

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SHEET NO. 1 OF 2

SINGLE POST ASSEMBLY EXAMPLES

DUAL POST ASSEMBLY EXAMPLES

GENERAL NOTES

Posts shall be fabricated by using slabs with post-to-stub post connection bolts snug tight only. Final tightening of all nuts. Strength bolts shall be in accordance with Article 727.05 and threads at the junction of the nut and post shall be turned or counter banded to prevent the nut from loosening.

One foundation requires 0.7 cubic yards of concrete and 45 pounds of reinforcement bars and spiral bars.

LOADING: 80 mph wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
Structural steel - 50,000 psi
Reinforcing steel - 20,000 psi
Concrete - 4,000 psi
Footing soil pressure - 5,000 pcf

After fabrication, the post, base plate, base plate and upper 4' of the stub post shall be hot dip galvanized in accordance with AASHTO M11. All bolts, nuts and washers shall be hot dip galvanized in accordance with AASHTO M293.

For Sections A-A and B-B, see Base Sheet BAT-A-2.

FOUNDATIONS:
All necessary excavation or drilling, cleanup in rock, backfilling with approved material, disposal of unsuitable or surplus material, formwork, and formwork and casting the Class ST Concrete and reinforcement bars, shall be included in the pay item used for foundations.

The measurement of the tubular steel shall be measured on the basis of the weight per foot of the support, multiplied by the combined length of the main post and stub post.

MAIN POST STEEL TUBING	HEIGHT POST POST (FOOTING)	SLAB THICKNESS (INCHES)	SLAB POST (INCHES)	BASE PLATE (INCHES)	A	f	R	Sp. C/req.
3" x 2" x 1/4"	7.11	2"-0"	2'-3"	3" x 2 1/2"	8"	3"	3"	8"
4" x 2" x 1/4"	8.87	2"-0"	2'-3"	3" x 2 1/2"	8"	3"	3"	8"
4" x 3" x 1/4"	10.51	2"-0"	2'-6"	3" x 3 1/2"	8"	3"	3"	8"
5" x 3" x 1/4"	12.21	2"-0"	2'-6"	3" x 3 1/2"	8"	3"	3"	8"
6" x 3" x 1/4"	13.91	2"-0"	2'-6"	3" x 3 1/2"	8"	3"	3"	8"
6" x 4" x 1/4"	15.62	2"-0"	2'-6"	3" x 3 1/2"	8"	3"	3"	8"
6" x 4" x 1/4"	16.68	2"-0"	2'-6"	3" x 3 1/2"	8"	3"	3"	8"
7" x 4" x 1/4"	18.62	2'-0"	2'-6"	3" x 3 1/2"	7"-0"	3"	3"	7"-0"
8" x 4" x 1/4"	19.62	2'-0"	2'-6"	3" x 3 1/2"	7"-0"	3"	3"	7"-0"
10" x 4" x 1/4"	22.42	2'-0"	2'-6"	3" x 3 1/2"	7"-0"	3"	3"	7"-0"

BREAK-AWAY TUBULAR STEEL SIGN POSTS AND FOUNDATIONS

Sheet 1 of 2

**STATE OF ILLINOIS
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SHEET NO. 2 OF 2

FRONT ELEVATION

SIDE ELEVATION

MAIN POST & STUB POST

SECTION A-A (CAST-IN-PLACE)

SECTION A-A (PRECAST)

ELEVATION GROUND LINE & STUB POST

SHIM DETAIL

SECTION B-B

SECTION C-C

GENERAL NOTES:

Hot dip galvanized fitting bases or inserts may be placed in precast foundation holes the same reinforcement but not within 6" of the top edge of the post. Inserts must be adequate for self lifting a total of 3,000 pounds and must not interfere with foundation of the stub post or proper functioning of the slip base.

For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

Finish two 0.01" thick and two 0.03" thick stainless steel or brass BR30 shims per post.

Weld continuously around corners.