

CONSTRUCTION BULLETIN 13-05

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DATE: July 2, 2013

Notification of Steel Structure Fabrication Inspection

Purpose

- To reinforce current policy and requirements for the fabrication inspection of steel structures, specifically the requirements necessary to allow sufficient time to schedule, assign and perform the steel fabrication inspection.
- To identify typical steel structures that require ADOT fabrication inspection and also those structures that do not require inspection services.

Background

The Bridge Group is charged with the responsibility for fabrication inspection of steel structures and utilizes a specialized on-call consultant to perform the inspection at the fabricator's plant. When a shop inspection of structural steel components is necessary, the Bridge Group must be notified well in advance of fabrication. There have been instances where notification was not provided, which resulted in structural steel shipped to the project without inspection. Other instances have occurred where sufficient time was not given to allow the Bridge Group to process the contract modification for consultant inspection services, necessitating rushing an advanced notice to proceed through the system.

Process

Standard Specifications **604-3.04 Shop Inspection** (Structural Steel) and **606-3.02 Fabrication** (Overhead Sign Structures) provide timelines for notification of required structural steel fabrication and shop inspection. Additional detail is contained in the Construction Manual [604-3 Construction Requirements](#).

When a shop inspection of structural steel components is necessary, the contractor is required to provide written notice a minimum of three months in advance prior to fabrication. Upon notification the Resident Engineer (RE) must convey the need for inspection to the Bridge Group Project Engineer assigned to oversee the project. Timely Bridge Group notification is required to enable the assignment of the on-call consultant inspection and completion of all task order contractual documents. Information - such as the fabricator and the type and number of steel structures requiring fabrication inspection - shall be provided to Bridge Group at the time of notification. Also, the Contractor is responsible to ensure that sufficient review time has been allowed for all shop drawings before scheduling fabrication. Once approved, the RE shall send two copies of the approved shop drawings to the Bridge Group Project Engineer.

The Preconstruction Meeting provides an opportunity to review fabrication requirements and associated timelines with the contractor. Prior to the Preconstruction Meeting, the RE should review the contract plans and identify the steel structures that require fabrication inspection by ADOT. Typical structures that do or do not require inspection are identified below and guidance should be sought from Bridge Group for steel structures not listed.

Typical structures that require fabrication inspection by ADOT are:

- Steel Bridge Members (Girders, Diaphragms, Bearing Assemblies, etc.)
- Tubular Sign Structures (Bridge Group Standards – SD Series)
- Bridge Barrier Steel Railing Components (Bridge Group Standards -SD 1.06)
- Modular Bridge Joint Systems
- Bridge Fascia Sign Structures

Typical structures that do not require fabrication inspection by ADOT are:

- Tapered Tube Sign Structures
- Ground Mounted Sign Structures
- Pedestrian Railing including Fence Components
- Traffic Signal, Lighting and High Mast Poles
- Bridge Deck Expansion Joints (Bridge Group Standards -SD 3.01, 3.02 and 3.03)