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PUBLIC WORKS  
 8401 Laguna Palms Way  
 Elk Grove, California 95758



## Standards Update Transmittal

Reference Number: 2024-15  
 Standards: Standard Construction Specifications, Section 34-1 and 34-2 and Standard Drawings T-6B and T-6C (new)

### Update:

1. Modification to Standard Construction Specifications:
  - a. Section 34-1, OVERHEAD SIGN STRUCTURES, added language to Overhead Sign Structures to address welding. Removed language that signs will be provided by the City.
  - b. Section 34-2, ROADSIDE SIGNS, renamed the section to “Signs” and defined the meaning of “signs”. Section refers to State Specifications that include the CAMUTCD.
  - c. Section 34-2.02, PARK SIGNS, added language to reference State Specification and the City Specifications. Provide direction for park sign information and mounting of sign panels.
  - d. Section 34-2.03, SIGN PANEL INSTALLATION, moved park sign information to Section 34-2.02
  - e. Section 34-2.04, Sign Post, is a new section that addresses the type (Perforated Square Steel Tube (PSST), the size and gage of PSST post, and the number of posts required based on the size of the panel. Section 34-2.04 references Standard Detail T-6B and T-6C. Sign Post size and gage is based on the LRFD requirements for wind speeds of 70 mph.
2. Modifications to Standard Drawing
  - a. Rename Standard Drawing T-6B to Signs Post
  - b. Remove detail B and update detail sheet with Caltrans Revised Standard Plan RSP – RS5 details.
  - c. Add details and table to address two sign post.
  - d. Update notes on Standard Plan sheet T-6B
  - e. New Standard Plan T-6C titled Sign Back Bracing. The is for single sign post back bracing.

### Effect of Update:

1. This modification is as follows:
  - a. Make Overhead Sign Structure Specification current with State Standards
  - b. Changed reference to State Specifications, which included the CAMUTCD.
  - c. Reference State and City Specifications for Park sign. Cover installation and sign information.
  - d. Moved specification language to a new Section of the Standards.
  - e. The type and size of the sign post is clarified and the number of post(s) required based on sign panel size.
2. This modification is as follows:

2024-15

Page 2 of 2

- a. Rename the detail sheet T-6B
- b. Replace the post foundation detail with the current Caltrans detail.
- c. Provide detail information for two sign post.
- d. Update the detail sheet notes.
- e. Created a new detail sheet (T-6C) that details back bracing for signs.

Request for Update Initiated By: Standard Review Committee 09/30/2023

Update Reviewed for Conformity and Consistency to Standards:

Shoaib Ahrary 5/7/2024 | 4:54 PM PDT  
Shoaib Ahrary, PE, ESD Manager Date

Update to Standards Approved:

Kristin Parsons 5/8/2024 | 9:15 AM PDT  
Kristin Parsons, PE, City Engineer Date

### 34-1 OVERHEAD SIGN STRUCTURES

Overhead sign structures shall conform to Section 56 "Overhead Sign Structures, Standards, and Poles", of the State Specifications, and these Specifications.

Welding of overhead sign structures must conform to Section 11-3 "Welding for Overhead Sign Structures, Standards, and Poles," of the State Specifications. The Contractor is responsible for welder certifications and must provide proof of certifications to the Engineer prior to starting the work.

### 34-2 SIGNS

Sign panels, and signs shall conform to Section 82, "Signs and Markers", of the State Specifications, and these Specifications unless otherwise shown or specified in the Special Provisions.

Signs include, but not limited to, roadway signs, street signs, and park signs.

Roadway signs include, but not limited to, directional signs, regulatory signs, street name signs, and advisory signs.

Signs shall conform to the latest California Manual of Uniform Traffic Control Devices version.

The bottom of the lowest sign panel shall be no less than seven (7) feet above the ground in accordance with Standard Drawing T-6B unless specified otherwise.

For sign panels requiring back bracing refer to Standard Drawing T-6C unless specified otherwise.

The exposed portion of fastening hardware on the face of signs shall be painted using touch-up enamel that matches the background color exactly.

#### **34-2.01 Sign Panel Fastening Hardware**

Sign panel fastening hardware shall conform to Section 82-3.02 "MATERIALS", of the State Specifications, and these Specifications. Lag screws, bolts, metal washers, and nuts may be cadmium-plated steel instead of commercial quality galvanized steel.

#### **34-2.02 Park Signs**

When park signs are specified, they shall conform to Section 82, "Signs and Markers" of the State Specifications and these Specifications unless otherwise shown or specified in the Special Provisions.

For signs with "Park Rules and Regulations" and or "Park Hours" the City will provide this information unless otherwise shown or specified in the Special Provisions.

Unless otherwise specified in the Special Provisions or approved by the Engineer, posts for park signs shall be furnished by the Contractor and shall be two and three-eighths (2-3/8) inches outside diameter galvanized steel pipe, fourteen (14) feet in length, with a minimum wall thickness of one hundred sixteen thousandths (0.116") of an inch. Posts for park signs shall be placed in a three (3) foot six (6) inch deep by ten (10) inch diameter portland cement concrete footing, leaving a ten (10) foot six (6) inch height from top of grade.

The Contractor shall provide a Certificate of Compliance for post supplied for use on the project before installation.

For park signs, footing concrete shall be Class "C" in accordance with Section 50-5, "Portland Cement Concrete", of these Specifications.

Park rules sign panels shall be mounted flush with top of the post, with park hours sign panels mounted directly under. The bottom of the lowest sign panel shall be no less than seven (7) feet above the ground unless specified otherwise.

The exposed portion of fastening hardware on the face of signs shall be painted using touch-up enamel that matches the background color exactly.

### **34-2.03 Sign Panel Installation**

Sign panels, blind rivets, and closure inserts shall be furnished by the Contractor and shall be fabricated of materials as specified in this Section.

The exposed portion of fastening hardware on the face of signs shall be painted using touch-up enamel that matches the background color exactly.

### **34-2.04 Sign Post**

Sign posts shall be Perforated Square Steel Tube (PSST) and installed per Standard Drawings T-6B and T-6C, unless otherwise specified or approved by the Engineer.

For single post signs, the sign post shall be centered on the sign panel and the sign panel shall not exceed the total square foot area of twelve and an half (12 1/2) square feet.

For two post signs, the sign posts shall be installed per Standard Drawings T-6B. Sign panels supported by two sign posts shall not exceed forty eight (48) inches in height nor shall they exceed the total square foot area of twenty four (24) square feet.

For sign panels that exceed forty-eight (48) inches in height or twenty-four (24) square feet in area, the Contractor shall submit shop drawing sealed by a registered civil engineer in the State of California for review and approval by the Engineer prior to installation.

Wood posts are not allowed, unless otherwise specified or approved by the Engineer.

The sign post, anchor post, and sleeve must:

1. Be fabricated from galvanized hot rolled steel complying with ASTM 1011 Grade 50 and galvanized under ASTM 653 G-90
2. Have a minimum 60 ksi yield strength after cold forming
3. Have zinc coated corner welds. Corner welds must be scarfed and then a conversion coating and clear organic polymer topcoat must be applied.

The sign post, anchor post and sleeve must have 7/16-inch diameter holes or punch-outs spaced at one-inch (1") on center on all four sides for the full length of the post. The sign post, anchor and sleeve shall be made of the same gage material. Mixing gage sizes will not be allowed.

Prior to installation of the sign post, anchor post and sleeve, the Contractor shall provide a Certificate of Compliance for each component of the sign panel support system.

The anchor post and sleeve shall be installed as one unit. The perforated holes must be aligned. The anchor post and sleeve are to be installed into undisturbed soil by means that do not damage the anchor post or sleeve. Pre-digging or digging of a hole for the placement of the anchor post and sleeve are not allowed. If any portion of the sleeve is to be encased in concrete, the sleeve shall not have perforated holes except for the holes necessary to

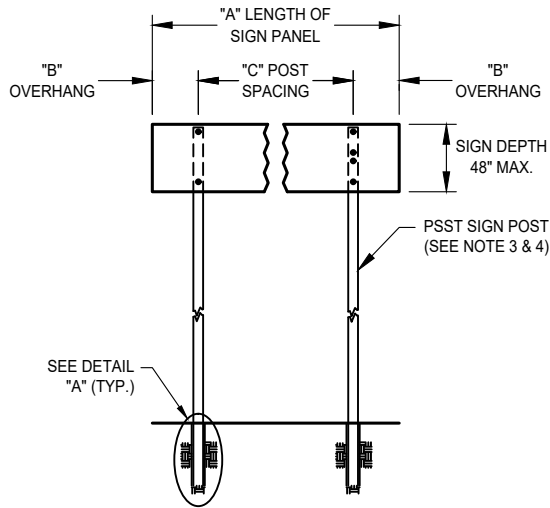
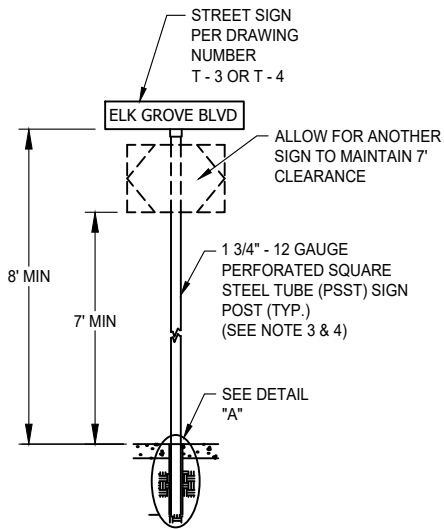
connect the anchor post to the sleeve near the top of both components.

Per Standard Drawing T-6B, the sign post shall slide into the anchor post and shall be one size smaller, typically one quarter inch (1/4"), than the anchor post. The anchor post shall be one size smaller, typically one quarter inch (1/4"), than the sleeve. The anchor post is to slide inside the sleeve. If this cannot be met, the Contractor is to provide a solution to the Engineer for approval.

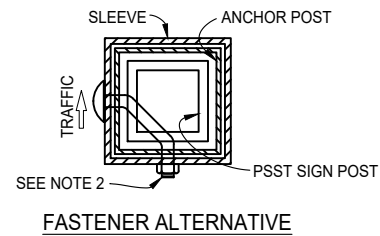
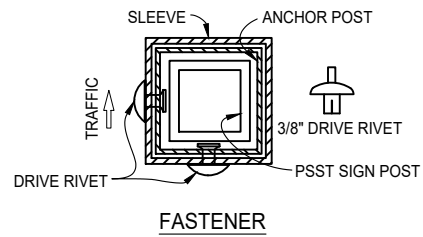
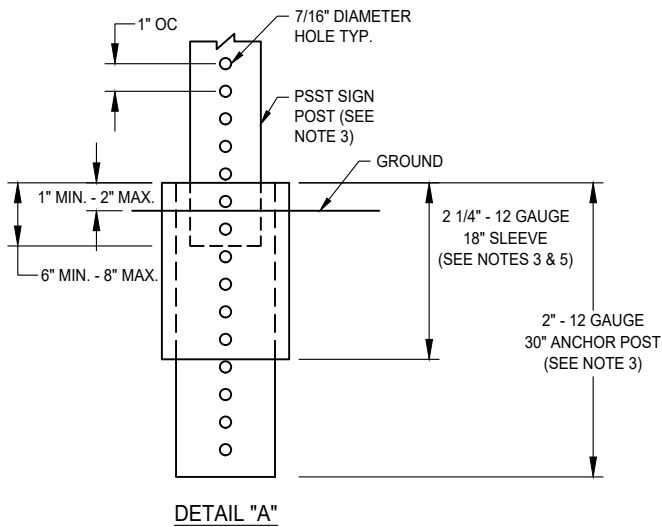
### 34-3 MEASUREMENT AND PAYMENT

Signs will be measured by the unit from actual count, complete in place, of the type or types of signs designated in the Contract.

The unit price paid for each sign of the type or types designated in the Contract includes full compensation for furnishing all labor, materials (except City-furnished materials), tools, equipment, and incidentals, doing all the work involved in furnishing and installing Overhead Sign Structures, Sign Panel, Sign Support System, and Park Signs, including rules and regulations, complete in place, shown or specified in the Contract, specified in these Specifications, and directed by the Engineer.



Sign Panel Length	Sign Panel Overhang	Post Spacing
"A"	"B"	"C"
3' - 6"	6"	2' - 6"
4' - 0"	6"	3' - 0"
4' - 6"	6"	3' - 6"
4' - 8"	7"	3' - 6"
5' - 6"	1' - 0"	3' - 6"
6' - 0"	1' - 0"	4' - 0"

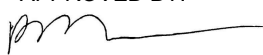


**NOTES:**

1. BOTTOM OF LOWEST STREET SIGN TO BE MOUNTED EIGHT (8) FEET ABOVE THE GROUND OR SIDEWALK PER DETAIL "A" SHOWN ON THIS SHEET EXCEPT, WHEN STOP SIGN IS MOUNTED ON SAME POST AS A STREET SIGN, BOTTOM OF STOP SIGN SHALL BE MOUNTED SEVEN (7) FEET ABOVE THE GROUND OR SIDEWALK AND STREET NAME SIGN TO BE MOUNTED DIRECTLY ABOVE THE STOP SIGN. IN NO CASE SHALL THE BOTTOM OF THE LOWEST SIGN BE LESS THAN SEVEN (7) FEET ABOVE THE GROUND OR SIDEWALK LEVEL.
2. USE TWO DRIVE RIVETS TO FASTEN ASSEMBLED SIGN AND SIGN POST INTO ANCHOR SLEEVE. INSTALL DRIVE RIVETS OR FASTNER ALTERNATIVE INTO THE SIDES FACING TRAFFIC.
3. PSST SIGN POST, ANCHOR POST, AND SLEEVE SHALL BE GALVANIZED AND OF THE SAME GAUGE.
4. PSST SIGN POST PER STANDARD SPECIFICATIONS.
5. SLEEVE PLACE IN CONCRETE SHALL BE SOLID WITH ONLY ONE HOLE AT THE TOP FOR DRIVE RIVET OR FASTENER.
6. SHALL BE 90°, HAWKINS PART NUMBER V14F-(HD)SL-105(90)-.0.125 (OR EQUAL). STREET LIGHT STANDARD BRACKET SHALL BE HAWKINS, WING BRACKET, PART NO. V14F-(HD)SL-AB-0.125 OR EQUAL.

DATE: 09/22/2017		NOT TO SCALE	
REVISION	BY	APPROVED	DATE
1	SJB	SMA	04-22-2024

**CITY OF ELK GROVE - PUBLIC WORKS**

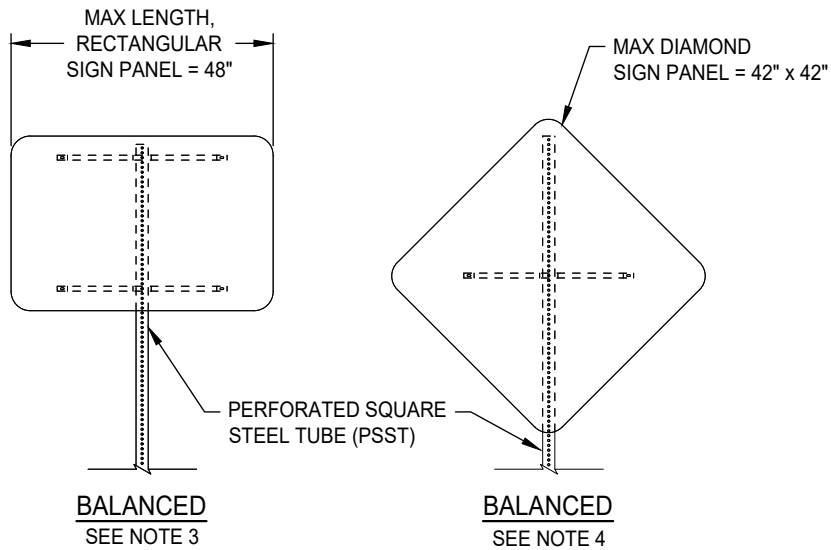
APPROVED BY:   
 CITY ENGINEER 05-08-2024  
 DATE

**SIGN POST**



DRAWING NUMBER

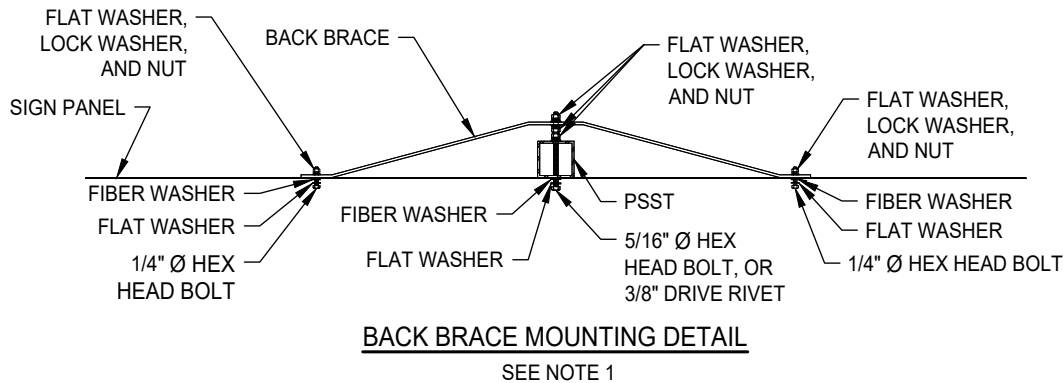
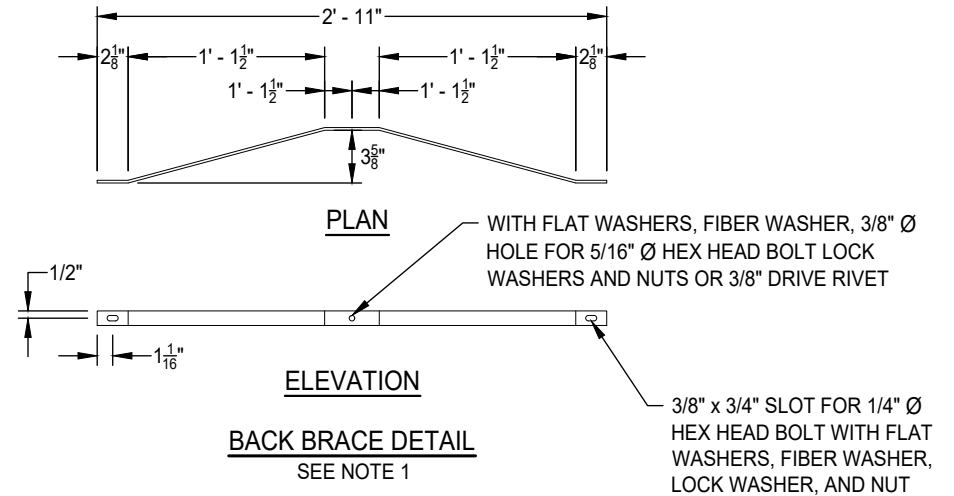
**T - 6B**



**SINGLE POST INSTALLATION**


**NOTES:**

1. BALANCED PSST POST INSTALLATIONS OF SIGN PANEL REQUIRE BACK BRACES WHEN 3' - 0" OR MORE IN LENGTH.
2. WOOD BLOCK SPACERS ARE NOT REQUIRED FOR SIGNS MOUNTED ON PSST POST.
3. ATTACH RECTANGULAR SIGN PANEL TO PSST POST AT THE TOP, BOTTOM, AND CENTER.
4. ATTACH DIAMOND SIGN PANEL TO PSST POST AT TOP, BOTTOM, AND CENTER.



DATE 04/23/2024		NOT TO SCALE	
REVISION	BY	APPROVED	DATE

CITY OF ELK GROVE - PUBLIC WORKS

APPROVED BY:   
05-08-2024  
CITY ENGINEER DATE

**SIGN BACK BRACING**

DRAWING NUMBER  
**T - 6C**

