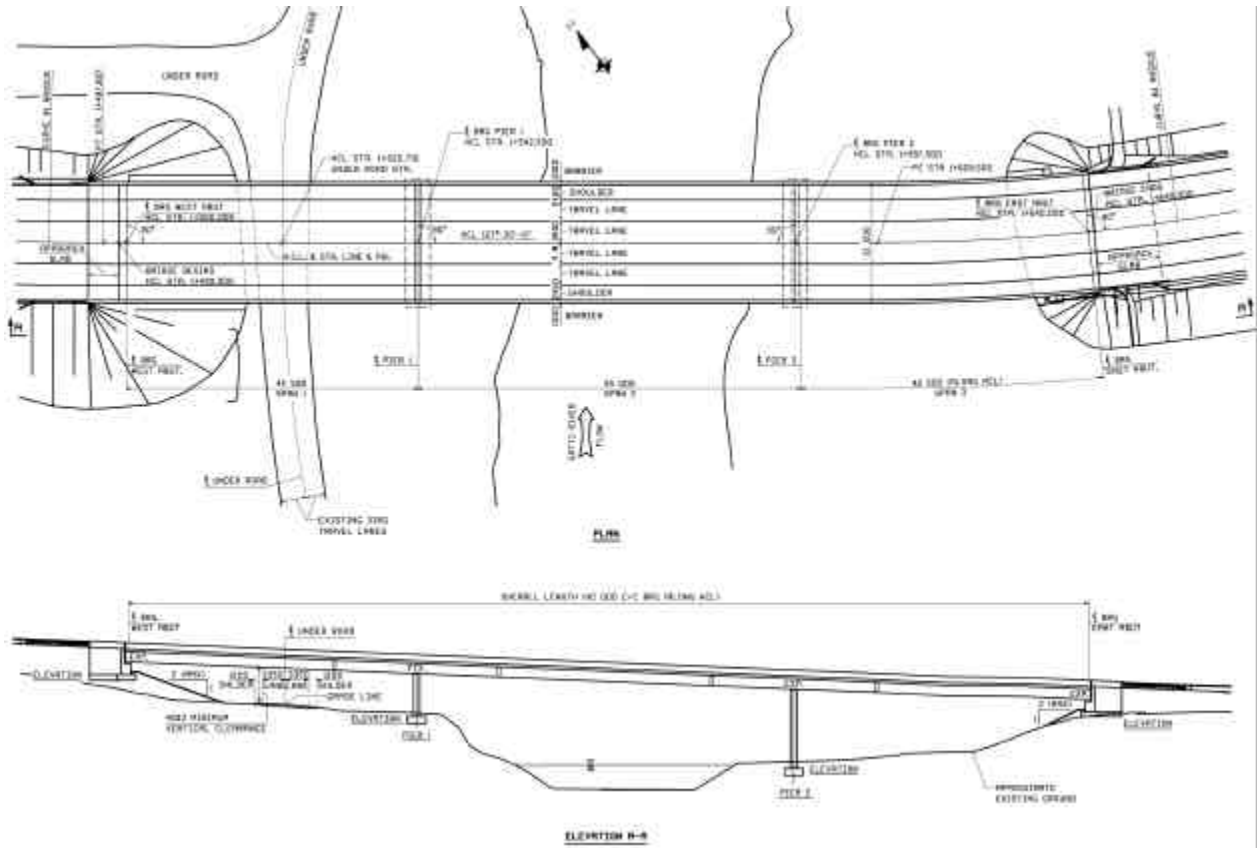


AASHTO/NSBA Steel Bridge Collaboration G 1.2 - 2003



Design Drawing Presentation Guidelines

AASHTO/NSBA Steel Bridge Collaboration



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Preface

This document is a standard developed by the AASHTO/NSBA Steel Bridge Collaboration. The primary goal of the Collaboration is to achieve steel bridge design and construction of the highest quality and value through standardization of the design, fabrication, and erection processes. Each standard represents the consensus of a diverse group of professionals

It is intended that Owners adopt and implement Collaboration standards in their entirety to facilitate the achievement of standardization. It is understood, however, that local statutes or preferences may prevent full adoption of the document. In such cases Owners should adopt these documents with the exceptions they feel are necessary.

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Design Drawing Presentation Guidelines

Introduction

This guide is to advise the designer on items that are the minimum required in order to detail and fabricate a structure. The following information is not to be used for designing a structure but as a guideline to establish a standard presentation of this information. Specific details and specifications are shown only as examples and it is not intended to establish them as standards.

Each section relates to a sheet in the design drawings. This sheet will follow the documentation of each section. Refer to these sheets for further clarification as you review the text.

Designers should be aware of their responsibility in making every effort to ensure that design drawings provide all of the information required by contractors and their agents to fabricate steel structures. Designers should likewise be aware of the economic impact of erroneous, missing, or conflicting information in design drawings. This guide is a collaborative effort by Owners, Fabricators, FHWA, Erectors, Detailers, and Designers to promote the need for clear concise contract documents.

The guide recognizes that other information is needed by the contractor to build a steel structure, i.e. slab reinforcement, concrete placement sequencing, etc, and this information should always be present in design drawings as well.

Design Drawing Presentation Guidelines

Standard Abbreviations

CVN Material	Charpy V-Notch tested material in accordance with ASTM A709.
FCM Material	Charpy V-Notch tested material that meets the requirements of the appropriate fracture control plan.
FCW	Fracture Critical Weld. Weld that must be specially qualified in accordance with the fracture control plan.
F.S.	Field Splice
HCL	Horizontal Control Line
PGL	Profile Grade Line
PVT	Point of Vertical Tangency

Design Drawing Presentation Guidelines

Section 1 Overall Design Plan Presentation

The Overall organization of a set of contract plans should follow a logical progression of the construction of the structure. The recommended organization of the contract plans for a structure is as follows.

- Title Sheet
- Index
- Typical Highway Sections
- Estimate of Quantities
- Legend, List of Abbreviations
- Structure Plans

The bridge plan details and information typically appear in the following order. Depending on the magnitude of the project, common items (e.g. all pier 1 details) may appear on a single sheet or require multiple sheets.

- General Plan and Elevation
- General Sections and Roadway Profile
- Estimate of Quantities and Notes
- Boring Location and General Subsurface Profile
- Excavation and Embankment Details
- Abutment 1 Plan & Elevation
- Abutment Details
- Pier 1 Plan & Elevation
- Pier Details (Subsequent up-station piers shall be numbered sequentially and shall follow the same sheet order as the first pier)
- Abutment 2 Plan & Elevation
- Superstructure

The superstructure sheets should appear in the following order. Items that relate to the steel portion of the superstructure are expanded upon in the subsequent sections of this document.

- Framing Plan
- Girder Elevation and Sections
- Standard Sections
- Camber & haunch dimensions; moment, shear & reaction tables.
- Miscellaneous Steel Details
- Superstructure cross section & plan, including reinforcement placement.
- Bearing Drawing
- Abutment Section (Joint Section)
- Joint Drawing (if required)
- Approach Slab (if required)
- Railing Layout (if required)