

---

## ORIGINATION FORM

---

### Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

**Contact Information:**

Date: May 12, 2022

Originator: Rick Jenkins

Phone: (850) 414-4355

Email: Rick.Jenkins@dot.state.fl.us

**Standard Plans:**

Index Number: 700-090

Sheet Number (s): 1 of 5

Index Title: Dynamic Message Sign Walk-In

**Summary of the changes:**

Updated General Note 1 - "Meet the requirements of Specification 700."; Deleted Note 5; Renumbered General Notes.

**Commentary / Background:**

The 700 Index Series is being edited to remove material information and other information that is located in the Standard Specifications. Revisions are being made to Specification Sections 700, 962 and 965 in conjunction with these changes.

**Other Affected Offices / Documents: (Provide name of person contacted)**

- | Yes                                 | No                                  |   |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Other Standard Plans –                      |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | FDOT Design Manual – Dewayne Carver         |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Basis of Estimates Manual – Ryan Gray       |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Standard Specifications – Daniel Strickland |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Approved Product List – Missy Hollis        |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Construction – Jason Russell                |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Maintenance – Deanna Hutchison              |

**Origination Package Includes:** (Submit package to Rick Jenkins)

- | Yes                                 | N/A                      |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups                                    |
| <input type="checkbox"/>            | <input type="checkbox"/> | Revised or Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/>            | <input type="checkbox"/> | Other Support Documents                             |

**Implementation:**

- |                                     |                                  |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/>            | Design Bulletin (Interim)        |
| <input type="checkbox"/>            | DCE Memo                         |
| <input type="checkbox"/>            | Program Mgmt. Bulletin           |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release) |

---

Contact the Roadway Design Office for assistance in completing this form

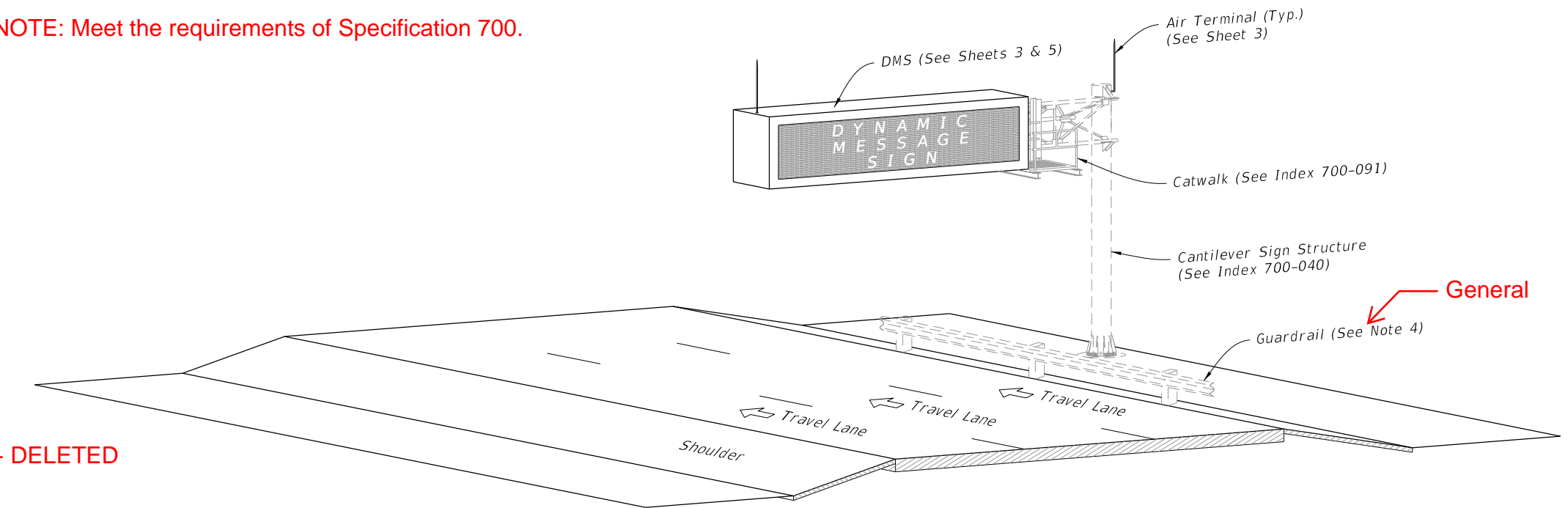
---

Email to: Rick Jenkins [rick.jenkins@dot.state.fl.us](mailto:rick.jenkins@dot.state.fl.us) and Darren Martin [darren.martin@dot.state.fl.us](mailto:darren.martin@dot.state.fl.us)

**GENERAL NOTES:**

- 1. ~~Work this Index with Specification 700.~~
- 2. Furnish and install the Dynamic Message Sign (DMS), sign structure in accordance with Index 700-040 or 700-041. Locate foundations at locations shown in the Plans.
- 3. Shop Drawings are required:
  - A. Include the DMS connection
  - B. Do not start fabrication until the shop drawings are approved
- 4. If required, install guardrail at location show in the Plans and in accordance with Index 536-001.
- 5. ~~Materials:~~
  - A. ~~Sign Mounting Components:~~
    - a. ~~Aluminum Structural Shapes: ASTM B221, Alloy 6061-T6~~
    - b. ~~Vertical Hangers: ASTM A704, Grade 36~~
    - c. ~~U-Bolts: ASTM A449 or A193 B7~~
    - d. ~~Steel Bolts, Nuts, and Washers:~~
      - 1. ~~High Strength Bolts: ASTM F3125, Grade A325, Type 1~~
      - 2. ~~Nuts: ASTM F563~~
      - 3. ~~Washers: ASTM F463 (Flat Washer)~~
  - B. ~~Coatings:~~
    - a. ~~All nuts, bolts and washers ASTM F2329~~
    - b. ~~All other steel items ASTM A123~~
    - c. ~~Bolt hole Diameters: Bolt plus 1/16" before galvanizing~~

**UPDATED NOTE: Meet the requirements of Specification 700.**

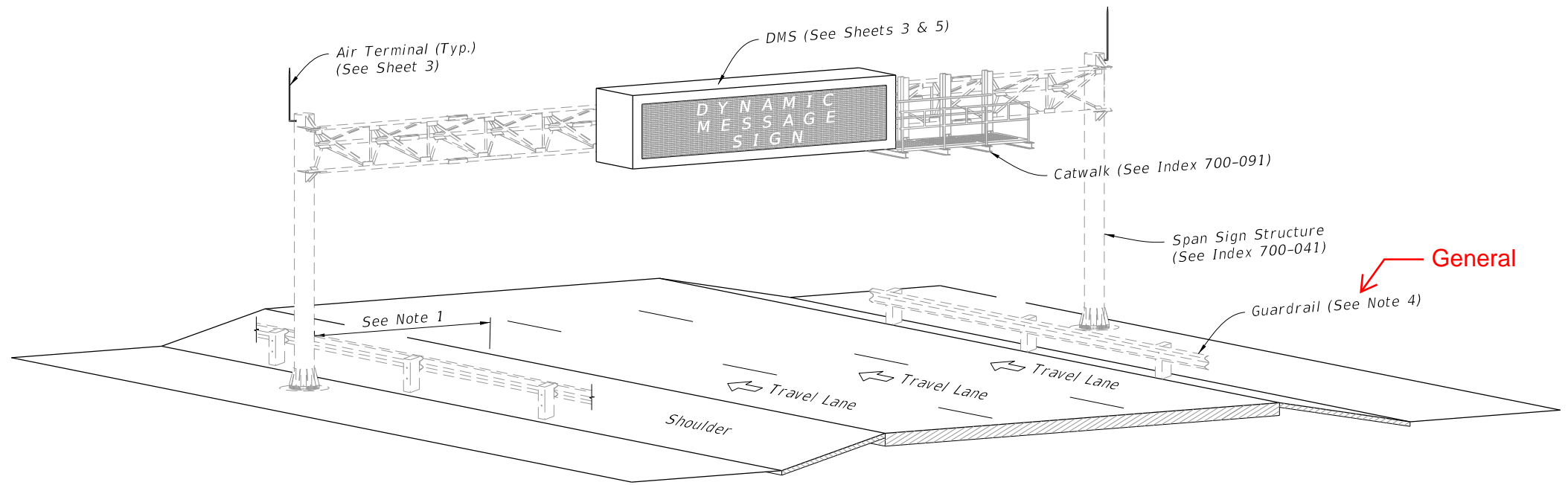


**General**

**DELETED**

**GENERAL COMMENT: Material information was deleted. Information is either already covered in Standard Specifications OR will be added to Section 700, 962 or 965 in conjunction with these revisions.**

- 5. ~~6. Installation:~~
  - A. See project requirements for location of DMS Cabinet.
  - B. Field Adjust pole-mounted DMS cabinet height to achieve best access for maintenance personnel given site condition as directed by the Engineer. Avoid conflicts with stiffeners, handhole and maintenance of anchor bolts.
  - C. Locate the sign horizontal on the structure as shown in the Plans. Vertically center the sign enclosure with the centerline of the truss.
  - D. Before erection, field drill the bolt holes in the vertical hangers and horizontal mounting member attached to the sign enclosure. Field locate holes to allow vertical hanger placement as shown on the Plans with no conflicts with gusset or splice plates.
  - E. Locate threaded couplings on sign side of upright above the sign truss
  - F. Connect grounding conductors to the steel framework that has been cleaned to base metal by use of bonding plates having contact area of not less than 8 square inches or by welding or brazing. Drilling and tapping the steel structure to accept a threaded connector is also an acceptable method
  - G. If steel framework is to be drilled and tapped to accept threaded connector, the threaded connector shall be galvanized and have at least 5 threads fully engaged and secured with a jam nut to the steel framework.
  - H. Bends in the conduit must be greater than the minimum bending radius for the cable contained in the conduit.
  - I. Completely encase all data, fiber optic and power cables for the DMS within the sign structure or in conduit.
  - J. Permanently stamp/mark foundation to indicate conduit locations.
  - K. Transition conduit in foundation to indicate underground conduit with appropriate reducer outside the limits of the foundation.



**General**

SPAN ISOMETRIC VIEW

DYNAMIC MESSAGE SIGN ASSEMBLY

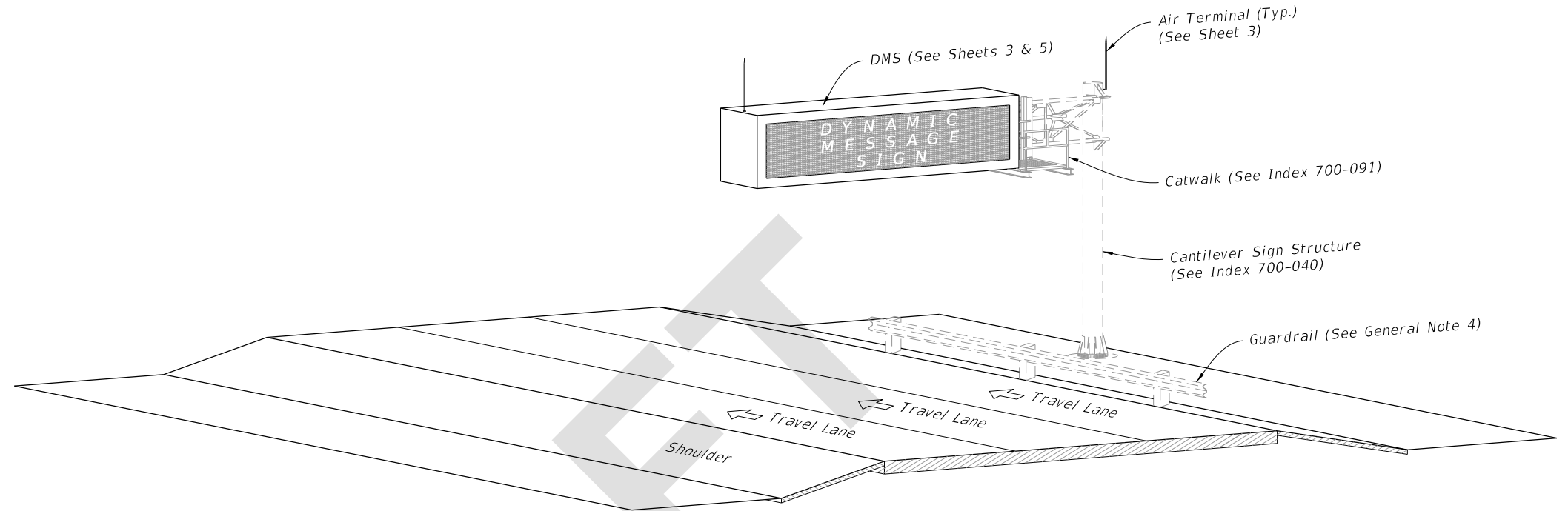
9/22/2021 2:54:13 PM

**11/01/22**

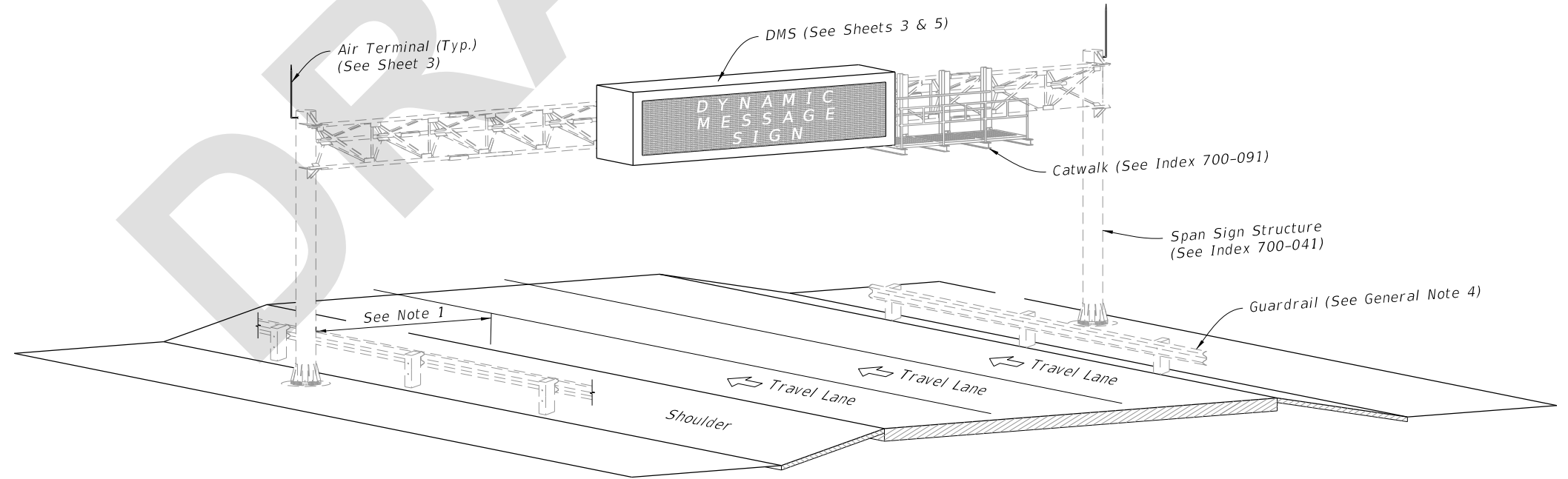
LAST REVISION	REVISION	DESCRIPTION:	 FY 2022-23 STANDARD PLANS	DYNAMIC MESSAGE SIGN WALK-IN	INDEX 700-090	SHEET 1 of 5
11/01/22						

**GENERAL NOTES:**

1. Meet the requirements of Specification 700.
2. Furnish and install the Dynamic Message Sign (DMS), sign structure in accordance with Index 700-040 or 700-041. Locate foundations at locations shown in the Plans.
3. Shop Drawings are required:
  - A. Include the DMS connection
  - B. Do not start fabrication until the shop drawings are approved
4. If required, install guardrail at location show in the Plans and in accordance with Index 536-001.
5. Installation:
  - A. See project requirements for location of DMS Cabinet.
  - B. Field Adjust pole-mounted DMS cabinet height to achieve best access for maintenance personnel given site condition as directed by the Engineer. Avoid conflicts with stiffeners, handhole and maintenance of anchor bolts.
  - C. Locate the sign horizontal on the structure as shown in the Plans. Vertically center the sign enclosure with the centerline of the truss.
  - D. Before erection, field drill the bolt holes in the vertical hangers and horizontal mounting member attached to the sign enclosure. Field locate holes to allow vertical hanger placement as shown on the Plans with no conflicts with gusset or splice plates.
  - E. Locate threaded couplings on sign side of upright above the sign truss
  - F. Connect grounding conductors to the steel framework that has been cleaned to base metal by use of bonding plates having contact area of not less than 8 square inches or by welding or brazing. Drilling and tapping the steel structure to accept a threaded connector is also an acceptable method
  - G. If steel framework is to be drilled and tapped to accept threaded connector, the threaded connector shall be galvanized and have at least 5 threads fully engaged and secured with a jam nut to the steel framework.
  - H. Bends in the conduit must be greater than the minimum bending radius for the cable contained in the conduit.
  - I. Completely encase all data, fiber optic and power cables for the DMS within the sign structure or in conduit.
  - J. Permanently stamp/mark foundation to indicate conduit locations.
  - K. Transition conduit in foundation to indicate underground conduit with appropriate reducer outside the limits of the foundation.




CANTILEVER ISOMETRIC VIEW



SPAN ISOMETRIC VIEW

DYNAMIC MESSAGE SIGN ASSEMBLY

5/26/2022 9:43:45 AM

LAST REVISION 11/01/22	REVISION	DESCRIPTION:	 FY 2023-24 STANDARD PLANS	DYNAMIC MESSAGE SIGN WALK-IN	INDEX 700-090	SHEET 1 of 5
---------------------------	----------	--------------	---	------------------------------	------------------	-----------------