLERS
- 20'-0" MIN. FROM ADJACENT BUILDING "D"
- DETERMINATION PER IR 31-1

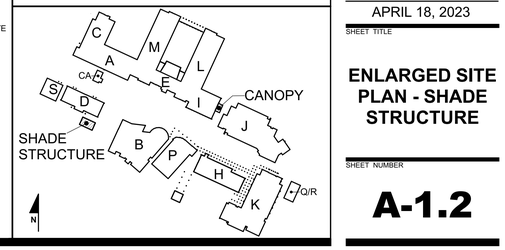
SITE PLAN LEGEND

- SHADE STRUCTURE
- (E) BUILDING TO REMAIN
- (E) LANDSCAPE TO REMAIN
- (E) CONCRETE TO REMAIN
- (E) STRIPING TO REMAIN
- (E) PROPERTY LINE
- (E) FENCE
- FENCE
- (E) STRIPING TO BE REMOVED

GATE PANEL TYPE & SCHEDULE

ID	TYPE	SIZE	HDWR	REMARKS
G01	SWING	7'-0" X 8'-0" (2 LEAF)	P.H.	SEE DETAIL 10/A-1.2
G02	ROLL	10'-0" X 8'-0"	N/A	VEHICULAR ROLLING GATE SEE 25/A-1.2

KEY PLAN



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East Bay:
55 Harrison Street, Suite 525,
Oakland, CA 94607
(707) 576-0829

LICENSED ARCHITECT
AARON JOBSON
LICENSE # C30620
EXP. OCTOBER 31, 2023
STATE OF CALIFORNIA

SIGNED: APRIL 18, 2023

TERRA LINDA HIGH SCHOOL

SHADE STRUCTURE & ENTRY CANOPY

320 Nova Albion Way
San Rafael, CA 94903

SAN RAFAEL CITY SCHOOLS

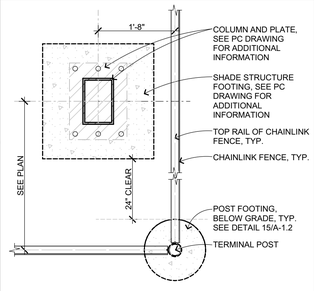
DSA APP NO. 01-120767
ARCH PROJECT NO: 2068.00
DRAWN BY:
DRAWING SCALE:
PTN: 65466-45 FILE NO: 21-H1

CD
APRIL 18, 2023
SHEET TITLE

ENLARGED SITE PLAN - SHADE STRUCTURE

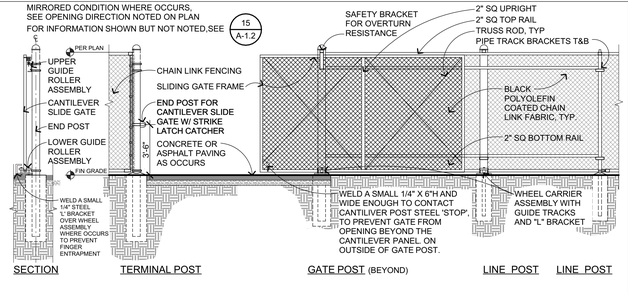
SHEET NUMBER

A-1.2



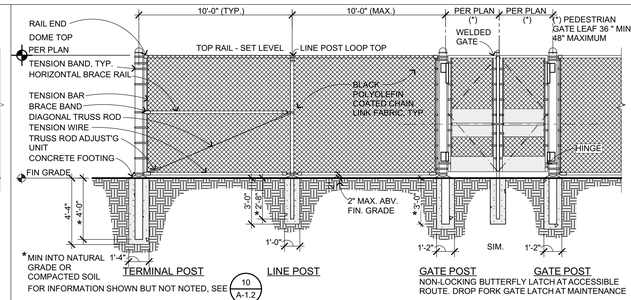
PIER AND POST PLAN

3/4" = 1'-0" D-07 **35**



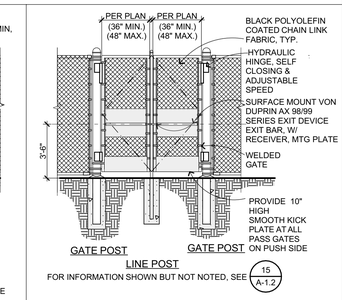
SLIDING CHAIN LINK GATE

1/4" = 1'-0" G204101.3 **25**



CHAIN LINK FENCE AND GATE

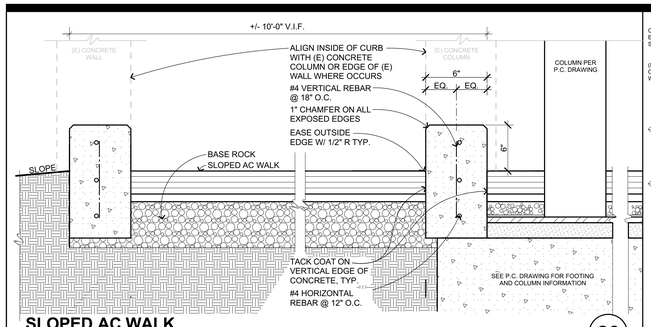
1/4" = 1'-0" G204101 **15**



CHAIN LINK DBL EXT GATE

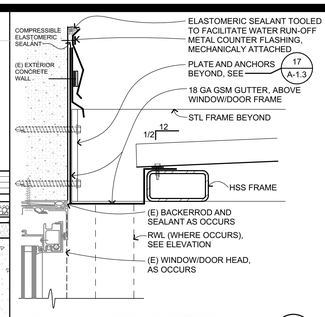
1/4" = 1'-0" G204101.1 **10**

P:\2068.00 - Terra Linda HS CTE, SRCS\Drawings\04-CD\2068.00 - TERRA LINDA HS CTE 25.pln;4/19/2023;7:08 AM



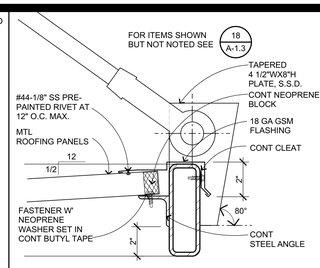
SLOPED AC WALK

1 1/2"= 1'-0" — 26



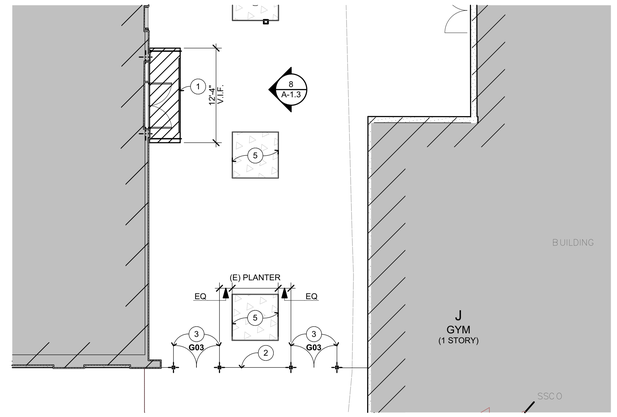
RAIN CANOPY GUTTER

3" = 1'-0" — B205115 — 21



RAIN CANOPY HEAD

3" = 1'-0" — B205112 — 16



ENLARGED SITE PLAN - GATE AND ENTRY CANOPY

1/8" = 1'-0" — 7 — NORTH

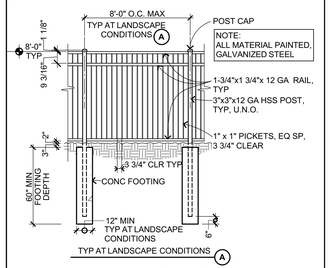
ENLARGED SITE PLAN KEYNOTES

1. 9'-0" AFF ENTRY CANOPY, S.S.D. AND SHEET S-0.1 FOR ATTACHMENT INFORMATION. FOR ARCHITECTURAL INFORMATION SEE 8 A-1.3, 9 A-1.3
2. 8'-0" ORNAMENTAL FENCE 23 A-1.3, 24 A-1.3, 30 A-1.3
3. DOUBLE SWING GATE WITH PANIC HARDWARE 19 A-1.3
4. DOUBLE ORANMENTAL VEHICULAR SWING GATE WITH CANE BOLT AND LOCK 28 A-1.3
5. (E) PLANTER TO REMAIN, PROTECT

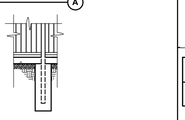
GENERAL NOTES

1. CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT (E) CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND WARRANTY REQUIREMENTS.
2. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF (E) CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.
3. EXTERIOR CONCRETE FLATWORK SHALL HAVE A MAXIMUM SLOPE OF 1:20, U.N.O.: EXTERIOR DOOR LANDINGS SHALL SLOPE 1/4" PER FOOT FOR 60" PERPENDICULAR TO DOOR FACE, MAXIMUM FOR DRAINAGE. CONCRETE SHALL SLOPE MINIMUM 1/8" PER FOOT AWAY FROM BUILDINGS. S.C.D.
4. REFER TO CIVIL ENGINEERING DRAWINGS AND SITE PLAN FOR SITE FEATURES NOT OTHERWISE INDICATED.
5. REPAIR AND REPLACE ALL EXISTING SURFACES AND FINISHES TO EXISTING UNDISTURBED WORK.
6. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATIONS OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
7. TO ACCOMPLISH THE FULL SCOPE OF WORK, ADDITIONAL WORK MAY BE REQUIRED BEYOND THE INDICATED SITE WORK. REFER TO ALL CONSTRUCTION DOCUMENTS. ALL SUCH WORK SHALL BE PATCHED AND REPAIRED TO ORIGINAL CONDITION.

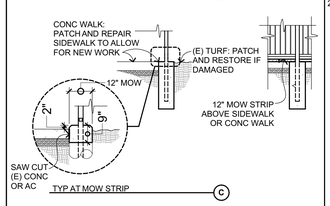
NOTE:
SEE PRODUCT SPECIFICATIONS FOR INSTALLATION REQUIREMENTS, BASIS OF DESIGN AMERISTAR MONTAGE II (MAJESTIC)



TYP AT LANDSCAPE CONDITIONS A



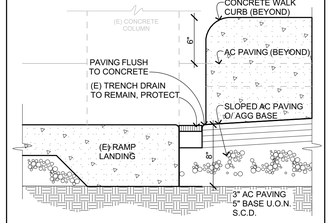
TYP AT CONC OR ASPHALT CONDITIONS B



TYP AT MOW STRIP C

ORNMENTAL FENCE DTL

1/4" = 1'-0" — G204102 — 33

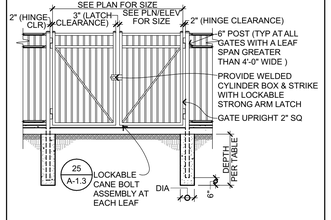


(E) CONC LAND. TO AC WALK

1 1/2"= 1'-0" — 27

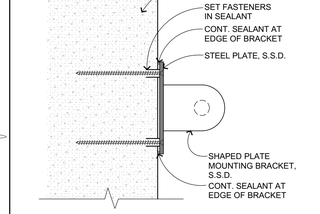
LEAF WIDTH	DEPTH	PIER DIA	POST GA	POST DIA
< 4'	60"	12"	11 GA HSS	3"
11'-0"	96"	18"	3/16" HSS	6"

NOTE: FOR INFORMATION SHOWN BUT NOT NOTED SEE 33 A-1.3



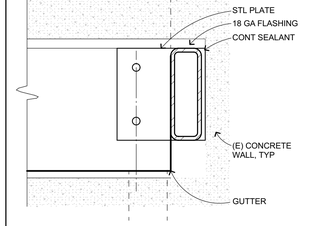
ORNAMENTAL SWING GATE

1/4" = 1'-0" — 1580 — 28



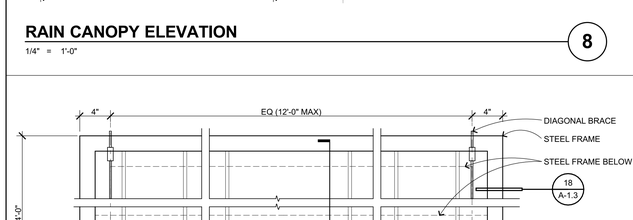
UPPER BRACKET INSTALLATION

3" = 1'-0" — D-04 — 22



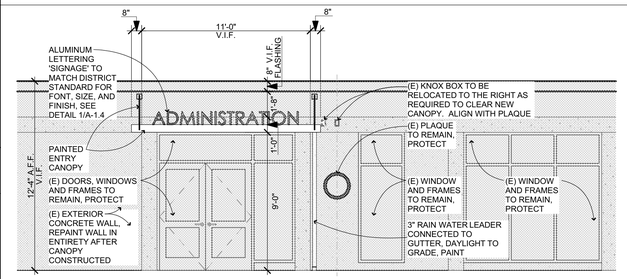
RAIN CANOPY ATTACHMENT

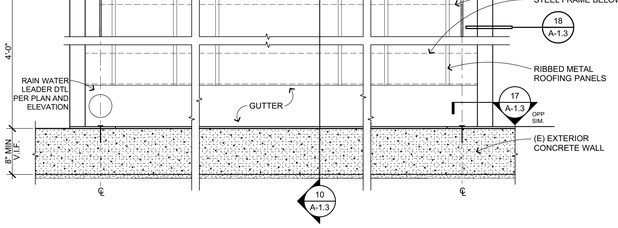
3" = 1'-0" — B205114 — 17



RAIN CANOPY ELEVATION

1/4" = 1'-0" — 8





RAIN CANOPY PLAN

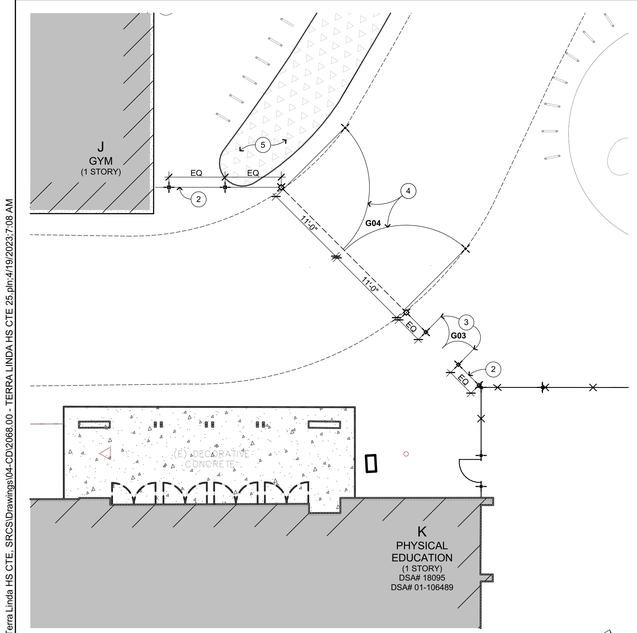
1 1/2"= 1'-0" — 9 — NORTH

SITE PLAN LEGEND

- ADMINISTRATION ENTRY CANOPY
- (E) BUILDING TO REMAIN
- (E) LANDSCAPE TO REMAIN
- (E) CONCRETE TO REMAIN
- (E) PROPERTY LINE
- (E) FENCE
- FENCE

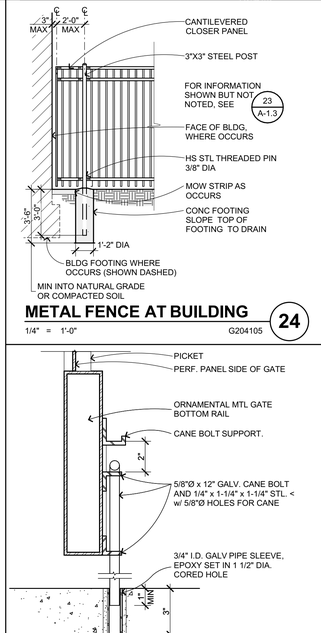
GATE PANEL TYPE & SCHEDULE

ID	TYPE	SIZE	HDWR	REMARKS
G03	SWING	6'-0" X 8'-0" (2 LEAF)	P.H.	PANIC HARDWARE SEE 19/A-1.3
G04	SWING	22'-0" X 8'-0" (2 LEAF)	N/A	VEHICULAR SWING GATE SEE 28/A-1.3



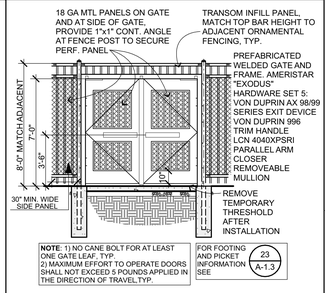
ENLARGED SITE PLAN - VEHICULAR SWING GATE

1/8" = 1'-0" — 30 — NORTH



METAL FENCE AT BUILDING

1/4" = 1'-0" — G204105 — 24

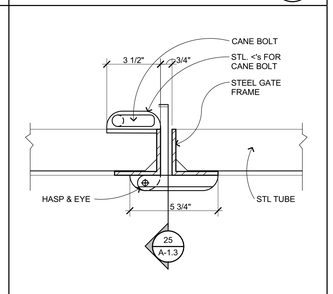


METAL FENCE DBL GATE

1/4" = 1'-0" — G204103 — 19

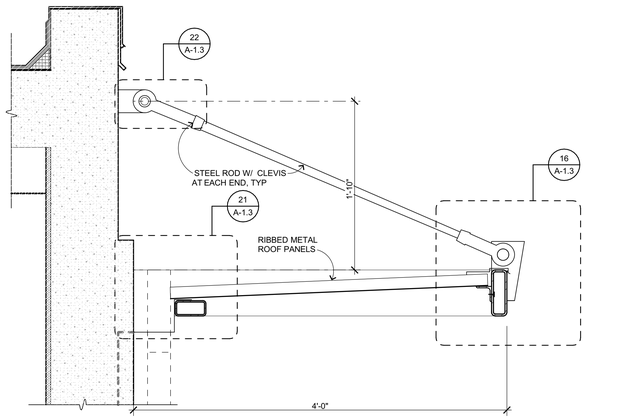
CANE BOLT

3" = 1'-0" — G204108-1580.02 — 25



GATE HASP & BOLT

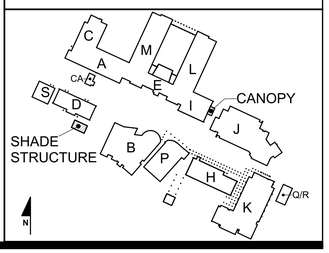
3" = 1'-0" — D-02 — 20



RAIN CANOPY SECTION

1 1/2"= 1'-0" — 10

KEY PLAN



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SAN RAFAEL CITY SCHOOLS

DSA APP NO. 01-120767
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DRAWING SCALE:
PTN: 65466-45 FILE NO: 21-H1

CD

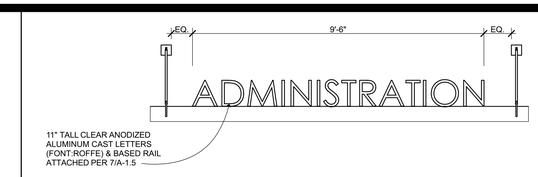
APRIL 18, 2023

SHEET TITLE

ENLARGED SITE PLAN - SITE FENCE AND CANOPY

SHEET NUMBER

A-1.3



NOTES:
FORM LETTERS OF SIZE, SPACING, AND LAYOUT INDICATED, BY CASTING. PRODUCE CHARACTERS WITH SMOOTH, FLAT, FACES; SHARP CORNERS; PRECISELY FORMED LINES AND PROFILES; AND FREE FROM PITS, SCALE, SAND HOLES OR OTHER DEFECTS. CAST LUGS INTO BACKS OF CHARACTERS AND TAP TO RECEIVE THREADED MOUNTING STUDS.

1) METAL: CAST ALUMINUM, CLEAR ANODIZED FINISH

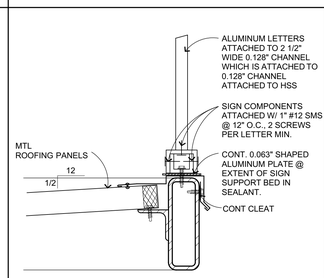
2) COPY: ROFFE.

3) SIZES: 11" HIGH BY 1" DEEP WITH BOTTOM RAIL ATTACHEMENT

4) ANCHORS AND INSERTS: NON-FERROURS METAL OR HOT DIPPED GALVANIZED

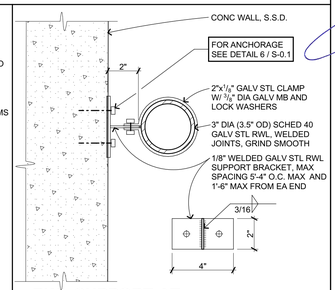
CANOPY SIGNAGE ELEVATION 1

1/2" = 1'-0"



ROOF RAKE - SIGNAGE 7

3" = 1'-0"



RWL SUPPORT AT CONCRETE WALL 2

3" = 1'-0" B304203

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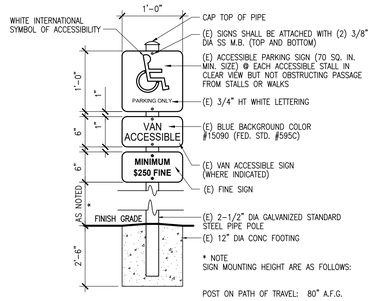
CD
APRIL 18, 2023
SHEET TITLE

ADDITIONAL DETAILS

SHEET NUMBER

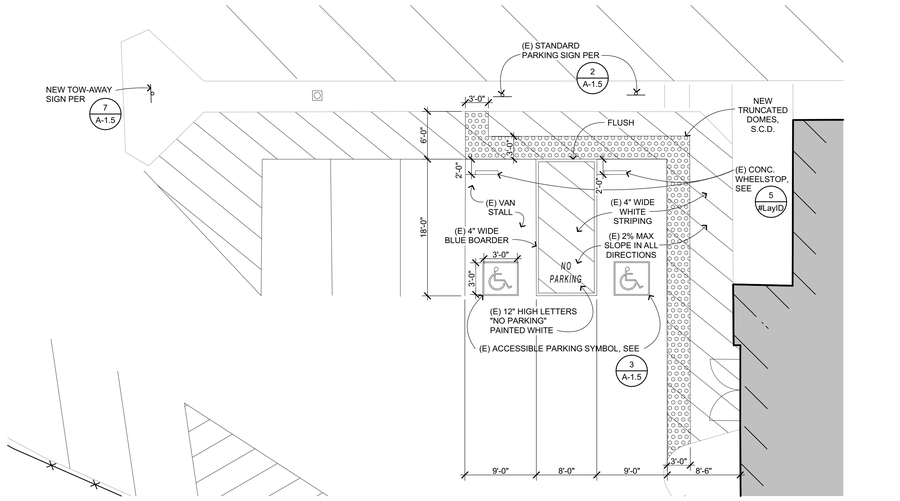
A-1.4

NOTE: THIS WORK IS SHOWN FOR REFERENCE ONLY, N.I.C. ALL AREAS WHERE NEW WORK SHOWN ON SHEET A-1.4 IS TO OCCUR UNDER A# 01-120337.



3 (E) ACCESSIBLE PARKING SIGN
1" = 1'-0"

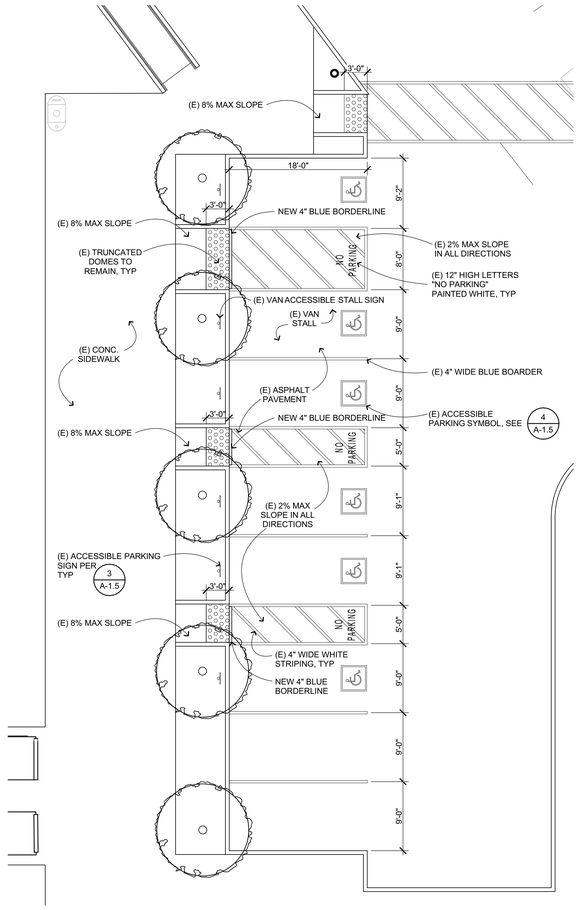
FOR REFERENCE ONLY



(E) ENLARGED PARKING PLAN (A#01-117586 & 01-12-0337) 2
1/8" = 1'-0"

NORTH

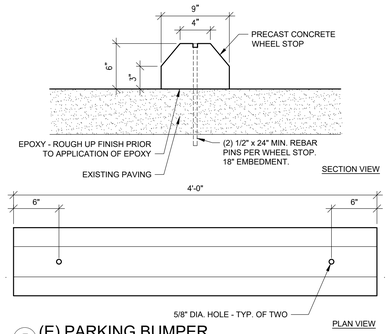
FOR REFERENCE ONLY



(E) ENLARGED PARKING PLAN (A#01-119221 & 01-12-0337) 1
1/8" = 1'-0"

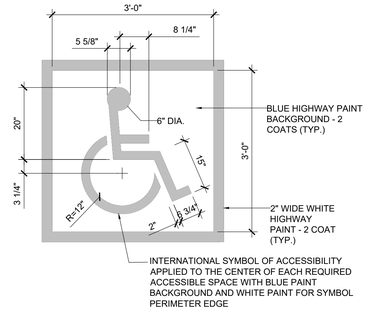
NORTH

FOR REFERENCE ONLY



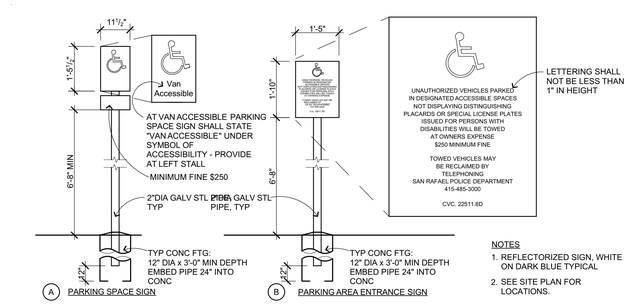
5 (E) PARKING BUMPER
1-1/2" = 1'-0"

FOR REFERENCE ONLY



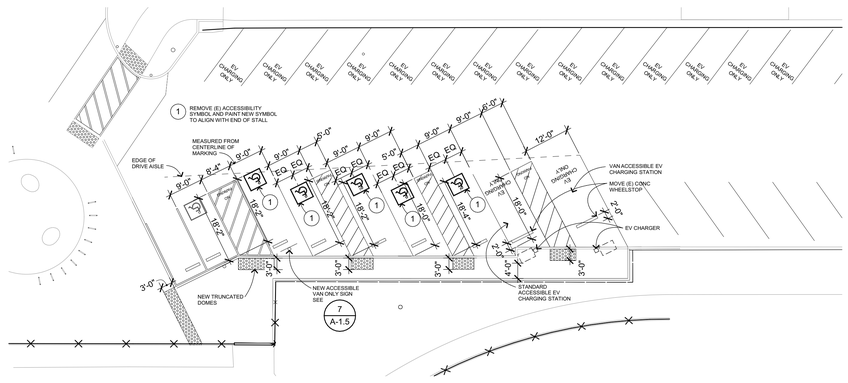
4 (E) ACCESSIBILITY SYMBOL
1" = 1'-0"

FOR REFERENCE ONLY



ACCESSIBLE PARKING SIGN 7
1/2" = 1'-0"

FOR REFERENCE ONLY



(E) ENLARGED EAST PARKING PLAN 6
1/16" = 1'-0"

NORTH

FOR REFERENCE ONLY

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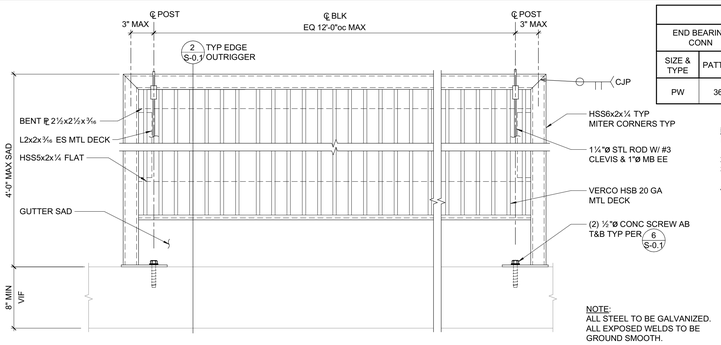
SHEET TITLE

(E) ENLARGED PLANS AND DETAILS

SHEET NUMBER

A-1.5

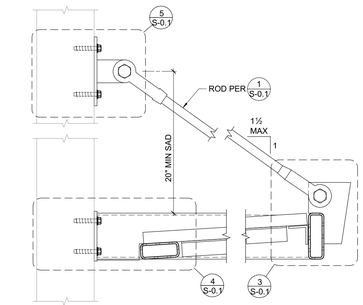


DECK CONNECTIONS					
END BEARING CONN		SIDE BEARING CONN		SIDELAP CONN	
SIZE & TYPE	PATTERN	SIZE & TYPE	PATTERN	SIZE & TYPE	PATTERN
PW	36/4	PW	12"	BP	12"

NOTES:
1. ATTACH DECK TO ALL STEEL SUPPORT FRAMING AS OCCURS.
2. BP = BUTTON PUNCH.
3. PW = ¾"ø PUDDLE WELD WITH ½"ø MIN OF FUSION (EFFECTIVE WELD).
4. ABOVE REFERENCED DECK IS BASED ON ALLOWABLE DESIGN LOADS PER IAPMO ER-2018 VERCO MANUFACTURING - EQUIVALENT DECK MUST HAVE EQUIVALENT ALLOWABLE VERTICAL LOADS.

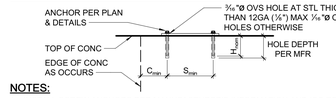
NOTE:
ALL STEEL TO BE GALVANIZED. ALL EXPOSED WELDS TO BE GROUND SMOOTH.

1 RAIN CANOPY - PLAN VIEW
1 1/2" = 1'-0"



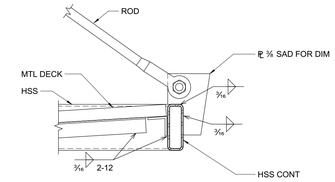
2 EDGE OUTRIGGER
1 1/2" = 1'-0"

SCREW ANCHOR IN 2500 PSI MIN CONCRETE							
ANCHOR TYPE	ANCHOR AND PILOT HOLE DIA	MINIMUM EMBEDMENT H_{nom}	MINIMUM EDGE DIST C_{min}	MINIMUM SPCG S_{min}	MINIMUM CONCRETE THICKNESS H_{min}	MINIMUM INSTALL TORQUE (FT-LB)	MAXIMUM INSTALL TORQUE (FT-LB)
SIMPSON TITEN HD (ICC-ESR 2713)	½"	1⅜"	1½"	1½"	3¼"	10	24
	⅝"	2½"	1⅞"	3"	4"	10	50
	½"	3¼"	1¾"	3"	5"	10	65
	⅝"	4"	1¾"	3"	6"	10	100
	¾"	5½"	1¾"	3"	8¾"	20	150
HILTI KH-EZ (ICC-ESR 3027)	½"	1⅜"	1½"	1½"	3¼"	10	18
	⅝"	2½"	1½"	3"	4"	10	40
	½"	3"	1⅞"	3"	4¾"	10	45
	⅝"	3¼"	1¾"	4"	5"	10	85
	¾"	4"	1¾"	4"	6"	20	95

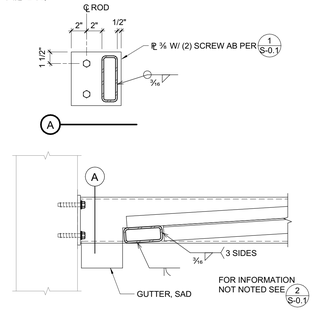


NOTES:
1. INSTALL SCREW ANCHORS PER MANUFACTURER'S INFORMATION AND ICC REPORT INSTRUCTIONS. SPECIAL INSPECTION IS REQUIRED PER SECTION 1705A OF THE CBC AND THE REQUIREMENTS OF THE ICC REPORTS. INSTALLED ANCHORS SHALL BRING CONNECTED PLIES INTO FIRM CONTACT, MEETING THE INSTALL TORQUE BUT NOT EXCEEDING THE MAXIMUM INSTALL TORQUE.
2. CONTRACTOR TO VERIFY MINIMUM EDGE DISTANCES, SPACING AND THICKNESS ARE IN ACCORDANCE W/ SCHEDULE PRIOR TO INSTALLING ANCHOR.
3. HOLES TO BE DRILLED W/ ROTARY DRILL ONLY. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. MAINTAIN 1" CLEARANCE BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR. FILL ABANDONED HOLES W/ HIGH STRENGTH GROUT.
4. THE SPECIAL INSPECTOR SHALL PERFORM PERIODIC/CONTINUOUS INSPECTION IN ACCORDANCE WITH TABLE 1705A.3. THE SPECIAL INSPECTOR SHALL INSPECT ANCHOR TYPE, ANCHOR DIMENSIONS, HOLE CLEANLINESS, EMBEDMENT DEPTH, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, DRILL BIT DIAMETER, HOLE DEPTH, EDGE DISTANCE(S), ANCHOR SPACING(S), CONCRETE THICKNESS, AND TIGHTENING TORQUE.
5. TEST ANCHORS IN ACCORDANCE W/ CBC SECTION 1910A.5.

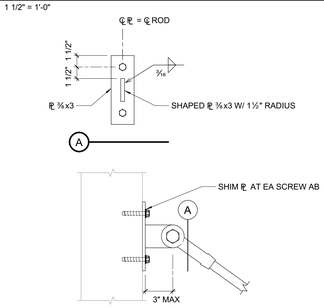
6 SCREW ANCHOR IN CONCRETE
3/4" = 1'-0"



3 RAIN CANOPY HEAD
1 1/2" = 1'-0"



4 RAIN CANOPY LOWER CANOPY ATTACHMENT
1 1/2" = 1'-0"



5 DIAGONAL BRACE CONNECTION
1 1/2" = 1'-0"

A DESIGN CRITERIA

DESIGN CRITERIA: 2022 CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2 (CBC)
ROOF LIVE LOAD: 20 PSF (REDUCIBLE)
RISK CATEGORY: III
WIND DATA: ULTIMATE WIND SPEED (3 SEC GUST) IN MPH: 110
WIND EXPOSURE: C
INTERNAL WIND PRESSURE COEFFICIENT (GCPI) = ±0.18
COMPONENTS AND CLADDING DESIGN PRESSURES FOR SYSTEMS DESIGNED BY OTHERS SHALL COMPLY WITH THE "ASCE 7-16" DESIGN STANDARD, PART 1 CHAPTER 30 FOR WALLS AND ROOF, PART 6 CHAPTER 30 FOR ROOF OVERHANGS
EARTHQUAKE DATA: SEISMIC IMPORTANCE FACTOR, I_e: 1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS: S_s = 1.50; S_1 = 0.60
SITE CLASS: D BY DEFAULT
SPECTRAL RESPONSE COEFFICIENTS: S_{DS} = 1.20; S_{D1} = 0.68
SEISMIC DESIGN CATEGORY: D
SCOPE: NEW RAIN CANOPY ON EXISTING CONCRETE BUILDING. NEW PC SHADE STRUCTURE BY OTHERS.

B GENERAL NOTES

1. REFER TO THE PROJECT SPECIFICATIONS FOR MATERIALS AND METHODS.
2. BUILDING DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY. SEE ARCHITECTURAL DRAWINGS (SAD) FOR ALL ACTUAL BUILDING DIMENSIONS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER SO CLARIFICATION CAN BE MADE PRIOR TO COMMENCING WORK.
3. STRUCTURAL DRAWINGS SHALL NOT BE SCALED. ALL DIMENSIONS AND FIT SHALL BE DETERMINED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK.
4. DETAILS NOT FULLY OR SPECIFICALLY SHOWN SHALL BE OF SAME NATURE AS OTHER SIMILAR CONDITIONS.
5. SHORING AND BRACING DESIGN, MATERIALS AND INSTALLATION SHALL BE PROVIDED BY THE GENERAL CONTRACTOR, AND SHALL BE ADEQUATE FOR ALL LOADS. LEAVE IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY AND UNTIL FINAL STRUCTURAL CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL ENGAGE A LICENSED CIVIL OR STRUCTURAL ENGINEER TO PROVIDE SHORING.
6. SPECIAL INSPECTIONS ARE REQUIRED PER THE TESTING AND INSPECTION FORM, SEE SPECIFICATIONS.
7. THE ORIGINAL BUILDING DSA APPLICATION NUMBER IS 18095. THE CONTRACTOR SHALL VERIFY ALL EXISTING JOB CONDITIONS, REVIEW THE PLANS AND VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ALL DISCREPANCIES AND EXCEPTIONS BEFORE PROCEEDING WITH ANY WORK.
8. ALL WORK NOT INDICATED AS EXISTING (E) SHALL BE ASSUMED TO BE NEW (N).

C STEEL NOTES

1. TOP OF STEEL ELEVATIONS ARE TO BE DETERMINED BY THE CONTRACTOR BASED ON ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS.

D MATERIAL DATA

(INFORMATION SHOWN IS FOR STRUCTURAL DESIGN REFERENCE ONLY. SEE THE PROJECT SPECIFICATIONS FOR ALL MATERIAL SPECIFICATIONS.)

STRUCTURAL STEEL (UNO):
ANGLES, CHANNELS, AND PLATES - ASTM A36 (Fy = 36,000 PSI)
RECTANGULAR HSS - ASTM A500 GRADE C (Fy = 50,000 PSI)

FASTENERS:
MACHINE BOLTS SHALL BE ASTM A307 GRADE A
ANCHOR RODS SHALL BE ASTM F1554 GR 36 UNO
ARC-WELDING ELECTRODES SHALL BE E70

SHEET INDEX	
S-0.1	GENERAL NOTES, RAIN CANOPY DETAILS, AND TYPICAL DETAILS

ABBREVIATIONS					
AB	ANCHOR BOLT	FTG	FOOTING	PNL	PANEL
ABV	ABOVE	GA	GAGE or GAUGE	PSF	POUNDS PER SQUARE FOOT
AC	AIR CONDITIONING	GALV	GALVANIZED	PSI	POUNDS PER SQUARE INCH
ADJ	ADJACENT	GB	GRADE BEAM	PSL	PARALLEL STRAND LUMBER
ADDL	ADDITIONAL	GL	GLULAM	PTDF	PRESSURE TREATED DOUGLAS FIR
ALT	ALTERNATE	GLB	GLUE LAMINATED BEAM	PT	POST
ALUM	ALUMINUM	GR	GRADE	R	RADIUS
ARCH	ARCHITECT	HD	HOLD DOWN	RBS	REDUCED BEAM SECTION
AYC	ALASKAN YELLOW CEDAR	HDG	HOT-DIP GALVANIZED	RFTR	RAFTER
@	AT	HDR	HEADER	REF	REFERENCE
BF	BRACED FRAME	HGR	HANGER	REINF	REINFORCING
BLDG	BUILDING	HK	HOOK	REQD	REQUIRED
BLK/BLKG	BLOCK/BLOCKING	HORIZ	HORIZONTAL	RET	RETAINING
BLW	BELOW	HSB	HIGH STRENGTH BOLT	REV	REVISION
BM	BEAM	HSG	HIGH STRENGTH GROUT	RH	RIGHT HAND
BN	BOUNDARY NAIL	HSH	HORIZONTAL SLOTTED HOLE	RWD	REDWOOD
BOT	BOTTOM	HSS	HOLLOW STRUCTURAL SECTION	S	AMERICAN STANDARD BEAM
BRG	BEARING	HT	HEIGHT	SAD	SEE ARCHITECTURAL DRAWINGS
BTWN	BETWEEN	ID	INSIDE DIAMETER	SB	SOLID BLOCK
BU	BUILT-UP	IJ	I SHAPED WOOD BUILT UP TRUSS	SC	SLIP CRITICAL
BYND	BEYOND	INT	INTERIOR	SCD	SEE CIVIL DRAWINGS
C	AMERICAN STANDARD CHANNEL	JST	JOIST	SCHED	SCHEDULE
CA	CALIFORNIA	JT	JOINT	SED	SEE ELECTRICAL DRAWINGS
CANT	CANTILEVER	KP	KING POST	SEOR	STRUCTURAL ENGINEER OF RECORD
CB	CARRIAGE BOLT	L	STEEL ANGLE	SFRS	SEISMIC FORCE RESISTING SYSTEM
CFS	COLD FORMED STEEL	Lb or #	POUND(s)	SHTG	SHEATHING
CIP	CAST IN PLACE	LGMF	LIGHT GAGE METAL FRAMING	SIM	SIMILAR
CGL	CERTIFIED GLUED LUMBER	LGMFC	LIGHT GAGE METAL FRAMING CONTRACTOR	SKYLT	SKYLIGHT
CJ	CONTROL JOINT	LL	LONG LEG	SLD	SEE LANDSCAPE DRAWINGS
℄	CENTERLINE	LLH	LONG LEG HORIZONTAL	SMS	SHEET METAL SCREW
CJP	COMPLETE JOINT PENETRATION	LLV	LONG LEG VERTICAL	SMD	SEE MECHANICAL DRAWINGS
CLG	CEILING	LOC	LOCATION	SOG	SLAB ON GROUND
CLR	CLEAR	LS	LAG SCREW	SPCG	SPACING
COL	COLUMN	LSL	LAMINATED STRAND LUMBER	SPD	SEE PLUMBING DRAWINGS
CONC	CONCRETE	LVL	LAMINATED VENEER LUMBER	SPEC	SPECIFICATION
CONN	CONNECTION	LWC	LIGHTWEIGHT CONCRETE	SQ	SQUARE
CONT	CONTINUOUS	MAX	MAXIMUM	SS	SELECT STRUCTURAL or STAINLESS STEEL
COORD	COORDINATE/ COORDINATION	MB	MACHINE BOLT	STGR	STAGGERED
CMU	CONCRETE MASONRY UNIT	MBM	METAL BUILDING MANUFACTURER	STD	STANDARD
CN	CLEAR NAIL	MC	MISCELLANEOUS CHANNEL	STIFF	STIFFENER
CW	CUT WASHER	MECH	MECHANICAL	STL	STEEL
DBA	DEFORMED BAR ANCHOR	MEZZ	MEZZANINE	STRUCT	STRUCTURAL
DBL	DOUBLE	MF	MOMENT FRAME	SW	SHEAR WALL
DCW	DEMAND CRITICAL WELD	MFR	MANUFACTURER	SYM	SYMMETRICAL
DF	DOUGLAS FIR	MIN	MINIMUM	T&B	TOP AND BOTTOM
DIA or ø	DIAMETER	MISC	MISCELLANEOUS	T&G	TONGUE AND GROOVE
DIAG	DIAGONAL	MW	MALLEABLE IRON WASHER	THK	THICK
DIM	DIMENSION	MTL	METAL	THRD	THREADED
DJ	DOWEL JOINT	MU	MECH UNIT	THRU	THROUGH
DL	DEAD LOAD	(N)	NEW	TL	TOTAL LOAD
DN	DOWN	N/A	NOT APPLICABLE	TN	TOE NAIL
DO	DITTO	NO or #	NUMBER	TOC	TOP OF CONCRETE
DWG	DRAWING	NS	NEAR SIDE	TOF	TOP OF FRAMING
DWL	DOWEL	NSG	NON-SHRINK GROUT	TOM	TOP OF MASONRY
EA	EACH	NTS	NOT TO SCALE	TOP	TOP OF PLYWOOD
EF	EACH FACE	NWC	NORMAL WEIGHT CONCRETE	TOS	TOP OF STEEL
ELEC	ELECTRICAL	O	OVER	TOT	TOTAL
ELEV	ELEVATOR/ELEVATION	OC	ON CENTER	TYP	TYPICAL
EMBED	EMBEDMENT	OD	OUTSIDE DIAMETER	UNO	UNLESS NOTED OTHERWISE
EQ	EQUAL	OH	OPPOSITE HAND	VERT	VERTICAL
EQUIP	EQUIPMENT	OPNG	OPENING	VIF	VERIFY IN FIELD
ES	EACH SIDE	OPP	OPPOSITE	VSH	VERTICAL SLOTTED HOLE
EW	EACH WAY	OVS	OVERSIZED	W	WIDE FLANGE STEEL BEAM
(E)	EXISTING	OW	OTHERWISE	W/	WITH
EXP	EXPANSION	OWT	OPEN WEB TRUSS	W/O	WITHOUT
EXT	EXTERIOR	P/L	PROPERTY LINE	WD	WOOD
FDN	FOUNDATION	PA	POST ABOVE	WHS	WELDED HEADED STUD
FIN	FINISH	PAF	POWER ACTUATED FASTENERS	WLD	WELDED
FG	FINISH GRADE	PEN	PANEL EDGE NAIL	WP	WORK POINT/WATERPROOF
FLR	FLOOR	PERP	PERPENDICULAR	WS	WOOD SCREW
FN	FACE NAIL	PES	PANEL EDGE SCREWS	WT	WEIGHT
FOC	FACE OF CONCRETE	PJP	PARTIAL JOINT PENETRATION	WTS	WELDED THREADED STUD
FOM	FACE OF MASONRY	PLF	POUNDS PER LINEAR FOOT	WWR	WELDED WIRE REINFORCEMENT
FOS	FACE OF STUD				
FRMG	FRAMING				
FS	FAR SIDE				

QUATTROCCHI KWOK ARCHITECTS
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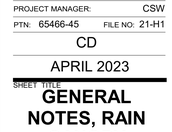
zfa job no. 23003



TERRA LINDA HIGH SCHOOL

SHADE STRUCTURE & ENTRY CANOPY

320 Nova Albion Way
San Rafael, CA 94903

SAN RAFAEL CITY SCHOOLS

DSA APP NO: 01-120767
ARCH PROJECT NO: 2068.00
ENGINEER: NBB
PROJECT MANAGER: CSW
PTN: 65466-45 FILE NO: 21-H1
CD
APRIL 2023

SHEET TITLE
GENERAL NOTES, RAIN CANOPY DETAILS, AND TYPICAL DETAILS

SHEET NUMBER
S-0.1

DESIGN CRITERIA	
DESCRIPTION	DESIGN VALUES
DEAD AND LIVE LOADS	
ROOF LIVE LOAD	20 PSF
ROOF DEAD LOAD (SUPERIMPOSED ON FRAME)	5 PSF MAX
ROOF PANEL DEAD LOAD	M=1.1 PSF, G = 1.2 PSF, S = 1.3 PSF
COLLATERAL DEAD LOAD	M = 3.9 PSF, G = 3.8 PSF, S =3.7 PSF
ROOF SNOW LOAD	
GROUND SNOW LOAD, P_g	20 PSF
RISK CATEGORY	II
ROOF SNOW LOAD: SLOPED, P_s	20 PSF
SITE APPLICATION DSA REVIEWER SHALL VERIFY THE STRUCTURE BE LOCATED AT LEAST 20 FEET FROM ADJACENT STRUCTURE	
SNOW LOAD SLOPE FACTOR, C_s	1.0
SNOW EXPOSURE FACTOR, C_e	1.0
SNOW LOAD IMPORTANCE FACTOR, I_s	1.0
THERMAL FACTOR, C_t	1.2
WIND DESIGN	
BASIC WIND SPEED (3 SECOND GUST), V_{ult}	100 MPH
RISK CATEGORY	II
EXPOSURE CATEGORY	C
FACTORS: K_z, K_{zt}, K_d	0.85, 1, 0.85
$q_h = 0.00256\ K_z\ K_{zt}\ K_d\ V^2$ FOR ALL EAVE HEIGHTS (8', 10' & 12')	18.50 PSF
C_{NW} PER ASCE FIGURE 27.4-5 ROOF ANGLE 18.43 - CLEAR / OBSTRUCTED	CASE A (1.1 / -1.2) CASE B (0.01 / -0.69)
C_{NL} PER ASCE FIGURE 27.4-5 ROOF ANGLE 18.43 - CLEAR / OBSTRUCTED	CASE A (-0.17 / -1.09) CASE B (-0.96 / -1.65)
C_N PER ASCE FIGURE 27.4-7 PARALLEL TO RIDGE - CLEAR / OBSTRUCTED	CASE A (-0.6 / -0.9) CASE B (-0.5 / -0.5)
COMPONENTS & CLADDING - C_N (PRESSURE/SUCTION) CLEAR / OBSTRUCTED	ZONE 3 - (2.29 / -2.11) / (1.0 / -3.0)
	ZONE 2 - (1.77 / -1.63) / (0.8 / -2.3)
	ZONE 1 - (1.15 / -1.05) / (0.5 / -1.5)
SEISMIC DESIGN	
LATERAL FORCE RESISTING SYSTEM	STEEL - ORDINARY CANTILEVER COLUMN
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
SESIMIC IMORTANCE FACTOR, Ie	1.0
SEISMIC SITE CLASS	D
MCE_R SPECTRAL RESPONSE ACCELERATION @ 0.2 s, S_S	2.60
MCE_R SPECTRAL RESPONSE ACCELERATION @ 0.2 s, S_1	0.90
SHORT PERIOD SITE COEFFICIENT, F_a	1.20
LONG PERIOD COEFFICIENT, F_v	1.70
FUNDAMENTAL PERIOD OF THE STRUCTURE, T	0.152 s
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, S_{DS}	2.08
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, S_{DS} - USED TO DETERMINE Cs (WITH CAP PER ASCE 7 12.8.1.3)	2.08 * 0.70 = 1.456
DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-s PERIODS, S_{D1}	1.02
SEISMIC DESIGN CATEGORY	E
RESPONSE MODIFICATION FACTOR, R	1.25
OVERSTRENGTH FACTOR, Ω	1.25
REDUNDANCY FACTOR, ρ	1.0
HORIZONTAL OR VERTICAL IRREGULARITIES	NONE
SEISMIC RESPONSE COEFFICIENT, Cs (20' WIDE, 30' WIDE, 40' WIDE)	1.16,
DESIGN BASE SHEAR, V (20' WIDE, 30' WIDE, 40' WIDE)	12.74 PSF, 10.58 PSF, 13.62 PSF
ALLOWABLE SOIL BEARING FOR FOUNDATIONS	VARIES - SEE FOUNDATION CHARTS
FLOOD DESIGN - DESIGN IS ASSUMED TO NOT BE IN FLOOD HAZARD AREA	
IF PROJECT IS LOCATED IN A FLOOD ZONE OTHERTHAN ZONE X, A LETTER STAMPED & SIGNED FROM A SOILS ENGINEER IS REQUIRED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED.	

STRUCTURAL SEPARATION

ALL DEFLECTIONS SHOWN ALSO INCLUDE THE P-DELTA ROTATION PER IR PC-7

DEFLECTIONS ARE FOR (1) STRUCTURE

SOIL CLASSES PER CBC TABLE 1806A.2

MAXIMUM DRIFT δ_{max} SIDE COLUMNS	Soil Class 5	Soil Class 4	Soil Class 3
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.40	2.55	2.65
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.15	2.30	2.40
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.20	2.20	2.30
MINIMUM SEPARATION ($\delta_m = C_d\ \delta_{max}$) $C_d = 1.25$			
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	3.00	3.19	3.31
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.69	2.88	3.00
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.75	2.75	2.88

MAXIMUM DRIFT δ_{max} END COLUMNS	Soil Class 5	Soil Class 4	Soil Class 3
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.40	2.55	2.65
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.15	2.30	2.40
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.20	2.20	2.30
MINIMUM SEPARATION ($\delta_m = C_d\ \delta_{max}$) $C_d = 1.25$			
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	3.00	3.19	3.31
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.69	2.88	3.00
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT) (INCHES)	2.75	2.75	2.88

ARCHITECTURAL REQUIREMENTS	
DESCRIPTION	DESIGN VAULES
TYPE OF CONSTRUCTION	II–B
OCCUPANCY CLASSIFICATION	A–3
NUMBER OF STORIES	1
FIRE SPRINKLER SYSTEM	NOT BY ICON/WEIGHT NOT INCLUDED IN DESIGN

RELATED BUILDING CODES AND STANDARDS

TITLE 24 CODES:

2019 CALIFORNIA ADMINISTRATIVE CODE (CAC)..................(PART 1, TITLE 24, CCR)
2019 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1, AND 2.(PART 2, TITLE 24, CCR)
2019 CALIFORNIA ELECTRICAL CODE....................................(PART 3, TITLE 24, CCR)
2019 CALIFORNIA MECHANICAL CODE (CMC).......................(PART 4, TITLE 24, CCR)
2019 CALIFORNIA PLUMBING CODE (CPC)............................(PART 5, TITLE 24, CCR)
2019 CALIFORNIA ENERGY CODE..(PART 6, TITLE 24, CCR)
2019 CALIFORNIA FIRE CODE (CFC) ....(PART 9, TITLE 24, CCR)
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE......(PART 11, TITLE 24, CCR)
2019 CALIFORNIA REFERENCE STANDARDS CODE..............(PART 12, TITLE 24, CCR)

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2019 CBC, CHAPTER 35
2019 CFC, CHAPTER 80

SCOPE OF WORK NARRATIVE

THESE DRAWINGS ILLUSTRATE THE FABRICATION AND INSTALLATION REQUIREMENTS FOR A FREE-STANDING PREFABRICATED STEEL SHADE STRUCTURE. THE ENTIRE STRUCTURAL SYSTEM IS COMPRISED OF HOLLOW STRUCTURAL STEEL MEMBERS SUPPORTED BY CONCRETE FOUNDATIONS. THE FLEXIBILITY INCLUDED HEREIN ALLOWS THE STRUCTURE TO COMPLY WITH A WIDE VARIETY OF PROJECT SITES AND LOADING REQUIREMENTS.

GENERAL:

1. GENERAL NOTES AND TYPICAL DETAILS SHALL APPLY TO ALL PARTS OF THE JOB EXCEPT WHERE THEY MAY CONFLICT WITH DETAILS AND NOTES ON OTHER SHEETS. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER FOR THIS PROJECT.
2. WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED TO DATE, OF THE LATEST ADOPTED EDITION OF THE CBC, C.A.C. TITLE 24, AND ALL OTHER LOCAL, STATE AND FEDERAL REGULATIONS.
3. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS, ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
5. THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING, BUT NOT LIMITED TO, BRACING, TEMPORARY SUPPORTS, AND SHORING. OBSERVATION VISIT TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT/ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER DURING THE CONSTRUCTION SHALL BE DISTINGUISHED FROM CONSTRUCTION AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER, WHETHER OF MATERIAL OR WORK, ARE FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONSTRUCTION.
6. ASTM DESIGNATIONS AND ALL STANDARDS REFER TO THE LATEST AMENDMENTS.
7. CONFORM TO APPLICABLE CAL/OSHA CONSTRUCTION SAFETY REGULATIONS FOR ALL WORK PERFORMED DURING CONSTRUCTION. JOB SITE SAFETY IS STRICTLY THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THE ARCHITECT/ENGINEER OR OWNER.
8. THE ENGINEER AND THEIR CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, HANDLING, REMOVAL OR DISPOSAL OF HAZARDOUS MATERIALS AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.
9. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, OR IF A CHANGE IN THE SCOPE OF WORK IS PROPOSED, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED CHANGE(S) SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
10. THE SCHOOL DISTRICT INSPECTOR ON RECORD SHALL INSPECT AND APPROVE THE ERECTED FRAME PRIOR TO ROOF INSTALLATION.
11. SEE REQUIREMENTS FOR LOCATION IN ANY FIRE HAZARD SEVERITY ZONE FOR WILDLAND URBAN INTERFACE AREAS (WUI) AS SPECIFIED IN THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE. PROVIDE PROTECTION AND DETAILS OF ALL AREAS COMPLYING WITH THE WUI REQUIREMENTS.
12. LOCATING THIS STRUCTURE CLOSER THAN 20 FEET TO OTHER STRUCTURES MAY AFFECT THE ALLOWABLE AREA FOR THE EXISTING CONSTRUCTION PER THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE.
13. VIEWS AND DETAILS ARE NOT DRAWN TO SCALE (UNLESS NOTED OTHERWISE). DO NOT SCALE THESE DRAWINGS.

STRUCTURAL AND MISCELLANEOUS STEEL:

1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL REFERENCED BY THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.
2. PIPE SECTIONS SHALL CONFORM TO ASTM A53, Fy = 35 KSI, GRADE B OR A501 UNLESS NOTED OTHERWISE.
3. STRUCTURAL TUBING (HSS SHAPES) SHALL CONFORM TO ASTM A–500, GRADE B (OR C), Fy = 46 KSI. MIN.
4. IF MATERIAL AVAILABILITY IS LIMITED, MEMBER THICKNESS CAN BE INCREASED BEYOND WHAT IS SHOWN IN THESE DRAWINGS (MAXIMUM INCREASE OF 1/8").
5. ALL CHANNELS, ANGLES, AND MISC. STEEL SHALL CONFORM TO ASTM A–36, Fy = 36 KSI.
6. ALL PLATE STEEL SHALL CONFORM TO ASTM A–572, Fy= 50 KSI.
7. ALL COLD FORM STEEL SHALL CONFORM TO ASTM A–653, CS = TYPE B, Fy = 50 KSI.
8. STRUCTURAL STEEL AND DECK SHALL BE IDENTIFIED FOR CONFORMITY PER CBC 2202A.1.
9. ALL ROOF DECKS SHALL HAVE KYNAR 500 METAL COATING.
10. ALL ROOF DECKS SHALL CONFORM TO ASTM A–792, Fy = 50 KSI.

INSTRUCTIONS FOR ARCHITECTS SUBMITTING THESE PRE–CHECKED DRAWING TO DSA:

BEFORE SUBMITTING THESE PRE–CHECKED DRAWINGS FOR YOUR PROJECT, FOLLOW THE STEPS BELOW TO PROPERLY DEFINE THE APPROVED OPTIONS:

STEP 1: SELECT FRAME DIMENSIONS FOR YOUR PROJECT
–GABLE STRUCTURES UP TO 20' WIDE USE THE "RG 20" BASE FRAME
–GABLE STRUCTURES UP TO 30' WIDE USE THE "RG 30" BASE FRAME
–GABLE STRUCTURES UP TO 40' WIDE USE THE "RG 40" BASE FRAME
–MAXIMUM WIDTH IS 40' (SEE "ARCHITECTURAL VIEWS" SHEET FOR REFERENCE)
–THE 24', 44', 64', 84' AND 104' LENGTHS ARE SUGGESTED BECAUSE THEY ARE THE MOST COMMON (20' BAYS ARE THE MOST ECONOMICAL)
–FRAME LENGTHS ASSUME 2' OVERHANGS (UNO BY ARCHITECT – 2' MAX DIMENSION)

STEP 2: SELECT ROOF DECK FOR YOUR PROJECT
–"M" REPRESENTS McELROY METAL "MULTI–RIB" ROOF PANEL
–"G" REPRESENTS McELROY METAL "MEGA–RIB" ROOF PANEL
–"S" REPRESENTS McELROY METAL "MEDALLION–LOK" 16" STANDING SEAM ROOF PANEL

STEP 3: IDENTIFY THE Ss ACCELERATION (g) FOR YOUR PROJECT
–Ss VALUE DETERMINES THE REQUIRED SEISMIC DESIGN FORCES
–Ss VALUE DEPENDS ON THE PROJECTS GEOGRAPHICAL LOCATION (VALUES RANGE FROM 0.00 TO 3.73)

STEP 4: IDENTIFY THE Ss REGION FOR YOUR PROJECT
–THE REGIONS ARE DEPENDANT ON THE Ss VALUE DETERMINED IN STEP 3
–THE Ss REGION DICTATES THE MAXIMUM DEAD LOAD PERMITTED ON THE FRAME (SEE TABLE TO RIGHT)

STEP 5: IDENTIFY THE ROOF DEAD LOAD FOR YOUR PROJECT
–THE ROOF DECK DEAD LOAD WILL ALWAYS BE INCLUDED
–THE COLLATERAL LOAD REPRESENTS ADDITIONAL LOAD THAT CAN BE SUPPORTED BY THE FRAME
–BE SURE THE TOTAL ROOF DEAD LOAD FOR YOUR PROJECT IS LESS THAN OR EQUAL TO THE MAX DEAD LOAD SHOWN IN STEP 4 FOR YOUR Ss VALUE
–Sds VALUE USED IN CALCULATION IS THE CAPPED Sds (SEE DESIGN CRITERIA)

STEP 6: IDENTIFY THE FOUNDATION REQUIREMENTS FOR YOUR PROJECT
–IDENTIFY SOIL CLASS FOR PROJECT SITE PER SITE SPECIFIC SOIL CONDITIONS
–USE THIS TO SELECT CORRECT FOUNDATION SIZE ON FOUNDATION SHEET

STEP 7: SELECT MISCELLANEOUS OPTIONS FOR YOUR PROJECT
–MAXIMUM CLEAR HEIGHT IS 12'–0"; (SEE "ARCHITECTURAL VIEWS" SHEET FOR REFERENCE)
–MARK UP PC DRAWINGS WITH SIZE AND LOCATION OF CUTOUTS BEFORE SUBMITTING TO DSA

STEP 8: SELECT APPLICABLE SHEET INDEX FOR YOUR PROJECT
–REFERENCE THE BASE FRAME (STEP 1) AND THE ROOF PANEL TYPE (STEP 2)
–IDENTIFY THE APPLICABLE SHEET INDEX

STEP 9: INCLUDE APPLICABLE SHEETS WITH YOUR DSA SUBMITTAL
–INCLUDE 'MISC DESIGN OPTIONS' SHEET FOR PROJECTS WITHOUT ELECTRICAL CUTOUTS OR GUTTERS

NOTICE OF DISCLAIMER FOR STRUCTURAL ENGINEERING RESPONSIBILITY

1. PER TITLE 24, PART 1, SECTION 4–316(e) OF THE CALIFORNIA CODE OF REGULATIONS, THIS NOTICE SHALL BE GIVEN TO DSA PRIOR TO THE APPROVAL OF PLANS AND SPECIFICATIONS.
2. FOR THE SITE SPECIFIC PROJECT, J. R. MILLER & ASSOCIATES IS NOT THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE.
3. FOR THE SITE SPECIFIC PROJECT, J.R. MILLER & ASSOCIATES' RESPONSIBILITY IS LIMITED TO THE PREPARATION OF THE PLANS AND SPECIFICATIONS FOR THE SHELTERS OF THIS PC ONLY.
4. STRUCTURAL OBSERVATION OF CONSTRUCTION IS SPECIFICALLY EXCLUDED FROM J.R. MILLER & ASSOCIATES' RESPONSIBILITY FOR THE SITE SPECIFIC PROJECT.
5. ALL CONSTRUCTION ACTIVITIES RELATED TO STRUCTURAL ENGINEERING SHALL BE DELEGATED TO A QUALIFIED ENGINEER BY THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE. THESE ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, APPROVAL OF INSPECTOR QUALIFICATIONS, STRUCTURAL OBSERVATION OF CONSTRUCTION, REVIEW OF INSPECTION REPORTS, AND SIGNING OFF OF THE VERIFIED REPORT FOR COMPLETED WORK.
6. J.R. MILLER & ASSOCIATES WILL BE RESPONSIBLE FOR RESPONDING TO QUESTIONS PERTAINING TO THE PLANS AND SPECIFICATIONS FOR THE SHELTERS OF THIS PC WHICH ARISE DURING PLAN REVIEW AND CONSTRUCTION.

WELDING:

1. ALL WELDING SHALL COMPLY WITH AWS D1.1 SPECIFICATIONS AND SHALL BE DONE BY AWS QUALIFIED WELDERS CERTIFIED FOR THE TYPE OF WELDING TO BE PERFORMED AS REQUIRED BY DSA.
2. ALL WELDING SHALL BE DONE BY GAS METAL ARC PROCESS WITH E70XX ELECTRODES. FLUX CORE ARC WELD SHALL CONFORM TO CHARPY NOTCH TOUGHNESS RATING OF 20 ft–lb @ (0° F).
3. ALL WELDING SHALL BE DONE IN THE SHOP WITH REQUIRED INSPECTION, PRE–APPROVED BY DSA, TO ENSURE PROPER MATERIAL ID AND WELDING.
4. WELD FILLER METAL MANUFACTURER SHALL PROVIDE WRITTEN CERTIFICATION OF COMPLIANCE WITH CODE AND SPECIFICATIONS.

BOLTING:

1. ALL BOLTS SHOWN ON THESE DRAWINGS ARE ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS (UNO), WITH THE NUTS CONFORMING TO ASTM A–563.
2. HIGH STRENGTH BOLTS SHALL BE VERIFIED AND INSPECTED PER CBC 1705A2.1.
3. BEFORE ERECTING THE FRAME, VERIFY ALL BOLTS AND NUTS ARE CLEAN OF DEBRIS AND BURRS – INCLUDING THE HARDWARE ALREADY FASTENED INSIDE THE MEMBERS. CHASING SOME OF THE BOLTS AND NUTS MAY BE REQUIRED.
4. HARDENED STEEL WASHERS SHALL CONFORM TO ASTM F–436.
5. THE BOLTING INSTALLATION REQUIREMENTS OUTLINED BELOW ARE CRITICAL TO THE STRUCTURE'S DESIGN AND PERFORMANCE. THE INSTALLER IS REQUIRED TO COORDINATE THIS PHASE OF CONSTRUCTION WITH THE SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD PRIOR TO THE ERECTION OF THE FRAME. ALL BOLTS SHALL BE INSTALLED AND INSPECTED PER THE APPLICABLE VERSION OF AISC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH–STRENGTH BOLTS", CBC 1705A.2.1; AISC 341–16 J7; AISC 360–16 N5.6.
   A) PRETENSIONED JOINTS MUST BE INSTALLED AND INSPECTED TO MEET ONE OF THE FOLLOWING REQUIREMENTS:
   1. TURN–OF–NUT PRETENSIONING
   2. CALIBRATED WRENCH PRETENSIONING
   3. DIRECT–TENSION–INDICATOR PRETENSIONING (CONTRACTOR RESPONSIBLE FOR PURCHASE OF REQUIRED WASHERS)

FOUNDATIONS:

1. ALLOWABLE SOIL PRESSURES ASSUME CLASS 5 SOIL CLASSIFICATION PER CBC TABLE 1806A, UNLESS NOTED OTHERWISE.
2. PER CBC SECTION 1803A.2, GEOTECHNICAL REPORTS ARE NOT REQUIRED FOR ONE–STORY LIGHT–STEEL FRAME BUILDINGS OF TYPE II CONSTRUCTION AND 4,000 SQUARE FOOT OR LESS IN FLOOR AREA AND NOT LOCATED WITHIN EARTHQUAKE FAULT ZONESOR SIESMIC HAZARD ZONES AS SHOWN ON THE MOST RECENT MAPS PUBLISHED BY THE CGS. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1806A.2.
3. FILL AND BACKFILL SHALL BE COMPACTED TO 95% OF MAX. DENSITY IN ACCORDANCE WITH ASTM TEST METHOD D–1557 OR AS RECOMMENDED BY THE GEO–TECH ENGINEER. FLOODING NOT PERMITTED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING, ETC. NECESSARY TO SUPPORT CUT AND/OR FILL BANKS DURING EXCAVATION, AND FORMING AND PLACEMENT OF CONCRETE.
5. MINIMUM SETBACK FROM TOE OF SLOPE ON AN ASCENDING SLOPE SHALL BE 15 FEET AND MINIMUM SETBACK FROM TOE OF SLOPE ON A DESCENDING SLOPE SHALL BE 40 FEET
6. PER CBC SECTION 1803A.6, GEOHAZARD REPORTS ARE NOT REQUIRED FOR ONE–STORY LIGHT–STEEL FRAME BUILDINGS OF TYPE II CONSTRUCTION AND 4,000 SQUARE FOOT OR LESS IN FLOOR AREA AND NOT LOCATED WITHIN EARTHQUAKE FAULT ZONESOR SIESMIC HAZARD ZONES AS SHOWN ON THE MOST RECENT MAPS PUBLISHED BY THE CGS.
7. GEOHAZRD REPORTS ARE TO COMPLY WITH DSA IR A–4 PER IR–7 SECTION 1.8
8. SITE SPECIFIC GEOTECHNICAL REPORT IS REQUIRED AT THE TIME OF SITE APPLICATION IS USING OTHER THAN CLASS 5 SOIL, PER DSA IR PC–7
9. LATERAL BEARING HAS BEEN INCREASED PER CBC 1806A.3.4 & HAS BEEN DESIGNED FOR P–DELTA EFFECTS

CONCRETE:

1. MIX DESIGN REQUIREMENTS: (NORMAL WEIGHT CONCRETE)

STRENGTH Pc (28 DAYS)	W/C RATIO (NON–AIR ENTRAINED)	W/C RATIO (AIR ENTRAINED)	SLUMP (±1")	UNIT WEIGHT (NORMAL WEIGHT)
4500 PSI	0.44	0.35	3"	150 PCF

2. CONCRETE MIX DESIGN PARAMETERS ARE GOOD FOR EXPOSURE CATEGORIES F0, F1 & F2. THE AIR ENTRAINMENT FOR THESE CATEGORIES SHALL BE AS FOLLOWS: F0–0, F1–4.5, F2–6
3. CHANGES TO THE MIX DESIGN MUST BE APPROVED BY THE ENGINEER OR ARCHITECT OF RECORD AND DSA.
4. AGGREGATES SHALL CONFORM TO THE ASTM C–33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.005. MAX AGGREGATE SIZE = 1".
5. CEMENT SHALL CONFORM TO ASTM C–150 (TYPE V) UNLESS NOTED OTHERWISE ON THE DRAWINGS.
6. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER PLACEMENT. ALTERNATE METHODS WILL BE APPROVED IF SATISFACTORY PERFORMANCE CAN BE ASSURED.
7. CONCRETE SHALL NOT FREE FALL MORE THAN FIVE FEET.
8. CONCRETE DURABILITY SHALL BE PER CBC 1904A.1 ACI 318–14, CHAPTER 19.
9. CONCRETE SHALL BE TESTED PER CBC 1903A, TABLE 1705A.3. AND ACI 318–14, SECTION 26.12.

STEP 10: IDENTIFY PROJECT NAME AND SCHOOL DISTRICT

PROJECT NAME:	SCHOOL DISTRICT:
TLHS CTE Shade Structure	San Rafael City Schools

STEP 1	FRAME DIMENSIONS					
		SUGGESTED				OTHER
	FRAME WIDTH	[ ] 20'	[X] 30'	[ ] 40'		[ ] (40' MAX)
	FRAME LENGTH	[X] 44'	[ ] 64'	[ ] 84'	[ ] 104'	[ ] (NO MAX)

STEP 2	ROOF PANEL		
	ROOF PANEL TYPE	[ ] M [ ] G [X] S	

STEP 3	PROJECT SITE – Ss ACCELERATION (g)
	_.___

STEP 4	Ss REGION			
			Ss REGIONS	MAX DEAD LOAD
	DESCRIPTION		0 < Ss <= 2.14	5 PSF
			2.14 < Ss <= 2.50	5 PSF
			2.50 < Ss <= 2.75	5 PSF
			2.75 < Ss <= 3.00	4 PSF
			Ss > 3.73 MAX	3 PSF

STEP 5	TOTAL ROOF DEAD LOAD		
		DEAD LOAD	EXAMPLES
	ROOF DECK	_____ PSF	M=1.1PSF; G=1.2PSF ;S=1.3PSF (SEE STEP 2)
	COLLATERAL	_____ PSF	LIGHTING, ECT.
	TOTAL	_____ PSF	ADD ROOF DECK AND COLLATERAL LOADS (MAX 5 PSF)

CONSTRUCTION NOTES

1. A DSA–CERTIFIED CLASS 3 PROJECT INSPECTOR IS REQUIRED FOR THIS PROJECT.
2. CHANGES 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.
3. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF WORK, THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4–342, PART 1, TITLE 24, CCR.
4. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
5. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS ARE THAT ALL THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON–COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK, (SECTION 4–317(c), PART 1, TITLE 24, CCR)
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES

REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A–615, AS FOLLOWS:
   GR 60: (#4 BARS AND LARGER)
   GR 40: (#3 BARS)
2. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS SHALL CONFORM TO THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES."
3. MIN. COVER FOR CAST–IN–PLACE CONCRETE SHALL BE AS FOLLOWS:
   A. CAST AGAINST EARTH ....3"
   B. CAST AGAINST FORM BELOW GRADE ....2"
   C. FORMED SLABS (#11 BAR & SMALLER).........................3/4"
   D. SLABS ON GRADE (FROM TOP OF SLAB)....................1"
4. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BENDS SHALL BE MADE COLD.
5. REINFORCING SHALL BE LAP SPLICED PER ACI 318–14, SECTION 25.5.
6. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
7. WELDING OF REINFORCING IS NOT ALLOWED.
8. REINFORCING STEEL SHALL BE INSPECTED PER CBC 1705A.3.

POWDER–COAT FINISH SYSTEM:

ALL BUILDINGS THAT HAVE A POWDER–COATED FINISH SHALL MEET THE FOLLOWING SPECIFICATIONS:
1. THE STEEL FRAME SHALL BE SHOT–BLASTED TO A NEAR WHITE CONDITION PER SSPC–10 SPECIFICATIONS.
2. THE STEEL SHALL BE WASHED IN A ZINC PHOSPHATE IN AN MINIMUM EIGHT STAGE ELECTRO DEPOSITION PRE–TREATEMENT PROCESS.
3. IMMEDIATELY FOLLOWING PRE–TREATMENT THE STEEL SHALL BE TOTALLY IMMERSED IN A LIQUID EPOXY PRIMER(E–COAT) AND COATED TO A UNIFORM THICKNESS OF A MINIMUM OF 0.7 TO 0.9 MILS. THE E–COATING SHALL PROVIDE A MINIMUM OF 1000 HOURS OF SALT SPRAY CORROSION PROTECTION TO THE STEEL.
4. THE STEEL SHALL THEN HAVE A TGIC POLYESTER COLOR COAT APPLIED OVER THE E–COATED SURFACE.
5. THE COLOR COAT SHALL THEN HAVE A CLEAR TGIC COATING APPLIED TO SEAL IN THE COLOR COAT AND RESIST ULTRAVIOLET LIGHT, TO HELP PREVENT FADING.
6. THE FINISH THICKNESS OF THESE THREE APPLICATIONS SHALL BE A MINIMUM OF 8 TO 12 MILS.
7. ALL CARBON STEEL MEMBERS (COLUMNS, BEAMS, PLATES, ETC.) NOT POWDER–COATED SHALL BE PAINTED WITH PRIME COAT PER THE "AISC CODE OF STANDARD PRACTICE" AND THE "AISC SPECIFICATION SECTION M3"(UNLESS NOTED OTHERWISE).

ABBREVIATIONS:			
ACI	AMERICAN CONCRETE INSTITUTE	MPH	MILES PER HOUR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	M	MULTI–RIB ROOF PANEL (MCELROY)
ASM	ASSEMBLY (INTERNAL REFERENCE)	NTS	NOT TO SCALE
ASTM	AMERICAN SOCIETY FOR TESTING AND MAT'LS	NO	NUMBER
AWS	AMERICAN WELDING SOCIETY	OC	ON CENTER
CBC	CALIFORNIA BUILDING CODE	OSHA	OCCUPATIONAL HEALTH AND SAFETY ADMIN
CJP	COMPLETE JOINT PENETRATION	PCF	POUNDS PER CUBIC FOOT
CLR	CLEAR	PJ	PRETENSIONED JOINT
DEG	DEGREE	PLCS	PLACES
DIA	DIAMETER	PLT	PLATE
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DSA	DIVISION OF THE STATE ARCHITECT	PSI	POUNDS PER SQUARE INCH
EQ	EQUAL	QTY	QUANTITY
FT	FEET	REF	REFERENCE
GA	GAGE	SQ	SQUARE
IN	INCHES	SS	STANDING SEAM ROOF PANEL (MCELROY)
KSI	KIPS PER SQUARE INCH	TYP	TYPICAL
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
MIN	MINIMUM	USGS	U.S. GEOLOGICAL SURVEY
MISC	MISCELLANEOUS	W/	WITH

STEP 6	FOUNDATION REQUIREMENTS		
	SOIL CLASS 5 (BEARING)–1500 PSF [ ]	SOIL CLASS 4 (BEARING)–2000 PSF [ ]	SOIL CLASS 3 (BEARING)–3000 PSF [X]
	SOIL CLASS 5 (LATERAL BEARING)–100 PSF	SOIL CLASS 4 (LATERAL BEARING)–150 PSF	SOIL CLASS 3 (LATERAL BEARING)–200 PSF

STEP 7	MISCELLANEOUS		
		DESIGN OPTIONS	
	CLEAR HEIGHT	[ ] 8' [ ] 10' [X] 12'	[ ] ' (12' MAX)
	ELECTRICAL CUTOUTS	[X] YES	[ ] NO
	GUTTERS	[X] YES	[ ] NO

STEP 8	SHEET INDEX													
	BASE FRAME		RG 20				RG 30				RG 40		
	ROOF PANEL TYPE		M	G	S		M	G	S		M	G	S
	SELECT ONE		[ ]	[ ]	[ ]		[ ]	[ ]	[X]		[ ]	[ ]	[ ]
	GENERAL NOTES		LS1.0	LS1.0	LS1.0		LS1.0	LS1.0	LS1.0		LS1.0	LS1.0	LS1.0
	DSA 103 EXAMPLE		LS1.1	LS1.1	LS1.1		LS1.1	LS1.1	LS1.1		LS1.1	LS1.1	LS1.1
	FOUNDATION PLAN		LS2.0	LS2.0	LS2.0		LS3.0	LS3.0	LS3.0		LS4.0	LS4.0	LS4.0
	FRAMING PLAN		LS2.1	LS2.1	LS2.1		LS3.1	LS3.1	LS3.1		LS4.1	LS4.1	LS4.1
	FRAME CONNECTION DETAILS		LS2.1	LS2.1	LS2.1		LS3.1	LS3.1	LS3.1		LS4.1	LS4.1	LS4.1
	ROOFING LAYOUT & DETAILS		LS2.2	LS2.3	LS2.4		LS3.2	LS3.3	LS3.4		LS4.2	LS4.3	LS4.4
	MISC DESIGN OPTIONS		LS5.0	LS5.0	LS5.0		LS5.0	LS5.0	LS5.0		LS5.0	LS5.0	LS5.0

ICON STD	RG/DSA–PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

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REGISTERED PROFESSIONAL ENGINEER MICHAEL D. LOCK S4092 STRUCTURAL STATE OF CALIFORNIA
07/29/2021

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021

GENERAL INFO

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

1455 LINCOLN AVE
HOLLAND MI, 49423

616.396.0919
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616.396.0944 FX

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

LS1.0

PRINTED ON :

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

2019 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 (2019 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	**GE** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic – Indicates that a periodic special inspection is required	**LOR** – 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.
Test – Indicates that a test is required	**PI** – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SI – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

Geotechnical Reports: Project has a geotechnical report, or CDs indicate soils special inspection is required by GE

	1. GENERAL:	Table 1705A.6		
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Verify that: • Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. • Foundation excavations are extended to proper depth and have reached proper material. • Materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)

	2. SOIL COMPACTION AND FILL:	Table 1705A.6		
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	**a.** Perform classification and testing of fill materials.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☐	**b.** Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (Refer to specific items identified in the Appendix for exemptions where soils SI and testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil SI and test reporting requirements for the exempt items.)

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

☐	**c.** Compaction testing.	Test	LOR*	* Under the supervision of the geotechnical engineer. (Refer to specific items identified in the Appendix for exemptions where soils testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil test reporting requirements for the exempt items.)

	4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):	Table 1705A.8		
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
☐	**b.** Verify pier locations, diameters, plumbness, bell diameters (if applicable), lengths and embedment into bedrock (if applicable); record concrete or grout volumes.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
☐	**c.** Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
☑	**d.** Concrete piers.	Provide tests and inspections per CONCRETE section below.		

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

	5. RETAINING WALLS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	**a.** Placement, compaction and inspection of backfill.	Continuous	GE*	**1705A.6.1.** * By geotechnical engineer or his or her qualified representative. (See Section 2 above).
☐	**b.** Placement of soil reinforcement and/or drainage devices.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative
☐	**c.** Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative See DSA IR 16-3.
☐	**d.** Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
☐	**e.** Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

	6. OTHER SOIL			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	**a.** Soil Improvements	Test	GE*	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS for final acceptance. * By geotechnical engineer or his or her qualified representative
☐	**b.** Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative
☐	**c.**			

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

	7. CAST-IN-PLACE CONCRE			
	Test or Special Inspection	Type	Performed By	Code References and Notes
Material Verification and Testing:				
☑	a. Verify use of required design mix.	Periodic	SI	**Table 1705A.3 Item 5, 1910A.1.**
☑	b. Identifiy, sample, and test reinforcing steel.	Test	LOR	**1910A.2**; ACI 318-14 Section 26.6.1.2; DSA IR 17-10. (See Appendix for exemptions.)
☑	**c.** During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Test	LOR	**Table 1705A.3 Item 6**; ACI 318-14 Sections 26.5 & 26.12.
☑	**d.** Test concrete (f'_c).	Test	LOR	**1905A.1.15**; ACI 318-14 Section 26.12.
Inspection:				
☐	e. Batch plant inspection:	See Notes	SI	Default of '**Continuous**' per **1705A.3.3**. If approved by DSA, batch plant inspection may be reduced to '**Periodic**' subject to requirements in Section **1705A.3.3.1**, or eliminated per **1705A.3.3.2.** (See Appendix for exemptions.)
☐	f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category 19.1(d) & (e) and/or 19.2(g) & (h) below.		

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

	17. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPO			
Material Verification and Testing:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that compl with requirements. • Material sizes, types and grades comply wit requirements.	Periodic	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1; AISI S100-16 Section A3.1 & A3.2, AISI S240-15 Section A3 & A5, AISI S220-15 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	Test	LOR	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
Inspection:				
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).

	18. HIGH-STRENGTH BOLTS: RCSC 2			
Material Verification and Testing of High-Strength Bolts, Nuts and Washers:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	Periodic	SI	**Table 1705A.2.1 Items 1a & 1b, 2202A.1**; AISC 360-16 Section A3.3, J3.1, and N3.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-8 & DSA IR 17-9.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

☑	**b.** Test high-strength bolts, nuts and washers.	Test	LOR	**Table 1705A.2.1 Item 1c, 2213A.1**; RCSC 2014 Section 7.2; DSA IR 17-8.
Inspection of High-Strength Bolt Installation:				
☐	**c.** Bearing-type ("snug tight") connections.	Periodic	SI	**Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2**; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.
☑	**d.** Pretensioned and slip-critical connections.	*	SI	**Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2**; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. * "Continuous" or "Periodic" depends on the tightening method used.

	19. WELDI	**1705A.2.5, Table 1705A.2.1 Items 4 & 5**; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3 (See Appendix for exemptions.)		
Verification of Materials, Equipment, Welders, etc.:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

	19.1 SHOP WELDING:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	**c.** Inspect welding of stairs and railing systems.	Periodic	SI	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
☐	**d.** Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	**e.** Inspect welding of reinforcing steel.	Continuous	SI	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8**; AWS D1.4; DSA IR 17-3.

	23. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☐	**b.** Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

	23. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**a.** Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☐	**b.** Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

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

DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number: 04-000000 **DSA File Number:**
School Name: ICON Shelter Systems **Increment Number:**
School District: PC Submittal **Date Created:** 2021-07-14 05:50:33

1. Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293
2. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
3. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
4. High-Strength Bolt Installation Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

ICON STD	RC/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST BREA, CA 92821
T.714.524.1870 F.714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. ...
STRUCTURAL
STATE OF CALIFORNIA
07/29/2021

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021

DSA 103

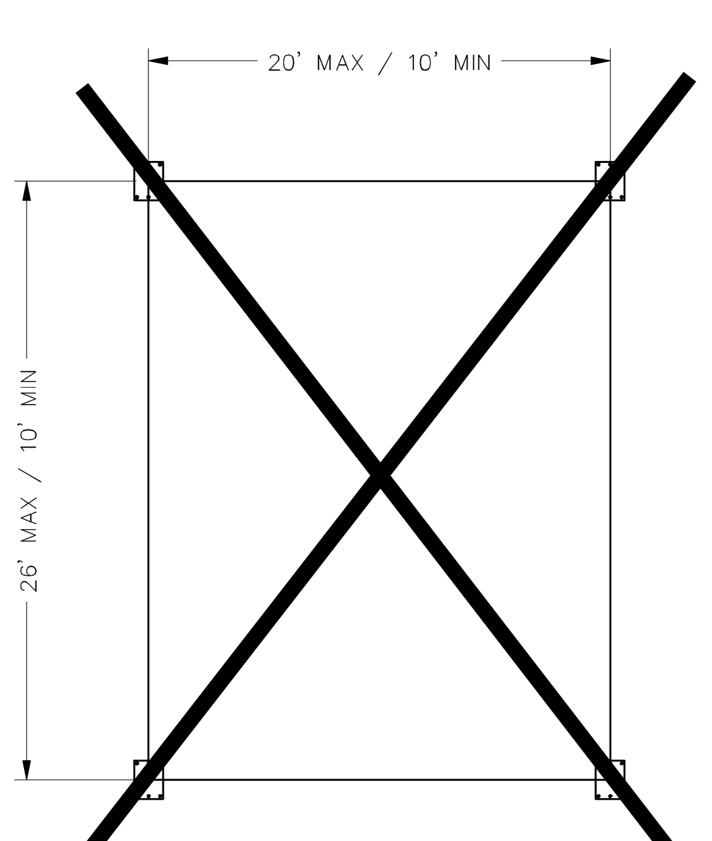
ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

1455 LINCOLN AVE
HOLLAND MI, 49423
616.396.0919
800.748.0985
616.396.0944 FX

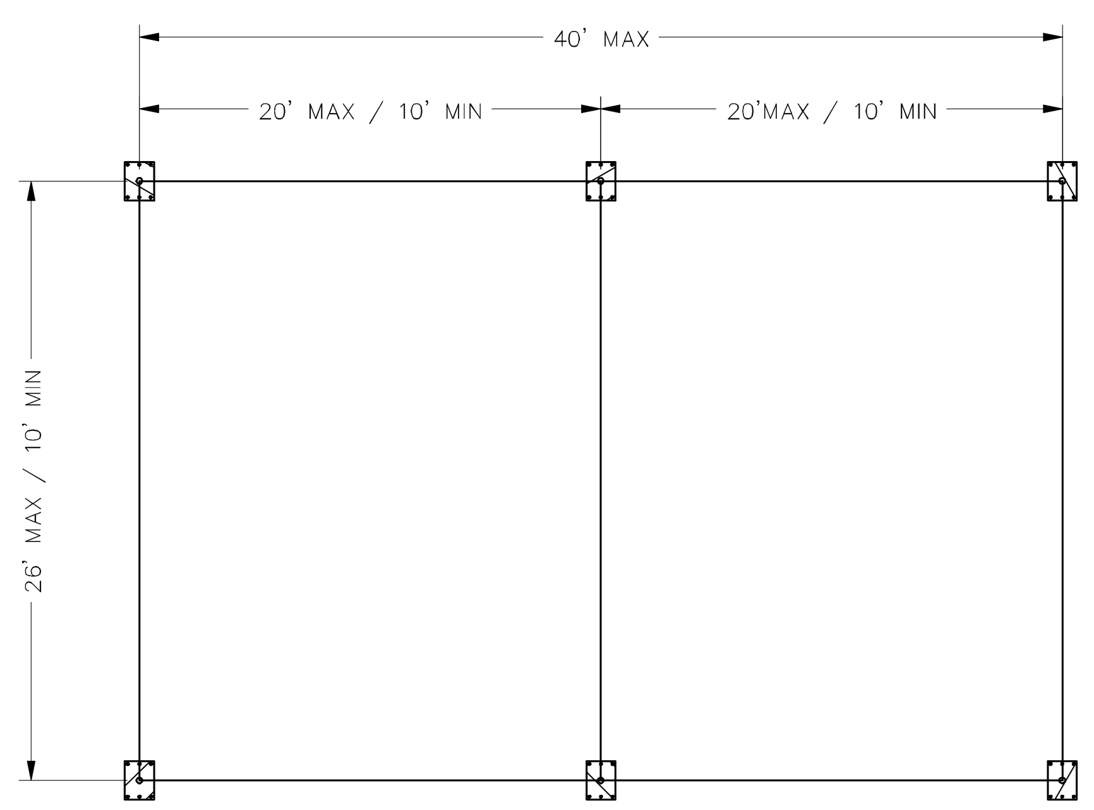
PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

LS1.1

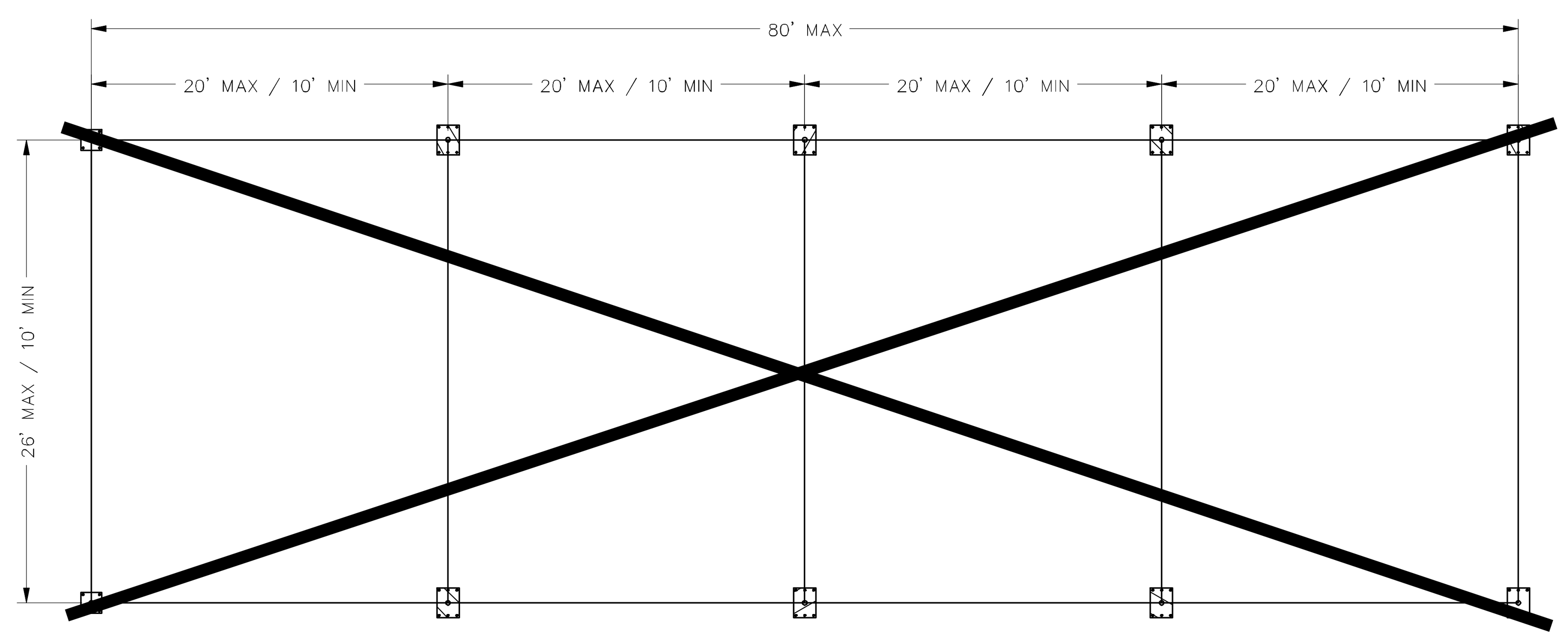
PRINTED ON :



RG30X24 COLUMN LAYOUT
(1 BAY)

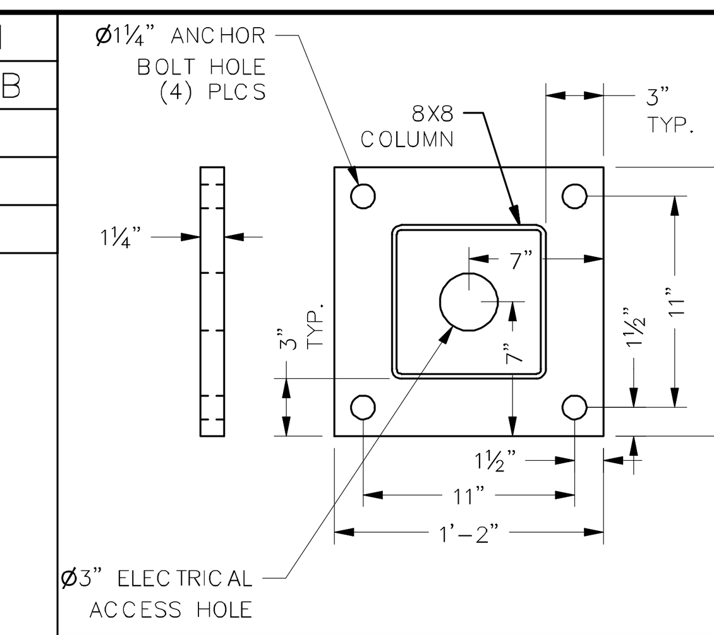


RG30X44 COLUMN LAYOUT
(2 BAYS)



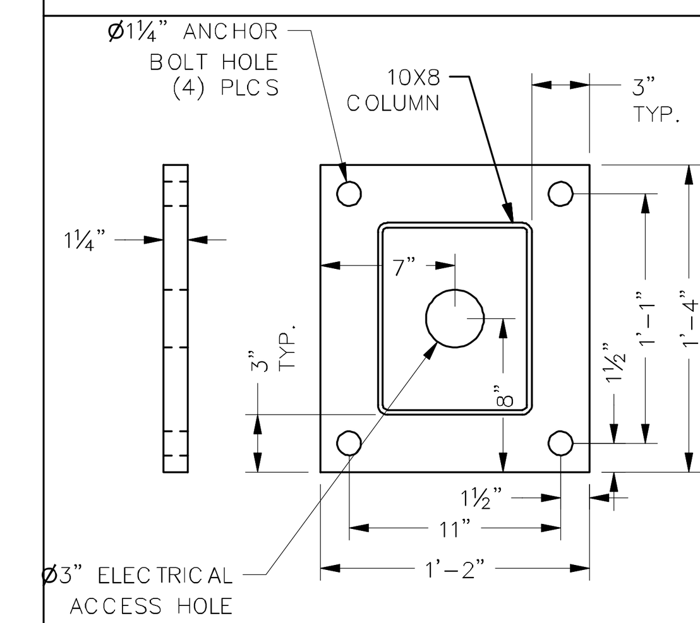
RG30X84 COLUMN LAYOUT
(4 BAYS)

BASE PLATE LOCATION		
	DETAIL A	DETAIL B
8'	BP1	BP3
10'	BP1	BP3
12'	BP2	BP3

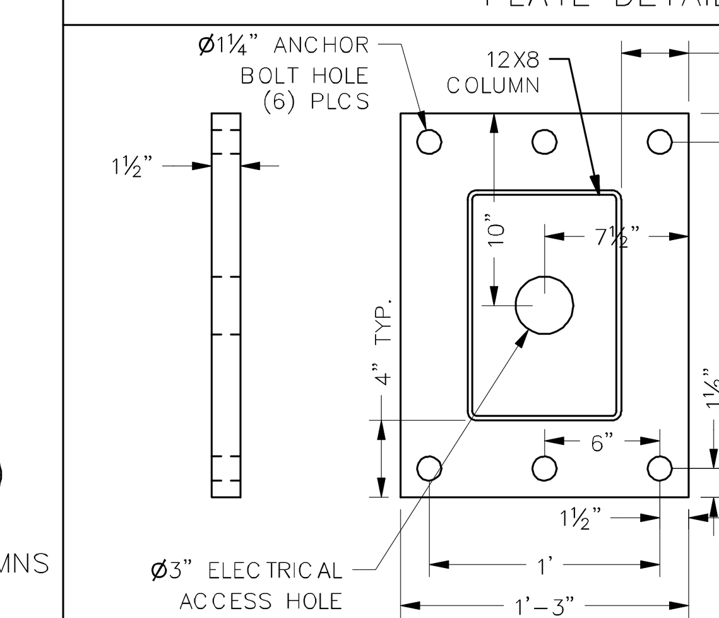


8X8 COLUMN BASE PLATE DETAIL — BP1

ICON STD	RG/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

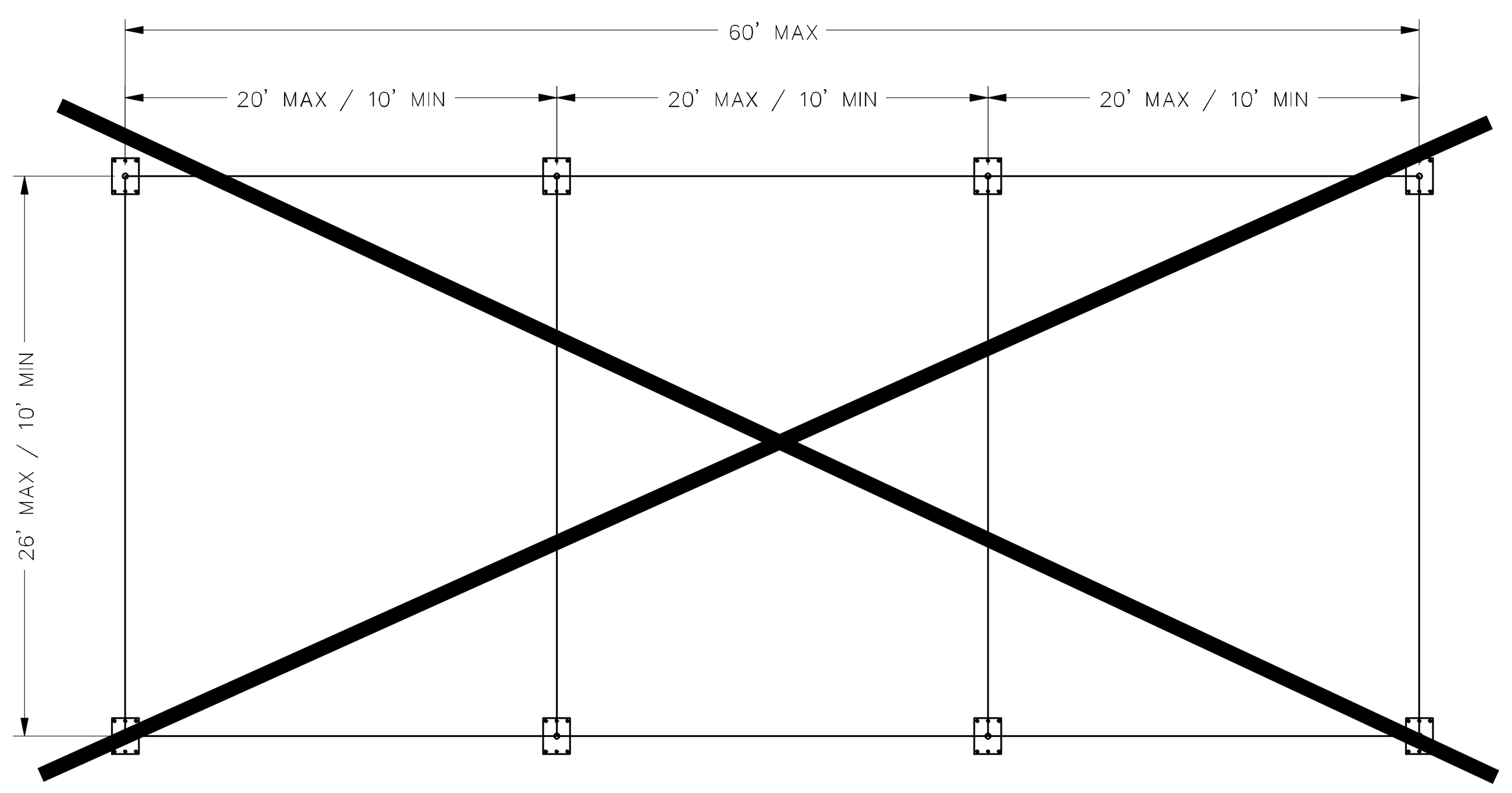


10X8 COLUMN BASE PLATE DETAIL — BP2

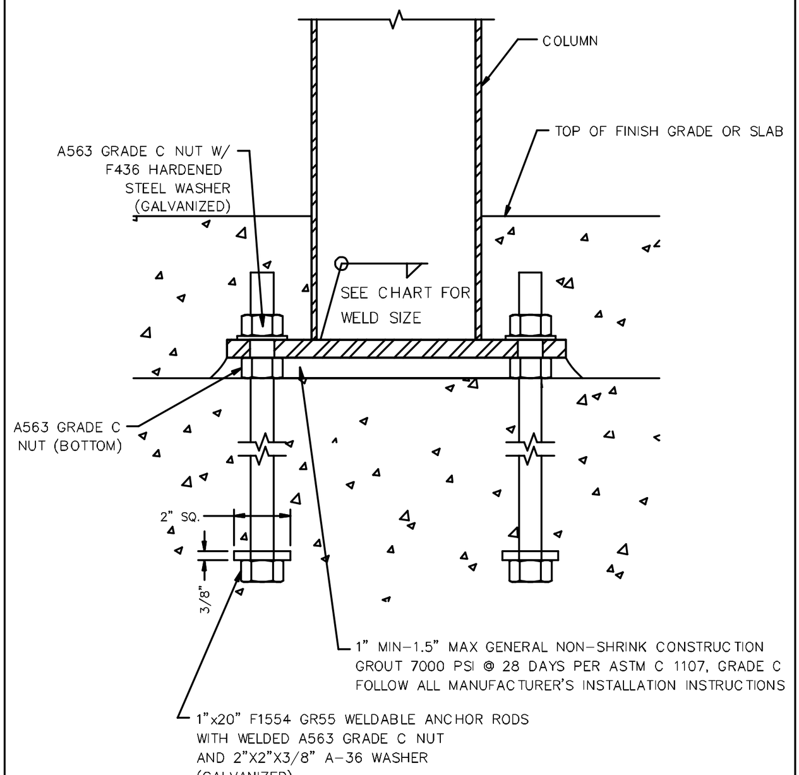


12X8 COLUMN BASE PLATE DETAIL — BP3

JRMA ARCHITECTS ENGINEERS
2700 SATURN ST | BREA, CA 92821
REGISTERED PROFESSIONAL ENGINEER — STRUCTURAL — STATE OF CALIFORNIA
07/29/2021



RG30X64 COLUMN LAYOUT
(3 BAYS)



NOTES:

COLUMN BASE PLATES ARE TO HAVE DOUBLE NUTS. PLACE ONE NUT UNDER THE PLATE AND ONE NUT ON TOP WITH A WASHER UNDER THE NUT.

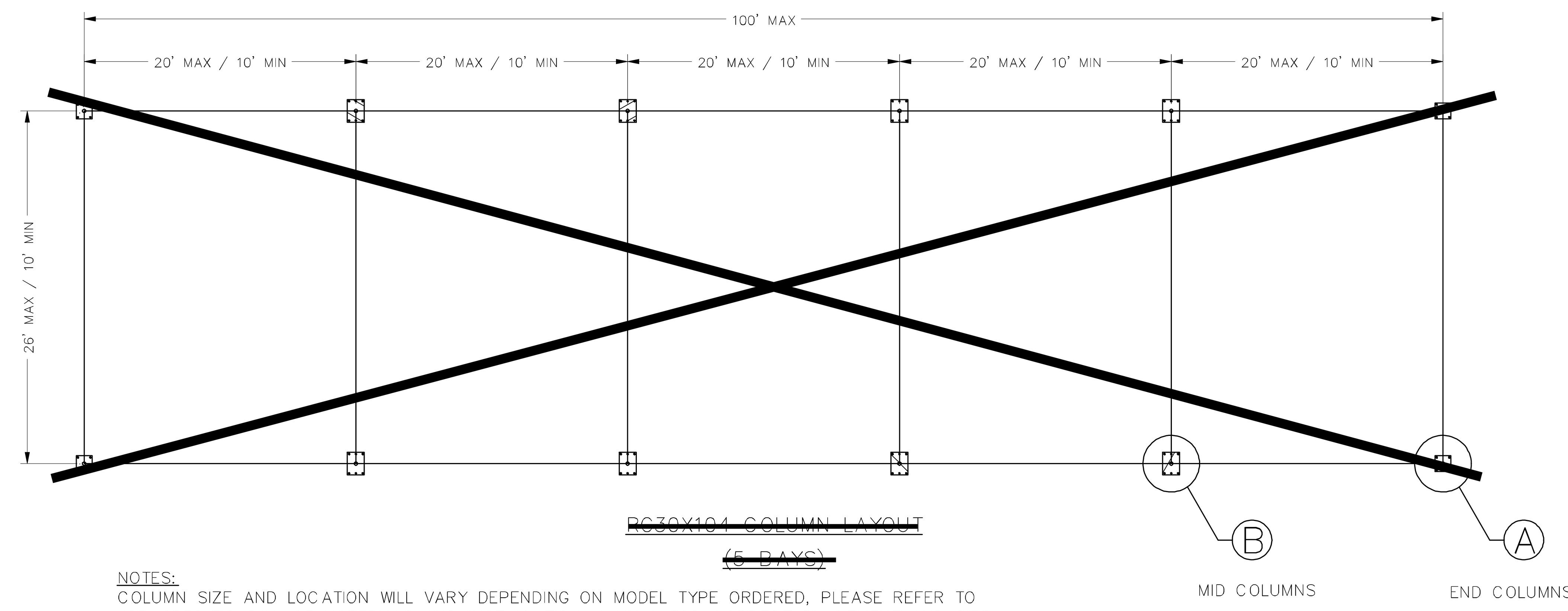
THE BOTTOM NUT CAN BE USED AS A LEVELING NUT.

AFTER COLUMN IS SET AND LEVELED AND THE NUTS HAVE BEEN TIGHTENED THE COLUMN MUST HAVE NON-SHRINK GROUT PLACED UNDER THE BASE PLATE BEFORE COVERING THE BASE WITH CONCRETE.

REFER TO FOOTING DETAIL FOR ROD/NUT LOCATIONS AND SIZE.

FOUNDATION ANCHORS ARE TO BE UNTORQUED.

COLUMN BASE CONNECTION DETAIL — SCALE: N.T.S. — C1



RG30X104 COLUMN LAYOUT
(5 BAYS)

NOTES:
COLUMN SIZE AND LOCATION WILL VARY DEPENDING ON MODEL TYPE ORDERED, PLEASE REFER TO JOB SPECIFIC BILL OF MATERIALS AND INSTALLATION MANUAL FOR CORRECT PLACEMENT AND SIZE.

WHERE CONCRETE SLAB SPECIFIED PORTLAND CEMENT CONCRETE PAVING SHALL HAVE A MEDIUM SALTED (MEDIUM BROOM) FINISH ON ALL SURFACES SLOPED LESS THAN 6% AND SLIP RESISTANT (HEAVY BROOM FINISH) ON ALL SURFACES SLOPED GREATER THAN 6% CBC SECTION 1133B.7.1

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021

30' WIDE RECTANGULAR GABLE

ALL ANCHOR RODS SHALL BE 1"X20" U.N.O.

RG30 - PIER

8' height - End Columns				8' height - End Columns				8' height - End Columns				8' End Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Tension Rebar			Weld
Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	X (in)	Y (in)	Rebar Size	Fillet Weld " W"
30	122	8	6	30	104	8	6	30	94	8	6	14	40	5	5/16

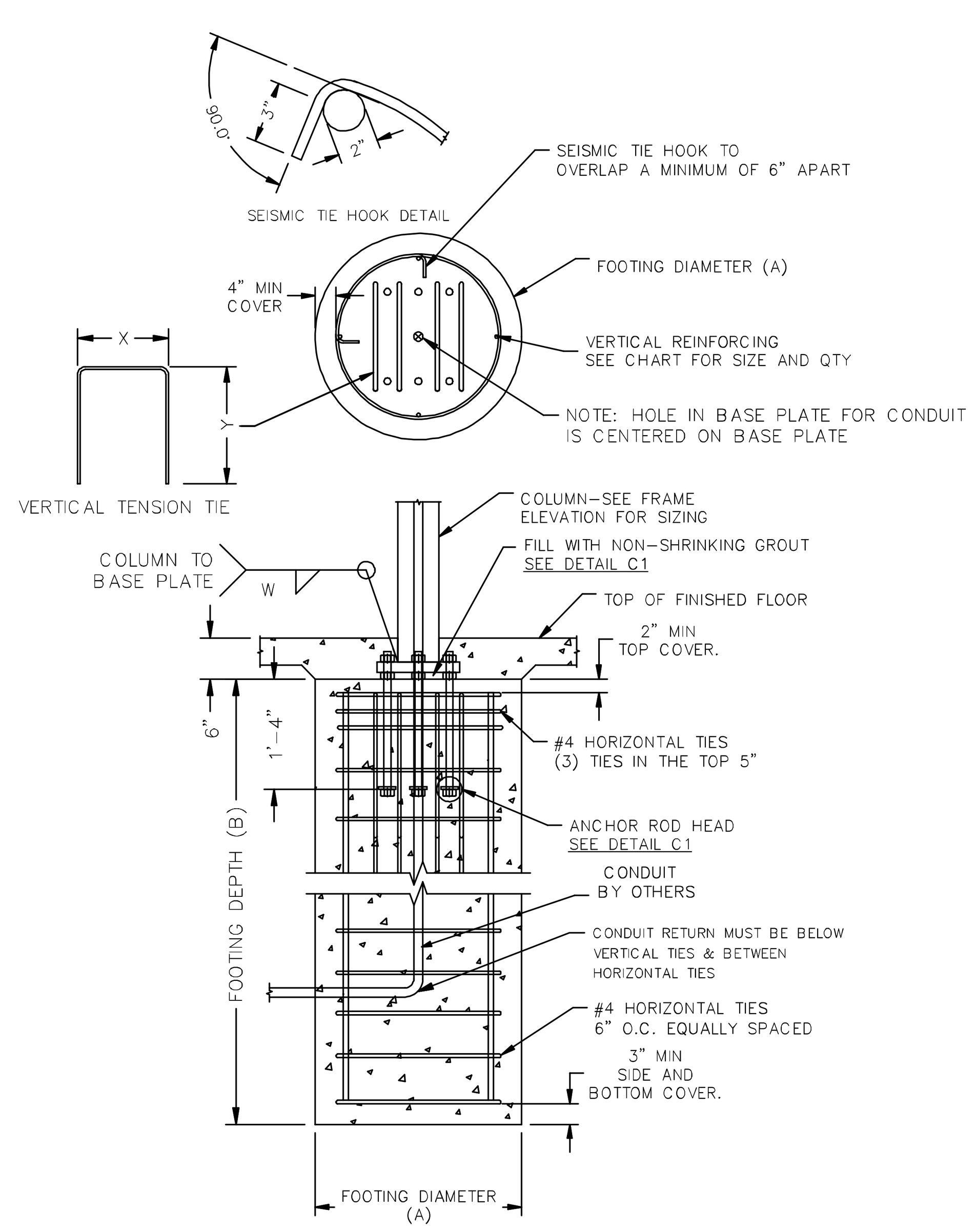
8' height - Side Columns				8' height - SIde Columns				8' height - Side Columns				8' Side Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions			Weld
Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	X (in)	Y (in)	Rebar Size	Fillet Weld " W"
48	138	12	8	36	132	8	8	36	118	8	8	20	40	5	3/8

10' height - End Columns				10' height - End Columns				10' height - End Columns				10' End Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions			Weld
Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	X (in)	Y (in)	Rebar Size	Fillet Weld " W"
30	116	8	6	30	100	8	6	30	90	8	[illegible]	14	40	5	5/16

10' height - Side Columns				10' height - SIde Columns				10' height - Side Columns				10' Side Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions			Weld
Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	X (in)	Y (in)	Rebar Size	Fillet Weld " W"
42	138	10	8	36	124	8	8	36	112	8	8	20	40	5	5/16

12' height - End Columns				12' height - End Columns				12' height - End Columns				12' End Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions			Weld
Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	X (in)	Y (in)	Rebar Size	Fillet Weld " W"
30	122	8	6	30	104	8	6	30	94	8	6	14	40	5	5/16

12' height - Side Columns				12' height - SIde Columns				12' height - Side Columns				12' Side Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions			Weld
Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	Dia (A) (in)	Depth (B) (in)	Vertical Rebar Qty	Rebar Size	X (in)	Y (in)	Rebar Size	Fillet Weld " W"
36	140	8	8	36	120	8	8	36	108	8	8	20	40	5	3/8



SEE DETAILS BP1, BP2 OR BP3 FOR ANCHOR BOLT PATTERNS
B1 & B2 ARE A (4) BOLT PATTERN WHILE B3 IS A (6) BOLT

RG30 - SPREAD

8' End Columns				8' End Columns				8' End Columns				8' End Columns					
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Tension Rebar					Weld
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	X (in)	Y (in)	B (in)	C (in)	Rebar Size	Fillet Weld " W"
66	30	[illegible]	6	60	30	5	6	57	30	5	6	14	22	15.7	17.3	5	5/16

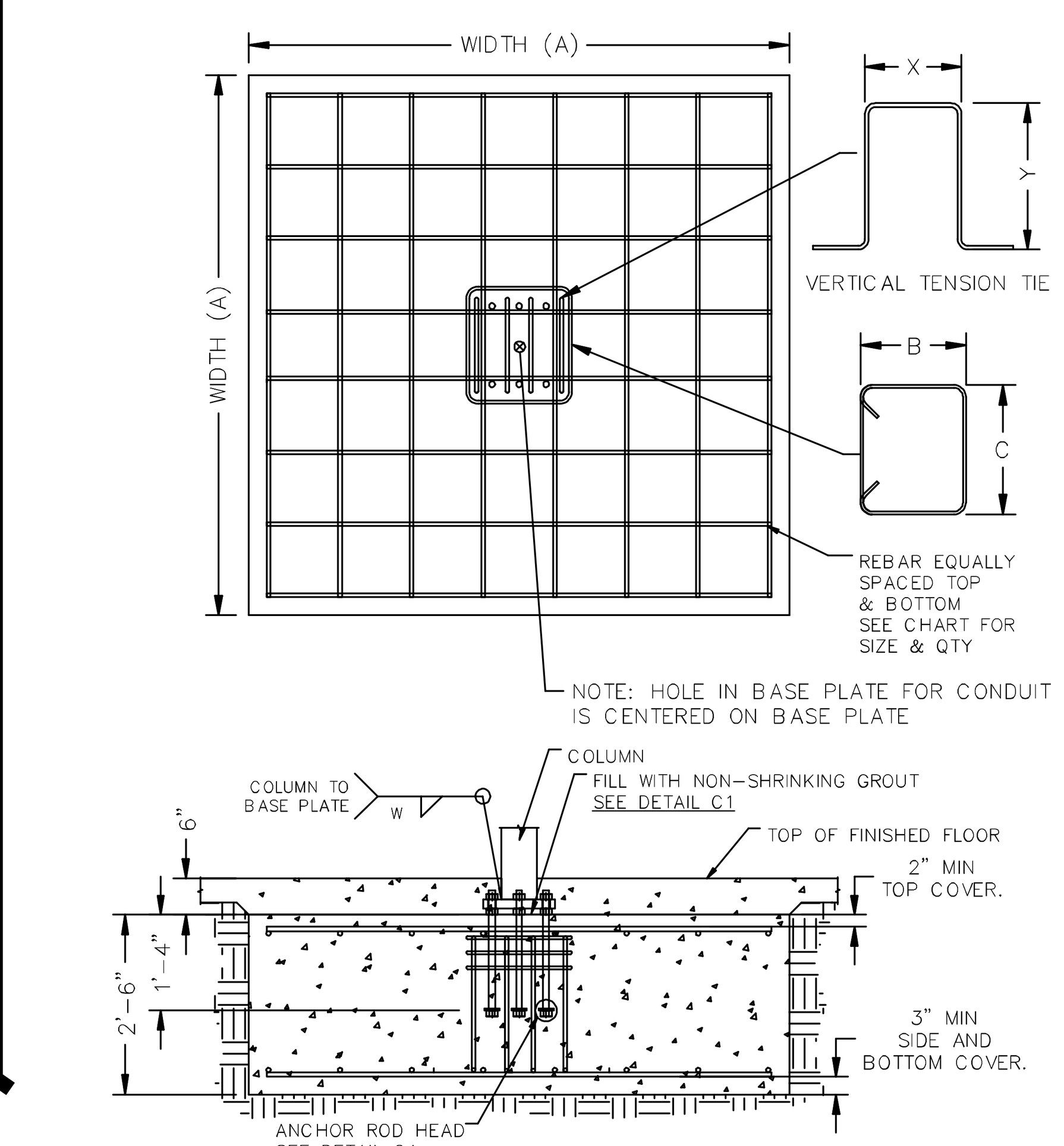
8' Side Columns				8' Side Columns				8' Side Columns				8' Side Columns					
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions					Weld
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	X (in)	Y (in)	B (in)	C (in)	Rebar Size	Fillet Weld " W"
84	30	6	6	75	30	6	6	72	30	5	6	20	22	16.9	23.3	5	3/8

10' End Columns				10' End Columns				10' End Columns				10' End Columns					
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions					Weld
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	X (in)	Y (in)	B (in)	C (in)	Rebar Size	Fillet Weld " W"
66	30	5	6	60	30	5	6	57	30	5	6	14	22	15.7	17.3	5	5/16

10' Side Columns				10' Side Columns				10' Side Columns				10' Side Columns					
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions					Weld
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	X (in)	Y (in)	B (in)	C (in)	Rebar Size	Fillet Weld " W"
84	30	6	6	75	30	6	6	72	30	5	6	20	22	16.9	23.3	5	5/16

12' End Columns				12' End Columns				12' End Columns				12' End Columns					
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions					Weld
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	X (in)	Y (in)	B (in)	C (in)	Rebar Size	Fillet Weld " W"
69	30	5	6	63	30	5	6	63	30	5	6	14	22	15.7	19.3	5	5/16

12' Side Columns				12' Side Columns				12' Side Columns				12' Side Columns					
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing				Rebar Dimensions					Weld
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	X (in)	Y (in)	B (in)	C (in)	Rebar Size	Fillet Weld " W"
84	30	6	6	75	30	6	6	72	30	5	6	20	22	16.9	23.3	5	3/8



SEE DETAILS BP1, BP2 OR BP3 FOR ANCHOR BOLT PATTERNS
B1 & B2 ARE A (4) BOLT PATTERN WHILE B3 IS A (6) BOLT

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

30' WIDE RECTANGULAR GABLE FOUNDATION PLAN

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

1455 LINCOLN AVE
HOLLAND MI, 49423
616.396.0919
800.748.0985
616.396.0944 FX

LS3.0

S:\Engineering\Inventor\DSA 2019\PC 2019 RG DSA\30 FOOT WIDE\DSA RG30-P4.iam

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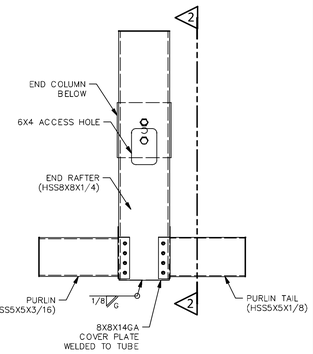
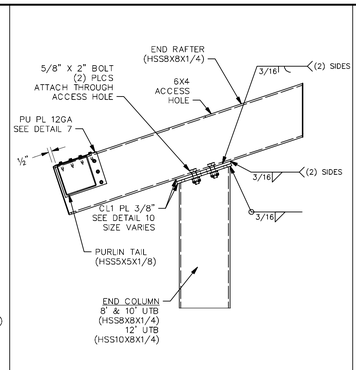
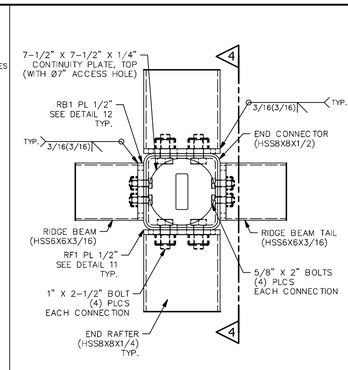


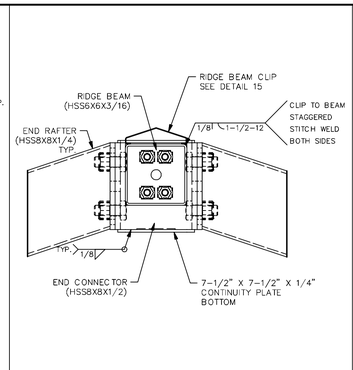
PLAN – PURLIN & END RAFTER CONNECTIONS @ END COLUMN | 1



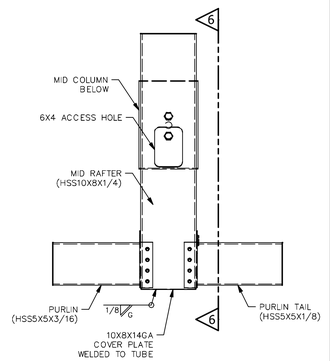
VIEW – PURLIN & END RAFTER CONNECTIONS @ END COLUMN | 2



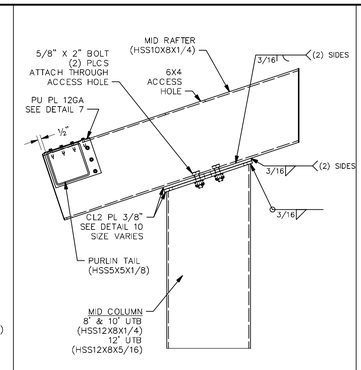
PLAN – END RAFTER & RIDGE BEAM CONNECTIONS @ END CONNECTOR | 3



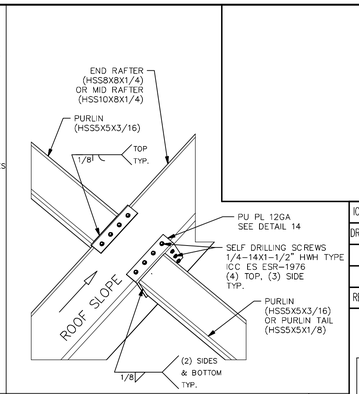
VIEW – END RAFTER & RIDGE BEAM CONNECTIONS @ END CONNECTOR | 4



PLAN – PURLIN & MID RAFTER CONNECTIONS @ MID COLUMN | 5



VIEW – PURLIN & MID RAFTER CONNECTIONS @ MID COLUMN | 6



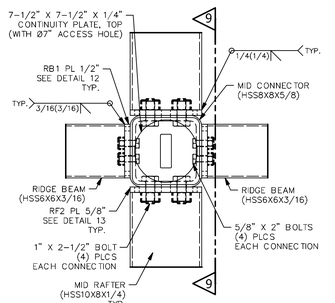
ISOMETRIC – PURLIN CONNECTIONS @ RAFTER | 7

ICON STD	RG/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

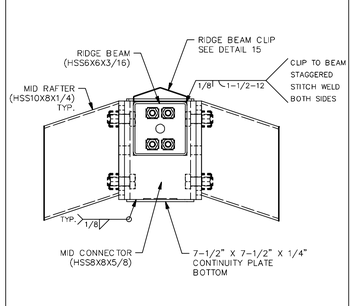
JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST IRVINE, CA 92821
T.714.524.1870 F.714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER MICHAEL D. JOHNSON 54092 STRUCTURAL STATE OF CALIFORNIA

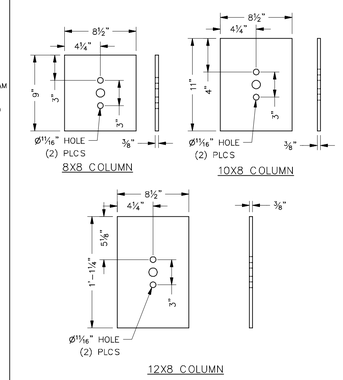
07/29/2021



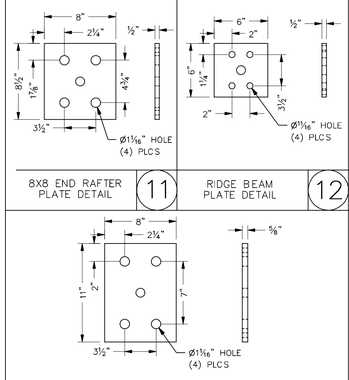
PLAN – MID RAFTER & RIDGE BEAM CONNECTIONS @ MID CONNECTOR | 8



VIEW – MID RAFTER & RIDGE BEAM CONNECTIONS @ MID CONNECTOR | 9



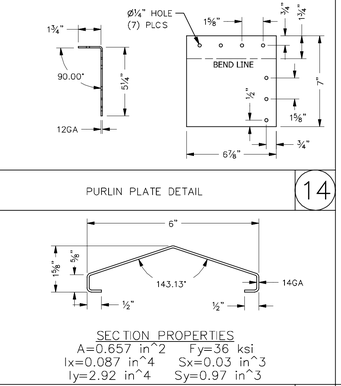
COLUMN TO RAFTER PLATE DETAILS | 10



8X8 END RAFTER PLATE DETAIL | 11

RIDGE BEAM PLATE DETAIL | 12

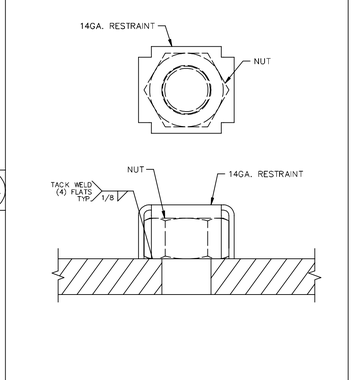
10X8 MID RAFTER PLATE DETAIL | 13



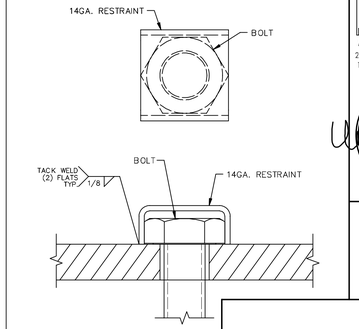
PURLIN PLATE DETAIL | 14

SECTION PROPERTIES
A=0.657 in^2 Fy=36 ksi
Ix=0.087 in^4 Sx=0.03 in^3
Iy=2.92 in^4 Sy=0.97 in^3

RIDGE BEAM CLIP (6" WIDE BEAM) | 15



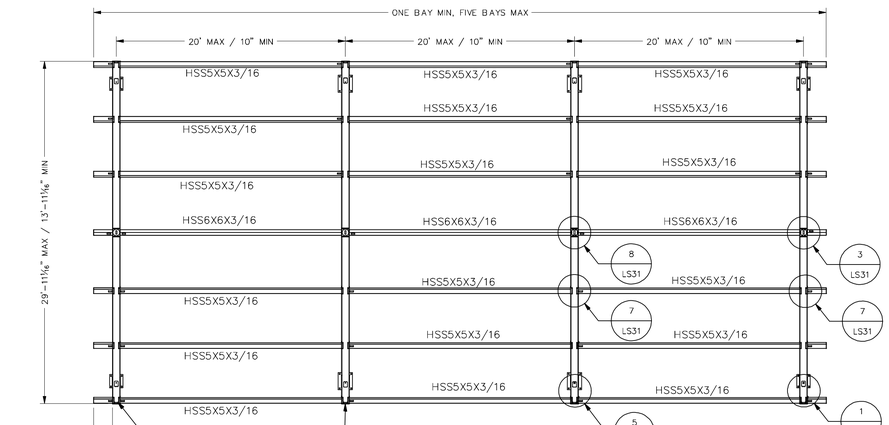
TYPICAL NUT RESTRAINING SYSTEM | NR



ALL BOLTS ARE ASTM F3125 GR A325 HIGH STRENGTH BOLTS PER SHEET LS1.0

TYPICAL BOLT RESTRAINING SYSTEM | BR

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021



PLAN VIEW

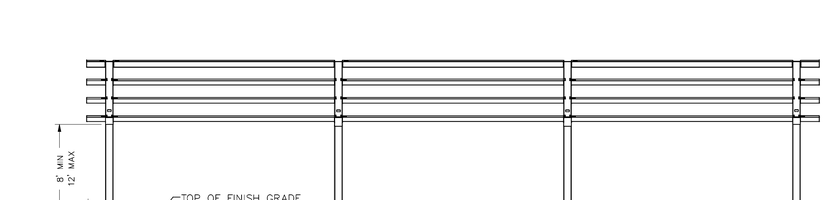
*NOTE:
QUANTITIES WILL VARY DEPENDING ON SHELTER SIZE ORDERED, PLEASE REFER TO JOB SPECIFIC BILL OF MATERIALS AND INSTALLATION MANUAL.

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	LENGTH	UNIT WEIGHT
1	4		END COLUMN	**SEE NOTE BELOW		285 lbmass
2	*		MID COLUMN	**SEE NOTE BELOW		381 lbmass
3	4		END RAFTER	HSS8X8X1/4		414 lbmass
4	*		MID RAFTER	HSS10X8X1/4		475 lbmass
5	*		PURLIN	HSS5X5X3/16		234 lbmass
6	6		PURLIN TAIL 1	HSS5X5X1/8		15 lbmass
7	6		PURLIN TAIL 2	HSS5X5X1/8		15 lbmass
8	*		RIDGE BEAM	HSS6X6X3/16		333 lbmass
9	2		RIDGE BEAM TAIL	HSS6X6X3/16		34 lbmass
10	2		END CONNECTOR	HSS8X8X1/2		38 lbmass
11	*		MID CONNECTOR	HSS8X8X5/8		57 lbmass

**NOTE:
MATERIAL WILL VARY DEPENDING ON SHELTER SIZE ORDERED.
☐ END COLUMN 8' UTB – (HSS8X8X1/4)
☐ MID COLUMN 8' UTB – (HSS12X8X5/16)

☐ END COLUMN 10' UTB – (HSS8X8X1/4)
☐ MID COLUMN 10' UTB – (HSS12X8X5/16)

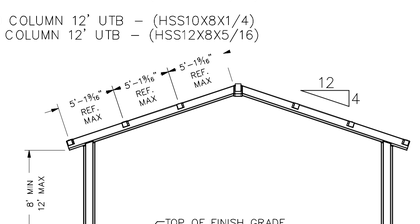
☒ END COLUMN 12' UTB – (HSS10X8X1/4)
☐ MID COLUMN 12' UTB – (HSS12X8X5/16)



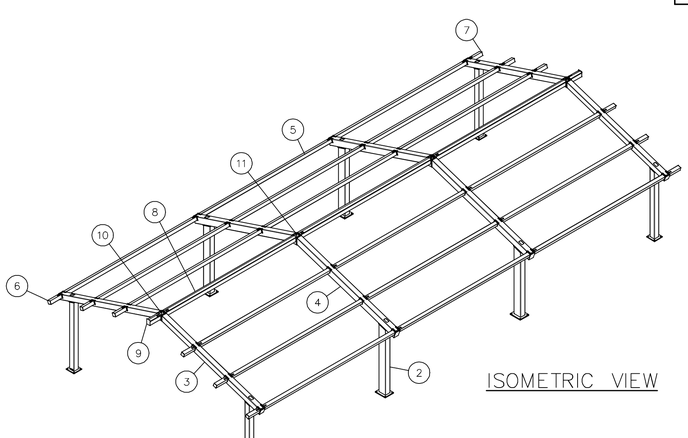
FRONT VIEW

96" MIN IF USED OVER ACCESSIBLE PARKING OR ACCESS AISLES

114" MIN IF LOCATED OVER ACCESSIBLE PASSENGER LOADING ZONES



SIDE VIEW



ISOMETRIC VIEW

MODEL DESIGNATION	
RG30X24	1 BAY
RG30X44	2 BAY
RG30X64	3 BAY
RG30X84	4 BAY
RG30X104	5 BAY

MODEL SHOWS 3 BAY SHELTER (RG30X64)
PLEASE REFER TO ANCHOR BOLT LAYOUT SHEET FOR CORRECT COLUMN PLACEMENT BASED ON SIZE ORDERED

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

30' WIDE RECTANGULAR GABLE FRAMING & CONNECTION DETAILS

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

1455 LINCOLN AVE
HOLLAND MI, 49423

616.396.0919
800.748.0985
616.396.0944 FX

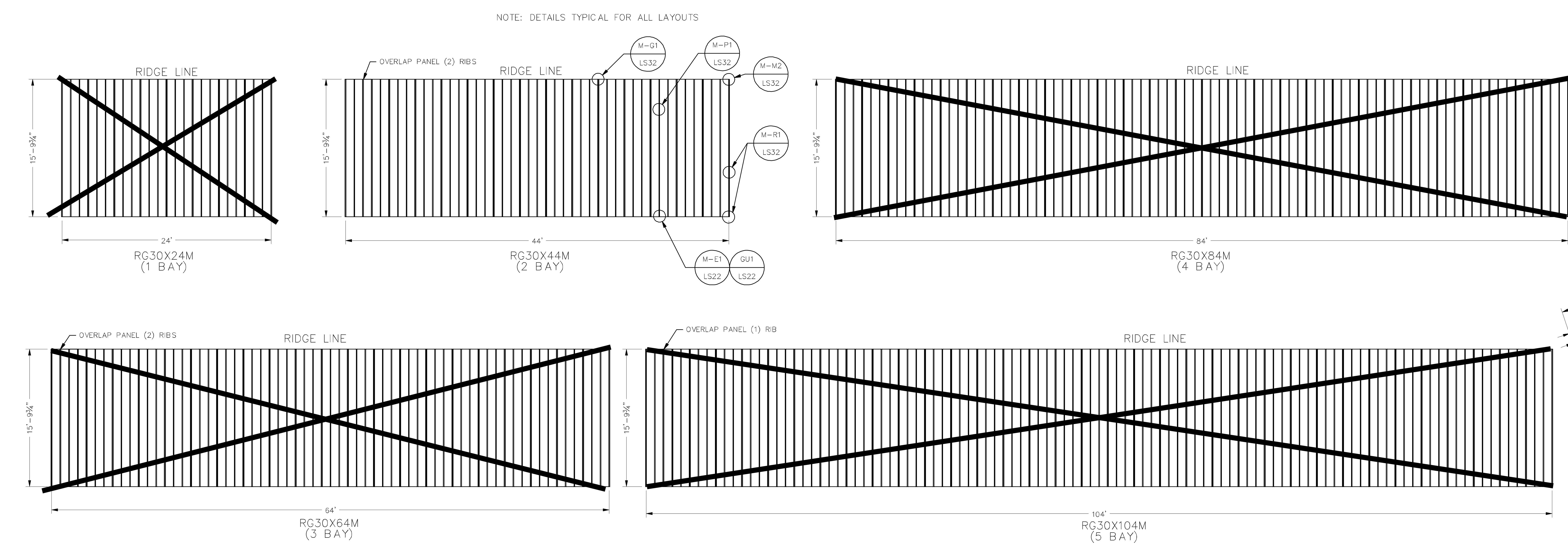
LS3.1

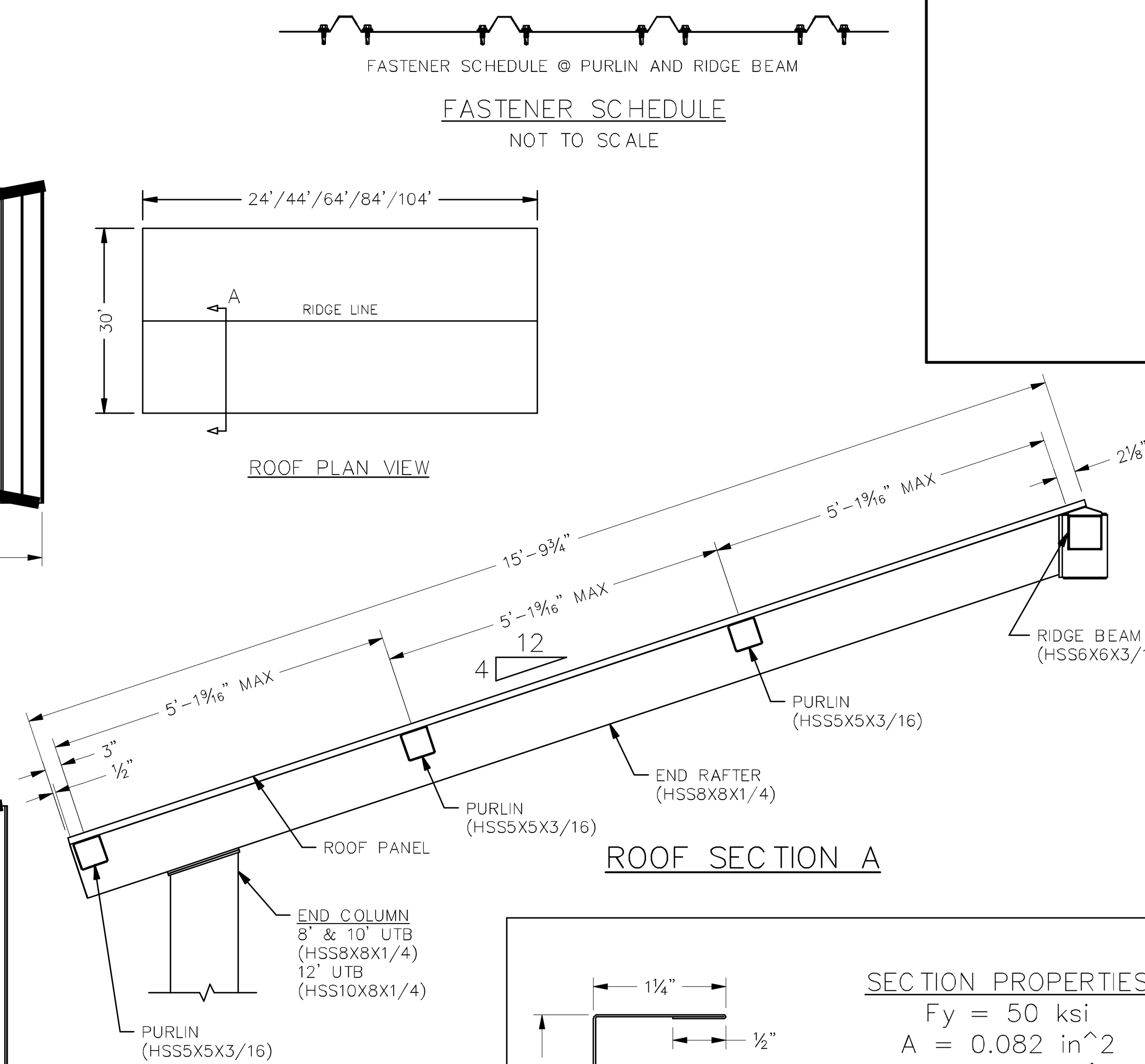
S:\Engineering\Inventor\DSA 2019\PC 2019 RG DSA\New folder\DSA RG30-P4.dwn

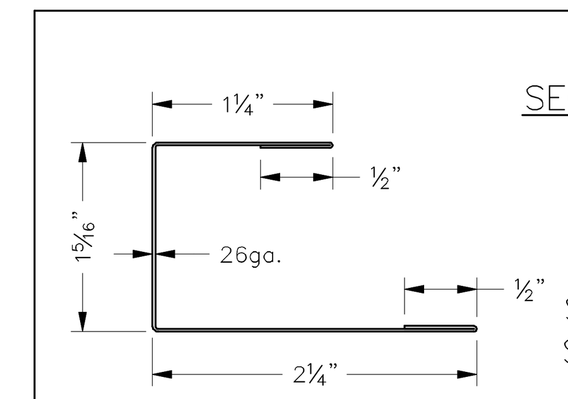
PRINTED ON :

30' WIDE RECTANGULAR GABLE

NOTE: DETAILS TYPICAL FOR ALL LAYOUTS







SECTION PROPERTIES

Fy = 50 ksi

A = 0.082 in^2

Ix = 0.029 in^4

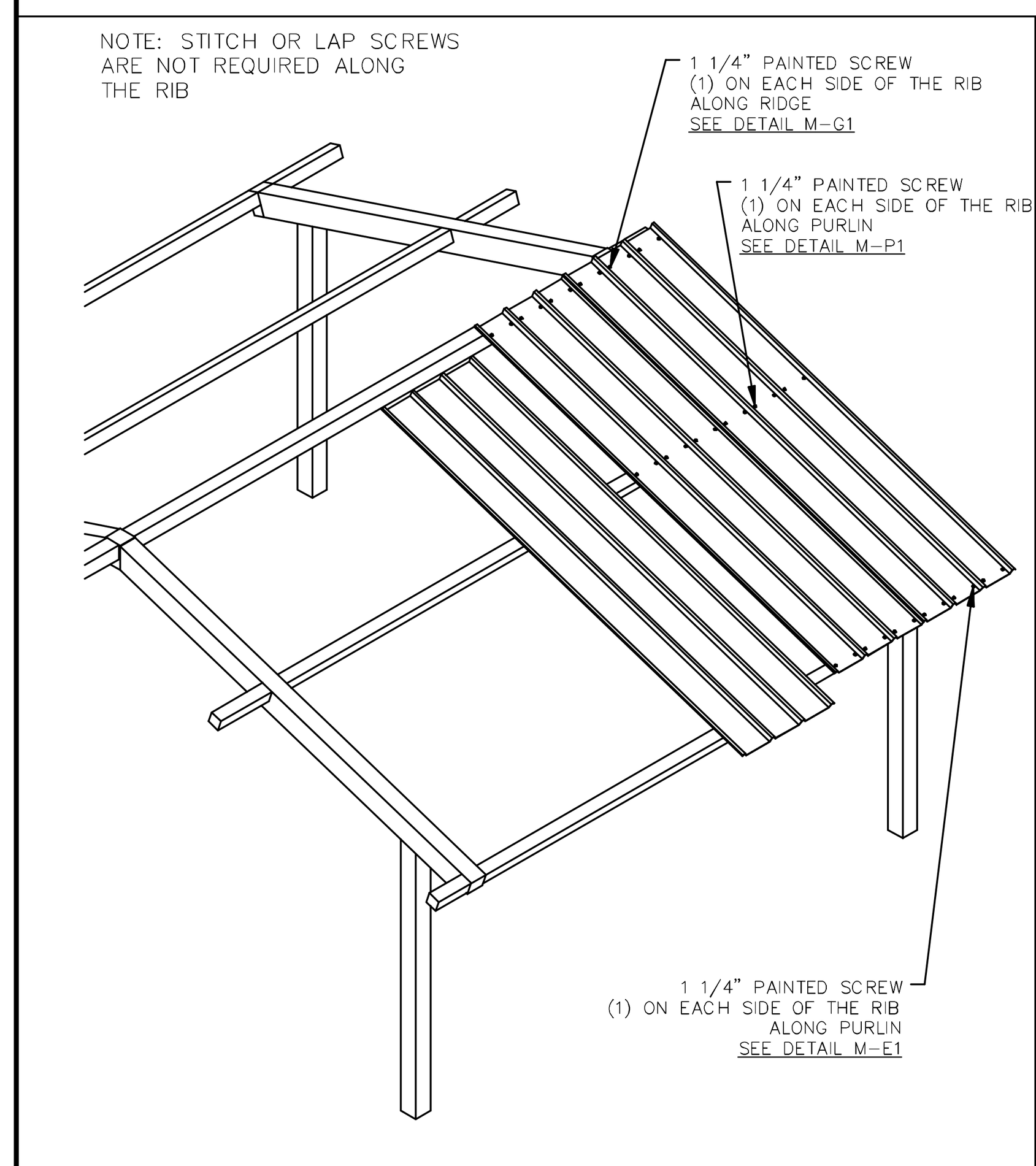
Iy = 0.039 in^4

Sx = 0.019 in^3

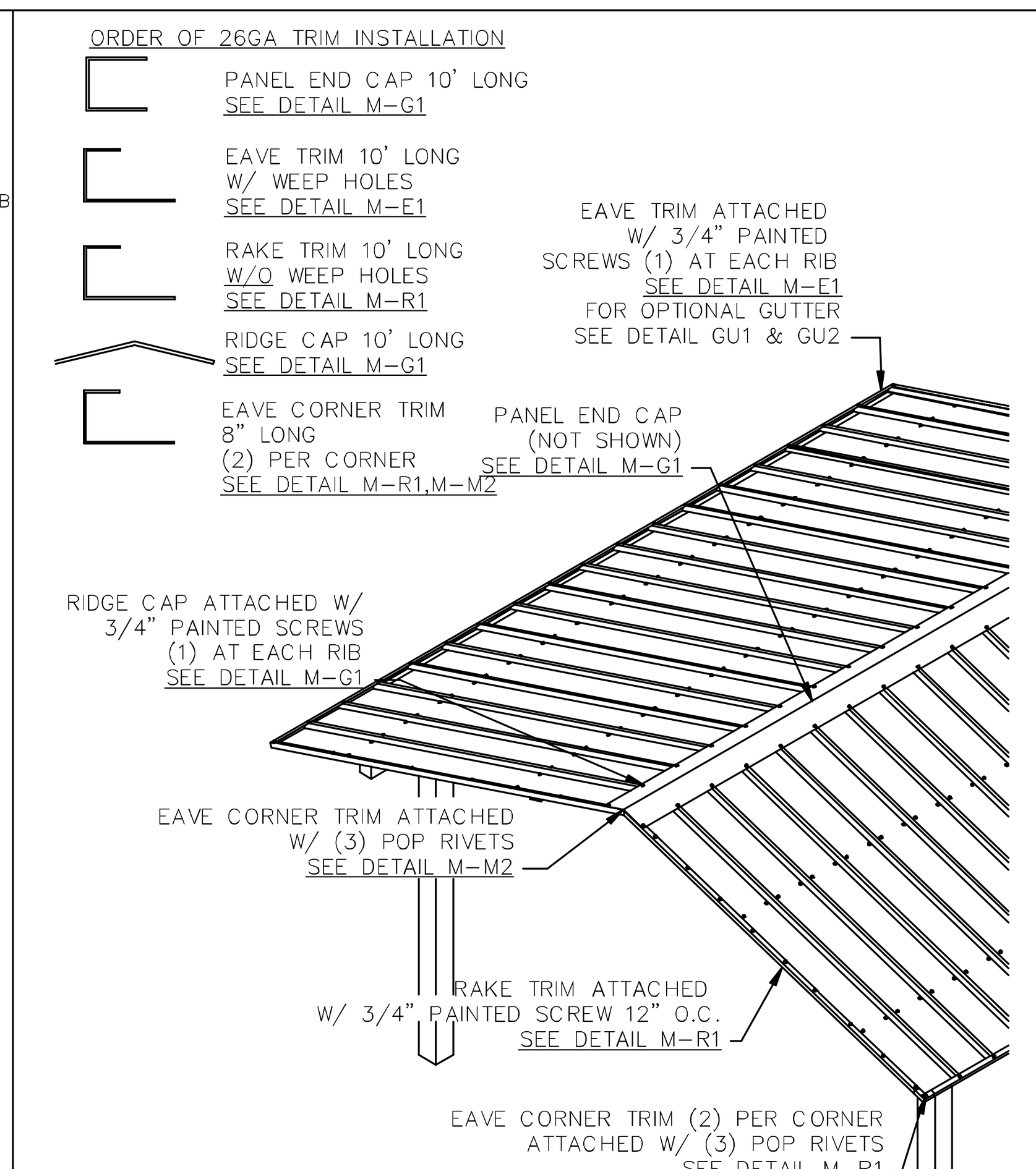
Sy = 0.049 in^3

MULTI RIB EAVE TRIM (1)

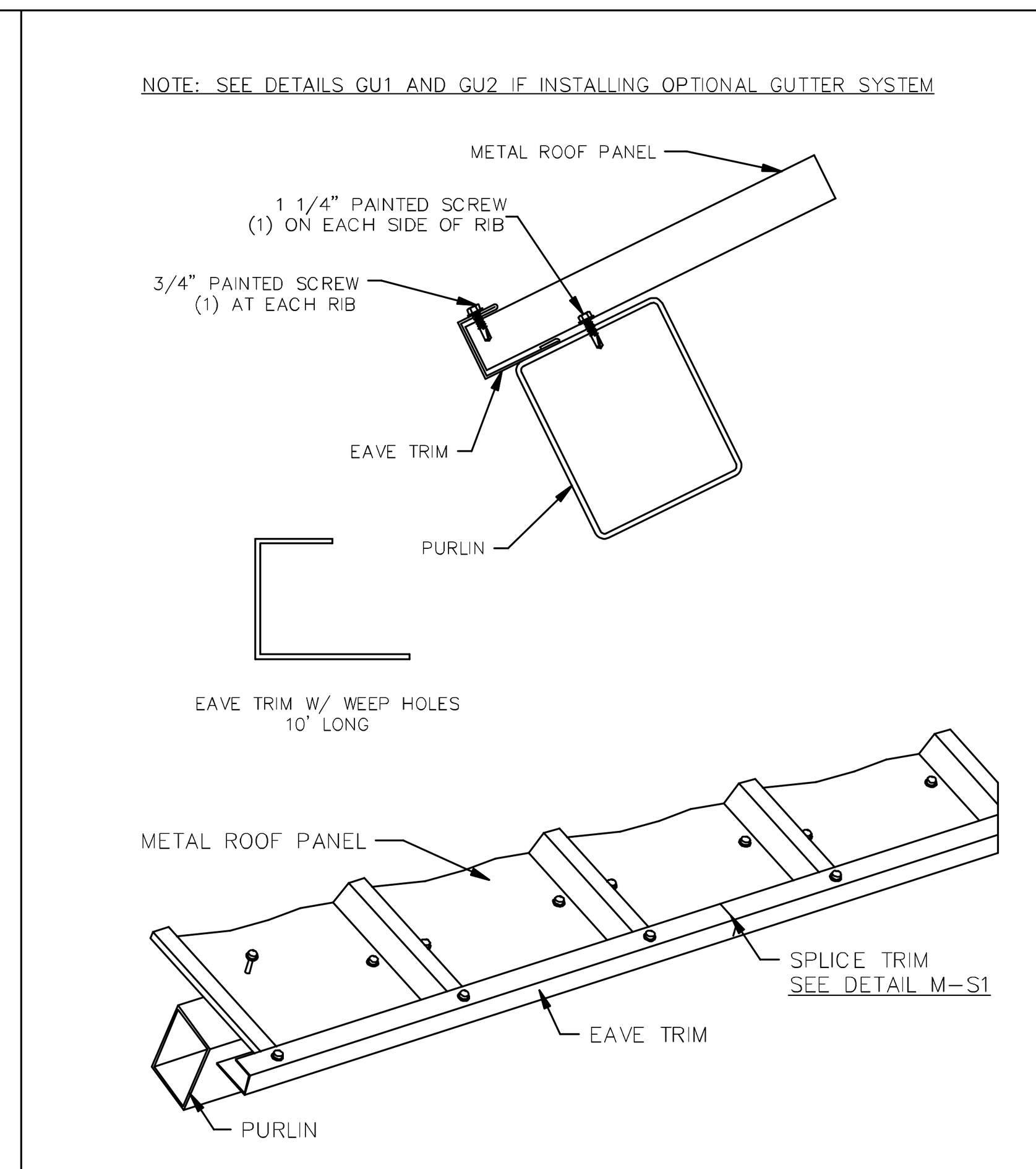
30' WIDE RECTANGULAR GABLE MULTI RIB ROOFING



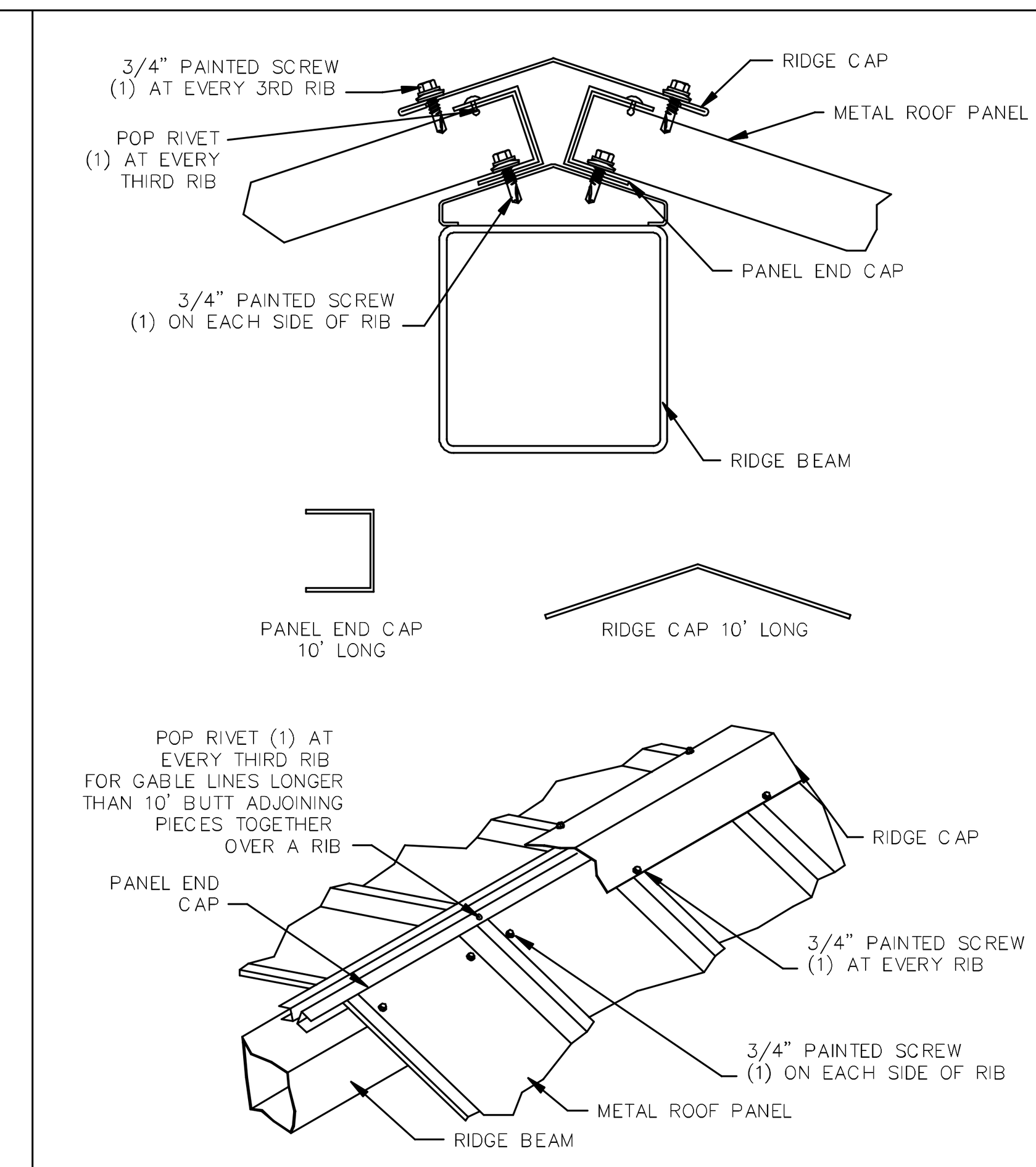
MULTI RIB ROOF INSTALLATION — ROOF



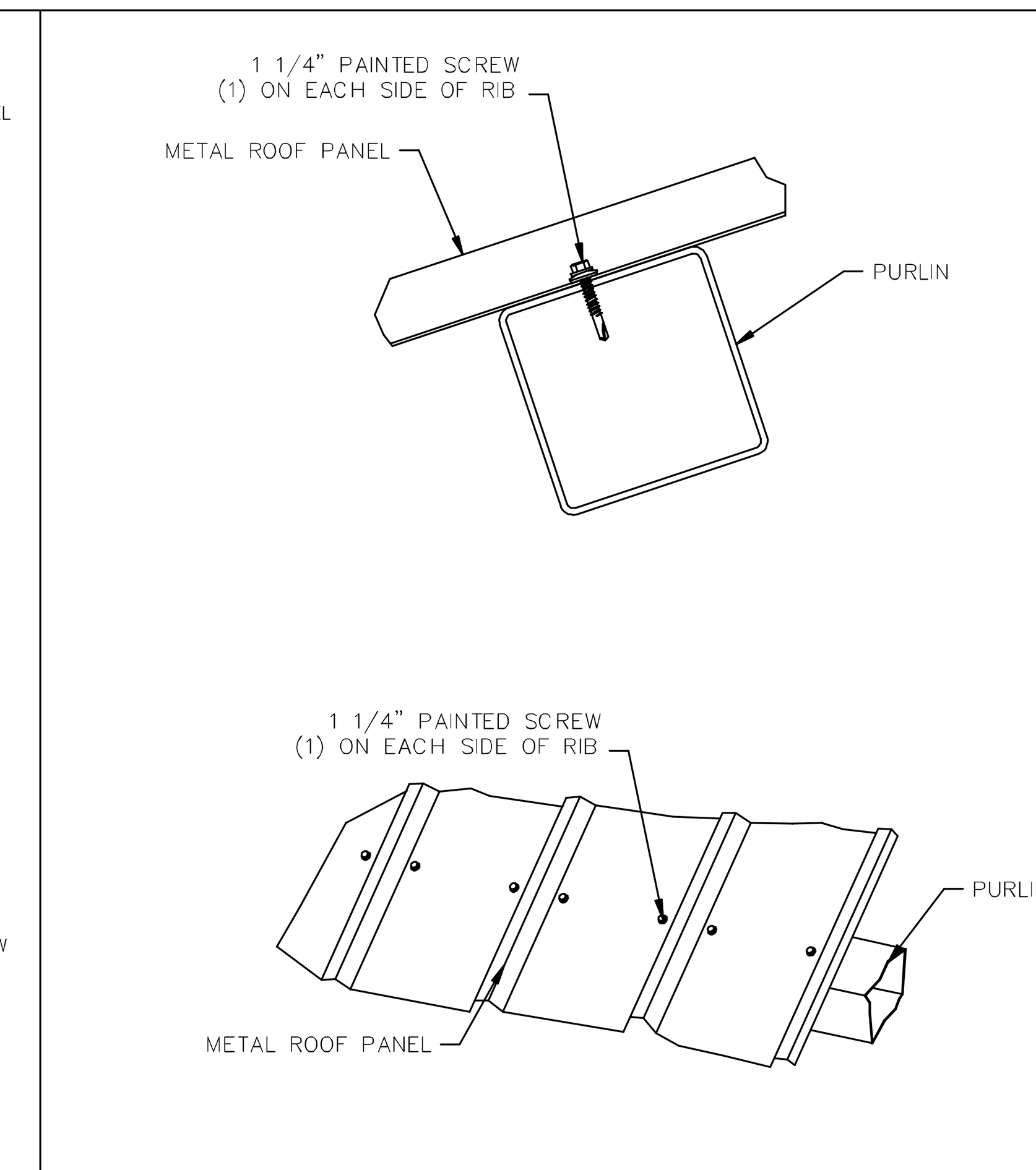
MULTI RIB TRIM INSTALLATION — TRIM



MULTI RIB ROOF EAVE CONNECTION DETAIL — M-E1



MULTI RIB ROOF CONNECTION AT RIDGE — M-G1

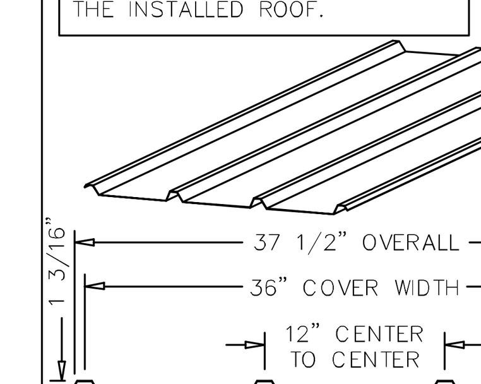


MULTI RIB ROOF CONNECTION AT PURLIN — M-P1

ROOF NOTES

ATTENTION INSTALLERS:
METAL SHAVINGS LEFT ON ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH!

DRILLING OR INSTALLING ROOF FASTENERS WILL CAUSE METAL SHAVINGS. THESE SHAVINGS MUST BE CAREFULLY REMOVED AT THE END OF EACH DAY BY EITHER SWEEPING OR BRUSHING THE INSTALLED ROOF.

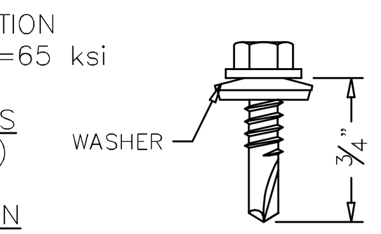


MULTI RIB PANEL SECTION
24 ga. Fy=50 ksi Fu=65 ksi

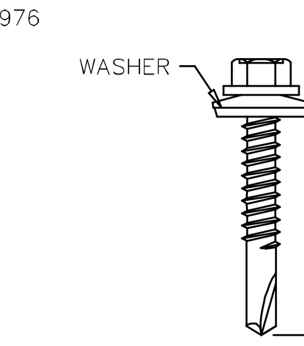
SECTION PROPERTIES
(PER FT. OF WIDTH)

TOP IN COMPRESSION
Ix=0.052 in^4
Se=0.0575 in^3
Ma=1.723 in-kips

BOTTOM IN COMPRESSION
Ix=0.031 in^4
Se=0.0495 in^3
Ma=1.483 in-kips



3/4" PAINTED SCREW
1/4-14 x 3/4"
HWH
ICC ESR-1976



1 1/4" PAINTED SCREW
12-14 x 1 1/4"
HWH
ICC ESR-1976

INSTALLED CORRECTLY	INSTALLED TOO TIGHT	INSTALLED TOO LOOSE
THE SEALING MATERIAL SLIGHTLY VISIBLE AROUND THE METAL WASHER	THE SEALING MATERIAL IS DEFORMED BEYOND THE EDGE OF THE METAL WASHER	THE SEALING MATERIAL IS NOT VISIBLE AROUND THE EDGE OF THE METAL WASHER

THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE METAL ROOFING SYSTEM. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. CHANGES TO THE DETAILS MAY BE REQUIRED DUE TO FIELD CONDITIONS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL INSTALLATION INSTRUCTION MATERIAL BEFORE STARTING WORK.

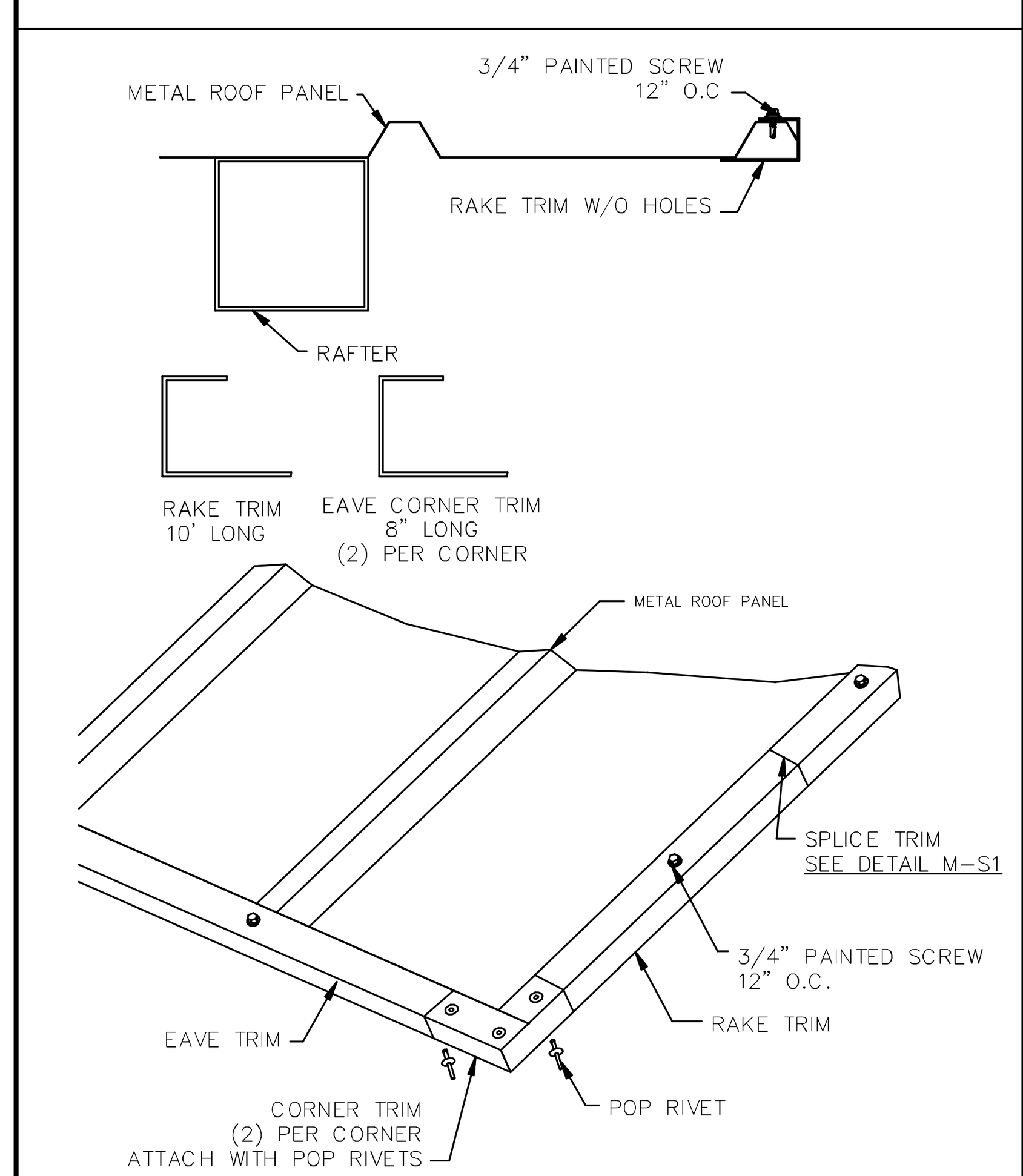
THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

ERECTORS SHALL BE RESPONSIBLE TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

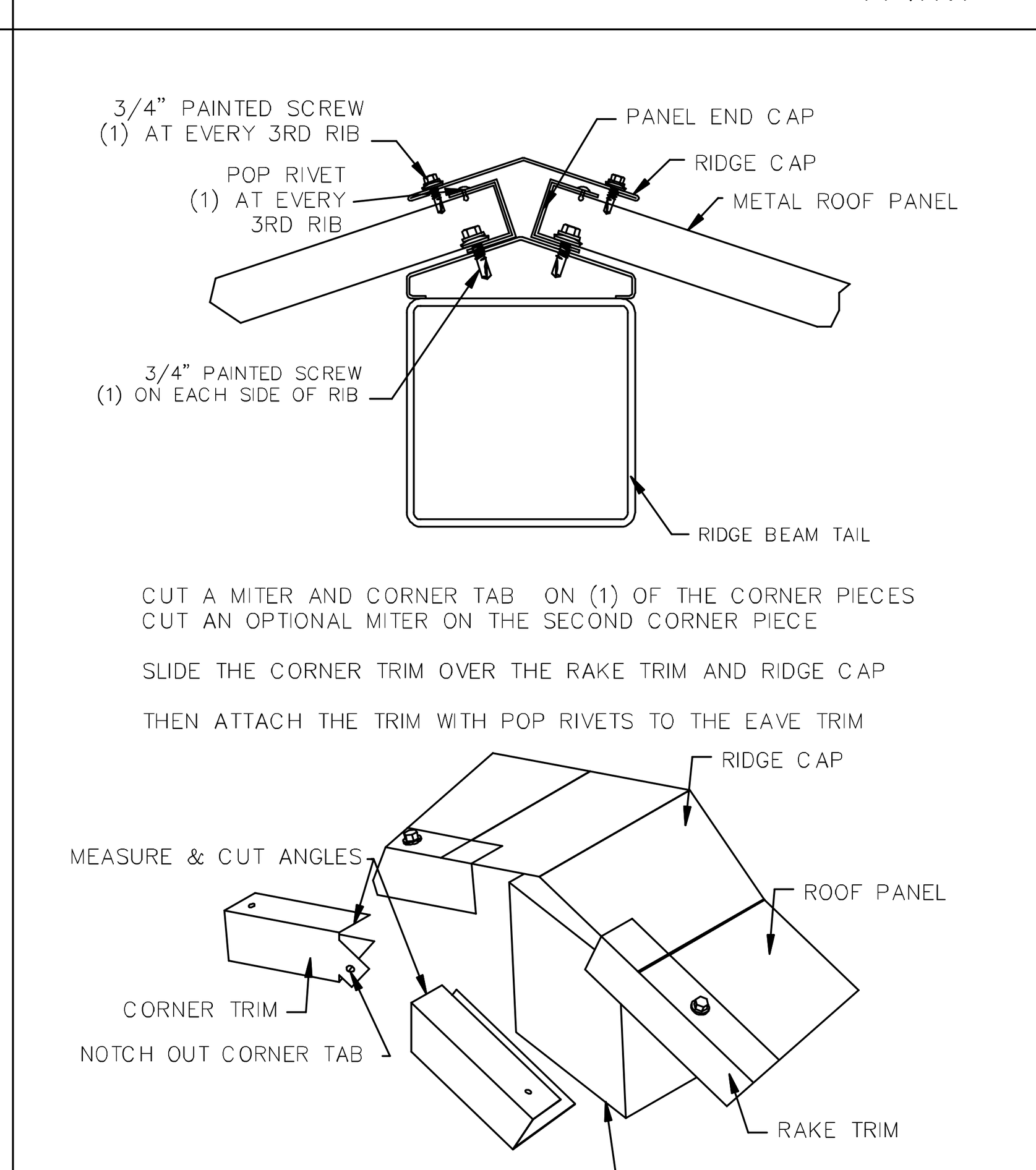
FOR THE BEST APPEARANCE ALL TRIM AND FLASHING SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ALL EXPOSED FASTENERS EQUALLY SPACED.

SOME FIELD CUTTING AND/OR FITTING OF PANELS, TRIM AND FLASHING IS TO BE EXPECTED BY THE ERECTOR. MINOR FIELD CORRECTIONS ARE PART OF NORMAL ERECTION WORK.

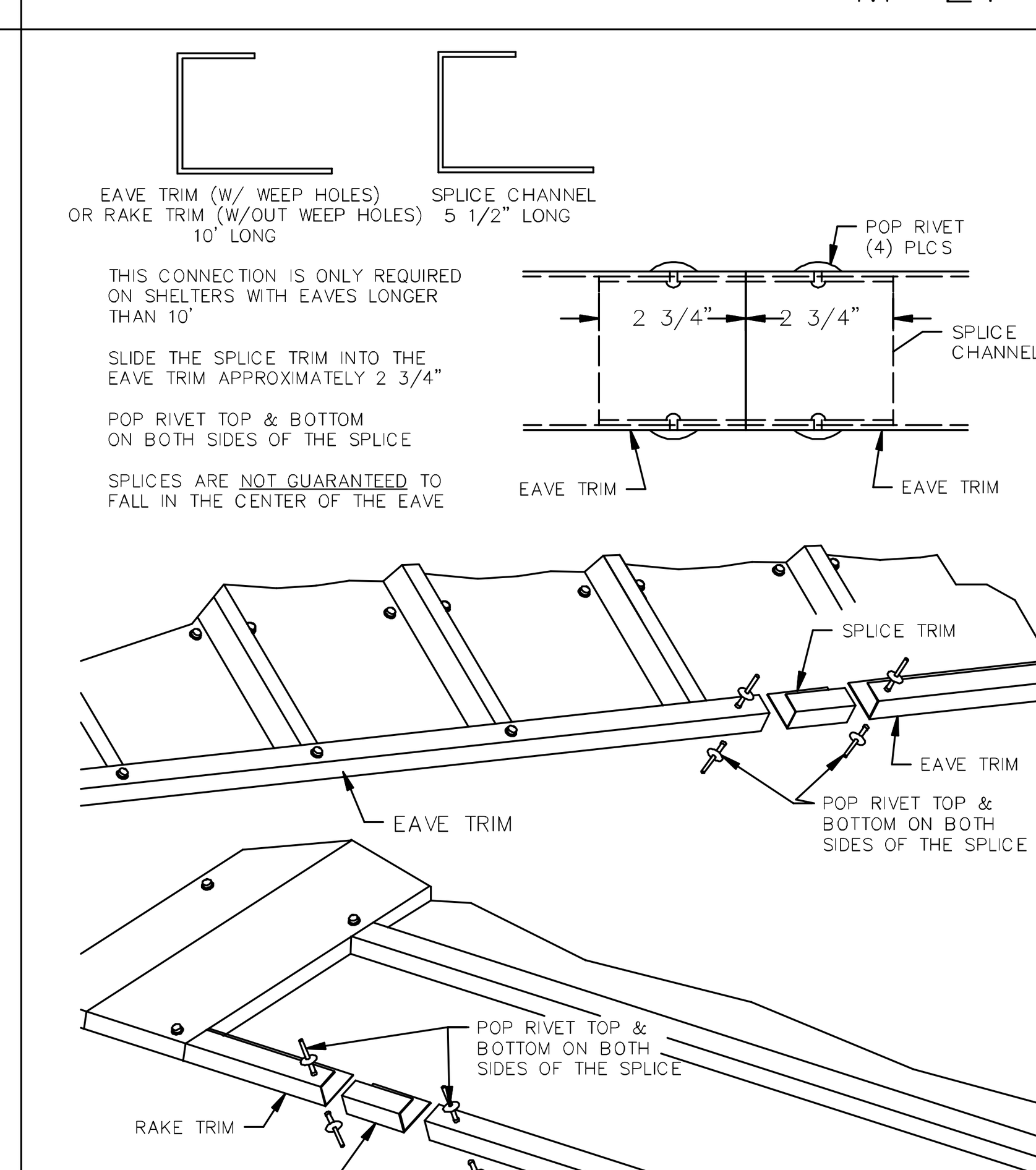
THE INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN AND WORKMANSHIP SHALL MEET THE BEST INDUSTRY STANDARDS.



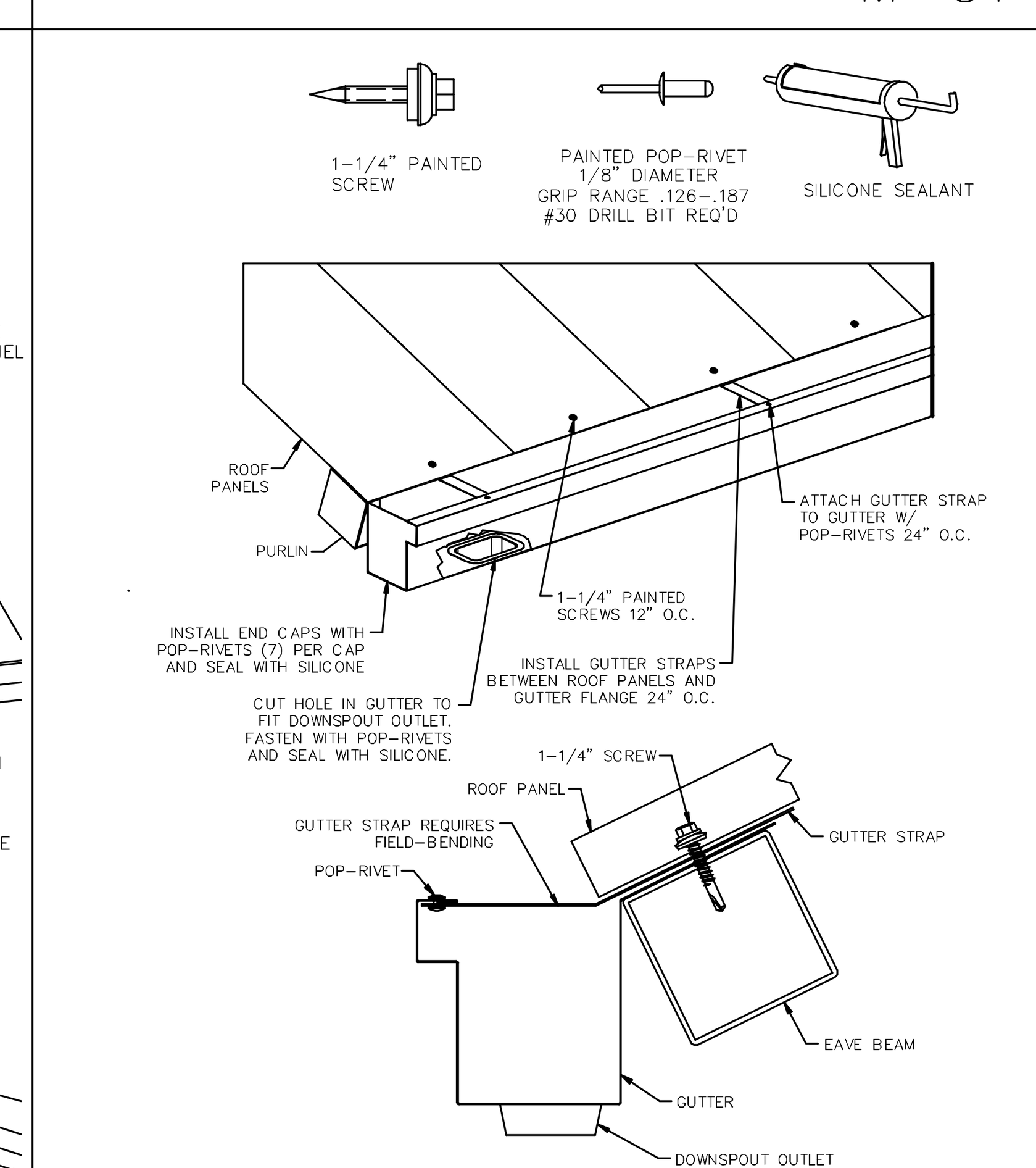
MULTI RIB ROOF CONNECTION AT RAKE — M-R1



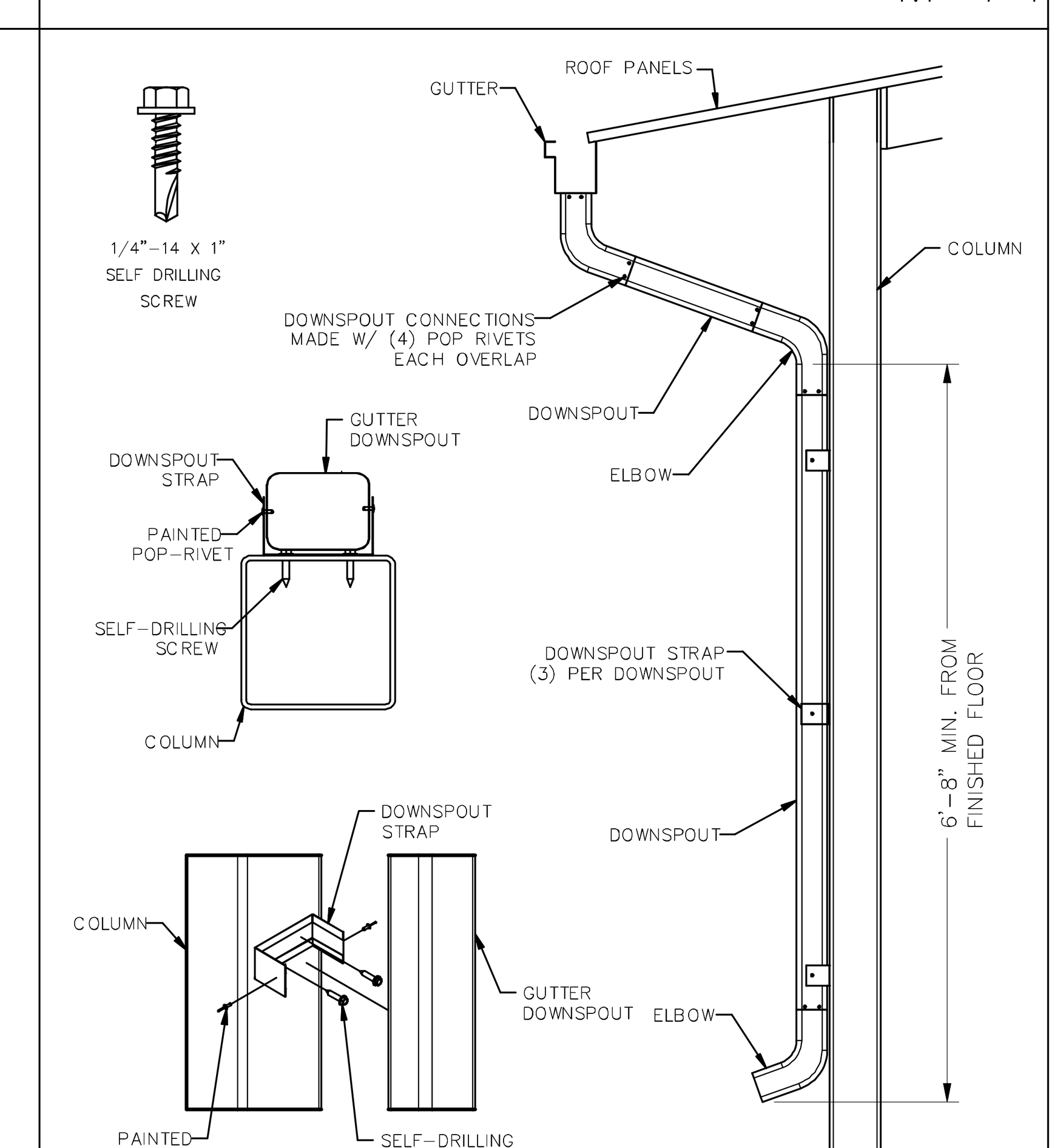
MULTI RIB ROOF CORNER CONNECTION DETAIL — M-M2



MULTI RIB ROOF SPLICE CONNECTION DETAIL — M-S1



OPTIONAL GUTTER INSTALLATION — GU1
MULTI RIB ROOF



OPTIONAL GUTTER SECTION — GU2
MULTI RIB ROOF

ICON STD	RG/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

JRMA ARCHITECTS ENGINEERS
2700 SATURN ST | BREA, CA 92821
T. 714.524.1870 | F. 714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER — STRUCTURAL — STATE OF CALIFORNIA — 07/29/2021

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021

30' WIDE RECTANGULAR GABLE MULTI RIB ROOFING PLAN

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

1455 LINCOLN AVE
HOLLAND MI, 49423
616.396.0919
800.748.0985
616.396.0944 FX

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

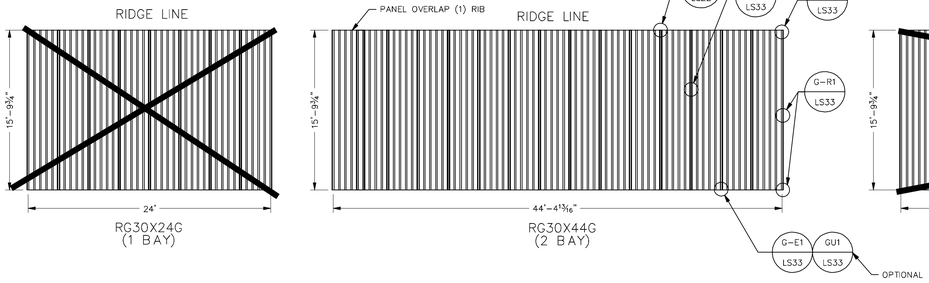
LS3.2

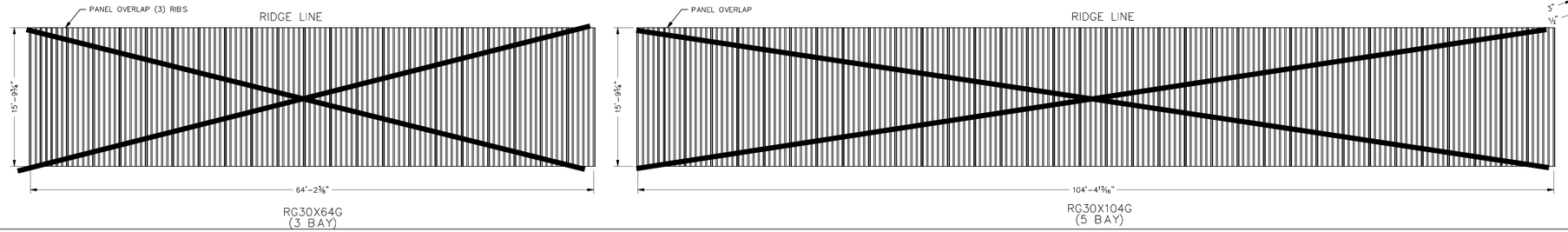
S:\Engineering\Inventor\Standard Parts\ROOF PARTS\EAVE TRIM.ipt

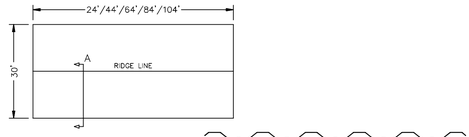
PRINTED ON :

30' WIDE RECTANGULAR GABLE MULTI RIB ROOFING

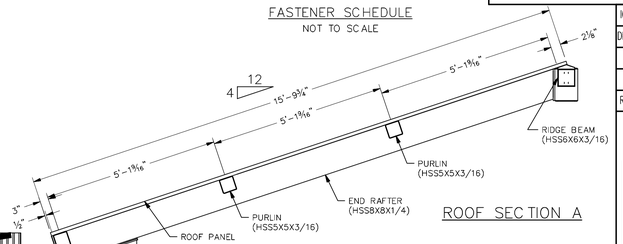
NOTE: DETAILS TYPICAL FOR ALL LAYOUTS



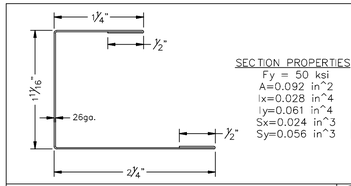




FASTENER SCHEDULE
NOT TO SCALE



ROOF SECTION A



SECTION PROPERTIES
Fy = 50 ksi
A=0.092 in^2
Ix=0.028 in^4
Iy=0.061 in^4
Sx=0.024 in^3
Sy=0.056 in^3

MEGA RIB EAVE TRIM (1)

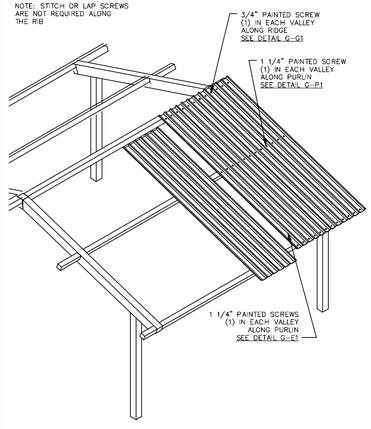
ICON STD	RG/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST BREA, CA 92821
T.714.524.1870 F.714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER
MICHAEL D. JOHNSON
S5992
STRUCTURAL
STATE OF CALIFORNIA

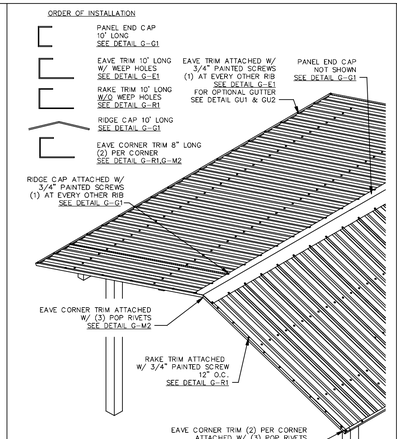
07/29/2021

NOTE: STITCH OR LAP SCREWS ARE NOT REQUIRED ALONG THE RIB



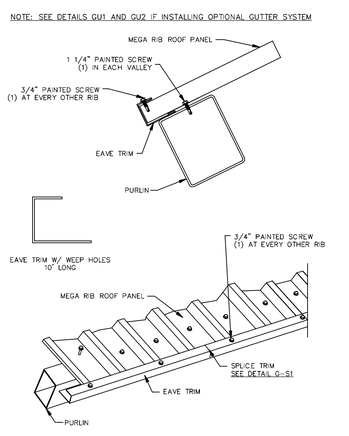
MEGA RIB ROOF INSTALLATION — ROOF

ORDER OF INSTALLATION

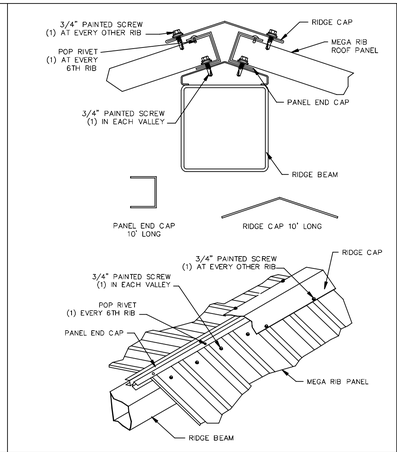


MEGA RIB TRIM INSTALLATION — TRIM

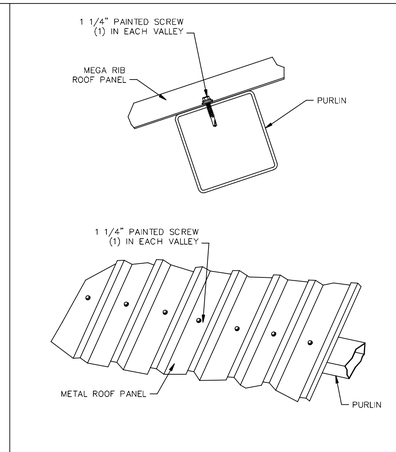
NOTE: SEE DETAILS GU1 AND GU2 IF INSTALLING OPTIONAL GUTTER SYSTEM



MEGA RIB ROOF EAVE CONNECTION DETAIL — G-E1



MEGA RIB ROOF CONNECTION AT RIDGE — G-G1

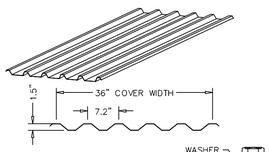


MEGA RIB ROOF CONNECTION AT PURLIN — G-P1

ROOF NOTES

ATTENTION INSTALLERS:
METAL SHAVINGS LEFT ON ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH!

DRILLING OR INSTALLING ROOF FASTENERS WILL CAUSE METAL SHAVINGS. THESE SHAVINGS MUST BE CAREFULLY REMOVED AT THE END OF EACH DAY BY EITHER SWEEPING OR BRUSHING THE INSTALLED ROOF.

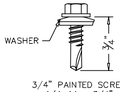


MEGA RIB PANEL SECTION
24 ga. Fy=50 ksi Fu= 65ksi

SECTION PROPERTIES
(PER FT. OF WIDTH)

TOP IN COMPRESSION
Ix=0.097 in^4
Se=0.1215 in^3
Ma=3.367 in-kips

BOTTOM IN COMPRESSION
Ix=0.097 in^4
Se=0.1126 in^3
Ma=3.37 in-kips



INSTALLED CORRECTLY	INSTALLED TOO TIGHT	INSTALLED TOO LOOSE
THE SEALING MATERIAL SLIGHTLY VISIBLE AROUND THE METAL WASHER	THE SEALING MATERIAL IS DEFORMED BEYOND THE EDGE OF THE METAL WASHER	THE SEALING MATERIAL IS NOT VISIBLE AROUND THE EDGE OF THE METAL WASHER

THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE METAL ROOFING SYSTEM. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. CHANGES TO THE DETAILS MAY BE REQUIRED DUE TO FIELD CONDITIONS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL INSTALLATION INSTRUCTION MATERIAL BEFORE STARTING WORK.

THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

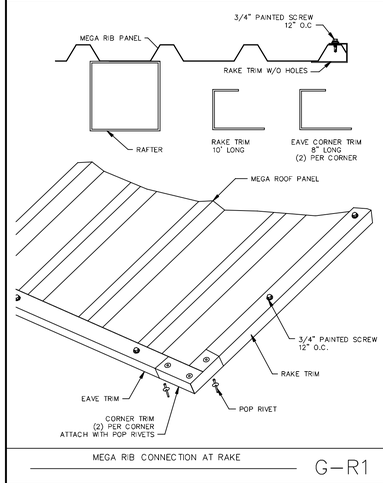
ERECTORS SHALL BE RESPONSIBLE TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

FOR THE BEST APPEARANCE ALL TRIM AND FLASHING SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ALL EXPOSED FASTENERS EQUALLY SPACED.

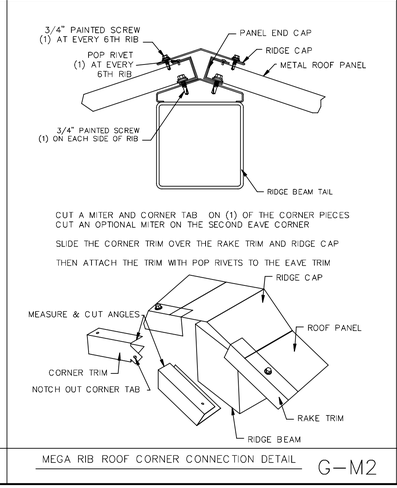
SOME FIELD CUTTING AND/OR FITTING OF PANELS, TRIM AND FLASHING IS TO BE EXPECTED BY THE ERECTOR. MINOR FIELD CORRECTIONS ARE PART OF NORMAL ERECTION WORK.

THE INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN AND WORKMANSHIP SHALL MEET THE BEST INDUSTRY STANDARDS.

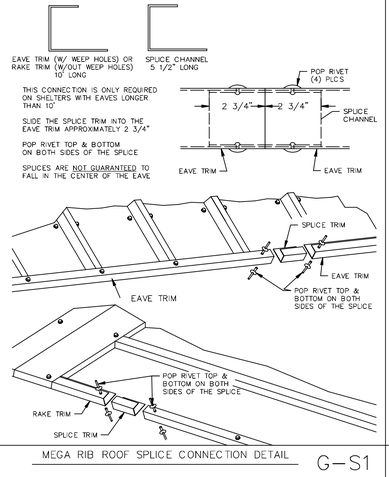
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021



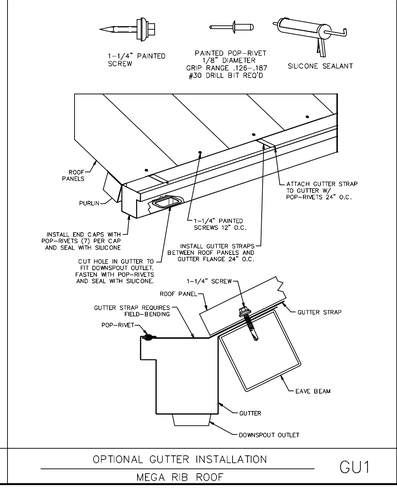
MEGA RIB CONNECTION AT RAKE — G-R1



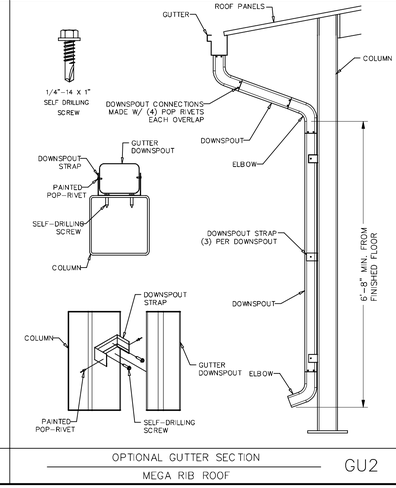
MEGA RIB ROOF CORNER CONNECTION DETAIL — G-M2



MEGA RIB ROOF SPLICE CONNECTION DETAIL — G-S1



OPTIONAL GUTTER INSTALLATION
MEGA RIB ROOF — GU1



OPTIONAL GUTTER SECTION
MEGA RIB ROOF — GU2

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

30' WIDE
RECTANGULAR GABLE
MEGA RIB ROOFING
PLAN

LS3.3

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616.396.0944 FX

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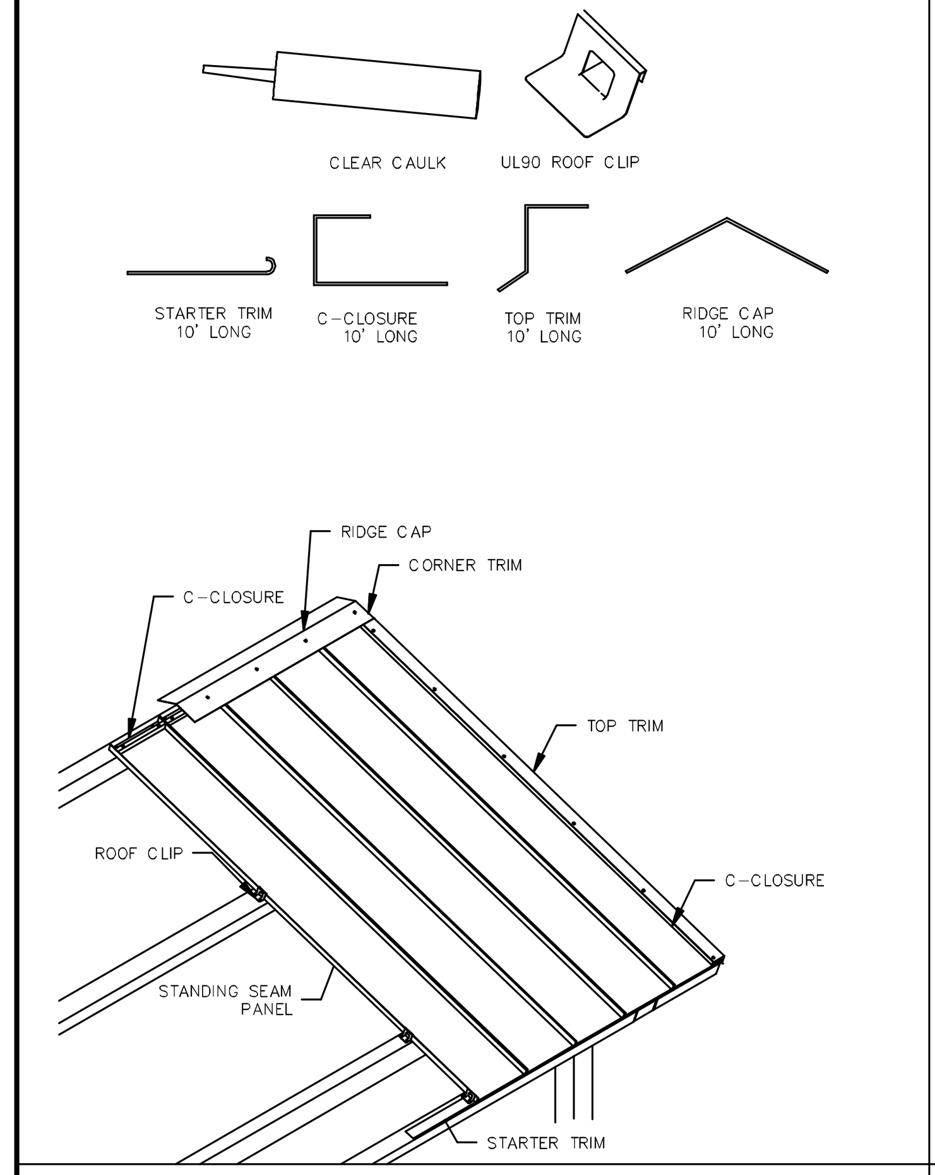
ROOF NOTES

TRIM REFERENCE



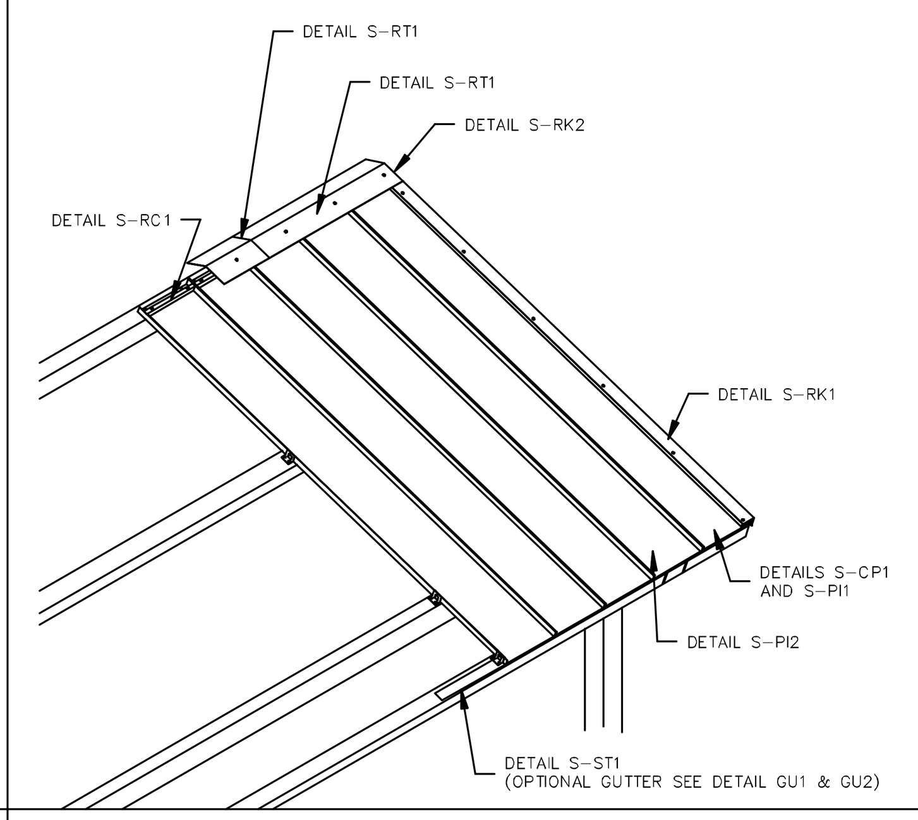
TRIM REFERENCE

ORDER OF INSTALLATION

THESE DETAILS ASSUME THAT ALL COMPONENTS OF THIS ROOF SYSTEM WILL BE INSTALLED PLUMB AND SQUARE. CAULK AND TRIM SHOULD ALSO BE INSTALLED TO ENSURE WATER TIGHTNESS

READ ALL DETAILS IN THIS INSTALLATION MANUAL BEFORE STARTING

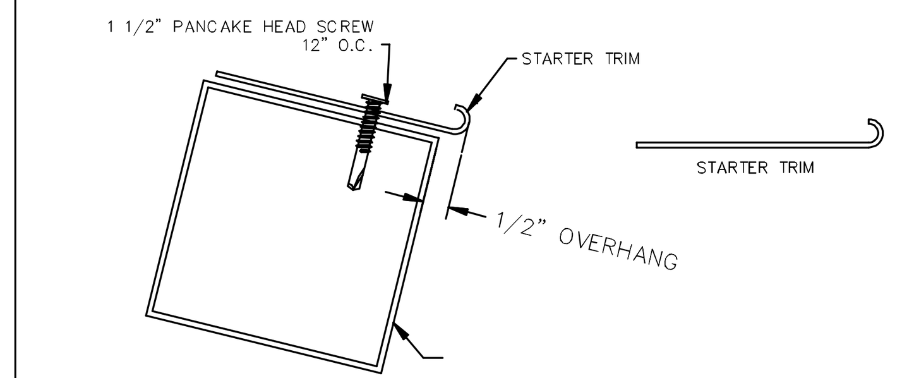
- S-ST1 STARTER TRIM
- S-CP1 ROOF PANEL PREPARATION
- S-PI1 FIRST ROOF PANEL
- S-PI2 SECOND ROOF PANEL
- S-RK1 TOP TRIM & C-CLOSURE @ RAKE
- S-RC1 C-CLOSURE @ RIDGE
- S-RK2 RIDGE CORNER TRIM
- S-RT1 RIDGE CAP



ORDER OF INSTALLATION

S-ST1

INSTALL STARTER TRIM OVERHANGING THE EDGE OF THE EAVE PURLIN 1/2". ATTACH STARTER TRIM WITH 1 1/2" PANCAKE HEAD SCREWS 12" O.C.

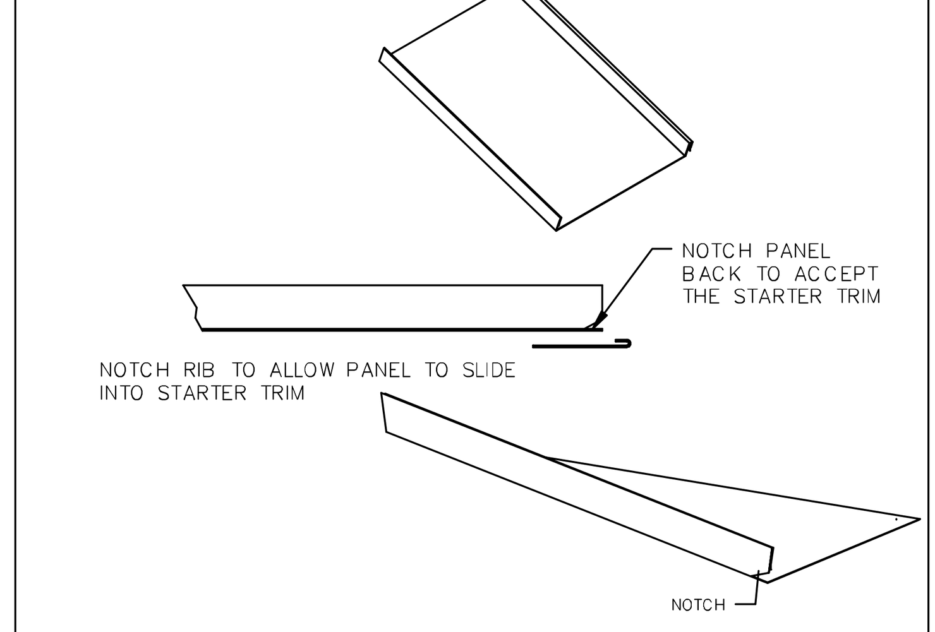


NOTE: SEE DETAILS GU1 AND GU2 IF INSTALLING OPTIONAL GUTTER SYSTEM

STARTER INSTALLATION — S-ST1

S-CP1

MEASURE, MARK & CUT THE FIRST ROOF PANEL



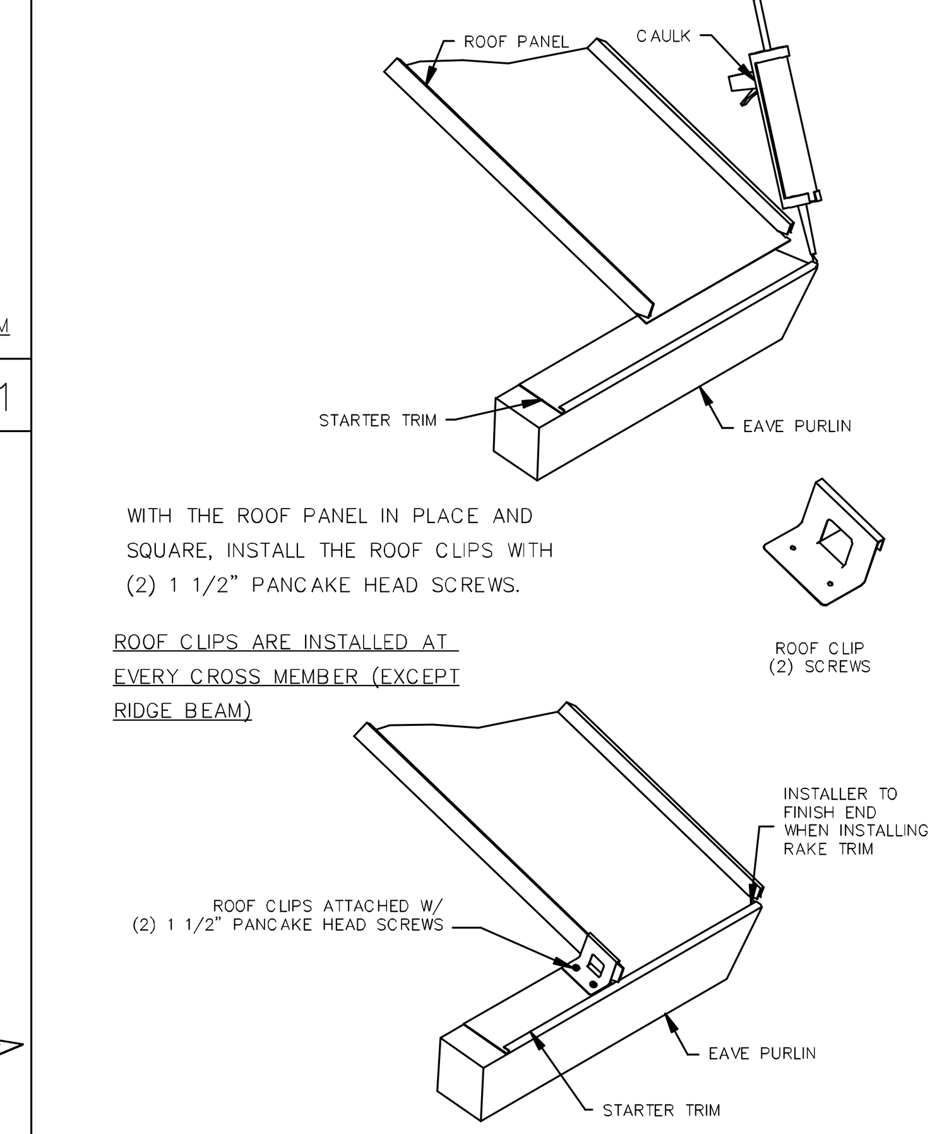
FIELD CUTTING ROOF PANELS — S-CP1

S-PI1

AFTER THE ROOF PANEL HAS BEEN CUT TO SIZE (IF NECESSARY) AND NOTCHED, TEST FIT THE PANEL. THEN APPLY A BEAD OF CAULK THE APPROXIMATE LENGTH OF THE PANEL. SLIDE THE PANEL INTO PLACE, AND SQUARE IT UP TO THE ROOF.

WITH THE ROOF PANEL IN PLACE AND SQUARE, INSTALL THE ROOF CLIPS WITH (2) 1 1/2" PANCAKE HEAD SCREWS.

ROOF CLIPS ARE INSTALLED AT EVERY CROSS MEMBER (EXCEPT RIDGE BEAM)

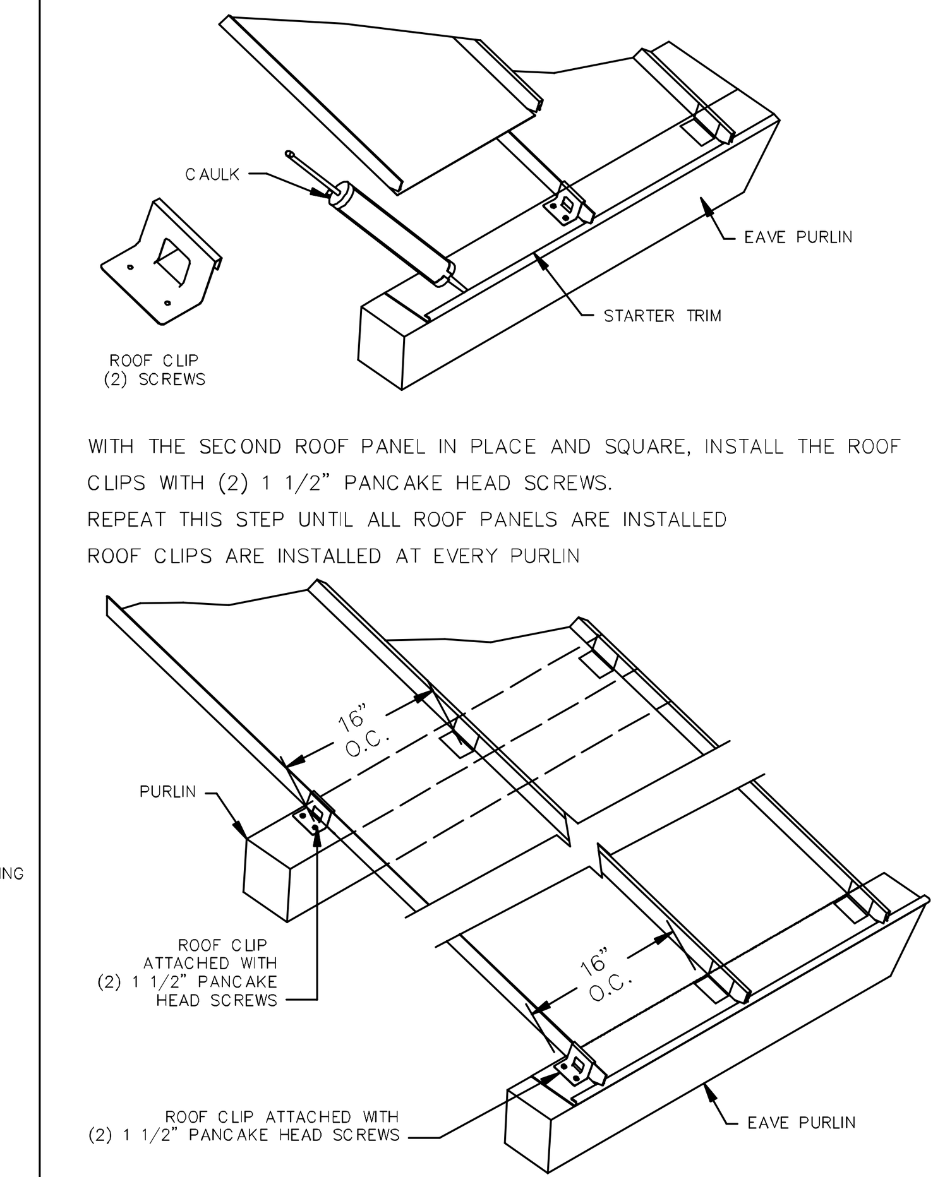


INSTALLATION OF FIRST ROOF PANEL — S-PI1

S-PI2

AFTER THE SECOND ROOF PANEL HAS BEEN CUT TO LENGTH (IF NECESSARY) AND NOTCHED, TEST FIT PANEL. THEN APPLY A BEAD OF CAULK INSIDE THE STARTER TRIM. SLIDE THE SECOND ROOF PANEL IN PLACE AND SNAP IT OVER THE BATTEN OF THE FIRST PANEL

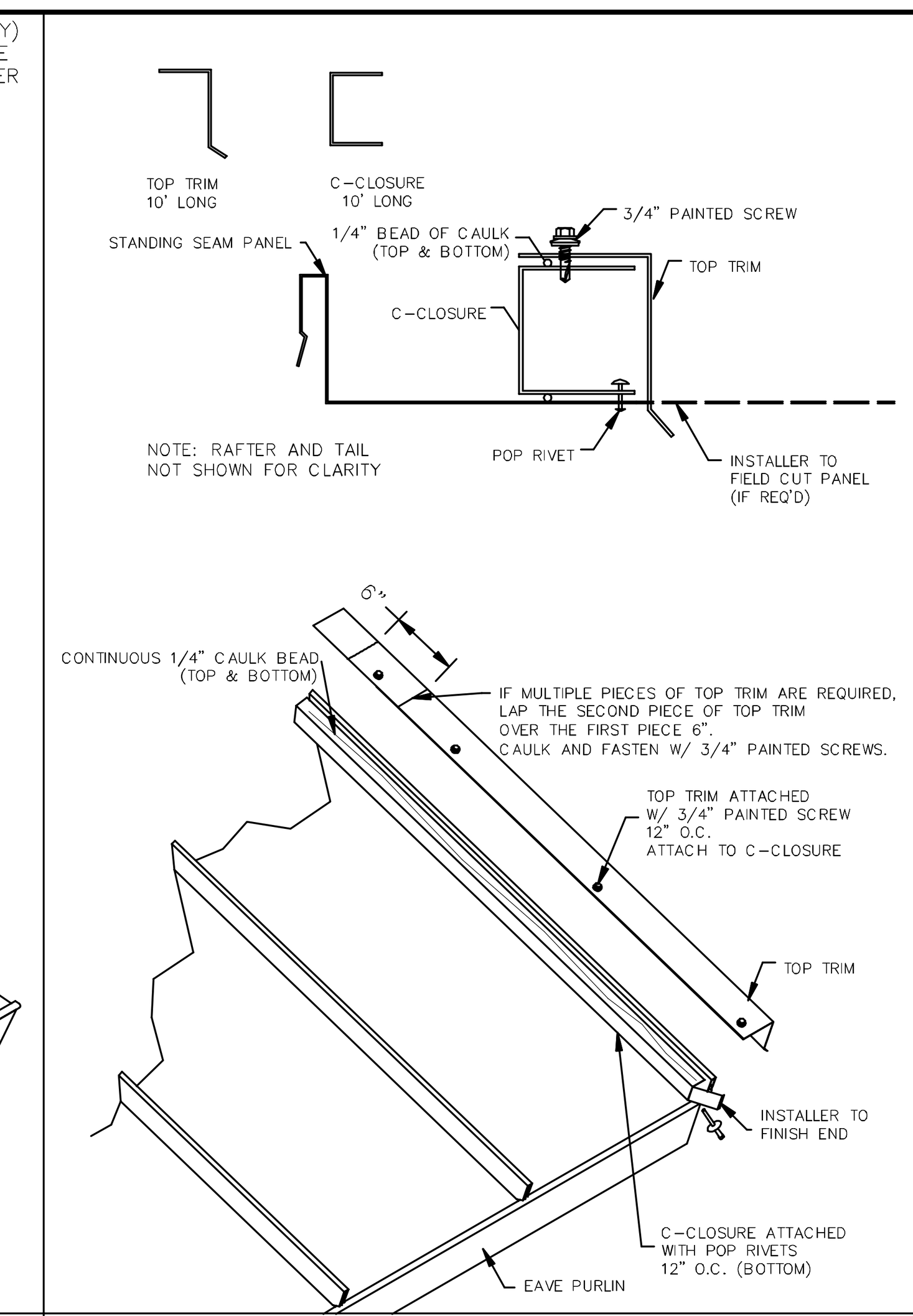
WITH THE SECOND ROOF PANEL IN PLACE AND SQUARE, INSTALL THE ROOF CLIPS WITH (2) 1 1/2" PANCAKE HEAD SCREWS.
REPEAT THIS STEP UNTIL ALL ROOF PANELS ARE INSTALLED
ROOF CLIPS ARE INSTALLED AT EVERY PURLIN



ROOF CLIPS ARE INSTALLED AT EVERY PURLIN

INSTALLATION OF SECOND ROOF PANEL — S-PI2

S-RK1

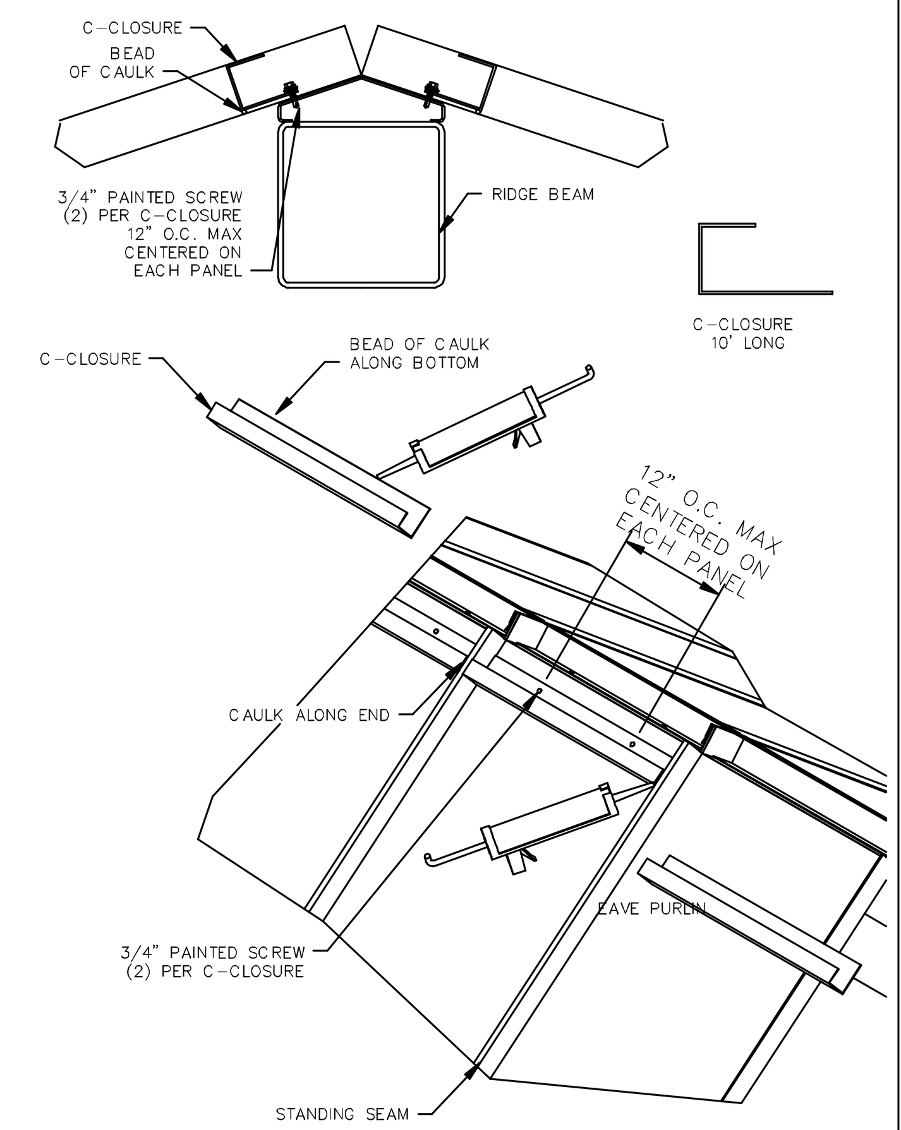


TOP TRIM INSTALLATION @ RAKE — S-RK1

S-RC1

TO INSTALL C-CLOSURES ALONG THE RIDGE MEASURE, MARK & CUT THE C-CLOSURE TO LENGTH.

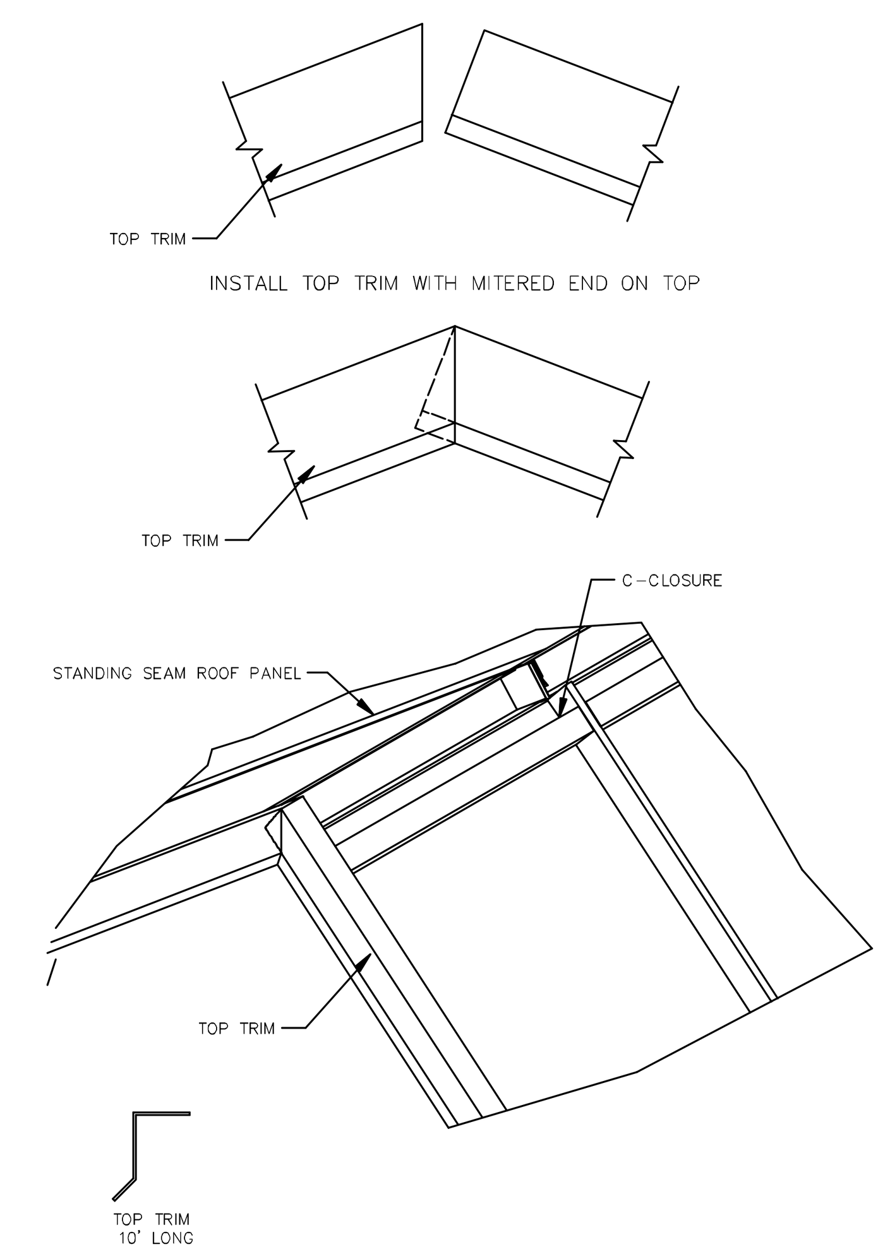
APPLY A 1/4" BEAD OF CAULK TO THE BOTTOM OF THE C-CLOSURE AND FASTEN IT TO THE ROOF WITH (2) 3/4" PAINTED SCREWS (12" O.C. MAX CENTERED ON EACH PANEL) ALONG THE RIDGE BEAM. THEN APPLY CAULK TO THE END OF THE C-CLOSURE FOR WATER TIGHTNESS



INSTALLATION OF C-CLOSURE @ RIDGE — S-RC1

S-RK2

TO FINISH OFF THE END OF THE RIDGE, CUT THE TOP TRIM AS SHOWN.

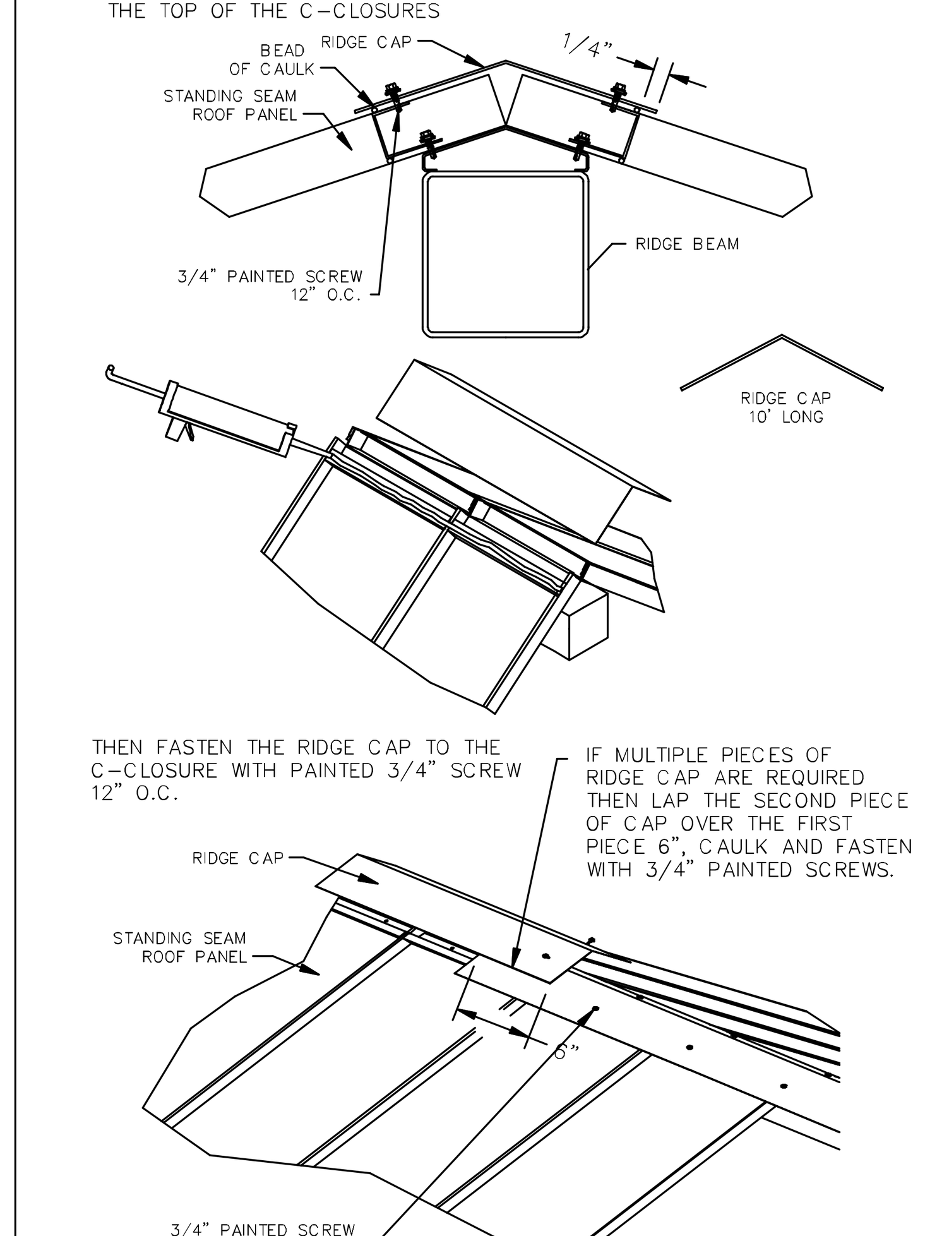


INSTALLATION OF CORNER TRIM — S-RK2

S-RT1

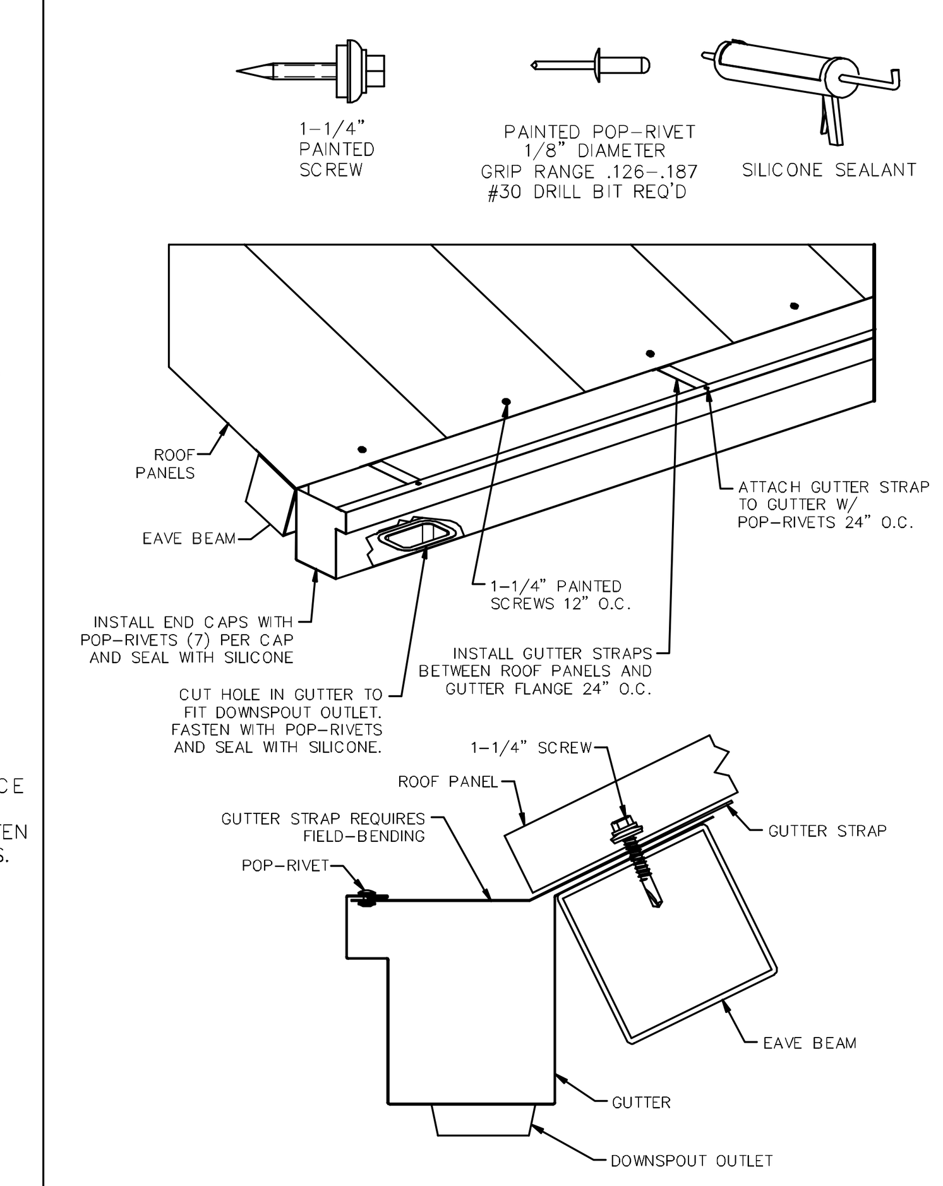
TO INSTALL RIDGE CAP:
FIRST APPLY A BEAD OF CAULK ALONG THE TOP OF THE C-CLOSURES

THEN FASTEN THE RIDGE CAP TO THE C-CLOSURE WITH PAINTED 3/4" SCREW 12" O.C.



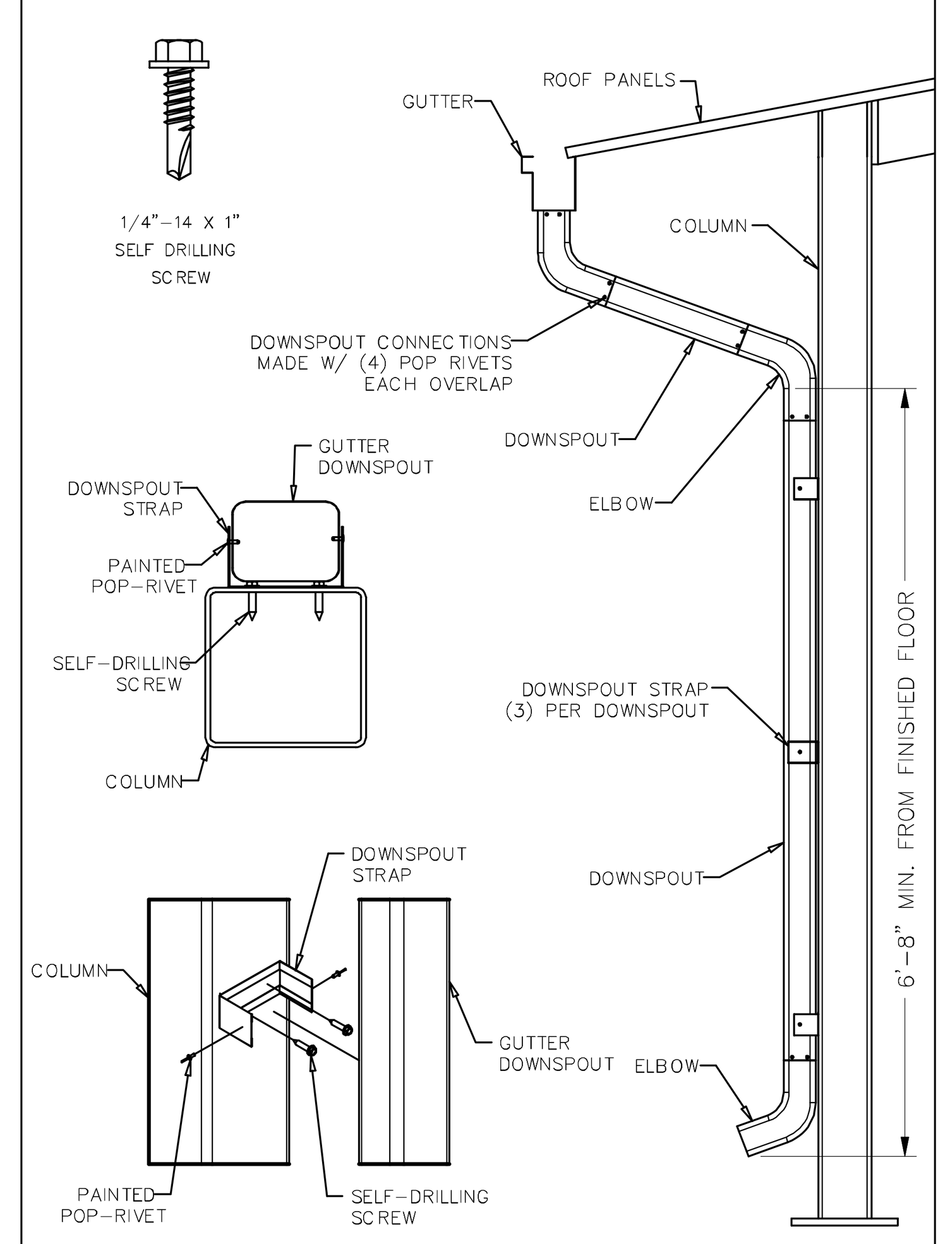
INSTALLATION OF RIDGE CAP — S-RT1

GU1



OPTIONAL GUTTER INSTALLATION
STANDING SEAM ROOF — GU1

GU2



OPTIONAL GUTTER SECTION
STANDING SEAM ROOF — GU2

ROOF NOTES

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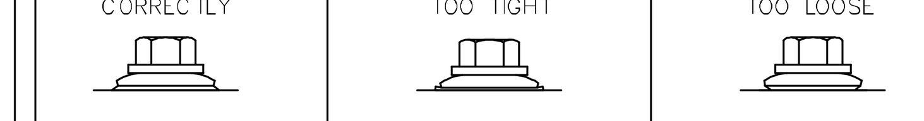

INSTALLED CORRECTLY	INSTALLED TOO TIGHT	INSTALLED TOO LOOSE
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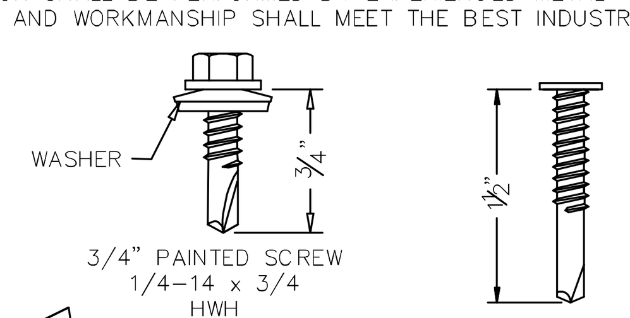
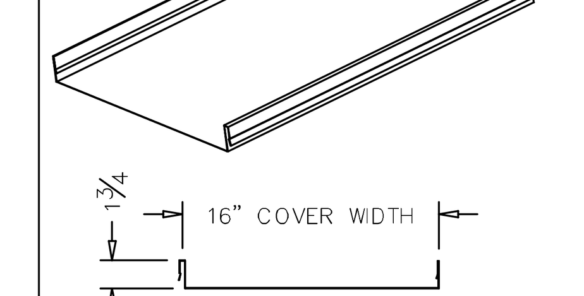


3/4" PAINTED SCREW
1/4-14 x 3/4
HWH
ICC ESR-1976

1 1/2" PANCAKE HEAD SCREW
12-24 x 1 1/2" SD5
ICC ESR-1976



MEDALLION LOK
STANDING SEAM PANEL SECTION
24 ga. Fy=50 ksi Fu=65 ksi
ICC ESL-1082

SECTION PROPERTIES
(PER FT. OF WIDTH)

TOP IN COMPRESSION
I_x=0.086 in^4
Se=0.0561 in^3
Ma=1.68 in-kips

BOTTOM IN COMPRESSION
I_x=0.040 in^4
Se=0.0479 in^3
Ma=1.248 in-kips

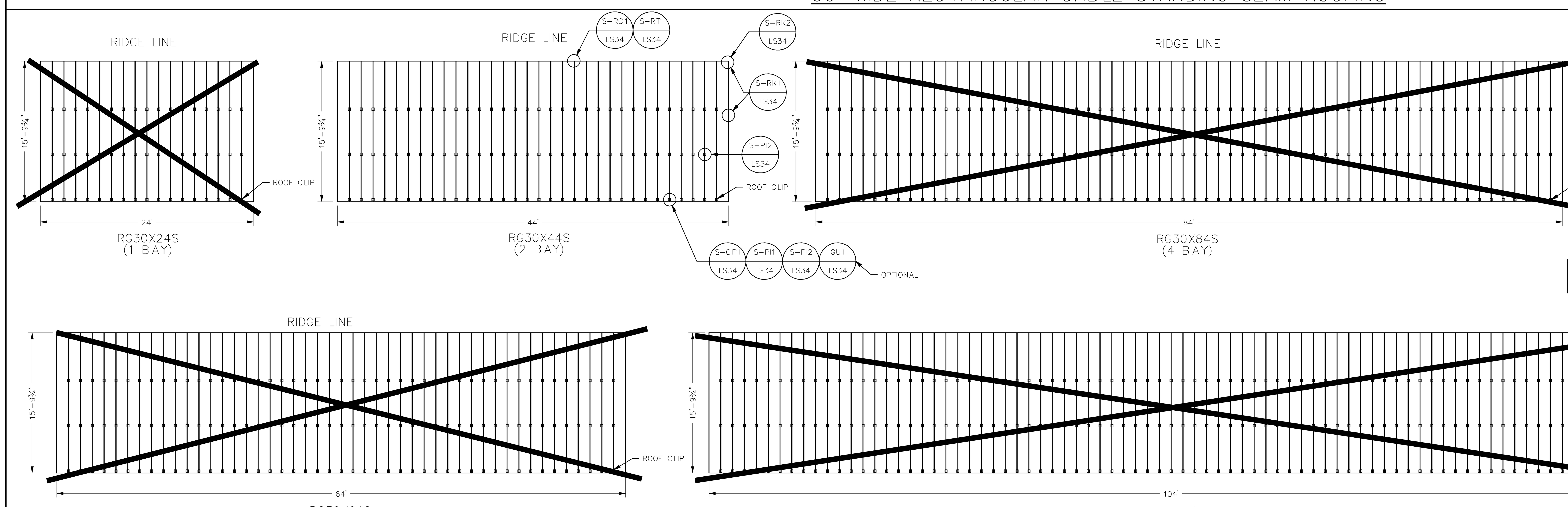
ICON STD	RG/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

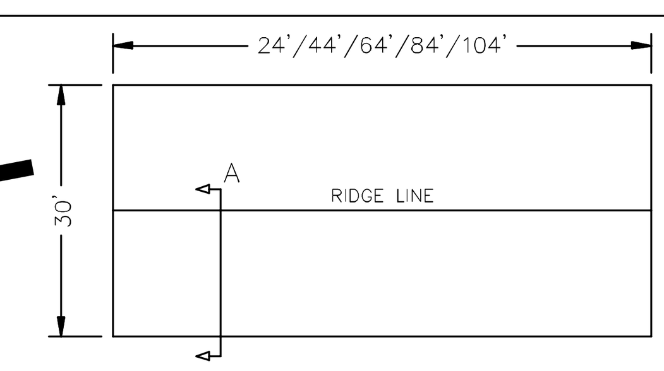
JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST | BREA, CA 92821
1.714.524.1870 | F.714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER MICHAEL D. ... STRUCTURAL STATE OF CALIFORNIA
07/29/2021

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021

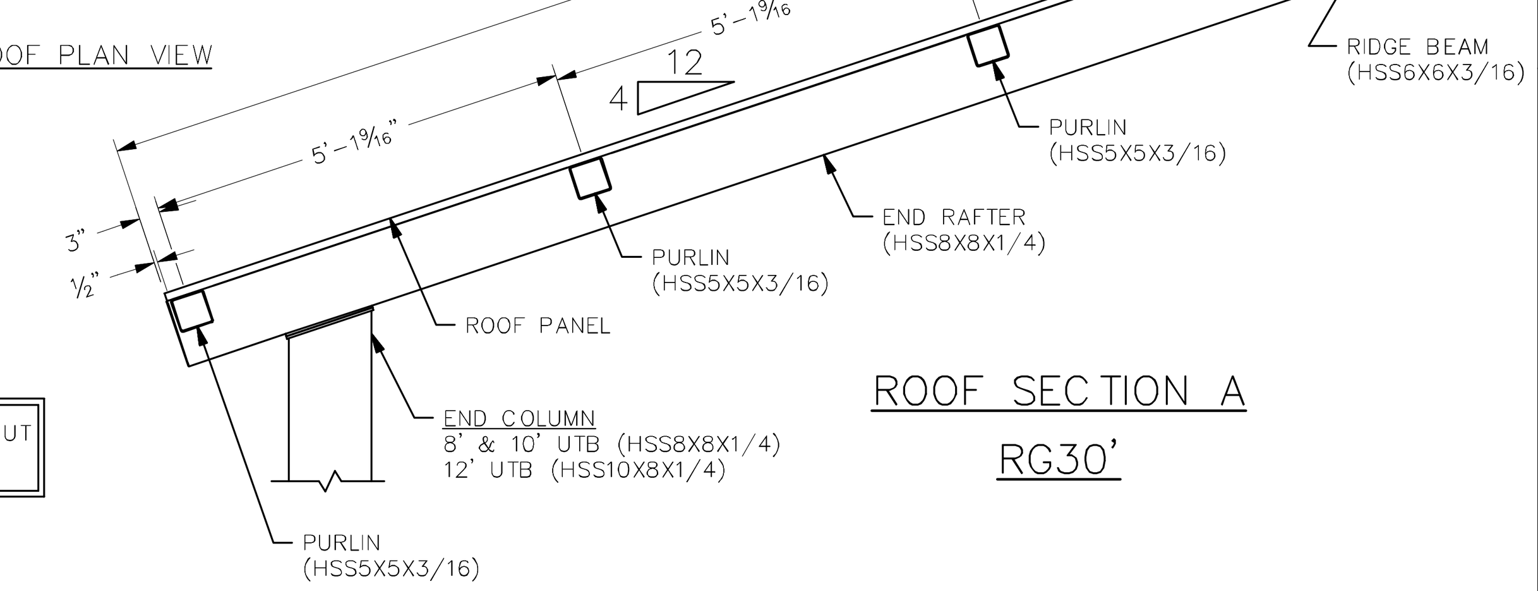
30' WIDE RECTANGULAR GABLE STANDING SEAM ROOFING





ROOF PLAN VIEW

INSTALLER TO FIELD CUT ALL ROOF PANELS



ROOF SECTION A
RG30'

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

30' WIDE RECTANGULAR GABLE STANDING SEAM ROOFING PLAN

ICON Shelter Systems Inc
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HOLLAND MI, 49423
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800.748.0985
616.396.0944 FX

LS3.4

S:\Engineering\Inventor\DSA 2019\PC 2019 RG DSA\30 FOOT WIDE\DSA RG30-P4.idw

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ELECTRICAL INFORMATION - RECTANGULAR GABLE

ICON'S STANDARD ELECTRICAL IS DESIGNED TO ACCOMMODATE Ø1/2" CONDUIT WITH A Ø3" INLET HOLE ON THE BOTTOM OF EACH COLUMN.
THE CONDUIT PATHWAY RUNS THROUGH THE COLUMN, RAFTER, AND RIDGE BEAM THROUGH ALL BOLTED CONNECTIONS AS SHOWN.
IF YOU HAVE SPECIAL ELECTRICAL REQUIREMENTS, PLEASE OUTLINE ANY CHANGES BELOW AS DESCRIBED.

PLEASE NOTE: DESIGN LIMITATIONS ON HOLE/CUTOUT SIZES MAY APPLY.
ICON WILL REACH OUT TO DISCUSS ANY SUCH LIMITATIONS AS NEEDED.

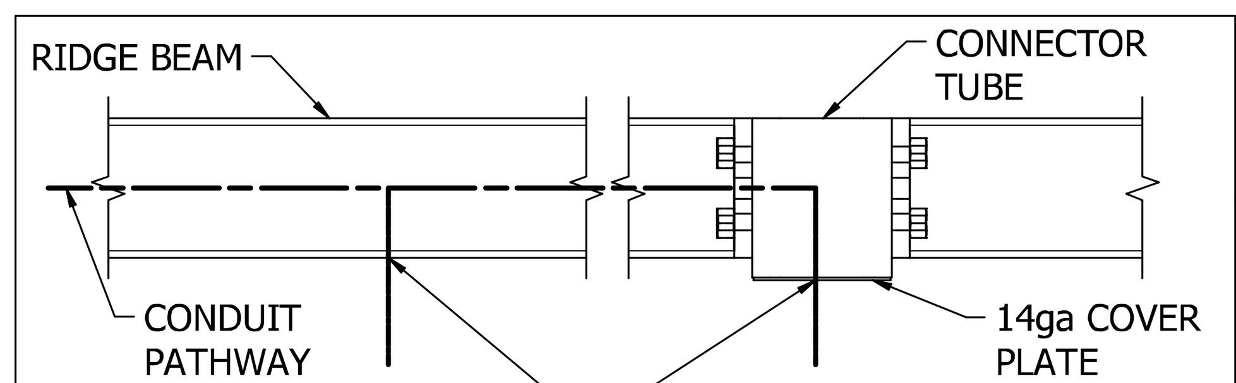
NOTE: ICON SHELTER FRAME IS NOT UL LISTED TO ACT AS A CONDUIT FOR ELECTRICAL WIRING. CONSULT LOCAL BUILDING CODES WHEN PLANNING YOUR ELECTRICAL SYSTEM.

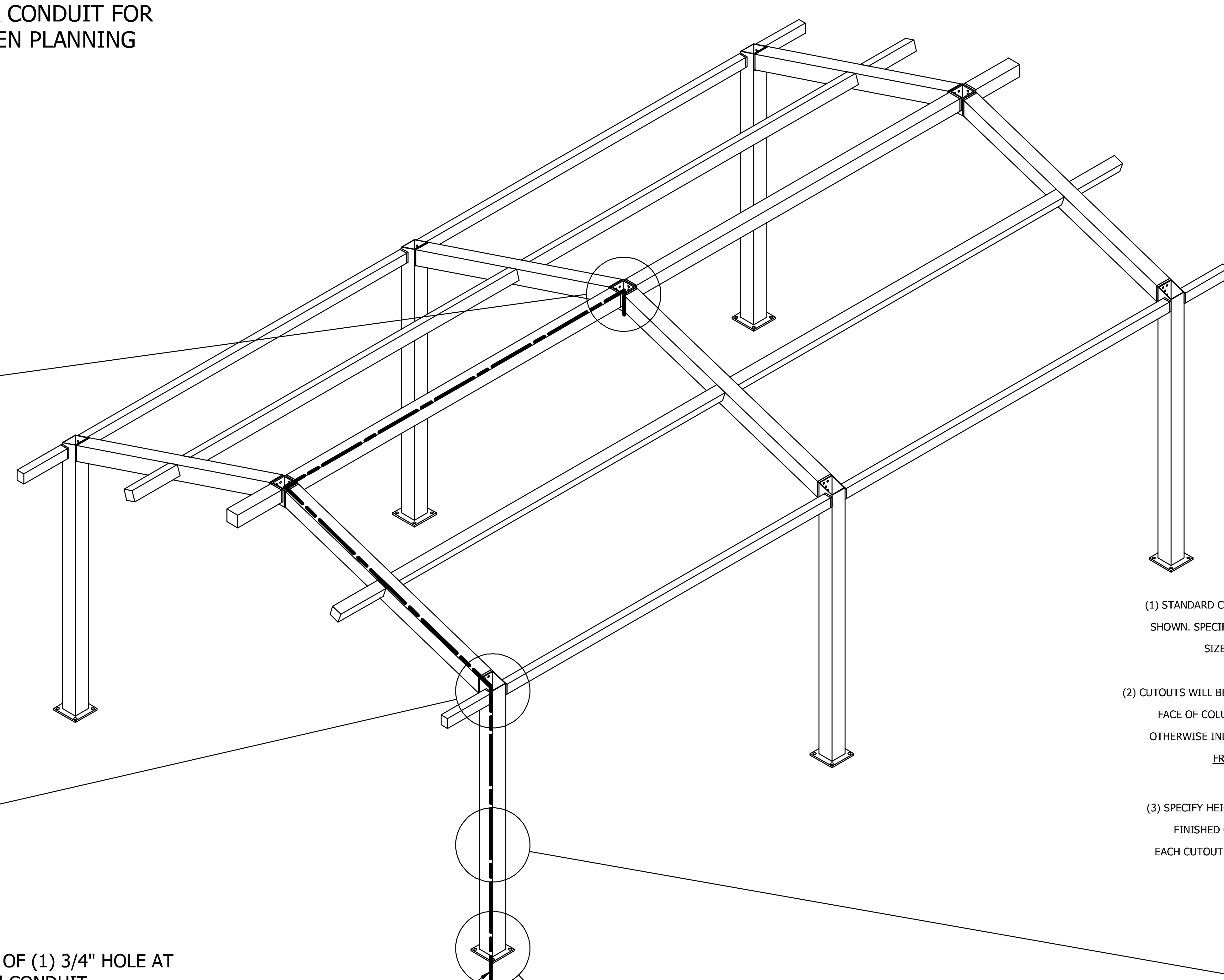
STEPS:

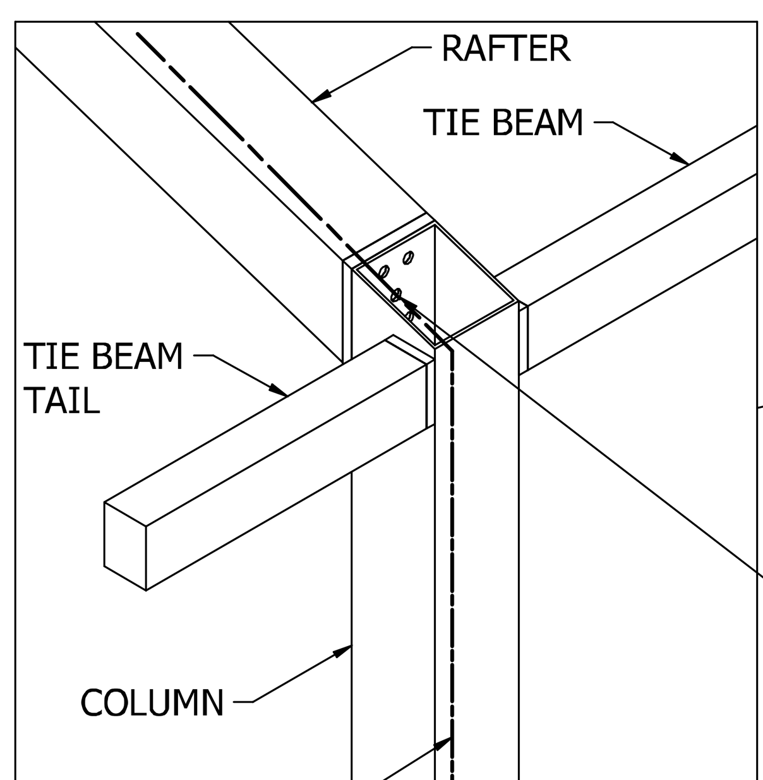
1. CONDUIT HOLE SIZE (DETAIL A)
2. ELECTRICAL EXIT HOLES (DETAIL B)
3. ELECTRICAL ACCESS & COVER PLATES (DETAIL C)
4. ELECTRICAL CONDUIT PATHWAY (DETAIL D)

OPTIONAL EXIT HOLES

IF REQUIRED, EXIT HOLES FOR LIGHTING, ETC. CAN BE PLACED IN THE RIDGE BEAM AND/OR CONNECTOR TUBE WITH 14ga COVER PLATE AS SHOWN (CHARGES APPLY) USE FRAME SHEET OF THIS PRELIMINARY TO SPECIFY REQUIRED EXIT HOLE LOCATIONS AND SIZE.





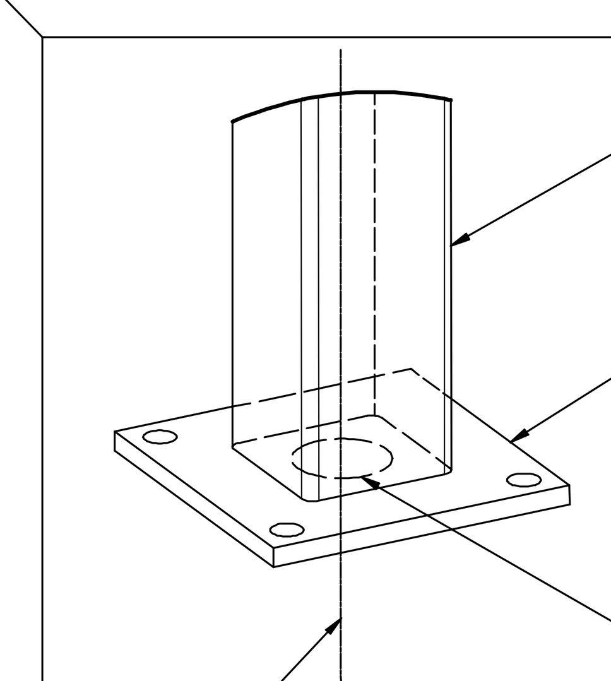


ICON PROVIDES A MINIMUM OF (1) 3/4" HOLE AT EACH CONNECTION FOR 1/2" CONDUIT.
IF APPLICABLE, PLEASE SPECIFY REQUIRED CONDUIT SIZE: (CHARGES APPLY)

- ☐ 3/4" CONDUIT (1" HOLES)
- ☐ 1" CONDUIT (1 1/4" HOLES)
- ☐ OTHER (PLEASE SPECIFY

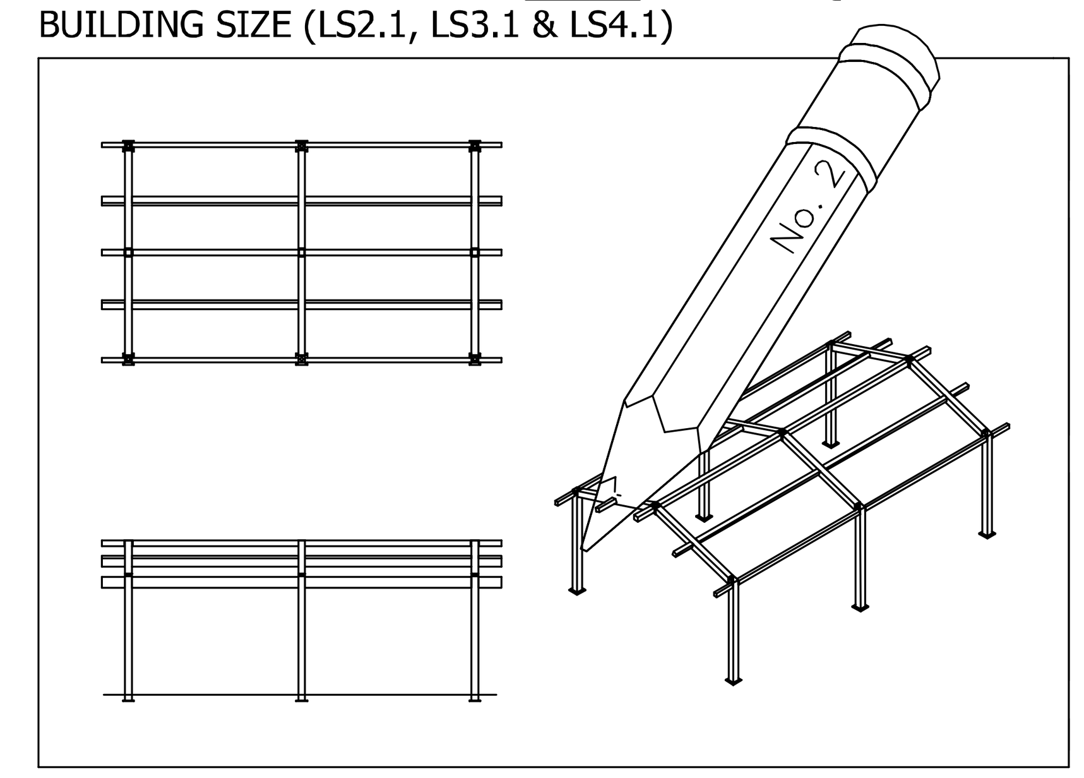
____

CONDUIT PATHWAY PROVIDED FOR EACH COLUMN.



NOTE: BUILDING DEPICTED ON THIS SHEET FOR ILLUSTRATION PURPOSES ONLY. ACTUAL LAYOUT AND FRAME MEMBER QUANTITIES VARY BY DESIGN. PLEASE REFER TO ELEVATION AND FRAME SHEETS IN THIS PRELIMINARY FOR ORDER-SPECIFIC CONFIGURATION.

IF REQUIRED, PLEASE DRAW THE NECESSARY ELECTRICAL CONDUIT PATHWAY ON THE FRAME SHEET REQUIRED FOR BUILDING SIZE (LS2.1, LS3.1 & LS4.1)



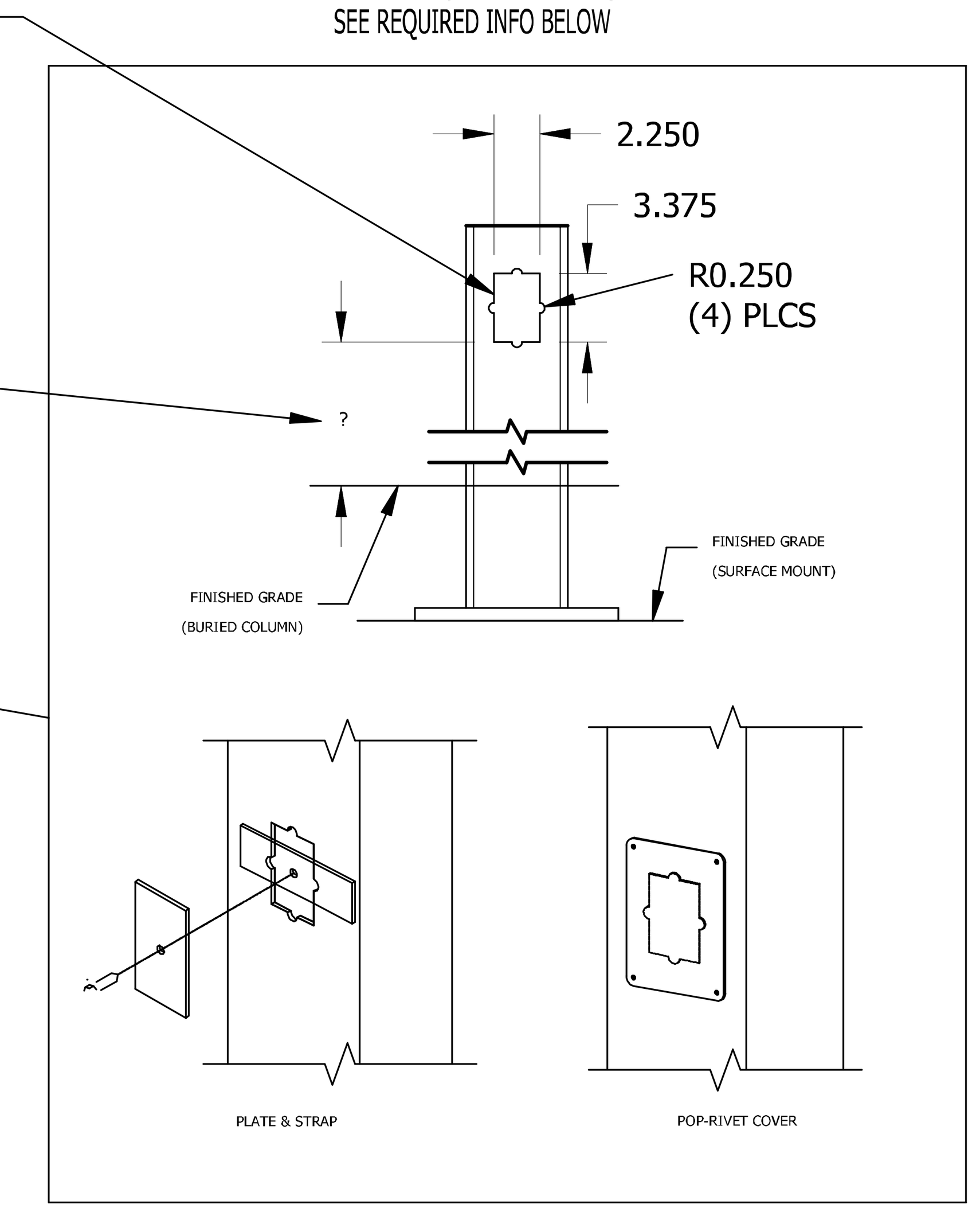
OPTIONAL CUTOUTS

USE FRAME SHEET OF THIS PRELIMINARY TO SPECIFY REQUIRED CUTOUT LOCATIONS (CHARGES APPLY)
SEE REQUIRED INFO BELOW

(1) STANDARD CUTOUT SIZE SHOWN. SPECIFY IF OTHER SIZE REQUIRED.

(2) CUTOUTS WILL BE ON INSIDE FACE OF COLUMN UNLESS OTHERWISE INDICATED ON FRAME SHEET.

(3) SPECIFY HEIGHT ABOVE FINISHED GRADE FOR EACH CUTOUT AS SHOWN



(4) COVER PLATES PROVIDED UPON REQUEST (CHARGES APPLY)
PLEASE SPECIFY TYPE AND QUANTITY REQUIRED:

- ☐ PLATE & STRAP
- ☐ POP-RIVET COVER PLATE

HOW MANY REQUIRED?________

ICON STD	RC/DSA-PC
DRAWN BY	ANGEL
DATE	4/2/2021
REV	
REV DATE	

JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST | BREA, CA 92821
1.714.524.1870 | F. 714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER MICHAEL D. ... S4092 STRUCTURAL STATE OF CALIFORNIA
07/29/2021

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120012 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 08/06/2021

OPTIONAL ELECTRICAL ACCESS

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

1455 LINCOLN AVE
HOLLAND MI, 49423
616.396.0919
800.748.0985
616.396.0944 FX

LS5.0

PRE-CHECK (PC) DOCUMENT
Code: 2019 CBC
A separate project application for construction is required.

PRINTED ON :

TERRA LINDA HS CTE SHADE STRUCTURE - 222123

ELECTRICAL EQUIPMENT ANCHORAGE

ELECTRICAL ANCHORAGE NOTES:

ALL 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 IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

A. COMPONENT WEIGHING LESS THAN 400 POUNDS AND HAVING 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 WALL.

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

ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

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

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

ELECTRICAL DISTRIBUTION SYSTEMS ARE: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

LIGHT FIXTURES:

ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LIGHT FIXTURE, PER ASTM E580, SECTION 5.3.1.

SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEED 56 LB. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.

LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.

LIGHT FIXTURES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LBS. MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE. EXCEPTION: ALL LIGHT FIXTURES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.

ALL LIGHT FIXTURES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR (4) TAUT #12 GAGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE FIXTURE.

SYMBOLS LIST

ALL SWITCH AND CONTROL MOUNTING HEIGHTS OF 48" SHALL BE TO TOP OF THE DEVICE BOX. ALL RECEPTACLES WITH MOUNTING HEIGHT OF UP TO 18" SHALL BE NO LOWER THAN 15" TO BOTTOM OF THE DEVICE BOX, TYPICAL, U.O.N.

AA1	INDICATES LUMINAIRE TYPE, SEE LUMINAIRE SCHEDULE
	SURFACE CEILING MOUNTED LUMINAIRE
	UNDER CABINET LUMINAIRE
$a	LINE VOLTAGE SINGLE POLE TOGGLE SWITCH, LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED, UP 48" U.O.N.
	MAIN SWITCHBOARD, DISTRIBUTION PANEL OR MOTOR CONTROL CENTER
	FLUSH MOUNTED PANELBOARD, 6'-6" TO TOP
	SURFACE MOUNTED PANELBOARD, 6'-6" TO TOP
J	FLUSH CEILING MOUNTED JUNCTION BOX, U.O.N.
J	FLUSH WALL MOUNTED JUNCTION BOX, UP 18" U.O.N.
	20A 3PG 125V DUPLEX RECEPTACLE, UP 18" U.O.N.
GFI	20A 3PG 125V DUPLEX RECEPTACLE, GROUND FAULT CIRCUIT INTERRUPTER TYPE, UP 18" U.O.N.
	SPECIAL RECEPTACLE (NEMA # AS NOTED)
	CONDUIT AND WIRE CONCEALED IN CEILING OR WALL
	CONDUIT AND WIRE CONCEALED IN OR UNDER SLAB OR UNDERGROUND
	CONDUIT AND WIRE RUN EXPOSED
	CROSSMARKS INDICATE QUANTITY OF #12 CONDUCTORS PLUS PARITY SIZED GROUND CONDUCTOR, NO HASHMARKS INDICATES (2) #12 CONDUCTORS PLUS PARITY SIZED GROUND CONDUCTOR, U.O.N.
	GROUND WIRE
(#10)	WIRE SIZE 10 AWG FOR ALL CONDUCTORS, INCLUDING GROUND WIRE, THROUGHOUT THE COMPLETE CIRCUIT
	FLEXIBLE METALLIC CONDUIT
	HOMERUN TO PANELBOARD OR TERMINAL BOARD, AS NOTED ON PLANS
	COMPLETE CONNECTION OF EQUIPMENT
	CONDUIT STUBBED OUT, CAPPED AND MARKED
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
3 / E-6	DETAIL DESIGNATION - SEE DETAIL 3, SHEET E-6
1	NUMBERED SHEET NOTE
2	NUMBERED SHEET NOTE THAT REFERS TO TYPICAL ITEMS ON SHEET

ABBREVIATIONS

AFG	ABOVE FINISHED GRADE
C	CONDUIT
CO	CONDUIT ONLY
CU	COPPER
E.C.	ELECTRICAL CONTRACTOR
(E)	EXISTING
EQPT	EQUIPMENT
EXT	EXTERIOR
GFI	GROUND FAULT CIRCUIT INTERRUPTING TYPE RECEPTACLE
LV	LOW VOLTAGE
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
(N)	NEW
N.E.C.	NATIONAL ELECTRICAL CODE
N.I.E.C.	NOT IN ELECTRICAL CONTRACT
O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED
PNL	PANEL
U.O.N.	UNLESS OTHERWISE NOTED
WP	WEATHER PROOF, NEMA 3R

CALIFORNIA GREEN BUILDING STANDARDS COMPLIANCE

ALL EXTERIOR LUMINAIRES SPECIFIED IN THESE CONTRACT DOCUMENTS COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA ENERGY CODE AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE, SECTION A5.106.8 LIGHT POLLUTION REDUCTION. EXTERIOR LUMINAIRES COMPLY WITH BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS AS DEFINED IN IESNA TM-15-11 AND BUG RATINGS DO NOT EXCEED THE MAXIMUM ALLOWABLE RATINGS FOR THIS PROJECT.

GENERAL NOTES

1. PRIOR TO BID THE CONTRACTOR SHALL VISIT THE SITE TO ADEQUATELY DETERMINE ALL PRE-EXISTING CONDITIONS. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DEEMED TO HAVE COMPLIED WITH THE FOREGOING, TO HAVE ACCEPTED SUCH CONDITIONS, AND TO HAVE MADE ALLOWANCES THEREFORE IN PREPARING THE BID.
2. PROVIDE PARITY SIZED GREEN GROUND WIRE IN ALL POWER CONDUITS, BRANCH CIRCUITS (LIGHTING & POWER) AND HOMERUNS.
3. COORDINATE TRENCHING WITH OWNER AND OTHER TRADES BEFORE BEGINNING WORK.
4. ALL CONDUIT PENETRATIONS THROUGH WALLS SHALL BE SEALED WEATHER-TIGHT.
5. DO NOT INSTALL ANY OUTLETS BACK TO BACK IN STUD WALLS OR DE-MOUNTABLE PARTITIONS.
6. THE CONTRACTOR SHALL VERIFY ALL CEILING TYPES BEFORE ORDERING OF LUMINAIRE(S). ALSO VERIFY THAT ALL FEATURES CALLED FOR IN LUMINAIRE DESCRIPTIONS ON THE LUMINAIRE SCHEDULE ARE INCLUDED WITH CATALOG NUMBERS LISTED ON THE LUMINAIRE SCHEDULE WHEN LUMINAIRE ORDERS ARE PLACED, AND ARE INCLUDED AS PART OF THE LIGHTING SUBMITTALS FOR THIS PROJECT. IF A DISCREPANCY EXISTS, CONTACT THE ARCHITECT AND ELECTRICAL ENGINEER FOR CLARIFICATION PRIOR TO BID.
7. CIRCUITRY AND CONDUIT ROUTING SHOWN ON THE PLANS IS DIAGRAMMATIC ONLY. THIS CONTRACTOR IS RESPONSIBLE FOR BECOMING COMPLETELY FAMILIAR WITH THE ARCHITECTURAL AND STRUCTURAL CONDITIONS AND LIMITATIONS IN THE BUILDING AND AT THE SITE AND TO PROVIDE ALL LABOR, TOOLS AND MATERIALS REQUIRED TO PRODUCE A COMPLETELY CONCEALED INSTALLATION WHEREVER INDICATED ON THE PLANS.
8. MAINTAIN "AS-BUILT" RECORDS AT ALL TIMES, SHOWING EXACT LOCATION OF ALL UNDERGROUND AND/OR CONCEALED CONDUITS AND SERVICES INSTALLED UNDER THIS CONTRACT, INCLUDING CIRCUIT IDENTIFICATION WHERE APPLICABLE. PROVIDE OWNER WITH "AS-BUILT" DOCUMENTS AS INDICATED IN THE SPECIFICATIONS, AND/OR CALLED FOR IN THE SPECIFICATIONS.
9. DRAWINGS INDICATE THE LOCATION(S) OF DEVICES, LUMINAIRE(S) AND EQUIPMENT, AND THE CIRCUIT NUMBER AND PANEL DESIGNATED TO SUPPLY THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETELY CONNECTING ALL ELECTRICAL DEVICES TO CIRCUITS INDICATED ON THE DRAWINGS.
10. UNLESS OTHERWISE NOTED, ALL WORK SHOWN ON DRAWINGS IS NEW AND TO BE PROVIDED AND INSTALLED COMPLETE UNDER THIS CONTRACT.
11. ALL EQUIPMENT GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, LATEST EDITION.
12. ALL ELECTRICAL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF THE N.E.C., AS WELL AS STATE, AND LOCAL CODES AND REQUIREMENTS.
13. ALL CONDUIT SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
14. THE CONTRACTOR SHALL PAY FOR ALL REQUIRED PERMITS AND INSPECTION FEES.
15. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE ARCHITECTURAL AND CANOPY DRAWINGS PRIOR TO ROUGH-IN.
16. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR ALL BRANCH CIRCUITS.
17. ALL CONDUIT CONNECTORS TO OUTLET OR JUNCTION BOXES SHALL HAVE INSULATED THROATS (MANUFACTURED AS AN INTEGRAL PART OF THE CONNECTOR). AFTER-MARKET INSERTABLE THROATS ARE NOT ACCEPTABLE.
18. ALL CIRCUITS IN ALL JUNCTION BOXES AND DEVICES SHALL BE CLEARLY IDENTIFIED BY MEANS OF "EZ" NUMBERING TAGS OR EQUIVALENT, TO IDENTIFY THE CIRCUIT NUMBER OR RELAY SUPPLYING THE CONDUCTOR. ALL JUNCTION BOXES SHALL BE LABELED PER SPECIFICATIONS.
19. ALL LOCATIONS OF BARE METAL SURFACE MOUNTED CONDUIT, BOXES, PANELBOARDS, AND RELATED FITTINGS OR ACCESSORIES INSTALLED IN FINISHED AREAS (BOTH INTERIOR AND EXTERIOR) SHALL BE FINISH PAINTED TO MATCH THE SURFACE TO WHICH THEY ARE MOUNTED TO (AFTER INSTALLATION). PAINTING SHALL INCLUDE DIFFERENT COLORS AS REQUIRED TO MATCH SURROUNDING CONDITIONS OR OTHER BUILDING FEATURES TO WHICH THE EQUIPMENT IS ATTACHED AND VISIBLE. VERIFY EXACT JUNCTION BOX LOCATION(S) AND ROUTING OF EXPOSED RACEWAYS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
20. PROVIDE A BLANK COVER PLATE (COLOR TO MATCH ADJACENT DEVICES OR AS SPECIFICALLY CALLED FOR IN SPECIFICATIONS) FOR ALL JUNCTION BOXES (NEW AND EXISTING) ON THE PROJECT WHEN NO DEVICE IS INSTALLED.
21. TWO OR THREE DIFFERENT PHASES SUPPLIED BY A 3-PHASE PANEL MAY SHARE A SINGLE NEUTRAL ONLY IF CIRCUIT POSITIONS ARE ADJACENT IN THE PANEL. PROVIDE COMMON HANDLE-TIE ON BREAKERS FOR MULTI-WIRE BRANCH CIRCUITS, WITH COMMON NEUTRAL, PER NEC REQUIREMENTS.

LIST OF DRAWINGS

QUATTROCCHI KWOK ARCHITECTS
Main:
636 Fifth Street, Santa Rosa, CA 95404
East Bay:
55 Harrison Street, Suite 525,
Oakland, CA 94607
(707) 576-0829

O'MAHONY & MYER
ELECTRICAL ENGINEERING and LIGHTING DESIGN
4340 REDWOOD HWY., SUITE 245
SAN RAFAEL, CALIFORNIA 94903
(415) 492-0420/FAX (415) 479-9662
www.ommconsulting.com

REGISTERED PROFESSIONAL ENGINEER
PILLER J. COLENDANDER
No.14738
Exp. 6/23
ELECTRICAL
STATE OF CALIFORNIA

TERRA LINDA HIGH SCHOOL

SHADE STRUCTURE & ENTRY CANOPY

320 Nova Albion Way
San Rafael, CA 94903

SAN RAFAEL CITY SCHOOLS

REVISIONS

DSA APP NO. 01-120767

ARCH PROJECT NO: 2068.00
DRAWN BY: LN/TV/JW
DRAWING SCALE: AS NOTED
PTN: 65466-45 FILE NO: 21-H1

CD

APRIL 18, 2023

SHEET TITLE

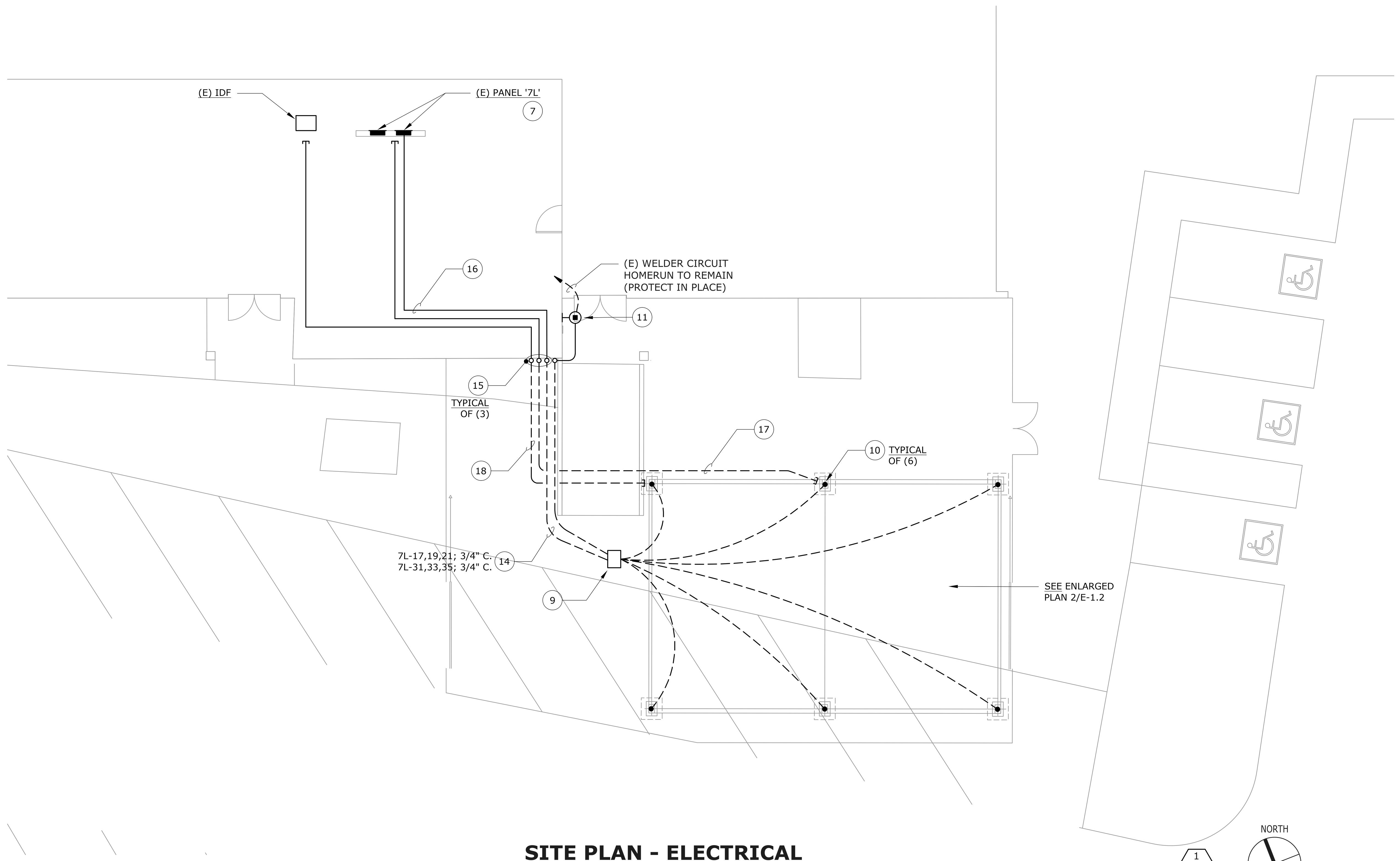
SYMBOLS LIST, GENERAL NOTES & LIST OF DRAWINGS

SHEET NUMBER

E-0.1

LUMINAIRE SCHEDULE

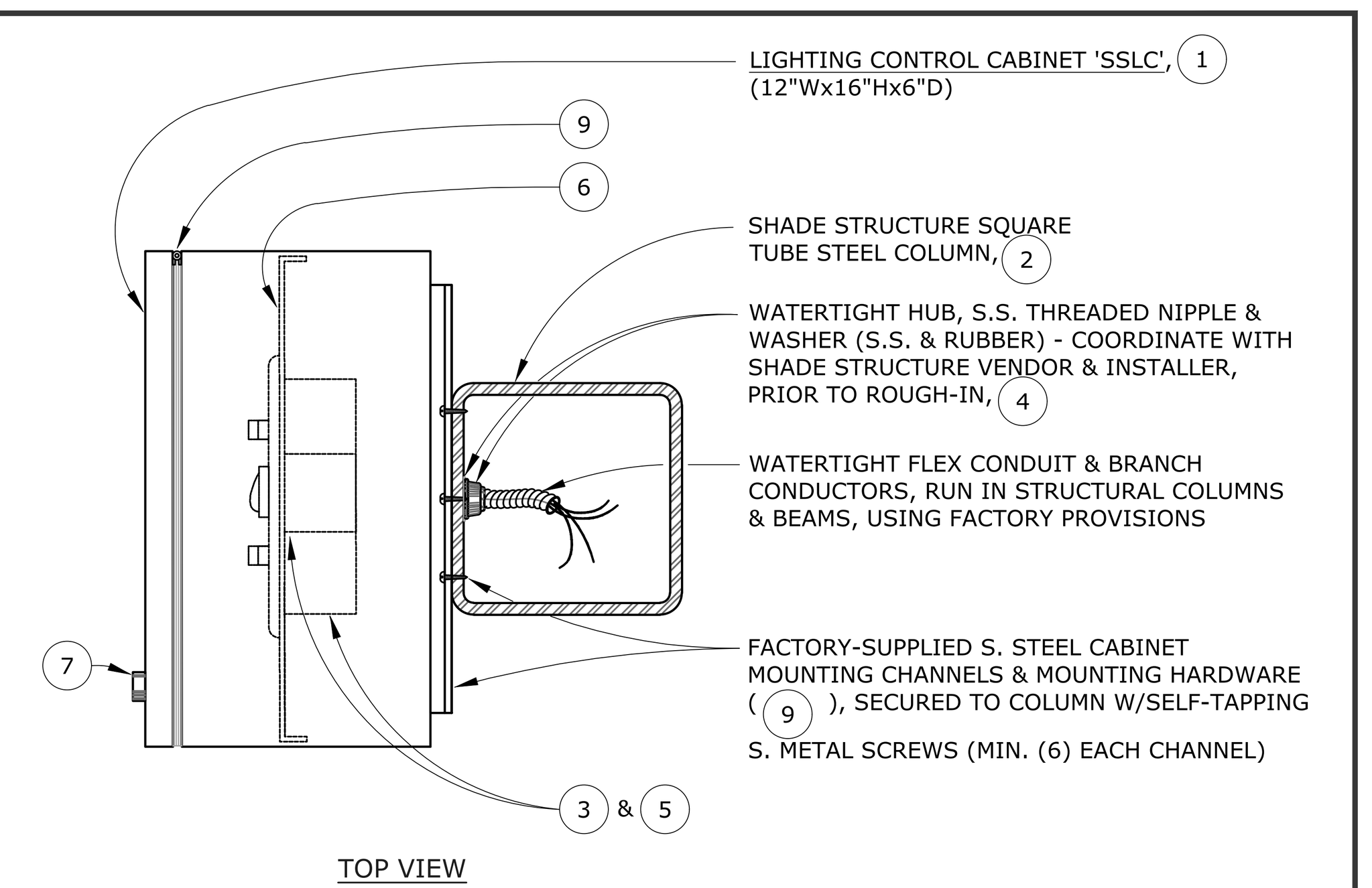
TYPE	MOUNTING	DESCRIPTION	MANUFACTURER CATALOG #	LIGHT SOURCE	POWER SUPPLY	VOLTS	INPUT WATTS
BA1	SURFACE ON ROOF RIDGE BEAM	SURFACE MOUNTED 7" W x 5.6" D x 8'-4" L LINEAR LED VAPORTIGHT LUMINAIRE; U.L. WET LOCATION LISTED FIBERGLASS HOUSING, ENCLOSED & GASKETED, W/ WATERTIGHT CONDUIT ENTRY HUBS AT BOTH ENDS, LINEAR RIBBED FROSTED 100% DR HIGH STRENGTH ACRYLIC LENS, POURED-IN-PLACE, NON POROUS LENS GASKET, OPTIONAL STAINLESS STEEL TAMPER- RESITANT LATCHES, FACTORY-PROVIDED STAINLESS STEEL MOUNTING BRACKETS & CHAIN-HANG KITS.	COLUMBIA LIGHTING LXEM-8-35XL-RFA-ED-U-DWH-SS MTG. BRACKET KITS	3500K 80CRI LED 10000 LM/4'	INTEGRAL ELECTRONIC NON-DIMMING DRIVER	UNV	183W
BA2	SURFACE ON ROOF RIDGE BEAM	SAME AS BA1, EXCEPT, (1) WATER TIGHT CONDUIT ENTRY HUB AT END OF UNIT.	COLUMBIA LIGHTING LXEM-8-35XL-RFA-ED-U-SWH-SS MTG. BRACKET KITS	3500K 80CRI LED 10000 LM/4'	INTEGRAL ELECTRONIC NON-DIMMING DRIVER	UNV	183W
END OF SCHEDULE							

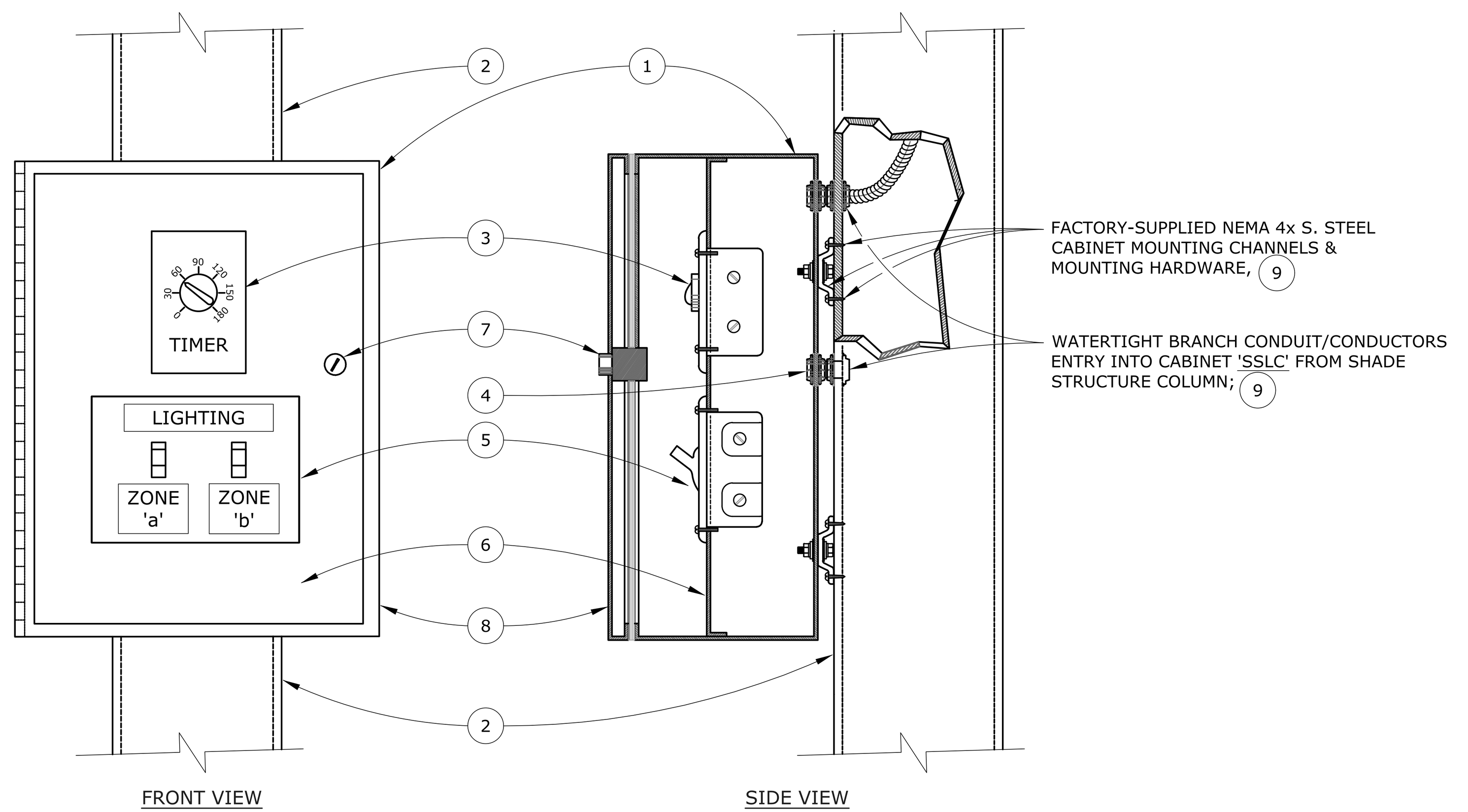


SITE PLAN - ELECTRICAL
SCALE: 1/8" = 1'-0"
1 E-1.2

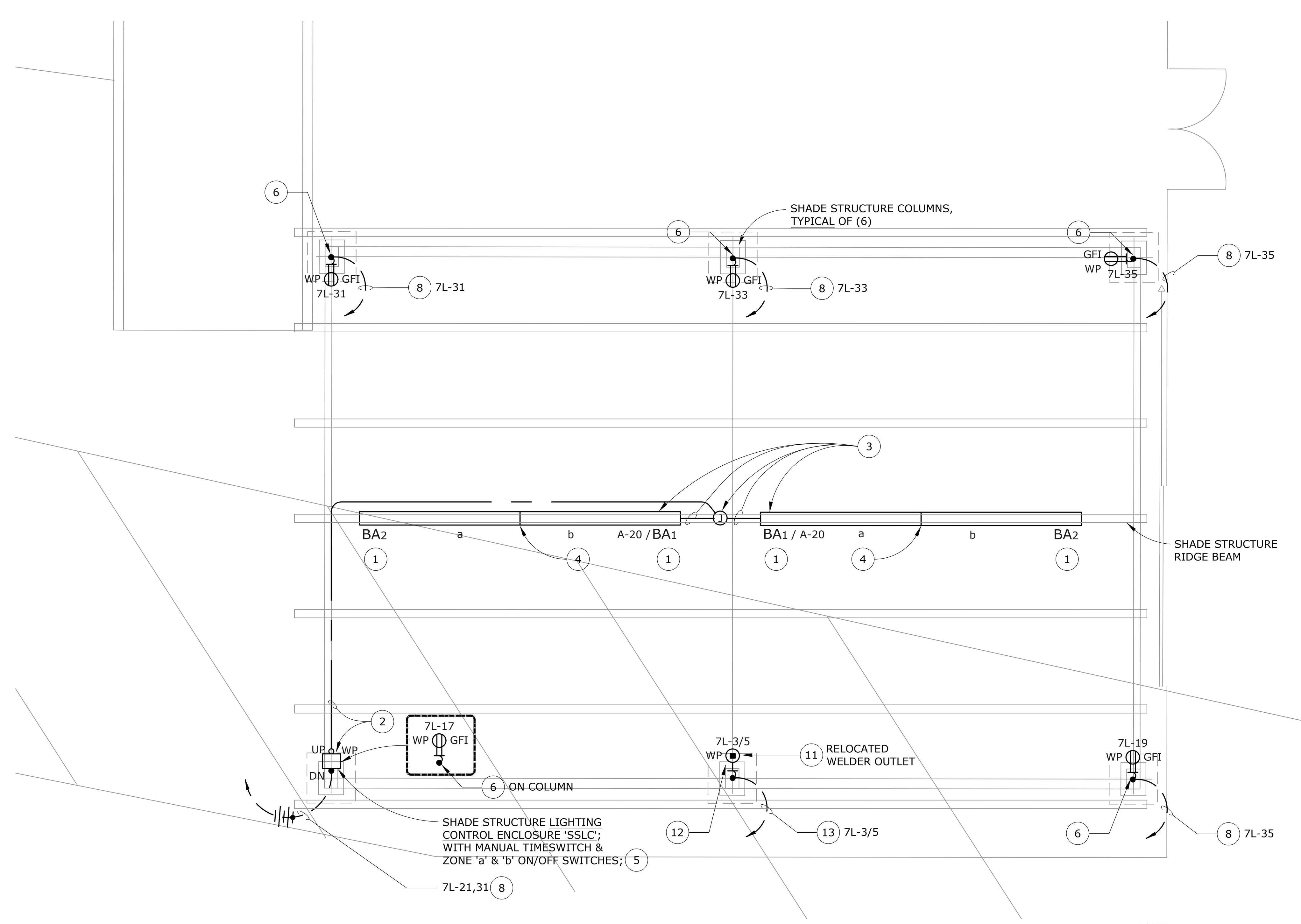
DETAIL NOTES:

1. NEW NEMA 4X STAINLESS STEEL SHADE STRUCTURE LIGHTING CONTROL CABINET 'SSLC', WITH MANUAL (3) HOUR TIME SWITCH AND ZONES 'a' & 'b' LIGHT SWITCHES, ALL MOUNTED ON CABINET INTERIOR DEAD FRONT PANEL. CABINET: HOFFMAN#CSD161210SS, WITH OPTIONAL KEYED DOOR LATCH & STAINLESS STEEL MOUNTING BRACKETS. ENCLOSURE DIMENSIONS: 16"H x 12"W x 10"D.
2. STRUCTURAL SQUARE TUBE STEEL SHADE STRUCTURE COLUMN.
3. MANUAL 120V, (3)-HOUR TIMER SWITCH.
4. 1/2" DIA. THREADED STAINLESS STEEL CONDUIT NIPPLE BETWEEN COLUMN AND CABINET, COMPLETE WITH ALL REQUIRED STAINLESS STEEL FLAT & LOCK WASHERS, RUBBER FLAT WASHERS (BOTH SIDES OF CABINET WALL & COLUMN), FOR COMPLETELY WATERTIGHT CONDUIT/CONDUCTOR ENTRY & EXIT INSTALLATIONS.
5. (2) 20A 1P LIGHTING 'ON/OFF' TOGGLE SWITCHES, COMPLETE WITH CUSTOM ENGRAVED S.S. 2-GANG COVERPLATE.
6. CONTROL ENCLOSURE DEAD FRONT S.S. PANEL.
7. OPTIONAL KEYED CABINET LATCH.
8. HINGED & GASKETED CABINET DOOR, WITH KEYED LATCH.
9. FACTORY EXTERNAL NEMA 4X CABINET STAINLESS STEEL MOUNTING CHANNELS & HARDWARE SECURED TO CABINET WITH FACTORY-SUPPLIED HARDWARE, SEALING WASHERS, ETC.; SECURED TO SHADE STRUCTURE COLUMN W/MIN. (6) 1/8" X 3/8" S.S. SELF-TAPPING SHEET METAL SCREWS EACH.





LIGHTING CONTROL CABINET - 'SSLC'
SCALE: 1/4" = 1'-0"
3 E-1.2

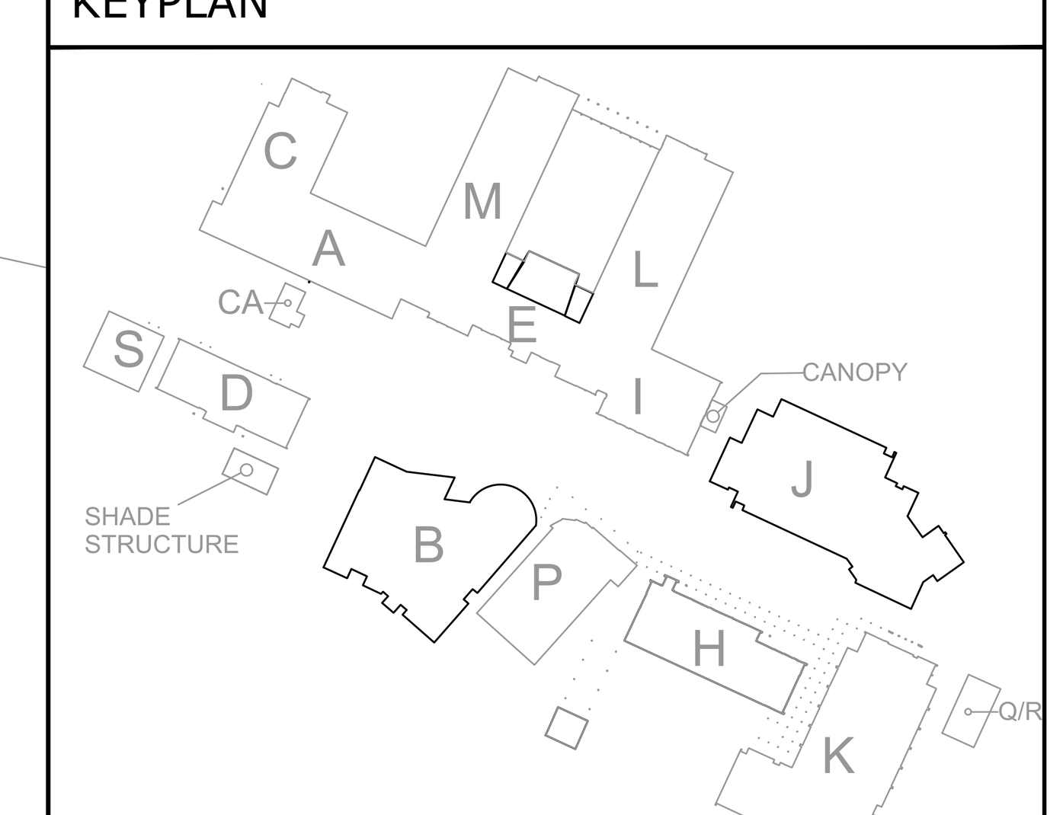


ENLARGED CANOPY PLAN - ELECTRICAL
SCALE: 1/4" = 1'-0"
2 E-1.2

NUMBERED SHEET NOTES

1. 'BA'-SERIES UNITS TO BE SECURED TO THE 'RIDGE BEAM' OF THE NEW SHADE STRUCTURE, UTILIZING FACTORY-SUPPLIED OPTIONAL STAINLESS STEEL MOUNTING BRACKETS, SECURED TO STRUCTURAL ROOF BEAM USING MIN. 1/8" DIA. x 3/8" L. SELF-TAPPING S. STEEL SCREWS, AND S. STEEL FACTORY MOUNTING HARDWARE. UTILIZE NEOPRENE FLAT-WASHERS AS REQUIRED FOR WATERTIGHT INSTALLATION.
2. COORDINATE INSTALLATION OF U/G RATED PVC COATED 12/3 METAL CLAD CABLE FOR NEW 'B1A/BA2' LUMINAIRE ASSEMBLIES, ROUTED INSIDE SHED STRUCTURE COLUMN, END RAFTER AND RIDGE BEAM, UTILIZING PROVISIONS (HANDHOLES FOR PULLING, ACCESS COVERPLATES, ETC.) PROVIDED BY THE SHED MFGR. FOR THIS PURPOSE. VERIFY EXACT REQUIREMENTS AND COORDINATE WITH SHED STRUCTURE INSTALLER.
3. PROVIDE AND INSTALL NEW PROPERLY-CONFIGURED 'FD'-TYPE DIECAST ALUMINUM, GASKETED, WET LOCATION J-BOX, SECURED TO RIDGE BEAM USING PROPERLY SIZED S. STEEL SELF-TAPPING SHEET METAL SCREWS, AND NEOPRENE AND S.S. FLAT- WASHERS. EXTEND THREADED S.S. CONDUIT AND CONDUCTORS TO NEW 'BA'-SERIES LUMINAIRES INDICATED, AND CONNECT COMPLETE, UTILIZING W.P. CONNECTING HUBS SUPPLIED WITH THE LUMINAIRES.
4. UTILIZE W.P. HUBS PROVIDED BY THE 'BA'-SERIES LUMINAIRE MANUFACTURER, AND SHORTEST POSSIBLE MATCHING THREADED RIGID STAINLESS STEEL CONDUIT NIPPLES FOR CONNECTIONS BETWEEN THE 'BA1' AND 'BA2' UNITS AS SHOWN.
5. SEE SPEC'S AND DETAIL 3/E-1.2. MOUNT ENCLOSURE AT +36" ABOVE FINISHED GRADE TO THE BOTTOM OF THE ENCLOSURE.
6. SURFACE MTD. 1-GANG J-BOX (TYPE FD) WITH CORROSION RESISTANT GFCI RECEPTACLE AND WEATHERPROOF COVER. MOUNT OVER SHADE STRUCTURE CUSTOM CUT-OUT AT +/-18” TO CENTER. SEE E-1.2 FOR SHADE STRUCTURE ELECTRICAL ROUTING AND CUT-OUT DETAILS.
7. UTILIZE (6) EXISTING SPARE 20A/1P CIRCUIT BREAKERS 17,19,21,31,33, AND 35 IN (E) PANEL FOR (N) CANOPY LIGHTING AND OUTLETS . PROVIDE NEW FULLY TYPED PANEL DIRECTORY TO IDENTIFY NEW AND EXISTING BRANCH CIRCUITS.
8. DIRECT BURIAL RATED 12/2 PVC COATED METAL CLAD CABLE FOR EACH CIRCUIT. STUB UP AT BASE OF COLUMN TO DIRECTLY ALIGN AND FALL WITHIN THE 3” BASE PLATE CUT-OUT. SEE E-1.2. DIRECT BURY AT MIN. 24” BELOW GRADE TO CHRISTY BOX AS SHOWN ON 1/E-1.1 AND SPLICE TO THWN CONDUCTORS FOR HOMERUN TO PANEL.
9. FLUSH IN-GROUND CHRISTY #N9 OR EQUAL, WITH TRAFFIC RATED H20 STEEL COVER LABELED “ELECTRIC”.
10. STUB UP AT BASE OF COLUMN. SEE 2/E-1.2
11. (E) WELDER OUTLET (NEMA 6-50R). DISCONNECT AND RELOCATE / RECONNECT AT NEW CANOPY STRUCTURE AT SOUTH/CENTER COLUMN. SPLICE AND EXTEND (E) CIRCUIT WITH (2)#6 + (1)#10G IN 3/4" CONDUIT.
12. SURFACE MTD. 1-GANG J-BOX (TYPE FD) WITH RELOCATED NEMA 6-50R WELDER RECEPTACLE AND WEATHERPROOF COVER. MOUNT OVER SHADE STRUCTURE CUSTOM CUT-OUT AT +/-18” TO CENTER. SEE E-1.2 FOR SHADE STRUCTURE ELECTRICAL ROUTING AND CUT-OUT DETAILS.
13. DIRECT BURIAL RATED 6/2 PVC COATED METAL CLAD CABLE FOR (E) EXTENDED WELDER OUTLET CIRCUIT. STUB UP AT BASE OF COLUMN TO DIRECTLY ALIGN AND FALL WITHIN THE 3” BASE PLATE CUT-OUT. SEE E-1.2. DIRECT BURY AT MIN. 24” BELOW GRADE TO CHRISTY BOX AS SHOWN ON 1/E-1.1 AND SPLICE TO THWN CONDUCTORS FOR HOMERUN TO (E) WELDER CIRCUIT RUN.
14. (2) NEW 3/4" SCHEDULE 40 PVC FOR CANOPY POWER AND LIGHTING CIRCUITS, MINIMUM 24" COVER. PATCH (E) SURFACE TO (N) CONDITION.
15. TURN UP AT SIDE OF (E) BUILDING AND TRANSITION TO SURFACE MOUNTED RGS, PAINTED TO MATCH BUILDING EXTERIOR. PENETRATE BUILDING WALL WITH CONDULET ELBOW ABOVE INTERIOR CEILING LEVEL AND SEAL WEATHER-TIGHT.
16. EXTEND OVERHEAD INSIDE BUILDING (ABOVE CEILING) TO (E) POWER PANEL '7L' WITH (2) 3/4" EMT.
17. PROVIDE (1) 2" CONDUIT FOR FUTURE POWER AT SHADE STRUCTURE. STUB UP ADJACENT TO SHADE STRUCTURE COLUMN AS SHOWN AND CAP. HOMERUN CONDUIT INSIDE BUILDING ABOVE CEILING AND STUB ADJACENT TO (E) POWER PANEL '7L'.
18. PROVIDE (1) 2" CONDUIT FOR FUTURE SIGNAL CABLING AT SHADE STRUCTURE. STUB UP ADJACENT TO SHADE STRUCTURE COLUMN AS SHOWN AND CAP. HOMERUN CONDUIT INSIDE BUILDING ABOVE CEILING AND STUB ADJACENT TO (E) IDF.

KEYPLAN



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REVISIONS

DSA APP NO. 01-120767

ARCH PROJECT NO: 2068.00
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DRAWING SCALE: AS NOTED
PTN: 65466-45 FILE NO: 21-H1

CD

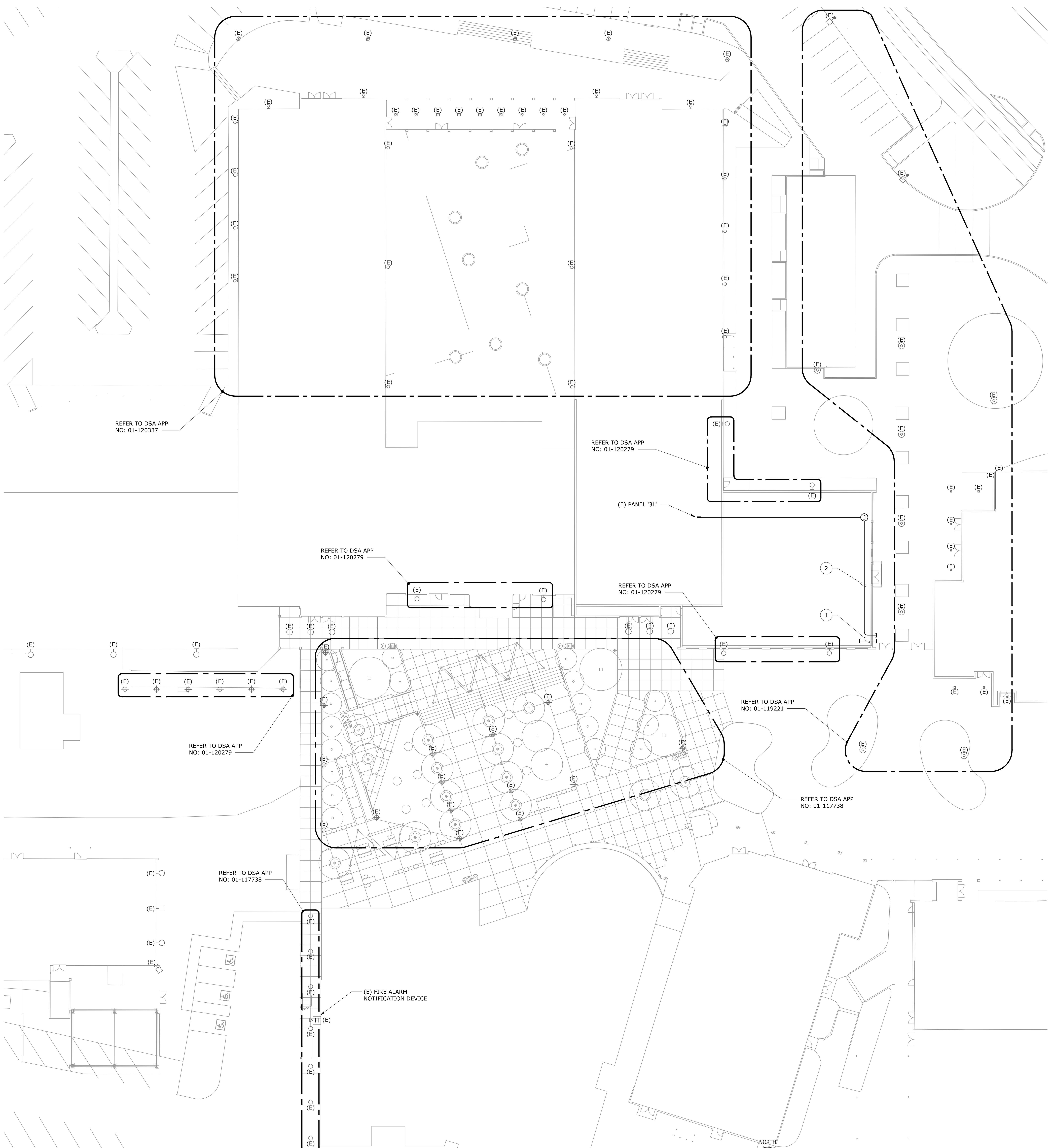
APRIL 18, 2023

SHEET TITLE

SITE PLAN - ELECTRICAL

SHEET NUMBER

TERRA LINDA HS CTE SHADE STRUCTURE - 222123



SITE PLAN - ELECTRICAL & EXISTING LIGHTING

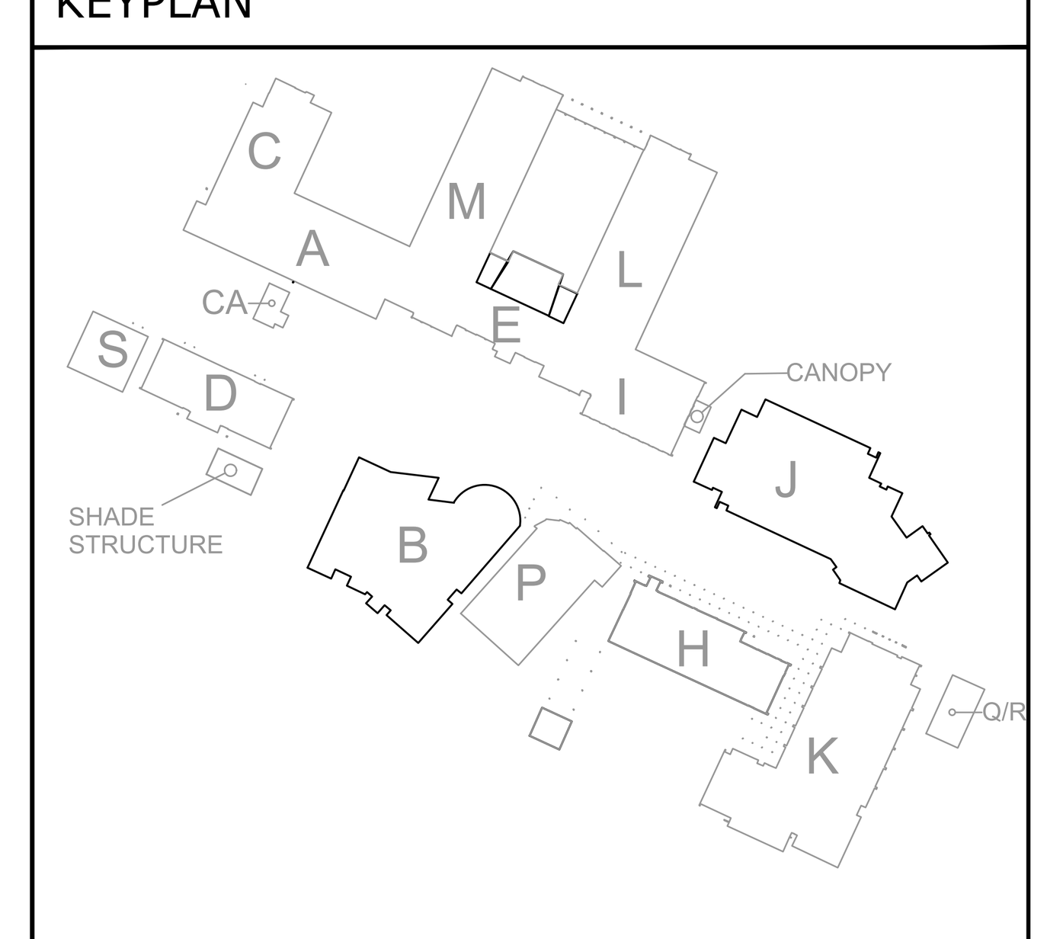
SCALE: 1" = 20'-0"

1 / E-1.2

NUMBERED SHEET NOTES

1. PROVIDE 3/4" CONDUIT FOR SECURITY SYSTEM WIRING AT GATE. STUB INTO ADJACENT ADMINISTRATION BUILDING ABOVE CEILING. SEAL WALL PENETRATION WEATHER-TIGHT. COORDINATE CONDUIT TERMINATION AT GATE WITH SECURITY CONSULTANT. PAINT EXPOSED CONDUIT TO MATCH ADJACENT SURFACES.
2. PROVIDE 3/4" CONDUIT FOR ELECTRIFIED HARDWARE CIRCUITRY AT GATE. PENETRATE ADMINISTRATION BUILDING EXTERIOR WALL ABOVE CEILING AND HOMERUN TO EXISTING PANEL '3L', AS SHOWN. SEAL WALL PENETRATION WEATHER-TIGHT. COORDINATE CONDUIT TERMINATION AT GATE WITH SECURITY CONSULTANT. PAINT EXPOSED CONDUIT TO MATCH ADJACENT SURFACES.

KEYPLAN



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SITE PLAN - ELECTRICAL & EXISTING LIGHTING

SHEET NUMBER

E-1.2A

TERRA LINDA HS CTE SHADE STRUCTURE - 222123

ELECTRICAL INFORMATION - RECTANGULAR GABLE

ICON'S STANDARD ELECTRICAL IS DESIGNED TO ACCOMMODATE Ø1/2" CONDUIT WITH A Ø3" INLET HOLE ON THE BOTTOM OF EACH COLUMN. THE CONDUIT PATHWAY RUNS THROUGH THE COLUMN, RAFTER, AND RIDGE BEAM THROUGH ALL BOLTED CONNECTIONS AS SHOWN. IF YOU HAVE SPECIAL ELECTRICAL REQUIREMENTS, PLEASE OUTLINE ANY CHANGES BELOW AS DESCRIBED.

PLEASE NOTE: DESIGN LIMITATIONS ON HOLE/CUTOUT SIZES MAY APPLY. ICON WILL REACH OUT TO DISCUSS ANY SUCH LIMITATIONS AS NEEDED.

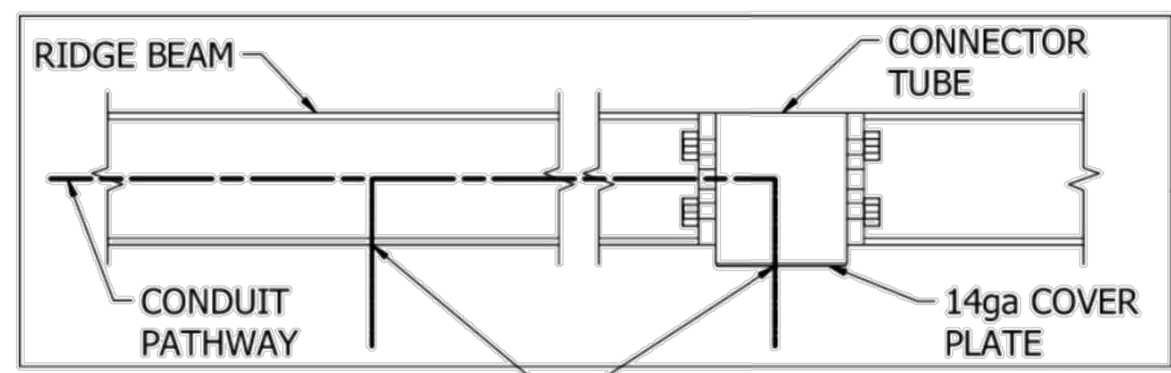
NOTE: ICON SHELTER FRAME IS NOT UL LISTED TO ACT AS A CONDUIT FOR ELECTRICAL WIRING. CONSULT LOCAL BUILDING CODES WHEN PLANNING YOUR ELECTRICAL SYSTEM.

STEPS:

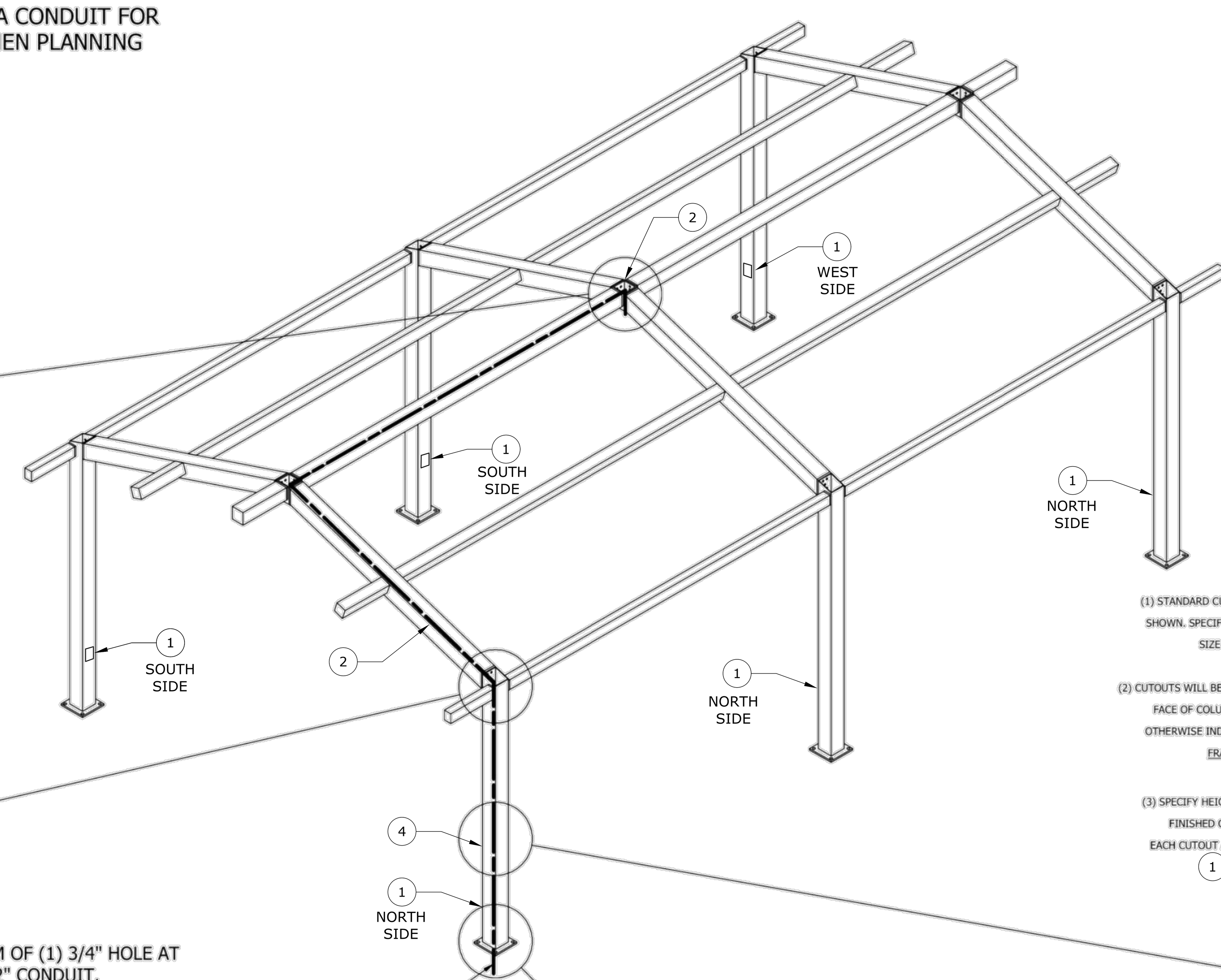
1. CONDUIT HOLE SIZE (DETAIL A)
2. ELECTRICAL EXIT HOLES (DETAIL B)
3. ELECTRICAL ACCESS & COVER PLATES (DETAIL C)
4. ELECTRICAL CONDUIT PATHWAY (DETAIL D)

OPTIONAL EXIT HOLES

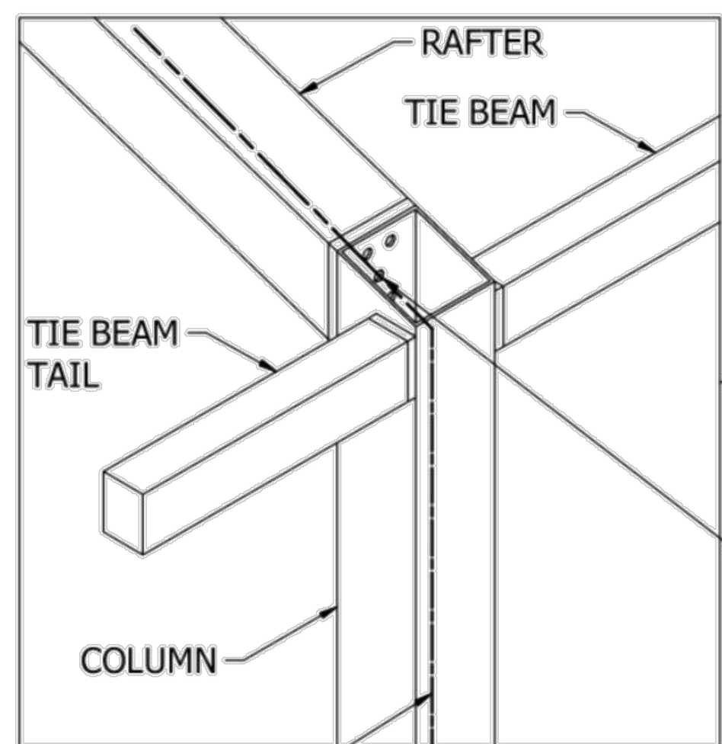
IF REQUIRED, EXIT HOLES FOR LIGHTING, ETC. CAN BE PLACED IN THE RIDGE BEAM AND/OR CONNECTOR TUBE WITH 14ga COVER PLATE AS SHOWN (CHARGES APPLY) USE FRAME SHEET OF THIS PRELIMINARY TO SPECIFY REQUIRED EXIT HOLE LOCATIONS AND SIZE.



DETAIL B



CONDUIT PATHWAY PROVIDED FOR EACH COLUMN.

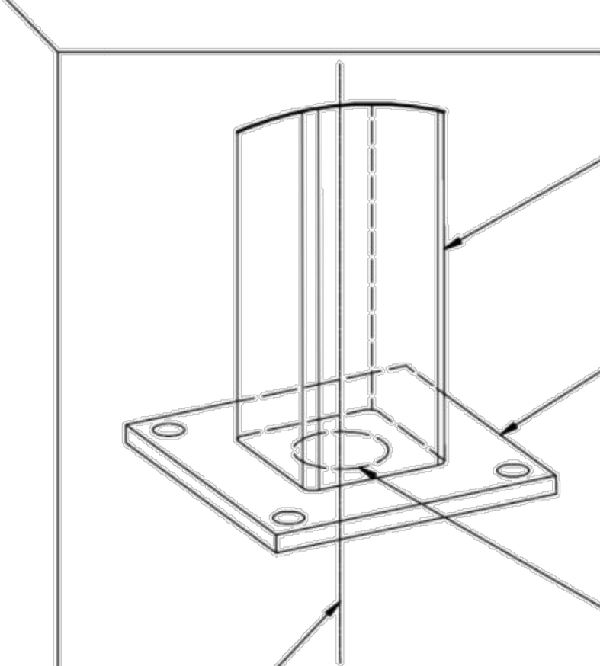


DETAIL A

ICON PROVIDES A MINIMUM OF (1) 3/4" HOLE AT EACH CONNECTION FOR 1/2" CONDUIT. IF APPLICABLE, PLEASE SPECIFY REQUIRED CONDUIT SIZE: (CHARGES APPLY)

- ☐ 3/4" CONDUIT (1" HOLES)
- ☐ 1" CONDUIT (1 1/4" HOLES)
- ☐ OTHER (PLEASE SPECIFY

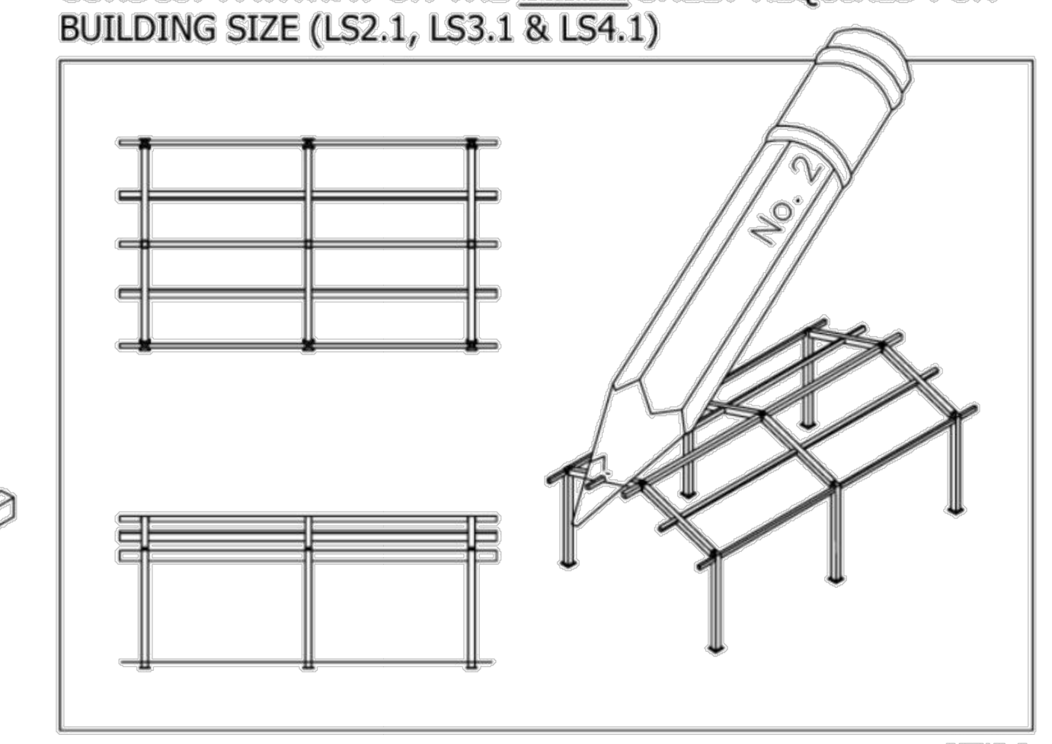
____



BASE DETAIL

NOTE: BUILDING DEPICTED ON THIS SHEET FOR ILLUSTRATION PURPOSES ONLY. ACTUAL LAYOUT AND FRAME MEMBER QUANTITIES VARY BY DESIGN. PLEASE REFER TO ELEVATION AND FRAME SHEETS IN THIS PRELIMINARY FOR ORDER-SPECIFIC CONFIGURATION.

IF REQUIRED, PLEASE DRAW THE NECESSARY ELECTRICAL CONDUIT PATHWAY ON THE FRAME SHEET REQUIRED FOR BUILDING SIZE (LS2.1, LS3.1 & LS4.1)



DETAIL D

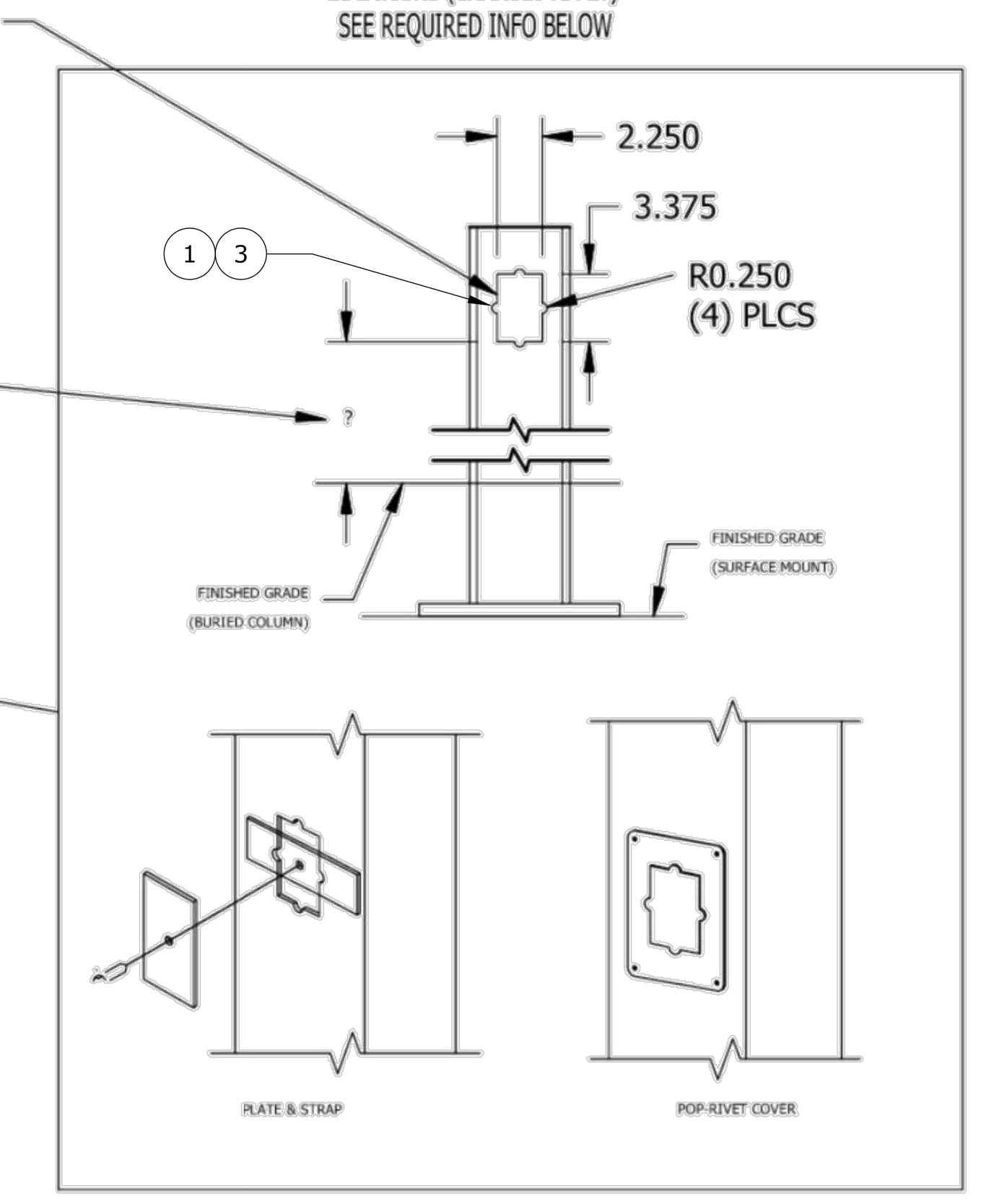
(1) OPTIONAL CUTOUTS

USE FRAME SHEET OF THIS PRELIMINARY TO SPECIFY REQUIRED CUTOUT LOCATIONS (CHARGES APPLY)
SEE REQUIRED INFO BELOW

(1) STANDARD CUTOUT SIZE SHOWN. SPECIFY IF OTHER SIZE REQUIRED.

(2) CUTOUTS WILL BE ON INSIDE FACE OF COLUMN UNLESS OTHERWISE INDICATED ON FRAME SHEET.

(3) SPECIFY HEIGHT ABOVE FINISHED GRADE FOR EACH CUTOUT AS SHOWN (1)



DETAIL C

(4) COVER PLATES PROVIDED UPON REQUEST (CHARGES APPLY)
PLEASE SPECIFY TYPE AND QUANTITY REQUIRED:

- ☐ PLATE & STRAP
- ☐ POP-RIVET COVER PLATE

HOW MANY REQUIRED?________

NUMBERED SHEET NOTES

1. COORDINATE WITH CANOPY MANUFACTURER FOR PROVISION OF AN ELECTRICAL OPENING AT EACH OF (6) SURFACE MOUNTED GFCI RECEPTACLES AT COLUMNS. LOCATE EACH RECEPTACLE OPENING AT +18" A.F.G. TO CENTER.
2. COORDINATE WITH CANOPY MANUFACTURER FOR PROVISION OF ELECTRICAL PATHWAYS AND OPENINGS AS SHOWN TO REACH THE GABLE PEAK AT CENTER. FEED NEW LIGHTING FROM CENTER AS SHOWN ON 2/E-1.2.
3. MOUNT SURFACE MOUNTED FD RECEPTACLE BOX OVER ELECTRICAL CUT-OUT AT EACH COLUMN. ENTER BOX AT REAR WITH 12/2 DB RATED, PVC COATED, MC CABLE.
4. COORDINATE WITH CANOPY MANUFACTURER FOR PROVISION OF AN ELECTRICAL OPENING AT THE SURFACE MOUNTED LIGHTING CONTROL ENCLOSURE ON THIS COLUMN. LOCATE OPENING AT +40" A.F.G. TO CENTER.

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SHEET TITLE

SHADE STRUCTURE ELECTRICAL PROVISIONS

SHEET NUMBER

E-7.1