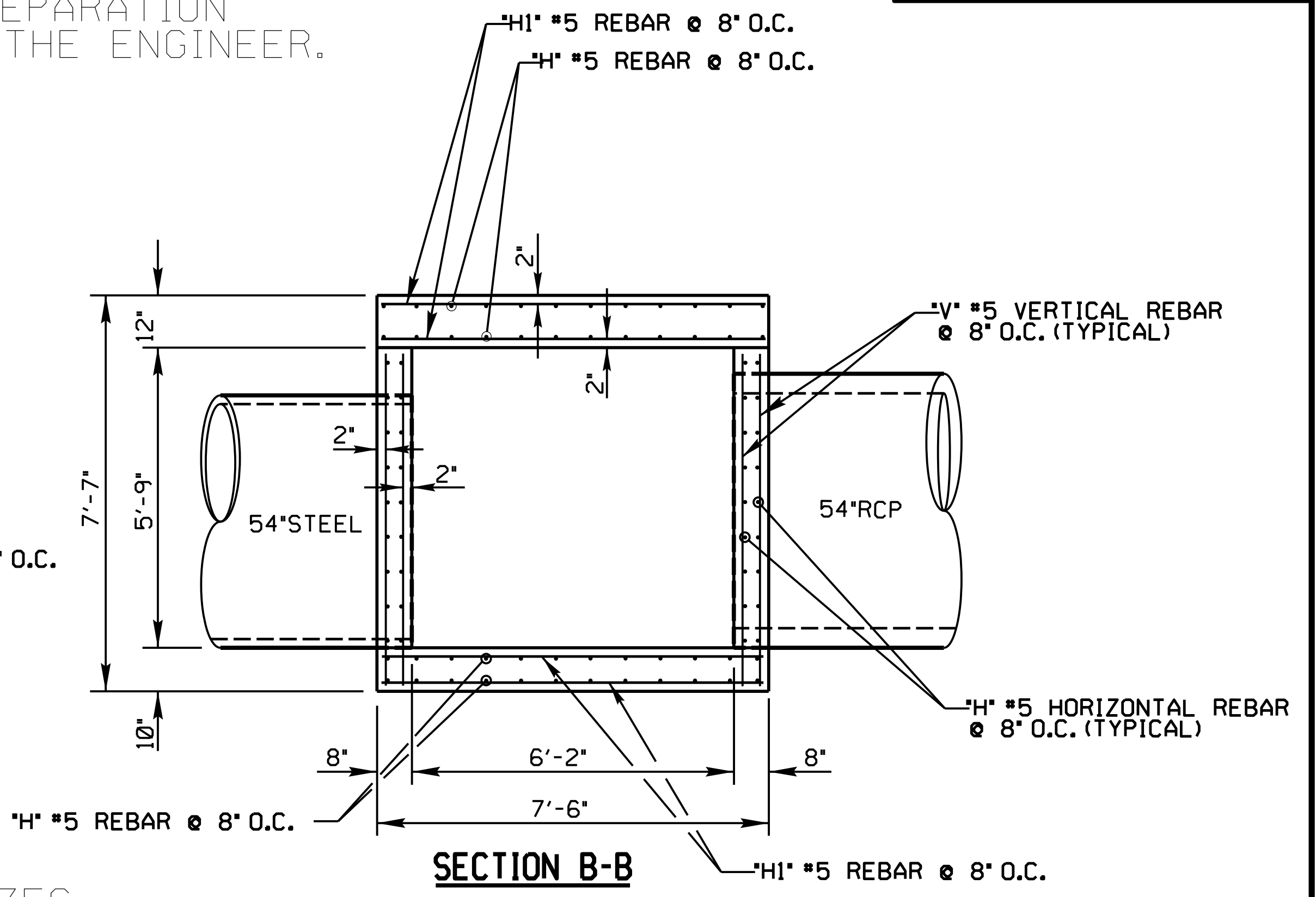
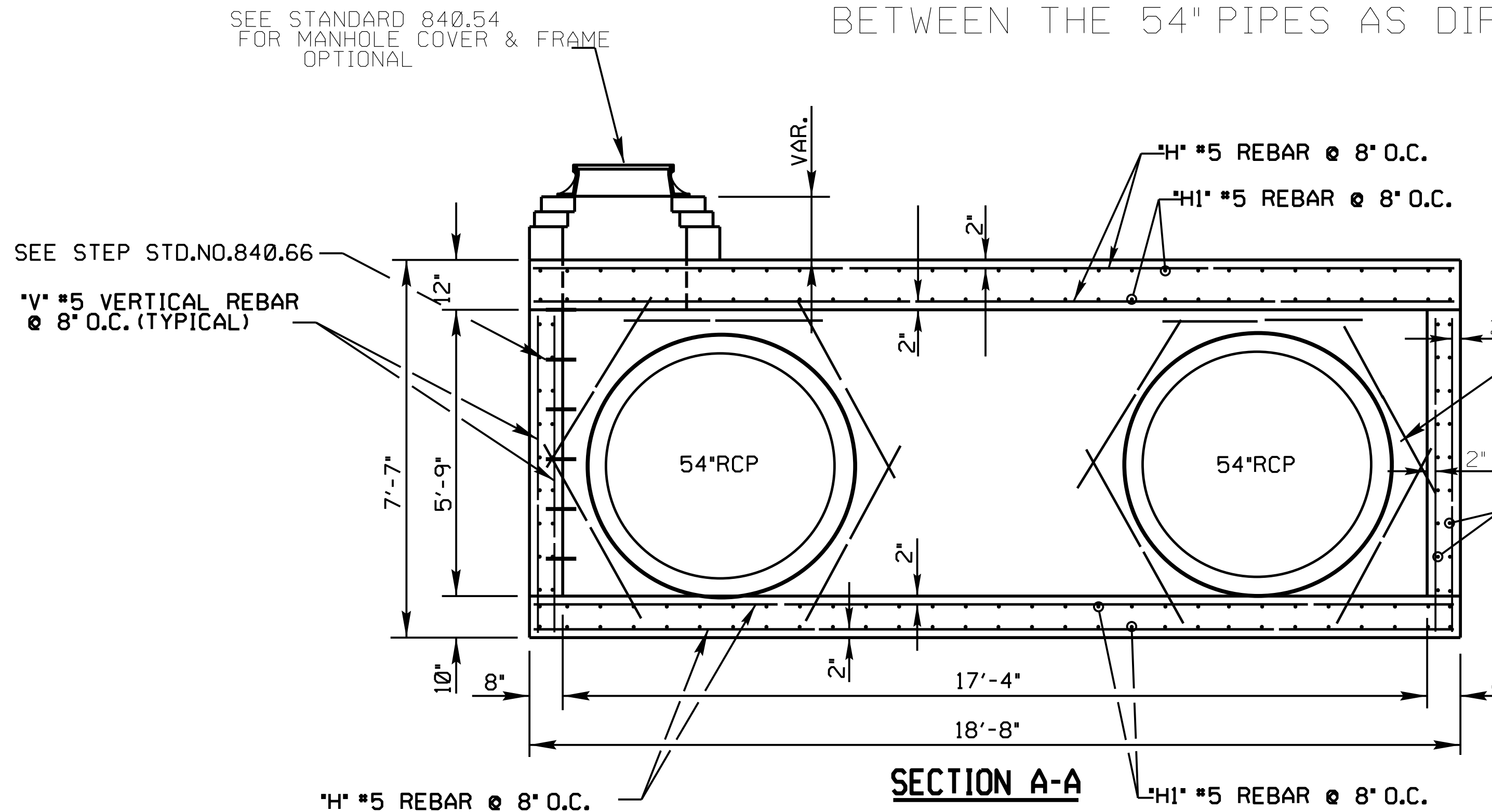
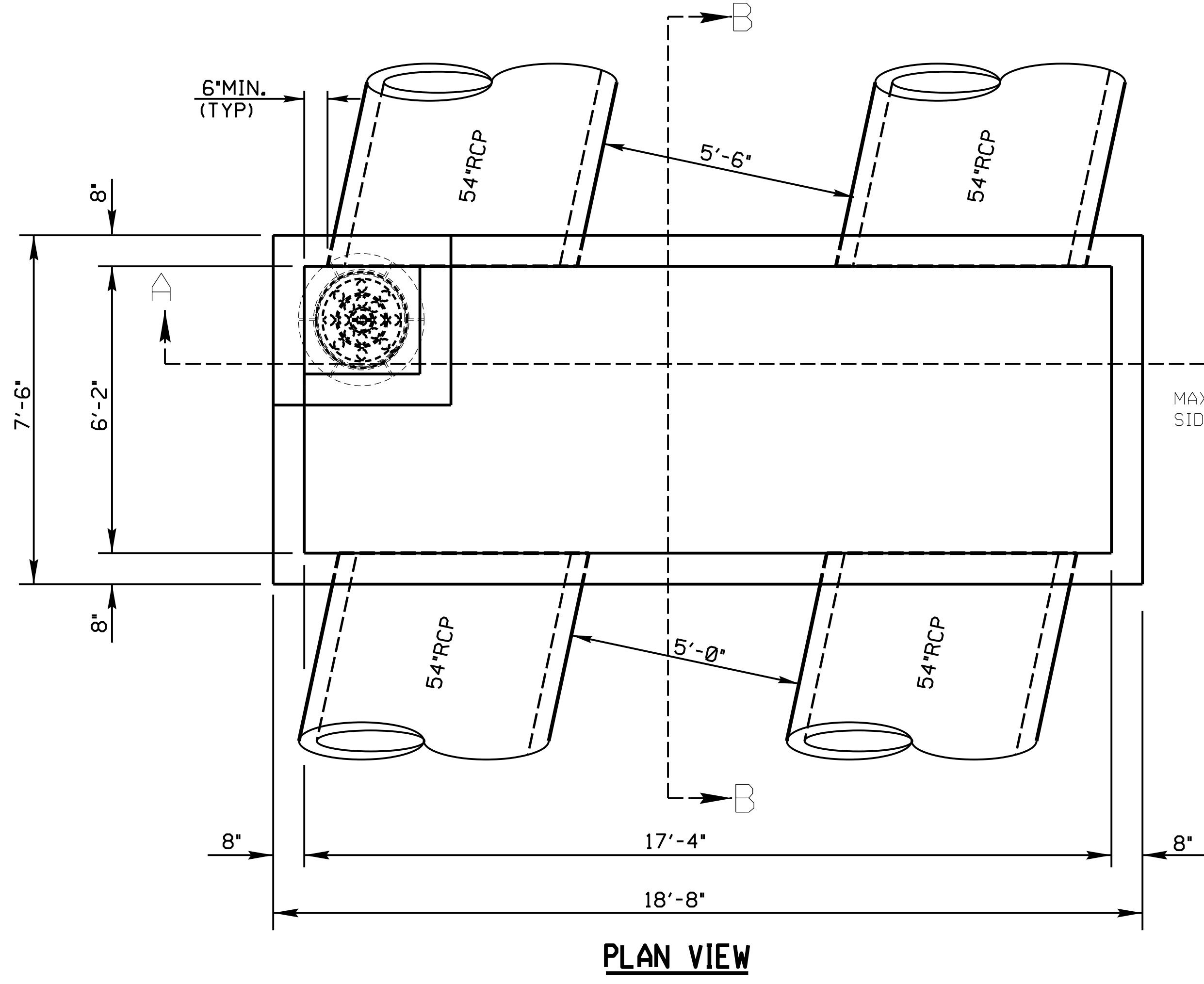


* DIMENSIONS MAY BE ADJUSTED FOR THE SEPARATION BETWEEN THE 54" PIPES AS DIRECTED BY THE ENGINEER.



SEE STEP STD.NO.840.66
 V #5 VERTICAL REBAR @ 8\"/>

* THIS DESIGN MAY BE USED FOR OTHER STRUCTURES WITH SMALLER PIPE SIZES. ADJUST DIMENSIONS AS NEEDED AND AS DIRECTED BY THE ENGINEER.



GENERAL NOTES:
 USE CLASS "AA" CONCRETE THROUGHOUT.
 PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 INSTALL MANHOLE IN POSITION AS DIRECTED BY THE ENGINEER. CUT OR BEND ALL REBAR CROSSING THIS OPENING TO ALLOW 2" MINIMUM CONCRETE COVERAGE.
 CHAMFER ALL EXPOSED CORNERS 1".
 2" MINIMUM CONCRETE COVERAGE ON ALL REBAR.

BILL OF MATERIALS				
BAR	NO.	SIZE	LENGTH	WEIGHT
H	84	#5	18'-4"	1607
H1	152	#5	7'-2"	1137
V	160	#5	6'-3"	1043
Z	20	#5	4'-0"	84
TOTAL REINF. STEEL (LBS.)			3871	
TOTAL CONCRETE (CU. YDS.)			16.6	



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS & DEVELOPMENT UNIT
 STANDARDS AND SPECIAL DESIGN
 Office 919-707-6950 FAX 919-250-4119

SPECIAL TEMPORARY
TBJB

ORIGINAL BY: nbritt DATE: 07/22/05
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 CHECKED BY: DATE:
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* NO DEDUCTIONS MADE FOR PIPES
 * 0.30 CU. YD. PER FOOT OF RISER HEIGHT
 * 0.46 CU. YD. DEDUCTION FOR 1@ 54" STEEL PIPE
 * 1.64 CU. YD. DEDUCTION FOR 3@ 54" RC PIPE ON 12" SKEW

5/14/99
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