

City of Mineral Wells

Design Standard Review

Parkhill

4222 85th St.
Lubbock, TX 79423
806.473.2200

SHEET INDEX

General

G-001 Cover Sheet and Index

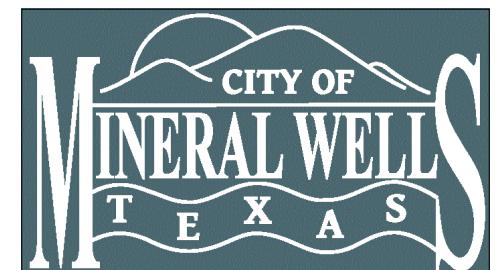
Civil

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Mineral Wells
Design Standards Review



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P.O. Box 460
Mineral Wells, Texas 76068
(940) 328-7777

PROJECT NO.
2503.22

DATE DESCRIPTION

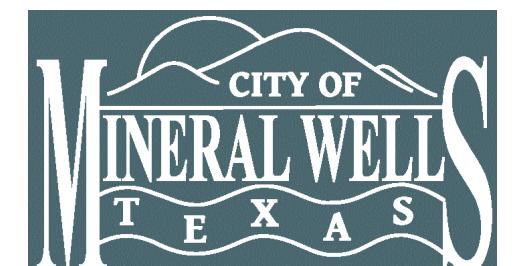
**Cover Sheet
and Index**

G-001

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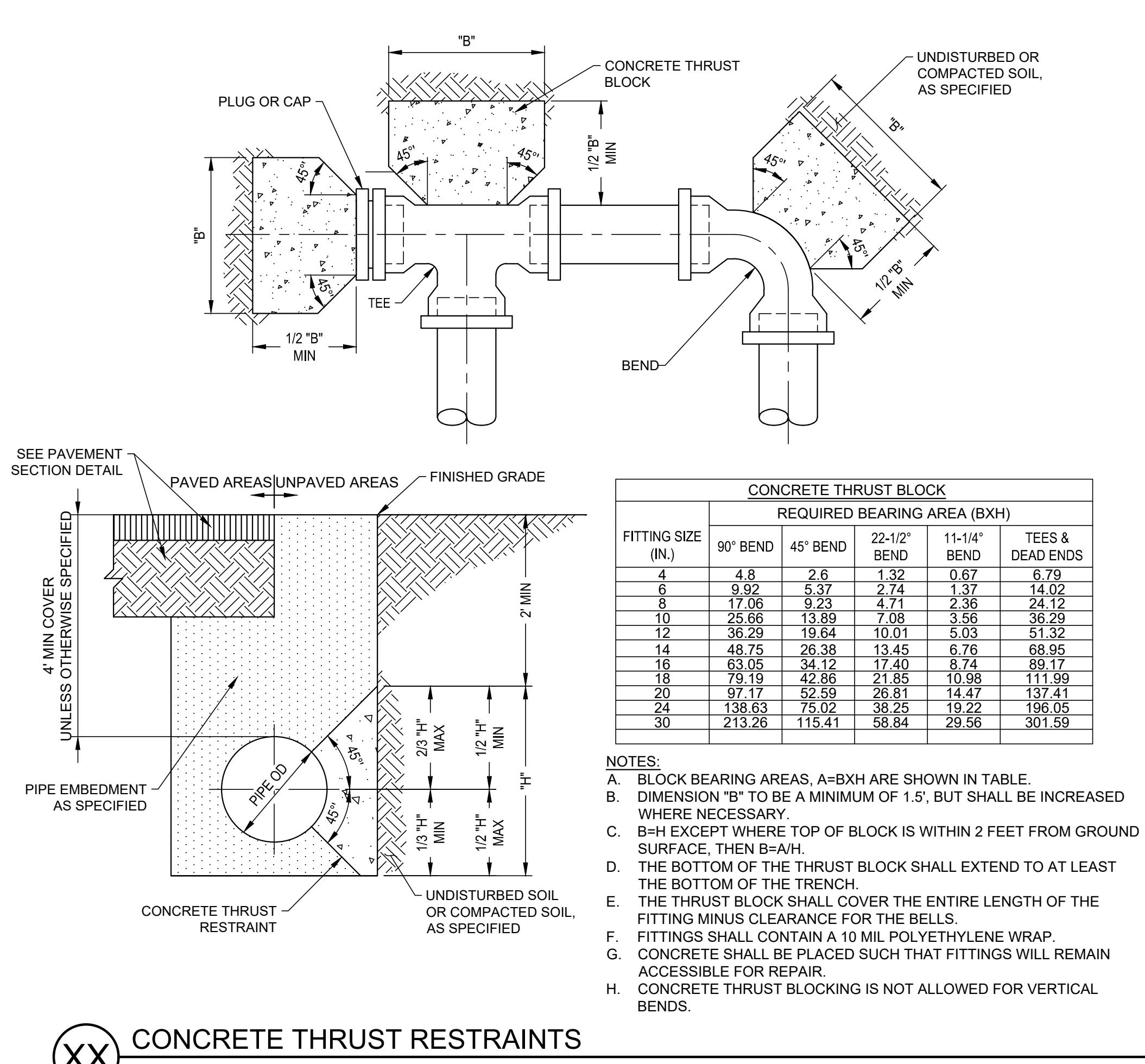
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PROJECT NO.
2503.22

DATE DESCRIPTION

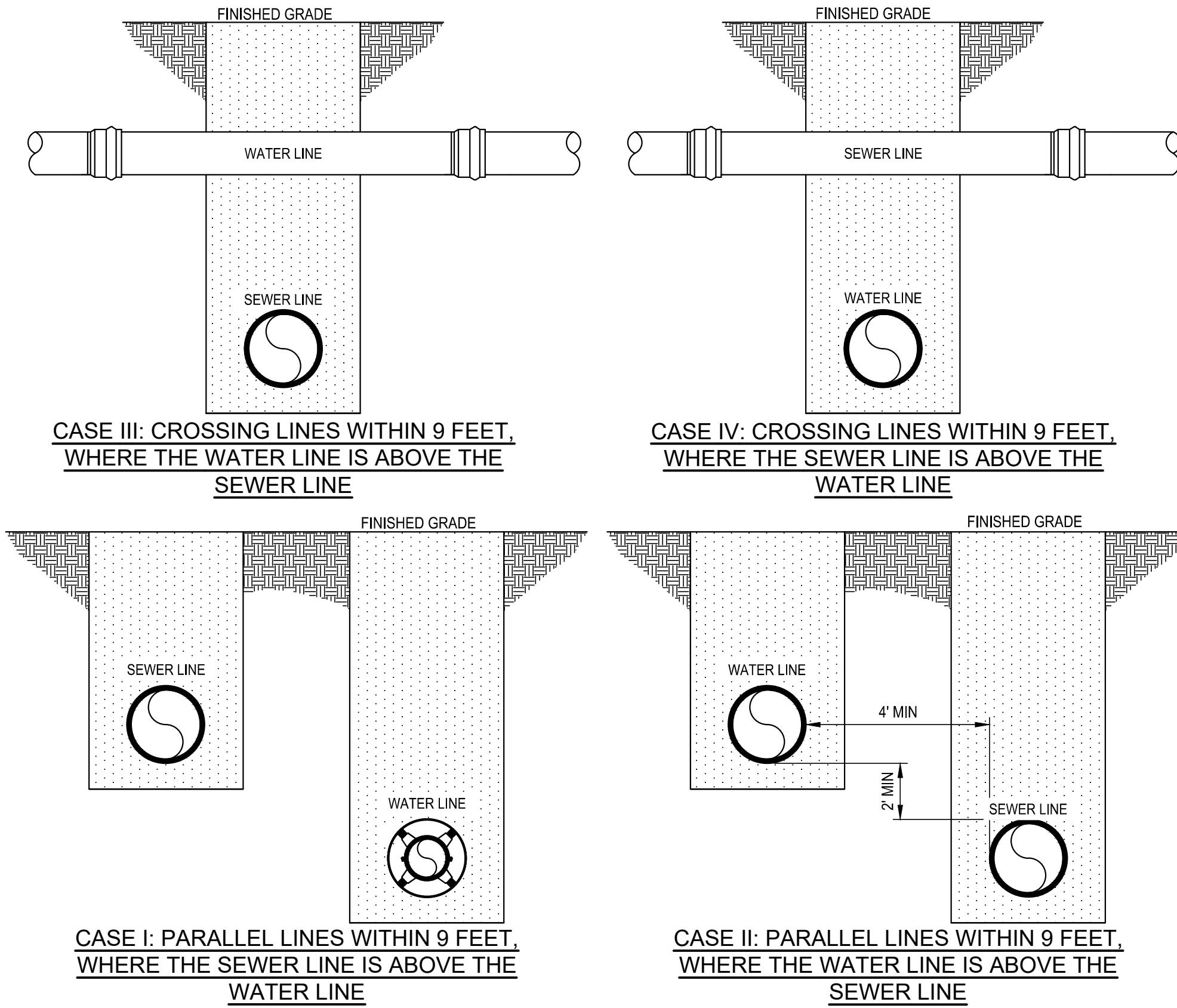
General Details

C-501



XX CONCRETE THRUST RESTRAINTS

NO SCALE



XX WATER AND SEWER LINES PARALLEL AND CROSSING

NO SCALE

CASE I

A. WATER LINE MUST BE ENCASED IN 150 PSI PIPE THAT IS 2 NOMINAL SIZES GREATER THAN SEWER LINE, SUPPORTED BY SPACERS, AND SEALED AT BOTH ENDS.

CASE II

B. SEWER LINE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PIPE
B.A. BE LOCATED AT LEAST 2 VERTICAL FEET FROM WATER LINE
B.B. BE LOCATED AT LEAST 4 HORIZONTAL FEET FROM WATER LINE
B.C. JOINTS THAT ARE DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE

-OR-

C. SEWER LINE MUST BE ENCASED IN 150 PSI PIPE THAT IS 2 NOMINAL SIZES GREATER THAN SEWER LINE, SUPPORTED BY SPACERS, AND SEALED AT BOTH ENDS.

CASE III/IV

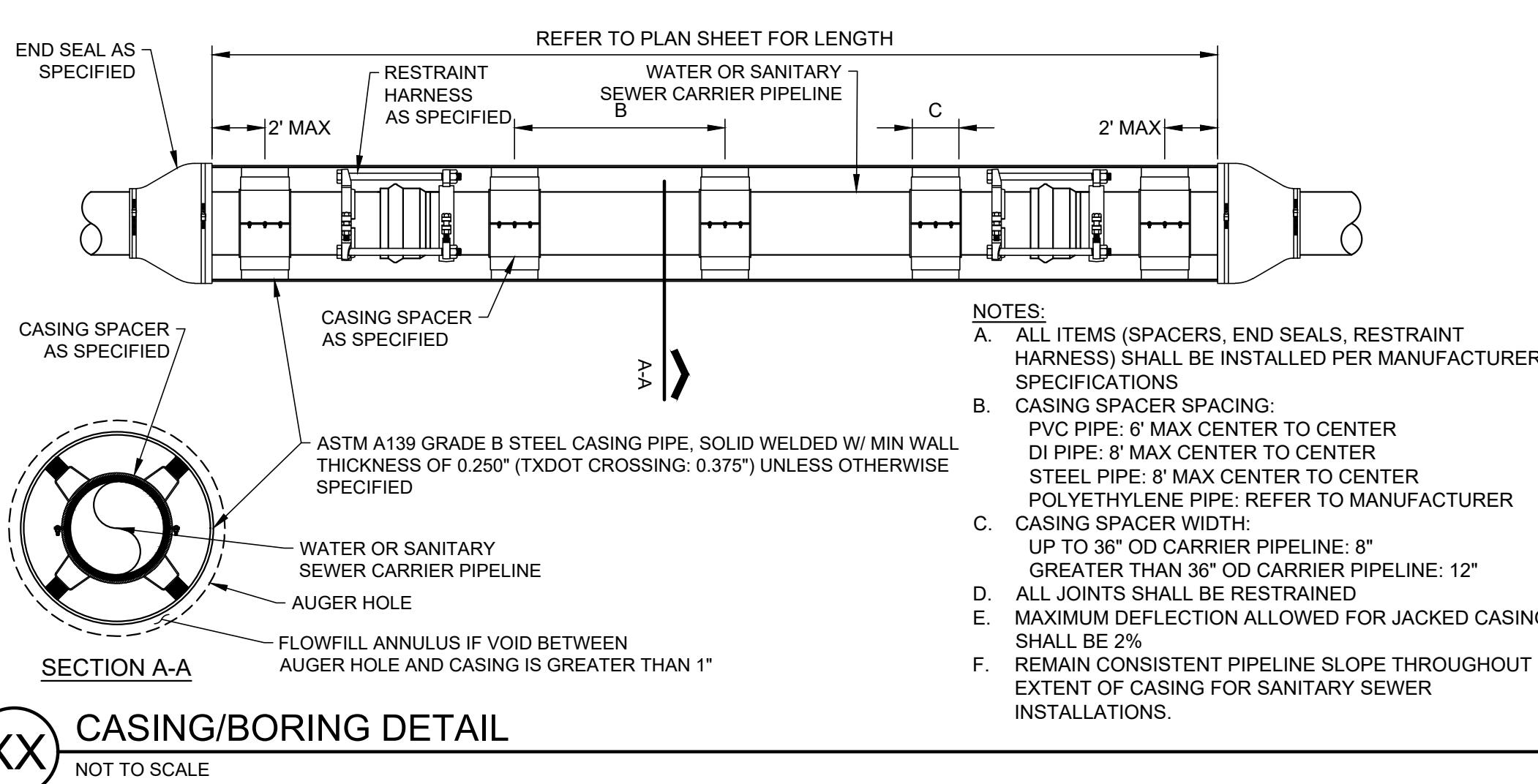
D. SEWER LINE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PIPE
D.A. BE LOCATED AT LEAST 6 VERTICAL INCHES FROM WATER LINE
D.B. BE CENTERED ON THE CROSSING
D.C. BE AT LEAST 18 FEET LONG
D.D. TERMINATE AT JOINTS THAT ARE DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE

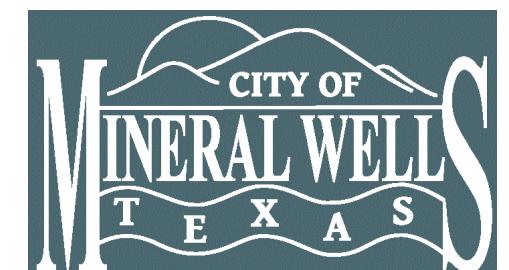
-OR-

E. SEWER LINE MUST BE ENCASED IN 150 PSI PIPE THAT IS 2 NOMINAL SIZES GREATER THAN SEWER LINE, SUPPORTED BY SPACERS, AND SEALED AT BOTH ENDS.

-OR-

F. SEWER LINE MUST BE ENCASED IN CEMENT-STABILIZED SAND
F.A. INCLUDE AT LEAST 160 POUNDS OF CEMENT FOR EVERY CUBIC YARD OF SAND
F.B. BE INSTALLED BEGINNING ONE-QUARTER PIPE DIAMETER BELOW THE CENTERLINE OF THE SEWER LINE
F.C. BE INSTALLED ENDING ONE FULL PIPE DIAMETER ABOVE THE TOP OF THE SEWER LINE, OR 12 INCHES ABOVE THE TOP OF THE SEWER LINE, WHICHEVER IS GREATER





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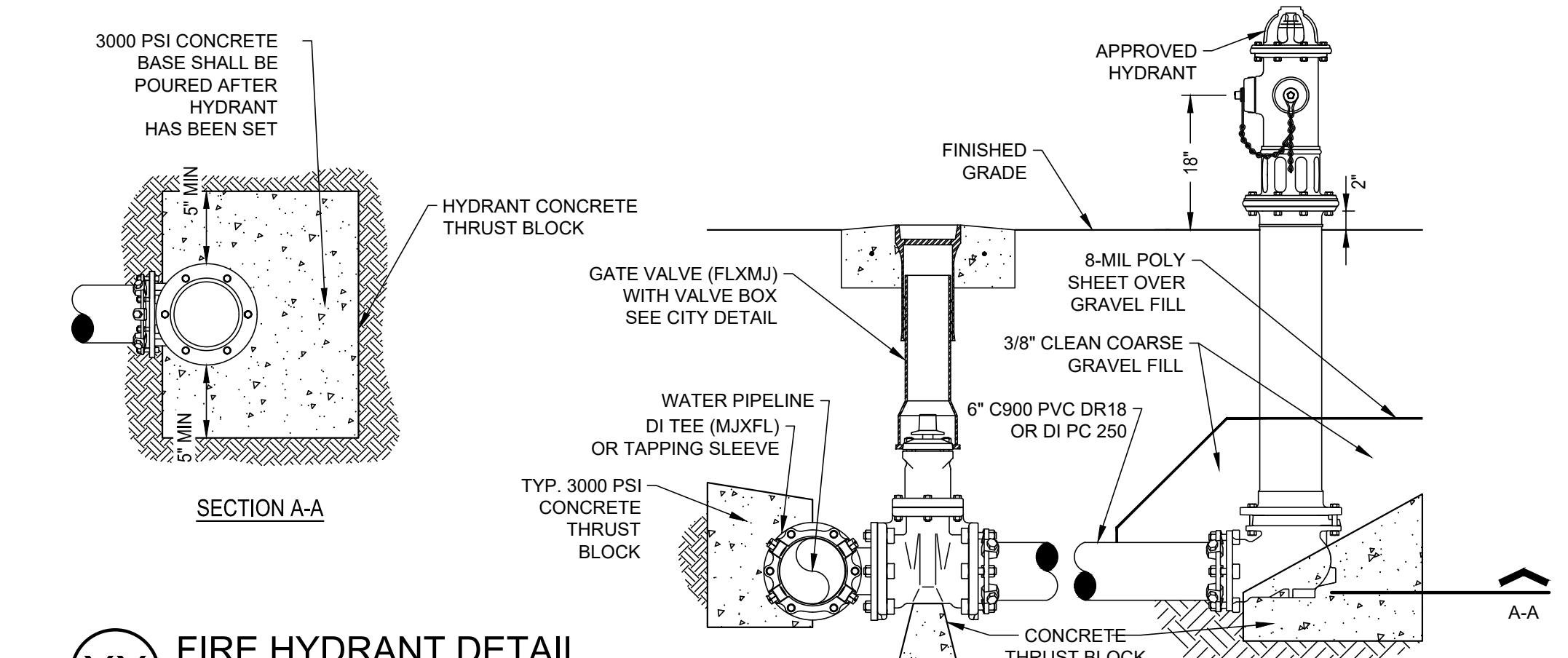
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PROJECT NO.
2503.22

DATE DESCRIPTION

Water Details

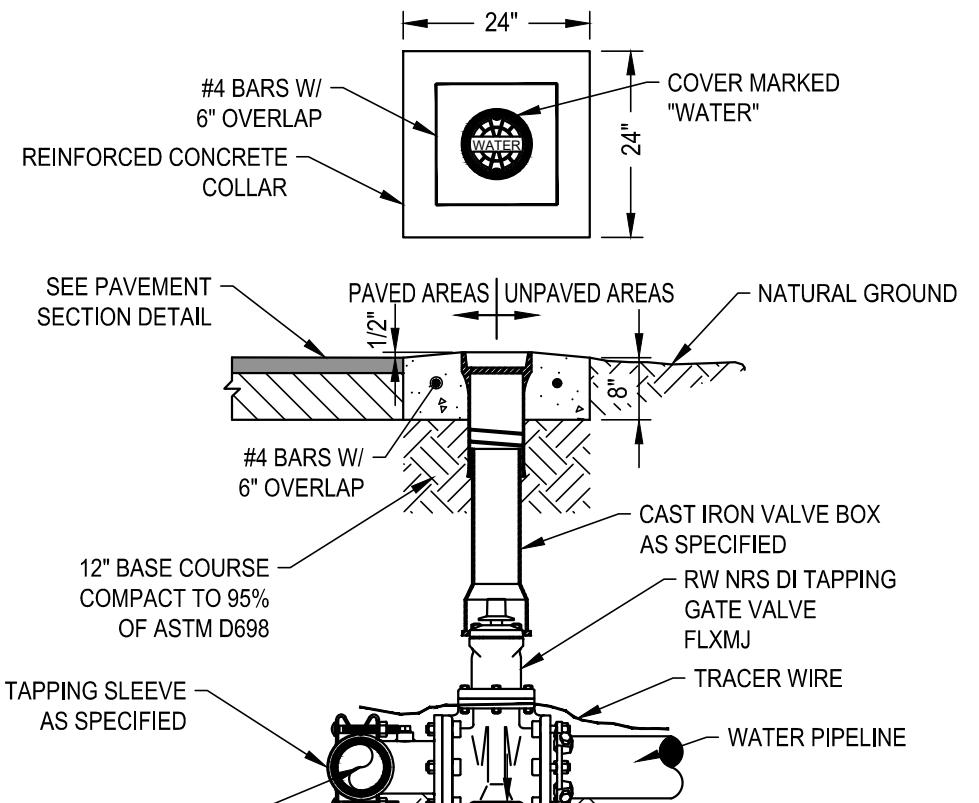
C-502



XX FIRE HYDRANT DETAIL

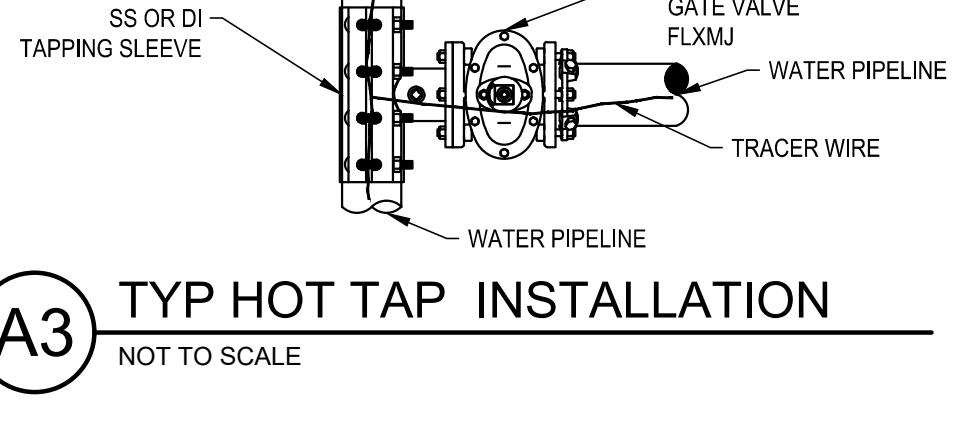
NOT TO SCALE

NOTES:
A. VERIFY DRAIN HOLES IN HYDRANT SHOE ARE FREE FROM OBSTRUCTION
B. INSTALL AND TEST HYDRANT IN ACCORDANCE WITH AWWA M-17
C. BACKFILL AND COMPACT AS SPECIFIED



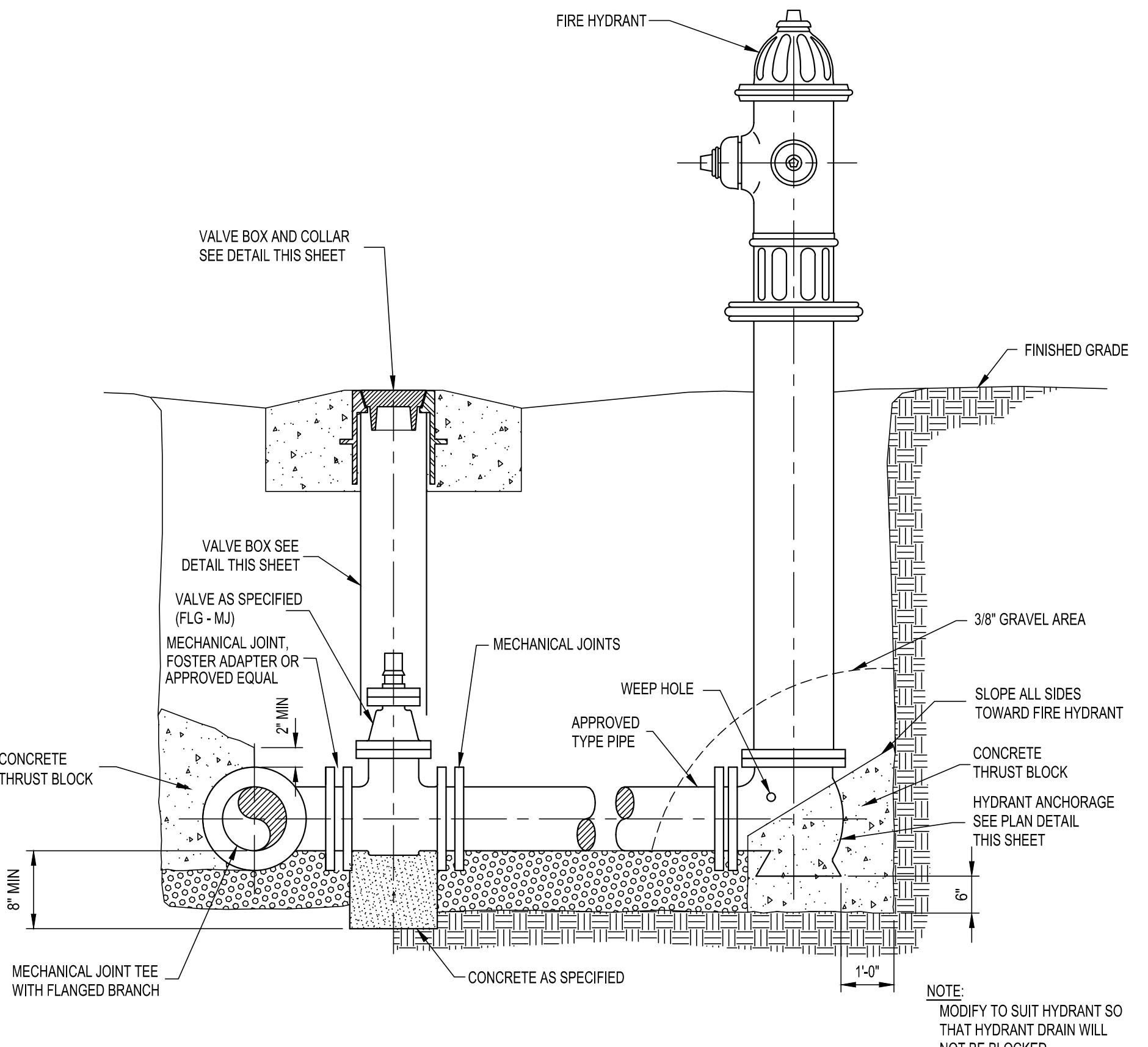
XX FRENCH DRAIN DETAIL

NO SCALE



A3 TYP HOT TAP INSTALLATION

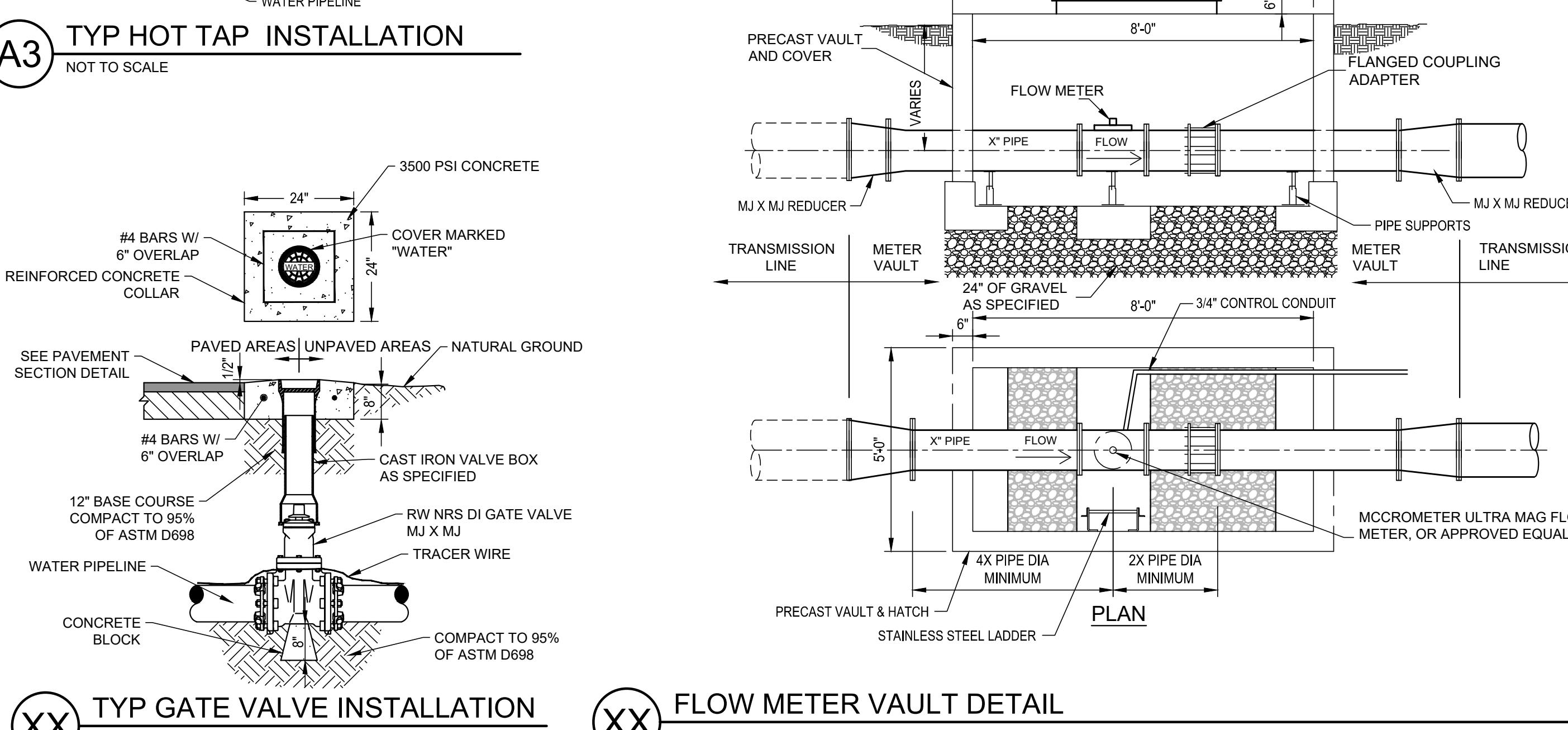
NOT TO SCALE



XX FIRE HYDRANT ASSEMBLY DETAIL

NOT TO SCALE

NOTE: MODIFY TO SUIT HYDRANT SO THAT HYDRANT DRAIN WILL NOT BE BLOCKED.



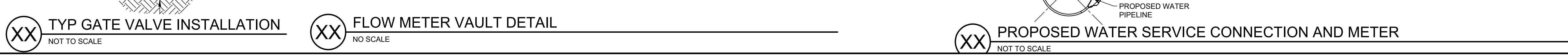
XX FLOW METER VAULT DETAIL

NO SCALE



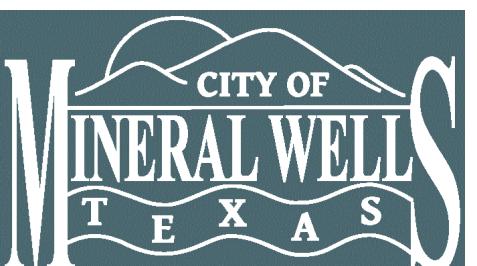
XX TYP GATE VALVE INSTALLATION

NOT TO SCALE



XX PROPOSED WATER SERVICE CONNECTION AND METER

NOT TO SCALE



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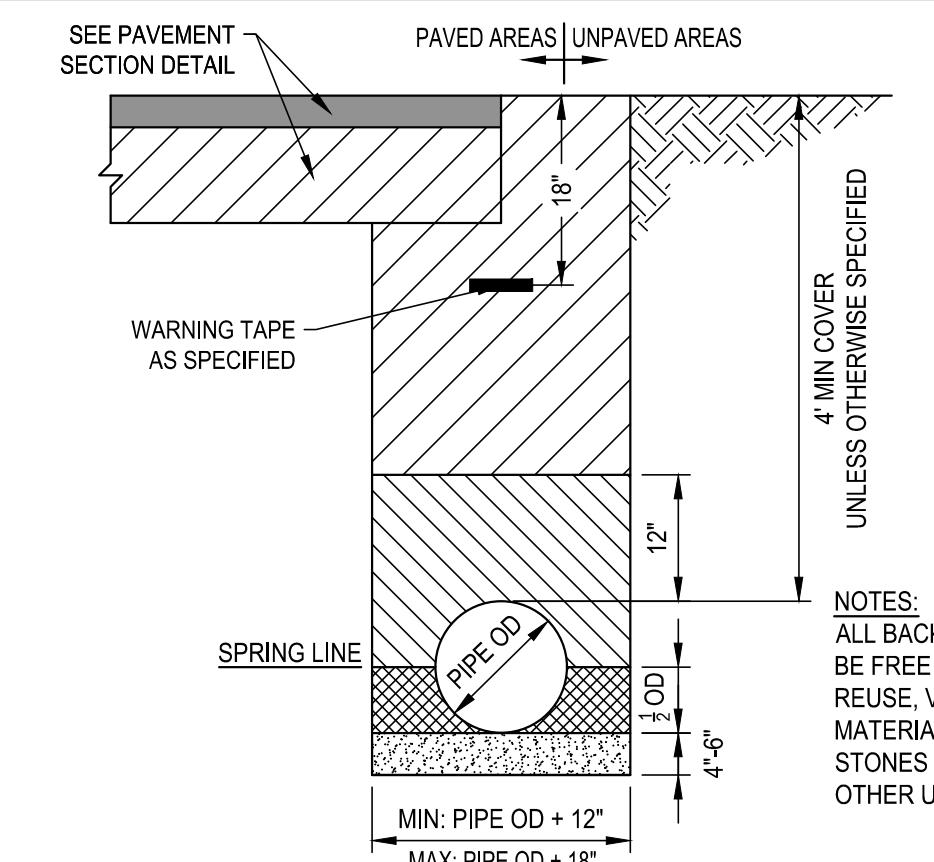
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PROJECT NO.
2503.22

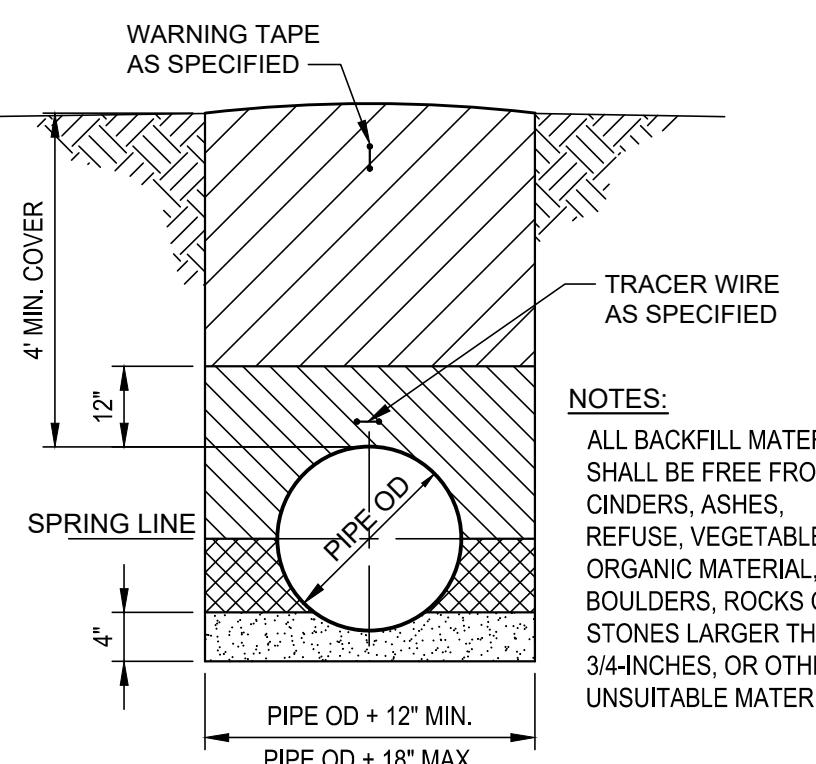
DATE DESCRIPTION

Water Details

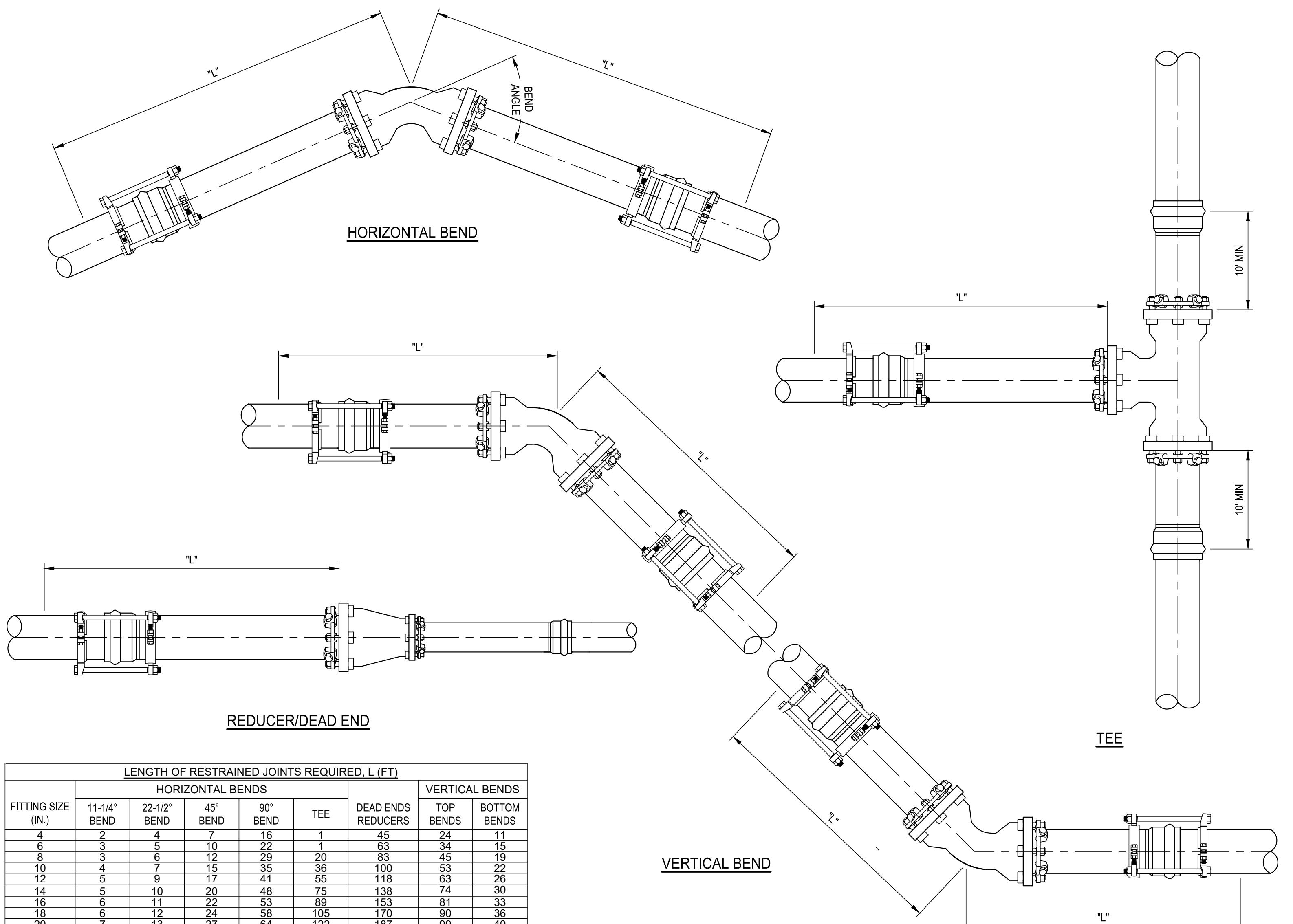
C-503



XX FLEXIBLE PIPE TRENCH DETAIL
NOT TO SCALE



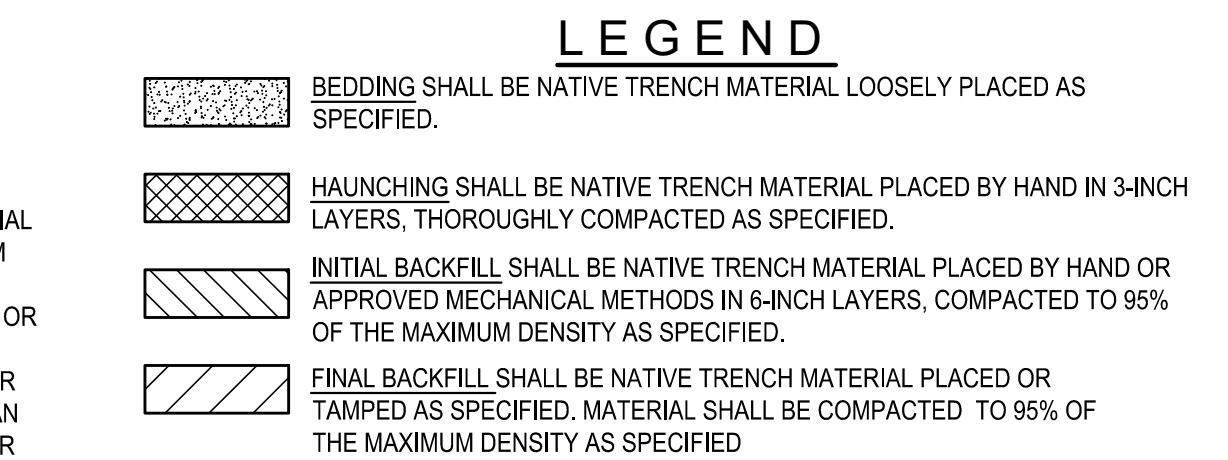
XX WATER LINE TRENCH DETAIL
NO SCALE



| FITTING SIZE (IN.) | LENGTH OF RESTRAINED JOINTS REQUIRED, L (FT) | | | | | | | |
|-----------------------|--|------|-------------|----------------|-----|-----------------------|--------------|-----------------|
| | HORIZONTAL BENDS | | | VERTICAL BENDS | | | | |
| 11-1/4° BEND | 22-1/2° BEND | BEND | 45° BEND | 90° BEND | TEE | DEAD ENDS REDUCERS | TOP BENDS | BOTTOM BENDS |
| 4 | 2 | 4 | 7 | 16 | 1 | 45 | 24 | 11 |
| 6 | 3 | 5 | 10 | 22 | 1 | 63 | 34 | 15 |
| 8 | 3 | 6 | 12 | 29 | 20 | 83 | 45 | 19 |
| 10 | 4 | 7 | 15 | 35 | 36 | 100 | 53 | 22 |
| 12 | 5 | 9 | 17 | 41 | 55 | 118 | 63 | 26 |
| 14 | 5 | 10 | 20 | 48 | 75 | 138 | 74 | 30 |
| 16 | 6 | 11 | 22 | 53 | 89 | 153 | 81 | 33 |
| 18 | 6 | 12 | 24 | 58 | 105 | 170 | 90 | 36 |
| 20 | 7 | 13 | 27 | 64 | 122 | 187 | 99 | 40 |
| 24 | 8 | 15 | 31 | 74 | 155 | 220 | 116 | 45 |
| 30 | 9 | 18 | 30 | 89 | 200 | 267 | 140 | 54 |
| 36 | 11 | 21 | 43 | 103 | 246 | 313 | 163 | 61 |

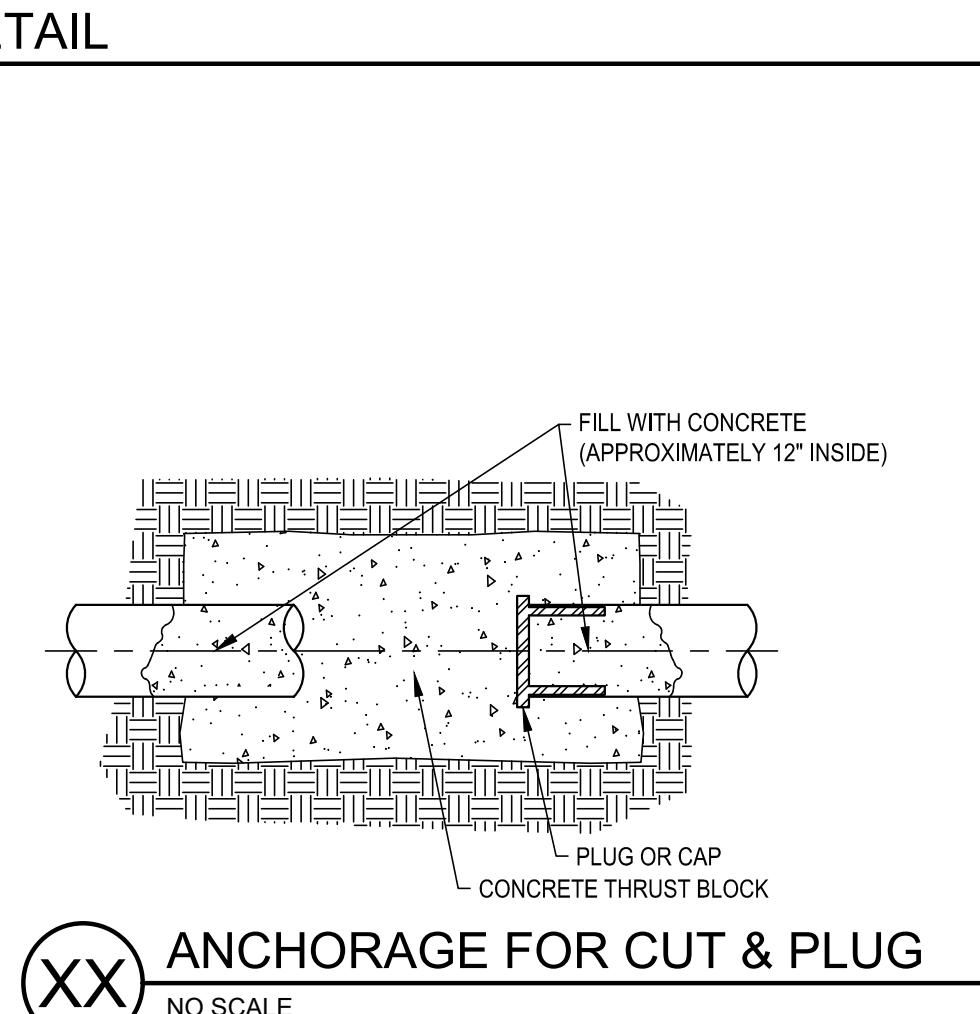
NOTES:
A. DESIGN CRITERIA
A.A. PIPE MATERIAL: PVC AWWA C900
A.B. SOIL TYPE: SC
A.C. SAFETY FACTOR: 1.5 TO 1
A.D. TRENCH TYPE: 4
A.E. MINIMUM BURY DEPTH (FT): 3
A.F. TEST PRESSURE (PSI): 200

XX MECHANICAL JOINT THRUST RESTRAINTS
NO SCALE

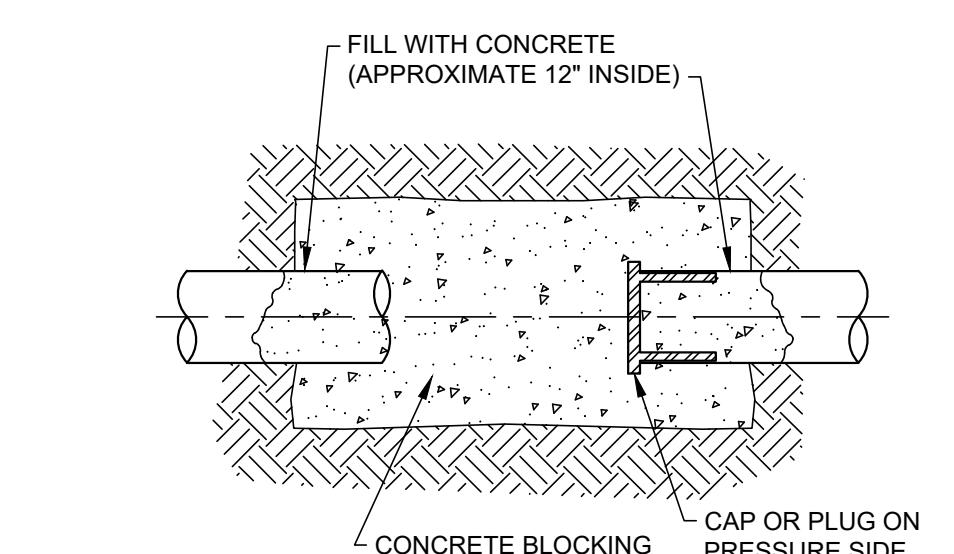


LEGEND

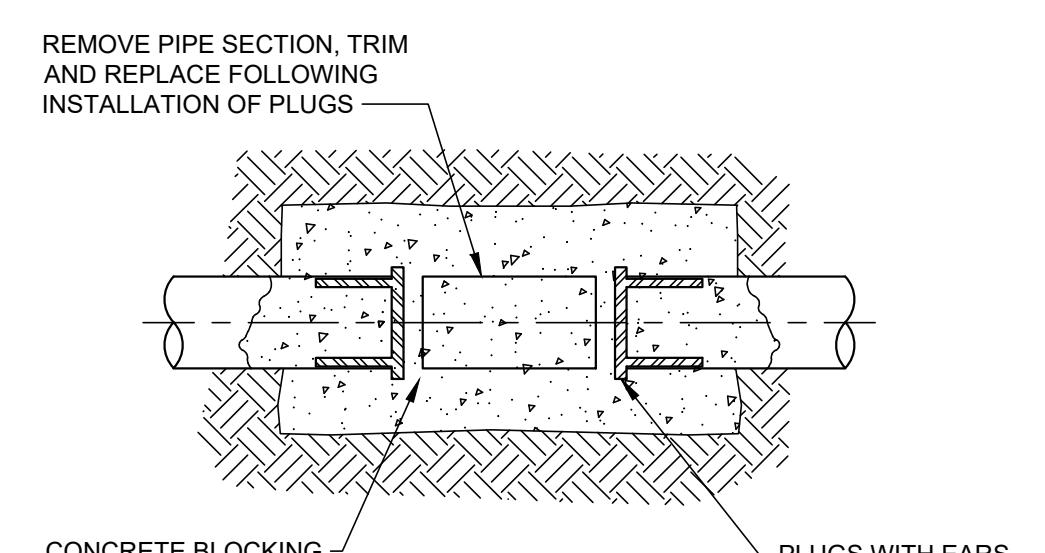
BEDDING SHALL BE NATIVE TRENCH MATERIAL LOOSELY PLACED AS SPECIFIED.
HAUNCHING SHALL BE NATIVE TRENCH MATERIAL PLACED BY HAND IN 3-INCH LAYERS, THOROUGHLY COMPAKTED AS SPECIFIED.
INITIAL BACKFILL SHALL BE NATIVE TRENCH MATERIAL PLACED BY HAND OR APPROVED MECHANICAL METHODS IN 6-INCH LAYERS, COMPACTED TO 95% OF THE MAXIMUM DENSITY AS SPECIFIED.
FINAL BACKFILL SHALL BE NATIVE TRENCH MATERIAL PLACED OR TAMPED AS SPECIFIED. MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS SPECIFIED.



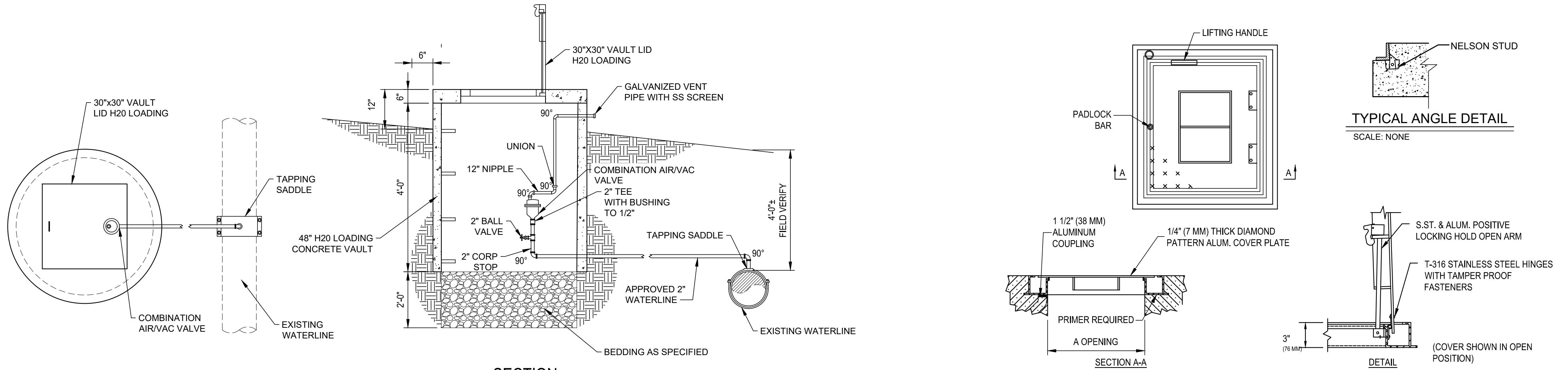
XX ANCHORAGE FOR CUT & PLUG
NO SCALE



XX CUT & PLUG DETAIL
NO SCALE



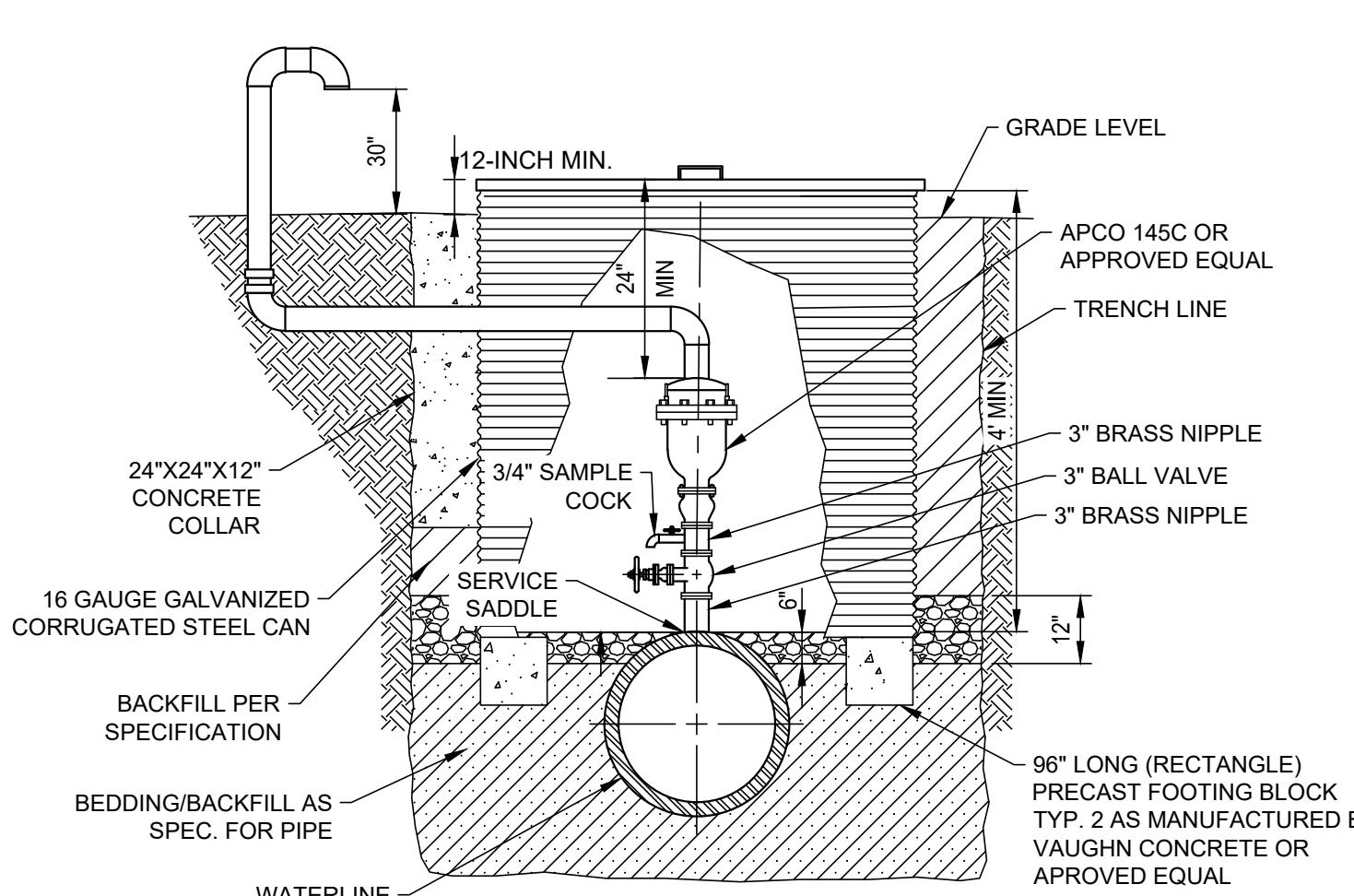
XX CUT & 2 PLUGS
NO SCALE



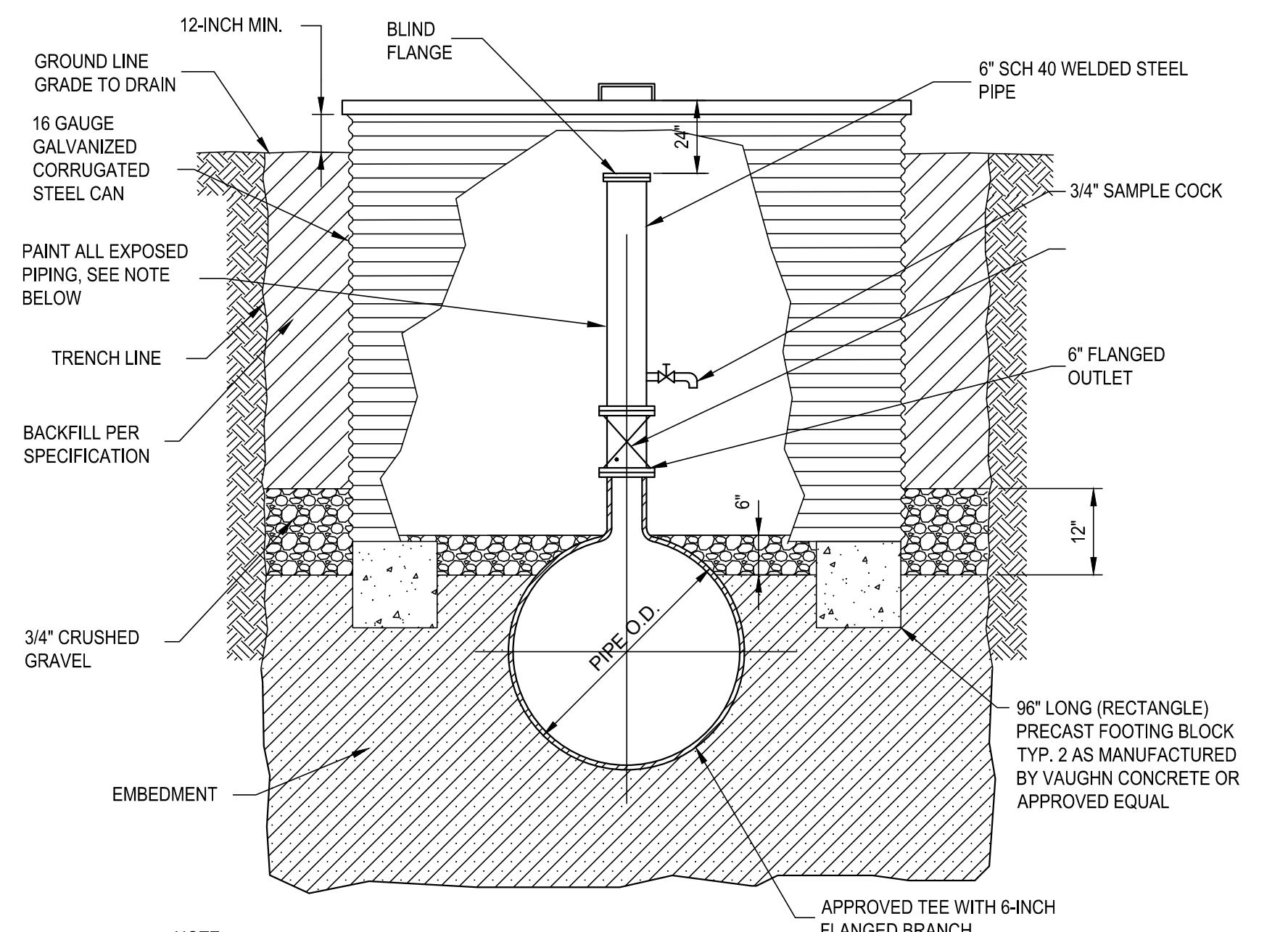
PLAN SECT

NOTES:

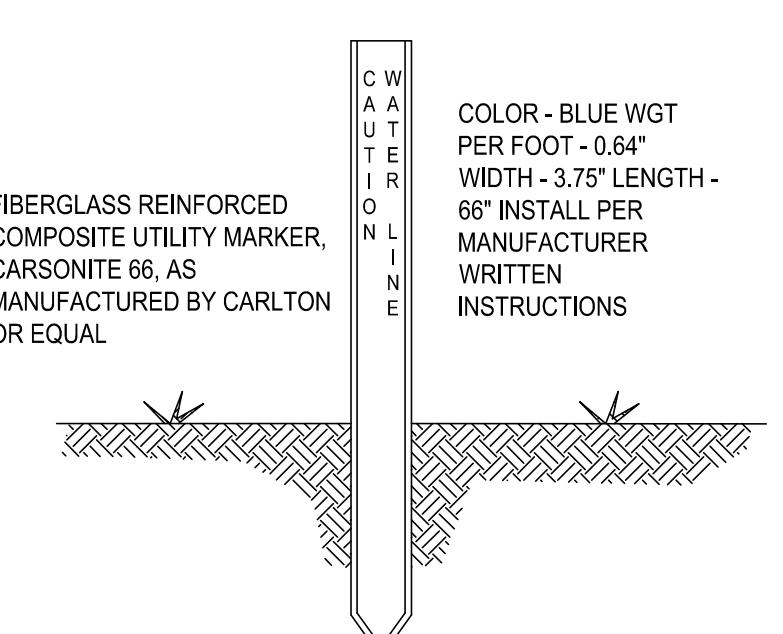
1. CONCRETE VAULT AND HATCH SHALL BE MANUFACTURED BY VAUGHN CONCRETE, OR APPROVED EQUAL. HATCH SHALL BE ALUMINUM AND DESIGNED FOR OFF STREET H-20 LOADS.



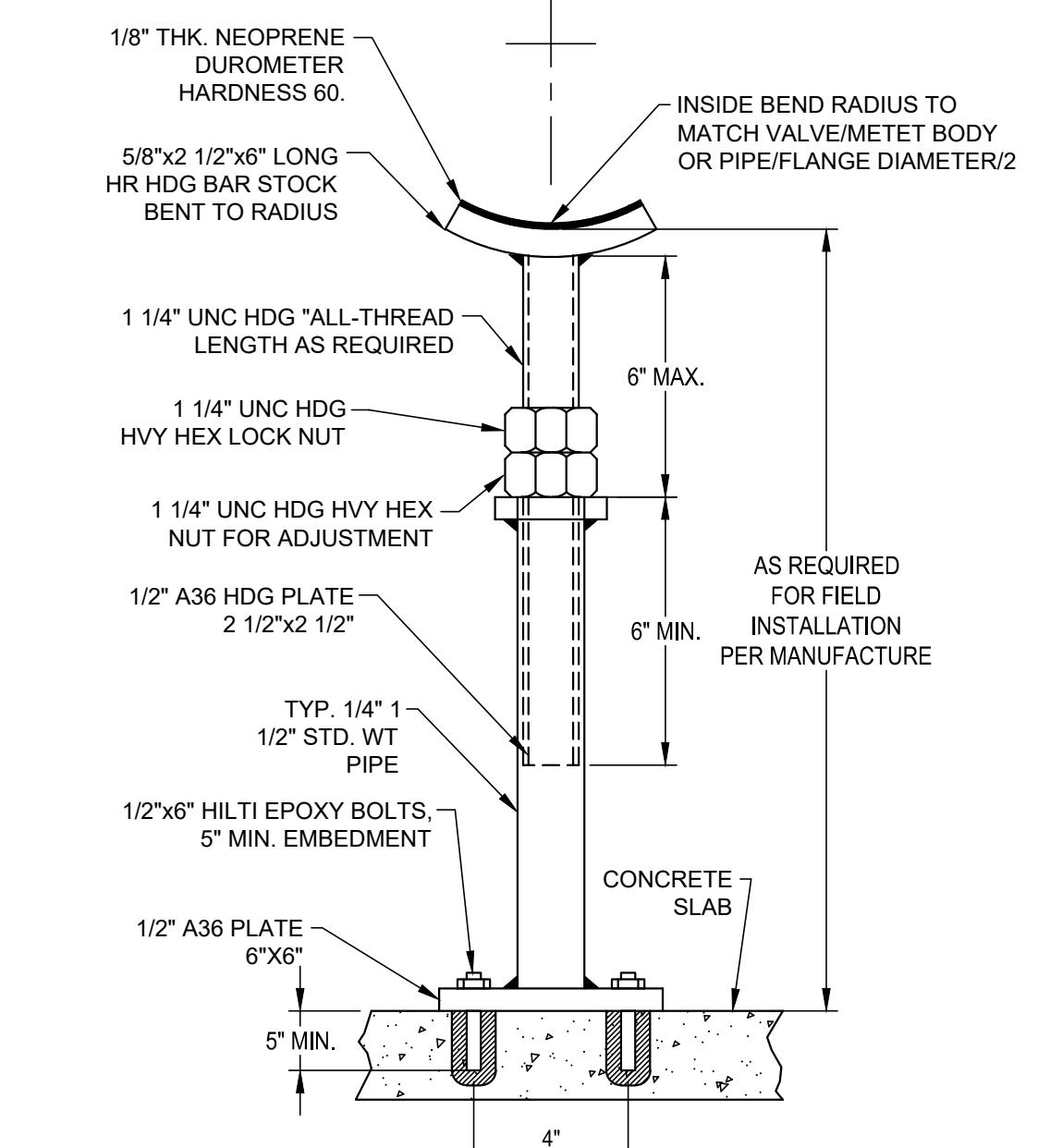
XX COMBINATION AIR/VAC VALVE INSTALLATION DETAIL



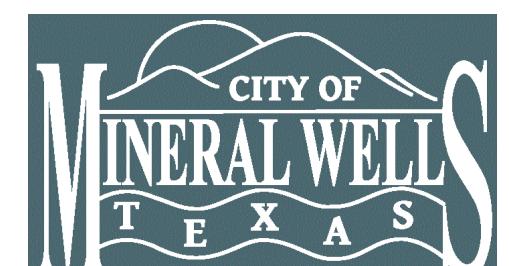
XX BLOWOFF DETAIL
NO SCALE



XX UTILITY MARKER
NO SCALE



XX ADJUSTABLE PIPE SUPPORT NTS



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PROJECT NO.

1000

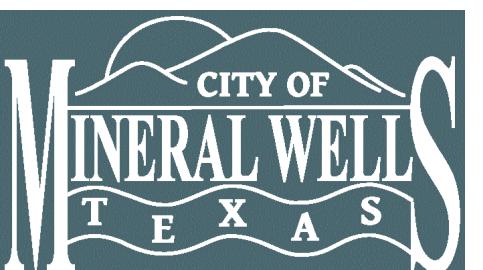
Water Details

C-504

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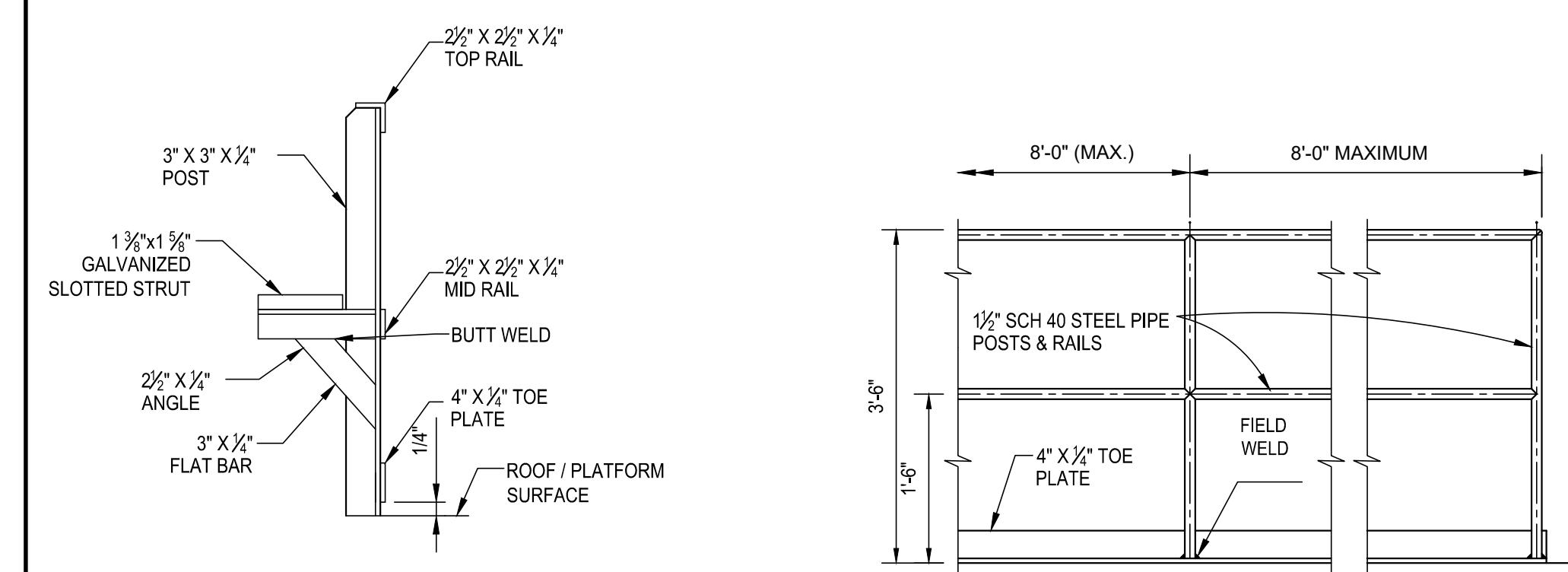
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PROJECT NO.
2503.22

DATE DESCRIPTION

Elevated Storage Tank Details

C-505

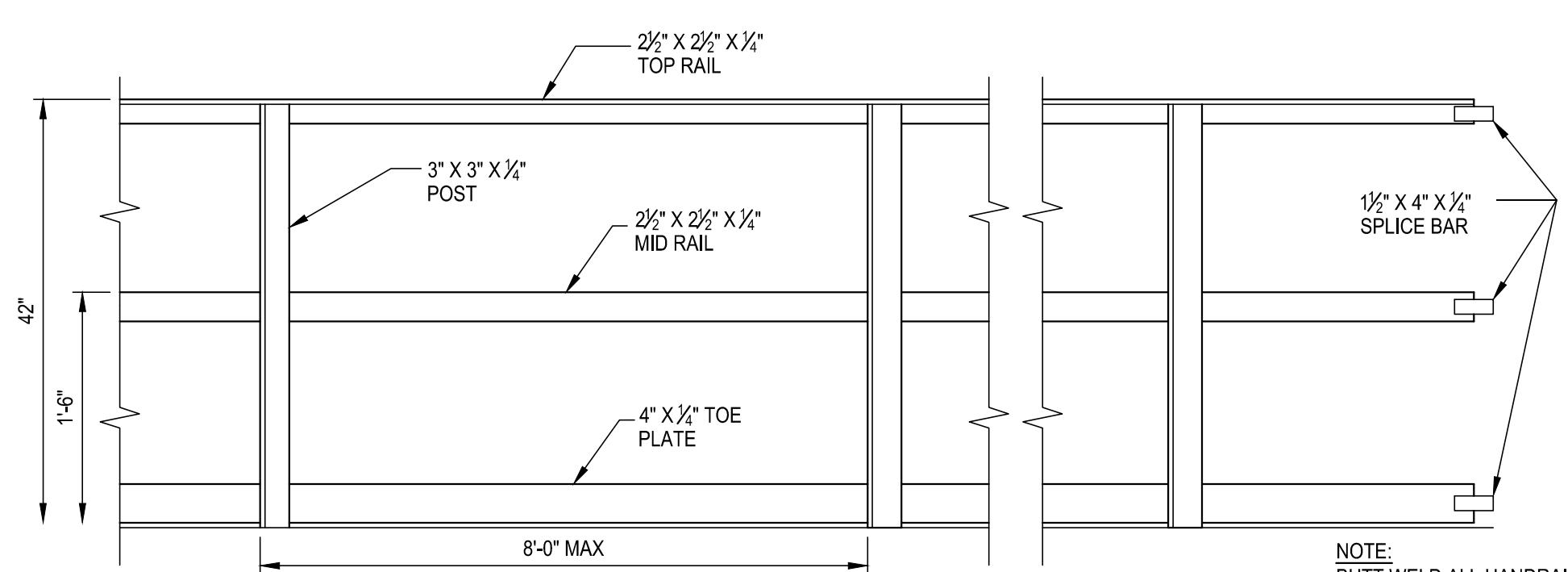


XX HANDBRAIL BRACKET

NO SCALE:

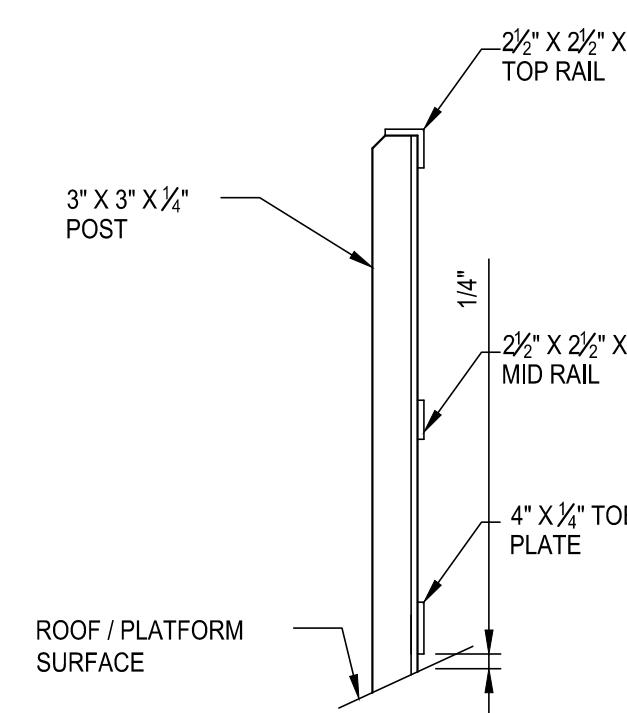
XX PIPE CONSTRUCTION HANDBRAIL

NO SCALE:



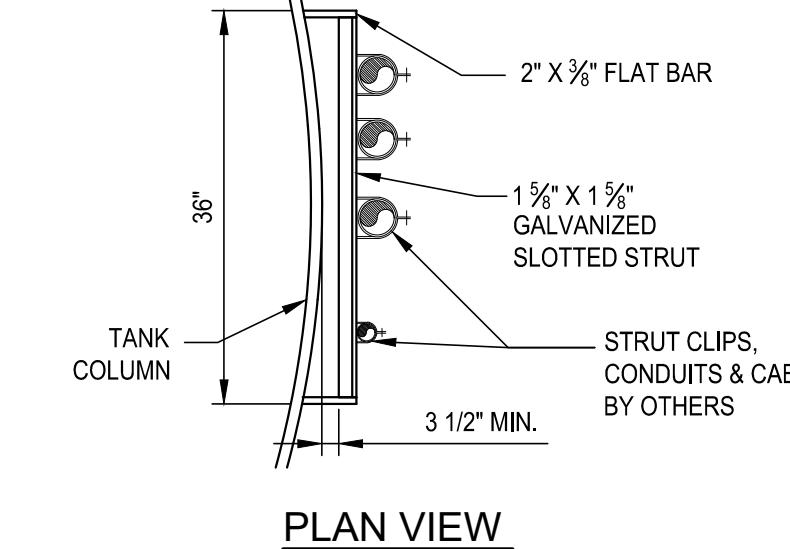
XX ANGLE CONSTRUCTION O.S.H.A. HANDBRAIL SYSTEM

NO SCALE:

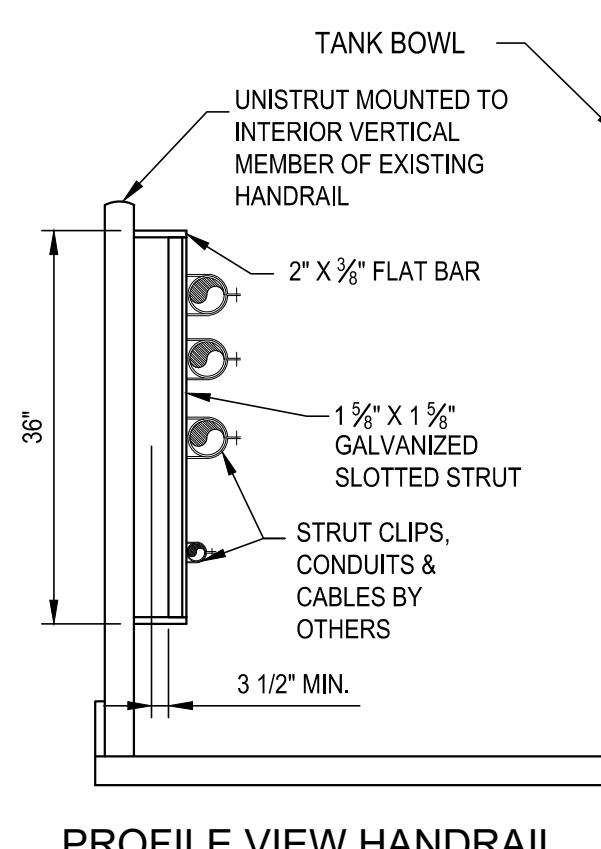


XX ANGLE HANDBRAIL SECTION

NO SCALE:

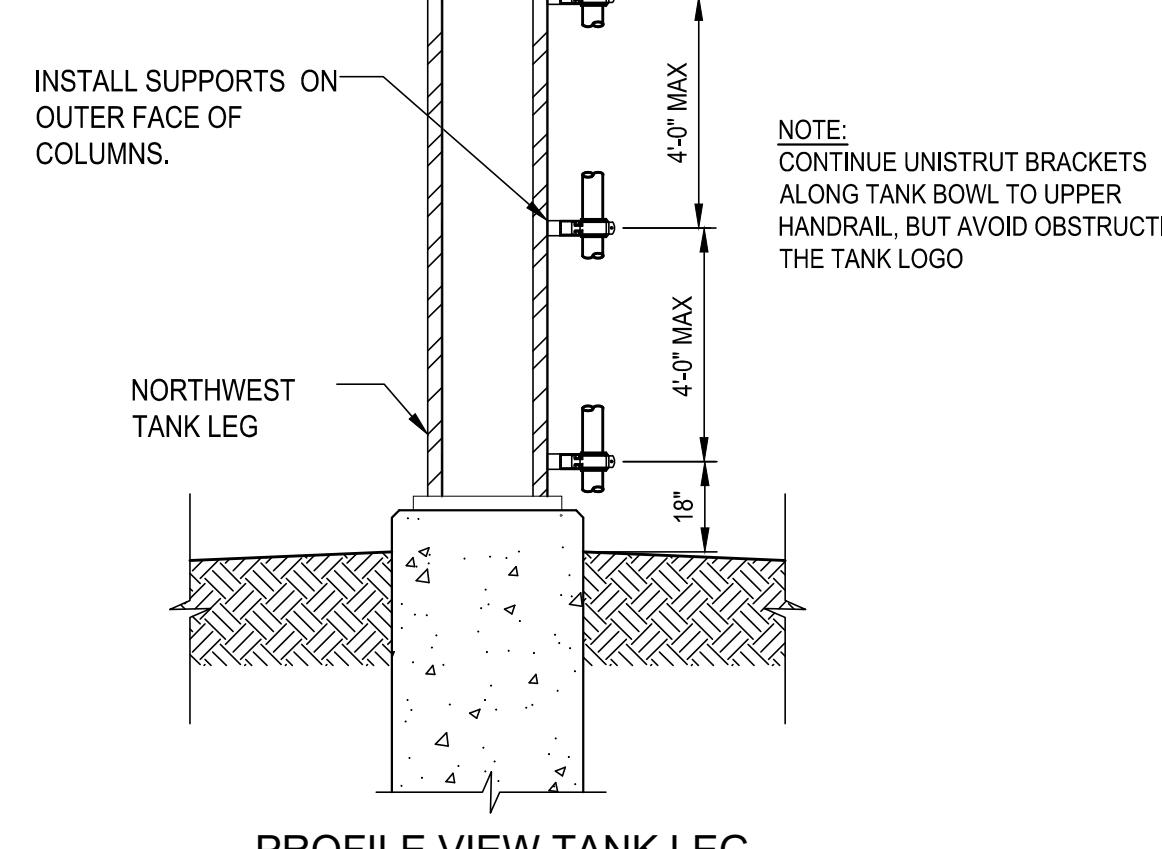


PLAN VIEW



XX CONDUIT BRACKET DETAIL

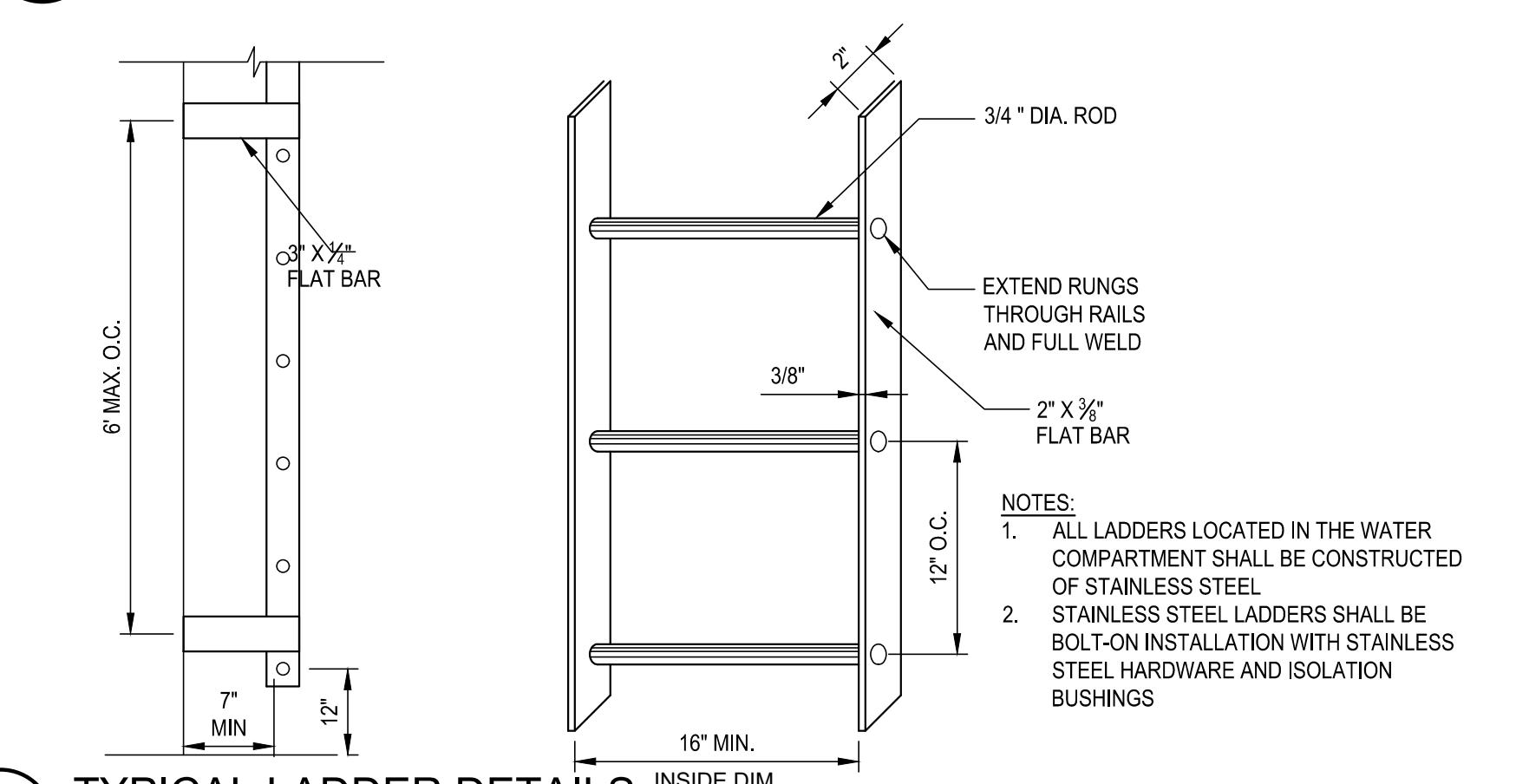
NO SCALE:



PROFILE VIEW TANK LEG

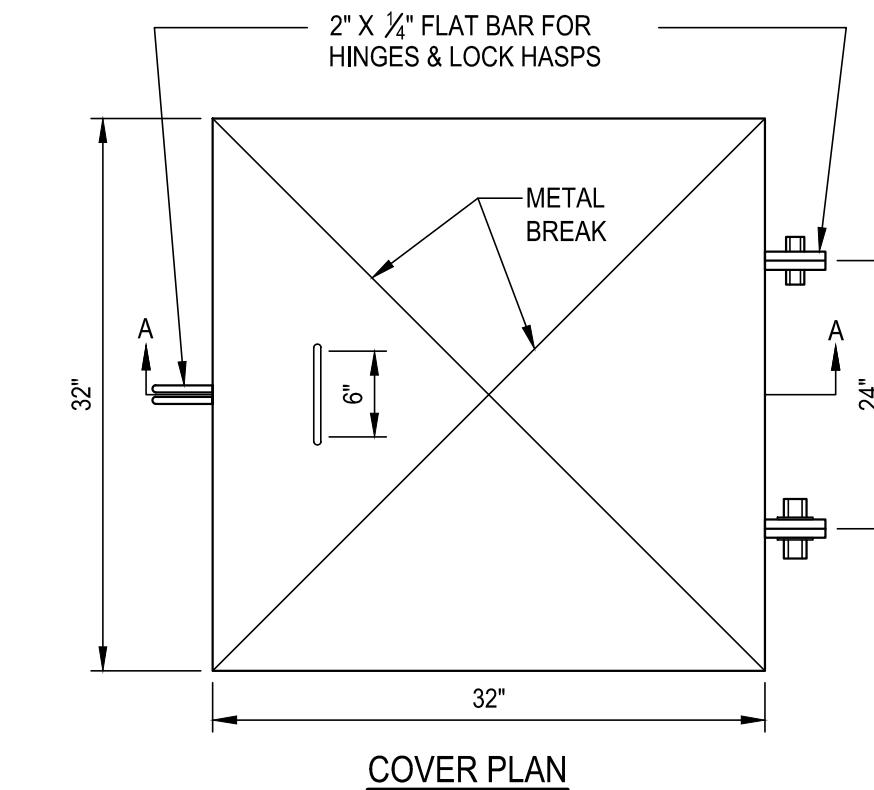
XX ANTENNA MOUNT DETAIL

NO SCALE:

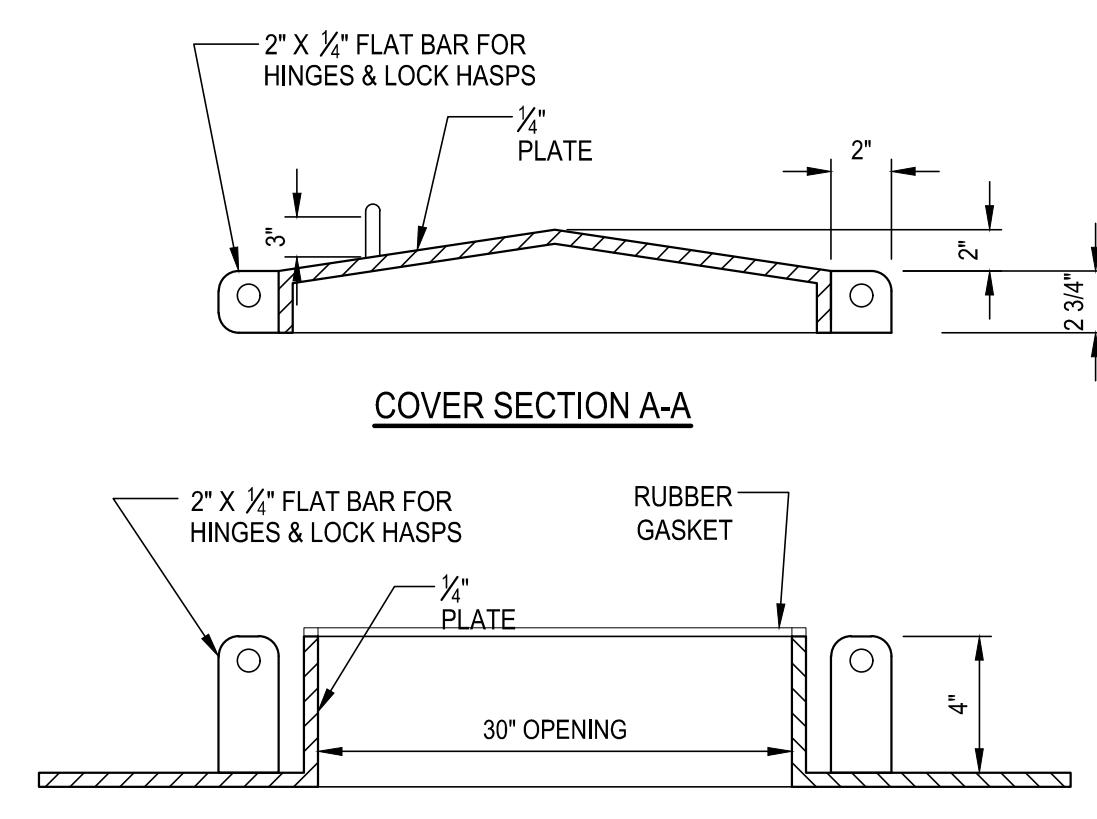


XX TYPICAL LADDER DETAILS

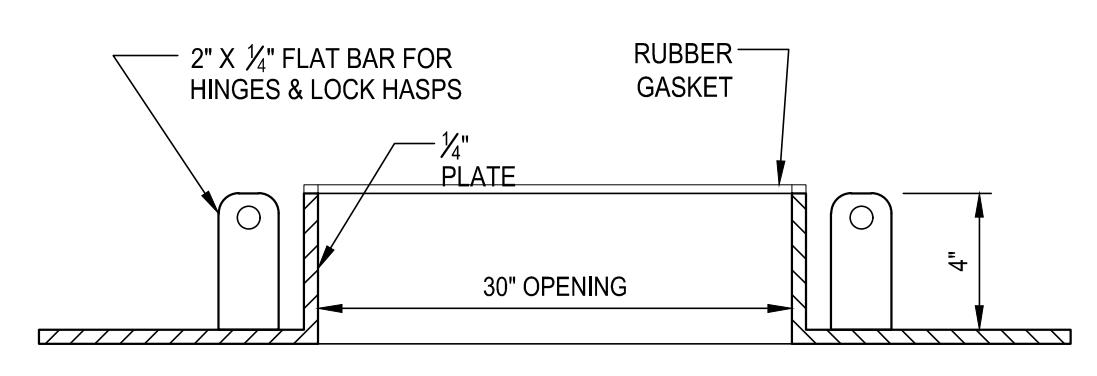
NO SCALE:



COVER PLAN



COVER SECTION A-A

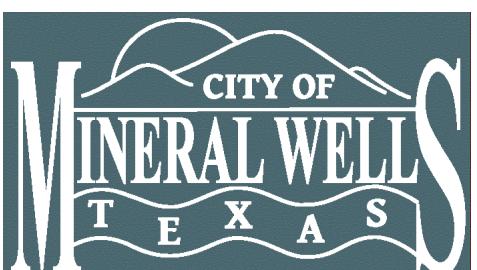


OPENING SECTION A-A



XX 30" HATCH DETAIL

NO SCALE:



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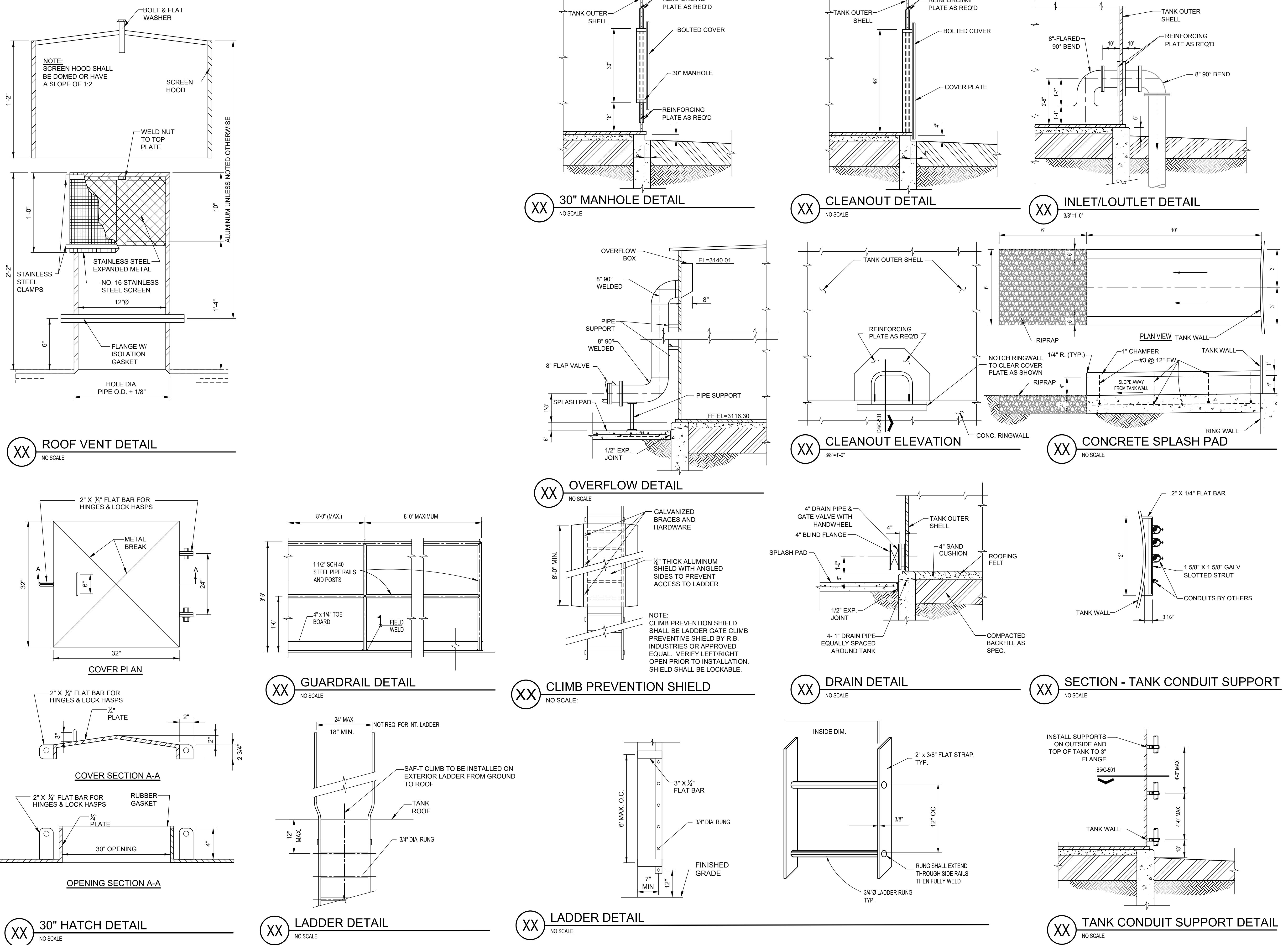
PROJECT NO.

“DATE” RECOGNITION

Ground Storage Tank Details

C-506

A:\2022\2303\2203_DSGNU\BEGLEITMATERIAL\DE\ALL.DWG, 02/2022 | 3220 PM, RHASSKIN



Mineral Wells Design Standards Review



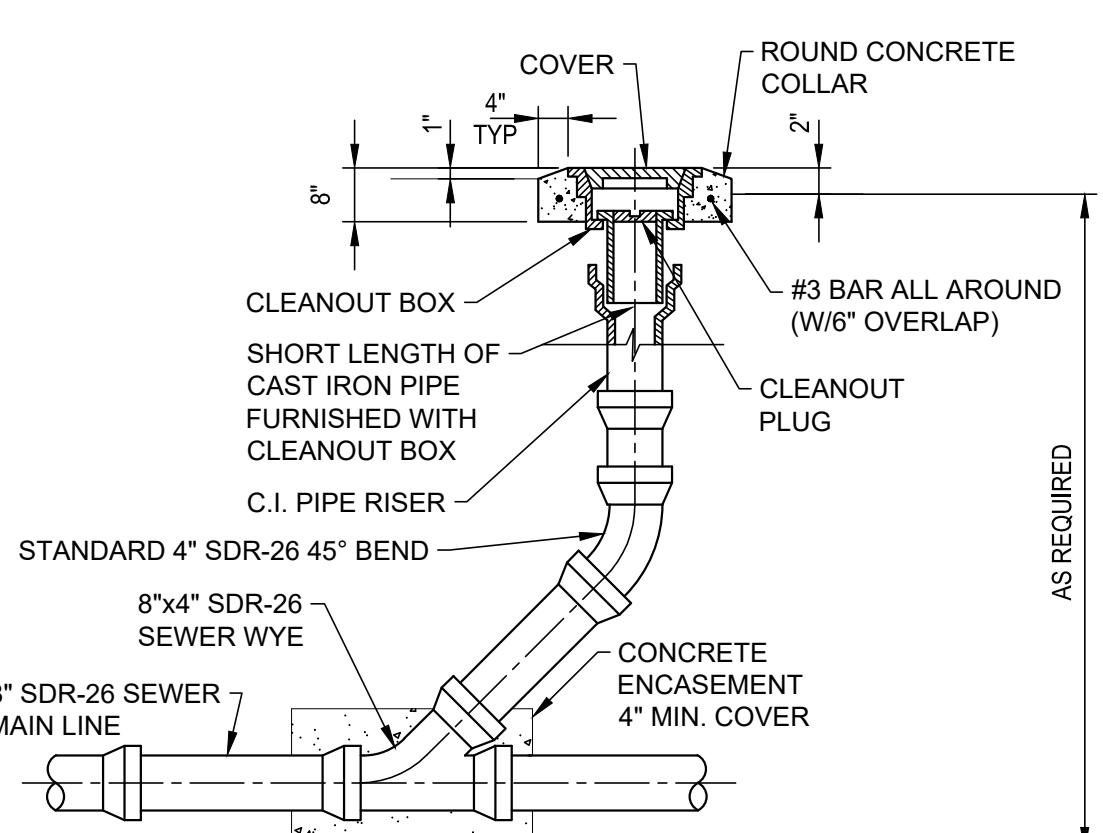
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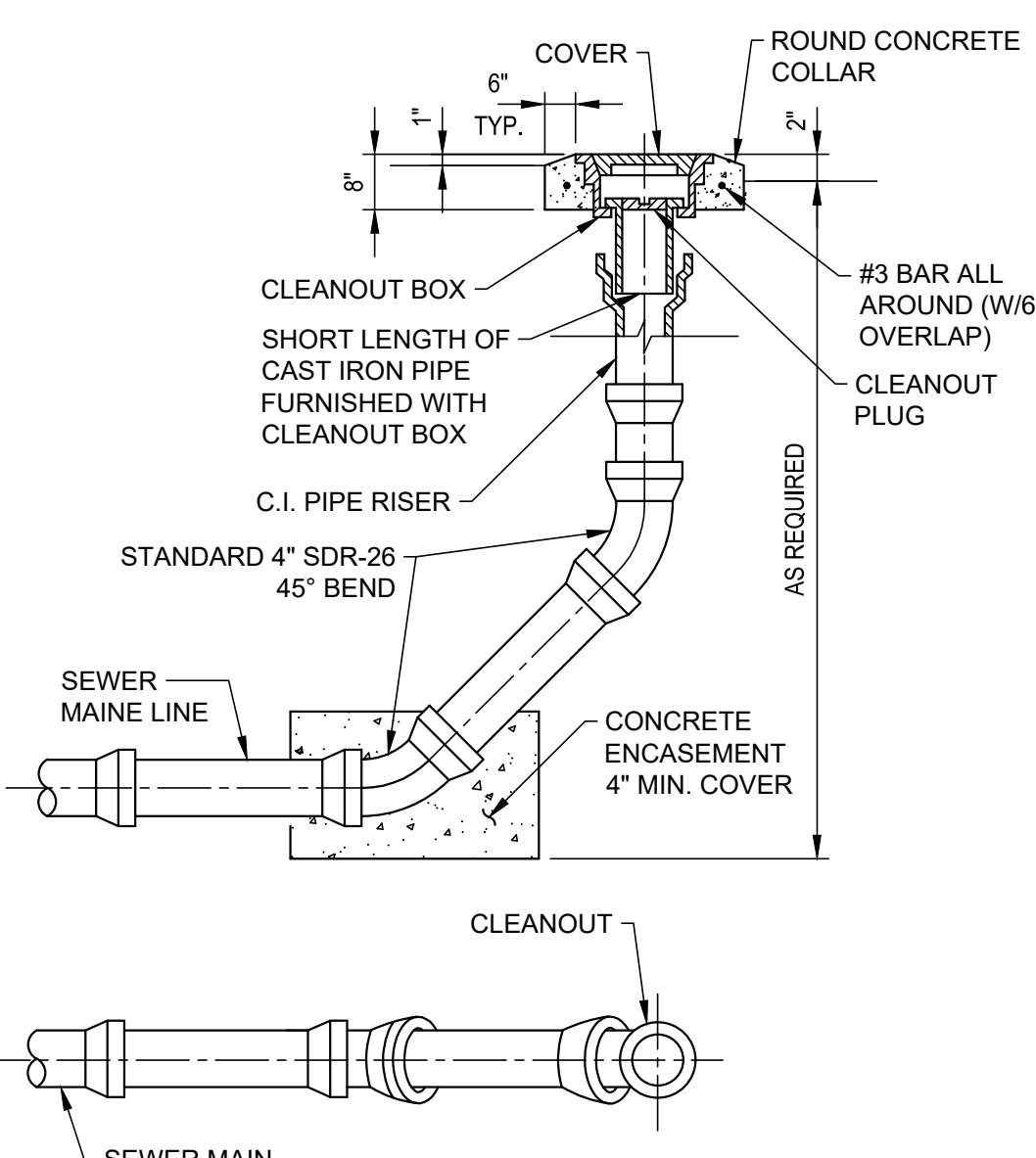
| PROJECT NO. | 2503.22 |
|-------------|-------------|
| # DATE | DESCRIPTION |

Wastewater Details

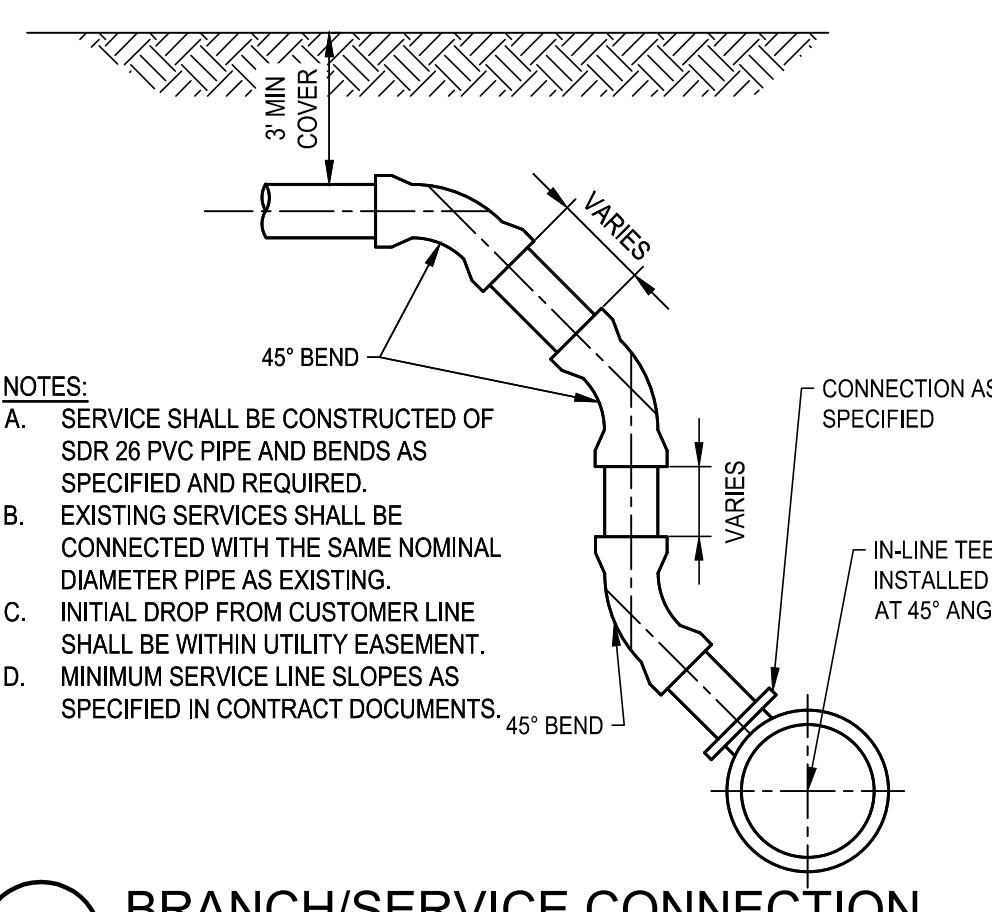
C-507



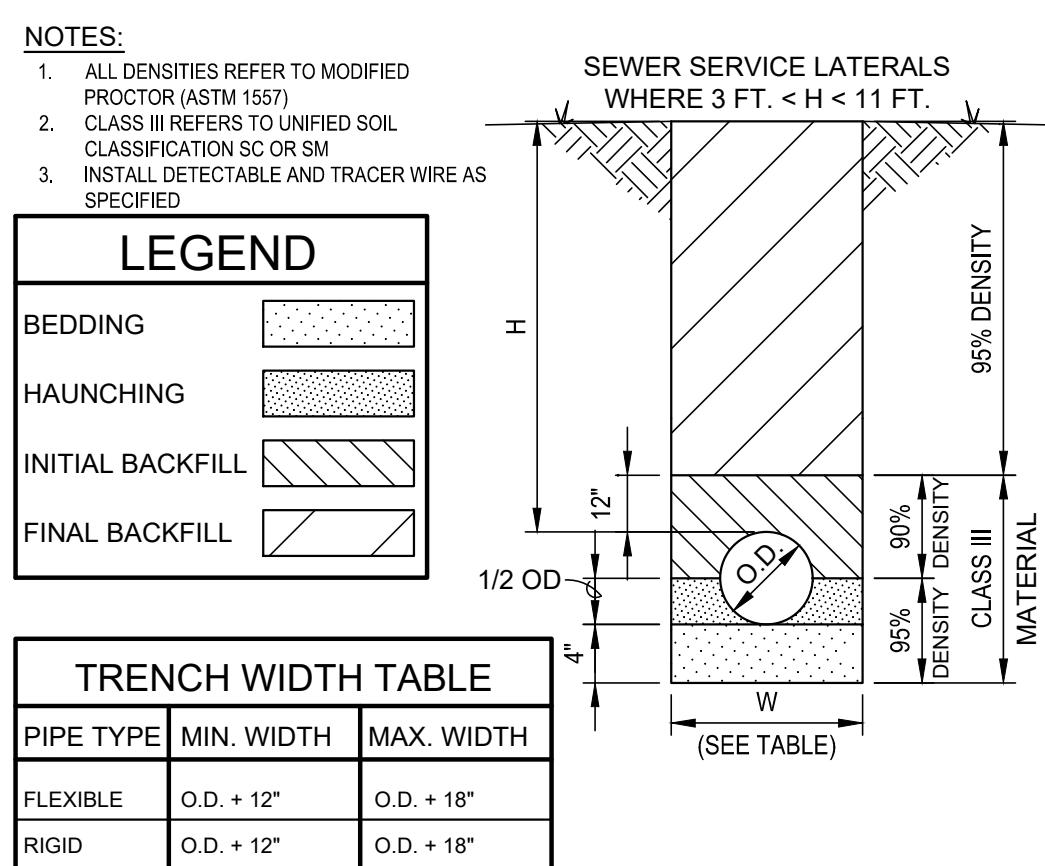
XX SINGLE CLEANOUT- INLINE
NO SCALE



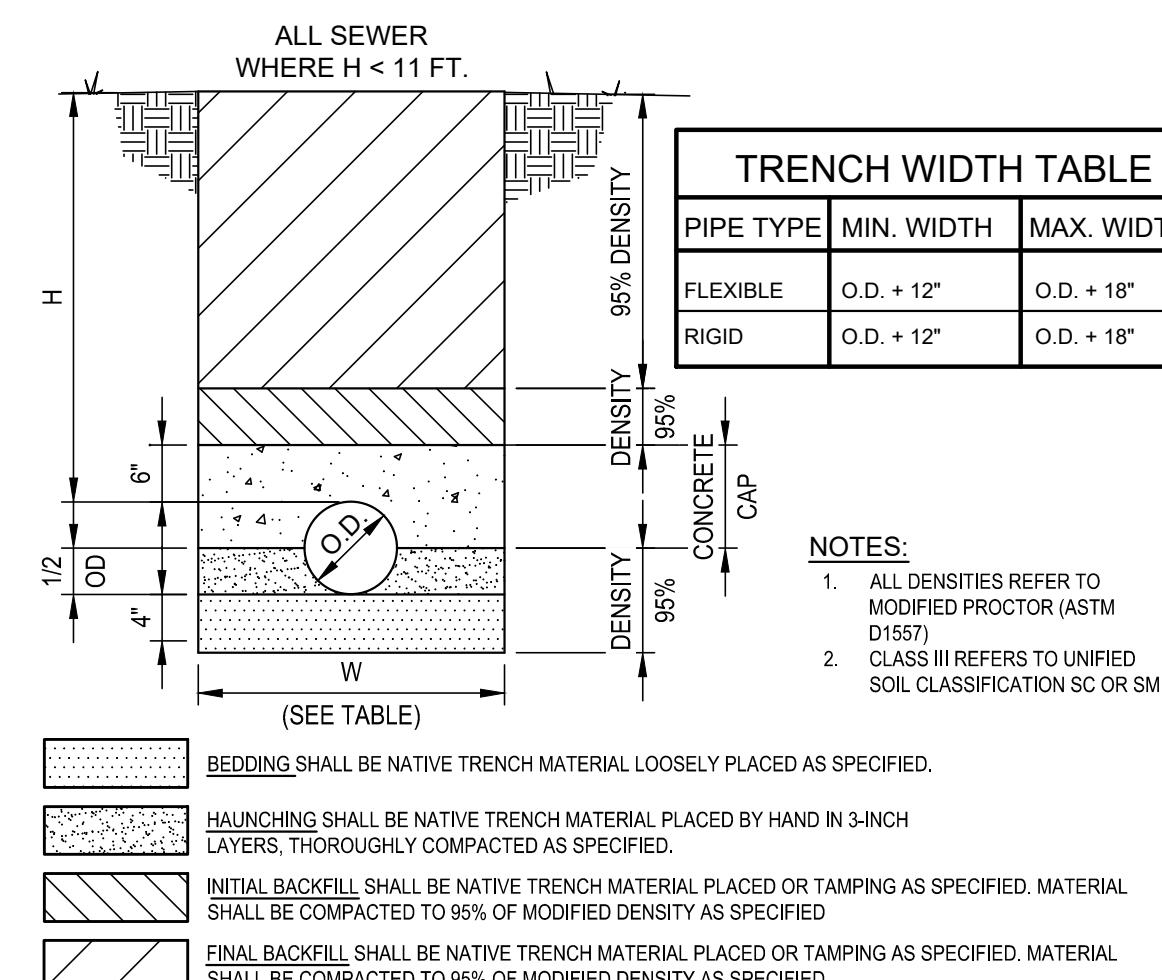
XX CLEAN OUT AT PIPE END
NO SCALE



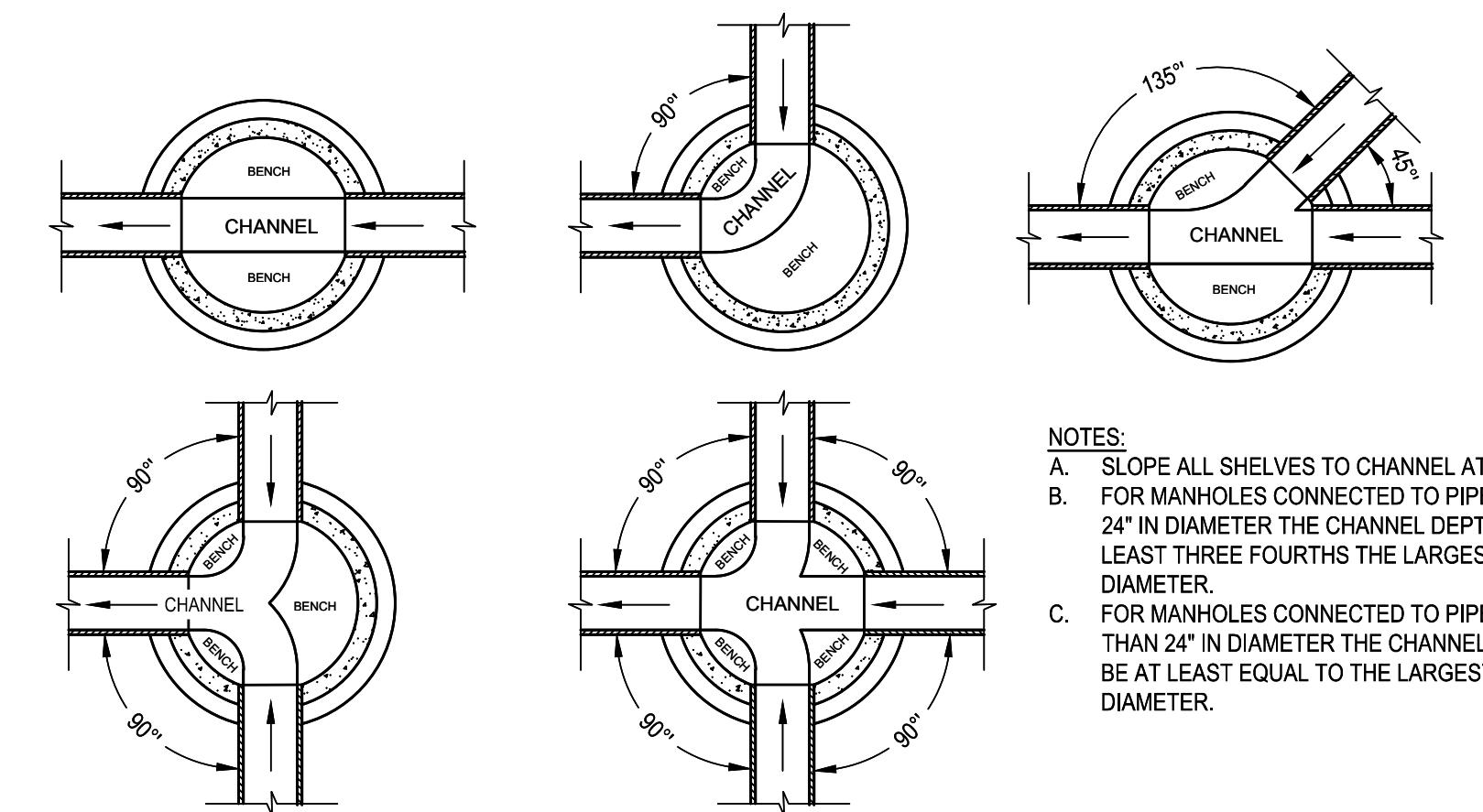
XX BRANCH/SERVICE CONNECTION
NO SCALE



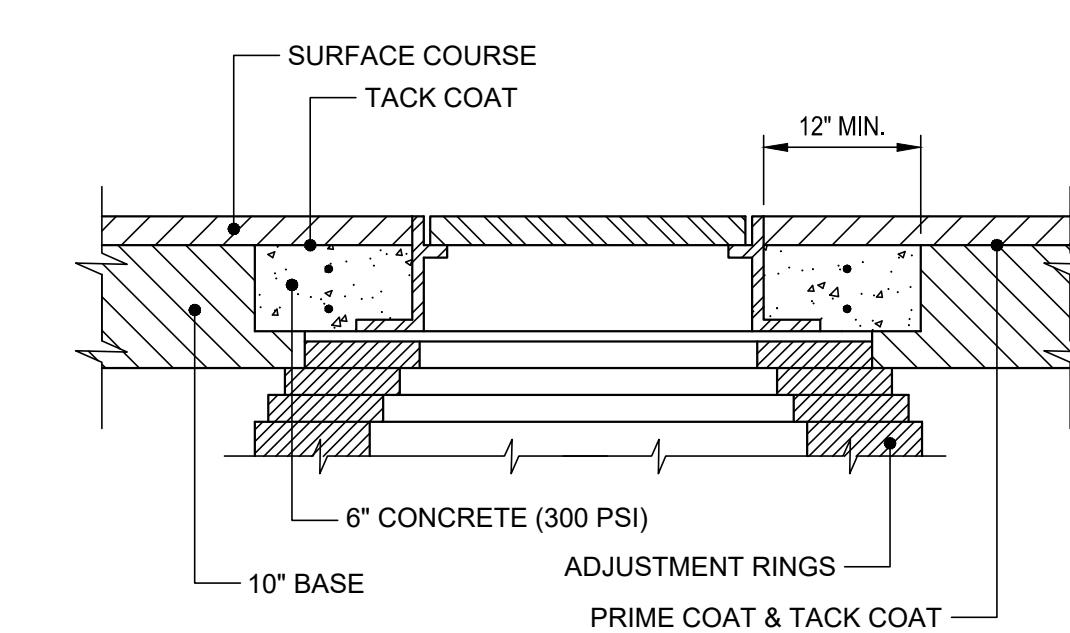
XX SEWER TRENCH DETAIL
NO SCALE



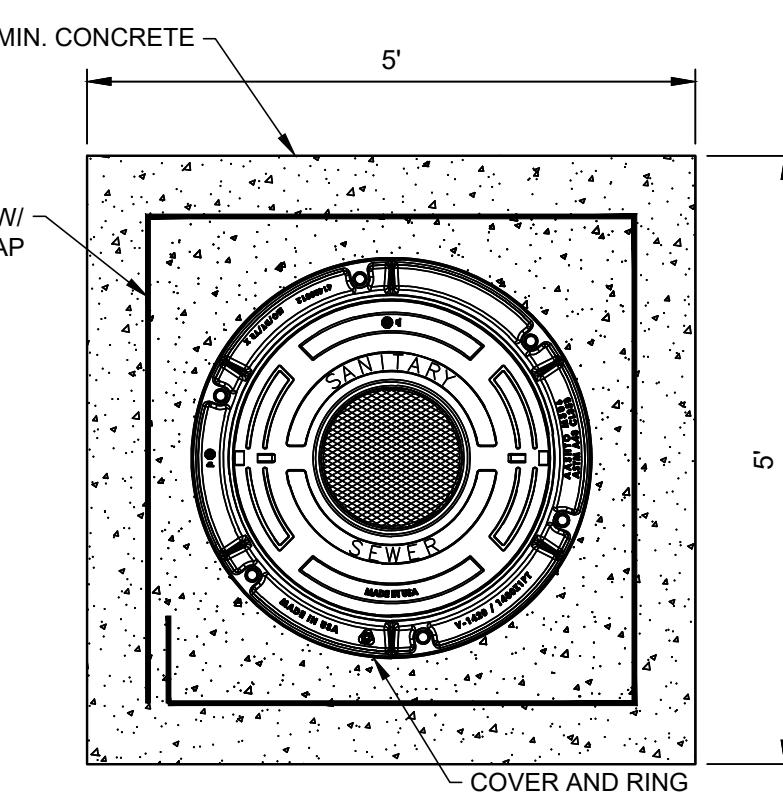
XX TRENCH DETAILS
NO SCALE



XX TYPICAL MANHOLE CHANNEL DETAIL
NOT TO SCALE

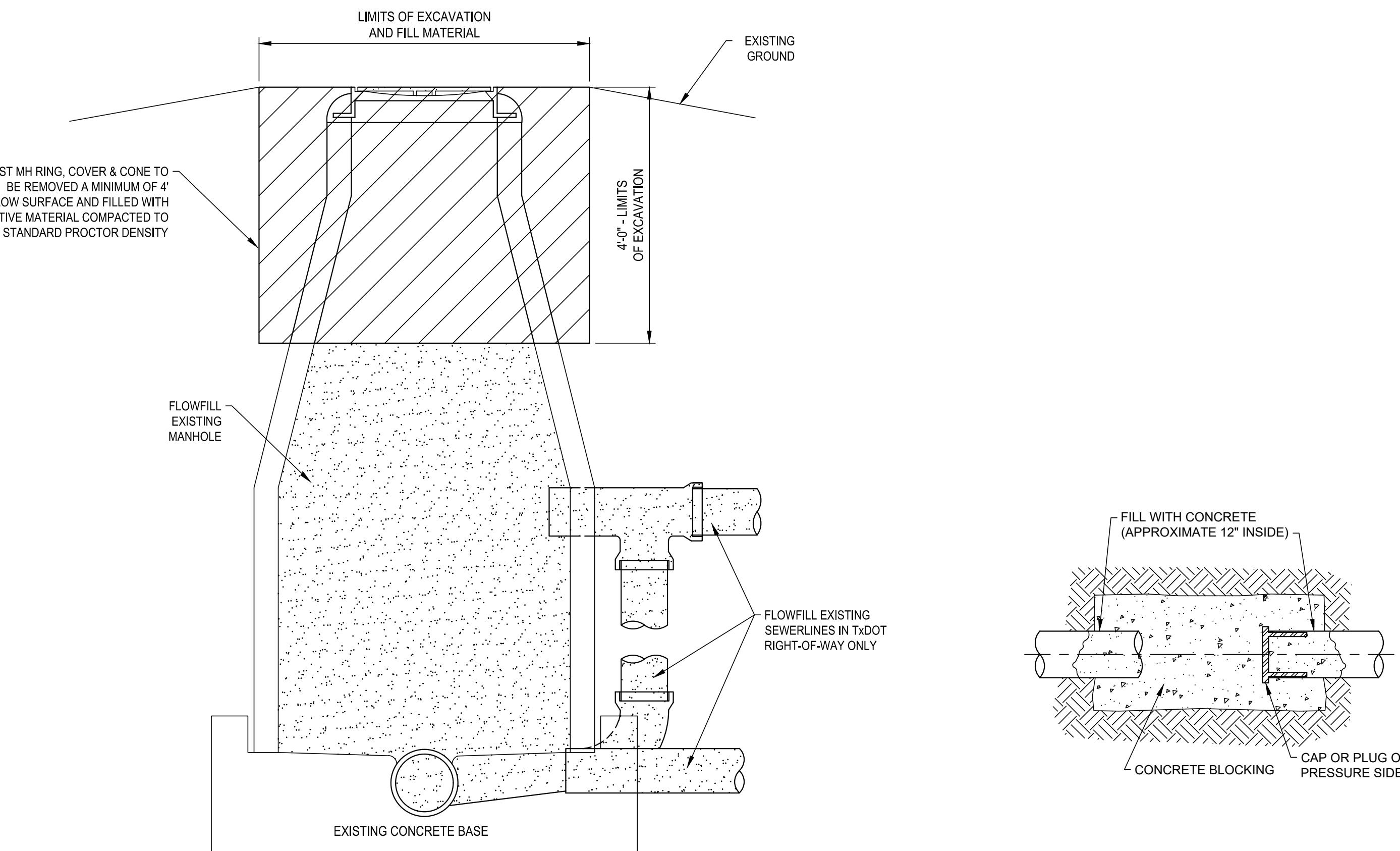


XX MANHOLE RING
ADJUSTMENT DETAIL
NO SCALE



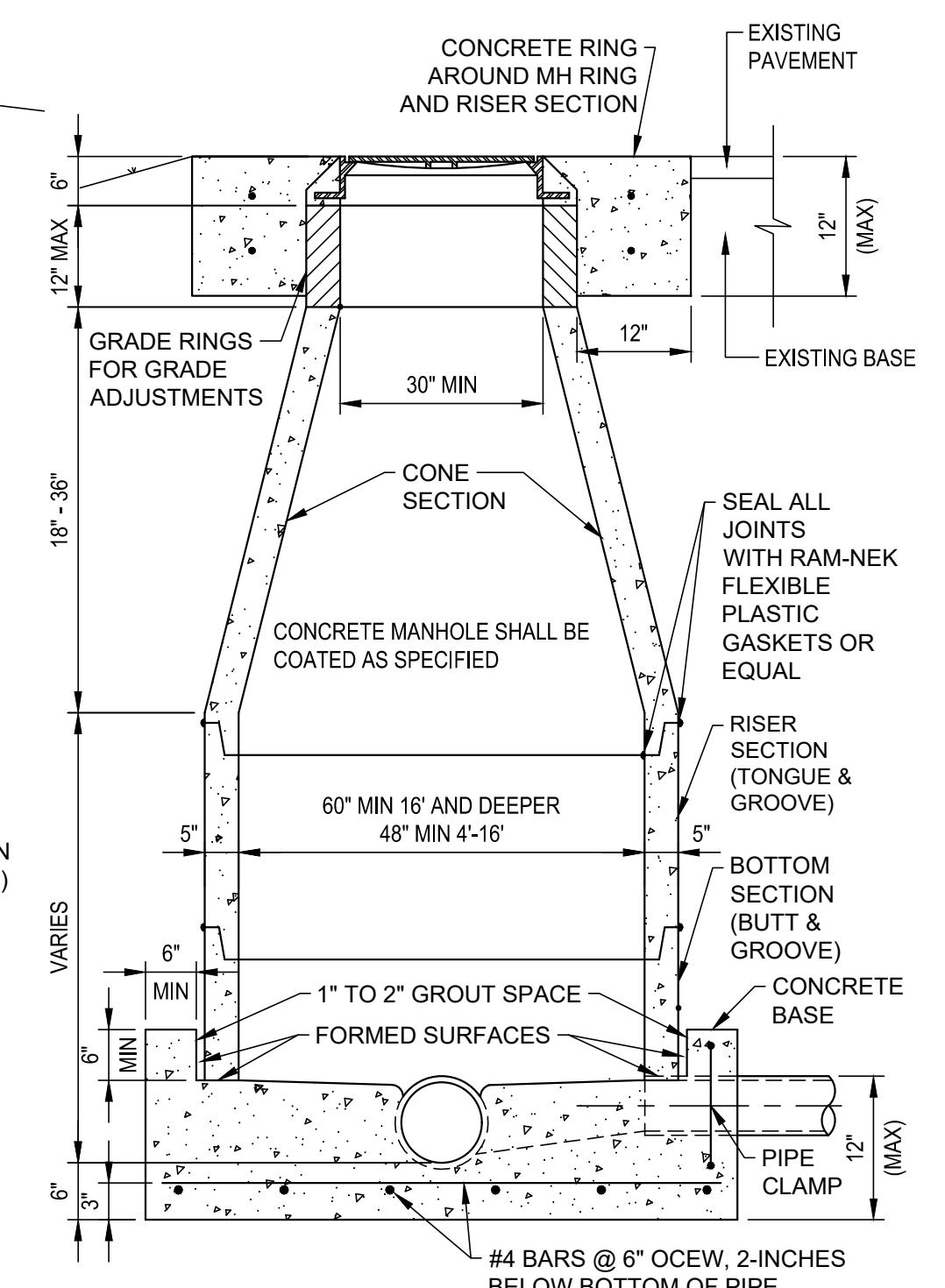
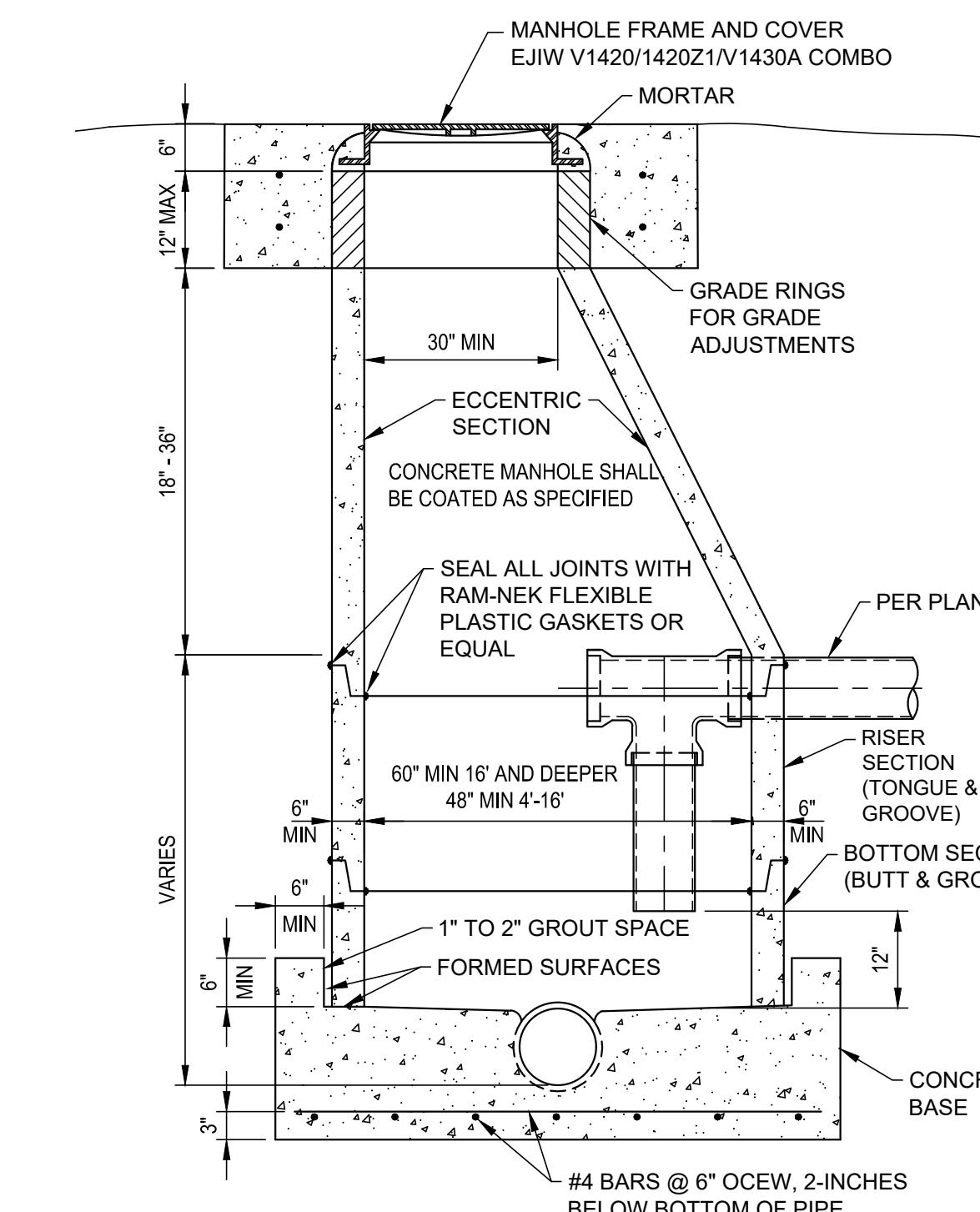
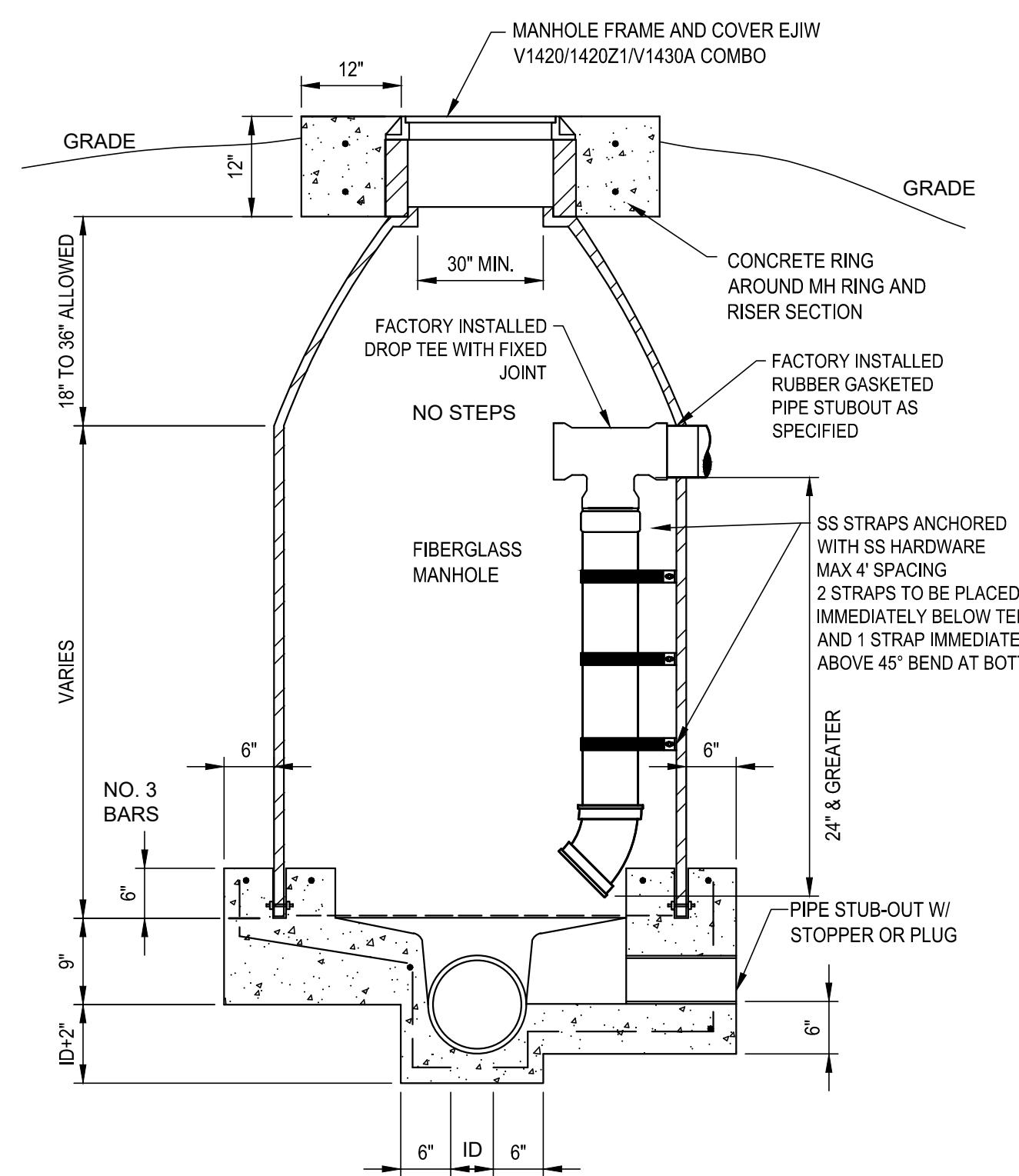
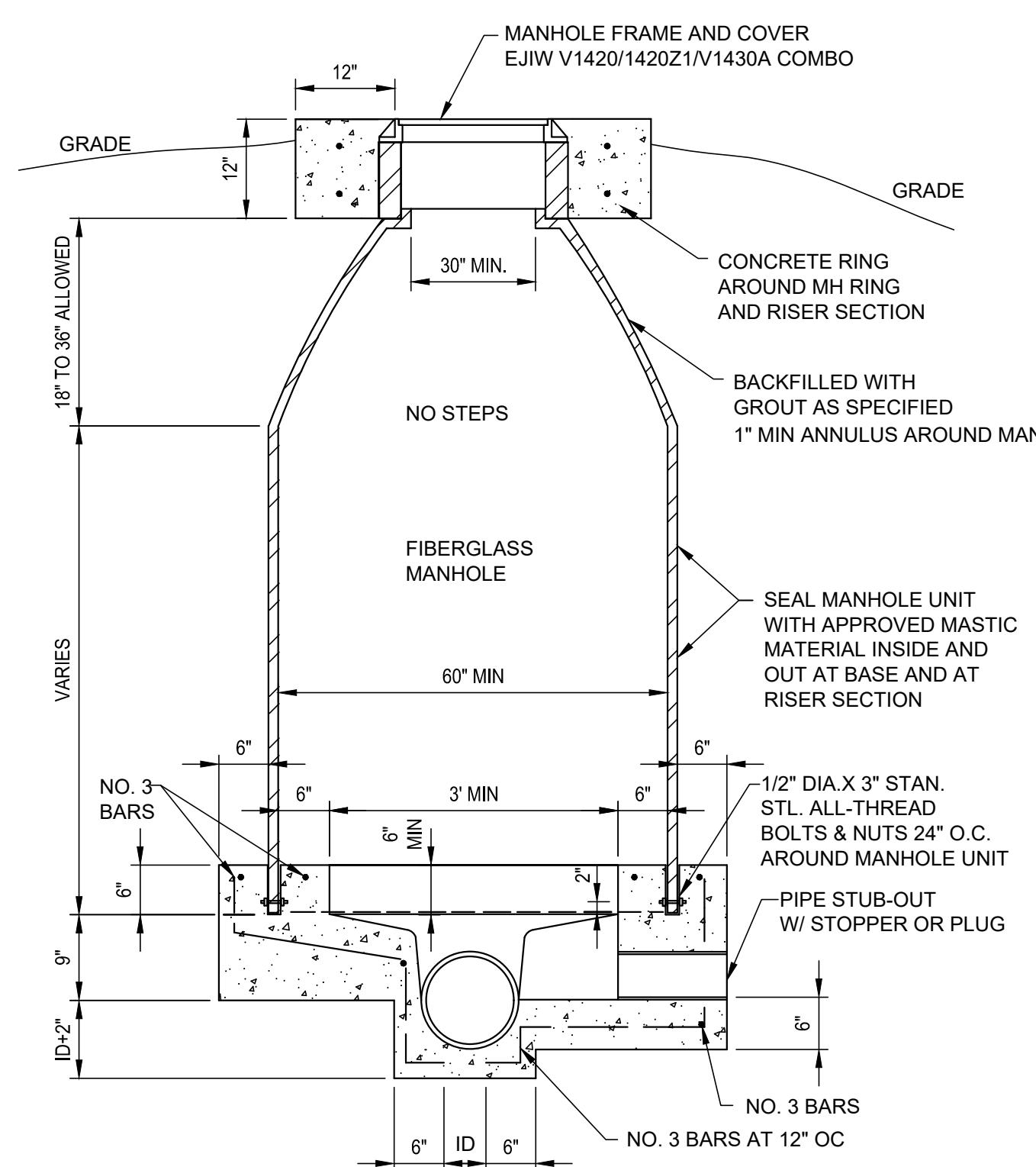
XX MANHOLE COVER AND RING
NO SCALE

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XX ABANDONED MANHOLE DETAIL
NO SCALE

XX CUT & PLUG DETAIL
NO SCALE



XX FIBERGLASS MANHOLE
NO SCALE

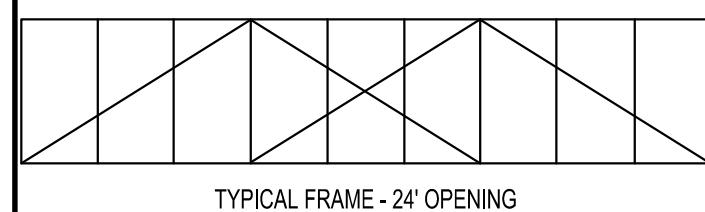
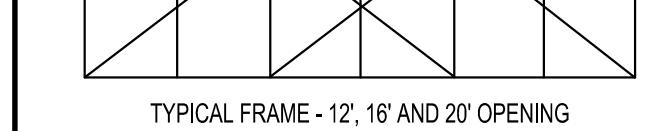
XX FIBERGLASS INSIDE DROP MANHOLE
NO SCALE

CONCRETE DROP MANHOLE WITH EPOXY COATING

STANDARD MANHOLE WITH EPOXY COATING

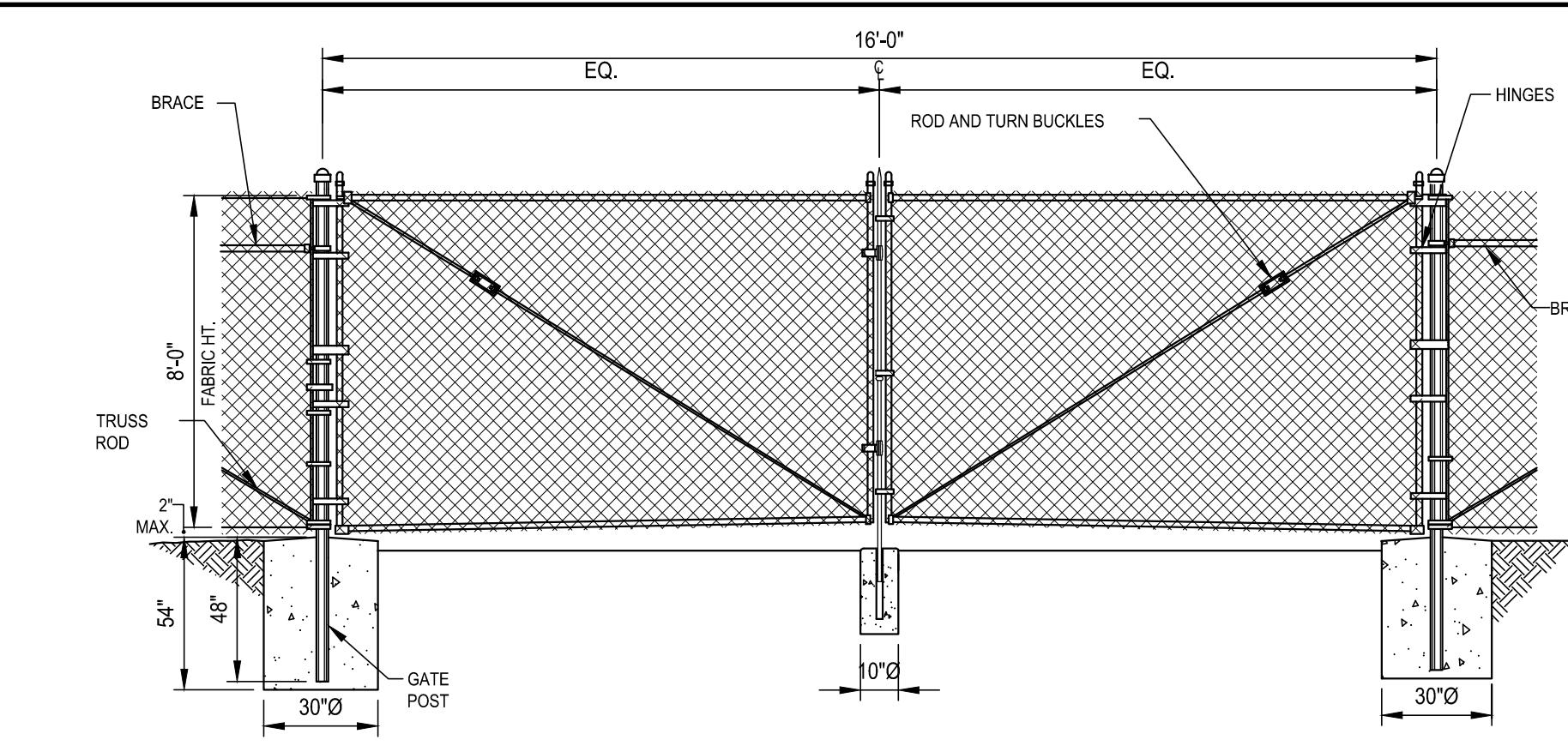
GENERAL NOTES:

1. THE CONTRACTOR MAY SUBSTITUTE ANY EQUIVALENT CANTILEVER SLIDE GATE APPROVED BY THE ENGINEER.
2. EXTRUDED, ROLLED OR FORMED COMPONENTS THAT PROVIDE EQUAL STRENGTH AND STABILITY MAY BE USED IN LIEU OF THE PIPE COMPONENTS SHOWN; AND, INTERNAL ROLLERS MAY BE USED IN LIEU OF THE EXTERNAL ROLLER UNITS SHOWN.
3. GATE COMPONENTS SHALL MEET OR EXCEED THE MATERIAL REQUIREMENTS SPECIFIED ON INDEX NO. 452.
4. STEEL GATE SHALL BE FABRICATED PRIOR TO GALVANIZING, EXCEPT THAT TRUSS RODS AND TRUSS ROD PLATES MAY BE FABRICATED FOLLOWING GALVANIZING PROVIDED SURFACES DAMAGED DURING WELDING ARE GALVANIZED IN ACCORDANCE WITH SECTION 24 OR AASHTO M36.
5. ALL FABRIC SHALL BE KNUCKLED TOP AND BOTTOM SELVAGES.
6. COST OF ALL GATE COMPONENTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR SLIDING FENCE GATE (CANTILEVER), EACH.

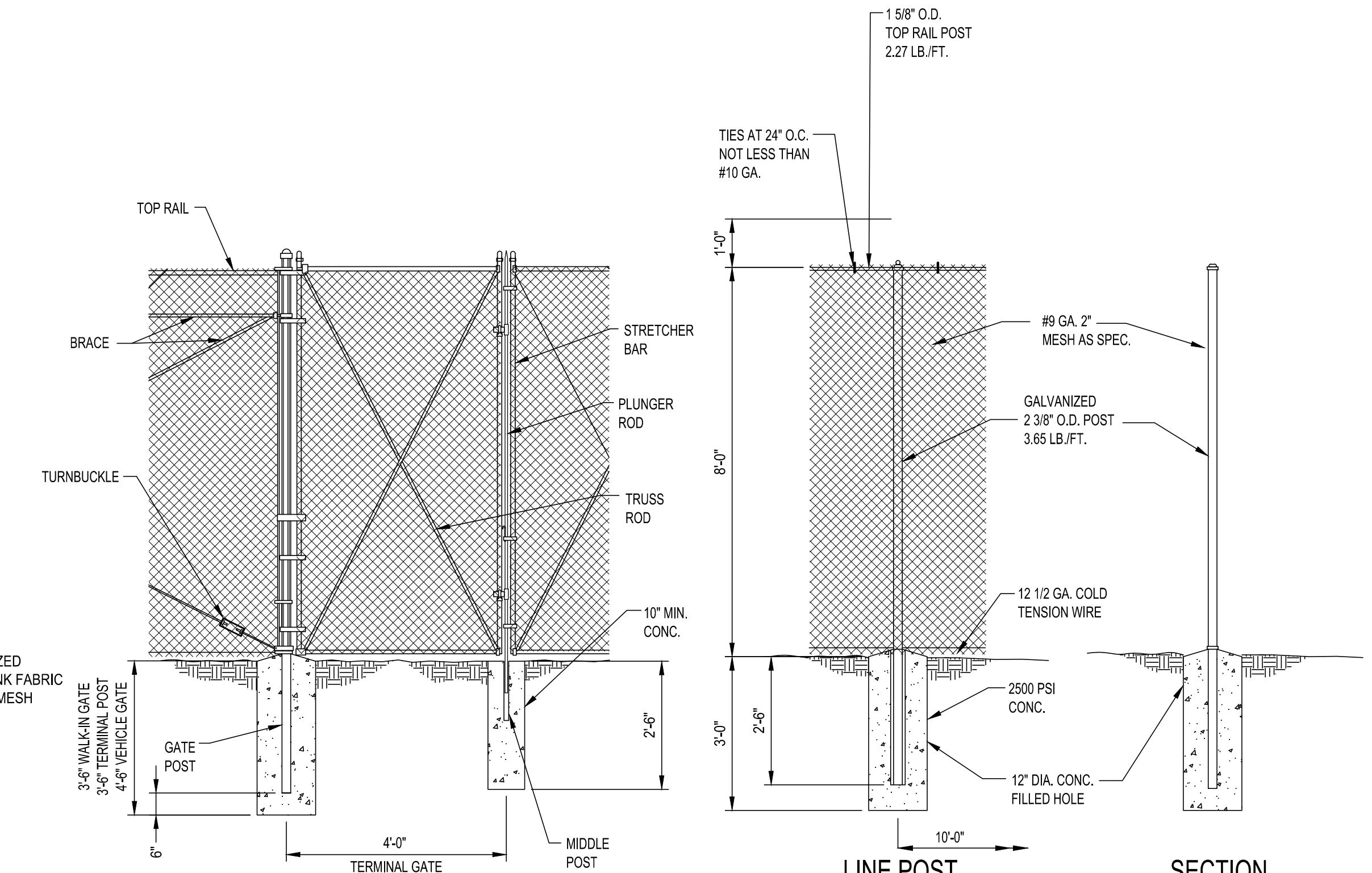


DETAIL B

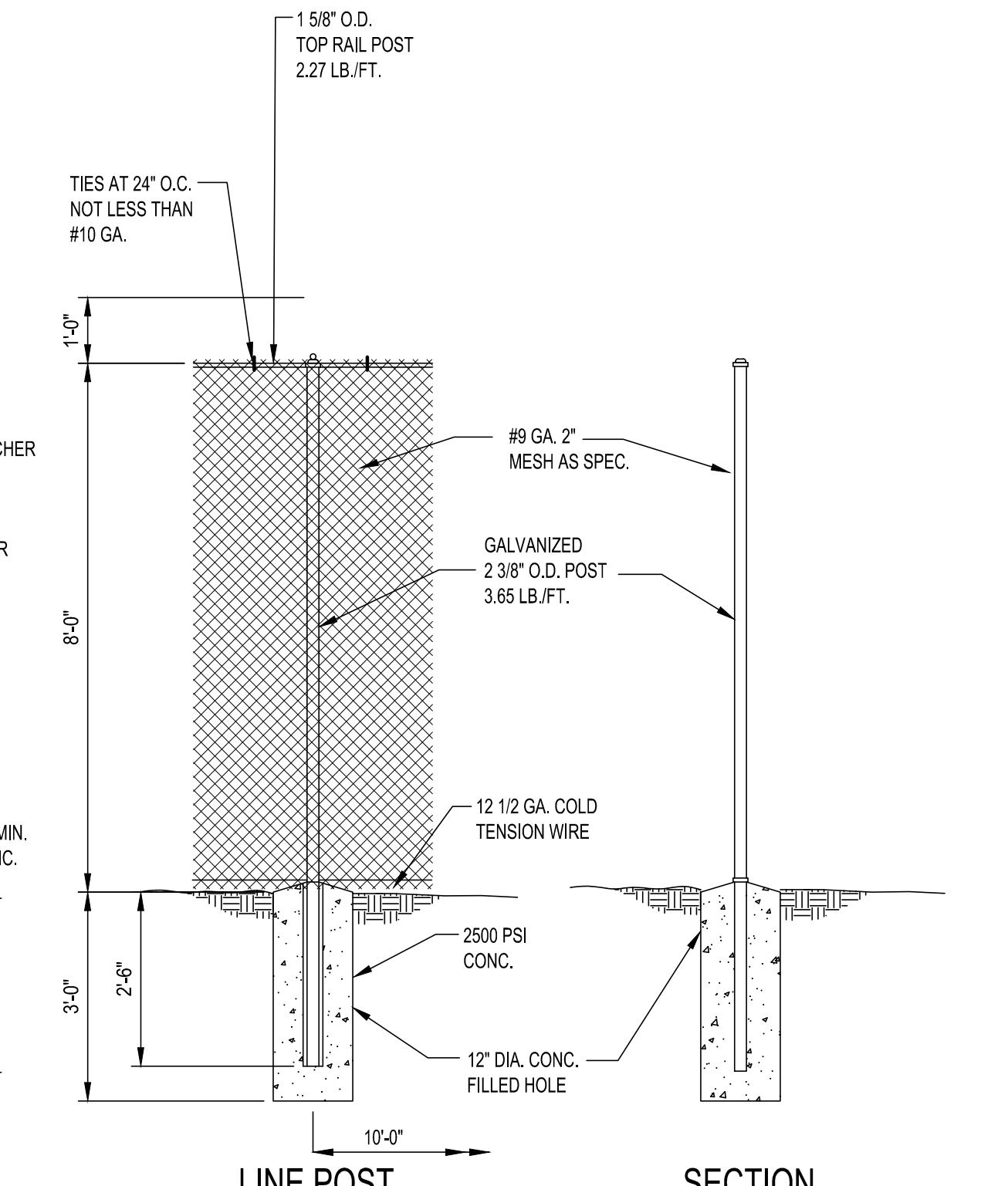
| GATE OPENING | GATE FRAME | BACK FRAME |
|--------------|------------|------------|
| 12'-0" | 12'-3" | 6'-0" |
| 16'-0" | 16'-3" | 8'-0" |
| 20'-0" | 20'-3" | 10'-0" |
| 24'-0" | 24'-3" | 12'-0" |



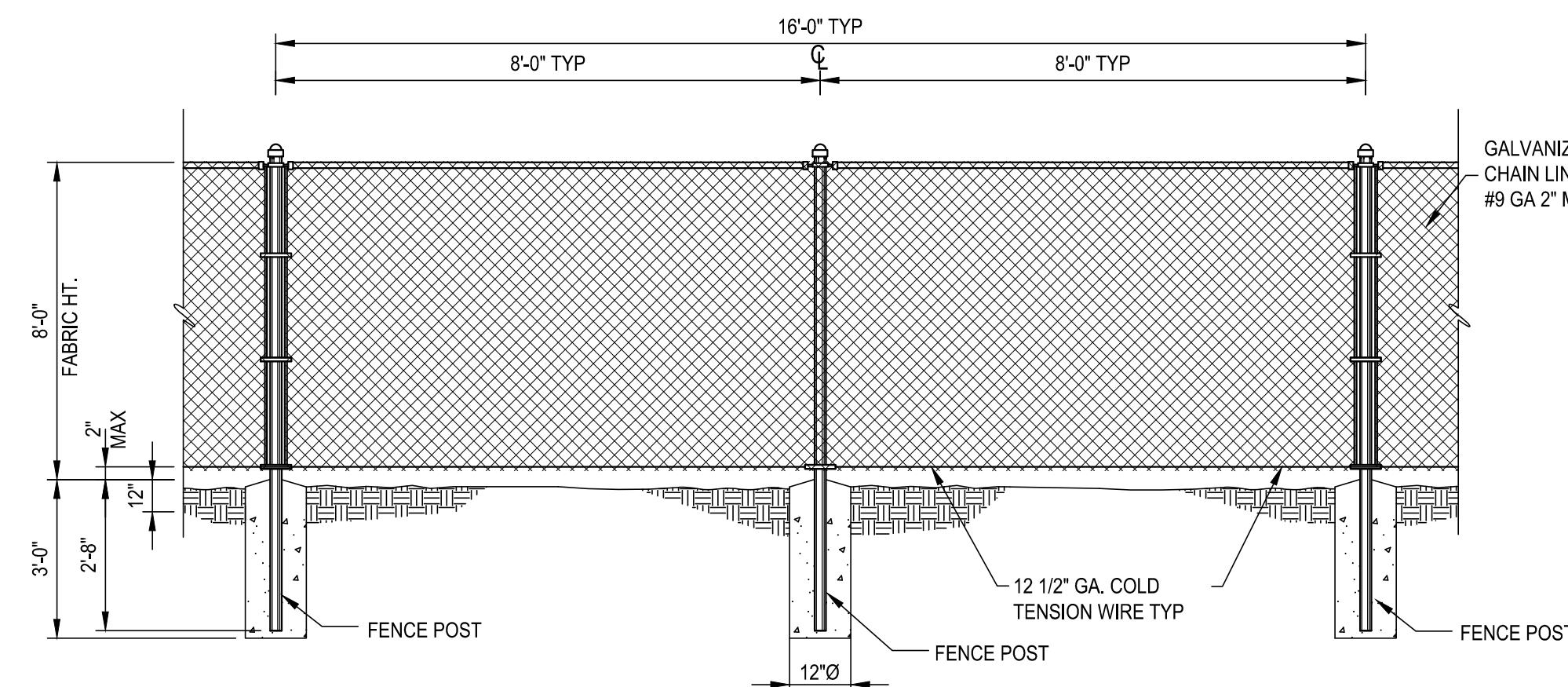
XX DOUBLE SWING ENTRANCE GATE
NOT TO SCALE



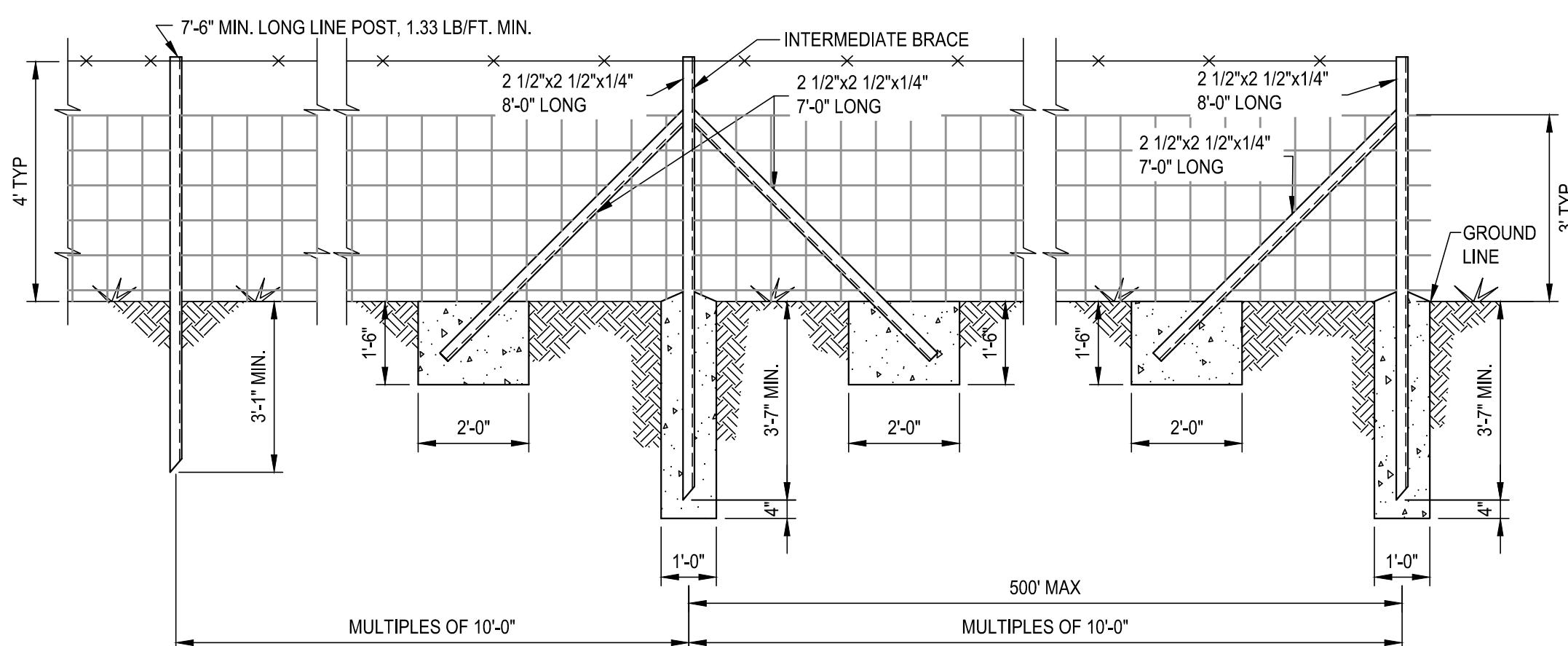
XX CHAIN LINK FENCE GATE
NOT TO SCALE



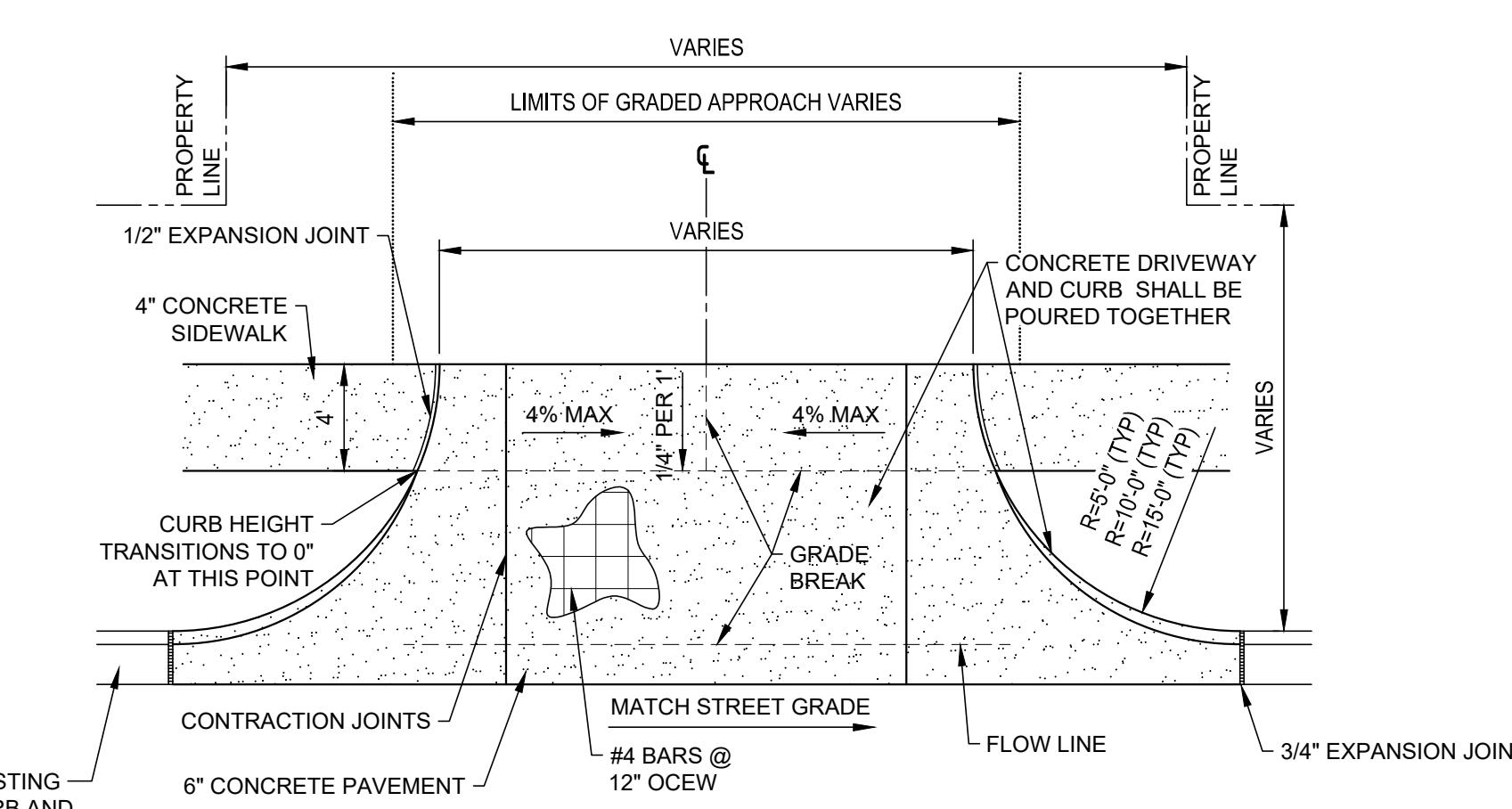
XX CHAIN LINK FENCE DETAILS
NOT TO SCALE



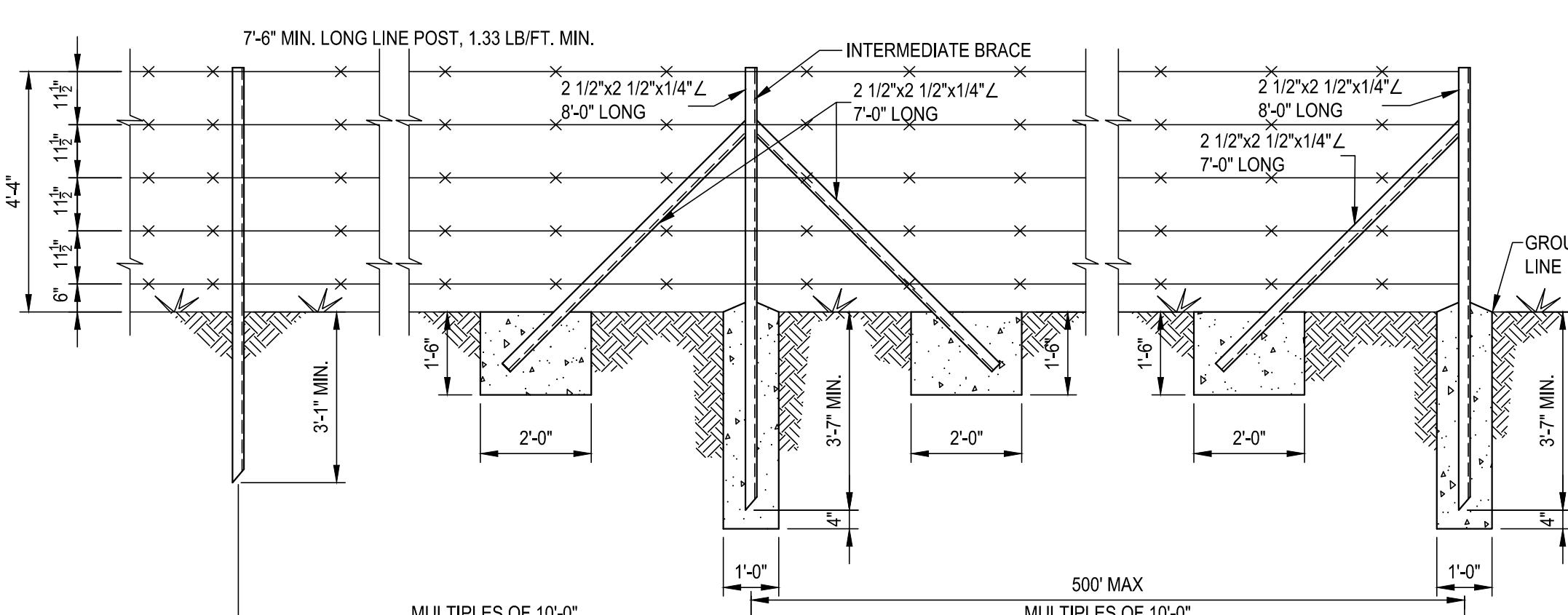
XX 8' CHAIN LINK FENCE
NOT TO SCALE



XX TYPICAL METAL MESH FENCE WITH BARBED WIRE TOP
NOT TO SCALE

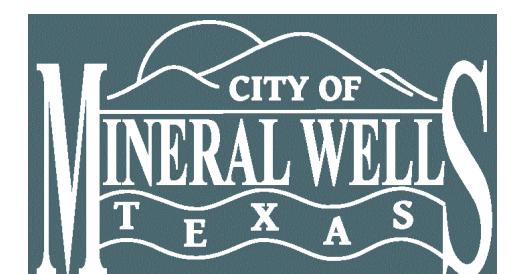


XX DRIVEWAY APPROACH AND CURB DETAIL
NOT TO SCALE



XX BARBED WIRE FENCE DETAIL
NOT TO SCALE

Mineral Wells Design Standards Review



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City of Mineral Wells

P.O. Box 460
Mineral Wells, Texas 76068
(940) 328-7777

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2503.22

DATE DESCRIPTION

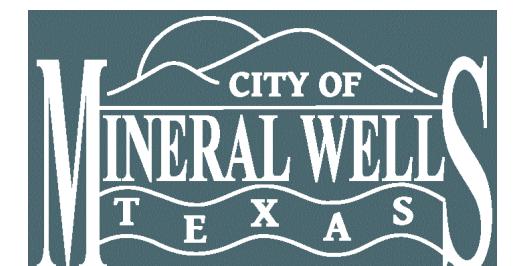
Paving Details

C-510

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Paving Details

C-511

ACCESS AISLE MARKING XX NO SCALE

TYPICAL ARROW MARKING DETAIL XX NOT TO SCALE

NOTES:

- A. STRIPES SHALL BE 4" WIDE WHITE PAINT.
- B. PAINT "NO PARKING" CENTERED IN EVERY ACCESS AISLE ADJACENT TO AN ACCESSIBLE PARKING SPACE.
- C. ALL CAPITAL LETTERS.
- D. LETTER HEIGHT SHALL BE 12", WITH A STROKE WIDTH OF 2"
- E. LETTERS SHALL BE RED PAINT

STANDARD DO NOT ENTER SIGN XX NOT TO SCALE

ONE WAY DO NOT ENTER SIGN XX NOT TO SCALE

RIGHT TURN ONLY SIGN XX NOT TO SCALE

ACCESSIBLE MARKINGS XX NO SCALE

TRAFFIC SIGN XX NOT TO SCALE

TRAFFIC SIGN XX NOT TO SCALE

TRAFFIC SIGN XX NOT TO SCALE

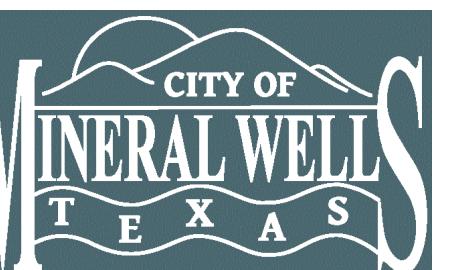
SIDEWALK JOINTS XX NOT TO SCALE

SIDEWALK PLAN AND SECTION XX NOT TO SCALE

ACCESSIBLE PARKING SIGN XX NO SCALE

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Mineral Wells Design Standards Review



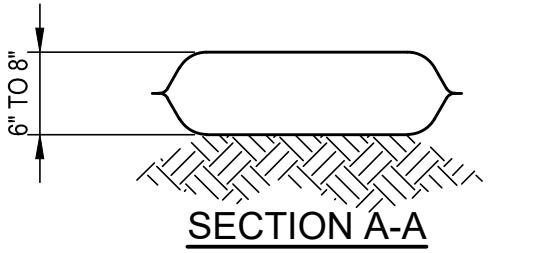
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PROJECT NO.
2503.22

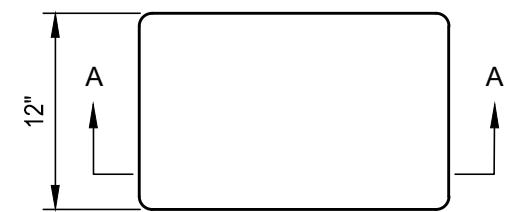
DATE DESCRIPTION

Erosion Control Details

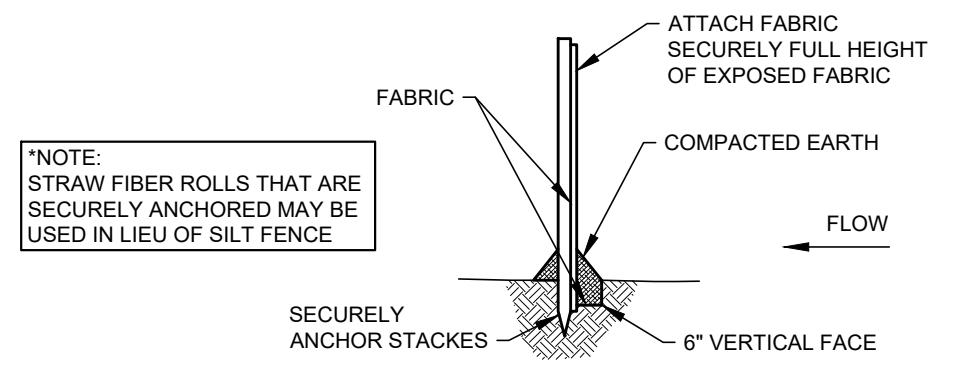
C-512



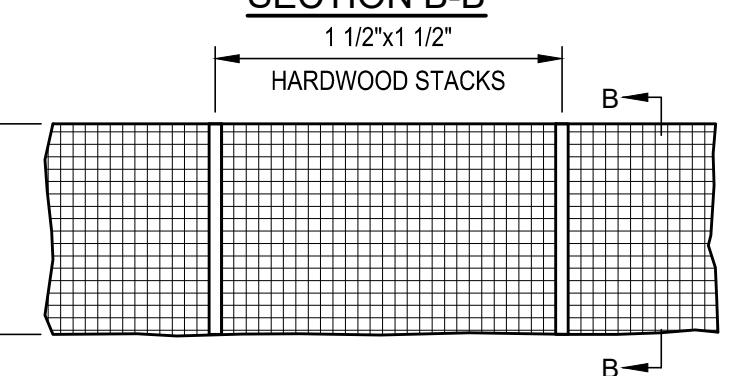
SECTION A-A



XX SAND BAG DETAIL
NO SCALE

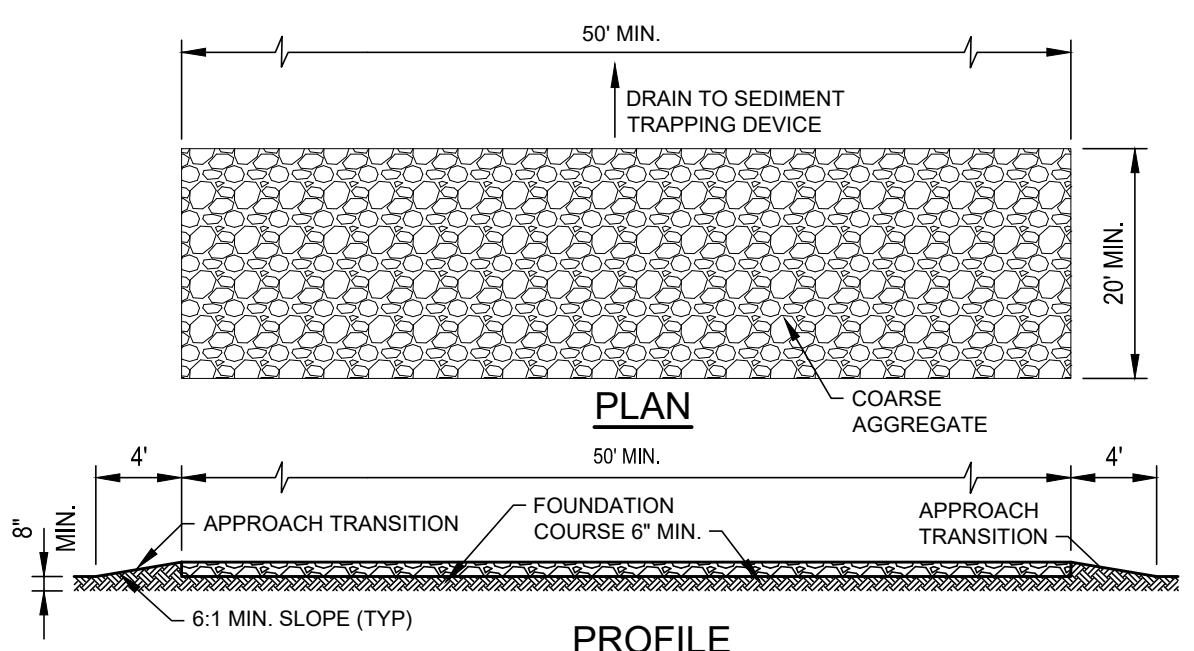


SECTION B-B



FABRIC TYPE "W" WITH TYPE II REINFORCEMENT CONFORMING TO ASTM D4159(MATL) AND ASTM D4355 (STRENGTH)

XX SILT FENCE DETAIL
NO SCALE



XX STABILIZED CONSTRUCTION
ENTRANCE & EXIT (TYPE 1)
NO SCALE

STABILIZED CONSTRUCTION ENTRANCE NOTES
1. THE LENGTH OF THE APPROACH SLOPES SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
3. THE APPROACH SHOULD BE NO STEEPER THAN 6:1.
4. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE OR PORTLAND CEMENT CONCRETE.
5. THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.