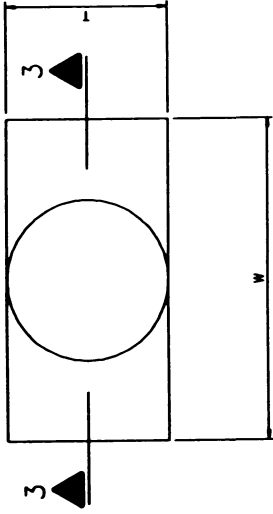
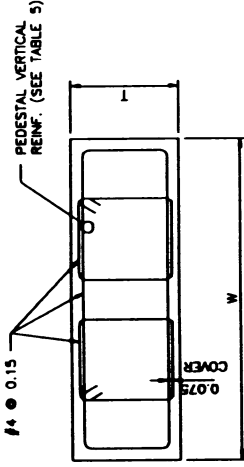


SPREAD FOOTING PLAN

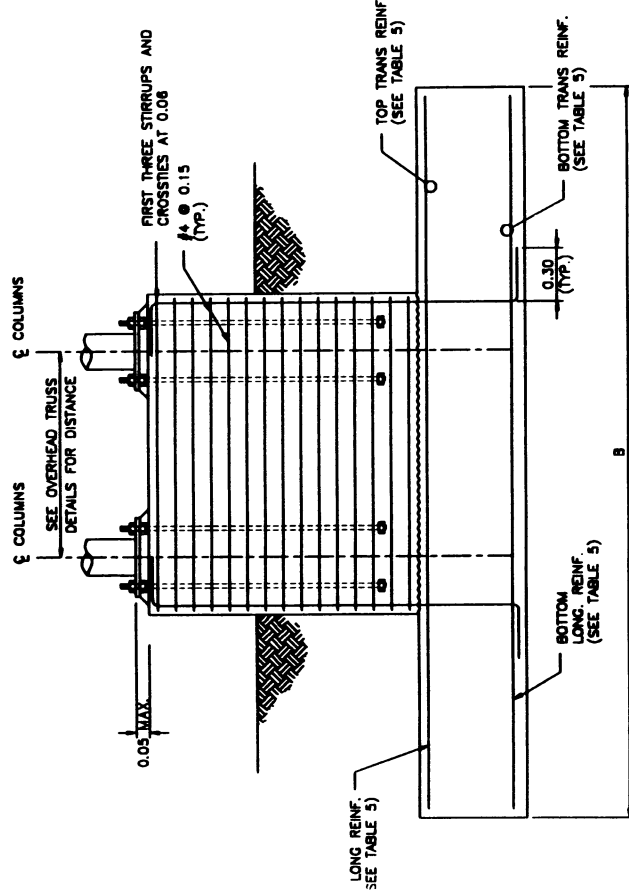
NOTES:
FOOTING TO BE PLACED WITH LONGEST SIDE PARALLEL TO ROADWAY.



PLAN



TYPICAL PEDESTAL SECTION



SECTION 1-1

NOTES:
PEDESTAL VERTICAL REINF. TABLE NOT SHOWN.

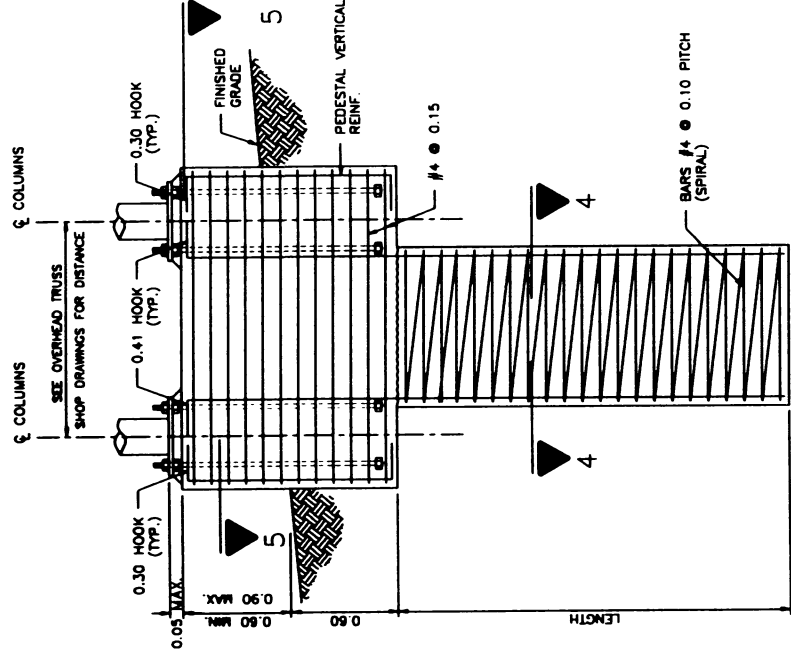
SPREAD FOOTING

(*) SPECIAL DESIGN FOR GREATER DEPTH.

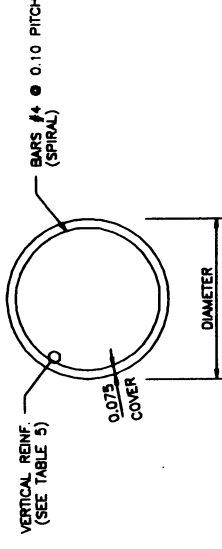
SECTION 2-2

TABLE 5

TYPE	SPREAD FOOTING						DRILL SHAFT														
	PEDESTAL SIZE		FOOTING DIMENSION		TOP REINF.		BOTTOM REINF.		VERTICAL REINF.		PEDESTAL SIZE										
	T	W	A	B	LONG	TRANS.	LONG	TRANS.	No.	Bar	LENGTH	DIA.									
III-A	0.60	1.80	3.0	#6	4.10	6	#4	14	6	#6	13	#8	12	4.00	0.90	4.00	0.90	1.80	34	#6	
III-B	0.60	1.80	3.0	#6	1.80	5.00	6	#4	17	6	#6	16	#8	12	4.75	0.90	4.75	0.90	1.80	34	#6
III-C	0.60	1.80	3.0	#6	2.10	5.50	7	#4	19	7	#8	18	#8	12	5.30	0.90	5.30	0.90	1.80	34	#6
III-D	0.60	1.80	3.0	#6	2.10	6.00	9	#4	21	10	#8	20	#8	12	5.75	0.90	5.75	0.90	1.80	34	#6
III-E	0.60	1.80	3.0	#6	2.10	6.60	12	#4	23	13	#8	22	#8	12	6.25	0.90	6.25	0.90	1.80	34	#6

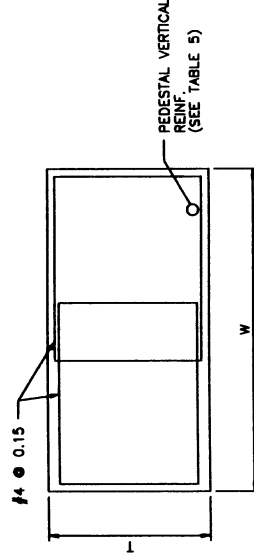


SECTION 3-3



SECTION 4-4

DRILLED SHAFT



SECTION 5-5

GENERAL NOTES:

GENERAL REFERENCES:

1. ASHTO - STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGN, LUMINAIRES AND TRAFFIC SIGNALS - SECOND DRAFT, MAY 1998, 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 TOP & SIDES 0.075
2. DRILLED SHAFT TOP & SIDES 0.075
3. PEDESTAL TOP 0.05 SIDES 0.075

MISCELLANEOUS:

1. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 0.025 WHETHER OR NOT SUCH CHAMFERS 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 WIND 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 PITS, REMOTE SENSING OR ANY OTHER METHOD SELECTED BY THE CONTRACTOR. IF OBSTRUCTIONS ARE DETECTED, 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 TRAFFIC CONSTRAINTS, PREVENT OR ANY OTHER SITE CONSTRAINTS. IF SITE CONSTRAINTS PREVENT THE USE OF A TYPE OF FOOTING, 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

SECTION 1-1

NOTES:
PEDESTAL VERTICAL REINF. TABLE NOT SHOWN.

SPREAD FOOTING

(*) SPECIAL DESIGN FOR GREATER DEPTH.

SECTION 2-2

TABLE 5

TYPE	SPREAD FOOTING						DRILL SHAFT														
	PEDESTAL SIZE		FOOTING DIMENSION		TOP REINF.		BOTTOM REINF.		VERTICAL REINF.		PEDESTAL SIZE										
	T	W	A	B	LONG	TRANS.	LONG	TRANS.	No.	Bar	LENGTH	DIA.									
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III-E	0.60	1.80	3.0	#6	2.10	6.60	12	#4	23	13	#8	22	#8	12	6.25	0.90	6.25	0.90	1.80	34	#6

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

**OVERHEAD SIGNS
FOUNDATION FOR
BRIDGE TYPE
(TWO COLUMNS)**

RECOMMENDED BY:
DEPUTY EXEC. DIR. FOR
TRAFFIC AND TOLL ROADS
DATE: 10-1-00

APPROVED BY:
EXECUTIVE DIRECTOR
DATE: 10-1-00

DATE	REVISION	BY
05-2000	GENERAL REVISION	IV.

STD. OHTS
DWG. 13 OF 20