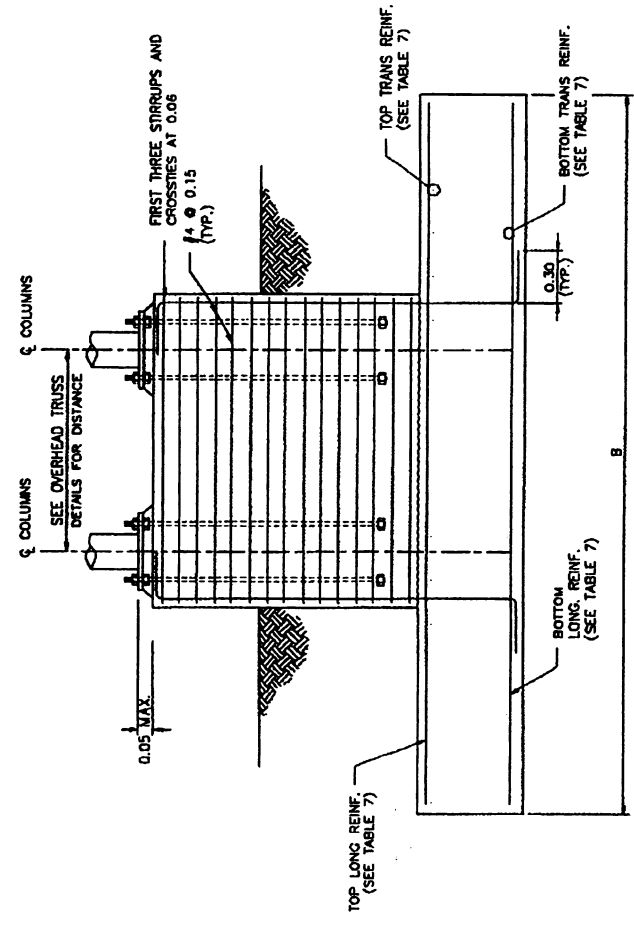


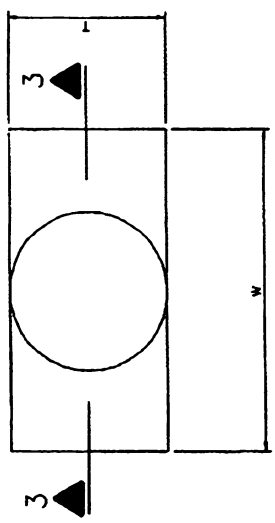
**SECTION 1-1**  
**SPREAD FOOTING PLAN**

**NOTES:**  
FOOTING TO BE PLACED WITH LONGEST SIDE PARALLEL TO ROADWAY.

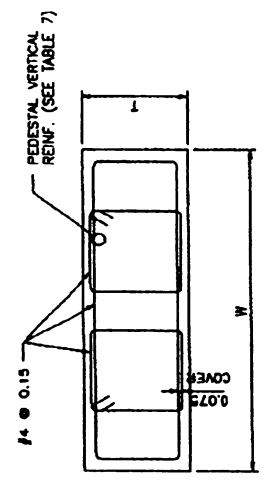


**SECTION 1-1**

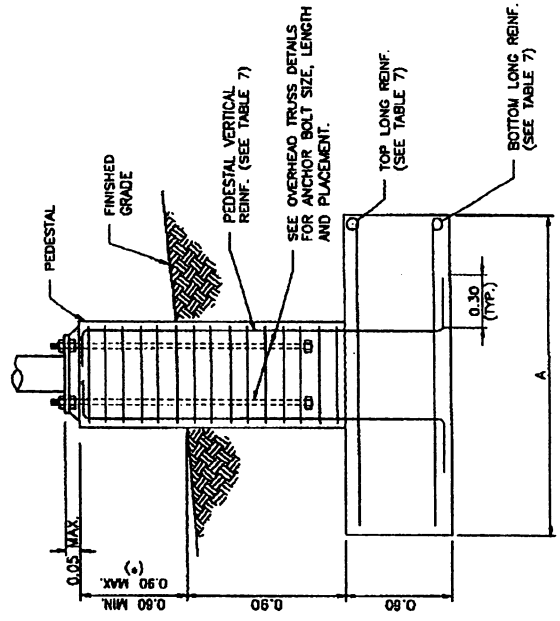
**NOTES:**  
PEDESTAL VERTICAL REINF. TABLE NOT SHOWN.



**PLAN**

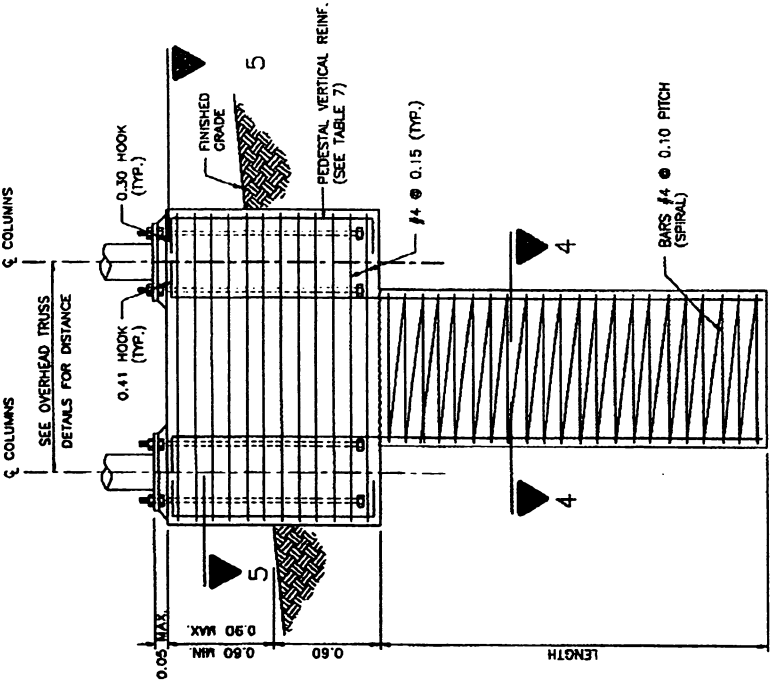


**TYPICAL PEDESTAL SECTION**

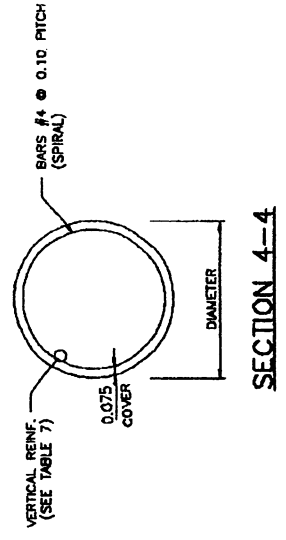


**SECTION 2-2**

(\*) SPECIAL DESIGN FOR GREATER DEPTH.

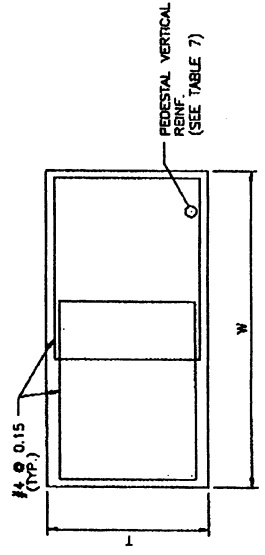


**SECTION 3-3**



**SECTION 4-4**

**DRILLED SHAFT**



**SECTION 5-5**

**TABLE 7**

TYPE	SPREAD FOOTING						DRILLED SHAFT															
	PEDESTAL VERTICAL REINF.		FOOTING DIMENSION		TOP REINF.		TRANS.		LONG.		BOTTOM REINF.		PEDESTAL VERTICAL REINF.		PEDESTAL SIZE		LENGTH		DIA.		VERTICAL REINF.	
	T	W	A	B	No.	Bar	No.	Bar	No.	Bar	No.	Bar	No.	Bar	T	W	m	m	m	m	No.	Bar
IV-A	0.60	1.80	30	#6	5.60	6	#4	20	#4	8	#8	18	#6	12	#8	0.90	5.10	0.90	1.80	34	#6	
IV-B	0.60	1.80	30	#6	5.90	7	#4	20	#4	8	#8	19	#6	12	#8	0.90	5.25	0.90	1.80	34	#6	
IV-C	0.60	1.80	30	#6	2.10	6.60	7	#5	23	#4	12	#8	21	#6	12	#8	0.90	6.15	0.90	1.80	34	#6
IV-D	0.60	1.80	30	#6	2.10	7.10	9	#5	27	#4	15	#8	25	#6	12	#8	0.90	6.55	0.90	1.80	34	#6

**GENERAL NOTES:**

**DESIGN REFERENCES:**

1. ASHTO - STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGN, LUMINAIRES AND TRAFFIC SIGNALS - SECOND DRAFT, MAY 1986, OR LATER DRAFTS, OF SAID SPECIFICATION
2. ASHTO - STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

**DESIGN LOADS:**

1. WIND - 125 M.P.H.
2. ALLOWABLE BEARING PRESSURE 2000 P.S.F.
3. INTERNAL FRICTION ANGLE  $\phi = 22^\circ$

**MATERIALS:**

1. CONCRETE: CLASS A -  $f'_c = 3,000$  psi
2. STEEL: REINFORCING STEEL, ASHTO M31 (ASTM A615) GRADE 60.

**CONCRETE COVER:**

1. FOOTING  
BOTT. 0.075  
TOP & SIDES 0.075
2. DRILLED SHAFT  
BOTT. 0.075  
TOP & SIDES 0.075
3. PEDESTAL  
TOP 0.06  
SIDES 0.075

**MISCELLANEOUS:**

1. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 0.025 WHETHER OR NOT SUCH CHAMFERERS ARE SHOWN ON THE PLAN DETAILS.
2. PRIOR TO ERECTION OF THE POST, THE BACKFILL MATERIAL SHALL BE IN PLACE.

**NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ANCHOR BOLTS, THEIR NUMBERS AND LENGTHS OF ANCHORING IN CONFORMANCE WITH THE ASHTO DOCUMENTS AND DESIGN LOADS INCORPORATED IN THE GENERAL NOTES.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND OBSTRUCTIONS TO THE CONSTRUCTION OF THE OVERHEAD FOOTING BY MEANS OF TEST PIT, GROUND PENETRATING RADAR, OR OTHER METHOD. THE CONTRACTOR SHALL AVOID THEM BY USING THE DRILLED SHAFT FOOTING OR RELOCATING THE SIGN STRUCTURE WITH THE CONSENT OF THE ENGINEER. THE EXPLORATION FOR THE UNDERGROUND OBSTRUCTIONS AND RELOCATION STRUCTURES ARE A SUBSIDIARY OBLIGATION OF THE CONTRACTOR.
3. ON CAST IN PLACE DRILLED SHAFTS, THE CONCRETE SHALL BE POURED AGAINST UNDISTURBED SOIL.
4. THE CONTRACTOR MAY ELECT TO CONSTRUCT A SPREAD FOOTING OR DRILLED SHAFT FOOTING PROVIDED THEY DO NOT CONFLICT WITH UNDERGROUND OBSTRUCTIONS, MAINTENANCE OF EXISTING CONDUITS, ROCK LAYER OR ANY OTHER SITE CONSTRAINTS. THE CONTRACTOR SHALL DESIGN AND CONSTRUCT A MODIFIED FOOTING SUITABLE TO THE SITE AS A SUBSIDIARY OBLIGATION AND SUBJECT TO THE APPROVAL OF THE AUTHORITY.
5. WHEN THE METAL OVERHEAD SIGN STRUCTURE SELECTED BY THE CONTRACTOR DOES NOT FIT THE GEOMETRY OF THE SPREAD FOOTING OR DRILLED SHAFT, IT WILL BE THE CONTRACTOR RESPONSIBILITY TO SUBMIT SHOP DRAWINGS TO THE ENGINEER MAKING THE NECESSARY ADJUSTMENTS TO THE PROPOSED FOOTING.
6. THE CONTRACTOR MAY ELECT TO PROVIDE PRECAST SPREAD FOOTINGS OR DRILLED SHAFTS IDENTICAL TO THE ONES SHOWN, IF THE PRECAST OPTION IS USED, ALL BACKFILL WILL BE MADE WITH CLEAN SAND.

EFFECTIVE DATE: JULY 2000

COMMONWEALTH OF PUERTO RICO  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS  
HIGHWAY AND TRANSPORTATION AUTHORITY

RECOMMENDED BY:  
*[Signature]*  
DEPUTY EXEC. DIR. FOR  
TRAFFIC AND TOLL ROADS  
DATE: 10-11-00

APPROVED BY:  
*[Signature]*  
EXECUTIVE DIRECTOR  
DATE: 11/15/00

OVERHEAD SIGNS  
FOUNDATION FOR  
BRIDGE WITH  
CANTILEVER TYPE  
FOUNDATION BC (TWO POSTS)

DATE	REVISION	BY
05-2000		IV.

STD. OHTS  
DWG. 15 OF 20