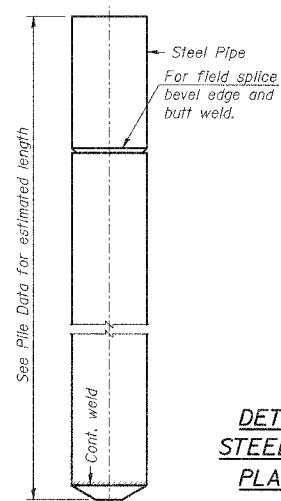


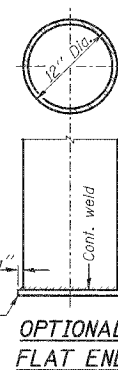
Handling: For Pile lengths up to 45' use two slings placed at a distance of 0.21L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12L from each end and at mid point of pile.

DETAIL OF PRECAST CONCRETE PILES

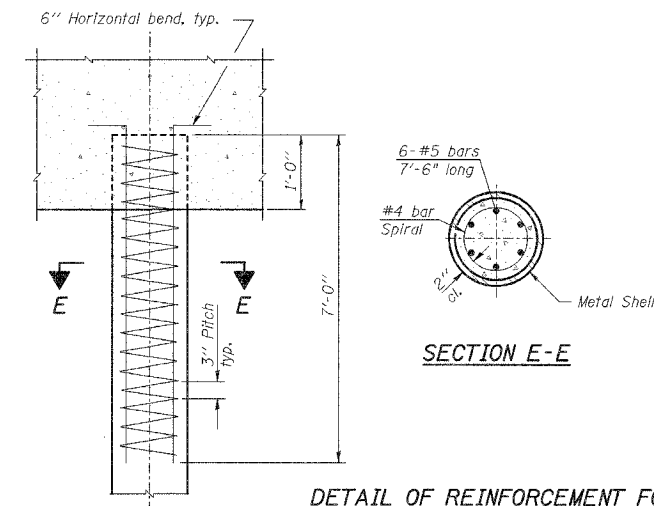
Notes:
Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 0.1793 inches with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specifications.



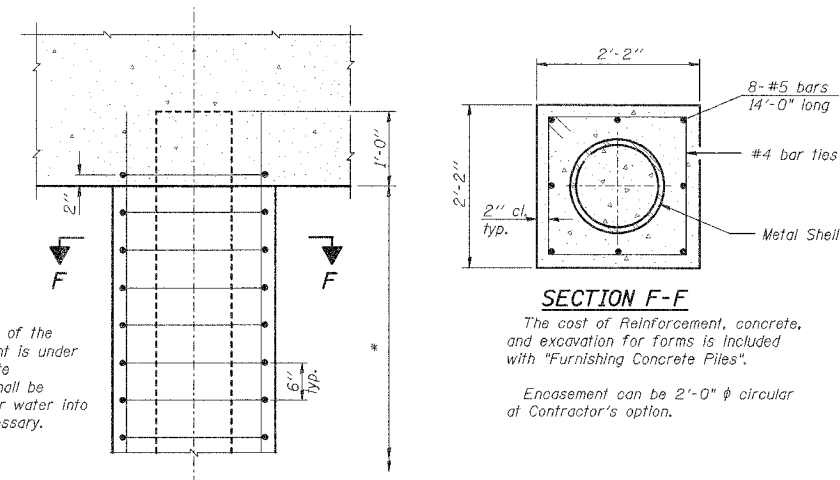
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



* If a portion of the pile encasement is under water, Concrete Encasement shall be tremmied under water into forms as necessary.



DETAIL OF REINFORCEMENT FOR METAL SHELLS AT ABUTMENTS



DETAIL OF PROTECTION FOR METAL SHELLS AT PIERS

BILL OF MATERIAL

Item	Unit	Quantity
Test Pile Concrete	Each	2
Furnishing & Driving Concrete Piles	Foot	1340

Note: Pile Lengths are based on 12" ϕ Metal Shells.

PILE DATA (ABUTMENT)

No. Req'd:	9+1 Test Pile
Est. Length:	32' 14" Square 45' 12" ϕ Metal Shell
Nominal Required Bearing:	270 Kips
Allowable Resistance Available:	90 Kips

PILE DATA (PIERS)

No. Req'd:	17+1 Test Pile
Est. Length:	40' 14" Square 55' 12" ϕ Metal Shell
Nominal Required Bearing:	270 Kips
Allowable Resistance Available:	90 Kips

SECTION 02-00208-01-BR
LIVINGSTON COUNTY
F.A.S. 342/C.H. 3

CONCRETE PILE DETAILS

DRAWN BY DMM	<p>2708 McGraw Drive Bloomington, Illinois 61704 309/899-9635 309/899-0771 fax</p>	FILE NO. 24-7131
DATE 12/01/06		BOOK NO. 2605
CREATED BY MSW		SHEET NO. 12 OF 24