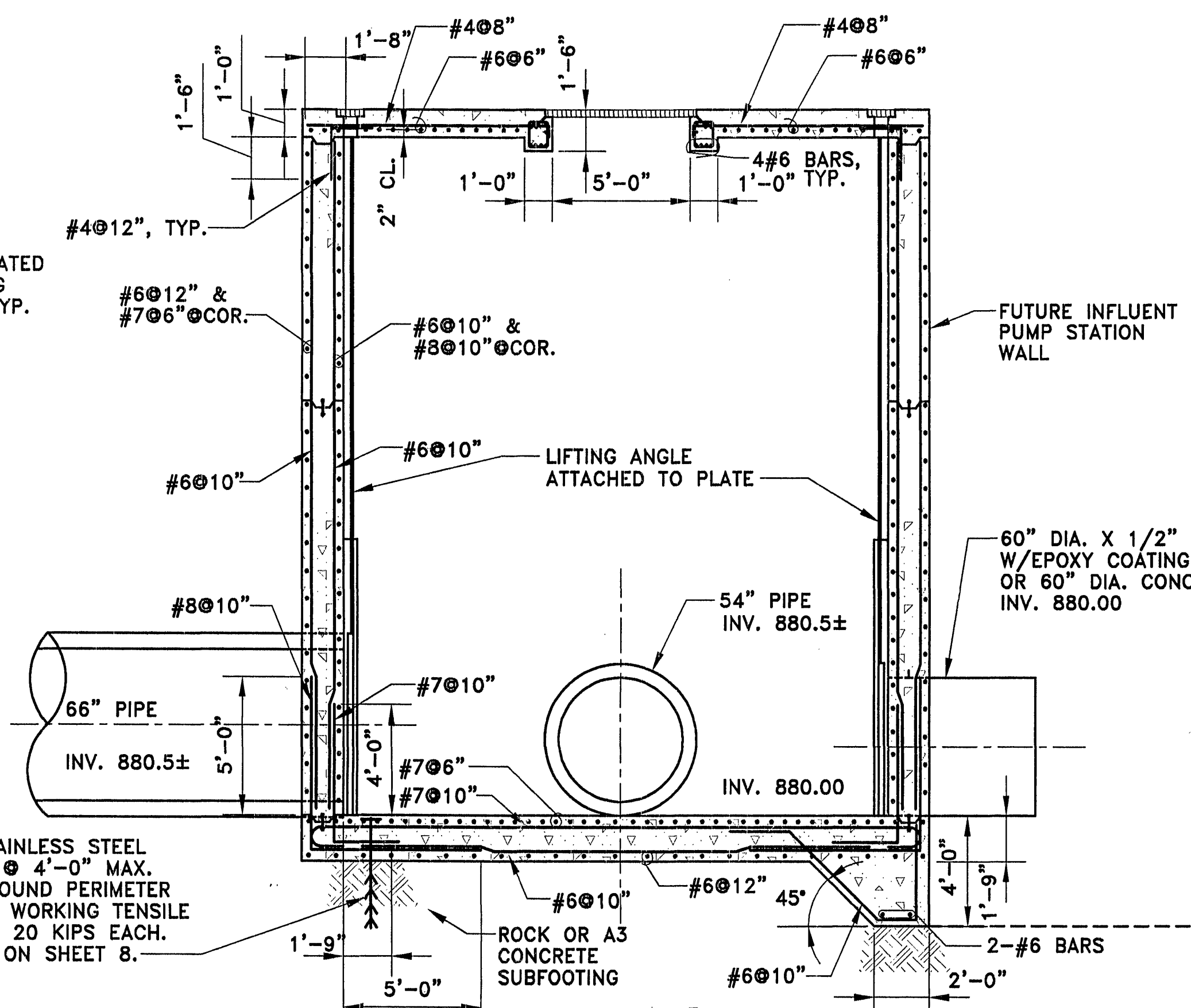
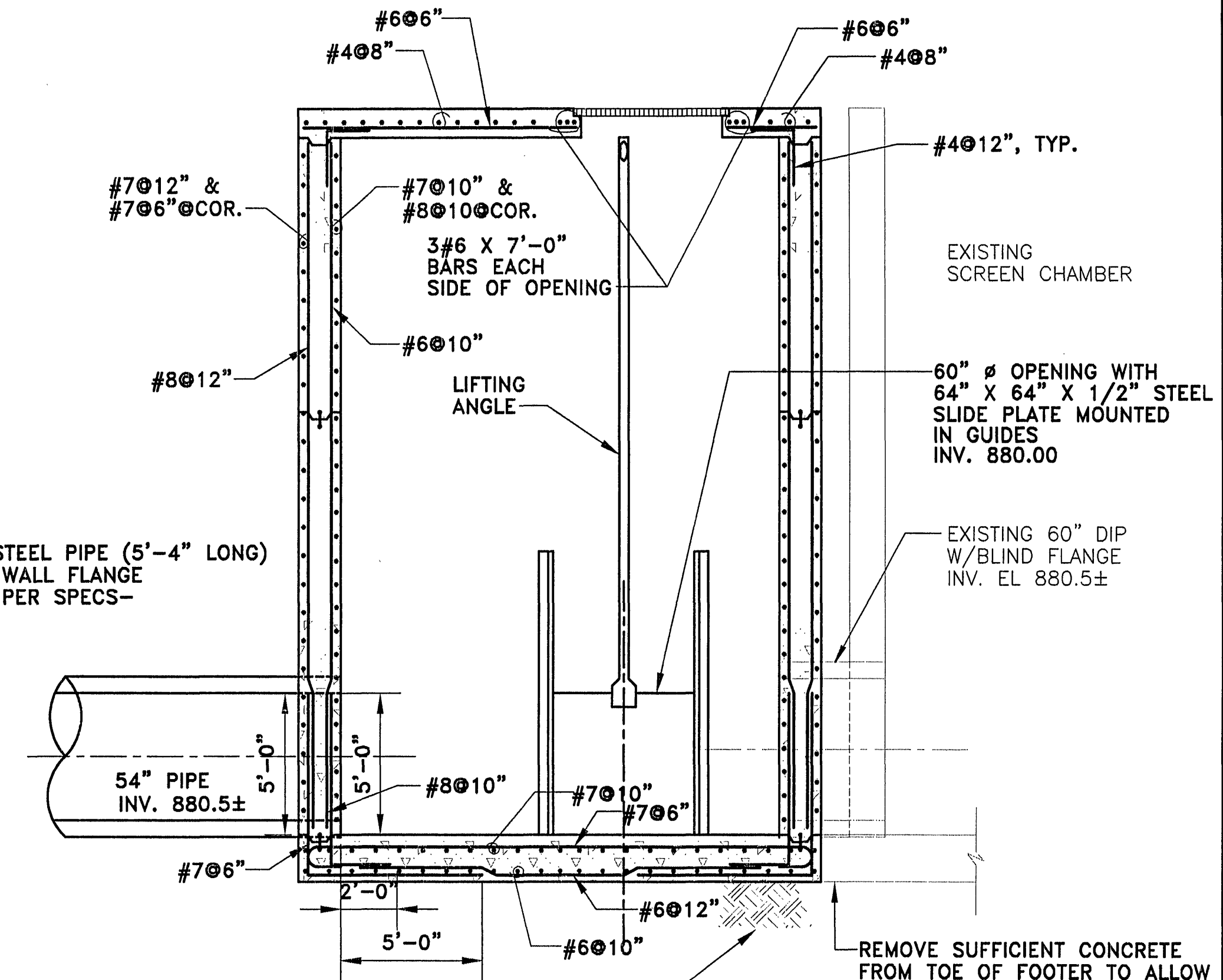


JUNCTION BOX- TOP SLAB PLAN
SCALE: 1/4" = 1'-0"

PROVIDE STAINLESS STEEL ROCK BOLT @ 4'-0" MAX. SPACING AROUND PERIMETER (TYP.), MIN. WORKING TENSILE CAPACITY IS 20 KIPS EACH. SEE DETAIL ON SHEET 8.



SECTION 1/77
SCALE: 1/4" = 1'-0"

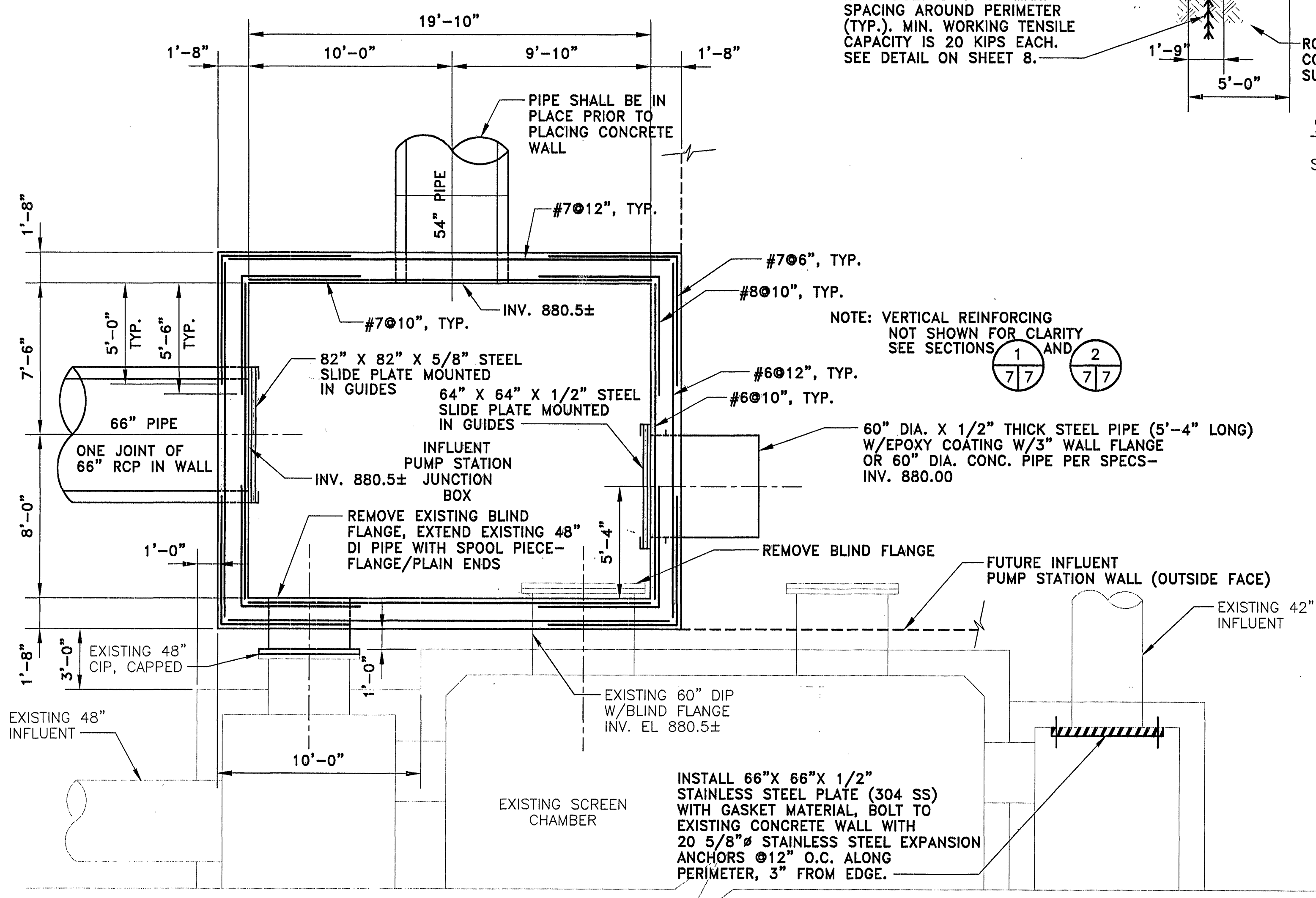


SECTION 2/77
SCALE: 1/4" = 1'-0"

STRUCTURAL GENERAL NOTES:

- MATERIAL DESIGN STRENGTHS:
CAST IN PLACE CONCRETE:
ALL CONCRETE (NORMAL WEIGHT). F'c = 4,000 PSI
REINFORCING STEEL, DEFORMED
(ASTM A615, GR. 60). FY = 60,000 PSI
 - DESIGN LOADS:
ROOF LOADS:
TOP SLAB LOADS 300 PSF
LATERAL LOADS:
EARTH LOAD, EQUIVALENT FLUID PRESSURES 90 PCF
WASTE WATER 65 PCF
 - ALL INFORMATION ON EXISTING CONDITIONS IS OBTAINED FROM BEST AVAILABLE SOURCES. THE ACTUAL AS-BUILT CONSTRUCTION MAY POSSIBLY DIFFER FROM WHAT IS ASSUMED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS NOTED ON THE CONTRACT DOCUMENTS, AND SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS.
 - THE CONTRACTOR SHALL REQUEST IN WRITING AND HIGHLIGHT ON THE SHOP DRAWINGS ANY PROPOSED CHANGES IN THE MATERIALS, DETAILS, ETC. INDICATED ON THE DRAWINGS OR SPECIFICATIONS. ANY CHANGES MUST BE APPROVED BY THE ENGINEER IN WRITING.
 - THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- FOUNDATIONS**
- FOUNDATION DESIGN IS BASED ON A SUBSURFACE INVESTIGATION BY GEOTECHNICS, INC. DATED DECEMBER 27, 1995 COMMISSION NUMBER 2045.
 - FOOTING ELEVATIONS SHOWN REPRESENT THE MINIMUM DEPTH TO WHICH FOOTINGS SHALL BE CARRIED. IF FOOTING EXCAVATIONS REVEAL ANY MATERIAL OTHER THAN BEDROCK, THE ENGINEER SHALL BE NOTIFIED. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED AND FOOTINGS SHALL REST ON BEDROCK OR CLASS A3 SUBFOOTING CONCRETE. DO NOT DISTURB SUPPORTING SOIL BENEATH EXISTING FOUNDATIONS.
- CONCRETE**
- ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315-92, UNLESS OTHERWISE NOTED. ALL SPLICES SHALL BE CLASS B TENSION WITH ALL APPLICABLE MODIFICATION FACTORS, UNLESS OTHERWISE NOTED. SPLICES NOT INDICATED MAY BE PROVIDED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER. SPLICES OF HORIZONTAL BARS SHALL BE STAGGERED UNLESS OTHERWISE NOTED. EMBEDMENT LENGTHS SHALL BE EQUAL TO

- TENSION DEVELOPMENT LENGTHS UNLESS OTHERWISE NOTED. STANDARD HOOKS CONFORMING TO ACI 318 SHALL BE USED UNLESS OTHERWISE NOTED. DOWELS IN WALLS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCING BARS UNLESS OTHERWISE NOTED. ALL BEAM STIRRUPS SHALL BE CLOSED TYPE (ACI TYPE T1) UNLESS OTHERWISE NOTED. CONCRETE PROTECTION FOR REINFORCEMENT SHALL CONFORM TO ACI 301-96 UNLESS OTHERWISE NOTED AND SHALL BE INDICATED ON THE SHOP DRAWINGS. ALL SPLICE LENGTHS AND EMBEDMENT LENGTHS, BENDING DIAGRAMS, AND ASSEMBLY DIAGRAM SHALL BE INDICATED ON THE SHOP DRAWINGS. PROVIDE 2-#5 CONTINUOUS AT THE TOP OF ALL WALLS. THE CONTRACTOR SHALL KEEP A COPY OF ACI 301-96 AND PUBLICATION SP-15 AT THE JOBSITE.
- CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS FOLLOWS AND SHALL BE INDICATED ON THE SHOP DRAWINGS:
A. SURFACE INSIDE BASINS 2 INCHES
B. FOOTING AND SLAB ON GROUND 3 INCHES
C. ALL OTHER FORMED SURFACES 2 INCHES
 - MAJOR CONSTRUCTION JOINTS ARE SHOWN. INTERMEDIATE JOINTS IN WALLS, SLABS, AND FLOOR FRAMING ARE NOT SHOWN UNLESS REQUIRED BY THE DESIGN. ALL CONSTRUCTION JOINTS SHALL BE SHOWN ON THE SHOP DRAWINGS. CONSTRUCTION JOINTS MAY BE OMITTED OR RELOCATED IF PROPERLY DETAILED ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. (JOINT LOCATIONS MUST BE APPROVED BY THE ENGINEER BEFORE SUBMITTING REINFORCING STEEL SHOP DRAWINGS). ALL CONSTRUCTION AND EXPANSION JOINTS BELOW ELEVATION 904.0 SHALL HAVE WATERSTOPS.
 - CONCRETE SHALL NOT BE PLACED IN VERTICAL LIFTS EXCEEDING 15 FEET.
 - BACKFILLING ADJACENT TO FOUNDATION WALLS SHALL NOT OCCUR UNTIL WALL CONCRETE HAS REACHED 70 PERCENT OF 28-DAY DESIGN COMPRESSIVE STRENGTH.
 - CHAMFER ALL EXPOSED EDGES OF CONCRETE 1 INCH.
 - CONCRETE SHALL BE PLACED IN LAYERS NOT OVER 18 INCHES DEEP AND EACH LAYER SHALL BE COMPACTED BY MECHANICAL INTERNAL-VIBRATING EQUIPMENT SUPPLEMENTED BY HAND SPADING, RODDING AND TAMPING. VIBRATORS SHALL NOT BE INSERTED INTO LOWER COURSES THAT HAVE BEGUN TO SET. CONCRETE SHALL BE PLACED BY CHUTES OR ELEPHANT TRUNKS WHEN THE VERTICAL DROP EXCEEDS 4'-0".
 - CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO PLACING ANY CONCRETE SO THAT REINFORCEMENT, SLEEVES, PIPES, INSERTS, ETC., CAN BE INSPECTED FOR CONFORMANCE WITH PLANS AND SPECIFICATIONS.



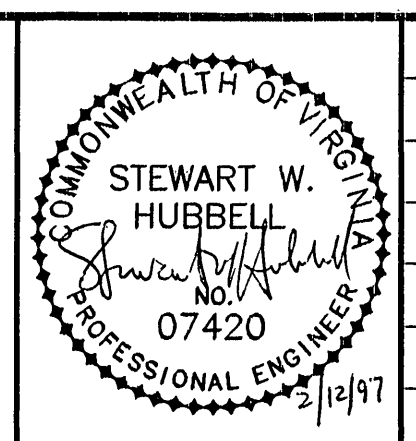
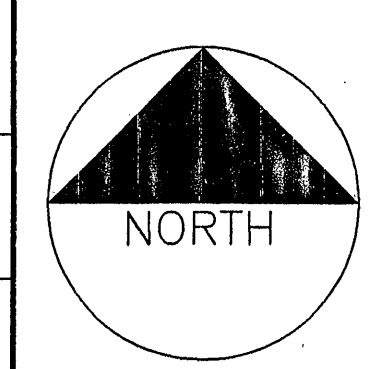
JUNCTION BOX PLAN
SCALE: 1/4" = 1'-0"

INSTALL 66"X 66"X 1/2" STAINLESS STEEL PLATE (304 SS) WITH GASKET MATERIAL, BOLT TO EXISTING CONCRETE WALL WITH 20 5/8" STAINLESS STEEL EXPANSION ANCHORS @12" O.C. ALONG PERIMETER, 3" FROM EDGE.

NOTE: SCREEN CHAMBER IS CONSTANTLY FLOWING WITH RAW SEWAGE.

Mattern & Craig
CONSULTING ENGINEERS • SURVEYORS
701 FIRST STREET, S.W.
ROANOKE, VIRGINIA 24016
(540) 345-9342
(540) 345-7691 FAX

DESIGNED:	NAB
DRAWN:	ARB
CHECKED:	SAC



REV.	DATE	DESCRIPTION	BY	APP.

DATE	APRIL 1996
COMM. NO.	1488

**TINKER CREEK INTERCEPTOR
54" SANITARY SEWER PROJECT
CITY OF ROANOKE, VIRGINIA**

DETAILS

SHEET	7
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