CONSTRUCTION, AND THE SPECIFICATIONS, QUALITIES AND METHODS. ANY WORK INDICATED ON THE WORKING DETAILS AND NOT MENTIONED IN THE SPECIFICATIONS. OR VICE VERSA. SHALL BE FURNISHED AS THOUGH FULLY SET FORTH IN BOTH. WORK NOT PARTICULARLY DETAILED, MARKED OR SPECIFIED, SHALL BE IDENTICAL OR SIMILAR TO LIKE CASES OF CONSTRUCTION THAT ARE DETAILED. MARKED OR SPECIFIED. IF CONFLICTS OCCUR ON DRAWINGS AND/OR SPECIFICATIONS, THE MOST EXPENSIVE MATERIALS OR METHODS WILL

DESIGN CRITERIA

1. CODES AND STANDARDS

ASCE 7-10

ACI 318-14

2. VERTICAL LOADS

2016 CALIFORNIA BUILDING CODE (CBC)

AISI S100-12, S200-12, S213-07/S1-09 (2012)

AISC 360-10, 341-10, 358-10

2015 NDS, 2015 SDPWS

ROOF LIVE LOAD = 20 PSF

CORRIDORS = 80 PSF

3. SOILS VALUES: BEDROCK

FLOOR LIVE LOAD = 60 PSF

PERMITTED BY CODE.

MINIMUM FOOTING SIZE

b. DL + LL 4000 PSF

MINIMUM DEPTH = 1

MINIMUM WIDTH = $\underline{24}$

a. DL <u>4000</u> PSF

A. DL + LL + SEISMIC 5333 PSF

FOOTING (PAD)

DETAIL SHEET.

TMS 402-13/ACI 530-13/ASCE 5-13

GROUND SNOW LOAD = 20 PSF

TMS 602-13/ACI 530.1-13/ASCE 6-13

FLOOR PARTITION LIVE LOAD = <u>20</u> PSF

ALLOWABLE SOILS PRESSURE BASED ON

REPORT # <u>E13310.007 BY YOUNGDAHL DATED AUGUST 2016.</u>
2. FOUNDATIONS SHALL BEAR ON <u>NATIVE BEDROCK.</u>

6. FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT

OTHERWISE, FOUNDATIONS SHALL BE FULLY FORMED. USE

AS REQUIRED. PLANKING DOES NOT REPLACE FORMWORK

28. MAXIMUM SLUMP SHALL NOT EXCEED 4 INCHES.

ASTM C-330 FOR LIGHTWEIGHT CONCRETE

REINFORCED CONCRETE CONSTRUCTION".

WIRE FABRIC SHALL CONFORM TO ASTM A-185.

BEAMS & COLUMNS (TIES)----- 1-1/2"

BEAMS & COLUMNS (MAIN REINFORCING)----- 2"

SUBMIT REBAR MILL CERTIFICATES.

#5 AND SMALLER----

TILT-UP WALLS-----

SLABS (ON FORMS)-----

WWF SHALL BE 1-1/2 MESHES WIDE.

SHALL BE SUPPLIED BY CONTRACTOR.

ELEVATED STRUCTURAL SLAB CONDITIONS.

28. CONCRETE STRENGTHS & MIX PROPERTIES:

D. NW CONC FILL OVER DECK

CIVIL ENGINEER PRIOR TO FABRICATION.

B. SLAB ON GRADE

WINDOW SYSTEM DESIGN CRITERIA

CONTRACTOR.

C. TILT UP WALLS

A. FOUNDATIONS, ELEVATOR PITS 3000 PSI

* W/CM = WATER : CEMENTITIOUS MATERIAL RATIO

STORIES OF NOT LESS THAN "" DUE TO SEISMIC LOADS.

#6 AND LARGER-----

CEMENT SHALL CONFORM TO ASTM C-150 TYPE II OR V.

3. CEMENTITIOUS MATERIALS:

REQUIRED TO STABILIZE EXCAVATION.

EXCAVATIONS PROVIDED THE EXCAVATIONS ARE STABLE (AS

DETERMINED BY A REPRESENTATIVE OF THE SOILS ENGINEER).

MINIMUM PLANKING SHOWN TO PROTECT AGAINST SLOUGHING,

EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN MORTAR MATRIX

8. NOTIFY THE STRUCTURAL ENGINEER 48 HOURS BEFORE CASTING FOUNDATIONS.

A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.

B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED AND:

SEE NOTES AND DETAILS ON SHEET <u>PS-S-0.3.</u>

LIVE LOADS ARE REDUCED WHERE

LATERAL LOADS

 $2x12 \rightarrow -1x8 \rightarrow -2x12$

PLAN PLAN

1. ALL FOUNDATION WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS

REPRESENTATIVE OF THE SOILS ENGINEER AND MUST BE COMPACTED TO THE MINIMUM DENSITY

THE EXTENT AND DEPTH OF OVEREXCAVATION AND PLACEMENT OF ENGINEERED FILL SHALL AT A

MINIMUM BE AS SHOWN ON THE PLANS. FINAL DEPTH AND EXTENT OF EXCAVATION AND FILL SHALL

3. ALL FILLING, BACKFILLING AND COMPACTION SHALL BE DONE UNDER THE OBSERVATION OF A

4. BUILDING PAD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE SOILS REPORT

BE DETERMINED AT TIME OF CONSTRUCTION BY A REPRESENTATIVE OF THE SOILS ENGINEER.

7. THE SURFACE OF ALL HORIZONTAL CONSTRUCTION JOINTS SHALL BE CLEANED & ROUGHENED BY

C. THE FOUNDATION EXCAVATION DEPTH AND MATERIAL ARE ADEQUATE TO ACHIEVE DESIGN

1. STRUCTURAL CONCRETE SHALL ATTAIN 28 DAY COMPRESSIVE STRENGTH AS REQUIRED IN NOTE #

CONCRETE MIX DESIGNS SHALL BE PREPARED BY A REGISTERED CIVIL ENGINEER, REVIEWED BY

OWNER'S TESTING LABORATORY AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.

4. CONCRETE AGGREGATES SHALL CONFORM TO ASTM C-33 FOR NORMAL WEIGHT CONCRETE AND

5. NON-SHRINK GROUT OR DRYPACK SHALL CONSIST OF A PREMIXED NONMETALLIC FORMULA.

6. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 FOR #3 AND LARGER, EXCEPT

REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A-706. CONTRACTOR SHALL

7. ALL PREHEATING AND WELDING OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH

). DIMENSIONS SHOWN FOR LOCATION OF REINFORCING ARE TO THE FACE OF BARS LISTED AND

CONTRACTOR SHALL FURNISH WPS FOR ALL REBAR WELDING TO THE LABORATORY.

AS FOLLOWS, UNO: CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLABS)--- 3"

CONCRETE EXPOSED TO GROUND OR WEATHER BUT PLACED IN FORMS:

CAST-IN-PLACE WALLS (EXTERIOR FACE & SOIL SIDE)------ SEE ABOVE

CAST-IN-PLACE WALLS (INTERIOR FACE-#11 & SMALLER)----- 3/4"

SLABS (ON GROUND)----- 2" CLEAR FROM TOP UNO

OR RAKING THE SURFACE TO PROVIDE 1/4" DEEP DEFORMATIONS

BE SECURELY POSITIONED BEFORE PLACING CONCRETE.

15. REMOVE ALL DEBRIS FROM FORMS BEFORE CASTING ANY CONCRETE

18. WALLS SHALL BE CAST IN HORIZONTAL LAYERS OF 2'-0" MAXIMUM DEPTH.

CONCRETE IN BEAMS, SPANDRELS, OR SLABS SUPPORTED THEREON.

----- 1-1/2"

----- SEE DETAILS

11. SPLICES IN CONTINUOUS REINFORCEMENT SHALL BE LAPPED UNO, SEE SCHEDULE THIS SHEET

SPLICES IN ADJACENT BARS SHALL BE GREATER THAN 5'-0" APART. SPLICE CONTINUOUS BARS IN

UNO: TOP BARS AT CENTERLINE OF SUPPORT; BOTTOM BARS AT MID-SPAN. SPLICE CONTINUOUS

BARS IN ELEVATED SLABS AND BEAMS, ETC. AS FOLLOWS UNO: TOP BARS AT MID-SPAN; BOTTOM

BARS AT CENTERLINE OF SUPPORT. ALL BARS SIZE #14 AND LARGER SHALL BE CONTINUOUS FOR

12. THE MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER SHALL NOT BE LESS THAN THE

FULL LENGTH SHOWN OR SPLICED WITH MECHANICAL COUPLERS AS NOTED IN DETAILS. SPLICES IN

LARGER OF BAR DIAMETER, 1", OR 33% GREATER THAN THE MAXIMUM AGGREGATE SIZE (NOMINAL),

WHICHEVER IS GREATEST. THIS REQUIREMENT ALSO APPLIES TO THE CLEAR SPACING BETWEEN

DIFFERENT LAYERS OF PARALLEL BARS AND TO THE CLEAR DISTANCE BETWEEN A CONTACT LAP

PROVIDE HOOKS AT ENDS OF ALL REINFORCING AT ENDS, CORNERS AND INTERSECTIONS, UNO.

SURFACE. CONCRETE MAY BE ROUGHENED BY CHIPPING THE ENTIRE SURFACE, SAND BLASTING,

16. REINFORCING, DOWELS, BOLTS, ANCHORS, SLEEVES, ETC. TO BE EMBEDDED IN CONCRETE SHALL

17. ANCHOR BOLTS (AB'S) CAST IN CONCRETE OR MASONRY FOR WALL SILL AND LEDGER\APPLICATIONS

SHALL BE HEADED BOLTS WITH CUT THREADS CONFORMING TO ASTM A307, UNO. REFER TO "WOOD"

NOTES FOR ADDITIONAL REQUIREMENTS FOR BOLTS IN CONTACT WITH PRESSURE TREATED OR FIRE

RETARDANT MATERIAL. REFER TO 'STRUCTURAL STEEL' NOTE FOR REQUIREMENTS FOR ANCHOR

RODS (AR'S) CAST IN CONCRETE FOR COLUMN BASE PLATE AND STEEL EMBED APPLICATIONS.

SUPPLEMENTED BY HAND-SPADING, RODDING OR TAMPING. USE EQUIPMENT AND PROCEDURES

FOR CONSOLIDATION OF CONCRETE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF

ACI 309 TO SUIT THE TYPE OF CONCRETE AND PROJECT CONDITIONS. CONCRETE SHALL NOT BE

AGGREGATES. IN SUCH CASES HOPPERS AND CHUTES OR TRUNKS OF VARIABLE LENGTHS SHALL

MAX AGGR.

___SIZE___

1-1/2"

3/4"

MAX W/CM*

0.45

0.50

0.52

WEIGHT RATIO

NW

NW

NW

DROPPED THROUGH REINFORCING STEEL (AS IN WALLS) SO AS TO CAUSE SEGREGATION OF

BE USED SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 6 FEET.

23. NO WOOD SPREADERS ALLOWED. NO WOOD STAKES ALLOWED IN AREAS TO BE CONCRETED.

24. ADDITIONAL REINFORCING IN PRECAST OR TILT-UP PANELS REQUIRED FOR LIFTING STRESSES

25. PROVIDE #5 X 4'-0" DIAGONAL REINFORCING AT TOP AND BOTTOM OF SLAB AT ALL RE-ENTRANT

CORNERS TYPICAL. THIS APPLIES TO SLAB ON GRADE, CONCRETE OVER METAL DECK, AND

26. ALL SAW CUTTING SHALL BE DONE AFTER INITIAL SET HAS OCCURRED TO AVOID TEARING OR

27. NOTIFY STRUCTURAL ENGINEER A MINIMUM OF 48 HOURS BEFORE PLACING ANY CONCRETE

F'C @ 28 DAYS

3500 PSI

5000 PSI

3500 PSI

DAMAGE BY THE SAW BLADE, BUT BEFORE INITIAL SHRINKAGE HAS OCCURRED.

SITE AND MISCELLANEOUS - SEE CIVIL OR ARCH'L DRAWINGS

CBC ULTIMATE WIND SPEED - 115 MPH EXPOSURE CATEGORY C.

1. ALL MULLIONS AND THEIR CONNECTIONS SHALL BE DESIGNED TO SPAN BETWEEN STRUCTURAL

2. ALL MULLIONS AND THEIR CONNECTIONS SHALL ALLOW FOR A RELATIVE MOVEMENT BETWEEN

3. SUBMIT COMPLETE SHOP DRAWINGS AND CALCULATIONS SIGNED BY A REGISTERED CALIFORNIA

ITEMS, DIAGONAL BRACING ANGLES, BRACKETS, OUTRIGGERS, ETC.) AS REQUIRED FOR THE

SUPPORT OF THE WINDOW SYSTEM. EMBEDDED ITEMS SHALL BE INSTALLED BY THE GENERAL

4. DETAILS PROVIDED IN THESE DRAWINGS ARE FOR REFERENCE ONLY. WINDOW SYSTEM

SUPPORTS AS SHOWN ON DRAWINGS. VERIFY CEILING HEIGHTS WITH ARCHITECTURAL DRAWINGS.

MANUFACTURER SHALL DESIGN AND SUPPLY ALL CONNECTION MATERIALS (INCLUDING EMBEDDED

19. CONCRETE IN WALLS, PIERS OR COLUMNS SHALL SET AT LEAST 2 HOURS BEFORE PLACING

20. HORIZONTAL WALL BARS IN MULTI-CURTAIN CAST IN PLACE WALLS SHALL BE STAGGERED.

21. DOWEL ALL VERTICAL REINFORCING IN WALLS AND COLUMNS FROM FOUNDATION WITH

22. CONSOLIDATE CONCRETE PLACED IN FORMS BY MECHANICAL VIBRATING EQUIPMENT

13. ALL HOOKS SHALL BE STANDARD HOOKS UNLESS OTHERWISE SHOWN OR NOTED. AT WALLS,

14. CONSTRUCTION JOINTS SHALL BE MADE ROUGH AND ALL LAITANCE REMOVED FROM THE

SOIL-BEARING GRADE BEAMS, STRUCTURAL SLABS ON GRADE AND MAT FOUNDATIONS AS FOLLOWS

FLY ASH SHALL CONFORM TO ASTM C-618. MAX. QUANTITY OF FLY ASH SHALL BE AS GIVEN IN SPECS

AWS D1.4 LATEST EDITION AND SHALL BE CONTINUOUSLY INSPECTED BY A QUALIFIED LABORATORY.

8. REINFORCING STEEL SHALL BE FABRICATED ACCORDING TO "MANUAL OF STANDARD PRACTICE FOR

DENOTE CLEAR COVERAGE. NON-PRESTRESSED, CAST-IN-PLACE CONCRETE COVERAGE SHALL BE

BEARING CAPACITY; AND FORMING COMPLY WITH THE SOILS REPORT AND APPROVED PLAN.

9. A REPRESENTATIVE OF THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING

SPECIFIED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE SOILS REPORT.

FOUNDATION DEPTHS INDICATED ON PLANS ARE FOR ESTIMATING PURPOSES ONLY.

5. BOTTOMS OF ALL FOUNDATIONS SHALL BE LEVEL. CHANGES IN BOTTOM OF FOUNDATION

ELEVATION SHALL BE MADE ACCORDING TO STEPPED FOOTING DETAIL ON THE TYPICAL

SEISMIC

C. SHOULD AN ERROR APPEAR IN THE WORKING DETAILS OR SPECIFICATIONS OR IN WORK DONE BY OTHERS AFFECTING THIS WORK, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AT ONCE AND IN WRITING. IF THE CONTRACTOR PROCEEDS WITH THE WORK SO AFFECTED WITHOUT HAVING GIVEN SUCH WRITTEN NOTICE AND WITHOUT RECEIVING THE NECESSARY APPROVAL, DECISION OR INSTRUCTIONS IN WRITING FROM THE OWNER, THEN HE SHALL HAVE NO VALID CLAIM AGAINST THE OWNER, FOR THE COST OF SO PROCEEDING AND SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECT. NO VERBAL APPROVAL, DECISION, OR INSTRUCTION SHALL BE VALID OR BE THE BASIS FOR ANY CLAIM AGAINST THE OWNER, ITS OFFICERS, EMPLOYEES OR AGENTS. THE FOREGOING INCLUDES TYPICAL ERRORS IN THE SPECIFICATIONS OR NOTATIONAL ERRORS IN THE WORKING DETAILS WHERE THE INTERPRETATION IS DOUBTFUL OR WHERE THE ERROR IS SUFFICIENTLY APPARENT AS TO PLACE A REASONABLY PRUDENT CONTRACTOR ON NOTICE THAT, SHOULD HE ELECT TO PROCEED, HE IS DOING SO AT HIS OWN RISK. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS.

3. SHOP DRAWING NOTE: A. WHEN NOT ADDRESSED BY DIVISION 1 OF THE SPECIFICATIONS, PAPER FORMAT STRUCTURAL SHOP DRAWINGS SHALL BE SUBMITTED IN THE FORM OF THREE COPIES MINIMUM OF EACH SHEET. WHERE SUBMITTALS ARE ELECTRONIC. FORMAT SHALL BE PDF. B. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE STRUCTURAL ENGINEER THAT HE UNDERSTANDS THE DESIGN CONCEPT BY INDICATING

WHICH MATERIAL HE INTENDS TO FURNISH AND INSTALL. AND BY DETAILING THE FABRICATION AND INSTALLATION METHODS HE INTENDS TO USE ON A STAND ALONE SET OF DOCUMENTS. DUPLICATION OF DESIGN DOCUMENTS FOR THE PURPOSE OF SHOP DRAWINGS IS NOT ACCEPTABLE PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER. SHOP DRAWING SUBMITTALS SHALL INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, STRUCTURAL STEEL, REINFORCING STEEL, & GLUE-LAMINATED

D. PRIOR TO SUBMISSION THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SHALL STAMP SUBMITTALS AS BEING "REVIEWED FOR CONFORMANCE". E. SHOP DRAWING SUBMITTALS PROCESSED BY THE STRUCTURAL ENGINEER ARE NOT CHANGE

F. ANY DETAIL ON THE SHOP DRAWINGS THAT DEVIATES FROM THE CONTRACT DOCUMENTS SHALL CLEARLY BE MARKED WITH THE NOTE "THIS IS A CHANGE" G. SHOP DRAWINGS OR CALCULATIONS SUBMITTED FOR REVIEW THAT REQUIRE RESUBMITTAL FOR RE-REVIEW SHALL BE BILLED HOURLY FOR SUCH TIME TO THE GENERAL CONTRACTOR. RE-REVIEW WILL NOT PROCEED WITHOUT WRITTEN APPROVAL FROM THE GENERAL

CONTRACTOR FOR ADDITIONAL ENGINEERING REVIEW SERVICES.

4. SAFETY NOTE: A. IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS, AS THEY APPLY TO THIS PROJECT, OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA LATEST EDITION, AND ALL OSHA REQUIREMENTS. B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED. SHORING INDICATIONS (LOCATION, DIRECTION, DURATION, ETC.) ARE ONLY SHOWN ON THE STRUCTURAL DRWGS WHEN REQUIRED TO IMPLEMENT THE DESIGN INTENT OF THE FINAL WORK PRODUCT. DETERMINATION WHETHER SHORING IS REQUIRED FOR TEMPORARY OR INTERMEDIATE CONDITIONS DURING CONSTRUCTION IS WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR.

C. THE OWNER AND THE STRUCTURAL ENGINEER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS. 5. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER WHERE A CONFLICT OR DISCREPANCY OCCURS BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER PORTION OF THE CONTRACT DOCUMENTS OR EXISTING FIELD CONDITIONS. SUCH NOTIFICATION SHALL BE GIVEN IN DUE TIME SO AS NOT TO AFFECT THE CONSTRUCTION SCHEDULE. IN CASE OF A CONFLICT BETWEEN STRUCTURAL DRAWINGS AND SPECIFICATIONS THE MORE RESTRICTIVE CONDITION SHALL AKE PRECEDENCE LINI ESS WRITTEN APPROVAL HAS BEEN GIVEN FOR THE LEAST RESTRICTIVE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PRIOR TO COMMENCING ANY 6. WHEN CONSTRUCTION ATTACHES TO OR IS WITHIN AN EXISTING BUILDING, A COMPLETE SET OF DRAWINGS OF THE EXISTING BUILDING SHALL BE KEPT ON THE JOB SITE. CONTRACTOR TO OBTAIN THESE DRAWINGS FROM THE OWNER (IF THEY ARE AVAILABLE) 7. CONTRACTOR SHALL PROVIDE AN ALLOWANCE EQUAL TO 2% OF THE BID FOR STRUCTURAL STEEL.

MISC. IRON AND REINFORCING STEEL TO BE USED AT THE DISCRETION OF THE STRUCTURAL ENGINEER. UNUSED AMOUNT TO REVERT TO THE OWNER UPON COMPLETION OF THE JOB. 8. ANY SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE OR DETAILS SHALL BE REVIEWED BY THE ARCHITECT AND STRUCTURAL ENGINEER. SUCH REVIEW WILL BE BILLED ON A TIME AND MATERIALS BASIS TO THE GENERAL CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED 9, DO NOT SCALE DRAWINGS. CONTACT THE ARCHITECT OR STRUCTURAL ENGINEER FOR ANY

DIMENSIONS NOT SHOWN. 10 THESE DRAWINGS ARE NOT COMPLETE UNTIL REVIEWED AND ACCEPTED BY LOCAL BUILDING

GYP - GYPSUM

HDR - HEADER

HGR - HANGER

HT - HEIGHT

LBS - POUNDS

LOC - LOCATION

LL - LIVE LOAD

INFO - INFORMATION

JH - JOIST HANGER

K - KIPS (1000 LBS)

LLH - LONG LEG HORIZONTAL

LLV - LONG LEG VERTICAL

HORIZ - HORIZONTAL

HD - HOLDOWN

HDG - HOT DIPPED GALVANIZED

HSB - HIGH STRENGTH BOLT

HSS - HOLLOW STRUCTURAL SECTION

	RAWINGS ARE NOT COMPLETE UNTIL REVIE S AND THE OWNER AND SIGNED BY THE ST		
ABBREVIA 100SN003-1	<u>TIONS</u>		
	- ANCHOR BOLT	LONG -	- LONGITUDINAL
	- "MEMBER" ABOVE		- LAG SCREW
	- ABOVE	LWC -	- LIGHTWEIGHT CONCRETE
	- ADDITIONAL	LWIC -	- LIGHTWEIGHT INSULATING CONC
	- AIR HANDLING UNIT	MAX ·	- MAXIMUM
	- ALTERNATE	MB ·	- MACHINE BOLT
			- MECHANICAL
ARCH'L	- ARCHITECTURAL	MFR ·	- MANUFACTURER
(B)	- "MEMBER" BELOW	MI ·	- MALLEABLE IRON
BLŘĞ	- BLOCKING	MIN -	- MINIMUM
BLDG	- BUILDING	MISC -	- MISCELLANEOUS
BLW	- BELOW	MTL -	- METAL
BM	- BEAM	MK ·	- MARK
BMS	- BEAMS		- NEW
B.O.	- BOTTOM OF	NIC -	- NOT IN CONTRACT
BOF	- BOTTOM OF FOOTING		- NEAR SIDE
	- BOTTOM		- NOT TO SCALE
	- BRACING		- NORMAL WEIGHT CONCRETE
	- BEARING		- OVER
	- BETWEEN		- OPPOSITE HAND
	- CENTER TO CENTER		- OPENING
	- CENTER OF GRAVITY		- ORIENTED STRAND BOARD
	- CONSTRUCTION JOINT		- PIECE
	- CENTERLINE		- PERPENDICULAR
	- CLEAR		- PARTIAL JOINT PENETRATION
	- CONCRETE MASONRY UNIT		- PLATE
	- COLUMN		- PRESSURE TREATED
	- COORDINATE		- REINFORCING OR REINFORCEME
	- CONCRETE		- REQUIRED
	- CONNECTION		- REVISION
	- CONDITION		- REDWOOD
	- CONTINUOUS		- SLIP CRITICAL
	- CONTRACTOR		- SCHEDULE - SELF-DRILLING SCREW
	- COMPLETE JOINT PENETRATION		- SELF-DRILLING SCREW - SHEATHING
	- COUNTERSINK		- SHEATHING - SIMILAR
	- DOUBLE - DOUGLAS FIR	•	- SIMILAR - STRUCTURAL ENGINEER OF REC
	- DOUGLAS FIR - DEAD LOAD		- SLAB CONTROL JOINT
	- DEAD LOAD - DRAWING		- SLAB CONTROL JOINT - SHEET METAL SCREW
	- EXISTING		- SLAB-ON-GRADE
` '	- EACH		- STRUCTURAL PANEL
	- EACH FACE OR EDGE FASTENER		- SQUARE
	- EXPANSION JOINT		- STANDARD
	- ELEVATION		- STIFFENER
	- EDGE NAILING		- STAGGERED
	- EDGE OF SLAB		- STEEL
	- EQUAL		- STRUCTURAL
	- EACH WAY	SW -	- SHEAR WALL
	- FACE OF BLOCK(OR BRICK) OR FLAT BAR		- TO BE DETERMINED
	- FACE OF CONCRETE OR FRAMING	T&B ·	- TOP & BOTTOM
	CLIP (SIMPSON A35 UNO)	T&G	- TONGUE & GROOVE
FDN	- FOUNDATION	THRD -	- THREADED
FF	- FINISH FLOOR		- TOE NAIL
FRMG	- FRAMING		- TOP OF
FS	- FACE OF STUD OR FAR SIDE		- TOP OF CONCRETE (SLAB UNO)
	- FIRE TREATED		- TOP OF FOOTING OR TOP OF FRA
	- FOOTING		- TOP OF STEEL
	- GAUGE OR GAGE		- TOP OF WALL
	- GALVANIZED		- TRANSVERSE
	- GLUED LAMINATED BEAM		- TYPICAL
	- GRADE		- UNLESS NOTED OTHERWISE

VERT - VERTICAL

W/ - WITH

& - AND

W/O - WITHOUT

VIF - VERIFY IN FIELD

WF - WIDE FLANGE

WP - WORK POINT

WS - WOOD SCREW

WWF - WELDED WIRE FABRIC

XXS - DOUBLE EXTRA STRONG

Ø - ROUND OR DIAMETER

- NUMBER OR POUNDS

XS - EXTRA STRONG

± - PLUS OR MINUS

GENERAL NOTES APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

711 2107 152	/ _				, , , <u>, , , , , , , , , , , , , , , , </u>						
ATERAL LOADS EISMIC: SITE CLASS <u>C</u> C _S = <u>.1383</u>	300SN002-1	CEMENT LAP								ACI 31 CBC/IE	
$S_S = 0.461$; $S_{DS} = 0.369$ $S_1 = 0.227$; $S_{D1} = 0.238$					FC' = 300	00 PSI CO	NC				
$R = \underline{4}$; $I_E = \underline{1.5}$ $\Omega_O = \underline{2.5}$; $C_D = \underline{4}$ $I_P = \underline{1.0}$ TYPICAL	SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
I _P = <u>1.5</u> PER ASCE 7-10 SECT 13.1.3 RISK CATEGORY: <u>IV</u>	В	TOP	19	37	47	56	81	93	105	118	131
SEISMIC DESIGN CATEGORY: <u>D</u> SEISMIC BASE SHEAR		OTHER	15	29	36	43	63	72	81	91	101
= <u>993</u> KIPS (NS DIR.) = <u>1014</u> KIPS (EW DIR.) SEISMIC FORCE RESISTING SYSTEM:					FC' = 350	00 PSI CO	NC				
INT. CONC PRECAST SHEAR WALL (TILT UP) ANALYSIS PROCEDURE: <u>ELF</u> VIND:	SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
$V_{ULT} = 115 \text{ MPH}$; $V_{ASD} = 69 \text{ MPH}$	_	TOP	18	35	43	52	75	86	97	109	121
RISK CATEGORY: <u>4</u> EXPOSURE CATEGORY: <u>C</u>	В	OTHER	14	27	33	40	58	66	75	84	93
$GC_{Pl} = \pm 0.18$					FC' = 400	00 PSI CO	NC	•	1	•	
	SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
		TOP	17	32	40	48	70	80	91	102	113
WITH THE REQUIREMENTS OF THE SOILS	В	OTHER	13	25	31	37	54	62	70	79	87
<u>.</u>					FC' = 500	00 PSI CO	NC				
IE UNDER THE OBSERVATION OF A COMPACTED TO THE MINIMUM DENSITY IED IN THE SOILS REPORT.	SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
EQUIREMENTS OF THE SOILS REPORT. MENT OF ENGINEERED FILL SHALL AT A		TOP	15	29	36	43	63	72	81	91	101
EXTENT OF EXCAVATION AND FILL SHALL ENTATIVE OF THE SOILS ENGINEER.	В	OTHER	12	22	28	33	49	55	63	70	78
MATING PURPOSES ONLY.	NOTES:		TO NOT:	441 147	OUT COLIC	DETE ::-	T	ATER 6-		· · · · · · · · · · · · · · · · · · ·	

1. SCHEDULE APPLIES TO NORMAL WEIGHT CONCRETE WITH UNCOATED, GRADE 60 REINFORCING STEEL FOR #4 BARS AND LARGER (VALUES FOR #3 BARS BASED ON GRADE 40). 2. TOP REINFORCEMENT IS HORIZONTAL REINFORCEMENT LOCATED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE. 3. WHEN LIGHTWEIGHT CONCRETE IS USED, MULTIPLY LAP LENGTHS BY 1.30. 4. WHERE CLEAR SPACING OF BARS BEING SPLICED IS LESS THAN 2 BAR DIA. OR WHERE CLEAR COVER

OF BARS BEING SPLICED IS LESS THAN 1 BAR DIA., MULTIPLY LAP LENGTHS BY 1.50, UNO. 5. WHERE NOTES #3 AND #4 OCCUR, MULTIPLY LAP LENGTHS BY 2.00, UNO 6. WHERE CLASS A LAP SPLICE IS NOTED IN DETAIL, DIVIDE LENGTHS ABOVE BY 1.30.

CRITERIA NOTES

1. FABRICATION, ERECTION AND MATERIALS SHALL CONFORM WITH THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, THE AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, AND THE CALIFORNIA BUILDING CODE, LATEST EDITIONS UNO IN THE DESIGN

2. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM WITH ASTM A992. ALL OTHER STRUCTURAL STEEL ROLLED SHAPES (CHANNELS, ANGLES, ETC) AND PLATES SHALL CONFORM

WITH ASTM A36, UNO. 3. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPES E OR S, GRADE B.

ALL HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500, GRADE B. ALL STRUCTURAL STEEL SHALL RECEIVE A MINIMUM OF ONE SHOP COAT OF RED PRIMER PAINT. DO NOT PAINT AREAS TO BE FIELD WELDED, FIREPROOFED, GALVANIZED, TO RECEIVE SLIP-CRITICAL HIGH STRENGTH BOLTS, OR TO BE EMBEDDED IN CONCRETE. PROVIDE ADDITIONAL PAINTING AS NOTED IN THE SPECIFICATIONS.

6. ALL STRUCTURAL STEEL SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND SHALL BE LEFT IN PLACE UNTIL OTHER MEANS ARE PROVIDED TO ADEQUATELY BRACE THE STRUCTURE. CONTRACTOR RESPONSIBLE FOR REVIEWING ALL BASE PLATE AND SUPPORT CONDITIONS DURING ERECTION AND BRACING AS REQUIRED. SEE AISC AND OSHA REQUIREMENTS

7. PLACE NON-SHRINK GROUT UNDER ALL BASE PLATES BEFORE ADDING VERTICAL LOAD. 8. STRUCTURAL STEEL BELOW GRADE SHALL HAVE 3 INCHES MINIMUM OF CONCRETE COVER. BOLTED CONNECTIONS:

A. BOLTED CONNECTIONS SHALL CONSIST OF UNFINISHED BOLTS CONFORMING TO ASTM A307 UNO. WHERE HIGH STRENGTH BOLTS ARE INDICATED, BOLTS CONFORMING TO ASTM A325 OR ASTM A490 AS SPECIFIED SHALL BE PROVIDED. ANCHOR RODS CAST IN CONCRETE OR MASONRY SHALL BE HEADED BOLTS WITH CUT THREAD, FULL DIAMETER BODY STYLE CONFORMING TO ASTM F1554 GR. 36, 55 (WELDABLE PER S1 SUPPLEMENTARY REQUIREMENTS), OR 105 AS INDICATED ON DRAWINGS. IN LIEU OF HEADED ANCHOR BOLTS, IHREADED ROD CONFORMING TO THE ABOVE SPECIFICATION MAY BE USED WITH A SINGLE

NUT WELDED TO THE ROD OR DOUBLE NUTS TIGHTENED TO PREVENT ROTATION. ANCHOR ROD PROJECTION ABOVE TOP OF FOUNDATION SHALL BE AS NOTED ON THE DRAWINGS. B. BOLTED CONNECTIONS SHALL HAVE WASHERS CONFORMING TO ASTM F436 UNO. WASHERS MAY BE OMITTED AT SNUG-TIGHTENED AND SLIP-CRITICAL CONNECTIONS, EXCEPT WHERE REQUIRED BY THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS, LATEST EDITION. C. BASE PLATES SHALL HAVE NUTS AND WASHERS AT TOP AND BOTTOM OF PLATE. WASHERS FOR BASE PLATES SHALL BE A36 SQUARE OR CIRCULAR PLATE UNLESS ASTM F844 WASHERS ARE PERMITTED. SEE BASE PLATE DETAILS FOR PLATE SIZE AND PERMISSIBLE WASHER TYPE.

10. ADDITIONAL REQUIREMENTS FOR "SLIP-CRITICAL" BOLTED CONNECTIONS: A. "SLIP-CRITICAL" CONNECTIONS (A325SC DESIGN VALUES WITH SPECIAL INSPECTION) ARE REQUIRED AT ALL BRACED FRAME CONNECTIONS, AT ALL CONNECTIONS ALONG CHORD LINES AND DRAG LINES (AS NOTED ON PLANS), AND UNO, AT ALL BOLTS IN OVERSIZED OR SLOTTED HOLES.

B. THE SPECIAL INSPECTOR MUST BE PRESENT DURING INSTALLATION AND TIGHTENING OPERATION OF "SLIP-CRITICAL" CONNECTIONS. 11. PROVIDE 3/4" DIAMETER STITCH BOLTS AND RING FILLS, SPACED AT NOT MORE THAN 2'-0" ON

CENTER FOR ALL DOUBLE ANGLE MEMBERS UNO. 12. AT WOOD TO STEEL PARALLEL CONTACT, BOLT WITH 1/2" DIAMETER BOLTS AT MAXIMUM 24"CC 13. HOLES FOR UNFINISHED BOLTS SHALL BE OF THE SAME NOMINAL DIAMETER OF THE BOLT PLUS 1/16". USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE. 14. WELDING SHALL BE DONE BY THE ELECTRIC ARC PROCESS IN ACCORDANCE WITH AMERICAN WELDING SOCIETY STANDARDS, USING ONLY CERTIFIED WELDERS. ALL GROOVE WELDS SHALL HAVE COMPLETE PENETRATION UNLESS NOTED OTHERWISE. ALL EXPOSED WELDS

SHALL BE GROUND SMOOTH. ALL ELECTRODES FOR WELDING SHALL COMPLY WITH AWS CODE. E70 SERIES MINIMUM. 15. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTHS REQUIRED. 16. MINIMUM FILLET WELDS: 3/16" @ T < 1/2"

1/4" @ T < 3/4" 5/16" @ T > 3/4"

17. WELDING PROCEDURE SPECIFICATIONS (WPS) FOR SHOP AND FIELD PREQUALIFIED WELD JOINTS AND WELD JOINTS QUALIFIED BY TEST SHALL BE PREPARED FOR REVIEW PRIOR TO FABRICATION. ALL WELDING PROCEDURE ITEMS SUCH AS BASE METALS, WELDING PROCESSES, FILLER METALS AND JOINT DETAILS THAT MEET THE REQUIREMENTS OF AWS D1.1 SECTION 3 SHALL BE CONSIDERED AS PREQUALIFIED. ANY CHANGE OR SUBSTITUTION THAT IS BEYOND THE RANGE OR TOLERANCE OR REQUIREMENTS FOR PREQUALIFICATION SHALL BE QUALIFIED BY TEST PER AWS D1.1 SECTION 4 PART B. QUALIFICATION TESTING IS REQUIRED FOR PARTIAL PENETRATION AND COMPLETE PENETRATION WELDS

18. FOR NONDESTRUCTIVE TESTING OF WELDED CONNECTIONS EXCLUDING PRIMARY MEMBERS OF MOMENT RESISTING FRAMES: A. WELDED CONNECTIONS SHALL BE TESTED BY NONDESTRUCTIVE METHODS FOR COMPLIANCE WITH AISC N5.5, AND JOB SPECIFICATIONS. ULTRASONIC TESTING SHALL BE IN ACCORDANCE WITH AWS D1.1, ASTM E164 AND ASME SECTION V. RADIOGRAPHY SHALL BE IN ACCORDANCE WITH AWS D1.1, ASTM E94 AND E99,

AND ASME SECTION V. THIS TESTING SHALL BE PART OF THE SPECIAL INSPECTION REQUIREMENTS OF CBC SECTION 1705 PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY AS FOLLOWS: 1. BASE METAL THICKER THAN 1-1/2 INCH WHEN SUBJECT TO THROUGH THICKNESS WELD

SHRINKAGE STRAINS 2. ALL COMPLETE JOINT PENETRATION GROOVE OR BUTT WELDS. 3. ALL PARTIAL JOINT PENETRATION GROOVE WELDS WHEN USED IN COLUMN SPLICES. B. ANY MATERIAL DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF

DEFECT RATING IN ACCORDANCE WITH THE (LARGER REFLECTOR) CRITERIA OF AISC N5.5.

METAL DECK NOTES

1. PROVIDE METAL DECKING OF TYPE AND GAUGE AS SHOWN ON PLANS. 2. METAL FLOOR DECK SHALL BE COMPOSITE TYPE, CONFORMING TO ASTM A653, STRUCTURAL QUALITY, WITH MINIMUM YIELD STRENGTH OF 38 KSI AND SHALL BE ZINC COATED PER ASTM A653, G60 COATING DESIGNATION.

3. METAL ROOF DECK SHALL CONFORM TO ASTM A653, STRUCTURAL QUALITY, WITH MINIMUM YIELD STRENGTH OF 38 KSI AND SHALL BE ZINC COATED PER ASTM A653, G60 COATING DESIGNATION. 4. PRIOR TO FABRICATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE METAL DECKING, SHOWING DECK GAUGE, SIZE AND LAYOUT AS WELL AS CLOSURE CONDITIONS, WELDS TO

SUPPORTS AND SIDE LAP DETAILS. 5. CONNECTION AND WELDING OF DECKING TO STRUCTURAL SUPPORTS AND DECK SIDE SEAMS SHALL BE AS SPECIFIED IN THE STRUCTURAL DRAWINGS. ALL ELECTRODES FOR WELDING SHALL COMPLY WITH AWS CODE F60 SERIES MINIMUM

6. ALL REINFORCED OPENINGS IN METAL DECK SHALL BE INSTALLED BY METAL DECK SUBCONTRACTOR 7. AT METAL DECKS TO RECEIVE CONCRETE, ABSOLUTELY NO CONDUIT OR PIPING OF ANY TYPE IS TO

BE PLACED HORIZONTALLY WITHIN THE DEPTH OF THE CONCRETE ABOVE THE METAL DECK. 8. AT METAL DECK WITHOUT CONCRETE FILL THE FOLLOWING MAY BE ATTACHED WITHOUT SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER: ACOUSTICAL TILE AND GYPSUM BOARD CEILINGS ONLY: NO PIPING, DUCTING OR CONDUIT. MAXIMUM CEILING WEIGHT - 3.5 PSF. MAXIMUM WIRE HANGER $I \cap AD = 60#$ 9. WHERE SUSPENSION OR HANGER WIRES ARE REQUIRED BY OTHERS, VERIFY AND COORDINATE

LOCATIONS, PATTERNS, SPACINGS, ETC. WITH THE APPROPRIATE TRADE. DRILL OR PUNCH HOLES AT BOTTOM OF DECK FLUTES OF SUFFICIENT SIZE TO PASS SUPPORT WIRES. WIRE SUPPORTS SHALL BE LOOPED AND SECURED WITH A MINIMUM OF THREE (3) TIGHT TURNS AROUND A MINIMUM 1-1/2" X 12" LONG FURRING CHANNEL OR NO. 3 X 12" LONG REINFORCING BAR CENTERED ABOVE THE HOLE AND LAID IN THE DECK FLUTES.

COLD FORMED METAL FRAMING

1. GALVANIZED SHEET STEEL SHALL CONFORM TO ASTM A653, STRUCTURAL QUALITY, WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 43 MILS (18 GA) AND THINNER AND ASTM A653, STRUCTURAL QUALITY, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 54 MILS (16 GA) AND THICKER. HOT-ROLLED CARBON SHEET AND STRIP STEEL USED IN THE FABRICATION OF COLD-FORMED MEMBERS SHALL CONFORM TO ASTM A1011 WITH A RUST INHIBITIVE COATING.

2. METAL STUDS AND JOISTS SHALL BE OF SIZE AND THICKNESS SHOWN ON DRAWINGS WITH THE MINIMUM EFFECTIVE SECTION PROPERTIES SHOWN IN THE TABLE(S). 3. MINIMUM THICKNESS SHOWN IN TABLE FOR THE THICKNESS SPECIFIED REPRESENTS 95% OF DESIGN THICKNESS PER 2007 AISI-NAS W/ S2-2010 SUPPLEMENT.

4. METAL FRAMING SHALL BE PER ICC-ES NO. 3064P. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AGENCY APPROVAL FOR ANY SUBSTITUTIONS. 5. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE-SHEET STEEL"

WELDERS SHALL BE AWS CERTIFIED. WELDING RODS: E60XX SERIES. ALL FIELD WELDING SHALL HAVE SPECIAL INSPECTION. 6. TYPICAL METAL TRACK SHALL BE SAME GAUGE AS STUDS WHICH IT SUPPORTS, UNPUNCHED, WITH A FLANGE WIDTH OF 1 1/4 INCHES AND A DEPTH EQUAL TO THE NOMINAL STUD PLUS 2 TIMES THE TRACK THICKNESS PLUS THE RADIUS. NESTED TRACKS SHALL BE FABRICATED TO FILL THE OUTSIDE OF A TYPICAL METAL TRACK. DEEP LEG TRACKS SHALL HAVE A MINIMUM FLANGE WIDTH OF 2 INCHES. USE SLOTTED SLIP TRACKS WHERE SPECIFIED. SEE SECTIONS AND TYPICAL METAL

STUD DETAILS. . METAL STUDS SHALL NOT HAVE PUNCH-OUTS CLOSER THAN 10" FROM THE END OF THE STUD OR AT INTERMEDIATE LATERAL BEARING POINTS OF STUDS. METAL STUDS WHICH ARE PART OF BUILT-UP HEADER SECTIONS SHALL BE UNPUNCHED FULL LENGTH.

POWDER ACTUATED FASTENERS (SHOT PINS)

1. THESE NOTES GOVERN ALL CONDITIONS CALLED OUT ON THE PLANS AS 'SHOT PINS' UNLESS SPECIFICALLY NOTED OTHERWISE 2. ALL SHOT PINS SHALL BE X-U UNIVERSAL KNURLED SHANK FASTENERS WITH SHANK DIAMETER OF 0.157" AS MANUFACTURED BY HILTI INCORPORATED IN ACCORDANCE WITH ICC ESR-2269 AND THE CURRENT EDITION OF THE HILTI 'PRODUCT TECHNICAL GUIDE.' 3. ALL SHOT PINS SHALL INCLUDE STANDARD HILTI STEEL WASHERS.

4. SHOT PINS DRIVEN INTO STEEL BASE MATERIAL SHALL MAINTAIN A MINIMUM EDGE DISTANCE AT ALL

STEEL ELEMENTS OF 1/2" AND MINIMUM FASTENER SPACING SHALL BE 1". LENGTH OF PIN SHALL BE AS REQUIRED TO PENETRATE THRU STEEL MEMBER U.N.O. AT 3/4" THICK STEEL, PENETRATION 5. SHOT PINS DRIVEN INTO CONCRETE BASE MATERIAL SHALL MAINTAIN A MINIMUM EDGE DISTANCE AT ALL CONCRETE ELEMENTS OF 3" AND MINIMUM FASTENER SPACING SHALL BE 4". PINS SHALL HAVE 1 1/4" PENETRATION U.N.O. MINIMUM CONCRETE THICKNESS SHALL BE 3 TIMES THE PENETRATION DEPTH. CONCRETE SHALL ATTAIN FULL DESIGN STRENGTH PRIOR TO INSTALLING

6. SHOT PINS DRIVEN INTO 3 1/4" MINIMUM LIGHT WEIGHT CONCRETE FILL OVER 3"X 20 GA MINIMUM METAL DECK MAY BE INSTALLED FROM THE TOP OR FROM THE BOTTOM IN EITHER THE HIGH OR LOW FLUTE. PINS INSTALLED FROM THE TOP SHALL BE SPACED AS NOTED ABOVE FOR TYPICAL CONCRETE ELEMENTS. PINS INSTALLED FROM THE BOTTOM IN THE HIGH FLUTES SHALL BE INSTALLED WITHIN 1" OF FLUTE CENTER. PINS INSTALLED FROM THE BOTTOM IN THE LOW FLUTES SHALL BE INSTALLED WITHIN 1" OF THE FLUTE CENTER AND SHALL BE NO CLOSER THAN 1 1/8" TO THE EDGE OF THE LOW FLUTE. PINS INSTALLED FROM THE BOTTOM SHALL BE SPACED NO CLOSER THAN 5 1/2" PARALLEL TO THE FLUTES. PINS SHALL HAVE 1" PENETRATION INTO CONCRETE U.N.O. CONCRETE SHALL ATTAIN FULL DESIGN STRENGTH PRIOR TO INSTALLING SHOT PINS. 7. SHOT PINS MAY BE DRIVEN INTO 8" NOMINAL MINIMUM THICKNESS FULLY GROUTED NORMAL WEIGHT CMU WITH TYPE S MORTAR AND MINIMUM F'M = 1500 PSI AT TIME OF INSTALLATION. SHOT PINS MAY BE INSTALLED INTO THE FACE SHELLS, HORIZONTAL MORTAR JOINTS OR VERTICALLY CENTERED IN THE TOP OF GROUTED CELLS. SHOT PINS SHALL NOT BE INSTALLED IN VERTICAL MORTAR JOINTS OR WITHIN 1" OF VERTICAL MORTAR JOINTS. NO MORE THAN ONE SHOT PIN MAY OCCUR IN AN INDIVIDUAL MASONRY UNIT CELL AND MUST BE INSTALLED A MINIMUM OF 4" FROM THE EDGE OF THE WALL. SHOT PINS IN MORTAR JOINTS MUST BE A MINIMUM OF 8" FROM THE END OF THE WALL AND SHALL HAVE A MINIMUM SPACING OF 8".

8. SHOT PIN INSTALLERS SHALL BE CERTIFIED BY HILTI AND HAVE A CURRENT HILTI ISSUED OPERATORS LICENSE. SHOT PIN INSTALLATION SHALL MEET ALL OSHA REQUIREMENTS.

HOLLOW CONCRETE UNIT MASONRY (BLOCK)

1. ALL MASONRY SHALL BE MANUFACTURED AND PLACED IN ACCORDANCE WITH TMS 402, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", AND TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES". MASONRY UNITS AND COMPONENTS THAT ARE DAMAGED ARE NOT TO BE INSTALLED IN TH PROJECT. REINFORCEMENTS AND ACCESSORIES ARE NOT TO BE STORED ON THE GROUND

AND ARE TO BE PROTECTED FROM PERMANENT DISTORTIONS 3. WHEN THE AMBIENT AIR TEMPERATURE IS BELOW 40°F, THE COLD WEATHER PROCEDURES FROM TMS 602, ARTICLE 1.8C ARE TO BE IMPLEMENTED. WHEN THE AMBIENT AIR TEMPERATURE IS ABOVE 90°F, THE HOT WEATHER PROCEDURES FROM TMS 602, ARTICLE 1.8D

4. CONCRETE BLOCK UNITS SHALL CONFORM TO ASTM C90 . F'M = 2000 PSI. F'M SHALL BE VERIFIED IN ACCORDANCE WITH TMS 602, ARTICLE 1.4 B.2. CONCRETE BLOCK UNITS SHALL BE MEDIUM WEIGHT. ALL MASONRY CONSTRUCTION IS TO BE GROUTED SOLID. MORTAR SHALL BE TYPE S PER ASTM C270

GROUT SHALL BE PROPORTIONED TO ATTAIN A 28 DAY COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED F'M VALUE NOTED ABOVE. NOT MORE THAN 5% OF THE PEA GRAVEL SHALL PASS THE NO. 8 SIEVE AND 100% SHALL PASS THE 3/8" SIEVE. WHEN REQUIRED, GROUT STRENGTH SHALL BE VERIFIED IN ACCORDANCE WITH ASTM C1019 REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 FOR #4 AND LARGER. GRADE 40 FOR #3 AND SMALLER. REINFORCING STEEL THAT IS TO BE WELDED SHALL CONFORM TO ASTM

A706. CONTRACTOR SHALL SUBMIT REBAR MILL CERTIFICATES VERTICAL REINFORCING SHALL BE AS NOTED IN DETAILS, UNO. LOCATE BARS AT ALL CORNERS, WALL ENDS, INTERSECTIONS, JAMBS AND AT EACH SIDE OF A WALL JOINT. LOCATE BARS OR ADD ADDITIONAL BARS DIRECTLY UNDER FRAMING MEMBERS SUCH AS BEAMS, JOISTS, GIRDERS, AND TRUSSES WHERE CENTER TO CENTER SPACING OF FRAMING MEMBERS EXCEED 48" CC. DOWELS WITH STANDARD 90° HOOKS INTO THE FOUNDATION SHALL MATCH AND LAP VERTICAL REINFORCING, TYPICAL, UNLESS NOTED OTHERWISE

9. HORIZONTAL REINFORCING SHALL BE AS NOTED ON DETAILS, LOCATED AT THE CENTER OF THE MASONRY WALL, UNO. LOCATE TWO (2) #5 HORIZONTAL BARS AT ALL ELEVATED FRAMING ASSEMBLIES, SUCH AS ROOFS, FLOORS, AND STAIRS. ALSO, LOCATE TWO #5 HORIZONTAL BARS AT TOPS OF PARAPETS, TOPS OF FREE-STANDING WALLS, AT THE BOTTOM OF ALL WALLS, AND ALIGNED WITH THE SLAB-ON-GRADE. PLACE A #5 BAR AT EACH FACE OF THE MASONRY WALL ABOVE AND BELOW ALL WALL OPENINGS, UNO. EXTEND THESE BARS A MINIMUM OF A LAP LENGTH PAST THE EDGE OF THE OPENING. WHERE EXTENSION CAN NOT BE ACHIEVED, BEND BARS UP OR DOWN FOR A DISTANCE EQUAL TO THE SPECIFIED LAP LENGTH. 10. PLACE ALL HORIZONTAL BARS IN BOND BEAM UNITS. WHEN 2 BARS ARE USED, STAGGER LAPS

11. MINIMUM REBAR CLEARANCE TO FACE SHELL IS ONE BAR DIAMETER OR 1/2", WHICHEVER IS GREATER. WHERE WALLS ARE EXPOSED TO EARTH OR WEATHER, A MINIMUM COVER FOR THE REINFORCING BARS OF 2" SHALL BE MAINTAINED 12. BEFORE BLOCK IS PLACED ON CONCRETE, THOROUGHLY CLEAN CONCRETE OF ALL LAITANCE AND ALL LOOSE MATERIAL. ROUGHEN AS IN A CONCRETE CONSTRUCTION JOINT 13. CONCRETE BLOCK MASONRY SHALL BE BUILT TO PRESERVE THE UNOBSTRUCTED VERTICAL CONTINUITY OF THE CELLS. ALL HEAD AND END JOINTS SHALL BE SOLIDLY FILLED WITH MORTAR

FOR A DISTANCE IN FROM THE FACE OF THE WALL OR UNIT NOT LESS THAN THE THICKNESS OF THE LONGITUDINAL FACE SHELLS. BOND SHALL BE PROVIDED BY LAPPING SUCCESSIVE COURSES OR BY EQUIVALENT MECHANICAL ANCHORAGE. 14. VERTICAL CELLS SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR UNOBSTRUCTED CONTINUOUS VERTICAL CELL GROUT PLACEMENT SHALL CONFORM TO TMS 602 SECTION 3.5.

CLEAN OUT OPENINGS SHALL BE PROVIDED AT THE BOTTOMS OF ALL CELLS TO BE FILLED AT EACH LIFT OR POUR OF GROUT WHERE SUCH LIFT OR POUR OF GROUT IS IN EXCESS OF 5'-4" IN HEIGHT, IN ACCORDANCE WITH TMS 602 SECTION 3.2F. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM INSIDE OF SUCH CELLS. THE CLEAN OUTS SHALL BE SEALED AFTER INSPECTION AND BEFORE GROUTING. MECHANICALLY VIBRATE ALL

GROUT POURS REINFORCEMENT IS TO BE SUPPORTED IN PLACE TO PREVENT DISPLACEMENT CAUSED BY PLACEMENT OF GROUT AND MORTAR OR BY CONSTRUCTION LOADS.

18. THOROUGHLY CLEAN ALL CELLS AND BOND BEAMS OF MORTAR BEFORE GROUTING 19. ALL CELLS SHALL BE FILLED SOLIDLY WITH GROUT. ALL GROUTING SHALL BE DONE UNDER THE OBSERVATION OF A QUALIFIED INSPECTOR. REFER TO SPECIAL STRUCTURAL INSPECTION SECTION OF THESE NOTES FOR FREQUENCY OF GROUTING INSPECTION

20. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS OR KEYS, SHALL BE FORMED BY STOPPING THE POUR OF GROUT 1-1/2" BELOW THE TOP OF THE 21. EVERY VERTICAL BAR IN WALLS SHALL BE LAPPED PER THE TABLE BELOW WITH A DOWEL OF THE

SAME SIZE EXTENDING FROM THE FOUNDATION. CARRY EACH DOWEL TO WITHIN 3" OF THE BOTTOM OF THE FOUNDATION AND TERMINATE WITH 90 DEGREE HOOK. DOWELS SHALL BE STRAIGHT AND PLUMB 22. ALL EMBEDDED ITEMS (BOLTS, STRAPS, ETC.) SHALL BE SECURED IN PLACE PRIOR TO GROUTING.

CUT A HOLE IN THE FACE SHELL TO ATTAIN A MINIMUM OF 1/2" GROUT ALL AROUND EMBEDDED ITEMS AT THE FACE SHELL. WITHIN THE CELL OF THE UNIT, PROVIDE A MINIMUM OF 8" OF GROUT AROUND EMBEDDED ITEMS. AT HORIZONTAL ANCHOR INSTALLATIONS, MAINTAIN A MINIMUM CLEAR DISTANCE OF 1/2" BETWEEN END OF ANCHOR AND FACE SHELL OF UN SINGLE CONDUITS (3/4" MAX) MAY BE PLACED IN VERTICAL CELLS NOT CONTAINING VERTICAL REBAR. NO HORIZONTAL CONDUITS ALLOWED IN WALL CONSTRUCTION.

24. ANCHOR BOLTS CAST IN MASONRY SHALL BE HEADED BOLTS WITH CUT THREADS CONFORMING TO ASTM F1554 GRADE 36, OR ASTM A307 GRADE A, UNO. BENT BAR ANCHOR BOLTS ARE NOT

USE OPEN END BLOCK FOR ALL CONSTRUCTION NOT LAID IN RUNNING BOND. . ALL REBAR SHALL BE LAP SPLICED AND DEVELOPED AS FOLLOWS (UNO). WHERE EPOXY COATED REBAR IS USED, MULTIPLY LAP LENGTHS BY 1.5. BARS LARGER THAN #8 ARE TO BE LAPPED WITH MECHANICAL SPLICES THAT DEVELOP AT LEAST 125 PERCENT OF THE YIELD STRENGTH OF THE BAR

			CMU SI	PLICE & D	EVELOPME	NT LENGT	HS (F'M = 2	000 PSI)		
BAR	FY	\ \ \	6" C	МП	8" C	MU	10" (СМИ	12" (CMU
SIZE	(KSI)	Y	CENTER	E.F.	CENTER	E.F.	CENTER	E.F.	CENTER	E.F.
#3	40	1.0	14"	-	14"	14"	14"	14"	14"	14"
#4	60	1.0	18"	-	18"	22"	18"	22"	18"	22"
#5	60	1.0	28"	-	22"	35"	22"	35"	22"	35"
#6	60	1.3	53"	ı	38"	54"	38"	54"	38"	54"
#7	60	1.3	ı	ı	52"	ı	52"	63"	52"	63"
#8	60	1.5	-	-	-	-	72"	-	72"	72"
			-							

<u>METAL STAIRWAYS</u>

1. SUPPLIER SHALL PROVIDE COMPLETE DESIGN DRAWINGS AND CALCULATIONS FOR ALL METAL STAIRWAYS. STAIRWAYS SHALL BE DESIGNED FOR DEAD LOAD + 100 PSF LIVE LOAD, AND SEISMIC LOADS.

SUPPLIER SHALL DESIGN, SUPPLY, AND INSTALL ALL CONNECTION MATERIALS WHICH SHALI INCLUDE BUT ARE NOT NECESSARILY LIMITED TO EMBEDDED ITEMS, BEARING PLATES, STIFFENERS, DIAGONAL STRUTS, SUPPORT ANGLES, CHANNELS AND TUBES. ALL LOADING CONDITIONS RESULTING IN ECCENTRICITIES OR TORSION TO BEAMS AND/OR COLUMNS SHALL BE RESOLVED BY THE INSTALLATION OF STIFFENERS AND DIAGONAL STRUTS, DESIGNED, SUPPLIED AND INSTALLED

BY THE SUPPLIER. 3. SEISMIC FORCES SHALL BE ACCOUNTED FOR AND BRACED BACK TO THE MAIN STRUCTURE. SLIP DETAILS SHALL BE INCORPORATED AT GROUND LEVEL FOR STORY DRIFT. POSITIVE TIES USING REBAR SHALL BE PROVIDED TO RESIST SEISMIC FORCES AT FLOOR LEVELS WITH CONCRETE FILL.

4. SEE ARCHITECTURAL DRAWINGS FOR STAIRWAY DIMENSIONS AND DETAILS. 5. SUBMIT SHOP DRAWINGS AND CALCULATIONS SIGNED BY A CIVIL ENGINEER, REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED, FOR REVIEW BY THE ARCHITECT AND/OR STRUCTURAL ENGINEER, AND APPROVAL BY THE ENFORCEMENT AGENCY PRIOR TO FABRICATION. 6. PROVIDE REBAR AT ALL CONCRETE FILL ON TREADS AND LANDINGS PER SPECS. 7. SEE SPECIFICATIONS FOR ADDITIONAL DESIGN CRITERIA.

ELEVATOR GUIDE RAILS AND SUPPORTS

1. GUIDE RAILS, GUIDE RAIL SUPPORTS AND BRACKETS FOR ELEVATOR CAB OR COUNTERWEIGHT SHALL BE DESIGNED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS OF ASCE7-10 SECT 13.6.10.

2. PROVIDE SHOP DRAWINGS AND ENGINEERING CALCULATIONS FOR THE GUIDE RAILS, GUIDE RAIL SUPPORTS AND SUPPORTING BRACKETS SIGNED BY A CALIFORNIA CIVIL ENGINEER, FOR REVIEW BY THE ARCHITECT AND/OR STRUCTURAL ENGINEER, AND FOR APPROVAL BY THE ENFORCEMENT AGENCY PRIOR TO FABRICATION.

3. ALL LOADING CONDITIONS RESULTING IN ECCENTRICITIES OR TORSION TO BEAMS AND/OR COLUMNS SHALL BE RESOLVED BY THE INSTALLATION OF STIFFENERS AND DIAGONAL STRUTS DESIGNED AND INSTALLED BY THE SUPPLIER. 4. SEISMIC FORCES SHALL BE ACCOUNTED FOR AND BRACED BACK TO THE STRUCTURE. FOR

ADDITIONAL REQUIREMENTS SEE CALIFORNIA CODE OF REGULATIONS TITLE 24 PART 2 AND PART 7. 5. SEE ARCHITECTURAL DRAWINGS FOR OPENING/PIT DIMENSIONS, LOCATIONS AND DETAILS.

DRILLED-IN ANCHORS

DEFERRED APPROVALS

1. FOR CONCRETE CONSTRUCTION, EPOXY ANCHORS SHALL BE HILTI HIT-HY 200 PER ESR-3187, HILTI HIT-RE500-SD PER ESR-2322, SIMPSON SET-XP PER ESR-2508, OR POWERS PURE 110 PER ESR-3298 FOR THR'D ROD & REBAR. EXPANSION ANCHORS SHALL BE HILTI KB-TZ PER ESR-1917, SIMPSON STRONG-BOLT 2 PER ESR-3037, OR POWERS POWER-STUD+ SD2 PER ESR-2502. SCREW ANCHORS SHALL BE HILTI KWIK HUS-EZ (KH-EZ) PER ESR-3027, SIMPSON TITEN HD PER ESR-2713, OR POWERS

WEDGEBOLT+ PER ESR-2526. 2. FOR MASONRY CONSTRUCTION, EPOXY ANCHORS SHALL BE HILTI HIT-HY 70 PER ESR-2682, SIMPSON SET PER ESR-1772, OR POWERS T308+ PER ESR-3149 FOR THRD'D ROD & REBAR. EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT 3 (KB3) PER ESR-1385, SIMPSON WEDGE-ALL PER ESR-1396, OR POWERS POWER-STUD+ PER ESR-2966. SCREW ANCHORS SHALL BE HILTI KWIK HUS-EZ (KH-EZ) PER ESR-3056, SIMPSON TITEN HD PER ESR-1056, OR POWERS WEDGEBOLT+ PER ESR-1678. 3. ANCHOR TYPE, SIZE & EMBEDMENT SHALL BE INDICATED IN DRAWINGS. POST-INSTALLED ANCHORS FOR REPAIR SHALL BE EVALUATED ON A CASE BY CASE BASIS. NOTIFY STRUCTURAL ENGINEER FOR

4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN THE ICC

5. UNLESS NOTED OTHERWISE ANCHORS HAVE BEEN DESIGNED FOR SPECIAL INSPECTION. PROVIDE SPECIAL INSPECTION AS INDICATED IN THE ICC REPORT. 6. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING CONCRETE OR MASONRY, USE CARE AND

CAUTION TO AVOID CUTTING OR DAMAGING EXISTING REINFORCING BARS. DO NOT INSTALL ANCHORS IN PRESTRESSED CONCRETE ELEMENTS. 7. ANCHORS INSTALLED FROM THE BOTTOM INTO METAL DECK WITH CONCRETE SHALL BE INSTALLED IN THE CENTER OF THE LOW FLUTE OF THE DECKING UNLESS NOTED OTHERWISE IN ICC REPORT. THE DECKING SHALL HAVE A MINIMUM THICKNESS OF 20 GAUGE. THE MINIMUM

THICKNESS OF THE CONCRETE ABOVE THE HIGH FLUTE OF THE METAL DECK SHALL BE AS INDICATED IN THE ICC REPORT. SEE ICC REPORT FOR ADDITIONAL REQUIREMENTS, INCLUDING MINIMUM DIMENSIONS FOR FLUTE WIDTH AND DEPTH. 8. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT THE TIME OF ANCHOR INSTALLATION PER ACI 318, APPENDIX D.

9 INSTALLER CERTIFICATION AND INSPECTION IS REQUIRED FOR HORIZONTAL AND UPWARDLY

INCLINED ADHESIVE ANCHORS SUBJECTED TO SUSTAINED TENSION LOADING IN ACCORDANCE WITH

ACI 318. APPENDIX [10. THE INSPECTION OF THE ANCHORS SHALL BE DONE BY A QUALIFIED INSPECTION AGENCY AND A REPORT OF THE INSPECTION RESULTS SHALL BE SUBMITTED TO THE GOVERNING AGENCY AND ARCHITECT/STRUCTURAL ENGINEER.

1. THE FOLLOWING ITEMS REQUIRE DEFERRED APPROVAL FROM THE ENFORCEMENT AGENCY:

A. ELEVATOR B. WINDOW WALL/STORE FRONT SYSTEMS PREFABRICATED METAL STAIRS AND CONNECTIONS TO THE STRUCTURE

STRUCTURAL ENGINEER OF RECORD, AND APPROVED BY THE ENFORCEMENT AGENCY.

D. FIRE SPRINKLER SUPPORT E. EQUIPMENT STRUCTURAL ANCHORAGE

2. THE DESIGN OF THE ABOVE ITEMS IS BY THE CONTRACTOR/MANUFACTURER. CONTRACTOR/MANUFACTURER MUST PREPARE ALL NECESSARY CALCULATIONS AND DRAWINGS PER THE CALIFORNIA BUILDING CODE UNDER THE SUPERVISION OF A CIVIL ENGINEER, REGISTERED IN CALIFORNIA, AND SHALL OBTAIN ALL NECESSARY PLAN CHECK APPROVALS FROM THE ENFORCEMENT AGENCY. 3. INSTALLATION OF THE ABOVE ITEMS SHALL NOT BE STARTED UNTIL DETAILED PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS HAVE BEEN REVIEWED BY THE ARCHITECT OR

OLD FORMED METAL FRAMING SECTION PROPERTIES - SSMA C STUDS & JOISTS - S162 SECTIONS 2,3

501100 <u>2</u> 1										
GAUGE/MIL	20	/33	18	/43	16	/54	14/	68		UDS & ISTS
ESIGNATION	S16:	S162-33		33 S162-43 S162-54 S162-68		2-68				
MIN THICKNESS	0.03	329	0.04	128	0.0	538	0.06	677		
DEPTH "D"	lx	Sx	lx	Sx	lx	Sx	lx	Sx		– 1 5/8" −
2 1/2"	0.235	0.180	0.302	0.240	0.370	0.284	0.450	0.357		TYP
3 5/8"	0.551	0.268	0.710	0.372	0.873	0.444	1.069	0.574	▎┰┢	
4"	0.692	0.299	0.892	0.417	1.098	0.498	1.346	0.648	ַב <u></u>	
6"	1.793	0.577	2.316	0.767	2.860	0.916	3.525	1.164	Ì <u>↓</u> ∟	. ⊢ 1
8"	3.384	0.710	4.500	1.019	5.600	1.229	7.070	1.663		1/2"
10"	-	-	7.523	1.302	9.391	1.572	11.978	2.154		

14.298 | 1.914 | 18.390 | 2.645

1. FOR COMPLETE SECTION DESIGNATIONS IN ACCORDANCE WITH SSMA STANDARDS, ADD MEMBER DEPTH TO FRONT OF INDICATED DESIGNATION. EXAMPLE: FOR 3 5/8" MEMBER WITH GAUGE/MIL OF 18/43. THE FULL DESIGNATION IS 362S162-43

2. SECTION PROPERTIES SHOWN ARE EFFECTIVE PROPERTIES CONFORMING TO AISI A7.2 PER SSMA STANDARDS FOR MATERIAL STRENGTH NOTED BELOW. 3. PROVIDE 33 KSI MIN MATERIAL FOR 18/43 & LIGHTER SECTIONS, PROVIDE 50 KSI MATERIAL FOR 16/54 & HEAVIER SECTIONS.

STRUCTURAL OBSERVATION

 IN ACCORDANCE WITH SECTION 1704.6 OF THE 2016 CBC, THIS PROJECT IS REQUIRED TO HAVE STRUCTURAL OBSERVATION. STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY CBC SECTIONS 110 OR 1705. THE FOLLOWING

B. CONCRETE TILT UP WALLS (PRIOR TO CONCRETE PLACEMENT) C. STEEL ERECTION PRIOR TO COMPLETION OF FIRST ELEVATED LEVEL (FLOOR OR ROOF) D. METAL DECK AND CONCRETE OVER DECK REINFORCING (PRIOR TO CONCRETE PLACEMENT)

. THE OWNER SHALL EMPLOY THE ARCHITECT OR STRUCTURAL ENGINEER OF RECORD, OR ANOTHER REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT DESIGNATED TO PERFORM STRUCTURAL OBSERVATION. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR AND BUILDING OFFICIAL. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A STATEMENT THAT THE FIELD VISITS HAVE OCCURRED AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED

3. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL OBSERVER A MINIMUM OF 48 HOURS IN ADVANCE OF PROJECT MILESTONES SO THAT OBSERVATIONS MAY BE SCHEDULED.

Structural Sheet Index PS-S-0.1 GENERAL NOTES PS-S-0.2 STRUCTURAL SPECIAL INSPECTIONS &

PROJECT MILESTONES SHALL BE OBSERVED:

A. FOUNDATIONS (PRIOR TO CONCRETE PLACEMENT)

TESTING PS-S-0.3 TYPICAL DETAILS PS-S-0.4 INTERIOR METAL STUD TYPICAL DETAILS PS-S-0.5 METAL STUD TYPICAL DETAILS PS-S-0.6 TYPICAL DETAILS

PS-S-2.5 ROOF FRAMING PLAN - WEST

PS-S-2.6 ROOF FRAMING PLAN - EAST

PS-S-2.0 OVERALL DIMENSION PLAN PS-S-2.1 FOUNDATION PLAN - WEST PS-S-2.2 FOUNDATION PLAN - EAST PS-S-2.3 SECOND FLOOR FRAMING PLAN - WEST PS-S-2.4 SECOND FLOOR FRAMING PLAN - EAST

PS-S-3.5 SECTIONS PS-S-4.1 WALL ELEVATIONS PS-S-4.2 PANEL ELEVATIONS PS-S-4.3 PANEL ELEVATIONS PS-S-4.4 PANEL DETAILS

PS-S-4.5 DETAILS PS-S-4.6 FRAMING ELEVATIONS PS-S-9.1 STEEL DETAILS PS-S-9.2 STEEL DECK DETAILS PS-S-9.3 DETAILS PS-S-9.4 DETAILS PS-S-9.5 DETAILS

PS-S-3.1 BUILDING SECTIONS

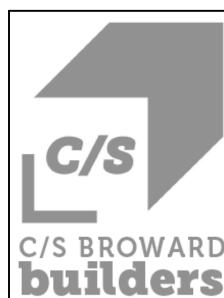
PS-S-3.3 SECTIONS

PS-S-3.4 SECTIONS

PS-S-9.6 DETAILS Buehler & Buehler Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 95 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco

Los Angeles . Silicon Valley

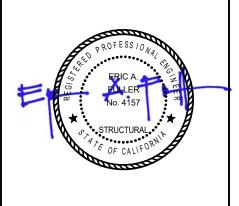
Structural Sheet Index



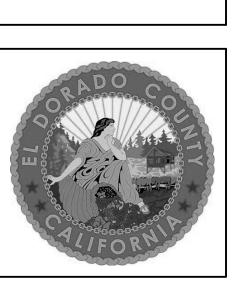


Arrington Watkins Architects 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

REGISTRANT SEAL



 ω



NO.	REVISIO	N	DATE
PRC	JECT NO.:	2	017.033
DAT	E:	04-	16-2018
DES	IGNED BY:		RJM
DRA	WN BY:		PVB
APP	ROVED BY:		
SHE	ET TITLE:		
GE	NERAL NO	TES	

1. SPECIAL INSPECTIONS AND TESTING SHALL BE PROVIDED BY A TESTING AND INSPECTION AGENCY, EMPLOYED BY THE OWNER (OR OWNER'S AUTHORIZED AGENT), AND APPROVED BY THE BUILDING OFFICIAL TO PROVIDE SPECIAL INSPECTIONS AND TESTING FOR THE PARTICULAR TYPE OF CONSTRUCTION.

. TABLES OF SPECIAL INSPECTIONS AND TESTING ARE DERIVED FROM THE STRUCTURAL PROVISIONS OF THE CBC AND REFERENCED STANDARDS AND ARE FOR REFERENCE ONLY. THE INCLUDED TABLES ARE PROVIDED FOR THE CONVENIENCE OF THE OWNER, TESTING AGENCY AND CONTRACTOR IN DEVELOPING THE SCOPE OF WORK FOR REQUIRED TESTING AND INSPECTION OF STRUCTURAL MATERIALS AND COMPONENTS. FINAL DEFINITION OF THIS SCOPE OF WORK IS TO BE DETERMINED BY THE TESTING AGENCY AND THE OWNER (OR OWNER'S AUTHORIZED AGENT). 3. FREQUENCY OF SPECIAL INSPECTIONS AND TESTING SHALL BE, AT A MINIMUM, AS NOTED FOR THE INDIVIDUAL ELEMENTS WITHIN THE TABLES BELOW. THE CONTRACTOR SHALL COORDINATE TIMING OF SPECIAL INSPECTIONS AND TESTING WITH THE SPECIAL INSPECTION AND TESTING AGENCY, 4. PRIOR TO THE START OF CONSTRUCTION, THE TESTING AND INSPECTION AGENCY SHALL PROVIDE DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION, IN ACCORDANCE WITH CBC SECTION 1704.2.1.

. THE TESTING AND INSPECTION AGENCY SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TESTS TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER OF RECORD AND THE CONTRACTOR. PER CBC SECTION 1704.2.4. THE REPORTS SHALL INDICATE WHETHER WORK INSPECTED OR TESTED CONFORMED TO THE APPROVED CONSTRUCTION DOCUMENTS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF DISCREPANCIES ARE NOT CORRECTED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER OF RECORD. 6. SPECIAL INSPECTION AND TESTING RECORDS SHALL BE RETAINED BY THE CONTRACTOR ON SITE

7. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT TO THE BUILDING OFFICIAL ACKNOWLEDGING RESPONSIBILITY FOR CONSTRUCTION OF THE MAIN LATERAL-FORCE RESISTING SYSTEM PRIOR TO COMMENCEMENT OF THAT WORK AS REQUIRED BY CBC SECTION 1704.4. 8. THE OWNER OR THE OWNER'S AUTHORIZED AGENT SHALL SUBMIT TO THE BUILDING OFFICIAL, A FINAL REPORT DOCUMENTING SPECIAL INSPECTIONS AND TESTS PER CBC SECTION 1704.2.4, AND REPORTS AND CERTIFICATES PER CBC SECTION 1704.5.

9. ALL SOILS AND FOUNDATION EXCAVATION INSPECTIONS SHALL BE BY THE GEOTECHNICAL ENGINEER OF RECORD, OR A GEOTECHNICAL FIRM HIRED BY THE OWNER PER CBC SECTION 1705.6. 10. SPECIAL INSPECTION IS REQUIRED FOR ALL SHOP FABRICATED MEMBERS OR ASSEMBLIES UNLESS WAIVED PER THE EXCEPTIONS IN CBC SECTION 1704.2.5. 11. DEFINITIONS:

A. CONTINUOUS - SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS CONTINUOUSLY PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.

B. PERIODIC - SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED. C. QUALITY ASSURANCE (QA) - MONITORING AND INSPECTION TASKS PERFORMED BY AN AGENCY OR FIRM OTHER THAN THE FABRICATOR OR ERECTOR TO ENSURE THAT THE MATERIAL PROVIDED AND WORK PERFORMED BY THE FABRICATOR AND ERECTOR MEET THE REQUIREMENTS OF THE APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED

STANDARDS. QUALITY ASSURANCE INCLUDES THOSE TASKS DESIGNATED 'SPECIAL INSPECTION' BY THE APPLICABLE CODE. D. QUALITY CONTROL (QC) - CONTROLS AND INSPECTIONS IMPLEMENTED BY THE FABRICATOR OR ERECTOR, AS APPLICABLE, TO ENSURE THAT THE MATERIAL PROVIDED AND WORK PERFORMED MEET THE REQUIREMENTS OF THE APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED

E. OBSERVE (O) - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. F. PERFORM (P) - PERFORM THOSE TASKS PRIOR TO FINAL ACCEPTANCE FOR EACH ITEM OR

ELEMENT. G. DOCUMENT (D) - THE INSPECTOR SHALL PREPARE REPORTS INDICATING THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE REPORT NEED NOT PROVIDE DETAILED MEASUREMENTS FOR JOINT FIT-UP, WPS SETTINGS, COMPLETED WELDS, OR OTHER INDIVIDUAL ITEMS LISTED IN THE TABLES. FOR SHOP FABRICATION, THE REPORT SHALL INDICATE THE PIECE MARK OF THE PIECE INSPECTED. FOR FIELD WORK, THE REPORT SHALL INDICATE THE REFERENCE GRID LINES AND FLOOR OR ELEVATION INSPECTED. WORK NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND WHETHER THE NONCOMPLIANCE HAS BEEN SATISFACTORILY REPAIRED SHALL BE NOTED IN THE INSPECTION REPORT.

12. SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED DURING CONSTRUCTION ON THE WORK SHOWN IN THE CONSTRUCTION DOCUMENTS AS REQUIRED BY CBC CHAPTER 17, THE TABLES LISTED BELOW, AND THE JURISDICTION'S SPECIAL INSPECTION AND TESTING FORM. IF DISCREPANCIES ARE NOTED, CONTACT THE SEOR. ALL EXCEPTIONS INCLUDED IN CBC CHAPTER 17 ARE PERMITTED TO BE USED.

 CONCRETE CONSTRUCTION MASONRY CONSTRUCTION - LEVEL C

UNTIL COMPLETION OF CONSTRUCTION.

 STEEL CONSTRUCTION - WELDING INSPECTION STEEL CONSTRUCTION - WELDING TESTING

 STEEL CONSTRUCTION - BOLTING STEEL COMPOSITE CONSTRUCTION

COLD-FORMED STEEL DECK

<u>LFRS (SEE NOTE #13)</u>
• STRUCTURAL STEEL LFRS - WELDING INSPECTIONS STRUCTURAL STEEL LFRS - WELDING TESTING STRUCTURAL STEEL LFRS BOLTING STRUCTURAL STEEL LFRS COMPOSITE CONSTRUCTION

13. SPECIAL INSPECTIONS AND TESTING ARE REQUIRED FOR THE LATERAL FORCE-RESISTING SYSTEM (LFRS) AND SHALL BE PROVIDED FOR ALL COMPONENTS AND CONNECTIONS ASSOCIATED WITH THE DESCRIPTION BELOW. SPECIAL INSPECTIONS AND TESTING FOR THE LFRS SHALL BE PER THE LFRS TABLES ABOVE, AND ARE IN ADDITION TO ALL OTHER REQUIRED INSPECTIONS AND TESTING. IF NO LFRS TABLES ARE INCLUDED, INSPECTIONS AND TESTING FOR THE LFRS ITEMS NOTED SHALL BE PER THE TYPICAL MATERIAL TABLES.

METAL DECK ROOF AND HIGH ROOF

 CONCRETE OVER METAL DECK FLOOR CONCRETE TILT-UP WALLS AND STEEL LEDGERS

 WF BEAMS WITH CONNECTIONS INDICATED AS: ●● CONCRETE WALL FOUNDATIONS

• CONCRETE WALL FOUNDATIONS		
SOILS - REQUIRED SPECIAL INSPECTIONS AND TESTS CBC TABLE 1705.6 110SN201-1		
TYPE	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	Х
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	1	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	Х	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	Х

STRUCTURAL STEEL LFRS - WELDING - REQUIRED TESTING AISC 341 - SECTION J6.2 NONDESTRUCTIVE TESTING (NDT) OF WELDED JOINTS

LL REQUIREMENTS OF THE 'STEEL CONSTRUCTION - WELDING - REQUIRED TESTING' TABLE SHALL APPLY IN ADDITION TO THE TESTING NOTED BELOW.

WHERE WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA. THE WEB SHALL BE TESTED FOR CRACKS USING MAGNETIC PARTICLE TESTING (MT). THE MT INSPECTION AREA SHALL INCLUDE THE K-AREA BASE METAL WITHIN 3" OF THE WELD. THE MT SHALL BE PERFORMED NO SOONER THAN 48 HOURS FOLLOWING COMPLETION OF THE WELDING.

B) CJP GROOVE WELD NDT ULTRASONIC TESTING (UT) SHALL BE PERFORMED ON 100% OF CJP GROOVE WELDS IN MATERIALS 5/16" THICK OR GREATER. ULTRASONIC TESTING IN MATERIALS LESS THAN 5/16" THICK IS NOT REQUIRED. WELD DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1/D1.1m TABLE 6.2. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS. THE RATE OF UT AND MT IS PERMITTED TO BE REDUCED IN ACCORDANCE WITH SECTIONS J6.2G AND J6.2H,

RESPECTIVELY. C) BASE METAL NDT FOR LAMELLAR TEARING AND LAMINATIONS AFTER JOINT COMPLETION, BASE METAL THICKER THAN 1 1/2" LOADED IN TENSION IN THE THROUGH-THICKNESS DIRECTION IN TEE AND CORNER JOINTS, WHERE THE CONNECTED MATERIAL IS GREATER THAN 3/4" AND CONTAINS CJP GROOVE WELDS, SHALL BE ULTRASONICALLY TESTED FOR DISCONTINUITIES BEHIND AND ADJACENT TO THE FUSION LINE OF SUCH WELDS. ANY BASE

OF THE PART SUBJECTED TO THE THROUGH-THICKNESS STRAIN. BEAM COPE AND ACCESS HOLE NDT AT WELDED SPLICES AND CONNECTIONS. THERMALLY CUT SURFACES OF BEAM COPES AND ACCESS HOLES SHALL BE TESTED USING MAGNETIC PARTICLE TESTING OR PENETRANT TESTING. WHEN THE FLANGE THICKNESS EXCEEDS 1 1/2" FOR ROLLED SHAPES. OR WHEN THE

METAL DISCONTINUITIES FOUND WITHIN T/4 OF THE STEEL SURFACE SHALL BE ACCEPTED OR

REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1/D1.1m TABLE 6.2, WHERE 'T' IS THE THICKNESS

E) REDUCED BEAM SECTION REPAIR NDT MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON ANY WELD AND ADJACENT AREA OF THE REDUCED BEAM SECTION (RBS) CUT SURFACE THAT HAS BEEN REPAIRED BY WELDING, OR ON THE BASE METAL OF THE RBS CUT SURFACE IF A SHARP NOTCH HAS BEEN REMOVED BY

F) WELD TAB REMOVAL SITES

AT THE END OF WELDS WHERE WELD TABS HAVE BEEN REMOVED. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON THE SAME BEAM-TO-COLUMN JOINTS RECEIVING UT AS REQUIRED UNDER SECTION J6.2B. THE RATE OF MT IS PERMITTED TO BE REDUCED IN ACCORDANCE WITH SECTION J6.2H. MT OF CONTINUITY PLATE WELD TABS REMOVAL SITES IS NOT REQUIRED.

B) REDUCTION OF PERCENTAGE OF ULTRASONIC TESTING

WEB THICKNESS EXCEEDS 1 1/2" FOR BUILT-UP SHAPES.

THE REDUCTION OF PERCENTAGE OF UT IS PERMITTED TO BE REDUCED, IN ACCORDANCE WITH THE 'STEEL CONSTRUCTION - WELDING - REQUIRED TESTING' TABLE ITEM (E). H) REDUCTION OF PERCENTAGE OF MAGNETIC PARTICLE TESTING

THE AMOUNT OF MT ON CJP GROOVE WELDS IS PERMITTED TO BE REDUCED IF APPROVED BY THE ENGINEER OF RECORD AND THE AUTHORITY HAVING JURISDICTION, PER AISC 341 SECTION

CONCRETE CONSTRUCTION - REQUIRED CBC TABLE 1705.3	RED SPEC	CIAL INSPECTION	NS AND TESTS	<u>S</u>
TYPE		CONTINUOUS	PERIODIC	REFERENCED STANDARD
1. INSPECT REINFORCEMENT, INCLUI PRESTRESSING TENDONS, AND VERI PLACEMENT.		-	Х	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3
2. REINFORCING BAR WELDING:				AWS D.14 ACI 318: 26.5.4
A. VERIFY WELDABILITY OF REINF BARS OTHER THAN ASTM A706	ORCING	-	Х	
B. INSPECT SINGLE-PASS FILLET \ MAXIMUM 5/16"	WELDS,	-	Х	
C. INSPECT ALL OTHER WELDS		Х	-	
3. INSPECT ANCHORS CAST IN CONC	RETE.	Х	-	ACI 318: 17.8.2
4. INSPECT ANCHORS POST-INSTALL HARDENED CONCRETE MEMBERS. ^B	ED IN			ACI 318: 17.8.2.4, 17.8.2
A. ADHESIVE ANCHORS INSTALLE HORIZONTALLY OR UPWARDLY IN ORIENTATIONS TO RESIST SUSTATENSION LOADS.	CLINED	Х	-	
B. MECHANICAL ANCHORS AND A ANCHORS NOT DEFINED IN 4.A.	DHESIVE	-	Х	
5. VERIFY USE OF REQUIRED DESIGN	MIX.	-	Х	ACI 318: CH. 19, 26.4.3, 26.4.4
6. PRIOR TO CONCRETE PLACEMENT FABRICATE SPECIMENS FOR STRENG TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TO TEMPERATURE OF THE CONCRETE.	STH	Х	-	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12
7. INSPECT CONCRETE AND SHOTCR PLACEMENT FOR PROPER APPLICAT TECHNIQUES.		-	Х	ACI 318: 26.4.5
8. VERIFY MAINTENANCE OF SPECIFII CURING TEMPERATURE AND TECHNI		-	Х	ACI 318: 26.5.3
9. INSPECT PRESTRESSED CONCRET	E FOR:			ACI 318: 26.10
A. APPLICATION OF PRESTRESSIN FORCES	IG	-	Х	
B. GROUTING OF BONDED PREST TENDONS.	RESSING	-	Х	
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.		-	Х	ACI 318: CH. 26.9
11. VERIFY IN-SITU CONCRETE STREI PRIOR TO STRESSING OF TENDONS I POST-TENSIONED CONCRETE AND P TO REMOVAL OF SHORES AND FORM FROM BEAMS AND STRUCTURAL SLA	N RIOR IS	-	Х	ACI 318: 26.10.2
12. INSPECT FORMWORK FOR SHAPE LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		-	Х	ACI 318: 26.11

A. WHERE APPLICABLE, SEE ALSO SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. B. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI

PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN

PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO COMMENCEMENT

318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT

OF THE WORK. MASONRY CONSTRUCTION - LEVEL C - REQUIRED SPECIAL INSPECTIONS AND TESTS

VERIFICATION OF F'_M AND F'_{AAC} IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4 B PRIOR TO CONSTRUCTION AND FOR EVERY 5000 SQ. FT. (465 SQ. M) DURING CONSTRUCTION

VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT, AS DELIVERED TO

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5 B.1.B.3 FOR SELF-CONSOLIDATING GROUT MINIMUM SPECIAL INSPECTION

	MININ	MUM SPECIAL I	INSPECTIO	<u>N</u>	
	INODE OTION TAOK	FREQU	JENCY	REFERENCE	FOR CRITERIA
	INSPECTION TASK	CONTINUOUS	PERIODIC	TMS 402/ ACI 530/ ASCE 5	TMS 602/ ACI 530.1/ ASCE 6
1.	VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS	-	Х		Art 1.5
2.	VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE				
	a. PROPORTIONS OF SITE-MIXED MORTAR, GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	-	Х		Art 2.1, 2.6 A, 2.6 B, 2.6 C, 2.4 G 1.b
	b. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES	-	Х	Sec. 6.1	Art 2.4, 3.4
	c. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS	-	Х		Art 3.3 B
	d. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES	Х	-	Sec. 6.1, 6.2.1, 6.2.6, 6.2.7	Art 3.2 E, 3.4, 3.6 A
	e. GROUT SPACE PRIOR TO GROUTING	Х	-		Art 3.2 D, 3.2F
	f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	Х			Art 3.5, 3.6 C
	g. SIZE AND LOCATION OF STRUCTURAL ELEMENTS	-	Х		Art 3.3 F
	h. TYPE, SIZE, AND LOCATION OF ANCHOR INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION (INCLUDES POST-INSTALLED ANCHORS)	s X			EPORT (POST- D ANCHORS)
	i. WELDING OF REINFORCEMENT	Х	-	Sec. 8.1.6.7.2, 9.3.3.4 (c), 11.3.3.4 (b)	
	j. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C))		Х		Art 1.8 C, 1.8 D
	k. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	Х			Art 3.6 B
	I. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	Х			Art 3.3 B9, 3.3 F.1.b
	m. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	Х			Art 2.1 C.1
3.	OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	Х			Art 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4, B.2.c.3, 1.4, b.3, 1.4 B.4

INSPECTION TASKS PRIOR TO WELDING	QC	QA
WELDING PROCEDURE SPECIFICATIONS (WPSS) AVAILABLE	P	Р
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	Р	Р
MATERIAL IDENTIFICATION (TYPE/GRADE)	0	0
WELDER IDENTIFICATION SYSTEM ¹	0	0
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	O	0
CONFIGURATION AND FINISH OF ACCESS HOLES	0	0
FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	0	0
CHECK WELDING EQUIPMENT	0	-
INSPECTION TASKS DURING WELDING	QC	QA
USE OF QUALIFIED WELDERS	0	0
CONTROL AND HANDLING OF WELDED CONSUMABLES • PACKAGING • EXPOSURE CONTROL	0	0
NO WELDING OVER CRACKED TACK WELDS	0	0
ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	0	0
WPS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F, V, H, OH) WELDING TECHNIQUES	O	0
INTERPASS AND FINAL CLEANING EACH PASS WITHIN PROFILE LIMITATIONS EACH PASS MEETS QUALITY REQUIREMENTS	0	0
INSPECTION TASKS AFTER WELDING	QC	QA
WELDS CLEANED	0	0
SIZE, LENGTH AND LOCATION OF WELDS	Р	Р
WELDS MEET VISUAL ACCEPTANCE CRITERIA CRACK PROHIBITION WELD/BASE-METAL FUSION CRATER CROSS SECTION WELD PROFILES WELD SIZE UNDERCUT POROSITY	Р	Р
ARC STRIKES	Р	Р
K-AREA ²	Р	Р
BACKING REMOVED AND WELD TABS REMOVED (IF DESIRED)	Р	Р
REPAIR ACTIVITIES	P	Р

¹THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW-STRESS

²WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN

THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75MM) OF THE WELD.

COLD-FORMED STEEL DECK - REQUIRED SPECIAL INSPECTIONS AND TESTS BC SECTION 1705.2.2/SDI QA/QC STANDARD TABLES 1.1-1.8 INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT QC QΑ . VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS . DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES

QA INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT QC A. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS . VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES QC INSPECTION OR EXECUTION TASKS PRIOR TO WELDING . WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE 0 0 . MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE . MATERIAL IDENTIFICATION (TYPE/GRADE) . CHECK WELDING EQUIPMENT INSPECTION OR EXECUTION TASKS DURING WELDING QC QΑ . USE OF QUALIFIED WELDERS B. CONTROL AND HANDLING OF WELDING CONSUMABLES :. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE) . WPS FOLLOWED 0 QC QA INSPECTION OR EXECUTION TASKS AFTER WELDING . VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, Р AND PERIMETER WELDS 3. WELDS MEET VISUAL ACCEPTANCE CRITERIA . VERIFY REPAIR ACTIVITIES DOCUMENT ACCEPTANCE OR REJECTION OF WELDS QC QA INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING . MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS B. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION 0 . PROPER STORAGE FOR MECHANICAL FASTENERS INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING A. FASTENERS ARE POSITIONED AS REQUIRED B. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING QC A. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS B. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS C. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS D. VERIFY REPAIR ACTIVITIES

E. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS

AISC360 TABLE N5.6 110SN503-1		
INSPECTION TASKS PRIOR TO BOLTING	QC	QA
MANUFACTURER CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	0	Р
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	0	0
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANE)	0	0
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	0	0
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	0	0
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	Р	0
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	0	0
INSPECTION TASKS DURING BOLTING	QC	QA
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	0	0
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	0	0
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	0	0
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	0	0
INSPECTION TASKS AFTER BOLTING	QC	QA
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	 Р	Р

STEEL COMPOSITE CONSTRUCTION - REQUIRED SPECIAL INSPECTIONS AISC360 TABLE N6.1 110SN504-1		
INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT	QC	QA
PLACEMENT AND INSTALLATION OF STEEL DECK	Р	Р
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	Р	Р
DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	Р	Р
		-
STEEL CONSTRUCTION - WELDING - REQUIRED TESTING AISC 360 - SECTION N5.5 NONDESTRUCTIVE TESTING (NDT) OF WELDED JOINT	·s	

ULTRASONIC TESTING (UT), MAGNETIC PARTICLE TESTING (MT), PENETRANT TESTING (PT) AND RADIOGRAPHIC TESTING (RT), WHERE REQUIRED, SHALL BE PERFORMED BY QA IN ACCORDANCE WITH AWS D1.1/D1.1m. ACCEPTANCE CRITERIA SHALL BE IN ACCORDANCE WITH AWS D1.1/D1.1m FOR STATICALLY LOADED STRUCTURES, UNLESS OTHERWISE DESIGNATED IN THE DESIGN DRAWINGS OR PROJECT SPECIFICATIONS. B) CJP GROOVE WELD NDT

FOR STRUCTURES IN RISK CATEGORY III OR IV. UT SHALL BE PERFORMED BY QA ON ALL CJP GROOVE WELDS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN BUTT, T- AND CORNER JOINTS, IN MATERIALS 5/16" THICK OR GREATER. FOR STRUCTURES IN RISK CATEGORY II, UT SHALL BE PERFORMED BY QA ON 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING, IN MATERIALS 5/16" THICK OR

) ACCESS HOLE NDT THERMALLY CUT SURFACES OF ACCESS HOLES SHALL BE TESTED BY QA USING MT OR PT, WHEN THE FLANGE THICKNESS EXCEEDS 2" FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS

REGARDLESS OF SIZE OR LOCATION. O) WELDED JOINTS SUBJECTED TO FATIGUE WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOINTS REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHIC OR ULTRASONIC INSPECTION SHALL BE TESTED BY QA AS PRESCRIBED. REDUCTION IN THE RATE OF UT IS PROHIBITED.

EXCEEDS 2" FOR BUILT-UP SHAPES. ANY CRACK SHALL BE DEEMED UNACCEPTABLE

REDUCTION OF RATE OF ULTRASONIC TESTING THE RATE OF UT IS PERMITTED TO BE REDUCED IF APPROVED BY THE EOR AND THE AHJ, PER AISC 360, SECTION N5.5E.

INCREASE IN RATE OF ULTRASONIC TESTING FOR STRUCTURES IN RISK CATEGORY II, WHERE THE INITIAL RATE FOR UT IS 10%, THE NDT RATE FOR AN INDIVIDUAL WELDER OR WELDING OPERATOR SHALL BE INCREASED TO 100% SHOULD THE REJECT RATE, THE NUMBER OF WELDS CONTAINING UNACCEPTABLE DEFECTS DIVIDED BY

THE NUMBER OF WELDS COMPLETED, EXCEEDS 5% OF THE WELDS TESTED FOR THE WELDER OR WELDING OPERATOR. SEE AISC 360, SECTION N5.5F FOR ADDITIONAL INFORMATION.

G) DOCUMENTATION

ALL NDT PERFORMED SHALL BE DOCUMENTED. FOR SHOP FABRICATION, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY PIECE MARK AND LOCATION IN THE PIECE. FOR FIELD WORK, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY LOCATION IN THE STRUCTURE, PIECE MARK, AND LOCATION IN THE PIECE. WHEN A WELD IS REJECTED ON THE BASIS OF NDT, THE NDT RECORD SHALL INDICATE THE LOCATION OF THE DEFECT AND THE BASIS OF

INSPECTION TASKS PRIOR TO BOLTING	Q	С	QA		
INGI EGITON THORET MON TO BOLTING	TASK	DOC	TASK	DOC	
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL	0	-	0	-	
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	0	-	0	-	
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	0	-	0	-	
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	Р	D	Р	D	
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	0	-	0	-	
INSPECTION TASKS DURING BOLTING	Q	QC		QA	
INSPECTION TASKS DURING BOLTING	TASK	DOC	TASK	DOC	
FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	0	-	0	-	
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	0	-	0	-	
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	0	-	0	-	

TASK DOC TASK DOC

BOLTS ARE PRETENSIONED PROGRESSING SYSTEMATICALLY FROM

THE MOST RIGID POINT TOWARD THE FREE EDGES

DOCUMENT ACCEPTED OR REJECTED CONNECTIONS

INSPECTION TASKS AFTER BOLTING

VISUAL INSPECTION TASKS PRIOR TO WELDING	Q	С	Q.A	A
VISUAL INSPECTION TACKS FIXION TO WELDING	TASK	DOC	TASK	DOC
MATERIAL IDENTIFICATION (TYPE/GRADE)	0	-	0	-
WELDER IDENTIFICATION SYSTEM	0	-	0	-
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	P/O**	-	0	-
CONFIGURATION AND FINISH OF ACCESS HOLES	0	-	0	-
FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	P/O**	-	0	-
VISUAL INSPECTION TASKS DURING WELDING	Q	С	QA	
VIOSAL INCI ESTIGIA MACIAS DOMINO WEEDING	TASK	DOC	TASK	DOC
WPS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F, V, H, OH) • INTERMIX OF FILLER METALS AVOIDED UNLESS APPROVED	0	-	0	-
USE OF QUALIFIED WELDERS	0	-	0	-
CONTROL AND HANDLING OF WELDED CONSUMABLES • PACKAGING • EXPOSURE CONTROL	0	-	0	-
ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	0	-	0	-
WELDING TECHNIQUES • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	0	-	0	-
NO WELDING OVER CRACKED TACKS	0	-	0	-
VISUAL INSPECTION TASKS AFTER WELDING	Q	С	Q	A
VISUAL INSI ECTION TAGNS ALTER WEEDING	TASK	DOC	TASK	DOC
WELDS CLEANED	0	-	0	
SIZE, LENGTH AND LOCATION OF WELDS	Р	-	Р	-
WELDS MEET VISUAL ACCEPTANCE CRITERIA CRACK PROHIBITION WELD/BASE-METAL FUSION CRATER CROSS SECTION WELD PROFILES AND SIZE	Р	D	Р	D

** FOLLOWING PERFORMANCE OF THIS INSPECTION TASK FOR TEN WELDS TO BE MADE BY A GIVEN WELDER, WITH THE WELDER DEMONSTRATING UNDERSTANDING OF REQUIREMENTS AND POSSESSION OF SKILLS AND TOOLS TO VERIFY THESE ITEMS. THE PERFORM DESIGNATION OF THIS TASK SHALL BE REDUCED TO OBSERVE, AND THE WELDER SHALL PERFORM THIS TASK. SHOULD THE INSPECTOR DETERMINE THAT THE WELDER HAS DISCONTINUED PERFORMANCE OF THIS TASK, THE TASK SHALL BE RETURNED TO PERFORM UNTIL SUCH TIME AS THE INSPECTOR HAS RE-ESTABLISHED ADEQUATE ASSURANCE THAT THE WELDER WILL PERFORM THE INSPECTION TASKS LISTED.

PLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS (IF REQ'D) F

BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND

WELD PROFILES AND SIZE

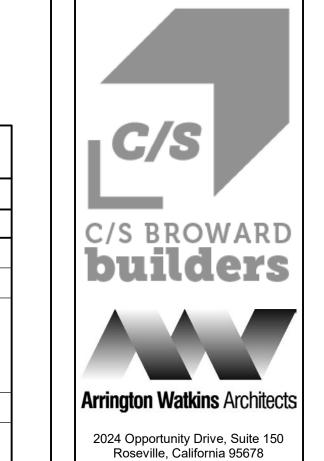
FILLET WELDS ADDED (IF REQUIRED)

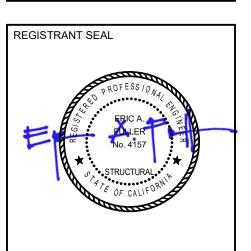
UNDERCUT

REPAIR ACTIVITIES

POROSITY

INSPECTION OF COMPOSITE STRUCTURES	Q	С	Q/	A
PRIOR TO CONCRETE PLACEMENT	TASK	DOC	TASK	DOC
MATERIAL IDENTIFICATION OF REINFORCING STEEL (TYPE/GRADE)	0	-	0	-
DETERMINATION OF CARBON EQUIVALENT FOR REINFORCING STEEL OTHER THAN ASTM A706	0	-	0	-
PROPER REINFORCING STEEL SIZE, SPACING AND ORIENTATION	0	-	0	-
REINFORCING HAS NOT BEEN REBENT IN THE FIELD	0	-	0	-
REINFORCING STEEL HAS BEEN TIED AND SUPPORTED AS REQUIRED	0	-	0	-
REQUIRED REINFORCING STEEL CLEARANCES HAVE BEEN PROVIDED	0	-	0	-
COMPOSITE MEMBER HAS REQUIRED SIZE	0	-	0	-
INSPECTION OF COMPOSITE STRUCTURES	Q	С	Q/	Α
DURING CONCRETE PLACEMENT	TASK	DOC	TASK	DOC
CONCRETE: MATERIAL IDENTIFICATION (MIX DESIGN, COMPRESSIVE STRENGTH, MAXIMUM LARGE AGGREGATE SIZE, MAXIMUM SLUMP)	0	D	0	D
LIMITS ON WATER ADDED AT THE TRUCK OR PUMP	0	D	0	D
PROPER PLACEMENT TECHNIQUES TO LIMIT SEGREGATION	0	-	0	-
INSPECTION OF COMPOSITE STRUCTURES	Q	С	Q/	Α
AFTER CONCRETE PLACEMENT	TASK	DOC	TASK	DOC
ACHIEVEMENT OF MINIMUM SPECIFIED CONCRETE COMPRESSIVE STRENGTH AT SPECIFIED AGE	-	D	_	D





Telephone: (916) 338-7707

Fax: (888) 510-3055

М М М FETY

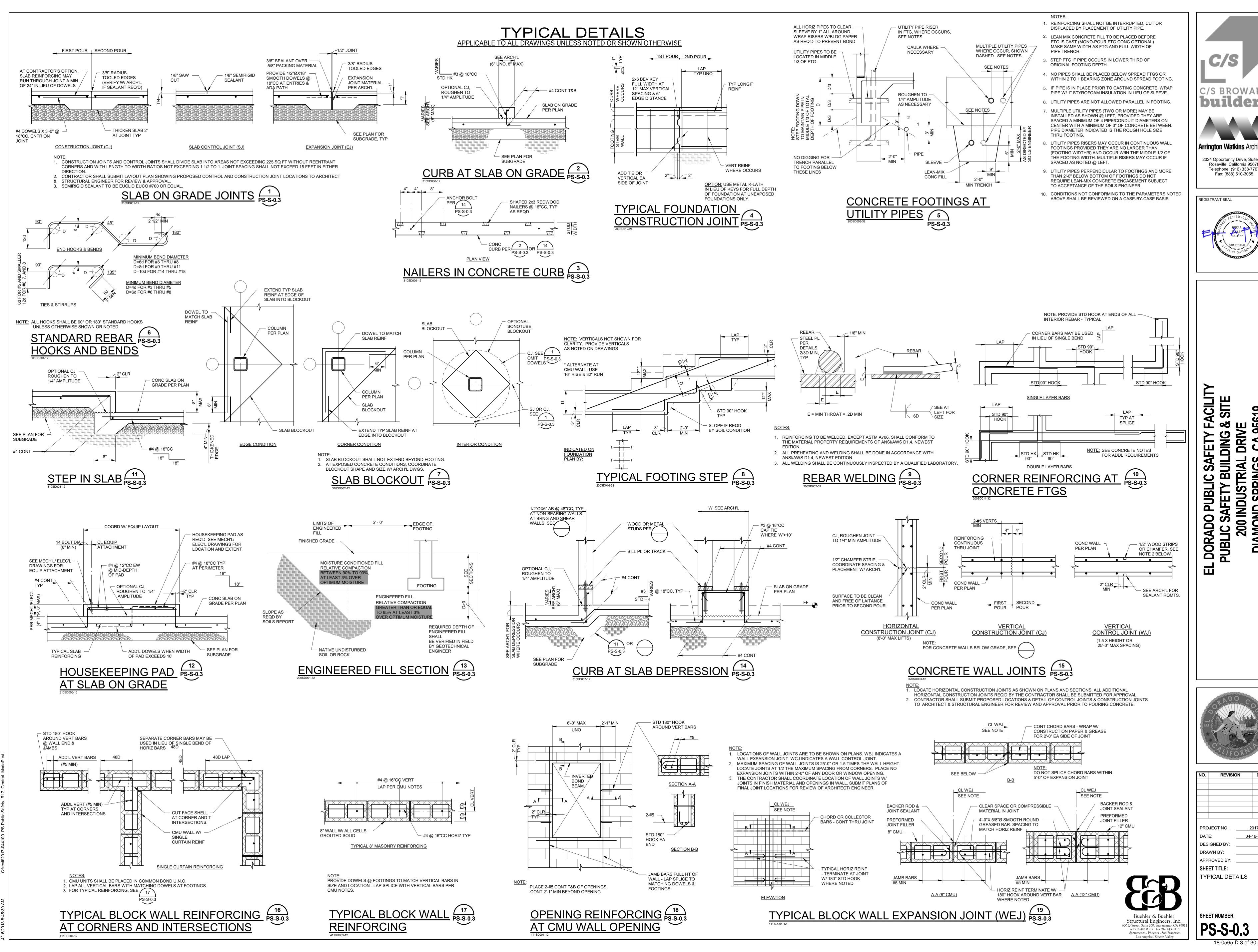


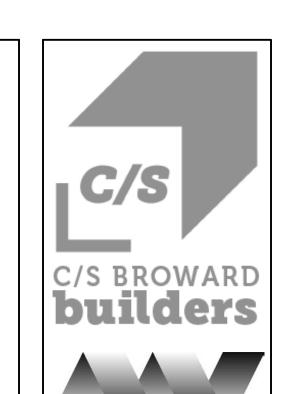
NO.	REVISIO	N	DATE
PRC	DJECT NO.:	2	017.033
DAT	E:	04-	16-2018
DES	SIGNED BY:		RJM
DRA	WN BY:		PVB
APP	ROVED BY:		
SHE	ET TITLE:		
STI	RUCTURAL	SPEC	CIAL

INSPECTIONS &

Structural Engineers, Inc. 600 O Street, Suite 200, Sacramento, CA 95 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco

Los Angeles . Silicon Valley



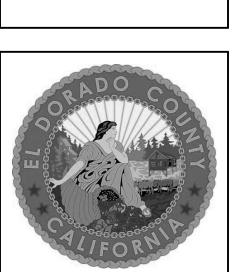


Arrington Watkins Architects 2024 Opportunity Drive, Suite 150

Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

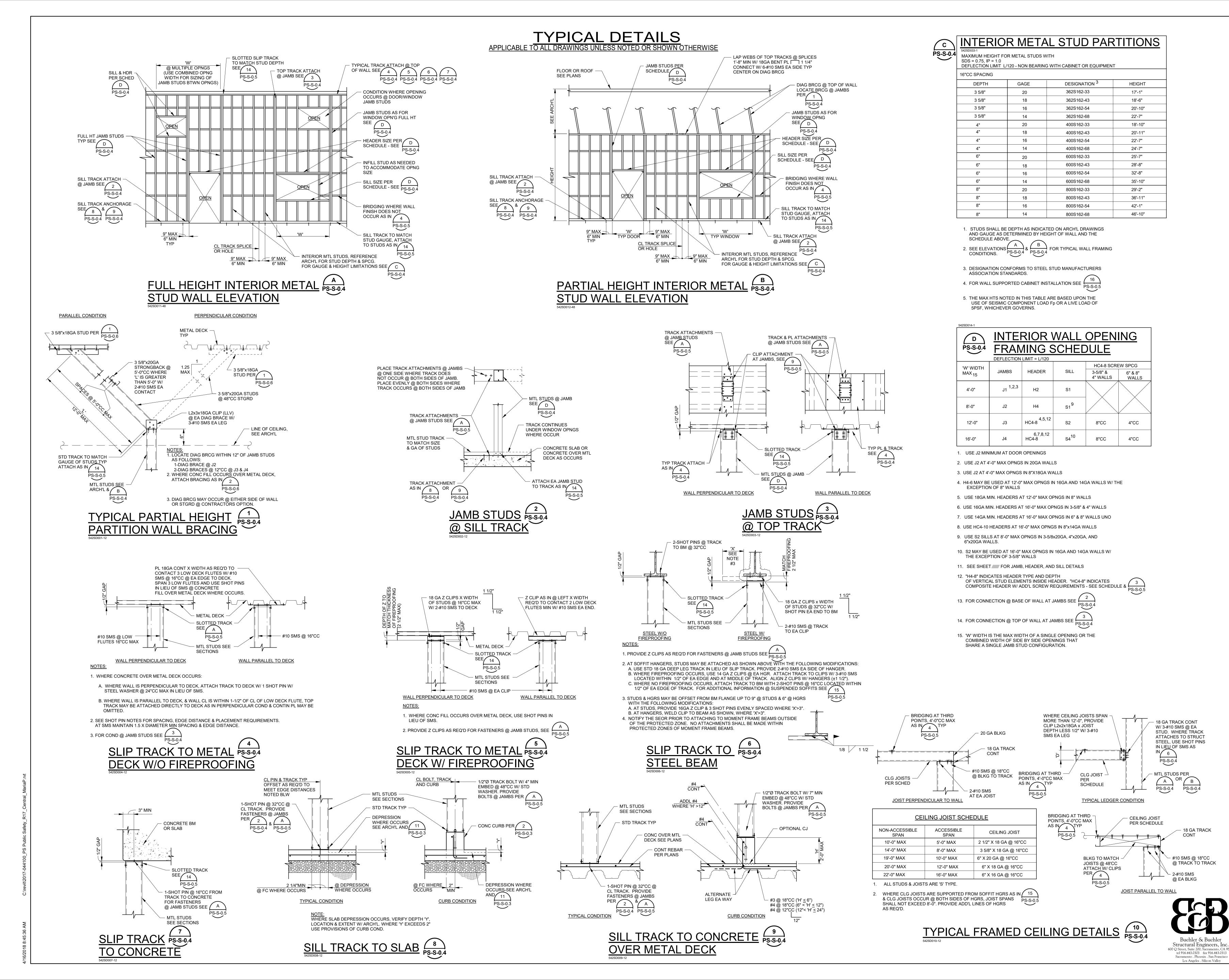
REGISTRANT SEAL

SPRINGS, DORADO PUBLIC





SHEET NUMBER: **PS-S-0.3**



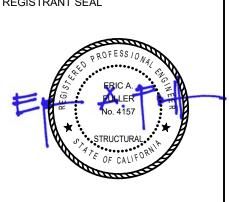
C/S
C/S BROWARD
builders



Telephone: (916) 338-7707

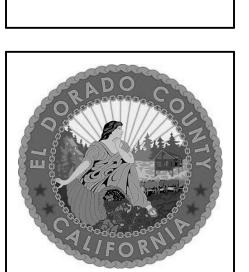
Fax: (888) 510-3055

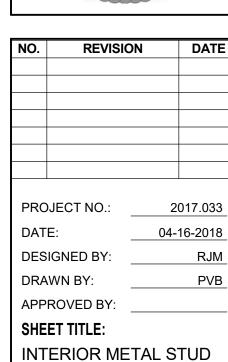
REGISTRANT SEAL



_ __

EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

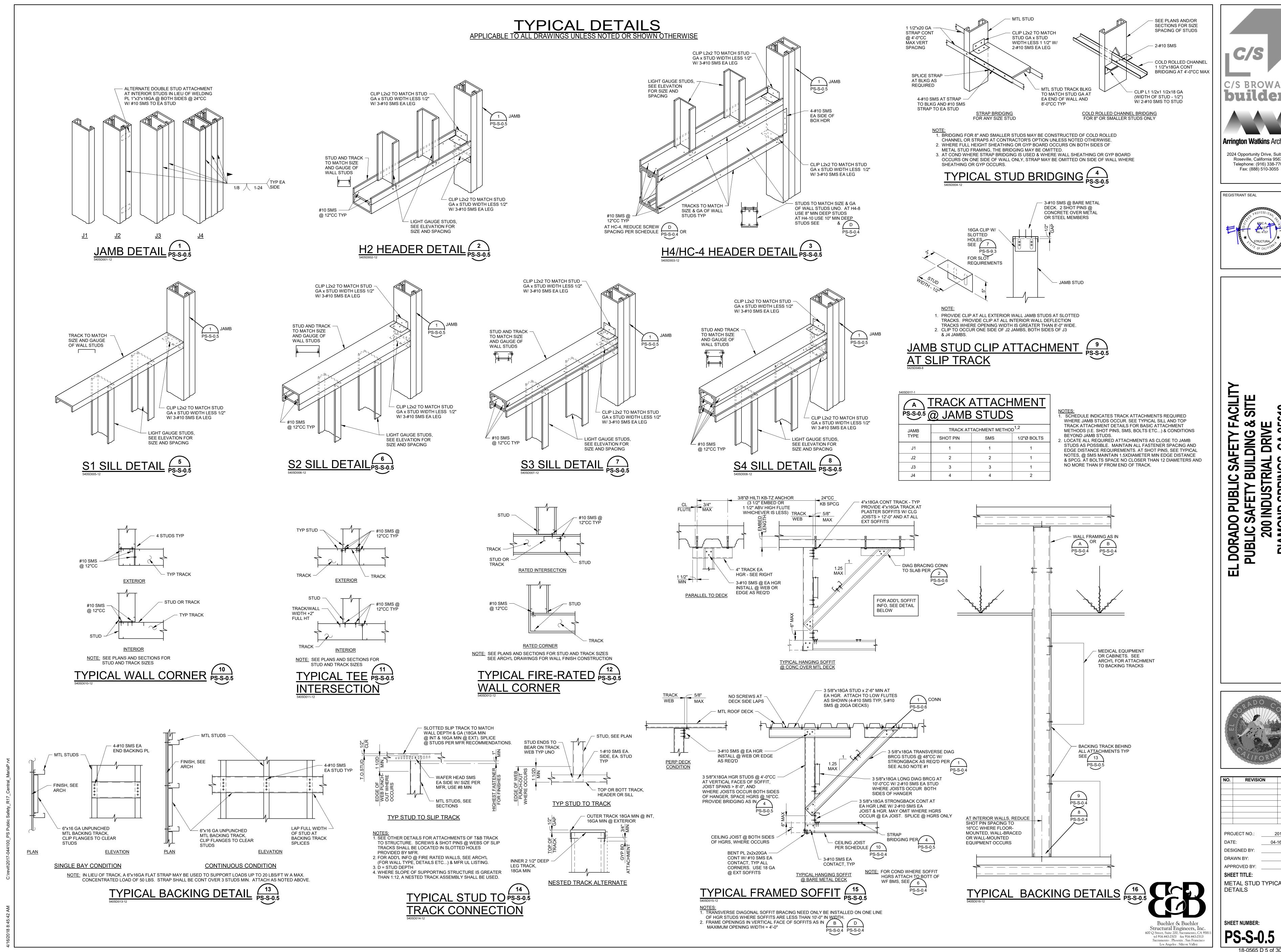


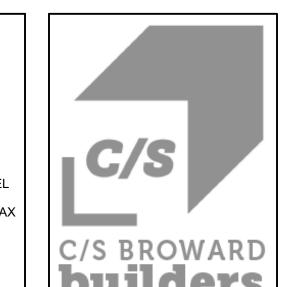


SHEET NUMBER:
PS-S-0.4

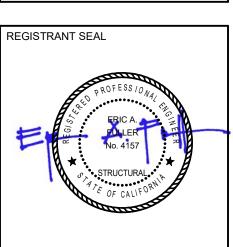
18-0565 D 4 of 30

TYPICAL DETAILS

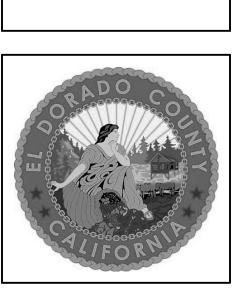


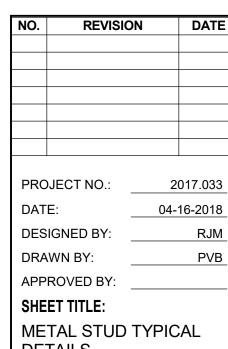






FETY FACILITIONS & SITE DRIVE CA 95619 PUBLIC SAFETY FAFETY FAFETY BUILDING DUSTRIAL I SPRINGS, NDQ N DORADO PU-PUBLIC SAFI 200 IND DIAMOND (

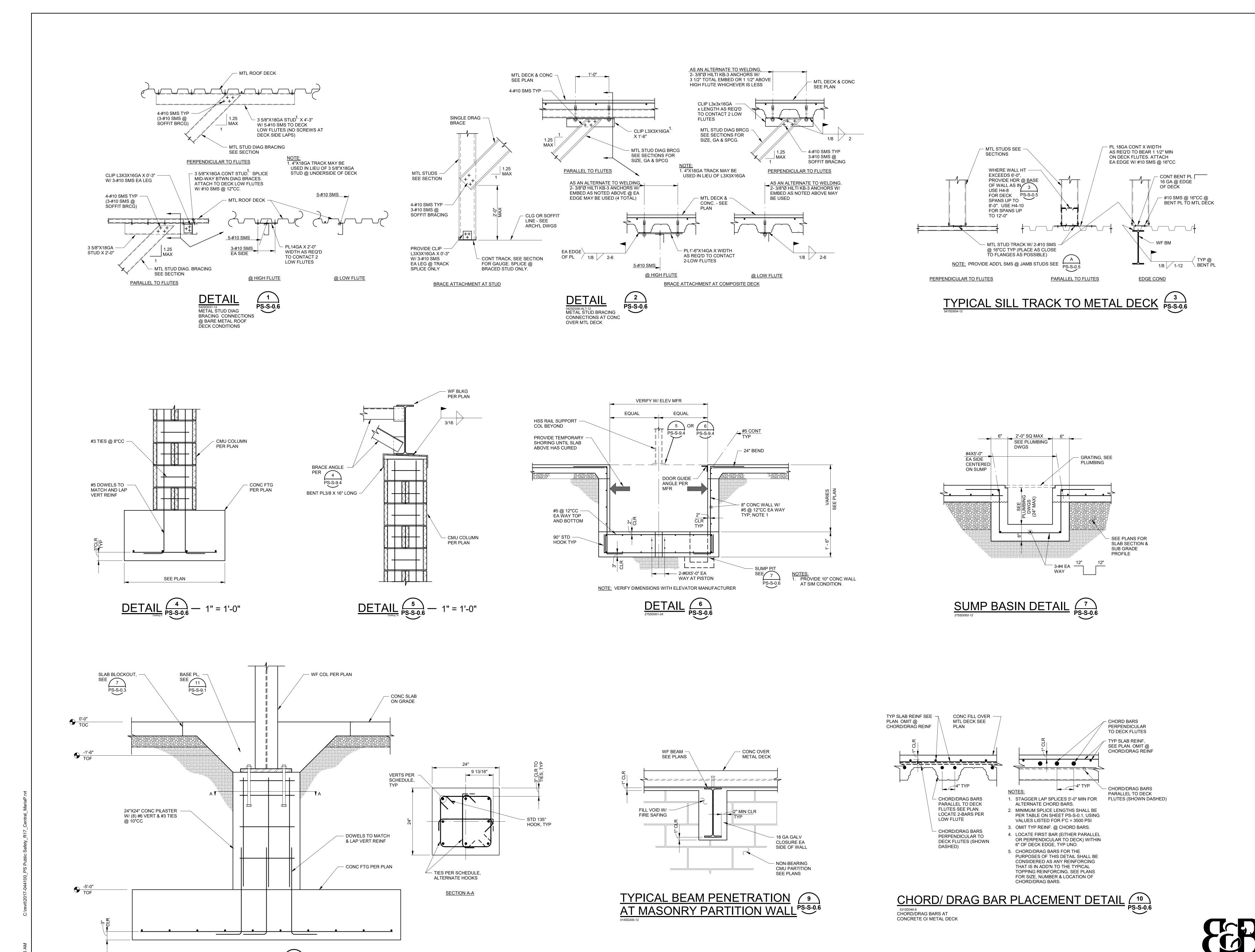


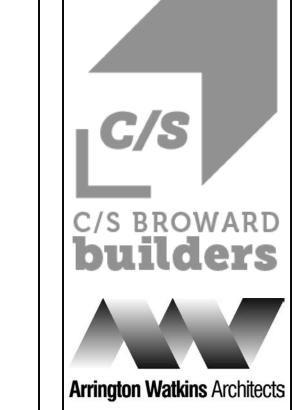


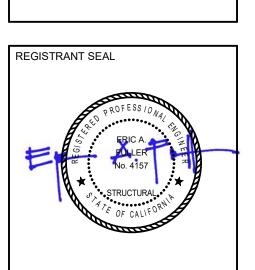
DETAILS

SHEET NUMBER:

18-0565 D 5 of 30







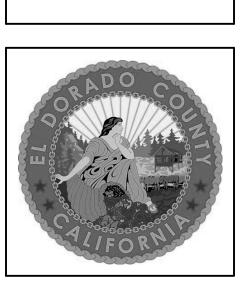
2024 Opportunity Drive, Suite 150

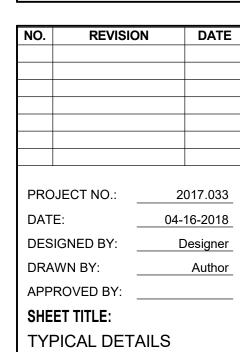
Roseville, California 95678

Telephone: (916) 338-7707

Fax: (888) 510-3055

EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



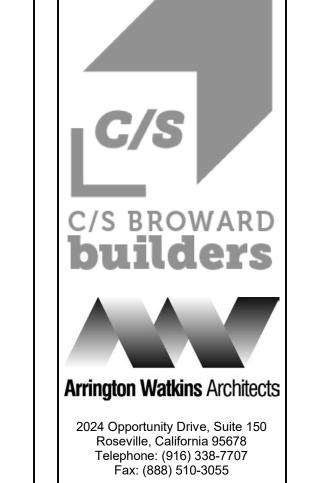


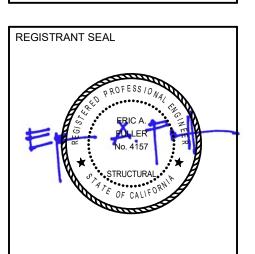
SHEET NUMBER:
PS-S-0.6

Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 958

tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley

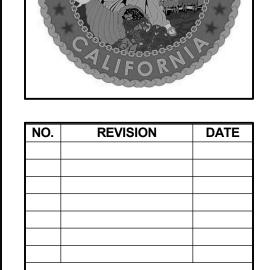








EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

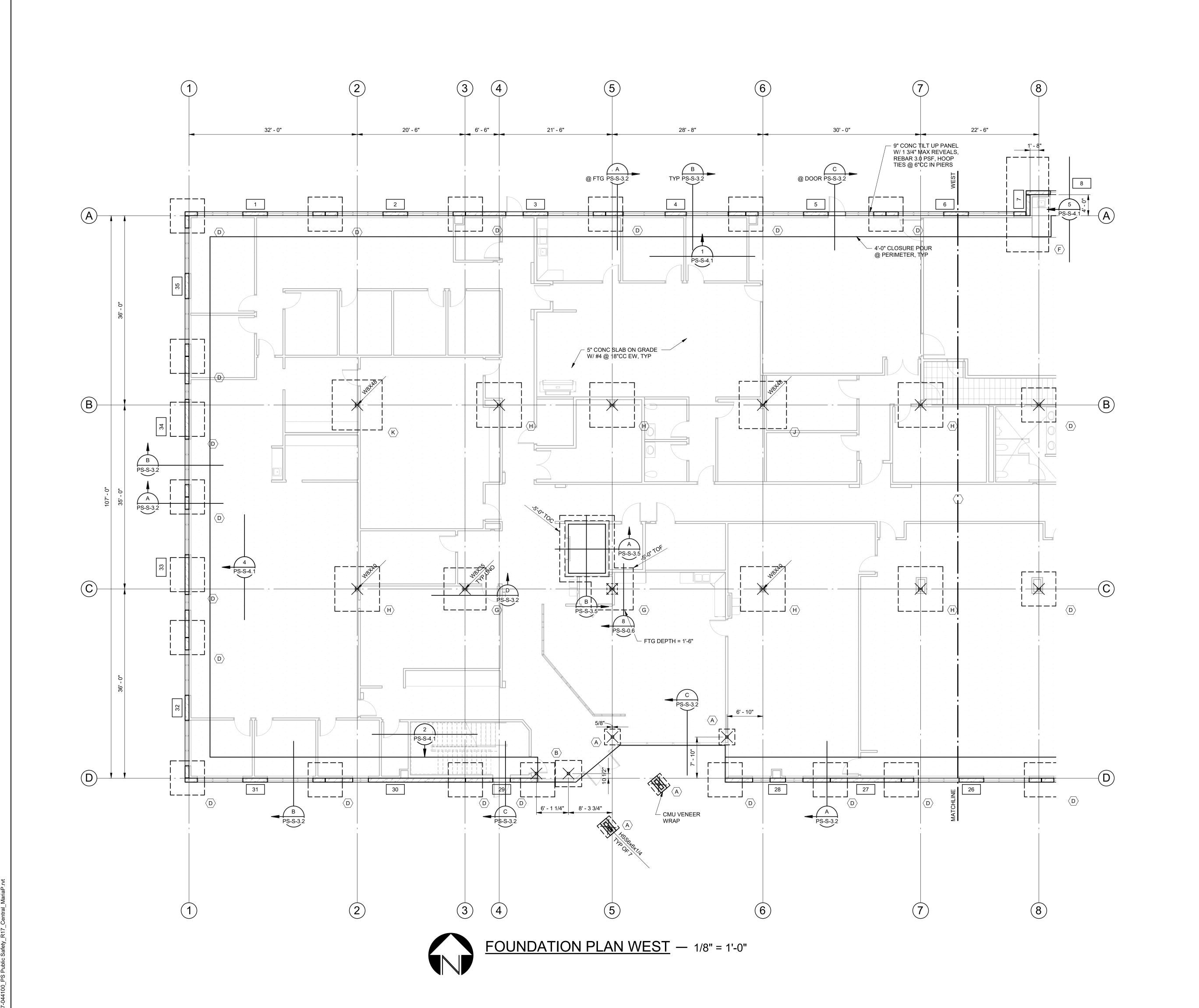


PROJECT NO.: DATE: DESIGNED BY: DRAWN BY: APPROVED BY:

SHEET TITLE: OVERALL DIMENSION PLAN

SHEET NUMBER:

Buehler & Buehler Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
tel 916.443.0303 fax 916.443.0313
Sacramento . Phoenix . San Francisco
Los Angeles . Silicon Valley



FOUNDATION PLAN NOTES:

1. SITE PREPARATION AND BUILDING PAD CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH SOILS REPORT # E13310.007 BY YOUNGDAHL CONSULTING GROUP DATED AUGUST 18, 2016.
BOTTOM OF FOOTING EXCAVATIONS SHALL BE REVIEWED BY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL. FOUNDATIONS SHALL BEAR ON NATIVE SOIL, ENGINEERED FILL, OR WEATHERED BEDROCK PER THE REQUIREMENTS OF THE SOILS REPORT.

 VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.
 DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO.

VERIFY ELEVATOR PIT DIMENSIONS W/ ELEVATOR MANUFACTURER PRIOR TO CONSTRUCTION.
 SLAB ON GRADE SHALL BE 5" THICK CONCRETE W/ #4 @ 18"CC EW AT MID-DEPTH. CONCRETE SHALL BE INSTALLED OVER 4" CLEAN CRUSHED ROCK OVER 15 MIL VAPOR RETARDER. TOP OF

CONCRETE SLAB IS +0'-0" UNO. DATUM ELEVATION = +100.00'

6. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL

GRIDS.

7. PROVIDE 3" MIN. CONCRETE COVER AT STRUCTURAL STEEL AND ANCHOR BOLTS BELOW GRADE

8. PROVIDE SLAB ON GRADE CONTROL JOINTS (SJ) AS INDICATED PER
TYP @ ALL INTERIOR SLABS. CONSTRUCTION JOINTS (CJ) MAY REPLACE
PS-S-0.3
CONTROL JOINTS AS REQUIRED.

9. SEE SHEETS PS-S-0.1 THRU PS-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE APPLICABLE TO ALL DRAWINGS UNO.

10. GUIDE RAIL SUPPORT COLUMNS UNO SHOWN ON PLAN SHALL CONTINUE FULL HEIGHT TO UNDERSIDE OF ROOF STRUCTURE. COORDINATE LOCATION OF COLUMNS WITH ELEVATOR MFR. FOR TYPICAL CONNECTION OF SUPPORT COLUMN TO ELEV. PIT SEE

11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE SLAB CONTROL JOINTS WITH ANY ARCHITECTURALLY EXPOSED SLAB AREAS OR THE LOCATION OF TILE CRACK CONTROL JOINTS. VERIFY SPECIAL CONDITION CONTROL JOINTS WITH ARCH'L DRAWINGS.

12. DESIGN, FABRICATION AND INSTALLATION OF MANUFACTURED STAIRS IS BY OTHERS. STAIR DESIGNER TO COORDINATE LOADING OF ADJACENT STRUCTURE W/ SEOR BEFORE COMMENCING DESIGN WORK.

13. PROVIDE THICKENED SLAB @ BASE OF ALL STAIRS PER PS-S-9.4

14. CONTRACTOR TO COORDINATE EXACT DIMENSIONS AND LOCATIONS OF THICKENED SLABS, HOUSEKEEPING PADS, ETC. WITH ALL OTHER DISCIPLINES' DWG'S AS WELL AS WITH THE EQUIPMENT PROVIDED PRIOR TO COMMENCING WORK.

15. SEE ARCH'L & CIVIL DRAWINGS FOR ALL EXTERIOR CURBS, FLATWORK, PLANTERS, RAMPS, ETC.

16. CONTINUE ALL REINFORCING IN CONTINUOUS FOOTINGS THROUGH SPREAD FOOTINGS, TYP,

17. INDICATES REFERENCE TO FOOTING SCHEDULE, SEE PS-S-2.1

INDICATES THAT ADDITIONAL TOP REINFORCING AS NOTED IN SCHEDULE SHALL BE PLACED @ 2" CLR OF TOP OF FOOTING.

18. INDICATES CONCRETE CURB. FOR CURBS BELOW NON-STRUCTURAL WALLS, SEE 2 4 14 VERIFY EXACT EXTENT W/ ARCH'L DWGS.

19. INDICATES CONCRETE OVERBUILD AREA PER 12 PS-S-0.3 UNO, SEE ARCH'L FOR EXTENT.

20. INDICATES SLOPED AND/OR DEPRESSED SLAB. DEPRESS BUILDING PAD AND PROVIDE

FULL SLAB AND BASE THICKNESS. WHERE DEPRESSION IS GREATER THAN 2" AND ADJACENT TO BUILDING FOUNDATION ELEMENT IT MAY BE NECESSARY TO STEP FOOTING IN ORDER TO MAINTAIN MINIMUM FOOTING EMBEDMENT PER SECTIONS. CONTRACTOR TO COORDINATE IN FIELD. SEE ALSO

PS-S-0.3

21. ALL DEPRESSIONS, SLOPES, CURBS, ETC. ARE SHOWN FOR REFERENCE ONLY. FOR EXACT DEPTHS, SLOPES, EXTENTS, ETC, SEE OTHER DISCIPLINES' DRAWINGS.

 TEMPORARY LOADS APPLIED DURING CONSTRUCTION HAVE NOT BEEN CONSIDERED IN SLAB ON GRADE DESIGN.

23. INDICATES TOP OF FOOTING ELEVATION WITH RESPECT TO REFERENCE TOP OF CONCRETE (+0'-0") THE BOTTOM OF ALL FOOTINGS SHALL BE AT LEAST 18" BELOW ADJACENT MINIMUM PREPARED BUILDING PAD ELEVATION (ON ALL SIDES), TYP UNO AND AS SHOWN ON SECTIONS.

25. \$ ------ \$ INDICATES FOOTING STEP PER PS-S-0.3 STEP LOCATIONS ARE DIAGRAMMATIC ONLY. CONTRACTOR TO COORDINATE IN FIELD. INTENT IS THAT NO TOP OF FTG IS WITHIN 12" OF EXTERIOR FINISH GRADE.

26. +2'-0" INDICATES TOP OF CONCRETE SLAB ELEVATION RELATIVE TO REFERENCE T.O. CONCRETE +0'-0".

INDICATES HSS COLUMN & SIZE. FOR BASE PLATE, SEE PS-S-9.3 TYP UNO.

N8x31
INDICATES WIDE FLANGE COLUMN, SIZE PER PLAN. FOR BASE PLATE, SEE PS-S-9.1 TYP UNO.

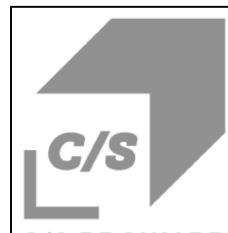
28. INDICATES CONCRETE TILT-UP WALL PANEL, TYP UNO. SEE ELEVATIONS FOR ADD'L INFO.

29. 1 INDICATES CONCRETE TILT-UP WALL NUMBER. SEE ELEVATIONS ON SHEETS PS-S-4.1THRU PS-S-4.3.

30. INDICATES 8" CMU WALL. FOR REINFORCING, SEE 17 PS-S-0.3 CONDUITS IN CMU TO BE PER CMU NOTES.

31. INDICATES WALL CONTROL JOINT PER 410SD01

PS-S-2.1	1 00	TING S		JOLL
Mk	WIDTH	LENGTH	DEPTH	REINFORCING
Α	3'-0"	3'-0"	1'-6"	(4) #5 EW (B)
В	5'-0"	5'-0"	1'-6"	(7) #5 EW (B)
С	6'-0"	6'-0"	2'-0"	(8) #6 EW (B)
D	6'-6"	6'-6"	2'-0"	(8) #6 EW (B)
E	7'-0"	7'-0"	2'-0"	(9) #6 EW (B)
F	8'-0"	18'-0"	2'-6"	(8) #8 LONG, (18) #6 TRA
G	8'-0"	8'-0"	2'-0"	(10) #6 EW (B)
Н	8'-6"	8'-6"	2'-0"	(11) #6 EW (B)
J	9'-0"	9'-0"	2'-0"	(11) #6 EW (B)
K	9'-6"	9'-6"	2'-0"	(12) #6 EW (B)
L	6'-6"	8'-6"	2'-6"	10-#5 EW (B), (13) #6 TR



c/s BROWARD builders

Arrington Watkins Architects

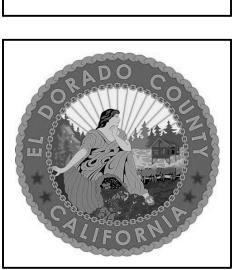
Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

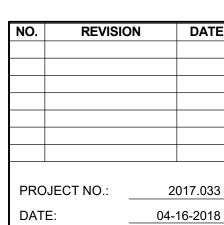
2024 Opportunity Drive, Suite 150

REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILI PUBLIC SAFETY BUILDING & SITE 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619





 PROJECT NO.:
 2017.00

 DATE:
 04-16-20

 DESIGNED BY:
 Ro

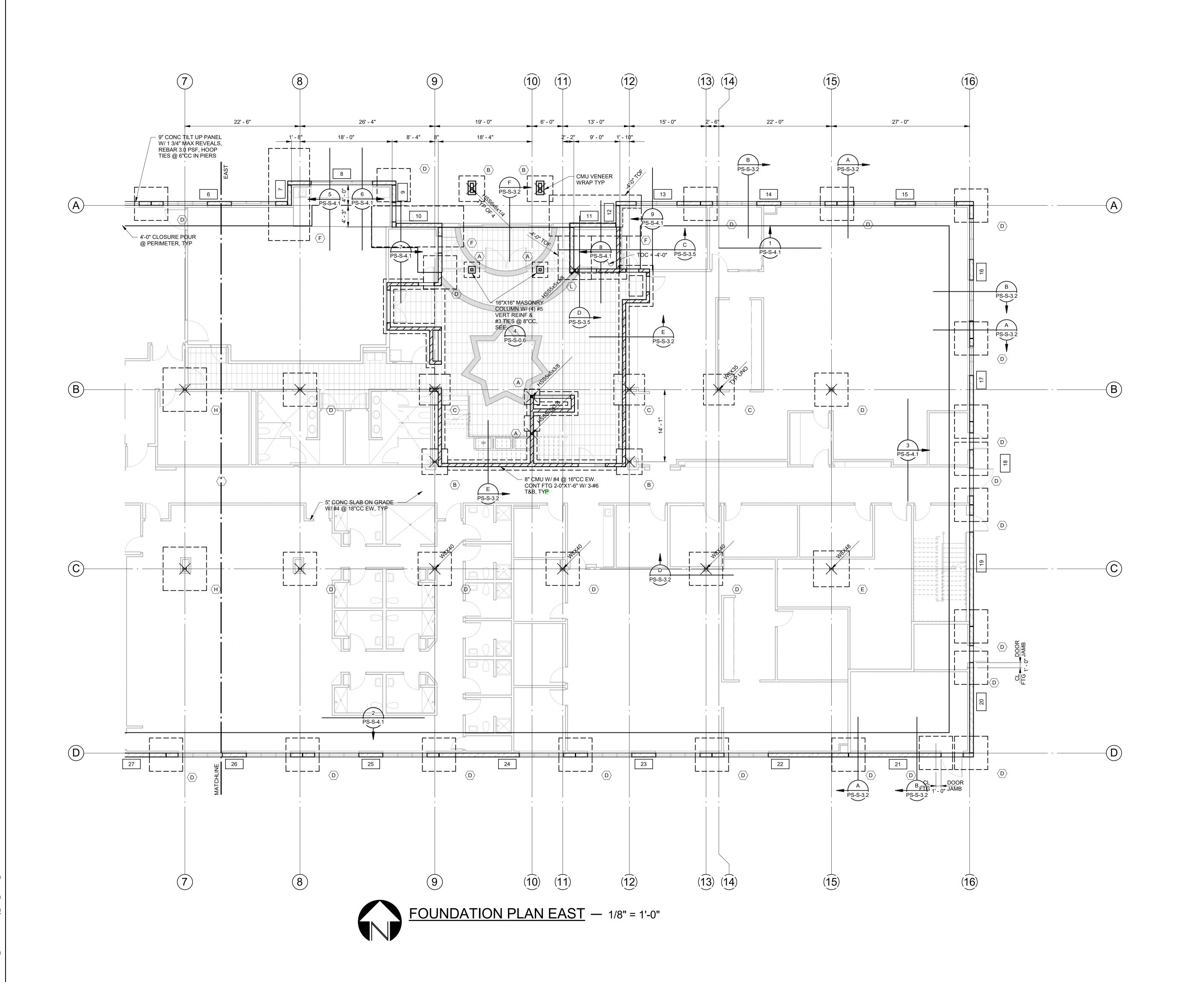
 DRAWN BY:
 PV

 APPROVED BY:
 PV

SHEET TITLE:
FOUNDATION PLAN WEST

SHEET NUMBER:
PS-S-2-1

Buehler & Buehler
Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 9581
tel 916.443.0303 fax 916.443.0313
Sacramento . Phoenix . San Francisco



FOUNDATION PLAN NOTES:

SITE PREPARATION AND BUILDING PAD CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH SOILS REPORT # E13310.007 BY YOUNGDAHL CONSULTING GROUP DATED AUGUST 18, 2016.
 BOTTOM OF FOOTING EXCAVATIONS SHALL BE REVIEWED BY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL. FOUNDATIONS SHALL BEAR ON NATIVE SOIL, ENGINEERED FILL, OR WEATHERED BEDROCK PER THE REQUIREMENTS OF THE SOILS REPORT.
 VERIFY ALL BUILDING DIMENSIONS AND FLEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE

2. VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.

DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO.
 VERIFY ELEVATOR PIT DIMENSIONS W/ ELEVATOR MANUFACTURER PRIOR TO CONSTRUCTION.
 SLAB ON GRADE SHALL BE 5" THICK CONCRETE W/ #4 @ 18"CC EW AT MID-DEPTH. CONCRETE SHALL BE INSTALLED OVER 4" CLEAN CRUSHED ROCK OVER 15 MIL VAPOR RETARDER. TOP OF

CONCRETE SLAB IS +0'-0" UNO. DATUM ELEVATION = +100.00'

6. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL

GRIDS.

7. PROVIDE 3" MIN. CONCRETE COVER AT STRUCTURAL STEEL AND ANCHOR BOLTS BELOW GRADE
TYP

8. PROVIDE SLAB ON GRADE CONTROL JOINTS (SJ) AS INDICATED PER
TYP @ ALL INTERIOR SLABS. CONSTRUCTION JOINTS (CJ) MAY REPLACE PS-S-0.3
CONTROL JOINTS AS REQUIRED.

 SEE SHEETS PS-S-0.1 THRU PS-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE APPLICABLE TO ALL DRAWINGS UNO.

10. GUIDE RAIL SUPPORT COLUMNS UNO SHOWN ON PLAN SHALL CONTINUE FULL HEIGHT TO UNDERSIDE OF ROOF STRUCTURE. COORDINATE LOCATION OF COLUMNS WITH ELEVATOR MFR. FOR TYPICAL CONNECTION OF SUPPORT COLUMN TO ELEV. PIT SEE

11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE SLAB CONTROL JOINTS WITH ANY ARCHITECTURALLY EXPOSED SLAB AREAS OR THE LOCATION OF TILE CRACK CONTROL JOINTS. VERIFY SPECIAL CONDITION CONTROL JOINTS WITH ARCH'L DRAWINGS.

12. DESIGN, FABRICATION AND INSTALLATION OF MANUFACTURED STAIRS IS BY OTHERS. STAIR DESIGNER TO COORDINATE LOADING OF ADJACENT STRUCTURE W/ SEOR BEFORE COMMENCING DESIGN WORK.

13. PROVIDE THICKENED SLAB @ BASE OF ALL STAIRS PER 9 PS-S-9.4

14. CONTRACTOR TO COORDINATE EXACT DIMENSIONS AND LOCATIONS OF THICKENED SLABS, HOUSEKEEPING PADS, ETC. WITH ALL OTHER DISCIPLINES' DWG'S AS WELL AS WITH THE EQUIPMENT PROVIDED PRIOR TO COMMENCING WORK.

15. SEE ARCH'L & CIVIL DRAWINGS FOR ALL EXTERIOR CURBS, FLATWORK, PLANTERS, RAMPS, ETC.

16. CONTINUE ALL REINFORCING IN CONTINUOUS FOOTINGS THROUGH SPREAD FOOTINGS, TYP, UNO.

17. INDICATES REFERENCE TO FOOTING SCHEDULE, SEE A PS-S-2.1

INDICATES THAT ADDITIONAL TOP REINFORCING AS NOTED IN SCHEDULE SHALL BE PLACED @ 2" CLR OF TOP OF FOOTING.

INDICATES CONCRETE CURB. FOR CURBS BELOW NON-STRUCTURAL WALLS, SEE 2 4 14 . VERIFY EXACT EXTENT W/ ARCH'L DWGS.

19. INDICATES CONCRETE OVERBUILD AREA PER 12 UNO, SEE ARCH'L FOR EXTENT.

20. INDICATES SLOPED AND/OR DEPRESSED SLAB. DEPRESS BUILDING PAD AND PROVIDE FULL SLAB AND BASE THICKNESS. WHERE DEPRESSION IS GREATER THAN 2" AND ADJACENT TO BUILDING FOUNDATION ELEMENT IT MAY BE NECESSARY TO STEP FOOTING IN ORDER TO MAINTAIN MINIMUM FOOTING EMBEDMENT PER SECTIONS. CONTRACTOR TO COORDINATE IN FIELD. SEE ALSO

21. ALL DEPRESSIONS, SLOPES, CURBS, ETC. ARE SHOWN FOR REFERENCE ONLY. FOR EXACT DEPTHS, SLOPES, EXTENTS, ETC, SEE OTHER DISCIPLINES' DRAWINGS.

22. TEMPORARY LOADS APPLIED DURING CONSTRUCTION HAVE NOT BEEN CONSIDERED IN SLAB ON GRADE DESIGN.

23. INDICATES TOP OF FOOTING ELEVATION WITH RESPECT TO REFERENCE TOP OF CONCRETE (+0'-0") THE BOTTOM OF ALL FOOTINGS SHALL BE AT LEAST 18" BELOW ADJACENT MINIMUM PREPARED BUILDING PAD ELEVATION (ON ALL SIDES), TYP UNO AND AS SHOWN ON SECTIONS.

. INDICATES SLAB STEP PER PS-S-0

25. \$ ------ \$ INDICATES FOOTING STEP PER PS-S-0.3 STEP LOCATIONS ARE DIAGRAMMATIC ONLY. CONTRACTOR TO COORDINATE IN FIELD. INTENT IS THAT NO TOP OF FTG IS WITHIN 12" OF EXTERIOR FINISH GRADE.

6. +2'-0" INDICATES TOP OF CONCRETE SLAB ELEVATION RELATIVE TO REFERENCE T.O. CONCRETE +0'-0".

INDICATES HSS COLUMN & SIZE. FOR BASE PLATE, SEE 5
PS-S-9.3 TYP UNO.
INDICATES WIDE FLANGE COLUMN, SIZE PER PLAN. FOR BASE PLATE, SEE PS-S-9.1 TYP UNO.

28. INDICATES CONCRETE TILT-UP WALL PANEL, TYP UNO. SEE ELEVATIONS FOR ADD'L INFO.

29. 1 INDICATES CONCRETE TILT-UP WALL NUMBER. SEE ELEVATIONS ON SHEETS PS-S-4.1THRU PS-S-4.3.

30. INDICATES 8" CMU WALL. FOR REINFORCING, SEE 17 PS-S-0.3 CONDUITS IN CMU TO BE PER CMU NOTES.

31. INDICATES WALL CONTROL JOINT PER 410SD010

C/S

c/s broward **builders**

Arrington Watkins Architects

Telephone: (916) 338-7707 Fax: (888) 510-3055

2024 Opportunity Drive, Suite 150 Roseville, California 95678

REGISTRANT SEAL

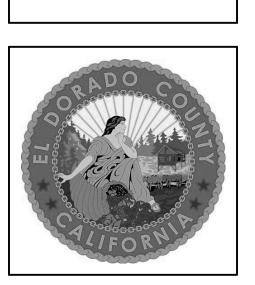
REGISTRANT SEAL

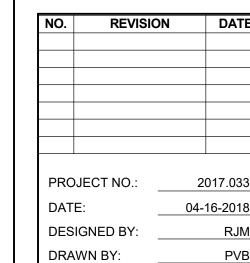
ROFESS 10 NAL

ROLLER
No. 4157

STRUCTURAL.

EL DORADO PUBLIC SAFETY FACILIT PUBLIC SAFETY BUILDING & SITE 200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619



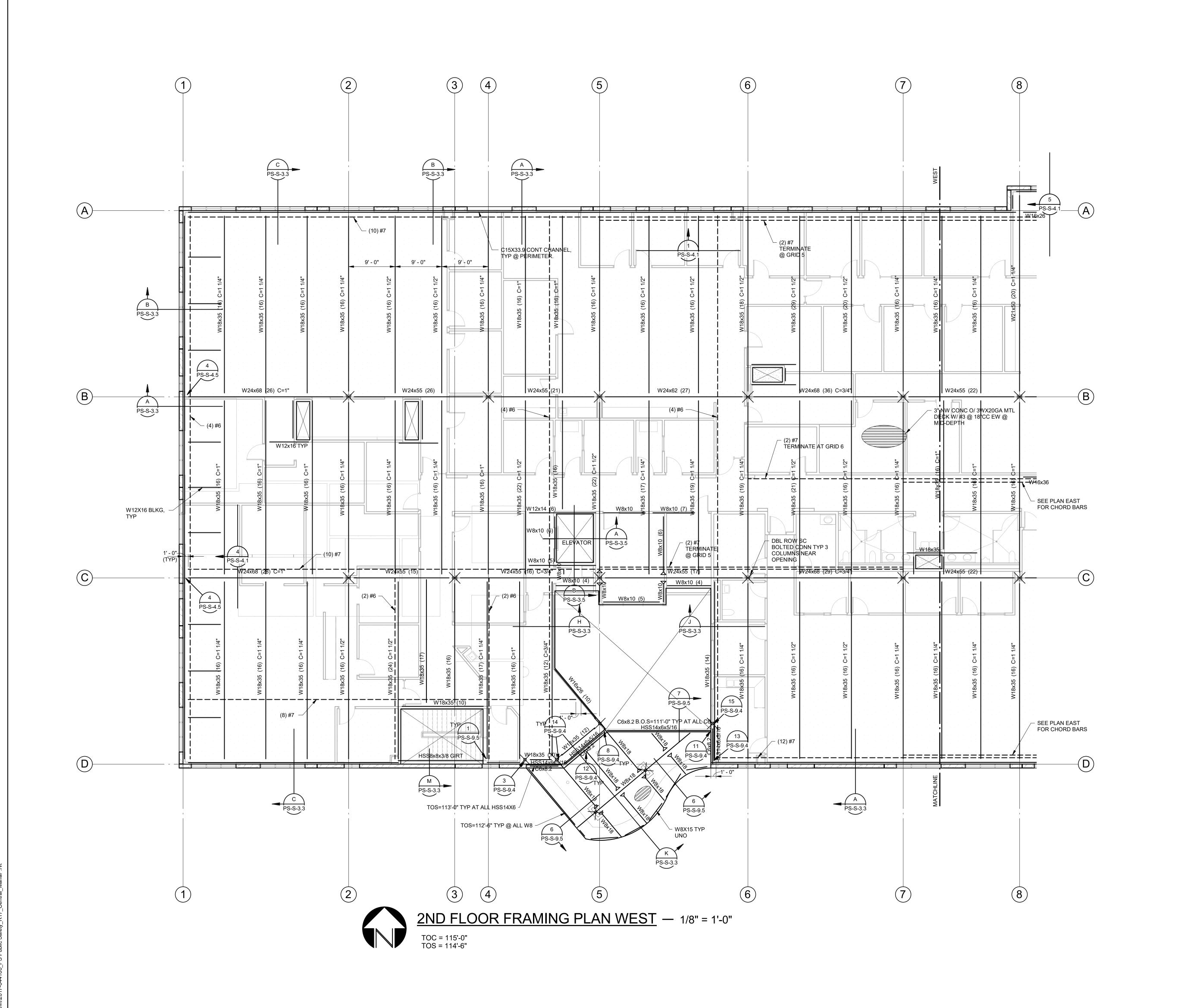


APPROVED BY:
SHEET TITLE:
FOUNDATION PLAN EAST

SHEET NUMBER:
PS-S-2.2

Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 958

Sacramento . Phoenix . San Francisco



FLOOR FRAMING PLAN NOTES:

- VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.
- DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO.
 SEE SHEETS PS-S-0.1 THRU PS-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE
- APPLICABLE TO ALL DRAWINGS UNO.

 4. (A) OR (B) INDICATES COLUMN IS ABOVE ONLY (A) OR BELOW ONLY (B). NO SYMBOL
- INDICATES THAT COL IS ABOVE AND BELOW.

 5. FOR CONNECTION OF ELEVATOR GUIDE RAIL SUPPORT FRAMING TO STRUCTURE SEE
- CONTRACTOR TO COORD LOCATION WITH ELEVATOR INSTALLER.

 551SD00

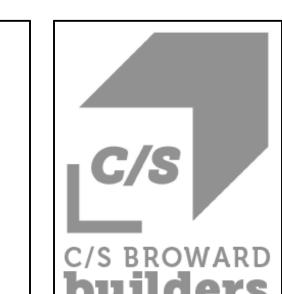
 6. DESIGN, FABRICATION AND INSTALLATION OF MANUFACTURED STAIRS IS BY OTHERS. STAIR
- DESIGN, PABRICATION AND INSTALLATION OF MANOPACTURED STAIRS IS BY OTHERS. STAIR
 DESIGNER TO COORDINATE LOADING OF ADJACENT STRUCTURE W/ SEOR BEFORE COMMENCING
 DESIGN WORK. FOR ADDITIONAL INFORMATION SEE STAIR NOTES AT SHEET PS-S-0.1.
- 7. FOR GUIDELINES AND LIMITATIONS FOR SUPPORTING FROM STRUCTURE, SEE

 8. INDICATES FLOOR OPENING. LOCATE OPENING PER AMEP DRAWINGS. FOR SUPPORT, SEE

 Q
 - P5-5-9.2
- 9. SEE SHEETS PS-S-9.1 & PS-S-9.3 FOR TYPICAL STEEL DETAILS.
 10. SEE SHEET PS-S-9.2 FOR TYPICAL CONCRETE OVER METAL DECK DETAILS.
- INDICATES ELEVATION OF TOP OF STEEL FRAMING AND BOTTOM OF METAL DECK.
- INDICATES CONC OVER METAL DECK. ORIENTATION AS SHOWN ON PLAN. PROVIDE DECK WELDING TO ALL BEAMS PER B.
- 13. CONCRETE OVER METAL DECK CONSTRUCTION SHALL BE 3"X20GA TYPE 3W STEEL FLOOR DECK (TWO SPAN MINIMUM WITHOUT SHORING) WITH MIN 3 1/2" NW CONCRETE. REINFORCE CONCRETE WITH #3 @ 18"CC EACH WAY.
- 14. THE MINIMUM THICKNESS OF CONCRETE OVER METAL DECK SHALL BE AS SPECIFIED ON PLAN. NOTE THAT THE CONCRETE DEPTH WILL VARY DUE TO DECK AND BEAM DEFLECTIONS DURING CONCRETE PLACEMENT, AND SHALL BE CONSIDERED IN THE ESTIMATING OF CONCRETE VOLUME, COST AND PLACEMENT STRATEGIES. SEE SPEC SECTION 053000 SUBSECTIONS 1.4.A.5 AND 2.1.K FOR ADDITIONAL REQUIREMENTS RELATED TO CONCRETE PLACEMENT. FOR ADDITIONAL INFORMATION SEE
- 15. SEE ARCH'L DWGS FOR LOCATION OF ALL SLAB EDGES AT FLOOR PERIMETER AND AROUND OPENINGS. WHERE NOT SHOWN OR INDICATED OTHERWISE ON STRUCTURAL OR ARCH'L DWGS, BEAMS ADJACENT TO SLAB EDGES SHALL BE 9" FROM CL OF BEAM TO EDGE OF SLAB.
- 16. NO MECH'L, ELEC'L, PLUMBING OR OTHER NON-STRUCTURAL ITEMS SHALL BE PLACED IN CONCRETE OVER METAL DECK.
- 17. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL
- 18. W18x35 (32)
 C=1"
 INDICATES BEAM SIZE, NUMBER OF 3/4"Ø WELDED HEADED STUDS, AND UPWARD CAMBER (WHERE NO CAMBER IS SPECIFIED FABRICATE WITH NATURAL MILL CAMBER UP). PROVIDE 3/4"Ø STUDS @ 24"CC MIN AT ALL BEAMS THAT RECEIVE MTL DECK AND CONCRETE, TYP. PROVIDE SPACING OF STUDS AT 12"CC AT ALL BEAMS W/ CONNECTIONS INDICATED AS (► ◆) UNLESS MORE STRINGENT REQUIREMENT IS NOTED ON PLANS. MINIMUM STUD LENGTH SHALL BE 5" LONG AFTER WELDING.
- 19. W10 DENOTES W10x15 TYP, UNO.
- W12 DENOTES W12x16 TYP, UNO.
 W14 DENOTES W14x22 TYP, UNO.
- C12 DENOTES C12x20.7 TYP, UNO.
- 20. ALL BEAMS SHALL BE EQUALLY SPACED BETWEEN DIMENSIONED COLUMNS, GRIDS, OR BEAMS
- WHERE OCCURS, TYP UNO.

 21. FOR TYPICAL BEAM TO BEAM CONNECTION, SEE

 1
 PS-S-9.1
 PS-S-9.1
- 22. FOR TYPICAL BEAM TO COLUMN CONNECTION, SEE 5
 PS-S-9.1 OF
- 23. \triangleright INDICATES WF NON-FRAME MOMENT CONNECTION, SEE $\frac{3}{PS-S-9.1}$
- 24. INDICATES SINGLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER 3
 PS-S-9.1
- 25. •• INDICATES DOUBLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER
- 26. ◆ INDICATES WELDED CONNECTION PER 512SD027 513SD014 512SD028 512SD029
- INDICATES WIDE FLANGE COLUMN. SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY INDICATES HSS COLUMN. SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY.
- 28. VERIFY ALL FLOOR OPENINGS, LOCATIONS & DIMENSIONS WITH ARCH'L DWGS PRIOR TO FABRICATION AND DETAILING. ALL FLOOR OPENINGS SHALL BE REINFORCED AS SHOWN ON TYPICAL METAL DECK SHEET PS-S-9.2. ADD'L WF BLKG MAY BE REQ'D @ FLOOR OPNGS AS SHOWN ON PLAN OR WHERE OPNGS EXCEED PROVISIONS OF TYPICAL DETAILS.
- 29. CONTRACTOR TO COORDINATE EXACT LOCATION OF FRAMING MEMBERS SUPPORTING MECHANICAL UNITS & SIMILAR ITEMS NOT DIMENSIONED ON PLAN.
- 30. — DASHED LINE INDICATES BOTTOM FLANGE BRACE. ARROW INDICATES LOW END, SEE INTENT IS THAT BRACES ARE EQUALLY SPACED BTWN ADJACENT GIRDERS OR 513SI BEAMS, UNO ON PLAN.
- SOLID LINE INDICATES BOTTOM FLANGE BRACING. SEE513SD010.
- 31. INDICATES DEPRESSION IN CONCRETE OVER METAL DECK SEE PLAN FOR DEPTH OF DEPRESSION. SEE ARCH'L DWGS FOR EXACT LOCATION AND EXTENT. DEPRESS FLOOR SLAB PER .
- 32. INDICATES CONCRETE CURB. SEE
- 33. ALL VISUALLY EXPOSED STEEL SHALL MEET 'ARCHITECTURALLY EXPOSED STRUCTURAL STEEL' REQUIREMENTS. SEE ARCH'L DWGS AND SPECS.
- 34. INDICATES SOLID GROUTED CONC MASONRY WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.
- 35. INDICATES CONCRETE WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.
- 36. INDICATES SOLID GROUTED CONC MASONRY WALL BELOW
- 37. = INDICATES CONCRETE WALL BELOW.
- 38. INDICATES MECHANICAL UNIT. ALL BLOCKING BEAMS SHOULD BE W10X12 UNO AND SHALL BE LOCATED DIRECTLY BELOW UNIT EDGES AND/OR CURB, SEE MECHANICAL UNIT SCHEDULE FOR WEIGHTS AND ATTACHMENT OF UNIT/ CURB TO STRUCTURE.
- 39. — INDICATES CHORD BARS IN CONC OVER MTL DECK, SEE



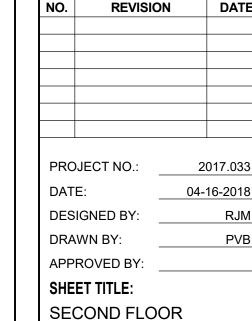
Arrington Watkins Architects

2024 Opportunity Drive, Suite 150 Roseville, California 95678

Telephone: (916) 338-7707 Fax: (888) 510-3055

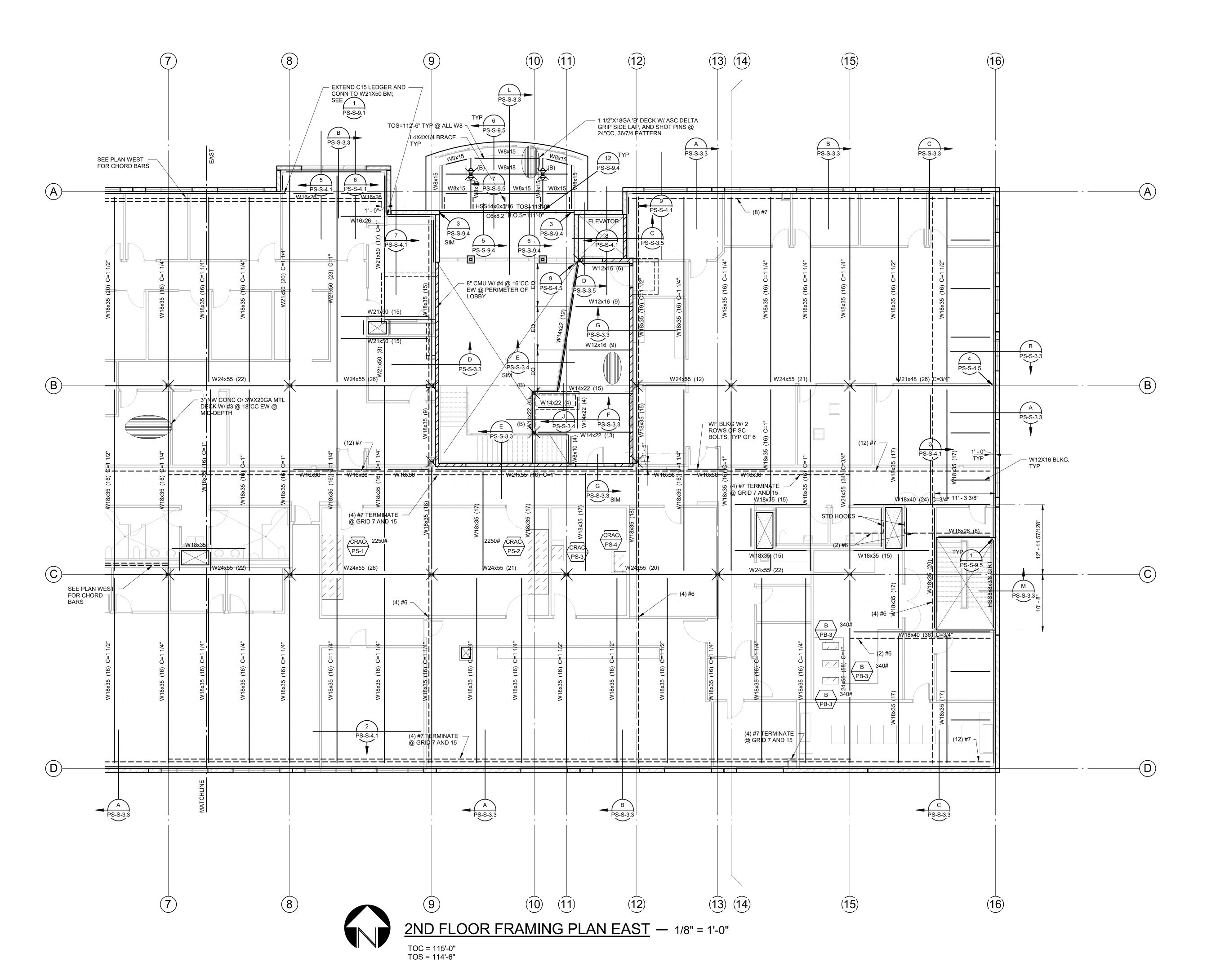
REGISTRANT SEAL

HOO COLLING TO SECONDARY OF THE PARTY OF THE



SHEET NUMBER:
PS-S-2.3

Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 9581 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco FRAMING PLAN - WEST



FLOOR FRAMING PLAN NOTES: 1. VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN. 2. DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO. 3. SEE SHEETS PS-S-0.1 THRU PS-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE APPLICABLE TO ALL DRAWINGS UNO. 4. (A) OR (B) INDICATES COLUMN IS ABOVE ONLY (A) OR BELOW ONLY (B). NO SYMBOL INDICATES THAT COL IS ABOVE AND BELOW. 5. FOR CONNECTION OF ELEVATOR GUIDE RAIL SUPPORT FRAMING TO STRUCTURE SEE CONTRACTOR TO COORD LOCATION WITH ELEVATOR INSTALLER. 6. DESIGN, FABRICATION AND INSTALLATION OF MANUFACTURED STAIRS IS BY OTHERS. STAIR DESIGNER TO COORDINATE LOADING OF ADJACENT STRUCTURE W/ SEOR BEFORE COMMENCING DESIGN WORK. FOR ADDITIONAL INFORMATION SEE STAIR NOTES AT SHEET PS-S-0.1. 7. FOR GUIDELINES AND LIMITATIONS FOR SUPPORTING FROM STRUCTURE, SEE INDICATES FLOOR OPENING. LOCATE OPENING PER AMEP DRAWINGS. FOR SUPPORT, SEE 9 **Arrington Watkins** Architects 9. SEE SHEETS PS-S-9.1 & PS-S-9.3 FOR TYPICAL STEEL DETAILS. 10. SEE SHEET PS-S-9.2 FOR TYPICAL CONCRETE OVER METAL DECK DETAILS. INDICATES ELEVATION OF TOP OF STEEL FRAMING AND BOTTOM OF METAL DECK. INDICATES CONC OVER METAL DECK. ORIENTATION AS SHOWN ON PLAN. PROVIDE DECK WELDING TO ALL BEAMS PER B REGISTRANT SEAL 13. CONCRETE OVER METAL DECK CONSTRUCTION SHALL BE 3"X20GA TYPE 3W STEEL FLOOR DECK (TWO SPAN MINIMUM WITHOUT SHORING) WITH MIN 3 1/2" NW CONCRETE. REINFORCE CONCRETE WITH #3 @ 18"CC EACH WAY. 14. THE MINIMUM THICKNESS OF CONCRETE OVER METAL DECK SHALL BE AS SPECIFIED ON PLAN. NOTE THAT THE CONCRETE DEPTH WILL VARY DUE TO DECK AND BEAM DEFLECTIONS DURING CONCRETE PLACEMENT, AND SHALL BE CONSIDERED IN THE ESTIMATING OF CONCRETE VOLUME, COST AND PLACEMENT STRATEGIES. SEE SPEC SECTION 053000 SUBSECTIONS 1.4.A.5 AND 2.1.K FOR ADDITIONAL REQUIREMENTS RELATED TO CONCRETE PLACEMENT. FOR ADDITIONAL INFORMATION SEE 11 15. SEE ARCH'L DWGS FOR LOCATION OF ALL SLAB EDGES AT FLOOR PERIMETER AND AROUND OPENINGS. WHERE NOT SHOWN OR INDICATED OTHERWISE ON STRUCTURAL OR ARCH'L DWGS, BEAMS ADJACENT TO SLAB EDGES SHALL BE 9" FROM CL OF BEAM TO EDGE OF SLAB. 16. NO MECH'L, ELEC'L, PLUMBING OR OTHER NON-STRUCTURAL ITEMS SHALL BE PLACED IN CONCRETE OVER METAL DECK. 17. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL 18. W18x35 (32) INDICATES BEAM SIZE, NUMBER OF 3/4"Ø WELDED HEADED STUDS, AND UPWARD CAMBER (WHERE NO CAMBER IS SPECIFIED FABRICATE WITH NATURAL MILL CAMBER UP). PROVIDE 3/4"Ø STUDS @ 24"CC MIN AT ALL BEAMS THAT RECEIVE MTL DECK AND CONCRETE, TYP. PROVIDE SPACING OF STUDS AT 12"CC AT ALL BEAMS W/ CONNECTIONS INDICATED AS (► • • •) UNLESS MORE STRINGENT REQUIREMENT IS NOTED ON PLANS. MINIMUM STUD LENGTH SHALL BE 5" LONG AFTER WELDING. 19. W10 DENOTES W10x15 TYP, UNO. W12 DENOTES W12x16 TYP, UNO. W14 DENOTES W14x22 TYP, UNO. C12 DENOTES C12x20.7 TYP, UNO. 20. ALL BEAMS SHALL BE EQUALLY SPACED BETWEEN DIMENSIONED COLUMNS, GRIDS, OR BEAMS WHERE OCCURS, TYP UNO. 21. FOR TYPICAL BEAM TO BEAM CONNECTION, SEE 22. FOR TYPICAL BEAM TO COLUMN CONNECTION, SEE 23. ▷ INDICATES WF NON-FRAME MOMENT CONNECTION, SEE PS-S-9.1 24. • INDICATES SINGLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER PS-S-9.1 25. •• INDICATES DOUBLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER 26. ◆ INDICATES WELDED CONNECTION PER 512SD027 513SD014 512SD028 512SD029 DORADO PU PUBLIC SAFI 200 IND DIAMOND INDICATES WIDE FLANGE COLUMN. SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY INDICATES HSS COLUMN. SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY. 28. VERIFY ALL FLOOR OPENINGS, LOCATIONS & DIMENSIONS WITH ARCH'L DWGS PRIOR TO FABRICATION AND DETAILING. ALL FLOOR OPENINGS SHALL BE REINFORCED AS SHOWN ON TYPICAL METAL DECK SHEET PS-S-9.2. ADD'L WF BLKG MAY BE REQ'D @ FLOOR OPNGS AS SHOWN ON PLAN OR WHERE OPNGS EXCEED PROVISIONS OF TYPICAL DETAILS. 29. CONTRACTOR TO COORDINATE EXACT LOCATION OF FRAMING MEMBERS SUPPORTING MECHANICAL UNITS & SIMILAR ITEMS NOT DIMENSIONED ON PLAN. INTENT IS THAT BRACES ARE EQUALLY SPACED BTWN ADJACENT GIRDERS OR BEAMS, UNO ON PLAN. SOLID LINE INDICATES BOTTOM FLANGE BRACING. SEE513SD010 INDICATES DEPRESSION IN CONCRETE OVER METAL DECK - SEE PLAN FOR DEPTH OF DEPRESSION. SEE ARCH'L DWGS FOR EXACT LOCATION AND EXTENT. DEPRESS FLOOR SLAB PER / 32. INDICATES CONCRETE CURB. SEE 33. ALL VISUALLY EXPOSED STEEL SHALL MEET 'ARCHITECTURALLY EXPOSED STRUCTURAL STEEL' REQUIREMENTS. SEE ARCH'L DWGS AND SPECS. 34. INDICATES SOLID GROUTED CONC MASONRY WALL. SEE FOUNDATION PLAN FOR ADD'L INFO. 35. INDICATES CONCRETE WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.

36. INDICATES SOLID GROUTED CONC MASONRY WALL BELOW

39. — — INDICATES CHORD BARS IN CONC OVER MTL DECK, SEE (10)

INDICATES MECHANICAL UNIT. ALL BLOCKING BEAMS SHOULD BE W10X12 UNO AND

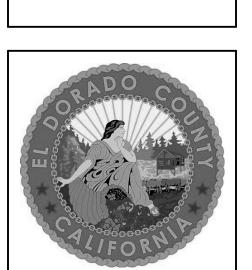
MECHANICAL UNIT SCHEDULE FOR WEIGHTS AND ATTACHMENT OF UNIT/ CURB TO

SHALL BE LOCATED DIRECTLY BELOW UNIT EDGES AND/OR CURB, SEE

37. ☐ ☐ INDICATES CONCRETE WALL BELOW.

STRUCTURE.

AHU 1A



2024 Opportunity Drive, Suite 150 Roseville, California 95678

Telephone: (916) 338-7707

Fax: (888) 510-3055

REVISION PROJECT NO.: DATE: DESIGNED BY: DRAWN BY:

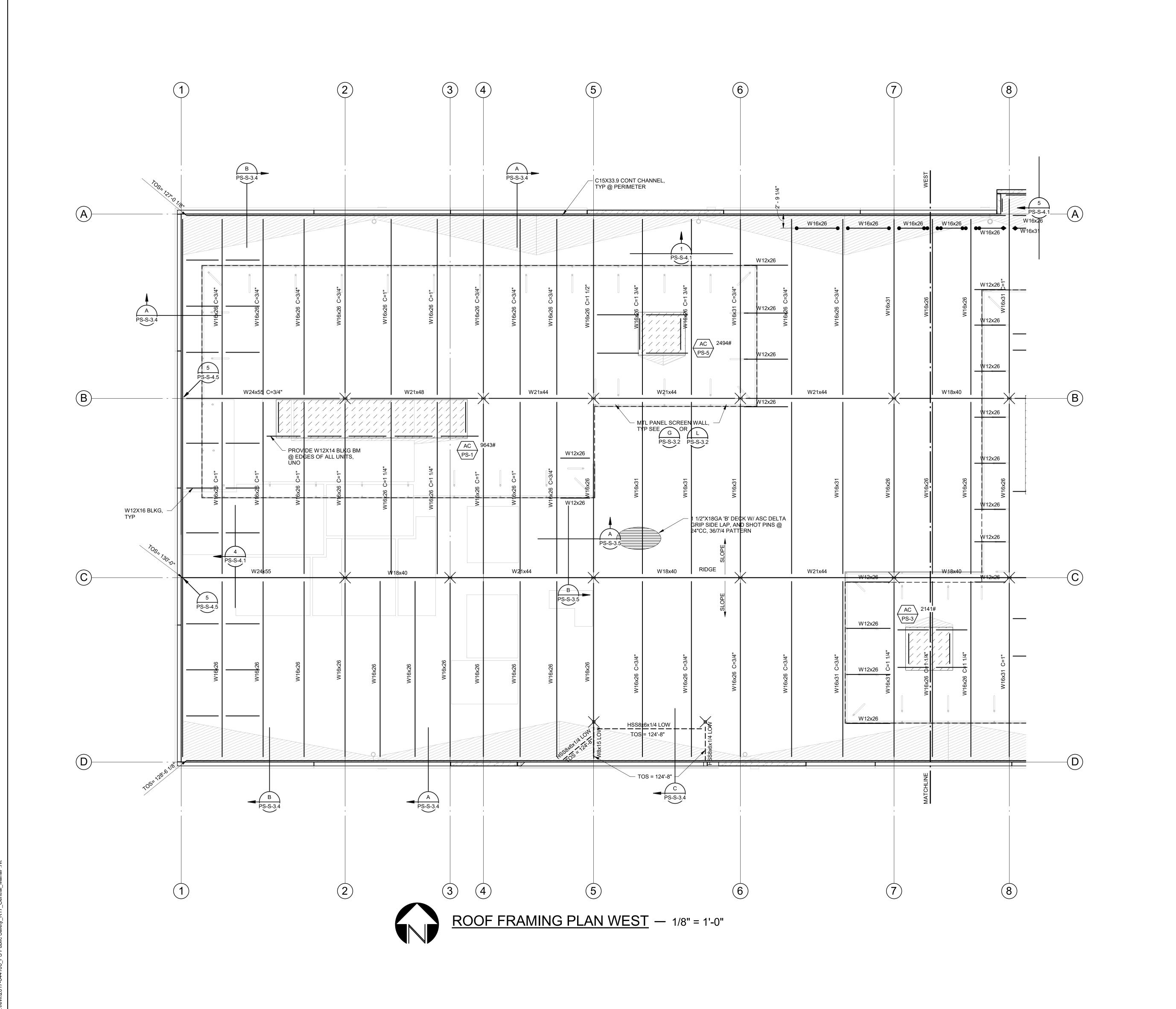
SHEET TITLE: SECOND FLOOR FRAMING PLAN - EAST

APPROVED BY:

SHEET NUMBER:

Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 958 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco

Los Angeles . Silicon Valley



ROOF FRAMING PLAN NOTES:

- VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.
- 2. DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO.

INDICATES THAT COL IS ABOVE AND BELOW.

- 3. SEE SHEETS PS-S-0.1 THRU PS-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE
- APPLICABLE TO ALL DRAWINGS UNO.

 4. (A) OR (B) INDICATES COLUMN IS ABOVE ONLY (A) OR BELOW ONLY (B). NO SYMBOL
- 5. FOR CONNECTION OF ELEVATOR GUIDE RAIL SUPPORT FRAMING TO STRUCTURE SEE
- CONTRACTOR TO COORD LOCATION WITH ELEVATOR INSTALLER.

 551SDC
- 6. DESIGN, FABRICATION AND INSTALLATION OF MANUFACTURED STAIRS IS BY OTHERS. STAIR DESIGNER TO COORDINATE LOADING OF ADJACENT STRUCTURE W/ SEOR BEFORE COMMENCING DESIGN WORK. FOR ADDITIONAL INFORMATION SEE STAIR NOTES AT SHEET \$1.1.

INDICATES ROOF OPENING. LOCATE OPENING PER AMEP DRAWINGS. FOR SUPPORT, SEE 9
PS-S-9.2

9. SEE SHEETS PS-S-9.1 & sp-s-9.3 FOR TYPICAL STEEL DETAILS.

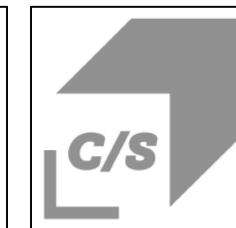
10. SEE SHEET PS-S-9.2 FOR TYPICAL METAL DECK DETAILS.

- 1×15'-0" INDICATES ELEVATION OF TOP OF STEEL FRAMING AND BOTTOM OF METAL DECK.
- 12. INDICATES BARE METAL DECK. ORIENTATION AS SHOWN ON PLAN. PROVIDE DECK WELDING TO ALL BEAMS PER B.
- 13. METAL DECK SHALL BE 1 1/2"x18GA 'B' METAL DECK.
- 14. SEE ARCH'L DWGS FOR LOCATION OF ALL SLAB EDGES AT ROOF PERIMETER AND AROUND OPENINGS. WHERE NOT SHOWN OR INDICATED OTHERWISE ON STRUCTURAL OR ARCH'L DWGS, BEAMS ADJACENT TO SLAB EDGES SHALL BE 8" FROM CL OF BEAM TO EDGE OF SLAB.
- 15. NO MECH'L, ELEC'L, PLUMBING OR OTHER NON-STRUCTURAL ITEMS SHALL BE PLACED IN CONCRETE OVER METAL DECK.
- 16. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL
- 17. W18x35 (32) INDICATES BEAM SIZE, NUMBER OF 3/4"Ø WELDED HEADED STUDS, AND UPWARD CAMBER (WHERE NO CAMBER IS SPECIFIED FABRICATE WITH NATURAL MILL CAMBER UP). PROVIDE 3/4"Ø STUDS @ 24"CC MIN AT ALL BEAMS THAT RECEIVE MTL DECK AND CONCRETE, TYP. PROVIDE SPACING OF STUDS AT 12"CC AT ALL BEAMS W/ CONNECTIONS INDICATED AS (► ◆) UNLESS MORE STRINGENT REQUIREMENT IS NOTED ON PLANS.
- 18. W10 DENOTES W10x15 TYP, UNO.W12 DENOTES W12x16 TYP, UNO.
- W14 DENOTES W14x22 TYP, UNO.
- C12 DENOTES C12x20.7 TYP, UNO.
- L4 DENOTES L4x4x1/4 TYP, UNO.
- 19. ALL BEAMS SHALL BE EQUALLY SPACED BETWEEN DIMENSIONED COLUMNS, GRIDS, OR BEAMS WHERE OCCURS, TYP UNO.
- 20. FOR TYPICAL BEAM TO BEAM CONNECTION, SEE PS-S-9.1 OR PS-S-9.1 U
- 21. FOR TYPICAL BEAM TO COLUMN CONNECTION, SEE $\begin{pmatrix} 4 \\ PS-S-9.1 \end{pmatrix}$ OR $\begin{pmatrix} 6 \\ PS-S-9.1 \end{pmatrix}$
- 22. INDICATES WF NON-FRAME MOMENT CONNECTION, SEE PS-S-9.1

 23. INDICATES SINGLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER 3
- 24. •• INDICATES DOUBLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER 3 OR 8 PS-S-9.1 OR PS-S-9.1
- 26. INDICATES WIDE FLANGE COLUMN. SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY.
- INDICATES HSS COLUMN. SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY.

 27. VERIFY ALL ROOF OPENINGS, LOCATIONS & DIMENSIONS WITH ARCH'L DWGS PRIOR TO FABRICATION AND DETAILING. ALL ROOF OPENINGS SHALL BE REINFORCED AS SHOWN ON TYPICAL
- METAL DECK SHEET PS-S-9.2. ADD'L WF BLKG MAY BE REQ'D @ ROOF OPNGS AS SHOWN ON PLAN OR WHERE OPNGS EXCEED PROVISIONS OF TYPICAL DETAILS.

 28 CONTRACTOR TO COORDINATE EXACT LOCATION OF FRAMING MEMBERS SUPPORTING
- 28. CONTRACTOR TO COORDINATE EXACT LOCATION OF FRAMING MEMBERS SUPPORTING MECHANICAL UNITS & SIMILAR ITEMS NOT DIMENSIONED ON PLAN.
- 29. INDICATES MECHANICAL UNIT. ALL BLOCKING BEAMS SHALL BE W10x12 UNO AND SHALL BE LOCATED DIRECTLY BELOW UNIT EDGES AND/OR CURBS, SEE MECHANICAL UNIT SCHEDULE FOR WEIGHTS AND ATTACHMENT OF UNIT/CURBS TO STRUCTURE.
- 30. SEE SHEET S6.1 FOR PRECAST FASCIA PANEL NOTES AND DETAILS. ADDITIONAL STEEL SUPPORTS AND BRACING FOR PANELS TO BE DESIGNED, PROVIDED AND INSTALLED BY PRECAST SUPPLIER.
- SOLID LINE INDICATES BOTTOM FLANGE BRACING. SEE 513SD010.
- 32. INDICATES DEPRESSION IN CONCRETE OVER METAL DECK SEE PLAN FOR DEPTH OF DEPRESSION. SEE ARCH'L DWGS FOR EXACT LOCATION AND EXTENT. DEPRESS FLOOR SLAB PER.
- 33. ALL VISUALLY EXPOSED STEEL SHALL MEET 'ARCHITECTURALLY EXPOSED STRUCTURAL STEEL' REQUIREMENTS. SEE ARCH'L DWGS AND SPECS.
- 34. INDICATES SOLID GROUTED CONC MASONRY WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.
- 35. INDICATES CONCRETE WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.
- 36. INDICATES SOLID GROUTED CONC MASONRY WALL BELOW.
- 37. = | INDICATES CONCRETE WALL BELOW.
- 38. INDICATES METAL STUD WALL. ALL EXTERIOR METAL STUD WALLS SHALL BE 6"X18GA @ 16"CC, UNO.

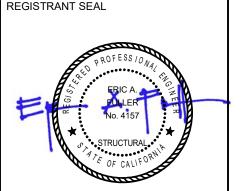


c/s broward

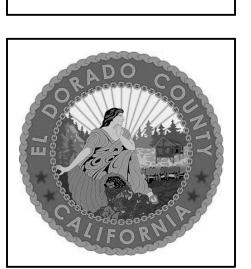


2024 Opportunity Drive, Suite 150 Roseville, California 95678

Telephone: (916) 338-7707 Fax: (888) 510-3055



L DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

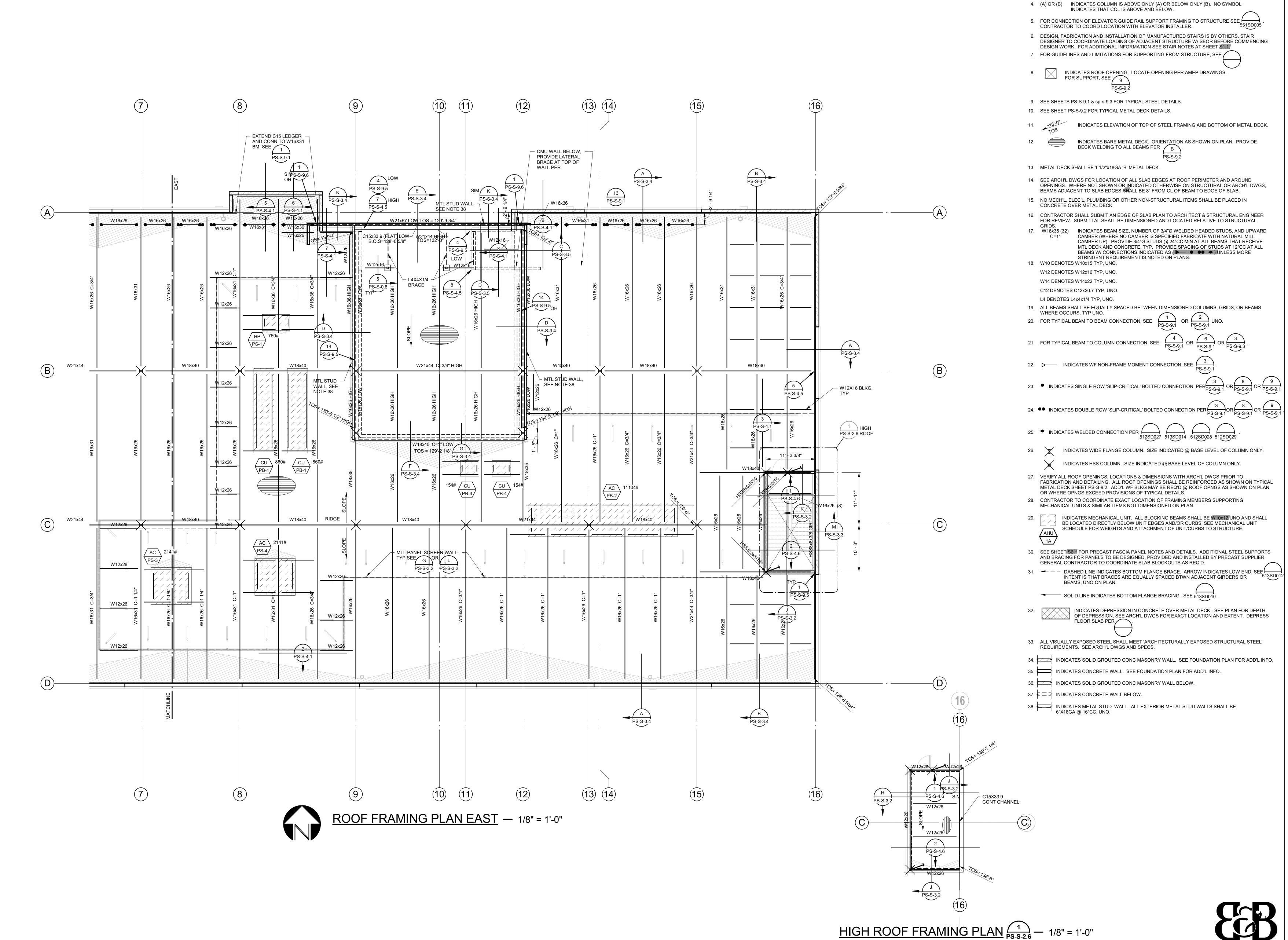


PROJECT NO.: 2017.03
DATE: 04-16-201
DESIGNED BY: RJM
DRAWN BY: PVI
APPROVED BY: SHEET TITLE:

SHEET NUMBER:
PS-S-2-5

ROOF FRAMING PLAN -

Buehler & Buehler
Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
tel 916.443.0303 fax 916.443.0313
Sacramento . Phoenix . San Francisco
Los Angeles . Silicon Valley



C/S

ROOF FRAMING PLAN NOTES:

APPLICABLE TO ALL DRAWINGS UNO.

1. VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.

3. SEE SHEETS PS-S-0.1 THRU PS-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE

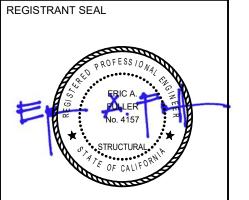
2. DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO.

builde

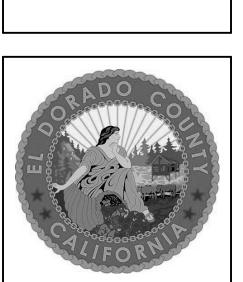
Arrington Watkins Architects

2024 Opportunity Drive, Suite 150 Roseville, California 95678

> Telephone: (916) 338-7707 Fax: (888) 510-3055



EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



NO.	REVISION	ON	DATI
PRC	JECT NO.:	2	017.033
DAT	E:	04-	16-2018
DES	IGNED BY:		RJM
DRA	WN BY:		PVE
APP	ROVED BY:		
SHE	ET TITLE:		
	0 = = D		

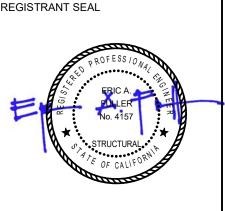
SHEET NUMBER:
PS-S-2.6

Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 958

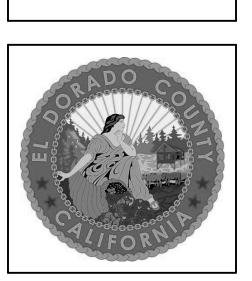
Sacramento . Phoenix . San Francisco

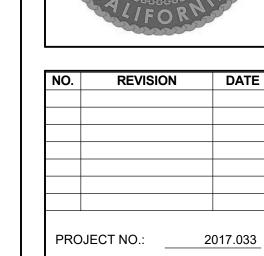


REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





PROJECT NO.: DATE: DESIGNED BY: DRAWN BY: APPROVED BY:
SHEET TITLE:

BUILDING SECTIONS

SHEET NUMBER: PS-S-3.1 18-0565 D 14 of 30

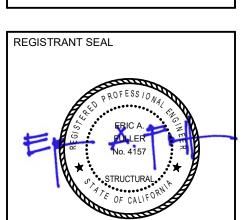
Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
tel 916.443.0303 fax 916.443.0313
Sacramento . Phoenix . San Francisco
Los Angeles . Silicon Valley

SECTION PS-S-3.2 — 1/2" = 1'-0"

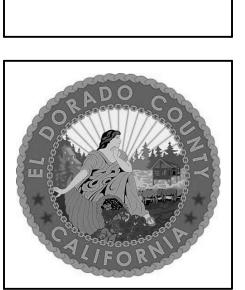


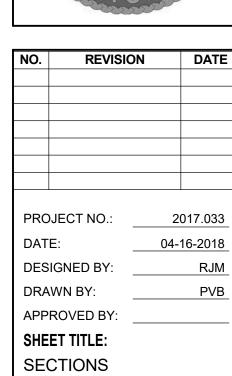


Fax: (888) 510-3055







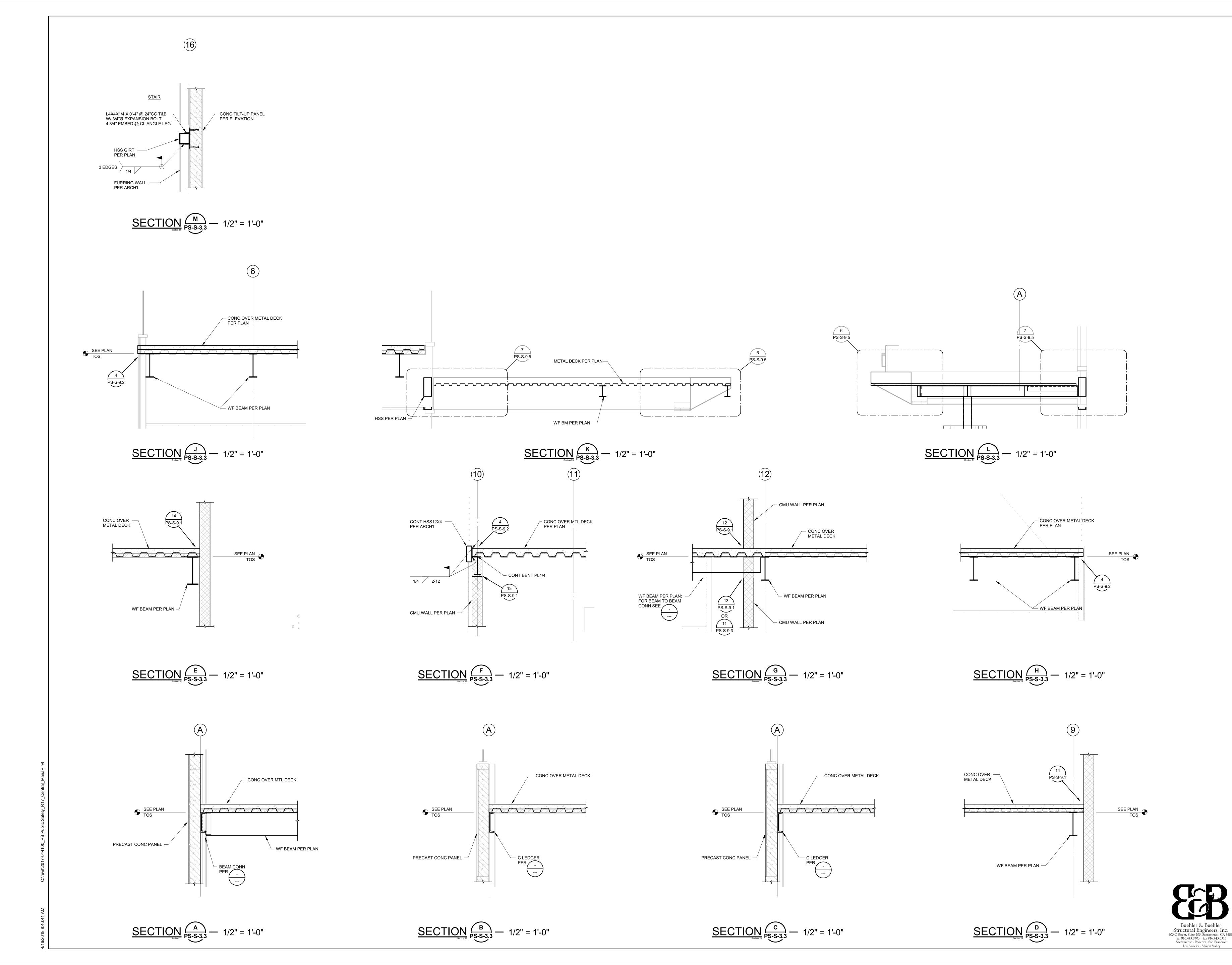


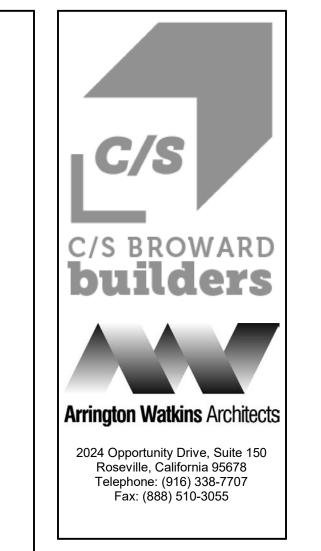
SHEET NUMBER: **PS-S-3.2**

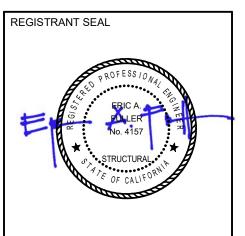
Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 958

tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley

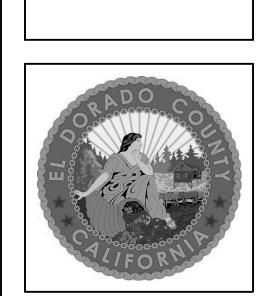
18-0565 D 15 of 30

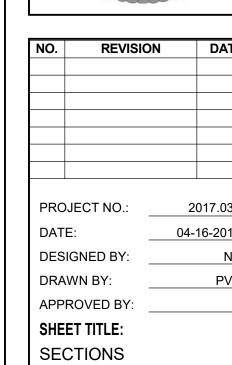




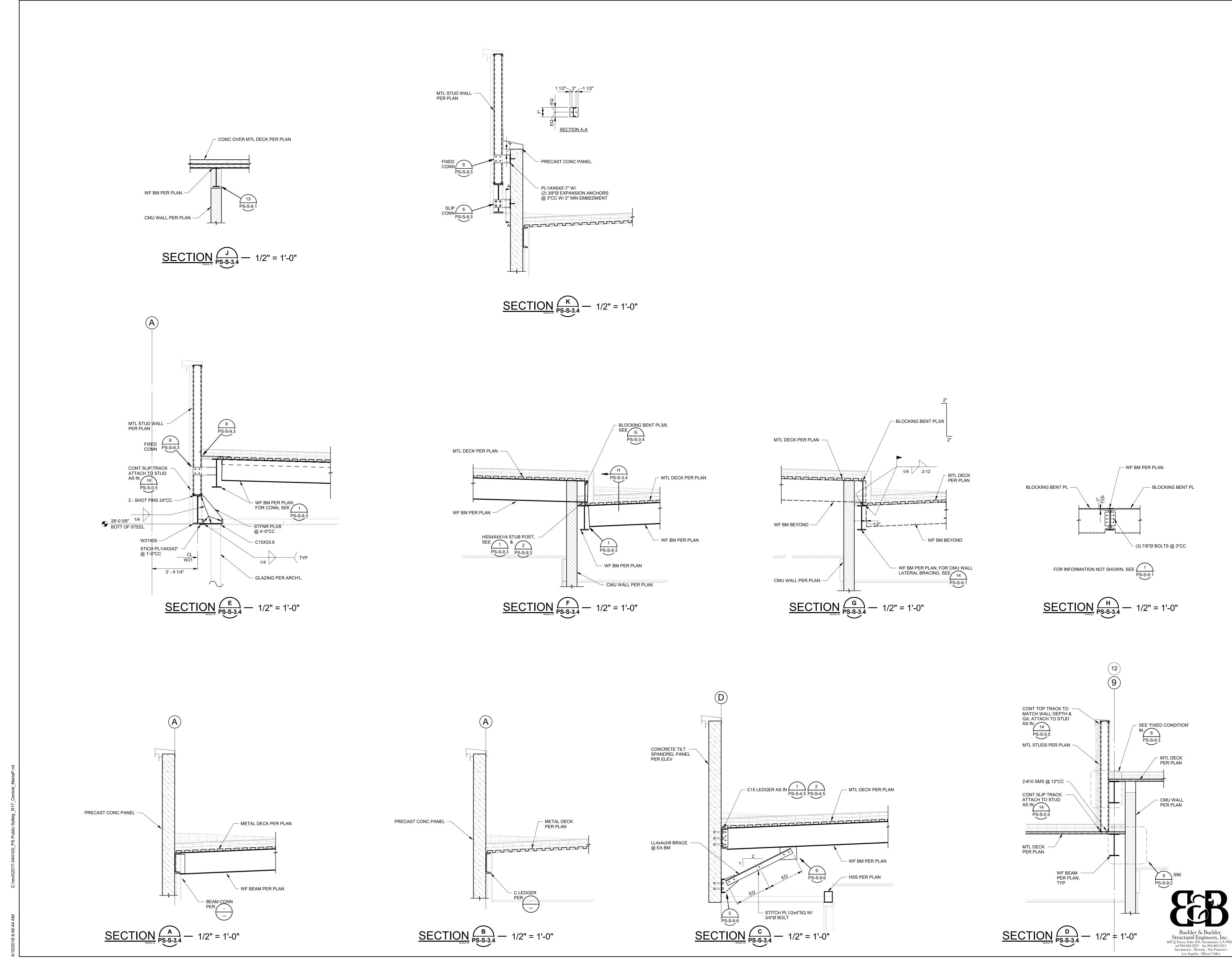


EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





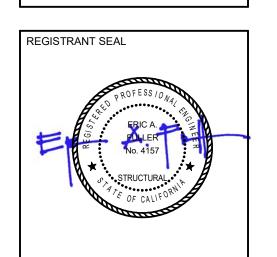
SHEET NUMBER:
PS-S-3.3



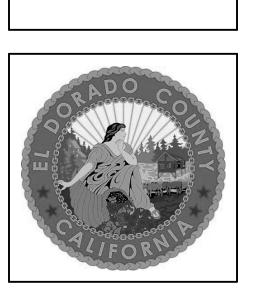
C/S BROWARD builders

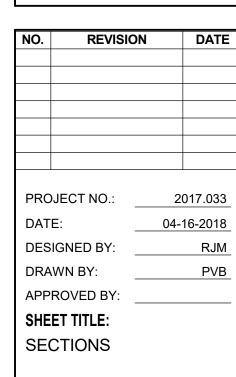
Arrington Watkins Architects

2024 Opportunity Drive, Suite 150
Roseville, California 95678
Telephone: (916) 338-7707
Fax: (888) 510-3055



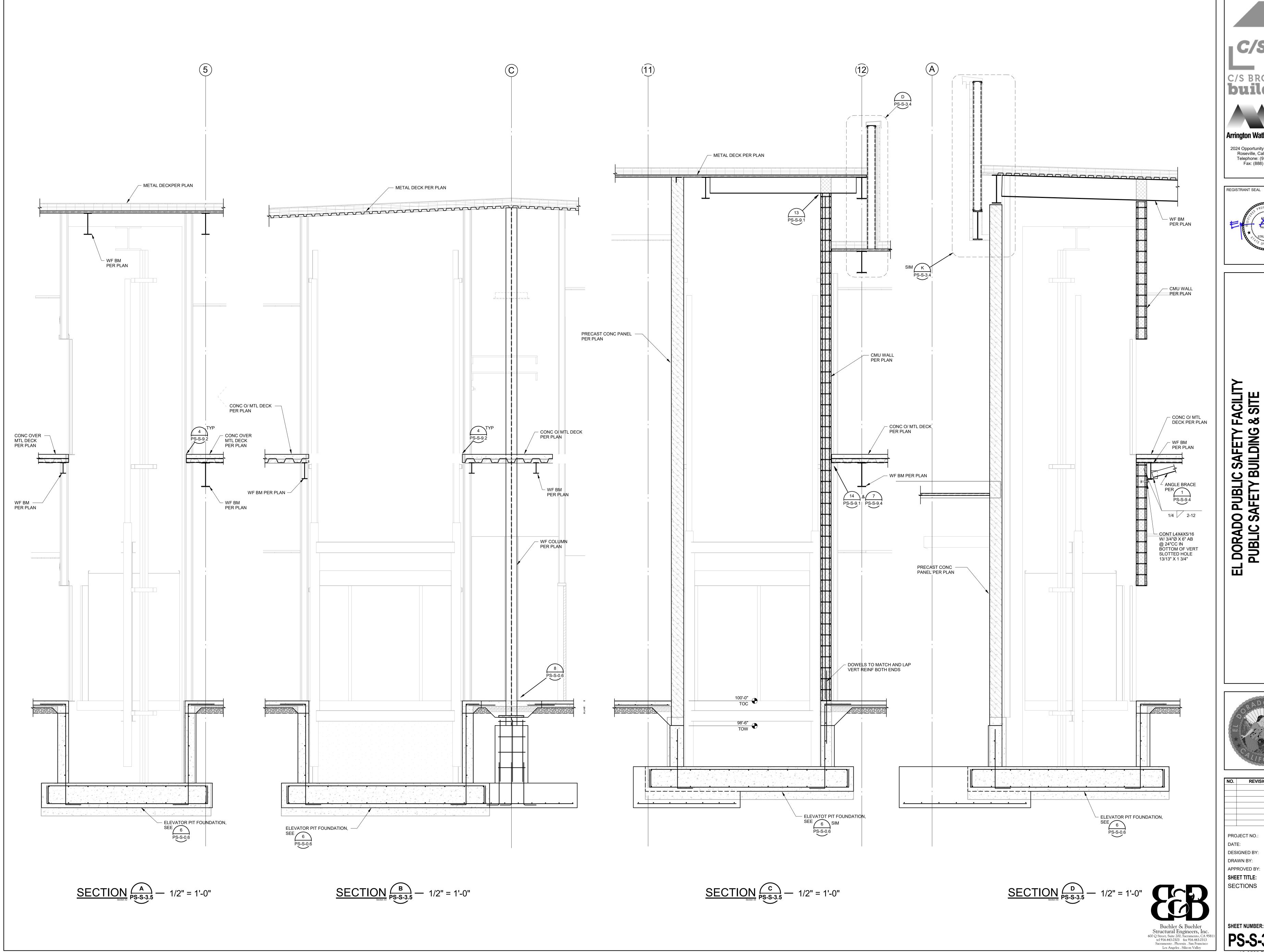
EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

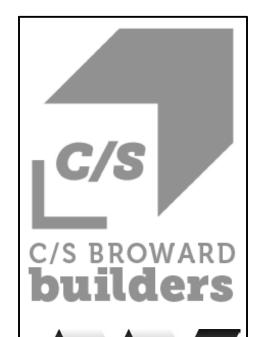




SHEET NUMBER:
PS-S-3.4

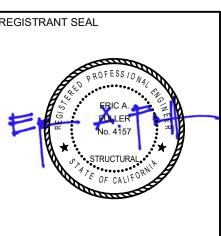
18-0565 D 17 of 30

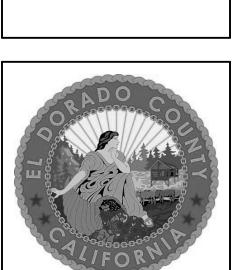


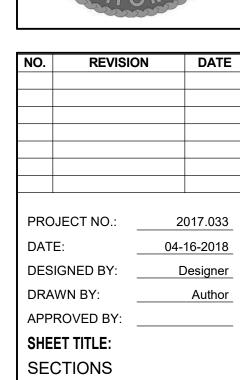




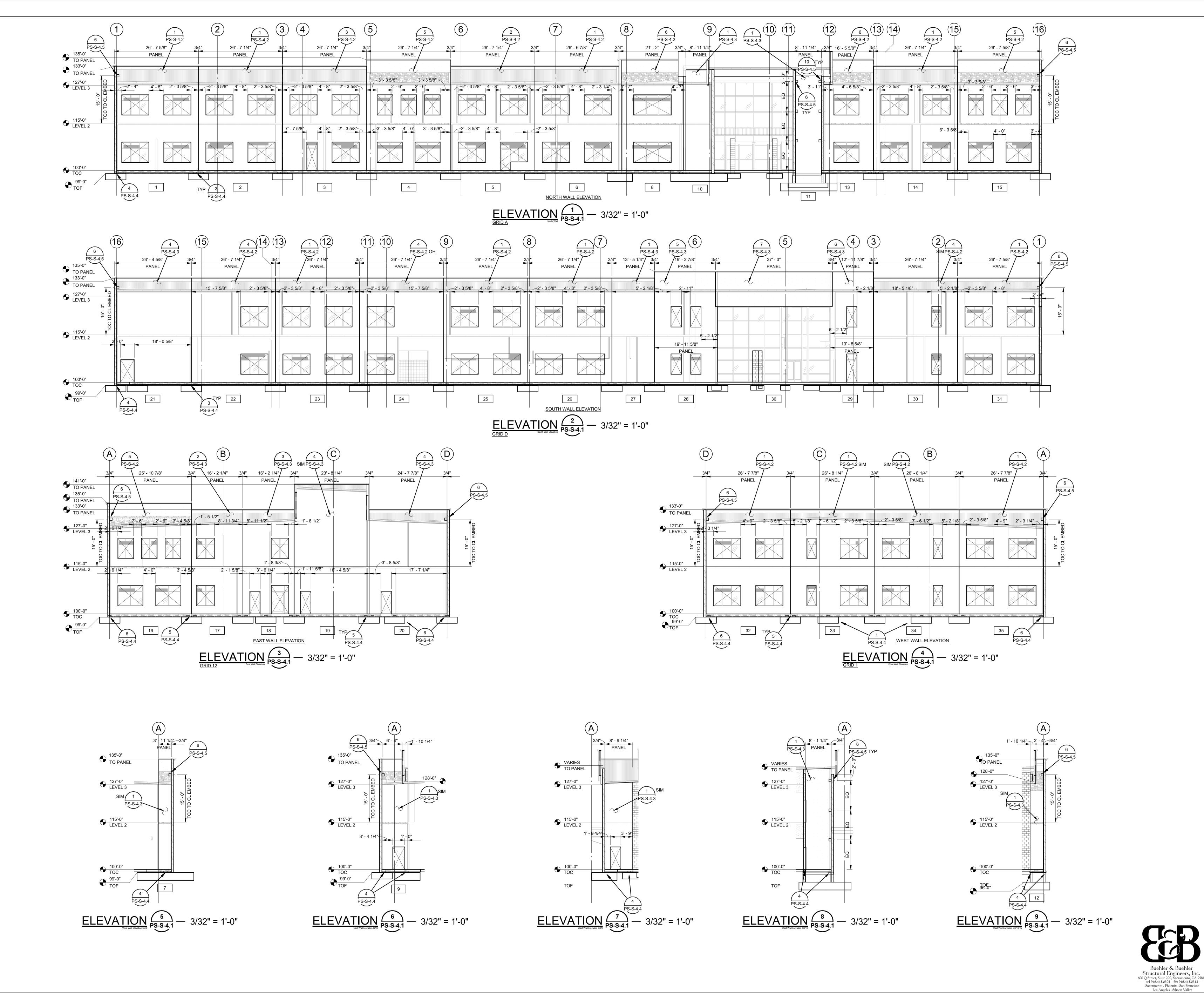
REGISTRANT SEAL

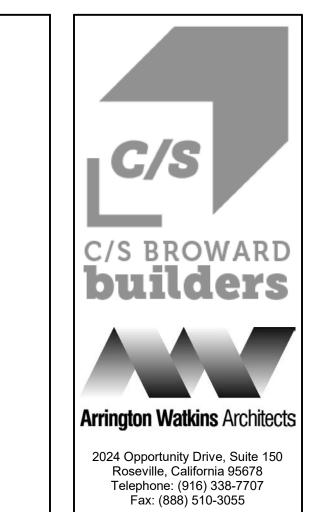


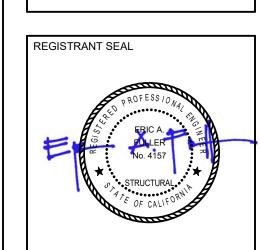




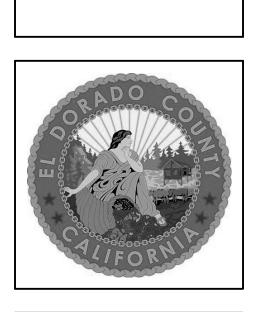
SHEET NUMBER: **PS-S-3.5**

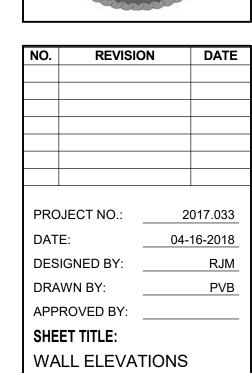




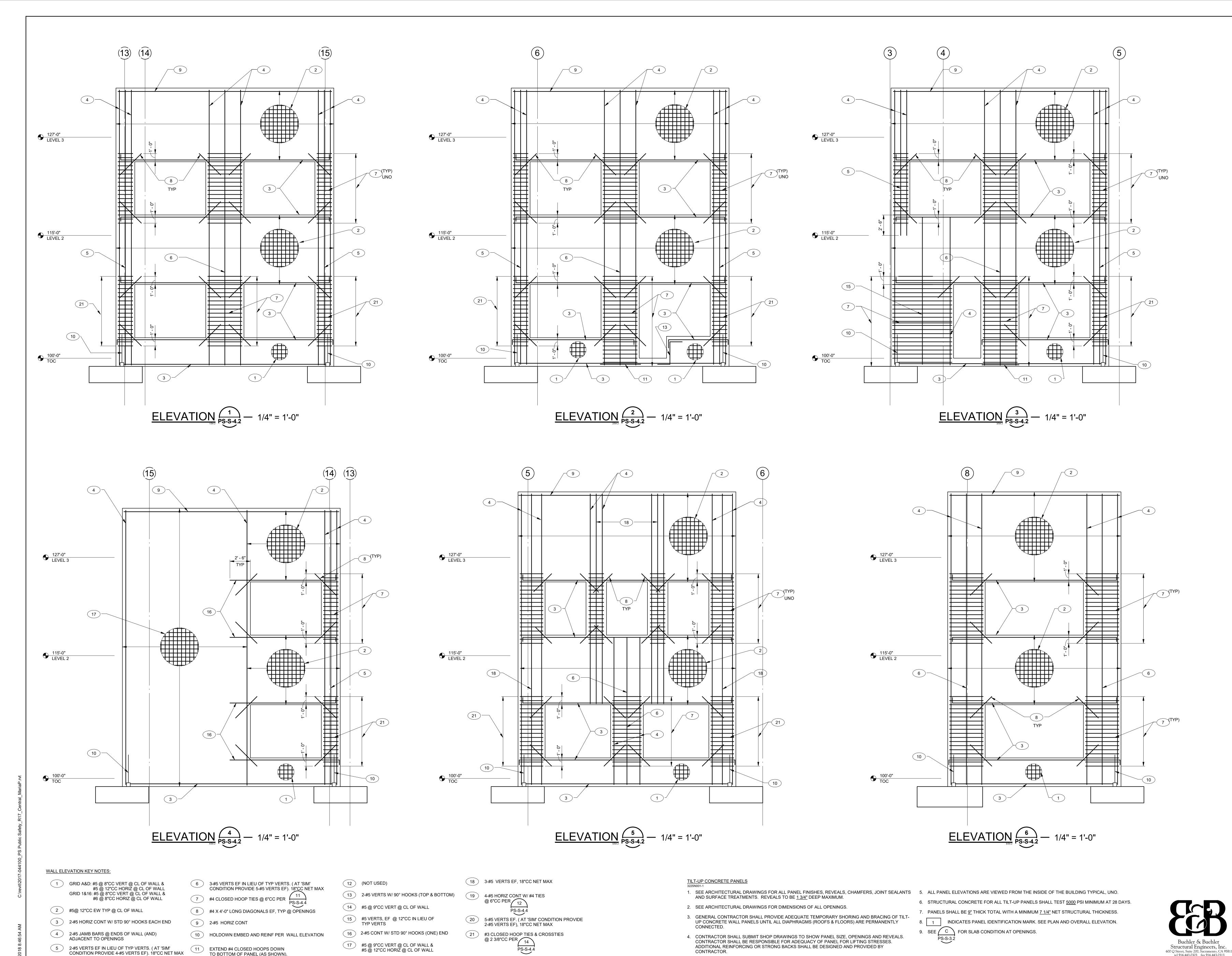


EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





SHEET NUMBER:
PS-S-4.1



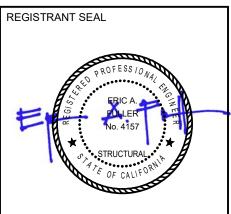
CONTRACTOR.

(11) EXTEND #4 CLOSED HOOPS DOWN

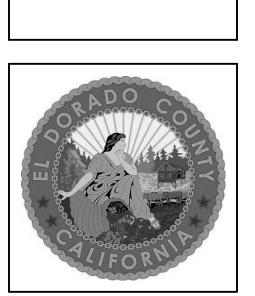
TO BOTTOM OF PANEL (AS SHOWN).

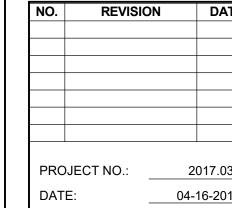
CONDITION PROVIDE 4-#5 VERTS EF). 18"CC NET MAX





EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619





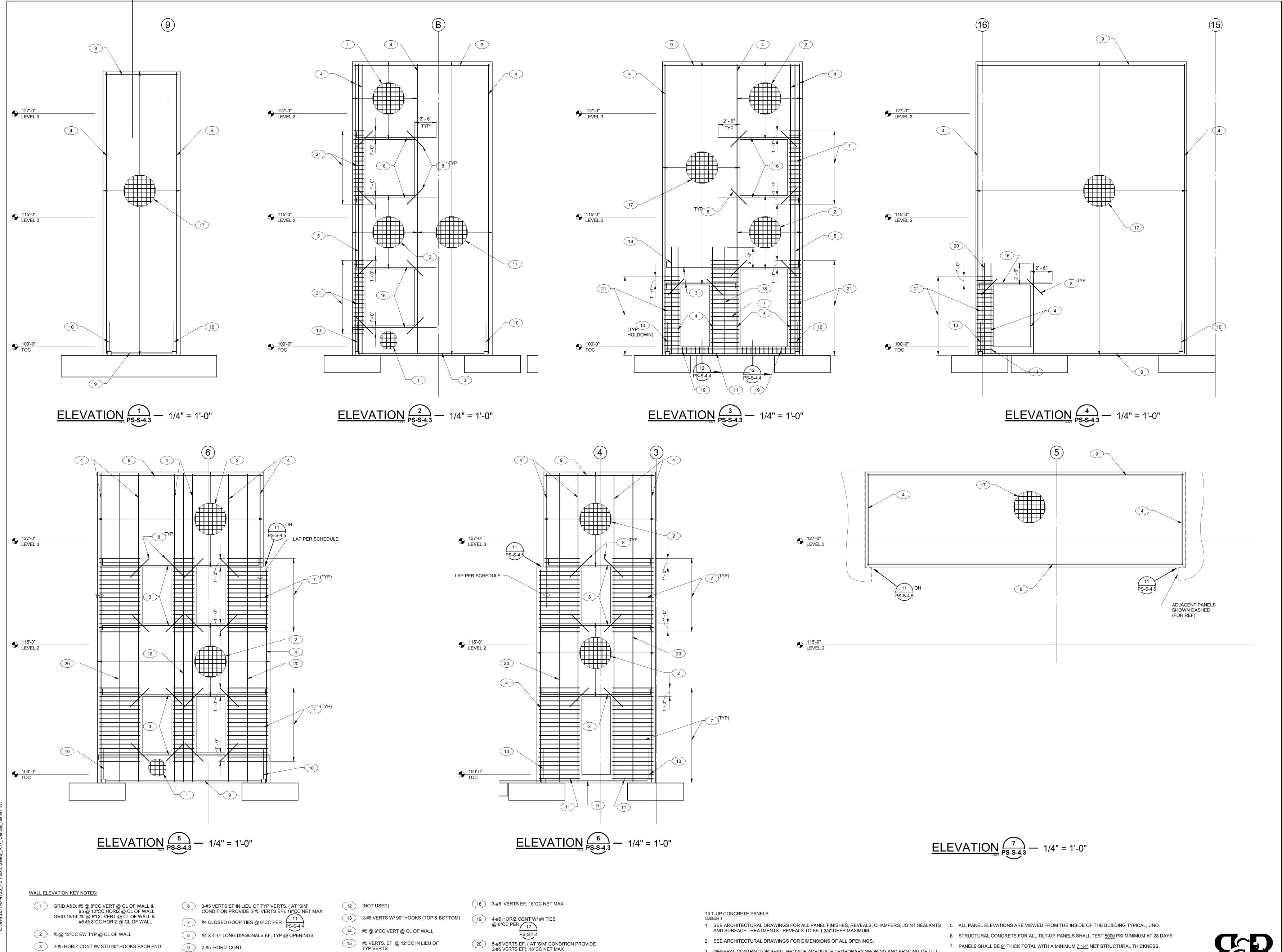
04-16-2018 DESIGNED BY: DRAWN BY: APPROVED BY:

SHEET TITLE: PANEL ELEVATIONS

SHEET NUMBER:

600 Q Street, Suite 200, Sacramento, CA 958

tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley



16 2-#5 CONT W/ STD 90° HOOKS (ONE) END

17 #5 @ 9"CC VERT @ CL OF WALL & #5 @ 12"CC HORIZ @ CL OF WALL

(10) HOLDOWN EMBED AND REINF PER WALL ELEVATION

11 EXTEND #4 CLOSED HOOPS DOWN

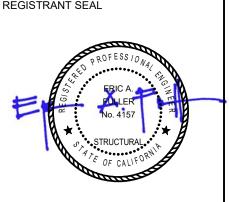
TO BOTTOM OF PANEL (AS SHOWN).

(21) #3 CLOSED HOOP TIES & CROSSTIES

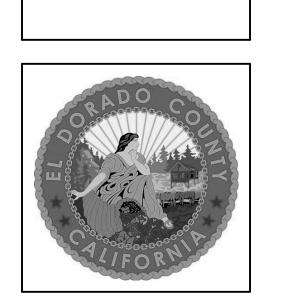
@ 2 3/8"CC PER 14 PS-S-4.4

2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



PROJECT NO.: DATE: DESIGNED BY: DRAWN BY: APPROVED BY:

REVISION

SHEET TITLE: PANEL ELEVATIONS

Buehler & Buehler

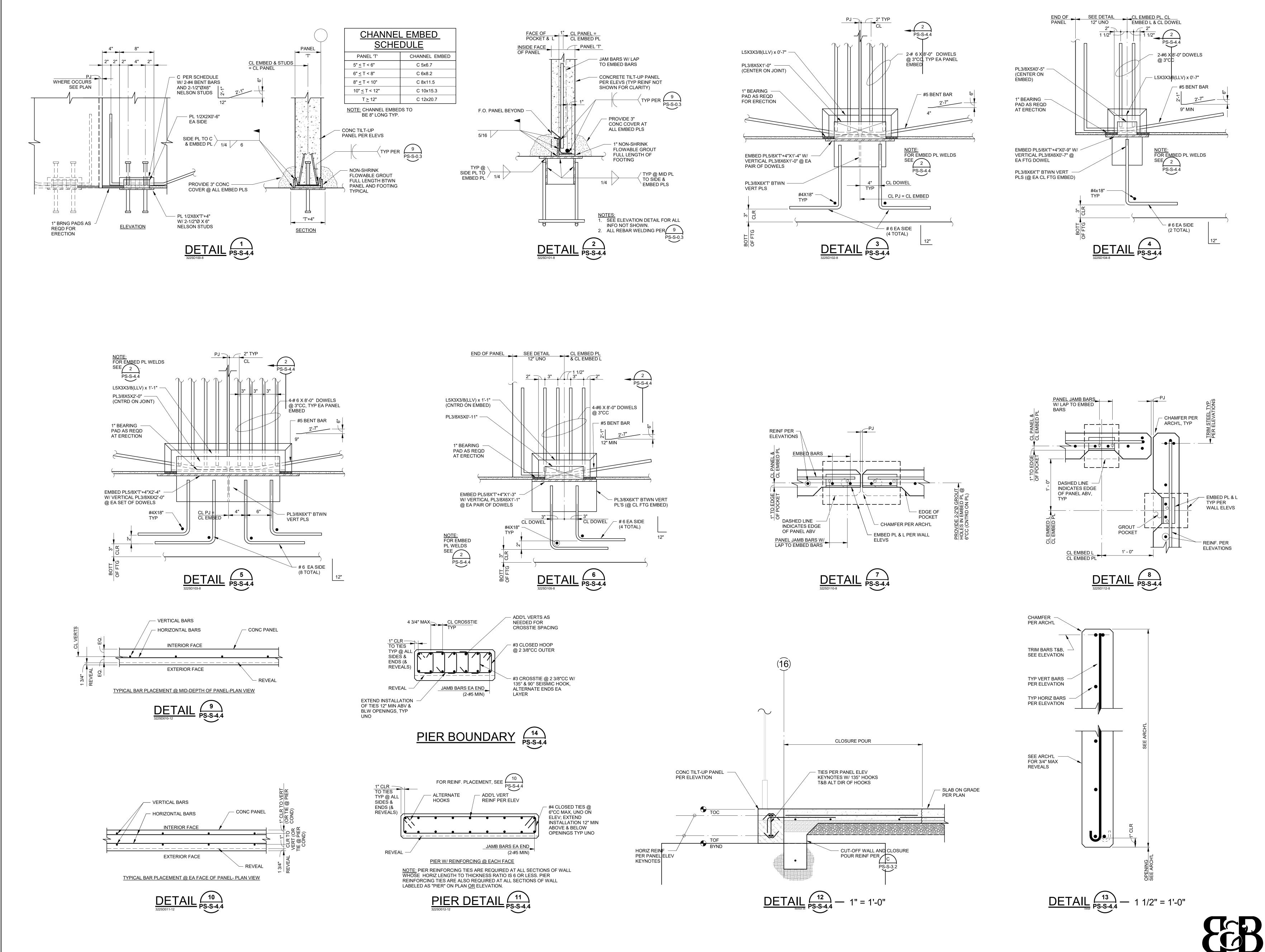
Structural Engineers, Inc.

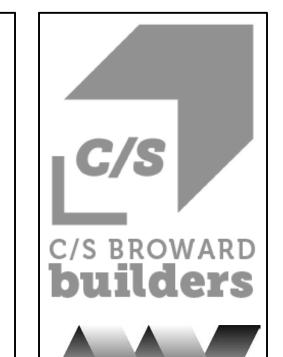
600 Q Street, Suite 200, Sacramento, CA 958 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley

- 3. GENERAL CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY SHORING AND BRACING OF TILT-UP CONCRETE WALL PANELS UNTIL ALL DIAPHRAGMS (ROOFS & FLOORS) ARE PERMANENTLY
- 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO SHOW PANEL SIZE, OPENINGS AND REVEALS. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUACY OF PANEL FOR LIFTING STRESSES. ADDITIONAL REINFORCING OR STRONG BACKS SHALL BE DESIGNED AND PROVIDED BY CONTRACTOR.
- 8. 1 INDICATES PANEL IDENTIFICATION MARK. SEE PLAN AND OVERALL ELEVATION.
- 9. SEE C FOR SLAB CONDITION AT OPENINGS.

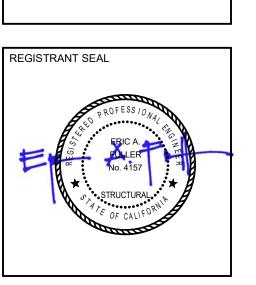
4 2-#5 JAMB BARS @ ENDS OF WALL (AND) ADJACENT TO OPENINGS

5 2-#5 VERTS EF IN LIEU OF TYP VERTS. (AT 'SIM' CONDITION PROVIDE 4-#5 VERTS EF). 18"CC NET MAX

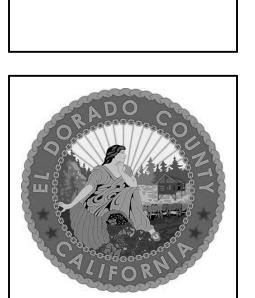


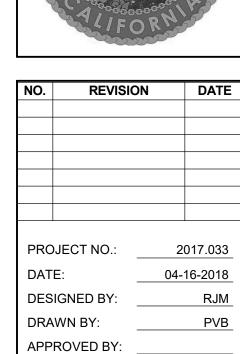






- DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

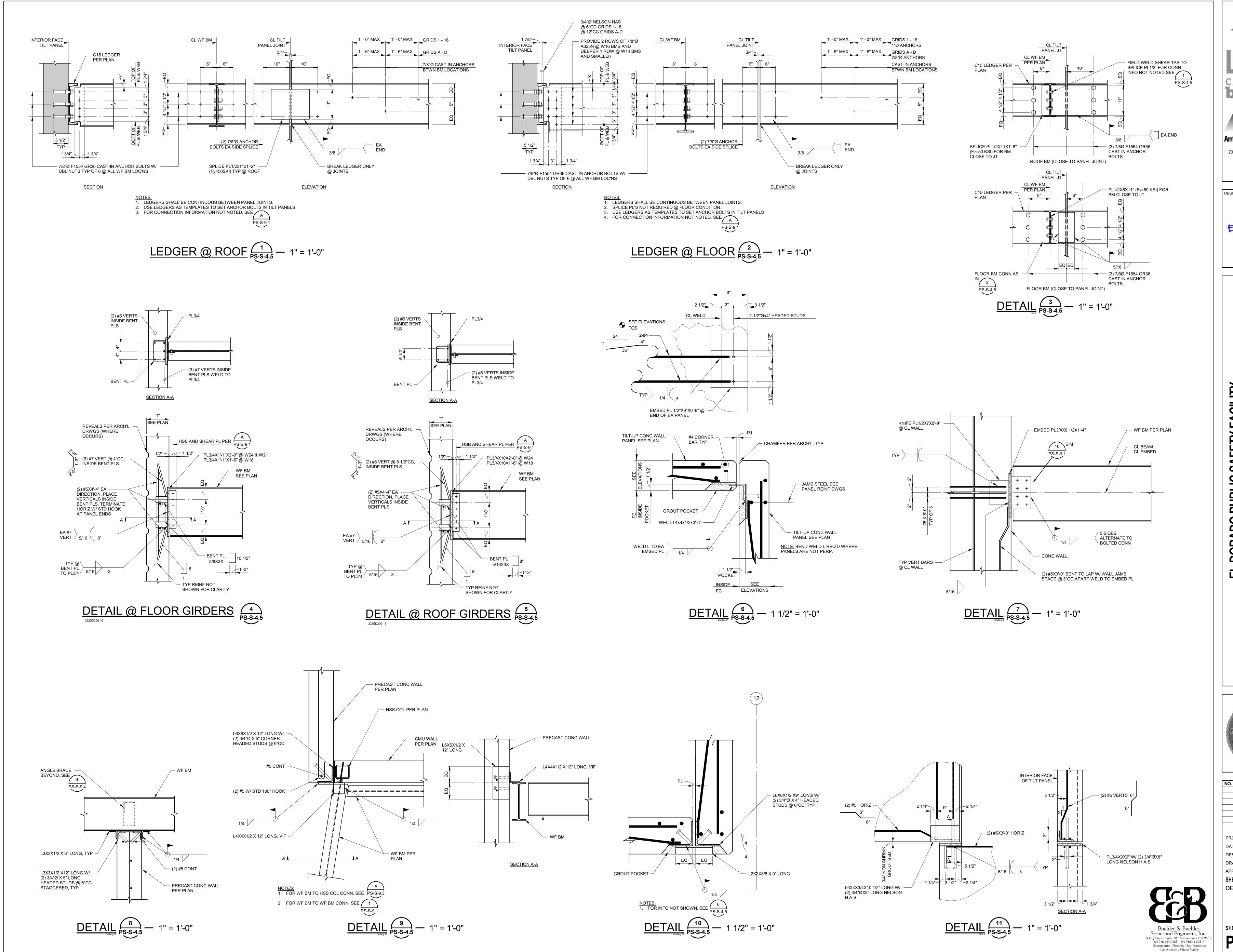


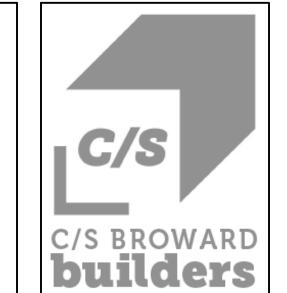


SHEET TITLE:
PANEL DETAILS

SHEET NUMBER:
PS-S-4.4

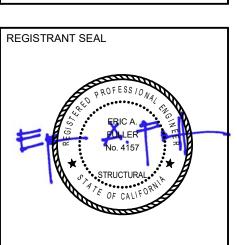
Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 958 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley



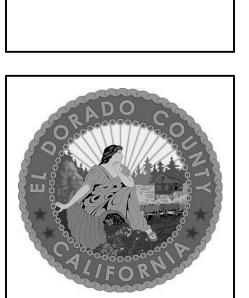


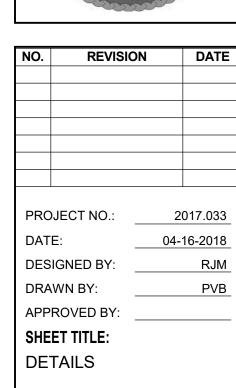


Fax: (888) 510-3055

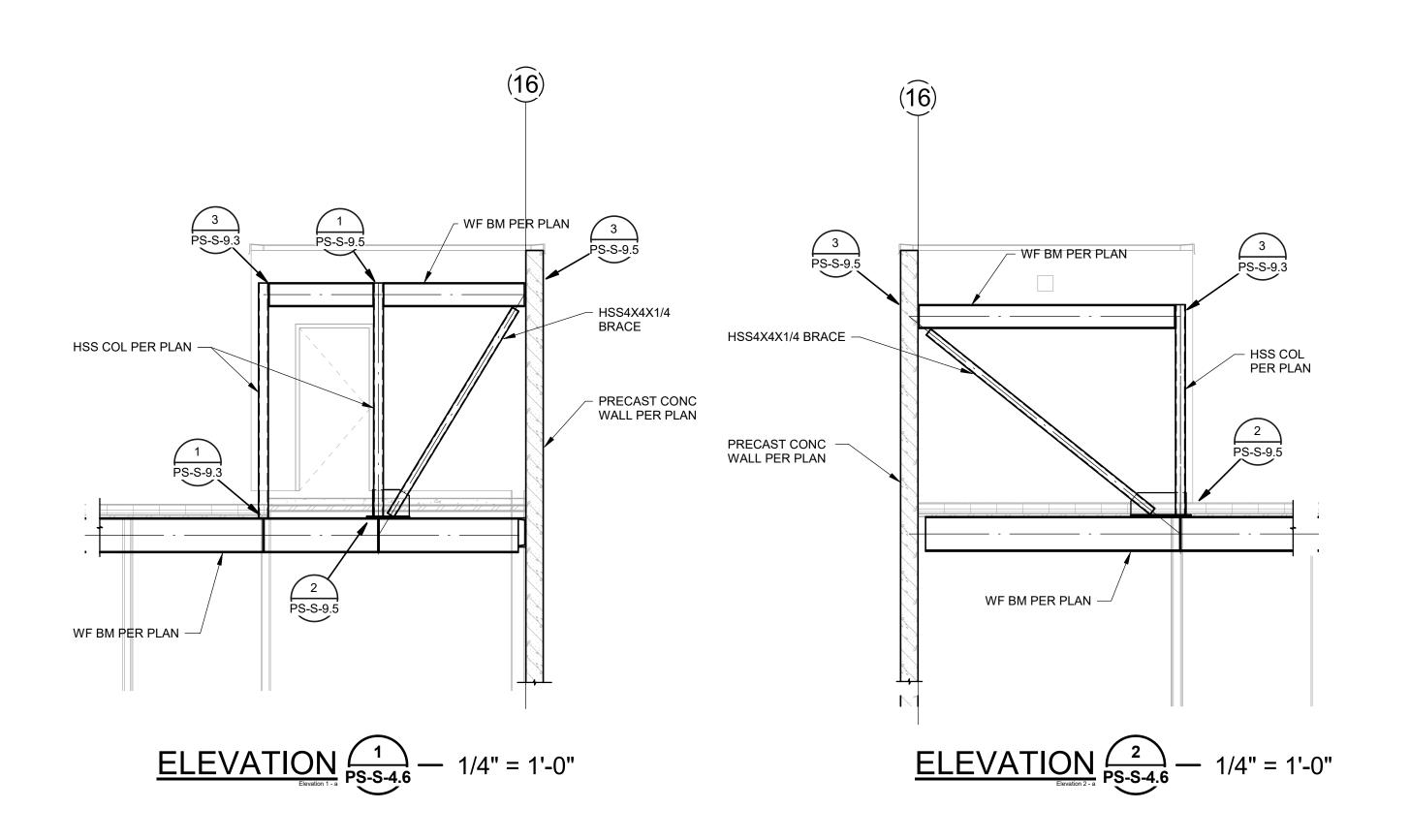


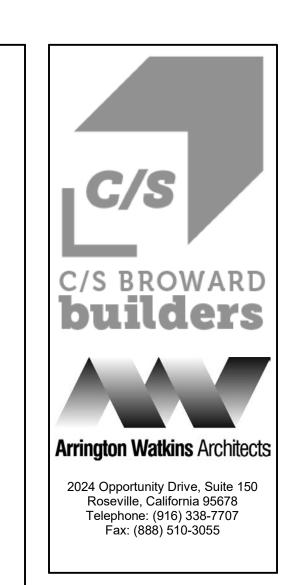
EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

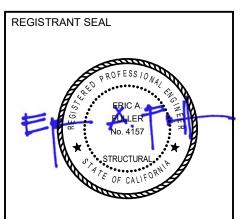




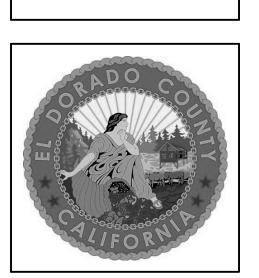
SHEET NUMBER:
PS-S-4.5







EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619



B	and the second s	
7	ALIFORN	555
	Commen of the same	
NO.	REVISION	DAT

PROJECT NO.:

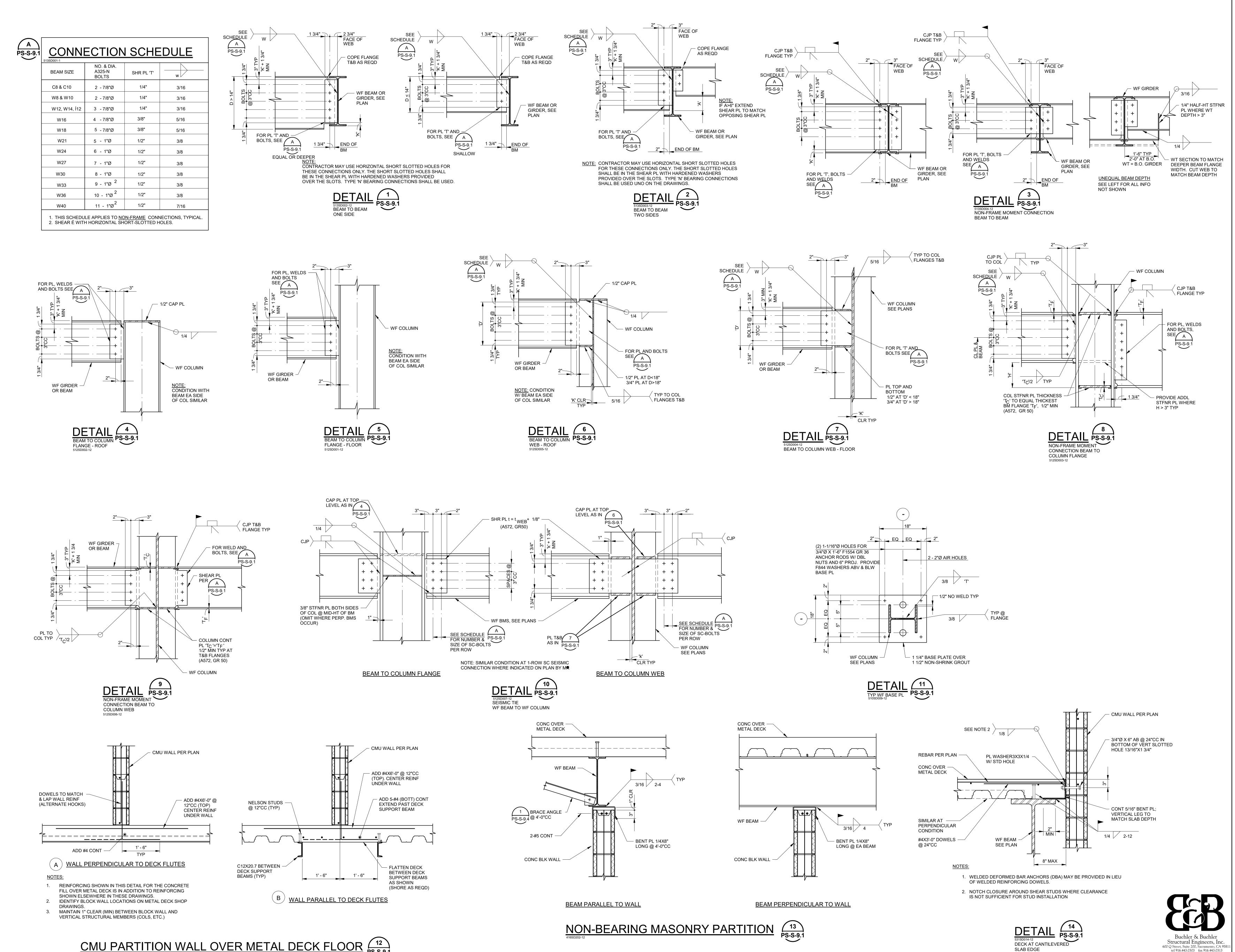
DATE: DESIGNED BY: DRAWN BY: APPROVED BY:

Buehler & Buehler

Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
tel 916.443.0303 fax 916.443.0313
Sacramento . Phoenix . San Francisco
Los Angeles . Silicon Valley

SHEET TITLE: FRAMING ELEVATIONS

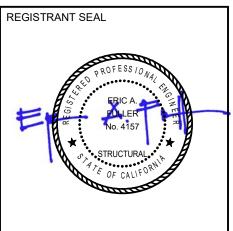
SHEET NUMBER:



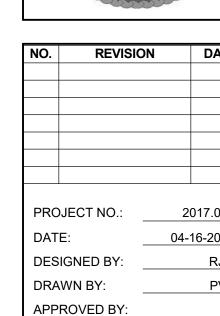
C/S BROWARD **builders**

Arrington Watkins Architects 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707

Fax: (888) 510-3055



EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

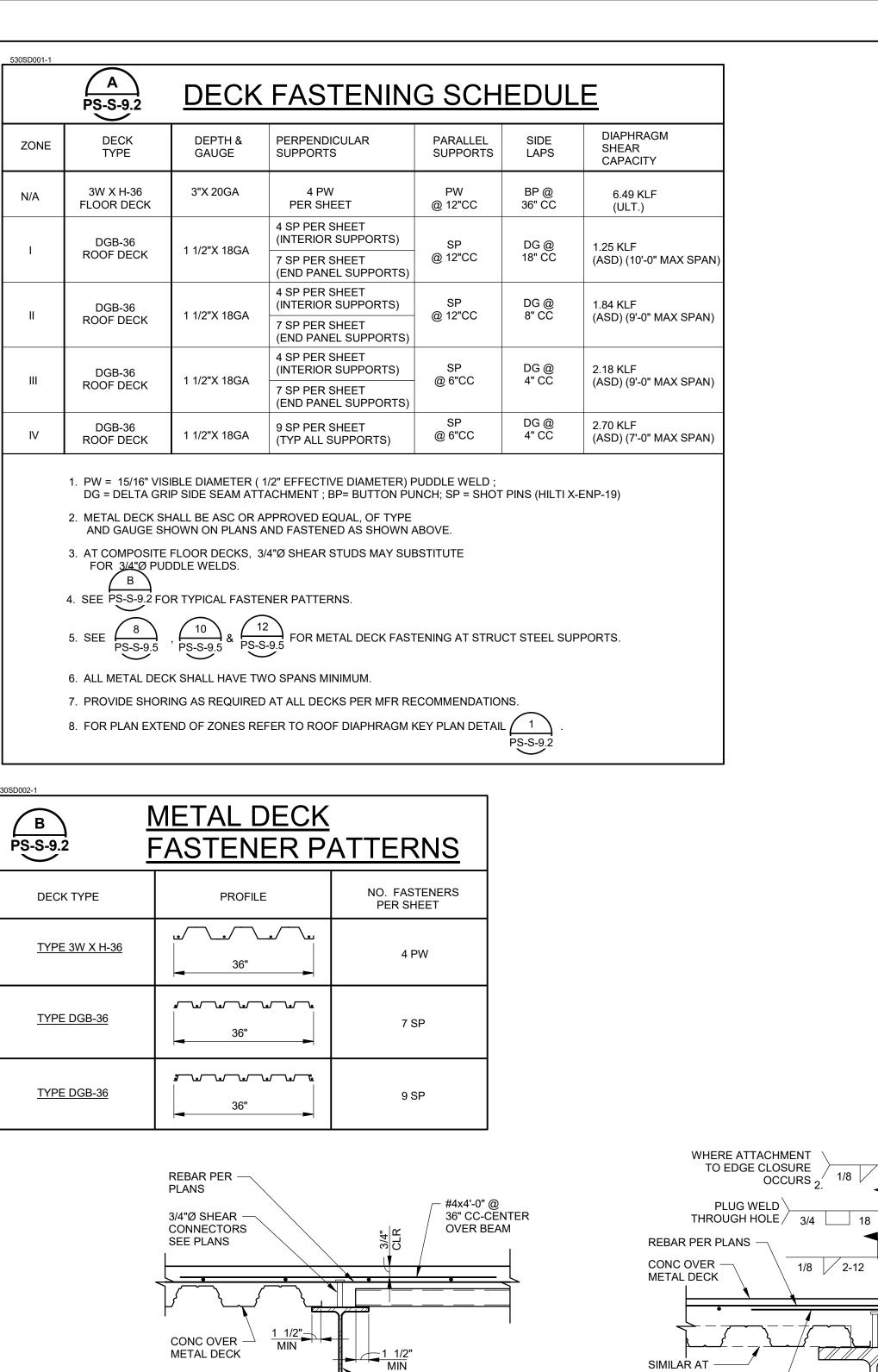


SHEET TITLE: STEEL DETAILS

SHEET NUMBER:

CMU PARTITION WALL OVER METAL DECK FLOOR
PS-S-9.1

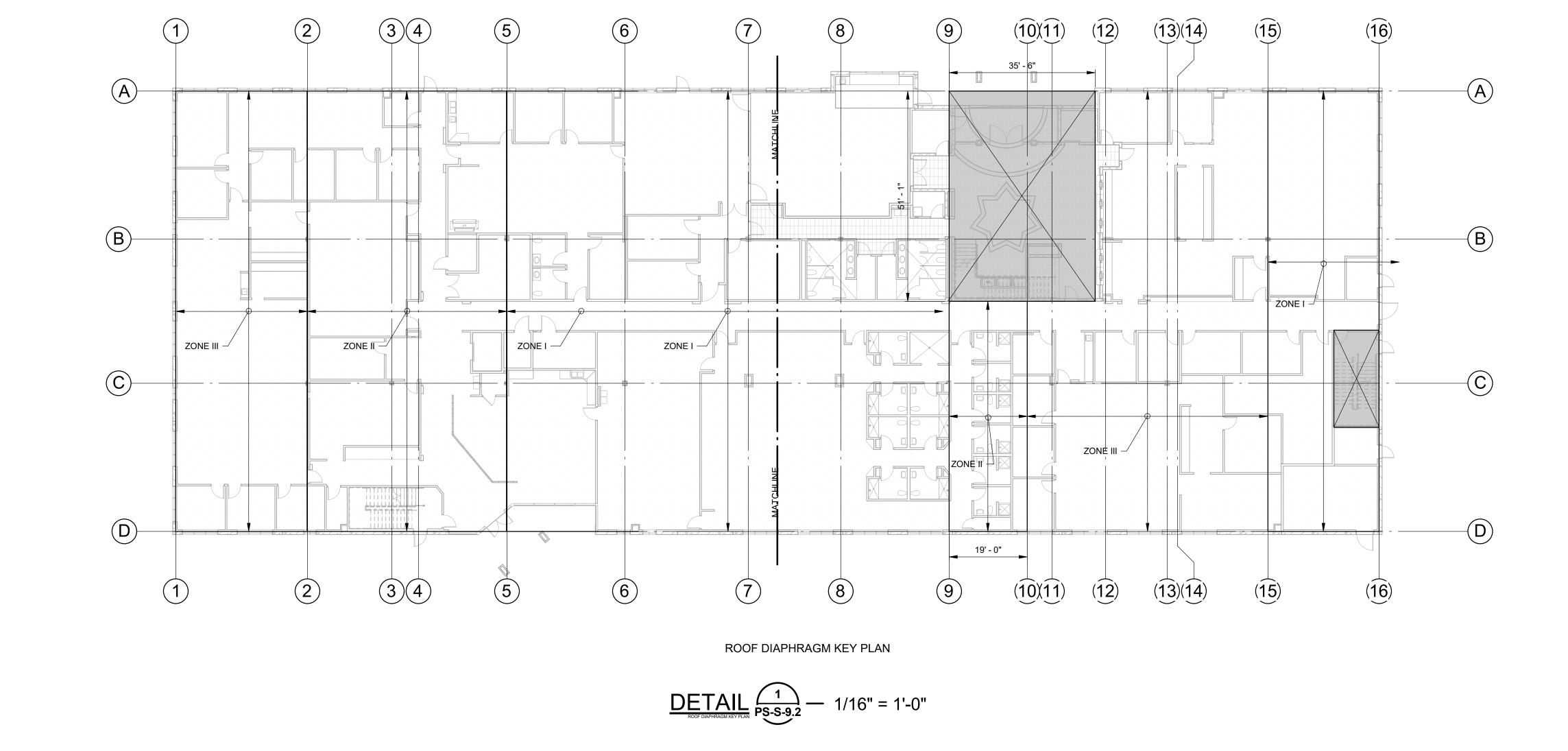
tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley



\ FLUTE

1/8 / 1 1/2

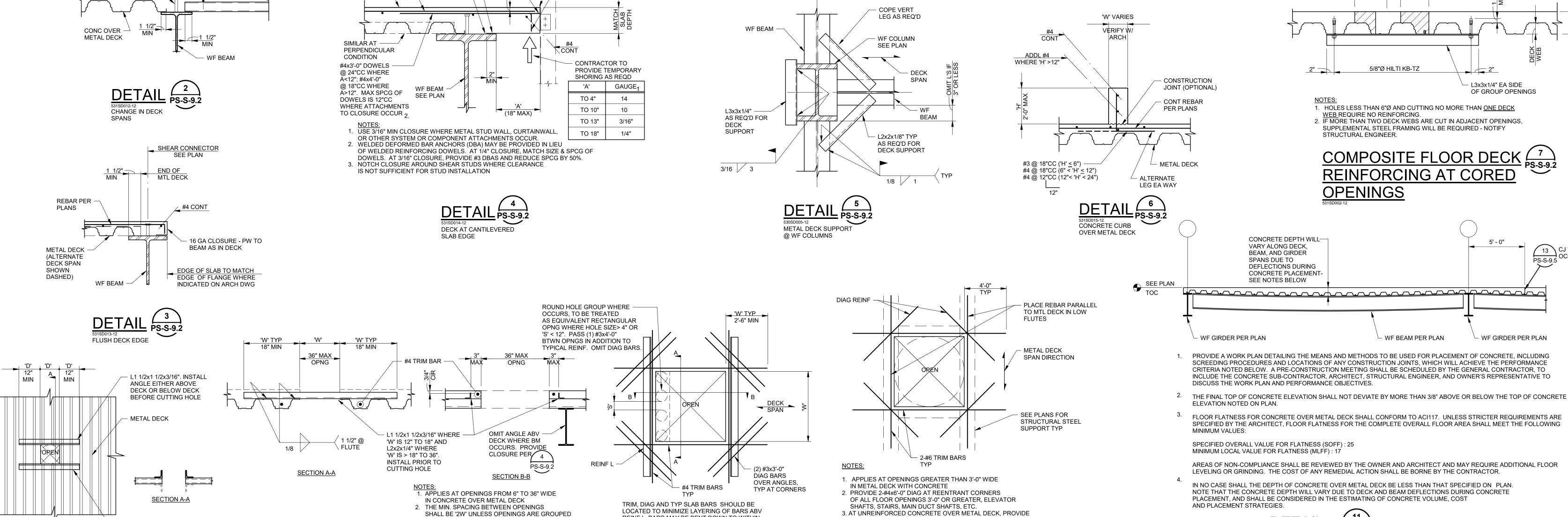
NOTE: APPLIES AT HOLES FROM 6" TO 24" WIDE IN METAL DECK WITHOUT CONCRETE



#3x2'-0" DIAG AT EACH CORNER OF COLUMN (4 TOTAL)

TRIM BARS @ OPENINGS >3'-0" IN METAL DECK W/ CONCRETE

TYPICAL ALL COLUMNS.



REINF L. BARS MAY BE BENT DOWN TO WITHIN

3/4" CLR OF DECK TO MAINTAIN CONC COVER

5/8" DIA HOLES IN REINF L'S, LOCATED AT MID-

ABV. BARS MAY ALSO PASS THROUGH MAX

HT OF ANGLE LEG.

- WALL FRAMING OR OTHER SYSTEM WHERE OCCURS

CLOSURE PIECE ¹
 SEE BELOW

- MAY USE 4" HOOK

WHERE NO WALL ATTACHMENT OCCURS

AT EDGE CLOSURE

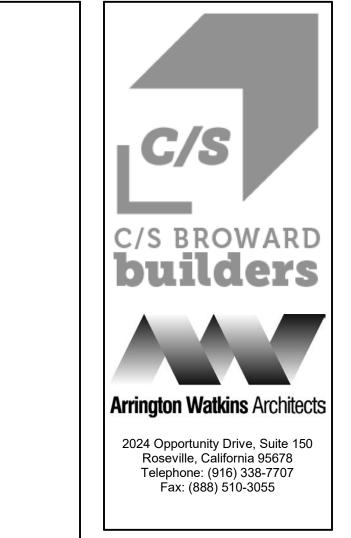
FOR GAUGE

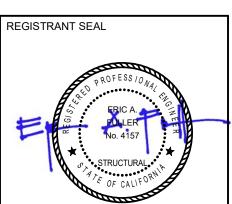
OCCURS 2

1/8 2-12

AND TREATED AS A SINGLE COMBINED OPENING

OF 3'-0" MAX. WIDTH





SPRINGS, -DORADO PUBLIC SA 200 II

CL HOLE
GROUP
SPACE OPNG GROUPS NO
CLOSER THAN 5'-0" MIN
IN EACH DIRECTION

5/8"Ø HILTI KB-TZ

OPENINGS

CONCRETE PLACEMENT OVER

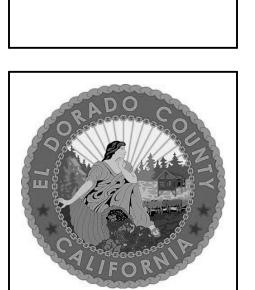
METAL DECK AT FLOORS

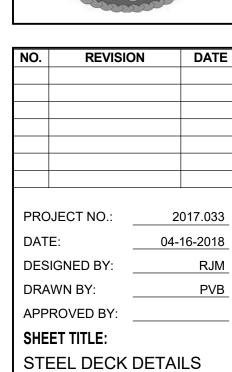
COMPOSITE FLOOR DECK PS-S-9.2
REINFORCING AT CORED

- WF BEAM PER PLAN

OF GROUP OPENINGS

WF GIRDER PER PLAN

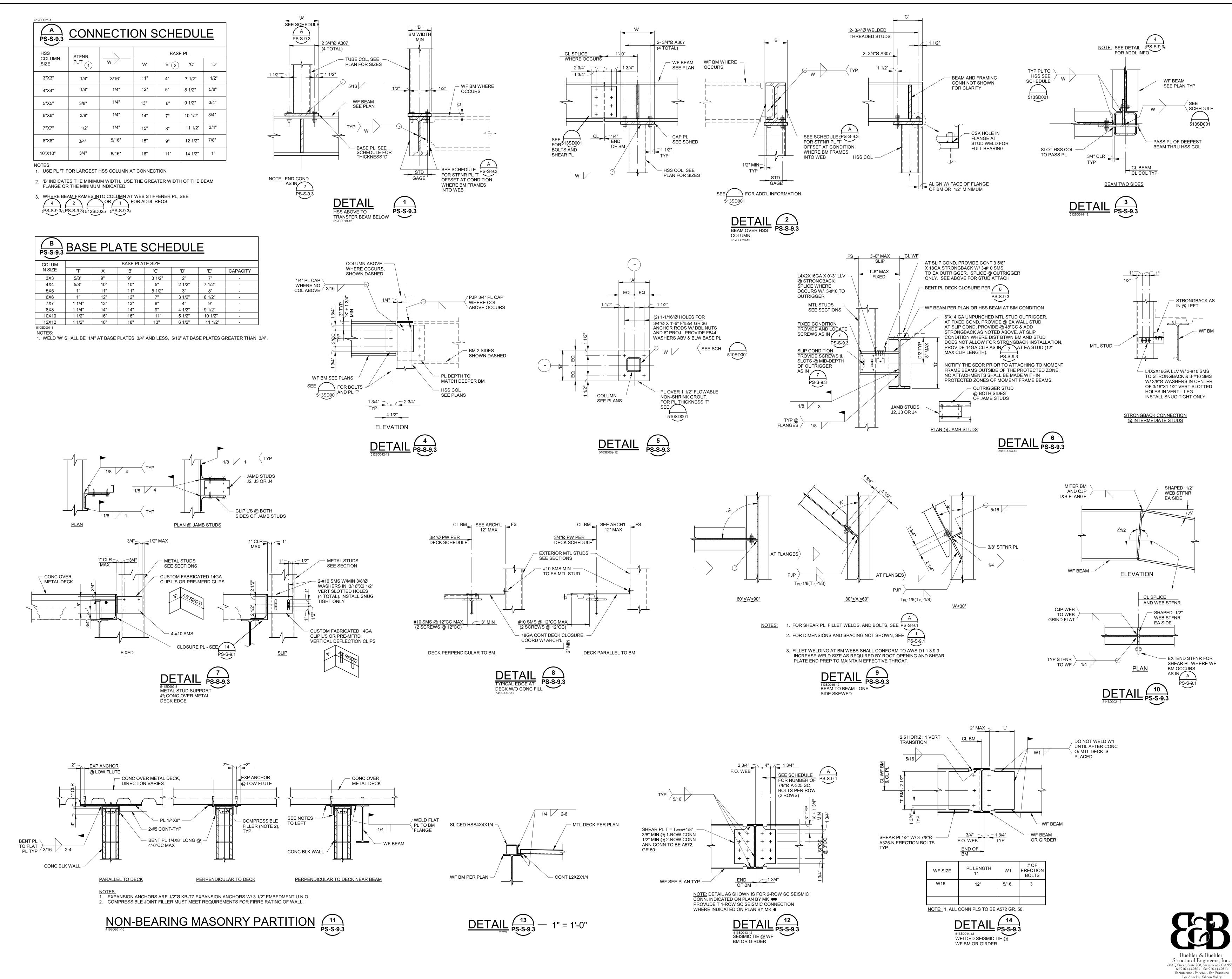




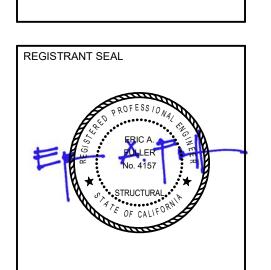
Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 95 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco

Los Angeles . Silicon Valley

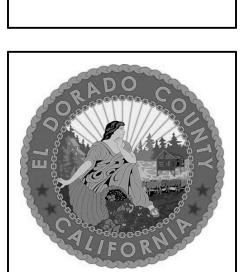
13 CJ WHERE OCCURS

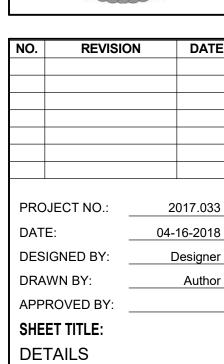


C/S BROWARD **builders Arrington Watkins Architects** 2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

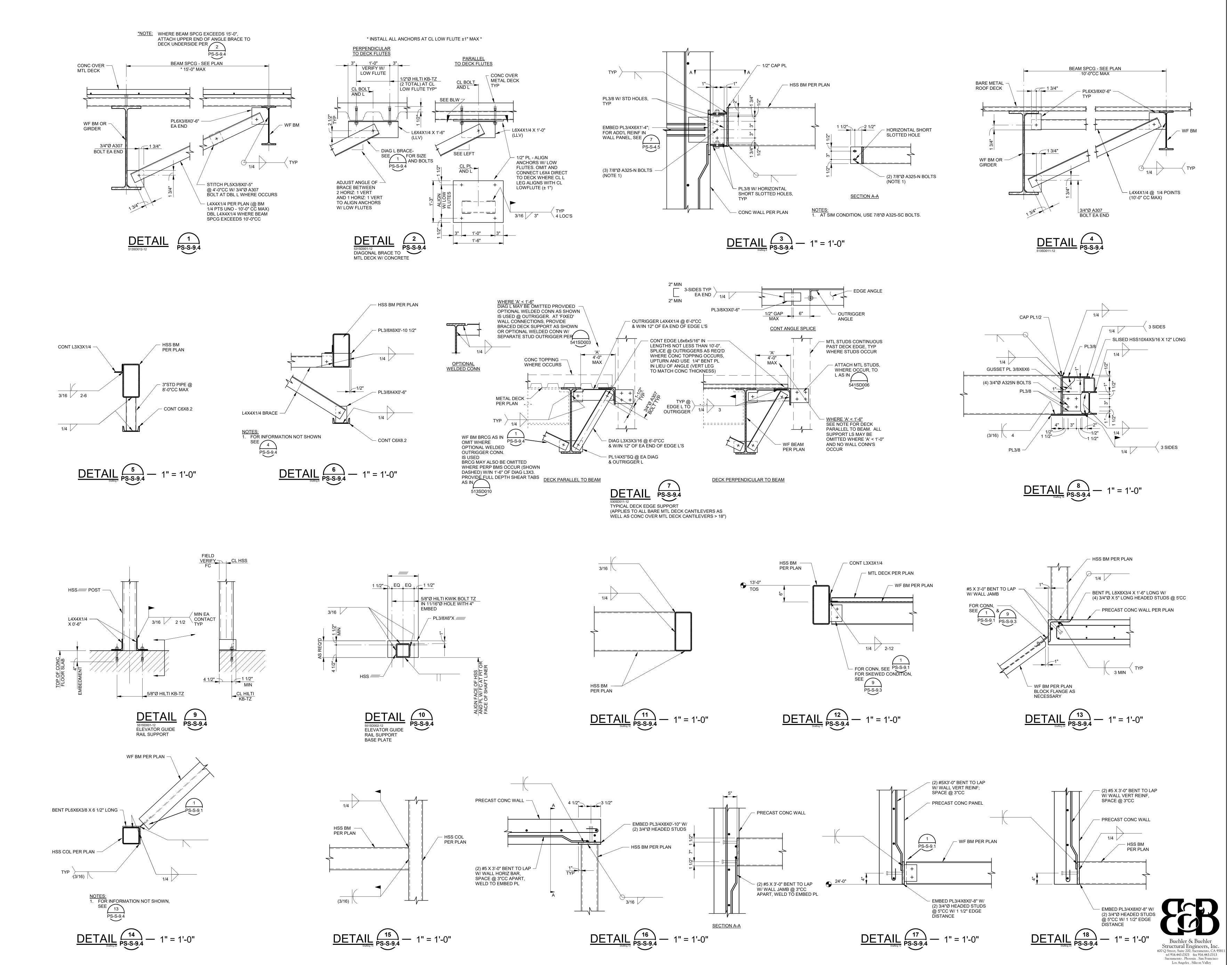


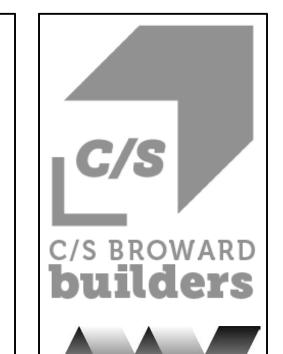
FETY FACILITIONS & SITE DRIVE CA 95619 L DORADO PUBLIC SAFE PUBLIC SAFETY BUILDI 200 INDUSTRIAL D DIAMOND SPRINGS, C





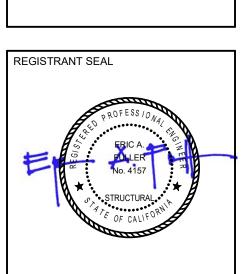
SHEET NUMBER:



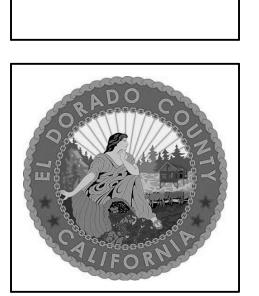




Fax: (888) 510-3055



EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

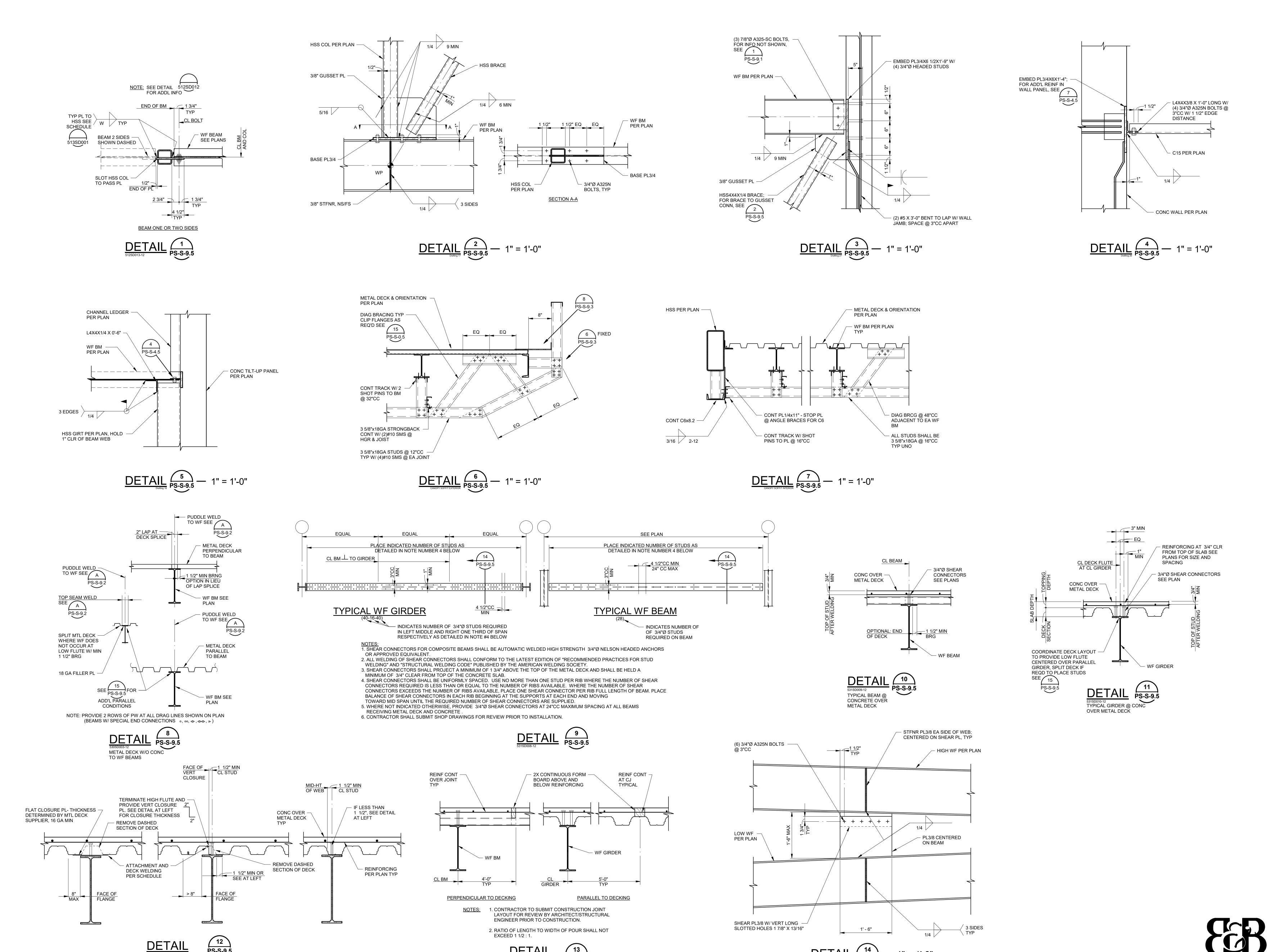




SHEET NUMBER:

PS-S-9.4

18-0565 D 28 of 30



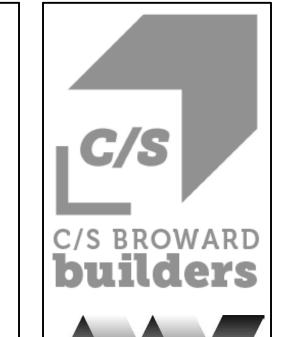
PS-S-9.5

CONSTRUCTION JOINT IN

CONCRETE OVER METAL DECK

METAL DECK W/ CONCRETE

PARALLEL TO BEAM





REGISTRANT SEAL

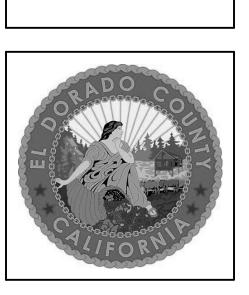
ERIC A.

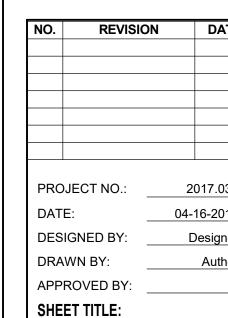
FULLER
No. 4157

STRUCTURAL

OF CALIFORNIA

EL DORADO PUBLIC SAFETY FACILITY
PUBLIC SAFETY BUILDING & SITE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

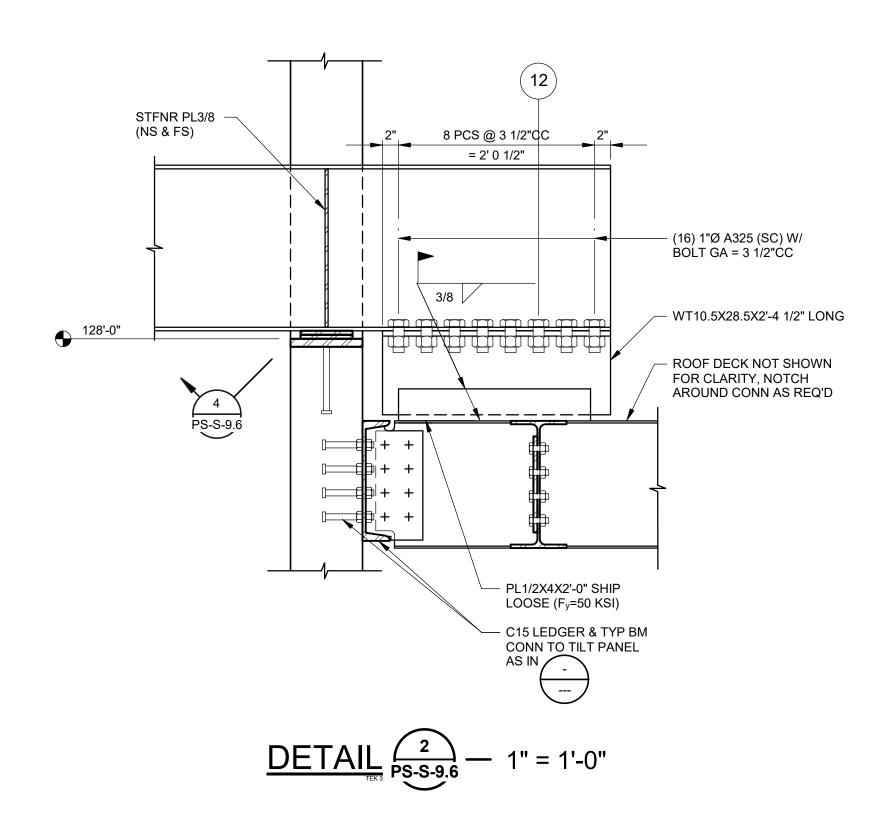


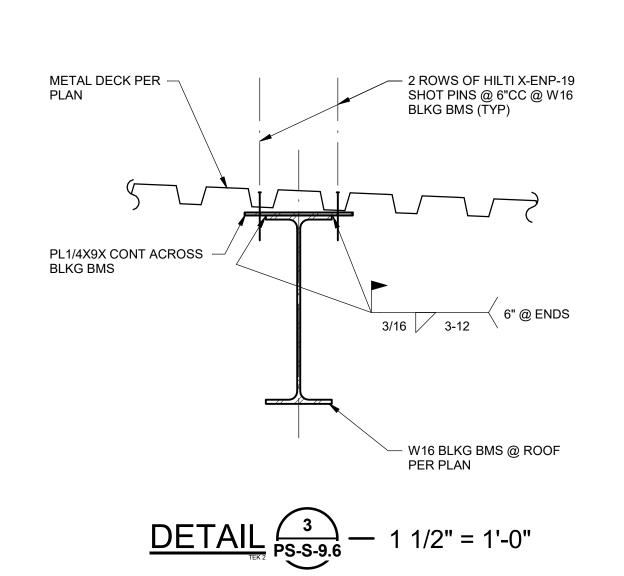


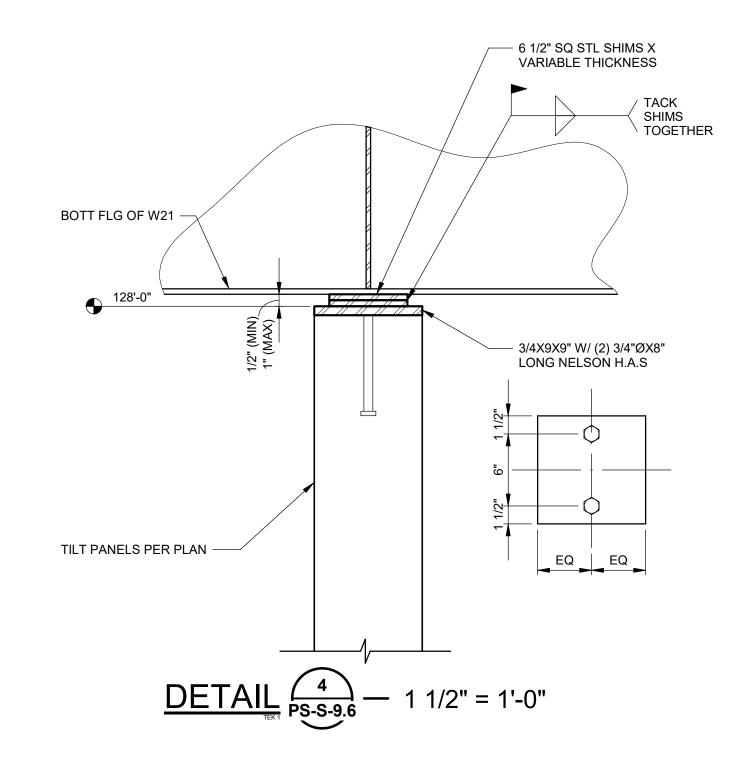
DETAILS

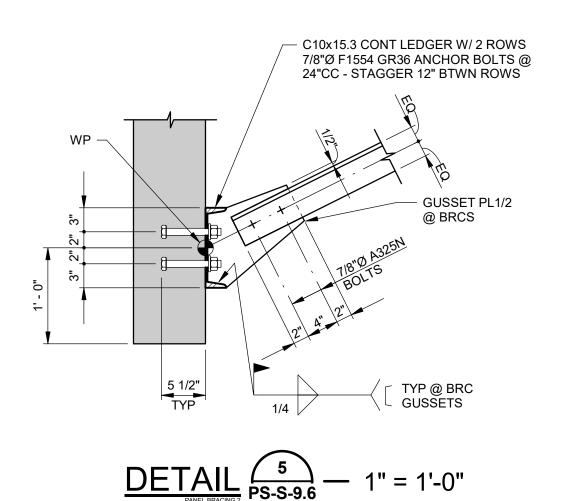
Structural Engineers, Inc.

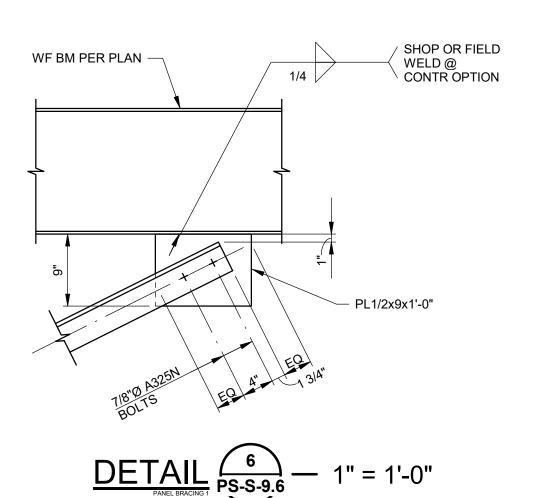
600 Q Street, Suite 200, Sacramento, CA 958 tel 916.443.0303 fax 916.443.0313 Sacramento . Phoenix . San Francisco Los Angeles . Silicon Valley SHEET NUMBER:
PS-S-9.5

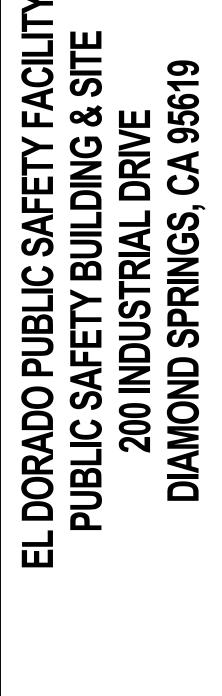










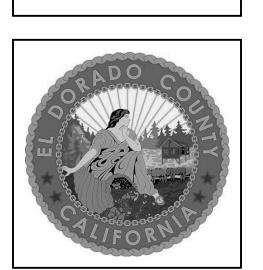


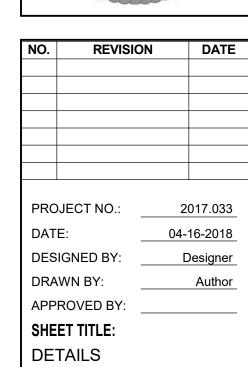
c/s broward builders

Arrington Watkins Architects

2024 Opportunity Drive, Suite 150 Roseville, California 95678 Telephone: (916) 338-7707 Fax: (888) 510-3055

REGISTRANT SEAL





SHEET NUMBER:
PS-S-9.6

Buehler & Buehler
Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
tel 916.443.0303 fax 916.443.0313
Sacramento . Phoenix . San Francisco
Los Angeles . Silicon Valley

3:47:32 AM C:\revit\2017-044100_PS Public Safety_F