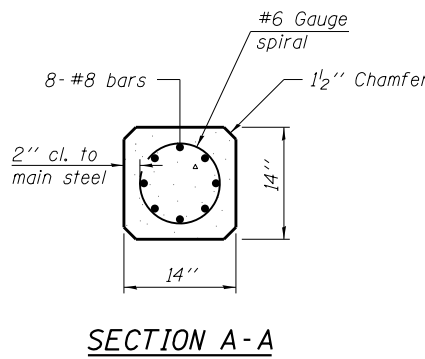
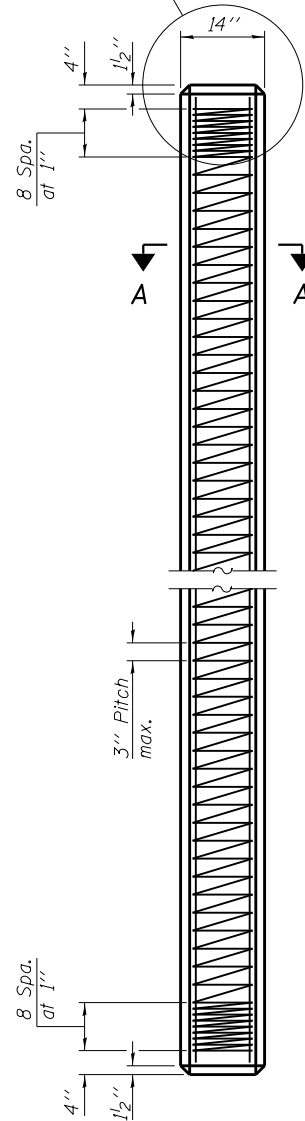
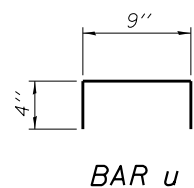


See End Plan and End Elevation for end reinforcement, typ.

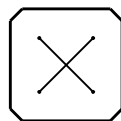


SECTION A-A

PRECAST CONCRETE PILE



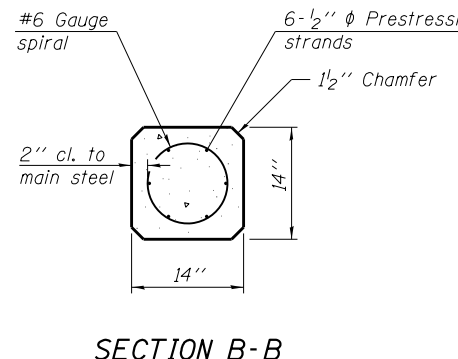
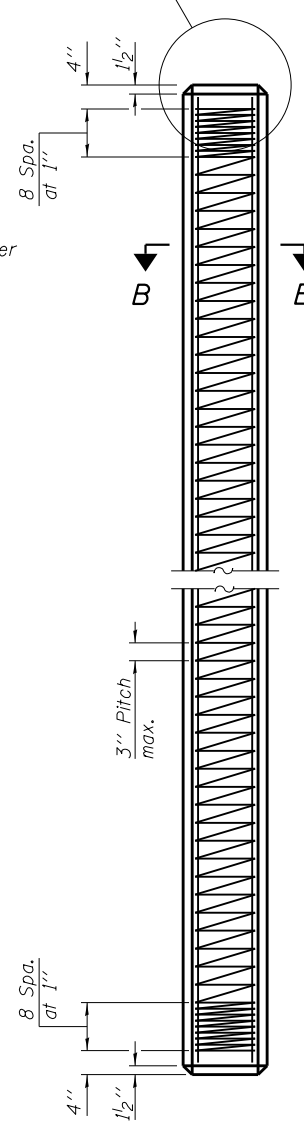
BAR U



END PLAN

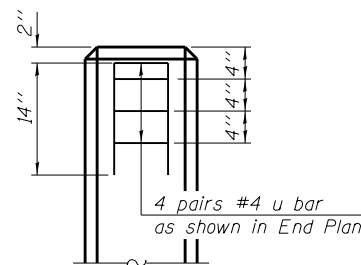
(End reinforcement only)

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



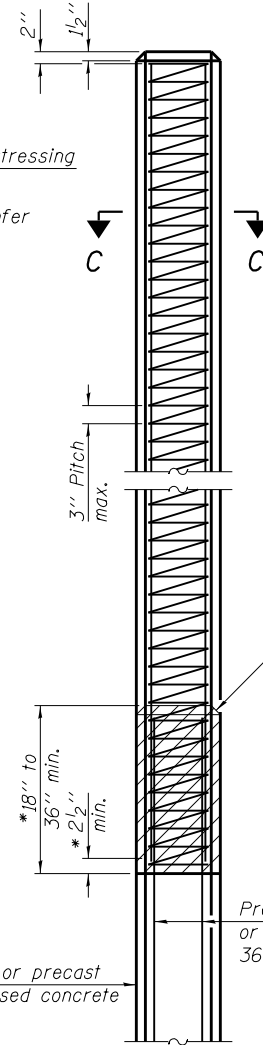
SECTION B-B

PRECAST PRESTRESSED CONCRETE PILE



END ELEVATION

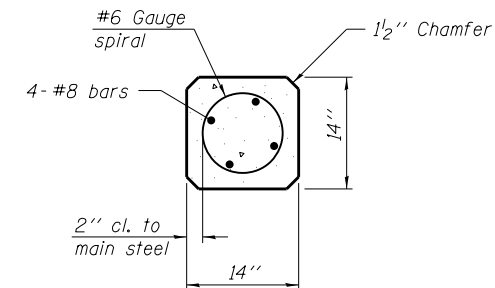
(End reinforcement only)



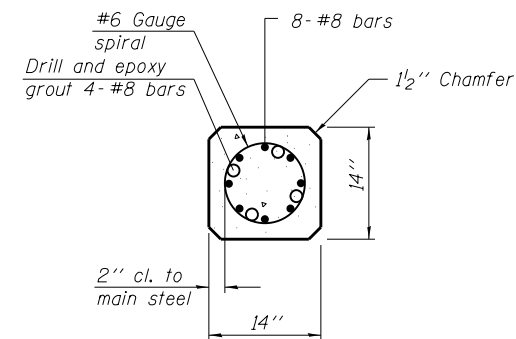
STANDARD PILE EXTENSION

NOTES

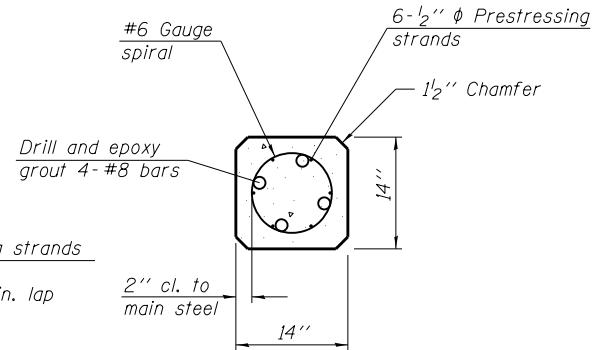
Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand. The nominal diameter shall be 1/2" with a cross-sectional area of 0.153 in².
 For Pile lengths up to 65', use two slings placed at a distance of 0.21 L* from each end. For Piles longer than 65', use three slings placed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



SECTION C-C



SECTION D-D (Precast)

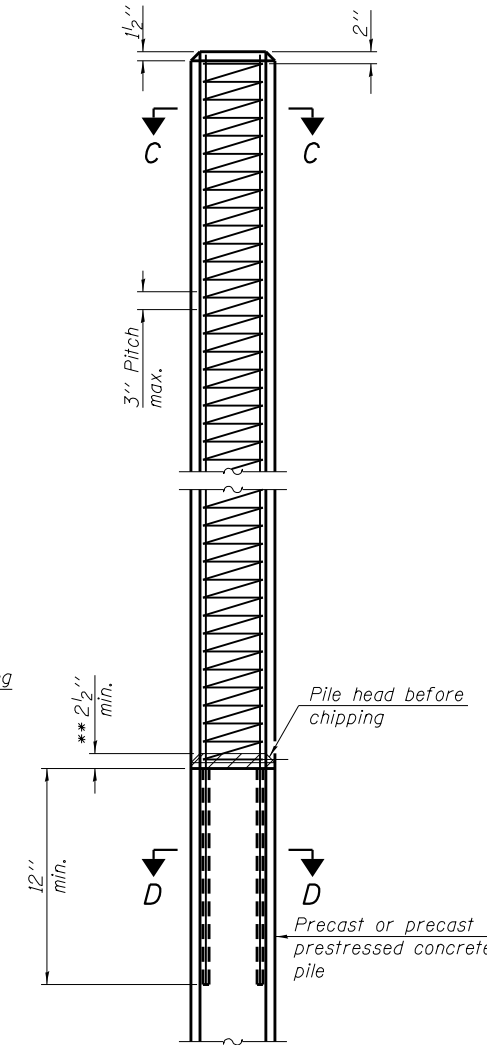


SECTION D-D (Precast prestressed)

* 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).

ALTERNATE PILE EXTENSION



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)

FILE NAME = 0060184_0185_66998-36-PrecastPileDetail.dgn
 MODEL = Defaul
 PLOT DRIVER = V8...PDF...1x17.plt

F-PC 7-1-10



USER NAME = tfray	DESIGNED - SCD	REVISED
FILE NAME =	CHECKED - DRB	REVISED
PLOT SCALE = 240.0000 ' / ft.	DRAWN - TKW	REVISED
PLOT DATE = 7/29/2013	CHECKED - SCD	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PRECAST PILE DETAILS
 STRUCTURE NO. 006-0184 (E.B.) & 006-0185 (W.B.)

SHEET NO. 36 OF 43 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(06-2)BR-3,4	BUREAU	133	80
CONTRACT NO. 66998				

ILLINOIS FED. AID PROJECT