1 INTRO.AP1

2 INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the
 2012 Standard Specifications for Road, Bridge, and Municipal Construction.

5 6 7

AMENDMENTS TO THE STANDARD SPECIFICATIONS

8 The following Amendments to the Standard Specifications are made a part of this contract 9 and supersede any conflicting provisions of the Standard Specifications. For informational 10 purposes, the date following each Amendment title indicates the implementation date of the 11 Amendment or the latest date of revision.

12

Each Amendment contains all current revisions to the applicable section of the Standard
 Specifications and may include references which do not apply to this particular project.

15 16 1-01.AP1

17 Section 1-01, Definition and Terms

18 January 2, 2012

19 **1-01.3 Definitions**

20 The definition for **"Bid Documents**" is revised to read:

- 21 22
 - The component parts of the proposed Contract which may include, but are not limited
- 23 to, the Proposal Form, the proposed Contract Provisions, the proposed Contract Plans,
- 24 Addenda, and, for projects with Contracting Agency subsurface investigations, the
- 25 Summary of Geotechnical Conditions and subsurface boring logs (if any).
- 26
- 27 1-02.AP1

28 Section 1-02, Bid Procedures and Conditions

29 January 2, 2012

30 1-02.4(2) Subsurface Information

- 31 The first two sentences in the first paragraph are revised to read:
- 32
 - If the Contracting Agency has made subsurface investigation of the site of the
- If the Contracting Agency has made subsurface investigation of the site of the proposed
 work, the boring log data, soil sample test data, and geotechnical recommendations
- 35 reports obtained by the Contracting Agency will be made available for inspection by the
- 36 Bidders at the location specified in the Special Provisions. The Summary of
- 37 Geotechnical Conditions, as an appendix to the Special Provisions, and the boring logs 38 shall be considered as part of the Contract.
- snall be considered as part of the Contract.
- 40 1-03.AP1

41 Section 1-03, Award and Execution of Contract

42 April 2, 2012

43 **1-03.1(1) Tied Bids**

- 44 This section's title is revised to read:
- 45
- 46 1-03.1(1) Identical Bid Totals
- 47

1-08.AP1 1

2 Section 1-08, Prosecution and Progress

3 April 2, 2012

1-08.1 Subcontracting 4

5 In the eighth paragraph, "Contracting Agency" is revised to read "WSDOT".

7 1-08.3(1) General Requirements

The following new paragraph is inserted after the first paragraph: 9

- Total float belongs to the project and shall not be for the exclusive benefit of any party.
- 10 11

6

8

12 1-08.7 Maintenance During Suspension

13 The second paragraph is revised to read:

- 14
- 15 At no expense to the Contracting Agency, the Contractor shall provide through the 16 construction area safe, smooth, and unobstructed roadways and pedestrian access
- 17 routes for public use during the suspension (as required in Section 1-07.23 or the
- 18 Special Provisions.) This may include a temporary road, alternative pedestrian access 19 route or detour.
- 20
- 21 1-09.AP1

22 Section 1-09, Measurement and Payment

23 April 2, 2012

24 1-09.2(5) Measurement

- 25 The second sentence in the first paragraph is revised to read:
- 26
- 27 The frequency of verification checks will be such that at least one test weekly is
- 28 performed for each scale used in weighing contract items of Work.
- 29
- 30 3-04.AP3

31 Section 3-04, Acceptance of Aggregate

32 April 2, 2012

33 3-04.3(7)D4 An Entire Lot

- 34 The last sentence is deleted.
- 35

36 3-04.5 Payment

37 In the second paragraph, the reference "Section 3-04.3(6)C" is revised to read "Section 3-38 04.3(8)".

39

40 In Table 1, the row containing the item "Gravel Borrow for Geosynthetic Retaining Wall" is

- 41 revised to read:
- 42

9-03.14(4)	Gravel Borrow for Geosynthetic	4000	2000	\$30	\$60
	Retaining Wall				

- 43
- 44 45

1 5-01.AP5

2 Section 5-01, Cement Concrete Pavement Rehabilitation

3 April 2, 2012

4 5-01.3(2)B Portland Cement Concrete

- 5 The fifth sentence in the third paragraph is revised to read:
- 6 7
- The lower Specification limit for compressive strength shall be 4,000-psi.
- 89 The last two sentences in the third paragraph are deleted.
- 10

11 5-01.3(11) Concrete Slurry

12 This section including title is revised to read: 13

14 **5-01.3(11)** Concrete Slurry and Grinding Residue

- All concrete slurry and grinding residue shall be removed from the pavement surface on
 a continual basis immediately behind the grinding or cutting operations. Slurry shall not
 be allowed to drain into an area open to traffic, off of the paved surface or into any
 drainage structure.
- 19
- The Contractor shall collect the concrete slurry and grinding residue from the pavement surface and dispose of it in accordance with Section 2-03.3(7)C.
- 22
- 23 Opening to traffic shall meet the requirements of Section 5-05.3(17).
- 24
- 25 5-04.AP5

26 Section 5-04, Hot Mix Asphalt

27 April 2, 2012

28 **5-04.3(10)B3** Longitudinal Joint Density

29 The section including title is revised to read: 30

5-04.3(10)B3 Vacant

- 31 32
- 33 6-02.AP6

34 Section 6-02, Concrete Structures

35 April 2, 2012

36 6-02.3(16) Plans for Falsework and Formwork

- 37 Item No. 4 in the seventh paragraph is revised to read:
- 38 39
- 4. Conditions required by other Sections of 6-02.3(17), Falsework and Formwork.
- 40
- 41 Item's No. 5, 6, 7, and 8 in the seventh paragraph are deleted.
- 42
- 43 The following paragraph is inserted after the seventh paragraph:
- 44

45 Plan approval can be done by the Project Engineer for footings and walls 4 to 8 feet high46 (excluding pedestal height) provided:

- 47
- 48 1. Concrete placement rate is 4 feet per hour or less.

1 2 2. Facing is ³/₄-inch plywood with grades as specified per Section 6-02.3(17). 3 4 Studs, with plywood face grain perpendicular, are 2 by 4's spaced at 12 inches. 3. 5 6 4. Walers with 3.000 pound safe working load ties spaced at 24 inches are two 2 by 7 4's spaced at 24 inches. 8 9 6-02.3(17)F Bracing 10 In the first paragraph, the phrase "per Section 6-02.3(17)I" is revised to read "in accordance 11 with Section 6-02.3(17)I". 12 13 This section is supplemented with the following new sub-section: 14 15 6-02.3(17)F5 Temporary Bracing for Bridge Girders During Diaphragm and 16 Bridge Deck Concrete Placement 17 Prestressed concrete girders shall be braced to resist forces that would cause rotation 18 or torsion in the girders caused by the placing of precast concrete deck panels and 19 concrete for the bridge deck. 20 21 Bracing shall be designed and detailed by the Contractor and shall be shown in the 22 falsework/formwork plans submitted to the Engineer for approval. These braces shall be 23 furnished, installed, and removed by the Contractor at no additional cost to the 24 Contracting Agency. The Contractor may consider the bracing effects of the 25 diaphragms in developing the falsework/formwork plans. The Contractor shall account 26 for the added load from concrete finishing machines and other construction loadings in 27 the design of the bracing. 28 29 Falsework support brackets and braces shall not be welded to structural steel bridge 30 members or to steel reinforcing bars. 31

32 **6-02.3(17)F4** Temporary Bracing for Bridge Girders

- 33 This section including title is revised to read:
- 34 35

36

6-02.3(17)F4 Temporary Bracing for Bridge Girders During Erection

- Steel girders shall be braced in accordance with Section 6-03.3(7)A.
- Prestressed concrete girders shall be braced sequentially during girder erection. The
 bracing shall be designed and detailed by the Contractor and shall be shown in the
 falsework/formwork plans submitted to the Engineer for approval. The Contractor shall
 furnish, install, and remove the bracing at no additional cost to the Contracting Agency.
- 42
- 43 At a minimum, the Contractor shall brace girders at each end and at midspan to prevent
- lateral movement or rotation. This bracing shall be placed prior to the release of each
 girder from the erection equipment. If the bridge is constructed with cast-in-place
- 46 concrete diaphragms, the bracing may be removed once the concrete in the
- 47 diaphragms has been placed and cured for a minimum of 24 hours.
- 48

49 6-02.3(25)N Prestressed Concrete Girder Erection

- 50 The third sentence in the fifth paragraph is revised to read:
- 51

- 1 The girders shall be braced in accordance with Sections 6-02.3(17)F4 and 6-2 02.3(17)F5.
- 2 3 4

6 7

8

9

6-02.3(26)E5 Leak Tightness Testing

The first sentence in the first paragraph is revised to read:

- The Contractor shall test each completed duct assembly for leak tightness after placing concrete but prior to placing post tensioning reinforcement.
- 10 The second paragraph is revised to read:
- 11

12 Prior to testing, all grout caps shall be installed and all vents, grout injection ports, and 13 drains shall either be capped or have their shut-off valves closed. The Contractor shall 14 pressurize the completed duct assembly to an initial air pressure of 50 psi. This 15 pressure shall be held for five minutes to allow for internal adjustments within the 16 assembly. After five minutes, the air supply valve shall be closed. The Contractor shall 17 monitor and measure the pressure maintained within the closed assembly, and any subsequent loss of pressure, over a period of one minute following the closure of the air 18 19 supply valve. The maximum pressure loss for duct assemblies equal to or less than 20 150 feet in length shall be 25 psig. The maximum pressure loss for duct assemblies 21 greater than 150 feet in length shall be 15 psig. If the pressure loss exceeds the 22 allowable, locations of leakage shall be identified, repaired or reconstructed using 23 methods approved by the Engineer. The repaired system shall then be retested. The 24 cycle of testing, repair and retesting of each completed duct assembly shall continue 25 until the completed duct assembly completes a test with pressure loss within the 26 specified amount.

- 27
- 28 6-03.AP6

29 Section 6-03, Steel Structures

30 April 2, 2012

31 6-03.3(28)A Method of Shop Assembly

- 32 The first sentence in Item 2.C. is revised to read:
- 33

For Trusses and Girders – After the first stage has been completed, each subsequent stage shall be assembled to include: at least one truss panel or girder shop section of the previous stage and two or more truss panels or girder shop sections added at the advancing end.

- 38
- 39 6-07.AP6
- 40 Section 6-07, Painting
- 41 April 2, 2012

42 6-07.3(9)A Paint System

- 43 The first sentence in the second paragraph is revised to read:
- 44
- 45 All paint coating components of the selected paint system shall be produced by the
- 46 same manufacturer.
- 47

48 6-07.3(10)H Paint System

49 The first and second sentences in the second paragraph are revised to read:

- 1 2
- All paint coating components of the selected paint system shall be produced by the same manufacturer.
- 3 4
- 5 6-10.AP6
- 6 Section 6-10, Concrete Barrier
- 7 April 2, 2012

8 6-10.5 Payment

In the second paragraph, the bid item "Conc. Class 4000" is revised to read: 9

10 11

"Conc. Class 4000 "

- 12
- 13 6-12.AP6

Section 6-12, Noise Barrier Walls 14

15 January 2, 2012

16 6-12.3(3) Shaft Construction

- 17 The third sentence in the fifth paragraph is revised to read:
- 18
- 19 When efforts to advance past the obstruction to the design shaft tip elevation result in 20 the rate of advance of the shaft drilling equipment being significantly reduced relative to
- 21 the rate of advance for the rest of the shaft excavation, then the Contractor shall remove 22
 - the obstruction under the provisions of Section 6-12.5.
- 23

24 6-12.5 Payment

25 This section is supplemented with the following:

- 26 27
 - "Removing Noise Barrier Wall Shaft Obstructions", estimated.
- 28

29 Payment for removing obstructions, as defined in Section 6-12.3(3), will be made for the

- 30 changes in shaft construction methods necessary to remove the obstruction. The 31 Contractor and the Engineer shall evaluate the effort made and reach agreement on the 32 equipment and employees utilized, and the number of hours involved for each. Once
- 33 these cost items and their duration have been agreed upon, the payment amount will be 34 determined using the rate and markup methods specified in Section 1-09.6. For the 35 purpose of providing a common proposal for all bidders, the Contracting Agency has
- 36 entered an amount for the item "Removing Noise Barrier Wall Shaft Obstructions" in the
- 37 bid proposal to become a part of the total bid by the Contractor.

38 39 If the shaft construction equipment is idled as a result of the obstruction removal work 40 and cannot be reasonably reassigned within the project, then standby payment for the 41 idled equipment will be added to the payment calculations. If labor is idled as a result of 42 the obstruction removal work and cannot be reasonably reassigned within the project, then all labor costs resulting from Contractor labor agreements and established 43 44 Contractor policies will be added to the payment calculations.

45

46 The Contractor shall perform the amount of obstruction work estimated by the

- 47 Contracting Agency within the original time of the contract. The Engineer will consider a
- time adjustment and additional compensation for costs related to the extended duration 48
- 49 of the shaft construction operations, provided:
- 50

1 2 3	1.	the dollar amount estimated by the Contracting Agency has been exceeded, and;
3 4 5 6 7	2.	the Contractor shows that the obstruction removal work represents a delay to the completion of the project based on the current progress schedule provided in accordance with Section 1-08.3.
8 9 10	6-14.AP6 Section 6- January 2,	14, Geosynthetic Retaining Walls 2012
11 12 13	6-14.2 Mat The reference	t erials ced section for the following item is revised to read:
14 15	Grout	9-20.3(4)
16 17 18	In the first pa Geosyntheti	aragraph, the following items are inserted after the item "Gravel Borrow For c Retaining Wall":
19 20 21	Polyure Closed	thane Sealant9-04.2(3)Cell Foam Backer Rod9-04.2(3)A
22 23 24	6-15.AP6 Section 6- January 2,	15, Soil Nail Walls 2012
25 26	6-15.2 Mat	t erials ced section for the following item is revised to read:
27 28 20	Grout	9-20.3(4)
30 31 32	6-15.3(3) Stem f benea	Submittals ath item number 3 is revised to read:
33 34	f. Mix	design and procedures for placing the grout.
35 36 37	6-15.3(6) \$ This section	Soil Nailing is supplemented with the following:
38 39 40 41 42 43	The Co WSDO ⁻ associa complet testing s with the	ntractor shall make and cure grout cubes once per day in accordance with Γ Test Method T 813. These samples shall be retained by the Contractor until all ted verification and proof testing of the soil nails has been successfully ted. If the Contractor elects to test the grout cubes for compressive strength, shall be conducted by an independent laboratory and shall be in accordance wSDOT FOP for AASHTO T106.

2 Section 6-16, Soldier Pile and Soldier Pile Tieback Walls

3 January 2, 2012

4 6-16.3(3) Shaft Excavation

- 5 The third sentence in the seventh paragraph is revised to read:
- 6 7

8

9

- When efforts to advance past the obstruction to the design shaft tip elevation result in the rate of advance of the shaft drilling equipment being significantly reduced relative to the rate of advance for the rest of the shaft excavation, then the Contractor shall remove the obstruction under the provisions of Section 6-16.5.
- 10 11

12 6-16.5 Payment

- 13 This section is supplemented with the following:
- 14
- 15 "Removing Soldier Pile Shaft Obstructions", estimated.
- 16
- 17 Payment for removing obstructions, as defined in Section 6-16.3(3), will be made for the
- 18 changes in shaft construction methods necessary to remove the obstruction. The
- 19 Contractor and the Engineer shall evaluate the effort made and reach agreement on the
- 20 equipment and employees utilized, and the number of hours involved for each. Once
- 21 these cost items and their duration have been agreed upon, the payment amount will be
- determined using the rate and markup methods specified in Section 1-09.6. For the purpose of providing a common proposal for all bidders, the Contracting Agency has
- entered an amount for the item "Removing Soldier Pile Shaft Obstructions" in the bid
- 25 proposal to become a part of the total bid by the Contractor.
- 26
- If the shaft construction equipment is idled as a result of the obstruction removal work
 and cannot be reasonably reassigned within the project, then standby payment for the
 idled equipment will be added to the payment calculations. If labor is idled as a result of
 the obstruction removal work and cannot be reasonably reassigned within the project,
 then all labor costs resulting from Contractor labor agreements and established
 Contractor policies will be added to the payment calculations.
- 33
- The Contractor shall perform the amount of obstruction work estimated by the
 Contracting Agency within the original time of the contract. The Engineer will consider a
 time adjustment and additional compensation for costs related to the extended duration
 of the shaft construction operations, provided:
 - 1. the dollar amount estimated by the Contracting Agency has been exceeded, and;
- 40 41 42

43

39

- the Contractor shows that the obstruction removal work represents a delay to the completion of the project based on the current progress schedule provided
- in accordance with Section 1-08.3.
- 45
- 46 6-17.AP6
- 47 Section 6-17, Permanent Ground Anchors
- 48 January 2, 2012

49 **6-17.3(3)** Submittals

50 The first sentence in the sixth paragraph is revised to read:

The Contractor shall submit the mix design for the grout conforming to Section 9-20.3(4)
 and the procedures for placing the grout to the Engineer for approval.

5 6-17.3(7) Installing Permanent Ground Anchors

6 The following new paragraph is inserted after the sixth paragraph:

- 7
 8 The Contractor shall make and cure grout cubes once per day in accordance with
 9 WSDOT Test Method T 813. These samples shall be retained by the Contractor until all
- 10 associated verification, performance and proof testing of the permanent ground anchors
- has been successfully completed. If the Contractor elects to test the grout cubes for
 compressive strength, testing shall be conducted by an independent laboratory and
- 13 shall be in accordance with the WSDOT FOP for AASHTO T106.
- 14

4

15 7-02.AP7

16 Section 7-02, Culverts

- 17 April 2, 2012
- 18 **7-02.5**
- 19 The bid item "Steel Rib Reinforced Polyethylene Culvert Pipe _____ In. Diam.", per linear 20 foot is revised to read:
- 21
- "St. Rib Reinf Polyethlene Culv. Pipe _____ In. Diam.", per linear foot
- 22 23
- 24 7-04.AP7
- 25 Section 7-04, Storm Sewers
- 26 April 2, 2012

27 7-04.3(1)B Exfiltration Test – Storm Sewers

- The fifth column title "PE⁴" is revised to read "PP⁴" from the table titled, "**Storm Sewer Pipe Schedules**".
- 30

31 **7-04.5**

- The bid item "Steel Rib Reinforced Polyethylene Storm Sewer Pipe _____ In Diam", per linear foot is revised to read:
- 34 35
- "St. Rib Reinf Polyethlene Storm Sewer Pipe _____ In. Diam", per linear foot
- 36

37 7-05.AP7

38 Section 7-05, Manholes, Inlets, Catch Basins, and Drywells

39 April 2, 2012

40 **7-05.3 Construction Requirements**

- 41 The third paragraph is supplemented with the following:
- 42
- 43 Leveling and adjustment devices that do not modify the structural integrity of the metal
- 44 frame, grate or cover, and do not void the originating foundry's compliance to these
- 45 specifications and warranty is allowed. Approved leveling devices are listed in the
- 46 Qualified Products List. Leveling and adjusting devices that interfere with the
- 47 backfilling, backfill density, grouting and asphalt density will not be allowed. The

- hardware for leveling and adjusting devices shall be completely removed when
 specified by the Project Engineer.
- 3
- 4 8-01.AP8
- 5 Section 8-01, Erosion Control and Water Pollution Control
- 6 April 2, 2012

7 8-01.3(2)D Mulching

- 8 The following two new paragraphs are inserted after the fourth paragraph: 9
- 10 Short-Term Mulch shall be hydraulically applied at the rate of 2500 pounds per acre and 11 may be applied in one lift.
- 12 13
- Moderate-Term Mulch and Long-Term Mulch shall be hydraulically applied at the rate of 3500 pounds per acre with no more than 2000 pounds applied in any single lift.
- 14 15

16 8-01.3(2)E Soil Binders and Tacking Agents

- 17 The first paragraph is revised to read:
- Tacking agents or soil binders applied using a hydroseeder shall have a mulch tracer
 added to visibly aid uniform application. This tracer shall not be harmful to plant,
 aquatic, or animal life. A minimum of 125 pounds per acre and a maximum of 250
- 22 pounds per acre of Short-Term Mulch shall be used as a tracer.
- 23
- 24 The last two paragraphs are deleted.

25 26 8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch

- 27 In the first paragraph, "Engineer" is revised to read "Project Engineer".
- 28
- 29 Note 1 of the table in the first paragraph is revised to read:
- 30 31
- ¹Where Contract timing is appropriate, seeding, fertilizing, and mulching shall be accomplished during the fall period listed above
- 32 33
- The third paragraph is deleted.

36 8-01.3(5) Placing Plastic Covering

37 The second and third paragraphs are revised to read:

- 38
- Clear plastic covering shall be used to promote seed germination when seeding is
 performed outside of the Dates for Application of Final Seed in Section 8-01.3(2)F.
 Black plastic covering shall be used for stockpiles or other areas where vegetative
 growth is unwanted.
- 43
- The plastic cover shall be installed and maintained in a way that prevents water from cutting under the plastic and prevents the plastic cover from blowing open in the wind.
- 46

47 8-01.3(6) Check Dams

- 48 This section is revised to read:
- 49
- 50 Check dams shall be installed as soon as construction will allow, or when designated by 51 the Engineer. The Contractor may substitute a different check dam, in lieu of what is

1 specified in the contract, with approval of the Engineer. The check dam is a temporary 2 or permanent structure, built across a minor channel. Water shall not flow through the 3 check dam structure. Check dams shall be constructed in a manner that creates a 4 ponding area upstream of the dam to allow pollutants to settle, with water from 5 increased flows channeled over a spillway in the check dam. The check dam shall be 6 constructed to prevent erosion in the area below the spillway. Check dams shall be 7 placed perpendicular to the flow of water and installed in accordance with the Standard 8 Plans. The outer edges shall extend up the sides of the conveyance to prevent water 9 from going around the check dam. Check dams shall be of sufficient height to maximize 10 detention, without causing water to leave the ditch. Check dams shall meet the 11 requirements in Section 9-14.5(4).

12

13 8-01.3(7) Stabilized Construction Entrance

14 The first paragraph is revised to read:

15 16

17

18

Temporary stabilized construction entrance shall be constructed in accordance with the Standard Plans, prior to beginning any clearing, grubbing, embankment or excavation. All quarry spall material used for stabilized construction entrance shall be free of

extraneous materials that may cause or contribute to track out.

19 20

21 8-01.3(9)B Gravel Filter, Wood Chip, or Compost Berm

22 The first paragraph is revised to read:

23 24

25

26

27

Filter berms shall retain sediment and direct flows. The gravel filter berm shall be a minimum of 1 foot in height and shall be maintained at this height for the entire time they are in use. Rock material used for filter berms shall meet the grading requirements in Section 9-03.9(2), but shall not include any recycled materials as outlined in Section 9-03.21.

28 29

30 8-01.3(9)C Straw Bale Barrier

31 This section including title is revised to read:

32 33

34

38

8-01.3(9)C Vacant

35 8-01.3(11) Vacant

This section including title is revised to read:

8-01.3(11) Outlet Protection

Outlet protection shall prevent scour at the outlets of ponds, pipes, ditches or other
 conveyances. All quarry spall material used for outlet protection shall be free of
 extraneous material and meet the gradation requirements in Section 9-13.6.

42

43 8-01.3(13) Temporary Curb

44 This section is revised to read: 45

- 46 Temporary curbs shall divert or redirect water around erodible soils.
- 47

48 Temporary curbs shall be installed along pavement edges to prevent runoff from flowing

49 onto erodible slopes. Water shall be directed to areas where erosion can be controlled.

- 50 The temporary curbs shall be a minimum of 4 inches in height. Ponding shall not be in 51 roadways.
- 52

1 8-01.4 Measurement

- 2 The third paragraph is revised to read:
- 3 4

5

6

7

- Check dams will be measured per linear foot one time only along the completed check dam. No additional measurement will be made for check dams that are required to be rehabilitated or replaced due to wear.
- 8 This section is supplemented with the following:
- 9 10
- Outlet Protection will be measured per each initial installation at an outlet location.
- 11

12 8-01.5 Payment

- 13 This section is supplemented with the following:
- 14 15
- "Outlet Protection", per each.
- 16
- 17 8-02.AP8

18 Section 8-02, Roadside Restoration

19 April 2, 2012

20 8-02.5 Payment

- 21 The paragraph following bid item "Coarse Compost", per cubic yard" is revised to read:
- 22
- The unit Contract price per cubic yard for "Fine Compost", Medium Compost" or
- "Coarse Compost" shall be full pay for furnishing and spreading the compost onto the
 existing soil.
- 26
- 27 8-03.AP8
- 28 Section 8-03, Irrigation Systems
- 29 April 2, 2012

30 8-03.3(7) Flushing and Testing

- 31 The fifth paragraph is deleted.
- 32
- 33 8-04.AP8
- 34 Section 8-04, Curbs, Gutters, and Spillways
- 35 April 2, 2012

36 8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways

- 37 This section is supplemented with the following new sub-section:
- 38 39

8-04.3(1)B Roundabout Cement Concrete Curb and Gutter

- 40 Roundabout cement concrete curb and gutter and roundabout splitter island nosing curb
- 41 shall be shaped and finished to match the shape of the adjoining curb as shown in the
- 42 Plans. All other requirements for cement concrete curb and cement concrete curb and
- 43 gutter shall apply to roundabout cement concrete curb and gutter.
- 44

45 **8-04.4 Measurement**

- 46 This section is supplemented with the following:
- 47
- 48 Roundabout splitter island nosing curb will be measured per each.

- 1 2 8-04.5 Payment 3 The bid item, "Roundabout Truck Apron Cement Concrete Curb", per linear foot is deleted. 4 5 This section is supplemented with the following: 6 7 "Roundabout Cement Concrete Curb and Gutter", per linear foot 8 9 The unit Contract price per linear foot for "Roundabout Cement Concrete Curb and 10 Gutter" shall be full payment for all costs for the Work including transitioning the 11 roundabout cement concrete curb and gutter to the adjoining curb shape. 12 13 "Roundabout Splitter Island Nosing Curb", per each. 14 15 The unit Contract price per each for "Roundabout Splitter Island Nosing Curb" shall be 16 full payment for all costs for the Work including transitioning the roundabout splitter 17 island nosing curb to the adjoining curb shape. 18 19 8-12.AP8 20 Section 8-12, Chain Link Fence and Wire Fence 21 April 2, 2012 22 In this Section "Engineer" is revised to read "Project Engineer". 23 24 8-12.1 Materials 25 This section is supplemented with the following: 26 27 Paint 9-08.1(2)B 28 29 8-12.3(1)A Posts 30 The words "for Type 3 and Type 4 fences" and "on Type 3 and Type 4 fences" are deleted 31 from this section. 32 33 The first sentence of the fifth paragraph is revised to read: 34 35 After the post is set and plumbed, the hole shall be filled with Grout Type 4. 36 37 The third sentence in the sixth paragraph is replaced with the following two sentences: 38 39 After the post is set and plumbed, the hole in the portion of the post in solid rock shall 40 be filled with Grout Type 4. The grout shall be thoroughly worked into the hole so as to 41 leave no voids. 42 43 The seventh paragraph is deleted. 44 45 The ninth paragraph is revised to read: 46 47 Steep slopes or abrupt topography may require changes in various elements of the 48 fence. It shall be the responsibility of the Contractor to provide all posts of sufficient 49 length to accommodate the chain link fabric. 50
- 51 The tenth paragraph is revised to read:

- All round posts shall have approved top caps fastened securely to the posts. The base of the top cap fitting for round posts shall feature an apron around the outside of the posts.
- 6 8-12.3(1)B Top Rail
- 7 This section's content including title is deleted and replaced with: 8
 - 8-12.3(1)B Vacant
- 9 10

3

4

5

11 8-12.3(1)C Tension Wire and Tension Cable

12 This section's content including title is revised to read: 13

- 8-12.3(1)C Tension Wire
- Tension Wires shall be attached to the posts as detailed in the Plans or as approved by the Engineer.
- 16 17 18

14

15

19 8-12.3(1)D Chain Link Fabric

20 The first three paragraphs are revised to read:

- 21
- Chain link fabric shall be attached after the cables and wires have been properlytensioned.
- 24

Chain link fabric shall be placed on the face of the post away from the Highway, except
on horizontal curves where it shall be placed on the face on the outside of the curve
unless otherwise directed by the Project Engineer.

- Chain link fabric shall be placed approximately 1-inch above the ground and on a
 straight grade between posts by excavating high points of ground. Filling of depressions
 will be permitted only upon approval of the Project Engineer.
- 32
- 33 The third sentence of the fourth paragraph is revised to read:
- 34 35

The top and bottom edge of the fabric shall be fastened with hog rings to the top and bottom tension wires as may be applicable, spaced at 24-inch intervals.

36 37

40

38 8-12.3(1)E Chain Link Gates

39 The third paragraph is deleted.

41 8-12.3(2)A Posts

42 In the second paragraph, "commercial" is deleted.

- 43
- The first sentence of the fifth paragraph is revised to read:
 - After the post is set and plumbed, the hole shall be filled with Grout Type 4.
- 46 47
- 48

The fourth sentence in the sixth paragraph is replaced with the following two sentences:

- 49
- 50 After the post is set and plumbed, the hole in the portion of the post in solid rock shall
 - 51 be filled with Grout Type 4. The grout shall be thoroughly worked into the hole so as to
 - 52 leave no voids.

1 2 The tenth paragraph is revised to read: 3 4 Where the new fence joins an existing fence, the 2 shall be attached in a manner 5 satisfactory to the Project Engineer, and end or corner posts shall be set as necessary. 6 7 The eleventh paragraph is deleted. 8 9 8-12.5 Payment 10 The paragraph following the item "Chain Link Fence Type ", per linear foot is revised to 11 read: 12 13 The unit Contract price per linear foot for "Chain Link Fence Type _____" shall be full 14 payment for all costs for the specified Work including brace post installation and all 15 other requirements of Section 8-12 for Chain Link Fence, unless covered in a separate 16 Bid Item in this Section. 17 18 The following paragraph is inserted after the item "End, Gate, Corner, and Pull Post for 19 Chain Link Fence", per each: 20 The unit Contract price per each for "End, Gate, Corner, and Pull Post for Chain Link 21 22 Fence" shall be full payment for all costs for the specified Work. 23 24 The following paragraph is inserted after the item "Single 6 Ft. Chain Link Gate", per each: 25 26 The unit Contract price per each for "Double 14 Ft. Chain Link Gate", "Double 20 Ft. 27 Chain Link Gate", and "Single 6 Ft. Chain Link Gate", shall be full payment for all costs 28 for the specified Work. 29 30 The following paragraph is inserted after the item "Wire Fence Type ", per linear foot: 31 32 The unit Contract price per each for "Wire Fence Type " shall be full payment for all 33 costs for the specified Work including payment for clearing of the fence line. 34 35 The following paragraph is inserted after the item "Double Wire Gate 20 Ft. Wide", per each: 36 37 The unit contract price per each for "Single Wire Gate 14 Ft. Wide" and "Double Wire 38 Gate 20 Ft. Wide" shall be full payment for all costs for the specified Work. 39 40 The paragraph following the item "Access Control Gate", per each is revised to read: 41 42 The unit contract price per each for "Access Control Gate" shall be full payment for all costs to perform the specified Work. 43 44 45 8-15.AP8 Section 8-15, Riprap 46 47 April 2, 2012 48 8-15.1 Description 49 The second paragraph is revised to read: 50

- 1 Riprap will be classified as heavy loose riprap, light loose riprap, and hand placed 2 riprap.
- 3
- 4 8-20.AP8
- 5 Section 8-20, Illumination, Traffic Signal Systems, And Electrical
- 6 January 2, 2012

7 8-20.3(9) Bonding, Grounding

- 8 The first sentence in the second paragraph is replaced with the following two sentences:
- 9 10
 - All conduit installed shall have an equipment ground conductor installed in addition to the conductors noted in the Contract. Conduit with innerducts shall have an equipment
- the conductors noted in the Contract. Conduit with innerducts shall have an e ground conductor installed in each innerduct that has an electrical conductor.
- 13
- 14 8-21.AP8

15 Section 8-21, Permanent Signing

16 April 2, 2012

17 8-21.2 Materials

- 18 The third sentence is revised to read:
- 19 20

21

Materials for sign mounting shall conform to Section 9-28.11.

22 8-21.3(9)A Fabrication of Steel Structures

- 23 The first sentence in the first paragraph is revised to read:
- 24 25
- Fabrication shall conform to the applicable requirements of Section 6-03 and 9-06.
- 26
- 27 This section is supplemented with the following:
- 28
- 29 All fabrication, including repairs, adjustments or modifications of previously fabricated 30 sign structure members and connection elements, shall be performed in the shop, under 31 an Engineer approved shop drawing prepared and submitted by the Contractor for the 32 original fabrication or the specific repair, adjustment or modification. Sign structure fabrication repair, adjustment or modification of any kind in the field is not permitted. If 33 34 fabrication repair, adjustment or modification occurs after a sign structure member or 35 connection element has been galvanized, the entire member or element shall be re-36 galvanized in accordance with AASHTO M 111.

37 38 8-21.3(9)B Vacant

39 This section including title is revised to read:

40 41

8-21.3(9)B Erection of Steel Structures

- Erection shall conform to the applicable requirements of Sections 6-03 and 8-21.3(9)F. Section 8-21.3(9)F notwithstanding, the Contractor may erect a sign bridge prior to completion of the shaft cap portion of one foundation for one post provided the following conditions are satisfied:
- 46 47

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1. The Contractor shall submit design calculations and working drawings of the temporary supports and falsework supporting the sign bridge near the location of the incomplete foundation to the Engineer for approval in accordance with

1 Section 6-01.9. The submittal shall include the method of releasing and 2 removing the temporary supports and falsework without inducing loads and 3 stress into the sign bridge. 4 5 2. The Contractor shall submit the method used to secure the anchor bolt array in 6 proper position with the sign bridge while casting the shaft cap concrete to 7 complete the foundation. 8 9 3. The Contractor shall erect the sign bridge and temporary supports and 10 falsework, complete the remaining portion of the incomplete foundation, and 11 remove the temporary supports and falsework, in accordance with the working drawing submittals as approved by the Engineer. 12 13 14 8-21.3(9)F Foundations 15 The eighth paragraph is replaced with the following three new paragraphs: 16 17 After construction of concrete foundations for sign bridge and cantilever sign structures, 18 the Contractor shall survey the foundation locations and elevations, the anchor bolt 19 array locations and lengths of exposed threads. The Contractor shall confirm that the 20 survey conforms to the sign structure post, beam, span and foundation design geometry 21 shown in the Plans, and shall identify any deviations from the design geometry shown in 22 the Plans. When deviations are identified, the Contractor shall notify the Engineer, and 23 such notice shall be accompanied by the Contractor's proposed method(s) of 24 addressing the deviations, including removal and reconstruction of the shaft cap portion 25 of the affected concrete foundation as outlined in this Section, or fabrication repair, 26 adjustment or modification, with associated shop drawings, in accordance with Section 27 8-21.3(9)A. 28 29 If the Contractor's survey indicates that a concrete foundation has been constructed 30 incorrectly for a sign structure that has already been fabricated, the Contractor may 31 remove and reconstruct the shaft cap portion of the foundation, in accordance with 32 Section 1-07.13, provided the following conditions are satisfied: 33 34 1. The Contractor shall submit the method and equipment to be used to remove 35 the portion of the concrete foundation to be removed and reconstructed to the 36 Engineer for approval in accordance with Section 1-05.3. The submittal shall 37 include confirmation that the equipment and the method of operation is 38 appropriate to ensure that the existing anchor bolt array and primary shaft 39 vertical steel reinforcing bars will not be damaged. 40 41 All steel reinforcing bars, except for steel reinforcing bars extending from the 2. 42 bottom portion of the foundation to remain, shall be removed and disposed of in accordance with Sections 2-02.3 and 2-03.3(7)C, and shall be replaced with 43 44 new steel reinforcing bars conforming to the size, dimensions and geometry 45 shown in the Plans. All concrete of the removed portion of the foundation shall 46 be removed and disposed of in accordance with Sections 2-02.3 and 2-47 03.3(7)C. 48 3. 49 The Contractor shall adjust the primary shaft vertical steel reinforcing bars as 50 necessary in accordance with Section 6-02.3(24)C to provide clearance for the 51 anchor bolt array. 52

1 Sign structures shall not be erected on concrete foundations until the Contractor 2 confirms that the foundations and the fabricated sign structures are either compatible 3 with each other and the design geometry shown in the Plans, or have been modified in 4 accordance with this Section and as approved by the Engineer to be compatible with 5 each other, and the foundations have attained a compressive strength of 2,400-psi. 6 7 8-21.5 Payment 8 This section is supplemented with the following: 9 10 All costs in connection with surveying completed concrete foundations for sign bridges 11 and cantilever sign structures shall be included in the lump sum contract price for 12 "Structure Surveying", except that when no Bid item is included in the Proposal for 13 "Structure Surveying" then such costs shall be included in the lump sum contract price(s) for "Sign Bridge No. ____" and "Cantilever Sign Structure No. ____". 14 15 16 17 8-25.AP8 18 Section 8-25, Glare Screen April 2, 2012 19 20 In this section, "tension cable" and "cable" are deleted. 21 22 8-25.3(3) Posts 23 The first sentence in the first paragraph is revised to read: 24 25 Posts shall be constructed in accordance with the Standard Plans and applicable 26 provisions of Section 8-12.3(1)A. 27 28 The last paragraph is revised to read: 29 30 All round posts for Type 1 Design B and Type 2 glare screen shall be fitted with a 31 watertight top securely fastened to the post. Line posts shall have tops designed to 32 carry the top tension wire. 33 34 8-25.3(5) Tension Cables 35 This section including title is revised to read: 36 37 8-25.3(5) Vacant 38 39 9-03.AP9 40 Section 9-03, Aggregates April 2, 2012 41 42 9-03.14(1) Gravel Borrow 43 Note ¹ is deleted, including the reference in the table. 44 45 9-03.14(2) Select Borrow Note ¹ is deleted. 46 47 48 Note ² is re-numbered Note ¹, including the reference in the table. 49

1 9-03.14(4) Gravel Borrow for Geosynthetic Retaining Wall

2 This section is revised to read:

3 4

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All backfill material for geosynthetic retaining walls shall consist of granular material, either naturally occurring or processed, and shall be free draining, free from organic or otherwise deleterious material. The material shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, portland cement concrete rubble, or asphaltic concrete rubble. The backfill material shall meet the following requirements for grading and guality:

9 10

Sieve Size	Percent Passing
1 ¼ " ¹	99-100
1"	90-100
No. 4	50-80
No. 40	30 max.
No. 200	7.0 max.
Sand Equivalent	50 min.

11

All percentages are by weight

12 13

Property	Test Method	Allowable Test Value
Los Angeles Wear	AASHTO T 96	35 percent max.
500 rev.		_
Degration Factor	WSDOT Test Method 113	15 min.
pH, permanent walls	AASHTO T 289	4.5-9
pH, temporary walls	AASHTO T 289	3-10

14

Wall backfill material satisfying these grading and property requirements shall beclassified as nonaggressive.

17

18 9-03.21(1) General Requirements

- 19 The first sentence in the first paragraph is revised to read:
- 20 21

Hot Mix Asphalt, Concrete Rubble, Recycled Glass (glass cullet), and Steel Furnace
 Slage may be used as, or blended uniformly with naturally occurring materials for
 aggregates.

24

25 9-03.21(1)C Vacant

26 This section including title is revised to read:

27 28

9-03.21(1)C Recycled Glass (Glass Cullet)

- Glass Cullet shall meet the requirements of AASHTO M 318 with the additional
 requirement that the glass cullet is limited to the maximum amounts set in Section 9-
- 31 03.21(1)E for recycled glass. Prior to use the Contractor shall provide certification to
- 32 the Project Engineer that the recycled glass meets the physical properties and
- 33 deleterious substances requirements in AASHTO M-318.
- 34

9-03.21(1) E Table on Maximum Allowable Percent (By Weight) of Recycled Material

- 37 The column heading "Recycled Glass" is revised to read "Recycled Glass (Glass Cullet) in
- 38 the table.

- In the column "Recycled Glass (Glass Cullet)" all amounts are revised to read "20" beginning
 with the item "Ballast" and continuing down until the last item in the table.
- 3 with the item "Ballast" and continuing down until the last item in the table.
- 5 9-04.AP9
- 6 Section 9-04, Joint And Crack Sealing Materials
- 7 January 2, 2012

8 9-04.2 Joint Sealants

- 9 This section is supplemented with the following new sub-sections:
- 10 11

17

9-04.2(3) Polyurethane Sealant

- Polyurethane sealant shall conform to ASTM C 920 Type S Grade NS Class 25 Use M.
- Polyurethane sealant shall be compatible with the closed cell foam backer rod. When
 required, compatibility characteristics of sealants in contact with backer rods shall be
 determined by Test Method ASTM C 1087.

18 9-04.2(3)A Closed Cell Foam Backer Rod

- Closed cell foam backer rod for use with polyurethane sealant shall conform to ASTM C1330 Type C.
- 21 22 9-06.AP9
- 23 Section 9-06, Structural Steel and Related Materials
- 24 April 2, 2012

25 9-06.5(2) High Strength Bolts

- 26 In this section, "AASHTO M 291" is revised to read "ASTM A 563".
- 27
- 28 9-10.AP9
- 29 Section 9-10, Piling
- 30 April 2, 2012

31 9-10.4 Steel Pile Tips and Shoes

- In the first paragraph "ASTMA A 148 Grade 60-90" is revised to read "ASTMA A 148 Grade 30-60".
- 34
- 35 9-14.AP9
- 36 Section 9-14, Erosion Control and Roadside Planting
- 37 April 2, 2012

38 9-14.3 Fertilizer

- 39 The second sentence in the first paragraph is revised to read:
- 40
- 41 It may be separate or in a mixture containing the percentage of total nitrogen, available
- 42 phosphoric acid, and water-soluble potash or sulfur in the amounts specified.
- 43

44 9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

- 45 The fourth row in Table 1 is revised to read:
- 46

Heavy MetalsEPA 6020A Total MetalsAntimony -< 4 mg/kg</th>

Arsenic – $< 6 \text{ mg/kg}$
Barium – < 80 mg/kg
Boron –< 160 mg/kg
Cadmium – < 2 mg/kg
Total Chromium – <4 mg/kg
Copper – < 10 mg/kg
Lead - < 5 mg/kg
Mercury – $< 2 \text{ mg/kg}$
Nickel – $< 2 \text{ mg/kg}$
Selenium – < 10 mg/kg
Strontium – < 30 mg/kg
Zinc - < 30 mg/kg

4

8

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9-14.4(2)A Long Term Mulch

3 In the first paragraph, the phrase "within 2 hours of application" is deleted.

5 9-14.4(4) Wood Strand Mulch

6 The third paragraph is revised to read: 7

The Contractor shall provide Material Safety Data Sheet (MSDS) that demonstrates that the product is not harmful to plant life and a test report performed in accordance with WSDOT Test Method 125 demonstrating compliance to this specification prior to acceptance.

11 acc 12

13 9-14.4(8) Compost

- 14 The second paragraph is revised to read:
- 16 Compost production and quality shall comply with WAC 173-350 and for biosolids 17 composts, WAC 173-308.
- 18 19

20 21

22 23

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26 27

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The third paragraph is to read:

Compost products shall meet the following physical criteria:

1. Compost material shall be tested in accordance with U.S. Composting Council Testing Methods for the Examination of Compost and Composting (TMECC) 02.02-B, "Sample Sieving for Aggregate Size Classification".

Fine compost shall meet the following gradation:

Sieve Size	Percent P	assing
	Minimum	Maximum
1"	100	
5/8"	90	100
1/4"	75	100

29 30

31

Note Maximum particle length of 4 inches.

- Medium compost shall meet the following gradation:
- 32 33

Sieve Size	Percent Passing

	Minimum	Maximum
1"	100	
⁵ / ₈ "	85	100
1/4"	70	85

 Note Maximum particle length of 4 inches. Medium compost shall have a carbon to nitrogen ration (C:N) between 18:1 and 35:1. The carbon to nitrogen ration shall be calculated using dry weight of "Organic Carbon" using TMECC 04.01A divided by the dry weight of "Total N" using TMECC 04.02D.

Coarse compost shall meet the following gradation:

Sieve Size	Percent P	assing
	Minimum	Maximum
2"	100	
1"	90	100
3/4"	70	100
1/4"	40	60

Note Maximum particle length of 6 inches. Coarse compost shall have a carbon to nitrogen ratio (C:N) between 25:1 and 35:1. The carbon to nitrogen ratio shall be calculated using the dry weight of "Organic Carbon" using TMECC 04.01A divided by the dry weight of "Total N" using TMECC 04.02D.
2. The pH shall be between 6.0 and 8.5 when tested in accordance with U.S. Composting Council TMECC 04.11-A, "1:5 Slurry pH".
3. Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 1 percent by weight as determined by U.S. Composting Council TMECC 03.08-A "Classification of Inerts by Sieve Size".

- 4. Minimum organic matter shall be 40 percent by dry weight basis as determined by U.S. Composting Council TMECC 05.07A "Loss-On-Ignition Organic Matter Method (LOI)".
- Soluble salt contents shall be less than 4.0 mmhos/cm when tested in accordance with U.S. Composting Council TMECC 04.10 "Electrical Conductivity."
- 6. Maturity shall be greater than 80 percent in accordance with U.S. Composting Council TMECC 05.05-A, "Germination and Root Elongation".
- 7. Stability shall be 7-mg CO2–C/g OM/day or below in accordance with U.S. Composting Council TMECC 05.08-B "Carbon Dioxide Evolution Rate".
- The compost product shall originate from organic waste as defined in WAC 173 350 as "Type 1 Feedstocks", "Type 2 Feedstocks", and/or "Type 3 Feedstocks". The Contractor shall provide a list of feedstock sources by percentage in the final compost product.

1 2 3 4 5	9.	The Engineer may also evalue Council TMECC 05.08-E "So number 6 or above on the So coarse compost shall score a Test.	uate compost for maturity using U.S. Composting olvita® Maturity Index". Fine compost shall score a olvita® Compost Maturity Test. Medium and a 5 or above on the Solvita® Compost Maturity
6 7 8	9-14.4(8)A This sectior	Compost Approval	
9 10 11	9-14.4	(8)A Compost Submittal R	equirements
12 13	The first se	ntence in this section up until th	ne colon is revised to read:
14 15	The Co	ontractor shall submit the follow	ing information to the Engineer for approval:
16 17	Item No. 2 i	n the first paragraph is revised	to read:
18 19 20 21 22 23 24	2. A Ju Fu the ma (B	copy of the Solid Waste Handli risdictional Health Department inctional Standards for Solid W e Coverage Under the General anufacturer by the Department iosolids Management).	ng Permit issued to the manufacturer by the in accordance with WAC 173-350 (Minimum aste Handling) or for biosolid composts a copy of Permit for Biosolids Management issued to the of Ecology in accordance with WAC 173-308
25	9-14.5(2)	Erosion Control Blanket	
26 27	I ne secono	sentence in the first paragrapi	is revised to read:
28 29 30	The Co Produc and 7:	ontractor shall supply independent t Evaluation Program (NTPEP)	ent test results from the National Transportation meeting the following requirements in Tables 6
32 33 34	9-14.5(4) This sectior	Geotextile Encased Check in including title is revised to rea	Dam d:
35 36 37 38	9-14.5 All mat when ir	(4) Check Dams erials used for check dams sha nstalled.	Ill be non-toxic and not pose a threat to wildlife
39 40	This sectior	n is supplemented with the follo	wing new sub-sections:
41 42 43	9-14.5 Biodeg	(4)A Biodegradable Check radable check dams shall mee	A Dams t the following requirements:
44 45 46 47	Bid Wa Co Co	odegradable Check Dams attle Check Dam ompost Sock Check Dam oir Log Check Dam	Materials 9-14.5(5) 9-14.5(6) 9-14.5(7)
48 49 50	The Co complie	ontractor may substitute a differ es with the following and is app	ent biodegradable check dam as long as it roved by the Engineer:
51 52	1.	Made of natural plant fiber.	

- 1 2 2. Netting if present shall be biodegradable. 3 4 9-14.5(4)B Non-biodegradable Check Dams 5 Non-biodegradable check dams shall meet the following requirements: 6 7 1. Geotextile materials shall conform to section 9-33 for silt fence. 8 9 2. Other such devices that fulfill the requirements of section 9-14.5(4) and shall 10 be approved by the Engineer prior to installation. 11 12 9-14.6(1) Description In item No. C in the fourth paragraph, "22-inch" is revised to read "2-inch". 13 14 15 9-16.AP9 Section 9-16, Fence and Guardrail 16 17 April 2, 2012 18 9-16.1(1)A Post Material for Chain Link Fence 19 The last sentence in the last paragraph is deleted. 20 21 9-16.1(1)C Tension Wire and Tension Cable 22 This section including title is revised to read: 23 24 9-16.1(1)C Tension Wire 25 Tension wire shall meet the requirements of AASHTO M 181. Tension wire galvanizing 26 shall be Class 1. 27 28 9-16.1(1)D Fittings and Hardware 29 The last paragraph is deleted. 30 31 9-16.1(2) Approval 32 This section is deleted. 33 34 9-16.6(3) Posts 35 This section is revised to read: 36 37 Line posts for Types 1 and 2 glare screens shall be 2 inch inside diameter galvanized 38 steel pipe with a nominal weight of 3.65 pounds per linear foot. End, corner, brace, and 39 pull posts for Type 1 Design A and B and Type 2 shall be 2 ½ inch inside diameter 40 galvanized steel pipe with a nominal weight of 5.79 pounds per linear foot. Intermediate 41 pull posts (braced line posts) shall be as specified for line posts. 42 43 The base material for the manufacture of steel pipes used for posts shall conform to the 44 requirements of ASTM A 53, except the weight tolerance on tubular posts shall be 45 applied as provided below. 46 47 Posts provided for glare screen will have an acceptance tolerance on the weight per
- Posts provided for glare screen will have an acceptance tolerance on the weight per
 linear foot, as specified, equal to plus or minus 5 percent. This tolerance will apply to
 each individual post.
- 50

1

2

coating is defined as a 12-inch piece cut from each end of the galvanized member.

6 9-16.6(5) Cable

7 This section including title is revised to read:8

9-16.6(5) Vacant

9 10

11 9-16.6(6) Cable and Tension Wire Attachments

12 This section including title is revised to read:

13 14

9-16.6(6) Tension Wire Attachments

All tension wire attachments shall be galvanized steel conforming to the requirements of AASHTO M 232 unless otherwise specified. Eye bolts shall have either a shoulder or a back-up nut on the eye end and be provided with an eye nut where needed or standard hex nut and lock washer ³/₈-inch diameter for tension wire and of sufficient length to fasten to the type of posts used. Turnbuckles shall be of the shackle end type, ¹/₂ inch diameter, with standard take-up of 6 inches and provided with ³/₈ inch diameter pins.

All posts shall be galvanized in accordance with AASHTO M 181 Section 32. The

minimum average zinc coating is per square foot of surface area. This area is defined

as the total area inside and outside. A sample for computing the average of mass of

21

22 9-16.6(9) Fabric Bands and Stretcher Bars

The first paragraph is revised to read:

- Fabric bands shall be $\frac{1}{8}$ inch by 1inch nominal. Stretcher bars shall be $\frac{3}{16}$ inch by $\frac{3}{4}$ inch nominal or $\frac{5}{16}$ inch diameter round bar nominal. A $\frac{5}{16}$ inch diameter round stretcher bar shall be used with Type 1. Nominal shall be construed to be the area of the cross section of the shape obtained by multiplying the specified width by thickness. A variation of minus 5-percent from this theoretical area shall be construed as "nominal" size. All shall be galvanized to meet the requirements of ASTM F 626.
- 31

32 9-20.AP9

33 Section 9-20, Concrete Patching Material, Grout, and Mortar

34 January 2, 2012

35 9-20.3(3) Grout Type 3 for Unconfined Bearing Pad Applications

- 36 This section is revised to read:
- 37 38

Grout Type 3 shall be a prepackaged material meeting the requirements of ASTM C 928 – Table 1, R2 Concrete or Mortar.

39 40

41 9-20.3(4) Grout Type 4 for Multipurpose Applications

- 42 In the third sentence of the first paragraph, the reference "0.40" is revised to read "0.45".
- 43
- 44 9-23.AP9
- 45 Section 9-23, Concrete Curing Materials and Admixtures
- 46 April 2, 2012

47 9-23.2 Liquid Membrane-Forming Concrete Curing Compounds

- 48 In the first paragraph, "moisture loss" is revised to read "water retention".
- 49

- 1 9-29.AP9
- 2 Section 9-29, Illumination, Signal, Electrical
- 3 April 2, 2012
- 4 9-29.10(2) Decorative Luminaries
- 5 The second sentence in the third paragraph is deleted.
- 67 9-29.25 Amplifier, Transformer, and Terminal Cabinets

In item No. 2.C., "Transformer 23.1 to 12.5 KVA" is revised to read "Transformer 3.1 to 12.5
 KVA".

- 10
- 11 9-34.AP9
- 12 Section 9-34, Permanent Marking Material
- 13 April 2, 2012

14 9-34.2 Paint

15 The second paragraph is revised to read:

16

- 17 Blue and black paint shall comply with the requirements for yellow paint in Section 9-
- 18 34.2(4) and Section 9-34.2(5), with the exception that blue and black paints do not need
- 19 to meet the requirements for titanium dioxide, directional reflectance, and contrast
- 20 ration.
- 21
- 22