

**TRAIL SCHEDULE THIS SHEET:**

DESCRIPTION	
EXISTING BIGHORN TRAIL	
NEW BIGHORN TRAIL ALIGNMENT	
ADJACENT TRAIL	
EXISTING ROAD / WASH	

**LEGEND AND SIGNAGE NOTE:**  
SEE CONSTRUCTION LEGEND ON SHEET L-1.0 FOR CALLOUT INFORMATION. SEE SHEETS L-1.1 THROUGH L-1.4 FOR SIGNAGE ORIENTATION SCHEDULE.

**NEW TRAIL ALIGNMENT NOTE:**  
NEW TRAIL PATH TO BE CLEARED FOR TRAIL ALIGNMENT TO BE PERFORMED BY CONTRACTOR WITH WINNING BID. TRAIL ALIGNMENTS TO BE BID AS "BID ADDITIVE 1"

**PLAN CROSS REFERENCES:**  
FOR NOTES AND LEGENDS, SEE THIS SHEET  
FOR CONSTRUCTION DETAILS, SEE SHEET L-1.13 TO L-1.24  
FOR CONSTRUCTION SPECIFICATIONS, SEE BOOK SPECS.



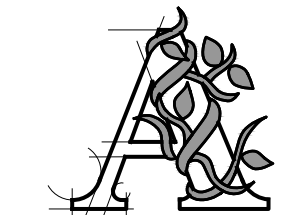
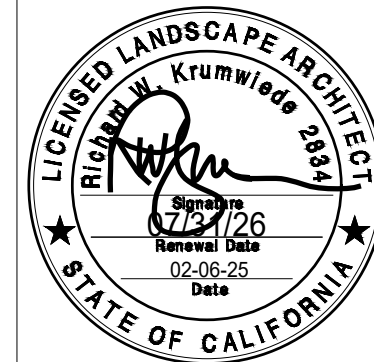
Know what's below.  
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**BENCHMARK:**

FOUND REBAR & CAP HGLLC RP  
FLUSH PER CAD FILE PROVIDED BY  
SPECIAL DISTRICTS (POINT #1001)  
ELEV = 3154.12'

**BASIS OF BEARINGS:**

CCS83 ZONE 5, NAD83(2011),  
EPOCH 2010.0



**ARCHITERRA  
DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA,  
CALIFORNIA 91730 PH: (909) 454-2800



PREPARED UNDER THE SUPERVISION OF:

PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. \_\_\_\_\_ DATE \_\_\_\_\_

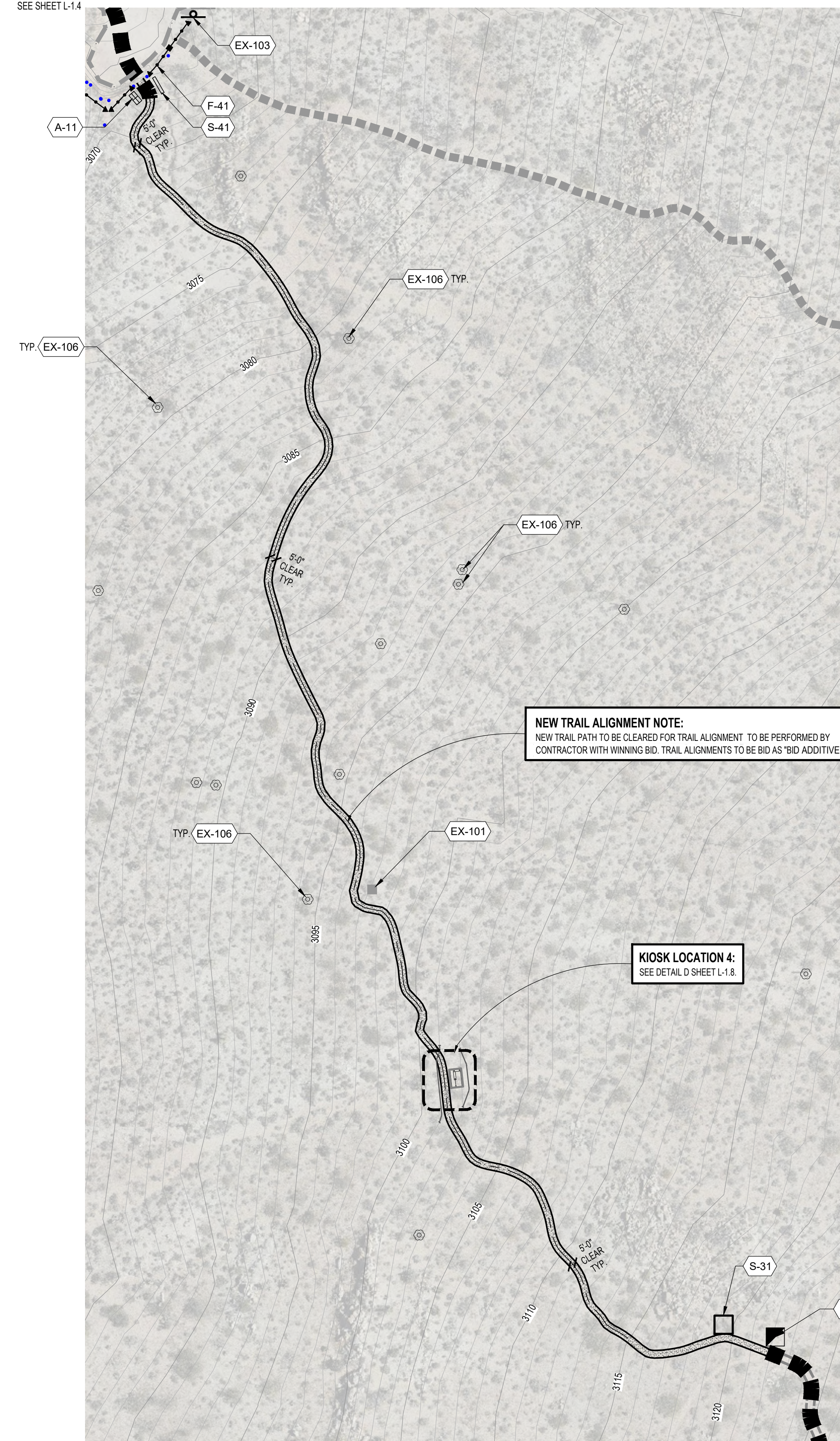
REVISIONS				
MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

PLANS APPROVED BY:			
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS			
ASSISTANT DIRECTOR		DATE	
		02/24/2026	
APPROVALS		DATE	
PROJECT MANAGER	INITIAL	DATE	
OPS. DIVISION MANAGER	JMH	02/10/2026	
PM, DIVISION MANAGER		02/10/2026	

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA  
RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
CONSTRUCTION ENLARGEMENT PLAN  
TRAIL ALIGNMENT ENLARGEMENT 2

DWG NO.  
**L-1.11**  
FILE NO.  
30.30.0170  
SHEET 13 OF 33

FOR CONTINUATION  
SEE SHEET L-1.4



**TRAIL SCHEDULE THIS SHEET:**

DESCRIPTION	
EXISTING BIGHORN TRAIL	
NEW BIGHORN TRAIL ALIGNMENT	
ADJACENT TRAIL	
EXISTING ROAD / WASH	

**LEGEND AND SIGNAGE NOTE:**  
SEE CONSTRUCTION LEGEND ON SHEET L-1.0 FOR CALLOUT INFORMATION. SEE SHEETS L-1.1 THROUGH L-1.4 FOR SIGNAGE ORIENTATION SCHEDULE.

**NEW TRAIL ALIGNMENT NOTE:**  
NEW TRAIL PATH TO BE CLEARED FOR TRAIL ALIGNMENT TO BE PERFORMED BY CONTRACTOR WITH WINNING BID. TRAIL ALIGNMENTS TO BE BID AS 'BID ADDITIVE 1'

**KIOSK LOCATION 4:**  
SEE DETAIL D SHEET L-1.8

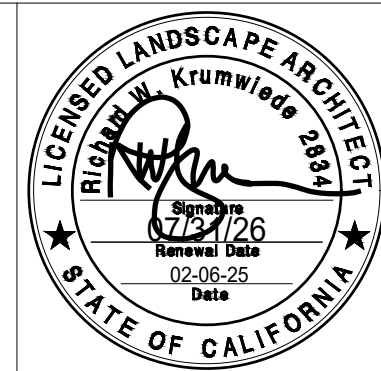
**PLAN CROSS REFERENCES:**  
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FOR CONSTRUCTION DETAILS, SEE SHEET L-1.13 TO L-1.24  
FOR CONSTRUCTION SPECIFICATIONS, SEE BOOK SPECS.



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**BENCHMARK:**  
FOUND REBAR & CAP HGLLC RP  
FLUSH PER CAD FILE PROVIDED BY  
SPECIAL DISTRICTS (POINT #1001)  
ELEV = 3154.12'

**BASIS OF BEARINGS:**  
CCS83 ZONE 5, NAD83(2011),  
EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA,  
CALIFORNIA 91730 PH: (909) 454-2800

PREPARED UNDER THE SUPERVISION OF:  
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. \_\_\_\_\_ DATE \_\_\_\_\_

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PLANS APPROVED BY:  
SAN BERNARDINO COUNTY - PUBLIC WORKS  
SPECIAL DISTRICTS

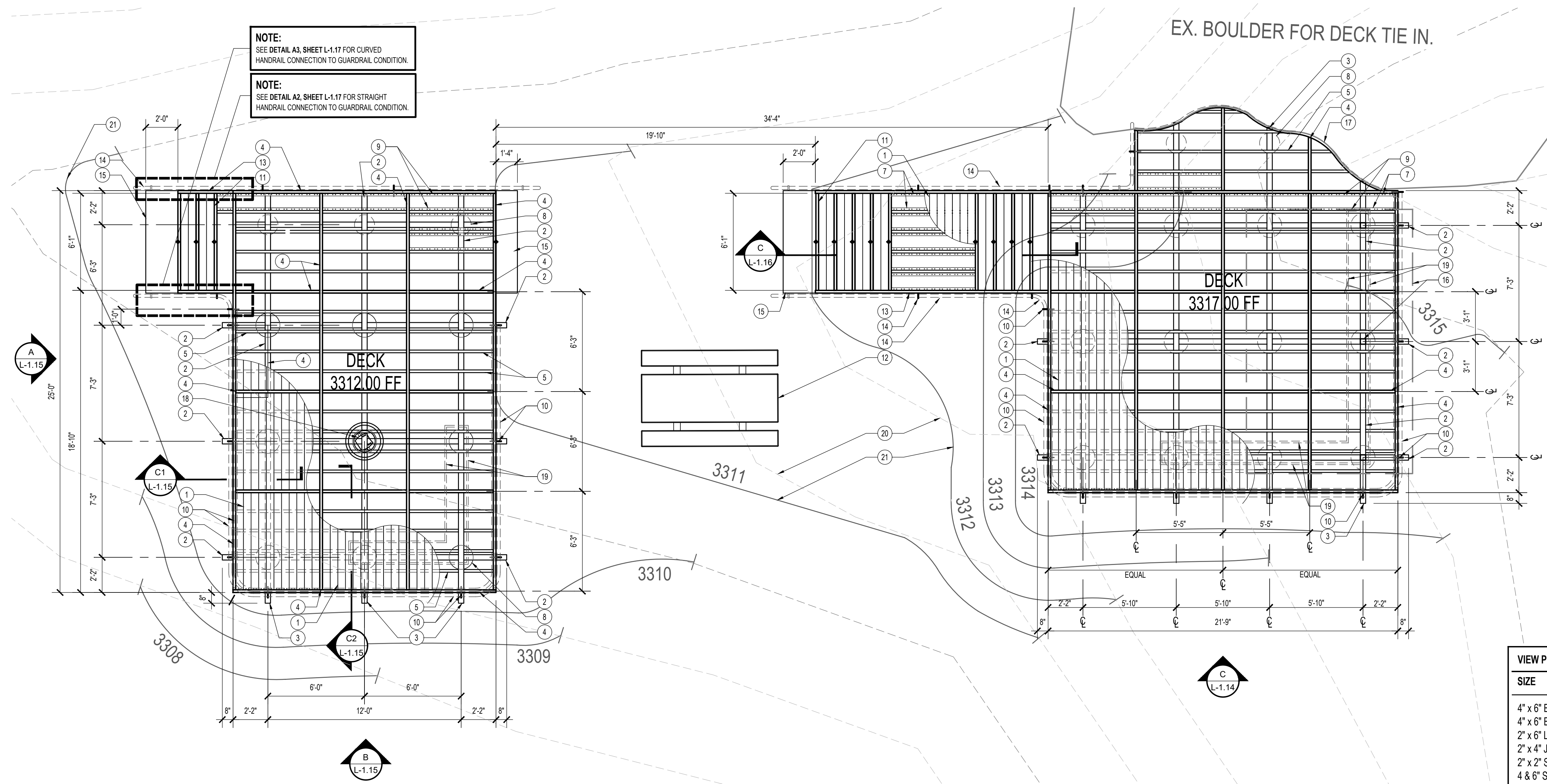
*David R. Washburn*  
ASSISTANT DIRECTOR

DATE: 02/24/2026

APPROVALS	INITIAL	DATE
PROJECT MANAGER	JMH	02/10/2026
OPS. DIVISION MANAGER	<i>AM</i>	2/10/2026
PM. DIVISION MANAGER		02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA  
RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
CONSTRUCTION ENLARGEMENT PLAN  
TRAIL ALIGNMENT ENLARGEMENT 3

DWG NO.  
**L-1.12**  
FILE NO.  
30.30.0170  
SHEET 14 OF 33



- LEGEND:**
- CLASS 'B' FIRE-RATED 2" x 6" (1.3" x 5.5") WOOD POLYMER DECKING - 2" SQUARE EDGE BOARDS. TREX "TRANSCEND," COLOR "HAVANA GOLD."
  - 4" x 6" WEATHERING STEEL BEAM, SPACING PER PLAN. WELD TO ANCHOR PLATE, TYPICAL EACH PIER. BEAMS SHALL HAVE ENDS CLOSED.
  - 4" x 6" WEATHERING STEEL BEAM EXTENSIONS. EXPOSED ENDS SHALL BE CLOSED.
  - 2" x 6" TUBULAR WEATHERING STEEL LEDGER, PERIMETER AND INTERMEDIATE, WELD TO TOP OF 4" x 6" BEAMS.
  - 2" x 4" TUBULAR WEATHERING STEEL JOISTS @ 18" O.C. WELD BETWEEN 2" x 6" LEDGERS.
  - 6" SQ. x 1/2" THICK WEATHERING STEEL PLATE WITH ANCHOR INTO PIER.
  - 2" x 2" STEEL ANGLE.
  - SONO-TUBE CONCRETE PIER WITH #5 REBAR, VERTICAL, AND TIES PER STRUCTURAL ENGINEERS' DETAILS.
  - SECURE DECKING FROM BELOW WITH 1-1/4" x #10 S.S. BUTTON-HEAD TORX SELF-TAPPING SCREWS. (2) PER BOARD AT EACH STEEL ANGLE.
  - BOARDWALK STEEL PIPE GUARDRAIL WITH STEEL POST.
  - STAIRS - WEATHERING STEEL FRAME WITH TREX TREADS.
  - PIVOT TABLE PER CONSTRUCTION PLAN AND SITE AMENITIES SCHEDULE.
  - 2" x 10" x 11 GA. TUBULAR STEEL STRINGER.
  - STAIR STEEL PIPE HANDRAIL WITH STEEL POST.
  - 24" WIDE x STAIR LENGTH CONCRETE PAD.
  - (3) POST OVERHEAD SHADE STRUCTURE. SEE DETAILS A, B & C, SHEET L-1.14.
  - ROCK FACE / EDGE OF PLATFORM. ADJUST DECK EDGE AS NEEDED TO BE 1" MIN., 4" MAX. FROM ROCK FACE.
  - BINOCULAR WITH POST AND BASE. SEE DETAILS A & B SHEET L-1.15.
  - TUBULAR WEATHERING STEEL AND TREX "L" BENCH.
  - EXISTING CONTOURS FOR REFERENCE ONLY. SEE GRADING PLAN, SHEET L-1.7.
  - PROPOSED CONTOURS FOR REFERENCE ONLY. SEE GRADING PLAN, SHEET L-1.7.
  - ROCK OUT CROP INTERPRETIVE SIGNAGE. SEE DETAIL B, L-1.18.

**VIEW PLATFORM MEMBER SIZES:**

SIZE	GAUGE	MATERIAL
4" x 6" BEAM	1/4"	WEATHERING STEEL
4" x 6" BEAM EXTENSION	1/4"	WEATHERING STEEL
2" x 6" LEDGER / FRAME / FASCIA	3/16"	WEATHERING STEEL
2" x 4" JOIST / FRAME	11 GA.	WEATHERING STEEL
2" x 2" STEEL ANGLE	1/8"	WEATHERING STEEL
4 & 6" SQ. POST	(*)	WEATHERING STEEL
2" x 2" STEEL ANGLE	1/8"	WEATHERING STEEL
2" x 10" STRINGER	11 GA.	WEATHERING STEEL
1/2" x 4" GUARDRAIL POST	---	WEATHERING STEEL
2-3/8" O.D. RAIL	SCH. 40	BLACK OXIDE
2" x 4" SHADE RAFTER	3/16"	WEATHERING STEEL

(\*) PER STRUCTURAL ENGINEER

**A VIEW PLATFORMS - PLAN AND FRAMING**  
 SCALE: 1/4" = 1'-0"  
 REFERENCE NUMBER: SS-24

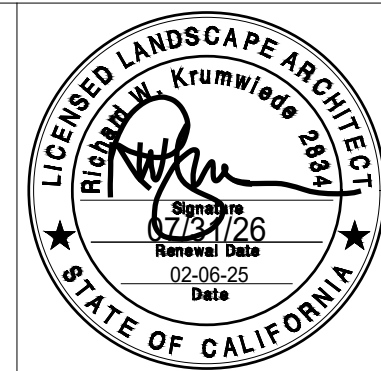
P-2417.1B-DV-27



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 LANDSCAPE ARCHITECTURE AND PLANNING  
 10221-A TRADEMARK ST., RANCHO CUCAMONGA,  
 CALIFORNIA 91730 PH: (909) 454-2800

PREPARED UNDER THE SUPERVISION OF:  
 PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:  
**SAN BERNARDINO COUNTY - PUBLIC WORKS  
 SPECIAL DISTRICTS**  
*David R. Washburn*  
 ASSISTANT DIRECTOR  
 DATE: 02/24/2026

APPROVALS:

PROJECT MANAGER	INITIAL	DATE
JMH	JMH	02/10/2026
OPS. DIVISION MANAGER	AM	2/10/2026
PM. DIVISION MANAGER		02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
 PHASE 2 DESERT VIEW CONSERVATION AREA  
 RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS  
 CONSTRUCTION DETAILS 1**

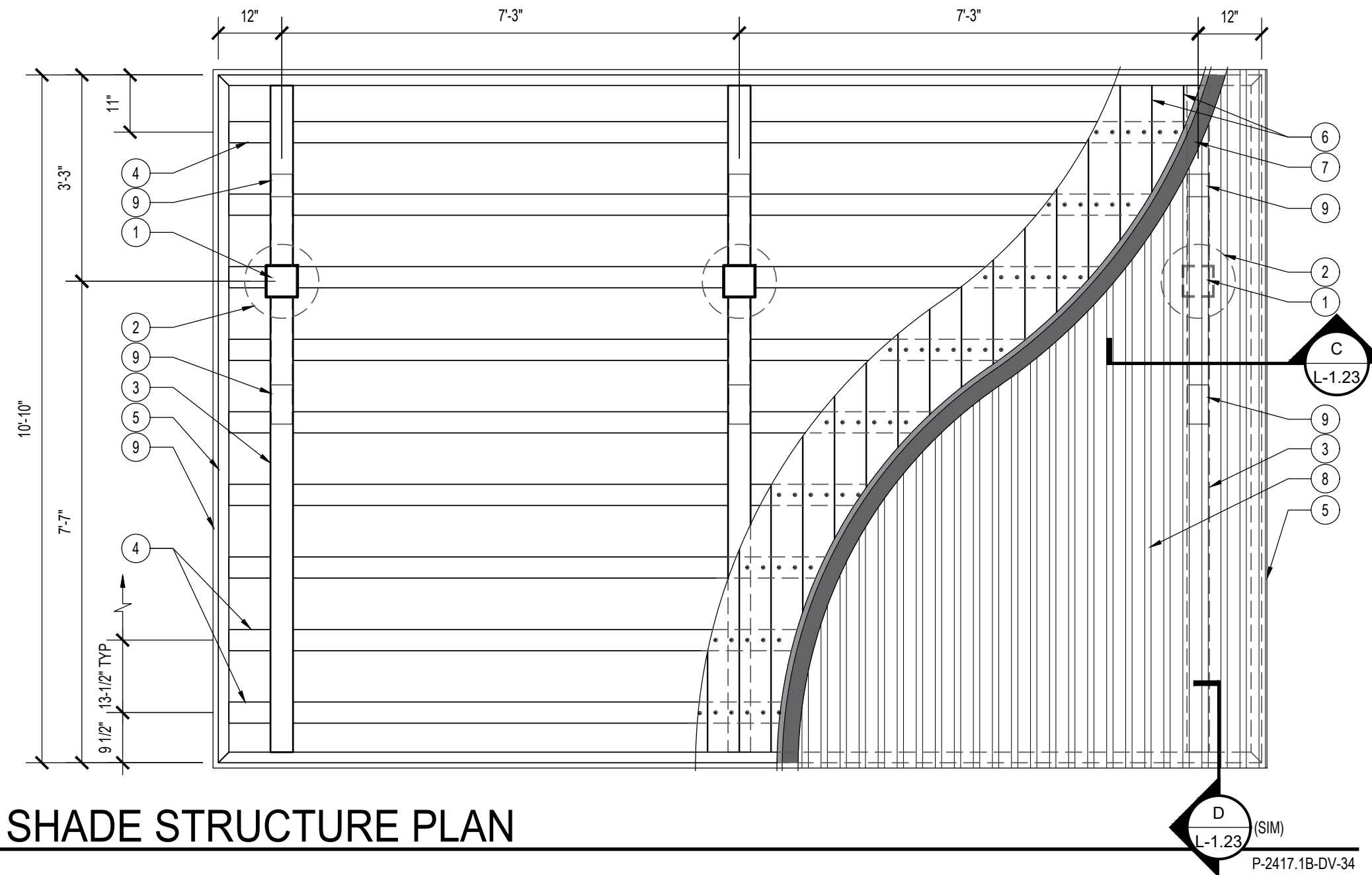
DWG NO. **L-1.13**  
 FILE NO. **30.30.0170**  
 SHEET **15** OF **33**

**LEGEND:**

- 6" x 6" x 1/4" WEATHERING STEEL POST. CENTER POST IN CONCRETE FOOTING & PIER, AND ATTACH TO FOOTING. REFER TO VIEW PLATFORM PLAN.
- CONCRETE PIER.
- 4" x 6" x 1/4" WEATHERING STEEL BEAM. WELD ENDS CLOSED. WELD TO TOP OF POST (TYP) EACH.
- 2" x 4" x 11 GA. WEATHERING STEEL RAFTER LAID FLAT. EVENLY SPACED (14" O.C. MAX). WELD BETWEEN BEAMS.
- 2" x 6" x 11 GA. WEATHERING STEEL FASCIA. ALL SIDES. MITER CORNERS AND WELD TOGETHER. WELD TO BEAM ENDS.
- 2" x 6" TONGUE & GROOVE. ATTACH TO EACH RAFTER WITH SELF-TAPPING SCREWS.
- (2) LAYERS #30 ROOFING FELT UNDERLAYMENT.
- 7/8" CORRUGATED WEATHERING STEEL ROOFING. INSTALL WITH GASKETED FASTENERS TO TONGUE AND GROOVE BOARDS, AND 1/4" x 7/8" LAP SCREWS.
- 4" x 4" x 1/4" WEATHERING STEEL DIAGONAL BRACE. 30° FROM VERTICAL. WELD TO POST AND BEAM, TYPICAL EACH.

**METAL CONSTRUCTION NOTES:**

ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.



**A VIEW PLATFORM SHADE STRUCTURE PLAN**

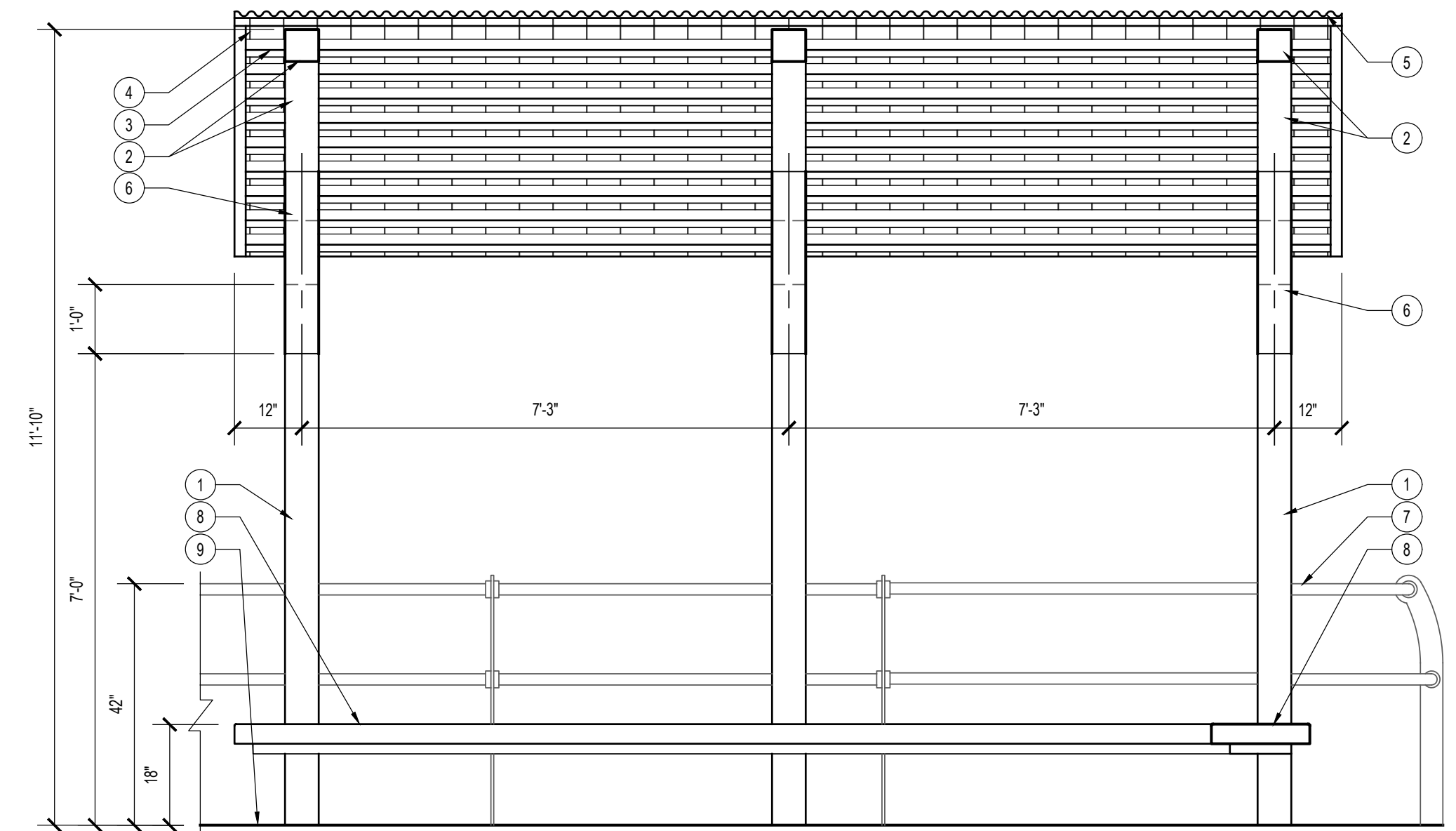
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER:

**LEGEND:**

- 6" x 6" x 1/4" WEATHERING STEEL POST. CENTER POST IN CONCRETE FOOTING AND PIER AND ATTACH TO FOOTING. REFER TO VIEW PLATFORM PLAN.
- 6" x 6" x 1/4" WEATHERING STEEL BEAM. WELD ENDS CLOSED. WELD TO TOP OF POST (TYP) EACH.
- 2" x 4" x 10 GA. WEATHERING STEEL RAFTER LAID FLAT. EVENLY SPACED (14" O.C. MAX). WELD BETWEEN BEAMS.
- 2" x 6" TONGUE & GROOVE. ATTACH TO EACH RAFTER WITH SELF-TAPPING SCREWS.
- 7/8" CORRUGATED WEATHERING STEEL ROOFING. INSTALL WITH GASKETED FASTENERS TO TONGUE AND GROOVE BOARDS, AND 1/4" x 7/8" LAP SCREWS.
- 4" x 4" x 1/4" WEATHERING STEEL DIAGONAL BRACE. 30° FROM VERTICAL. WELD TO POST AND BEAM, TYPICAL EACH.
- WEATHERING STEEL GUARDRAIL.
- WEATHERING STEEL AND TREX BENCH.
- VIEW PLATFORM FINISH SURFACE.

**METAL CONSTRUCTION NOTES:**

ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.



**B VIEW PLATFORM SHADE STRUCTURE FRONT ELEVATION**

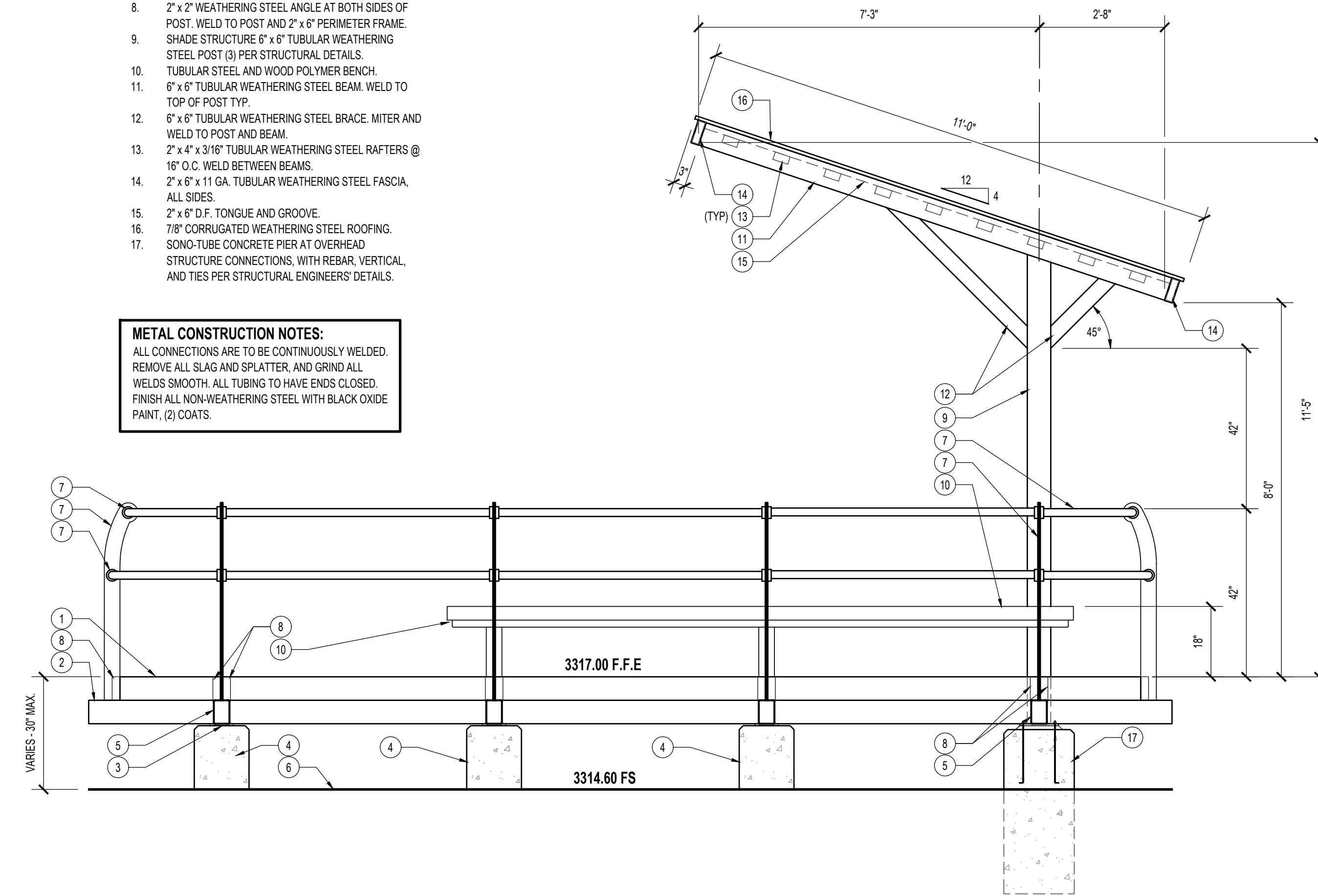
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER:

**LEGEND:**

- 2" x 6" TUBULAR WEATHERING STEEL LEDGER, PERIMETER AND INTERMEDIATE. WELD TO TOP OF 4" x 6" BEAMS.
- 4" x 6" TUBULAR WEATHERING STEEL BEAM. SPACING PER PLAN. WELD TO ANCHOR PLATE, TYPICAL EACH CONCRETE PIER.
- 6" SQ. x 1/2" WEATHERING STEEL PLATE WITH ANCHOR INTO PIER.
- SONO-TUBE CONCRETE PIER WITH REBAR, VERTICAL AND TIES PER STRUCTURAL ENGINEERS' DETAILS.
- 4" x 6" TUBULAR WEATHERING STEEL BEAM.
- EXTENSIONS:
- FINISH GRADE.
- STEEL GUARDRAIL AND GUARDRAIL POST. SEE DETAIL A, SHEET L-1.18.
- 2" x 2" WEATHERING STEEL ANGLE AT BOTH SIDES OF POST. WELD TO POST AND 2" x 6" PERIMETER FRAME.
- SHADE STRUCTURE 6" x 6" TUBULAR WEATHERING STEEL POST (3) PER STRUCTURAL DETAILS.
- TUBULAR STEEL AND WOOD POLYMER BENCH.
- 6" x 6" TUBULAR WEATHERING STEEL BEAM. WELD TO TOP OF POST TYP.
- 6" x 6" TUBULAR WEATHERING STEEL BRACE. MITER AND WELD TO POST AND BEAM.
- 2" x 4" x 3/16" TUBULAR WEATHERING STEEL RAFTERS @ 16" O.C. WELD BETWEEN BEAMS.
- 2" x 6" x 11 GA. TUBULAR WEATHERING STEEL FASCIA. ALL SIDES.
- 2" x 6" D.F. TONGUE AND GROOVE.
- 7/8" CORRUGATED WEATHERING STEEL ROOFING.
- SONO-TUBE CONCRETE PIER AT OVERHEAD STRUCTURE CONNECTIONS, WITH REBAR, VERTICAL, AND TIES PER STRUCTURAL ENGINEERS' DETAILS.

**METAL CONSTRUCTION NOTES:**

ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.



**C UPPER VIEW PLATFORM SIDE ELEVATION**

SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: SS-23



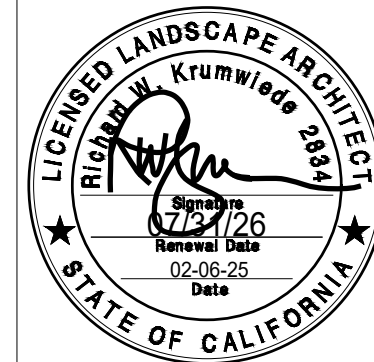
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FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**

CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



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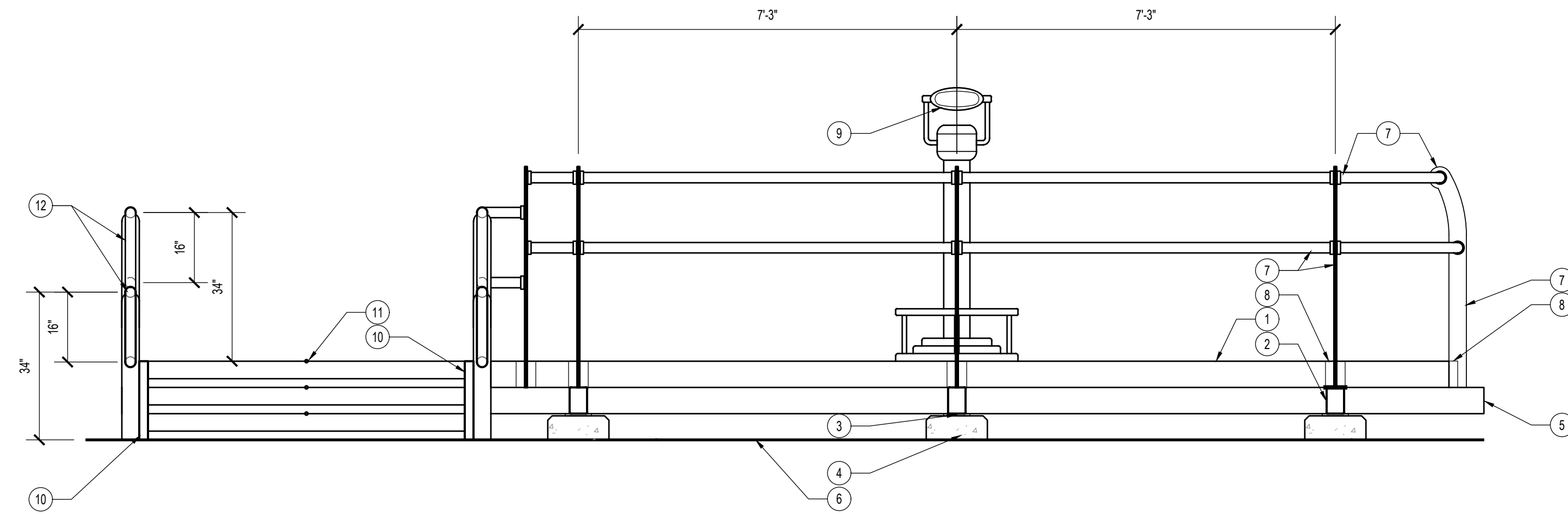
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS				
MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

PLANS APPROVED BY:			
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS			
DATE		DATE	
David R. Washburn ASSISTANT DIRECTOR		02/24/2026	
APPROVALS		DATE	
PROJECT MANAGER	JMH	INITIAL	DATE
OPS. DIVISION MANAGER	H.M.	INITIAL	DATE
PM. DIVISION MANAGER		INITIAL	DATE

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 2**

DWG NO. L-1.14  
FILE NO. 30.30.0170  
SHEET 16 OF 33

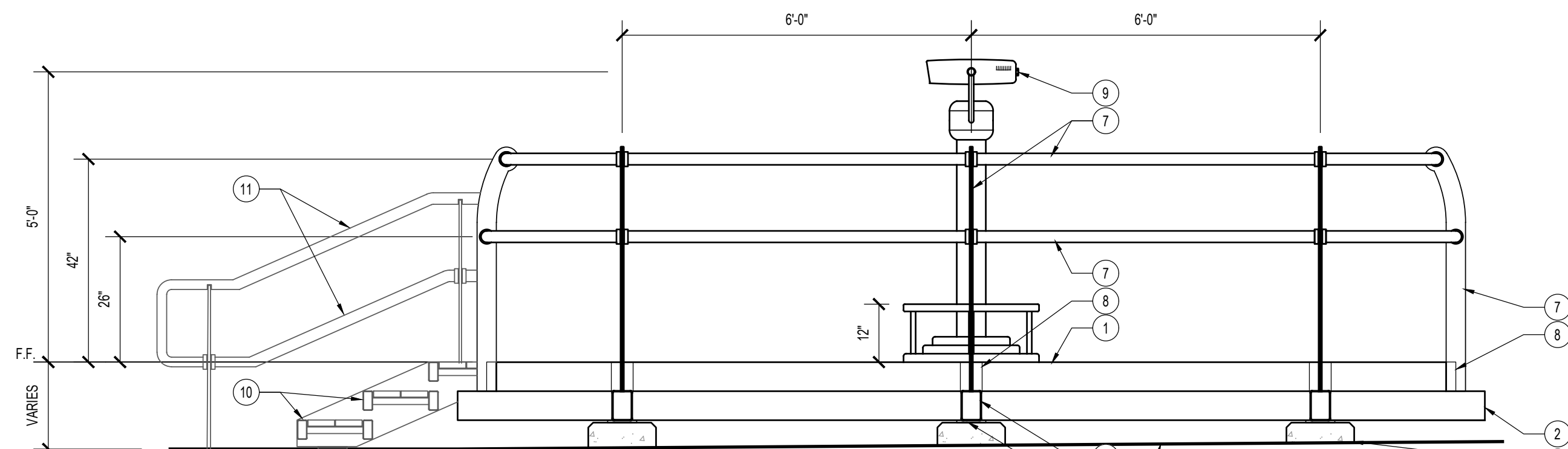


**LEGEND:**

1. 2" x 6" TUBULAR WEATHERING STEEL LEDGER, PERIMETER AND INTERMEDIATE. WELD TO TOP OF 4" x 6" BEAMS.
2. 4" x 6" TUBULAR WEATHERING STEEL BEAM, SPACING PER PLAN. WELD TO ANCHOR PLATE, TYPICAL EACH CONCRETE PIER.
3. 6" SQ. x 1/2" WEATHERING STEEL PLATE WITH ANCHOR INTO PIER.
4. 14" DIA. SONO-TUBE CONCRETE PIER WITH (4) #4 REBAR, VERTICAL, AND TIES @ 12" O.C.
5. 4" x 6" TUBULAR WEATHERING STEEL BEAM EXTENSIONS, FINISH GRADE.
6. FINISH GRADE.
7. STEEL GUARDRAIL AND GUARDRAIL POST. SEE DETAIL A, SHEET L-1.18.
8. 2" x 2" WEATHERING STEEL ANGLE AT BOTH SIDES OF POST. WELD TO POST AND 2" x 6" PERIMETER FRAME.
9. SEPIA HAMMERTONE PAINTED / POWDER-COATED ALUMINUM SEECOAST NON-COIN OPERATED BINOCULAR VIEWER, WITH FULL BASE FASTENED TO DECK. REFER TO SITE AMENITIES SCHEDULE FOR INFORMATION. BOLT THROUGH DECKING TO SUPPORT BEAMS WITH TAMPER-PROOF STAINLESS STEEL BOLTS.
10. 2" x 10" x 3/16" TUBULAR STEEL STRINGER.
11. STAIR - TUBULAR STEEL WITH TREX WOOD POLYMER DECKING TREAD.
12. STEEL PIPE HANDRAIL WITH WEATHERING STEEL HANDRAIL POST. SEE DETAIL A, SHEET L-1.17.

**A LOWER VIEW PLATFORM ELEVATION 1**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: A-18

P-2417.1B-DV-18

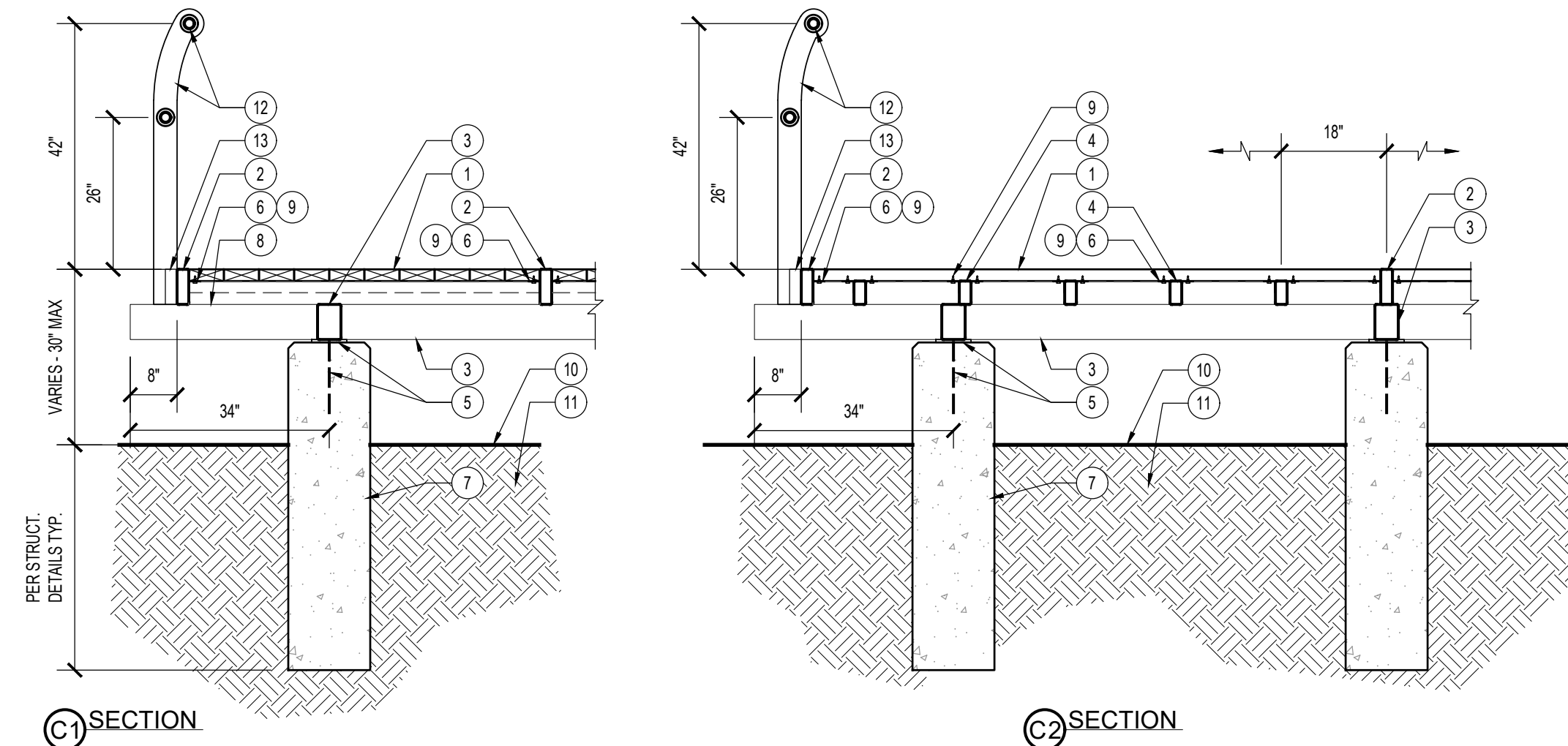


**LEGEND:**

1. 2" x 6" TUBULAR WEATHERING STEEL LEDGER, PERIMETER AND INTERMEDIATE. WELD TO TOP OF 4" x 6" BEAMS.
2. 4" x 6" TUBULAR WEATHERING STEEL BEAM, SPACING PER PLAN. WELD TO ANCHOR PLATE, TYPICAL EACH CONCRETE PIER.
3. 6" SQ. x 1/2" WEATHERING STEEL PLATE WITH ANCHOR INTO PIER.
4. SONO-TUBE CONCRETE PIER WITH REBAR, VERTICAL, AND TIES PER STRUCTURAL ENGINEERS' DETAILS.
5. 4" x 6" TUBULAR WEATHERING STEEL BEAM EXTENSIONS.
6. FINISH GRADE.
7. STEEL GUARDRAIL AND GUARDRAIL POST.
8. 2" x 2" WEATHERING STEEL ANGLE AT BOTH SIDES OF POST. WELD TO POST AND 2" x 6" PERIMETER FRAME.
9. SEPIA HAMMERTONE PAINTED / POWDER-COATED ALUMINUM SEECOAST NON-COIN OPERATED BINOCULAR VIEWER, WITH FULL BASE FASTENED TO DECK. REFER TO SITE AMENITIES SCHEDULE FOR INFORMATION. BOLT THROUGH DECKING TO SUPPORT BEAMS WITH TAMPER-PROOF STAINLESS STEEL BOLTS.
10. STAIRS.
11. STEEL PIPE HANDRAIL.

**B LOWER VIEW PLATFORM- ELEVATION 2**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER:

P-2417.1B-DV-17



**LEGEND:**

1. CLASS 'B' FIRE-RATED 2" x 6" WOOD POLYMER DECKING, TREX COLOR: HAVANA GOLD.
2. 2" x 6" TUBULAR WEATHERING STEEL LEDGER, PERIMETER AND INTERMEDIATE. WELD TO TOP OF 4" x 6" BEAMS.
3. 4" x 6" TUBULAR WEATHERING STEEL BEAM, SPACING PER PLAN. WELD TO ANCHOR PLATE, TYPICAL EACH CONCRETE PIER.
4. 2" x 4" TUBULAR WEATHERING STEEL JOISTS @ 18" O.C. WELD BETWEEN 2" x 6" LEDGERS.
5. 6" SQ. x 1/2" WEATHERING STEEL PLATE WITH ANCHOR BOLTS (2) WELDED TO BOTTOM. SET INTO TOP OF PIER.
6. 2" x 2" STEEL ANGLE, WELD TO 2x4 OR 2x6.
7. SONO-TUBE CONCRETE PIER WITH REBAR, VERTICAL, AND TIES PER STRUCTURAL ENGINEERS' DETAILS.
8. 4" x 6" TUBULAR WEATHERING STEEL BEAM EXTENSIONS.
9. SECURE DECKING FROM BELOW WITH 1-1/4" x #10 S.S. BUTTONHEAD TORX SELF-TAPPING SCREWS. (2) PER BOARD AT EACH STEEL ANGLE.
10. FINISH GRADE.
11. NATIVE SUBGRADE.
12. STEEL GUARDRAIL. SEE DETAIL A, SHEET L-1.18.
13. 2" x 2" WEATHERING STEEL ANGLE AT BOTH SIDES OF POST. WELD TO POST AND 2" x 6" PERIMETER FRAME.

**C VIEW PLATFORM TYPICAL SECTIONS**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER:

P-2417.1B-DV-42



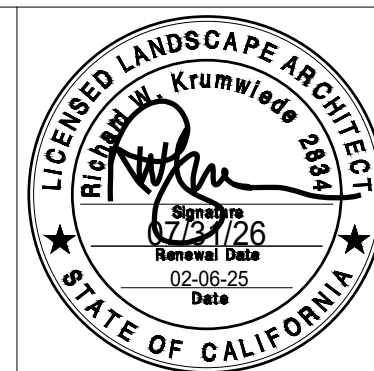
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FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**

CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



PREPARED UNDER THE SUPERVISION OF:

PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS					
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PLANS APPROVED BY:			
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS			
DATE		DATE	
02/24/2026		02/24/2026	
APPROVALS			
PROJECT MANAGER	INITIAL	DATE	
OPS. DIVISION MANAGER	JMH	02/10/2026	
PM. DIVISION MANAGER	AM	2/10/2026	
		02/10/2026	

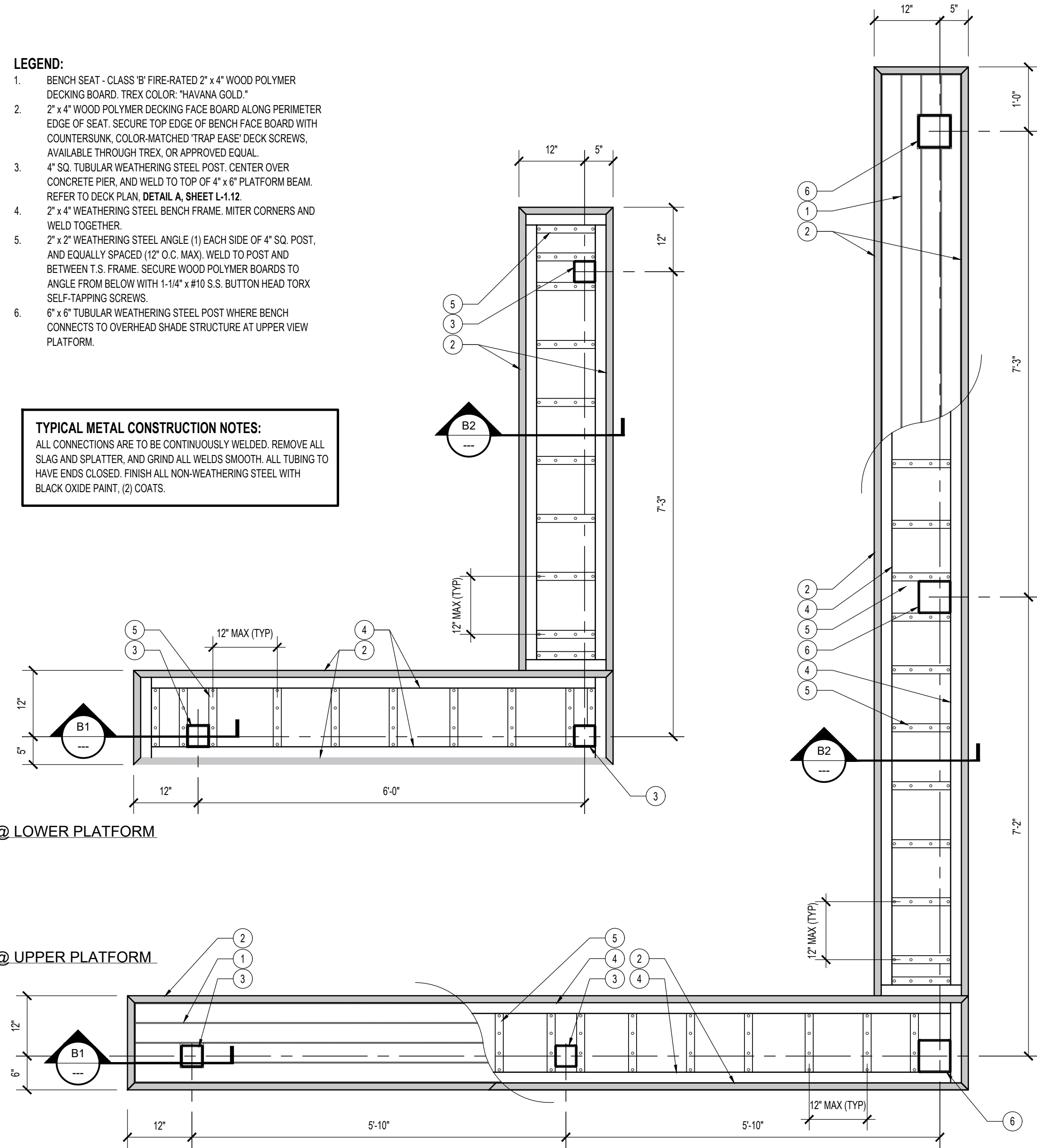
COUNTY SERVICE AREA 20 JOSHUA TREE  
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**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 3**

DWG NO. **L-1.15**  
FILE NO. **30.30.0170**  
SHEET **17** OF **33**

**LEGEND:**

1. BENCH SEAT - CLASS 'B' FIRE-RATED 2" x 4" WOOD POLYMER DECKING BOARD, TREX COLOR: "HAVANA GOLD."
2. 2" x 4" WOOD POLYMER DECKING FACE BOARD ALONG PERIMETER EDGE OF SEAT. SECURE TOP EDGE OF BENCH FACE BOARD WITH COUNTERSUNK, COLOR-MATCHED 'TRAP EASE' DECK SCREWS, AVAILABLE THROUGH TREX, OR APPROVED EQUAL.
3. 4" SQ. TUBULAR WEATHERING STEEL POST, CENTER OVER CONCRETE PIER, AND WELD TO TOP OF 4" x 6" PLATFORM BEAM. REFER TO DECK PLAN, DETAIL A, SHEET L-1.12.
4. 2" x 4" WEATHERING STEEL BENCH FRAME, MITER CORNERS AND WELD TOGETHER.
5. 2" x 2" WEATHERING STEEL ANGLE (1) EACH SIDE OF 4" SQ. POST, AND EQUALLY SPACED (12" O.C. MAX), WELD TO POST AND BETWEEN T.S. FRAME. SECURE WOOD POLYMER BOARDS TO ANGLE FROM BELOW WITH 1-1/4" x #10 S.S. BUTTON HEAD TORX SELF-TAPPING SCREWS.
6. 6" x 6" TUBULAR WEATHERING STEEL POST WHERE BENCH CONNECTS TO OVERHEAD SHADE STRUCTURE AT UPPER VIEW PLATFORM.

**TYPICAL METAL CONSTRUCTION NOTES:**  
ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.



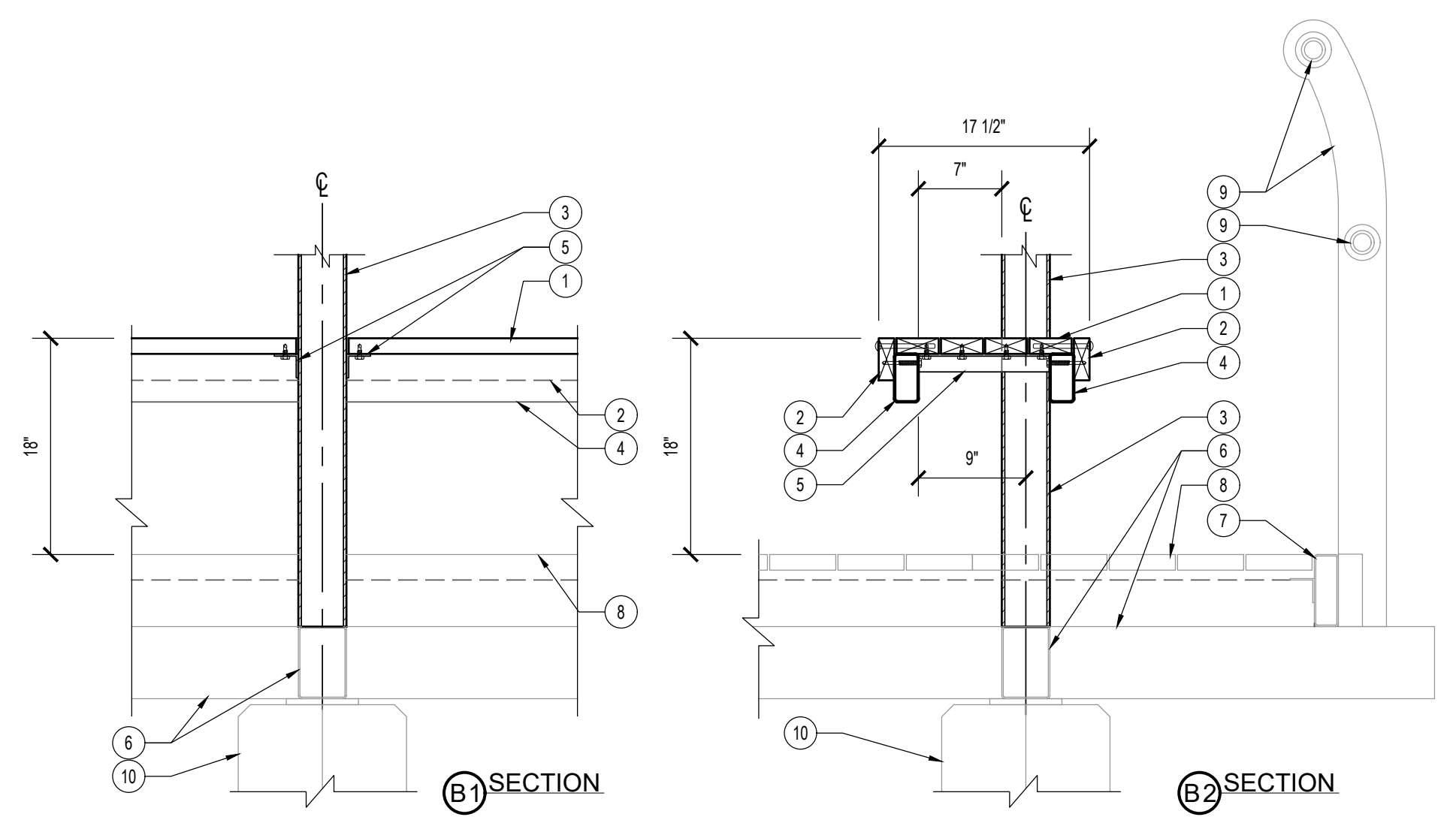
**A VIEW PLATFORM BENCH FRAMING PLANS**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER: A-17

P-2417.1B-DV-31

**LEGEND:**

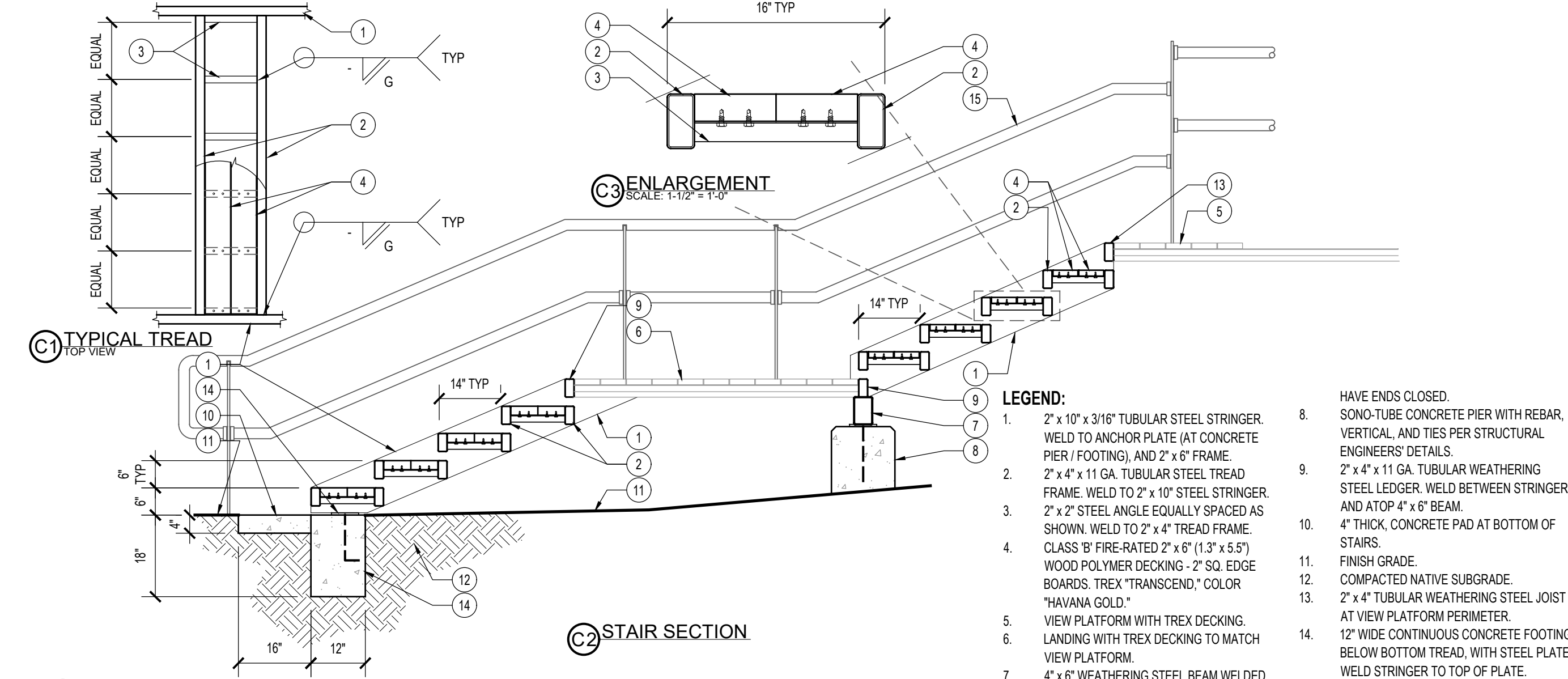
1. BENCH SEAT - CLASS 'B' FIRE-RATED 2" x 4" WOOD POLYMER DECKING BOARD, TREX COLOR: "HAVANA GOLD."
2. 2" x 4" WOOD POLYMER DECKING FACE BOARD ALONG PERIMETER EDGE OF SEAT. SECURE TOP EDGE OF BENCH FACE BOARD WITH COUNTERSUNK, COLOR-MATCHED 'TRAP EASE' DECK SCREWS, AVAILABLE THROUGH TREX, OR APPROVED EQUAL.
3. 4" SQ. TUBULAR WEATHERING STEEL POST, CENTER OVER CONCRETE PIER, AND WELD TO TOP OF 4" x 6" PLATFORM BEAM. (6" SQ. TUBULAR WEATHERING STEEL POST OCCURS AT UPPER PLATFORM, WHERE OVERHEAD SHADE STRUCTURE OCCURS).
4. 2" x 4" WEATHERING STEEL BENCH FRAME, MITER CORNERS AND WELD TOGETHER.
5. 2" x 2" WEATHERING STEEL ANGLE (1) EACH SIDE OF 4" SQ. POST, AND EQUALLY SPACED (12" O.C. MAX), WELD TO POST AND BETWEEN T.S. FRAME. SECURE WOOD POLYMER BOARDS TO ANGLE FROM BELOW WITH 1-1/4" x #10 S.S. BUTTON HEAD TORX SELF-TAPPING SCREWS.
6. 4" x 6" VIEW PLATFORM SUPPORT BEAM. REFER TO DECK PLAN.
7. VIEW PLATFORM T.S. FRAME. REFER TO DECK PLAN.
8. VIEW PLATFORM TREX DECKING BOARDS. REFER TO DECK PLAN.
9. VIEW PLATFORM GUARDRAIL AND POST.
10. CONCRETE PIER. REFER TO DECK PLAN.

**METAL CONSTRUCTION NOTES:**  
ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS WELDED CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.



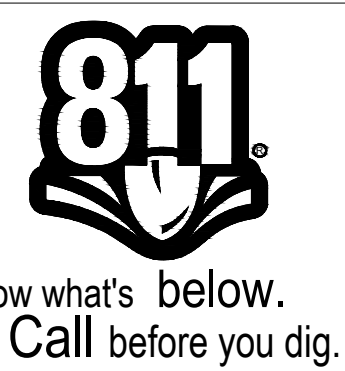
**B VIEW PLATFORM BENCH SECTIONS**  
SCALE: 1" = 1'-0"  
REFERENCE NUMBER:

P-2417.1B-DV-32



**C STAIR SECTION**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: ST-51

P-2417.1B-DV-03



**BENCHMARK:**  
FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**  
CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA, CALIFORNIA 91730 PH: (909) 454-2800

PREPARED UNDER THE SUPERVISION OF:  
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. \_\_\_\_\_ DATE \_\_\_\_\_

REVISIONS			
MARK	DATE	INITIAL	DESCRIPTION

PLANS APPROVED BY:  
**SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS**

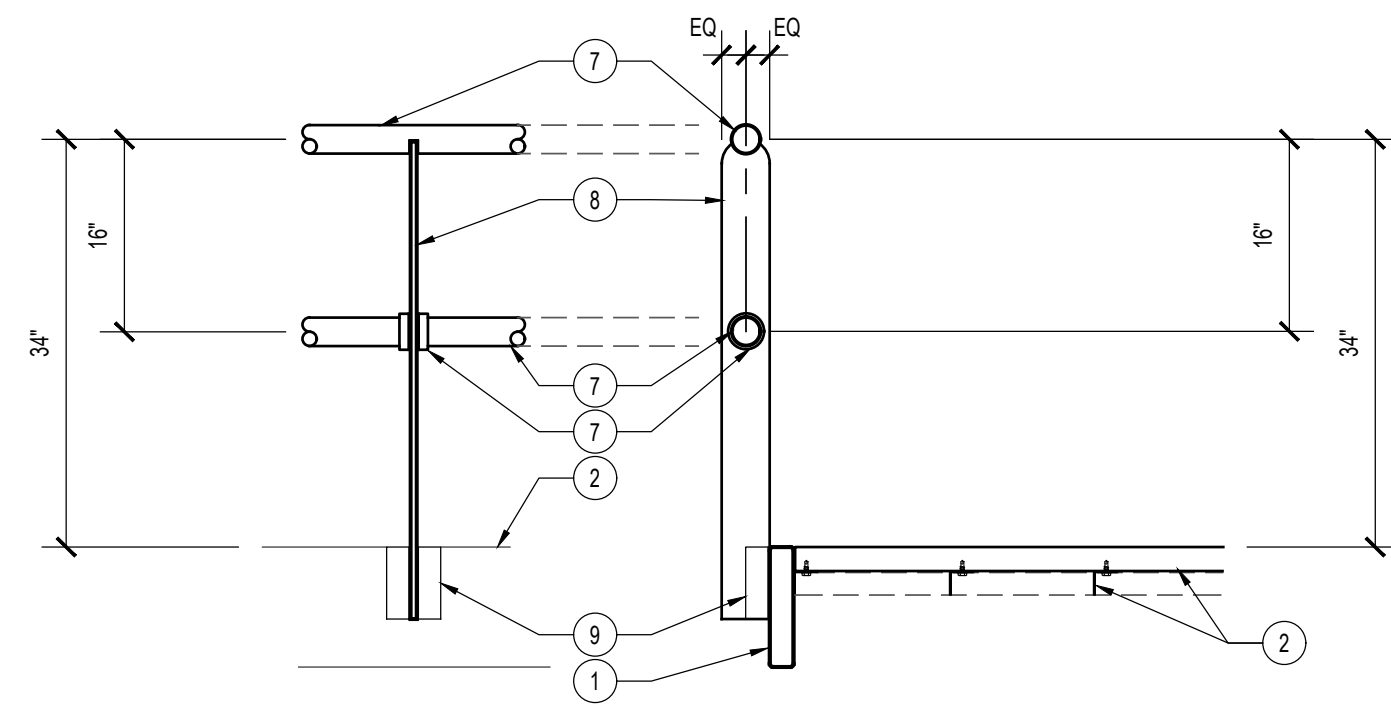
*David R. Washburn*  
ASSISTANT DIRECTOR

DATE: 02/24/2026

APPROVALS	INITIAL	DATE
PROJECT MANAGER	JMH	02/10/2026
OPS. DIVISION MANAGER	<i>H.M.</i>	2/10/2026
PM. DIVISION MANAGER		02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS CONSTRUCTION DETAILS 4**

DWG NO. **L-1.16**  
FILE NO. **30.30.0170**  
SHEET **18** OF **33**



A1 TYPICAL ELEVATION

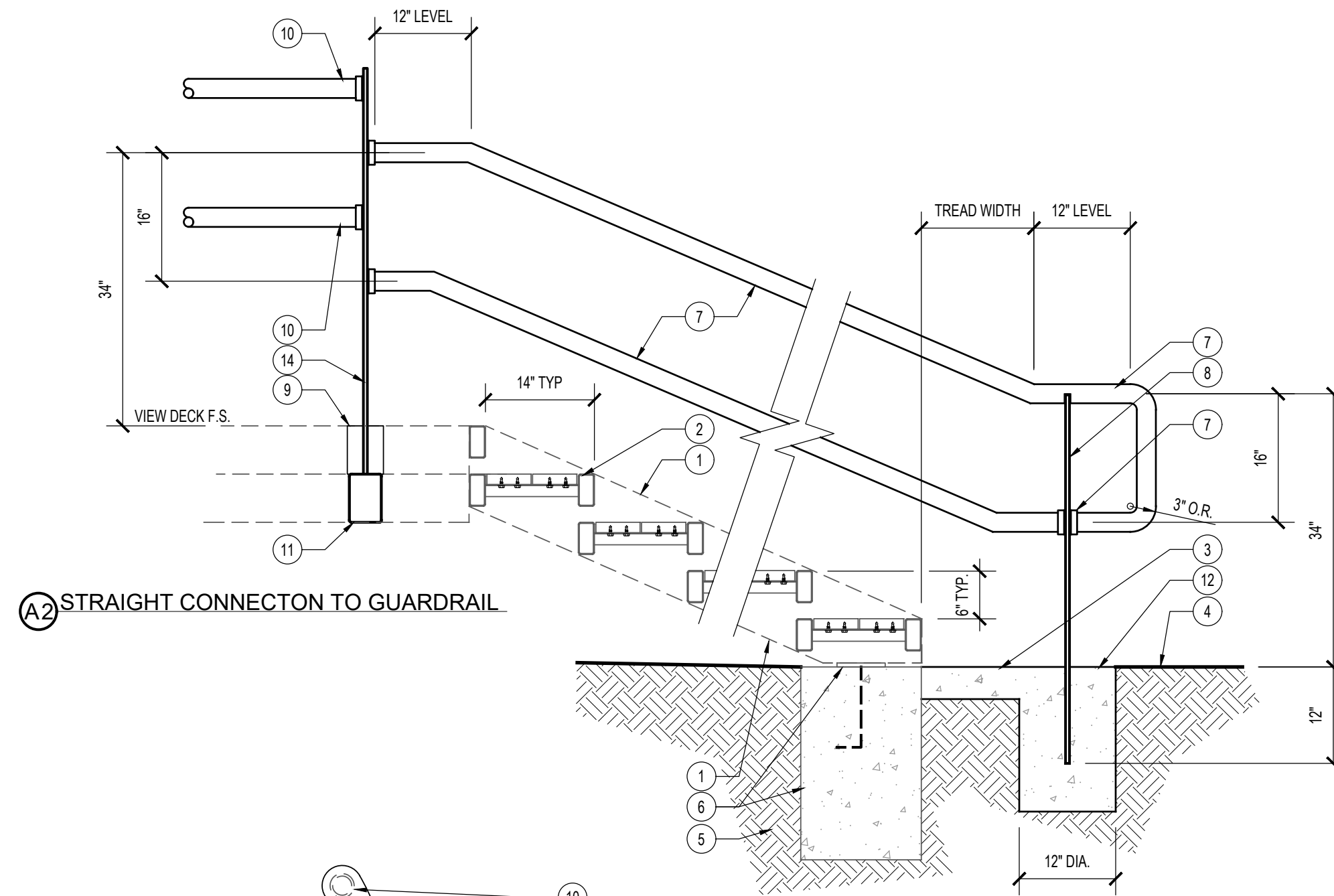
**LEGEND:**

1. 2" x 10" x 3/16" TUBULAR WEATHERING STEEL STRINGER, WELD TO ANCHOR PLATE (AT CONCRETE FOOTING), AND 2" x 6" FRAME.
2. TYPICAL STAIR TREAD WITH 2" x 8" WEATHERING TUBULAR STEEL TREAD FRAME, STEEL ANGLES AND TREX DECKING, COLOR: "HAVANA GOLD."
3. 4" THICK CONCRETE PAD LANDING AT BOTTOM OF STAIRS.
4. FINISH GRADE.
5. COMPACTED SUBGRADE.
6. 12" WIDE CONTINUOUS CONCRETE FOOTING BELOW BOTTOM TREAD, WITH STEEL PLATE, WELD STRINGER TO TOP OF PLATE.
7. 2-3/8" O.D. STEEL PIPE HANDRAIL WITH BLACK OXIDE FINISH, WITH 2-3/8" x 3-1/4" x 1/8" STD STEEL SET SCREW COLLAR, WELD COLLAR TO STEEL POST WITH SET SCREWS AT BOTTOM.
8. 12" x 4" WEATHERING STEEL HANDRAIL POST, GRIND EDGES SMOOTH, MAX SPACING AT 6'-0" O.C.
9. 2" x 2" STEEL ANGLE AT BOTH SIDES OF POST, WELD TO POST AND 2" x 10" STRINGER / 2" x 6" VIEWING PLATFORM FRAME.
10. STEEL PIPE GUARDRAIL WITH BLACK OXIDE FINISH AROUND VIEWING DECK PERIMETER.
11. 4" x 6" TUBULAR WEATHERING STEEL BEAM.
12. SET BOTTOM HANDRAIL POST IN CONCRETE FOOTING.
13. 2" x 6" TUBULAR WEATHERING STEEL PLATFORM FRAME @ PLATFORM PERIMETER.
14. 1/2" x 4" WEATHERING STEEL GUARDRAIL POST.

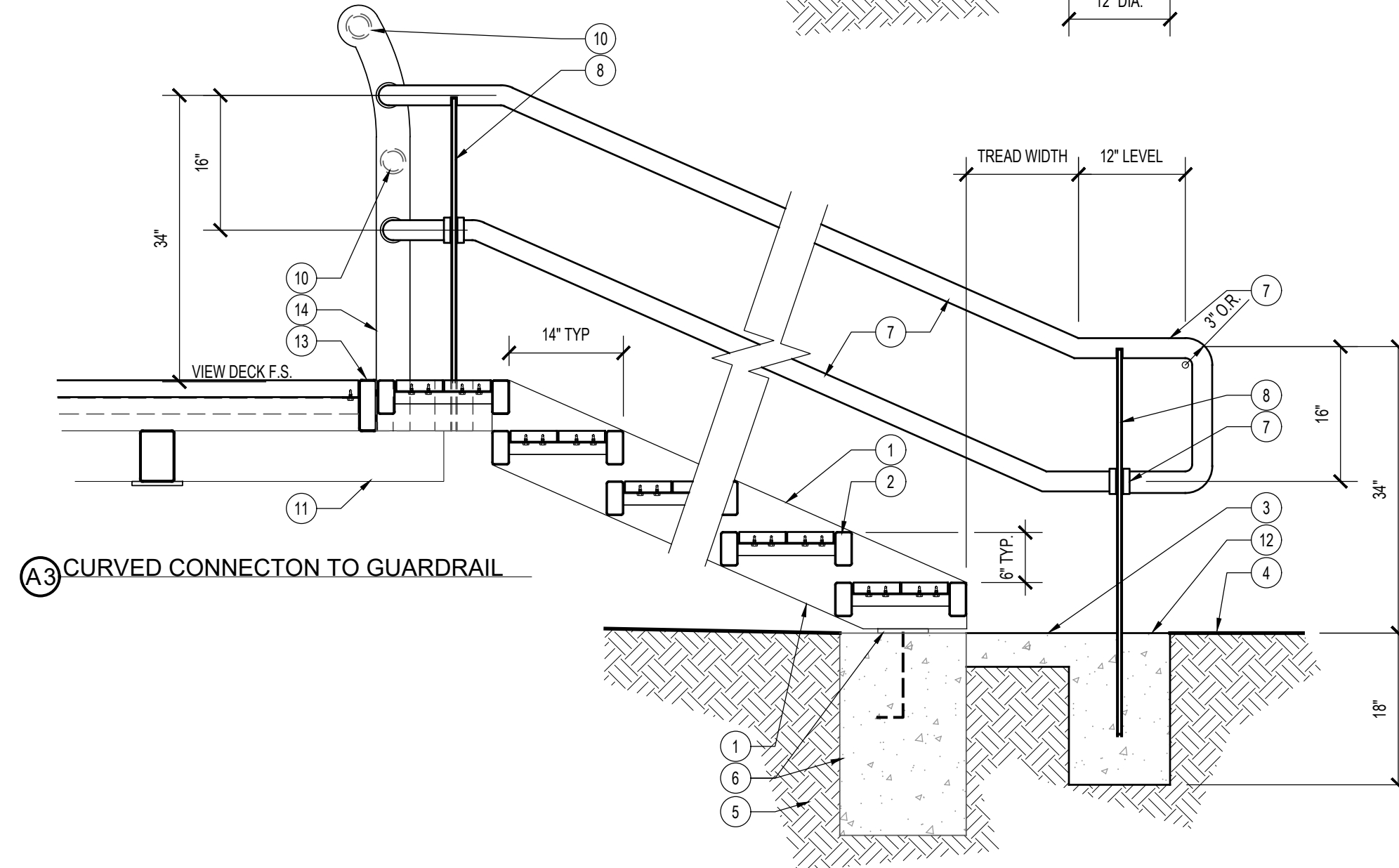
**NOTE:**  
REFER TO PLAN FOR REQUIRED NUMBER OF RISERS AT EACH STAIR LOCATION.

**METAL CONSTRUCTION NOTES:**  
ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS WELDED CLOSED.

**NOTE:**  
SEE ALSO DETAIL C, SHEET L-1.16 FOR TYPICAL STAIR TREAD PLAN & SECTION.



A2 STRAIGHT CONNECT TO GUARDRAIL



A3 CURVED CONNECT TO GUARDRAIL

**A STAIR HANDRAIL**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER:

P-2417.1B-DV-30

**TUFFBOX**  
ANIMAL RESISTANT STORAGE SOLUTIONS

**SINGLE AND DUAL STREAM RECEPTACLES KEEP ALL WILDLIFE OUT OF THE GARBAGE IN PUBLIC SPACES**

The TuffBox Trail models are animal resistant waste receptacles that are strong enough for the largest of wildlife, while being effective for the smallest critters. The Trail comes in Single and Double models to meet most of your outdoor space requirements. It uses a guarded, self-closing latch for the top lid, so you can count on it to be closed when the user has deposited their trash. Keeping it closed keeps both the wildlife and the elements out, and keeps your public environments clean and tidy. It has lockable rear door access for waste collection that is designed to be easy to use for the waste collector.

Trail receptacles are available in a number of colour options, and with labeling it can be easy to distinguish between the waste streams that are required at your property.

**TRAIL**  
Animal resistant litter receptacles.

- Rust Resistant Galvanized Steel
- Self-Closing Weather Proof Lids
- Bear Resistant Latches
- Stainless Steel Hinges
- Lockable Rear Door
- Removable Plastic Liner

**SINGLE**  
Weight: 200 lbs  
Size: 26" Wide  
26" Deep  
48" High

**DOUBLE**  
Weight: 400 lbs  
Size: 48" Wide  
26" Deep  
48" High

**OPTIONS**  
- Recycling Models Available  
- Precast Cement Pod

Available Colours:  
[Color swatches]

**B 'TRAIL' TUFFBOX COMBO TRASH AND RECYCLING**  
SCALE: NTS



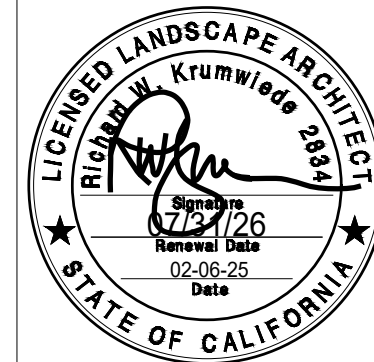
Know what's below.  
Call before you dig.

**BENCHMARK:**

FOUND REBAR & CAP HGLLC RP  
FLUSH PER CAD FILE PROVIDED BY  
SPECIAL DISTRICTS (POINT #1001)  
ELEV = 3154.12'

**BASIS OF BEARINGS:**

CCS83 ZONE 5, NAD83(2011),  
EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA, CALIFORNIA 91730 PH: (909) 454-2800

PREPARED UNDER THE SUPERVISION OF:

PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS				
MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

PLANS APPROVED BY:  
SAN BERNARDINO COUNTY - PUBLIC WORKS  
SPECIAL DISTRICTS

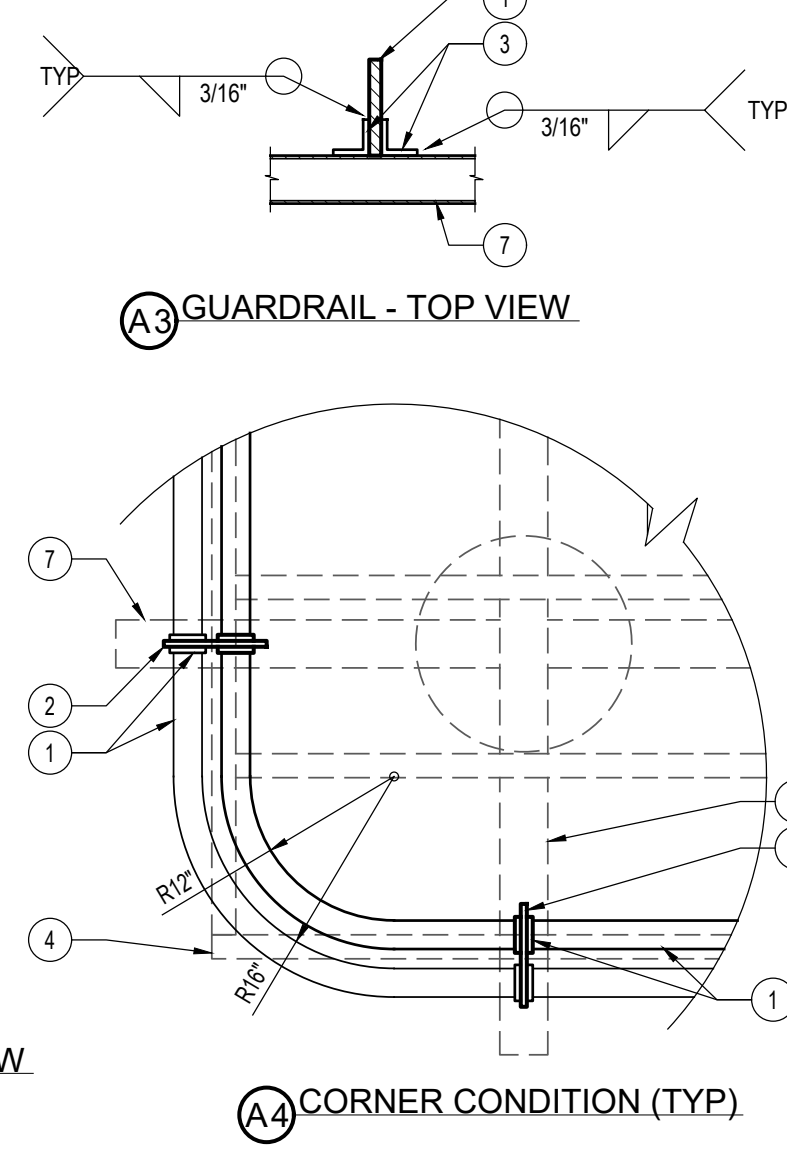
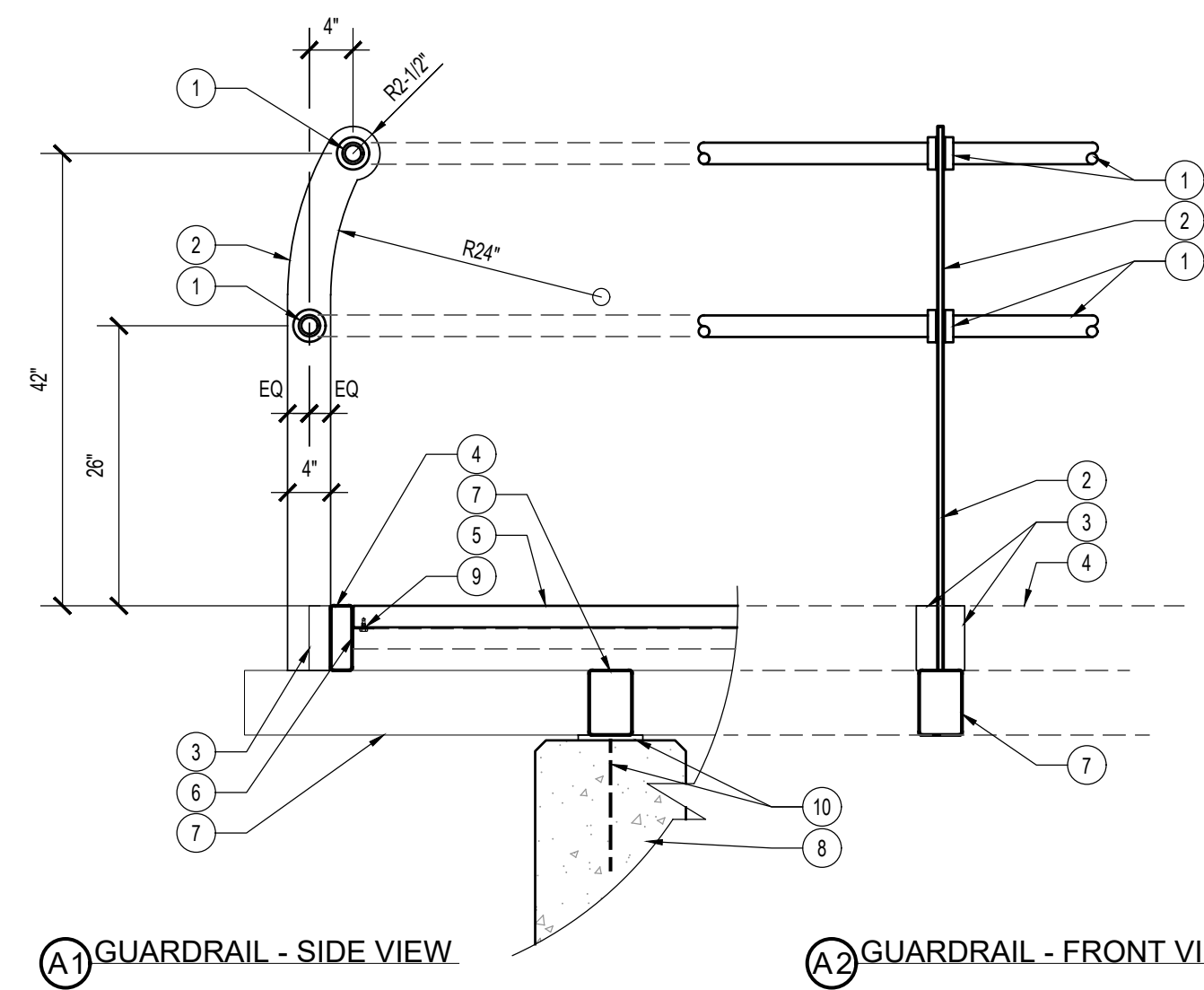
*David R. Waddell*  
ASSISTANT DIRECTOR

DATE: 02/24/2026

APPROVALS	INITIAL	DATE
PROJECT MANAGER	JMH	02/10/2026
OPS. DIVISION MANAGER	<i>AM</i>	2/10/2026
PM. DIVISION MANAGER		02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA  
RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 5**

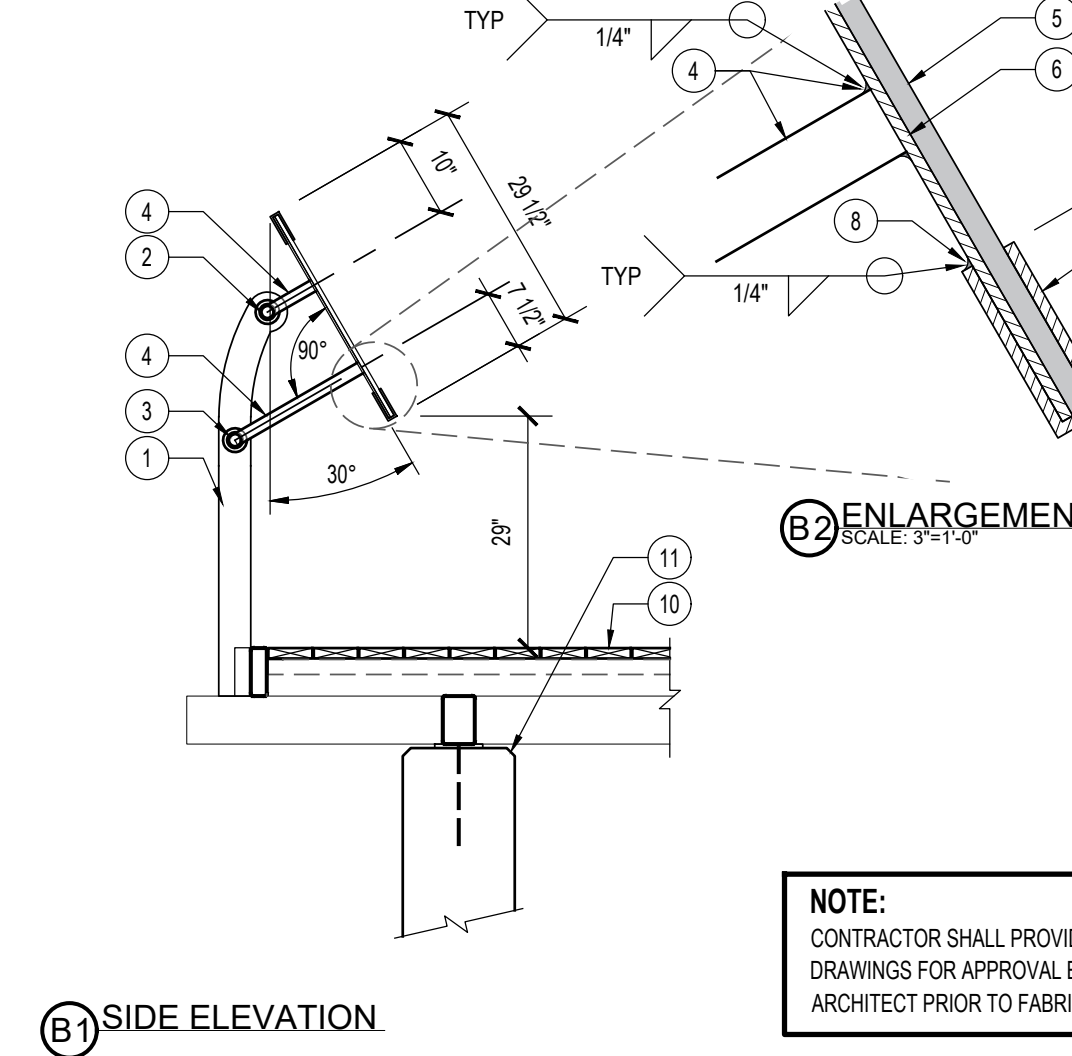
DWG NO. L-1.17  
FILE NO. 30.30.0170  
SHEET 19 OF 33



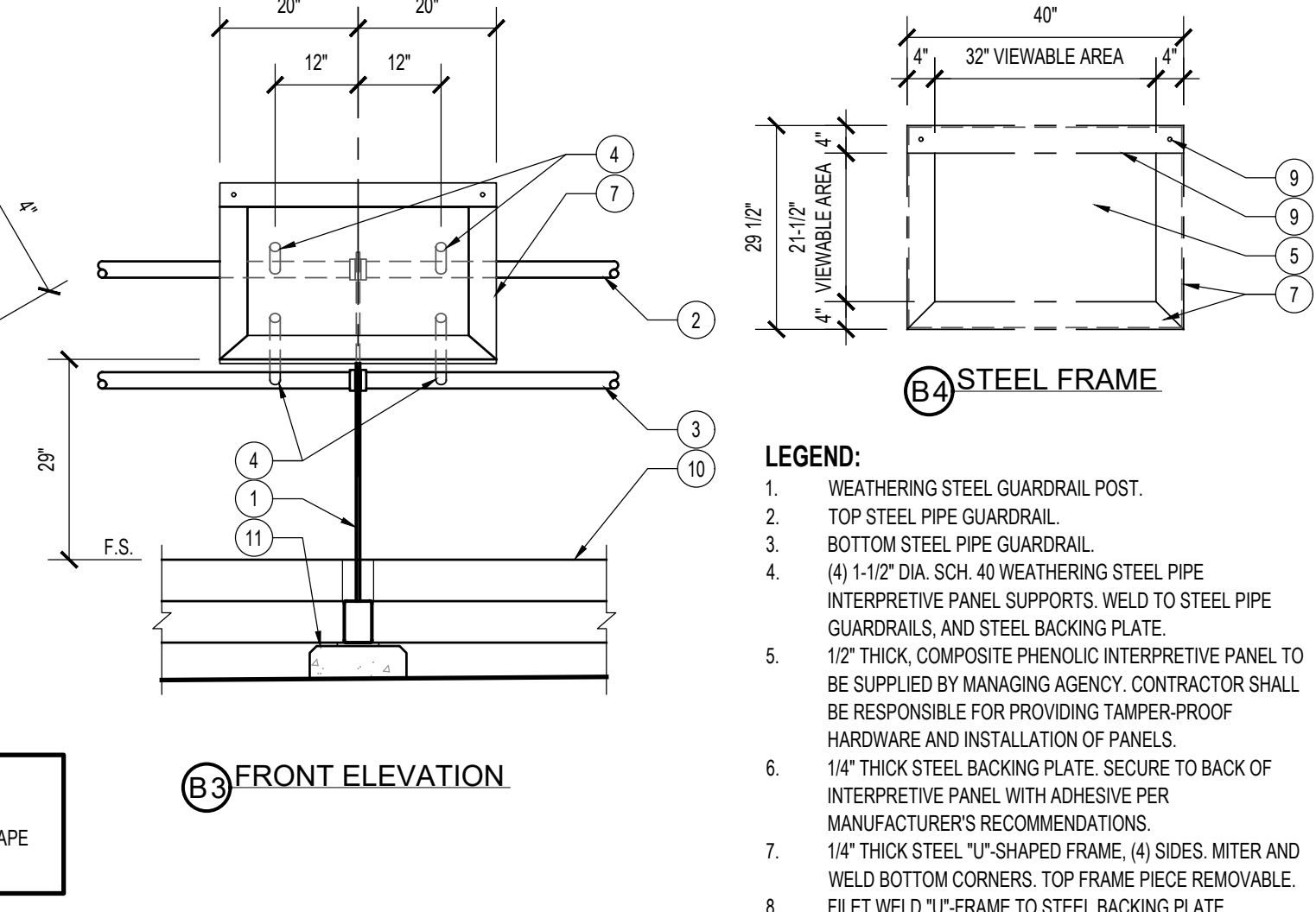
- LEGEND:**
- 2-3/8" O.D. STEEL PIPE RAILING (BLACK OXIDE FINISH) WITH 2-3/8" x 3-1/4" x STD STEEL SET SCREW COLLAR, WELD COLLAR TO STEEL POST WITH SET SCREWS AT BOTTOM.
  - 1/2" x 4" WEATHERING STEEL RAILING POST, GRIND EDGES SMOOTH, MAX. SPACING: 6'-0" O.C.
  - 2" x 2" STEEL ANGLE AT BOTH SIDES OF POST, WELD TO POST AND 2" x 6" FRAME.
  - 2" x 6" TUBULAR STEEL PLATFORM FRAME @ PERIMETER.
  - 2" x 6" WOOD POLYMER DECKING.
  - 2" x 2" STEEL ANGLE PLATFORM DECK SUPPORT.
  - 4" x 6" TUBULAR STEEL BEAM.
  - SONO-TUBE CONCRETE PIER.
  - WOOD POLYMER DECKING ATTACHES TO STEEL ANGLE FROM BELOW, WITH 1-1/4" x #10 S.S. BUTTON HEAD TORX SELF-TAPPING SCREWS, (2) PER BOARD @ EACH ANGLE.
  - 6" SQ. x 1/2" THICK STEEL PLATE WITH ANCHOR INTO CONCRETE PIER.

**A VIEW PLATFORM - GUARDRAILS**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER:

P-2417.1B-DV-05



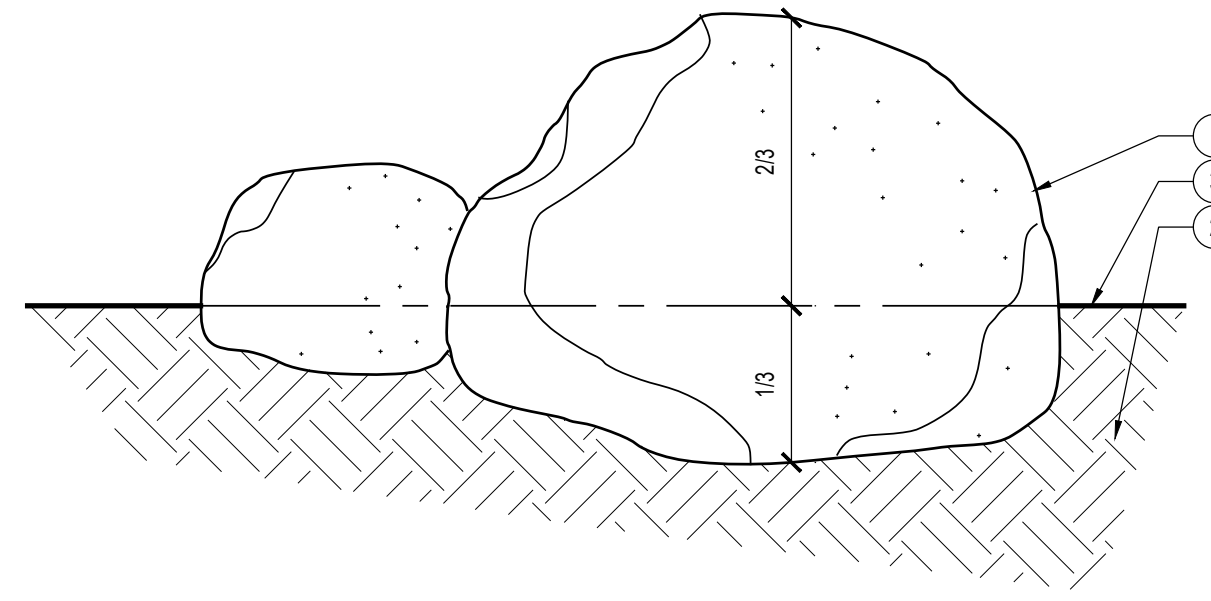
**NOTE:**  
CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION.



- LEGEND:**
- WEATHERING STEEL GUARDRAIL POST.
  - TOP STEEL PIPE GUARDRAIL.
  - BOTTOM STEEL PIPE GUARDRAIL.
  - (4) 1-1/2" DIA. SCH. 40 WEATHERING STEEL PIPE INTERPRETIVE PANEL SUPPORTS, WELD TO STEEL PIPE GUARDRAILS, AND STEEL BACKING PLATE.
  - 1/2" THICK COMPOSITE PHENOLIC INTERPRETIVE PANEL TO BE SUPPLIED BY MANAGING AGENCY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TAMPER-PROOF HARDWARE AND INSTALLATION OF PANELS.
  - 1/4" THICK STEEL BACKING PLATE, SECURE TO BACK OF INTERPRETIVE PANEL WITH ADHESIVE PER MANUFACTURER'S RECOMMENDATIONS.
  - 1/4" THICK STEEL "U"-SHAPED FRAME, (4) SIDES, MITER AND WELD BOTTOM CORNERS, TOP FRAME PIECE REMOVABLE.
  - FILED WELD "U"-FRAME TO STEEL BACKING PLATE.
  - REMOVABLE TOP ACCESS FRAME, SECURE THROUGH PHENOLIC PANEL WITH TAMPER-PROOF STAINLESS STEEL BOLTS (2) PLACES.
  - VIEW PLATFORM FINISH SURFACE.
  - VIEW PLATFORM SUPPORT CONCRETE PIER.

**B VIEW PLATFORM INTERPRETIVE PANEL FRAME & MOUNT**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: S-47

P-2417.1B-DV-08

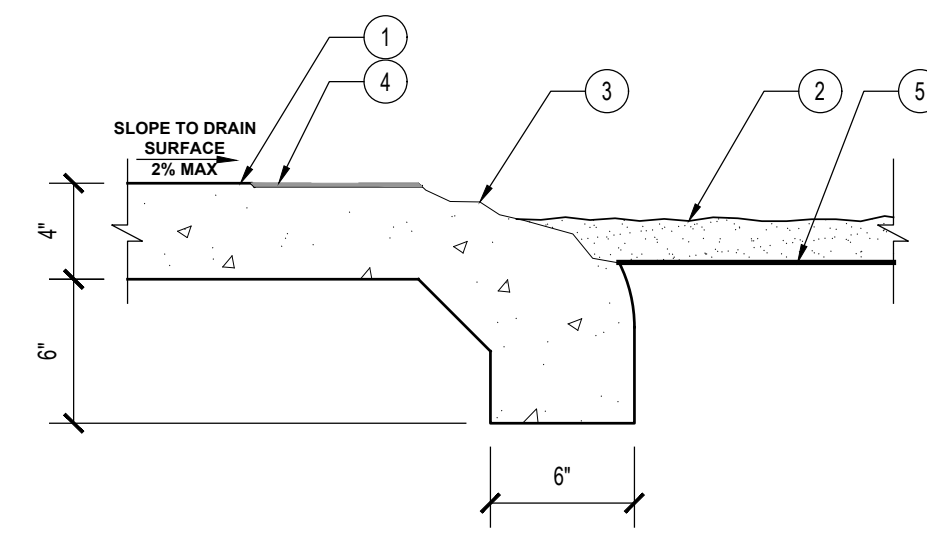


- LEGEND:**
- BOULDER PER CONSTRUCTION PLAN I SITE AMENITIES SCHEDULE, RECESS AT LEAST 1/3 OF BOULDER INTO SUB-GRADE.
  - NATIVE SUB-GRADE.
  - FINISH GRADE.

**NOTE:**  
LANDSCAPE ARCHITECT TO APPROVE BOULDERS AND SPOT LOCATIONS PRIOR TO INSTALLATION.

**C LANDSCAPE BOULDER**  
SCALE: 1 1/2" = 1'-0"  
REFERENCE NUMBER: A-61

S-CONST-SA-BLDR-15

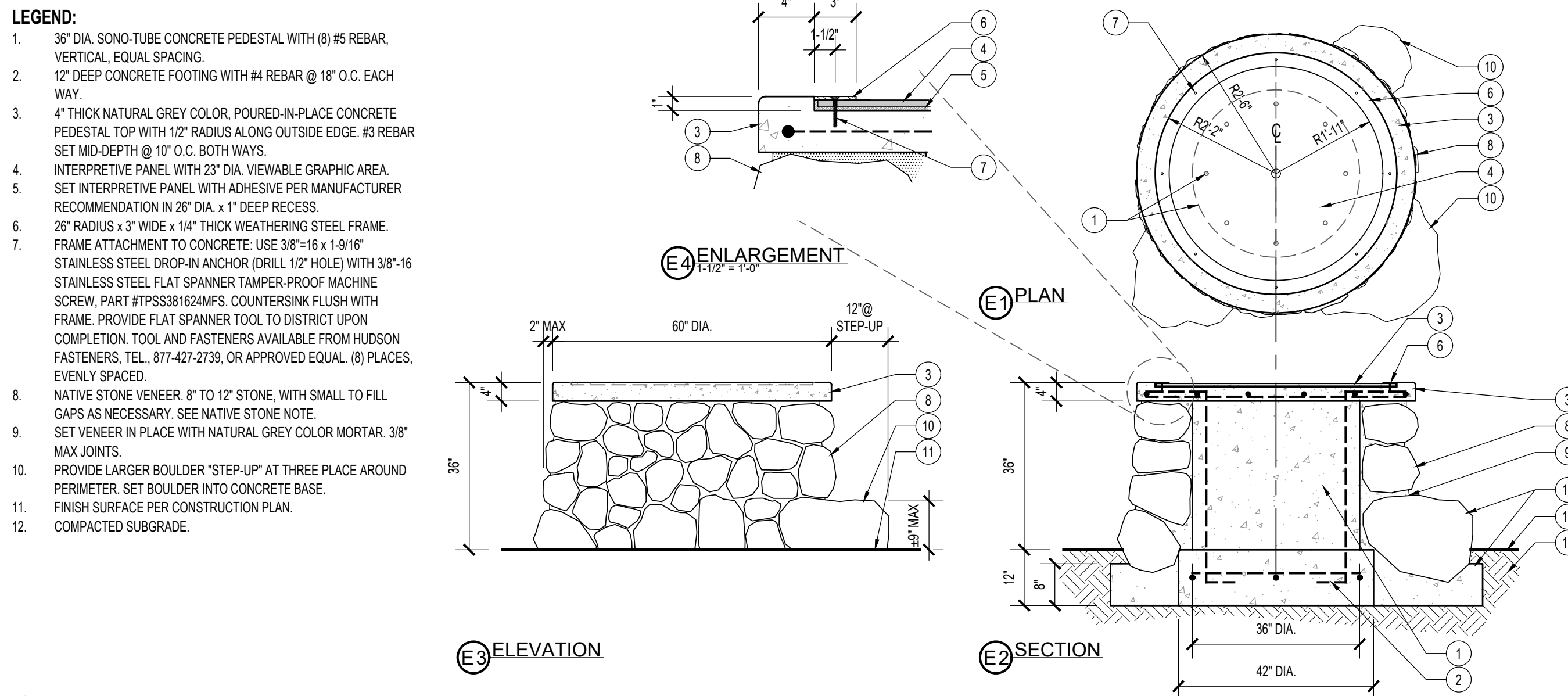


- LEGEND:**
- COLORLED CONCRETE SURFACE WITH ANIMAL FOOTPRINTS. SEE PLAN VIEW, SHEET L-1.9 FOR COLOR, FOOTPRINTS, LAYOUT AND FINISH DIRECTIONS.
  - NATIVE ADJACENT AGGREGATE SOIL.
  - IRREGULAR ROUGH CONCRETE EDGE.
  - SEEDED SURFACING USING NATIVE AGGREGATE, SEED TO DEPTH OF CONCRETE AGGREGATE. FLOAT THE BUTTER OF THE CONCRETE OVER THE TOP AND THEN USE TOPCAST PER LEGEND FINISH DIRECTIONS, SHEET L-1.9.
  - FINISHED EDGE.

**NOTES:**  
A. IRREGULAR ROUGH CONCRETE EDGETREATMENT. CONTRACTOR TO SHAPE EDGES WHILE CONCRETE IS WET AND BRING ADJACENT NATIVE GRADE TO BE FLUSH. SEE PLAN VIEW FOR LAYOUT.  
B. 10' X 10' SAMPLES FOR ARCHITECT APPROVAL, COLOR PER LEGEND.

**D ANIMAL FOOTPRINT PAVEMENT EDGE**  
SCALE: 1 1/2" = 1'-0"  
REFERENCE NUMBER:

P-2417.1B-DV-46



**E GEOLOGY STONE VENEER CONCRETE PODIUM**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: A-12

P-2417.1B-DV-41



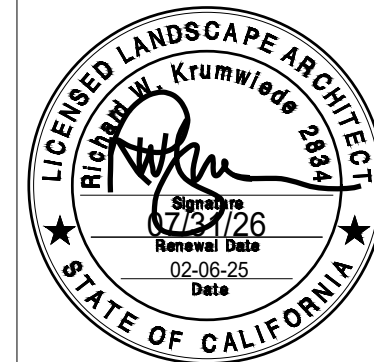
Know what's below.  
Call before you dig.

**BENCHMARK:**

FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**

CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



PREPARED UNDER THE SUPERVISION OF:

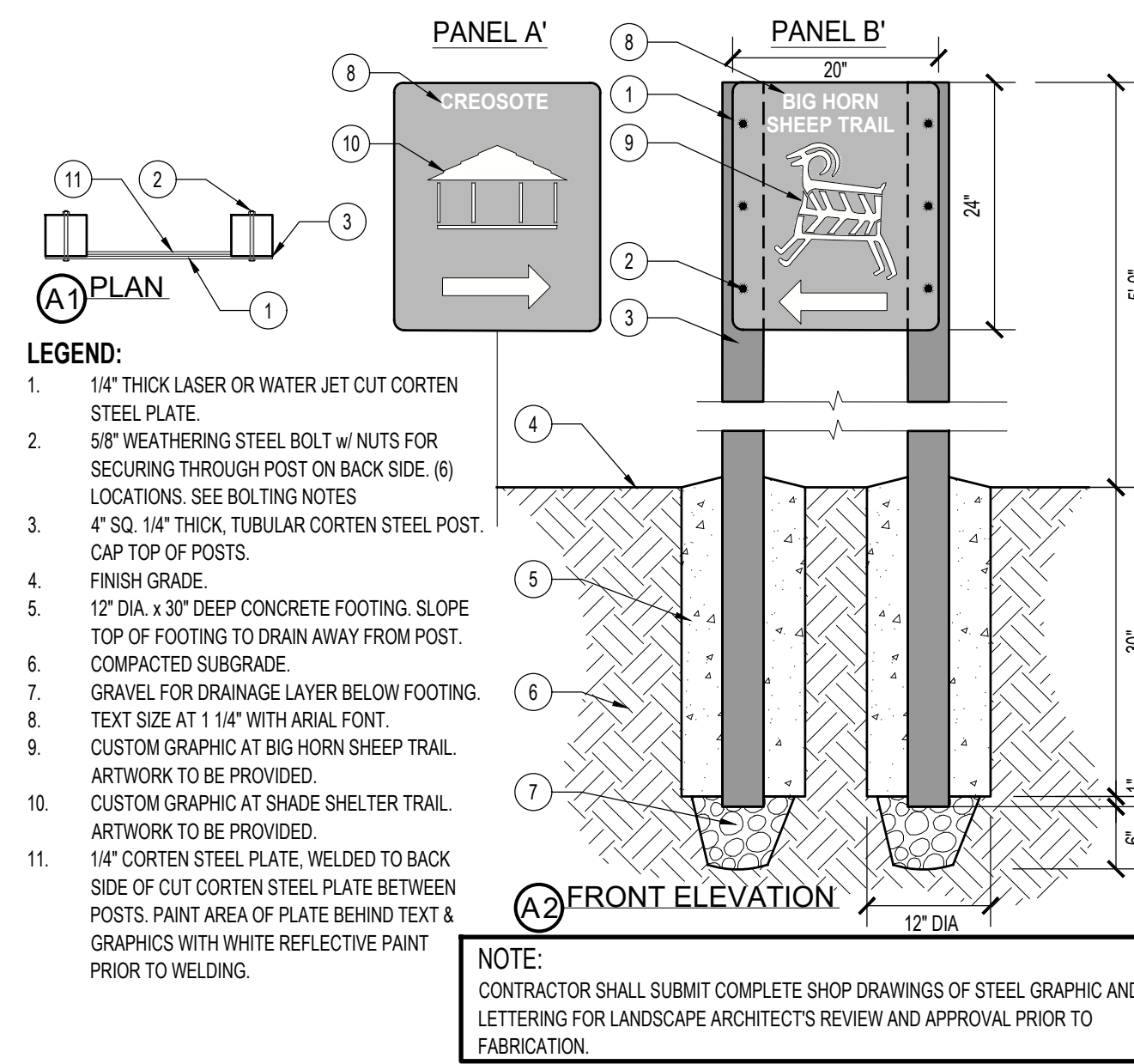
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

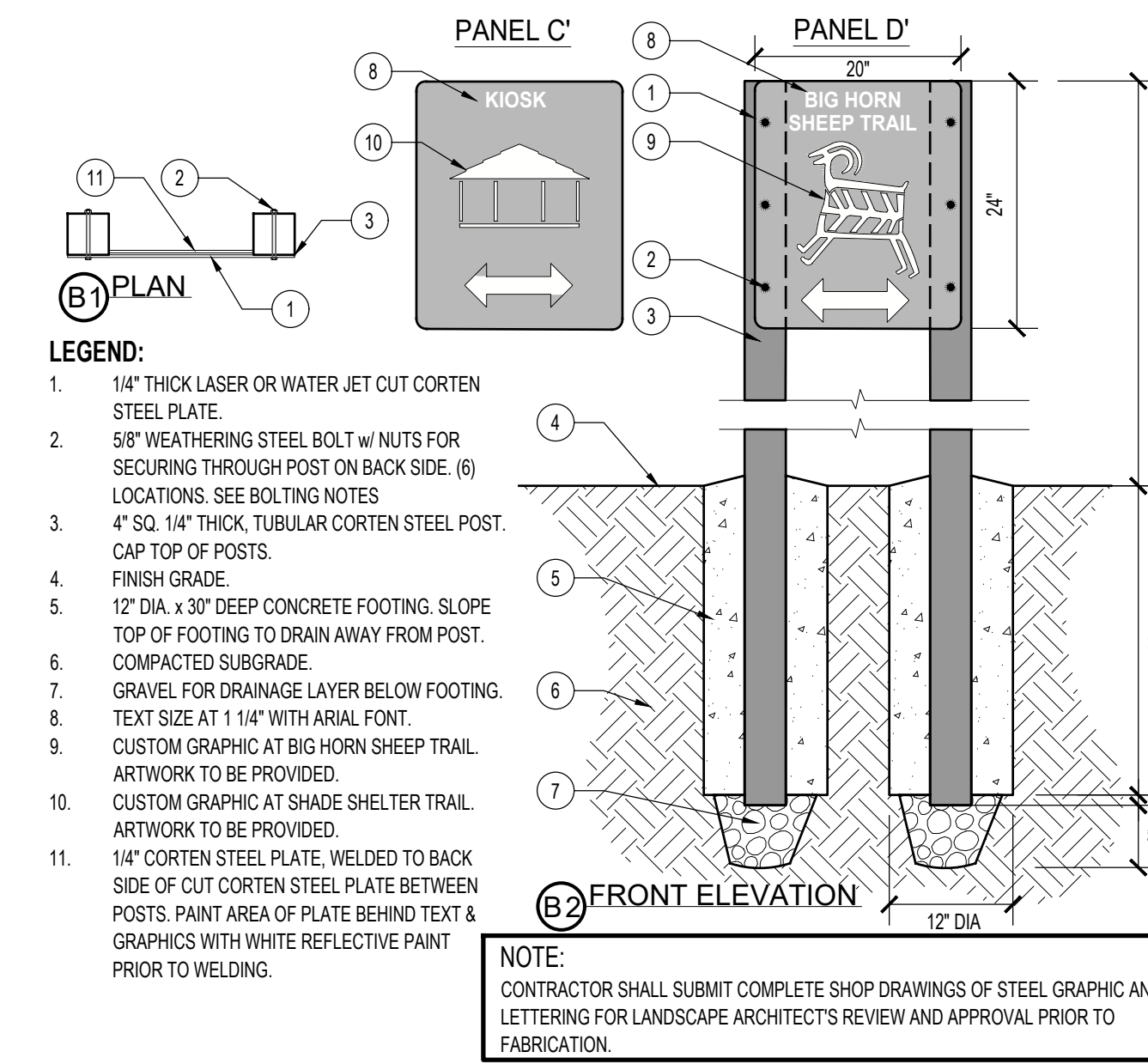
APPROVALS			
PROJECT MANAGER	INITIAL	DATE	DATE
	JMH	02/10/2026	02/24/2026
OPS. DIVISION MANAGER			
PM. DIVISION MANAGER			

SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS  
COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 6**

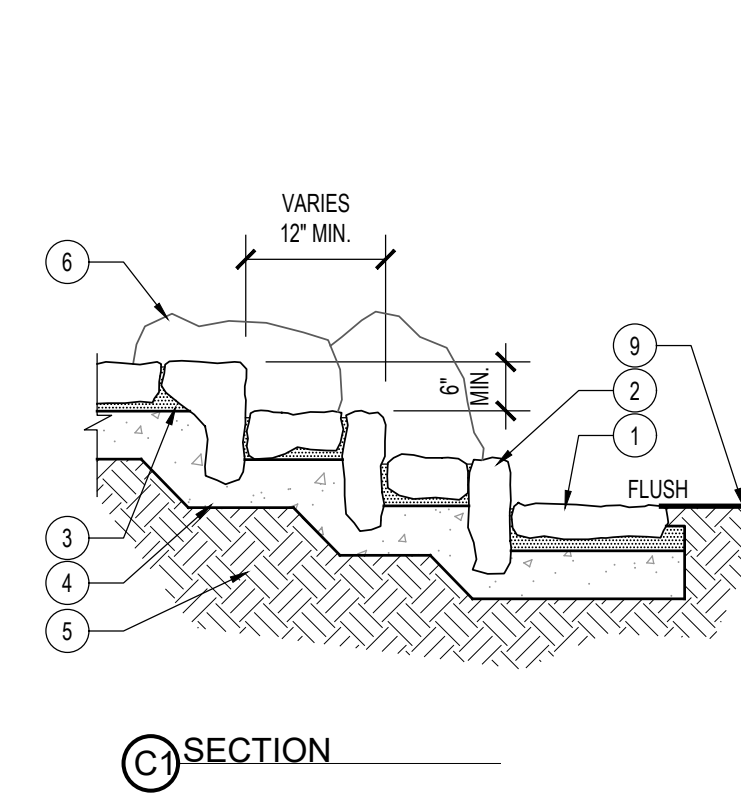
DWG NO. L-1.18  
FILE NO. 30.30.0170  
SHEET 20 OF 33



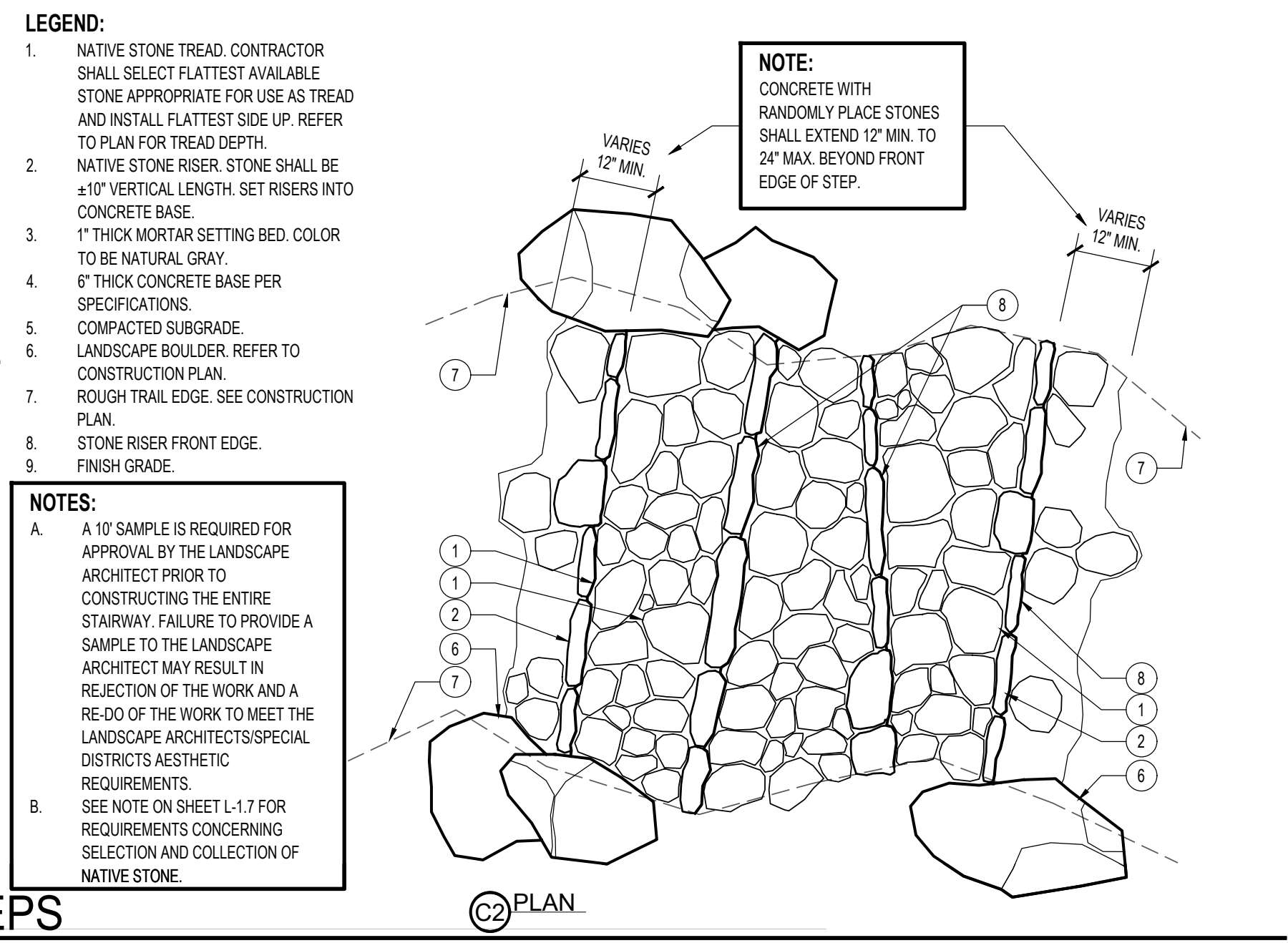
**A SINGLE DIRECTIONAL SIGN**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER: P-2417.1B-DV-13



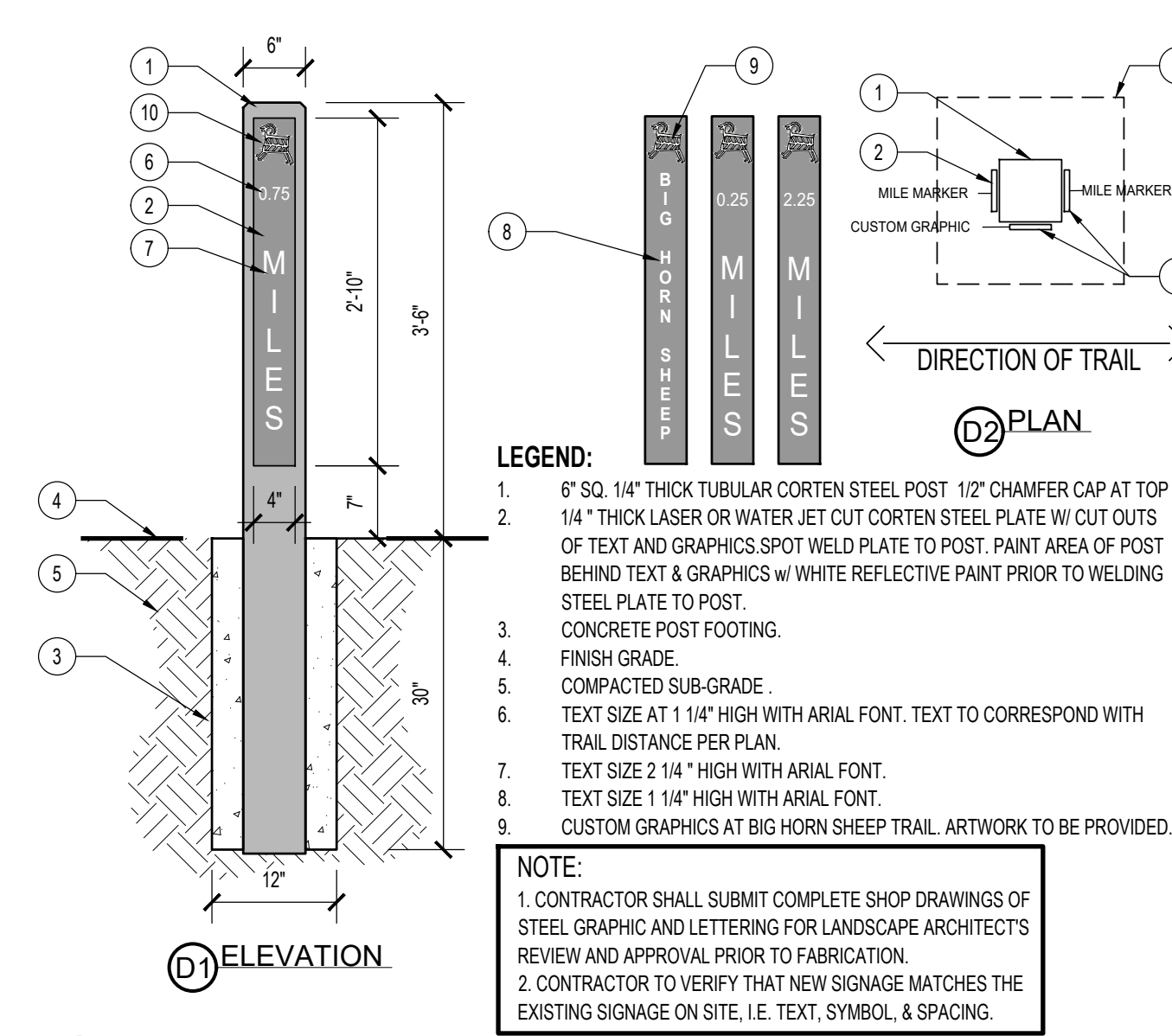
**B DOUBLE DIRECTIONAL SIGN**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER: P-2417.1B-DV-14



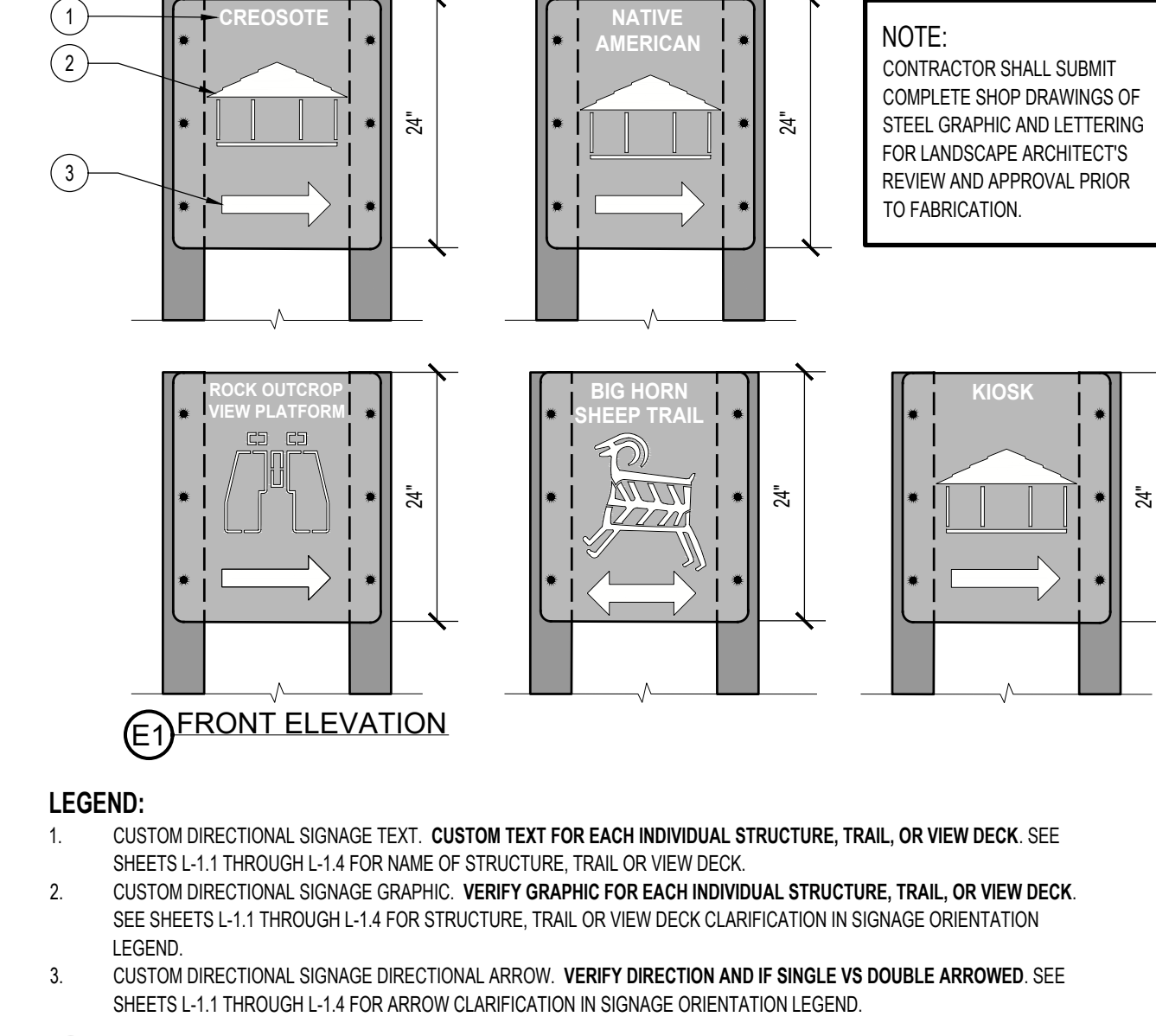
**C ESCARPMENT STONE STEPS**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: ST-11



**C2 PLAN**  
P-2417.1B-DV-39



**D STEEL TRAIL MILE MARKER**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER: S-31



**E CUSTOM DIRECTIONAL SIGN PANELS**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER: P-2417.1B-DV-45

**PRODUCT: Q-LBT96PT** WEIGHT: 2,707 lbs. (COURTESY TO Q-LBT96PT OVER 800.LBS.)

**CONCRETE COLOR:**  BROWN,  MEDIUM GREY,  MEDIUM WHITE,  WHITE,  CUSTOM

**CONCRETE TEXTURE:**  CHESTNUT (ST-1),  HONEY,  STRATA

**SEALER: PERMASHIELD 4200 SEALER**

**QUANTITY:** \_\_\_\_\_

**GENERAL PRODUCT NOTES:**

- E = EXPOSED FINISHED SURFACE
- INSTALLATION IS REQUIRED BY OTHERS.
- ALL EDGES TO BE EASED.
- MANUFACTURING TOLERANCE ± 1/16"
- REINFORCED WIREBAR & NYLON FIBERS
- DISABLED ACCESS COMPLIANT
- 5 YEAR GUARANTEE

**Authorized Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

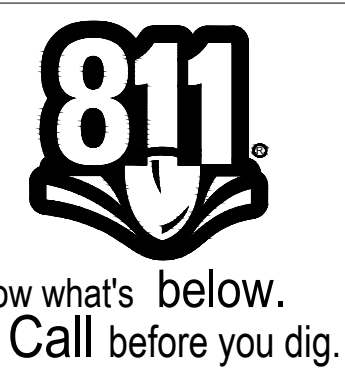
By signing above or stamping the identity, approval or "no objection letter" authorization by the QCP to produce the drawing as shown within a 10' radius.

**PLAN VIEW:** 96" x 72"

**ELEVATION VIEW:** 36" x 33"

<b>QCP</b> www.qcp-corp.com	PLAN TYPE: CONSTRUCTION PLAN	DATE: 5/18/23	FILE NO.: Q-LBT-96PT	SHEET: 1
	PRODUCT: Q-LBT96PT   PICNIC TABLE   LBT	SCALE: 3/8" = 1'	DRAWN BY:	OF:
	PROJECT NAME:	PC NO.:	QC ITEM NO.:	1

**F QCP Q-LBT96PT**  
SCALE: NTS



**BENCHMARK:**  
FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**  
CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA, CALIFORNIA 91730 PH: (909) 464-2800

PREPARED UNDER THE SUPERVISION OF: \_\_\_\_\_ DATE \_\_\_\_\_

PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. \_\_\_\_\_ DATE \_\_\_\_\_

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:  
**SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS**

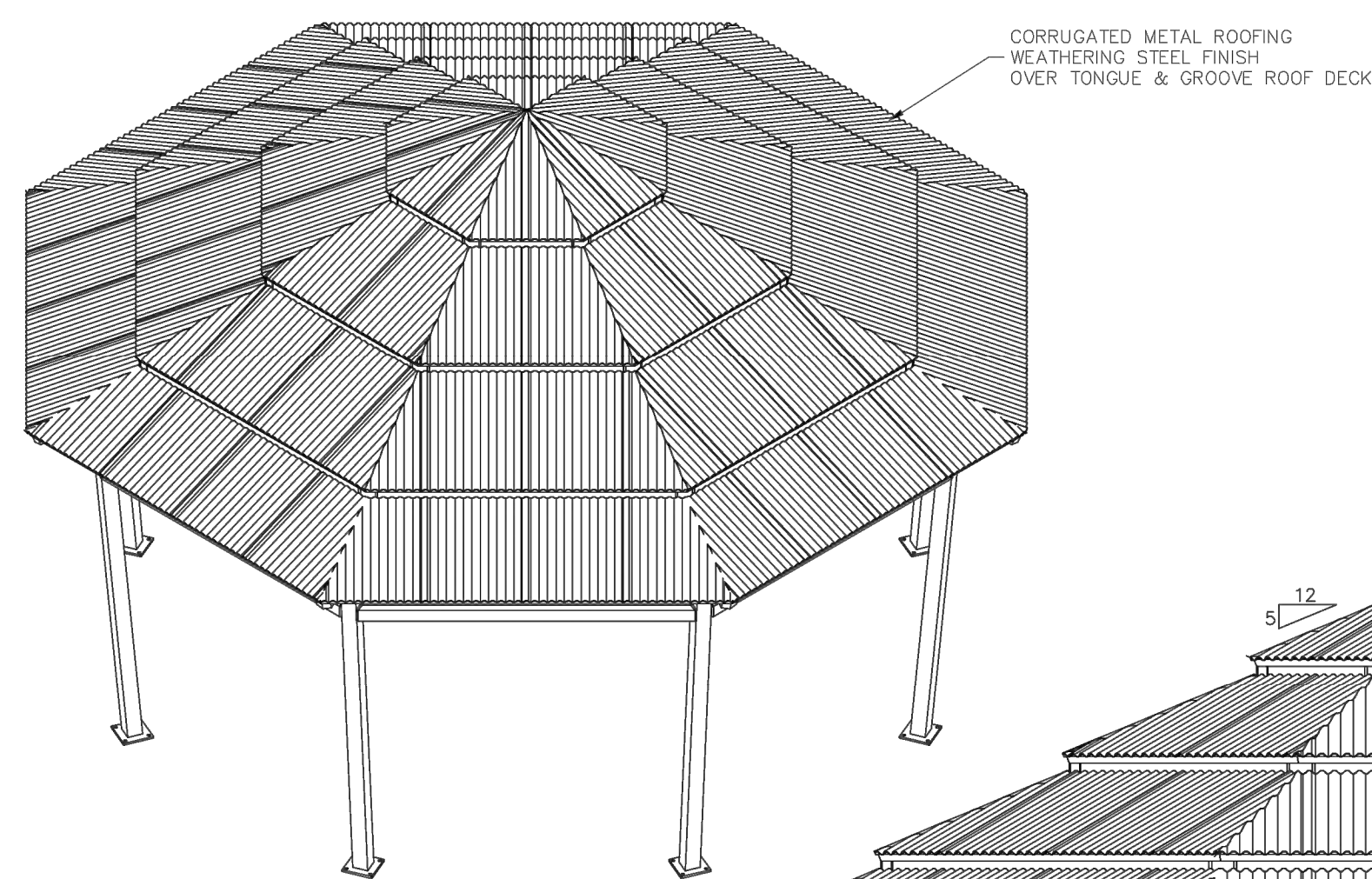
*David R. Waddell*  
ASSISTANT DIRECTOR

DATE: 02/24/2026

PROJECT MANAGER	INITIAL: JMH	DATE: 02/10/2026
OPS. DIVISION MANAGER	INITIAL: JMH	DATE: 2/10/2026
PM. DIVISION MANAGER	INITIAL: JMH	DATE: 02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS CONSTRUCTION DETAILS 7**

DWG NO. L-1.19  
FILE NO. 30.30.0170  
SHEET 21 OF 33



CORRUGATED METAL ROOFING  
WEATHERING STEEL FINISH  
OVER TONGUE & GROOVE ROOF DECK

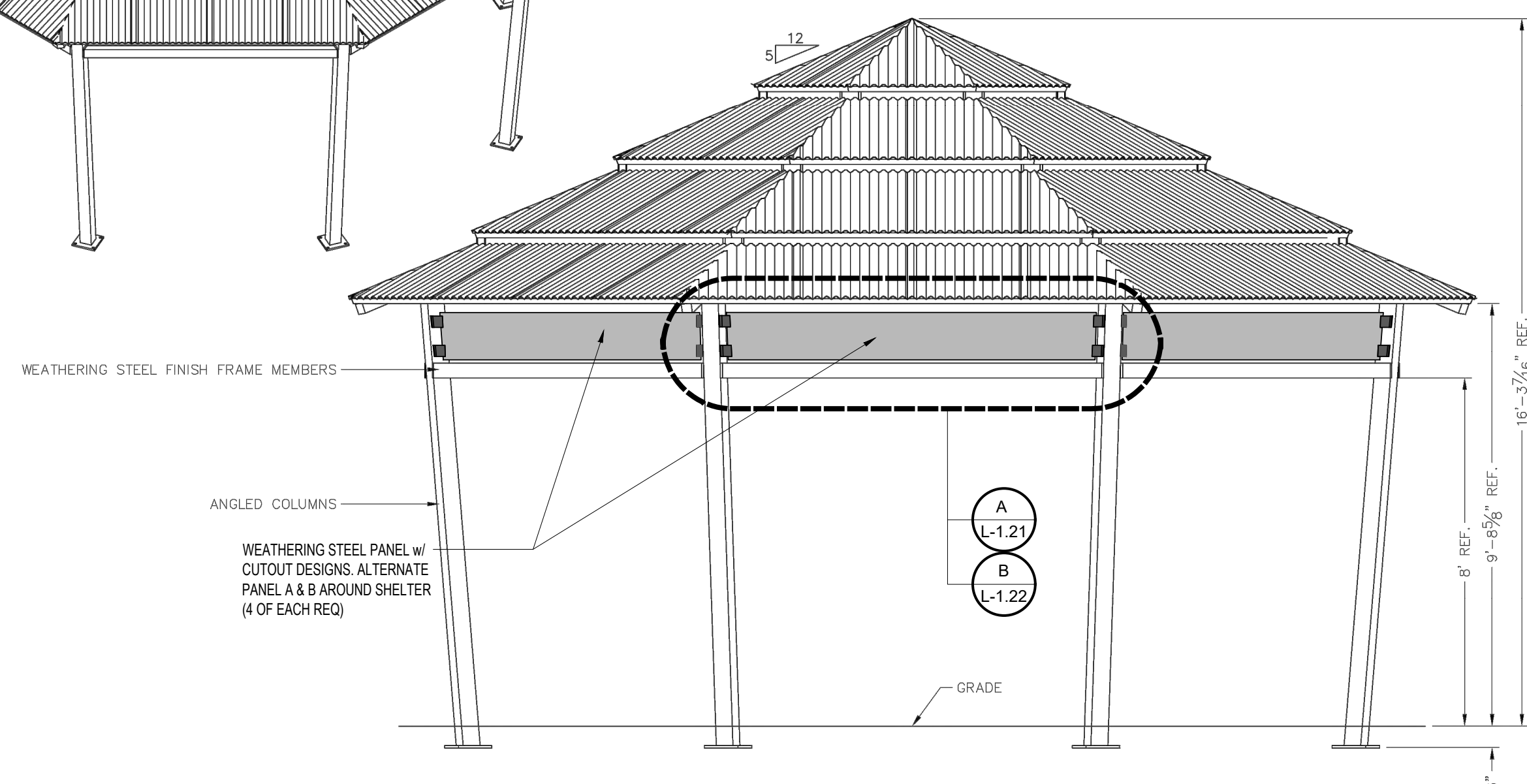
**DEFERRED SUBMITTAL SHELTER NOTES**

A. ICON SQUARE SHELTER STRUCTURES IS A DEFERRED SUBMITTAL. CONTRACTOR SHALL SUBMIT FINAL CONSTRUCTION DOCUMENTS, STRUCTURAL CALCULATIONS AND FINISH SCHEDULE TO CITY BUILDING DEPT. FOR REVIEW AND APPROVAL PRIOR TO ORDERING AND FABRICATION.

B. PRE-FABRICATED SHADE STRUCTURE: 28' OCTAGON, ICON MODEL#: OC28TY4V-P5 - AVAILABLE FROM ICON SHELTER SYSTEMS INC. CONTACT CHAD BARRY, PH: (714) 619-0100 X206. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

C. STRUCTURAL CALCULATIONS WILL BE PROVIDED BY MANUFACTURER.

D. VERIFY ALL MATERIAL FINISHES AND COLORS WITH OWNER PRIOR TO ORDERING.



**A** SHADE SHELTER - ELEVATIONS REFERENCE ONLY DEFERRED SUBMITTAL  
SCALE: NOT TO SCALE

LOADS TO FOUNDATION (KIPS, IN-RKIPS)

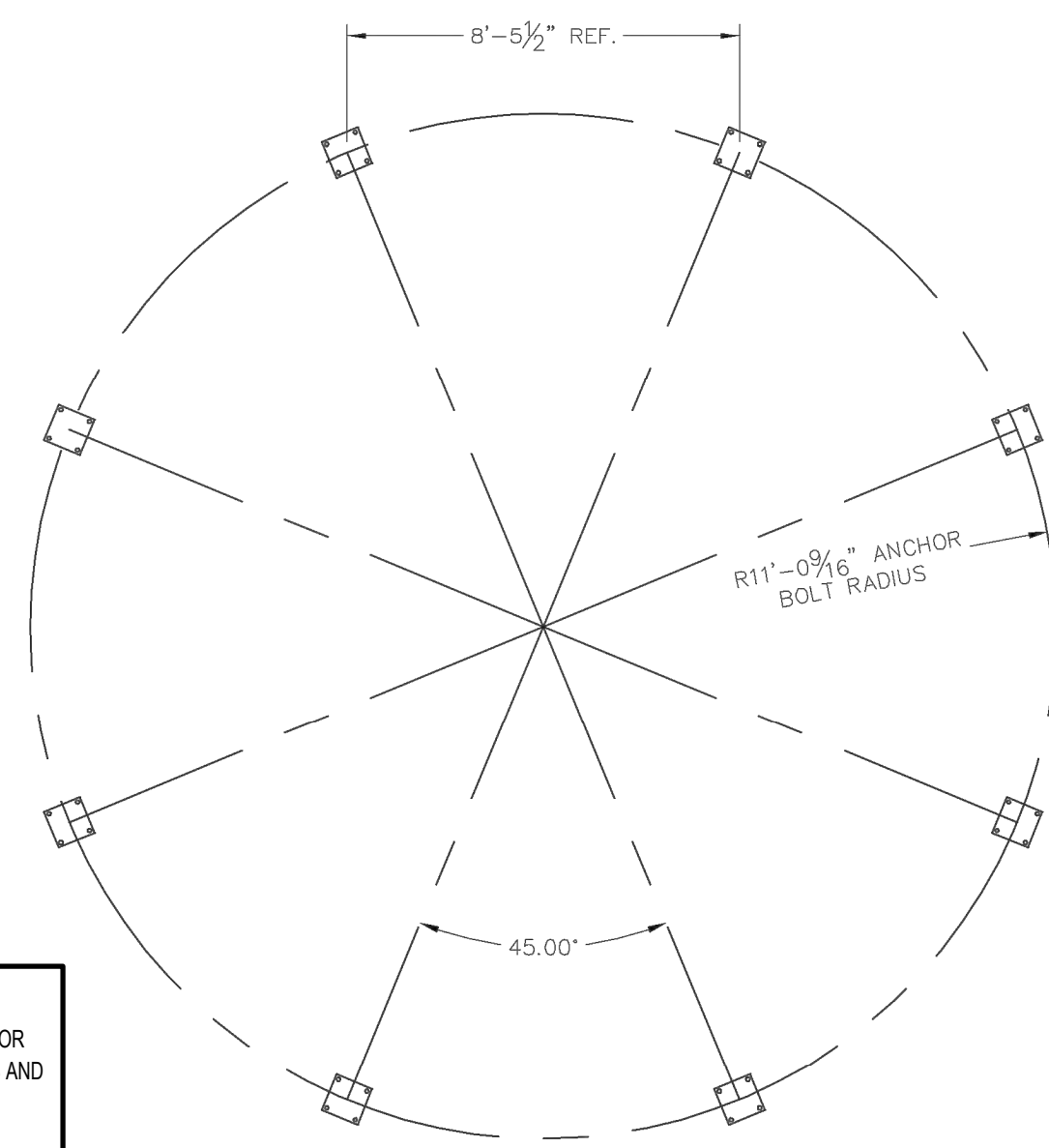
LOAD COMBINATION	FOUNDATION LOADS				
	AXIAL (F <sub>x</sub> )	AXIAL (F <sub>y</sub> )	AXIAL (F <sub>z</sub> )	MOMENT (M <sub>y</sub> )	MOMENT (M <sub>z</sub> )
DL	4.02	0.00	0.16	-5.82	0.00
SL	-2.68	0.00	0.23	-8.90	0.13
W-UPLIFT	-4.25	-0.35	-0.50	5.63	-13.44
W-FY	-2.70	-0.59	-0.17	-5.49	-14.49
W-FZ	-2.85	-0.54	-0.83	23.63	-7.64
E-FY	0.00	-0.80	0.00	0.00	-26.15
E-FZ	-0.61	0.00	-1.02	43.37	0.00

**NOTES:**

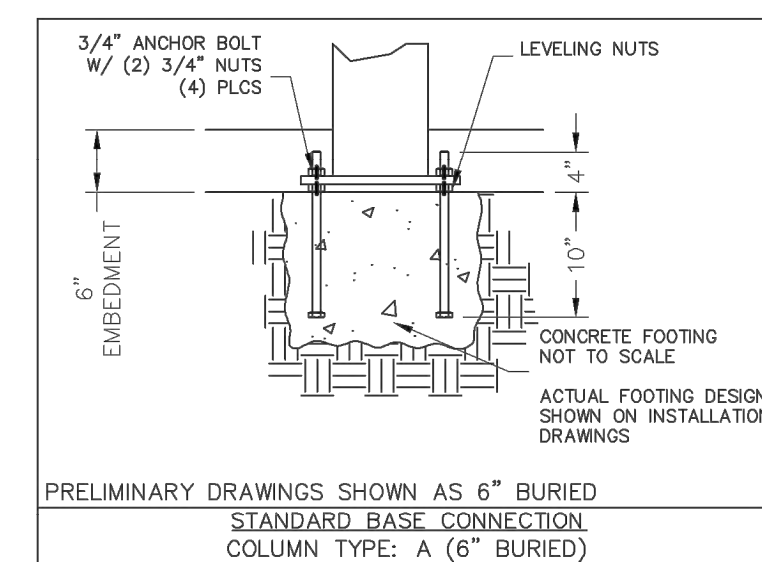
- TABLE SHOWS UNFACTORED SERVICE LOADS
- A FOUNDATION DESIGN HAS NOT BEEN PERFORMED BY ICON SHELTER SYSTEMS INC.
- A LICENSED ENGINEER FAMILIAR WITH SOIL CONDITIONS AT CONSTRUCTION SITE MUST PERFORM A FOUNDATION DESIGN.
- THE STRUCTURE HAS BEEN ENGINEERED AS AN OPEN STRUCTURE.
- CONSULT ICON SHELTER SYSTEMS INC. IF THE STRUCTURE IS TO BE ENCLOSED.
- COORDINATES ARE LOCAL TO THE COLUMN

**DEFINITIONS:**

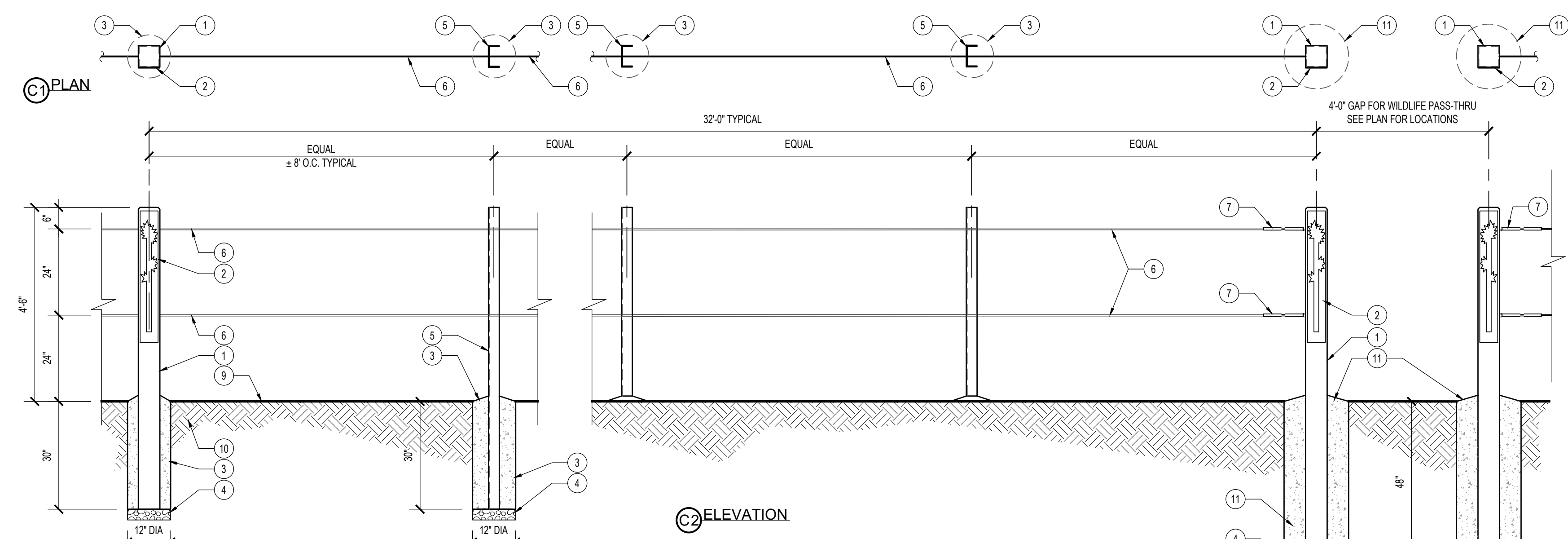
- DL = SERVICE LEVEL DEAD LOAD REACTION WITH THE GREATEST AXIAL LOAD
- SL = SERVICE LEVEL SNOW LOAD REACTION WITH THE GREATEST AXIAL LOAD
- W-UPLIFT = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST UPLIFT LOAD
- W-FY = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION
- W-FZ = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST SHEAR VALUE ACTING IN THE SAME DIRECTION AS THE DL SHEAR LOAD
- E-FY = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION
- E-FZ = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Z DIRECTION



**SHADE SHELTER NOTE:**  
SHADE SHELTER PLAN AND DETAILS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE AND SUBMIT FINAL MANUFACTURE PLANS, DETAILS, SPECIFICATIONS AND STRUCTURAL CALCULATIONS FOR SEPARATE SUBMITTAL AND PERMIT. FOOTING DEPTH REQUIRED WITH SHOP DRAWING SUBMITTALS.



**B** SHADE SHELTER - FRAMING & FOOTING PLAN REFERENCE ONLY DEFERRED SUBMITTAL  
SCALE: NTS



**C** 2-CABLE FENCE  
SCALE: 1/2\"/>

**LEGEND:**

- 8\"/>
- 1/4\"/>
- 12\"/>
- 3\"/>
- C\"/>
- 1/2\"/>
- SWAGE TERMINAL FITTING AT CABLE ENDS.
- CONCRETE FOOTINGS AT DIAGONAL BRACE.
- FINISH GRADE.
- COMPACTED SUBGRADE.
- 18\"/>

**NOTES:**

- ALL CONNECTIONS TO BE CONTINUOUS WELDED.
- REMOVE ALL SLAG & SPATTER, AND GRIND ALL WELDS SMOOTH.
- ALL TUBING TO BE CAPPED AND WELDED CLOSED.
- CONTRACTOR TO RECEIVE CAD FILE FOR 'JOSHUA TREE' CUT OUT FROM LANDSCAPE ARCHITECT.

PRODUCT: Q2-KERNEL-S WEIGHT: 650 lbs. (CONCRETE WEIGHT 600 (300) LBS.)

CONCRETE COLOR:  BROWN  REDDISH  BLACK  WHITE  GREY

CONCRETE TEXTURE:  PERFORMED  EXPOSURE  SAND  SEALER: PERMASHIELD 4200 SEALER

GENERAL PRODUCT NOTES:  
E = EXPOSED FINISHED SURFACE  
INSTALLATION IS REQUIRED BY OTHERS  
ALL EDGES TO BE FINISHED  
MANUFACTURER'S TOLERANCE ±1/8\"/>

**HARDWARE LIST**

QTY	TYPE
1	1/2\"/>
1	SWAGES

**QCQ**  
www.qcq-corp.com

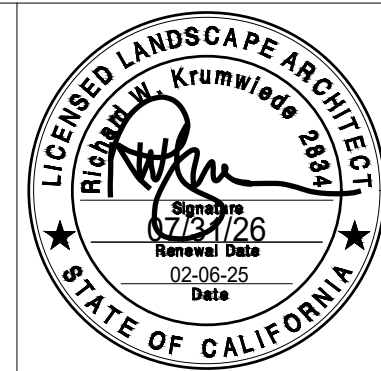
DATE	BY	DESCRIPTION
02/24/2026	JMH	CONSTRUCTION PLAN

**D** QCQ Q2-KERNEL-S  
SCALE: NTS



**BENCHMARK:**  
FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**  
CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA, CALIFORNIA 91730 PH: (909) 454-2800

PREPARED UNDER THE SUPERVISION OF:  
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:  
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

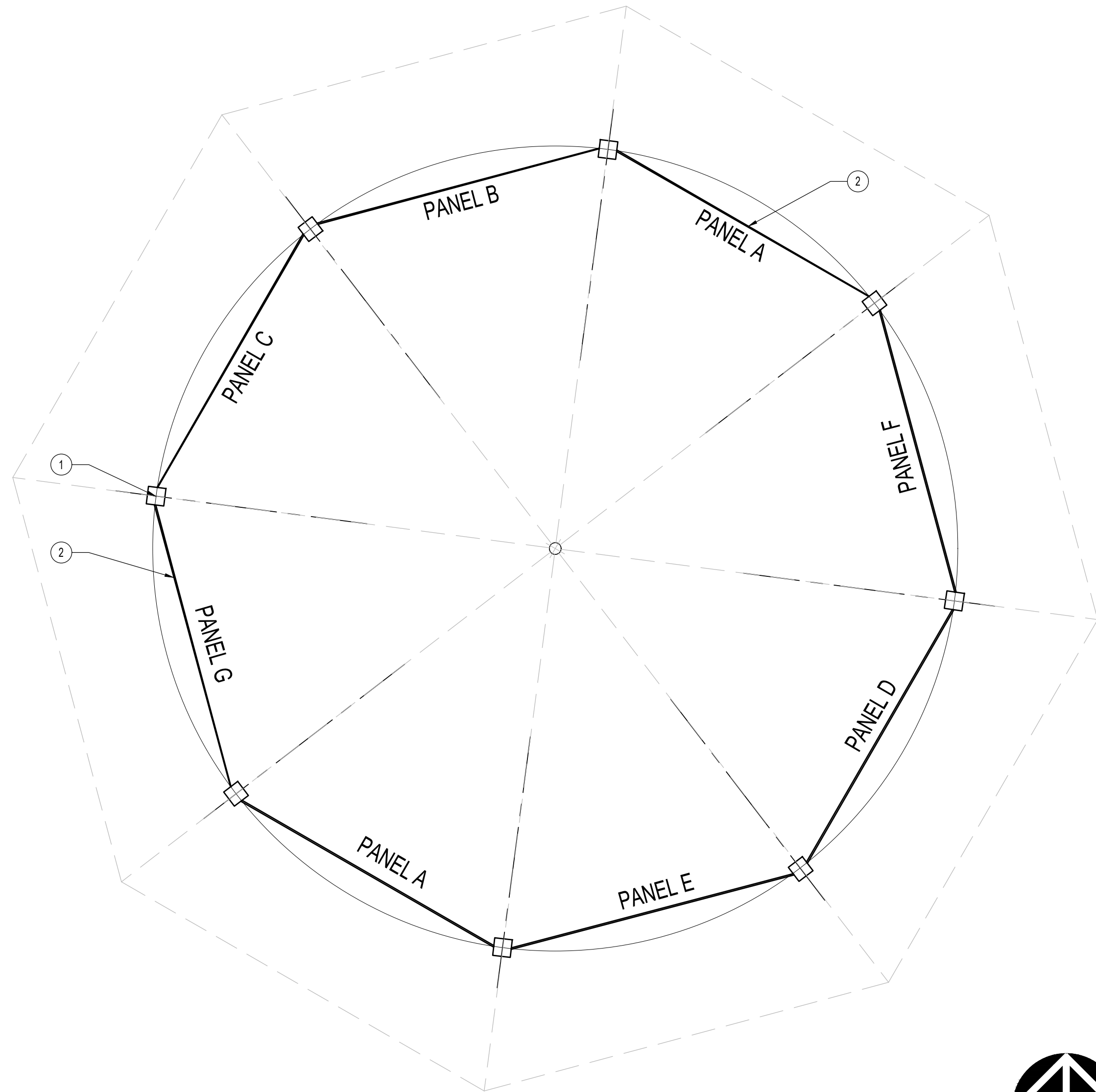
Assistant Director: David R. Waddell  
Date: 02/24/2026

APPROVALS:

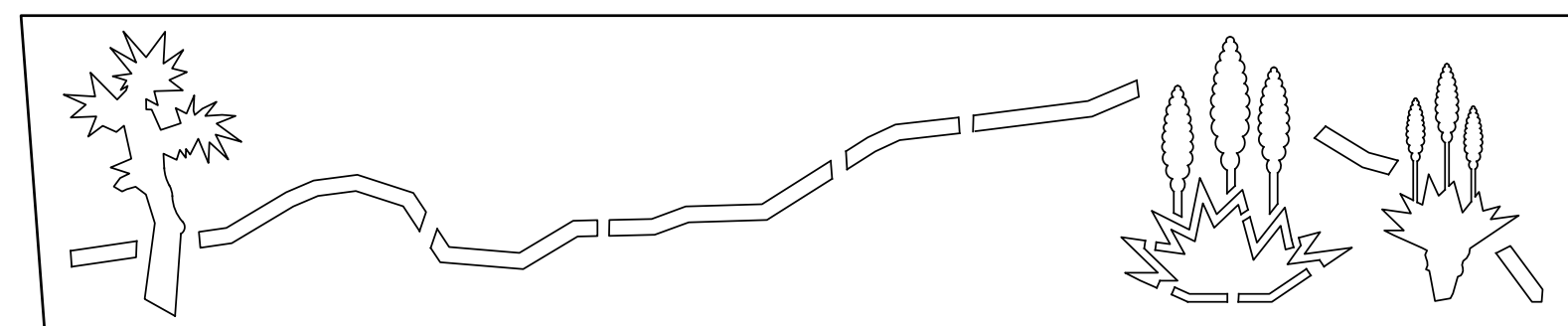
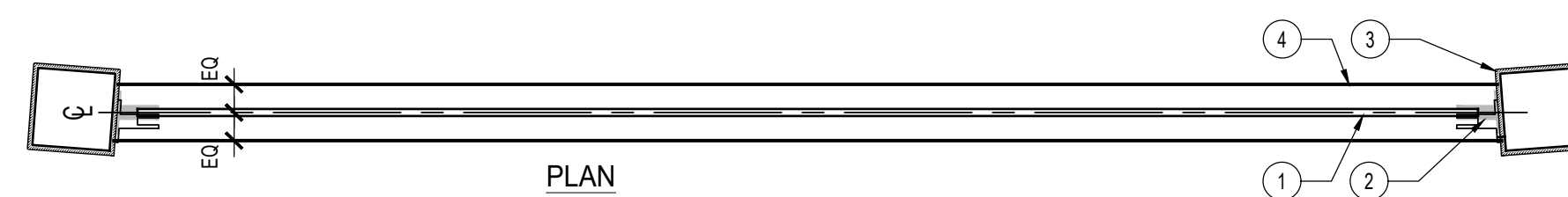
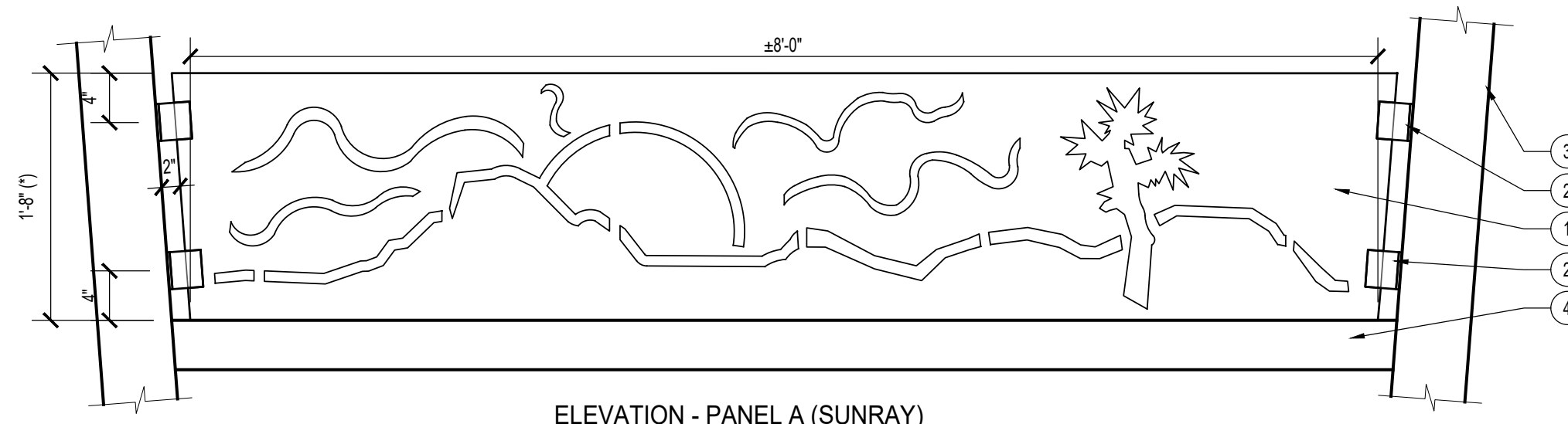
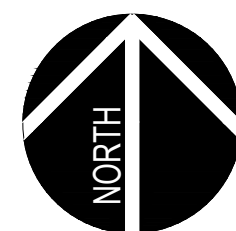
PROJECT MANAGER	INITIAL	DATE
JMH	JMH	02/10/2026
OPS. DIVISION MANAGER	AM	2/10/2026
PM. DIVISION MANAGER		02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
CONSTRUCTION DETAILS 8

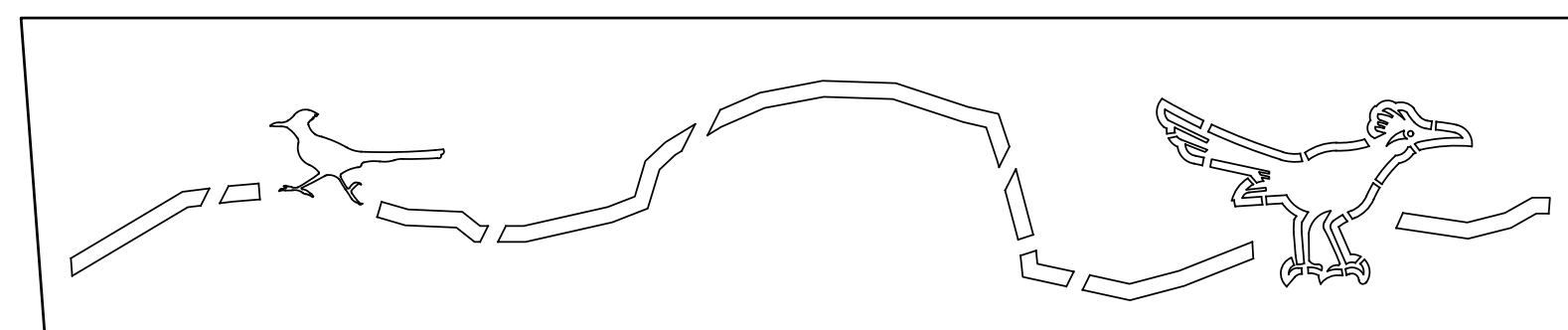
DWG NO. L-1.20  
FILE NO. 30.30.0170  
SHEET 22 OF 33



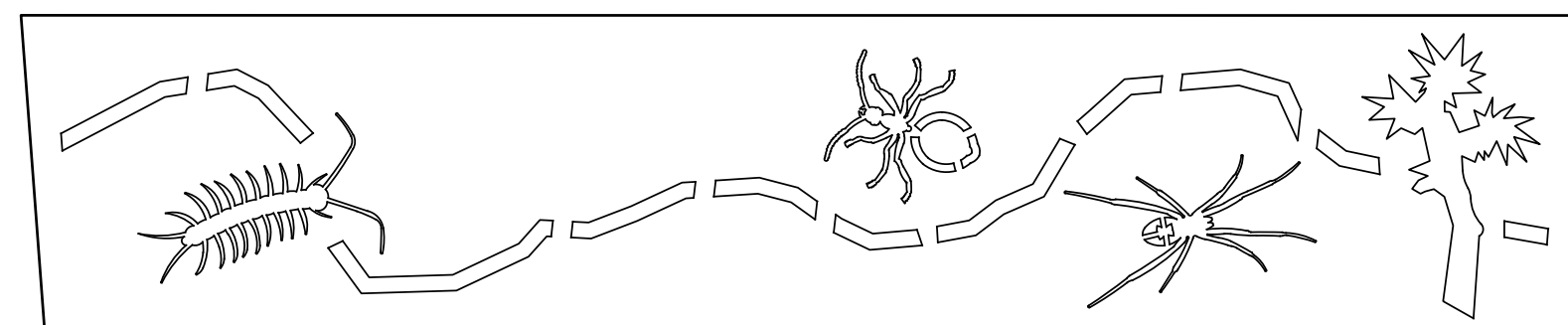
**LEGEND:**  
 1. STEEL POST AT SHADE SHELTER PER PLAN.  
 2. STEEL PANEL, TYPICAL.



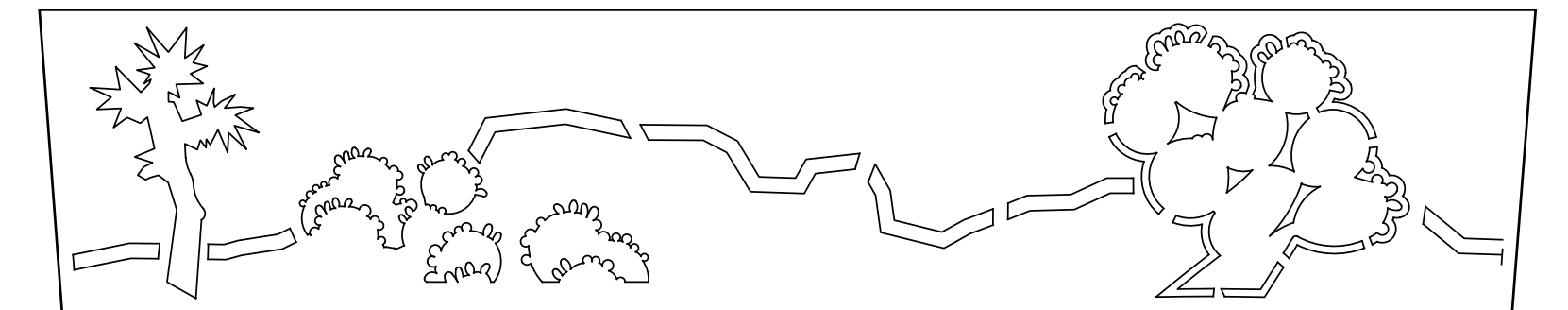
ELEVATION - PANEL B (YUCCA PLANT)



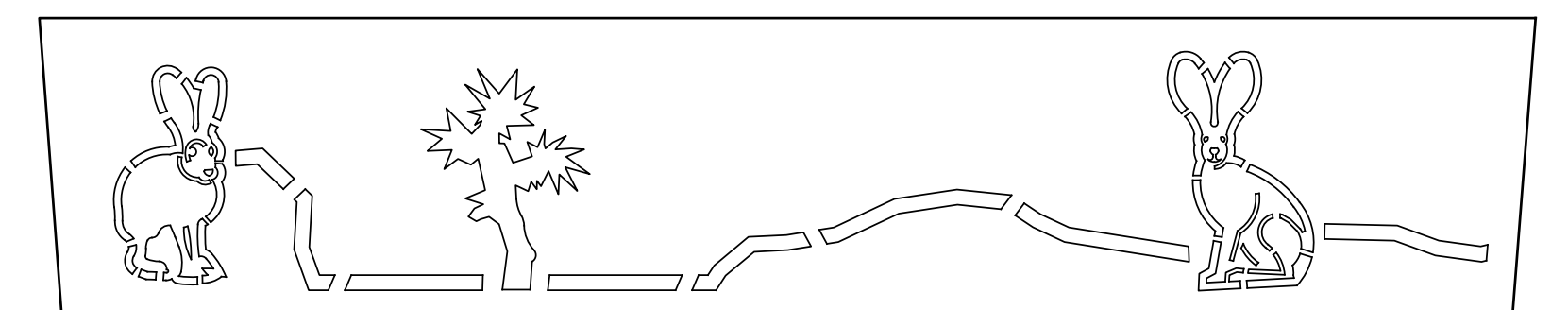
ELEVATION - PANEL C (ROAD RUNNER)



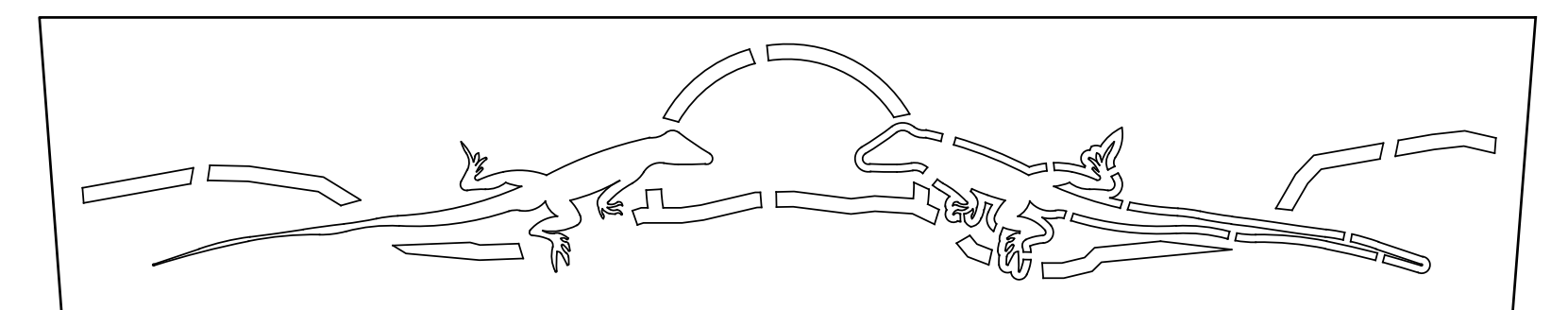
ELEVATION - PANEL D (CENTIPEDE, HONEY POT ANT, BLACK WIDOW)



ELEVATION - PANEL E (OPUNTIA)



ELEVATION - PANEL F (RABBIT)



ELEVATION - PANEL G (LIZARD)

**LEGEND:**  
 1. 1/4" THICK WEATHERING STEEL PLATE WITH CUT OUTS. FINAL ART WORK TO BE PROVIDED. WELD PLATE DIRECTLY TO BEAM ALONG BOTTOM. USE MOUNTING TABS TO SECURE PLATE TO POSTS.  
 2. WEATHERING STEEL MOUNTING TABS. WELD TABS TO 1/4" THICK PLATE AND TO SHADE STRUCTURE POSTS.  
 3. STEEL ICON SHELTER POST PER MANUFACTURER.  
 4. STEEL ICON SHELTER BEAM PER MANUFACTURER.

**NOTES:**  
 A. CENTER PANELS BETWEEN ANGLED COLUMNS AND OVER BEAM, AS SHOWN. FIELD MEASURE POSTS SPACING PRIOR TO FABRICATION OF PANELS.  
 B. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS OF STEEL GRAPHIC FOR LANDSCAPE ARCHITECT'S REVIEW AND APPROVAL PRIOR TO FABRICATION.

**A** CREOSOTE DISCOVERY - SILHOUETTE PANEL PLACEMENT  
 SCALE: 3/8" = 1'-0"  
 REFERENCE NUMBER: SS-21

P-2417.1B-DV-24

**B** CREOSOTE DISCOVERY SHELTER - SILHOUETTE PANEL  
 SCALE: 1" = 1'-0"  
 REFERENCE NUMBER:

P-2417.1B-DV-22



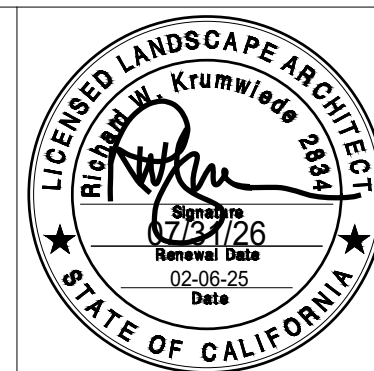
Know what's below.  
 Call before you dig.

**BENCHMARK:**

FOUND REBAR & CAP HGLLC RP  
 FLUSH PER CAD FILE PROVIDED BY  
 SPECIAL DISTRICTS (POINT #1001)  
 ELEV = 3154.12'

**BASIS OF BEARINGS:**

CCS83 ZONE 5, NAD83(2011),  
 EPOCH 2010.0



PREPARED UNDER THE SUPERVISION OF:

PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. \_\_\_\_\_ DATE \_\_\_\_\_

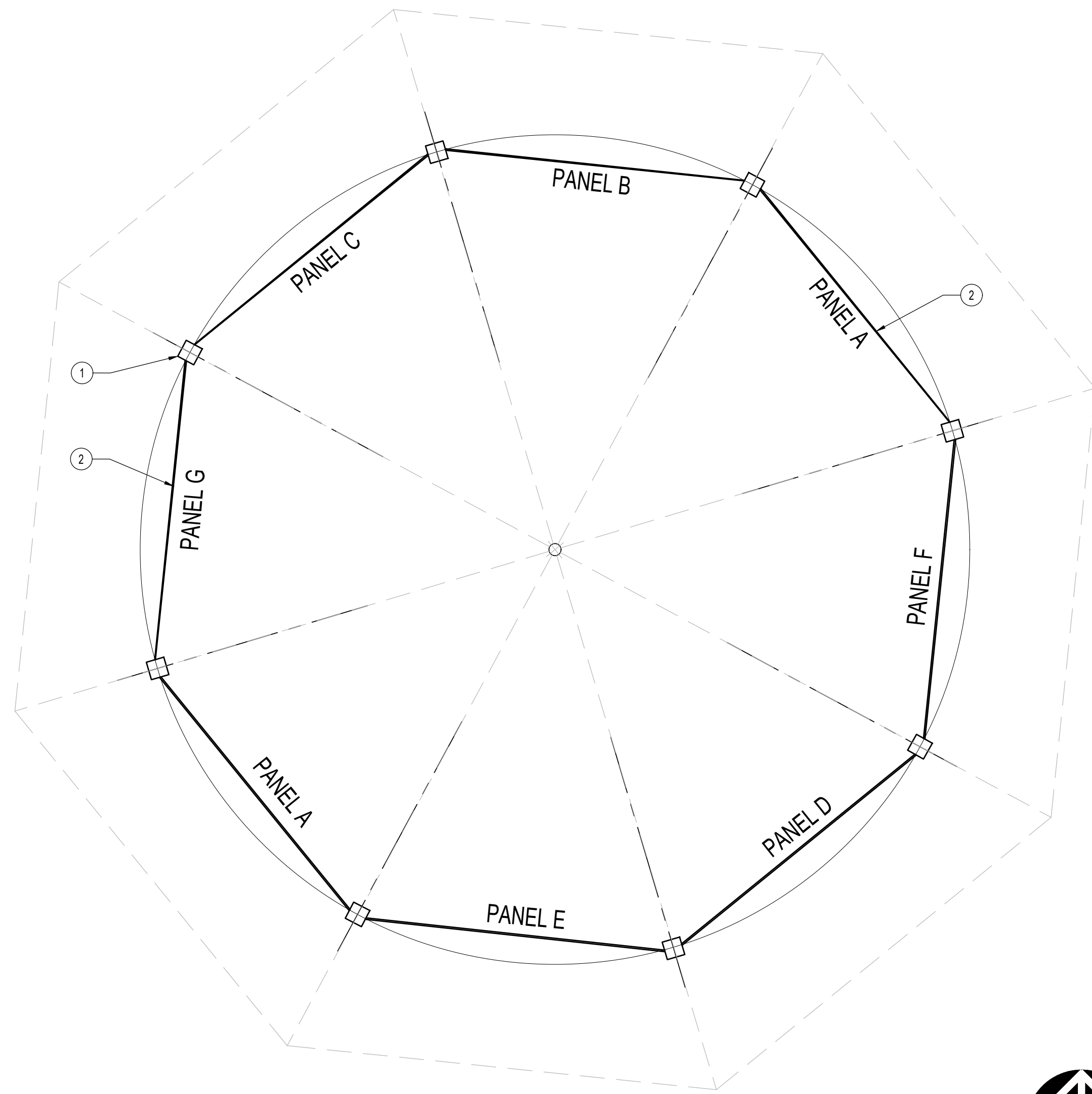
REVISIONS				
MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

APPROVALS		DATE	
PROJECT MANAGER	JMH	02/10/2026	
OPS. DIVISION MANAGER		2/10/2026	
PM. DIVISION MANAGER		02/10/2026	

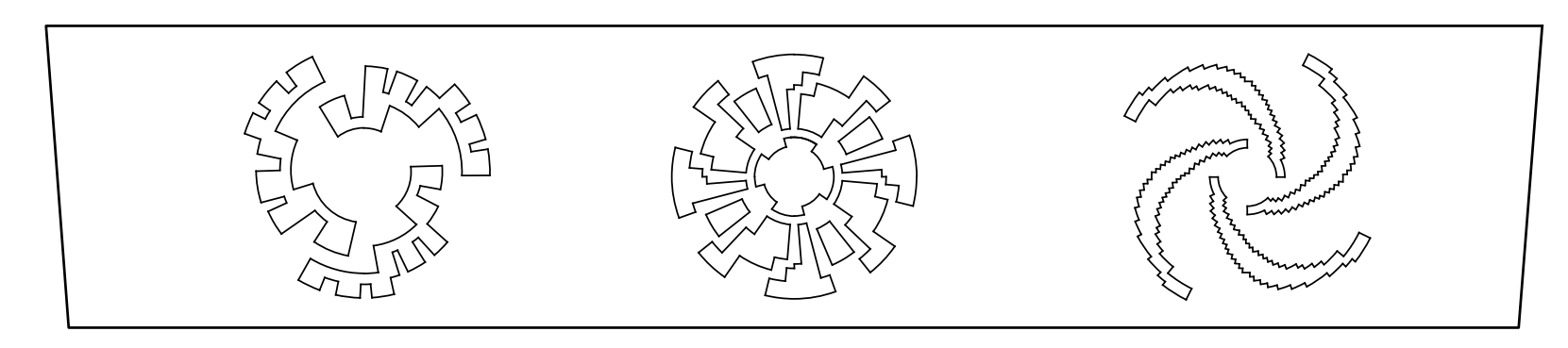
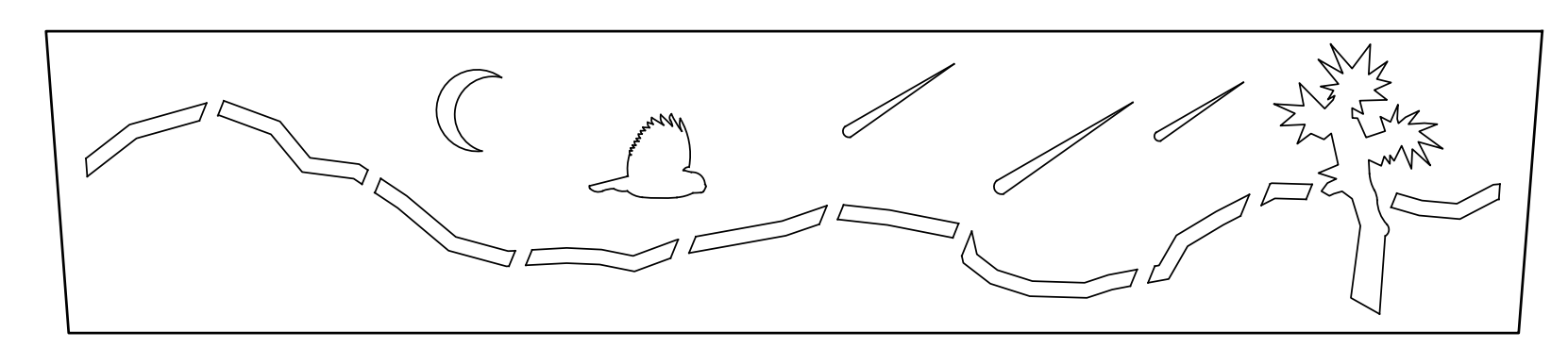
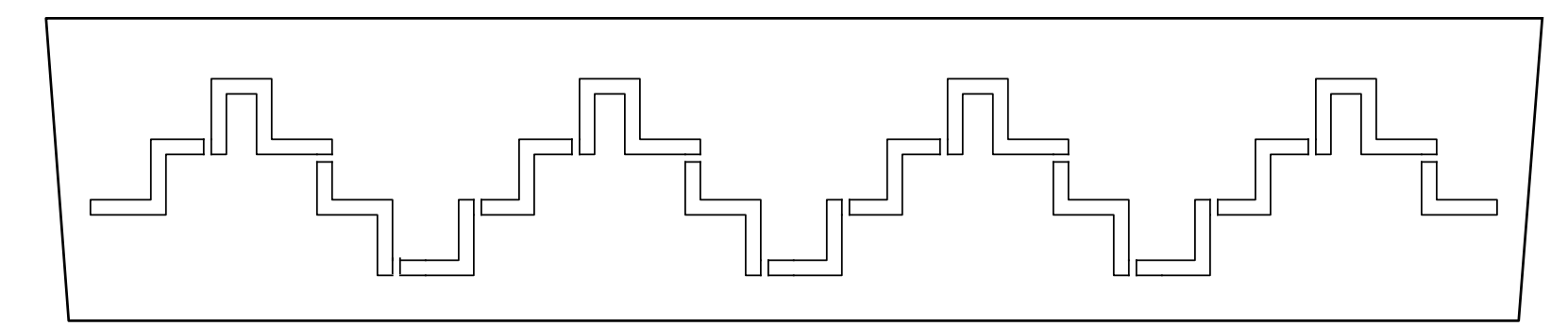
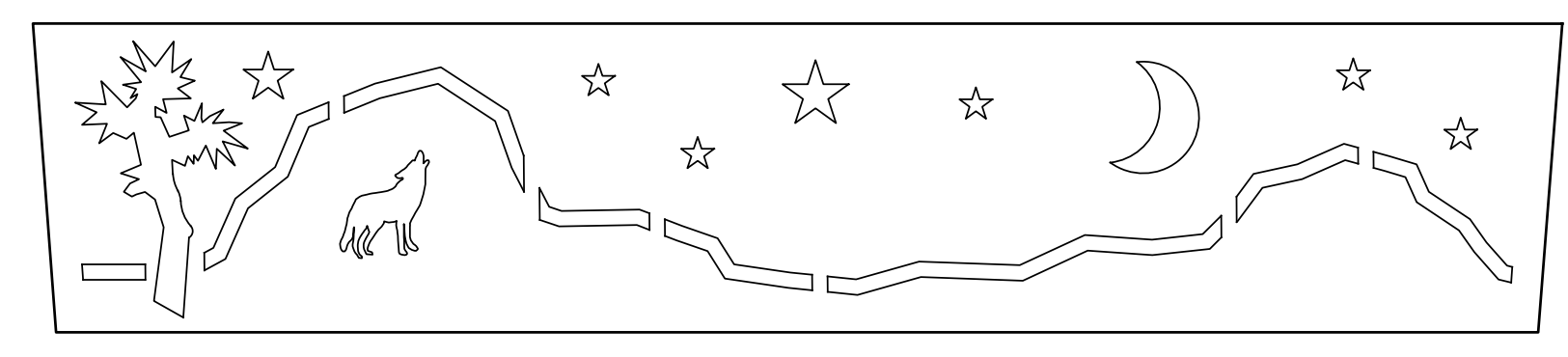
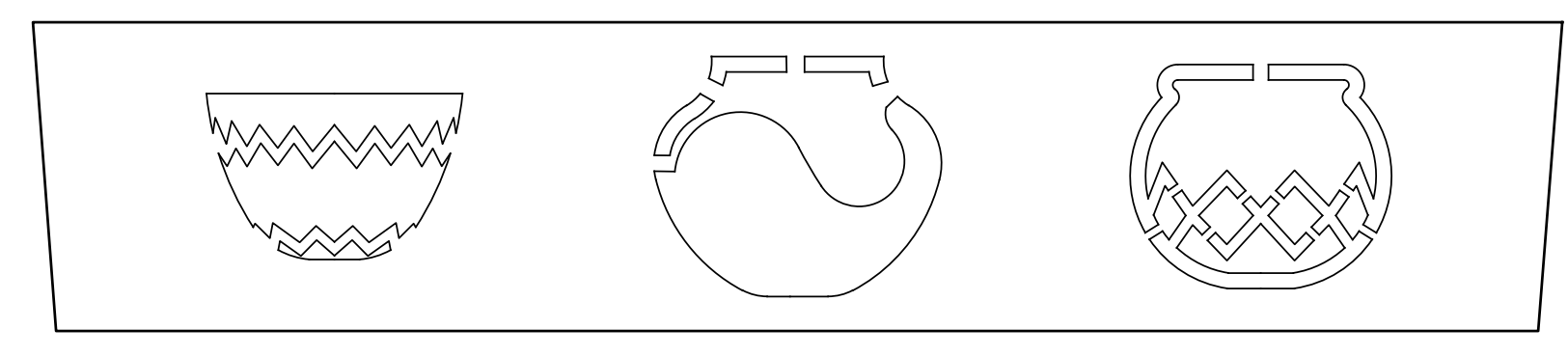
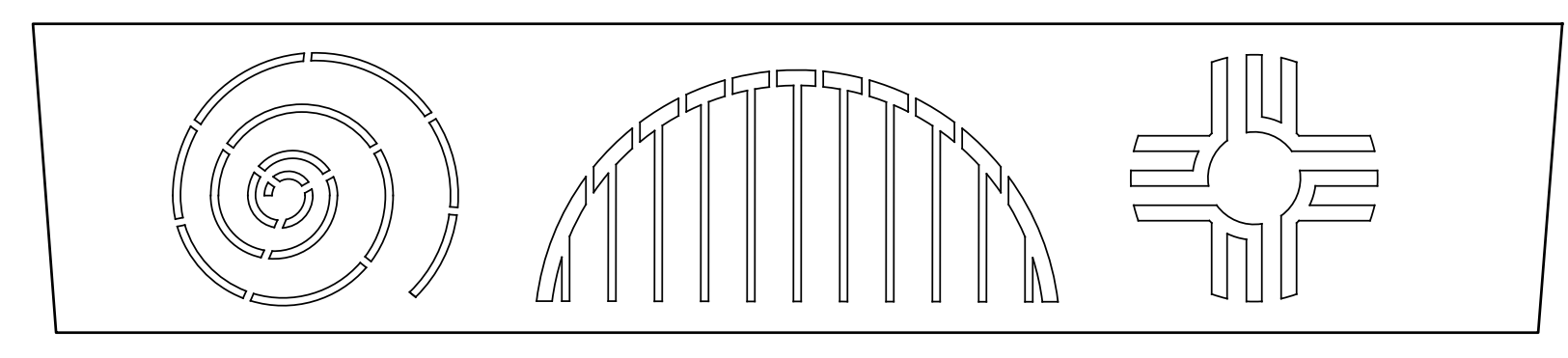
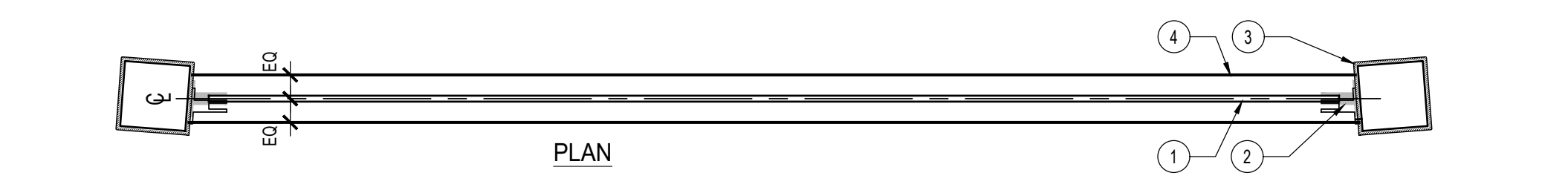
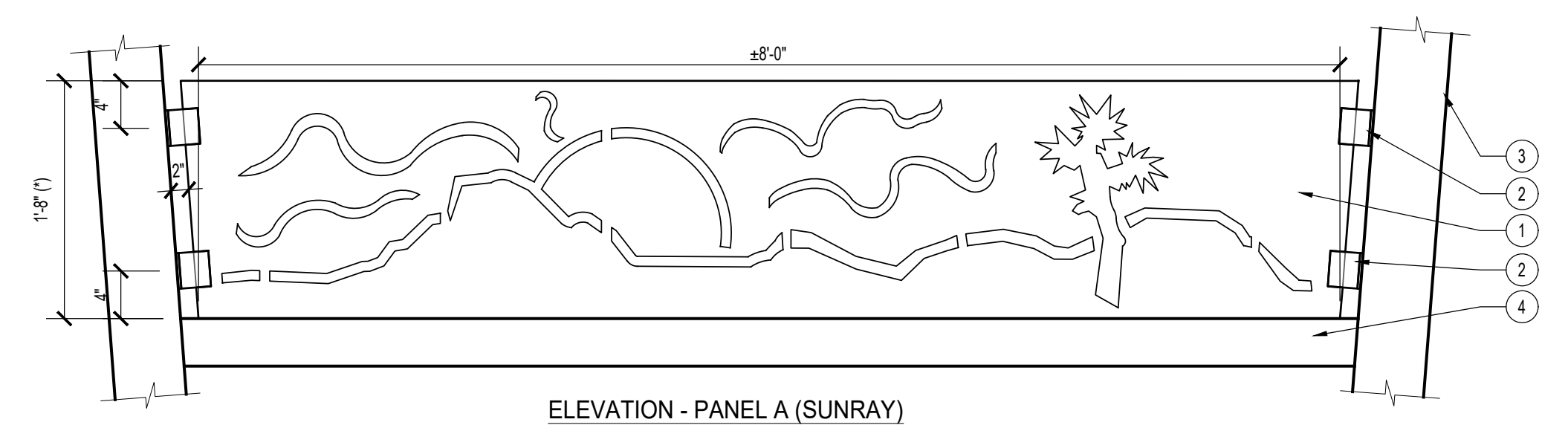
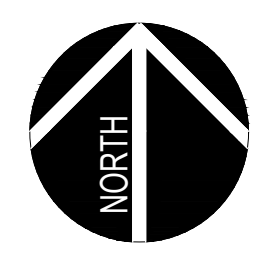
PLANS APPROVED BY:  
 SAN BERNARDINO COUNTY - PUBLIC WORKS  
 SPECIAL DISTRICTS  
 David R. Washburn  
 ASSISTANT DIRECTOR  
 02/24/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
 PHASE 2 DESERT VIEW CONSERVATION AREA  
 RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 8**

DWG NO. L-1.21  
 FILE NO. 30.30.0170  
 SHEET 23 OF 33



**LEGEND:**  
 1. STEEL POST AT SHADE SHELTER PER PLAN.  
 2. STEEL PANEL, TYPICAL.

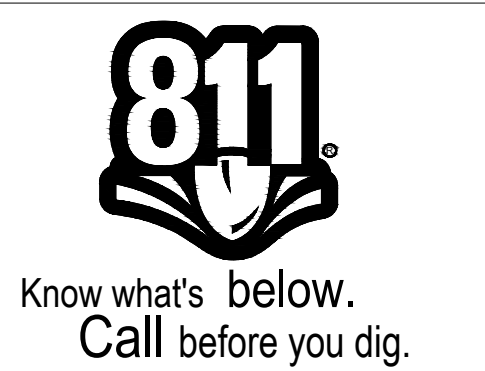


**LEGEND:**  
 1. 1/4\"/>

**NOTES:**  
 A. CENTER PANELS BETWEEN ANGLED COLUMNS AND OVER BEAM, AS SHOWN. FIELD MEASURE POSTS SPACING PRIOR TO FABRICATION OF PANELS.  
 B. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS OF STEEL GRAPHIC FOR LANDSCAPE ARCHITECT'S REVIEW AND APPROVAL PRIOR TO FABRICATION.

**A** NATIVE AMERICAN DISCOVERY - SILHOUETTE PANEL PLACEMENT  
 SCALE: 3/8\"/>

**B** NATIVE AMERICAN DISCOVERY SHELTER - SILHOUETTE PANEL  
 SCALE: 1\"/>



**BENCHMARK:**  
 FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**  
 CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
 LANDSCAPE ARCHITECTURE AND PLANNING  
 10221-A TRADEMARK ST. RANCHO CUCAMONGA, CALIFORNIA 91730 PH: (909) 454-2800  
 PREPARED UNDER THE SUPERVISION OF:  
 PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS				
MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

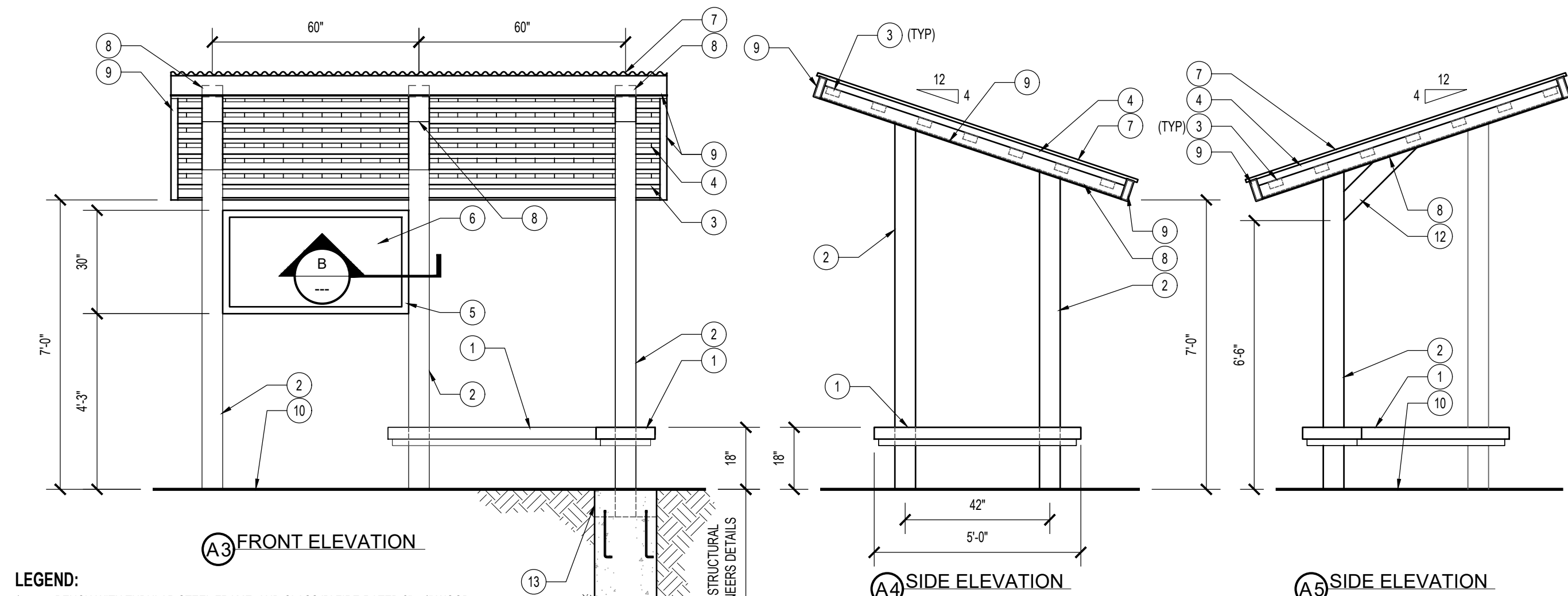
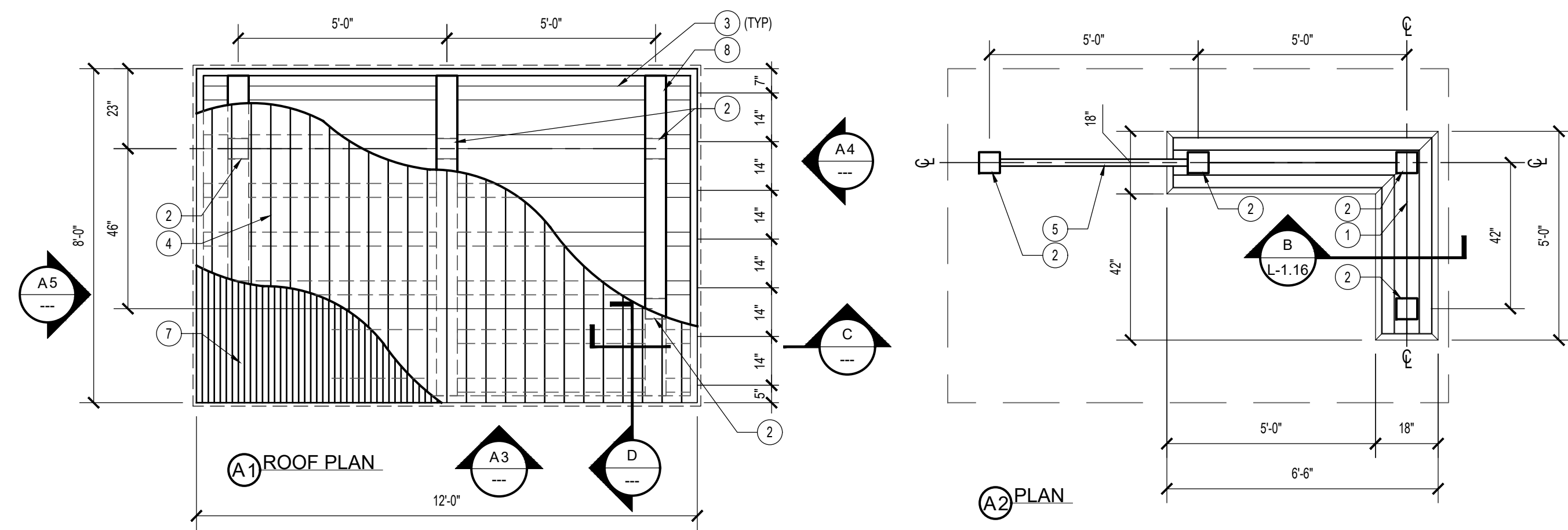
PLANS APPROVED BY:  
**SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS**  
 ASSISTANT DIRECTOR  
 DATE: 02/24/2026

APPROVALS:

PROJECT MANAGER	INITIAL: JMH	DATE: 02/10/2026
OPS. DIVISION MANAGER	INITIAL: AM	DATE: 2/10/2026
PM. DIVISION MANAGER		DATE: 02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
 PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 9**

DWG NO. L-1.22  
 FILE NO. 30.30.0170  
 SHEET 24 OF 33

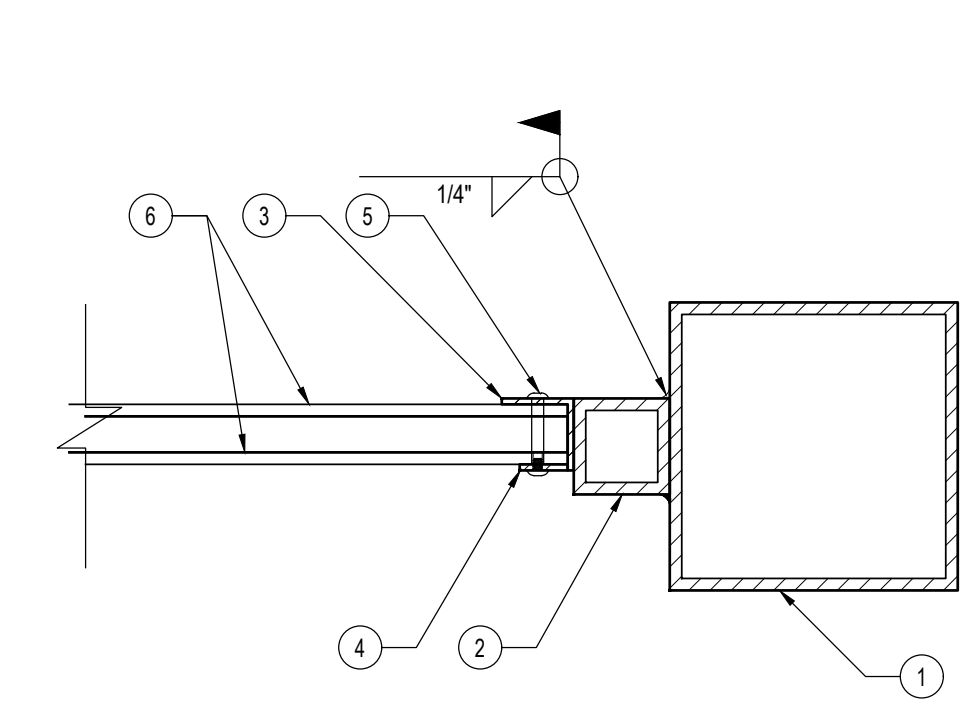


- LEGEND:**
- BENCH WITH TUBULAR STEEL FRAME, AND CLASS 'B' FIRE-RATED 2" x 4" WOOD POLYMER DECKING BOARD SEAT. SEE STRUCTURAL FOR CONNECTIONS.
  - 6" SQ. WEATHERING TUBULAR STEEL POST.
  - 2" x 4" WEATHERING TUBULAR STEEL RAFTER. WELD BETWEEN 6" SQ. T.S. BEAMS.
  - 2" x 6" TONGUE AND GROOVE BOARD.
  - SIGN 2" SQ. x 1/4" TUBULAR STEEL FRAME.
  - TRAIL MAP DIRECTORY SIGN. MAP GRAPHIC TO BE PROVIDED. BOTH SIDES.
  - 7/8" WEATHERING STEEL CORRUGATED STEEL PANEL ROOF.
  - 6" SQ. WEATHERING TUBULAR STEEL BEAM. CLOSE ENDS, AND WELD TO TOP OF POSTS.
  - 2" x 6" WEATHERING TUBULAR STEEL FASCIA. ALL SIDES.
  - FINISH SURFACE PER CONSTRUCTION PLAN.
  - CONCRETE FOOTING. TYPICAL EACH POST. FOOTING AND POST CONNECTION PER STRUCTURAL ENGINEER'S DETAILS.
  - 6" x 6" TUBULAR WEATHERING STEEL BRACE. WELD TO POST AND BEAM.
  - PROVIDE CONCRETE FINISH UP TO FINISH SURFACE. MATCH FOOTING SIZE.

**TYPICAL METAL CONSTRUCTION NOTES:**  
ALL CONNECTIONS TO BE CONTINUOUSLY WELDED.  
REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS WELDED CLOSED.  
FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT (2) COATS.

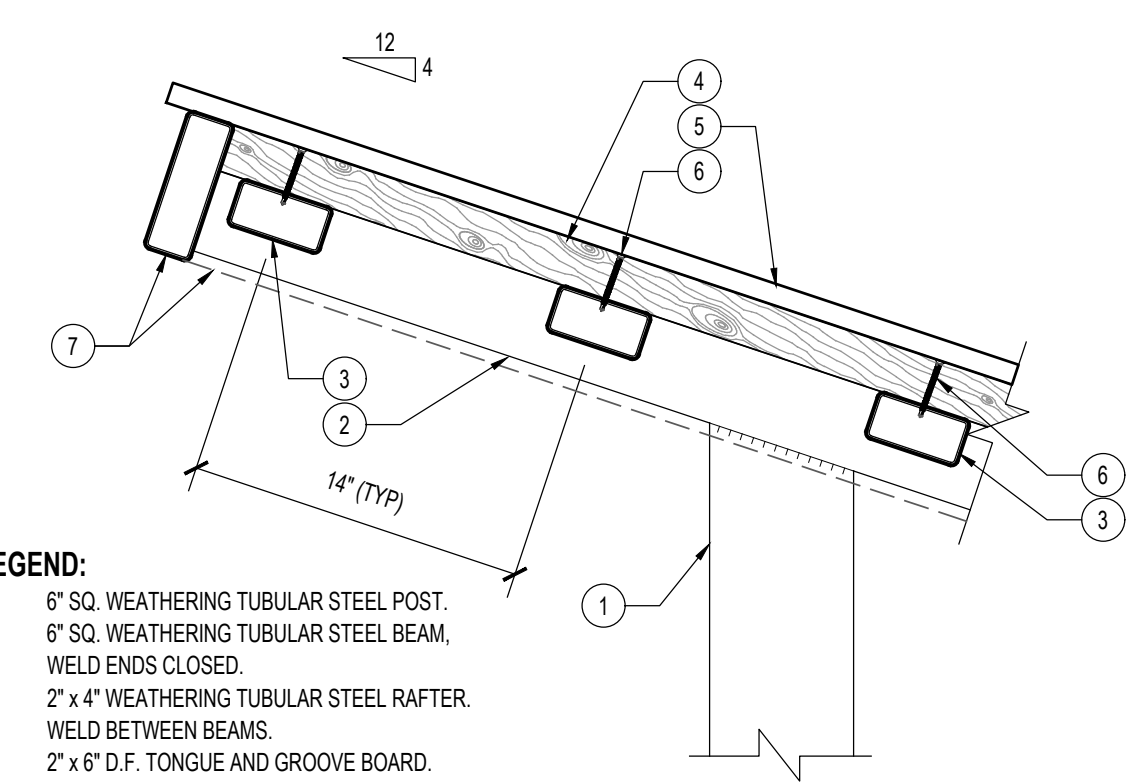
**A KIOSK**  
SCALE: 3/8" = 1'-0"  
REFERENCE NUMBER: SS-25

P-2417.1B-DV-09



- LEGEND:**
- 6" SQ. WEATHERING TUBULAR STEEL POST.
  - 2" SQ. x 1/4" WEATHERING TUBULAR STEEL FRAME. WELD TO POST. MITER CORNERS.
  - 1 1/2" x 1 1/2" x 1/8" WEATHERING STEEL ANGLE. WELD TO FRAME. MITER CORNERS.
  - 1" x 1/8" WEATHERING STEEL BAR.
  - STAINLESS STEEL TORX TRUSS HEAD SCREW AND BARREL.
  - 3/4" THICK DOUBLE SIDED HIGH PRESSURE LAMINATE MAP PANEL WITH 1/4" LEXAN COVER ON BOTH SIDES.

**B KIOSK MAP FRAME SECTION**  
SCALE: 3" = 1'-0"  
REFERENCE NUMBER: P-2417.1B-DV-10



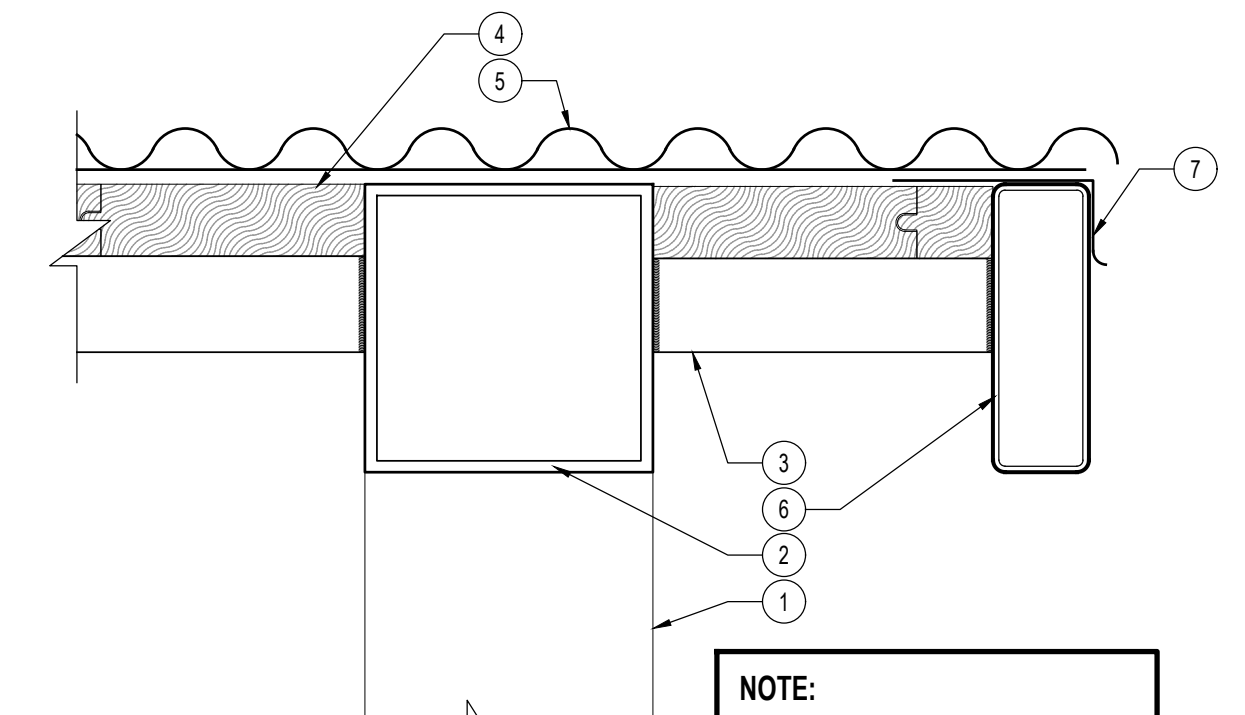
- LEGEND:**
- 6" SQ. WEATHERING TUBULAR STEEL POST.
  - 6" SQ. WEATHERING TUBULAR STEEL BEAM. WELD ENDS CLOSED.
  - 2" x 4" WEATHERING TUBULAR STEEL RAFTER. WELD BETWEEN BEAMS.
  - 2" x 6" D.F. TONGUE AND GROOVE BOARD.
  - CORRUGATED 7/8" WEATHERING STEEL ROOF PANEL. SECURE TO TONGUE AND GROOVE BOARDS PER MANUFACTURER SPECIFICATIONS.
  - #14 X 2 1/2 FLAT HEAD SELF TAPPING S.S. SCREW.
  - 2" x 6" FASCIA @ PERIMETER, ALL SIDES.

**TYPICAL METAL CONSTRUCTION NOTES:**  
ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED.  
REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.

**NOTE:**  
FINISH EXPOSED WOOD SURFACES W/ (2) COATS EXTERIOR PAINT. COLOR T.B.S.

**D KIOSK RAFTER END**  
SCALE: 1 1/2" = 1'-0"  
REFERENCE NUMBER: P-2417.1B-DV-11

P-2417.1B-DV-11



- LEGEND:**
- 6" SQ. WEATHERING TUBULAR STEEL POST.
  - 6" SQ. WEATHERING TUBULAR STEEL BEAM. CLOSE ENDS.
  - 2" x 4" WEATHERING TUBULAR STEEL RAFTER. WELD BETWEEN BEAMS.
  - 2" x 6" TONGUE AND GROOVE BOARD. ATTACH TO RAFTERS.
  - CORRUGATED 7/8" WEATHERING STEEL ROOFING PANEL. SECURE TO TONGUE & GROOVE BOARDS PER MANUFACTURER SPECIFICATIONS. WITH WP CONNECTORS.
  - 2" x 6" WEATHERING TUBULAR STEEL FASCIA. ALL SIDES.
  - DRIP EDGE FLASHING ON BOTH SIDES TYPICAL.

**NOTE:**  
SEE STRUCTURAL PLANS FOR WELDS AND CONNECTIONS.

FINISH EXPOSED WOOD SURFACES W/ (2) COATS EXTERIOR PAINT. COLOR T.B.S.

**TYPICAL METAL CONSTRUCTION NOTES:**  
ALL CONNECTIONS ARE TO BE CONTINUOUSLY WELDED. REMOVE ALL SLAG AND SPLATTER, AND GRIND ALL WELDS SMOOTH. ALL TUBING TO HAVE ENDS CLOSED. FINISH ALL NON-WEATHERING STEEL WITH BLACK OXIDE PAINT, (2) COATS.

**C KIOSK ROOF SECTION**  
SCALE: 3" = 1'-0"  
REFERENCE NUMBER: P-2417.1B-DV-12

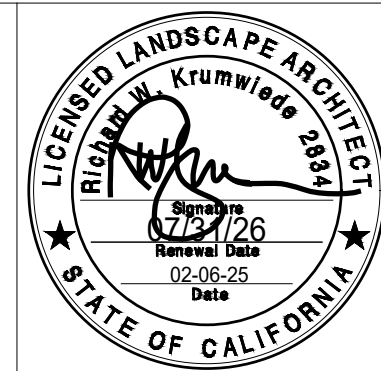
P-2417.1B-DV-12



Know what's below.  
Call before you dig.

**BENCHMARK:**  
FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001) ELEV = 3154.12'

**BASIS OF BEARINGS:**  
CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



PREPARED UNDER THE SUPERVISION OF:  
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. \_\_\_\_\_ DATE \_\_\_\_\_

REVISIONS				
MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

PLANS APPROVED BY:  
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

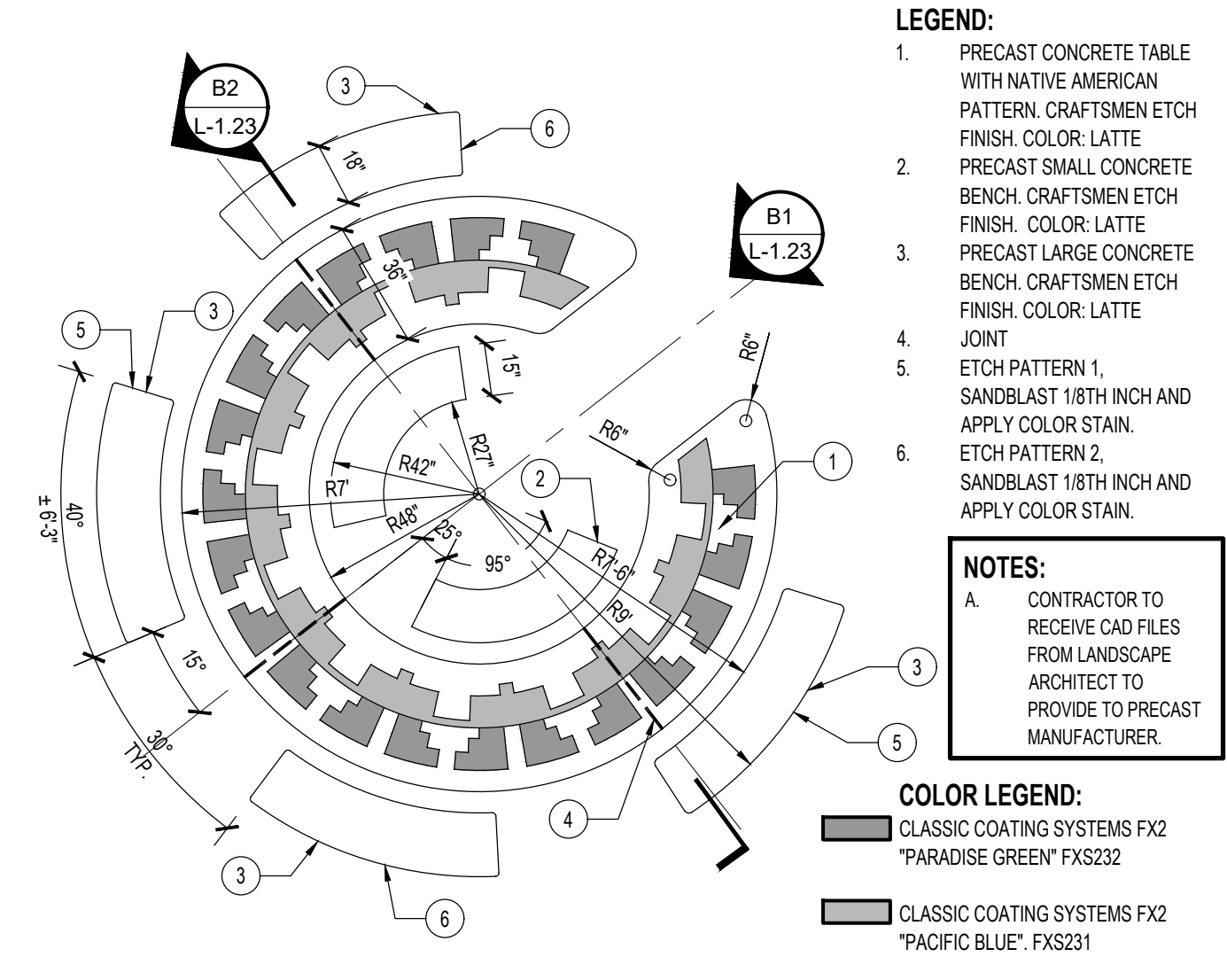
*David R. Washburn*  
ASSISTANT DIRECTOR

DATE: 02/24/2026

APPROVALS	INITIAL	DATE
PROJECT MANAGER	JMH	02/10/2026
OPS. DIVISION MANAGER	AM	2/10/2026
PM. DIVISION MANAGER		02/10/2026

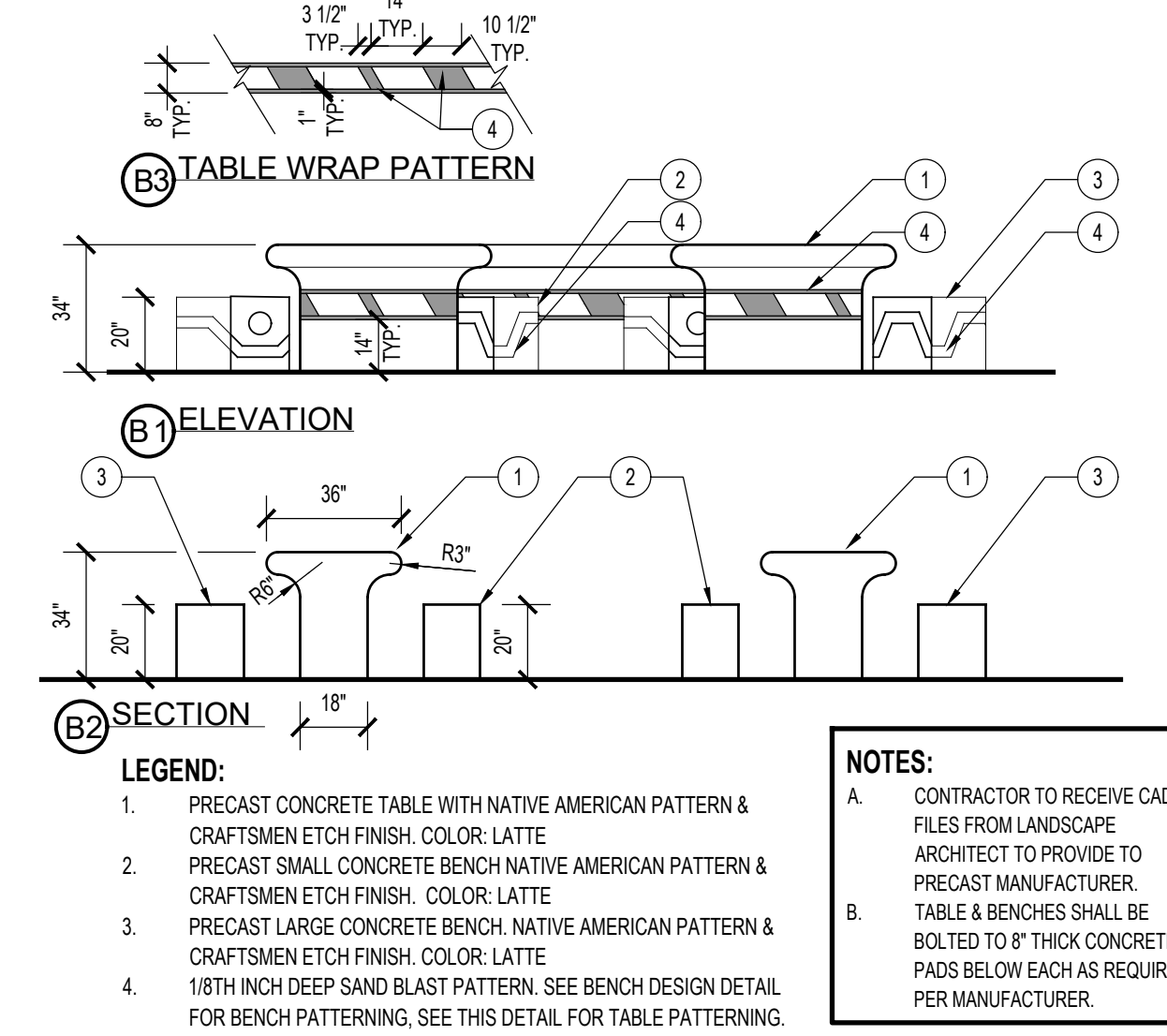
COUNTY SERVICE AREA 20 JOSHUA TREE  
PHASE 2 DESERT VIEW CONSERVATION AREA RECREATIONAL TRAILS PROJECT  
**PH 2 IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS 10**

DWG NO. **L-1.23**  
FILE NO. **30.30.0170**  
SHEET **25** OF **33**

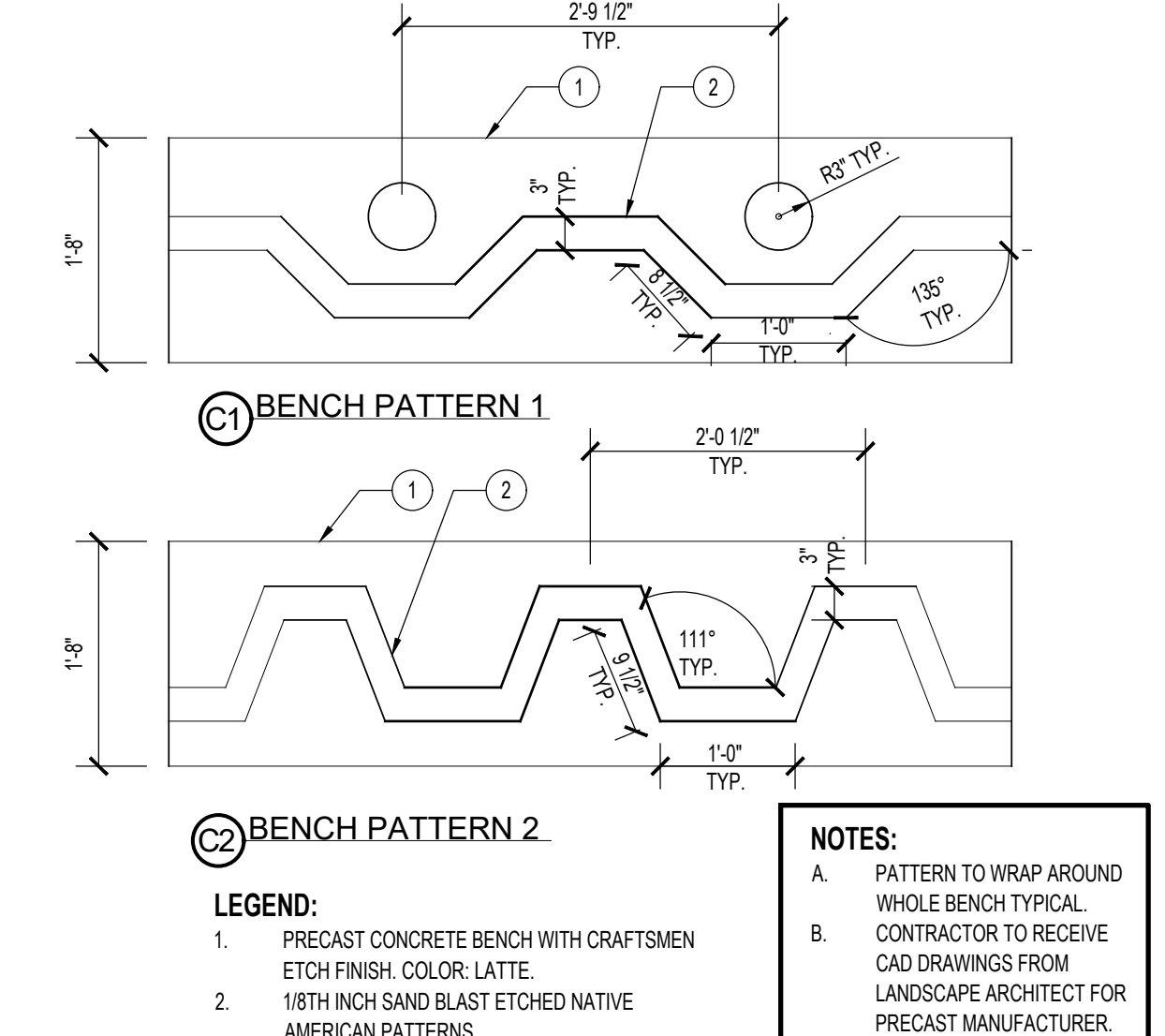


- LEGEND:**
1. PRECAST CONCRETE TABLE WITH NATIVE AMERICAN PATTERN. CRAFTSMEN ETCH FINISH. COLOR: LATTE
  2. PRECAST SMALL CONCRETE BENCH. CRAFTSMEN ETCH FINISH. COLOR: LATTE
  3. PRECAST LARGE CONCRETE BENCH. CRAFTSMEN ETCH FINISH. COLOR: LATTE
  4. JOINT
  5. ETCH PATTERN 1. SANDBLAST 1/8TH INCH AND APPLY COLOR STAIN
  6. ETCH PATTERN 2. SANDBLAST 1/8TH INCH AND APPLY COLOR STAIN
- NOTES:**
- A. CONTRACTOR TO RECEIVE CAD FILES FROM LANDSCAPE ARCHITECT TO PROVIDE TO PRECAST MANUFACTURER.
- COLOR LEGEND:**
- CLASSIC COATING SYSTEMS FX2 "PARADISE GREEN" FXS232
  - CLASSIC COATING SYSTEMS FX2 "PACIFIC BLUE" FXS231

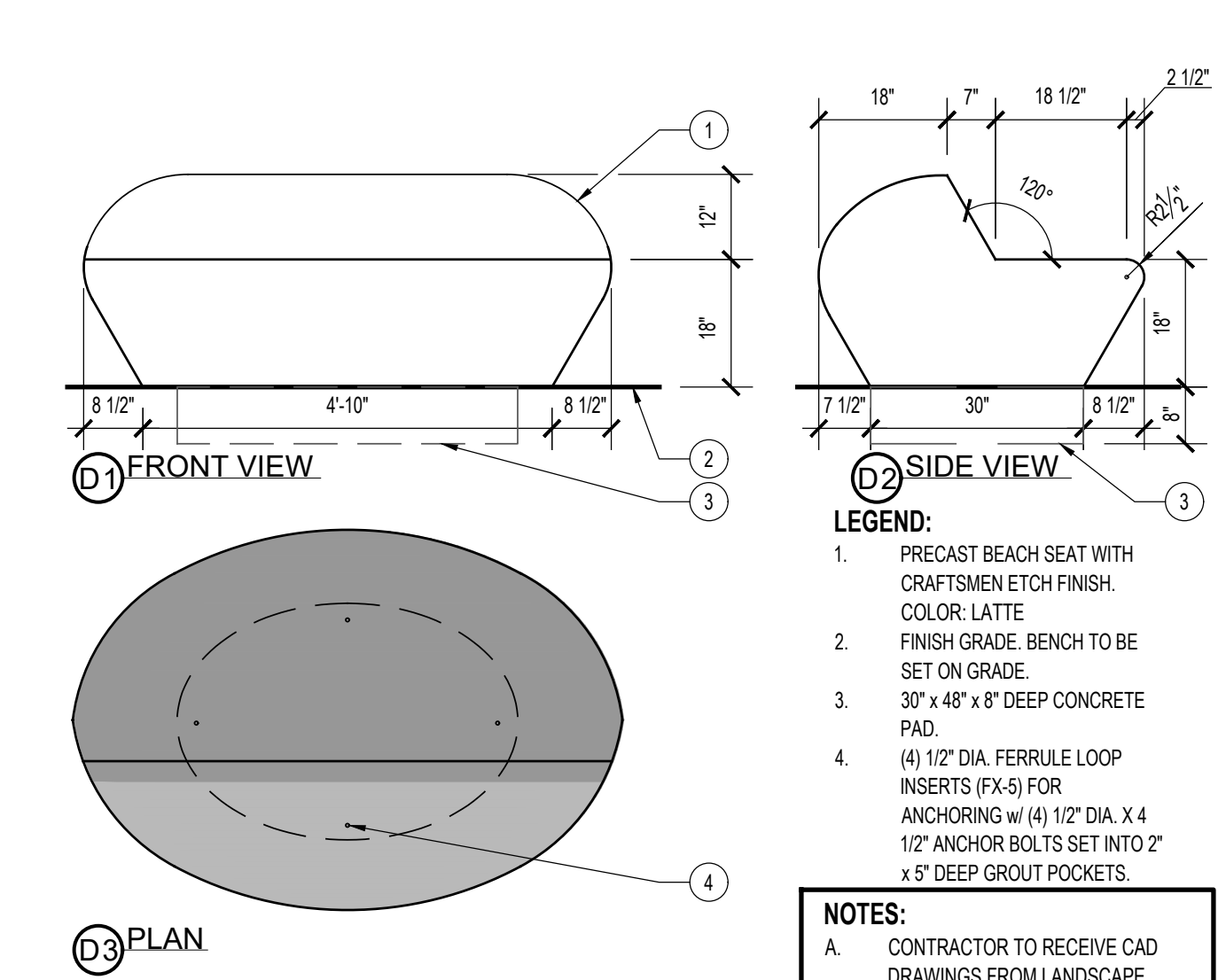
**A NATIVE AMERICAN TABLE WITH BENCHES - PLAN**  
SCALE: 1/4" = 1'-0"  
REFERENCE NUMBER: A-15, A-16  
P-2417.1B-DV-28



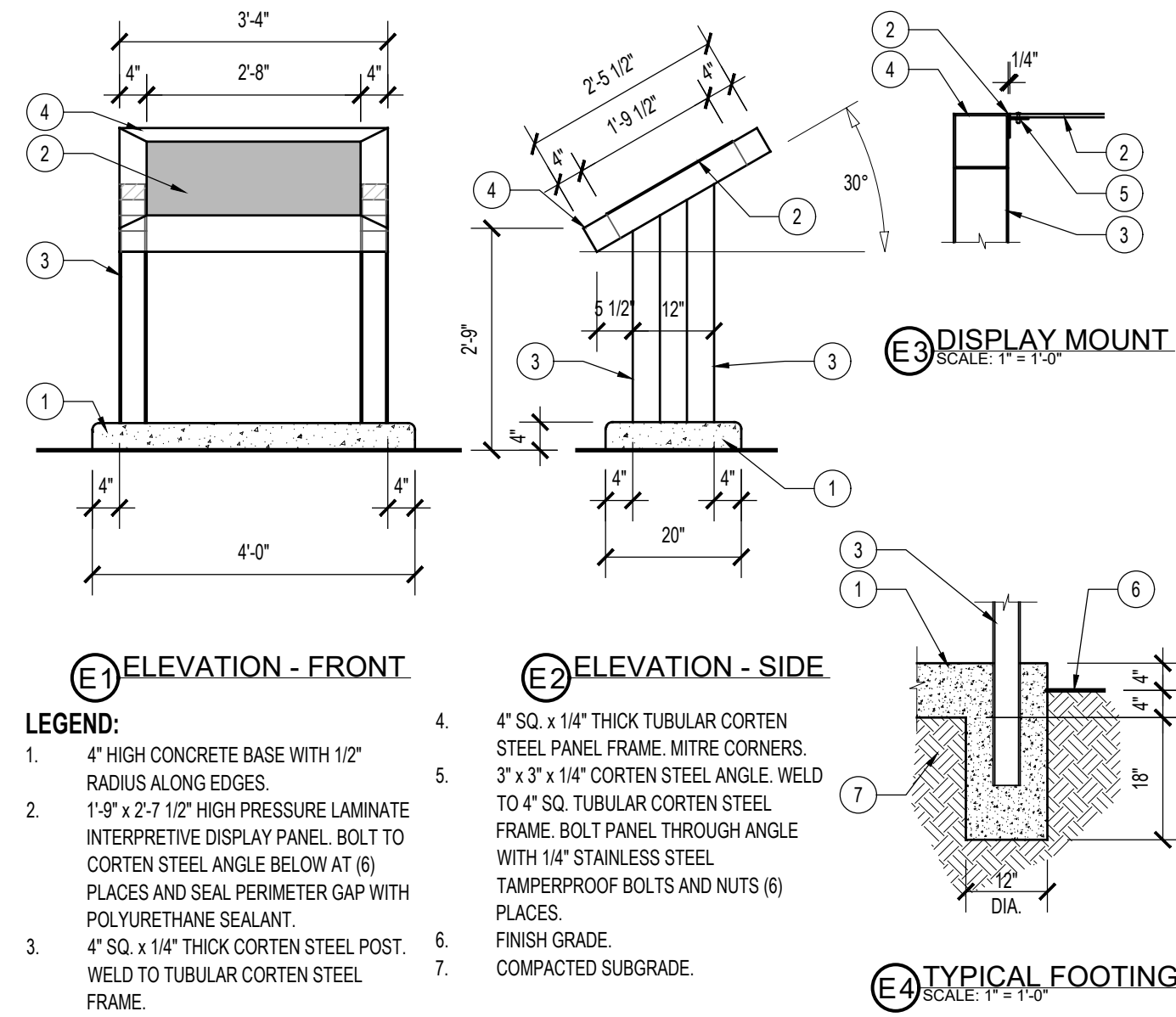
**B NATIVE AMERICAN TABLE ELEVATION AND SECTION**  
SCALE: 1/4" = 1'-0"  
REFERENCE NUMBER:  
P-2417.1B-DV-29



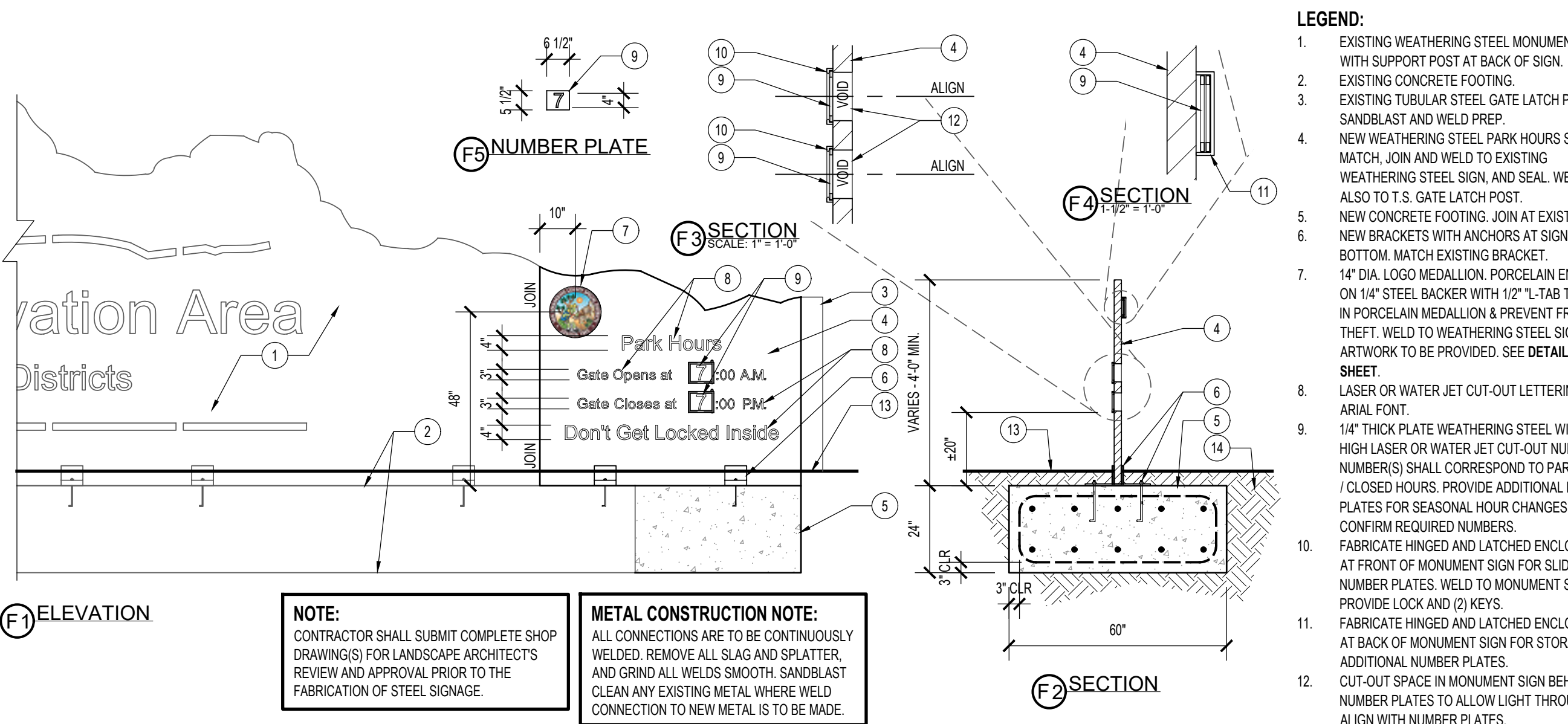
**C NATIVE AMERICAN BENCH DESIGNS**  
SCALE: 3/4" = 1'-0"  
REFERENCE NUMBER:  
P-2417.1B-DV-37



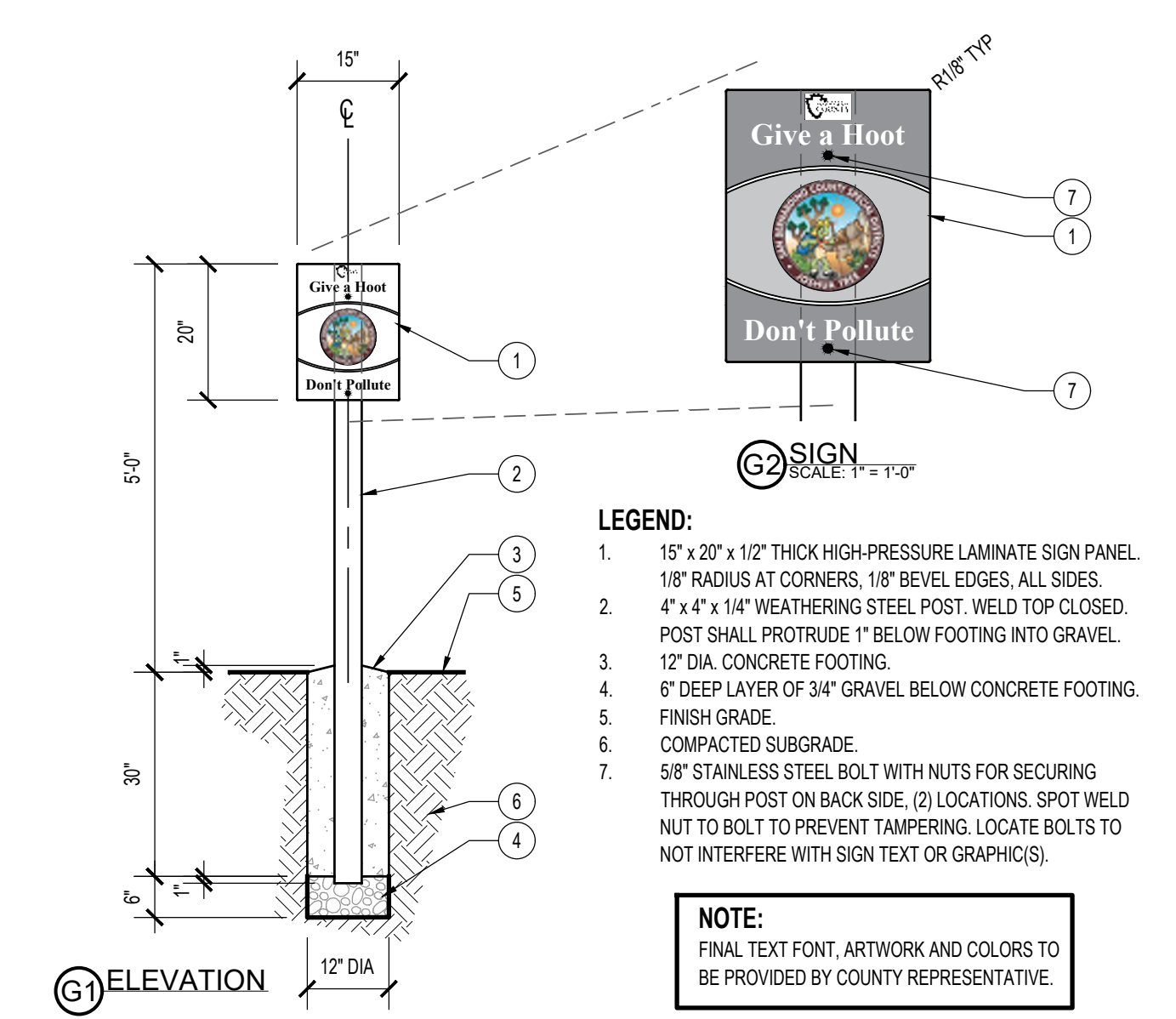
**D PRECAST CONCRETE BENCH**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: A-13  
P-2417.1B-DV-40



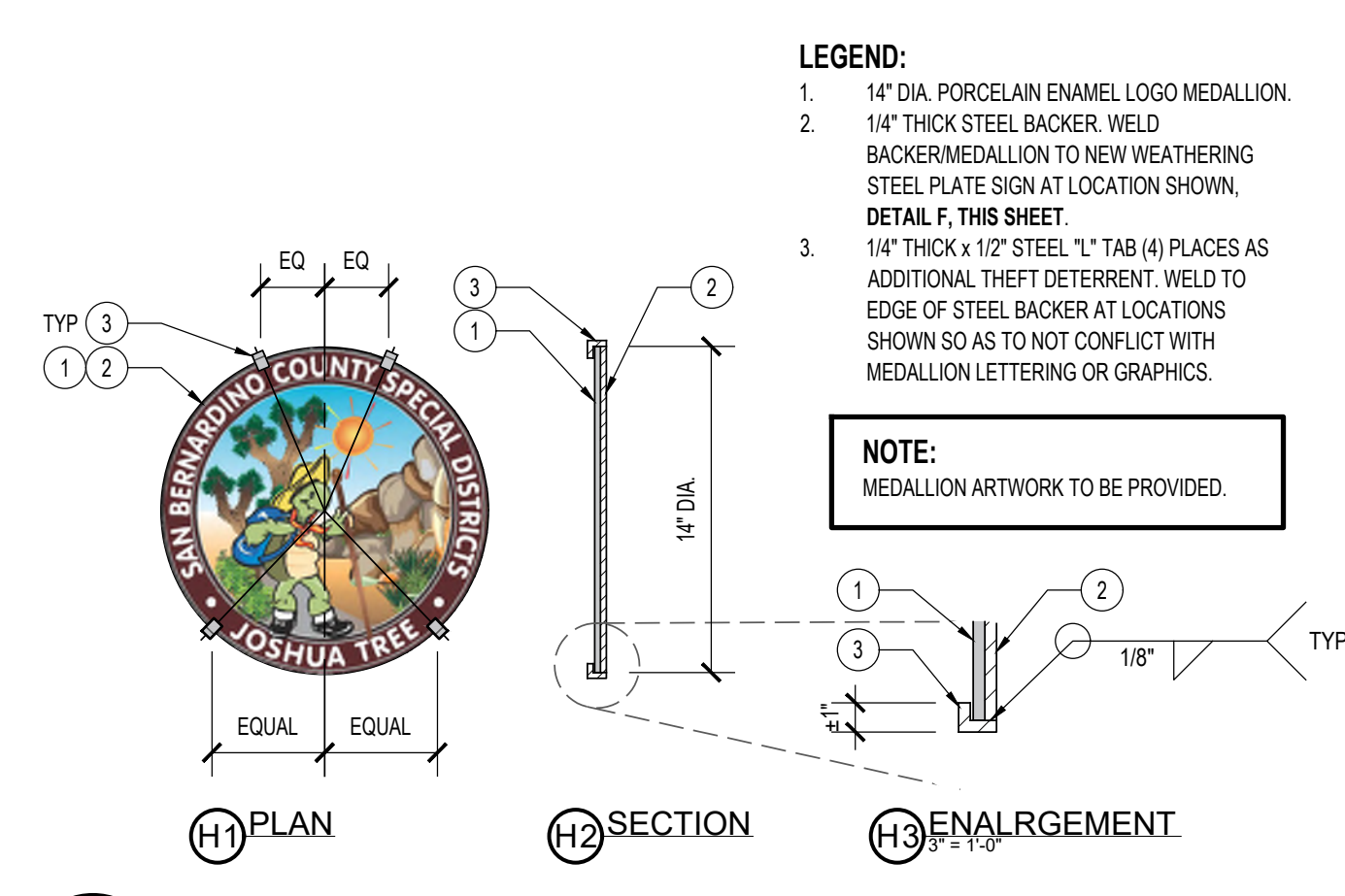
**E INTERPRETIVE PANEL FRAME**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER: S-49  
P-2417.1B-DV-48



**F NEW ENTRY SIGN EXTENSION**  
SCALE: 3/8" = 1'-0"  
REFERENCE NUMBER: S-48  
P-2417.1B-DV-44



**G ENVIRONMENTAL AWARENESS SIGN**  
SCALE: 1/2" = 1'-0"  
REFERENCE NUMBER:  
P-2417.1B-DV-47



**H MEDALLION WITH 'L' TABS**  
SCALE: 1 1/2" = 1'-0"  
REFERENCE NUMBER:  
P-2417.1B-DV-49



**BENCHMARK:**  
FOUND REBAR & CAP HGLLC RP FLUSH PER CAD FILE PROVIDED BY SPECIAL DISTRICTS (POINT #1001)  
ELEV = 3154.12'

**BASIS OF BEARINGS:**  
CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0



**ARCHITERRA DESIGN GROUP**  
LANDSCAPE ARCHITECTURE AND PLANNING  
10221-A TRADEMARK ST. RANCHO CUCAMONGA, CALIFORNIA 91730 PH: (909) 464-2800

PREPARED UNDER THE SUPERVISION OF:  
PROFESSIONAL LANDSCAPE ARCHITECT P.L.A. No. DATE

REVISIONS					
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SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

Assistant Director: *David R. Washburn* DATE: 02/24/2026

APPROVALS	PROJECT MANAGER	INITIAL	DATE
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	OPS. DIVISION MANAGER	HJM	2/10/2026
	PM. DIVISION MANAGER		02/10/2026

COUNTY SERVICE AREA 20 JOSHUA TREE  
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DWG NO. L-1.24  
FILE NO. 30.30.0170  
SHEET 26 OF 33

**ABBREVIATIONS:**

AB	ANCHOR BOLT	EXT	EXTERIOR	PT	PLATE TRUSS/
ABV	ABOVE	FDN	FOUNDATION		PRESSURE TREATED
ADDL	ADDITIONAL	FF	FINISH FLOOR/	REINF	REINFORCEMENT
ADHES	ADHESIVE		FIELD FASTENER	REC	REQUIRED
ADJ	ADJACENT	FG	FIELD GRADE	REQD	REQUIRED
ALT	ALTERNATE	FH	FULL HEIGHT	R&R	REMOVE AND REPLACE
AMP	AMPLITUDE	FN	FIELD NAILING	SCHED	SCHEDULE
ARCH	ARCHITECT/	FL	FLOOR	SD	SHORT DIRECTION
	ARCHITECTURAL	FLG	FLANGE	SF	SQUARE FOOT
AVG	AVERAGE	FOC	FACE OF CONCRETE	SHT	SHEET
BF	BOUNDARY FASTENER	FOS	FACE OF STUD	SHTG	SHEATHING
BLDG	BUILDING	FS	FAR SIDE/	SIM	SIMILAR
BLKG	BLOCKING		FINISHED SURFACE	SMRF	SPECIAL MOMENT -
BLW	BELOW	FT	FOOT/FEET	SN	RESISTING FRAME
BM	BEAM	FTG	FOOTING	SN	SOLE PLATE NAILING
BN	BOUNDARY NAILING	GA	GAGE	SOG	SLAB ON GRADE
BOTT	BOTTOM	GALV	GALVANIZED	SPCNG	SPACING
BS	BOTH SIDES	GRND	GROUND	SPEC	SPECIFICATION
BSMT	BASEMENT	GRD	GRADE	SQ	SQUARE
BTWN	BETWEEN	GT	GIRDER TRUSS	SS	STAINLESS STEEL
BYND	BEYOND	HNGR	HANGER	STAGG	STAGGERED
CF	CUBIC FOOT	HT	HEIGHT	STD	STANDARD
CMU	CAST IN PLACE	HORIZ	HORIZONTAL	STIFF	STIFFENER
CJ	CONTROL JOINT/	HS	HIGH STRENGTH	STL	STEEL
	CEILING JOIST	HSS	HOLLOW STRUCTURAL SECTION	STRUCT	STRUCTURAL
CL	CENTERLINE	ID	INSIDE DIAMETER	SW	SHEARWALL
CLG	CEILING	INFO	INFORMATION	SWO	SHEARWALL WITH
CLR	CLEAR	INT	INTERIOR	OPENING	
CMU	CONCRETE MASONRY UNIT	INV	INVERTED	SYM	SYMMETRICAL
CNTRS	COUNTERSINK/	JT	JACK TRUSS	THK	THICK
CNTRS	COUNTERSUNK	KP	KING POST	THRD	THREADED
	COLUMN	KSI	KIPS PER SQUARE INCH	T&B	TOP AND BOTTOM
COL	CONCRETE	LBS	POUNDS	TN	TOE NAILING
CONN	CONNECTION	LD	LONG DIRECTION	TOP	TOP OF FOOTING
CONST	CONSTRUCTION	LG	LONG	TOP	TOP OF PODIUM
CONT	CONTINUOUS	LL	LIVE LOAD	TOS	TOP OF STEEL
CONTR	CONTRACTOR	LLH	LONG LEG HORIZONTAL	TL	TOP OF LEDGER
COORD	COORDINATE	LLV	LONG LEG VERTICAL	TOW	TOP OF WALL
CVR	COVER	LOC'S	LOCATIONS	TRANV	TRANSVERSE
DIA	DIAMETER	LONG	LONGITUDINAL	TR	TUBE STEEL
DIM	DIMENSION	LT WT	LIGHT WEIGHT	TYP	TYPICAL
DIR	DIRECTION	MANUF	MANUFACTURER	UNO	UNLESS NOTED OTHERWISE
DIST	DISTANCE	MAX	MAXIMUM	VERT	VERTICAL
DL	DEAD LOAD	MB	MACHINE BOLT	VIF	VERIFY IN FIELD
DMG	DAMAGE	MD	METAL DECK	WF	WIDE FLANGE BEAM
DO	DO OVER	MECH	MECHANICAL	W	WITH
DP	DEEP	MEP	MECHAN/ELEC/PLUMBING	WO	WITHOUT
DRAG	DRAG STRUT	MIN	MINIMUM	WT	WEIGHT
DSA	DEPARTMENT OF STATE	MISC	MISCELLANEOUS	WP	WORKING POINT
	ARCHITECTS	MTL	METAL	WWF	WELDED WIRE FABRIC
DTL	DETAIL	(N)	NEW	WWO	WALL W/ OPENING & OR
DWG	DRAWING	NS	NEAR SIDE/NEELSON STUD		PERFORATED
DWL	DOWEL	NW	NORMAL WEIGHT		SHEARWALL
(E)	EXISTING	OC	ON CENTER		
EA	EACH	OD	OUTSIDE DIAMETER		
EA	EACH FACE/	OH	OPPOSITE HAND		
	EDGE FASTENER	OMF	ORDINARY MOMENT FRAME		
ELEC	ELECTRICAL	OPNG	OPENING		
ELEV	ELEVATION	OPP	OPPOSITE		
EMB	EMBEDMENT	PERIM	PERIMETER		
EN	EDGE NAILING	PERP	PERPENDICULAR		
ENGR	ENGINEER	PL	PROPERTY LINE		
ES	EDGE SCREW	PLF	POUNDS PER LINEAR FOOT		
EJ	EXPANSION JOINT	PLT	PLATE		
EQ	EQUAL	PSF	POUNDS PER SQUARE FOOT		
EQ	EACH WAY	PSI	POUNDS PER SQUARE INCH		

**FOUNDATION NOTES:**

- FOUNDATION DESIGN IS BASED ON THE SOIL INVESTIGATION REPORT BY: GEOTEK, INC. 1548 NORTH MAPLE ST. CORONA, CA 92678 DATE: AUGUST 29, 2024 PROJECT NO. 3910-CR PHONE NO.: (951) 710-1160 EMAIL: www.geotekusa.com
- DESIGN SOIL BEARING PRESSURE IS 2500PSF @ 12" MIN BELOW LOWEST ADJACENT GRADE. PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:
  - THE BUILDING PAD WAS PREPARED ACCORDING TO THE SOILS REPORT.
  - THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE SOILS REPORT.
  - THE UTILITY TRENCHES HAVE BEEN PROPERLY BACK FILLED AND COMPACTED.
- THE SOILS REPORT IS AN INTEGRAL PART OF THE CONSTRUCTION DOCUMENTS. ANY INCONSISTENCIES OR CONFLICTS SHOULD BE BROUGHT TO OUR ATTENTION IMMEDIATELY, AND WAIT FOR OUR DIRECTION.
- REFERENCE THE SOILS REPORT FOR OVER EXCAVATION AND RECOMPACTION, AND OPTIMUM MOISTURE LEVEL INSTRUCTIONS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY FINAL GRADE ELEVATIONS, FOR MINIMUM FOOTING DEPTHS BELOW LOWEST ADJACENT GRADES AND MINIMUM COVERAGE OVER TOP OF FOOTINGS. ELEVATIONS OF FOOTINGS SHOWN ON THESE PLANS ARE ESTIMATES BASED ON THE INFORMATION AVAILABLE. FOOTING ELEVATIONS ARE SUBJECT TO CHANGE, AND ARE NOT FINAL TILL THE BUILDING PAD IS GRADED AND TRENCHES FOR FOOTINGS HAVE BEEN APPROVED BY THE SOILS ENGINEER OF RECORD.
- THE CONTRACTOR IS TO VERIFY IF THE SOILS ENGINEER REQUIRES ADDITIONAL TESTING AT THE COMPLETION OF GRADING OF THE BUILDING PAD.
- IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED.
- PRIOR TO BEING DELIVERED TO THE SITE, ALL IMPORTED SOIL SHALL BE TESTED AND APPROVED BY THE SOILS ENGINEER FOR CORROSIVITY AND SUITABILITY FOR THE FOUNDATION DESIGN.
- BACKFILL BEHIND ALL RETAINING WALLS SHALL BE FREE DRAINING PER RECOMMENDATIONS OF THE SOILS REPORT.
- EXCAVATION FOR ANY PURPOSE SHALL NOT REMOVE LATERAL SUPPORT FROM ANY FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOUNDATION AGAINST SETTLEMENT OR LATERAL TRANSLATION.
- THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, COBBLES AND BOLDERS OR WITH A CONTROLLED LOW-STRENGTH MATERIAL (CLSM). THE BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION OR THE WATERPROOFING OR DAMP PROOFING MATERIAL.
 

EXCEPTION: CLSM NEED NOT BE COMPACTED.
- THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5-PERCENT SLOPE) FOR A MINIMUM DISTANCE OF 10 FEET (3048 MM) MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET (3048 MM) OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED A MINIMUM OF 2 PERCENT WHERE LOCATED WITHIN 10 FEET (3048 MM) OF THE BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET (3048 MM) OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2 PERCENT AWAY FROM THE BUILDING.
 

EXCEPTION: WHERE CLIMATIC OR SOIL CONDITIONS WARRANT, THE SLOPE OF THE GROUND AWAY FROM THE BUILDING FOUNDATION SHALL BE PERMITTED TO BE REDUCED TO NOT LESS THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2-PERCENT SLOPE). THE PROCEDURE USED TO ESTABLISH THE FINAL GROUND LEVEL ADJACENT TO THE FOUNDATION SHALL ACCOUNT FOR ADDITIONAL SETTLEMENT OF THE BACKFILL.
- SEE SOILS REPORT FOR ALLOWABLE TEMPORARY GRADES, VERTICAL CUTS, OR OPTIONS ON SLOT CUTTING DURING CONSTRUCTION.
- THE SOIL BEHIND RESTRAINED RETAINING WALLS CANNOT BE BACKFILLED TILL THE FLOORS USED FOR RESTRAINING ARE CURED AT LEAST 14 DAYS OR 75% OF SPECIFIED STRENGTH.

**DESIGN CRITERIA: DECK**

- (CBC 2022) BUILDING CODE
- FLOOR LIVE LOADS = 100 PSF [1603.1.1 CBC]
  - FLOOR DEAD LOADS = 23.5 PSF
  - SNOW LOAD= 19 PSF
  - [1603.1.4 CBC] WIND DESIGN DATA:
    - BASIC WIND SPEED (3-SEC GUST) = 95 MPH
    - WIND IMPORTANCE FACTOR = 1.0
    - WIND EXPOSURE(S) = C
  - [1603.1.5 CBC] EARTHQUAKE DESIGN DATA:
    - SEISMIC IMPORTANCE FACTOR I= 1.0
    - SEISMIC RISK CATEGORY= II
    - MAPPED SPECTRAL RESPONSE ACCELERATIONS, S<sub>w</sub>= 1.931g & S<sub>v</sub>= 0.693g
    - SOIL SITE CLASS= D
    - SPECTRAL RESPONSE COEFFICIENTS, S<sub>DS</sub>= 1.545g
    - SEISMIC DESIGN CATEGORY= D
    - BASIC SEISMIC-FORCE RESISTING SYSTEM(S)= PILE FOUNDATIONS DETAILED AS INTERMEDIATE REINFORCED CONCRETE MOMENT FRAMES
    - DESIGN BASE SHEAR V= 0.7206W
    - SEISMIC RESPONSE COEFFICIENT(S), C = 0.7206
    - RESPONSE MODIFICATIONS FACTOR(S), R = 1.5
    - ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE PROCEDURE
    - REDUNDANCY FACTOR, ρ = 1.0

**DESIGN CRITERIA: SHADE STRUCTURE**

- (CBC 2022) BUILDING CODE
- ROOF LIVE LOADS = 20 PSF [1603.1.1 CBC]
  - ROOF DEAD LOADS = 20 PSF
  - SNOW LOAD= 19 PSF
  - [1603.1.4 CBC] WIND DESIGN DATA:
    - BASIC WIND SPEED (3-SEC GUST) = 95 MPH
    - WIND IMPORTANCE FACTOR = 1.0
    - WIND EXPOSURE(S) = C
  - [1603.1.5 CBC] EARTHQUAKE DESIGN DATA:
    - SEISMIC IMPORTANCE FACTOR I= 1.0
    - SEISMIC RISK CATEGORY= II
    - MAPPED SPECTRAL RESPONSE ACCELERATIONS, S<sub>w</sub>= 1.931g & S<sub>v</sub>= 0.693g
    - SOIL SITE CLASS= D
    - SPECTRAL RESPONSE COEFFICIENTS, S<sub>DS</sub>= 1.545g
    - SEISMIC DESIGN CATEGORY= D
    - BASIC SEISMIC-FORCE RESISTING SYSTEM(S)= ORDINARY CANTILEVER COLUMN SYSTEM
    - DESIGN BASE SHEAR V= 0.8651W
    - SEISMIC RESPONSE COEFFICIENT(S), C = 0.8651
    - RESPONSE MODIFICATIONS FACTOR(S), R = 1.25
    - ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE PROCEDURE
    - REDUNDANCY FACTOR, ρ = 1.0

**GENERAL STRUCTURAL NOTES:**

- THIS DOCUMENT IS AN INSTRUMENT OF PROFESSIONAL SERVICE PREPARED BY RGSE INC. ALTERATION OF THIS DOCUMENT BY ANY PARTY OTHER THAN RGSE INC. IS A VIOLATION OF LAW THAT WILL BE PROSECUTED TO ITS FULLEST EXTENT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS AT THE JOB SITE PRIOR TO STARTING CONSTRUCTION AND THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES, INCONSISTENCIES, OR ISSUES WITH CONSTRUCTIBILITY.
- AT ANY DISCREPANCIES OR CONFLICTS BETWEEN PLAN AND ELEVATION DIMENSIONS SHOWN ON THE ARCHITECTURAL DRAWINGS AND THE STRUCTURAL DRAWINGS, THE ARCHITECTURAL DIMENSIONS SHALL GOVERN. IF ANY OF THESE DIMENSIONS DIFFER BY MORE THAN 5%, THE ENGINEER SHALL BE NOTIFIED OF THE SAME FIRST, AND THE CONTRACTOR SHALL WAIT FOR INSTRUCTIONS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE NOTED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, BRACING, ALL SHORING, FORMS, AND SCAFFOLDING.
- OPENINGS, POCKETS, ETC. SHALL NOT BE PLACED IN SLABS BEAMS, COLUMNS, WALLS, ETC., UNLESS SPECIFICALLY DETAILLED ON THE STRUCTURAL DRAWINGS.
- ALL ASTM SPECIFICATIONS NOTED ON THESE DRAWINGS SHALL BE OF THE LATEST REVISION.
- IN THE EVENT THAT CERTAIN FEATURES OF CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE NOTES OR SPECIFICATIONS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY & WAIT FOR INSTRUCTIONS.
- COST OF ADDITIONAL DESIGN WORK NECESSITATED BY SELECTION OF AN OPTION NOT DUE TO ERRORS OR OMISSIONS IN CONSTRUCTION, SHALL BE BORNE BY THE CONTRACTOR.
- WHERE DESIGN AND DETAILS OF PLATE GIRDERS, TRUSSES, ETC., IS TO BE PROVIDED BY FABRICATOR, CONTRACTOR SHALL SUBMIT CALCULATIONS PREPARED BY A CIVIL OR STRUCTURAL ENGINEER, TO THE ENGINEER AND TO THE BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATION.
- UNLESS AN ITEM ON THE PLANS OR DETAILS IS SPECIFICALLY MARKED AS AN EXISTING ITEM, THE CONTRACTOR IS TO ASSUME THAT IT IS NEW, AND INCLUDE IT IN THE CONSTRUCTION BUDGET.
- WHERE SOILS REPORTS ARE CITED, ITS REQUIREMENTS APPLY TO THE ARCHITECT.
- ALL MANUFACTURED PRODUCTS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATION.
- WHILE EVERY REASONABLE EFFORT HAS BEEN MADE TO PROVIDE A BUILDABLE SET OF CONTRACT DOCUMENTS WITH MINIMAL ERRORS OR OMISSIONS, THE CONTRACTOR ACKNOWLEDGES AND UNDERSTANDS THAT THE CONTRACT DOCUMENTS MAY REPRESENT IMPERFECT DATA AND MAY CONTAIN ERRORS, OMISSIONS, CONFLICTS, INCONSISTENCIES, CODE VIOLATIONS AND IMPROPER USE OF MATERIALS. SUCH DEFICIENCIES WILL BE CORRECTED BY THE ARCHITECT OR HIS/HER CONSULTANTS IN WRITING. THE CONTRACTOR AGREES TO CAREFULLY STUDY AND COMPARE THE INDIVIDUAL CONTRACT DOCUMENTS AND REPORT AT ONCE IN WRITING TO THE ARCHITECT ANY DEFICIENCIES THE CONTRACTOR MAY DISCOVER. THE CONTRACTOR FURTHER AGREES TO REQUIRE EACH SUBCONTRACTOR TO LIKEWISE STUDY THE DOCUMENTS AND TO REPORT AT ONCE ANY DEFICIENCIES DISCOVERED. THE CONSULTANT AND ARCHITECT, TOGETHER WITH CONTRACTOR SHALL RESOLVE ALL REPORTED DEFICIENCIES PRIOR TO STARTING ANY WORK. ANY QUESTIONABLE WORK PERFORMED PRIOR TO RESOLUTION OF CONFLICTS OR ERRORS OR FURTHER CLARIFICATION FROM THE ARCHITECT WILL BE DONE AT THE CONTRACTOR'S RISK.
- OPTIONS, IF PROVIDED HEREIN, ARE FOR CONTRACTOR'S CONVENIENCE. HE SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY, SHALL COORDINATE ALL DETAILS, AND SHALL OBTAIN ALL REQUIRED APPROVALS.
- ANY MECHANICAL AND ELECTRICAL EQUIPMENT, STORAGE RACKS, SAFES, AND ANY OBJECT EXPECTED TO BE INSTALLED OR PLACED THAT EXCEEDS THE ALLOWED WEIGHT (GROSS WEIGHT) GREATER THEN 400 LB. FLOOR OR ROOF MOUNTED, OR GREATER THEN 200 LB. SUSPENDED FROM A FLOOR, CEILING OR WALL SHALL BE SHOWN ON THESE DRAWINGS. IF THEY ARE NOT SHOWN ON THESE DRAWINGS, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER, AND A CUT SHEET FOR THE SPECIFIC ITEM SHALL BE MADE AVAILABLE.
- THE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD WHO SHALL REVIEW AND APPROVE THEM, AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND APPROVED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. PROVIDE AMPLE TIME FOR THE BUILDING OFFICIAL TO REVIEW THE DOCUMENTS.
- CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING SHALL BE IN CONFORMANCE WITH THE RECYCLING AND WASTE MANAGEMENT GREEN BUILDING CODE.
- CONTRACTOR IS TO VERIFY THAT NO EXISTING STEEL REINFORCING, OR TENSION CABLES ARE DAMAGED WHEN INSTALLING POST INSTALLED WEDGE OR CHEMICAL ANCHORS. MECHANICAL ANCHORS ARE ONLY APPROVED FOR INTERIOR DRY DRUSE, OTHERWISE CHEMICAL ANCHORS MUST BE USED.
- ENHANCED DURABILITY AND REDUCE MAINTENANCE: RODENT PROOFING, ANNULAR SPACES AROUND PIPED, ELECTRICAL CONDUITS OR OTHER OPENINGS IN SOILS OR CONCRETE AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.
- WHERE SEISMIC GAPS ARE SPECIFIED, THE GAP SHALL BE DEFINED AS THE DISTANCE BETWEEN ARCHITECTURAL FINISH TO FINISH. COMPRESSIBLE MATERIALS MAY BE PLACED IN SEISMIC GAPS. DUE TO SUPPLY CHAIN INTERRUPTIONS, AND THE COMPLEXITY OF PREDICTING THEM, THE CONTRACTOR SHALL REVIEW THE SPECIFICATIONS, ANY KNOWN EQUAL ALTERNATIVE MATERIALS AND PRODUCTS SHALL BE SUBMITTED TO THE ARCH AND EOR FOR REVIEW AND APPROVAL, TO AVOID UNREASONABLE COST INCREASES, AND/OR CONSTRUCTION DELAYS.

**SPECIAL INSPECTIONS:**

- SPECIAL INSPECTION U.N.O. BY A REGISTERED DEPUTY INSPECTOR APPROVED BY THE ARCHITECT AND/OR ENGINEER AND THE BUILDING DEPARTMENT SHALL BE EMPLOYED BY THE OWNER FOR THE FOLLOWING TYPES OF WORK:
  - PERIODIC INSPECTION FOR SOILS IN SEISMIC DESIGN CATEGORIES D, E, AND F.
  - ALL FOUNDATIONS DESIGNATED AS GRADE BEAMS, PIER FOOTINGS, OR PILES.
  - ALL WELDING, (EXCEPTIONS: WELDING DONE IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH AWS D1.1). ONLY PERIODIC INSPECTION IS REQUIRED FOR: SINGLE PASS FILLET WELDS LESS THEN 5/16"; FLOOR AND ROOF DECK WELDS, WELDED STUDS ON A METAL DECK SYSTEM, WELDED COLD FOR STEEL, STAIRS, AND RAILING.
  - ALL WORK INVOLVING HIGH STRENGTH, AND OR SLIP CRITICAL BOLTS.
  - SEE C.B.C. VOL.II, SECTION 1704 FOR ADDITIONAL REQUIREMENTS. DEPUTY INSPECTOR MAY BE WAIVED FOR WORK THAT IS MINOR IN NATURE AS INTERPRETED BY THE BUILDING OFFICIAL.
- THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN, IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND-OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND-OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTION SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
  - ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.
  - ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL.
  - PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS; AND
  - IDENTIFICATION AND QUALIFICATION OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

**STRUCTURAL OBSERVATION:**

PROGRAM NOT INCLUDED BECAUSE THIS PROJECT IS NOT REQUIRED BY ANY OF CBC SECTIONS BELOW:

- 1704.6.1 STRUCTURAL OBSERVATIONS FOR STRUCTURES.  
STRUCTURAL OBSERVATIONS SHALL BE PROVIDED FOR THOSE STRUCTURES WHERE ONE OR MORE OF THE FOLLOWING CONDITIONS EXIST:
- THE STRUCTURE IS CLASSIFIED AS RISK CATEGORY III OR IV.
  - THE STRUCTURE IS A HIGH-RISE BUILDING.
  - THE STRUCTURE IS ASSIGNED TO SEISMIC DESIGN CATEGORY E, AND IS GREATER THAN TWO STORIES ABOVE THE GRADE PLANE.
  - SUCH OBSERVATION IS REQUIRED BY THE REGISTERED DESIGN PROFESSIONAL RESPONSIBLE FOR THE STRUCTURAL DESIGN.
  - SUCH OBSERVATION IS SPECIFICALLY REQUIRED BY THE BUILDING OFFICIAL.

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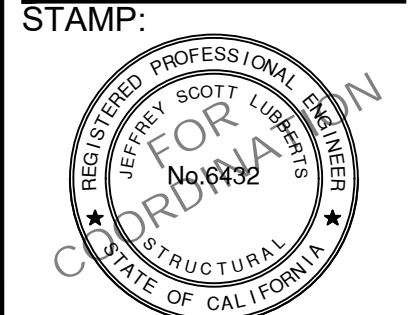
**R G S E Inc.**  
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**NEW CONSTRUCTION FOR:**  
**DESERT VIEW CONSERVATION AREA**  
JOSHUA TREE  
COUNTY OF SAN BERNARDINO

**SHEET TITLE :**  
**GENERAL NOTES**

**JOB NO:** 24120  
**DRAWN:** aaronc@rgseinc.com  
**ENGINEER:** alannt@rgseinc.com  
**PLOT DATE:** 6/13/2025



**S0.01**  
1" ACTUAL

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**STRUCTURAL STEEL CONT.:**

15. ANCHOR ROD HOLES IN BASE PLATES:  
 A. ANCHOR ROD HOLES IN BASE PLATES W/O WASHER PLATES, MAXIMUM HOLE SIZE SHALL BE THE ANCHOR DIAMETER +1/2" MAX.  
 B. ANCHOR ROD HOLES IN BASE PLATES W/ WASHER PLATES:

MAXIMUM SIZES FOR ANCHOR-ROD HOLES IN BASE PLATES							
ANCHOR ROD DIAMETER, IN.	MAX. HOLE DIAMETER, IN.	MIN. WASHER SIZE, IN.	MIN. WASHER THICKNESS	ANCHOR ROD DIAMETER, IN.	MAX. HOLE DIAMETER, IN.	MIN. WASHER SIZE, IN.	MIN. WASHER THICKNESS
3/4	1 1/16	2	1/4	1 1/2	2 1/16	3 1/2	1/2
7/8	1 1/8	2 1/2	3/16	1 3/4	2 3/4	4	3/8
1	1 3/16	3	3/8	2	3 1/4	5	3/4
1 1/4	2 1/16	3	1/2	2 1/2	3 3/4	5 1/2	3/4

- NOTES:  
 1. CIRCULAR OR SQUARE WASHERS MEETING THE WASHER SIZE ARE ACCEPTABLE.  
 2. CLEARANCE MUST BE CONSIDERED WHEN CHOOSING AN APPROPRIATE ANCHOR ROD HOLE LOCATION, NOTHING EFFECTS SUCH AS THE POSITION OF THE ROD IN THE HOLE WITH RESPECT TO THE COLUMN, WELD SIZE AND OTHER INTERFERENCES.  
 3. WHEN BASE PLATES ARE LESS THAN 1 1/2 IN. THICK, PUNCHING OF HOLES MAY BE AN ECONOMICAL OPTION. IN THIS CASE, 7/16 IN. ANCHOR RODS AND 1 1/16 IN. DIAMETER PUNCHED HOLES MAY BE USED WITH ASTM F844 (USS STANDARD) WASHERS IN PLACE OF FABRICATED PLATE WASHERS.  
 4. FOR USE AT LFRS MEMBERS, WELDING OF WASHER  $\epsilon$  TO BASE  $\epsilon$  REQUIRED. (FILLET WELD = WASHER  $\epsilon$  THK - 1/8 IN. U.N.O. SUBJECT TO E.O.R. APPROVAL.)

**STRUCTURAL STEEL:**

1. STRUCTURAL STEEL:  
 PROVIDE STRUCTURAL STEEL COMPLYING WITH THE FOLLOWING ASTM STANDARD SPECIFICATIONS, UNLESS NOTED OTHERWISE:  
 ANGLES..... ASTM A36, ASTM 242 OR A588  
 PLATES..... ASTM A36, ASTM 242 OR A588  
 HOLLOW STRUCTURAL SECTIONS..... ASTM 847  
 ANCHOR BOLTS / THREADED ROD..... ASTM F 1554, GRADE 36 UNO WEATHERING STEEL  
 REINFORCING STEEL..... SEE REINFORCING STEEL SECTION

WHERE NOTED ON PLANS AS (SS), SHALL BE STAINLESS STEEL. ASTM A709 GRADE 50R, STAINLESS STEEL MECHANICAL TUBING SHALL BE PER ASTM A554 STANDARD SPECIFICATION, AND ALL STAINLESS BARS AND SHAPES SHALL BE PER ASTM A276 STANDARD SPECIFICATIONS.

FURNISH READILY IDENTIFIABLE STRUCTURAL STEEL COMPLYING WITH CBC 2203.

2. HIGH STRENGTH BOLTS, NUTS, AND WASHERS:  
 A. TYPE: PROVIDE HIGH STRENGTH BOLTS, NUTS, AND WASHERS COMPLYING WITH ASTM A325, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS SHALL BE BEARING WITH THREADS INCLUDED IN SHEAR PLANE (A325-N), UNLESS NOTED OTHERWISE. PROVIDE SLIP-CRITICAL HIGH STRENGTH BOLTS (A325-SC) FOR SEISMIC MOMENT FRAME BEAM-TO-COLUMN CONNECTIONS, UNLESS NOTED OTHERWISE.  
 B. INSTALLATION: INSTALL HIGH STRENGTH BOLTS COMPLYING WITH "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" AND CBC SECTION 2204.2.  
 C. TIGHTENING: TIGHTEN A325-N BOLTS TO A SNUG TIGHT CONDITION, TIGHTEN A325-SC BOLTS TO AT LEAST THE MINIMUM TENSION USING ONE OF THE FOLLOWING METHODS: TURN-OF-NUT, CALIBRATED WRENCH, OR DIRECT TENSION INDICATOR TIGHTENING. WHERE "PRETENSIONED" IS SPECIFIED, APPLY TIGHTENING PER A325-SC BUT SURFACE PREPARATION IS NOT REQUIRED.  
 3. WELDING:  
 A. WELDING STANDARD: AWS D1.1 AND AISC 360 (AWS D1.8 AND AISC 341 FOR SEISMIC FORCE RESISTING SYSTEM)  
 B. WELDING PROCESS: WELDING PROCEDURES ARE "MEANS AND METHODS" SELECTED BY THE CONTRACTOR FROM AN APPROVED PROCEDURE IN THE AWS D1.1.  
 C. PRE-QUALIFIED & NON PRE-QUALIFIED WELDS: WELDS SHALL BE PRE-QUALIFIED COMPLYING WITH WELDING STANDARD. WHERE NON PRE-QUALIFIED WELDS ARE SPECIFICALLY INDICATED, QUALIFY BY TESTING AND PROCEDURE QUALIFICATION TEST RECORD COMPLYING WITH WELDING STANDARD.  
 D. WELDER CERTIFICATION: WELDERS SHALL BE CERTIFIED AS REQUIRED BY GOVERNING CODE AUTHORITY.  
 E. SHOP WELDING INCLUDING ULTRASONIC TESTING OF COMPLETE PENETRATION GROOVE WELDS WELDED IN SHOP: PERFORM ON PREMISES OF AN APPROVED FABRICATOR COMPLYING WITH CBC SECTION 1704.2.5.1.  
 F. MINIMUM FILLET WELD SIZE: PROVIDE MINIMUM FILLET WELD COMPLYING WITH AISC 360 SECTION J2 AND TABLE J2.4 UNLESS A LARGER WELD IS INDICATED ON DRAWINGS.  
 G. SHOP AND FIELD WELDING INDICATION ON DRAWINGS: NO ATTEMPT IS MADE TO DIFFERENTIATE BETWEEN SHOP AND FIELD WELDED CONNECTIONS.  
 4. WELD INSPECTION:  
 A. LEAD WELDING INSPECTOR CERTIFICATION: LEAD WELDING INSPECTOR SHALL BE A CERTIFIED WELDING INSPECTOR COMPLYING WITH AWS D1.1 STANDARDS, SHALL BE RECOGNIZED BY THE BUILDING OFFICIAL AS A REGISTERED DEPUTY INSPECTOR FOR STRUCTURAL STEEL WELDING (ICC CERTIFICATION) AND SHALL POSSES A MINIMUM LEVEL OF UT LEVEL I CERTIFICATION.  
 B. OTHER WELDING INSPECTORS: WELDING INSPECTORS PERFORMING VISUAL INSPECTION UNDER THE SUPERVISION OF THE LEAD WELDING INSPECTOR SHALL POSSES ICC CERTIFICATION, AND PERSONS PERFORMING NON-DESTRUCTIVE TESTING SHALL POSSES UT LEVEL II CERTIFICATION. FOUR NON-CERTIFIED WELDING INSPECTORS MAXIMUM SHALL BE UNDER THE SUPERVISION OF A CWI.  
 C. WELD INSPECTIONS: PROVIDE WELD INSPECTIONS AS REQUIRED BY CBC SECTION 1705.2 AND AISC 360 CHAPTER N (AISC 341 CHAPTER J FOR SEISMIC FORCE RESISTING SYSTEM). SEE STATEMENT OF SPECIAL INSPECTION AND QUALITY ASSURANCE SECTION.  
 5. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS OF ALL STEEL FOR THE ENGINEER'S REVIEW PRIOR TO FABRICATION. ALL STEEL FABRICATION SHALL BE PERFORMED IN A SHOP APPROVED BY THE BUILDING DEPARTMENT.  
 6. EXCEPT WHERE ENCASED IN CONCRETE, MASONRY, OR SPRAYED-ON FIREPROOFING, ALL STEEL SHALL BE PRIMERED UNLESS NOTED OTHERWISE ON THE DRAWINGS. PAINTING OF STRUCTURAL STEEL MEMBERS SHALL COMPLY WITH THE REQUIREMENTS CONTAINED IN AISC 360.  
 7. OPENINGS SHALL NOT BE PLACED IN STEEL MEMBERS UNLESS SPECIFICALLY DETAILED. STEEL MEMBERS SHALL BE SHIPPED WHEN ACCESSIBLE HOLES ARE CUT WITH A TORCH AFTER STEEL IS ERECTED. THE SHORES SHALL REMAIN IN PLACE UNTIL THE STEEL TEMPERATURE HAS RETURNED TO AIR TEMPERATURE.  
 8. STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC. AND SHALL BE PRIMED.  
 9. WHEN WELDING TO EXISTING BEAMS ARE SHOWN, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE ADEQUATE SHORING OF EXISTING BEAMS FOR LOSS OF STRENGTH DUE TO HEAT DURING WELDING.  
 10. NON-SHINK GROUTS OR DRY-PACKS SHALL BE 6000 PSI MIN. ASTM C109 W/ SPECIAL INSPECTION REQUIRED TYP. BASE PLATES SHALL BE GROUTED PRIOR TO PLACEMENT OF CONCRETE ON ANY UPPER FLOORS.  
 11. ALL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL MEET THE MINIMUM SPECIFICATIONS IN THE AISC CODE OF STANDARD PRACTICE CHAPTER 10 UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.  
 12. WHEN CURVING HSS SECTION, INCREASE WALL THICKNESS AS REQUIRED TO AVOID WALL CURLING.  
 13. DEMAND CRITICAL WELDS:  
 WELDS DESIGNATED AS DEMAND CRITICAL SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS SPECIFIED IN AWS D1.8M CLAUSE 6.3.

MECHANICAL PROPERTIES FOR DEMAND CRITICAL WELDS		
PROPERTY	CLASSIFICATION	
	70 KSI (480 MPa)	80 KSI (550 MPa)
YIELD STRENGTH, KSI (MPa)	58 (400) MIN.	68 (470) MIN.
TENSILE STRENGTH, KSI (MPa)	70 (480) MIN.	80 (550) MIN.
ELONGATION, %	22 MIN.	19 MIN.
CVN TOUGHNESS, ft-lb (J)	20 (27) MIN. @ 0°F (-18°C).	
a. FILLER METALS CLASSIFIED AS MEETING 20 ft-lb (27 J) MIN. AT A TEMPERATURE LOWER THAN 0°F (-18°C) ALSO MEET THIS REQUIREMENT.		

IN ADDITION TO THE ABOVE REQUIREMENTS, AWS D1.8/D1.8M REQUIRES, UNLESS OTHERWISE EXEMPTED FROM TESTING, THAT ALL DEMAND CRITICAL WELDS ARE TO BE MADE WITH FILLER METALS RECEIVING HEAT IN FIT AND TO BE TESTED THAT ACHIEVE THE FOLLOWING MECHANICAL PROPERTIES IN THE WELD METAL:

MECHANICAL PROPERTIES FOR DEMAND CRITICAL WELDS		
PROPERTY	CLASSIFICATION	
	70 KSI (480 MPa)	80 KSI (550 MPa)
YIELD STRENGTH, KSI (MPa)	58 (400) MIN.	68 (470) MIN.
TENSILE STRENGTH, KSI (MPa)	70 (480) MIN.	80 (550) MIN.
ELONGATION, %	22 MIN.	19 MIN.
CVN TOUGHNESS, ft-lb (J)	40 (54) MIN. @ 70°F (20°C) b,c.	
b. FOR LAST OF +50°F (+10°C), FOR LAST LESS THAN +50°F (+10°C), SEE AWS D1.8/D1.8M SUB-CLAUSE 6.3.6.		
c. TESTS CONDUCTED IN ACCORDANCE WITH AWS D1.8/D1.8M ANNEX A MEETING 40 ft-lb (54 J) MIN. AT A TEMPERATURE LOWER THAN +70°F (+20°C) ALSO MEET THIS REQUIREMENT.		

14. STRUCTURAL STEEL H-PILES AND STRUCTURAL STEEL SHEET PILING SHALL CONFORM TO THE MATERIAL REQUIREMENTS IN ASTM A6. STEEL PIPE PILES SHALL CONFORM MATERIAL REQUIREMENTS IN ASTM A252. FULLY WELDED STEEL PIPES SHALL BE FABRICATED FROM PLATES THAT CONFORM TO THE MATERIAL REQUIREMENTS IN ASTM A36, ASTM A283, ASTM A572, ASTM A588 OR ASTM A690.

**REINFORCED CONCRETE NOTES CONT.:**

TYPE OF MEMBER	MAXIMUM WATER SOLUBLE CHLORIDE ION (C <sub>i</sub> ) IN CONCRETE, PERCENT BY WEIGHT OF CEMENT
PRESTRESSED CONCRETE	0.06
REINFORCED CONCRETE EXPOSED TO CHLORIDE IN SERVICE	0.15
REINFORCED CONCRETE THAT WILL BE DRY OR PROTECTED FROM MOISTURE IN SERVICE	1.00
OTHER REINFORCED CONCRETE CONSTRUCTION	0.30

28. MAXIMUM CHLORIDE ION CONTENT FOR CORROSION PROTECTION OF REINFORCEMENT:  
 29. TOLERANCE FOR REINFORCEMENT AND CONCRETE LOCATION SHALL BE PER ACI 117.  
 TOLERANCE FOR LONGITUDINAL LOCATION OF BEND AND ENDS OF REINFORCEMENT SHALL BE ± 2 IN., EXCEPT THE TOLERANCE SHALL BE ± 1/2 IN. AT THE DISCONTINUOUS ENDS OF BRACKETS AND CORBELS AND ± 1 IN. AT THE DISCONTINUOUS ENDS OF OTHER MEMBERS.  
 31. REINFORCEMENT RESISTING EARTHQUAKE-INDUCED FLEXURAL AND AXIAL FORCES IN FRAME MEMBERS AND IN STRUCTURAL WALL BOUNDARY ELEMENTS SHALL COMPLY WITH ASTM A 706. ASTM A 615 GRADE 60 REINFORCEMENT SHALL BE PERMITTED IN THESE MEMBERS IF:  
 A. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED 1.1 BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3000 PSI); AND THE RATIO OF THE ACTUAL TENSILE STRENGTH TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25. THE VALUE CONCERNING TRANSVERSE REINFORCEMENT INCLUDING SPIRAL REINFORCEMENT SHALL NOT EXCEED 60,000 PSI.  
 32. CONCRETE FLOOR FLATNESS SHALL BE A MINIMUM OF 1/4" : 10 FT. TYP. U.N.O.  
 33. WHERE CORROSION-RESISTANT REINFORCEMENT (CRR) IS SPECIFIED, USE MMFX2 REBAR ASTM A1035 GRADES 690 AND 830.  
 34. WELDING OF ELECTRICAL CONDUCTORS TO REINFORCING STEEL IS PROHIBITED WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.  
 35. PERFORMANCE OF SHOTCRETE SHALL BE PER ACI 506.2 SPECIFICATIONS.  
 ACI 318 TABLE 26.4.1.1.(a) - SPECIFICATIONS FOR CEMENTITIOUS MATERIALS.

CEMENTITIOUS MATERIALS	SPECIFICATION
PORTLAND CEMENT	ASTM C150
BLENDED HYDRAULIC CEMENTS	ASTM C595, EXCLUDING TYPE IS (S-70) AND TYPE IT (S-70)
EXPANSIVE HYDRAULIC CEMENTS	ASTM C845
HYDRAULIC CEMENT	ASTM C1157
FLY ASH AND NATURAL POZZOLAN	ASTM C618
SLAG CEMENT	ASTM C989
SILICA FUME	ASTM C1240

37. AGGREGATES - COMPLIANCE REQUIREMENTS:  
 A. AGGREGATES SHALL CONFORM TO (1) OR (2):  
 1. NORMALWEIGHT AGGREGATE: ASTM C33.  
 2. LIGHTWEIGHT AGGREGATE: ASTM C330.  
 B. AGGREGATES NOT CONFORMING TO ASTM C33 OR ASTM C330 ARE PERMITTED IF THEY HAVE BEEN SHOWN BY TEST OF ACTUAL SERVICE TO PRODUCE CONCRETE OF ADEQUATE STRENGTH AND DURABILITY AND ARE APPROVED BY THE BUILDING OFFICIAL.  
 C. MAXIMUM AGGREGATE SIZE:  
 1. FOOTINGS.....1" MAX.  
 2. SLAB ON GRADE.....1" MAX.  
 3. GRADE BEAMS.....1" MAX.  
 4. ELEVATED STRUCT. SLABS, BEAMS, FRAME COLUMNS, WALLS.....3/4" MAX.  
 5. REMAINDER.....3/4" MAX.  
 NOTE: \* INDICATES VERIFY MINIMUM 1 1/2" BETWEEN BARS.  
 38. WATER - COMPLIANCE REQUIREMENTS:  
 A. MIXING WATER SHALL CONFORM TO ASTM C1602.  
 B. MIXING WATER, INCLUDING THAT PORTION OF MIXING WATER CONTRIBUTED IN THE FORM OF FREE MOISTURE ON AGGREGATES, SHALL NOT CONTAIN DELETERIOUS AMOUNTS OF CHLORIDE ION WHEN USED FOR PRESTRESSED CONCRETE, FOR CONCRETE THAT WILL CONTAIN ALUMINUM EMBEDMENTS, OR FOR CONCRETE CAST AGAINST STAY-IN-PLACE GALVANIZED STEEL FORMS.  
 39. ADMIXTURES - COMPLIANCE REQUIREMENTS:  
 A. ADMIXTURES SHALL CONFORM TO (1) THROUGH (4):  
 1. WATER REDUCTION AND SETTING TIME MODIFICATION: ASTM C494.  
 2. PRODUCING FLOWING CONCRETE: ASTM C1017.  
 3. AIR ENTRAINMENT: ASTM C260.  
 4. INHIBITING CHLORIDE-INDUCED CORROSION: ASTM C1582.  
 B. ADMIXTURES THAT DO NOT CONFORM TO THESE SPECIFICATIONS SHALL BE SUBJECT TO PRIOR REVIEW BY THE LICENSED DESIGN PROFESSIONAL.  
 C. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDE FROM SOURCES OTHER THAN IMPURITIES IN ADMIXTURE INGREDIENTS SHALL NOT BE USED IN PRESTRESSED CONCRETE, IN CONCRETE CONTAINING EMBEDDED ALUMINUM, OR IN CONCRETE CAST AGAINST STAY-IN-PLACE GALVANIZED STEEL FORMS.  
 D. ADMIXTURES USED IN CONCRETE CONTAINING EXPANSIVE CEMENTS CONFORMING TO ASTM C845 SHALL BE COMPATIBLE WITH THE CEMENT AND PRODUCE NO DELETERIOUS EFFECTS.  
 40. STEEL FIBER REINFORCEMENT - COMPLIANCE REQUIREMENTS:  
 A. STEEL FIBER REINFORCEMENT USED FOR SHEAR RESISTANCE SHALL SATISFY (1) AND (2):  
 1. BE DEFORMED AND CONFORM TO ASTM A820.  
 2. HAVE A LENGTH-TO-DIAMETER RATIO OF AT LEAST 50 AND NOT EXCEEDING 100.  
 41. COVER THICKNESS FOR REINFORCED CONCRETE FLOOR OR ROOF SLABS (INCHES)

FIRE-RESISTING RATING (HOURS)									
INTERIOR SPAN					END SPAN				
1 HR	1 1/2 HR	2 HR	3 HR	4 HR	1 HR	1 1/2 HR	2 HR	3 HR	4 HR
3/4	3/4	3/4	3/4	3/4	3/4	3/4	1	1 1/4	1 1/2

FIRE-RESISTING RATING (HOURS)									
INTERIOR SPAN					END SPAN				
1 HR	1 1/2 HR	2 HR	3 HR	4 HR	1 HR	1 1/2 HR	2 HR	3 HR	4 HR
3/4	3/4	3/4	3/4	3/4	1 1/2	1 1/2	1 1/2	2 1/2	2 1/2

43. 722.2.3 (3) - MINIMUM COVER FOR MAIN REINFORCING BARS OF REINFORCED CONCRETE BEAMS<sup>6</sup> (APPLICABLE TO ALL TYPES OF STRUCTURAL CONCRETE)

BEAM WIDTH <sup>a</sup> (inches)	FIRE-RESISTING RATING (HOURS)					
	1 HR	1 1/2 HR	2 HR	3 HR	4 HR	4 HR
5	3/4	1	1 1/4	-	-	-
7	3/4	3/4	3/4	1 1/4	3	3
≥ 10	3/4	3/4	3/4	1	1 1/4	1 1/4

S1: 1 INCH = 25.4mm 1 FOOT = 304.8mm  
 a. FOR BEAM WIDTHS BETWEEN THE TABULATED VALUES, THE MINIMUM COVER THICKNESS CAN BE DETERMINED BY DIRECT INTERPOLATION.  
 b. THE COVER FOR AN INDIVIDUAL REINFORCING BAR IS THE MINIMUM THICKNESS OF CONCRETE BETWEEN THE SURFACE OF THE BAR AND THE FIRE-EXPOSED SURFACE OF THE BEAM. FOR BEAMS IN WHICH SEVERAL BARS ARE USED, THE COVER FOR THE CORNER BARS USED IN THE CALCULATION SHALL BE REDUCED TO ONE-HALF OF THE ACTUAL VALUE. THE COVER FOR AN INDIVIDUAL BAR MUST BE NOT LESS THAN ONE-HALF OF THE VALUE GIVEN IN TABLE 722.2.3 (3) NOR LESS THAN 3/4 INCH.

44. TABLE 722.2.4 MINIMUM DIMENSION OF CONCRETE COLUMNS (INCHES)

FIRE-RESISTING RATING (HOURS)					
1 HR	1 1/2 HR	2 <sup>a</sup> HR	3 <sup>a</sup> HR	4 <sup>a</sup> HR	
8	9	10	12	14	

S1: 1 INCH = 25mm  
 a. THE MINIMUM DIMENSION IS PERMITTED TO BE REDUCED TO 8 INCHES FOR RECTANGULAR COLUMNS WITH TWO PARALLEL SIDES NOT LESS THAN 36 INCHES IN LENGTH.  
 b. THE MINIMUM DIMENSION IS PERMITTED TO BE REDUCED TO 10 INCHES FOR RECTANGULAR COLUMNS WITH TWO PARALLEL SIDES NOT LESS THAN 36 INCHES IN LENGTH.

45. 722.2.4.2 COVER FOR REINFORCED CONCRETE COLUMNS.  
 THE MINIMUM THICKNESS OF CONCRETE COVER TO THE MAIN LONGITUDINAL REINFORCEMENT IN COLUMNS, REGARDLESS OF THE TYPE OF AGGREGATE USED IN THE CONCRETE AND THE SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE,  $f_c$ , SHALL BE NOT LESS THAN 1 INCH (25mm) TIMES THE NUMBER OF HOURS OF REQUIRED FIRE RESISTANCE OR 2 INCHES (51mm), WHICHEVER IS LESS.

**REINFORCED CONCRETE NOTES:**

1. CONCRETE MIXES SHALL BE DESIGNED BY A RECOGNIZED TESTING LABORATORY AND COPIES OF THE DESIGN SHALL BE SENT TO THE ARCHITECT AND THE ENGINEER. COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND THE ARCHITECT. ALL CONCRETE EXCEPT FOUNDATION CONCRETE SHALL BE BASED WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150. TYPE II AGGREGATE FOR STONE CONCRETE SHALL CONFORM TO ASTM C-33. NON-REACTIVE AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONFORM ASTM C-330.  
 2. ALL REINFORCING BARS, ANCHOR BOLTS, PRE STRESSING TENDONS, AND ALL OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.  
 3. THE MAXIMUM SLUMP SHALL NOT EXCEED 4" +/- 1" FOR FOOTINGS, SLABS ON EARTH, AND MASS CONCRETE. AND 5" +/- 1" FOR OTHER CONCRETE. SLUMP MAY BE INCREASED WHEN CHEMICAL ADMIXTURES ARE USED, PROVIDED THAT ADMIXTURE-TREATED CONCRETE HAS THE SAME OR LOWER WATER: CEMENT OR WATER: CEMENTITIOUS MATERIAL RATIO. (ACI 211 TABLE 6.3.1)  
 4. MINIMUM COMPRESSIVE STRENGTH:  
 PROVIDE CONCRETE WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH ( $f'_c$ ) AT 28 DAYS UNLESS NOTED OTHERWISE (MINIMUM 5 SACKS OF CEMENT PER CUBIC YARD) (MAXIMUM WATER/CEMENT RATIO BY WEIGHT SHALL BE .65 FOR BALANCE):

CONSTRUCTION TYPE	MINIMUM COMPRESSIVE STRENGTH ( $f'_c$ )		
	PSI	SPEC. INSP. REQUIRED	AGGREGATE
DEEP FOUNDATION (PILES, CAISSONS, ETC.)	4000 PSI	YES	NORMAL WT.

NOTE: \* 2500 PSI STRENGTH USED FOR DESIGN, SPECIAL INSPECTION NOT REQUIRED.

5. THE COMPRESSIVE STRENGTH OF EXTERIOR SLABS AND FLAT WORK SHALL BE INCREASED FOR MODERATE AND SEVERE WEATHERING EXPOSURE PER TABLE 1904.2.2 OF THE CBC.  
 6. ALL STRUCTURAL CONCRETE IS TO BE REINFORCED.  
 7. CONTRACTOR SHALL SUBMIT CONSTRUCTION WITH JOINT LAYOUT DRAWINGS TO THE ARCHITECT AND ENGINEER FOR REVIEW. THE MAXIMUM SPACING OF CONTROL JOINTS IN SLAB ON GRADE EACH WAY SHALL BE 30X THE SLAB THICKNESS BEFORE 7 DAYS OF CURING. SLABS REQUIRE AT LEAST 7 DAYS CURING (14 DAYS WHERE FLY ASH OR POZZOLAN IS USED), AND THE ENVIRONMENT (HUMIDITY AND TEMPERATURE) OF ROOM SHALL BE ACCLIMATED TO LONG TERM CLIMATE CONDITIONS PRIOR TO INSTALLATION OF FLOORING. THE SLAB TEMPERATURE SHALL BE WITHIN 5 DEGREES OF DEW POINT DURING CURING. SEE NOTES BELOW ON CURING REQUIREMENTS. MOISTURE AND HUMIDITY TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY HIRED BY THE OWNER, AND TESTS RESULTS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF FLOORING.  
 8. PROJECTING CORNERS OF BEAMS, COLUMNS, WALLS, ETC., SHALL BE FORMED WITH A 3/4" CHAMFER UNLESS DETAILED OTHERWISE.  
 9. IF EXPOSURE TO SULFATES, OR SPECIAL EXPOSURE CONDITIONS OCCUR, THE CONCRETE STRENGTH, WATER CEMENT RATIOS, AND OTHER PROPERTIES OF THE CONCRETE MIX SHALL BE IN ACCORDANCE WITH ACI 318 SECTION 19.3. VERIFY WITH SOILS REPORT FOR CORROSIVE CHEMICALS IN THE SOILS.  
 10. DO NOT POUR CONCRETE WHEN THE TEMPERATURE EXCEEDS 90°F OR 80°F WHEN THE WIND EXCEEDS 12MPH. START CURING AS SOON AS HARD TRAWLING IS DONE. WHEN WIND, TEMPERATURE AND HUMIDITY CONDITIONS CAUSE EARLY DISAPPEARANCE OF BLEED WATER, STEPS SHALL BE TAKEN TO USE A FOG SPRAY. CURING SHALL COMMENCE IMMEDIATELY AFTER FINISHING TRAWLING.  
 11. CURING METHODS SHALL BE AS FOLLOWS:  
 A. WET CURING BY USING BURLAP FOR A MINIMUM OF 7 DAYS. BURLAP MUST BE PLACED WITHIN 2 HOURS OF POURING.  
 B. CURING COMPOUND MUST CONFORM TO ASTM C309. APPLY UNIFORMLY IN CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURE'S WRITTEN INSTRUCTION.  
 C. MOISTURE RETAINING COVER SHOULD CONFORM TO ASTM C171, BE AT LEAST 0.4 MILL THICK, AND PREFERABLE REINFORCED WITH GLASS FIBER.  
 12. WHERE AIR ENTRAINMENT CONCRETE IS SPECIFIED, THE VOLUME OF AIR IN THE MORTAR FRACTION OF CONCRETE MIX DESIGN SHALL BE 9% ±1%.  
 13. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 GRADE 60. AT GRADE BEAMS & CONCRETE FRAMES ALL REINF. SHALL CONFORM TO ASTM A706 REBAR. U.N.O.  
 14. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.  
 15. REINFORCING STEEL SHALL BE SPLICED WITH CLASS B SPLICES UNLESS NOTED OTHERWISE ON THE DRAWINGS.  
 16. LOW HYDROGEN ELECTRODES SHALL BE USED WHEREVER REINFORCING STEEL IS WELDED. BARS SHALL BE A706 GRD. 60 MIN. FOR WELD ABILITY.  
 17. AT THE TIME CONCRETE IS PLACED, REINFORCEMENT SHALL BE FREE FROM MUDD, OIL, OR OTHER NONMETALLIC COATINGS THAT DECREASE BOND, WHERE SPECIFIED IN THE DETAILS. EPOXY COATING OF STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI STANDARDS, EXCEPT FOR PRESTRESSING STEEL. STEEL REINFORCEMENT WITH RUST, MILL SCALE, OR A COMBINATION OF BOTH SHALL BE CONSIDERED SATISFACTORY, PROVIDED THE MINIMUM DIMENSIONS (INCLUDING HEIGHT OF DEFORMATIONS) AND WEIGHT OF A HAND-WIRE-BRUSHED TEST SPECIMEN COMPLY WITH APPLICABLE ASTM SPECIFICATIONS.  
 18. THE MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER SHALL BE  $\phi$  BUT NOT LESS THAN 1 IN. WHERE PARALLEL BARS ARE PLACED IN TWO OR MORE LAYERS, BARS IN THE UPPER LAYERS SHALL BE SPACED DIRECTLY ABOVE BARS IN THE BOTTOM LAYER WITH CLEAR DISTANCE BETWEEN LAYERS NOT LESS THAN 1 IN. CLEAR DISTANCE LIMITATION BETWEEN BARS SHALL APPLY ALSO TO THE CLEAR DISTANCE BETWEEN A CONTACT LAP SPlice AND ADJACENT SPLICES OR BARS. IN SPIRALLY REINFORCED OR TIED REINFORCED COMPRESSION MEMBERS, CLEAR DISTANCE BETWEEN LONGITUDINAL BARS SHALL BE NOT LESS THAN 1.5 $\phi$  NOR LESS THAN 1 1/2 IN. IN WALLS AND SLABS OTHER THAN CONCRETE JOIST CONSTRUCTION, PRIMARY FLEXURAL REINFORCEMENT SHALL NOT BE SPACED FARTHER APART THAN THREE TIMES THE WALL OR SLAB THICKNESS, NOR FARTHER APART THAN 18 IN.  
 19. WHERE CONCRETE MUST BE INSTALLED AND CURED IN COLD WEATHER, THE GENERAL REQUIREMENTS AND SPECIFICATIONS OF ASTM STD C-31 SHALL BE IMPLEMENTED.  
 20. CAST-IN-PLACE CONCRETE (NON-PRESTRESSED)  
 THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:  
 A. CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH..... 3" MIN.  
 B. CONCRETE EXPOSED TO EARTH OR WEATHER:  
 • NO. 6 THROUGH NO. 18 BARS.....2" MIN.  
 • NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER.....1 1/2" MIN.  
 C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:  
 SLABS, WALLS, JOISTS:  
 • NO. 14 AND NO. 18 BARS.....1 1/2" MIN.  
 • NO. 11 BAR AND SMALLER.....3/4" MIN.  
 BEAMS, COLUMNS:  
 • PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS.....1 1/2" MIN.  
 SHELLS, FOLDED PLATE MEMBERS:  
 • NO. 6 BAR AND LARGER.....3/4" MIN.  
 • NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER.....1/2" MIN.  
 21. BUNDLED BARS:  
 MINIMUM CONCRETE COVER SHALL BE EQUAL TO THE EQUIVALENT DIAMETER OF THE BUNDLE, BUT NEED NOT TO BE GREATER THAN 2 IN.; EXCEPT FOR CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH, WHERE MINIMUM COVER SHALL BE 3 IN. GROUPS OF PARALLEL REINFORCING BARS BUNDLED IN CONTACT TO ACT AS A UNIT SHALL BE LIMITED TO FOUR IN ANY ONE BUNDLE. BUNDLED BARS SHALL BE ENCLOSED WITHIN STIRRUPS OR TIES. BARS LARGER THAN NO. 11 SHALL NOT BE BUNDLED IN BEAMS. INDIVIDUAL BARS WITHIN A BUNDLE TERMINATED WITHIN THE SPAN OF FLEXURAL MEMBERS SHALL TERMINATE AT DIFFERENT POINTS WITH AT LEAST 40 $\phi$  STAGGER.  
 22. CORROSION ENVIRONMENTS:  
 IN CORROSIVE ENVIRONMENTS OR OTHER SEVERE EXPOSURE CONDITIONS, AMOUNT OF CONCRETE PROTECTION SHALL BE SUITABLY INCREASED, AND DENSENESS AND NONPOROSITY OF PROTECTING CONCRETE SHALL BE CONSIDERED, OR OTHER PROTECTION SHALL BE PROVIDED. COVER WHEN NOTED ON PLANS AND DETAILS IS NOT A MINIMUM, UNLESS NOTED AS "MIN." THE COVER SHALL BE AS NOTED WITH TOLERANCE.  
 23. MINIMUM DIAMETER OF BEND:  
 MINIMUM DIAMETERS OF BEND

BAR SIZE	MINIMUM DIAMETER
NO.3 THROUGH NO.8	6 $\phi$
NO.9, NO.10, AND NO.11	8 $\phi$
NO.14 AND NO.18	10 $\phi$

27. TOLERANCE FOR  $\phi$  AND MINIMUM CONCRETE COVER IN FLEXURAL MEMBERS, WALLS, AND COMPRESSION MEMBERS SHALL BE AS FOLLOWS:

	TOLERANCE ON $\phi$	TOLERANCE ON MINIMUM CONCRETE COVER
$\phi \leq 8$ IN.	±3/8 IN.	-3/8 IN.
$\phi > 8$ IN.	±1/2 IN.	-1/2 IN.

EXCEPT THAT TOLERANCE FOR THE CLEAR DISTANCE TO FORMED SOFFITS SHALL BE MINUS 1/4 IN. AND TOLERANCE FOR COVER SHALL NOT EXCEED MINUS 1/4 IN. THE MINIMUM CONCRETE COVER REQUIRED IN THE DESIGN DRAWINGS AND SPECIFICATIONS.

REVISIONS		
NO.	REVISION	DATE

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 info@rgseinc.com



**NEW CONSTRUCTION FOR:**  
**DESERT VIEW CONSERVATION AREA**  
 JOSHUA TREE  
 COUNTY OF SAN BERNARDINO

**SHEET TITLE :**  
**GENERAL NOTES**

**JOB NO:** 24120  
**DRAWN:** aaronc@rgseinc.com  
**ENGINEER:** alannl@rgseinc.com  
**PLOT DATE:** 6/13/2025

**STAMP:**  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 NO. 19322  
 STATE OF CALIFORNIA

**S0.02**  
 1" ACTUAL

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REVISIONS		
NO.	REVISION	DATE

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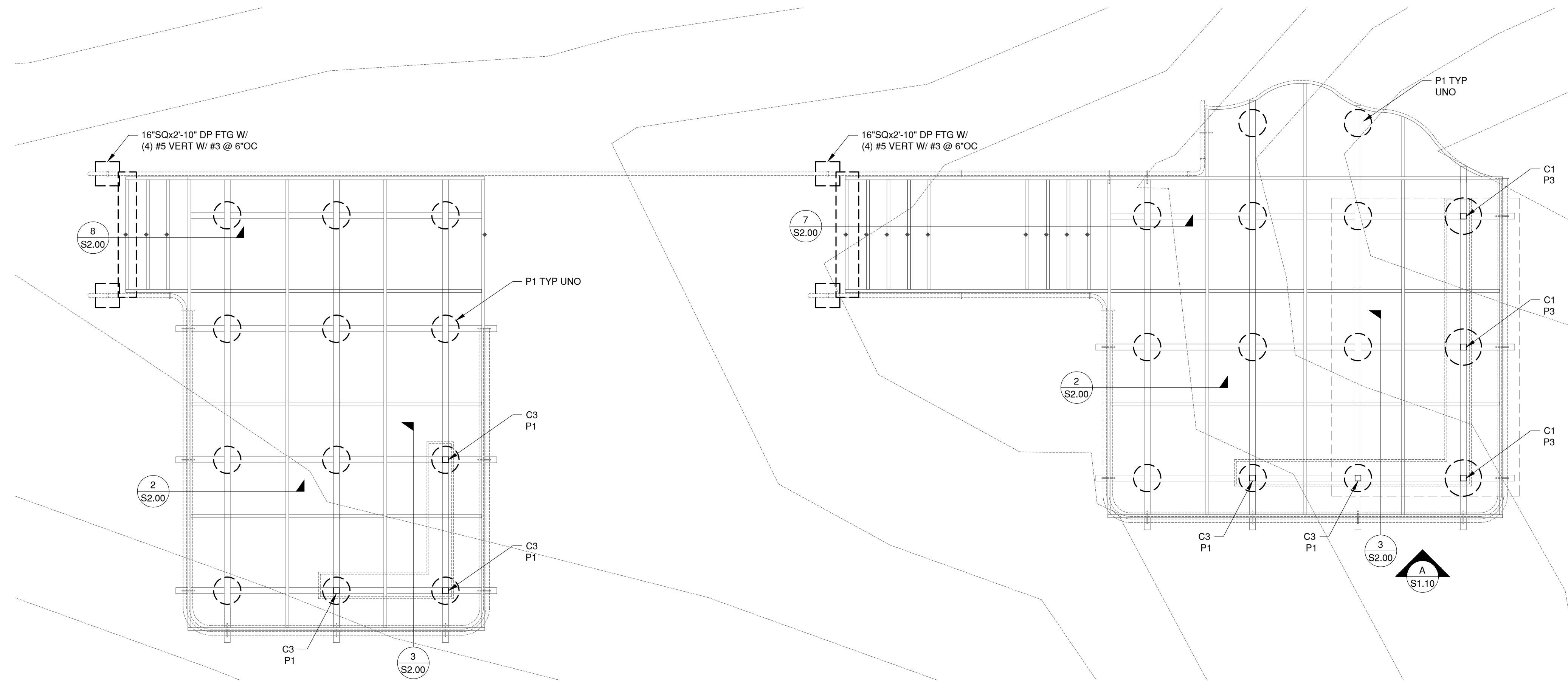
**NEW CONSTRUCTION FOR:  
 DESERT VIEW CONSERVATION AREA**  
 JOSHUA TREE  
 COUNTY OF SAN BERNARDINO

**SHEET TITLE:  
 DECK FRAMING &  
 FOUNDATION PLAN**

JOB NO: 24120  
 DRAWN: aaronc@rgseinc.com  
 ENGINEER: alanm@rgseinc.com  
 PLOT DATE: 6/13/2025  
 STAMP:



**S1.00**  
 1" ACTUAL



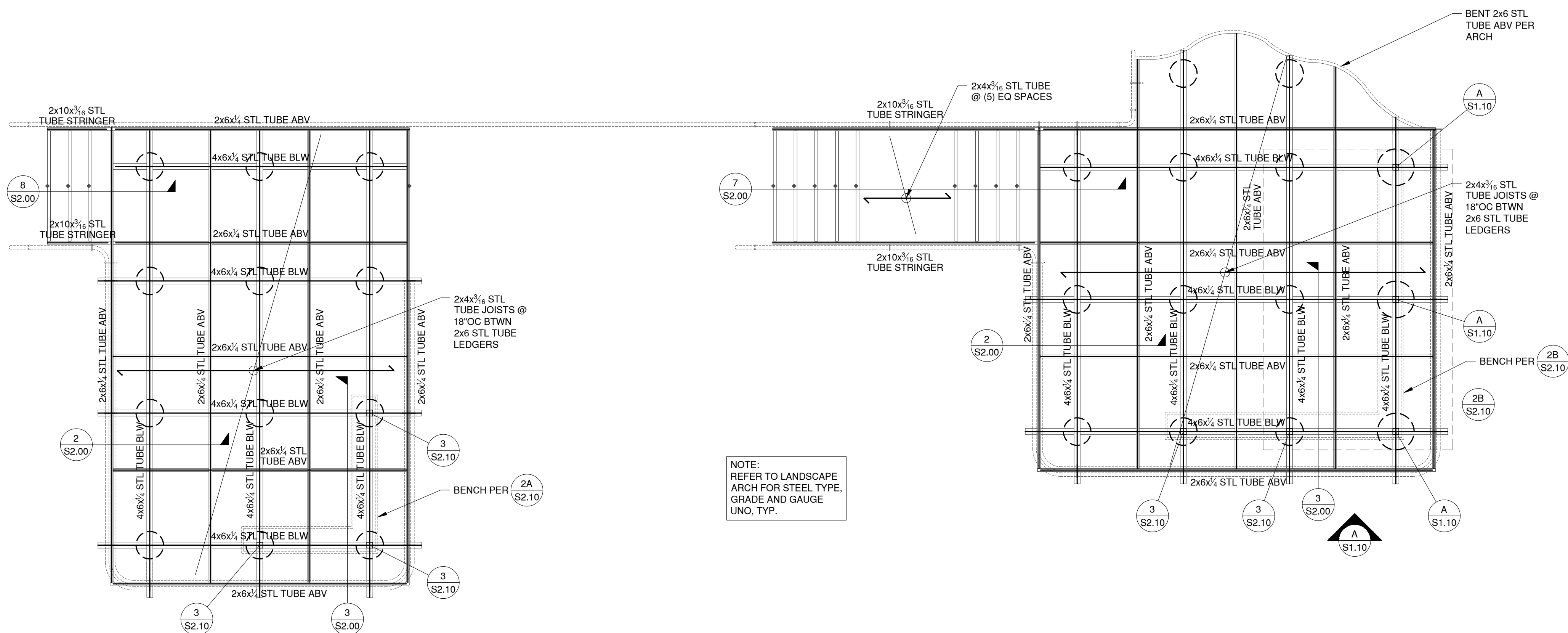
**FOUNDATION PLAN**  
 SCALE: 1/4"=1'-0"

**FOUNDATION NOTES:**

- SEE FOUNDATION NOTES ON SHEET S0.01 FOR DESIGN SOIL BEARING PRESSURE, ETC.
- C1 - INDICATES COLUMN MARK, FOR SIZE SEE SCHEDULE SHEET S1.00.
- P1 - INDICATES FOOTING MARK, FOR SIZE SEE SCHEDULE SHEET S1.00.
- SEE ARCH. FOR ALL DIMENSIONS & CONDITIONS NOT SHOWN.
- PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:
  - THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
  - THE UTILITY TRENCHES HAVE BEEN PROPERLY BACK FILLED & COMPACTED.
  - THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE SOILS REPORT.
- ALL FOOTINGS ARE CENTERED UNDER COLUMNS AND BEARING WALLS UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
- SEE ARCHITECTURAL PLANS FOR LOCATIONS OF ALL WALL OPENINGS, SLOPED AND DEPRESSED SLABS, CONCRETE CURBS, ADDITIONAL EMBEDDED ITEMS NOT SHOWN ON THESE DRAWINGS. VERIFY ALL BUILDING DIMENSIONS, SLOPES AND DEPRESSED SLAB DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE BEGINNING WORK. REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR RESOLUTION.
- SEE GENERAL NOTES AND SPECIFICATIONS FOR SPECIAL GRADING REQUIREMENTS UNDER FOOTINGS.
- COLUMNS ARE ONE SIZE FROM FOUNDATION TO ROOF UNLESS OTHERWISE NOTED ON PLANS
- ALL DIMENSIONS SHOWN ARE TO EDGE OF CONCRETE SLAB, CENTER OF INTERIOR WALL, OR CENTERLINE OF POST OR COLUMN. REFER TO ARCHITECTURAL PLANS FOR OTHER DIMENSIONS.
- ALL COLUMNS ARE CENTERED ON THE GRID LINES UNLESS NOTED OTHERWISE.
- SURFACE WATER SHALL DRAIN AWAY FROM THE BUILDING. COORDINATE WITH CIVIL & LANDSCAPE.
- CONTRACTOR SHALL COORDINATE ALL UNDERGROUND UTILITY WORK TO AVOID CONFLICTS WITH FOOTINGS.
- CONTRACTOR SHALL SUBMIT PROPOSED FIRE RISER, CONDUIT, PIPING SLEEVE LOCATION FOR ENGINEER'S REVIEW PRIOR TO FOOTING CONSTRUCTION.
- SEE ARCH. AND CIVIL DRAWINGS FOR LOCATION OF MOISTURE BARRIER, CURBS, TRASH ENCLOSURES, EXTERIOR SLABS, DRAINAGE, RAMPS, WALKS, ETC.
- FOR FOOTINGS OUTSIDE THE BUILDING ENVELOPE, COORDINATE TOP OF FOOTING ELEVATION WITH THE STRUCTURAL DETAILS AND WITH CIVIL AND LANDSCAPE.
- EXCAVATIONS SHALL BE MADE IN COMPLIANCE WITH CAL/OSHA REGULATIONS.

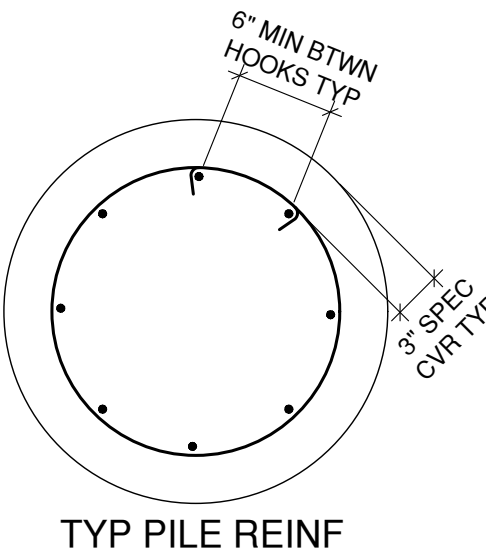
**STEEL FRAMING NOTES:**

- "C" = INDICATES CAMBER BETWEEN SUPPORTS ONLY @ BEAMS (i.e. NO CAMBER @ CANTILEVERS)
- PROVIDE BOUNDARY NAILING ALONG ALL STRUT MEMBERS, UNO.
- FOR TYPICAL DETAILS SEE SHEETS S0.10, S0.20, S0.30 ETC.
- UNLESS SPECIFICALLY NOTED ON THE PLANS, FRAMING SHALL NOT BE CUT OR RELOCATED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL OBTAIN APPROVAL OF JOIST MFR SHOP DRAWINGS FROM BOTH MECHANICAL AND STRUCTURAL ENGINEERS PRIOR TO ERECTION OF JOIST FRAMING.
- FOR LOW SPOTS CREATED BY THE ROOF PITCH SHALL BE PROVIDED WITH CRICKETS AS REQUIRED TO SLOPE AS REQUIRED.
- PROTECTED ZONE: WHERE A PROTECTED ZONE IS DESIGNED, IT SHALL COMPLY WITH THE FOLLOWING:
  - WITHIN THE PROTECTED ZONE, DISCONTINUITIES CREATED BY FABRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING AND THERMAL CUTTING SHALL BE REPAIRED AS REQUIRED BY THE ENGINEER OF RECORD.
  - WELDED SHEAR STUDS AND DECKING ATTACHMENTS THAT PENETRATE THE BEAM FLANGE SHALL NOT BE PLACED ON BEAM FLANGES WITHIN THE PROTECTED ZONE. DECKING ARC SPOT WELDS AS REQUIRED TO SECURE DECKING SHALL BE PERMITTED.
  - WELDED, BOLTED, SCREWED OR SHOT-IN ATTACHMENTS FOR PERIMETER EDGE ANGLES, EXTERIOR FACADES, PARTITIONS, DUCK WORK, PIPING OR OTHER CONSTRUCTION SHALL NOT BE PLACED WITHIN THE PROTECTED ZONE.
- ALL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL MEET THE MINIMUM SPECIFICATIONS IN THE AISC CODE OF STANDARD PRACTICE CHAPTER 10 UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.

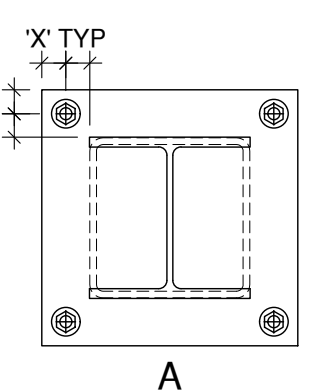


**DECK FRAMING PLAN**  
 SCALE: 1/4"=1'-0"

PILE SCHEDULE				
MARK	Ø	EMB	VERT REINF	TIES
P1	1'-6"	8'-0" MIN (5'-0" MIN INTO COMPETENT MATERIAL)	(5) #5	#4 TIES @ 6" OC
P2	2'-0"	8'-0" MIN (5'-0" MIN INTO COMPETENT MATERIAL)	(8) #5	#4 TIES @ 6" OC
P3	2'-0"	11'-6" MIN (8'-6" MIN INTO COMPETENT MATERIAL)	(8) #5	#4 TIES @ 6" OC



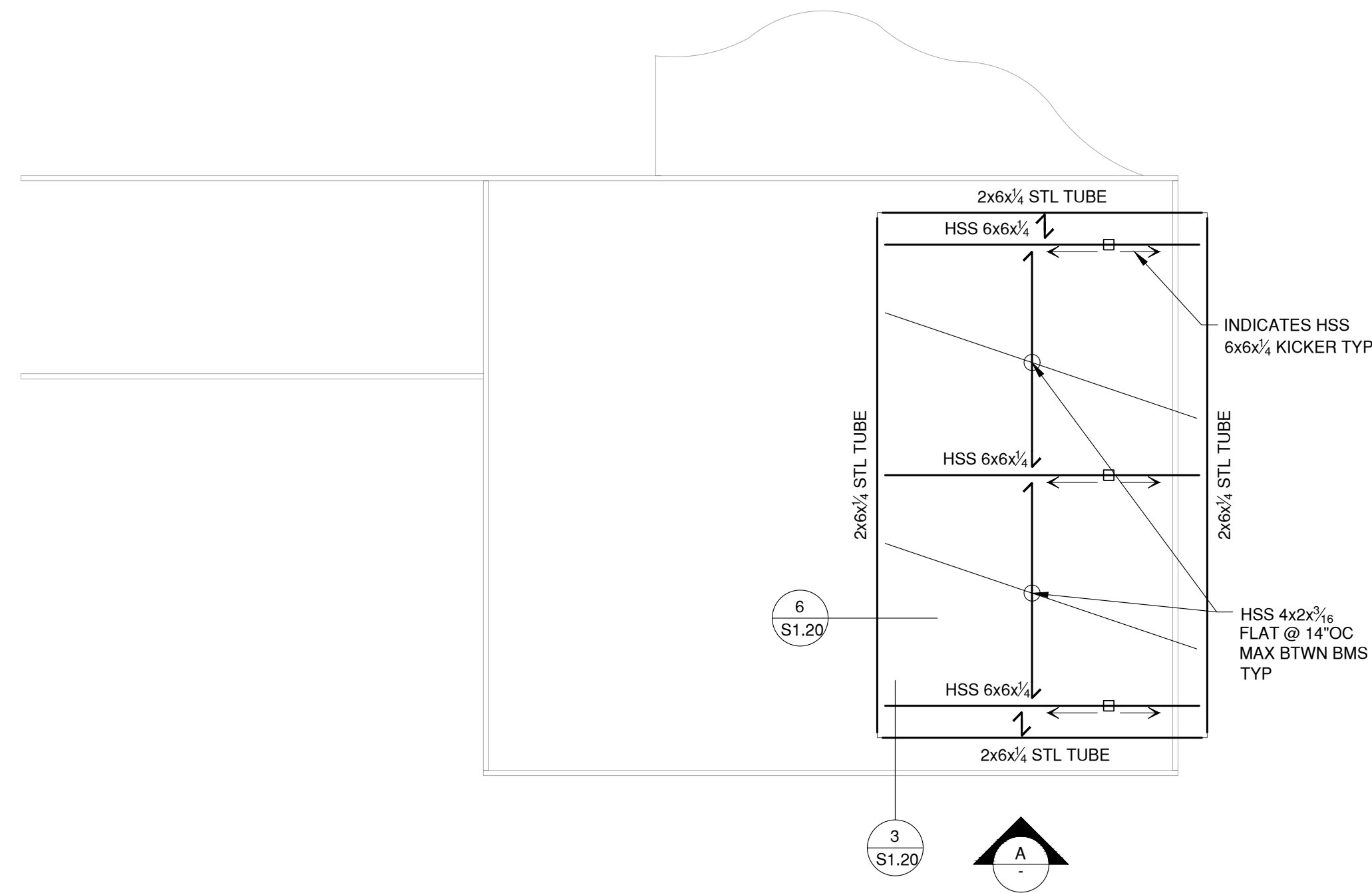
STEEL COLUMN SCHEDULE					
MARK	COLUMN SIZE	BASE PLATE SIZE	ANCHOR BOLTS	BOLT LAYOUT	REMARKS
C1	HSS 6 X 6 X 1/2"	13" SQ X 1" THK	(1) 1" Ø X 24" EMB	A	
C2	HSS 6 X 6 X 1/4"	12" SQ X 3/4" THK	(4) 1/2" Ø X 24" EMB	A	
C3	HSS 4 X 4 X 1/4"	10" SQ X 1/2" THK	(4) 1/2" Ø X 16" EMB	A	



"X" = 1 1/2" FOR AB < 7/8" Ø  
 1 3/4" x Ø FOR AB > 7/8" Ø  
 TYP UNO

NOTE:  
 REFER TO LANDSCAPE ARCH FOR STEEL TYPE, GRADE AND GAUGE UNO, TYP.

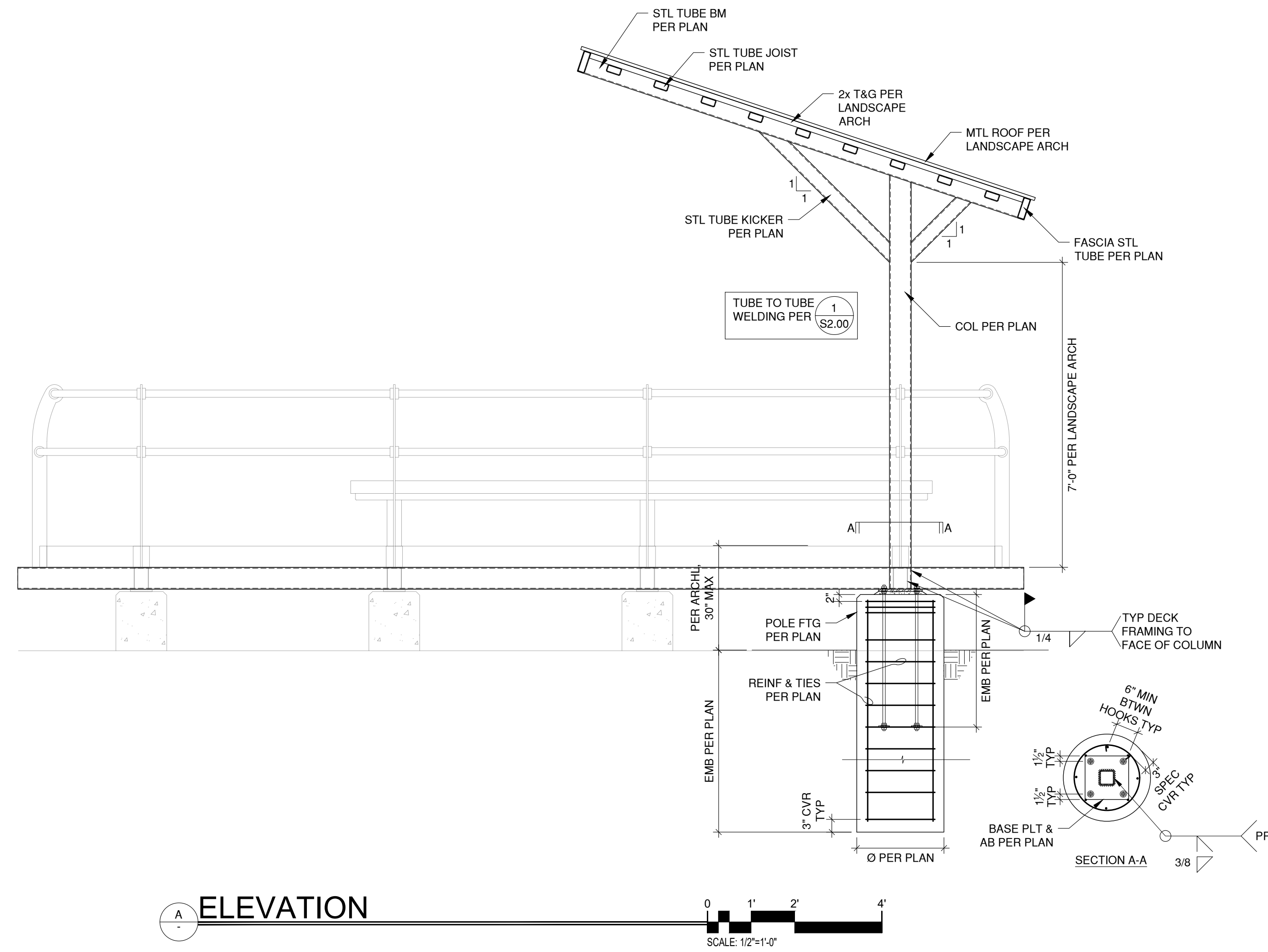
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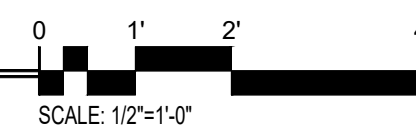
**SHADE COVER FRAMING PLAN**



**NOTE:**  
SEE SHEET S1.00 FOR ALL OTHER  
SCHEDULES, TABLES, LEGENDS,  
AND PLAN NOTES NOT SHOWN  
ON THIS SHEET.



**ELEVATION**



REVISIONS		
NO.	REVISION	DATE

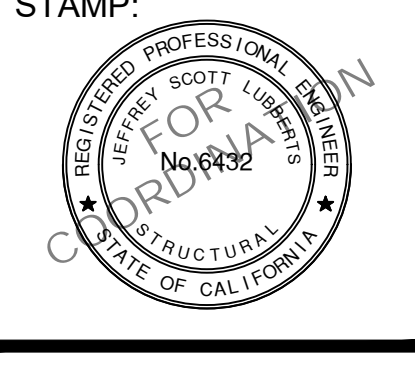
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**NEW CONSTRUCTION FOR:**  
**DESERT VIEW CONSERVATION AREA**  
JOSHUA TREE  
COUNTY OF SAN BERNARDINO

**SHEET TITLE :**  
**SHADE COVER**  
**FRAMING PLAN**

**JOB NO:** 24120  
**DRAWN:** aaronc@rgseinc.com  
**ENGINEER:** alannt@rgseinc.com  
**PLOT DATE:** 6/13/2025



**S1.10**

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REVISIONS		
NO.	REVISION	DATE

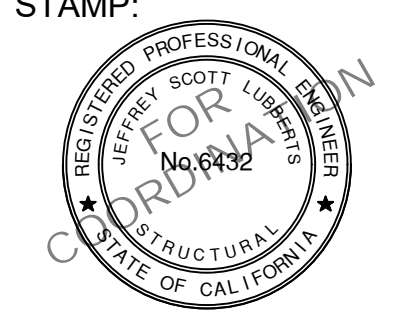
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**NEW CONSTRUCTION FOR:**  
**DESERT VIEW CONSERVATION AREA**  
 JOSHUA TREE  
 COUNTY OF SAN BERNARDINO

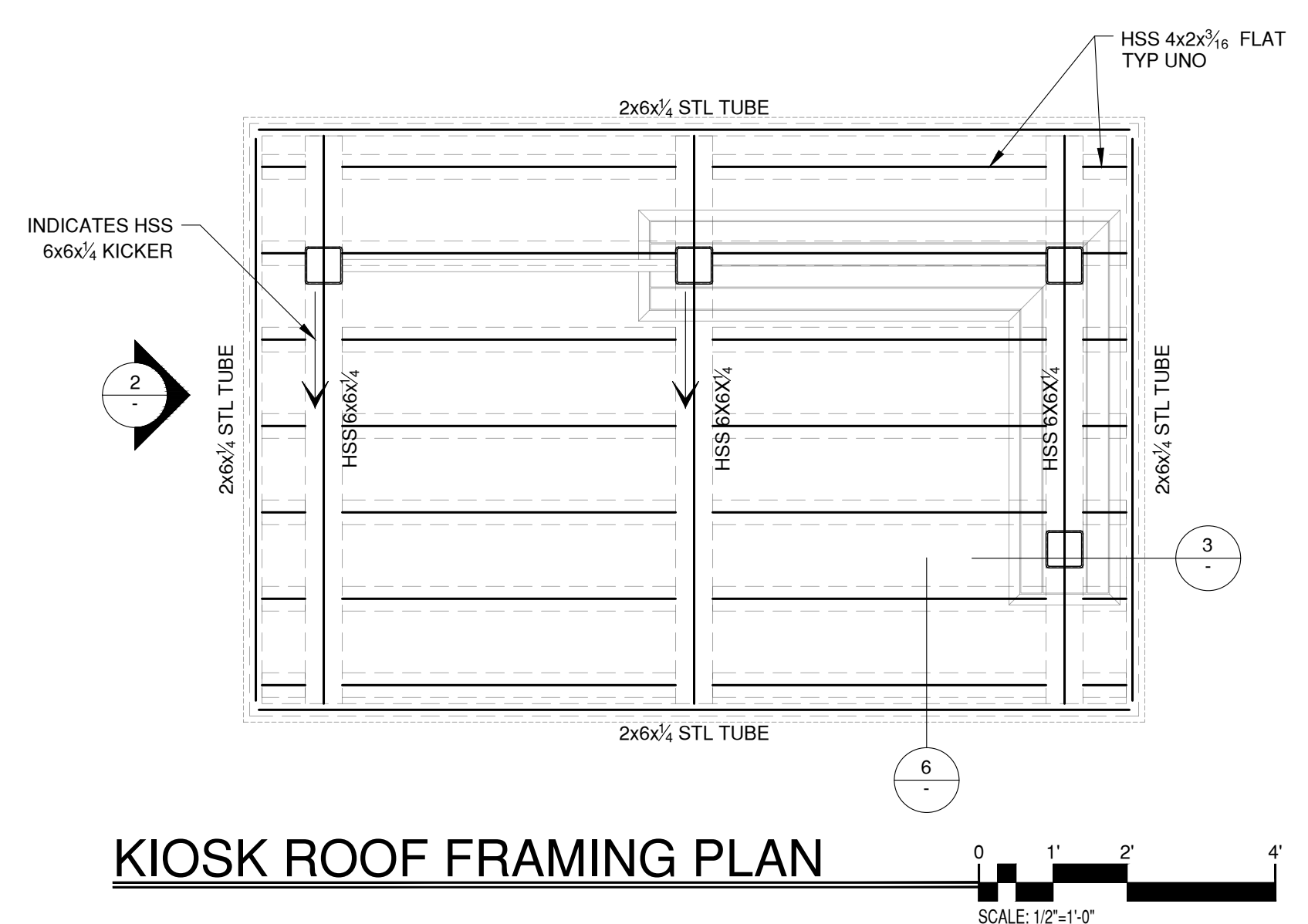
**SHEET TITLE :**  
**KIOSK STRUCTURAL PLANS & DETAILS**

**JOB NO:** 24120  
**DRAWN:** aaronc@rgseinc.com  
**ENGINEER:** alann@rgseinc.com  
**PLOT DATE:** 6/13/2025

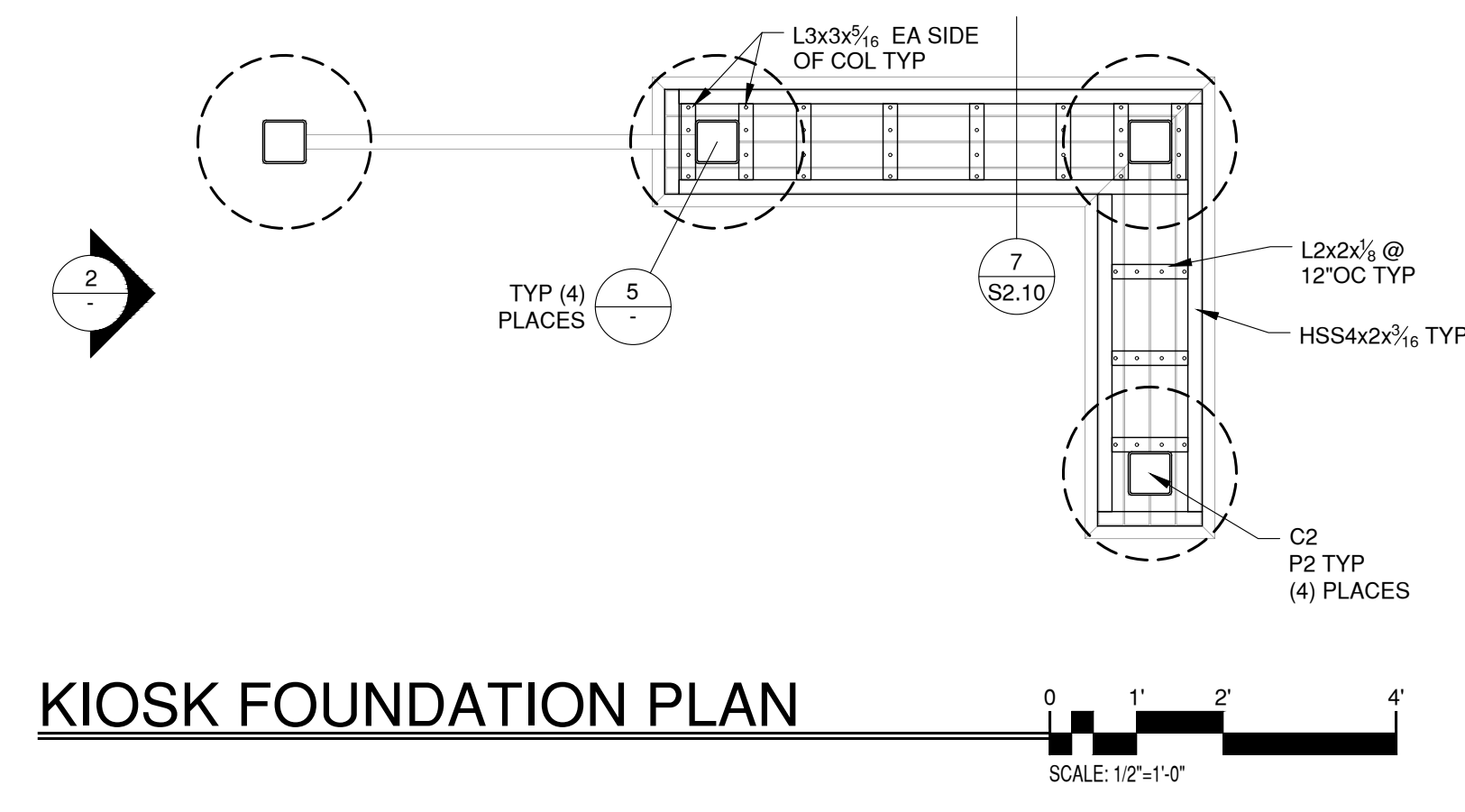


**S1.20**

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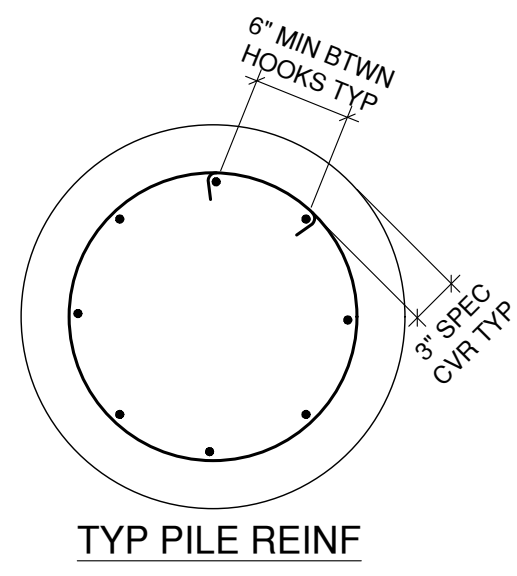
**KIOSK ROOF FRAMING PLAN**



**KIOSK FOUNDATION PLAN**

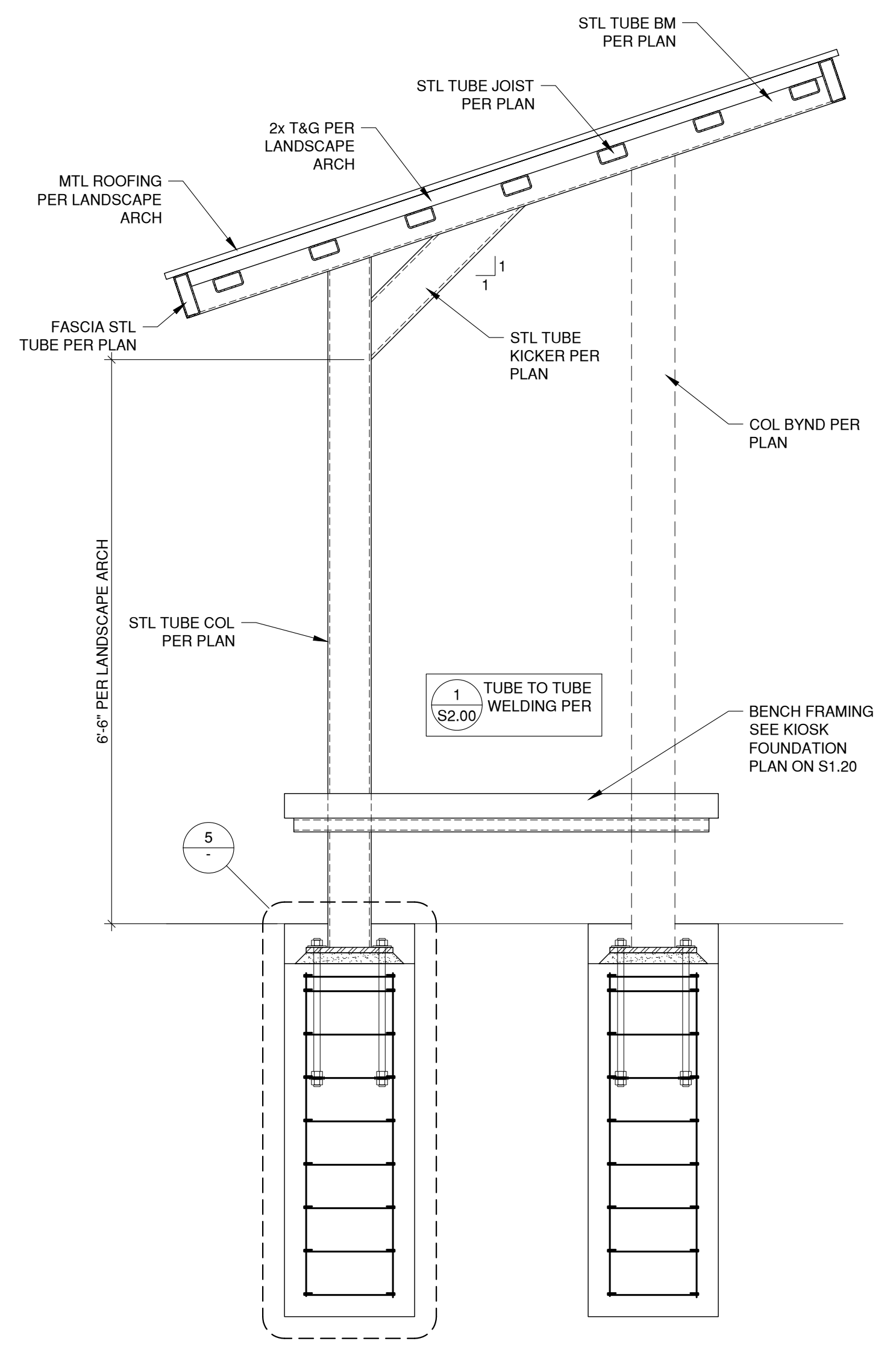
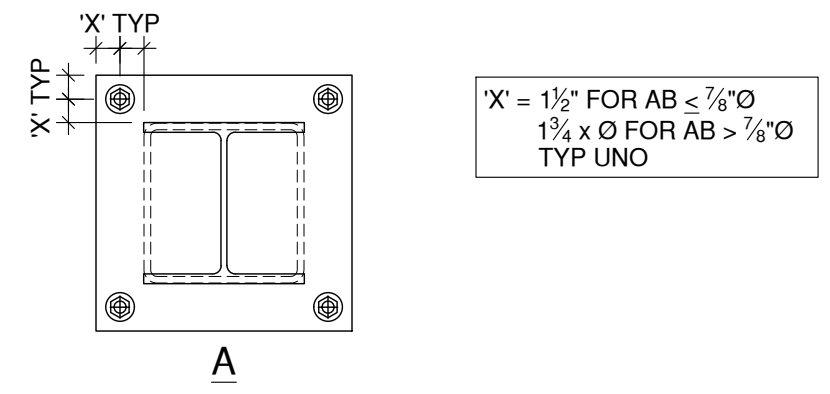
**NOTE:**  
 SEE SHEET S1.00 FOR ALL OTHER SCHEDULES, TABLES, LEGENDS, AND PLAN NOTES NOT SHOWN ON THIS SHEET.

PILE SCHEDULE				
MARK	Ø	EMB	VERT REINF	TIES
P1	1'-6"	8'-0" MIN (5'-0" MIN INTO COMPETENT MATERIAL)	(5) #5	#4 TIES @ 6"OC
P2	2'-0"	8'-0" MIN (5'-0" MIN INTO COMPETENT MATERIAL)	(8) #5	#4 TIES @ 6"OC
P3	2'-0"	11'-6" MIN (8'-6" MIN INTO COMPETENT MATERIAL)	(8) #5	#4 TIES @ 6"OC

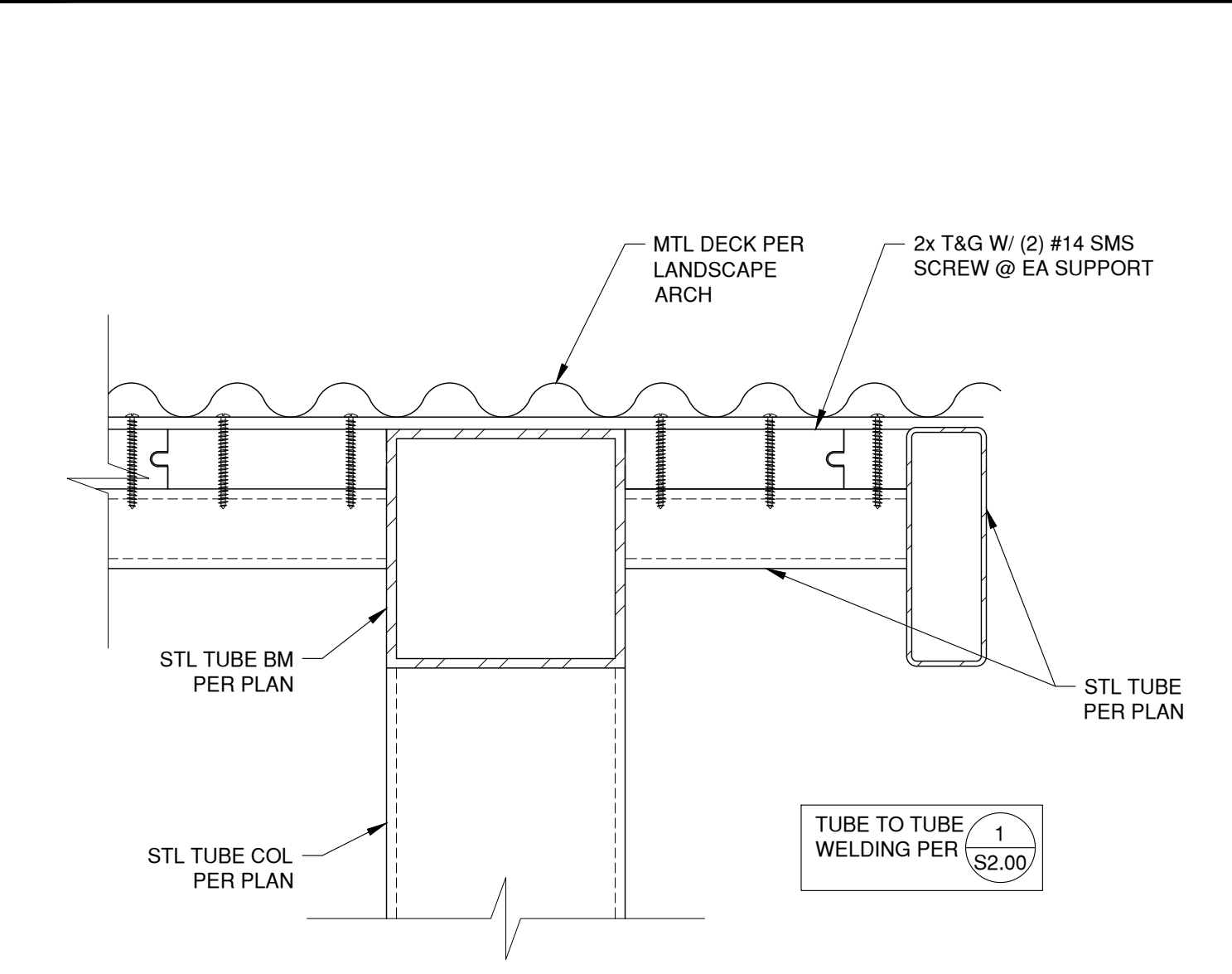


STEEL COLUMN SCHEDULE					
MARK	COLUMN SIZE	BASE PLATE SIZE	ANCHOR BOLTS	BOLT LAYOUT	REMARKS
C1	HSS 6 X 6 X 1/2	13" SQ X 1" THK	(4) 1" Ø X 24" EMB	A	
C2	HSS 6 X 6 X 1/4	12" SQ X 3/4" THK	(4) 3/4" Ø X 24" EMB	A	
C3	HSS 4 X 4 X 1/4	10" SQ X 1/2" THK	(4) 1/2" Ø X 16" EMB	A	

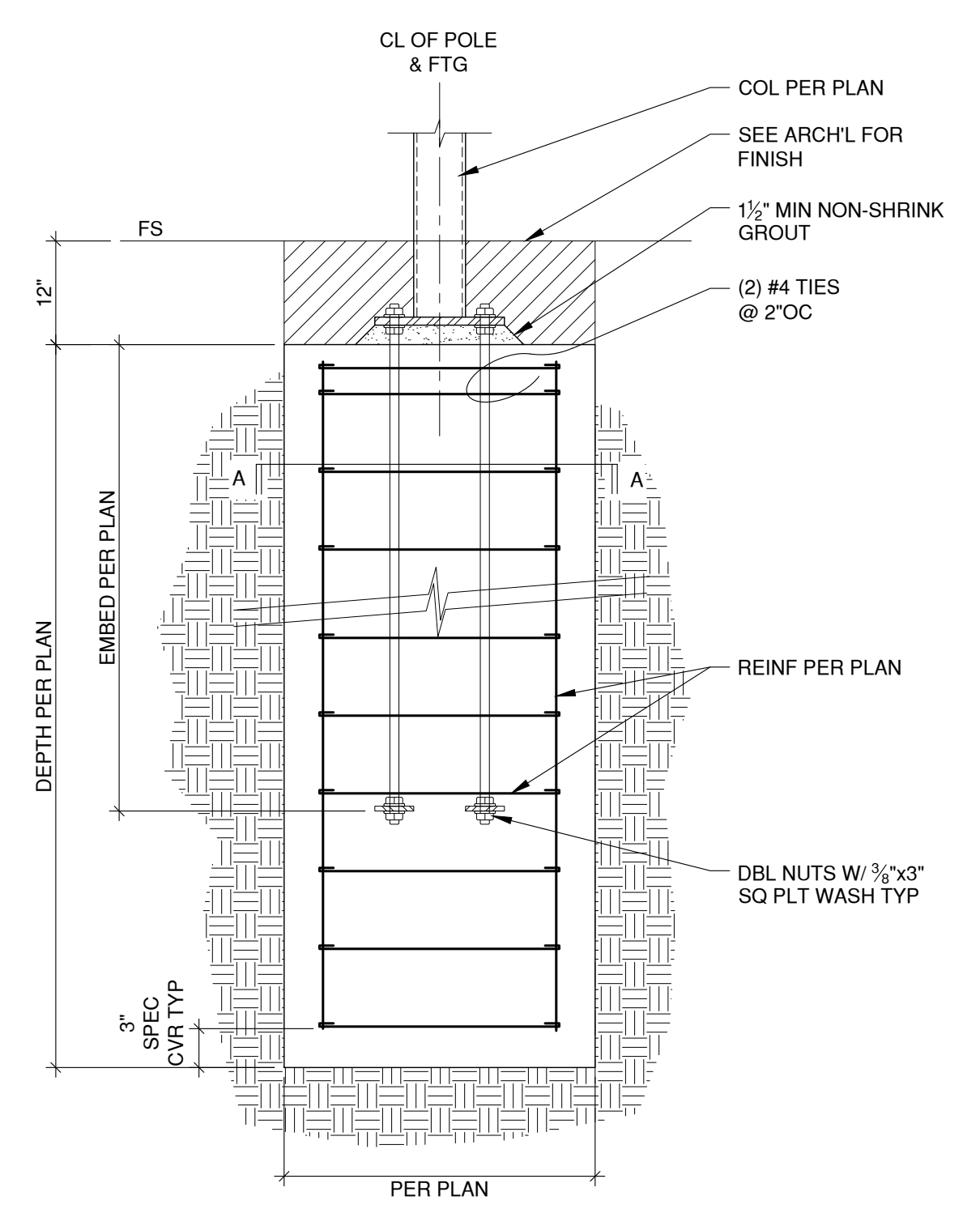
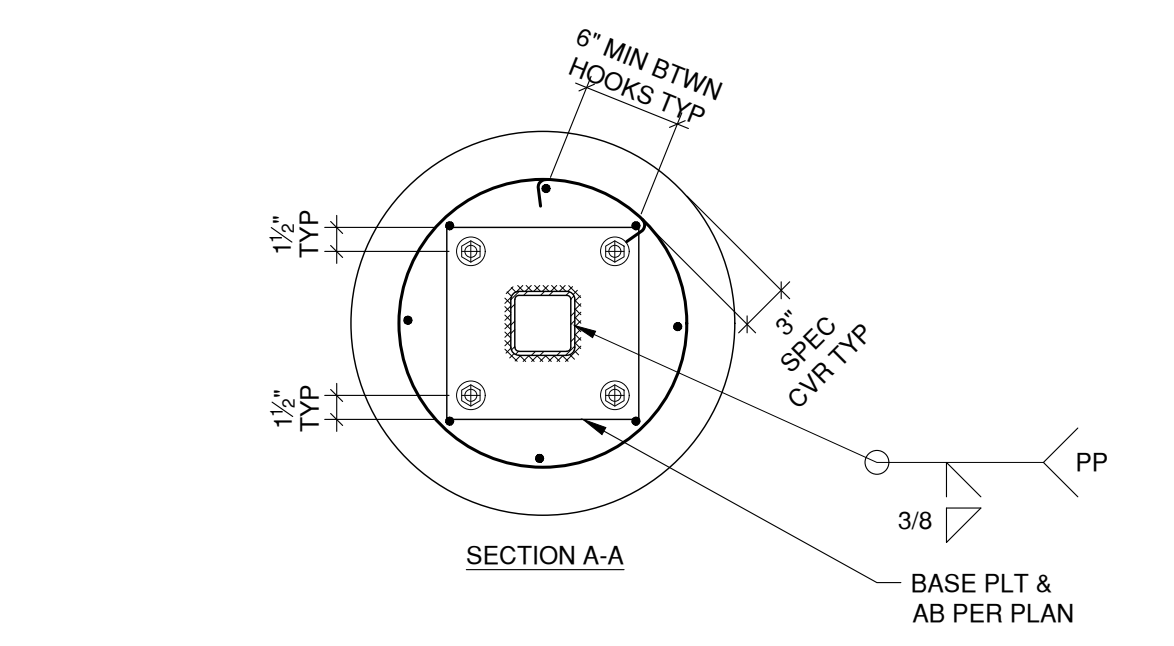
**NOTES:**  
 AT BASE PLATES W/ < (4) AB'S ADD TEMP BRACING FOR LATERAL STABILITY IN (2) DIRECTIONS.



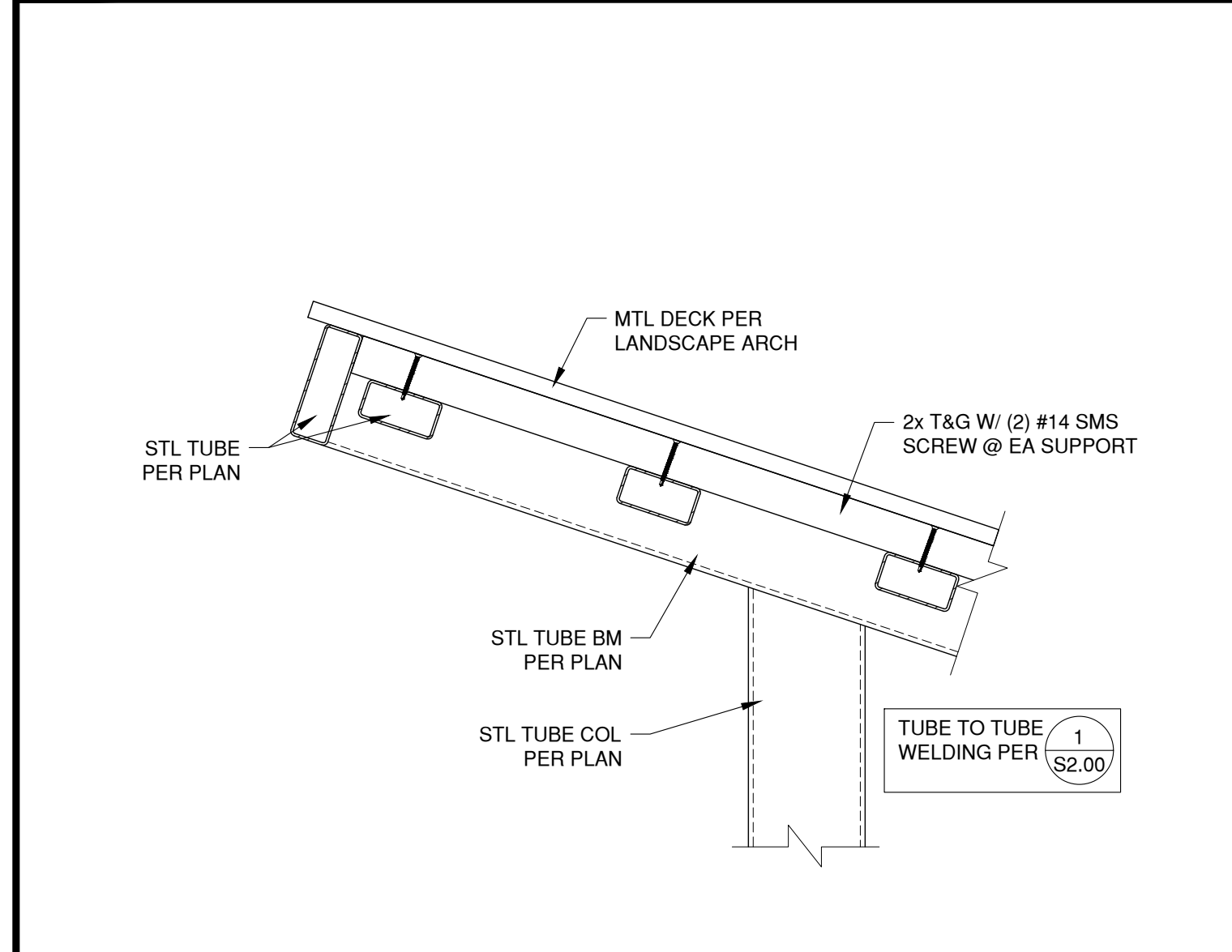
**KIOSK ELEVATION**



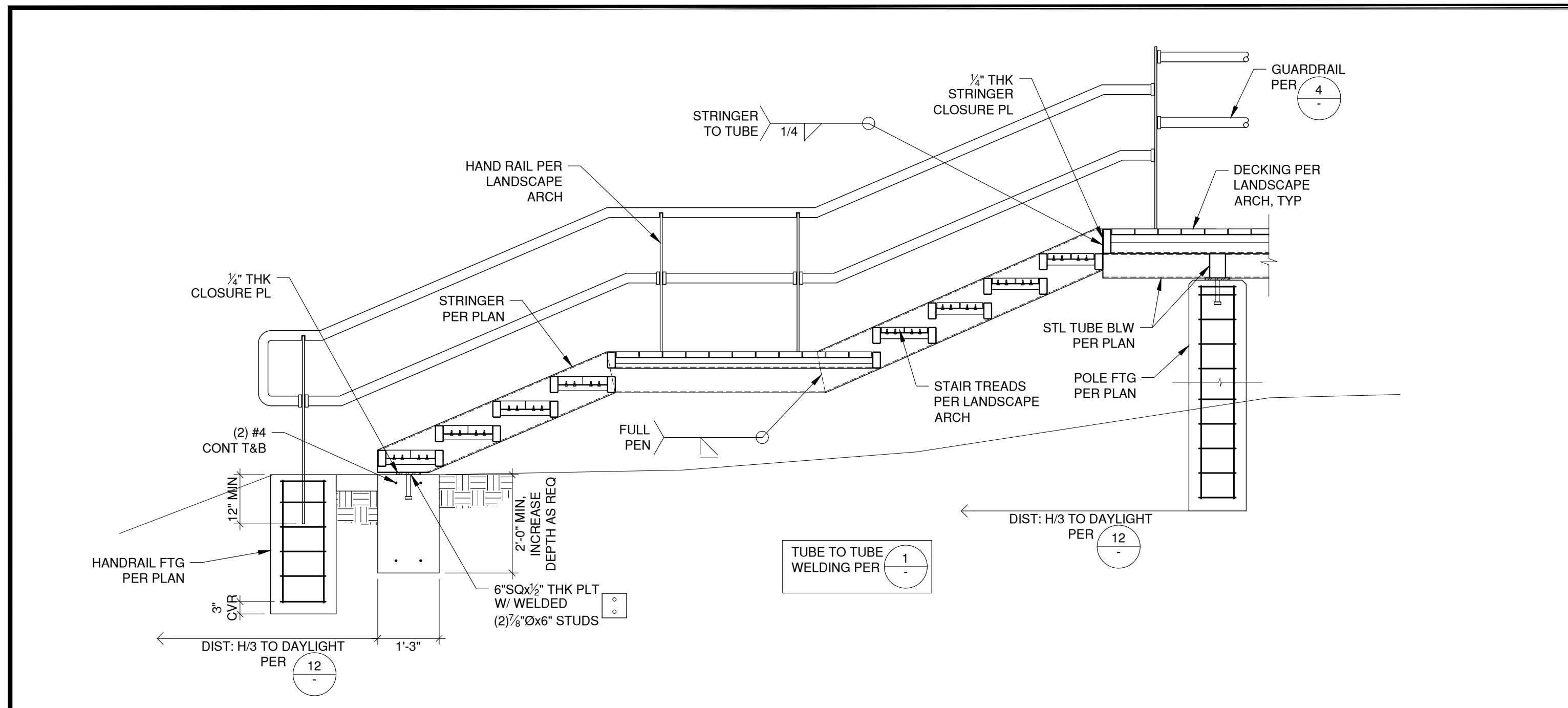
**SECTION AT ROOF**



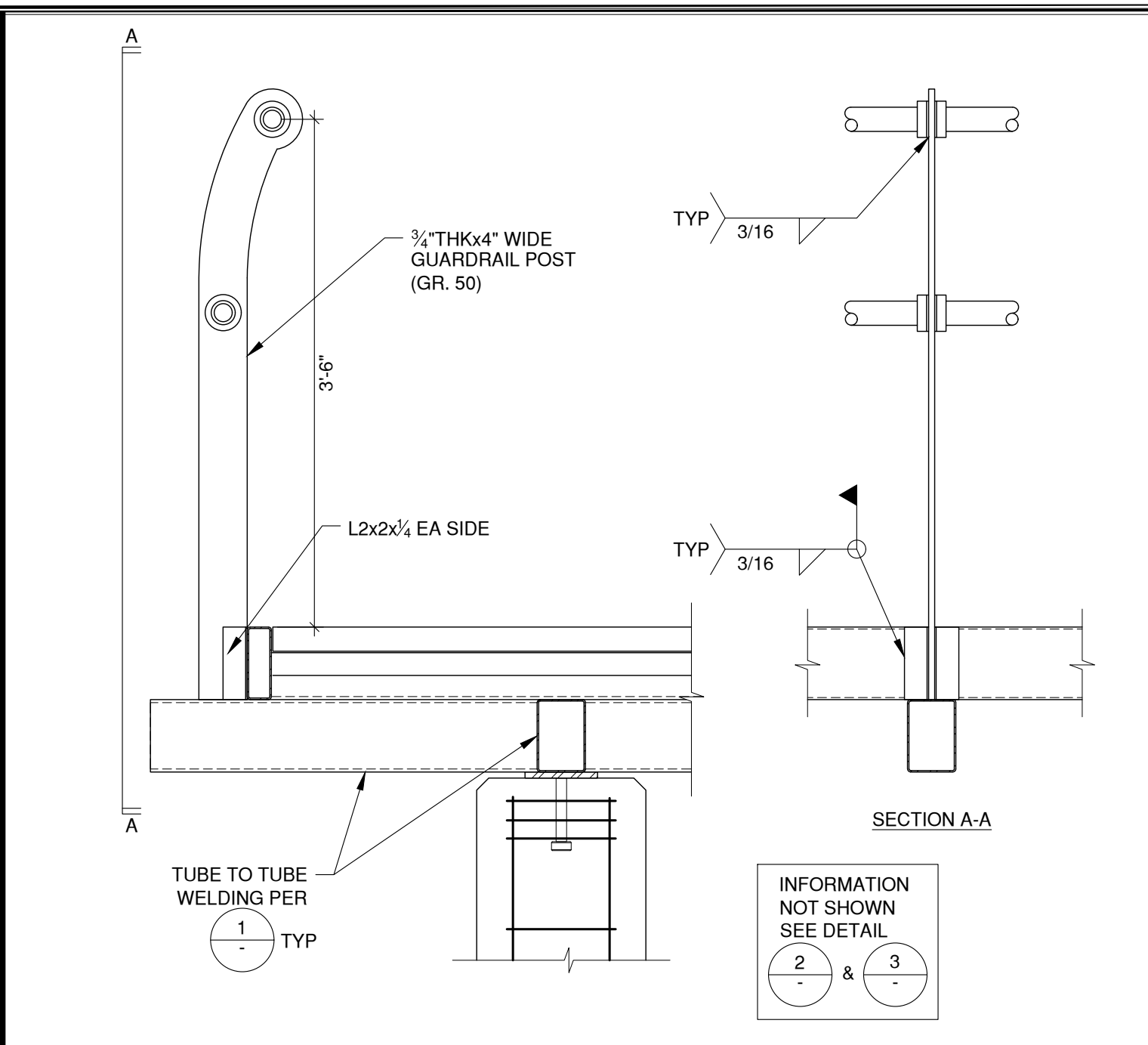
**POLE FOOTING**



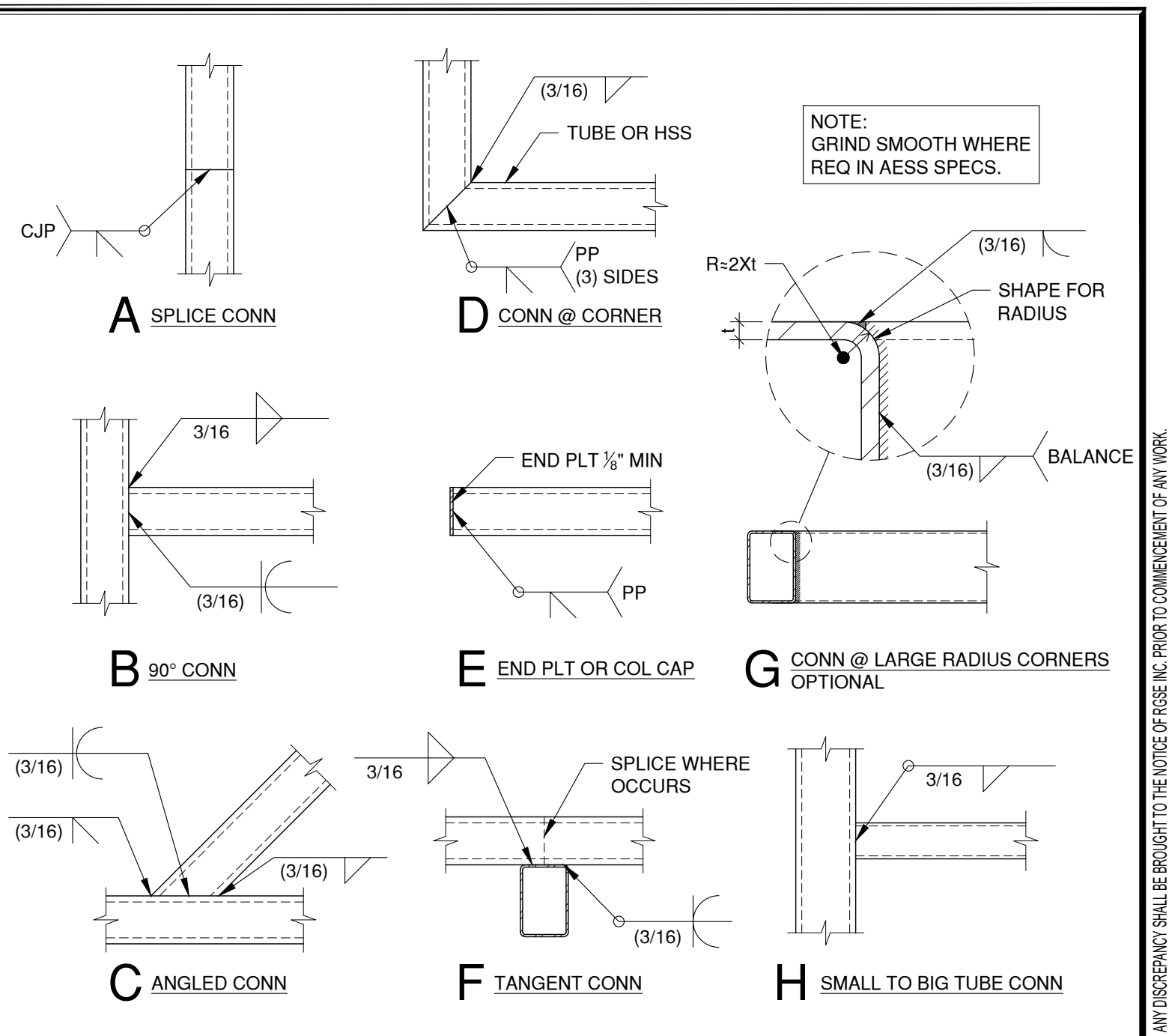
**SECTION AT ROOF**



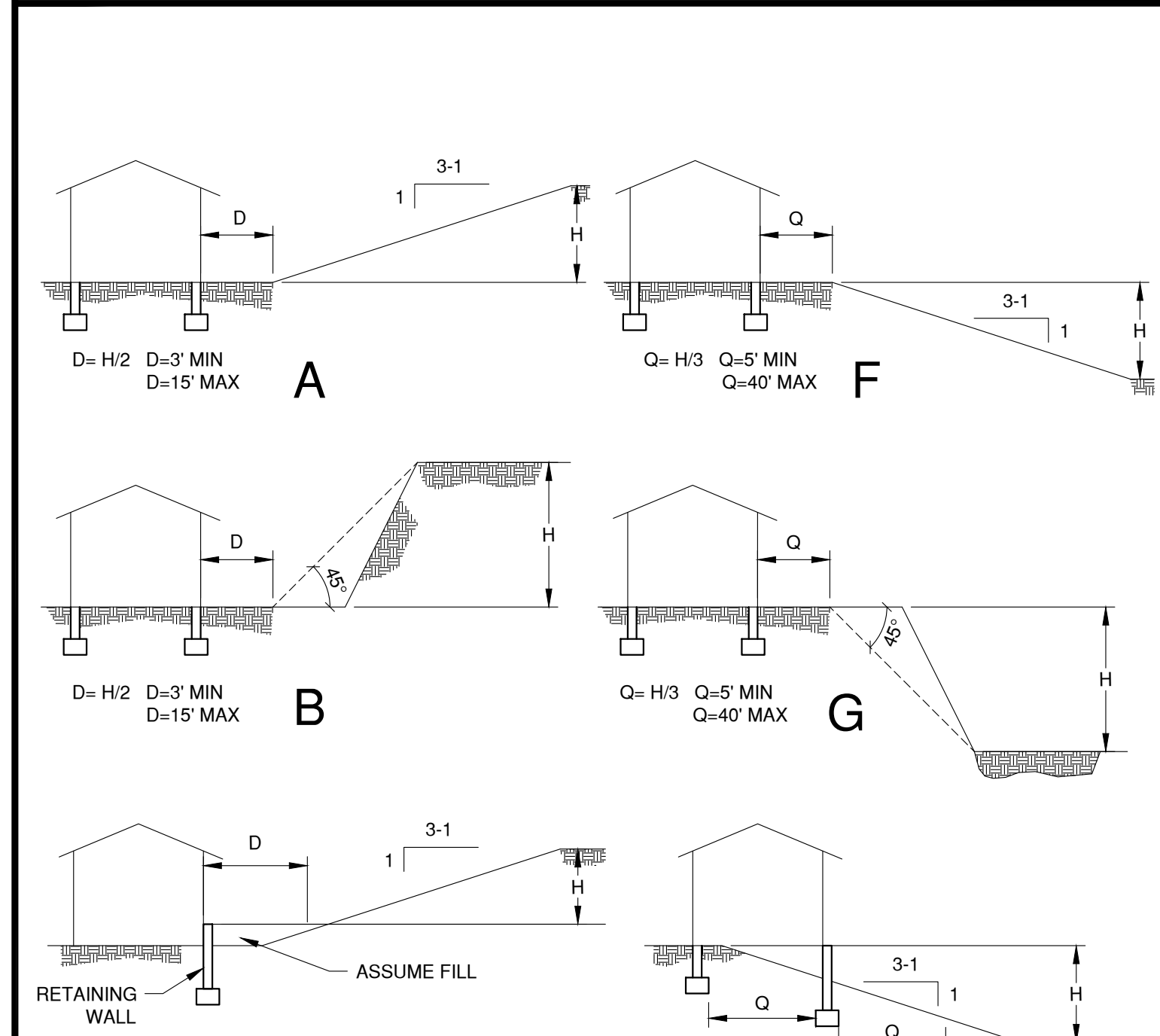
STAIR SECTION SCALE: 1/2"=1'-0" 7



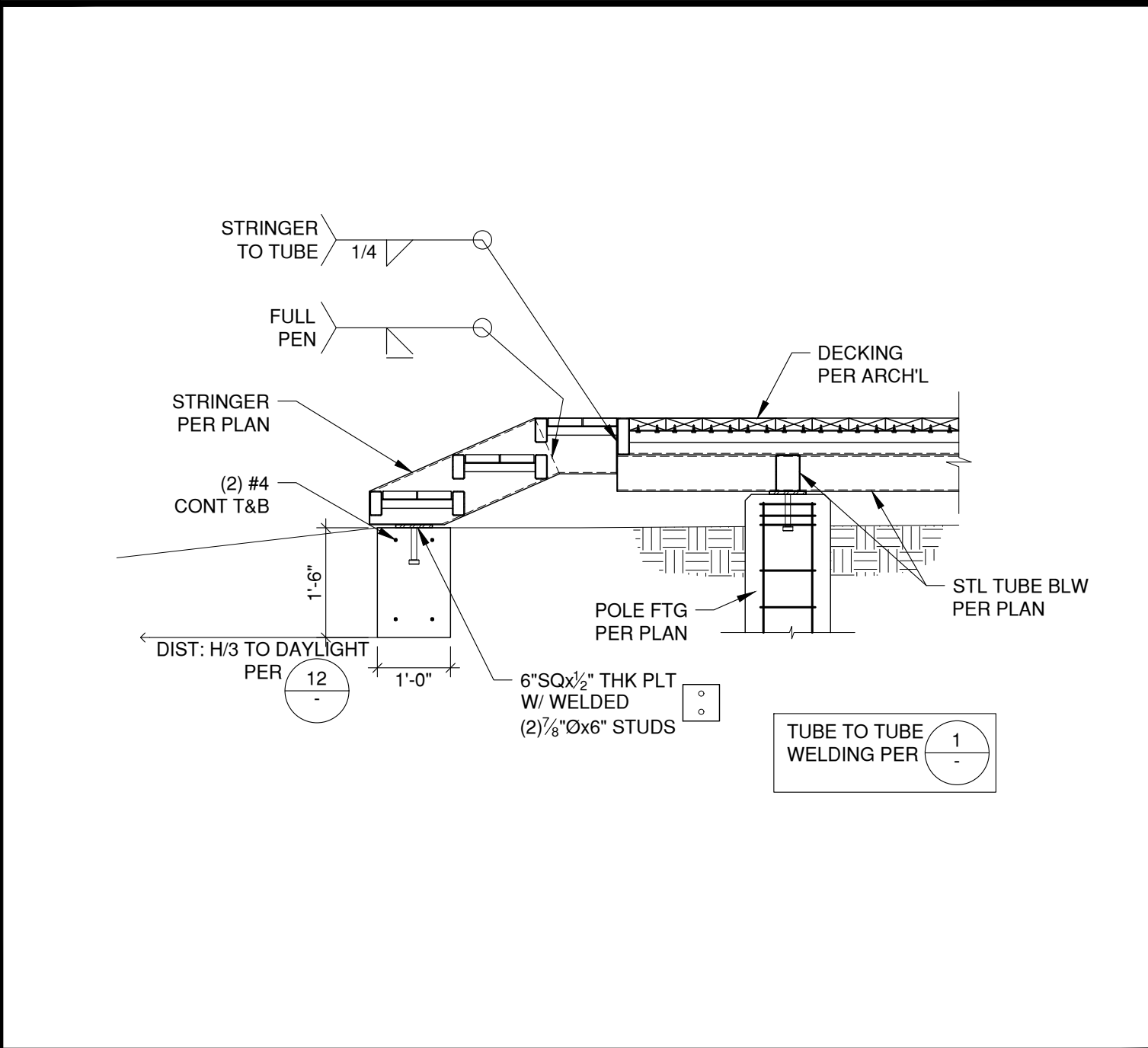
GUARDRAIL SECTION SCALE: 1"=1'-0" 4



HSS BM TO BM CONN SCALE: 1"=1'-0" 1



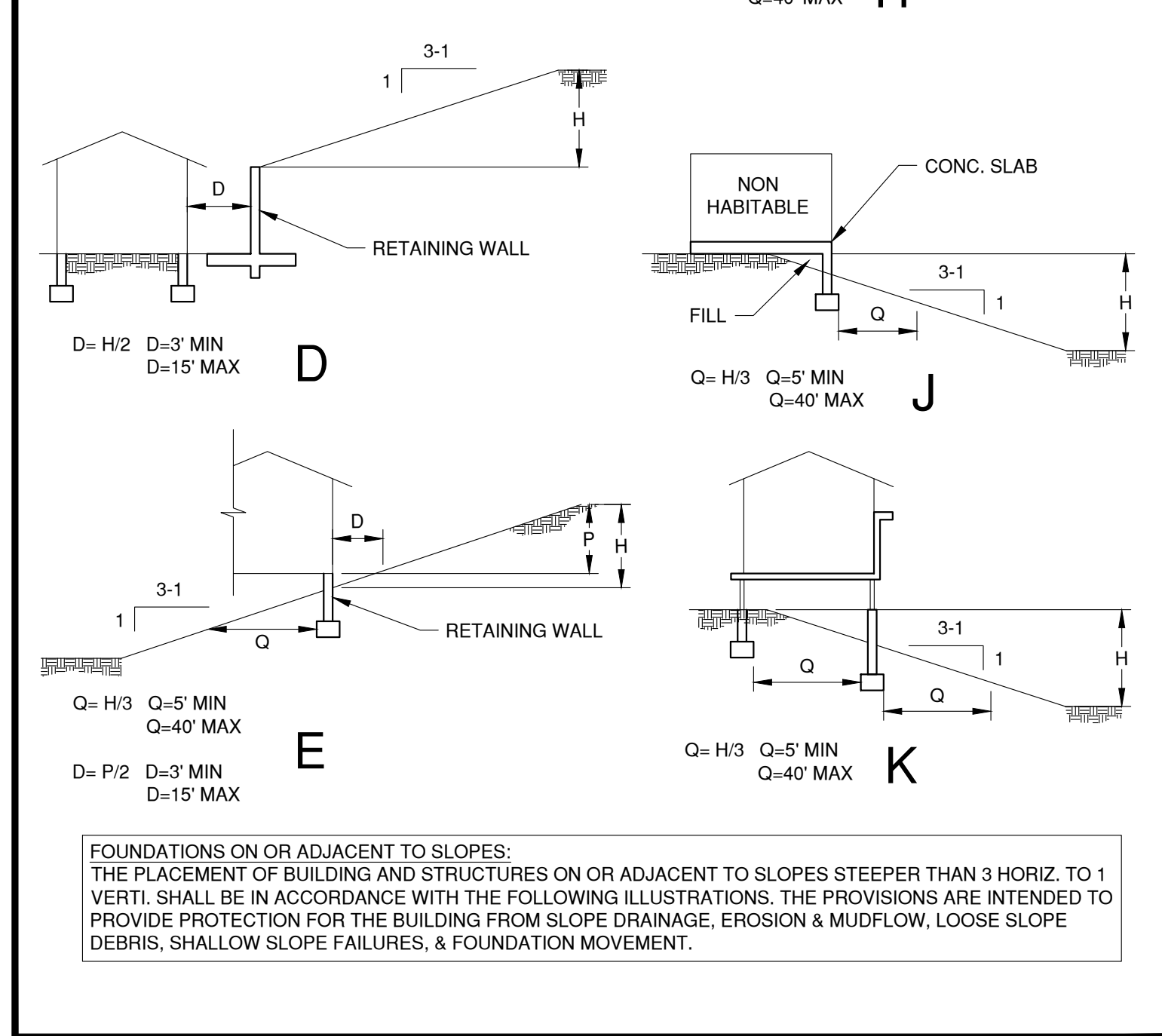
STAIR SECTION SCALE: 1/2"=1'-0" 8



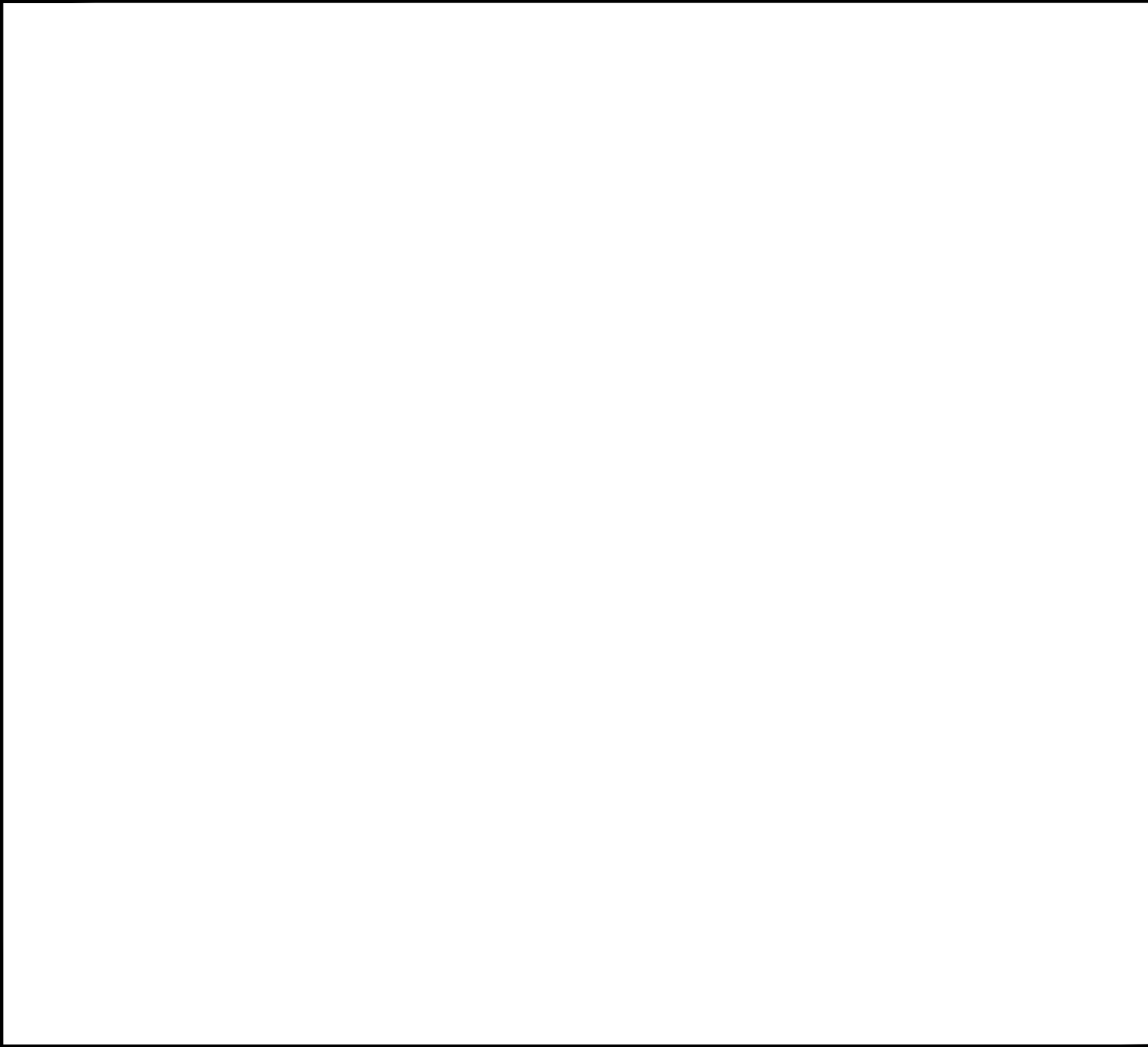
STAIR SECTION SCALE: 1/2"=1'-0" 5



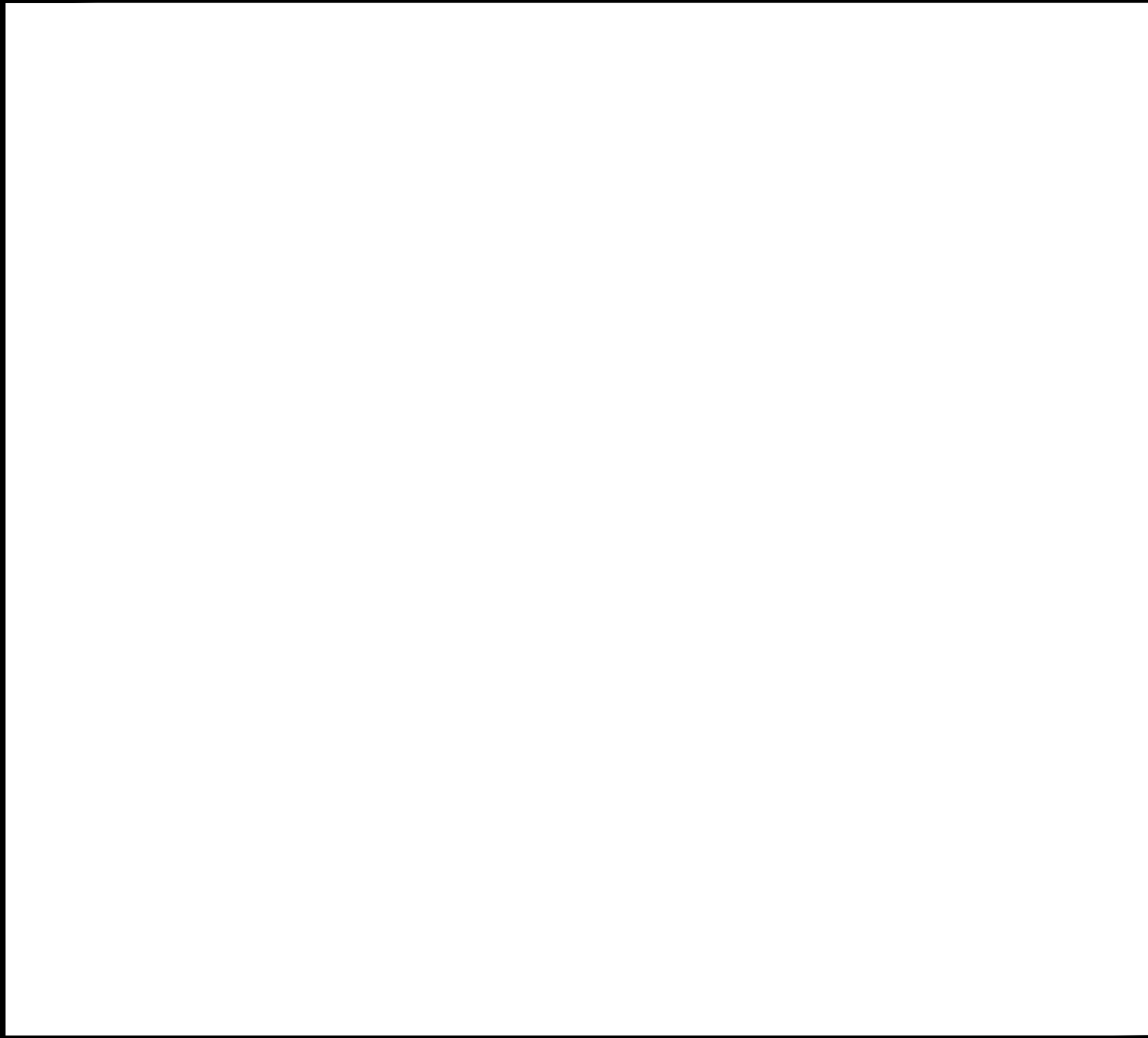
FOOTING SECTION SCALE: 1/2"=1'-0" 2



FDN CLEARANCES FROM SLOPES N.T.S. 12



FOOTING SECTION SCALE: 1/2"=1'-0" 6



FOOTING SECTION SCALE: 1/2"=1'-0" 3

REVISIONS		
NO.	REVISION	DATE

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 Structural Engineers  
 2720 Cochran St, Suite 8B  
 Simi Valley, CA 93065  
 P: 805.522.3379  
 www.rgseinc.com  
 info@rgseinc.com

**NEW CONSTRUCTION FOR:**  
**DESERT VIEW CONSERVATION AREA**  
 JOSHUA TREE  
 COUNTY OF SAN BERNARDINO

**SHEET TITLE:**  
**STRUCTURAL**  
**DETAILS**

JOB NO: 24120  
 DRAWN: aaronc@rgseinc.com  
 ENGINEER: alanm@rgseinc.com  
 PLOT DATE: 6/13/2025  
 STAMP:

**S2.00**

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REVISIONS		
NO.	REVISION	DATE

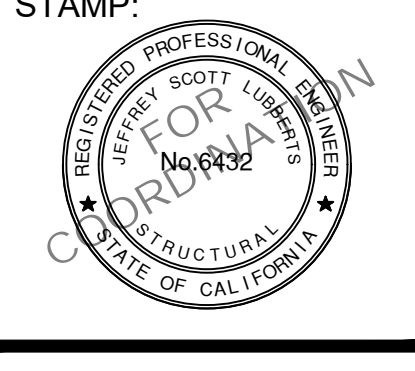
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**JOB NO:** 24120  
**DRAWN:** aaronc@rgseinc.com  
**ENGINEER:** alant@rgseinc.com  
**PLOT DATE:** 6/13/2025

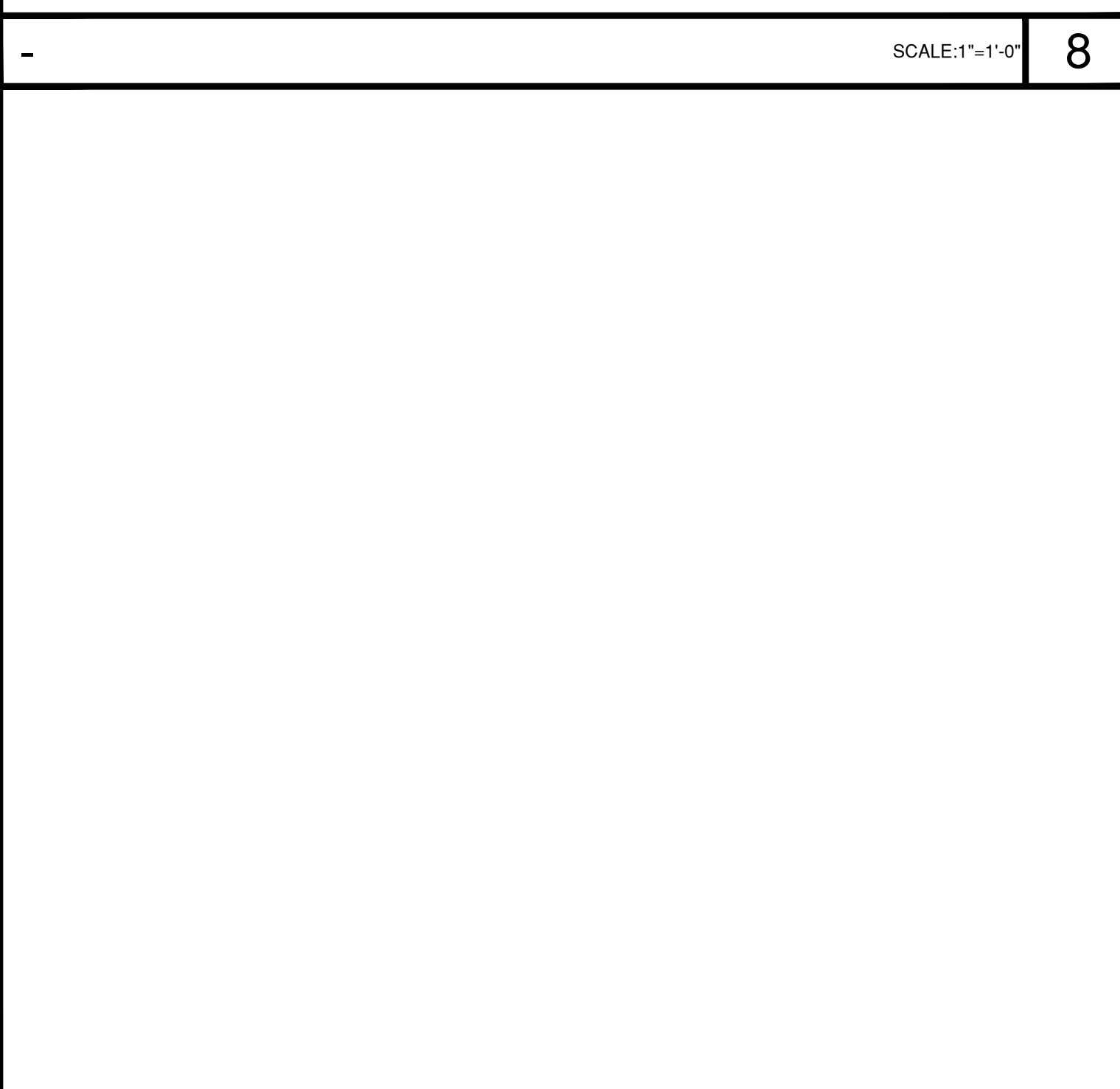
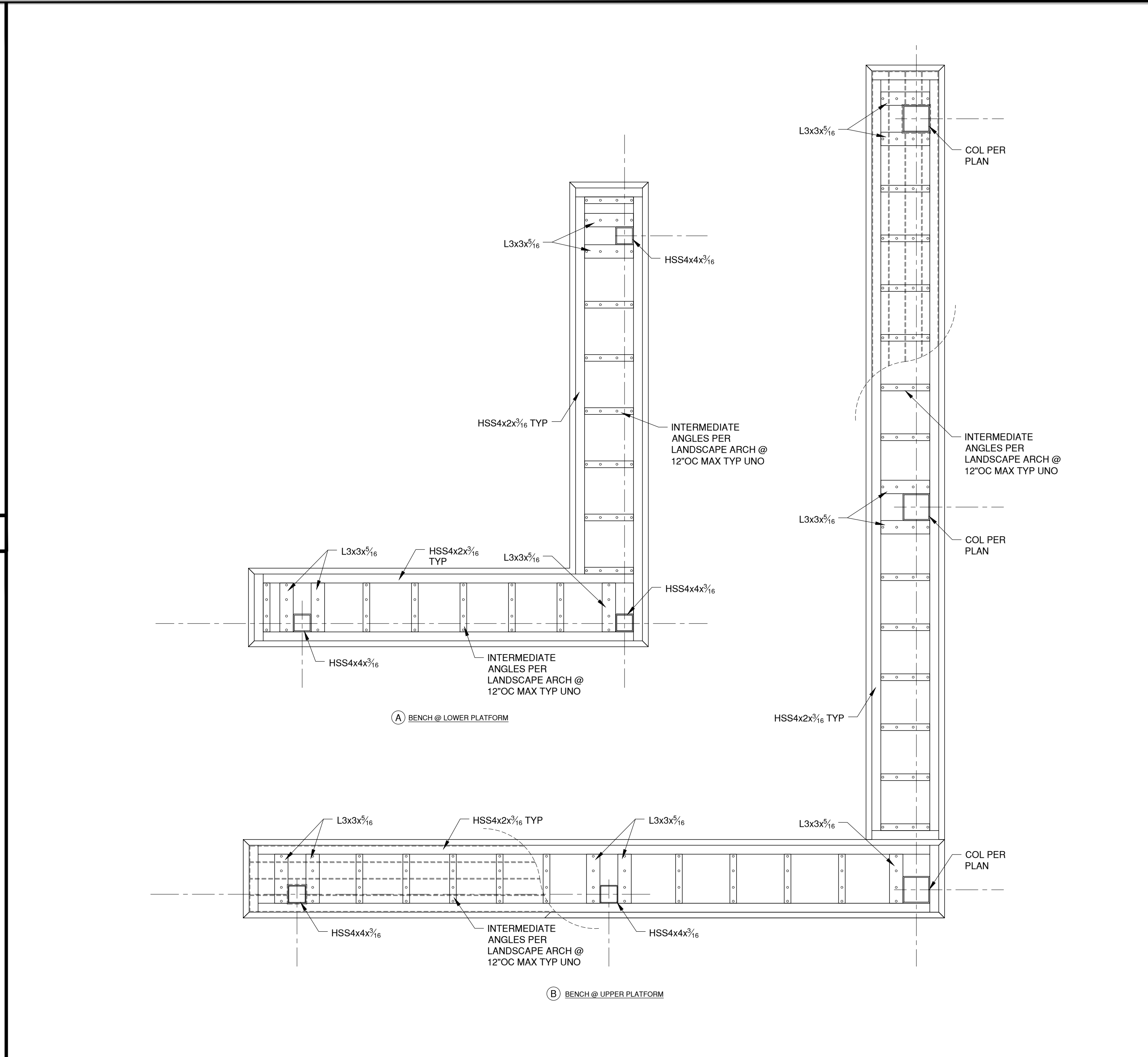
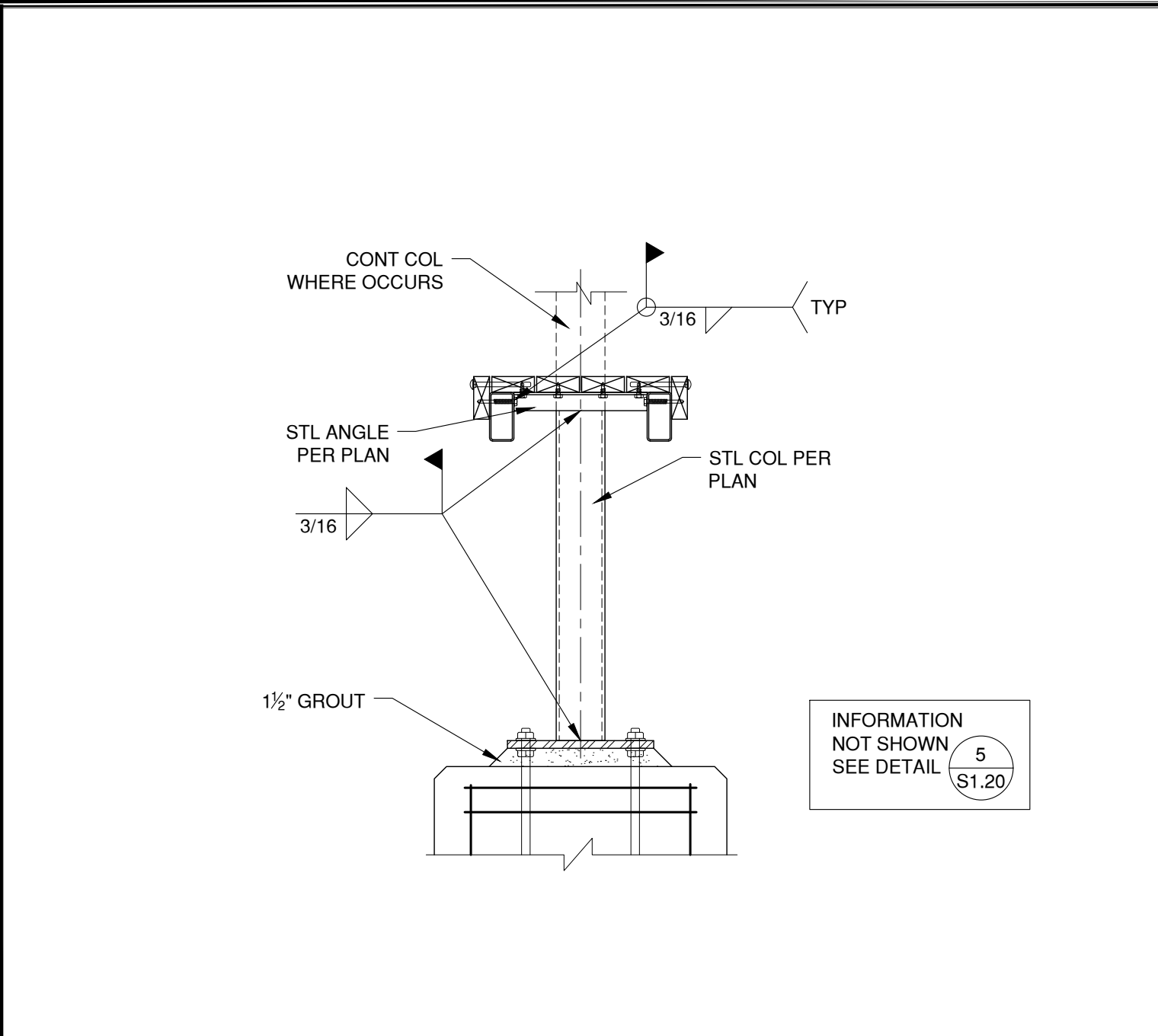


**S2.10**

SCALE: 1"=1'-0"    **10**    PLATFORM BENCH SECTION    SCALE: 1"=1'-0"    **7**

SCALE: 1"=1'-0"    **11**       SCALE: 1"=1'-0"    **8**    PLATFORM BENCH DETAIL    SCALE: 3/4"=1'-0"    **2**

SCALE: 1"=1'-0"    **12**       SCALE: 1"=1'-0"    **9**    PLATFORM BENCH SECTION    SCALE: 1"=1'-0"    **3**



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