

# **Bridge Design Details 11.1 June 2019**

#### **Girder Elevation**

- 1. Dimension locations of field splices.
- 2. Show distances from the centerlines of bearings to the ends of girders.
- 3. Show sizes of web plates and flange plates.
- Dimension locations of stiffeners.
- 5. Show spacing of stud connectors.
- 6. Denote member designation (see *Memo to Designers*: 12-2 Guidelines for Identification of Steel Bridge Members)
  - a) Show notes about Charpy V-Notch (CVN) and Fracture Critical Member (FCM) requirements as applicable.
  - b) Identify and define limits for:
    - Fracture Critical Members
    - ii. Main Members Tension (T) or Compression (C)
    - iii. Primary Components of Main Members Tension or Compression
    - iv. Secondary Members

#### **Camber Diagram**

(See Memo to Designers: 12-3 Camber of Steel-Concrete Composite Girders)

- 1. Draw diagrams for both the WEB CAMBER and the SCREED CAMBER, but do not scale.
- 2. Show Camber components table.

#### Field Splices

- 1. Show sizes of all splice plates, fill plates, and bolt diameters.
- 2. Show weld symbols (weld type and size).
- 3. Show bolt layout including spacing and edge distance.
- Show gap distance between spliced girder segments.



## **Cross frames, Diaphragms and Lateral Bracings**

- 1. Show all member designations and dimensions.
- 2. Show weld symbols (weld type and size).
- 3. Show bolt layout including spacing and edge distance.
- 4. Show dimensions from working points to flanges.
- 5. Provide notes on loading conditions during erection, as applicable. Specify whether details apply to "NO LOAD", "STEEL COMPONENTS DEAD LOAD" or "FINAL DEAD LOAD" conditions.

### **Bearings**

- 1. Show all components and fasteners, including sole plate details.
- 2. Show weld symbols (weld type and size).
- 3. Show bolt layout including spacing and edge distance