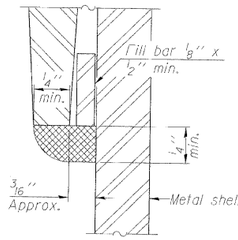
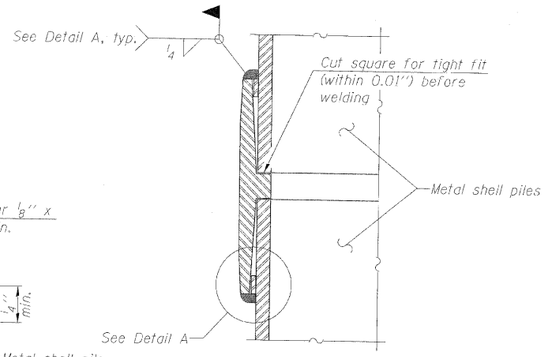
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-10K-1,60-10HB	MADISON	420	280
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 76709

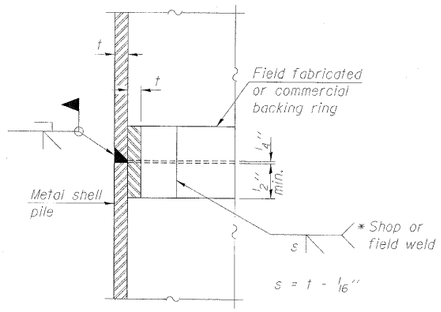


DETAIL A



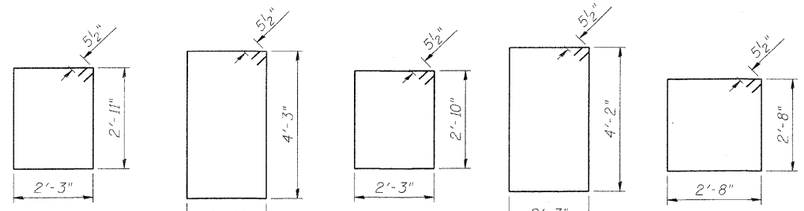
Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

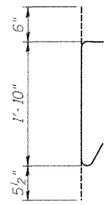
WELDED COMMERCIAL SPLICE



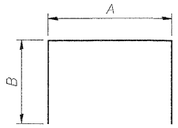
COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.





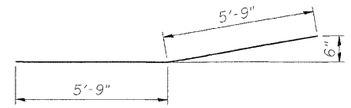
BAR s6(E)



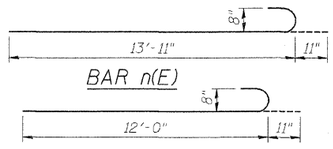
s & u BARS

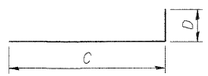
A & B DIMENSIONS

Bar	A	B
s(E)	2'-2"	4'-6"
s1(E)	2'-2"	3'-11"
s2(E)	2'-2"	3'-9"
s3(E)	1'-4"	2'-8"
s4(E)	1'-4"	3'-4"
s5(E)	1'-4"	3'-10"
s7(E)	2'-3"	2'-7"
s8(E)	2'-3"	2'-5"
s13(E)	2'-8"	2'-2"
s14(E)	2'-3"	2'-4"
u1(E)	2'-8"	2'-0"



BAR p2(E)





BARS p & v

C & D DIMENSIONS

Bar	C	D
p1(E)	44'-6"	1'-7"
p5(E)	44'-3"	1'-7"
p6(E)	16'-3"	1'-7"
p8(E)	44'-6"	1'-7"
v1(E)	7'-0"	1'-0"

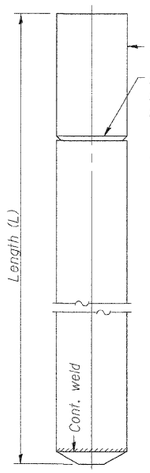
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#6	27'-3	
h1(E)	12	#5	28'-4"	
h2(E)	6	#5	23'-0"	
h3(E)	36	#6	25'-6"	
h4(E)	12	#5	26'-9"	
h5(E)	6	#5	21'-4"	
n(E)	160	#8	14'-10"	
p(E)	10	#9	39'-9"	
p1(E)	5	#9	46'-1"	
p2(E)	10	#9	11'-6"	
p3(E)	3	#5	9'-1"	
p4(E)	3	#5	20'-8"	
p5(E)	5	#9	45'-10"	
p6(E)	5	#9	17'-10"	
p7(E)	10	#9	37'-3"	
p8(E)	5	#9	46'-1"	
p9(E)	3	#5	9'-2"	
p10(E)	3	#5	20'-6"	
p11(E)	5	#9	39'-3"	
p12(E)	3	#5	11'-2"	
s(E)	143	#5	11'-2"	
s1(E)	143	#5	10'-0"	
s2(E)	10	#6	9'-8"	
s3(E)	400	#5	6'-8"	
s4(E)	120	#5	8'-0"	
s5(E)	640	#5	9'-0"	
s6(E)	580	#5	2'-9 1/2"	
s7(E)	24	#5	7'-5"	
s8(E)	6	#5	7'-1"	
s9(E)	40	#5	11'-3"	
s10(E)	56	#5	13'-11"	
s11(E)	40	#5	11'-1"	
s12(E)	46	#5	13'-9"	
s13(E)	95	#5	7'-0"	
s14(E)	6	#5	6'-11"	
t(E)	294	#8	11'-6"	
u(E)	18	#5	11'-7"	
u1(E)	6	#5	6'-8"	
v(E)	160	#8	12'-11"	
v1(E)	32	#6	8'-0"	
w(E)	72	#5	26'-7"	
w1(E)	72	#5	24'-11"	
Structure Excavation		Cu. Yd.	401	
Concrete Structures		Cu. Yd.	331	
Reinforcement Bars, Epoxy Coated		Pound	53,920	
Test Pile Metal Shell		Each	1	
Furnishing Metal Pile Shells 12" x 0.250"		Foot	4558	
Driving Piles		Foot	4558	

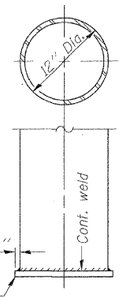
Reinforcement Bars designated (E) shall be epoxy coated

NOTE:

Work this sheet with Shts. S-59 thru S-61.

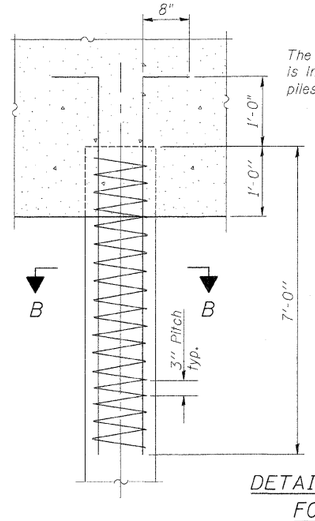


Note: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 0.25 inches with a tolerance of 5 %.

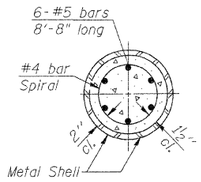


OPTIONAL FLAT END

DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



The cost of Reinforcement is included with furnishing piles.



SECTION B-B

DETAIL OF REINFORCEMENT FOR METAL SHELLS

Note:
The metal shell piles shall be according to ASTM A 252 Grade 3.

REVISIONS	
NAME	DATE

SHT. S-62 OF S-68

STV Incorporated
Engineers/Architects/Planners/Construction Managers
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Chicago, IL. 60606-5015
312/553-0655, FAX 312/553-0661

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 162 OVER I-55/70 IN TROY
F.A.I ROUTE 70 SECTION 60-10K-1, 60-10HB
MADISON COUNTY STATION 499+48.35
STRUCTURE NO. 060-0338

PIER & PILE DETAILS

DESIGNED: BTO DRAWN: BTO
DATE: 03/06 CHECKED: AWH CHECKED: AWH