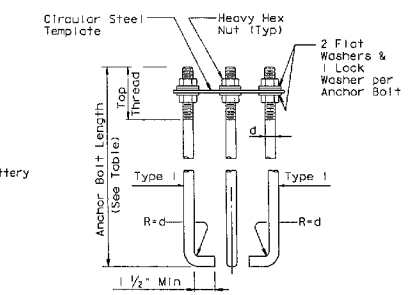


FOUNDATION DESIGN TABLE

FDN TYPE	DRILLED SHAFT DIA	REINFORCING STEEL		DRILLED SHAFT LENGTH-FT TEXAS CONE PENETROMETER 10 Blows/FT	ANCHOR BOLT DESIGN			FOUNDATION DESIGN LOAD		
		VERT BARS	SPIRAL & PITCH		ANCHOR BOLT DIA	Fy (ksi)	BOLT CIR DIA	ANCHOR TYPE	MOMENT K-ft	SHEAR Klbs
24-A	24"	4-#5	#2 at 12"	6	3/4"	36	12 3/4"	1	10	1



**HOOKED ANCHOR (TYPE I)
ANCHOR BOLT ASSEMBLY**

INSTALLATION PROCEDURE:
Threads of anchor bolts shall be coated with pipe joint compound prior to installation of upper nuts when erecting pole. After pole is plumbed and in permanent alignment, the exposed threads of painted bolts shall be cleaned and an additional coating of zinc-rich paint applied to seal the bolt thread-nut joint.

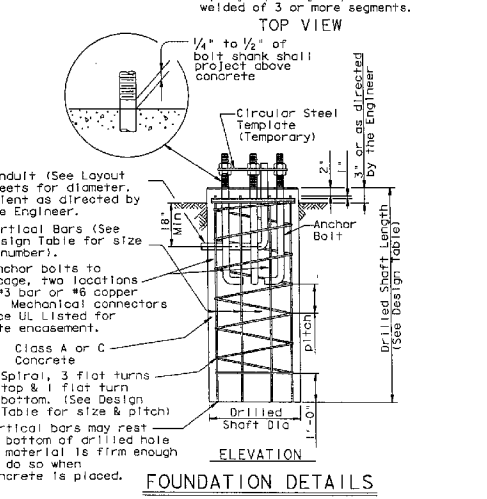
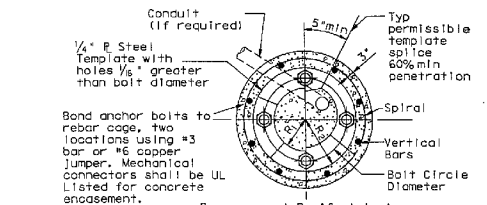
GENERAL NOTES:
Design conforms to 1994 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and Interim revisions thereto. Concrete shall be Class A or C.
Threads for anchor bolts and nuts shall be rolled or cut threads of unified national coarse thread series except for A193B7 bolts which shall have 8 pitch thread series. Bolts and nuts shall have Class 2A and 2B fit tolerances.
Anchor bolts that are 1" in diameter or less shall conform to ASTM A36. Galvanize all anchor bolts unless otherwise noted. Exposed nuts shall be galvanized or coated with zinc-rich paint. Washers shall be galvanized. Templates and embedded nuts need not be galvanized.

NOTES:
① Anchor bolt design develops the foundation capacity given under Foundation Design Loads.
② Foundation Design Loads are the allowable moments and shears at the base of the structure.

ANCHOR BOLT & TEMPLATE SIZES

BOLT DIA IN.	BOLT LENGTH	TOP THREAD	BOTT THREAD	BOLT CIRCLE	R ₂	R ₁
3/4"	1'-6"	3"	---	12 3/4"	7 1/8"	5 3/8"

③ Min dimensions given, longer bolts are acceptable.



- NOTES:**
- Details show a typical sign, other arrangements are possible.
 - Use 24 in. Drill Shaft Foundation as shown.
 - Use materials specifically designed for attaching cabinets, solar panels, etc., to poles.
 - Per manufacturer's recommendations, engage all threads on the pedestal pole base and pipe unless the pipe is fully seated into base. In high winds, use a pole and base collar assembly to add strength and prevent loosening a connection.
 - Provide non-fused watertight breakaway electrical connectors for breakaway poles. (Busshorn HEI, Littlefuse LEI, Ferraz-Shawmut FE2N, or approved equal).
 - When required, install batteries in the cabinet. Provide the number of batteries as required. Wire batteries according to manufacturer's recommendations.
 - Provide clearance as shown above the sidewalk or pavement grade at the edge of the road. Mount the sign at least 7 ft. above the sidewalk or pavement grade at the edge of the road.
 - Pole shaft shall be one piece, schedule 40 Aluminum pipe, ASTM B429 or B221 (Alloy 6061-T6 only). Aluminum conduit will not develop the necessary strength and will not be allowed.
 - When required, provide 120/240VAC electrical service in accordance with current City of Houston standards and local power company requirements.
 - Orient the solar panel as shown above.
 - Confirm speed limit requirement with the City of Houston.

NO.	DATE	REVISION	BY:	CHKD:	APPROVAL (SIGNATURE):

CITY OF HOUSTON

PUBLIC WORKS & ENGINEERING DEPARTMENT
TRAFFIC SIGNAL ENGINEERING
AND OPERATIONS SECTION

**RADAR SPEED SIGN ASSEMBLY
TYPICAL DETAILS**

...Radar speed sign.dgn