

Phone: 916.683.7111
Fax: 916.691.3168

Web: www.elkgrovecity.org

8401 Laguna Palms Way
Elk Grove, California 95758



Modification or Addition to Improvement Standards and Details

Modification Number: Section 49-6.03 Internally Illuminated Street Name Signs Rev.1

Effective Date of Change: 3/25/2008

Modification:

1. Revision of Section 49-6.03 of the Standard Construction Specifications in its entirety.
2. Revision of Standard Drawing Number T-13.

Amended specifications are attached. Projects with preconstruction conference prior to effective date not subject to modification.

Effect of Modification:

1. This modification will address the wind damage problems associated with the previously approved sign.

Request for Modification Initiated By:

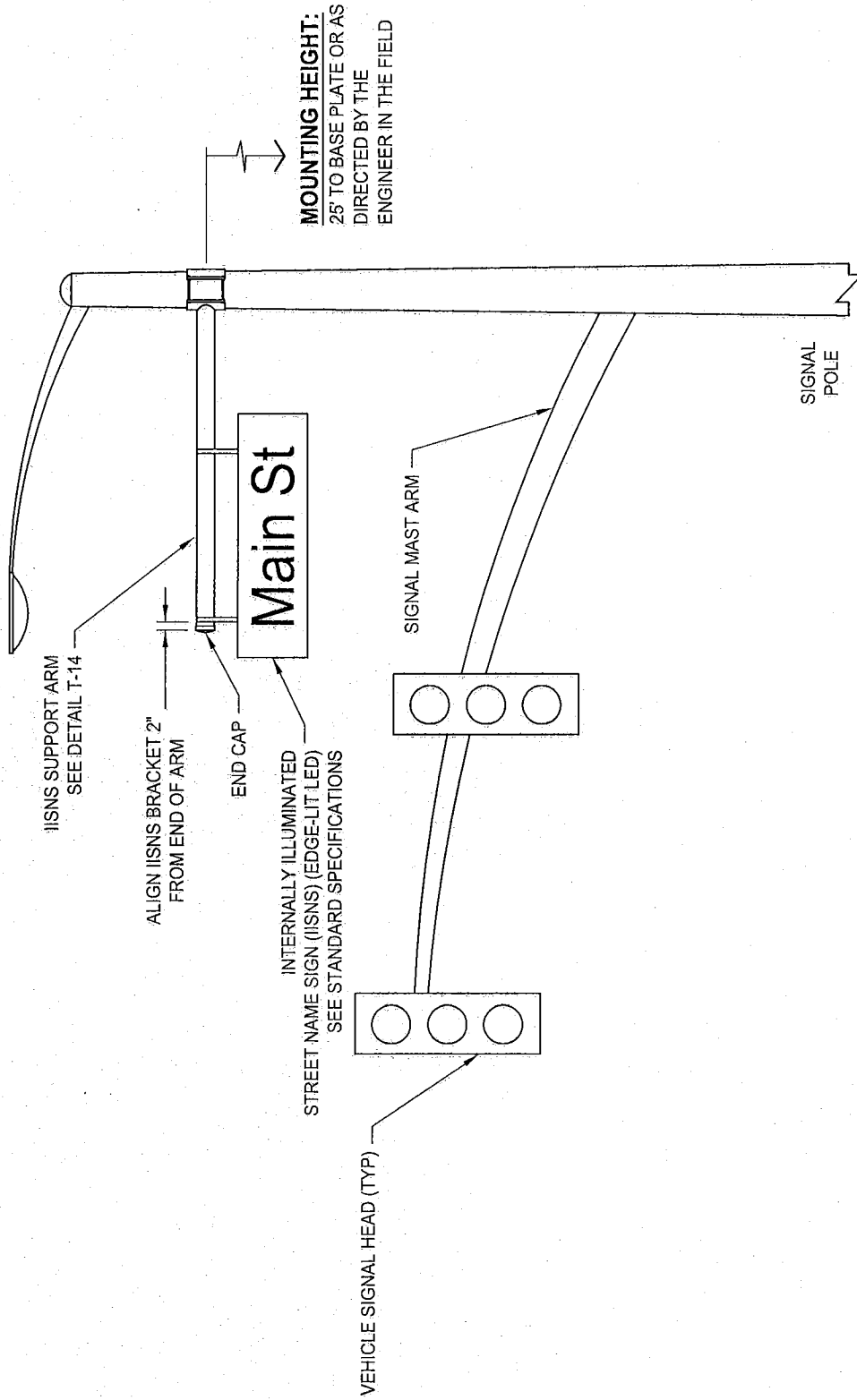
John Kim 3-25-08
Date

Modification Reviewed for Conformity and
Consistency to Standards:

[Signature]
City Engineer Date

Modification to Improvement Standards Approved:

Cheryl Creson 3/27/08
Director of Public Works Date



MOUNTING HEIGHT:
25' TO BASE PLATE OR AS
DIRECTED BY THE
ENGINEER IN THE FIELD

DATE:	NOT TO SCALE	
1/17/2007		
REVISION	APPROVED	DATE
1	DC	FB
		03/25/2008

CITY OF ELK GROVE - PUBLIC WORKS

(EDGE-LIT LED) INTERNALLY
ILLUMINATED STREET NAME SIGN

APPROVED BY: *[Signature]*
CITY ENGINEER

DRAWING NUMBER
T - 13



49-6.03 Internally Illuminated Street Name Signs

A. General

Mechanical Specifications

- IISNS shall be fabricated for mounting with Pelco Tri Stud brackets, or approved equal, on a separate IISNS support arm between the signal mast arm and the luminaire arm, as shown on the details.
- The outer dimensions of the sign assembly (excluding the mounting brackets) shall be standard widths of 15, 18, 20 and 24 inches, and standard lengths of 48 - 96 inches, at 6 inches increments.
- IISNS shall be double-sided, unless otherwise noted on the plans. The maximum thickness of the sign shall be 1.38 inches for single-sided sign, and 1.77 inches for double-sided signs.
- The long edges of the sign shall be made from a single section of 6063-T5 Aluminum extrusion. The end caps shall be affixed to the frame with stainless screws. The end caps shall be removable to enable replacing panels and components.
- The overall weight, excluding mounting hardware, shall not exceed 6 pounds per square foot for single-sided signs, and 8 pounds per square foot for double-sided signs.
- 1/8" diameter steel safety cable with a minimum breaking strength of 1760 lbs. shall be attached to each end of the sign assembly to connect sign to the IISNS support arm.

Environmental Specifications

- The sign shall be designed and constructed to withstand 110 miles per hour wind loads in conformance with the requirements of the AASHTO publication, "Standard Specifications for Structural Supports of Highway Signs, Luminaries and Traffic Signals", 4th Edition 2001.
- The sign and power supply should be able to withstand and operate at temperature extremes of -40 degree F to +140 degree F.

Light Source

- The light source for the sign shall be LEDs (light emitting diodes) mounted along both the top and bottom edges inside the sign frame assembly. The LEDs shall evenly illuminate a light panel that is the same dimensions of the sign face. The LEDs shall have a minimum projected life of 50,000 hours.

Electrical

- The power supply shall be housed inside the sign frame assembly. Power supply shall be UL Class 2 limited output voltage and current plus isolation for safe operation, and UL Outdoor damp location rated. Power supply shall be IP66 Outdoor rated.
- IISNS electrical service shall be metered.

Energy Requirements

- The overall average power required shall not exceed 48 watts for 6-foot single-sided or double-sided signs, and 55 watts for 8-foot single-sided or double-sided signs.

Energy Star Partner

- The sign shall be an Energy Star Qualified Product.

Quality Assurance

- Manufacturer must be ISO 9001 certified.

Product Guarantee

- Product must be guaranteed for a minimum of three years.

B. Sign Panel

- The sign face shall be 1/8" white polycarbonate panel that is UV, weather, abrasion and impact resistant, with flexible, colored, wide-angle prismatic retroreflective sheeting, tape and related processing materials designed to enhance the visibility of the sign.
- The sign panels shall be replaceable.
- The retroreflective sheeting for sign face/finished sign shall have a smooth surface with a distinctive interlocking diamond seal pattern and orientation marks visible from the face. The sheeting shall be precoated with a pressure sensitive adhesive backing protected by a removable liner. The adhesive shall require no heat for proper bonding when applied in accordance with the manufacturer's recommendations to substrates 65° F or above. The retroreflective sheeting shall be 3M, "Scotchlite", Diamond grade Series 3970G or equivalent.
- Formatted letters shall conform to the MUTCD Clearview font for highway signs and shall be 8" upper case and 6" lower case letters. If necessary, the width of each letter ("stroke") and the spacing between letters may be reduced for the legend to fit on an 8-foot sign.
- Face Colors – letters and border shall be white with a green background.