

C5.3 Haunches

[See the Office of Bridges and Structures web site for archived Methods Memos listed under articles in this section.](#)

[The Methods Memos for which policies have been partially revised and/or for which document references have been updated are noted as partially revised. Any obsolete Methods Memos that apply to this section are listed at the end.](#)

C5.3.1 General

C5.3.1.1 Policy overview

Partially revised: Methods Memo No. 62: Beam Line Haunch Elevations for PPCB and Steel Girder Bridges
28 August 2002

C5.3.1.2 Design information

C5.3.1.3 Definitions

C5.3.1.4 Abbreviations and notation

C5.3.1.5 References

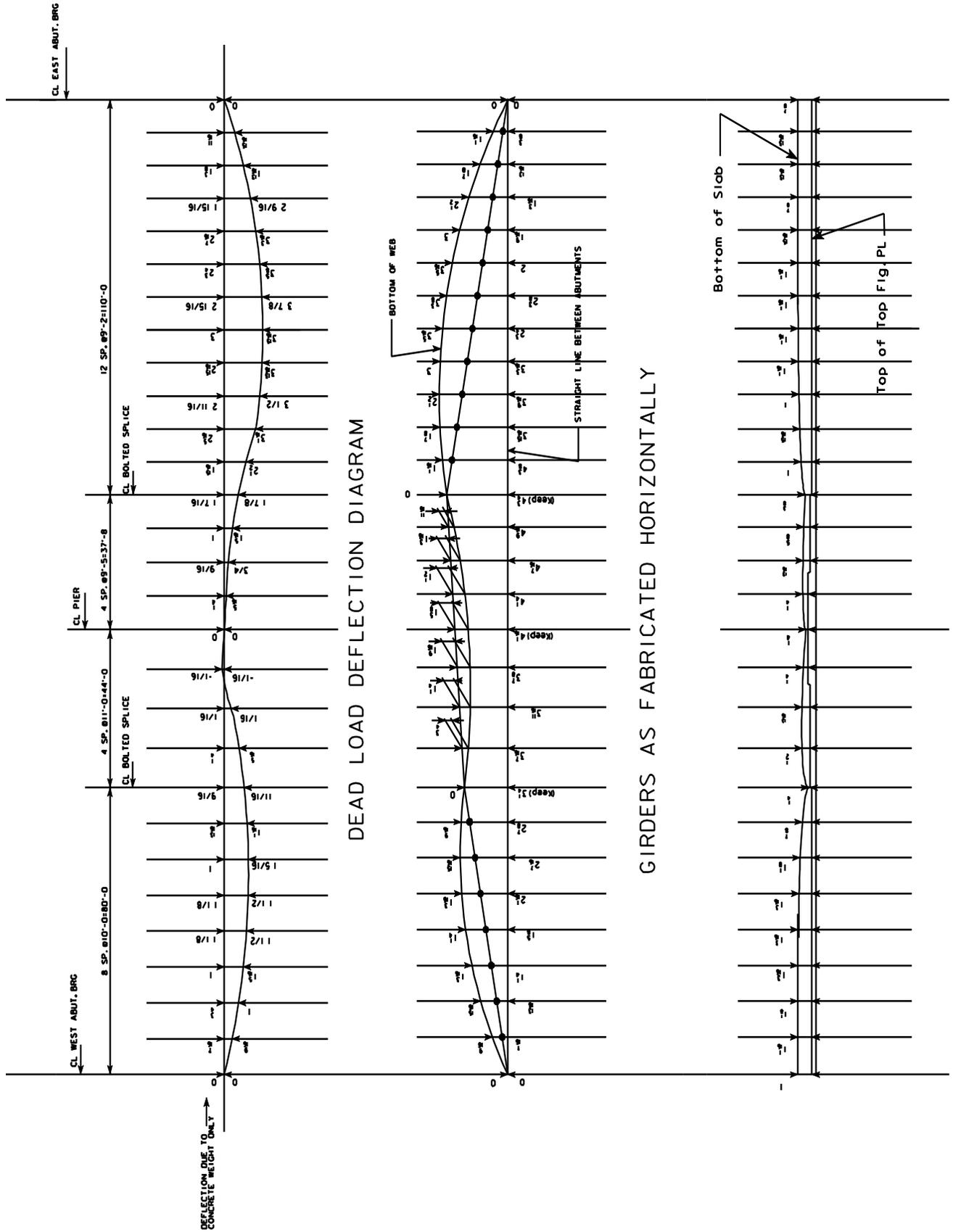
C5.3.2 PPCB bridges

C5.3.2.1 Analysis and design

Methods Memo No. 26: Haunch Reinforcement for PCBM
24 July 2003

Methods Memo No. 115: Revised Haunch Policies (This memo made changes to MM Nos. 62 and 89.)
4 August 2005

The three diagrams shown below should be developed using spacing intervals consistent with the intervals of the “Top of Slab Elevations” view.



Haunch Policy Summary ~ 4 August 2005

Policy Item	PPCB	CWPG and RSB
Field haunch adjustment	1.0-1.5 inches for LXA-LXD, 1.5-2.0 inches for BT, BTC, BTD [BDM 5.3.1.1, 5.3.2.1]	0.5-1.0 inches [BDM 5.3.1.1, 5.3.3.1] Same as above for RSB [BDM 5.3.4.1]
Shear connectors	Min. into deck 2.5 inches [BDM 5.3.1.1, 5.3.2.1, MM No. 62] Above top flange 4.5 inches for LXA-LXD, 5 inches for BT, BTC, BTD [BDM 5.3.2.1]	Min. into deck 2 inches [BDM 5.3.3.1, MM No. 62Rev, 115] Same as above for RSB [BDM 5.3.4.1] 3½-, 4-, 5-, and 6-inch shear studs available
Design haunch	Min. at centerline 0.5 inches for LXA-LXD, 1.0 inch for BT, BTC, BTD [BDM 5.3.2.1] Min. at edge of top flange 0 inches [BDM 5.3.2.1] Max. at centerline 2.0 inches for LXA-LXD, 2.5 inches for BT, BTC, BTD [BDM 5.3.2.1]	At abutment 1.0 inch [BDM 5.3.3.1, MM No. 115, SS 4305-4310 modifications in process] At abutment 0.5 inch for RSB [BDM 5.3.4.1, SS 5252-5259] Min. at edge of top flange 0 inch [BDM 5.3.3.1, MM No. 89] Same as above for RSB [BDM 5.3.4.1] Max. at centerline 2.0 inches [BDM 5.3.3.1, MM No. 89] Same as above for RSB [BDM 5.3.4.1]
Field haunch	Max. embedment at edge of top flange 0.5 inch [BDM 5.3.2.1, MM No. 62] Min. clear above top of shear reinforcement 2.5 inches [BDM 5.3.2.1, 5.3.2.1, MM No. 62Rev, 115] Min. penetration of shear stirrups into deck 2½ inches Max. haunch at centerline 4.0 inches [BDM 5.3.2.1, MM No. 26]	Max. embedment at edge of top flange 0.5 inch [BDM 5.3.3.1, MM No. 62, 89, 115] Same as above for RSB [BDM 5.3.4.1] Min. clear above top of stud 2.5 inches [BDM 5.3.3.1, MM No. 62Rev, 89Rev, 115] Same as above for RSB [BDM 5.3.4.1] Min. penetration of shear studs into deck 2.0 inches [BDM 5.3.3.1, MM No. 89, 115] Same as above for RSB [BDM 5.3.4.1] Max. haunch at centerline 4.0 inches [BDM 5.3.3.1, MM No. 89Rev, 115] Same as above for RSB [BDM 5.3.4.1]
Detailing	“Beam Camber Data”, “Slab Thickness at Beams”, “Slab Thickness Details” [BDM 5.3.2.2, MM No. 62] “Haunch Data Detail Sheet” with: “Table of Beam Line Haunch Elevations”, “Miscellaneous Data Table”, “Haunch Locations”, “Haunch Detail” [BDM 5.3.2.2, MM No. 62]	“Dead Load Deflection Diagram”, “Girders as Fabricated Horizontally”, “Theoretical Concrete Haunch Diagram” [BDM 5.3.3.2, MM No. 62Rev, 115] “Dead Load Deflection Diagram” [BDM 5.3.4.2, RS40 series], “Beam Camber”, “Theoretical Haunch Diagram” [BDM 5.3.4.2, SS 5252-5259 modifications in process] for RSB “Haunch Data Detail Sheet” with: “Table of Beam Line Haunch Elevations”, “Miscellaneous Data Table”, “Haunch Locations”, “Haunch Detail” [BDM 5.3.3.2, MM No. 62] “Beam Line Haunch Data” sheet with same information for RSB [BDM 5.3.4.2, SS 5261A, 5263A, etc.]

C5.3.2.2 Detailing

Partially revised: Methods Memo No. 62: Beam Line Haunch Elevations for PPCB and Steel Girder Bridges

28 August 2002 (Manual text changed provisions of this memo on 14 July 2005.)

C5.3.3 CWPG bridges

C5.3.3.1 Analysis and design

Partially revised: Methods Memo No. 89: Shear Stud Lengths and Haunch Requirements for Steel Girders

26 January 2004

Methods Memo No. 115: Revised Haunch Policies

19 May 2005

C5.3.3.2 Detailing

Methods Memo No. 115: Revised Haunch Policies

19 May 2005

Partially revised: Methods Memo No. 62: Beam Line Haunch Elevations for PPCB and Steel Girder Bridges

28 August 2002

C5.3.4 RSB bridges

C5.3.4.1 Analysis and design

Methods Memo No. 115: Revised Haunch Policies

19 May 2005

C5.3.4.2 Detailing