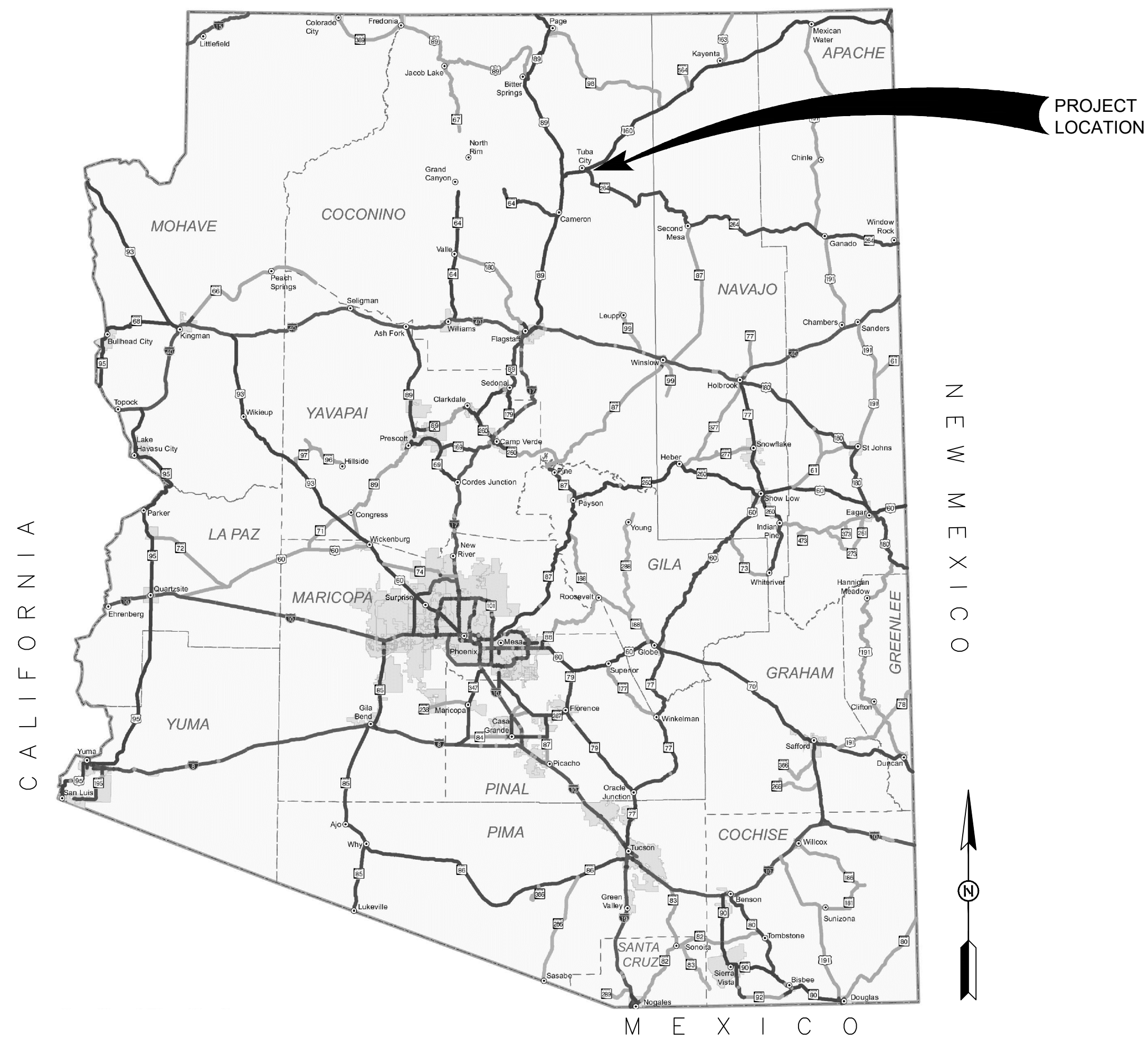


CONSTRUCTION PLANS  
FOR

# NAVAJO TRIBAL UTILITY AUTHORITY TUBA CITY WWTP SEWER PIPE BRIDGE REHABILITATION



## LOCATION MAP



## INDEX TO SHEETS

SHEET NUMBER	SHEET TITLE
G-1	COVER SHEET
G-2	LEGEND
G-3	SURVEY CONTROL AND VICINTIY MAP
G-4	HAUL ROUTE VICINITY MAP
C-1	REMOVAL AND DISPOSAL PLAN
C-2	BRIDGE PIPE PLAN AND PROFILE
C-3	CIVIL DETAILS
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S-1	PIPE BRIDGE PLAN AND ELEVATION
S-2	PIPE BRIDGE REPLACEMENT PLAN, PROFILE, AND 3D VIEW
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S-5	BRIDGE BEARING DETAILS



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TUBA CITY WWTP SEWER PIPE BRIDGE REHABILITATION  
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COVER SHEET

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JOB NO.  
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DATE:  
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SHEET NO.  
G-1

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**STRUCTURAL DESIGN CRITERIA**

CODE:  
 COMPLY WITH 2010 ASCE MINIMUM DESIGN LOADS  
 RISK CATEGORY: II  
 SEISMIC IMPORTANCE FACTOR: IE=1.0  
 MAPPED SPECTRAL RESPONSE ACCELERATION: S<sub>s</sub>=0.314, S<sub>1</sub>=0.092  
 SPECTRAL RESPONSE COEFFICIENT: S<sub>ds</sub>=0.324, S<sub>d1</sub>=0.147  
 SITE COEFFICIENT: F<sub>a</sub>=1.549, F<sub>v</sub>=2.4  
 SITE CLASS: D  
 SEISMIC DESIGN CATEGORY: C  
 SEISMIC-FORCE-RESISTING SYSTEM: SPECIAL TRUSS MOMENT FRAME  
 RESPONSE MODIFICATION FACTOR: R=7  
 SEISMIC RESPONSE COEFFICIENT: C<sub>s</sub>=0.046  
 ANALYSIS PROCEDURE USED: SIMPLIFIED METHOD  
 BASIC WIND SPEED: 125 MPH  
 EXPOSURE: C  
 DESIGN WIND PRESSURE FOR MWFRS: 40 PSF  
 GROUND SNOW: P<sub>g</sub>=10 PSF  
 LIVE LOADS: (2) 300 LB MOVING POINT LOADS.

**LEGEND**

SYMBOL	DESCRIPTOR	#	NUMBER
	BENCHMARK	L1	ALIGNMENT LINE NUMBER
	SANITARY SEWER MANHOLE	264	AZ-264 (ARIZONA HIGHWAY 264)
	SLOPE INDICATOR	160	US-160 (UNITED STATES HIGHWAY 160)
	EXISTING SANITARY SEWER LINE	89	US-89 (UNITED STATES HIGHWAY 89)
	BOUNDARY LINE	6371	INDIAN ROUTE #6371
	EXISTING INDEX CONTOUR		
	EXISTING INTERMEDIATE CONTOUR		
	PROPOSED INDEX CONTOUR		
	PROPOSED INTERMEDIATE CONTOUR		
	PROPOSED SANITARY SEWER LINE		
	PROPOSED CONCRETE		
	NORTH ARROW		
	BAR SCALE		
	ROAD OR HIGHWAY LINE		
	CONTROL POINT		
	RIP RAP		
	SANITARY SEWER MANHOLE		
	EXISTING GRADE IN PROFILE		
	EXISTING STEEL STRUCTURE		
	NEW STEEL STRUCTURE		
	EXISTING CONCRETE ABUTMENT		
	ORDINARY HIGH WATER MARK LINE		
	ORDINARY HIGH WATER MARK EXTENTS		
	CENTER LINE		
	CENTER LINE		
	EXISTING STRUCTURE LINE		
	WATER SURFACE ELEVATION		
	SLOPE		



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LEGEND

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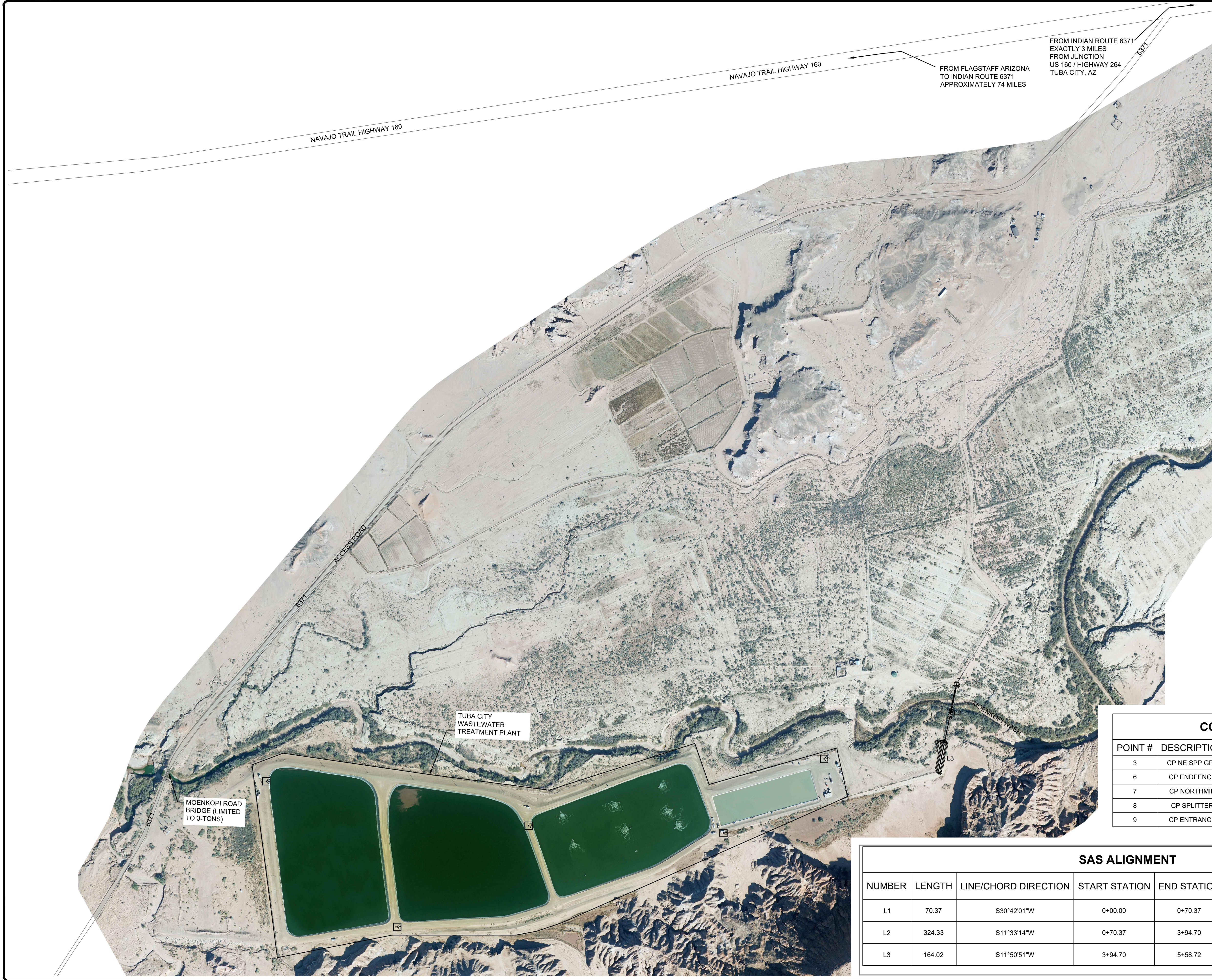


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G-2





NAVAJO TRAIL HIGHWAY 160

FROM FLAGSTAFF ARIZONA  
TO INDIAN ROUTE 6371  
APPROXIMATELY 74 MILES

FROM INDIAN ROUTE 6371  
EXACTLY 3 MILES  
FROM JUNCTION  
US 160 / HIGHWAY 264  
TUBA CITY, AZ

NAVAJO TRAIL HIGHWAY 160

ACCESS ROAD

TUBA CITY  
WASTEWATER  
TREATMENT PLANT

MOENKOPI ROAD  
BRIDGE (LIMITED  
TO 3-TONS)

MOENKOPI WASH

#KEYED NOTES

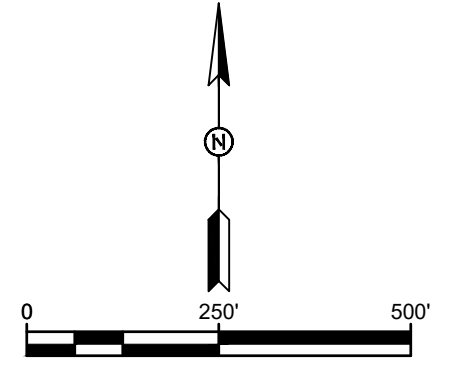
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**SHEET GENERAL NOTES**

- HORIZONTAL COORDINATES ARE ARBITRARILY DERIVED FROM G.P.S. SINGLE POINT POSITIONING. VERTICAL CONTROL BASED UPON TUBA CITY WWTF AS-BUILT DATED 08/95. THE ELEVATION OF THE INLET PIPE INVERT AT GRIT CHAMBER = 4534.38 FEET. COMBINED SCALE FACTOR (CSF) = 1.000309015 GRID TO GROUND, DERIVED FROM NGS HORIZONTAL CONTROL POINT MOENKOPI LOCATED APPROXIMATELY 14,918 FEET SOUTH WESTERLY OF PROJECT (SITE NOT VISITED). MEASUREMENTS ARE U.S. SURVEY FEET. ALL CONTROL POINTS SET FOR THIS PROJECT ARE 1/2" REBAR WITH PLASTIC CAP STAMPED "CONTROL POINT".
- AERIAL SURVEY IMAGERY AND TOPOGRAPHIC DATA COMPLETED IN 2019 BY AEROTEK MAPPING TECHNOLOGIES, LLC.



**CONTROL POINTS**

POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
3	CP NE SPP GPS	1853612.72	887047.46	4534.96
6	CP ENDFENCE	1853217.90	886510.86	4536.84
7	CP NORTHMID	1853256.56	885471.88	4534.13
8	CP SPLITTER	1852716.75	884772.24	4531.35
9	CP ENTRANCE	1853493.89	884073.90	4529.07

**SAS ALIGNMENT**

NUMBER	LENGTH	LINE/CHORD DIRECTION	START STATION	END STATION	START NORTHING START EASTING	END NORTHING END EASTING
L1	70.37	S30°42'01"W	0+00.00	0+70.37	N:1854072.61 E:887789.06	N:1854012.10 E:887753.13
L2	324.33	S11°33'14"W	0+70.37	3+94.70	N:1854012.10 E:887753.13	N:1853694.34 E:887688.18
L3	164.02	S11°50'51"W	3+94.70	5+58.72	N:1853694.34 E:887688.18	N:1853533.82 E:887654.50

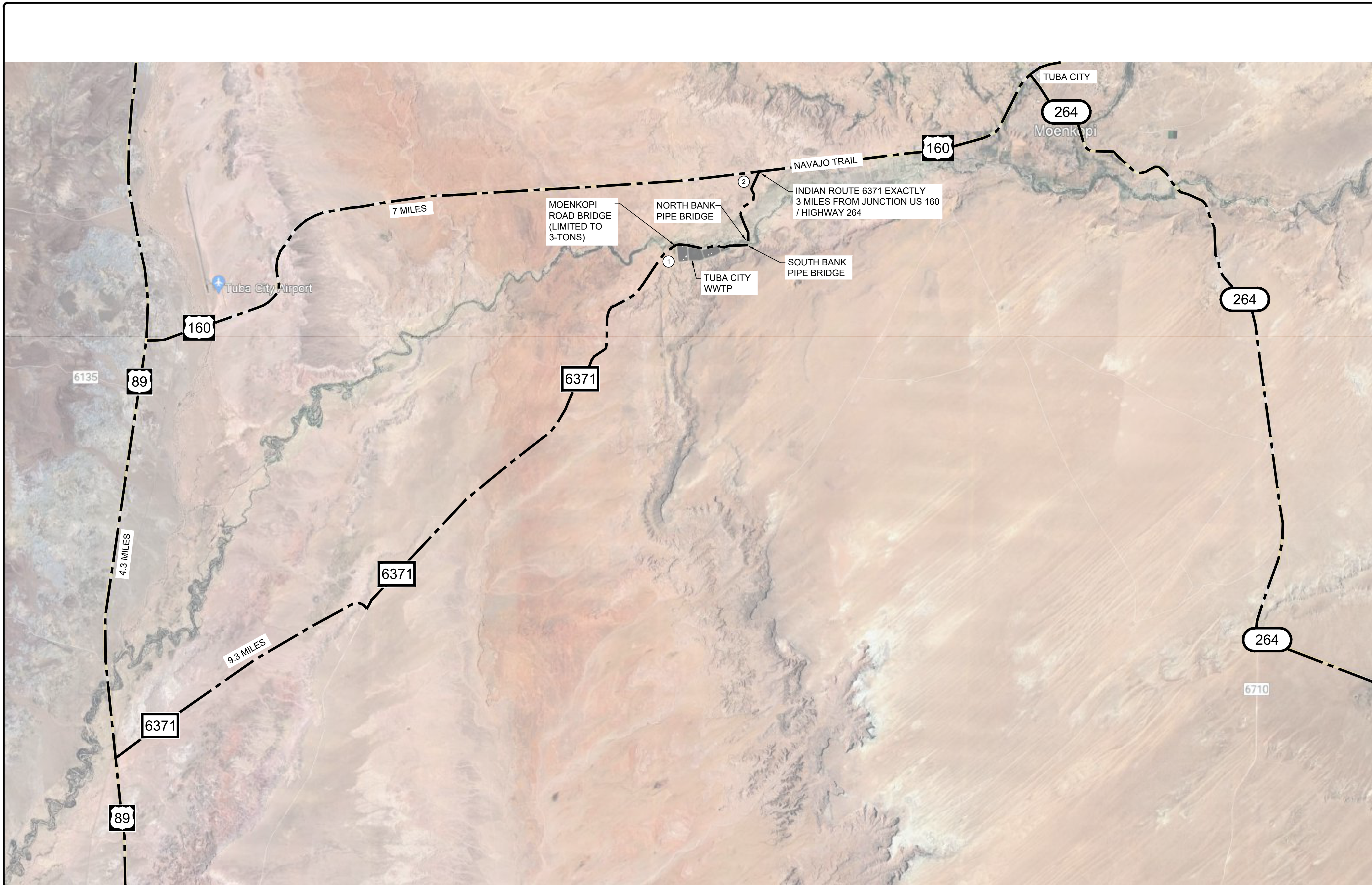
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SURVEY CONTROL AND VICINITY MAP

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1. DUE TO THE ROAD BRIDGE LIMITED 3 TONS, ALL HEAVY EQUIPMENT TRAFFIC TO THE SOUTH BANK HAS TO COME FROM HWY 89 TO INDIAN ROUTE #6371 THROUGH THE WWTP.
2. HEAVY EQUIPMENT ACCESS TO NORTH BANK. COORDINATION WITH LANDOWNERS MAY BE REQUIRED.



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HAUL ROUTE VICINITY MAP

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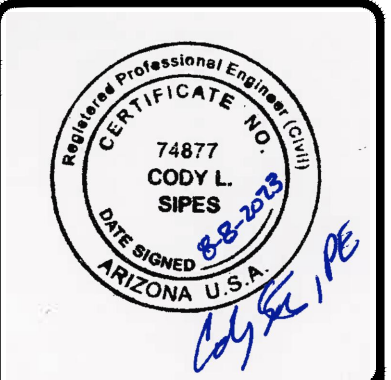
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- ### # KEYED NOTES
1. REMOVE AND DISPOSE OF EXISTING MANHOLE.
  2. REMOVE AND DISPOSE EXISTING STEEL PIPE FROM MANHOLE TO MANHOLE.
  3. REMOVE AND DISPOSE OF EXISTING STEEL BRIDGE. EXISTING BRIDGE IS STEEL TRUSS CONSTRUCTION WITH WELDED CONNECTIONS. BRIDGE WAS ORIGINALLY ASSEMBLED IN 3 - SECTIONS WITH BOLTED SPLICES. APPROXIMATE WEIGHT OF BRIDGE IS 28,000 POUNDS.
  4. REMOVE AND DISPOSE OF EXISTING CONCRETE ON TOP OF EXISTING PILES. SEE DETAILS 1 AND 4 SHEET S-4 FOR CONSTRUCTION SEVEN LOCATIONS.
  5. REMOVE AND DISPOSE EXISTING 18" STEEL SAS LINE. CLEAN PRIOR TO REMOVAL.
  6. NO EQUIPMENT OR VEHICLES PERMITTED IN WASH AREA INDICATED.
  7. CLEAN, REMOVE AND DISPOSE EXISTING 18" SAS LINE.
  8. 10" HDPE (MIN. ID 6.7", MAX 7.9") BYPASS PUMPING LINE. INSTALL BY DIRECTIONAL DRILLING WITH 5'-COVER. CONTRACTOR TO CONFIRM THE RADIUS, DIMENSIONS, PULL LENGTHS AND THE PIPE WALL THICKNESS REQUIRED FOR PULLING STRESSES. BYPASS PUMP LINE WILL REMAIN IN PLACE. AFTER NEW PIPE IS IN SERVICE, BYPASS LINE SHALL BE PRESSURE TESTED, CLEANED, AND CAPPED.
  9. ASBESTOS SAMPLES TAKEN FROM THIS LOCATION OF THE BRIDGE FROM THE INSULATION OF THE EXISTING SAS PIPE WERE SUBMITTED TO HALL ENVIRONMENTAL ANALYSIS LABORATORY IN ALBUQUERQUE, NEW MEXICO AND HAVE BEEN DETERMINED TO CONTAIN ASBESTOS IN THE INSULATION WRAP.
  10. PAINT SAMPLES TAKEN FROM THIS LOCATION OF THE BRIDGE STEEL STRUCTURE WERE SUBMITTED TO HALL ENVIRONMENTAL ANALYSIS LABORATORY IN ALBUQUERQUE, NEW MEXICO AND HAVE BEEN DETERMINED TO CONTAIN LEAD.

- ### SHEET NOTES
1. HAZARDOUS MATERIAL DISPOSAL SHALL BE IN SUBSTANTIAL CONFORMANCE TO SPECIFICATION STS 02 80 00 AND STS 02 82 13.33.
  2. PROVIDE SEWAGE BY-PASS PUMPING IN ACCORDANCE WITH STS 33 01 30.51.
  3. CONTRACTOR SHALL PROVIDE A REMOVAL PLAN SHOWING EQUIPMENT, STAGING AREAS AND SEQUENCE OF OPERATIONS.
  4. IT IS ANTICIPATED THAT COATINGS SHALL REMAIN ON DISPOSED ITEMS (UNLESS THEY CONTAIN ASBESTOS) AND SHALL BE DISPOSED OF IN ACCORDANCE TO NAVAJO NATION AND FEDERAL REQUIREMENTS.
  5. EARTH DISTURBANCE SHALL NOT OCCUR WITHIN THE ORDINARY HIGH WATER MARK



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REMOVAL AND DISPOSAL PLAN

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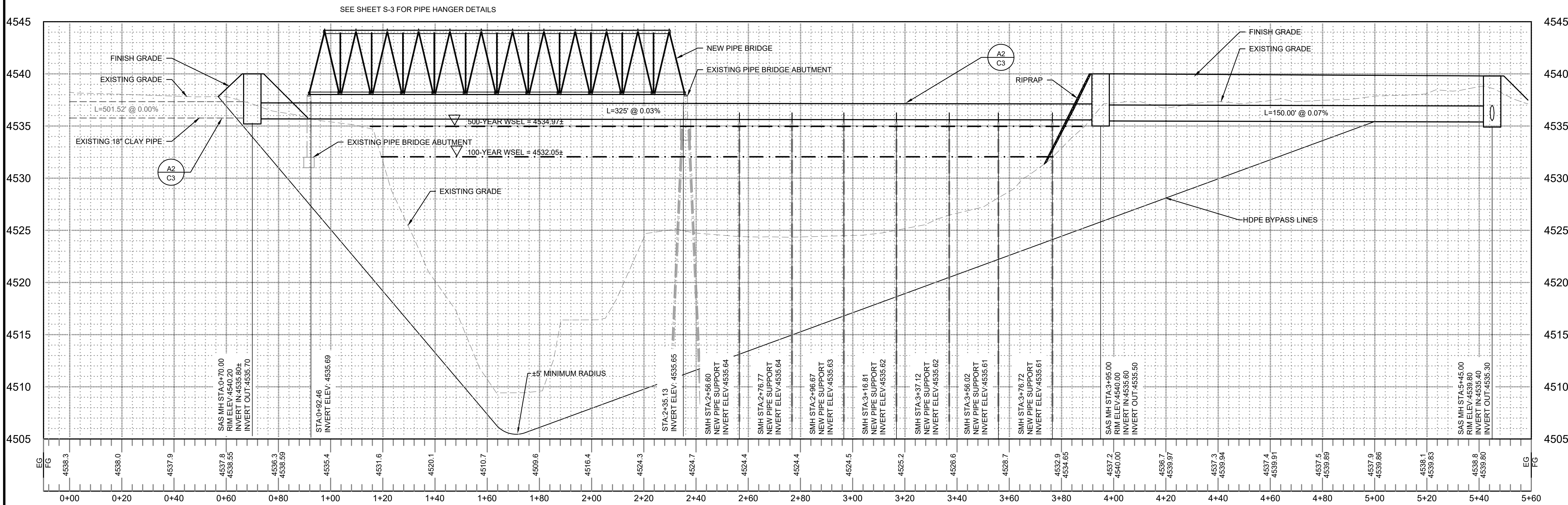
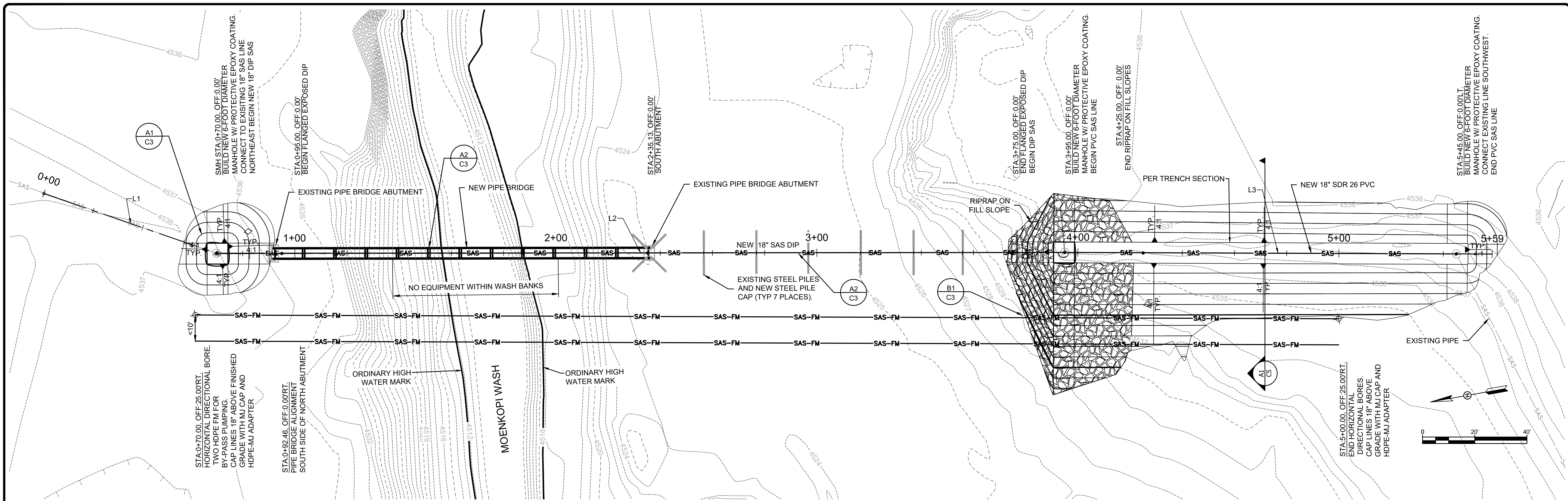
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BRIDGE PIPE PLAN AND PROFILE

**SMITH ENGINEERING**

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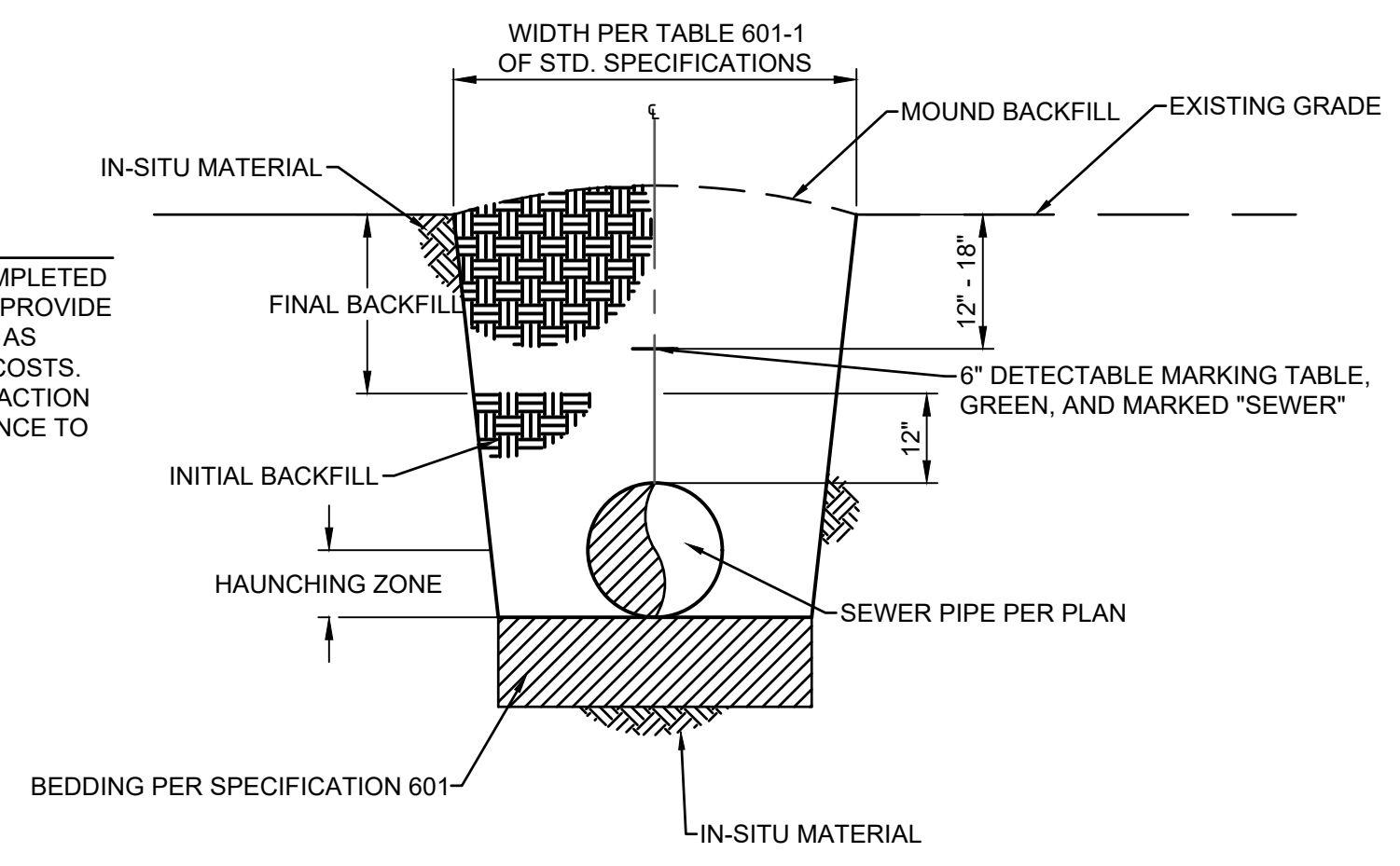
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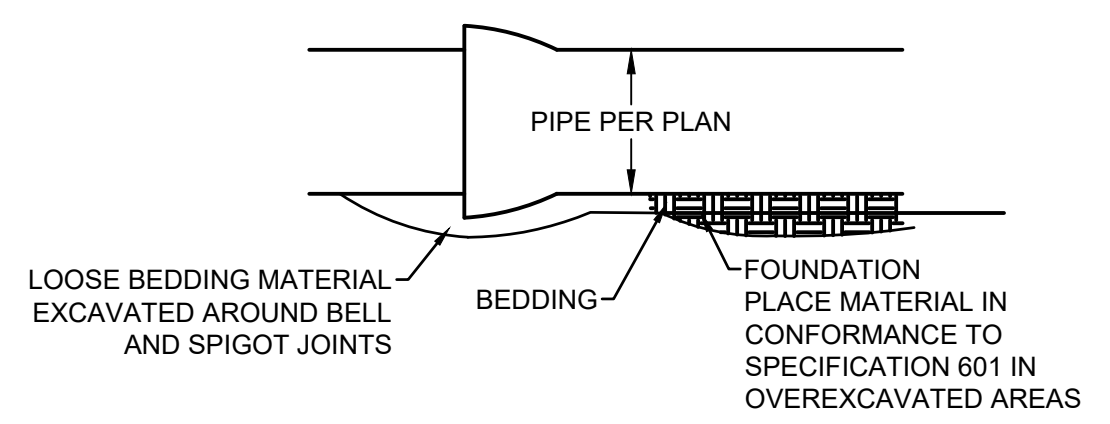




- NOTES:**
- ALL EXCAVATIONS SHALL BE COMPLETED TO MEET OSHA REQUIREMENTS. PROVIDE SHORING OR OVER-EXCAVATION AS NECESSARY AT NO ADDITIONAL COSTS.
  - BACKFILL MATERIALS AND COMPACTION EFFORTS SHALL BE IN ACCORDANCE TO SPECIFICATION 601.

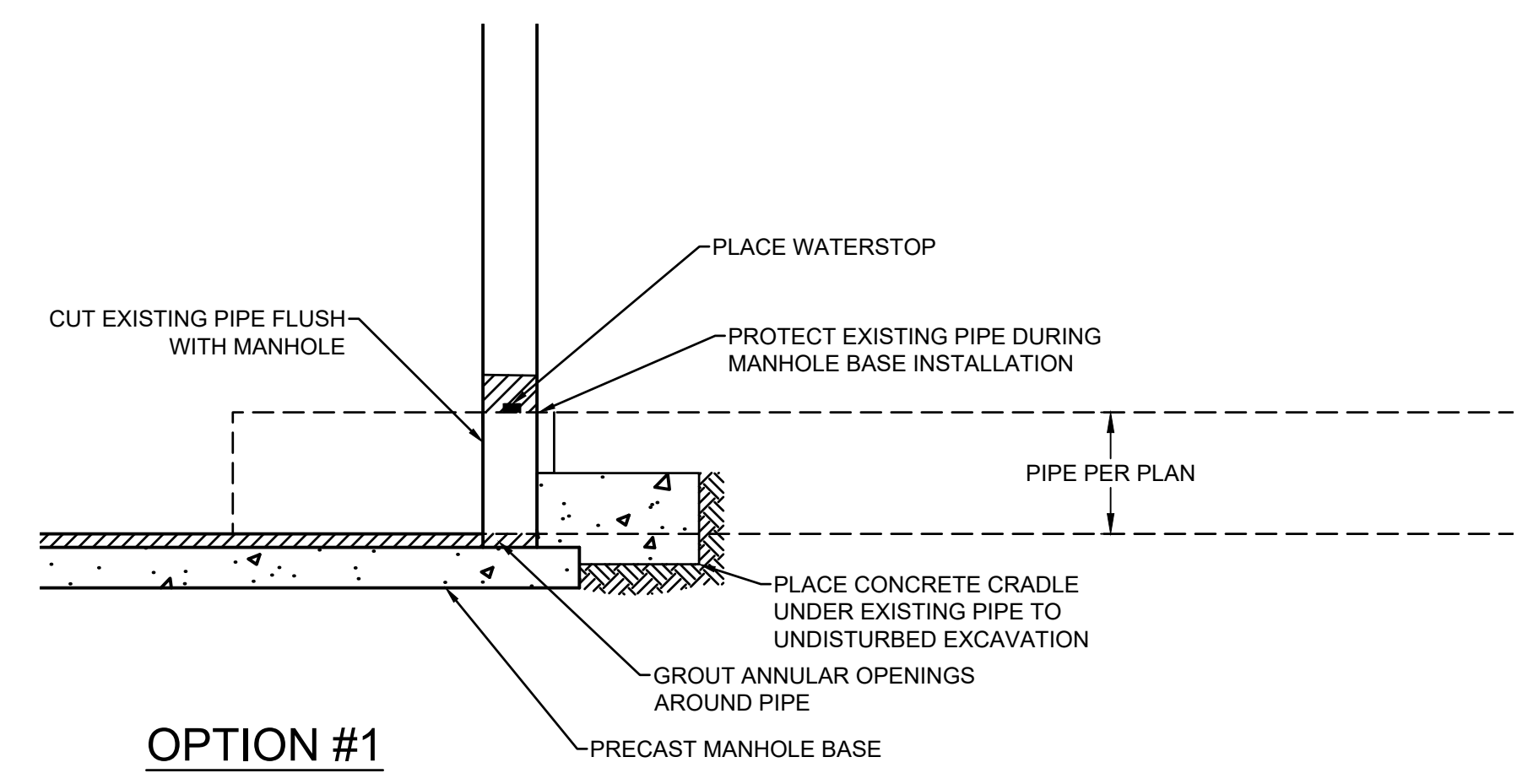


**AREAS W/ 3-FT COVER TO EXISTING GRADE**

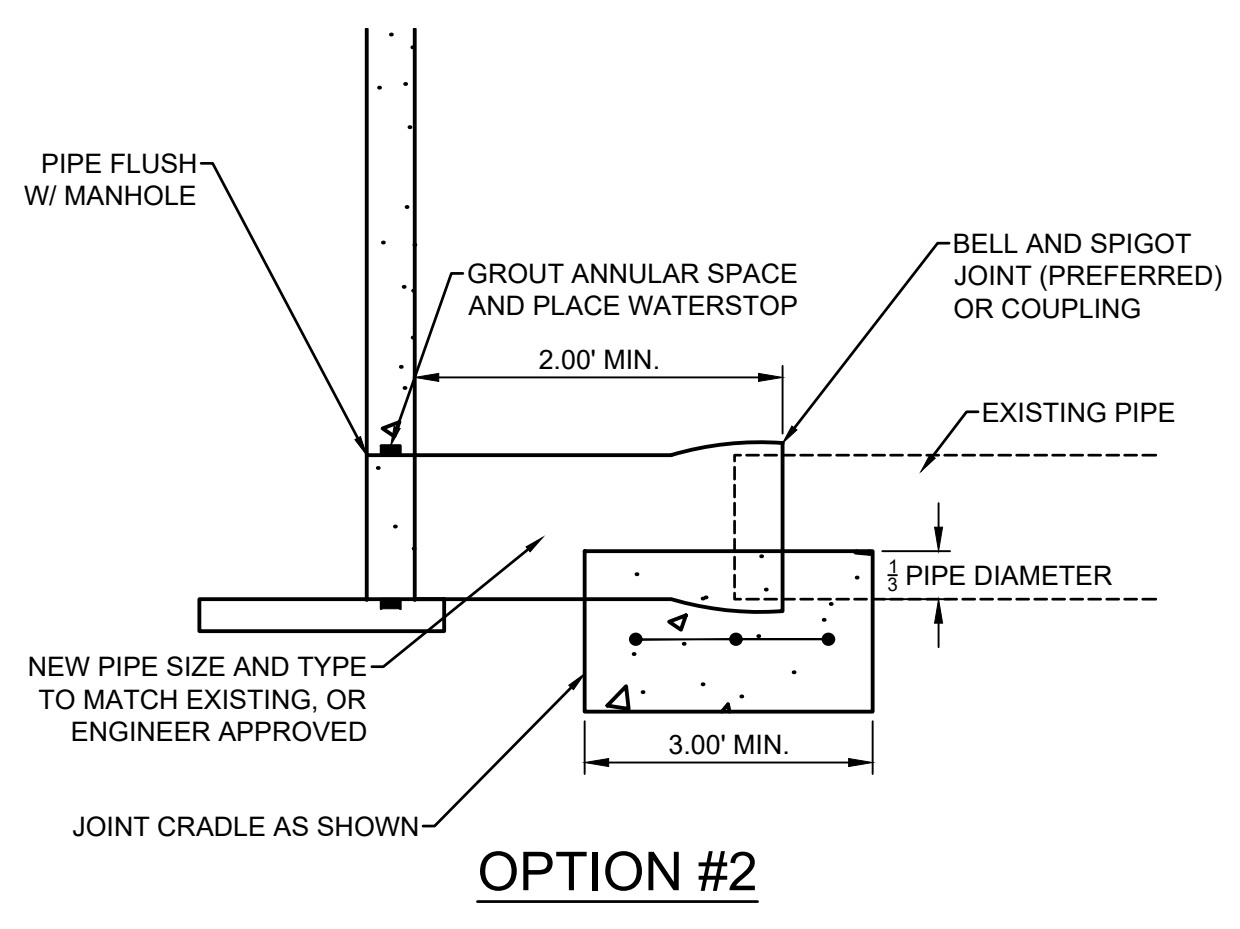


**AREAS W/ LESS THAN 3-FT COVER TO EXISTING GRADE**

**A1**  
**C-3** TYPICAL TRENCH SECTIONS  
NOT TO SCALE

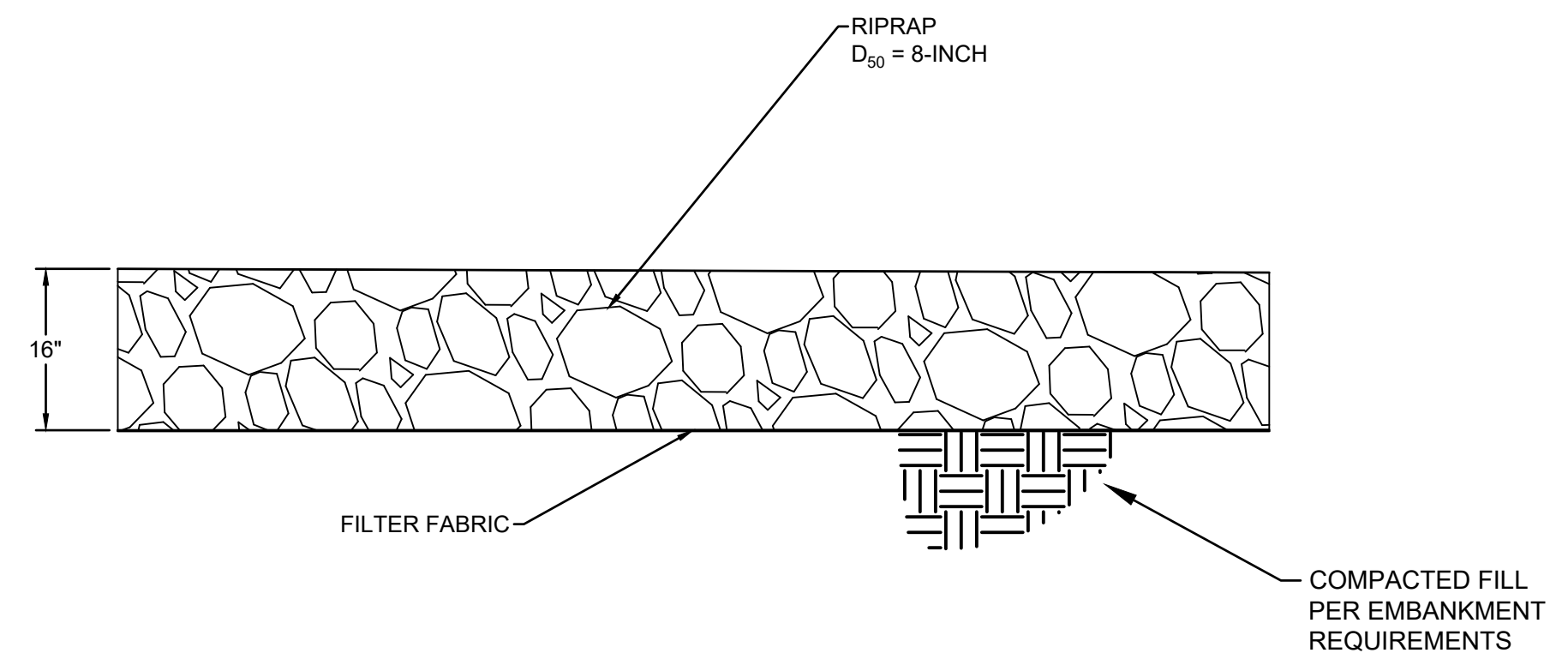


**OPTION #1**

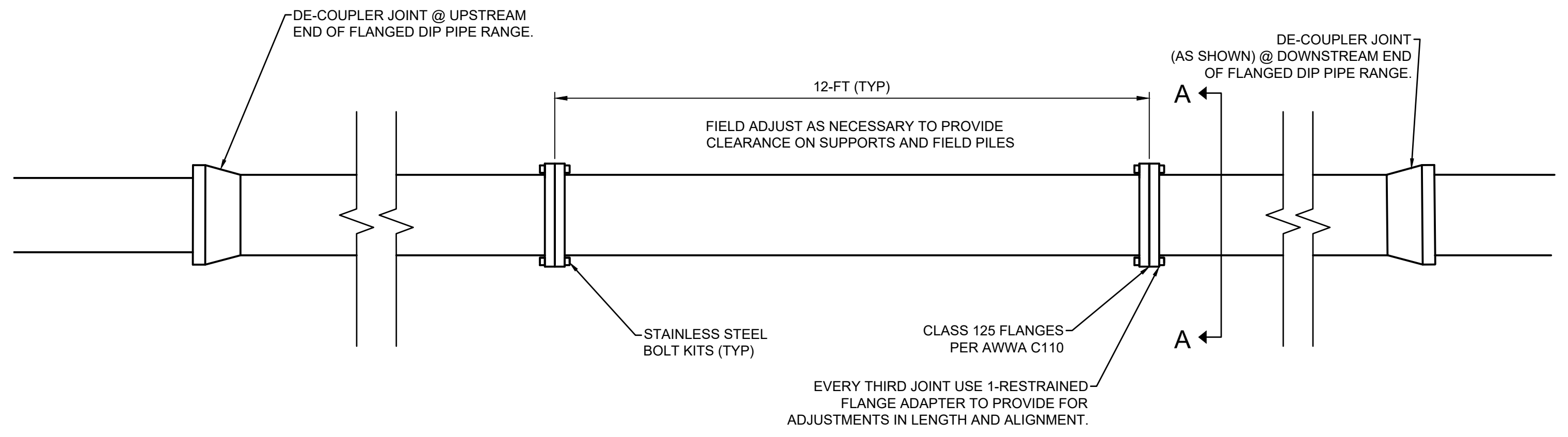


**OPTION #2**

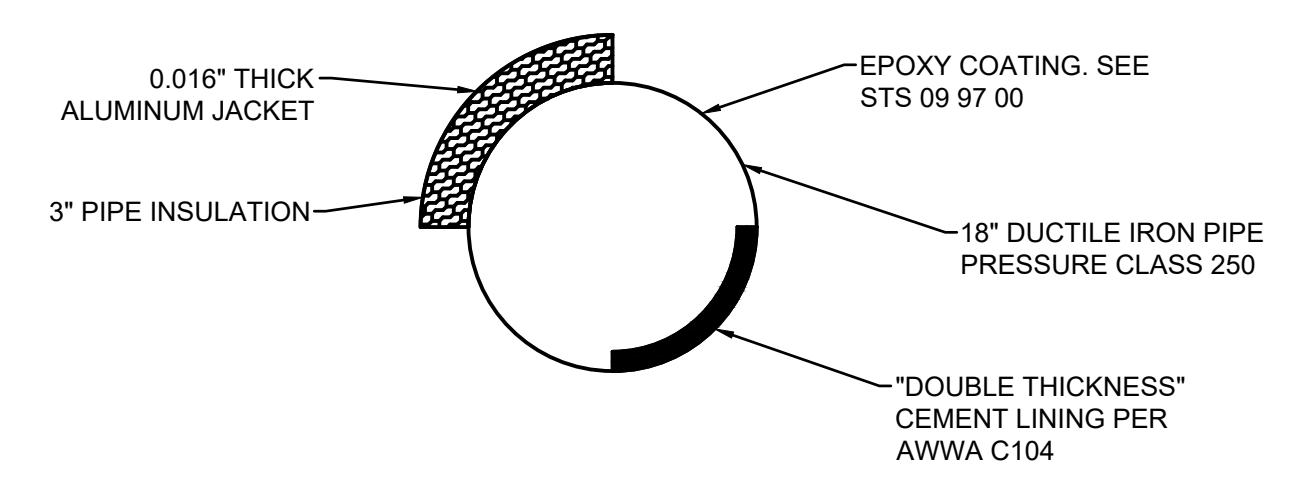
**A2**  
**C-3** EXISTING PIPE CONNECTION TO NEW MANHOLE  
NOT TO SCALE



**B1**  
**C-3** RIPRAP SECTION  
NOT TO SCALE



**A3**  
**C-3** FLANGED EXPOSED DIP DETAIL  
NOT TO SCALE



**SECTION A-A**

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CIVIL DETAILS

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C-3

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STANDARD DETAILS

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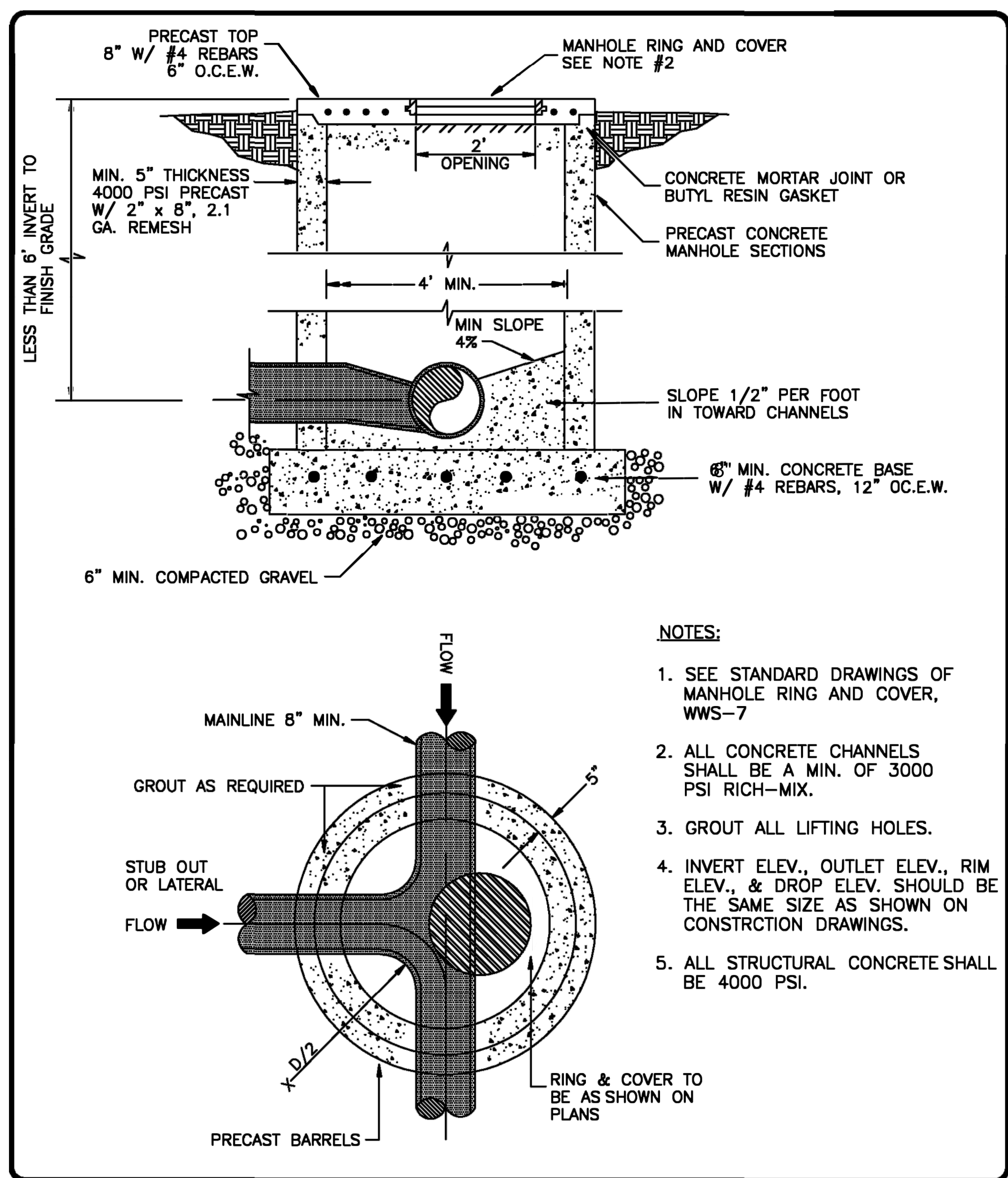
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SHEET NO.  
C-4



- NOTES:**
1. SEE STANDARD DRAWINGS OF MANHOLE RING AND COVER, WWS-7
  2. ALL CONCRETE CHANNELS SHALL BE A MIN. OF 3000 PSI RICH-MIX.
  3. GROUT ALL LIFTING HOLES.
  4. INVERT ELEV., OUTLET ELEV., RIM ELEV., & DROP ELEV. SHOULD BE THE SAME SIZE AS SHOWN ON CONSTRUCTION DRAWINGS.
  5. ALL STRUCTURAL CONCRETE SHALL BE 4000 PSI.

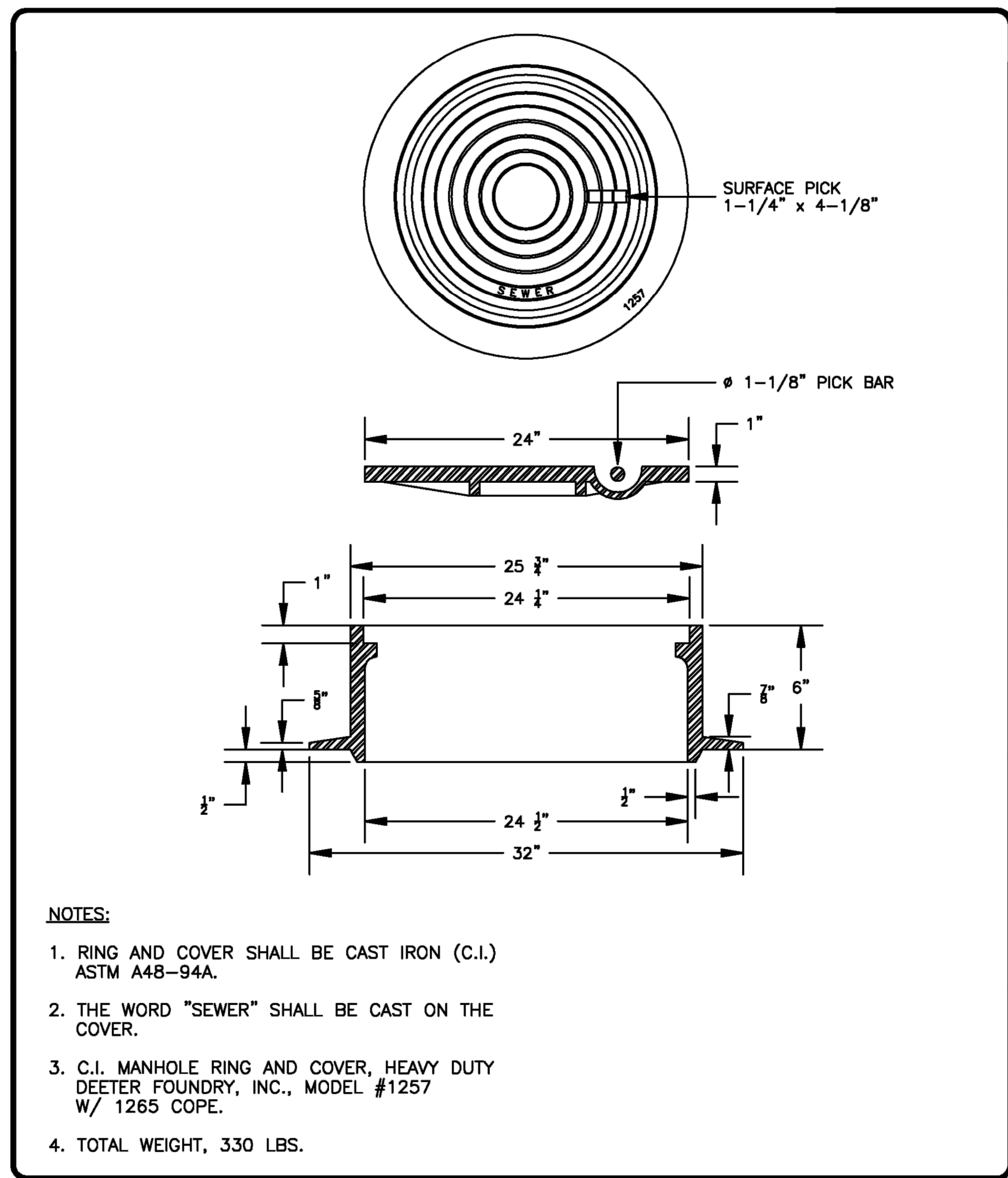
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SURVEYED BY:	
DRAWN BY:	NTUA
APPROVED BY:	NTUA
DATE:	3/09
PROJECT NO.:	
SCALE:	NTE
ACAD FILENAME:	Watermain Standard
DWG. NO.:	WVS-2

NAVAJO TRIBAL UTILITY AUTHORITY  
BY THE CHIEF ENGINEER

**SHALLOW PRECAST MANHOLE DETAIL**

BY: [Signature]

No.	Date	Revised	By
01	3/09	Revised	L.K.
02			
03			
04			
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06			



- NOTES:**
1. RING AND COVER SHALL BE CAST IRON (C.I.) ASTM A48-94A.
  2. THE WORD "SEWER" SHALL BE CAST ON THE COVER.
  3. C.I. MANHOLE RING AND COVER, HEAVY DUTY DEETER FOUNDRY, INC., MODEL #1257 W/ 1265 COPE.
  4. TOTAL WEIGHT, 330 LBS.

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SURVEYED BY:	
DRAWN BY:	NTUA
APPROVED BY:	NTUA
DATE:	3/09
PROJECT NO.:	
SCALE:	NTE
ACAD FILENAME:	Watermain Standard
DWG. NO.:	WVS-5

NAVAJO TRIBAL UTILITY AUTHORITY  
BY THE CHIEF ENGINEER

**STANDARD MANHOLE RING AND COVER**

BY: [Signature]

No.	Date	Revised	By
01	3/09	Revised	L.K.
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03			
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**SHEET NOTES:**

- STRUCTURAL STEEL MEMBER WORKPOINTS ARE AT THE INTERSECTION OF EACH MEMBER CENTROID (y OR x), UNLESS NOTED OTHERWISE.



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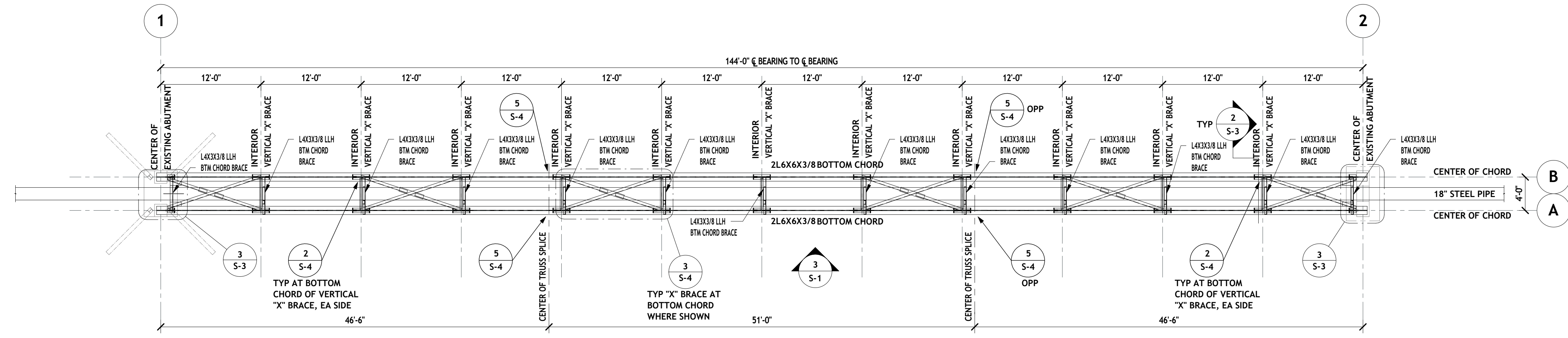
TUBA CITY WWTP SEWER PIPE BRIDGE  
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PIPE BRIDGE PLANS, AND ELEVATION

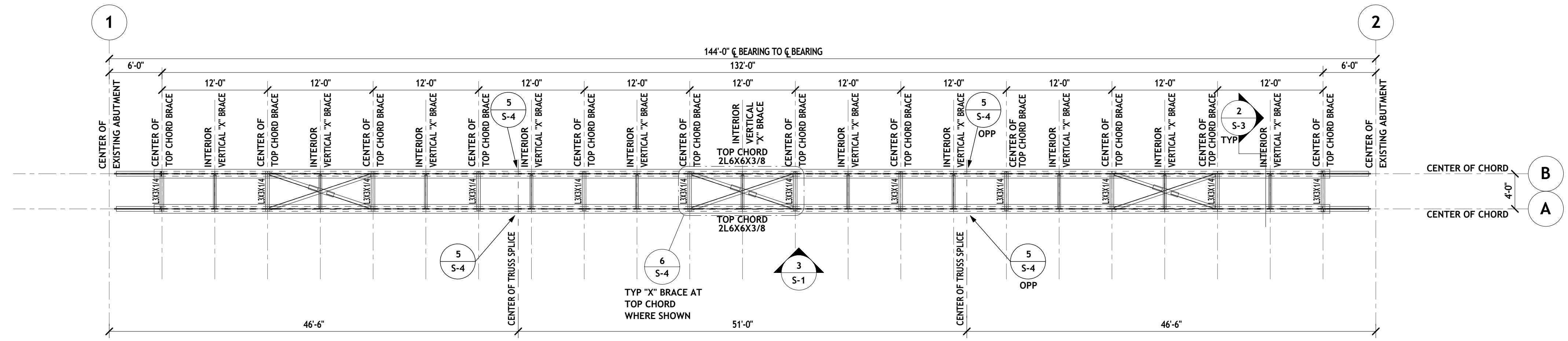
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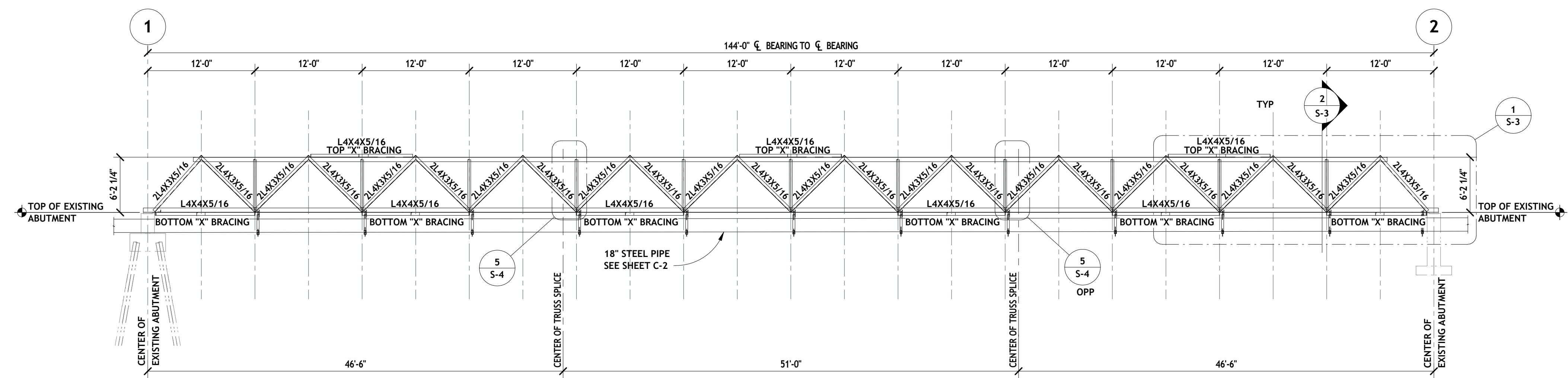
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**1** PIPE BRIDGE TRUSS AT BOTTOM CHORD PLAN  
1/8" = 1'-0"

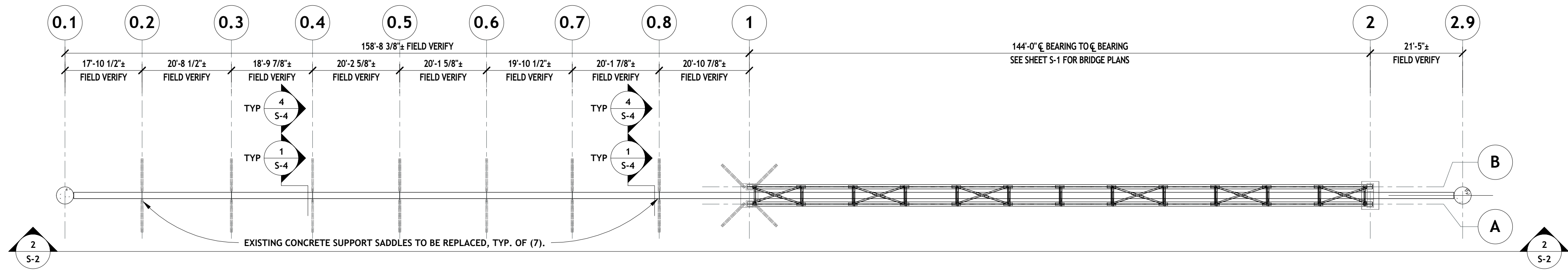


**2** PIPE BRIDGE TRUSS AT TOP CHORD PLAN  
1/8" = 1'-0"

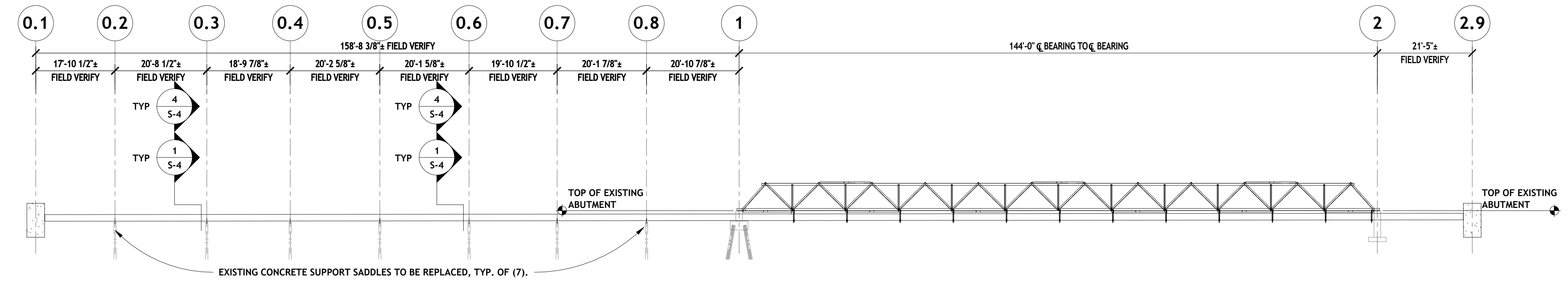
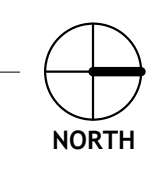


**3** PIPE BRIDGE TRUSS ELEVATION  
1/8" = 1'-0"

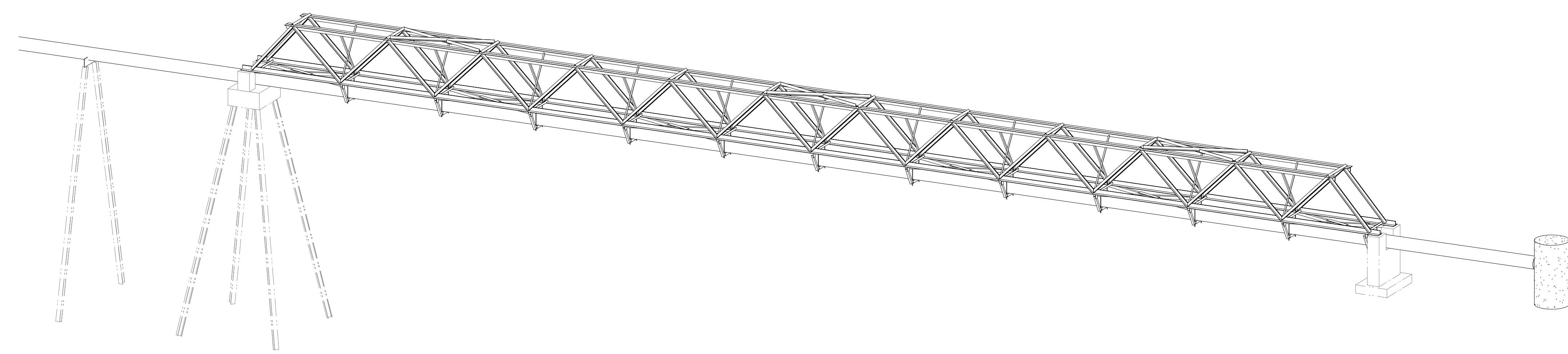




**1** PIPE BRIDGE REPLACEMENT SUPPORT PLAN  
1/16" = 1'-0"



**2** PIPE BRIDGE REPLACEMENT SUPPORT PROFILE  
1/16" = 1'-0"



**3** PIPE BRIDGE 3D VIEW - FOR REFERENCE ONLY



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PIPE BRIDGE REPLACEMENT PLAN, PROFILE, AND 3D VIEW

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PIPE BRIDGE DETAILS AND SECTIONS

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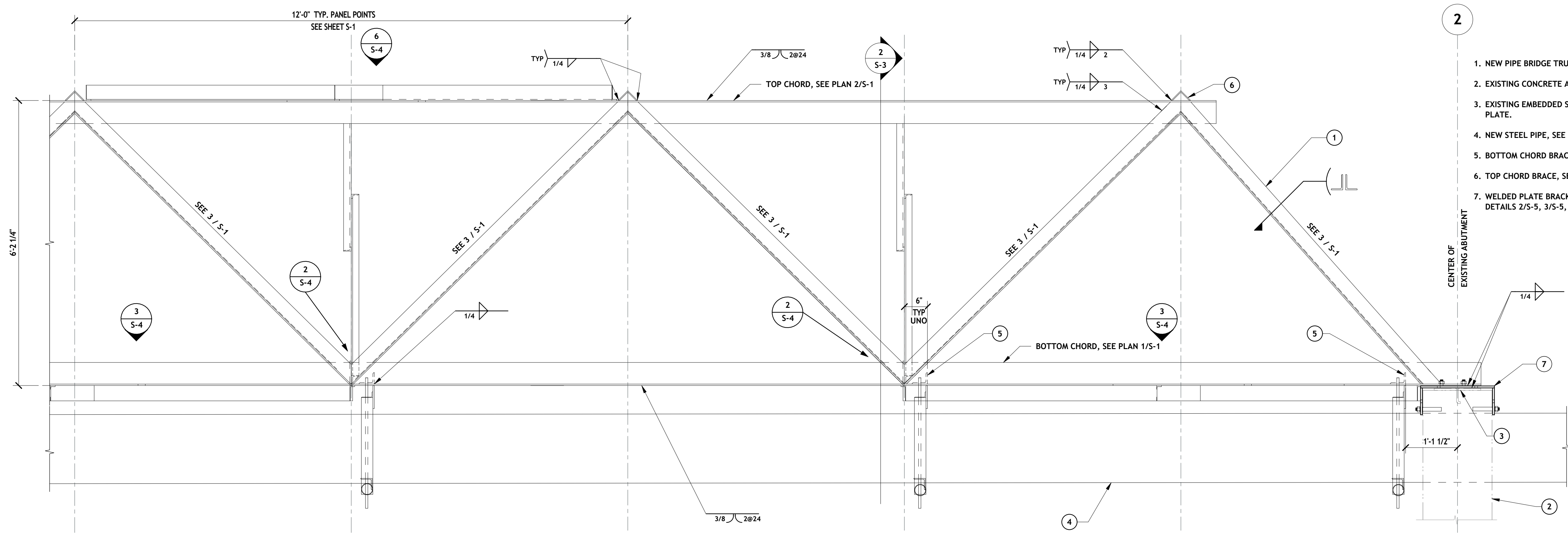
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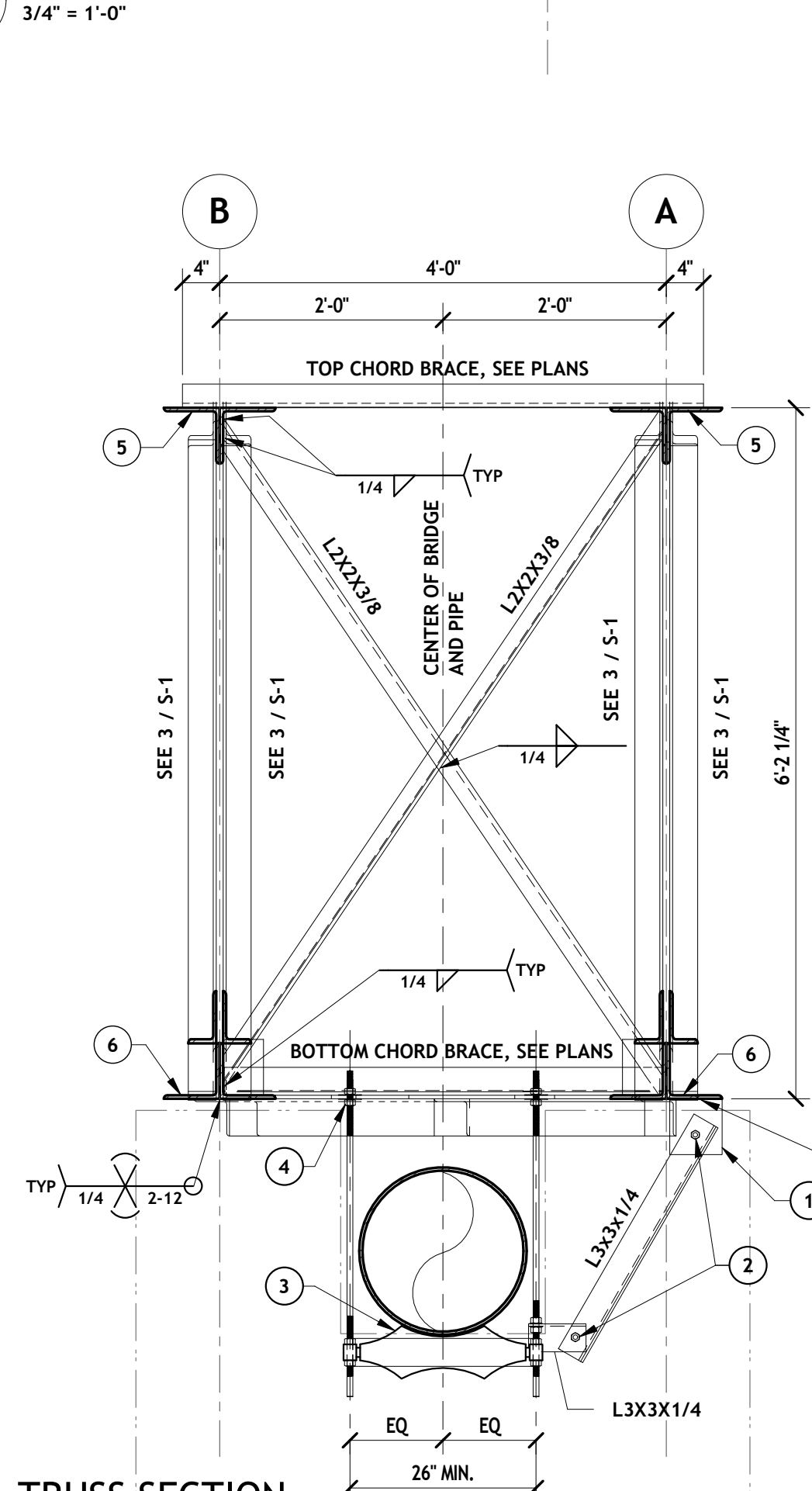
PROJECT NO:  
121110

DATE:  
AUGUST 2023

SHEET NO:  
S-3

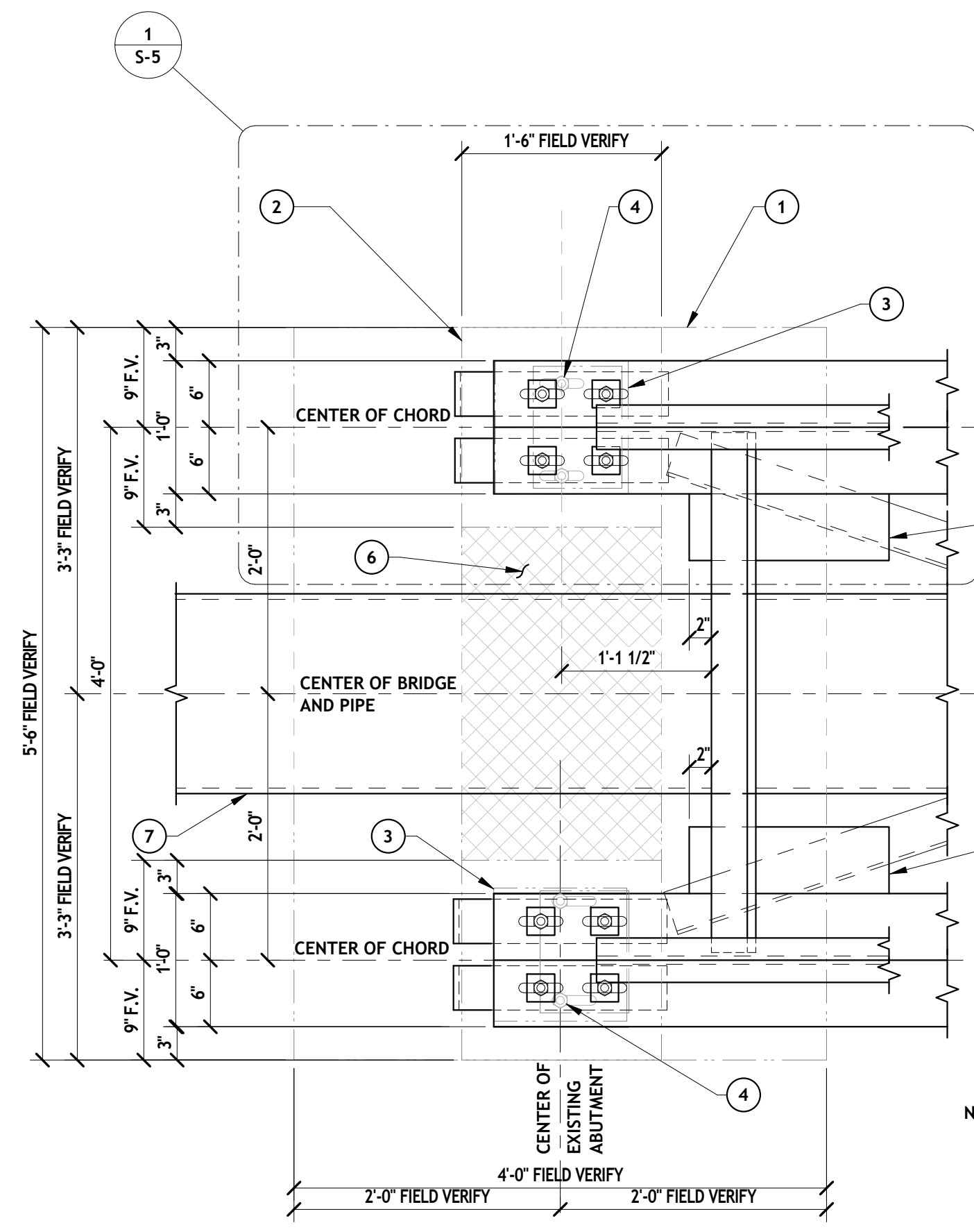


**1 TRUSS DETAIL**  
3/4" = 1'-0"



**2 TRUSS SECTION**  
3/4" = 1'-0"

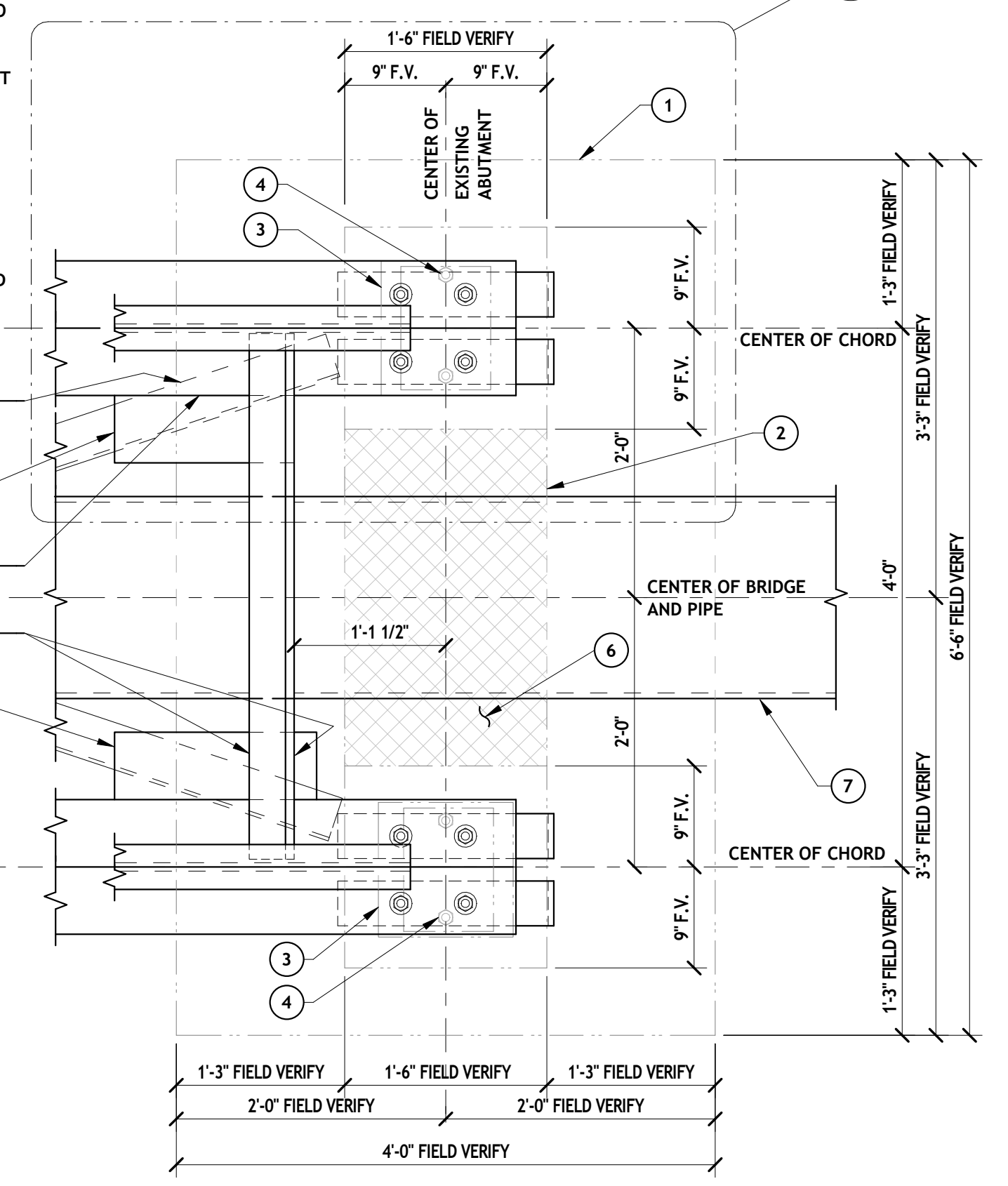
1. PL 1/4"x6"x0'-6".
- 1/2" DIAMETER BOLT. (FIELD DRILL BOLT HOLE)
- NON-CONDUCTIVE PIPE ROLLER WITH HANGER RODS, NUTS, SOCKET AND AXLE FOR 18" PIPE WITH INSULATION. INSTALL PER MANUFACTURER RECOMMENDATIONS. 12'-0" MAX PIPE SPAN INTERVALS.
- FIELD DRILL HOLES IN MEMBER TO FIT REQUIRED HANGERS, WASHER AND NUT ON BOTH SIDES OF ANGLE LEG AS SHOWN.
- 2L6X6 TOP CHORD, SEE 2/S-1.
- 2L6X6 BOTTOM CHORD, SEE 1/S-1.



**3 TRUSS BEARING DETAIL**  
1" = 1'-0"

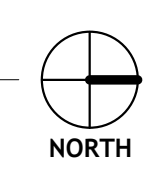
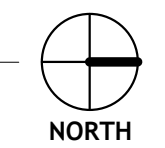
- EXISTING ABUTMENT FOUNDATION TO REMAIN.
- EXISTING ABUTMENT TO REMAIN.
- EXISTING EMBED PLATE 1/2"x12"x1'-0" ATTACHED TO EXISTING ABUTMENT TO REMAIN.
- EXISTING 3/4" DIAMETER ANCHOR BOLT TO BE CUT FLUSH WITH THE TOP OF THE EXISTING EMBED PLATE, SEE DETAILS 1/S-5 AND 2/S-5.
- PL 3/8"x6"x1'-6".
- PROVIDE 1/4" MINIMUM THICKNESS X 18" X 2'-6" UV-RESISTANT NEOPRENE PIPE RESTING SUPPORT, OR APPROVED EQUAL.
- 18" STEEL PIPE, SEE SHEET C-2. 8" MIN. TOTAL WELD 4" MIN. PER SIDE TYPICAL 5/16

NOTE: SEE 1 / S-5 FOR SOUTH BEARING POINT DETAILS.  
SEE 2 / S-5 FOR NORTH BEARING POINT DETAILS

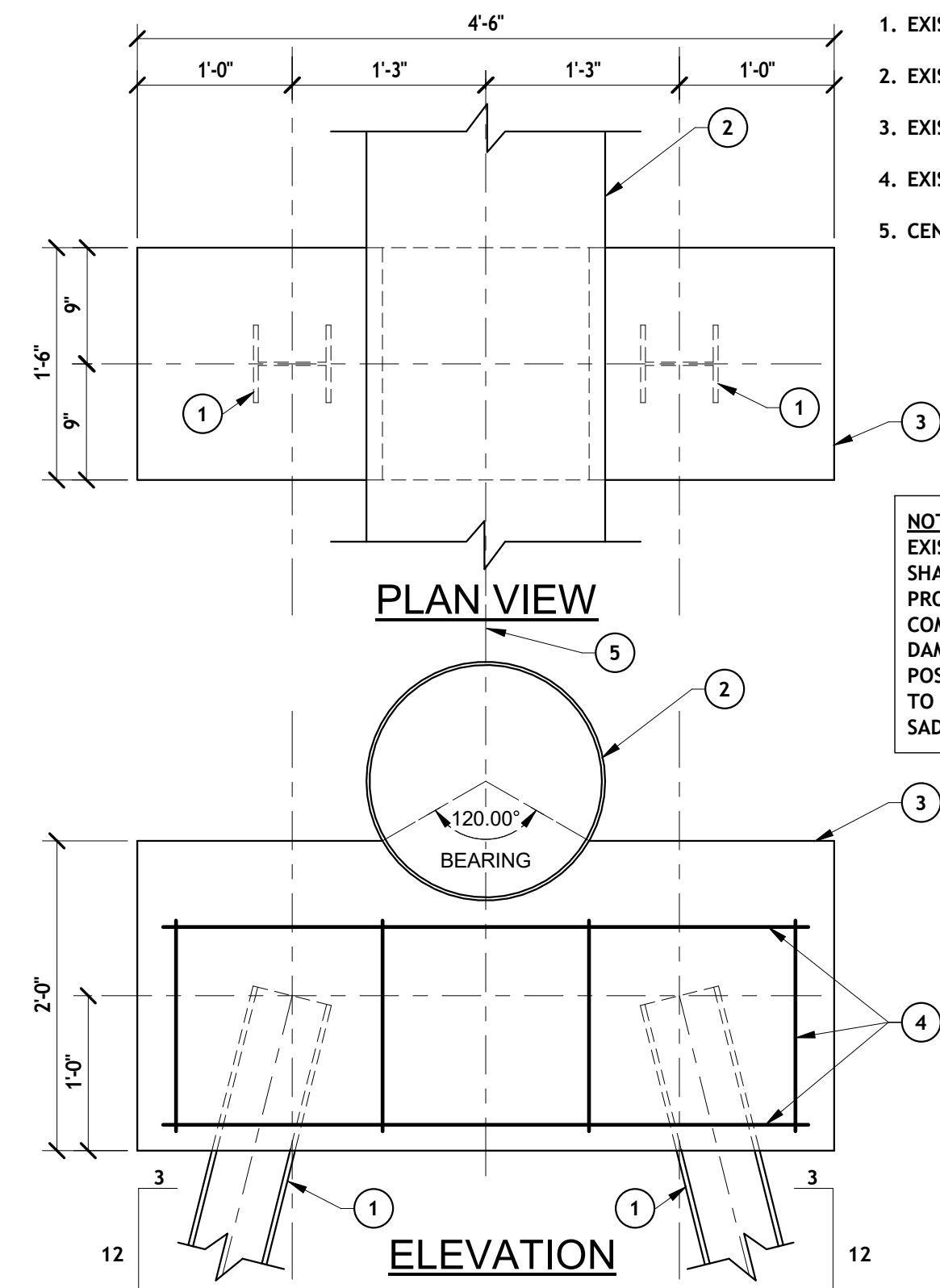


FIXED CONNECTION

- NEW PIPE BRIDGE TRUSS.
- EXISTING CONCRETE ABUTMENT.
- EXISTING EMBEDDED STEEL PLATE.
- NEW STEEL PIPE, SEE CIVIL.
- BOTTOM CHORD BRACE, SEE PLANS.
- TOP CHORD BRACE, SEE PLANS.
- WELDED PLATE BRACKET, SEE DETAILS 2/S-5, 3/S-5, AND 4/S-5.

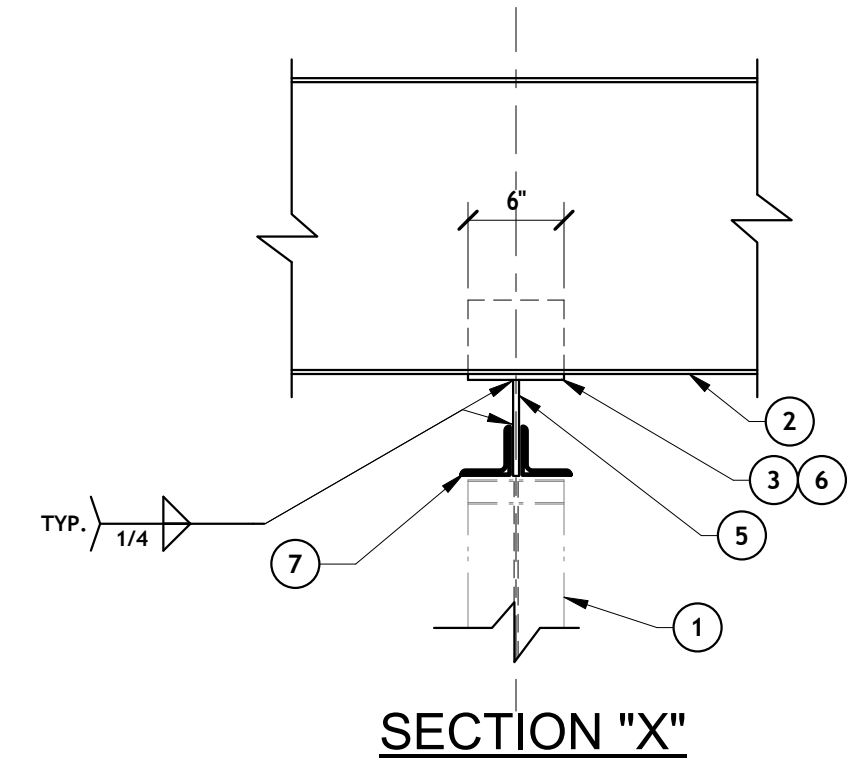




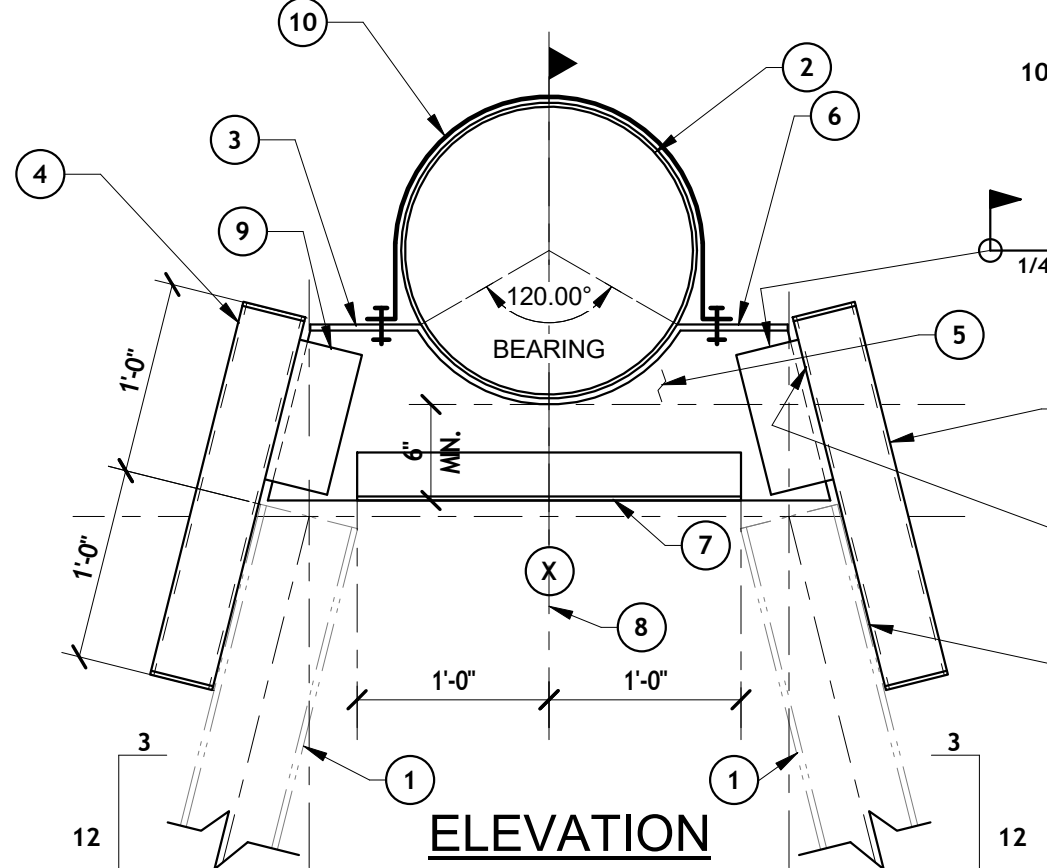


**NOTE:**  
EXISTING PIPE AND CONCRETE SADDLE SHALL BE REMOVED AS PART OF THIS PROJECT. REMOVE CONCRETE SADDLE COMPLETELY. DO NOT CUT OR DAMAGE THE EXISTING W6 SUPPORT POSTS. SEE DETAIL 4/S-4 FOR DETAILS TO RECONSTRUCT THE PIPE SUPPORT SADDLE WITH STEEL.

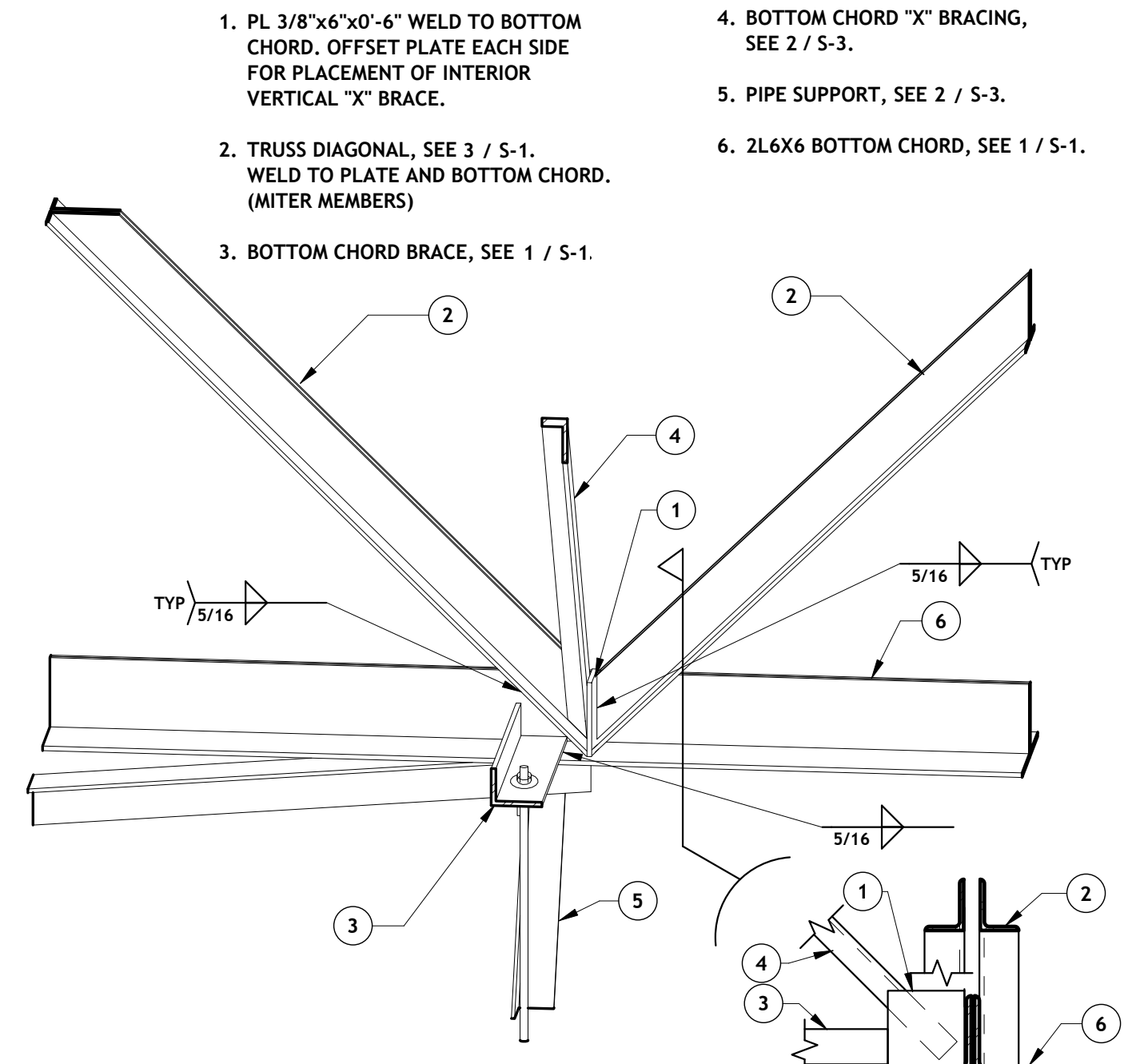
**1 EXISTING PIPE SUPPORT**  
1" = 1'-0"



- EXISTING W6x20 SUPPORT POST.
- 18" I.D. STEEL PIPE.
- STEEL PIPE SUPPORT SADDLE.
- HSS4x4x1/4 STRUT WELDED TO FLANGE OF EXISTING W6 POST. PROVIDE 1/4" THK. CAP PLATE TO EACH END OF HSS.
- 3/8" THK. WEB PLATE CUT TO SHAPE.
- 3/8" THK. x 6" WIDE SADDLE SEAT, ROLLED TO FIT PIPE AND WELDED TO WEB PLATE.
- L3x3x1/4 STIFFENER WELDED TO EACH SIDE OF WEB PLATE.
- CENTER LINE OF PIPE.
- SHEAR PLATE 4"x3/8"x0'-9" SHOP WELDED TO HSS STRUT AND FIELD WELDED TO SADDLE WEB PLATE.
- PROVIDE A 2" WIDE x 18GA. SEISMIC RESTRAINT STRAP OVER PIPE WITH 1/2" Ø BOLT TO SADDLE SEAT EA. SIDE.

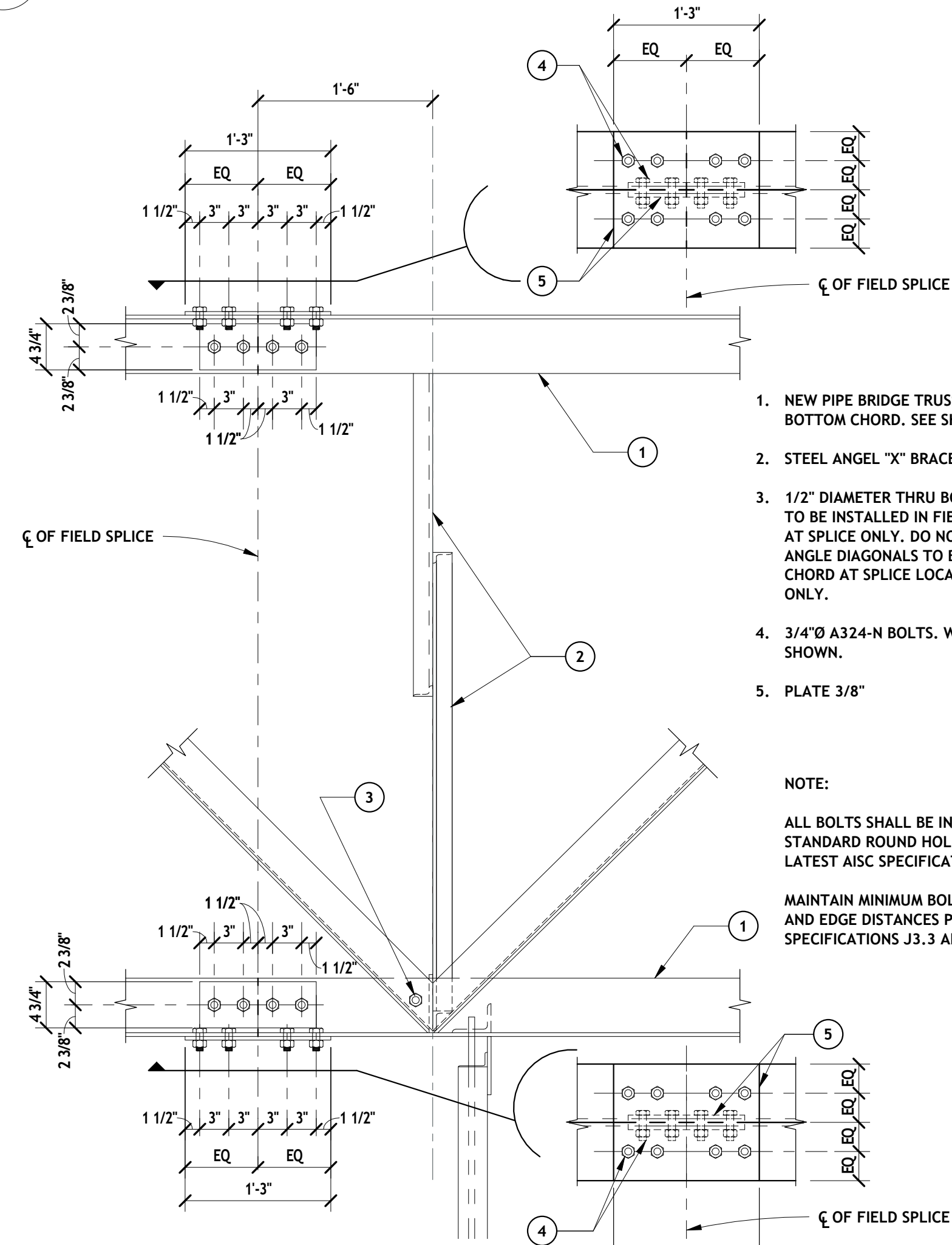


**4 STEEL PIPE SUPPORT SADDLE DETAILS**  
1" = 1'-0"



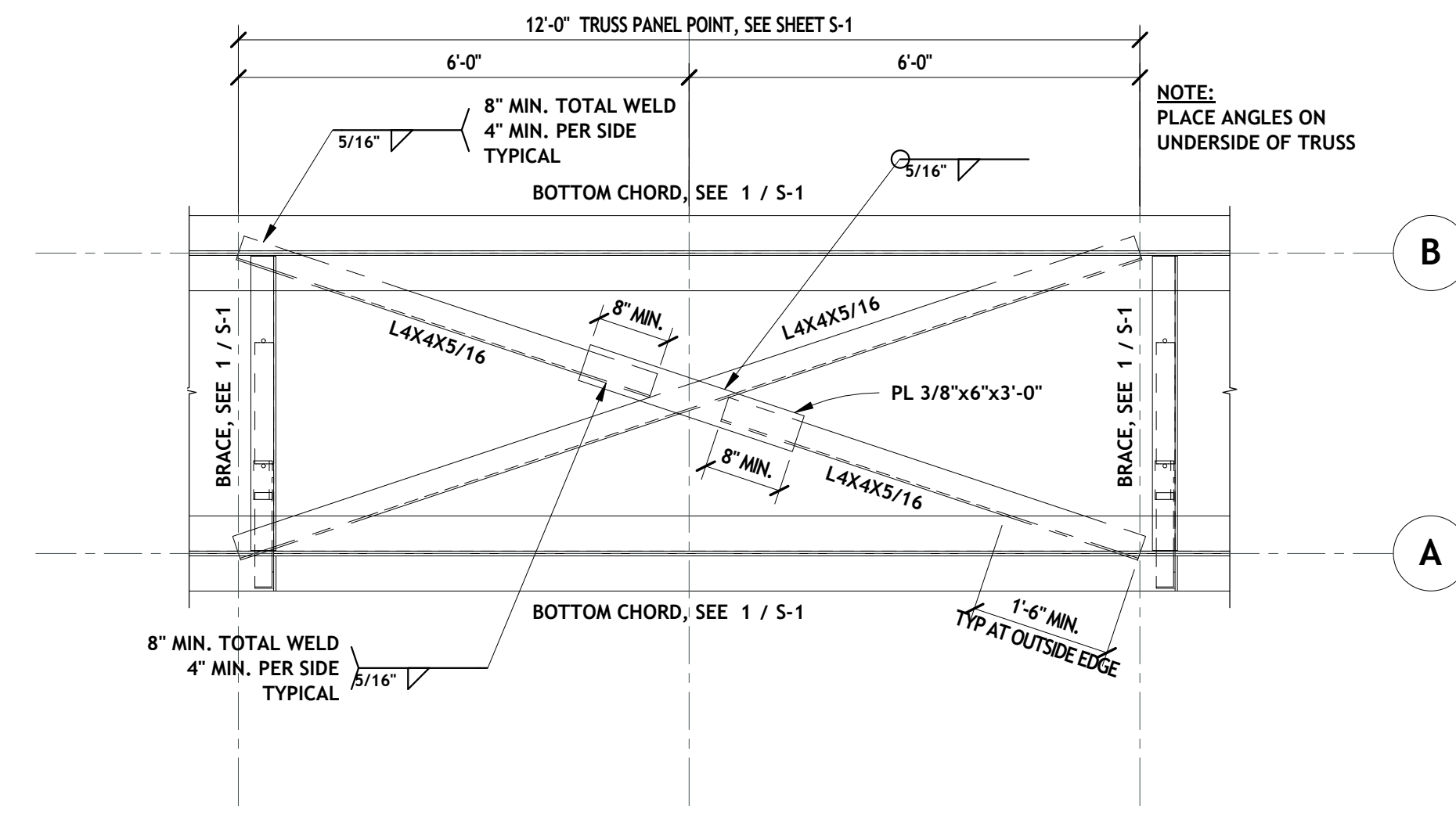
- PL 3/8"x6"x0'-6" WELD TO BOTTOM CHORD. OFFSET PLATE EACH SIDE FOR PLACEMENT OF INTERIOR VERTICAL "X" BRACE.
- TRUSS DIAGONAL, SEE 3 / S-1. WELD TO PLATE AND BOTTOM CHORD. (MITER MEMBERS)
- BOTTOM CHORD BRACE, SEE 1 / S-1.
- BOTTOM CHORD "X" BRACING, SEE 2 / S-3.
- PIPE SUPPORT, SEE 2 / S-3.
- 2L6X6 BOTTOM CHORD, SEE 1 / S-1.

**2 STRUCTURAL TRUSS DETAIL**

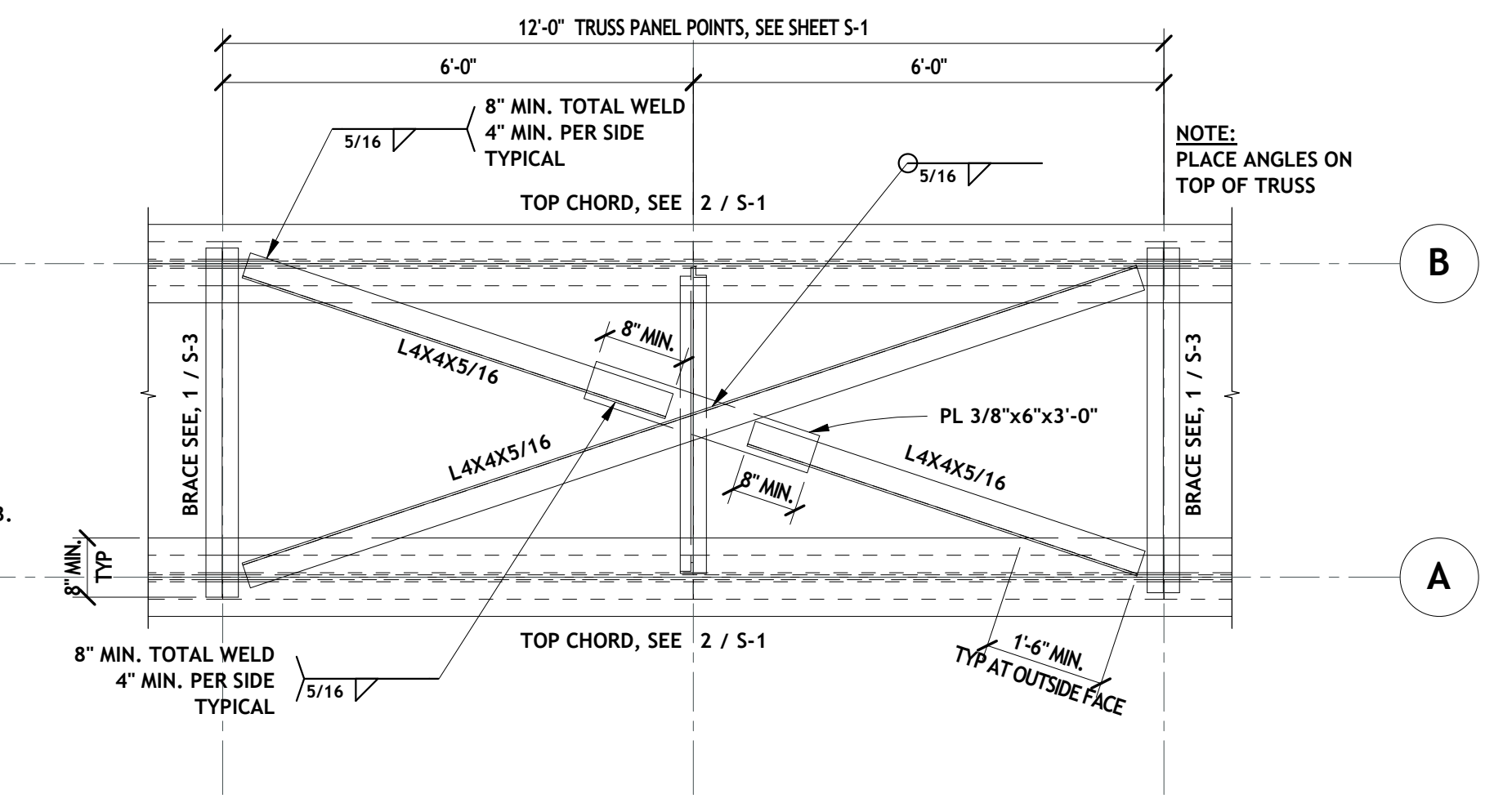


- NEW PIPE BRIDGE TRUSS, TOP OR BOTTOM CHORD. SEE SHEET S-1.
  - STEEL ANGEL "X" BRACE, SEE 2/S-3.
  - 1/2" DIAMETER THRU BOLT TO BE INSTALLED IN FIELD AT SPLICE ONLY. DO NOT WELD ANGLE DIAGONALS TO BOTTOM CHORD AT SPLICE LOCATIONS ONLY.
  - 3/4" Ø A324-N BOLTS. WHERE SHOWN.
  - PLATE 3/8"
- NOTE:**  
ALL BOLTS SHALL BE INSTALLED USING STANDARD ROUND HOLES PER THE LATEST AISC SPECIFICATIONS.  
MAINTAIN MINIMUM BOLT SPACING AND EDGE DISTANCES PER AISC SPECIFICATIONS J3.3 AND J3.4.

**5 TRUSS SPLICE DETAIL**  
1" = 1'-0"



**3 PIPE BRIDGE BOTTOM CHORD "X" BRACING**  
1/2" = 1'-0"



**6 PIPE BRIDGE TOP CHORD "X" BRACING**  
1/2" = 1'-0"



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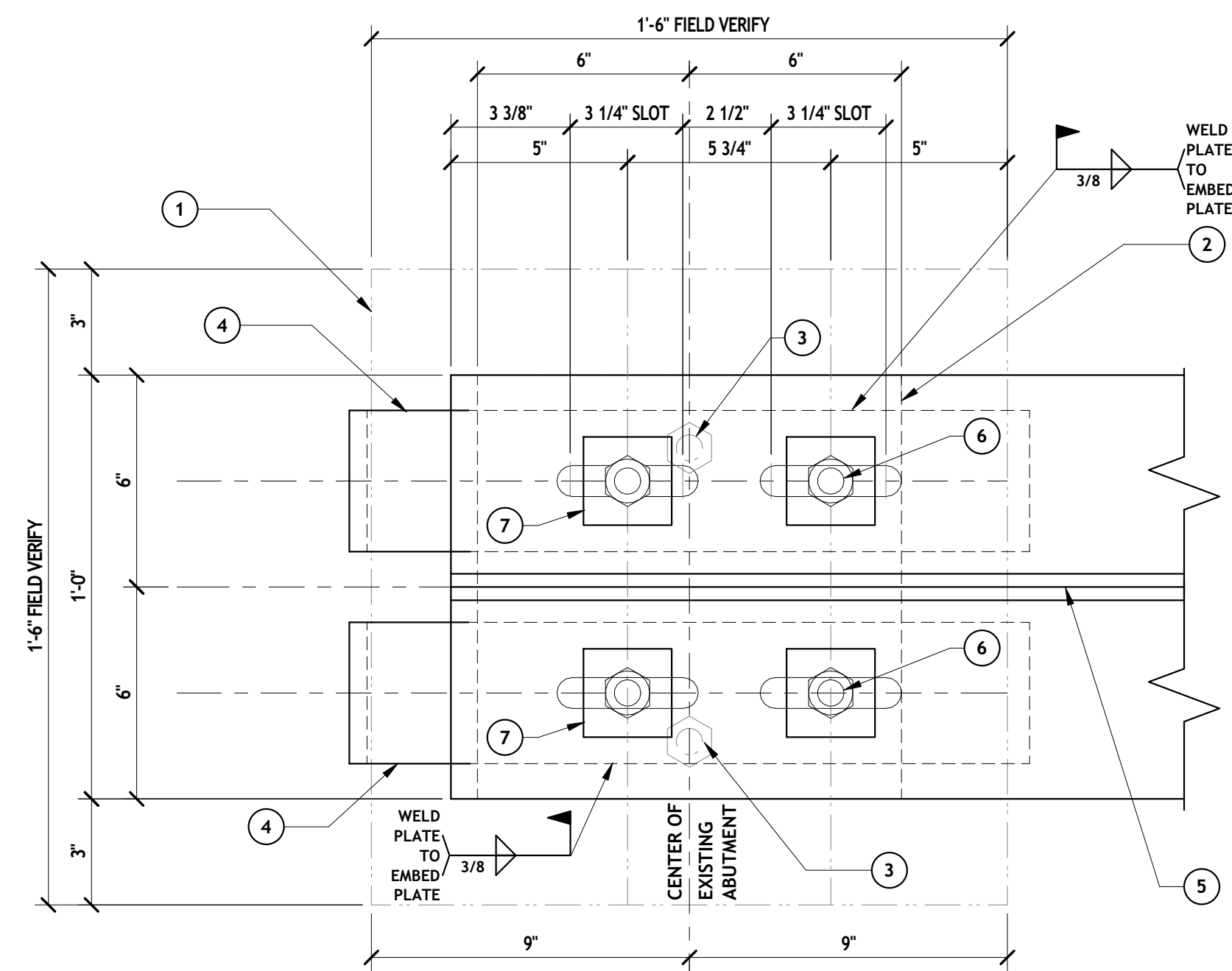
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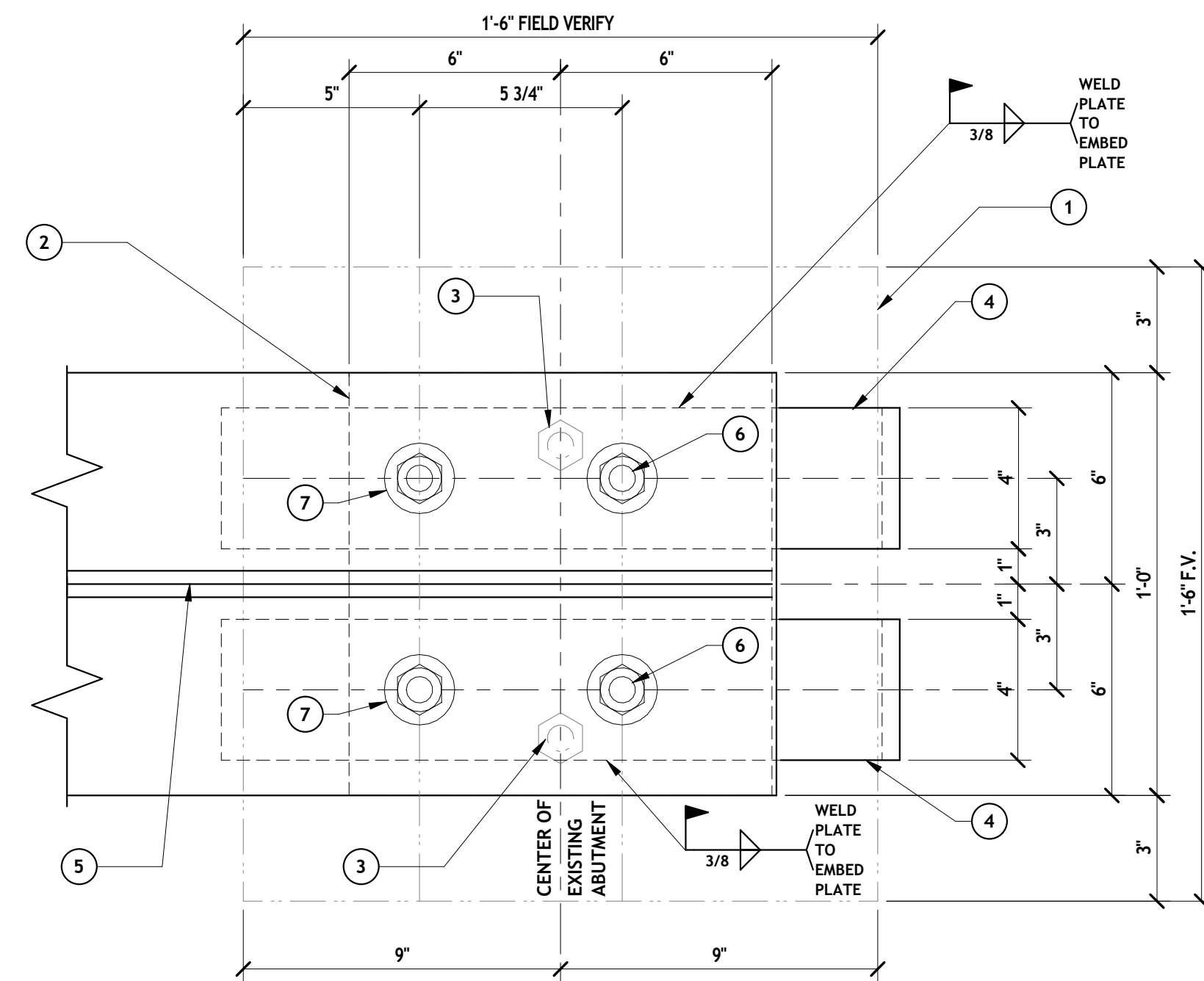






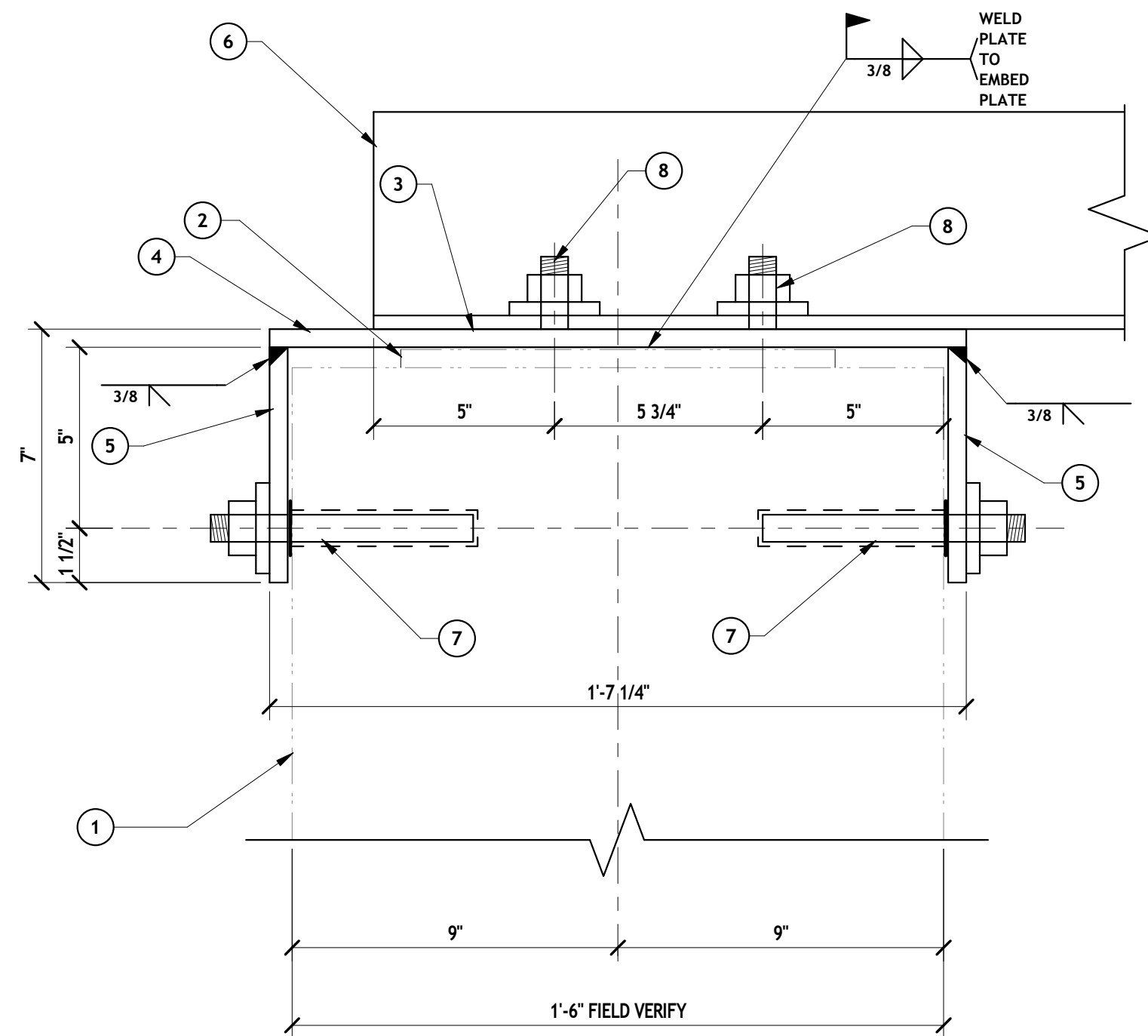
1. EXISTING 18" SQ. CONCRETE PEDESTAL CAST ON TOP OF EXISTING ABUTMENT TO REMAIN.
2. EXISTING EMBED PLATE 1/2"x12"x1'-0" ATTACHED TO EXISTING PEDESTAL TO REMAIN.
3. EXISTING 3/4" DIAMETER ANCHOR BOLT TO BE CUT FLUSH WITH THE TOP OF THE EXISTING EMBED PLATE.
4. PROVIDE (2) WELDED PLATE BRACKETS ANCHORED TO TOP OF PEDESTAL. SEE DETAILS 3 / S-5 AND 4 / S-5 .
5. 2L6x6 TRUSS BOTTOM CHORD MEMBER, SEE PLAN 1 / S-1. PROVIDE LONG SLOTTED HOLES IN HORIZ. LEGS FOR 3/4"Ø STUDS.
6. 3/4"Ø x 2" THREADED STUDS WELDED TO WELD PLATES.
7. 2 1/2"SQ. x3/8" PLATE WASHERS AND 3/4"Ø NUT.

**1 SOUTH BEARING POINT DETAIL**  
3" = 1'-0"



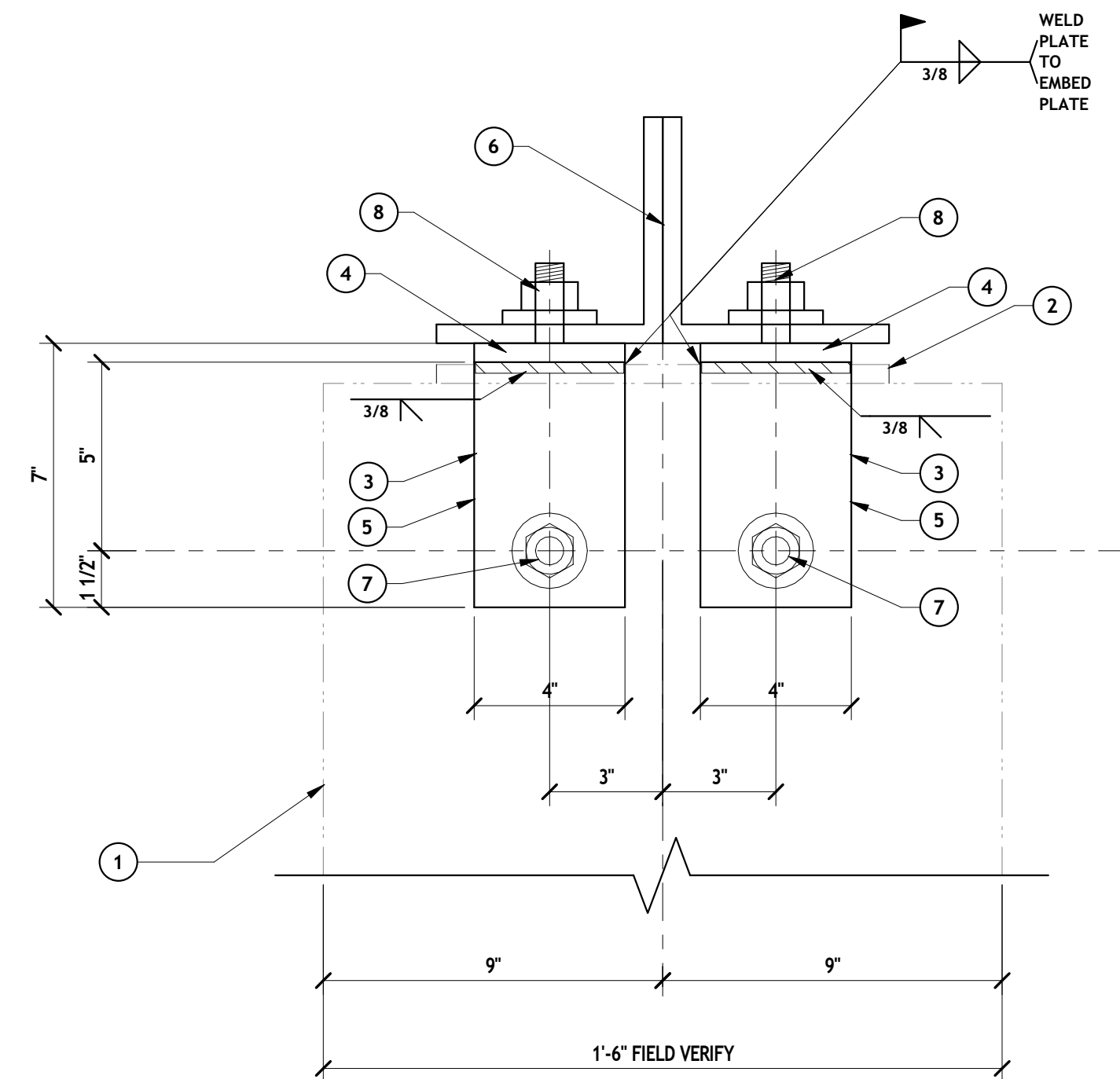
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2. EXISTING EMBED PLATE 1/2"x12"x1'-0" ATTACHED TO EXISTING PEDESTAL TO REMAIN.
3. EXISTING 3/4" DIAMETER ANCHOR BOLT TO BE CUT FLUSH WITH THE TOP OF THE EXISTING EMBED PLATE.
4. PROVIDE (2) WELDED PLATE BRACKETS ANCHORED TO TOP OF PEDESTAL. SEE DETAILS 3 / S-5 AND 4 / S-5 .
5. 2L6x6 TRUSS BOTTOM CHORD MEMBER, SEE PLAN 1 / S-1 . PROVIDE 1"Ø HOLES IN HORIZ. LEGS FOR 3/4"Ø STUDS.
6. 3/4"Ø x 2" THREADED STUDS WELDED TO WELD PLATES.
7. STD. NUT AND WASHER.

**2 NORTH BEARING POINT DETAIL**  
3" = 1'-0"



1. EXISTING 18" SQ. CONCRETE PEDESTAL CAST ON TOP OF EXISTING ABUTMENT TO REMAIN.
2. EXISTING EMBED PLATE 1/2"x12"x1'-0" ATTACHED TO EXISTING PEDESTAL TO REMAIN.
3. 1/2" THICK WELDED PLATE BRACKETS ANCHORED TO TOP OF PEDESTAL. SEE DETAILS 1 / S-5 AND 2 / S-5 .
4. TOP PLATE 4"x1/2"x1'-7 1/4".
5. SIDE PLATE 4"x1/2"x 0'-6 1/2" BEVEL WELDED TO EACH END OF TOP PLATE.
6. 2L6x6 TRUSS BOTTOM CHORD MEMBER, SEE PLAN 1 / S-1. SEE 1 / S-5 FOR SLIP SIDE, SEE 2 / S-5 FOR FIXED END.
7. 3/4"Ø THREADED ANCHOR EPOXY SET INTO EXIST. PEDESTAL, EMBED 5" MIN. THRU WELD PLATE BRACKET SIDE PLATES, TYP.
8. 3/4"Ø x 2" THREADED STUDS WELDED TO WELD PLATES. WITH NUTS AND WASHERS PER DETAILS 1 / S-5 AND 2 / S-5 .

**3 WELDED PLATE BRACKET SIDE VIEW**  
3" = 1'-0"



1. EXISTING 18" SQ. CONCRETE PEDESTAL CAST ON TOP OF EXISTING ABUTMENT TO REMAIN.
2. EXISTING EMBED PLATE 1/2"x12"x1'-0" ATTACHED TO EXISTING PEDESTAL TO REMAIN.
3. 1/2" THICK WELDED PLATE BRACKETS ANCHORED TO TOP OF PEDESTAL. SEE DETAILS 1 / S-5 AND 2 / S-5 .
4. TOP PLATE 4"x1/2"x1'-7 1/4".
5. SIDE PLATE 4"x1/2"x 0'-6 1/2" BEVEL WELDED TO EACH END OF TOP PLATE.
6. 2L6x6 TRUSS BOTTOM CHORD MEMBER, SEE PLAN 1 / S-1. SEE 1 / S-5 FOR SLIP SIDE, SEE 2 / S-5 FOR FIXED END.
7. 3/4"Ø THREADED ANCHOR EPOXY SET INTO EXIST. PEDESTAL, EMBED 5" MIN. THRU WELD PLATE BRACKET SIDE PLATES, TYP.
8. 3/4"Ø x 2" THREADED STUDS WELDED TO WELD PLATES. WITH NUTS AND WASHERS PER DETAILS 1 / S-5 AND 2 / S-5 .

**4 WELDED PLATE BRACKET END VIEW**  
3" = 1'-0"



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SHEET NO.  
S-5