

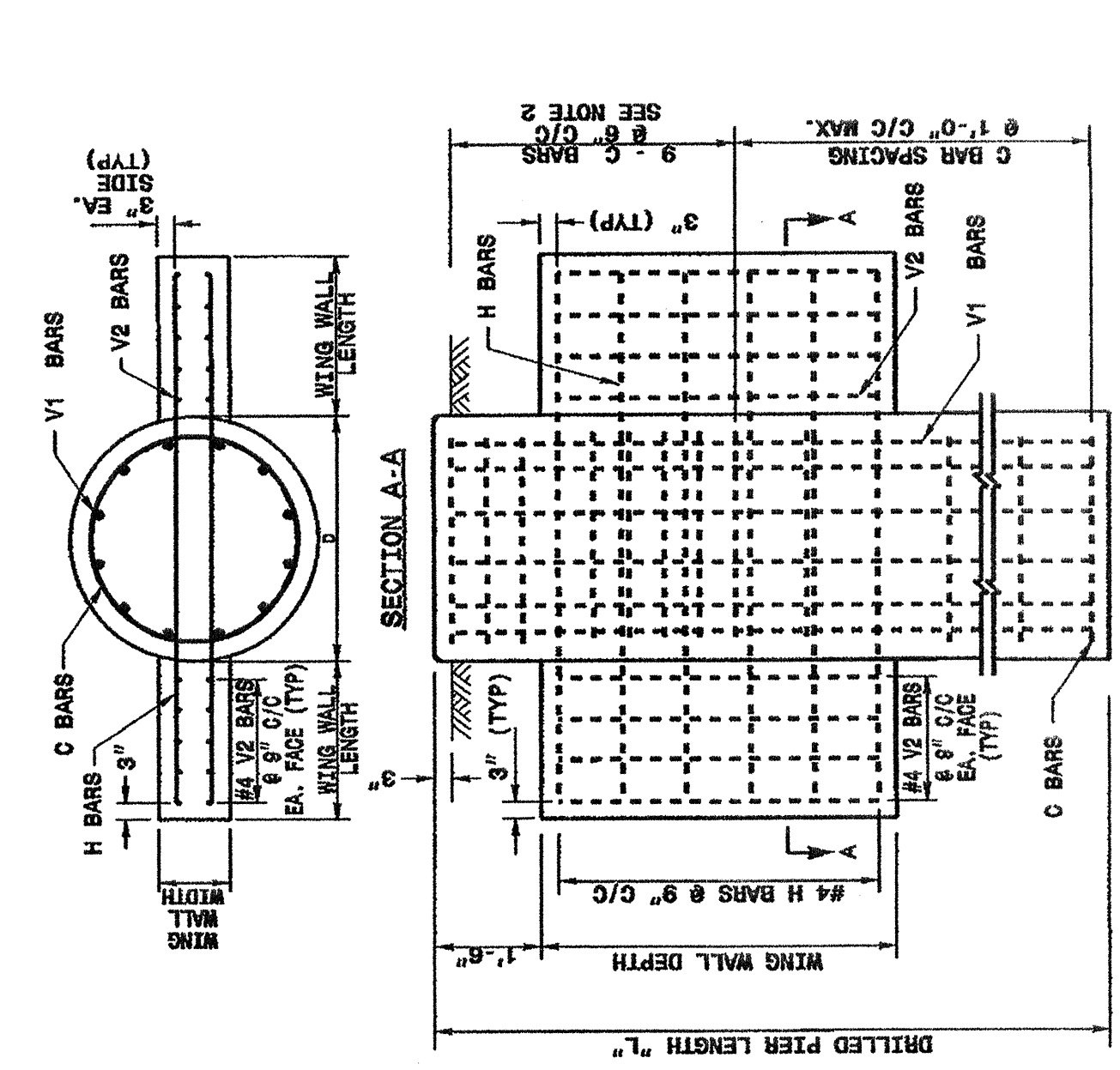
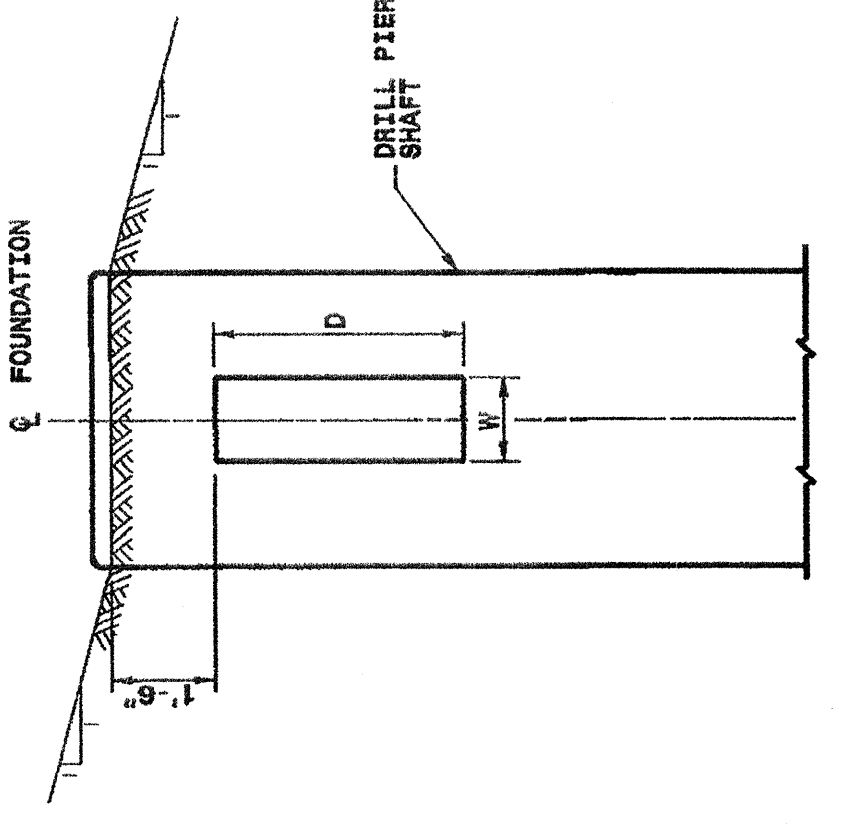
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR METAL POLE FOUNDATIONS REINFORCING CAGE DETAILS

SHEET 1 OF 2 1742.01

**NOTES**

1. THE NUMBER OF C-BARS IS BASED ON FOUNDATION DEPTH. SEE FOUNDATION SELECTION TABLES.
2. CIRCULAR TIE REINFORCING RINGS MAY BE VERTICALLY ADJUSTED BY +/- 3" AT A DEPTH BETWEEN 2'-0" AND 3'-0" TO FACILITATE THE INSTALLATION OF ELECTRICAL CONDUIT ENTERING IN THE CAGE.
3. THE LENGTH OF V1-BARS IS BASED ON FOUNDATION DEPTH. SEE FOUNDATION SELECTION TABLES.
4. THE QUANTITIES FOR STEEL AND CONCRETE SHOWN ON THIS DRAWING ARE DETAILS CHART SELECT THE AMOUNT OF MATERIAL FOR PAIR OF WING WALLS (2 WING WALLS PER DRILL PIER SHAFT.).
5. CONCRETE DRILL PIER SHAFT VOLUME (CU. YDS.):  
FOR 42" DIA. = .356XL  
FOR 48" DIA. = .465XL
6. DEFORM REINFORCING STEEL TO CONFORM TO ASTM A615 GRADE 60. TIES MAY BE DEFORMED OR PLAIN.
7. CAST CONCRETE AGAINST UNDISTURBED SOIL.
8. DO NOT ERECT TRAFFIC SIGNAL STRUCTURES BEFORE THE CONCRETE IN THE FOUNDATION HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
9. MAKE PROVISIONS FOR DRAINAGE OF WATER FROM INSIDE OF THE METAL SUPPORT.
10. FOR OTHER DETAILS REGARDING CONSTRUCTION OF CONCRETE FOUNDATION SEE PROJECT SPECIAL PROVISIONS.
11. IN CASE OF ANY CROSS SLOPES, GRADE AROUND THE FOUNDATION AS FOLLOWS:



REINFORCING STEEL TABLE FOR STANDARD 42" and 48" DRILL PIER SHAFT WITH TYPE 1 AND TYPE 2 WING WALLS

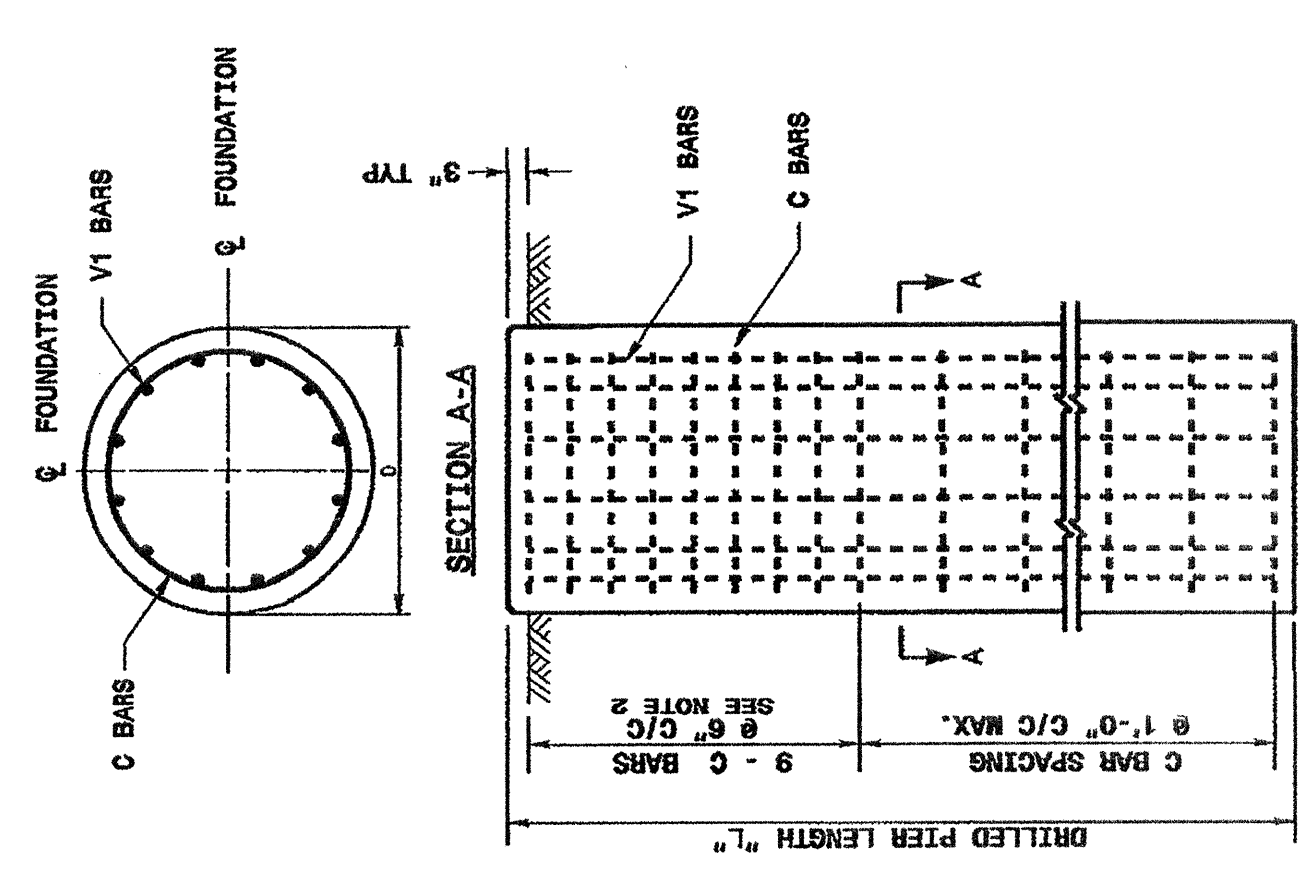
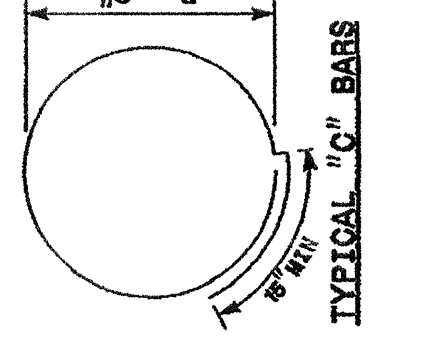
Wing Wall Type	Drill Pier Shaft Dia. (in.)	Bar No.	Size	Type	Length (ft.)
TYPE 1	42"	V1	#8	STR.	3xL
		V2	#8	STR.	6'-0"
		H	#4	STR.	6'-0"
		C	#4	STR.	10'-0"
TYPE 2	42"	V1	#8	STR.	3xL
		V2	#8	STR.	6'-0"
		H	#4	STR.	6'-0"
		C	#4	STR.	10'-0"
TYPE 2	48"	V1	#8	STR.	3xL
		V2	#8	STR.	6'-0"
		H	#4	STR.	6'-0"
		C	#4	STR.	12'-0"

\* See Construction Note No. 1.  
\*\* See Construction Note No. 2.

REINFORCING STEEL TABLE FOR STANDARD DRILL PIER SHAFT (42" & 48" DIAMETER)

SHAFT DIA. (in.)	VOLUME OF CONC. (cu. yds.)	BAR No.	Size	Type	Length (ft.)
42"	.356 X L	V1	#8	STR.	3xL
48"	.465 X L	V1	#8	STR.	3xL
		C	#4	STR.	10'-0"
		H	#4	STR.	6'-0"
		C	#4	STR.	12'-0"

\* See Construction Note No. 1.  
\*\* See Construction Note No. 2.



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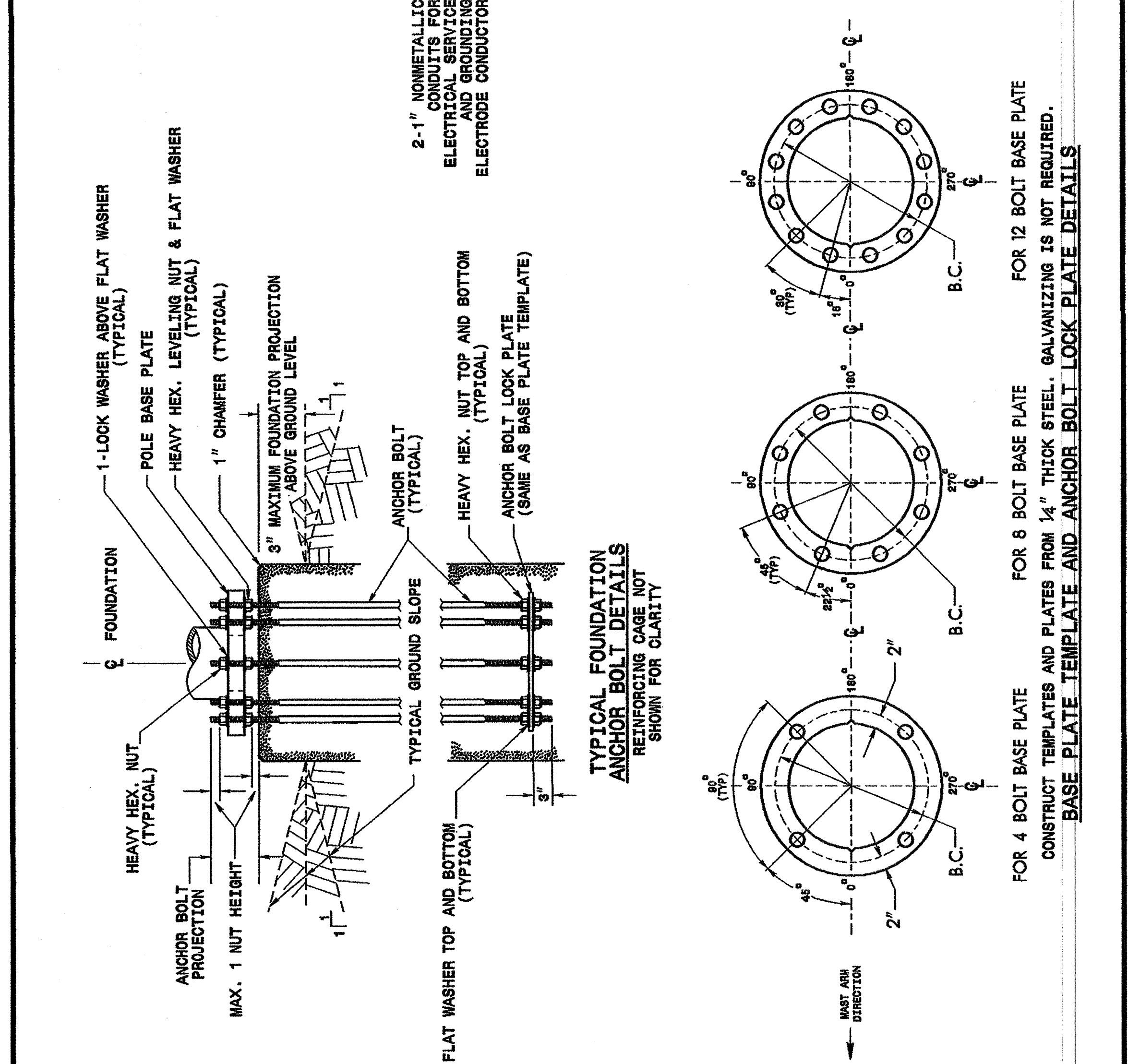
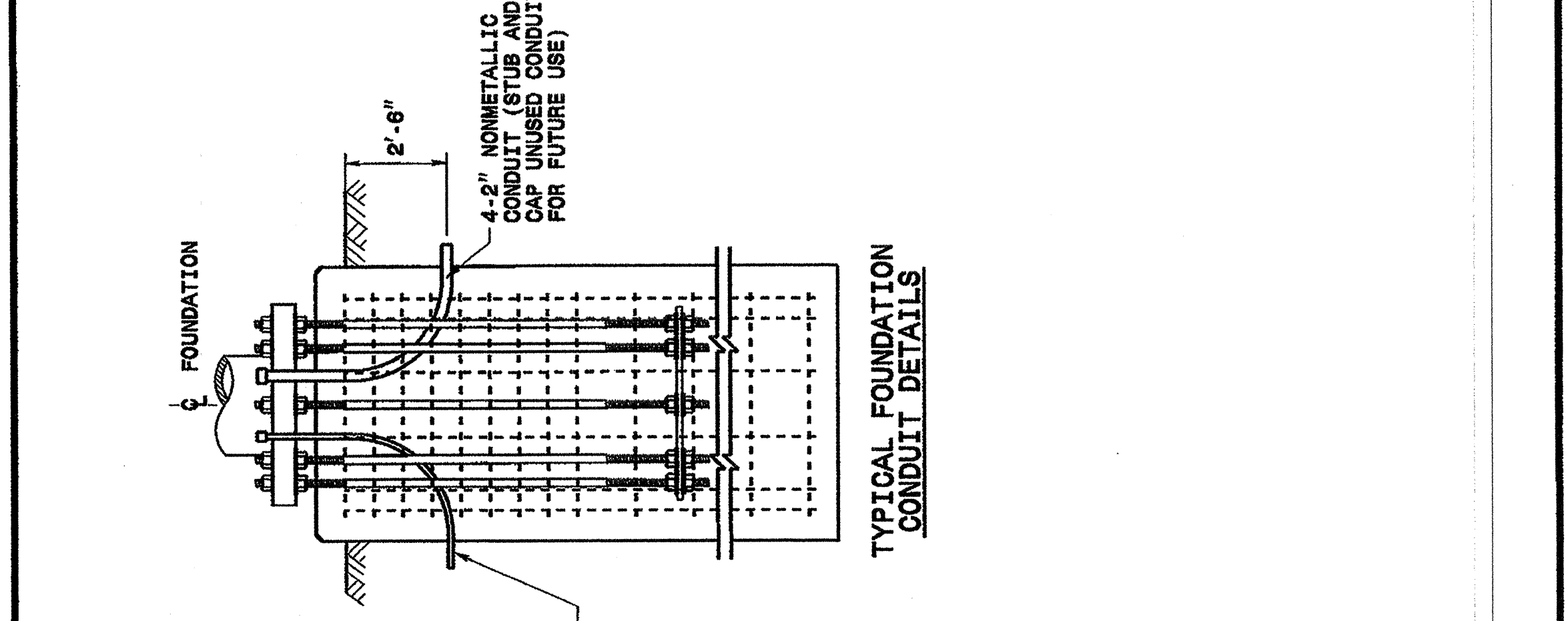
ENGLISH STANDARD DRAWING FOR METAL POLE FOUNDATIONS REINFORCING CAGE DETAILS

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STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR METAL POLE FOUNDATIONS INSTALLATION DETAILS

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STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR METAL POLE FOUNDATIONS INSTALLATION DETAILS

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20-AUG-2004 12:08 \\unit1\mrc\groups\003 METAL POLE STANDARDS\plate sheets\174201.plt on sheet.dgn

Structural Engineer: **Gregory C. Barker** (Seal 028094)  
 Electrical Engineer: **Gregory A. Fuller** (Seal 023919)  
 Standard Drawings  
 Traffic Management and Signal Systems Unit  
 122 N. McDowell St., Raleigh, NC 27603  
**See Plate for Title**  
 Original: 2002 Standards