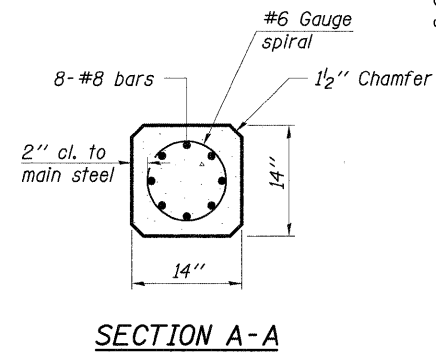
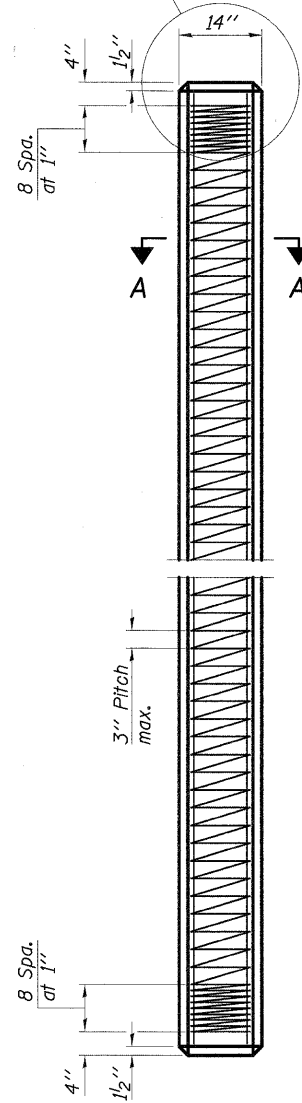
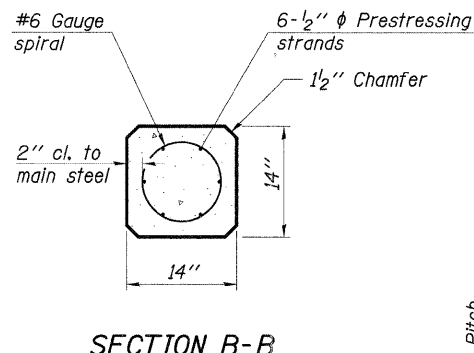
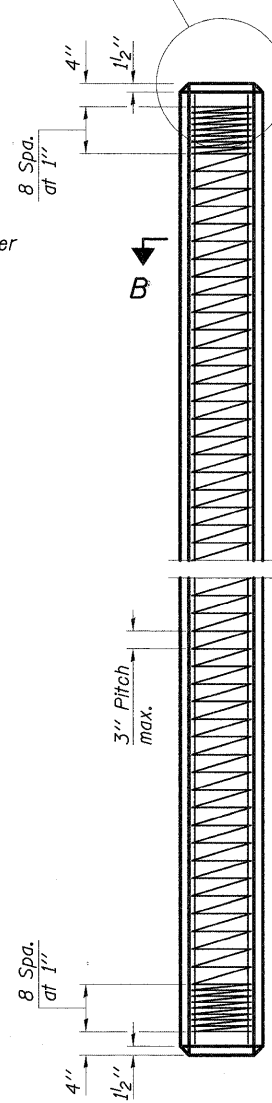


See End Plan and End Elevation for end reinforcement, typ.

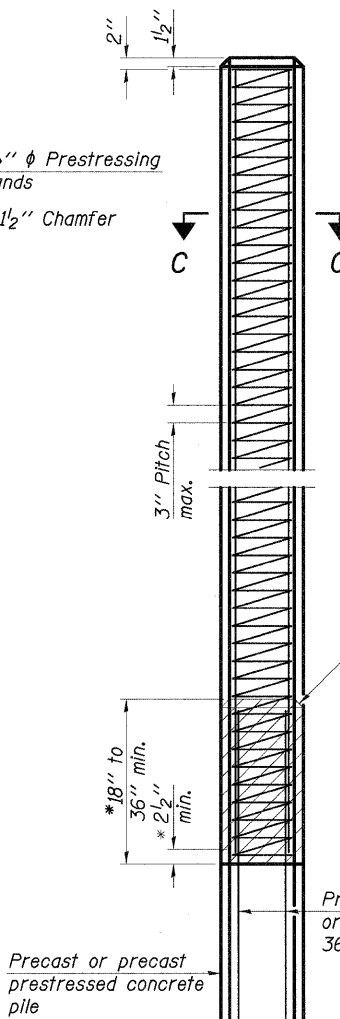


PRECAST CONCRETE PILE

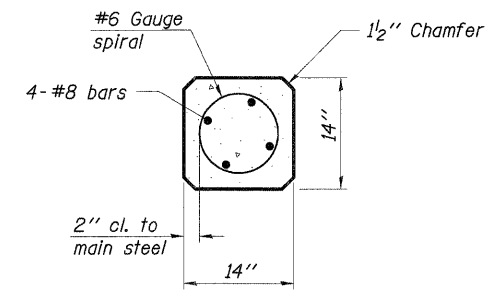
See End Plan and End Elevation for end reinforcement, typ.



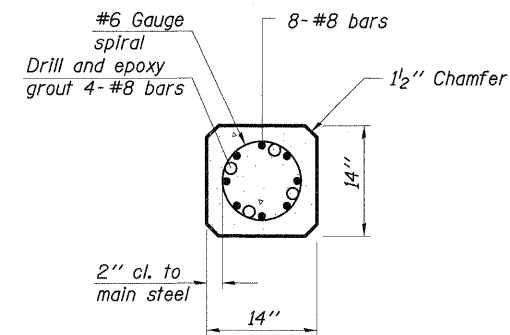
PRECAST PRESTRESSED CONCRETE PILE



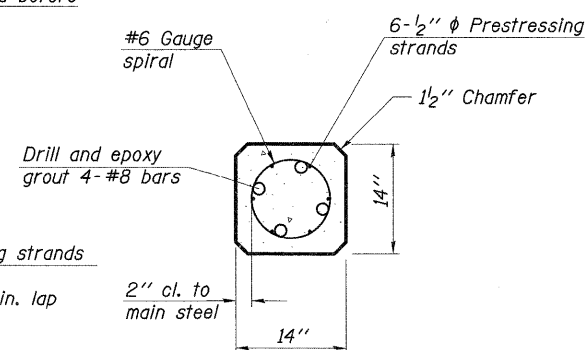
STANDARD PILE EXTENSION



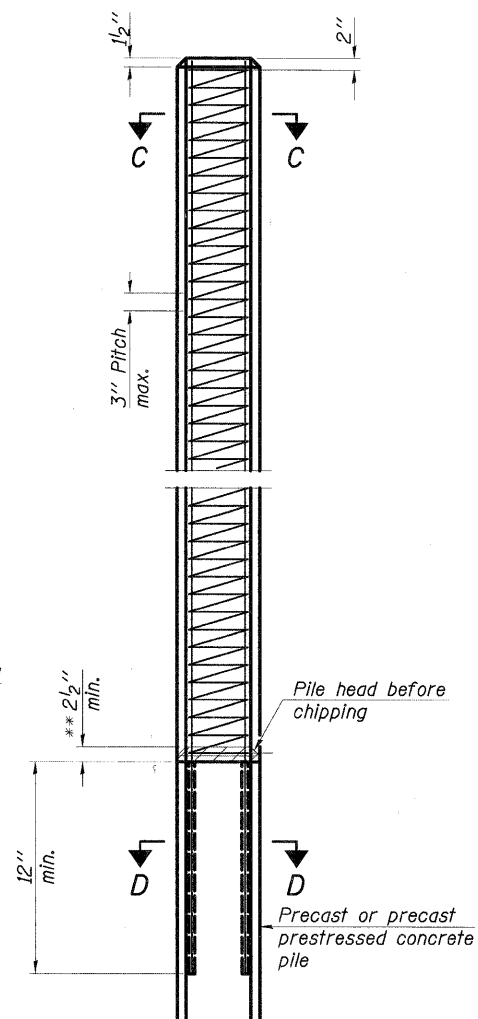
SECTION C-C



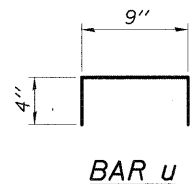
SECTION D-D
(Precast)



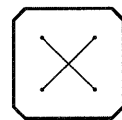
SECTION D-D
(Precast prestressed)



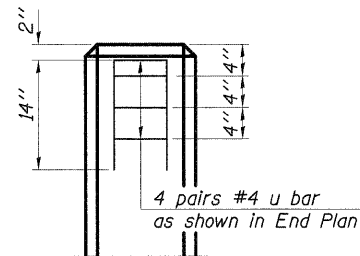
ALTERNATE PILE EXTENSION



BAR U



END PLAN
(End reinforcement only)



END ELEVATION
(End reinforcement only)

NOTES

Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand. The nominal diameter shall be 1/2" with a cross-sectional area of 0.153 in².
 For Pile lengths up to 65', use two slings placed at a distance of 0.21 L* from each end. For Piles longer than 65', use three slings placed at a distance of 0.12 L* from each end and at midpoint of pile. *L= Overall length of pile to be handled.
 For handling pile lengths up to 45', use two slings placed at a distance of 0.21 L from each end. For handling piles longer than 45', use three slings placed at a distance of 0.12 L from each end and at midpoint of pile.

- * To construct pile extension, chip top of pile back 36 bar ϕ min. to expose vertical bars and lap vertical buildup bars. Remove spiral to 2 1/2" min. above chipping and provide full strength lap weld exterior face (4" min. length).
- ** To construct pile extension, chip top of pile back 2 1/2" to expose wire spiral and provide full strength lap weld exterior face (4" min. length).

DESIGN STRESSES

f'_c = 5,000 p.s.i. (prestressed)
 f'_c = 4,500 p.s.i. (precast)
 f'_{ci} = 4,000 p.s.i.
 f'_s = 270,000 p.s.i. (41,300 lbs. - 1/2" ϕ)
 f_{si} = 189,000 p.s.i. (28,900 lbs. - 1/2" ϕ)

F-PC 7-1-10

FILE NAME =	DESIGNED -	REVISED
USER NAME =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST PILE DETAILS
STRUCTURE NO.

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00092-00-BR	KANE	440	80
CONTRACT NO. 63650				
ILLINOIS FED. AID PROJECT				