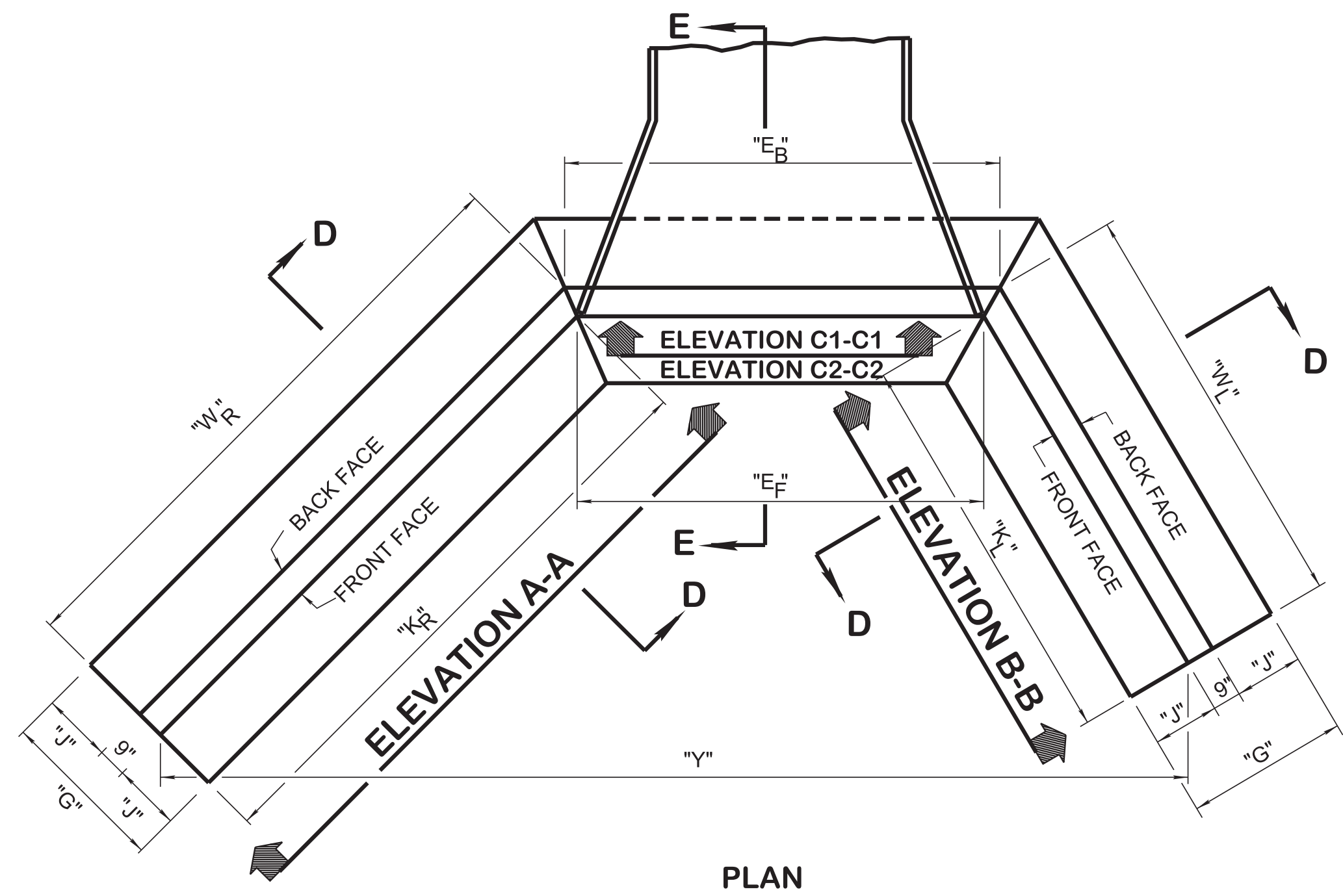
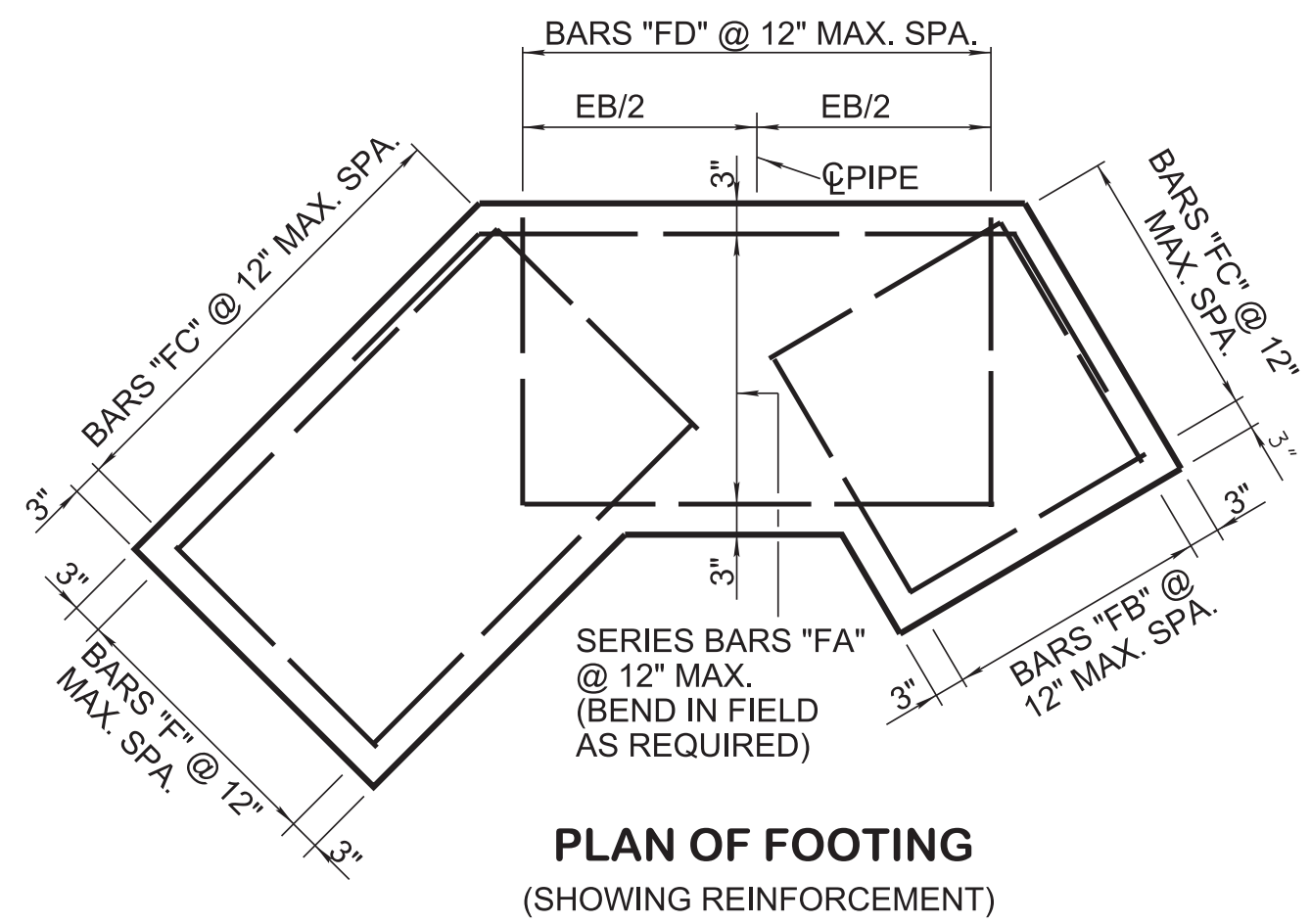


9/4/2019 11:57:07 AM P:\StandDraw\DESIGN STANDARDS\Standards Drawings - CURRENT\In Progress\110.00 Pipe Culverts and Endwalls IP1110.04 Protected Endwalls IP1DPE9-20190628.dgn

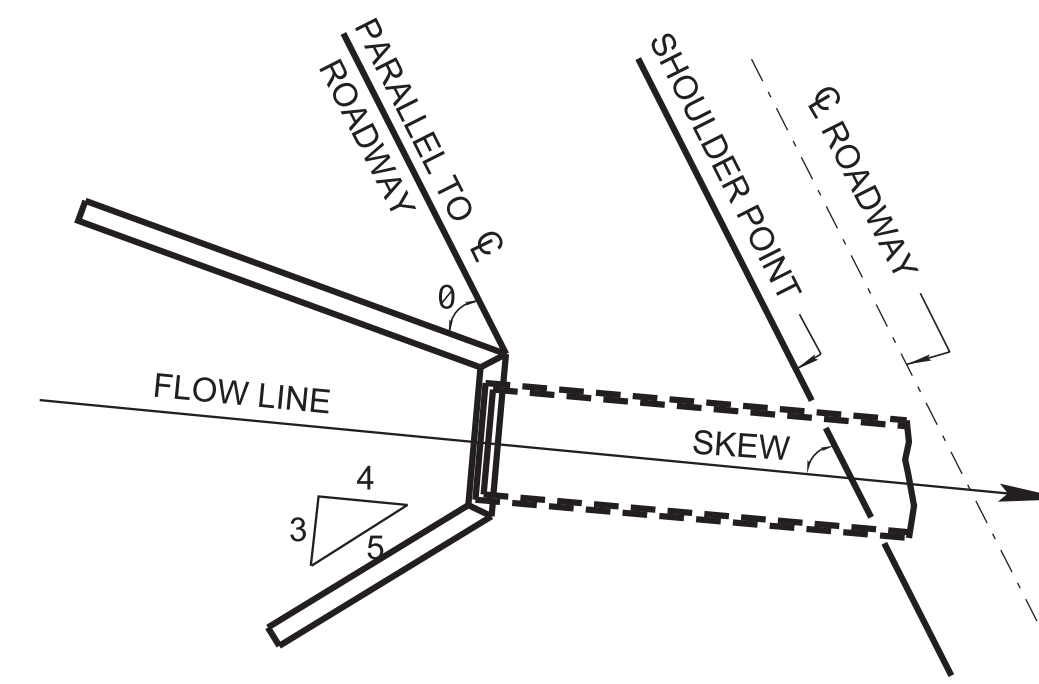
REV. 4-25-90: REVISED GENERAL NOTES.
 REV. 0-28-19: REVISED SHEET NAME AND REDREW SHEET.



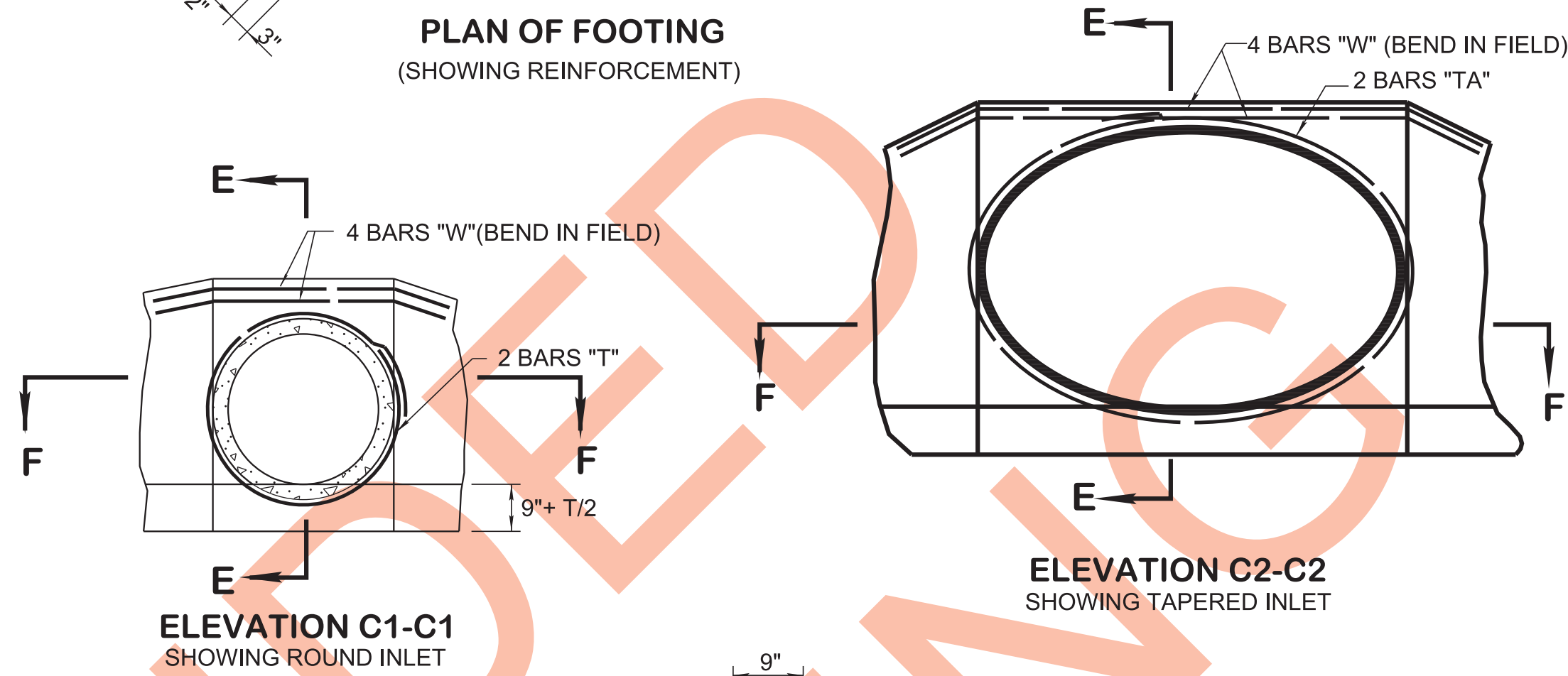
PLAN



PLAN OF FOOTING
(SHOWING REINFORCEMENT)



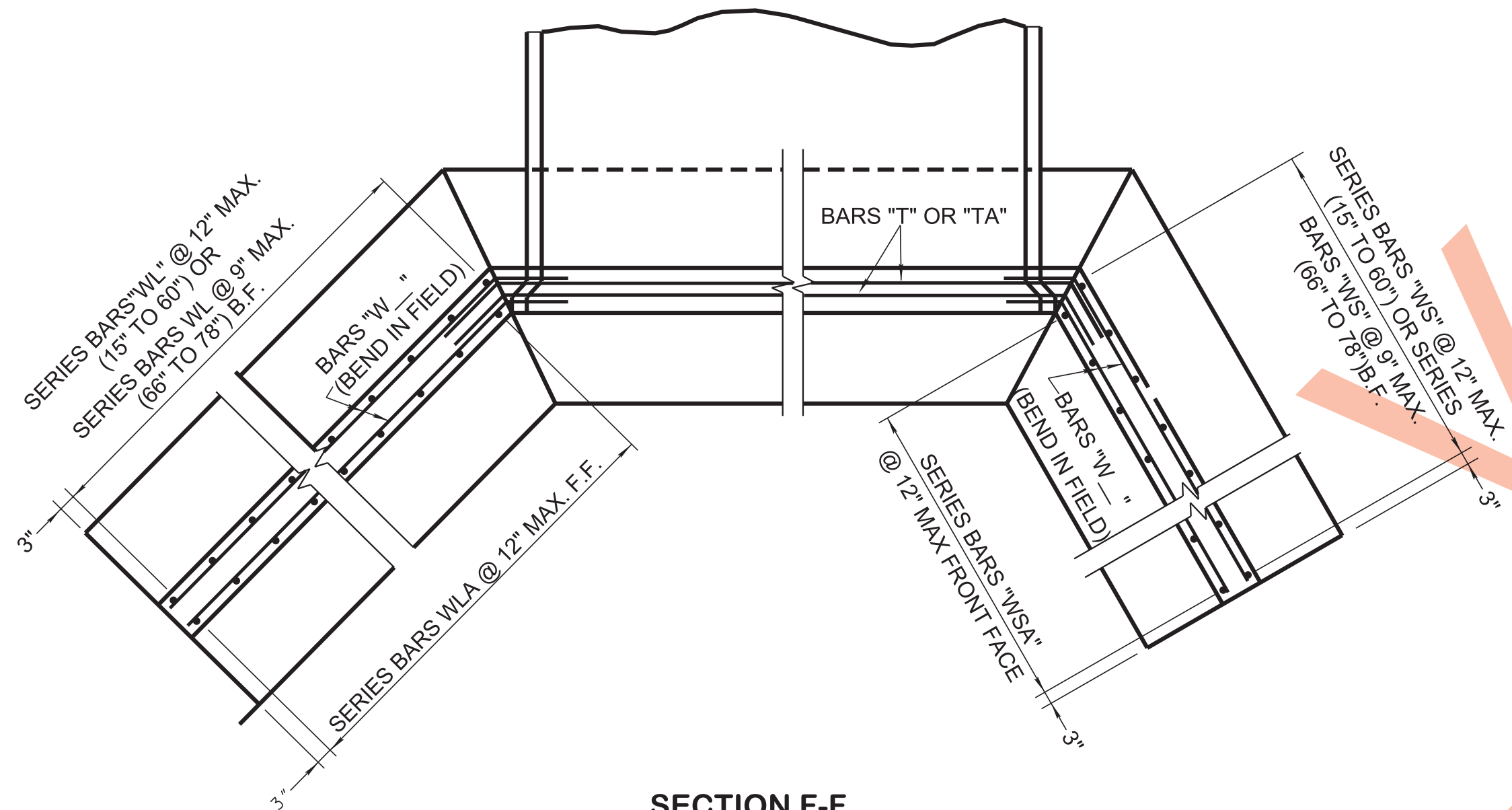
LOCATION SKETCH



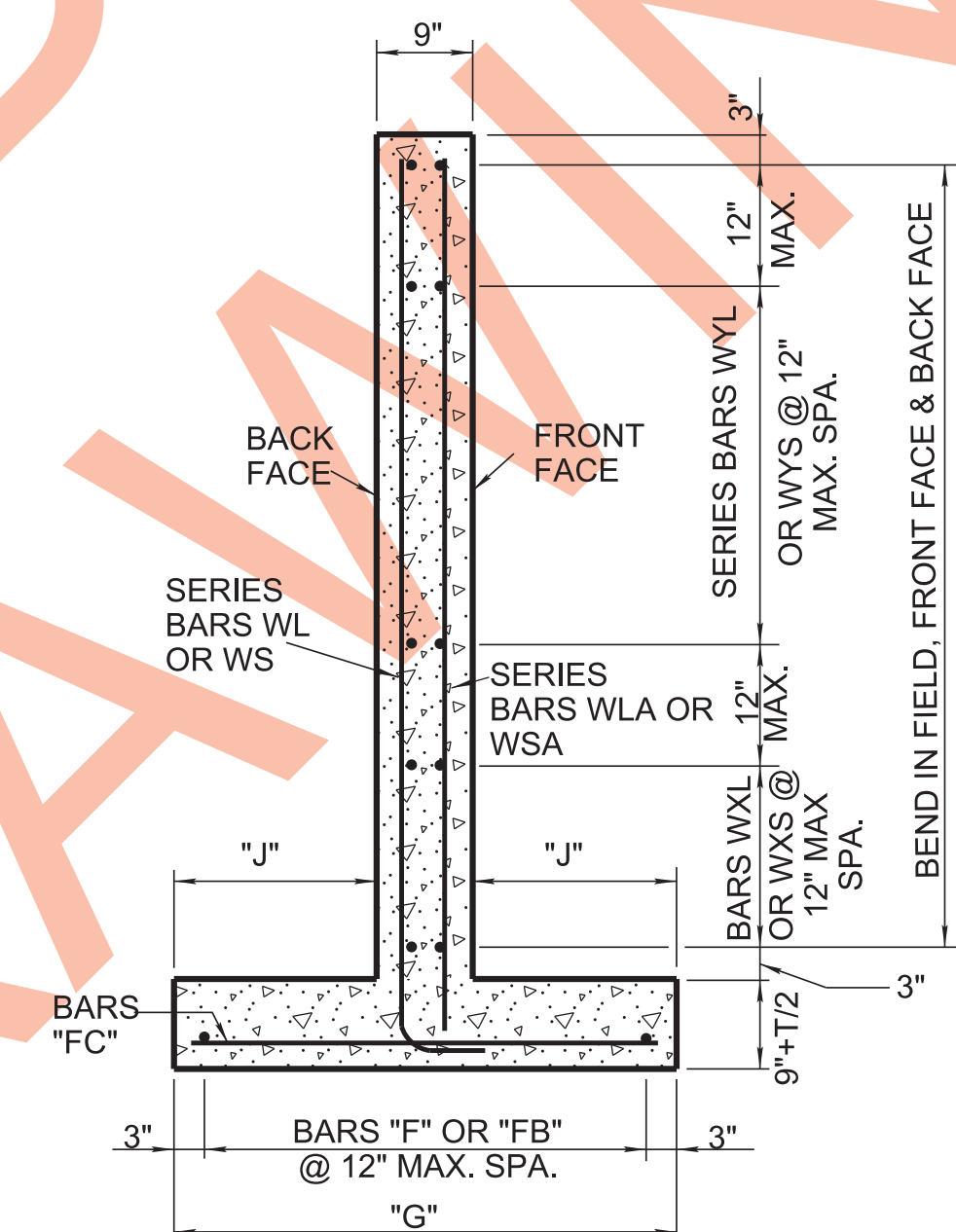
ELEVATION C1-C1
SHOWING ROUND INLET

ELEVATION C2-C2
SHOWING TAPERED INLET

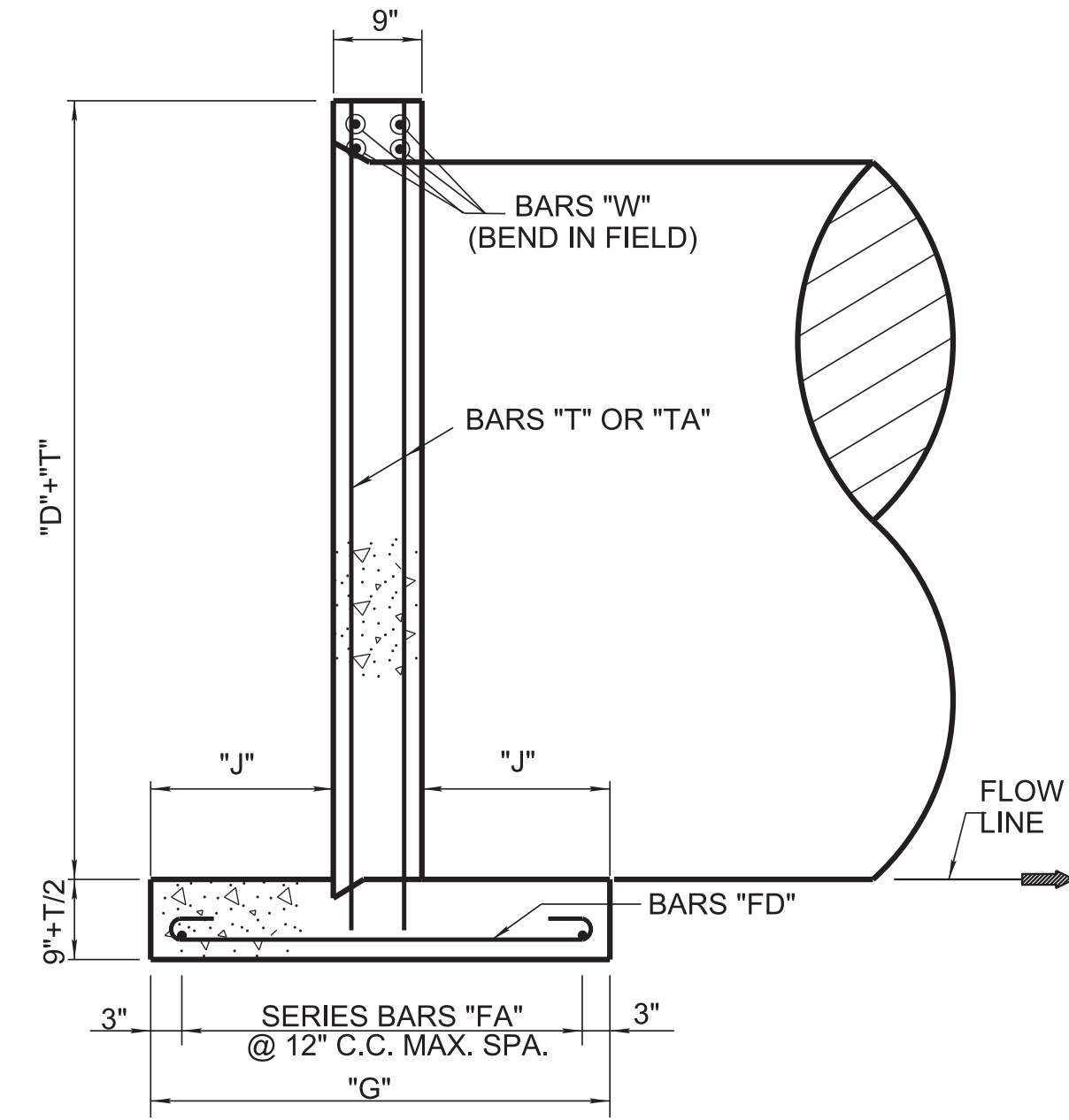
NOTES:
 "D" = NOMINAL INSIDE PIPE DIAMETER,
 "D" + "T" = WALL HEIGHT, FOR DIMENSIONS
 "D" AND "T", SEE DWG. NOS. D-PE-9A AND
 D-PE-9B.
 FOR ALL DIMENSIONS REPRESENTED BY
 LETTER VALUES, SEE DWG. NOS. D-PE-9A
 AND D-PE-9B.



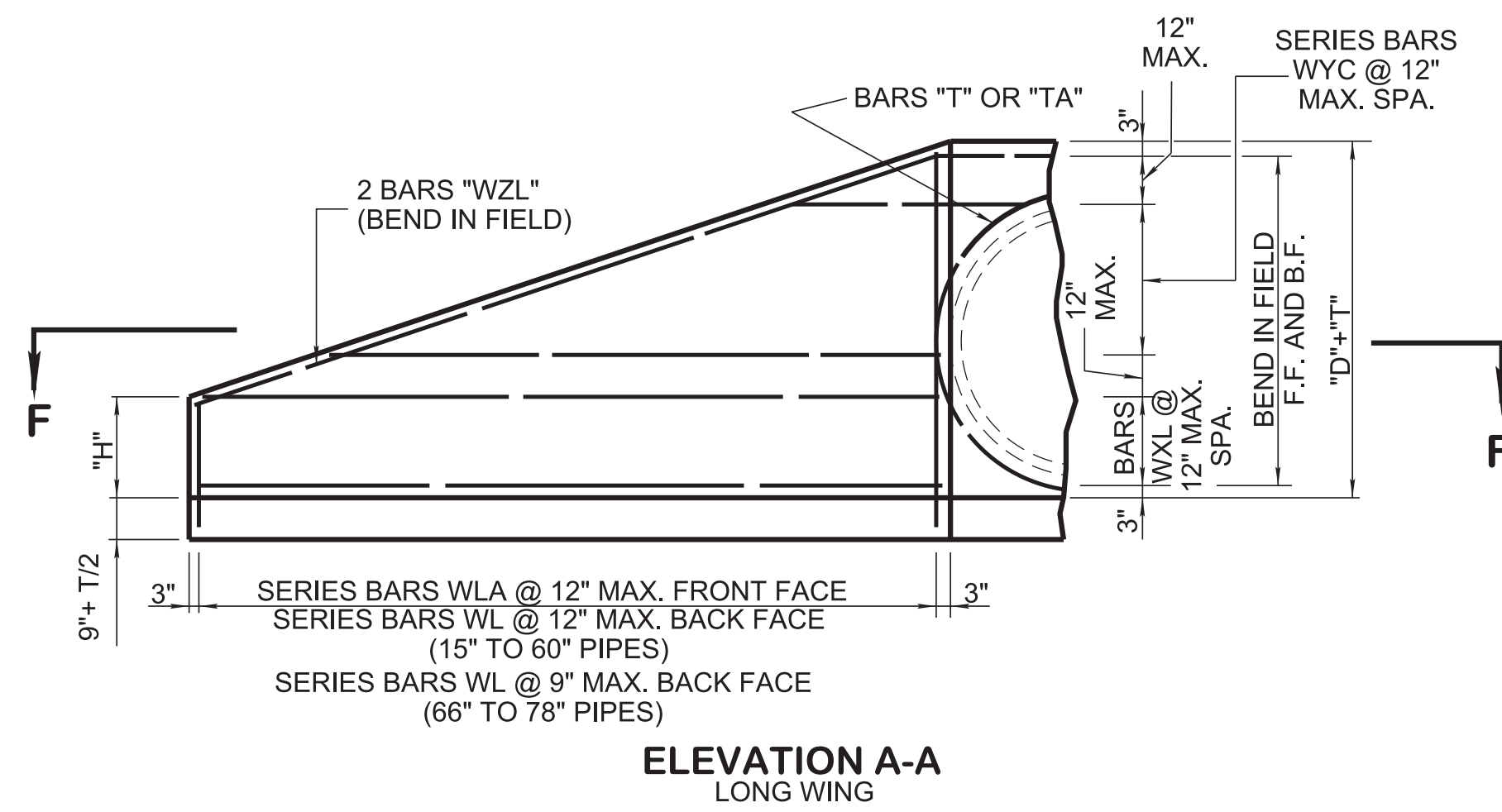
SECTION F-F



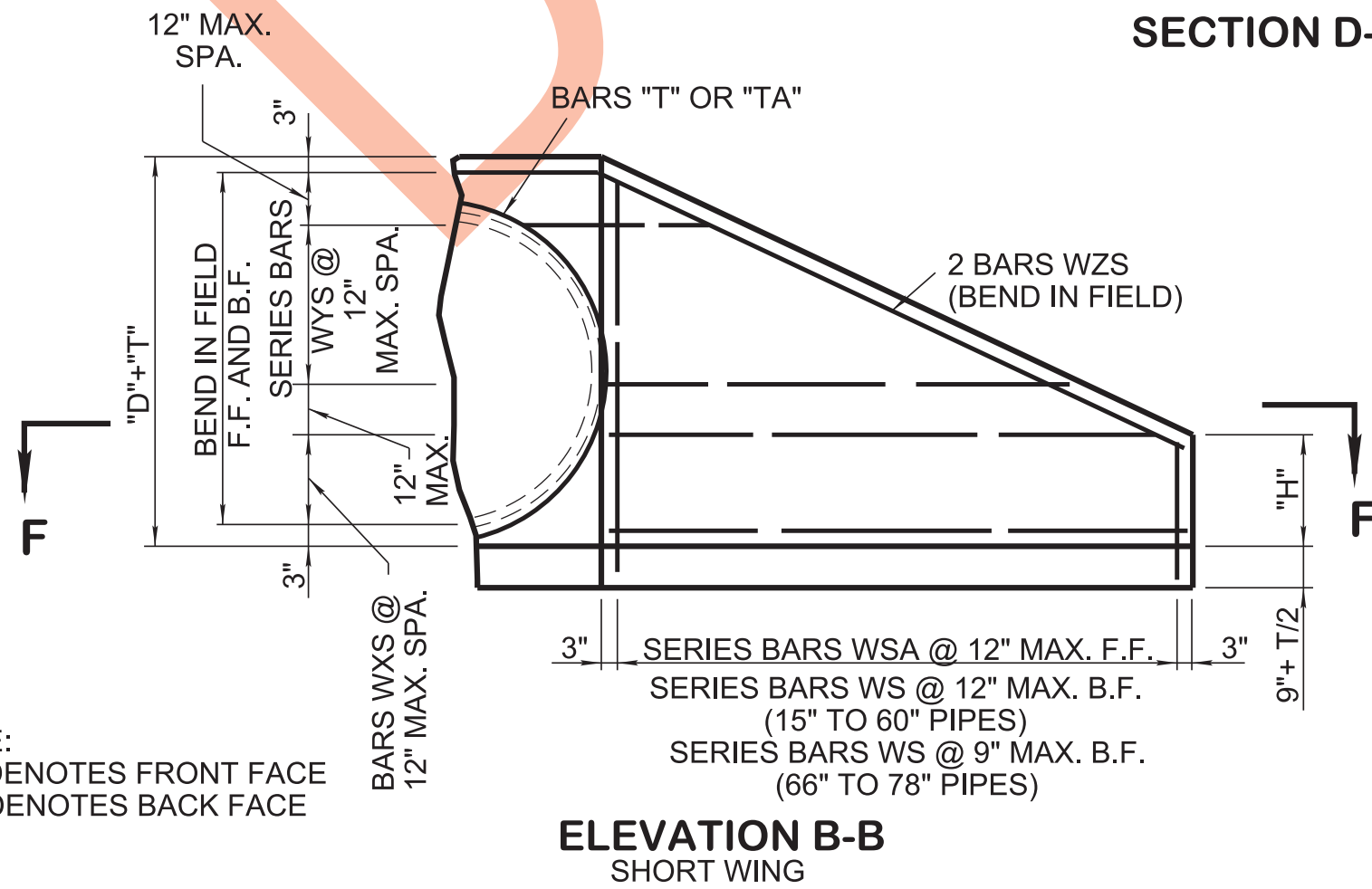
SECTION D-D



SECTION E-E



ELEVATION A-A
LONG WING



ELEVATION B-B
SHORT WING

NOTE:
 F.F. DENOTES FRONT FACE
 B.F. DENOTES BACK FACE

GENERAL NOTES

(A) SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (CURRENT EDITION)

(B) DESIGN SPECIFICATIONS: AASHTO CURRENT EDITION WITH ADDENDA.

(C) CONCRETE: TO BE CLASS "A". $f_c=3000$ psi. SEE SPECIAL PROVISION REGARDING SECTION 604 - CONCRETE STRUCTURES.

(D) REINFORCING STEEL: TO BE ASTM A615 GRADE 60. STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL. BENDING DIMENSIONS SHOWN ARE BASED ON GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED ON DETAIL DRAWINGS.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
 STANDARD DRAWING
 DEPARTMENT OF TRANSPORTATION

TYPE "B"
 CONCRETE ENDWALLS
 FOR ROUND AND
 SIDE TAPERED INLETS
 (PIPE SIZES 15" TO 78",
 ALL SKEWS,
 2:1 AND 4:1 SLOPES)