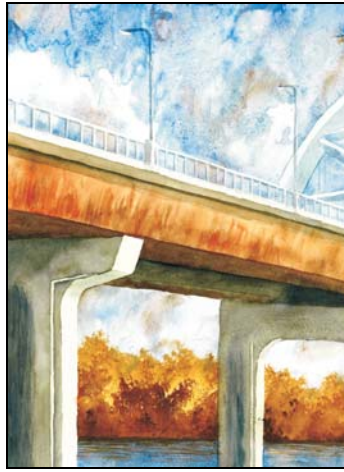
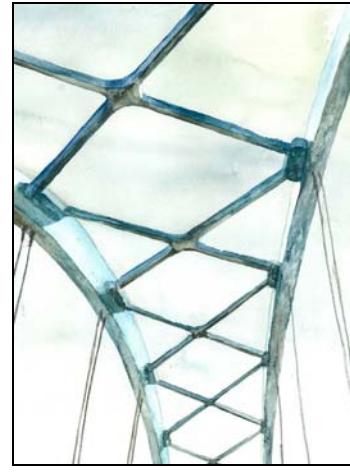




Division of Transportation
System Development
Bureau of Structures
PO Box 7916
Madison, WI 53707-7916



Bridge Manual



Standard Details

DATE: February 6, 2009
TO: Bridge Manual Users
FROM: DTSD – Bureau of Structures
SUBJECT: **January, 2009 Bridge Manual Update**

The following Bridge Manual chapters have text that has been edited:
Chapters 3, 4, 5, 6, 11, 12, 13, 17, 19, 24, 27, 28, 37, 38, 39, 40

Many changes were fairly minor. A vertical black bar in the left margin notes all changes.

A new WisDOT Policy Item under section 13.4.10 Extreme Event Collision Loads should provide beneficial guidance with regards to addressing the 400 kip pier impact load. Standards may be developed in the future to represent what is verbally stated in this Policy Item.

Chapter 13 has a new example for multi-columned pier design.

Please see the attached sheets for a list, with brief explanation, of the Standards that were revised.

January 2009 Standard Details Update Summary

Chapter 11 Std 11.01 ■ Slight change to weld designation for HP piles

Chapter 12

Std 12.01 ■ Minor typing edit

Std 12.02 ■ In wing haunch, changed FF horiz. bar at top to a #5 bar from "same size as "W" bars"
■ Corrected font style in a couple of locations

Std 12.03 ■ Removed incorrect #4 horiz. bar reference in Front Elevation
■ Added note below pile spacing calcs as a reminder that pile must also be designed for lateral loads

Std 12.04 ■ Enhanced note regarding top of side wall elevation

Std 12.05 ■ Clarified 'B' bars in Section A-A (Typ. Body B.F.)
■ Changed "Longit." to "Horizontal" in Section A-A note

Std 12.06 ■ Enhanced note regarding top of side wall elevation
■ Removed parapet to be consistent with other abut. standards

Std 12.07 ■ In Wing Elevation, F.F. bars changed to proper #5 bars at 1'-0"

Chapter 13

Std 13.01 ■ Maximum stirrup spacing changed from 6" to 4"

Std 13.02 ■ Enhance note (*) regarding use of oversized seals

Std 13.04 ■ Added note labeling horiz. # 5 U-bars at cap ends

Chapter 19

Std 19.01 ■ Modified note regarding coating of girder ends

Std 19.03 ■ Modified note regarding coating of girder ends

Std 19.13 ■ Modified note regarding coating of girder ends

Std 19.14 ■ Revised maximum number of strands for undraped patterns
■ Misc. minor text/font issues

Std 19.15 ■ Modified note regarding coating of girder ends

Std 19.16 ■ Revised maximum number of strands for undraped patterns
■ Misc. minor text/font issues

Chapter 19 (con't)

- Std 19.17 ■ Modified note regarding coating of girder ends
- Std 19.18 ■ Revised maximum number of strands for undraped patterns and added values for 42 draped strands
 - Misc. minor text/font issues
- Std 19.19 ■ Modified note regarding coating of girder ends
- Std 19.20 ■ Revised maximum number of strands for undraped patterns
 - Misc. minor text/font issues
- Std 19.31 ■ Minor typing edit
- Std 19.33 ■ Removed note not allowing construction joint at top of concrete diaphragm. The construction joint is not allowed on W-flanged prestressed girders, only
- Std 19.34 ■ Clarified diaphragm bars
 - Minor typing edit
- Std 19.35 ■ Clarified diaphragm bars
 - Minor typing edit

Chapter 24

- Std 24.02 ■ Parabolic Haunch Details view now reflects current policy of utilizing shear studs entire length of girder
 - In "Notes", removed option for butt splice when permanent hold down devices are being used at the abutment. This will lock in dimensions used to fabricate the hold down device

Chapter 27

- Std 27.02 ■ Minor text changes
- Std 27.06 ■ Minor text changes
- Std 27.07 ■ Minor text changes
- Std 27.08 ■ Moved notes referred to on Std 27.02, combined with existing notes on this Std, then split "Bearing Notes" and "Designer Notes" similar to other Standards
- Std 27.09 ■ Added "Designer Notes"
 - Removed reference to "Bearing Assemblies Fixed" in note regarding payment
 - Minor text changes

Chapter 30

- Std 30.07 ■ Added note for 2-1/2" bar clearance in top of sidewalk
- Std 30.17 ■ Removed extraneous lines
- Std 30.18 ■ Added to notes painting of inside of tube at field erection jts.
 - Added "Closure Plug Detail"

Chapter 36

- Std 36.05 ■ Added reinforcement to "Joint Detail" which shall be used when amount of longitudinal reinforcement in joint is too small

Chapter 38

- Std 38.01 ■ Reworded statement for maximum vertical clearance in "Designer Notes" per request by the Rails & Harbors Section

Chapter 39

- Std 39.02 ■ Minor revision
- Std 39.10 ■ Minor revision

Chapter 40

- Std 40.02 ■ Removed Deck Cleaning reference in the notes (not required for asphaltic overlays)
- Std 40.08 ■ 1" dimension from end of girder to edge of plate dimensioned to the correct extension line in Plan View of elastomeric brg.