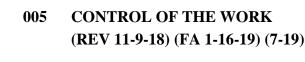
## EXPECTED IMPLEMENTATION JULY 2019



SUBARTICLE 5-1.4.1.is deleted and the following substituted:

## 5-1.4 Shop Drawings:

## **5-1.4.1. Definitions:**

1. Shop Drawings: All working, shop and erection drawings, associated trade literature, calculations, schedules, manuals and similar documents submitted by the Contractor to define some portion of the project work. The type of work includes both permanent and temporary works as appropriate to the project.

- 2. Permanent Works: All the permanent structures and parts thereof required of the completed Contract.
- 3. Temporary Works: Any temporary construction work necessary for the construction of the permanent works. This includes but is not limited to bracing, falsework, formwork, scaffolding, shoring, temporary earthworks, sheeting, cofferdams, and special erection equipment.
- 4. Construction Affecting Public Safety: Construction that may jeopardize public safety such as structures spanning functioning vehicular roadways, demolition of a continuous span structure while traffic is under any span, pedestrian walkways, railroads, navigation channels of navigable waterways and walls or other structure foundations located in embankments immediately adjacent to functioning roadways. It does not apply to those areas of the site under the Contractor's control and outside the limits of normal public access.
- 5. Major and Unusual Structures: Bridges of complex geometry and/or complex design. Generally, this includes the following types of structures:
  - a. Bridges with an individual span longer than 300 feet.
  - b. Structurally continuous superstructures with spans over

150 feet.

- c. Steel box and plate girder bridges.
- d. Steel truss bridges.
- e. Concrete segmental and longitudinally post-tensioned

continuous girder bridges.

- f. Cable stayed or suspension bridges.
- g. Arch bridges.
- h. Tunnels.
- i. Movable bridges (specifically electrical and mechanical

components).

j. Rehabilitation, widening, or lengthening of any of the

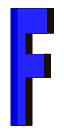
above.

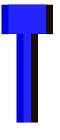
- 6. Special Erection Equipment includes launching gantries, beam and winch equipment, form travelers, stability towers, strong-backs, erection trusses, launching noses or similar items made purposely for construction of the structure. It does not apply to commonly available proprietary construction equipment such as cranes.
- 7. Falsework includes any temporary construction work used to support the permanent structure until it becomes self-supporting. Falsework includes steel











## EXPECTED IMPLEMENTATION JULY 2019

or timber beams, girders, columns, piles and foundations, and any proprietary equipment including modular shoring frames, post shores, and adjustable horizontal shoring.

8. Formwork includes any structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Formwork comprises common materials such as wood or metal sheets, battens, soldiers and walers, ties, proprietary forming systems such as stay-in-place metal forms, and proprietary supporting bolts, hangers and brackets. Formwork may be either permanent formwork requiring a shop drawing submittal such as stay-in-place metal or concrete forms, or may be temporary formwork which requires certification by the Specialty Engineer for Construction Affecting Public Safety and for Major and Unusual Structures.

- 9. Scaffolding is an elevated work platform used to support workmen, materials and equipment, but not intended to support the structure.
- 10. Shoring is a component of falsework such as horizontal, vertical or inclined support members. In this Section, this term is interchangeable with falsework.
- 11. Bracing is a temporary structural member(s) placed between beams, girders, piles columns, etc. to provide stability during construction activities.
- 12. Contractor Originated Designs: Items which the Contract Documents require the Contractor to design, detail and incorporate into the permanent works.