Chapter 4 Bridge Program Drawings

Section 4.20-Sign Structures

Introduction

Sign structures are designed for mounting directional and variable/ dynamic message signs, signal lights, and luminaires over a roadway for the proper flow and control of traffic, and are installed in areas to give the traveling public sufficient advance warning of the physical features for the roadway ahead. The Bridge Program designs these structures when the Traffic Program requests them. The most preferred types of overhead sign structures used are the single-plane sign structure and the monotube sign structure. Space frame truss sign structures may also be used when long spans are required.

Sign Structure Types

SINGLE-PLANE SIGN STRUCTURES consist of two chords connected by diagonals and struts forming a single-plane truss configuration. The truss is mounted to a single column on each side of the roadway.

MONOTUBE SIGN STRUCTURES consist of a single chord mounted to a single column on each side of the roadway or a single monotube serving as both column supports and span.

SPACE FRAME TRUSS STRUCTURES consist of four chords connected by diagonals and struts forming a frame truss configuration. The truss is mounted to two columns on each side of the roadway.

CANTILEVER SIGN STRUCTURES may be space frame trusses mounted on a single column or monotubes. These are mounted on one side of the roadway and extend over a portion of the roadway.

Drilled shafts for all sign structure types shall be set a minimum of 6" above the proposed ground line or flush with the sidewalk.

Standard Sheets

Name DMS_Overhead DMS_Side Mount **Description**Overhead sign structure for large DMS
Gound mounted sign structure