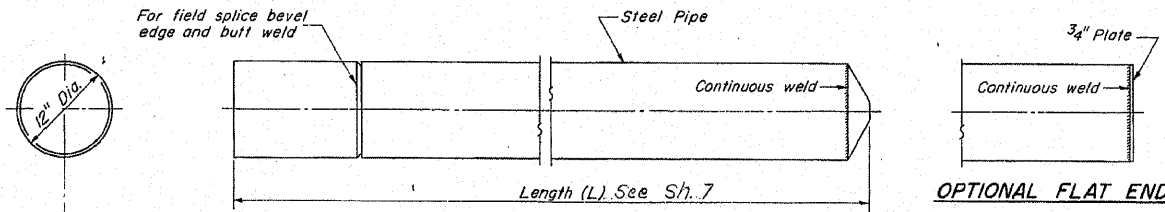


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

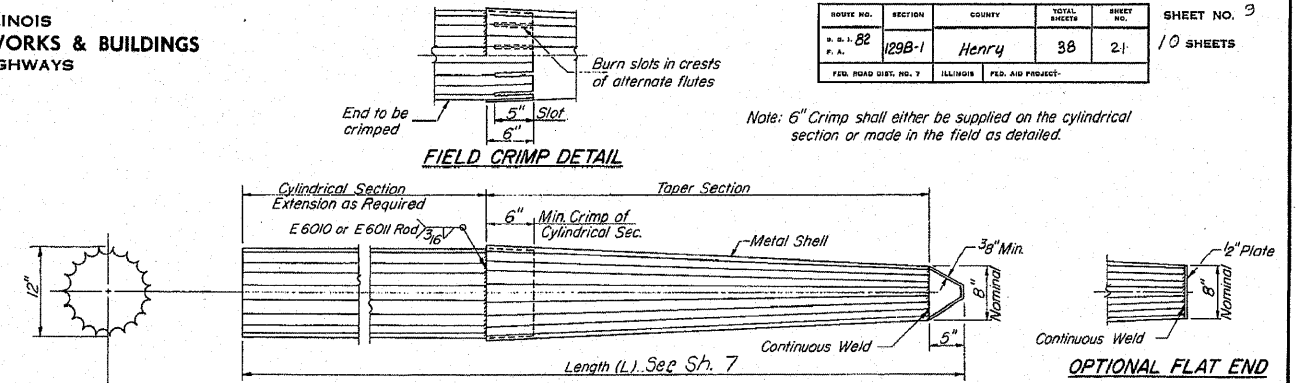
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 10 SHEETS
S. B. I. 82	129B-1	Henry	38	21	
F. A. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



The thickness of the shell shall be .1793 inches with a tolerance of 5%.

Note: Driving and bearing ends of pipe shall be cut square.

DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



Note: 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.

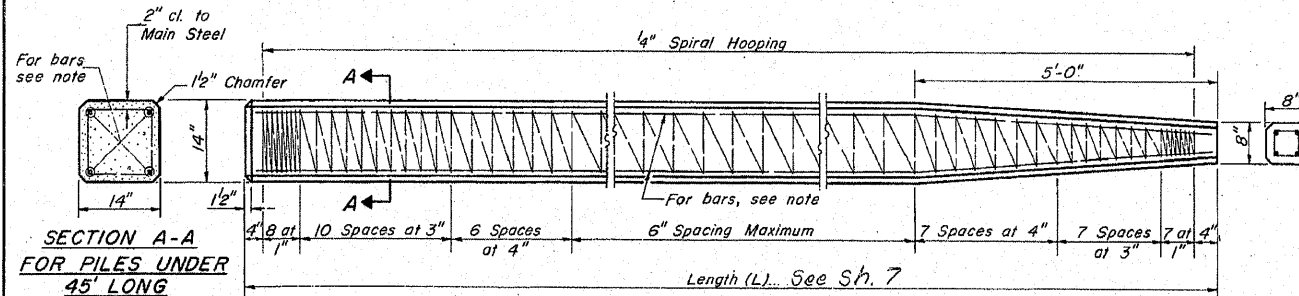
ALLOWABLE TAPER SECTIONS

- 10' Length - Taper 1" in 2'-6"
- 17' Length - Taper 1" in 4'-0"
- 25' Length - Taper 1" in 7'-0"
- 30' Length - Taper 1" in 7'-0"

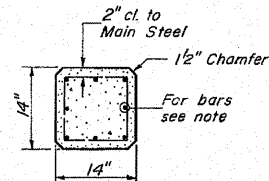
SHOWN FOR INFORMATION ONLY

The thickness of the shell shall be .1793 inches with a tolerance of 5%.

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



SECTION A-A FOR PILES UNDER 45' LONG



SECTION A-A FOR PILES 45' OR MORE

Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars full length.

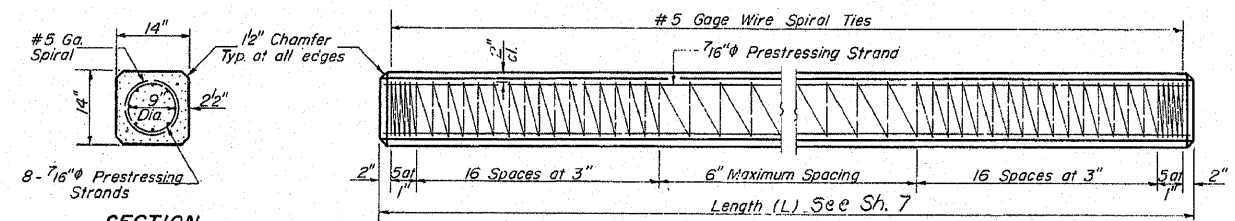
Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12L from each end and at mid-point of pile.

DESIGNED	<i>[Signature]</i>
CHECKED	R. F. ROBLEY
DRAWN	F. M. [Signature]
CHECKED	R. F. R.

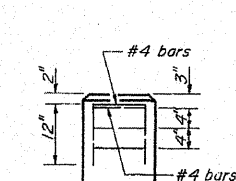
EXAMINED	<i>[Signature]</i> MAY 17 1971
PASSED	<i>[Signature]</i>
APPROVED	<i>[Signature]</i>

X-2 2-14-69

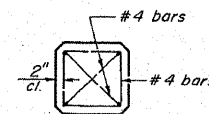
DETAIL OF PRECAST CONCRETE PILES



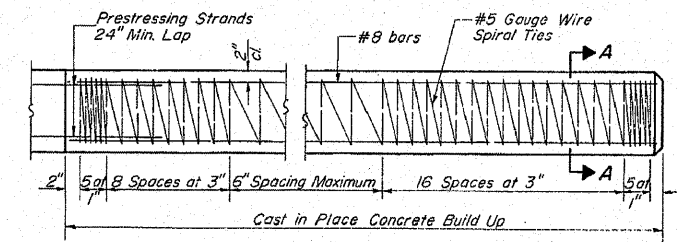
SECTION THRU PILE



ELEVATION (End Reinforcement)



PLAN (End Reinforcement)



PILE BUILD UP

DESIGN STRESSES
 $f_c' = 5,000$ psi.
 $f_t' = 4,000$ psi.
 $f_s' = 268,000$ psi. (31,000 lbs.)
 $f_s' = 188,000$ psi. (21,700 lbs.)

Note: Prestressing steel shall be non-galvanized extra high strength stress-relieved 7 wire strand. The nominal diameter shall be 7/16" and the minimum nominal cross-sectional area shall be 0.1155 square inch.
 Handling: For pile lengths up to 65', use two slings placed at a distance of 0.21L from each end. For piles longer than 65', use three slings placed at a distance of 0.12L from each end at midpoint of pile.

PILE DETAILS

S. B. I. R182 SEC. 129 B-1
HENRY COUNTY
STA. 12.85 + 20.76

DETAIL OF PRECAST PRESTRESSED CONCRETE PILES

FILE NAME =	USER NAME = #USER#	DESIGNED - JDS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 82 OVER HENNEPIN CANAL EXISTING STRUCTURE PLANS	F.A.P. RTE. 638	SECTION 129BR-3	COUNTY HENRY	TOTAL SHEETS 73	SHEET NO. 51
\$FILEL\$		DRAWN - WLL	REVISED -							
		CHECKED - RJA	REVISED -							
		DATE -	REVISED -							
					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT