

Proposal for BDDM – Box Girder Stem and Bottom Slab Aggregate Size

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Modify Section 1.1.12.1 as follows:

1.1.12.1 Concrete General

Designate the concrete class by the minimum compressive strength at 28 days followed by the maximum aggregate size (e.g., Class 4000 – 3/4). Unless otherwise specified, Class ~~3300~~ – 1-1/2, 1 or 3/4 is called for by the Standard Specifications. The ultimate strength on which allowable stresses are based should not exceed 5000 psi, except for prestressed concrete. Use High Performance Concrete (HPC) in all cast-in-place concrete decks and end panels.

Deleted: 3600

Classes of Concrete

(For design and to be shown on plans)

HPC4000 – 1 ½, 1, or ¾ All poured decks [except Box Girder decks that require greater strength]

HPC4000 -1-1/2. 1, or ¾ End Panels

XXXX - ¾ Prestressed members [Does not include poured deck on prestressed members, see above]

XXXX – ~~1/2 or 3/8~~ Post-tensioned ~~box girder bottom slab and stem walls~~

Deleted: 3/4

Deleted: members

XXXX – 3/4 Compression Members

~~3300~~ – 1 ½, 1, or 3/4 All other concrete

Deleted: 3600

Background

Flow of concrete around rebar and post-tensioning ducts has been a concern in some box girder bridges. This change, along with the increased stem cover already implemented through recent changes to DET3130 will help improve concrete flow and result in higher quality construction.