DIVISION6.GR6  Structures

6-01.GR6  General Requirements For Structures

6-01.5.GR6  Work Access and Temporary Structures

6-01.5.INST1.GR6  (Section 6-01.5 is re-titled and revised to read:)
Must use once preceding any of the following:

6-01.7.GR6  Navigable Streams

6-01.7.INST1.GR6  (Section 6-01.7 is supplemented with the following)
Must use once preceding any of the following:

6-01.7.OPT1.FB6  (Navigation Lighting System)
(June 26, 2000)
Use in projects requiring installation of a navigation lighting system. The fill-in specifies the Bridge Number.
Include with either 1-07.6.OPT3.FB1 or 1-07.6.OPT4.GB1.
(1 fill-in)

6-01.7.OPT2.FB6  (Temporary Navigation Lights)
(June 26, 2000)
Use in projects requiring installation of temporary navigation lights. The fill-in specifies the bid item name.
Include with either 1-07.6.OPT3(A).FB1 or 1-07.6.OPT3(B).GB1.
(1 fill-in)

6-01.9.GR6  Working Drawings

6-01.9.INST1.GR6  (Section 6-01.9 is supplemented with the following)
Must use once preceding any of the following:

6-02.GR6  Concrete Structures

6-02.2.GR6  Materials

6-02.2.INST1.GR6  (Section 6-02.2 is supplemented with the following)
Must use once preceding any of the following:

6-02.2.OPT1.GR6  (Resin Bonded Anchors)
(April 1, 2013)
Include in projects requiring resin bonded anchors for attaching and anchoring items to concrete structures. Must also include 6-02.3(18).OPT1.GR6.

6-02.2.OPT2.GB6  (Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels)
(December 2, 2002)
Use in projects when epoxy resin is required for setting steel reinforcing bars into holes drilled into concrete.
Include with 6-02.3(24).OPT1.GB6 and 6-02.5.OPT9.FB6.

6-02.2.OPT3.GB6 (Epoxy Mortar)
(December 2, 2002)
Use in projects which require the use of epoxy mortar. Include with 6-02.3(10).D.OPT2.GB6 and 6-02.5.OPT1.GB6 when coating existing bridge deck surfaces.

6-02.2.OPT4.GB6 (Epoxy Crack Sealing)
(June 26, 2000)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with 6-02.3.OPT1.GB6 and 6-02.5.OPT49.GB6.

6-02.2.OPT5.GB6 (Exposed Aggregate Finish)
(January 7, 2008)
Use in projects requiring exposed aggregate finish of concrete surfaces. Include with 6-02.3(5).A.OPT1.GB6, 6-02.3(14).OPT1.GB6, 6-02.2.OPT6.GB6 and 6-02.3(14).OPT3.GB6.

6-02.2.OPT6.GB6 (Clear Sealer for Exposed Aggregate Finish)
(April 2, 2007)
Use in projects with an exposed aggregate finish. Include with 6-02.2.OPT5.GB6, 6-02.3(5).A.OPT1.GB6, 6-02.3(14).OPT1.GB6, and 6-02.3(14).OPT3.GB6.

6-02.2.OPT7.GB6 (Fractured Basalt Finish)
(April 7, 2008)

6-02.2.OPT8.GB6 (Fractured Fin Finish)
(April 7, 2008)

6-02.2.OPT9.GB6 (Fractured Granite Finish)
(April 7, 2008)

6-02.2.OPT10.GB6 (Variable Depth Random Board Finish and ¾ Inch Random Board Finish)
(April 7, 2008)
Use in projects requiring use of elastomeric, ABS, or plastic form liners to produce random board finish of concrete surfaces. Include with 6-02.3(14).OPT8.GB6.

6-02.2.OPT11.GB6 (Ribbed Finish)
(April 7, 2008)

6-02.2.OPT12.GB6  (Striated Finish)
(April 7, 2008)

6-02.2.OPT13.GB6  (Ashlar Stone Finish)
(April 7, 2008)

6-02.2.OPT14.GB6  (Block Finish)
(April 7, 2008)

6-02.2.OPT15.GB6  (Split Face Finish)
(April 7, 2008)

6-02.2.OPT16.GB6  (River Rock Finish)
(April 7, 2008)

6-02.2.OPT17.GB6  (Cascadian Stone Finish)
(April 5, 2010)

6-02.2.OPT22.GB6  (Modular Expansion Joint System)
(April 1, 2013)
Include in projects requiring a modular expansion joint system. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with 6-03.3(30).OPT1.FB6. Must use with 6-02.3(13).OPT3, 6-02.4.OPT3.FB6, and 6-02.5.OPT28.GB6.

6-02.2.OPT33.GB6  (Fabric Pad Bearing)
(April 7, 2008)
Use in projects requiring fabric pad bearings. Include with 6-02.3(19).B.OPT1.GB6, 6-02.4.OPT13.FB6, 6-02.5.OPT38.GB6, and 6-03.3(30).OPT1.FB6.

6-02.2.OPT46.GB6  (Bridge Supported Utilities)
Must use once preceding any of the following:

6-02.2.OPT46(A).GB6  (June 26, 2000)
Use in projects with bridge supported utilities when the supports include concrete inserts. Include with 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and either 6-02.5.OPT9.FB6 or 6-02.5.OPT26.FB6.

6-02.2.OPT46(B).GB6  (Bridge Supported Utilities)
(April 30, 2001)
Use in projects with bridge supported utilities when the supports include steel rods, bars, and plates. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, and 6-02.5.OPT92.FB6, and either 6-02.3.OPT2(B).GB6, or 6-02.3.OPT2(C).GB6 and 6-02.5.OPT93.GB6.

6-02.2.OPT46(C).GB6  (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the supports include transverse braces. Include with 6-02.2.OPT46(A).GB6, 6-02.2.OPT46(B).GB6, 6-02.3.OPT2(A).GB6, and 6-02.5.OPT92.FB6, and either 6-02.3.OPT2(B).GB6, or 6-02.3.OPT2(C).GB6 and 6-02.5.OPT93.GB6.

6-02.2.OPT46(D).GB6  (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the supports include pipe rolls or pipe saddles. Include with 6-02.5.OPT92.FB6 and other applicable bridge supported utility material and construction requirement GSP's.

6-02.2.OPT46(E).GB6  (Bridge Supported Utilities)
(April 30, 2001)
Use in projects with bridge supported utilities in concrete box girder bridges when the utilities are supported on anchor blocks on the bottom slab. Include with 6-02.5.OPT92.FB6 and other applicable bridge supported utility material and construction requirement GSP's.

6-02.2.OPT47.GB6  (Bridge Grate Inlet)
(April 30, 2001)
Use in projects with bridge grate inlets. Include with 6-02.4.OPT25.GB6 and 6-02.5.OPT50.GB6.

6-02.2.OPT48.GB6  (Bridge Drain Risers)
(April 30, 2001)
Use in projects requiring the raising of bridge drains prior to asphalt or modified concrete overlay work on bridge decks. Include with 6-02.3(10)D.OPT3.GB6. Also include with 6-02.3(10)D.OPT4.GB6 if the bridge deck is overlaid with membrane waterproofing and ACP. Include with 6-02.5.OPT53.FB6 if the work is included in the cost of the membrane waterproofing or modified concrete overlay.
Include with 6-02.4.OPT26.GB6 and 6-02.5.OPT51.GB6 if the unit contract bid item “Modify Bridge Drain” is used to pay for the work.

6-02.2.OPT49.GB6 (Bridge Deck Repair Concrete) (August 1, 2011)
Use in projects where bridge deck repair is required (except not required for bridge deck overlay projects with modified concrete). Include with 6-02.3(10)D.OPT6.GB6. Include with 6-02.4.OPT37.GB6 and 6-02.5.OPT64.GB6 when the volume of work can be determined from bridge deck survey data. Include with 6-02.5.OPT65.GB6 when the work will be paid by force account.

6-02.3.GR6 Construction Requirements

6-02.3.INST1.GR6 (Section 6-02.3 is supplemented with the following)
Must use once preceding any of the following:

6-02.3.OPT1.GB6 (Epoxy Crack Sealing) (August 1, 2011)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with 6-02.2.OPT4.GB6, 6-02.4.OPT24.GB6, and 6-02.5.OPT49.GB6.

6-02.3.OPT2.GB6 (Bridge Supported Utilities)
Must use once preceding any of the following:

6-02.3.OPT2(A).GB6 (Bridge Supported Utilities) (June 26, 2000)
Use in projects with bridge supported utilities when the supports include concrete inserts. Include with 6-02.2.OPT46.GB6, 6-02.4.OPT26.GB6, and either 6-02.5.OPT9.FB6 or 6-02.5.OPT26.FB6.

6-02.3.OPT2(B).GB6 (Bridge Supported Utilities) (June 26, 2000)
Use in projects with bridge supported utilities when the Contractor furnishes and installs the supports and the utility pipe or conduit pipe. Include with 6-02.5.OPT92.FB6 and other applicable bridge supported utility material GSP’s. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and either 6-02.5.OPT9.FB6 or 6-02.5.OPT26.FB6 when the supports include concrete inserts.

6-02.3.OPT2(C).FB6 (Bridge Supported Utilities) (June 26, 2000)
Use in projects with bridge supported utilities when the Utility Company furnishes, or furnishes and installs, some of the supports and pipe for the utilities. The first
fill-in specifies the items to be furnished and installed by the Utility Company. The second and third fill-ins specify the items to be installed by the Contractor which are furnished by either the Utility Company or the Contractor. Include with 6-02.5.OPT92.FB6 and 6-02.5.OPT93.GB6, and other applicable bridge supported utility material GSP’s. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and either 6-02.5.OPT9.FB6 or 6-02.5.OPT26.FB6 when the supports include concrete inserts. (3 fill-ins)

6-02.3.OPT3.GR6  (Submittals)  
(April 3, 2006)  
Include in all projects when pH monitoring is a condition of a 401 Water Quality Certification, or other permit. Do not use in projects covered by a NPDES General Construction permit. Requires approval of Regional Environmental Manager and Regional Construction Manager. Must also use 6-02.5.OPT3.GR6, 5-01.3(1)A.OPT1.GR5, 5-01.5.OPT1.GR5, 5-05.3(1).OPT7.GR5, 5-05.5.OPT1.GR5, 8-01.3(1)A.OPT1.GR8, and 8-01.5.OPT1.GR8.

6-02.3(2).GR6  Proportioning Materials

6-02.3(2).INST1.GR6  (Section 6-02.3(2) is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(5).GR6  Acceptance of Concrete

6-02.3(5)A.GR6  General  
6-02.3(5)A.INST1.GR6  (Section 6-02.3(5)A is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(5)A.OPT1.GB6  (Concrete Class EA)  
(June 26, 2000)  
Use in projects requiring concrete members with exposed aggregate finish. Include with 6-02.2.OPT5.GB6, 6-02.3(14).OPT1.GB6, 6-02.2.OPT6.GB6 and 6-02.3(14).OPT3.GB6.

6-02.3(6).GR6  Placing Concrete

6-02.3(6)B.GR6  Placing Concrete in Foundation Seals

6-02.3(6)B.INST1.GR6  (Section 6-02.3(6)B is supplemented with the following)  
Must use once preceding any of the following:
6-02.3(6)B.OPT1.GB6 (Concrete Seals) (June 26, 2000)
Use in projects where there is the possibility of seals being omitted during construction, in which case the footing is to be lowered to bottom of seal.

6-02.3(6)B.OPT2.GB6 (Concrete Seals) (June 26, 2000)
Use in projects where there is the possibility of seals being omitted during construction, in which case the footing is not to be lowered.

6-02.3(10).GR6 Bridge Decks and Bridge Approach Slabs

6-02.3(10)D.GR6 Concrete Placement, Finishing, and Texturing

6-02.3(10)D.INST1.GR6 (Section 6-02.3(10)D is supplemented with the following)
Must use once preceding any of the following:

6-02.3(10)D.OPT1.GB6 (Repairing Slab Left Exposed After Removing Existing Curb or Sidewalk) (August 4, 2008)
Use in projects when existing curbs or sidewalks are to be removed and the portion of the slab under the curb or sidewalk that is to remain exposed will be within two feet from the traffic lane.

6-02.3(10)D.OPT2.GB6 (Repairing Slab Left Exposed After Removing Existing Curb or Railbase) (August 4, 2008)
Use in projects when existing curbs or railbases are to be removed and the portion of the slab under the curb or railbase that is to remain exposed will be more than two feet from the traffic lane. Include with 6-02.2.OPT3.GB6 and 6-02.5.OPT53.FB6.

6-02.3(10)D.OPT3.GB6 (Bridge Drain Risers) (August 3, 2009)
Use in projects requiring the raising of bridge drains prior to asphalt or modified concrete overlay work on bridge decks. Include with 6-02.2.OPT48.GB6. Include with 6-02.3(10)D.OPT4.GB6 if the bridge deck is overlaid with membrane waterproofing and ACP. Include with 6-02.5.OPT53.FB6 if the work is included in the cost of the membrane waterproofing or modified concrete overlay. Include with 6-02.4.OPT26.GB6 and 6-
02.5.OPT51.GB6 if the unit contract bid item "Modify Bridge Drain" is used to pay for the work. Must use once preceding any of the following:

6-02.3(10)D.OPT3(A).GB6 (Bridge Drain Risers)
(August 4, 2008)
Use in projects requiring the raising of bridge drains prior to membrane waterproofing and asphalt overlay work. Include with 6-02.2.OPT48.GB6 and 6-02.3(10)D.OPT3.GB6. Include with 6-02.5.OPT53.FB6 if the work is included in the cost of the membrane waterproofing. Include with 6-02.4.OPT26.GB6 and 6-02.5.OPT51.GB6 if the unit contract bid item "Modify Bridge Drain" is used to pay for the work.

6-02.3(10)D.OPT5.GB6 (Plugging Existing Bridge Drain)
(January 4, 2010)
Use in projects requiring plugging of bridge drains. Include with 6-02.5.OPT53.FB6 if the work is included in the cost of the membrane waterproofing or modified concrete overlay. Include with 6-02.4.OPT27.GB6 and 6-02.5.OPT52.GB6 if the unit contract bid item "Plugging Existing Bridge Drain" is used to pay for the work.

6-02.3(10)D.OPT6.GB6 (Bridge Deck Repair)
(August 1, 2011)
Use in projects where bridge deck repair is required (except not required for bridge deck overlay projects with modified concrete). Include with 6-02.2.OPT49.GB6. Include with 6-02.4.OPT37.GB6 and 6-02.5.OPT64.GB6 when the volume of work can be determined from bridge deck survey data. Include with 6-02.5.OPT65.GB6 when the work will be paid by force account.

6-02.3(10)F.GR6 Bridge Approach Slab Orientation and Anchors

6-02.3(10)F.INST1.GR6 (Section 6-02.3(10)F is supplemented with the following)
Must use once preceding any of the following:

6-02.3(10)F.OPT2.GB6 (Construct pavement end of approach slabs parallel to pavement seat)
(August 4, 2008)
Use in projects when the pavement ends of all approach slabs are constructed parallel to the pavement seat.
6-02.3(10).FB6 (Construct pavement end of approach slabs both normal to the roadway centerline and parallel to pavement seat) (August 4, 2008)
Use in projects when the pavement ends of the approach slabs are constructed both normal to the roadway centerline and parallel to the pavement seat.
(2 fill-ins)

6-02.3(13).GR6 Expansion Joints

6-02.3(13).INST1.GR6 (Section 6-02.3(13) is supplemented with the following)
Must use once preceding any of the following:

6-02.3(13).OPT3.FB6 (Modular Expansion Joint System) (August 2, 2010)
Include in projects requiring a modular expansion joint system. The fill-in specifies the percentage of the amplified vertical load range to be used for the horizontal load range for fatigue design. The fill-in value shall be 20 percent except as otherwise specified. The fill-in value shall be 50 percent for all modular expansion joint systems installed at locations subject to significant braking and acceleration forces or to particularly large movement ranges. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with 6-03.3(30).OPT1.FB6. Must use with 6-02.4.OPT3.FB6, 6-02.2.OPT22.GB6, and 6-02.5.OPT28.GB6.
(1 fill-in)

6-02.3(14).GR6 Finishing Concrete Surfaces

6-02.3(14).INST1.GR6 (Section 6-02.3(14) is supplemented with the following)
Must use once preceding any of the following:

6-02.3(14).OPT1.GB6 (Exposed Aggregate Finish) (June 26, 2000)
Use in projects requiring exposed aggregate finish of concrete surfaces. Include with 6-02.2.OPT5.GB6, 6-02.3(5)A.OPT1.GB6, 6-02.2.OPT6.GB6 and 6-02.3(14).OPT3.GB6.

6-02.3(14).OPT2.GB6 (Containment) (June 26, 2000)
Use in projects requiring exposed aggregate finish of concrete surfaces over water. Include with 6-
02.3(14).OPT1.GB6, 6-02.3(5)A.OPT1.GB6, 6-
02.3(14).OPT1.GB6, 6-02.2.OPT6.GB6 and 6-
02.3(14).OPT3.GB6.

6-02.3(14).OPT3.GB6 (Applying Clear Sealer)
(April 2, 2007)
Use in projects with an exposed aggregate finish.
Include with 6-02.2.OPT5.GB6, 6-02.2.OPT6.GB6, 6-
02.3(5)A.OPT1.GB6, and 6-02.3(14).OPT1.GB6.

6-02.3(14).OPT5.GB6 (Fractured Basalt Finish)
(April 7, 2008)
Use in projects requiring fractured basalt finish of
concrete surfaces. Include with 6-02.2.OPT7.GB6.

6-02.3(14).OPT6.GB6 (Fractured Fin Finish)
(June 26, 2000)
Use in projects requiring fractured fin finish of concrete
surfaces. Include with 6-02.2.OPT8.GB6.

6-02.3(14).OPT7.GB6 (Fractured Granite Finish)
(June 26, 2000)
Use in projects requiring fractured granite finish of

6-02.3(14).OPT8.GB6 (Variable Depth Random Board Finish and
3/4 Inch Random Board Finish)
(April 7, 2008)
Use in projects requiring use of elastomeric, ABS, or
plastic form liners to produce random board finish of
corporate surfaces. Include with 6-02.2.OPT10.GB6.

6-02.3(14).OPT9.GB6 (Random Board Finish)
(June 26, 2000)
Use in projects requiring use of wooden forms
conforming to Section 6-02.3(17)J to produce random
board finish of concrete surfaces.

6-02.3(14).OPT10.GB6 (Ribbed Finish)
(August 6, 2007)
Use in projects requiring ribbed finish of concrete
surfaces. Include with 6-02.2.OPT11.GB6.

6-02.3(14).OPT11.GB6 (Striated Finish)
(August 6, 2007)
Use in projects requiring striated finish of concrete
surfaces. Include with 6-02.2.OPT12.GB6.

6-02.3(14).OPT12.GB6 (Ashlar Stone Finish)
(August 6, 2007)
Use in projects requiring ashlar stone finish of
6-02.3(14).OPT13.GB6  (Block Finish)  
(August 6, 2007)  

6-02.3(14).OPT14.GB6  (Split Face Finish)  
(April 7, 2008)  
Use in projects requiring split face finish of concrete surfaces. Include with 6-02.2.OPT15.GB6.

6-02.3(14).OPT15.GB6  (River Rock Finish)  
(April 7, 2008)  

6-02.3(14).OPT16.GB6  (Cascadian Stone Finish)  
(April 5, 2010)  
Use in projects requiring cascadian stone finish of concrete surfaces. Include with 6-02.2.OPT17.GB6.

6-02.3(14)C.GR6  Pigmented Sealer for Concrete Surfaces

6-02.3(14)C.INST1.GR6  (Section 6-02.3(14)C is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(14)C.OPT1.GB6  (Washington Gray Pigmented Sealer)  
(April 6, 2009)  
Use in projects requiring application of pigmented sealer to concrete surfaces, with Washington Gray being the sole color.

6-02.3(14)C.OPT2.GB6  (Mt. St. Helens Gray Pigmented Sealer)  
(April 6, 2009)  
Use in projects requiring application of pigmented sealer to concrete surfaces, with Mt. St. Helens Gray being the sole color.

6-02.3(14)C.OPT3.GB6  (Mt. Baker Gray Pigmented Sealer)  
(April 6, 2009)  
Use in projects requiring application of pigmented sealer to concrete surfaces, with Mt. Baker Gray being the sole color.

6-02.3(14)C.OPT4.GB6  (Cascade Green Pigmented Sealer)  
(April 6, 2009)  
Use in projects requiring application of pigmented sealer to concrete surfaces, with Cascade Green being the sole color.

6-02.3(14)C.OPT5.FB6  (Multiple Color Pigmented Sealer)  
(April 6, 2009)
Use in projects requiring application of pigmented sealer to concrete surfaces, with two or more colors specified. Each fill-in pair is to be used to specify the structural features receiving a specific color of pigmented sealer.

(2 fill-ins)

**6-02.3(17).GR6**  
**Falsework and Formwork**

**6-02.3(17)C.GR6**  
**Falsework and Formwork at Special Locations**

**6-02.3(17)C.INST1.GR6** (Section 6-02.3(17)C is supplemented with the following)

Must use once preceding any of the following:

**6-02.3(17)C.OPT1.GB6** (Falsework Adjacent to or over Railroad Tracks)

(June 26, 2000)

Use in bridge projects requiring falsework adjacent to or over railroad tracks.

**6-02.3(17)K.GR6**  
**Concrete Forms on Steel Spans**

**6-02.3(17)K.INST1.GR6** (The first paragraph of Section 6-02.3(17)K is revised to read as follows)

Must use once preceding any of the following:

**6-02.3(17)K.OPT1.GB6** (Stay-in-place Metal forms for Steel Box Girders)

(August 4, 2010)

Use in projects with steel box girder bridges when stay-in-place metal forms are allowed by the Bridge and Structures Office Steel Specialist. Include with **6-02.4.OPT1.FB6, 6-02.5.OPT2._FB6, 6-03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, and 6-03.4.OPT1.FB6.**

**6-02.3(18).GR6**  
**Placing Anchor Bolts**

**6-02.3(18).INST1.GR6** (Section 6-02.3(18) is supplemented with the following)

Must use once preceding any of the following:

**6-02.3(18).OPT1.GR6** (January 3, 2011)

Include in projects requiring resin bonded anchors for attaching and anchoring items to concrete structures. Must also include **6-02.2.OPT1.GR6.**

**6-02.3(19).GR6**  
**Bridge Bearings**

**6-02.3(19)A.GR6**  
**Elastomeric Bearing Pads**
6-02.3(19)A.INST1.GR6 (Section 6-02.3(19)A is supplemented with the following)
Must use once preceding any of the following:

6-02.3(19)B.GR6 Bridge Bearing Assemblies
6-02.3(19)B.INST1.GR6 (Section 6-02.3(19)B is supplemented with the following)
Must use once preceding any of the following:

6-02.3(19)B.OPT1.GB6 (Fabric Pad Bearing)
(August 6, 2012)
Use in projects requiring fabric pad bearings. Include with 6-02.2.OPT33.GB6, 6-02.4.OPT13.FB6, 6-02.5.OPT38.GB6, and 6-03.3(30).OPT1.FB6.

6-02.3(20).GR6 Grout for Anchor Bolts and Bridge Bearings
6-02.3(20).INST1.GR6 (Section 6-02.3(20) is supplemented with the following)
Must use once preceding any of the following:

6-02.3(20).OPT1.FB6 (Grout)
(June 26, 2000)
Use in projects requiring grout for structural applications such as grout pads for beams and girders, bridge bearing plates, post base plates, (does not include cantilever sign structures) etc. The fill-in specifies the locations where the grout is required. (1 fill-in)

6-02.3(24).GR6 Reinforcement
6-02.3(24)C.GR6 Placing and Fastening
6-02.3(24)C.INST1.GR6 (Section 6-02.3(24)C is supplemented with the following)
Must use once preceding any of the following:

6-02.3(24)C.OPT1.GB6 (Drilling Holes for, and Setting, Steel Reinforcing Bar Dowels)
(June 26, 2000)
Use in projects where holes are drilled into existing concrete and steel reinforcing bar dowels are set with epoxy resin. Include with 6-02.2.OPT2.GB6 and 6-02.5.OPT9.FB6. Include the above with 2-02.1.OPT3.GR2, 2-02.3(2).OPT8.GB2, 2-02.3(2).OPT12.GR2, 6-02.3(24)C.OPT2.GR6, and either 2-02.5.OPT7.GR2 or 2-02.5.OPT10.GR2 when extending a conc. box culvert.
6-02.3(24).GR6 (Drilling Holes for, and Setting, Dowels for Conc. Box Culvert Extension)

(June 26, 2000)
Use in projects requiring the extension of an existing conc. box culvert. Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT8.GB2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24).C.OPT1.GB6, 6-02.5.OPT9.FB6, and either 2-02.5.OPT7.GR2 or 2-02.5.OPT10.GR2.

6-02.3(24)D.GR6 Splicing
6-02.3(24)D.INST1.GR6 (Section 6-02.3(24)D is supplemented with the following)
Must use once preceding any of the following:

6-02.3(24)E.GR6 Welding Reinforcing Steel
6-02.3(24)E.INST1.GR6 (Section 6-02.3(24)E is supplemented with the following)
Must use once preceding any of the following:

6-02.3(25).GR6 Prestressed Concrete Girders
6-02.3(25)B.GR6 Casting
6-02.3(25)B.INST1.GR6 (The second paragraph of Section 6-02.3(25)B is revised to read)
Must use once preceding any of the following:

6-02.3(25)E.GR6 Contractors Control Strength
6-02.3(25)E.INST1.GR6 (Section 6-02.3(25)E is supplemented with the following)
Must use once preceding any of the following:

6-02.3(25)M.GR6 Shipping
6-02.3(25)M.INST1.GR6 (The first paragraph of Section 6-02.3(25)M is revised to read as follows)
Must use once preceding any of the following:
6-02.3(25)M.INST2.GR6 (The third paragraph of Section 6-02.3(25)M is supplemented with the following)
Must use once preceding any of the following:

6-02.3(26).GR6 Cast-in-Place Prestressed Concrete
6-02.3(26).INST1.GR6 (The third paragraph of Section 6-02.3(26) is revised to read as follows)
Must use once preceding any of the following:
6-02.3(26).OPT1.GB6  (Cast-in-Place Prestressed Concrete)  
(January 4, 2010)  
Use in projects with segmental post-tensioned structures. Check with the Region Construction Engineer to see if testing equipment is available.

6-02.3(28).GR6  Precast Concrete Panels

6-02.3(28).INST1.GR6  (Section 6-02.3(28) is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(28).OPT1.GR6  (Precast Reinforced Concrete Three Sided Structures)  
(January 7, 2013)  
Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include 6-02.3(28)A.OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)E.OPT1.GR6, 6-02.3(28)G.OPT1.GR6, 6-02.3(28)H.OPT1.GR6, 6-02.3(28)I.OPT1.GR6, and 6-02.5.OPT25.GR6.

6-02.3(28)A.GR6  Shop Drawings

6-02.3(28)A.INST1.GR6  (The third paragraph of Section 6-02.3(28)A is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(28)A.OPT1.GR6  (Precast Reinforced Concrete Three Sided Structures)  
(August 1, 2011)  
Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)E.OPT1.GR6, 6-02.3(28)G.OPT1.GR6, 6-02.3(28)H.OPT1.GR6, 6-02.3(28)I.OPT1.GR6, and 6-02.5.OPT25.GR6.

6-02.3(28)A.INST2.GR6  (The list included in the third paragraph of Section 6-02.3(28)A is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(28)B.GR6  Casting

6-02.3(28)B.INST1.GR6  (Section 6-02.3(28)B is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(28)B.OPT1.GR6  (Precast Reinforced Concrete Three Sided Structures)
Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)A.OPT1.GR6, 0238E1.GR6, 6-02.3(28)G.OPT1.GR6, 6-02.3(28)H.OPT1.GR6, and 6-02.5.OPT25.GR6.

6-02.3(28)E.GR6 Finishing

6-02.3(28)E.INST1.GR6 (Section 6-02.3(28)E is supplemented with the following) Must use once preceding any of the following:

6-02.3(28)E.OPT1.GR6 (Precast Reinforced Concrete Three Sided Structures) (January 7, 2002) Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)A.OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)G.OPT1.GR6, 6-02.3(28)H.OPT1.GR6, 6-02.3(28)I.OPT1.GR6, and 6-02.5.OPT25.GR6.

6-02.3(28)F.GR6 Tolerances

6-02.3(28)F.INST1.GR6 (Section 6-02.3(28)F is supplemented with the following) Must use once preceding any of the following:

6-02.3(28)G.GR6 Handling and Storage

6-02.3(28)G.INST1.GR6 (Section 6-02.3(28)G is supplemented with the following) Must use once preceding any of the following:

6-02.3(28)G.OPT1.GR6 (Precast Reinforced Concrete Three Sided Structures) (April 30, 2001) Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)A.OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)E.OPT1.GR6, 6-02.3(28)H.OPT1.GR6, 6-02.3(28)I.OPT1.GR6, and 6-02.5.OPT25.GR6.

6-02.3(28)H.GR6 Shipping

6-02.3(28)H.INST1.GR6 (Section 6-02.3(28)H is supplemented with
the following)

Must use once preceding any of the following:

6-02.3(28)H.OPT1.GR6  (Precast Reinforced Concrete Three Sided Structures)
(April 30, 2001)
Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)A.OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)E.OPT1.GR6, 6-02.3(28)G.OPT1.GR6, 6-02.3(28)I.OPT1.GR6, and 6-02.5.OPT25.GR6.

6-02.3(28)I.GR6  Erection

6-02.3(28)I.INST1.GR6  (Section 6-02.3(28)I is supplemented with the following)
Must use once preceding any of the following:

6-02.3(28)I.OPT1.GR6  (Precast Reinforced Concrete Three Sided Structures)
(August 3, 2009)
Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)A.OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)E.OPT1.GR6, 6-02.3(28)G.OPT1.GR6, and 6-02.3(28)H.OPT1.GR6.

6-02.4.GR6  Measurement

6-02.4.INST1.GR6  (Section 6-02.4 is supplemented with the following)
Must use once preceding any of the following:

6-02.4.OPT1.FB6  (Summary of Quantities for Superstructure and Bridge Deck)
(August 2, 2010)
Use in bridge construction projects with lump sum items for superstructure or bridge deck. The first and third fill-in specify the appropriate bid item name (“Superstructure - ____” or “Bridge Deck - ____”). The second fill-in itemizes the approximate quantities included. Include with 6-02.5.OPT9.FB6 for superstructure, and with 6-02.5.OPT26.FB6 for bridge deck.
(3 fill-ins)

6-02.4.OPT3.FB6  (Modular Expansion Joint System)
(August 2, 2010)
Include in projects requiring a modular expansion joint system. The fill-in is to itemize the quantities of work and materials included in the lump sum item. Coordination
with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with 6-03.3(30).OPT1.FB6. Must use with 6-02.2.OPT22.GB6, 6-02.3(13).OPT3.FB6, and 6-02.5.OPT28.GB6.

(1 fill-in)

6-02.4.OPT13.FB6 (Bridge Bearing Assembly)

(June 26, 2000)
Use in projects with bridge bearing assemblies. The fill-in specifies the type of bridge bearing assembly. Include with 6-02.5.OPT38.GB6. Include with 6-02.2.OPT33.GB6, 6-02.3(13).OPT1.GB6, and 6-03.3(30).OPT1.FB6 for fabric pad bearings.

(1 fill-in)

6-02.4.OPT24.GB6 (Epoxy Crack Sealing)

(August 6, 2012)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with 6-02.2.OPT4.GB6, 6-02.3.OPT1.GB6, and 6-02.5.OPT49.GB6.

6-02.4.OPT25.GB6 (Bridge Grate Inlet)

(June 26, 2000)
Use in projects with bridge grate inlets. Include with 6-02.2.OPT47.GB6 and 6-02.5.OPT50.GB6.

6-02.4.OPT26.GB6 (Modifying Bridge Drain)

(June 26, 2000)
Use in projects where modifying bridge drains is a stand-alone bid item. Include with 6-02.2.OPT48.GB6, 6-02.3(10)D.OPT3.GB6, and 6-02.5.OPT51.GB6 with modified concrete overlay projects. Include the above with 6-02.3(10)D.OPT4.GB6 with membrane waterproofing and ACP overlay projects.

6-02.4.OPT27.GB6 (Plugging Existing Bridge Drain)

(June 26, 2000)
Use in projects where plugging existing bridge drains is a stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6 and 6-02.5.OPT52.GB6.

6-02.4.OPT37.GB6 (Bridge Deck Repair)

(June 26, 2000)
Use in projects where bridge deck repair is required and when the volume of work can be determined from the deck survey data (except not required for bridge deck overlay projects with modified concrete). Include with 6-02.2.OPT49.GB6, 6-02.3(10)D.OPT6.GB6, and 6-02.5.OPT64.GB6.

6-02.5.GR6 Payment

6-02.5.INST1.GR6 (The first bid item under Section 6-02.5 is supplemented with
the following)
Must use once preceding any of the following:

6-02.5.OPT1.GB6 (Coating Surfaces with Epoxy Mortar)
(June 26, 2000)
Use in projects requiring coating of concrete surfaces with epoxy mortar. Include with 6-02.2.OPT3.GB6 and 6-02.3(10)D.OPT2.GB6.

6-02.5.OPT3.GR6 (Payment)
(April 3, 2006)
Must include with 6-02.3.OPT3.GR6, 5-01.3(1)A.OPT1.GR5, 5-01.5.OPT1.GR5, 5-05.3(1).OPT2.GR5, 5-05.5.OPT1.GR5, 8-01.3(1)A.OPT1.GR8, and 8-01.5.OPT1.GR8.

6-02.5.INST2.GR6 (The third bid item under Section 6-02.5 is supplemented with the following)
Must use once preceding any of the following:

6-02.5.OPT9.FB6 (Superstructure)
(June 26, 2000)
Use in bridge projects with lump sum items for superstructure when payment for certain features is to be included in the superstructure item. The fill-in specifies work items included in the bid item. Include with 6-02.4.OPT1.FB6.
(1 fill-in)

6-02.5.INST3.GR6 (The fifth and sixth bid items under Section 6-02.5 are supplemented with the following)
Must use once preceding any of the following:

6-02.5.INST4.GR6 (Section 6-02.5 is supplemented with the following)
Must use once preceding any of the following:

6-02.5.OPT25.GR6 (Precast Reinforced Concrete Three Sided Structures)
(April 28, 1997)
Use in projects requiring precast reinforced concrete three sided structures of span lengths of 26 feet or less. Must include with 6-02.3(28).OPT1.GR6, 6-02.3(28)A.OPT1.GR6, 6-02.3(28)B.OPT1.GR6, 6-02.3(28)E.OPT1.GR6, 6-02.3(28)G.OPT1.GR6, 6-02.3(28)H.OPT1.GR6, and 6-02.3(28)I.OPT1.GR6.

6-02.5.OPT26.FB6 (Bridge Deck)
(August 2, 2010)
Use in steel bridge construction projects with lump sum items for bridge deck. The fill-in specifies work items included in the bid item. Include with 6-02.4.OPT1.FB6.
(1 fill-in)
6-02.5.OPT28.GB6 (Modular Expansion Joint System)  
(August 2, 2010)  
Include in projects requiring a modular expansion joint system. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with 6-03.3(30).OPT1.FB6. Must use with 6-02.2.OPT22.GB6, 6-02.3(13).OPT3.FB6, and 6-02.4.OPT3.FB6.

6-02.5.OPT38.GB6 (Bridge Bearing Assembly)  
(June 26, 2000)  
Use in projects with bridge bearing assemblies. Include with 6-02.4.OPT13.FB6. Include with 6-02.2.OPT33.GB6, 6-02.3(19)B.OPT1.GB6, and 6-03.3(30).OPT1.FB6 for fabric pad bearings.

6-02.5.OPT49.GB6 (Epoxy Crack Sealing)  
(August 1, 2011)  
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with 6-02.2.OPT4.GB6, 6-02.3.OPT1.GB6, and 6-02.4.OPT24.GB6.

6-02.5.OPT50.GB6 (Bridge Grate Inlet)  
(June 26, 2000)  
Use in projects with bridge grate inlets. Include with 6-02.2.OPT47.GB6 and 6-02.4.OPT25.GB6.

6-02.5.OPT51.GB6 (Modify Bridge Drain)  
(June 26, 2000)  
Use in projects where modifying bridge drains is a stand-alone bid item. Include with 6-02.2.OPT48.GB6, 6-02.3(10)D.OPT3.GB6, and 6-02.4.OPT26.GB6 with modified concrete overlay projects. Include the above with 6-02.3(10)D.OPT4.GB6 with membrane waterproofing and ACP overlay projects.

6-02.5.OPT52.GB6 (Plugging Existing Bridge Drain)  
(June 26, 2000)  
Use in projects where plugging existing bridge drains is a stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6 and 6-02.4.OPT27.GB6.

6-02.5.OPT53.FB6 (Modifying or Plugging Existing Bridge Drain)  
(June 26, 2000)  
Use in projects where payment for modifying or plugging existing bridge drains is included under either “Membrane Waterproofing (Deck Seal)” or “Finishing and Curing Modified Conc. Overlay”. The first fill-in specifies whether the work is modifying or plugging existing bridge drains. The second fill-in specifies appropriate pay item for the work. Include with 6-02.2.OPT48.GB6, and 6-02.3(10)D.OPT3.GB6 for modifying bridge drains with modified concrete overlay projects. Include the above with
6-02.3(10)D.OPT4.GB6 for modifying bridge drains with membrane waterproofing and ACP overlay projects. Include with 6-02.3(10)D.OPT5.GB6 for plugging existing bridge drains. (2 fill-ins)

6-02.5.OPT64.GB6 (Bridge Deck Repair) (June 26, 2000)
Use in projects where bridge deck repair is required and when the volume of work can be determined from deck survey data (except not required for bridge deck overlay projects with modified concrete). Include with 6-02.2.OPT49.GB6, 6-02.3(10)D.OPT6.GB6, and 6-02.4.OPT37.GB6.

6-02.5.OPT65.GB6 (Bridge Deck Repair) (June 26, 2000)
Use in projects where bridge deck repair is required and when the volume of work cannot be determined because of existing overlay (except not required for bridge deck overlay projects with modified concrete). Include with 6-02.2.OPT49.GB6 and 6-02.3(10)D.OPT6.GB6.

6-02.5.OPT91.FB6 (Bridge and Structures Minor Items) (June 26, 2000)
Use in projects with bridges and other structures when there are minor items that are incidental to a lump sum or a unit price bid item. The first fill-in specifies the minor items. The second fill-in specifies the appropriate pay item(s) for the minor items. (2 fill-ins)

6-02.5.OPT92.FB6 (Bridge Supported Utilities) (June 26, 2000)
Use in projects requiring installation of bridge supported utilities. The first fill-in specifies the type of utility. The second fill-in specifies the bridge(s). The third fill-in specifies the work performed by the Contractor (furnishing materials, installing materials, coordination with utility, etc.), excluding furnishing and installing inserts. The fourth fill-in specifies the pay item. Include with 6-02.3.OPT2(B).GB6, with appropriate bridge supported utility material GSP’s, if all materials and work are supplied and performed by the Contractor. Include with 6-02.3.OPT2(C).GB6 and 6-02.5.OPT93.GB6 if a utility company is supplying and performing a portion of the utility materials and work. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and either 6-02.5.OPT9.FB6 or 6-02.5.OPT26.FB6 when the supports include concrete inserts. (4 fill-ins)

6-02.5.OPT93.GB6 (Bridge Supported Utilities)
Use in projects requiring installation of bridge supported utilities where a utility company is supplying and performing a portion of the utility materials and work. Include with 6-02.3.OPT2(C).GB6 and 6-02.5.OPT92.FB6, and appropriate bridge supported utility material GSP’s. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and either 6-02.5.OPT9.FB6 or 6-02.5.OPT26.FB6 when the supports include concrete inserts.

6-03.GR6 Steel Structures

6-03.2.GR6 Materials

6-03.2.INST1.GR6 (Section 6-03.2 is supplemented with the following)
Must use once preceding any of the following:

6-03.3.GR6 Construction Requirements

6-03.3.INST1.GR6 (Section 6-03.3 is supplemented with the following)
Must use once preceding any of the following:

6-03.3(7).GR6 Shop Plans

6-03.3(7)A.GR6 Erection Methods

6-03.3(7)A.INST1.GR6 (The list in the second paragraph of Section 6-03.3(7)A is supplemented with the following)
Must use once preceding any of the following:

6-03.3(11).GR6 Workmanship and Finish

6-03.3(11).INST1.GR6 (Section 6-03.3(11) is supplemented with the following)
Must use once preceding any of the following:

6-03.3(18).GR6 Built Members

6-03.3(18).INST1.GR6 (Section 6-03.3(18) is supplemented with the following)
Must use once preceding any of the following:

6-03.3(25).GR6 Welding and Repair Welding

6-03.3(25).INST1.GR6 (Section 6-03.3(25) is supplemented with the following)
Must use once preceding any of the following:

6-03.3(25)A.GR6 Welding Inspection

6-03.3(25)A.INST1.GR6 (Section 6-03.3(25)A is supplemented with the following)
Must use once preceding any of the following:

**6-03.3(27).GR6**  
High Strength Bolt Holes

**6-03.3(27)B.GR6**  
Reamed and Drilled Holes

**6-03.3(27)B.INST1.GR6**  
(The second sentence of the first paragraph of Section 6-03.3(27)B is revised to read)

**6-03.3(28).GR6**  
Shop Assembly

**6-03.3(28)A.GR6**  
Method of Shop Assembly

**6-03.3(28)A.INST1.GR6**  
(Section 6-03.3(28)A is supplemented with the following)

**6-03.3(28)A.OPT1.GB6**  
(Progressive Transverse Shop Assembly)  
(August 5, 2013)

Use in projects with new steel girder bridges that have curved or skewed geometry, with the concurrence of the Bridge and Structures Office Steel Specialist. Include with 6-03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.

**6-03.3(28)B.GR6**  
Check of Shop Assembly

**6-03.3(28)B.INST1.GR6**  
(Section 6-03.3(28)B is supplemented with the following)

**6-03.3(28)B.OPT1.GB6**  
(Check of Shop Assembly)  
(June 26, 2000)

Use in projects with new steel bridges. Include with 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.

**6-03.3(30).GR6**  
Painting

**6-03.3(30).INST1.GR6**  
(Section 6-03.3(30) is supplemented with the following)

**6-03.3(30).OPT1.FB6**  
(Color of Finish Coat)  
(August 3, 2009)

Use in projects with new steel bridges and steel members to cover paint color requirements by specifying the Federal Standard 595B Color Number, or the color name if no number. Include with 6-
03.3(28).OPT1.GB6, 6-03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.

Also include in projects with new minor steel items such as steel expansion joints (6-02.3(13).OPT3.FB6, 6-02.4.OPT3.FB6, 6-02.5.OPT28.GB6, and 6-02.2.OPT22.GB6) and bearings (6-02.3(19).B.OPT1.GB6).

(1 fill-in)

**6-03.3(37).GR6**  Setting Steel Bridge Bearings

**6-03.3(37).INST1.GR6** (Supplemental Instructions)

Must use once preceding any of the following:

**6-03.3(38).GR6**  Placing Superstructure

**6-03.3(38).INST1.GR6** (Section 6-03.3(38) is supplemented with the following)

Must use once preceding any of the following:

**6-03.3(38).OPT1.GB6** (Concrete Protection)

(June 26, 2000)

Use within projects with bridges having weathering steel superstructure members which remain unpainted at completion of construction, and which are above concrete surfaces which require protection from staining while the steel members develop their weathered protective surface. Include with **6-03.5.OPT7.FB6**.

**6-03.3(39).GR6**  Swinging the Span

**6-03.3(39).INST1.GR6** (Supplemental Instructions)

Must use once preceding any of the following:

**6-03.3(39).OPT1.GB6** (Girder Camber Field Measurements)

(June 26, 2000)

Use in projects with new steel bridges. Include with **6-03.3(28).B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.**

**6-03.4.GR6**  Measurement

**6-03.4.INST1.GR6** (Section 6-03.4 is supplemented with the following)

Must use once preceding any of the following:

**6-03.4.OPT1.FB6** (Structural Low Alloy Quantities)

(August 6, 2007)

Use in projects with new steel bridges. Include with **6-03.3(28).B.OPT1.GB6, 6-03.3(30).OPT1.FB6, and 6-03.3(39).OPT1.GB6.** Include with **6-03.5.OPT1.GB6** when the steel girder includes a pipe railing.

(2 fill-ins)
6-03.5.GR6  Payment

6-03.5.INST1.GR6  (The second bid item under Section 6-03.5 is supplemented with the following)
Must use once preceding any of the following:

6-03.5.OPT1.GB6  (Payment for Steel Girder Railing)
(August 6, 2007)
Use in projects with new steel bridges when the steel girder includes a pipe railing. Include with 6-03.3(28).OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, and 6-03.4.OPT1.FB6.

6-03.5.INST2.GR6  (Section 6-03.5 is supplemented with the following)
Must use once preceding any of the following:

6-03.5.OPT7.FB6  (Payment for Concrete Protection)
(June 26, 2000)
Use in projects with bridges having weathering steel members which remain unpainted at the completion of construction, and which are above concrete surfaces which require protection from staining while the steel members develop their weathered protective surface. Include with 6-03.3(38).OPT1.GB6.
(1 fill-in)

6-04.GR6  Timber Structures

6-04.3.GR6  Construction Requirements

6-04.3(1).GR6  Storing and Handling Material

6-04.3(1).INST1.GR6  (Section 6-04.3(1) is supplemented with the following)
Must use once preceding any of the following:

6-04.3(1).OPT1.GB6  (Fire Prevention)
(March 6, 2000)
Use in all timber bridge construction and timber deck replacement projects. Include with 6-04.5.OPT1.FB6.

6-04.3(1).OPT2.GB6  (Top Flange Treatment)
(August 1, 2011)
Include in timber redecking projects. Include with 6-04.3(1).OPT1.GB6, 6-04.5.OPT1.FB6, and 6-04.5.OPT2.FB6.

6-04.5.GR6  Payment

6-04.5.INST1.GR6  (Section 6-04.5 is supplemented with the following)
Must use once preceding any of the following:

6-04.5.OPT1.FB6  (Fire Protection)
Use in all timber bridge construction and timber deck replacement projects. Include with 6-04.3(1).OPT1.GB6. (1 fill-in)

6-04.5.OPT2.FB6 (Top Flange Treatment)
(March 6, 2000)
Use in timber deck replacement projects. Include with 6-04.3(1).OPT1.GB6, 6-04.3(1).OPT2.GB6, and 6-04.5.OPT1.FB6. (1 fill-in)

6-05.GR6 Piling

6-05.2.GR6 Materials

6-05.2.INST1.GR6 (Section 6-05.2 is supplemented with the following)
Must use once preceding any of the following:

6-05.3.GR6 Construction Requirements

6-05.3.INST1.GR6 (Section 6-05.3 is supplemented with the following)
Must use once preceding any of the following:

6-05.3(5).GR6 Manufacture of Steel Piles

6-05.3(5).INST1.GR6 (Section 6-05.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-05.3(6).GR6 Splicing Steel Casings and Steel Piles

6-05.3(6).INST1.GR6 (Section 6-05.3(6) is supplemented with the following)
Must use once preceding any of the following:

6-05.3(10).GR6 Test Piles

6-05.3(10).INST1.GR6 (Section 6-05.3(10) is supplemented with the following)
Must use once preceding any of the following:

6-05.3(10).OPT1.FB6 (Furnishing and Driving Test Piles)
(March 6, 2000)
Include in projects having test piles, as recommended by the Materials Laboratory Geotechnical Branch. The first, third, and fourth fill-ins specify the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). (4 fill-ins)

6-05.3(11).GR6 Driving Piles

6-05.3(11)D.GR6 Achieving Minimum Tip Elevation and
Bearing

6-05.3(11)D.INST1.GR6  (Section 6-05.3(11)D is supplemented with the following)
Must use once preceding any of the following:

6-05.3(11)D.OPT1.FB6  (Minimum Pile Tip Elevation)
(March 6, 2000)
Include in projects which have a minimum pile tip elevation specified, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier).
(2 fill-ins)

6-05.3(11)D.OPT2.GB6  (Vibration From Pile Driving)
(March 6, 2000)
Include in projects where minimizing vibration from driving piles is critical, as recommended by the Materials Laboratory Geotechnical Branch.

6-05.3(11)D.OPT3.FB6  (Preboring Piles)
(March 6, 2000)
Include in projects where preboring of piles is required to prevent downdrag from settlement, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). The third fill-in specifies the bottom elevation of the preboring. Include with 6-05.4.OPT1.FB6 and 6-05.5.OPT1.FB6.
(3 fill-ins)

6-05.3(11)D.OPT4.FB6  (Preboring Piles)
(March 6, 2000)
Include in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). The third fill-in specifies the bottom elevation of the preboring. Include with 6-05.4.OPT1.FB6 and 6-05.5.OPT1.FB6.
(3 fill-ins)

6-05.4.GR6  Measurement

6-05.4.INST1.GR6  (Section 6-05.4 is supplemented with the following)
Must use once preceding any of the following:
6-05.4.OPT1.FB6 (Preboring Piles)
(March 6, 2000)
Use in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. The fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). Include with 6-05.3(11)D.OPT3.FB6 or 6-05.3(11)D.OPT4.FB6, and 6-05.5.OPT1.FB6.
(1 fill-in)

6-05.5.GR6 Payment

6-05.5.INST1.GR6 (Section 6-05.5 is supplemented with the following)
Must use once preceding any of the following:

6-05.5.OPT1.FB6 (Preboring Piles)
(March 6, 2000)
Use in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. Both fill-ins specify the pile type (cast-in-place conc., steel, timber, etc.). Include with 6-05.3(11)D.OPT3.FB6 or 6-05.3(11)D.OPT4.FB6, and 6-05.4.OPT1.FB6.
(2 fill-ins)

6-06.GR6 Bridge Railings

6-06.2.GR6 Materials

6-06.2.INST1.GR6 (Section 6-06.2 is supplemented with the following)
Must use once preceding any of the following:

6-06.2.OPT1.GB6 (Bridge Railing Type Chain Link Fence)
(January 5, 2004)
Use in projects with Bridge Railing Type Chain Link Fence. Include with 6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, and 6-06.3(2).OPT1.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as "Superstructure - __", or "Roadway Deck - __".

6-06.2.OPT2.GB6 (Bridge Railing Type Chain Link Fence)
(March 6, 2000)
Use in projects with Bridge Railing Type Chain Link Fence where the posts are set into blockouts with epoxy resin. Include with 6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, 6-06.2.OPT1.GB6 and 6-06.3(2).OPT2.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as "Superstructure - __", or "Roadway Deck - __".

6-06.3.GR6 Construction Requirements

6-06.3(2).GR6 Metal Railings
6-06.3(INST1.GR6 (Section 6-06.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-06.3(OPT1.GB6 (Bridge Railing Type Chain Link Fence)
(March 6, 2000)
Use in projects with Bridge Railing Type Chain Link Fence where the posts are fastened into position with anchor bolts or resin bonded anchors. Include with 6-02.2.OPT1.GR6, 6-02.3.18.OPT1.GR6, and 6-06.2.OPT1.GR6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as “Superstructure - ___”, or “Roadway Deck - ___."

6-06.3(OPT2.GB6 (Bridge Railing Type Chain Link Fence)
(March 6, 2000)
Use in projects with Bridge Railing Type Chain Link Fence where the posts are set into blockouts with epoxy resin. Include with 6-02.2.OPT1.GR6, 6-02.3.18.OPT1.GR6, 6-06.2.OPT1.GB6 and 6-06.2.OPT2.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as “Superstructure - ___”, or “Roadway Deck - ___."

Use in projects with Bridge Railing Type Snow Fence or Bridge Railing Type Wire Fabric Fence. Include with 6-06.2.OPT8.BSP.FB6.

6-06.5.GR6 Payment

6-06.5(INST1.GR6 (Section 6-06.5 is supplemented with the following)
Must use once preceding any of the following:

6-06.5(OPT1.FB6 (Bridge Railing)
(March 6, 2000)
Use in projects with bridge railing where the work is included as part of a separate bid item such as “Superstructure - ___”, or "Roadway Deck - ___." The first fill-in specifies the bridge railing type. The second fill-in specifies the bid item name.
(2 fill-ins)

6-07.GR6 Painting

6-07.1.GR6 Description

6-07.1(INST1.GR6 (Section 6-07.1 is supplemented with the following)
Must use once preceding any of the following:

6-07.1(OPT1.FB6 (Scope of Work)
(August 3, 2009)
Include in projects with cleaning and painting of existing steel bridge(s). Use to define limits of cleaning and
painting by using the second fill-in to specify surfaces that are not to be painted (light fixtures, utilities, bridge attachments, etc.). Include with \texttt{6-07.3(10)D.OPT1.FB6} and/or \texttt{6-07.3(10)E.OPT1.FB6} as appropriate for the surface preparation requirements. Include with \texttt{DESWORK2.FB1} and \texttt{6-07.3(10)I.OPT1.FB6}. Include with \texttt{1-07.1.OPT2.FR1} if the existing bridge(s) contain lead paint. Include with \texttt{1-07.6.OPT4.GB1} if the bridge(s) cross a navigable waterway.

(2 fill-ins)

\texttt{6-07.1.OPT2.FB6} (Scope of Work)

(August 3, 2009)

Include in projects with cleaning and painting of existing timber bridge(s). Use to define limits of cleaning and painting by using the second fill-in to specify the surfaces to be painted (railing, rail posts, wheelguards, etc.). Include with \texttt{1-07.1.OPT2.FR1} if the existing bridge(s) contain lead paint. Project specific Special Provisions supplementing Section 6-07.3(13) may be required to specify specific primer and top coat paint requirements.

(2 fill-ins)

\texttt{6-07.3.GR6} Construction Requirements

\texttt{6-07.3(10).GR6} Painting Existing Steel Structures

\texttt{6-07.3(10).INST1.GR6} (Section 6-07.3(10) is supplemented with the following)

Must use once preceding any of the following:

\texttt{6-07.3(10).OPT1.FB6} (Utility Conduits)

(August 3, 2009)

Include only when utility conduits are attached to the existing bridge(s) being painted. Fill-in to read "shall or "shall not". Include with \texttt{DESWORK2.FB1}, \texttt{6-07.1.OPT1.FB6} and \texttt{6-07.3(10)I.OPT1.FB6}.

(1 fill-in)

\texttt{6-07.3(10).OPT2.GB6} (Light Fixtures)

(August 3, 2009)

Include only when light fixtures are attached to existing bridge(s) being painted. Include with \texttt{DESWORK2.FB1}, \texttt{6-07.1.OPT1.FB6} and \texttt{6-07.3(10)I.OPT1.FB6}.

\texttt{6-07.3(10).OPT3.GB6} (Railroad Facilities)

(August 3, 2009)

Include when paint could spill or drip on railroad right-of-way. Include with \texttt{DESWORK2.FB1}, \texttt{6-07.1.OPT1.FB6}, \texttt{1-07.18.OPT1.FR1}, either \texttt{07183.GR1} or \texttt{1-07.18.OPT3.GR1}, and \texttt{6-07.3(10)I.OPT1.FB6}.
6-07.3(10).OPT4.GB6  (Cleaning Grid Deck)
(August 3, 2009)
Use with DESWORK2.FB1, 6-07.1.OPT1.FB6, 6-07.3(10)I.OPT1.FB6, and 6-07.3(10)N.OPT1.GB6 if the bridge has a grid roadway deck or steel grid catwalks which require cleaning and painting.

6-07.3(10)A.GR6
Containment
6-07.3(10)A.INST1.GR6  (Section 6-07.3(10)A is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)A.OPT1.GB6  (Protection of Existing Structure)
(August 3, 2009)
Use only when the bridge has mechanical equipment to protect such as a draw bridge. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6.

6-07.3(10)D.GR6  Surface Preparation Prior to Overcoat Painting
6-07.3(10)D.INST1.GR6  (Section 6-07.3(10)D is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)D.OPT1.FB6  (Surfaces Requiring Overcoat Painting Surface Preparation)
(April 5, 2010)
Use in bridge painting projects with bridges and bridge members requiring surface preparation for overcoat painting. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6. Include with 6-07.3(10)E.OPT1.FB6 if the bridge(s) also have bridge members requiring full paint removal. Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway. The first fill-in specifies the bridge(s) requiring overcoat painting surface preparation. The second fill-in specifies the bridge members requiring overcoat painting surface preparation. (2 fill-ins)

6-07.3(10)E.GR6  Surface Preparation – Full Paint Removal
6-07.3(10)E.INST1.GR6  (Section 6-07.3(10)E is supplemented with the following)
Use once preceding any of the following:
6-07.3(10)E.OPT1.FB6 (Surfaces Requiring Full Paint Removal Surface Preparation) (April 5, 2010)
Use in bridge painting projects with bridges and bridge members requiring surface preparation for full paint removal. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6. Include with 6-07.3(10)D.OPT1.FB6 if the bridge(s) also have bridge members requiring overcoat painting. Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway. The first fill-in specifies the bridge(s) requiring full paint removal surface preparation. The second fill-in specifies the bridge members requiring full paint removal surface preparation.
(2 fill-ins)

6-07.3(10)I.GR6 Paint Color

6-07.3(10)I.INST1.GR6 (Section 6-07.3(10)I is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)I.OPT1.FB6 (Color of Top Coat) (August 3, 2009)
Use in projects with existing steel bridges and bridge members to cover paint color requirements by specifying the Federal Standard 595 Color Number, or the color name if no number. Use with DESWORK2.FB1, and 6-07.1.OPT1.FB6. Include with 6-07.3(10)D.OPT1.FB6 and/or 6-07.3(10)E.OPT1.FB6 as appropriate for the surface preparation requirements. Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway.
(1 fill-in)

6-07.3(10)N.GR6 Field Coating Application Methods

6-07.3(10)N.INST1.GR6 (Section 6-07.3(10)N is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)N.OPT1.GB6 (Painting Grid Deck) (August 3, 2009)
Use with DESWORK2.FB1, 6-07.1.OPT1.FB6, 6-07.3(10).OPT4.GB6 and 6-
if the bridge has a grid roadway deck or steel grid catwalks which require painting.

6-07.3(11).GR6  
**Painting or Powder Coating of Galvanized Surfaces**

6-07.3(11).INST1.GR6  
(Section 6-07.3(11) is supplemented with the following)  
Must use once preceding any of the following:

6-07.3(11).OPT1.FB6  
(Coating Color)  
(August 3, 2009)  
Use in projects requiring coating of galvanized surfaces with either paint or powder coating. The fill-in specifies the Federal Standard 595 color number, or the color name if no number.  
(1 fill-in)

6-08.GR6  
**Waterproofing**

6-08.1.GR6  
**Description**

6-08.1.INST1.GR6  
(Section 6-08.1 is supplemented with the following)  
Must use once preceding any of the following:

6-08.1.OPT1.GB6  
(Membrane Waterproofing (Deck Seal))  
(January 3, 2011)  
Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay. Include with 6-08.2.OPT1.GB6, 6-08.2(9-11.2).OPT1.GB6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6, 6-08.3(4).OPT1.GB6, and either 6-08.5.OPT2.FB6 or 6-08.4.OPT1.GB6, and 6-08.5.OPT1.GB6.

6-08.2.GR6  
**Materials**

6-08.2.INST1.GR6  
(Section 6-08.2 is supplemented with the following)  
Must use once preceding any of the following:

6-08.2.OPT1.GB6  
(Primer for Membrane Waterproofing (Deck Seal))  
(January 3, 2011)  
Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay. Include with 6-08.1.OPT1.GB6, 6-08.2(9-11.2).OPT1.GB6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6, 6-08.3(4).OPT1.GB6, and either 6-08.5.OPT2.FB6, or 6-08.4.OPT1.GB6 and 6-08.5.OPT1.GB6.

6-08.2(9-11.2).GR6  
(Waterproofing Fabric)  
(Section 9-11.2 is supplemented with the following)  
Must use once preceding any of the following:

6-08.2(9-11.2).OPT1.GB6  
(Membrane Waterproofing Membrane)
Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6, 6-08.3(4).OPT1.GB6 and either 6-08.5.OPT2.FB6 or 6-08.4.OPT1.GB6, and 6-08.5.OPT1.GB6.

6-08.3.GR6 Construction Requirements

6-08.3(2).GR6 Preparation of Surface

6-08.3(2).INST1.GR6 (Section 6-08.3(2) is supplemented with the following)

Must use once preceding any of the following:

6-08.3(2).OPT1.GB6 (Surface Preparation)

Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08.2(9-11.2).GR6, 6-08.3(3).OPT1.GB6, 6-08.3(4).OPT1.GB6 and either 6-08.5.OPT2.FB6 or 6-08.4.OPT1.GB6, and 6-08.5.OPT1.GB6.

6-08.3(3).GR6 Application of Waterproofing

6-08.3(3).INST1.GR6 (Section 6-08.3(3) is supplemented with the following)

Must use once preceding any of the following:

6-08.3(3).OPT1.GB6 (Applying Membrane Waterproofing)

Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08.2(9-11.2).GR6, 6-08.3(2).OPT1.GB6, 6-08.3(4).OPT1.GB6 and either 6-08.5.OPT2.FB6 or 6-08.4.OPT1.GB6, and 6-08.5.OPT1.GB6.

6-08.3(4).GR6 Protection Course

6-08.3(4).INST1.GR6 (Section 6-08.3(4) is supplemented with the following)

Must use once preceding any of the following:

6-08.3(4).OPT1.GB6 (Membrane Protection and Asphalt Overlay)

Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08.2(9-11.2).GR6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6 and either 6-08.5.OPT2.FB6 or 6-08.4.OPT1.GB6, and 6-08.5.OPT1.GB6.
6-08.4.GR6 Measurement

6-08.4.INST1.GR6 (Section 6-08.4 is supplemented with the following)
Must use once preceding any of the following:

6-08.4.OPT1.GB6 (Membrane Waterproofing (Deck Seal))
(March 6, 2000)
Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay where the work is included as part of Standard Item 4455 “Membrane Waterproofing (Deck Seal)”. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08.2(9-11.2).GR6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6, 6-08.3(4).OPT1.GB6, and 6-08.5.OPT1.GB6.

6-08.5.GR6 Payment

6-08.5.INST1.GR6 (Section 6-08.5 is supplemented with the following)
Must use once preceding any of the following:

6-08.5.OPT1.GB6 (Membrane Waterproofing (Deck Seal))
(August 2, 2004)
Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay where the work is included as part of Standard Item 4455 “Membrane Waterproofing (Deck Seal)”. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08.2(9-11.2).GR6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6, 6-08.3(4).OPT1.GB6, and 6-08.4.OPT1.GB6.

6-08.5.OPT2.FB6 (Membrane Waterproofing (Deck Seal))
(January 3, 2011)
Use in all projects placing membrane waterproofing on bridge decks prior to HMA overlay where the work is included as part of a bid item other than Standard Item 4455 “Membrane Waterproofing (Deck Seal)”. The fill-in identifies the name and the unit of measurement for the bid item being used to pay for this work. Include with 6-08.1.OPT1.GB6, 6-08.2.OPT1.GB6, 6-08(9-11.2).OPT1.GB6, 6-08.3(2).OPT1.GB6, 6-08.3(3).OPT1.GB6, and 6-08.3(4).OPT1.GB6.
(1 fill-in)

6-09.GR6 Modified Concrete Overlays

6-09.2.GR6 Materials

6-09.2.INST1.GR6 (Section 6-09.2 is supplemented with the following)
Must use once preceding any of the following:

6-09.3.GR6 Construction Requirements

6-09.3(1).GR6 Equipment
6-09.3(1).INST1.GR6 (Section 6-09.3(1) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(1)H.GR1 Mobile Mixer for Latex Modified Concrete

6-09.3(1)H.INST1.GR6 (Section 6-09.3(1)H is supplemented with the following)
Must use once preceding any of the following:

6-09.3(2).GR6 Submittals

6-09.3(2).INST1.GR6 (Section 6-09.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(3).GR6 Concrete Overlay Mixes

6-09.3(3).INST1.GR6 (Section 6-09.3(3) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(3).OPT1.GB6 (FMC, LMC, and MMC)
(January 7, 2002)
Use in modified concrete overlay projects where all three concrete overlay mixes are allowed. Include with either 6-09.3(5).OPT2.GB6 or 6-09.3(5).OPT1.GB6.

6-09.3(3).OPT2.GB6 (FMC or LMC Only)
(January 7, 2002)
Use in modified concrete overlay projects where only fly ash modified concrete or latex modified concrete overlay mixes are allowed. Include with either 6-09.3(5).OPT2.GB6 or 6-09.3(5).OPT1.GB6.

6-09.3(3).OPT3.GB6 (LMC Only)
(January 7, 2002)
Use in modified concrete overlay projects where only latex modified concrete overlay mixes are allowed. Include with either 6-09.3(5).OPT2.GB6 or 6-09.3(5).OPT1.GB6.

6-09.3(4).GR6 Storing and Handling

6-09.3(4).INST1.GR6 (Section 6-09.3(4) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(5).GR6 Scarifying Concrete Surface

6-09.3(5).INST1.GR6 (Section 6-09.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(5).OPT1.GB6  (Rotary Mill, Hydro-Demolisher, or Shot Blaster)  
(January 7, 2002) 
Include in modified concrete overlay projects where all three types of scarifying machines are allowed. Include with either 6-09.3(3).OPT1.GB6, 6-09.3(3).OPT2.GB6, or 6-09.3(3).OPT3.GB6. 

6-09.3(5).OPT2.GB6  (Hydro-Demolisher or Shot Blaster Only)  
(January 7, 2002) 
Include in modified concrete overlay projects where only hydro-demolisher or shot blaster scarifying machines are allowed. Include with either 6-09.3(3).OPT1.GB6, 6-09.3(3).OPT2.GB6, or 6-09.3(3).OPT3.GB6. 

6-09.3(6).GR6  Further Deck Preparation

6-09.3(6)B.GR6  Deck Repair Preparation

6-09.3(6)B.INST1.GR6  (Section 6-09.3(6)B is supplemented with the following) 
Must use once preceding any of the following: 

6-09.3(6)C.GR6  Placing Deck Repair Concrete

6-09.3(6)C.INST1.GR6  (Supplemental Instructions) 
Must use once preceding any of the following: 

6-09.3(8).GR6  Quality Assurance

6-09.3(8).INST1.GR6  (Section 6-09.3(8) is supplemented with the following) 
Must use once preceding any of the following: 

6-09.3(9).GR6  Mixing Concrete for Concrete Overlay

6-09.3(9).INST1.GR6  (Section 6-09.3(9) is supplemented with the following) 
Must use once preceding any of the following: 

6-09.3(10).GR6  Overlay Profile and Screed Rails

6-09.3(10).INST1.GR6  (Section 6-09.3(10) is supplemented with the following) 
Must use once preceding any of the following: 

6-09.3(11).GR6  Placing Concrete Overlay

6-09.3(11).INST1.GR6  (Section 6-09.3(11) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(12).GR6  Finishing Concrete Overlay

6-09.3(12).INST1.GR6  (Section 6-09.3(12) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(13).GR6  Curing Concrete Overlay

6-09.3(13).INST1.GR6  (Section 6-09.3(13) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(14).GR6  Checking For Bond

6-09.3(14).INST1.GR6  (Section 6-09.3(14) is supplemented with the following)
Must use once preceding any of the following:

6-09.4.GR6  Measurement

6-09.4.INST1.GR6  (Section 6-09.4 is supplemented with the following)
Must use once preceding any of the following:

6-09.5.GR6  Payment

6-09.5.INST1.GR6  (The second bid item under Section 6-09.5 is supplemented with the following)
Must use once preceding any of the following:

6-09.5.INST2.GR6  (Section 6-09.5 is supplemented with the following)
Must use once preceding any of the following:

6-10.GR6  Concrete Barrier

6-10.3.GR6  Construction Requirements

6-10.3(6).GR6  Placing Concrete Barrier

6-10.3(6).INST1.GR6  (Section 6-10.3(6) is supplemented with the following)
Must use once preceding any of the following:

6-10.3(6).OPT1.GR6  (Use Permanent Barrier as Temporary)
(March 13, 1995)
Use in projects when permanent barrier may be used as temporary barrier.

6-10.5.GR6  Payment

6-10.5.INST1.GR6  (Section 6-10.5 is supplemented with the following)
Must use once preceding any of the following:
6-10.5.OPT1.GR6 (Temporary barrier delineators)
(April 28, 1997)
Use in projects that require temporary barrier to be placed adjacent to a travelled lane.

6-10.5.OPT2.FB6 (Bridge Concrete Barrier)
(March 6, 2000)
Use in projects with concrete barrier on bridges only where the barrier is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”. The first fill-in specifies the barrier type (traffic barrier, traffic-pedestrian barrier, pedestrian barrier, etc.). The second fill-in specifies the bid item name.
(2 fill-ins)

6-12.GR6 Noise Barrier Walls

6-12.2.GR6 Materials

6-12.2.INST1.GR6 (Section 6-12.2 is supplemented with the following)
Must use once preceding any of the following:

6-12.2.OPT1.GB6 (Precast Concrete Noise Barrier Walls)
(April 1, 2013)
Use in projects with noise barrier walls of precast concrete panels. Include with 6-12.3(6).OPT1.FB6 and all other applicable noise barrier wall GSP’s.

6-12.2.OPT2.FB6 (Masonry Noise Barrier Walls)
(January 2, 2012)
Use in projects with noise barrier walls of masonry block panels. The fill-in describes the surface texture and color requirements for the field, cap, accent, and other CMU blocks used for the masonry wall. Include with 6-12.3(7).OPT1.GB6 and all other applicable noise barrier wall GSP’s.
(1 fill-in)

6-12.2.OPT3.FB6 (Noise Barrier Wall Access Door)
(August 3, 2009)
Use in projects with noise barrier walls with access doors. The fill-in specifies the Federal Standard 595B color number, or the color name if no number, for the paint color of the door and door frame.
(1 fill-in)

6-12.3.GR6 Construction Requirements

6-12.3(1).GR6 Submittals

6-12.3(1).INST1.GR6 (Section 6-12.3(1) is supplemented with the following)
Must use once preceding any of the following:
6-12.3(1).OPT1.GB6 (Noise Barrier Wall Existing Groundline Field Survey) (April 5, 2004)
Use in noise barrier wall projects where the Contractor is required to perform and submit a field survey of the existing noise barrier wall alignment. Include with 1-05.4.OPT1.GR1, 6-12.5.OPT1.GB6, and all other applicable noise barrier wall GSP’s.

6-12.3(6).GR6 Precast Concrete Panel Fabrication and Erection

6-12.3(6).INST1.GR6 (Section 6-12.3(6) is supplemented with the following)
Must use once preceding any of the following:

6-12.3(6).OPT1.FB6 (Precast Concrete Panel Surface Finish Requirements) (April 5, 2004)
Use in projects with noise barrier walls of precast concrete panels. The fill-ins specify the type or name of the formed finish on the traffic side and on the residential side of the precast concrete panels. Include with 6-12.2.OPT1.GB6 and all other applicable noise barrier wall GSP’s. (2 fill-ins)

6-12.3(7).GR6 Masonry Wall Construction

6-12.3(7).INST1.GR6 (Section 6-12.3(7) is supplemented with the following)
Must use once preceding any of the following:

6-12.3(7).OPT1.GB6 (Masonry Noise Barrier Wall Construction Requirements) (April 6, 2009)
Use in projects with noise barrier walls of masonry block panels. Include with 6-12.2.OPT2.FB6 and all other applicable noise barrier wall GSP’s.

6-12.5.GR6 Payment

6-12.5.INST1.GR6 (Section 6-12.5 is supplemented with the following)
Must use once preceding any of the following:

6-12.5.OPT1.GB6 (Payment for Noise Barrier Wall Groundline Field Survey) (April 5, 2004)
Use in noise barrier wall projects where the Contractor is required to perform and submit a field survey of the existing noise barrier wall alignment. Include with 1-05.4.OPT1.GR1, 6-12.3(1).OPT1.GB6, and all other applicable noise barrier wall GSP’s.
6-13.GR6  Structural Earth Walls

6-13.2.GR6  Materials

6-13.2.INST1.GR6 (Section 6-13.2 is supplemented with the following)

Must use once preceding any of the following:

6-13.2.OPT1.GB6 (Welded Wire Faced Structural Earth Wall Materials)
(April 1, 2013)
Use in projects with structural earth walls where welded wire faced walls are an acceptable alternative. Include with 6-13.3.OPT1.GB6 and 6-13.3(2).OPT1.FB6.

6-13.2.OPT2.GB6 (Precast Concrete Panel Faced Structural Earth Wall Materials)
(August 5, 2013)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with 6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6.

6-13.2.OPT3.GB6 (Concrete Block Faced Structural Earth Wall Materials)
(August 5, 2013)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with 6-13.3.OPT3.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT2.GB6.

6-13.2.OPT3(A).GB6 (Allan Block Concrete Block Faced Structural Earth Wall Materials)
(January 4, 2010)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative AND where wall geometric and aesthetic parameters for the project allow for a sloped wall face batter not steeper than 19V:1H. Include with 6-13.2.OPT3.GB6, 6-13.3.OPT3.GB6, 6-13.3.OPT3(A).GB6, 6-13.3(2).OPT1.FB6, 6-13.3(2).OPT1(A).GB6, and 6-13.3(5).OPT2.GB6.

6-13.3.GR6  Construction Requirements

6-13.3.INST1.GR6 (Section 6-13.3 is supplemented with the following)

Must use once preceding any of the following:

6-13.3.OPT1.GB6 (Welded Wire Faced Structural Earth Wall)
(April 4, 2011)
Use in projects with structural earth walls where welded wire faced walls are an acceptable alternative. Include with 6-13.2.OPT1.GB6 and 6-13.3(2).OPT1.FB6.
6-13.3.OPT2.GB6 (Precast Concrete Panel Faced Structural Earth Wall)  
(August 5, 2013)  
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with 6-13.2.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6.

6-13.3.OPT3.GB6 (Concrete Block Faced Structural Earth Wall)  
(April 2, 2012)  
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with 6-13.2.OPT3.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT2.GB6.

6-13.3.OPT3(A).GB6 (Allan Block Concrete Block Faced Structural Earth Wall)  
(January 7, 2013)  

6-13.3(2).GR6 Submittals

6-13.3(2).INST1.GR6 (Section 6-13.3(2) is supplemented with the following)  
Must use once preceding any of the following:

6-13.3(2).OPT1.FB6 (Structural Earth Wall Geotechnical Design Parameters)  
(January 3, 2011)  
Use in projects with structural earth walls. The first fill-in identifies the wall by name or number, and the remaining fill-ins specify the values for various geotechnical design parameters as specified in the geotechnical report prepared for the project. The table may be repeated as necessary for additional walls with differing geotechnical design parameters. (13 fill-ins)

6-13.3(2).OPT1(A).GB6 (Allan Block Concrete Block Faced Structural Earth Wall Design Submittal Requirements)  
(January 4, 2010)  
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative AND where wall geometric and aesthetic
parameters for the project allow for a sloped wall face batter not steeper than 19V:1H. Include with 6-
13.2.OPT3.GB6, 6-13.2.OPT3(A).GB6, 6-
13.3.OPT3.GB6, 6-13.3.OPT3(A).GB6, 6-

6-13.3(4).GR6 Precast Concrete Facing Panel and Concrete Block Fabrication

6-13.3(4).INST1.GR6 (Section 6-13.3(4) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(4).OPT1.GB6 (Specific Fabrication Requirements for Precast Concrete Panel Faced Structural Earth Walls) (April 12, 2012)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with 6-13.2.OPT2.GB6, 6-
13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, and 6-

6-13.3(5).GR6 Precast Concrete Facing Panel and Concrete Block Erection

6-13.3(5).INST1.GR6 (Section 6-13.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(5).OPT2.GB6 (Specific Erection Requirements for Precast Concrete Block Faced Structural Earth Walls) (April 2, 2012)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with 6-13.2.OPT3.GB6 6-

6-14.GR6 Geosynthetic Retaining Walls

6-14.2.GR6 Materials

6-14.2(9-33.2(2)).GR6 (Geosynthetic Properties For Retaining Walls and Reinforced Slopes) (Section 9-33.2(2) is supplemented with the following)
Must use once preceding any of the following:

6-14.2(9-33.2(2)).OPT1.FB6 (Geosynthetic Properties For Temporary Geosynthetic Retaining Walls) (August 7, 2006)
Use in projects with temporary geosynthetic retaining walls. The first fill-in identifies the wall location. The second fill-in specifies the reinforcement layer vertical spacing. The third fill-in specifies the dimension from the
top of wall to the reinforcement layer. The fourth fill-in specifies the geosynthetic tensile strength.
(4 fill-ins)

6-15.6 GR6  Soil Nail Walls

6-15.2 GR6  Materials

6-15.2 INST1 GR6  (Section 6-15.2 is supplemented with the following)
Must use once preceding any of the following:

6-15.2 OPT1 GB6  (Permanent Soil Nail Materials and Components)
(April 1, 2013)
Use in projects with soil nail retaining walls. Include with 6-18.2 OPT1 GB6 and 6-15.3(8) A OPT1 FB6.

6-15.3 GR6  Construction Requirements

6-15.3(8) GR6  Soil Nail Testing And Acceptance

6-15.3(8) A GR6  Verification Testing

6-15.3(8) A INST1 GR6  (Section 6-15.3(8)A is supplemented with the following)
Must use once preceding any of the following:

6-15.3(8) A OPT1 FB6  (Soil Nail Verification Test Locations)
(April 5, 2004)
Use in projects with soil nail retaining walls. The fill-ins specify the soil nail verification test locations and the number of successful tests required at each location. Include with 6-15.2 OPT1 GB6 and 6-18.2 OPT1 GB6.
(3 fill-ins)

6-17.6 GR6  Permanent Ground Anchors

6-17.1 GR6  Description

6-17.1 INST1 GR6  (Section 6-17.1 is supplemented with the following)
Must use once preceding any of the following:

6-17.1 OPT1 GB6  (Rock Bolts and Rock Dowels)
(January 7, 2013)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.2 OPT2 GB6, 6-17.3 OPT1 GB6, 6-17.3(8) OPT1 GB6, 6-17.4 OPT1 GB6 and 6-17.5 OPT1 GB6.

6-17.2 GR6  Materials

6-17.2 INST1 GR6  (Section 6-17.2 is supplemented with the following)
Must use once preceding any of the following:
6-17.2.OPT1.GB6 (Permanent Ground Anchor Materials and Components) (August 1, 2011) Use in projects with walls using permanent ground anchors.

6-17.2.OPT2.GB6 (Rock Bolt and Rock Dowel Materials) (January 7, 2013) Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

6-17.3.GR6 Construction Requirements

6-17.3.INST1.GR6 (Section 6-17.3 is supplemented with the following) Must use once preceding any of the following:

6-17.3.OPT1.GB6 (Rock Bolt and Rock Dowel Construction Requirements) (January 7, 2013) Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

6-17.3(8).GR6 Testing And Stressing

6-17.3(8).INST1.GR6 (Section 6-17.3(8) is supplemented with the following) Must use once preceding any of the following:

6-17.3(8).OPT1.GB6 Rock Bolt and Rock Dowel Testing (January 7, 2013) Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

6-17.3(8)A.GR6 Verification Testing

6-17.3(8)A.INST1.GR6 (Section 6-17.3(8)A is supplemented with the following) Must use once preceding any of the following:

6-17.3(8)A.OPT1.GB6 (August 1, 2011) Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors as recommended by the WSDOT Materials Laboratory Geotechnical Services.
Division. Include with 6-17.3(8)B.OPT1.GB6 and 6-17.3(8)C.OPT1.GB6.

6-17.3(8)B.GR6  Performance Testing

6-17.3(8)B.INST1.GR6 (The performance test schedule following the second paragraph of Section 6-17.3(8)B is revised to read)
Must use once preceding any of the following:

6-17.3(8)B.OPT1.GB6 (January 3, 2011)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors, as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include with 6-17.3(8)A.OPT1.GB6 and 6-17.3(8)C.OPT1.GB6.

6-17.3(8)C.GR6  Proof Testing

6-17.3(8)C.INST1.GR6 (The proof test schedule following the first paragraph of Section 6-17.3(8)C is revised to read)
Must use once preceding any of the following:

6-17.3(8)C.OPT1.GB6 (January 3, 2011)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors, as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include with 6-17.3(8)A.OPT1.GB6 and 6-17.3(8)B.OPT1.GB6.

6-17.4.GR6  Measurement

6-17.4.INST1.GR6 (Section 6-17.4 is supplemented with the following)
Must use once preceding any of the following:

6-17.4.OPT1.GB6 (Rock Bolts and Rock Dowels)
(January 4, 2010)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, and 6-17.5.OPT1.GB6.

6-17.5.GR6  Payment

6-17.5.INST1.GR6 (Section 6-17.5 is supplemented with the following)
Must use once preceding any of the following:

6-17.5.OPT1.GB6 (Rock Bolts and Rock Dowels)
(January 4, 2010)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-
6-18.GR6  Shotcrete Facing

6-18.2.GR6  Materials

6-18.2.INST1.GR6  (Section 6-18.2 is supplemented with the following)

Must use once preceding any of the following:

6-18.2.OPT1.GB6  (Shotcrete Facing)

(August 1, 2005)

Use in projects with shotcrete facing. Include with 6-15.2.OPT1.GB6 and 6-15.3(8)A.OPT1.FB6 for all soil nail retaining wall projects. Include with 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6 for all projects with shotcrete facing for rock/soil slope stabilization.

6-18.2.OPT2.GB6  (Coloration for Shotcrete Facing Finishing Alternative C)

(April 5, 2004)

Use in projects with shotcrete facing where tinting of the finish coating of shotcrete is required. Include with 6-15.2.OPT1.GB6, 6-15.3(8)A.OPT1.FB6 and 6-18.2.OPT1.GB6 for all soil nail retaining wall projects with such requirements. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6 for all projects with shotcrete facing for rock/soil slope stabilization.

6-18.2.OPT3.GB6  (Fiber Reinforcement for Shotcrete Facing)

(April 5, 2010)

Use in projects with shotcrete facing where fiber reinforcement in the shotcrete is specified. Include with 6-18.2.OPT1.GB6. Include with 6-18.2.OPT2.GB6, 6-18.3.OPT1.GB6 and 6-18.5.OPT1.GB6 for all projects with shotcrete facing for rock/soil slope stabilization.

6-18.3.GR6  Construction Requirements

6-18.3.INST1.GR6  (Section 6-18.3 is supplemented with the following)

Must use once preceding any of the following:

6-18.3.OPT1.GB6  (Shotcrete Facing For Rock/Soil Slope Stabilization)

(April 5, 2010)

Use in projects with shotcrete facing for rock/soil slope stabilization. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6.

6-18.4.GR6  Measurement
6-18.4.INST1.GR6  (Section 6-18.4 is supplemented with the following)
Must use once preceding any of the following:

6-18.4.OPT1.GB6  (Shotcrete Facing For Rock/Soil Slope Stabilization)
(April 5, 2010)
Use in projects with shotcrete facing for rock/soil slope stabilization. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6 and 6-18.5.OPT1.GB6.

6-18.5.GR6  Payment

6-18.5.INST1.GR6  (Section 6-18.5 is supplemented with the following)
Must use once preceding any of the following:

6-18.5.OPT1.GB6  (Shotcrete Facing For Rock/Soil Slope Stabilization)
(April 5, 2010)
Use in projects with shotcrete facing for rock/soil slope stabilization. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6 and 6-18.5.OPT1.GB6.

6-19.GR6  Shafts

6-19.2.GR6  Materials

6-19.2(9-36.2(2)).GR6  Synthetic Slurry
(Section 9-36.2(2) is supplemented with the following)
Must use once preceding any of the following:

6-19.2(9-36.2(2)).OPT1.GB6  (Fresh Water For Synthetic Slurry)
(January 2, 2012)
Use in projects with shafts constructed in salt water when the geotechnical report specifies that the use of fresh water for synthetic slurry is feasible and when the Contracting Agency restricts the water for synthetic slurry to fresh water only. Include with 6-19.4.OPT3.GB6 and 6-19.5.OPT2.GB6.

6-19.3.GR6  Construction Requirements

6-19.3(2).GR6  Submittals

6-19.3(2).INST1.GR6  (Section 6-19.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-19.3(2).OPT1.GB6  (CSL Testing By Contractor)
(January 2, 2012)
Use in projects where CSL testing is to be provided by the Contractor. Include with 6-19.3(9)A.OPT1.GB6, 6-19.3(9)C.OPT1.GB6, 6-19.4.OPT2.GB6 and 6-19.5.OPT1.GB6.
6-19.3(3).GR6  Shaft Excavation

6-19.3(3).INST1.GR6  (Section 6-19.3(3) is supplemented with the following)
Must use once preceding any of the following:

6-19.3(3).OPT1.GB6  (Variations In Bearing Layer Elevations)
(January 2, 2012)
Use in projects where shaft embedment to a minimum penetration into a bearing layer is required, and where the bearing layer elevation cannot be accurately specified with certainty. Include with 6-19.3(5).OPT1.GB6 and 6-19.4.OPT1.GB6.

6-19.3(3)B.GR6  Temporary and Permanent Shaft Casing

6-19.3(3)B.INST1.GR6  (Section 6-19.3(3)B is supplemented with the following)
Must use once preceding any of the following:

6-19.3(3)B.OPT1.FB6  (Required Casing)
(January 2, 2012)
Use in projects where permanent and/or temporary casing is required. The first fill-in identifies the bridge and pier number or the wall name and station limits. The second fill-in specifies the casing type as permanent or temporary. The third fill-in specifies the bottom elevation of the casing. The fourth fill-in specifies the top and bottom elevation limits for concurrent casing placement with excavation. The fifth fill-in specifies the maximum dimension that excavation may precede the casing tip. The third, fourth and fifth fill-ins should be specified in the geotechnical report prepared for the project.
(5 fill-ins)

6-19.3(3)B.OPT2.GB6  (Rotating/Oscillating Method Required)
(January 2, 2012)
Use in projects where the geotechnical report for the project recommends, and the ADSC/WSDOT Shaft Task Force concurs, that site conditions dictate the use of the rotating/oscillating method for shaft excavation.

6-19.3(3)B4.GR6  Temporary Telescoping Shaft Casing

6-19.3(3)B4.INST1.GR6  (The second paragraph of Section 6-19.3(3)B4 is revised to read as follows)
Must use once preceding any of the following:

6-19.3(3)B4.OPT1.GB6  (Temp. Telescoping Casing Not Allowed At End Piers)
Use in projects where design conditions exist where the option of temporary telescoping casing for shafts at bridge end piers is not appropriate for the overall design behavior of the overall bridge.

**6-19.3(3).GR6**  
**Required Use of Slurry in Shaft Excavation**

**6-19.3(3).INST1.GR6**  
(Section 6-19.3(3) is supplemented with the following)  
Must use once preceding any of the following:

**6-19.3(3).OPT1.GB6**  
(Exception For Casing Sealed Against Influx Of Water Into Excavation)  
(January 2, 2012)  
Use in projects where the geotechnical conditions, as documented in the geotechnical report for the project, allow the possibility of performing shaft excavation in a cased hole beneath the water table level without the need for slurry to ensure the stability of the bottom of the excavation.

**6-19.3(4).GR6**  
**Slurry Installation Requirements**

**6-19.3(4).A.GR6**  
**Slurry Technical Assistance**

**6-19.3(4).A.INST1.GR6**  
(Section 6-19.3(4)A is supplemented with the following)  
Must use once preceding any of the following:

**6-19.3(4).A.OPT1.FB6**  
(Slurry Manufacturer’s Representative’s Presence Required At Specific Shaft Sites)  
(January 2, 2012)  
Use in projects where the geotechnical conditions vary enough from one shaft site to another to affect how the slurry is used at each shaft site. The fill-in identifies the specific shaft locations where the presence of the slurry manufacturer’s representative is required.  
(1 fill-in)

**6-19.3(5).GR6**  
**Assembly and Placement of Reinforcing Steel**

**6-19.3(5).INST1.GR6**  
(Section 6-19.3(5) is supplemented with the following)  
Must use once preceding any of the following:

**6-19.3(5).OPT1.GB6**  
(Variations In Bearing Layer Elevations)  
(January 2, 2012)  
Use in projects where shaft embedment to a minimum penetration into a bearing layer is required, and where the bearing layer elevation cannot be accurately specified with certainty.
Include with 6-19.3(3).OPT1.GB6 and 6-19.4.OPT1.GB6.

6-19.3(7).GR6 Placing Concrete

6-19.3(7)D.GR6 Requirements for Placing Concrete Underwater

6-19.3(7)D.INST1.GR6 (Section 6-19.3(7)D is supplemented with the following)

Must use once preceding any of the following:

6-19.3(7)D.OPT1.GB6 (Tremie Allowed As An Alternative To Concrete Pump)

(January 2, 2012)

Use in projects where the construction site is at a remote location where it may be difficult to make arrangements to have a concrete pump at the site.

6-19.3(9).GR6 Nondestructive Testing of Shafts
(Crosshole Sonic Log Testing)

6-19.3(9)A.GR6 Schedule of CSL Testing

6-19.3(9)A.INST1.GR6 (The first paragraph of Section 6-19.3(9)A is revised to read as follows)

Must use once preceding any of the following:

6-19.3(9)A.OPT1.GB6 (CSL Testing By Contractor)

(January 2, 2012)

Use in projects where CSL testing is to be provided by the Contractor. Include with 6-19.3(2).OPT1.GB6, 6-19.3(9)C.OPT1.GB6, 6-19.4.OPT2.GB6 and 6-19.5.OPT1.GB6.

6-19.3(9)C.GR6 Engineer’s Final Acceptance of Shafts

6-19.3(9)C.INST1.GR6 (Section 6-19.3(9)C is revised to read as follows)

Must use once preceding any of the following:

6-19.3(9)C.OPT1.GB6 (CSL Testing By Contractor)

(January 2, 2012)

Use in projects where CSL testing is to be provided by the Contractor. Include with 6-19.3(2).OPT1.GB6, 6-19.3(9)A.OPT1.GB6, 6-19.4.OPT2.GB6 and 6-19.5.OPT1.GB6.

6-19.4.GR6 Measurement

6-19.4.INST1.GR6 (The ninth and tenth paragraphs of Section 6-19.4 are revised to read as follows)

Must use once preceding any of the following:
6-19.4.OPT1.GB6 (Variations In Bearing Layer Elevations)
(January 2, 2012)
Use in projects where shaft embedment to a minimum penetration into a bearing layer is required, and where the bearing layer elevation cannot be accurately specified with certainty. Include with 6-19.3(3).OPT1.GB6 and 6-19.3(5).OPT1.GB6.

6-19.4.INST2.GR6 (Section 6-19.4 is supplemented with the following)
Must use once preceding any of the following:

6-19.4.OPT2.GB6 (CSL Testing By Contractor)
(January 2, 2012)
Use in projects where CSL testing is to be provided by the Contractor. Include with 6-19.3(2).OPT1.GB6, 6-19.3(9)A.OPT1.GB6, 6-19.3(9)C.OPT1.GB6 and 6-19.5.OPT1.GB6.

6-19.4.OPT3.GB6 (Fresh Water For Synthetic Slurry)
(January 2, 2012)
Use in projects with shafts constructed in salt water when the geotechnical report specifies that the use of fresh water for synthetic slurry is feasible and when the Contracting Agency restricts the water for synthetic slurry to fresh water only. Include with 6-19.2(9-36.2(2)).OPT1.GB6 and 6-19.5.OPT2.GB6.

6-19.5.GR6 Payment

6-19.5.INST1.GR6 (Section 6-19.5 is supplemented with the following)
Must use once preceding any of the following:

6-19.5.OPT1.GB6 (CSL Testing By Contractor)
(January 2, 2012)
Use in projects where CSL testing is to be provided by the Contractor. Include with 6-19.3(2).OPT1.GB6, 6-19.3(9)A.OPT1.GB6, 6-19.3(9)C.OPT1.GB6 and 6-19.4.OPT2.GB6.

6-19.5.OPT2.GB6 (Fresh Water for Synthetic Slurry)
(January 2, 2012)
Use in projects with shafts constructed in salt water when the geotechnical report specifies that the use of fresh water for synthetic slurry is feasible and when the Contracting Agency restricts the water for synthetic slurry to fresh water only. Include with 6-19.2(9-36.2(2)).OPT1.GB6 and 6-19.4.OPT3.GB6.