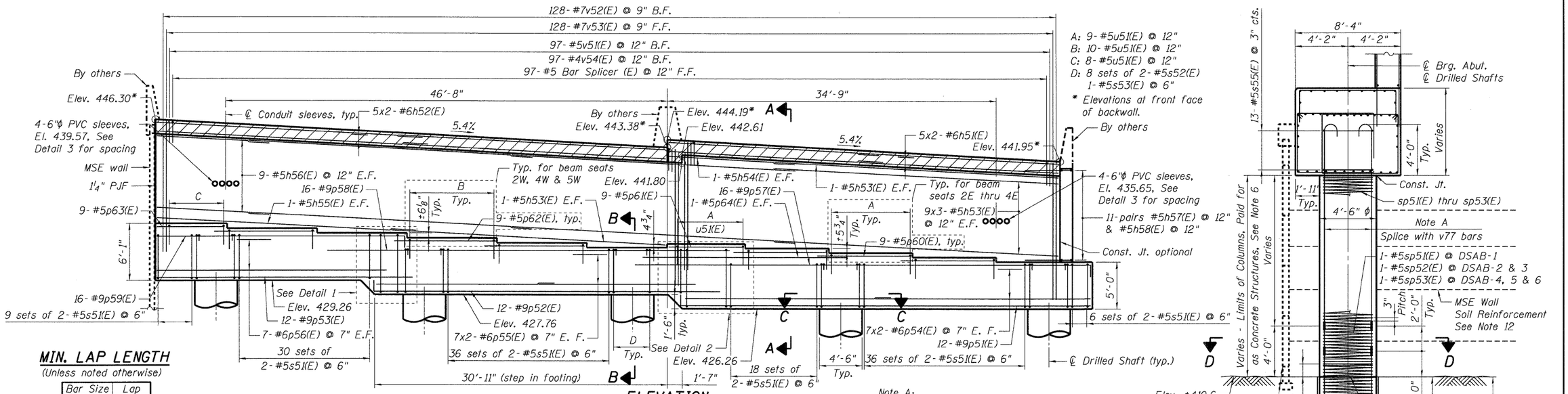


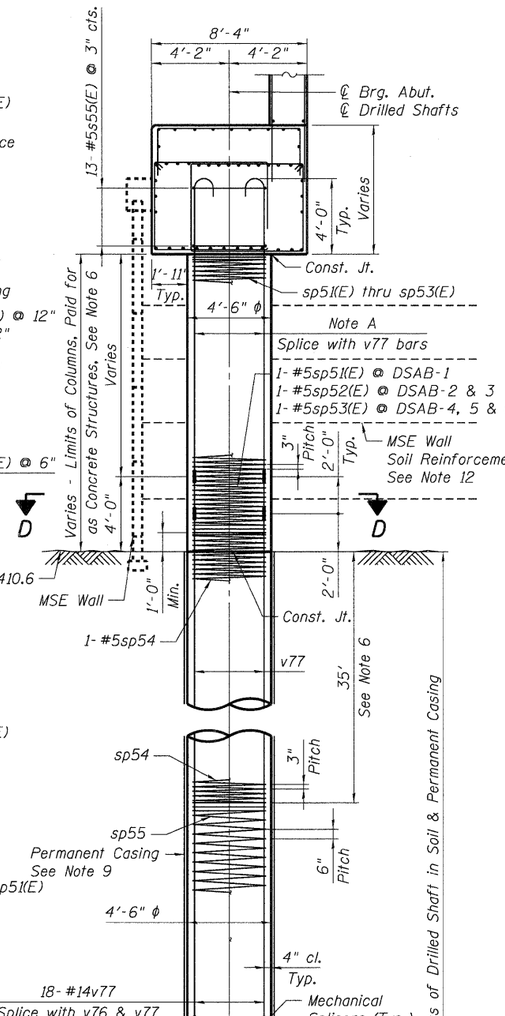
MIN. LAP LENGTH

(Unless noted otherwise)

Bar Size	Lap
#4	2'-11"
#5	3'-8"
#6	4'-5"

ELEVATION

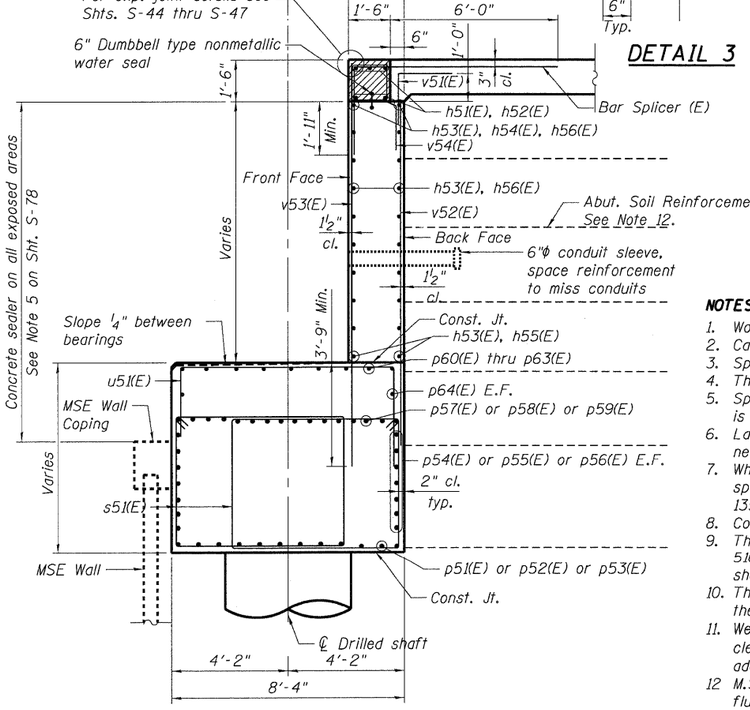
(Looking East)



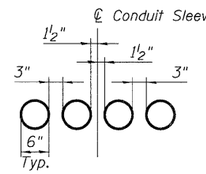
Note A:
9-#14v70(E) & 9-#14v71(E) (Alternating): DSAB-1
9-#14v72(E) & 9-#14v73(E) (Alternating): DSAB-2 & 3
9-#14v74(E) & 9-#14v75(E) (Alternating): DSAB-4, 5 & 6

X: Limits of Drilled Shaft in Rock

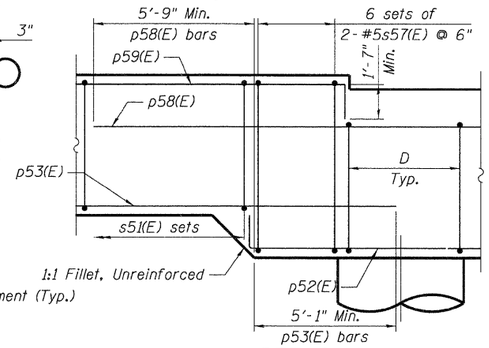
COLUMN/DRILLED SHAFT END VIEW



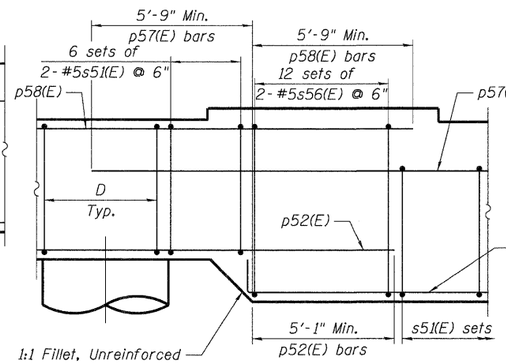
SECTION A-A



DETAIL 3



DETAIL 1



DETAIL 2

NOTES:

1. Work this sheet with Shts. S-75, S-77 & S-78.
2. Cast steps monolithically with cap.
3. Space top reinforcement in cap to miss anchor bolts.
4. The hooks of v70(E) thru v75(E) bars embedded in abutment cap shall be oriented inward.
5. Splice locations of v or v(E) bars in column/drilled shaft shall be staggered by 2'-0" min. Lap splicing of these bars is not allowed, full-mechanical bar splicers or full-welding of bars is required.
6. Lapping of spiral reinforcement is not allowed within columns and within 35' of T/drilled shafts. Where splicing is necessary, fully-welded or full-mechanical splices are allowed.
7. When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1½ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook. Provide min. 4-#4 spacers or equivalent.
8. Continue sp51(E) thru sp53(E) to the bottom of abutment cap stirrup bars.
9. The Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing shall be based on the minimum length shown.
10. The drilled shaft foundation design is based on end bearing in bedrock. The limits shown for Drilled Shaft in Rock is the minimum penetration into bedrock required to achieve the factored resistance used in design (200 ksf).
11. Wet construction methods within the permanent casing may be required. The Contractor's installation procedure shall clearly address cleaning and inspection methods proposed for use with wet construction methods which will ensure adequate end bearing on rock is achieved.
12. M.S.E. Wall supplier shall design and supply abutment soil reinforcement to resist earth pressure of 40 pcf equivalent fluid weight applied to back of the abutment and backwall plus a longitudinal force of 72 kips transmitted by the bearings to the bridge seats.
13. Construct backwall and backfill prior to erecting structural steel.

FILE NAME = $FILE$
USER NAME = $USER$
PLOT SCALE = $SCALE$
PLOT DATE = $DATE$
TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS
DESIGNED - KK
DRAWN - KK
CHECKED - TCU
DATE - 06/04/10
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
I-70 CONNECTION OVER
NS, TRRA, MCT AND INDUSTRIAL DR.

EAST ABUTMENT DETAILS
1 OF 3

SCALE: | SHEET NO. S-76 OF S-111 | STA. 134+22.00 TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
998	82-2-1HVB	ST. CLAIR	285	186
SN 082-0318 (EB) & 0319 (WB)		CONTRACT NO. 76C44		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

I:\082\2318-CONN-95-001-AB.DGN, ..\082\2318-CONN-95-001-BD.DGN, ..\082\2318-CONN-95-001-AB.DGN, ..\082\2318-CONN-95-001-AB.DGN, ..\082\2318-CONN-95-002-SHT-AB.DGN
C-82-2818, 1264-685 BOROHOLD \\FS-9844-VIRTUAL\P-TRANS\P\2282\2818\PRO\CONSTRUCTION\082\2318\SHEET\082\2318-CONN-95-002-SHT-AB.DGN