STRUCTURES MANUAL INTRODUCTION - REVISION HISTORY

I.1 ..... Added "all Non-Design-Bid-Build" to second paragraph; Revised example MNCP box; Revised Commentary; Changed "Design-Build" to "Non-Conventional" in list of audiences.

I.2 ..... Renumbered Modifications to LTS-6 to Volume 3; Deleted references to unused volumes; Added "Additional Links" link to cover page.

I.4 ..... Added clarification to Paragraph I.4.

I.6 ..... Revised per SDB 13-09.

I.12 ..... Added Section I.12 Additional Links.

VOLUME 1 - REVISION HISTORY

Per Structures Design Bulletin 13-12, language related to how estimated quantities are shown in the plans has been revised throughout the manual.

I.2 ..... Added clarification to Paragraphs B and C.

Table I.3-1 ..... Deleted cross reference to LRFD 5.4.2.6; Redirected cross reference from LRFD 5.14.2.3.4.B to SDG 2.13.2.

1.1.6 ..... Clarified requirements for ADA on bridges.

1.1.8 ..... Added new Section per SDB 13-09.

1.4.2 ..... Modified Table 1.4.2-1 to revise cover for tops of prestressed beams; Added criteria for traffic and pedestrian railings constructed using slip form method.

1.4.5 ..... Added new Section per SDB 13-03 with modifications to Paragraph B.

1.5 ..... Replaced paragraph D.

1.6.2 ..... Revised list of structures for which Adhesive Bonded Anchor Systems are not permitted in Paragraph B.

1.10 ..... Added new section 1.10.

2.2 ..... Deleted "Archived" from the listing for AASHTO Type II Beams in Table 2.2-1 per SDB 13-11.

2.4.1 ..... Revised definition of "z" to address noise walls in Paragraph D.

2.5 ..... Revised reference to Drainage Manual section.

2.8.2 ..... Added references to LRFD sections.

2.10 ..... Revised Structure Type description for Steel Piers and added criteria for Concrete Piers in first table of Paragraph A.

2.11.2 ..... Updated Navigation Data Center link.

2.11.7 ..... Revised Section per SDB 13-04.

2.13 ..... Revised to include new Section 2.13.1.

3.1 ..... Revised requirement for reinforced concrete core in Paragraph F.2 and Commentary.

3.5.5 ..... Clarified Paragraph B and added cross reference to SFH.

3.6.11 ..... Clarified requirements.

3.11.5 ..... New Section - relocated requirements from SDM 13.11.D.

3.13.1 ..... Revised Section per SDB 13-05.

3.13.2 ..... Clarified terminology in Paragraph C; Revised Paragraph N and added new Paragraph P per SDB 13-06 with subsequent revisions.

3.16.2 ..... Deleted MNCP box and added "precast" to second sentence of second paragraph.

3.16.4 ..... Added definition of exposed wall height and revised height zone determination in third Paragraph.

3.16.6 ..... Moved requirements to the Soils and Foundations Handbook and replaced section with a cross reference to the handbook.

3.16.7 ..... Deleted old section 3.16.7 Resistance Factors as it is already covered in the Soils and Foundations Handbook; Moved Commentary to the Soils and Foundations Handbook; Renumbered subsequent Section.

3.18 ..... Added new section.

4.1.3 ..... Added Paragraph D per SDB 13-07.

4.1.7 ..... Revised Section per SDB 13-04 with subsequent revision to Paragraphs B.3, B.4 and B.5.

4.2.2 ..... Added "Minor Widenings" to Paragraph C and MNCP Box. Deleted "minor widenings" from Paragraph D.

4.2.3 ..... Clarified Paragraph A and added cross reference to SDG 7.7. Revised Paragraph B and MNCP box.

4.2.8 ..... Expanded Commentary after Paragraph G.

4.2.13 ..... Revised Section per SDB 13-11.

4.3.1 ..... Revised first Paragraph and MNCP box, Paragraph C.3, Table 4.3.1-1 and Paragraph G per SDB 13-11 with subsequent revisions.

4.5.5 ..... Revised Tables 4.5.5-1 and 4.5.5-3 per SDB 13-07; Updated Table 4.5.5-3 and added Paragraph K, Table 4.5.5-4 and Figure 4.5.5-1 per SDB 13-08.

4.5.6 ..... Revised Table 4.5.6-1 per SDB 13-07 with subsequent revisions.

4.6 ..... Renamed Section per SDB 13-07.

4.6.1 ..... Clarified Paragraphs B and C for electrical and access opening requirements.

4.7 ..... Renamed Section per SDB 13-07 with subsequent clarification and relocated Paragraph A.4 to Paragraph C and renumbered subsequent Paragraph.

4.8 ..... Added new Section per SDB 13-07 with subsequent clarifications and addition of Commentary to Paragraph 4.8.1.D and revisions to Paragraph 4.8.2.C.

5.3.1 ..... Added requirements for structural steel that will be coated to Paragraph A. Revised Paragraph B to make use of HPS Steel mandatory for Steel Substructure elements, excluding piles, and added Commentary.

5.6.2 ..... Clarified Paragraphs B and C for electrical and access opening requirements.

6.7.4 ..... Corrected cross references to PPM in Paragraph A.2.

6.7.9 ..... Added Commentary to Paragraph B.

6.8 ..... Added new Section. Relocated previous Section 6.8 to 6.10.

6.10 ..... Relocated Section from 6.8 and revised per SDB 13-07.

7.3.1 ..... Replaced Paragraph C per SDB 13-03 and added clarification to the new requirements; Deleted the MNCP box.

7.6 ..... Revised Paragraph A.1 and Commentary and Paragraph F per SDB 13-11.

7.7 ..... Clarified the requirements in Paragraphs D and E.

8.9 ..... Added FAC and Commentary to Paragraph B.

9 ..... Updated unit prices throughout; Reorganized Sections 9.2.1 and 9.2.2; Added pricing details for Traffic Railings, Approach Slabs and Bridge Deck Grooving.

9.2.2 ..... Revised Paragraph B.2 per SDB 13-11.

9.2.3 ..... Added Approach Slabs to Step 1, Clarified requirements of Step 2 and Updated Costs in Step 3.

VOLUME 2 - REVISION HISTORY

Per Structures Design Bulletin 13-12, language related to how estimated quantities are shown in the plans has been revised throughout the manual. Relocated Structures Detailing Manual Examples to a new external web page and redirected all links.

I.1 .....Revised Paragraph D.

I.4 .....Revised per SDB 13-12.

I.5 .....Renamed section and revised per SDB 13-12.

2.2 .....Revised practice stated in Paragraph B MNCP box.

2.6 .....Clarified requirements of Paragraphs E and H.

2.8 .....Revised Paragraph D per SDB 13-12.

2.11.1 .....Added leader line criteria to Paragraph E and related Figure 2.11.1-2.

3.1 .....Revised per SDB 13-12.

4.3 .....Added clarification to Paragraph E.

4.4 .....Revised per SDB 13-03.

5.1 .....Revised Paragraph G to match Specifications Handbook.

5.2 .....Revised Paragraphs F, G.1 and K.

5.3 .....Added criteria for steel straddle/integral pier caps to Paragraph F.

5.4 .....Revised per SDB 13-12.

6.3 .....Added new Paragraph C.

7.3 .....Added new Paragraph V.

7.4 .....Added new Paragraphs L and M.

11.5 .....Added new Paragraph O.

12.1 .....Revised Paragraph B and deleted MNCP Box.

12.2 .....Deleted Paragraph N and its associated MNCP box per SDB 13-12; Renumbered subsequent Paragraphs.

12.5 .....Added "and the bearing seat is stepped" to Paragraph E; Deleted Paragraph I; Revised title of Figure 12.5-5; Revised Figure 12.5-5.

12.6 .....Revised Figure 12.6-2.

13.2 .....Revised Paragraphs B and M and deleted their associated MNCP boxes per SDB 13-12.

13.5 .....Clarified Figure 13.5-1.

13.7 .....Revised Paragraph O; Deleted previous Figure 13.7-5; Renumbered subsequent figure and revised its title.

13.11 .....Relocated requirements of Paragraph D to SDG 3.11.5.

15.3 .....Deleted redundant Paragraph H; Renumbered subsequent Paragraphs; Revised Paragraph N and deleted its associated MNCP box.

15.4 .....Added Paragraph J.

15.5 .....Revised Figures 15.5-1 and 15.5-2.

15.8 .....Relocated beam end treatment requirement from Paragraph F to SDG 4.3.1; Revised Figures 15.8-1, 15.8-2, 15.8-4, 15.8-5 and 15.8-6.

15.9 .....Clarified detail in Figure 15.9-5.

16.6 .....Added cross reference to Figure 16.6-4.

16.12 .....Clarified requirements of Paragraph C and Figure 16.12-1 for treatment of drain pipe through backwall.

18.2 .....Relocated handrail design criteria from Paragraph C to SDG 6.8; Revised Figure 18.2-3 to show a 42" traffic railing.

19.1 .....Added new Paragraphs I and J, Commentary and Figures 19.1-1 and 19.1-2 per SDB 13-06 with minor modification.

19.2.3 .....Deleted Paragraph D and its associated MNCP box per SDB 13-12; Renumbered subsequent Paragraphs.

19.6 .....Clarified Paragraph M; Deleted Paragraph N and Figure 19.6-5 per SDB 13-06.

19.6.1 .....Revised Paragraph B and its associated MNCP box; Revised Figure 19.6.1-2; Added new Figure 19.6.1-3; Renumbered subsequent Figure.

22.3 .....Revised Paragraph H per SDB 13-07.

VOLUME 3 - REVISION HISTORY

2.4.2.2 .....Revised first Paragraph and Figure 2.

2.4.2.5 .....Revised maximum length of Span Overhead Sign Structures from 250 to 220 feet.

3.8 .....Clarified Commentary.

5.14.3 .....Added criteria for mast arm signal structures, steel strain poles and high mast light poles.

5.17.2.4 .....Added new Section and associated Commentary.

5.17.3.1 .....Added new Section and Commentary.

5.17.3.3 .....Revised criteria and associated Commentary regarding the use of grout pads.

5.17.4.3 .....Replaced Section and associated Commentary.

5.19 .....Added new Section

11.6 .....Added galloping requirement; Changed cross references; Deleted some Commentary.

13.6.1.1 .....Added "uncorrected" to definition of ω_{fdot}.

C.1 .....Revised Section.