
Amendments

1 INTRO.AP1

2 **INTRODUCTION**

3 The following Amendments and Special Provisions shall be used in conjunction with the
4 2018 Standard Specifications for Road, Bridge, and Municipal Construction.

5

6

AMENDMENTS TO THE STANDARD SPECIFICATIONS

7

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

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

15

16 1-01.AP1

17 **Section 1-01, Definitions and Terms**

18 **August 6, 2018**

19 **1-01.3 Definitions**

20 The following new term and definition is inserted before the definition for “Shoulder”:

21

22 **Sensitive Area** – Natural features, which may be previously altered by human activity,
23 that are present on or adjacent to the project location and protected, managed, or
24 regulated by local, tribal, state, or federal agencies.

25

26 The following new term and definition is inserted after the definition for “Working Drawings”:

27

28 **WSDOT Form** – Forms developed and maintained by WSDOT that are required or
29 available for use on a project. These forms can be downloaded from the forms
30 catalogue at:

31

32 <http://wsdot.wa.gov/forms/pdfForms.html>

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34 1-02.AP1

35 **Section 1-02, Bid Procedures and Conditions**

36 **June 3, 2019**

37 **1-02.4(1) General**

38 This section is supplemented with the following:

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40 Prospective Bidders are advised that the Contracting Agency may include a partially
41 completed Washington State Department of Ecology (Ecology) Transfer of Coverage
42 (Ecology Form ECY 020-87a) for the Construction Stormwater General Permit
43 (CSWGP) as part of the Bid Documents. When the Contracting Agency requires the
44 transfer of coverage of the CSWGP to the Contractor, an informational copy of the
45 Transfer of Coverage and the associated CSWGP will be included in the appendices.
46 As a condition of Section 1-03.3, the Contractor is required to complete sections I, III,
47 and VIII of the Transfer of Coverage and return the form to the Contracting Agency.

48

1 The Contracting Agency is responsible for compliance with the CSWGP until the end of
2 day that the Contract is executed. Beginning on the day after the Contract is executed,
3 the Contractor shall assume complete legal responsibility for compliance with the
4 CSWGP and full implementation of all conditions of the CSWGP as they apply to the
5 Contract Work.
6

7 **1-02.5 Proposal Forms**

8 The first sentence of the first paragraph is revised to read:
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10 At the request of a Bidder, the Contracting Agency will provide a physical Proposal
11 Form for any project on which the Bidder is eligible to Bid.
12

13 **1-02.6 Preparation of Proposal**

14 Item number 1 of the second paragraph is revised to read:
15

- 16 1. A unit price for each item (omitting digits more than two places to the right of the
17 decimal point),
18

19 In the third sentence of the fourth paragraph, "WSDOT Form 422-031" is revised to read
20 "WSDOT Form 422-031U".
21

22 The following new paragraph is inserted before the last paragraph:
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24 The Bidder shall submit with their Bid a completed Contractor Certification Wage Law
25 Compliance form (WSDOT Form 272-009). Failure to return this certification as part of
26 the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A
27 Contractor Certification of Wage Law Compliance form is included in the Proposal
28 Forms.
29

30 **1-02.13 Irregular Proposals**

31 Item 1(h) is revised to read:
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- 33 h. The Bidder fails to submit Underutilized Disadvantaged Business Enterprise Good
34 Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the
35 documentation that is submitted fails to demonstrate that a Good Faith Effort to
36 meet the Condition of Award was made;
37

38 Item 1(i) is revised to read the following three items:
39

- 40 i. The Bidder fails to submit a UDBE Bid Item Breakdown form, if applicable, as
41 required in Section 1-02.6, or if the documentation that is submitted fails to meet
42 the requirements of the Special Provisions;
43
44 j. The Bidder fails to submit UDBE Trucking Credit Forms, if applicable, as required in
45 Section 1-02.6, or if the documentation that is submitted fails to meet the
46 requirements of the Special Provisions; or
47
48 k. The Bid Proposal does not constitute a definite and unqualified offer to meet the
49 material terms of the Bid invitation.
50

1 1-03.AP1
2 **Section 1-03, Award and Execution of Contract**
3 **January 2, 2018**

4 **1-03.3 Execution of Contract**

5 The first paragraph is revised to read:

6
7 Within 20 calendar days after the Award date, the successful Bidder shall return the
8 signed Contracting Agency-prepared Contract, an insurance certification as required by
9 Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer
10 of Coverage form for the Construction Stormwater General Permit with sections I, III,
11 and VIII completed when provided, and shall be registered as a contractor in the state of
12 Washington.

13
14 **1-03.5 Failure to Execute Contract**

15 The first sentence is revised to read:

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17 Failure to return the insurance certification and bond with the signed Contract as
18 required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's
19 Business Enterprise information if required in the Contract, or failure or refusal to sign
20 the Contract, or failure to register as a contractor in the state of Washington, or failure to
21 return the completed Transfer of Coverage for the Construction Stormwater General
22 Permit to the Contracting Agency when provided shall result in forfeiture of the proposal
23 bond or deposit of this Bidder.

24
25 1-05.AP1

26 **Section 1-05, Control of Work**
27 **August 6, 2018**

28 **1-05.5 Vacant**

29 This section, including title, is revised to read:

30
31 **1-05.5 Tolerances**

32 Geometrical tolerances shall be measured from the points, lines, and surfaces defined
33 in Contract documents.

34
35 A plus (+) tolerance increases the amount or dimension to which it applies, or raises a
36 deviation from level. A minus (-) tolerance decreases the amount or dimension to which
37 it applies, or lowers a deviation from level. Where only one signed tolerance is specified
38 (+ or -), there is no specified tolerance in the opposing direction.

39
40 Tolerances shall not be cumulative. The most restrictive tolerance shall control.

41
42 Tolerances shall not extend the Work beyond the Right of Way or other legal
43 boundaries identified in the Contract documents. If application of tolerances causes the
44 extension of the Work beyond the Right of Way or legal boundaries, the tolerance shall
45 be reduced for that specific instance.

46
47 Tolerances shall not violate other Contract requirements. If application of tolerances
48 causes the Work to violate other Contract requirements, the tolerance shall be reduced
49 for that specific instance. If application of tolerances causes conflicts with other

1 components or aspects of the Work, the tolerance shall be reduced for that specific
2 instance.

3 4 **1-05.9 Equipment**

5 The following new paragraph is inserted before the first paragraph:
6

7 Prior to mobilizing equipment on site, the Contractor shall thoroughly remove all loose
8 dirt and vegetative debris from drive mechanisms, wheels, tires, tracks, buckets and
9 undercarriage. The Engineer will reject equipment from the site until it returns clean.

10
11 This section is supplemented with the following:
12

13 Upon completion of the Work, the Contractor shall completely remove all loose dirt and
14 vegetative debris from equipment before removing it from the job site.
15

16 1-06.AP1

17 **Section 1-06, Control of Material** 18 **January 7, 2019**

19 **1-06.1(3) Aggregate Source Approval (ASA) Database**

20 This section is supplemented with the following:
21

22 Regardless of status of the source, whether listed or not listed in the ASA database the
23 source owner may be asked to provide testing results for toxicity in accordance with
24 Section 9-03.21(1).
25

26 **1-06.2(2)D Quality Level Analysis**

27 This section is supplemented with the following new subsection:
28

29 **1-06.2(2)D5 Quality Level Calculation – HMA Compaction**

30 The procedures for determining the quality level and pay factor for HMA compaction are
31 as follows:
32

- 33 1. Determine the arithmetic mean, X_m , for compaction of the lot:
34

$$35 \quad X_m = \frac{\sum x}{n}$$

36

37 Where:

38 x = individual compaction test values for each subplot in the lot.

39 $\sum x$ = summation of individual compaction test values

40 n = total number test values
41

- 42 2. Compute the sample standard deviation, "S", for each constituent:
43

$$44 \quad S = \left[\frac{n \sum x^2 - (\sum x)^2}{n(n-1)} \right]^{\frac{1}{2}}$$

45

46 Where:

1 $\sum x^2 =$ summation of the squares of individual compaction test values
2 $(\sum x)^2 =$ summation of the individual compaction test values squared
3

4 3. Compute the lower quality index (Q_L):
5

6
$$Q_L = \frac{X_m - LSL}{S}$$

7
8 Where:
9 LSL = 92.0
10

11 4. Determine P_L (the percent within the lower Specification limit which
12 corresponds to a given Q_L) from Table 1. For negative values of Q_L , P_L is equal
13 to 100 minus the table P_L . If the value of Q_L does not correspond exactly to a
14 figure in the table, use the next higher value.
15

16 5. Determine the quality level (the total percent within Specification limits):
17

18 Quality Level = P_L
19

20 6. Using the quality level from step 5, determine the composite pay factor (CPF)
21 from Table 2.
22

23 7. If the CPF determined from step 6 is 1.00 or greater: use that CPF for the
24 compaction lot; however, the maximum HMA compaction CPF using an LSL =
25 92.0 shall be 1.05.
26

27 8. If the CPF from step 6 is not 1.00 or greater: repeat steps 3 through 6 using an
28 LSL = 91.5. The value thus determined shall be the HMA compaction CPF for
29 that lot; however, the maximum HMA compaction CPF using an LSL = 91.5
30 shall be 1.00.
31

32 **1-06.2(2)D1 Quality Level Analysis**

33 The following new sentence is inserted after the first sentence:
34

35 The quality level calculations for HMA compaction are completed using the formulas in
36 Section 1-06.2(2)D5.
37

38 **1-06.2(2)D4 Quality Level Calculation**

39 The first paragraph (excluding the numbered list) is revised to read:
40

41 The procedures for determining the quality level and pay factors for a material, other
42 than HMA compaction, are as follows:
43

44 **1-06.6 Recycled Materials**

45 The first three sentences of the second paragraph are revised to read:
46

47 The Contractor shall submit a Recycled Material Utilization Plan on WSDOT Form 350-
48 075A within 30 calendar days after the Contract is executed. The plan shall provide the
49 Contractor's anticipated usage of recycled concrete aggregates for meeting the
50 requirements of these Specifications. The quantity of recycled concrete aggregate will

1 be provided in tons and as a percentage of the Plan quantity for eligible material listed
2 in Section 9-03.21(1)E Table on Maximum Allowable percent (By Weight) of Recycled
3 Material.
4

5 The last paragraph is revised to read:
6

7 Within 30 calendar days after Physical Completion, the Contractor shall report the
8 quantity of recycled concrete aggregates that were utilized in the construction of the
9 project for each eligible item listed in Section 9-03.21(1)E. The Contractor's report shall
10 be provided on WSDOT Form 350-075A, Recycled Materials Reporting.
11

12 **1-06.6(1)A General**

13 Item 1(a) in the second paragraph is revised to read:
14

- 15 a. The estimated costs for the Work for each material with 25 percent recycled
16 concrete aggregate. The cost estimate shall include for each material a
17 documented price quote from the supplier with the lowest total cost for the Work.
18

19 1-07.AP1

20 **Section 1-07, Legal Relations and Responsibilities to the Public** 21 **April 1, 2019**

22 **1-07.5 Environmental Regulations**

23 This section is supplemented with the following new subsections:
24

25 **1-07.5(5) U.S. Army Corps of Engineers**

26 When temporary fills are permitted, the Contractor shall remove fills in their entirety and
27 the affected areas returned to pre-construction elevations.
28

29 If a U.S. Army Corps of Engineers permit is noted in Section 1-07.6 of the Special
30 Provisions, the Contractor shall retain a copy of the permit or the verification letter (in
31 the case of a Nationwide Permit) on the worksite for the life of the Contract. The
32 Contractor shall provide copies of the permit or verification letter to all subcontractors
33 involved with the authorized work prior to their commencement of any work in waters of
34 the U.S.
35

36 **1-07.5(6) U.S. Fish/Wildlife Services and National Marine Fisheries Service**

37 The Contracting Agency will provide fish exclusion and handling services if the Work
38 dictates. However, if the Contractor discovers any fish stranded by the project and a
39 Contracting Agency biologist is not available, they shall immediately release the fish into
40 a flowing stream or open water.
41

42 **1-07.5(1) General**

43 The first sentence is deleted and replaced with the following:
44

45 No Work shall occur within areas under the jurisdiction of resource agencies unless
46 authorized in the Contract.
47

48 The third paragraph is deleted.
49

50 **1-07.5(2) State Department of Fish and Wildlife**

51 This section is revised to read:

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In doing the Work, the Contractor shall:

1. Not degrade water in a way that would harm fish, wildlife, or their habitat.
2. Not place materials below or remove them from the ordinary high water line except as may be specified in the Contract.
3. Not allow equipment to enter waters of the State except as specified in the Contract.
4. Revegetate in accordance with the Plans, unless the Special Provisions permit otherwise.
5. Prevent any fish-threatening silt buildup on the bed or bottom of any body of water.
6. Ensure continuous stream flow downstream of the Work area.
7. Dispose of any project debris by removal, burning, or placement above high-water flows.
8. Immediately notify the Engineer and stop all work causing impacts, if at any time, as a result of project activities, fish are observed in distress or a fish kill occurs.

If the Work in (1) through (3) above differs little from what the Contract requires, the Contracting Agency will measure and pay for it at unit Contract prices. But if Contract items do not cover those areas, the Contracting Agency will pay pursuant to Section 1-09.4. Work in (4) through (8) above shall be incidental to Contract pay items.

1-07.5(3) State Department of Ecology

This section is revised to read:

In doing the Work, the Contractor shall:

1. Comply with Washington State Water Quality Standards.
2. Perform Work in such a manner that all materials and substances not specifically identified in the Contract documents to be placed in the water do not enter waters of the State, including wetlands. These include, but are not limited to, petroleum products, hydraulic fluid, fresh concrete, concrete wastewater, process wastewater, slurry materials and waste from shaft drilling, sediments, sediment-laden water, chemicals, paint, solvents, or other toxic or deleterious materials.
3. Use equipment that is free of external petroleum-based products.
4. Remove accumulations of soil and debris from drive mechanisms (wheels, tracks, tires) and undercarriage of equipment prior to using equipment below the ordinary high water line.

- 1 5. Clean loose dirt and debris from all materials placed below the ordinary high
2 water line. No materials shall be placed below the ordinary high water line
3 without the Engineer's concurrence.
4
- 5 6. When a violation of the Construction Stormwater General Permit (CSWGP)
6 occurs, immediately notify the Engineer and fill out WSDOT Form 422-011,
7 Contractor ECAP Report, and submit the form to the Engineer within 48 hours
8 of the violation.
9
- 10 7. Once Physical Completion has been given, prepare a Notice of Termination
11 (Ecology Form ECY 020-87) and submit the Notice of Termination
12 electronically to the Engineer in a PDF format a minimum of 7 calendar days
13 prior to submitting the Notice of Termination to Ecology.
14
- 15 8. Transfer the CSWGP coverage to the Contracting Agency when Physical
16 Completion has been given and the Engineer has determined that the project
17 site is not stabilized from erosion.
18
- 19 9. Submit copies of all correspondence with Ecology electronically to the
20 Engineer in a PDF format within four calendar days.
21

22 **1-07.5(4) Air Quality**

23 This section is revised to read:

24
25 The Contractor shall comply with all regional clean air authority and/or State
26 Department of Ecology rules and regulations.
27

28 The air quality permit process may include additional State Environment Policy Act
29 (SEPA) requirements. Contractors shall contact the appropriate regional air pollution
30 control authority well in advance of beginning Work.
31

32 When the Work includes demolition or renovation of any existing facility or structure that
33 contains Asbestos Containing Material (ACM) and/or Presumed Asbestos-Containing
34 Material (PACM), the Contractor shall comply with the National Emission Standards for
35 Hazardous Air Pollutants (NESHAP).
36

37 Any requirements included in Federal and State regulations regarding air quality that
38 applies to the "owner or operator" shall be the responsibility of the Contractor.
39

40 **1-07.7(1) General**

41 The first sentence of the third paragraph is revised to read:

42
43 When the Contractor moves equipment or materials on or over Structures, culverts or
44 pipes, the Contractor may operate equipment with only the load-limit restrictions in
45 Section 1-07.7(2).
46

47 The first sentence of the last paragraph is revised to read:

48
49 Unit prices shall cover all costs for operating over Structures, culverts and pipes.
50

51 **1-07.9(1) General**

52 The last sentence of the sixth paragraph is revised to read:

1
2 Generally, the Contractor initiates the request by preparing standard form 1444 Request
3 for Authorization of Additional Classification and Rate, available at
4 <https://www.dol.gov/whd/recovery/dbsurvey/conformance.htm>, and submitting it to the
5 Engineer for further action.
6

7 **1-07.9(2) Posting Notices**

8 The second sentence of the first paragraph (up until the colon) is revised to read:
9

10 The Contractor shall ensure the most current edition of the following are posted:
11

12 The revision dates are deleted from all items in the numbered list.
13

14 The following new items are inserted after item number 1:
15

16 2. **Mandatory Supplement to EEOC P/E-1** published by US Department of Labor.
17 Post for projects with federal-aid funding.
18

19 3. **Pay Transparency Nondiscrimination Provision** published by US Department of
20 Labor. Post for projects with federal-aid funding.
21

22 Item number 2 through 12 are renumbered to 4 through 14, respectively.
23

24 **1-07.11(2) Contractual Requirements**

25 In this section, "creed" is revised to read "religion".
26

27 Item numbers 1 through 9 are revised to read 2 through 10, respectively.
28

29 After the preceding Amendment is applied, the following new item number 1 is inserted:
30

31 1. The Contractor shall maintain a Work site that is free of harassment, humiliation,
32 fear, hostility and intimidation at all times. Behaviors that violate this requirement
33 include but are not limited to:
34

35 a. Persistent conduct that is offensive and unwelcome.
36

37 b. Conduct that is considered to be hazing.
38

39 c. Jokes about race, gender, or sexuality that are offensive.
40

41 d. Unwelcome, unwanted, rude or offensive conduct or advances of a sexual
42 nature which interferes with a person's ability to perform their job or creates an
43 intimidating, hostile, or offensive work environment.
44

45 e. Language or conduct that is offensive, threatening, intimidating or hostile
46 based on race, gender, or sexual orientation.
47

48 f. Repeating rumors about individuals in the Work Site that are considered to be
49 harassing or harmful to the individual's reputation.
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51 **1-07.11(5) Sanctions**

52 This section is supplemented with the following:

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Immediately upon the Engineer’s request, the Contractor shall remove from the Work site any employee engaging in behaviors that promote harassment, humiliation, fear or intimidation including but not limited to those described in these specifications.

1-07.11(6) Incorporation of Provisions

The first sentence is revised to read:

The Contractor shall include the provisions of Section 1-07.11(2) Contractual Requirements (1) through (5) and the Section 1-07.11(5) Sanctions in every subcontract including procurement of materials and leases of equipment.

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

The last sentence of the first paragraph is revised to read:

An SPCC Plan template and guidance information is available at <http://www.wsdot.wa.gov/environment/technical/disciplines/hazardous-materials/spill-prevent-report>.

1-07.16(2)A Wetland and Sensitive Area Protection

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

Existing wetland and other sensitive areas, where shown in the Plans or designated by the Engineer, shall be saved and protected through the life of the Contract.

1-07.18 Public Liability and Property Damage Insurance

Item number 1 is supplemented with the following new sentence:

This policy shall be kept in force from the execution date of the Contract until the Physical Completion Date.

1-08.AP1

Section 1-08, Prosecution and Progress January 7, 2019

1-08.1 Subcontracting

The first sentence of the seventh paragraph is revised to read:

All Work that is not performed by the Contractor will be considered as subcontracting except: (1) purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready-mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any other materials supplied by established and recognized commercial plants; or (2) delivery of these materials to the Work site in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies hired by those commercial plants.

The following new paragraph is inserted after the seventh paragraph:

The Contractor shall not use businesses (material suppliers, vendors, subcontractors, etc.) with federal purchasing exclusions. Businesses with exclusions are identified using the System for Award Management web page at www.SAM.gov.

1 **1-08.5 Time for Completion**

2 Item number 2 of the sixth paragraph is supplemented with the following:

3

- 4 f. A copy of the Notice of Termination sent to the Washington State Department of
5 Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the
6 Notice of Termination by Ecology; and no rejection of the Notice of Termination by
7 Ecology. This requirement will not apply if the Construction Stormwater General
8 Permit is transferred back to the Contracting Agency in accordance with Section 8-
9 01.3(16).

10

11 **1-08.7 Maintenance During Suspension**

12 The fifth paragraph is revised to read:

13

14 The Contractor shall protect and maintain all other Work in areas not used by traffic. All
15 costs associated with protecting and maintaining such Work shall be the responsibility
16 of the Contractor.

17

18 1-09.AP1

19 **Section 1-09, Measurement and Payment**

20 **August 6, 2018**

21 **1-09.2(1) General Requirements for Weighing Equipment**

22 The last paragraph is supplemented with the following:

23

24 When requested by the Engineer, the Contractor's representative shall collect the
25 tickets throughout the day and provide them to the Engineer's designated receiver, not
26 later than the end of shift, for reconciliation. Tickets for loads not verified as delivered
27 will receive no pay.

28

29 **1-09.2(2) Specific Requirements for Batching Scales**

30 The last sentence of the first paragraph is revised to read:

31

32 Batching scales used for concrete or hot mix asphalt shall not be used for batching
33 other materials.

34

35 **1-09.10 Payment for Surplus Processed Materials**

36 The following sentence is inserted after the first sentence of the second paragraph:

37

38 For Hot Mix Asphalt, the Plan quantity and quantity used will be adjusted for the quantity
39 of Asphalt and quantity of RAP or other materials incorporated into the mix.

40

41 2-01.AP2

42 **Section 2-01, Clearing, Grubbing, and Roadside Cleanup**

43 **April 1, 2019**

44 **2-01.2(3) Disposal Method No. 3 – Chipping**

45 Item number 2 of the first paragraph is revised to read:

46

- 47 2. Chips shall be disposed outside of sensitive areas, and in areas that aren't in
48 conflict with permanent Work.

49

1 2-02.AP2
2 **Section 2-02, Removal of Structures and Obstructions**
3 **April 2, 2018**

4 **2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters**

5 In item number 3 of the first paragraph, the second sentence is revised to read:

6
7 For concrete pavement removal, a second vertical full depth relief saw cut offset 12 to
8 18 inches from and parallel to the initial saw cut is also required, unless the Engineer
9 allows otherwise.

10

11 2-03.AP2

12 **Section 2-03, Roadway Excavation and Embankment**
13 **April 1, 2019**

14 **2-03.3(14)F Displacement of Unsuitable Foundation Materials**

15 This section, including title, is revised to read:

16

17 **2-03.3(14)F Vacant**

18

19 2-09.AP2

20 **Section 2-09, Structure Excavation**
21 **April 1, 2019**

22 **2-09.2 Materials**

23 In the first paragraph, the references to “Portland Cement” and “Aggregates for Portland
24 Cement Concrete” are revised to read:

25

26 Cement 9-01
27 Fine Aggregate for Concrete 9-03.1(2)

28

29 **2-09.3(3)B Excavation Using Open Pits – Extra Excavation**

30 The last two paragraphs are deleted and replaced with the following:

31

32 The excavation height (Ht) shall be calculated within a vertical plane as the difference
33 between the lowest elevation in the excavation and the highest elevation of the ground
34 surface immediately adjacent to the excavation. Pavement thickness and other surface
35 treatments existing at the time of the excavation shall be included in the height
36 calculation.

37

38 **Submittals and Design Requirements**

39 Excavations 4-feet and less in height do not require design and submittals. The
40 Contractor shall provide a safe work environment and shall execute the work in a
41 manner that does not damage adjacent pavements, utilities, or structures. If the
42 Engineer determines the Contractor’s work may potentially affect adjacent traffic,
43 pavements, utilities, or structures, the Engineer may request a Type 1 Working Drawing
44 from the Contractor. The Contractor shall explain in the Type 1 Working Drawing how
45 the Engineer’s concerns will be addressed, why infrastructure will not be damaged by
46 the work, and how worker safety will be preserved.

47

1 For excavations that have soil types and slope geometries defined in WAC 296-155 part
2 N and are between 4-feet and 20-feet in height, the Contractor shall submit Type 2
3 Working Drawings. Required submittal elements include, at a minimum, the following:
4

- 5 1. A plan view showing the limits of the excavation and its relationship to traffic,
6 structures, utilities and other pertinent project elements. If the stability of the
7 excavation requires no-load zones or equipment setback distances, those shall
8 be shown on the plan view.
9
- 10 2. A typical or controlling cross section showing the proposed excavation, original
11 ground line, and locations of traffic, existing structures, utilities, site
12 constraints, surcharge loads, or other conditions that could affect the stability
13 of the slope. If the stability of the excavation requires no-load zones or
14 equipment setback distances, those shall be shown in cross section.
15
- 16 3. A summary clearly describing subsurface conditions, soil type for WAC 296-
17 155 part N, and groundwater conditions, sequencing considerations, and
18 governing assumptions.
19

20 Where WAC 296-155 part N requires an engineer's design, the Contractor shall submit
21 Type 2E Working Drawings. Required submittal elements include, at a minimum, the
22 three items above and the following additional items:
23

- 24 4. Supporting calculations for the design of the excavation, the soil and material
25 properties selected for design, and the justification for the selection for those
26 properties, in accordance with the WSDOT *Geotechnical Design Manual M 46-*
27 *03*.
28
- 29 5. Safety factors, or load and resistance factors used, and justification for their
30 selection, in accordance with the WSDOT *Geotechnical Design Manual M 46-*
31 *03*, and referenced AASHTO design manuals.
32
- 33 6. A monitoring plan to evaluate the excavation performance throughout its
34 design life.
35
- 36 7. Any supplemental subsurface explorations made by the Contractor to meet the
37 requirements for geotechnical design of excavation slopes, in accordance with
38 the WSDOT *Geotechnical Design Manual M 46-03*.
39

40 **2-09.3(3)D Shoring and Cofferdams**

41 The first sentence of the sixth paragraph is revised to read:
42

43 Structural shoring and cofferdams shall be designed for conditions stated in this Section
44 using methods shown in Division I Section 5 of the AASHTO *Standard Specifications for*
45 *Highway Bridges* Seventeenth Edition – 2002 for allowable stress design, or the
46 AASHTO *LRFD Bridge Design Specifications* for load and resistance factor design.
47

1 3-01.AP3
2 **Section 3-01, Production from Quarry and Pit Sites**
3 **April 2, 2018**

4 **3-01.1 Description**

5 The first paragraph is revised to read:

6
7 This Work shall consist of manufacturing and producing crushed and screened
8 aggregates including pit run aggregates of the kind, quality, and grading specified for
9 use in the construction of concrete, hot mix asphalt, crushed surfacing, maintenance
10 rock, ballast, gravel base, gravel backfill, gravel borrow, riprap, and bituminous surface
11 treatments of all descriptions.

12
13 4-04.AP4

14 **Section 4-04, Ballast and Crushed Surfacing**
15 **April 2, 2018**

16 **4-04.3(5) Shaping and Compaction**

17 This section is supplemented with the following new paragraph:

18
19 When using 100% Recycled Concrete Aggregate, the Contractor may submit a written
20 request to use a test point evaluation for compaction acceptance testing in lieu of
21 compacting to 95% of the standard density as determined by the requirements of
22 Section 2-03.3(14)D. The test point evaluation shall be performed in accordance with
23 SOP 738.

24
25 5-02.AP5

26 **Section 5-02, Bituminous Surface Treatment**
27 **April 1, 2019**

28 **5-02.3(5) Application of Aggregates**

29 The first sentence of the eleventh paragraph is revised to read:

30
31 The Contractor shall use a pickup broom in all curbed areas, on all bridges, within city
32 limits, within sensitive areas, and where shown in the Plans both before the application
33 of emulsified asphalt and during the final brooming operation.

34
35 5-04.AP5

36 **Section 5-04, Hot Mix Asphalt**
37 **April 1, 2019**

38 **5-04.1 Description**

39 The last sentence of the first paragraph is revised to read:

40
41 The manufacture of HMA may include additives or processes that reduce the optimum
42 mixing temperature (Warm Mix Asphalt) or serve as a compaction aid in accordance
43 with these Specifications.

44
45 **5-04.2 Materials**

46 The reference to "Warm Mix Asphalt Additive" is revised to read "HMA Additive".

47

1 **5-04.2(1) How to Get an HMA Mix Design on the QPL**

2 The last bullet in the first paragraph is revised to read:

3

- 4 • Do not include HMA additives that reduce the optimum mixing temperature or serve
5 as a compaction aid when developing a mix design or submitting a mix design for
6 QPL evaluation. The use of HMA additives is not part of the process for obtaining
7 approval for listing a mix design on the QPL. Refer to Section 5-04.2(2)B.
8

9 In the table, “WSDOT Standard Practice QC-8” is revised to read “WSDOT Standard
10 Practice QC-8 located in the WSDOT Materials Manual M 46-01”.

11

12 **5-04.2(1)C Mix Design Resubmittal for QPL Approval**

13 Item number 3 of the first paragraph is revised to read:

14

- 15 3. Changes in modifiers used in the asphalt binder.
16

17 **5-04.2(2)B Using Warm Mix Asphalt Processes**

18 This section, including title, is revised to read:

19

20 **5-04.2(2)B Using HMA Additives**

21 The Contractor may, at the Contractor’s discretion, elect to use additives that reduce the
22 optimum mixing temperature or serve as a compaction aid for producing HMA. Additives
23 include organic additives, chemical additives and foaming processes. The use of
24 Additives is subject to the following:

25

- 26 • Do not use additives that reduce the mixing temperature in accordance with
27 Section 5-04.3(6) in the production of High RAP/Any RAS mixtures.
28
29 • Before using additives, obtain the Engineer’s approval using WSDOT Form
30 350-076 to describe the proposed additive and process.
31

32 **5-04.3(3)A Mixing Plant**

33 Item number 5 of the first paragraph is revised to read:

34

- 35 5. Provide HMA sampling equipment that complies with FOP for AASHTO T 168:
36
37 • Use a mechanical sampling device accepted by the Engineer, or
38
39 • Platforms or devices to enable sampling from the truck transport without
40 entering the truck transport for sampling HMA.
41

42 **5-04.3(4) Preparation of Existing Paved Surfaces**

43 The first sentence of the fourth paragraph is revised to read:

44

45 Unless otherwise allowed by the Engineer, use cationic emulsified asphalt CSS-1, CSS-
46 1h, or Performance Graded (PG) asphalt for tack coat.
47

48 **5-04.3(6) Mixing**

49 The first paragraph is revised to read:

50

1 The asphalt supplier shall introduce recycling agent and anti-stripping additive, in the
2 amount designated on the QPL for the mix design, into the asphalt binder prior to
3 shipment to the asphalt mixing plant.
4

5 The seventh paragraph is revised to read:
6

7 Upon discharge from the mixer, ensure that the temperature of the HMA does not
8 exceed the optimum mixing temperature shown on the accepted Mix Design Report by
9 more than 25°F, or as allowed by the Engineer. When an additive is included in the
10 manufacture of HMA, do not heat the additive (at any stage of production including in
11 binder storage tanks) to a temperature higher than the maximum recommended by the
12 manufacturer of the additive.
13

14 **5-04.3(7) Spreading and Finishing**

15 The last row of the table is revised to read:
16

$\frac{3}{8}$ inch	0.25 feet	0.30 feet
--------------------	-----------	-----------

17

18 **5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA**

19 The following new paragraph is inserted after the first paragraph:
20

21 The Contracting Agency's combined aggregate bulk specific gravity (Gsb) blend as
22 shown on the HMA Mix Design will be used for VMA calculations until the Contractor
23 submits a written request for a Gsb test. The new Gsb will be used in the VMA
24 calculations for HMA from the date the Engineer receives the written request for a Gsb
25 retest. The Contractor may request aggregate specific gravity (Gsb) testing be
26 performed by the Contracting Agency twice per project. The Gsb blend of the combined
27 stockpiles will be used to calculate voids in mineral aggregate (VMA) of any HMA
28 produced after the new Gsb is determined.
29

30 **5-04.3(9)A1 Test Section – When Required, When to Stop**

31 The following new row is inserted after the second row in Table 9:
32

VMA	Minimum PF _i of 0.95 based on the criteria in Section 5-04.3(9)B4 ²	None ⁴
-----	---	-------------------

33

34 **5-04.3(9)A2 Test Section – Evaluating the HMA Mixture in a Test Section**

35 In Table 9a, the test property "Gradation, Asphalt Binder, and V_a" is revised to read
36 "Gradation, Asphalt Binder, VMA, and V_a"
37

38 In Table 9a, the first column of the third row is revised to read:
39

Aggregates: Sand Equivalent Uncompacted Void Content Fracture
--

40

41 **5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing**

42 In Table 11, "V_a" is revised to read "VMA and V_a"
43

1 **5-04.3(9)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)**

2 The following new row is inserted above the last row in Table 12:

3

Voids in Mineral Aggregate (VMA)	2
----------------------------------	---

4

5 **5-04.3(9)B7 Mixture Statistical Evaluation – Retests**

6 The second to last sentence is revised to read:

7

8 The sample will be tested for a complete gradation analysis, asphalt binder content,
9 VMA and V_a , and the results of the retest will be used for the acceptance of the HMA
10 mixture in place of the original mixture subplot sample test results.

11

12 **5-04.3(10)A HMA Compaction – General Compaction Requirements**

13 The last paragraph is revised to read:

14

15 On bridge decks and on roadway approaches within five feet of a bridge/back of
16 pavement seat, rollers shall not be operated in a vibratory mode, defined as a mode in
17 which the drum vibrates vertically. However, unless otherwise noted on the plans,
18 rollers may be operated in an oscillatory mode, defined as a mode in which the drum
19 vibrates in the horizontal direction only.

20

21 **5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots**

22 The bulleted item in the fourth paragraph is revised to read:

23

- 24 • For a compaction lot in progress with a compaction CPF less than 0.75 using an
25 LSL = 91.5, a new compaction lot will begin at the Contractor’s request after the
26 Engineer is satisfied that material conforming to the Specifications can be
27 produced. See also Section 5-04.3(11)F.

28

29 **5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing**

30 In the table, “WSDOT FOP for AASHTO T 355” is revised to read “FOP for AASHTO T 355”.

31

32 **5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments**

33 In the first paragraph, “WSDOT FOP for AASHTO T 355” is revised to read “FOP for
34 AASHTO T 355”.

35

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

37

38 For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not
39 meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in
40 accordance with Section 1-06.2(2)D5 to determine the appropriate Composite Pay
41 Factor (CPF).

42

43 The last two paragraphs are revised to read:

44

45 Determine the Compaction Price Adjustment (CPA) from the table below, selecting the
46 equation for CPA that corresponds to the value of CPF determined above.

47

Calculating HMA Compaction Price Adjustment (CPA)	
Value of CPF	Equation for Calculating CPA

When CPF > 1.00	CPA = [1.00 x (CPF – 1.00)] x Q x UP
When CPF = 1.00	CPA = \$0
When CPF < 1.0	CPA = [0.60 x (CPF – 1.00)] x Q x UP

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Where
 CPA = Compaction Price Adjustment for the compaction lot (\$)
 CPF = Composite Pay Factor for the compaction lot (maximum is 1.05)
 Q = Quantity in the compaction lot (tons)
 UP = Unit price of the HMA in the compaction lot (\$/ton)

5-04.3(10)C4 HMA Statistical Compaction – Requests for Retesting

The first sentence is revised to read:

For a compaction subplot that has been tested with a nuclear density gauge that did not meet the minimum of 91.5 percent of the theoretical maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core, taken at the same location as the nuclear density test, be used for determination of the relative density of the compaction subplot.

5-04.3(13) Surface Smoothness

The second to last paragraph is revised to read:

When concrete pavement is to be placed on HMA, the surface tolerance of the HMA shall be such that no surface elevation lies above the Plan grade minus the specified Plan depth of concrete pavement. Prior to placing the concrete pavement, bring any such irregularities to the required tolerance by grinding or other means allowed by the Engineer.

5-04.5 Payment

The paragraph following the Bid item “Crack Sealing-LF”, per linear foot is revised to read:

The unit Contract price per linear foot for “Crack Sealing-LF” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)A.

7-05.AP7

**Section 7-05, Manholes, Inlets, Catch Basins, and Drywells
 August 6, 2018**

7-05.3 Construction Requirements

The fourth sentence of the third paragraph is deleted.

7-08.AP7

**Section 7-08, General Pipe Installation Requirements
 April 2, 2018**

7-08.3(3) Backfilling

The fifth sentence of the fourth paragraph is revised to read:

1 All compaction shall be in accordance with the Compaction Control Test of Section 2-
2 03.3(14)D except in the case that 100% Recycled Concrete Aggregate is used.

3
4 The following new sentences are inserted after the fifth sentence of the fourth paragraph:

5
6 When 100% Recycled Concrete Aggregate is used, the Contractor may submit a written
7 request to use a test point evaluation for compaction acceptance. Test Point evaluation
8 shall be performed in accordance with SOP 738.

9
10 8-01.AP8

11 **Section 8-01, Erosion Control and Water Pollution Control**

12 **April 1, 2019**

13 **8-01.1 Description**

14 This section is revised to read:

15
16 This Work consists of furnishing, installing, maintaining, removing and disposing of best
17 management practices (BMPs), as defined in the Washington Administrative Code
18 (WAC) 173-201A, to manage erosion and water quality in accordance with these
19 Specifications and as shown in the Plans or as designated by the Engineer.

20
21 The Contracting Agency may have a National Pollution Discharge Elimination System
22 Construction Stormwater General Permit (CSWGP) as identified in the Contract Special
23 Provisions. The Contracting Agency may or may not transfer coverage of the CSWGP
24 to the Contractor when a CSWGP has been obtained. The Contracting Agency may not
25 have a CSWGP for the project but may have another water quality related permit as
26 identified in the Contract Special Provisions or the Contracting Agency may not have
27 water quality related permits but the project is subject to applicable laws for the Work.
28 Section 8-01 covers all of these conditions.

29
30 This section is supplemented with the following new subsection:

31 32 **8-01.1(1) Definitions**

33 **1. pH Affected Stormwater**

- 34
35 a. Stormwater contacting green concrete (concrete that has set/stiffen but is still
36 curing), recycled concrete, or engineered soils (as defined in the Construction
37 Stormwater General Permit (CSWGP)) as a natural process
38
39 b. pH monitoring shall be performed in accordance with the CSWGP, or Water
40 Quality Standards (WQS in accordance with WAC 173-201A (surface) or 173-
41 200C (ground)) when the CSWGP does not apply
42
43 c. May be neutralized and discharged to surface waters or infiltrated
44

45 **2. pH Affected Non-Stormwater**

- 46
47 a. Conditionally authorized in accordance with CSWGP Special Condition S.1.C.,
48 uncontaminated water contacting green concrete, recycled concrete, or
49 engineered soils (as defined in the CSWGP)
50

- 1 b. Shall not be categorized as cementitious wastewater/concrete wastewater, as
- 2 defined below
- 3
- 4 c. Shall be managed and treated in accordance with the CSWGP, or WQS when
- 5 the CSWGP does not apply
- 6
- 7 d. pH adjustment and dechlorination may be necessary, as specified in the
- 8 CSWGP or in accordance with WQS when the CSWGP does not apply
- 9
- 10 e. May be neutralized, treated, and discharged to surface waters in accordance
- 11 with the CSWGP, with the exception of water-only shaft drilling slurry. Water-
- 12 only shaft drilling slurry may be treated, neutralized, and infiltrated but not
- 13 discharged to surface waters (Refer to Special Conditions S1.C. Authorized
- 14 Discharges and S1.d Prohibited Discharges of the CSWGP)
- 15

16 **3. Cementitious Wastewater/Concrete Wastewater**

- 17
- 18 a. Any water that comes into contact with fine cementitious particles or slurry; any
- 19 water used in the production, placement and/or clean-up of cementitious
- 20 products; any water used to cut, grind, wash, or otherwise modify cementitious
- 21 products
- 22
- 23 b. When any water, including stormwater, commingles with cementitious
- 24 wastewater/concrete wastewater, the resulting water is considered
- 25 cementitious wastewater/concrete wastewater and shall be managed to
- 26 prevent discharge to waters of the State, including ground water
- 27
- 28 c. CSWGP Examples include: water used for or resulting from concrete
- 29 truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and
- 30 surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and
- 31 road surfacing)
- 32
- 33 d. Cannot be neutralized and discharged or infiltrated
- 34

35 **8-01.2 Materials**

36 The first paragraph is revised to read:

37

38 Materials shall meet the requirements of the following sections:

39	Corrugated Polyethylene Drain Pipe	9-05.1(6)
40	Quarry Spalls and Permeable Ballast	9-13
41	Erosion Control and Roadside Planting	9-14
42	Construction Geotextile	9-33
43		
44		

45 The second paragraph is deleted.

46

47 **8-01.3(1) General**

48 This section is revised to read:

49

50 Adaptive management shall be employed throughout the duration of the project for the

51 implementation of erosion and water pollution control permit requirements for the

52 current condition of the project site. The adaptive management includes the selection

1 and utilization of BMPs, scheduling of activities, prohibiting unacceptable practices,
2 implementing maintenance procedures, and other managerial practices that when used
3 singularly or in combination, prevent or reduce the release of pollutants to waters of the
4 State. The adaptive management shall use the means and methods identified in this
5 section and means and methods identified in the Washington State Department of
6 Transportation's Temporary Erosion and Sediment Control Manual or the Washington
7 State Department of Ecology's Stormwater Management Manuals for construction
8 stormwater.
9

10 The Contractor shall install a high visibility fence along the lines shown in the Plans or
11 as instructed by the Engineer.
12

13 Throughout the life of the project, the Contractor shall preserve and protect the
14 delineated preservation area, acting immediately to repair or restore any high visibility
15 fencing damaged or removed.
16

17 All discharges to surface waters shall comply with surface water quality standards as
18 defined in Washington Administrative Code (WAC) Chapter 173-201A. All discharges to
19 groundwater shall comply with groundwater quality standards WAC Chapter 173-200.
20 The Contractor shall comply with the CSWGP when the project is covered by the
21 CSWGP.
22

23 Work, at a minimum, shall include the implementation of:
24

- 25 1. Sediment control measures prior to ground disturbing activities to ensure all
26 discharges from construction areas receive treatment prior to discharging from
27 the site.
28
- 29 2. Flow control measures to prevent erosive flows from developing.
30
- 31 3. Water management strategies and pollution prevention measures to prevent
32 contamination of waters that will be discharged to surface waters or the
33 ground.
34
- 35 4. Erosion control measures to stabilize erodible earth not being worked.
36
- 37 5. Maintenance of BMPs to ensure continued compliant performance.
38
- 39 6. Immediate corrective action if evidence suggests construction activity is not in
40 compliance. Evidence includes sampling data, olfactory or visual evidence
41 such as the presence of suspended sediment, turbidity, discoloration, or oil
42 sheen in discharges.
43

44 To the degree possible, the Contractor shall coordinate this Work with permanent
45 drainage and roadside restoration Work the Contract requires.
46

47 Clearing, grubbing, excavation, borrow, or fill within the Right of Way shall never expose
48 more erodible earth than as listed below:
49

**Western Washington
(West of the Cascade
Mountain Crest)**

**Eastern Washington
(East of the Cascade
Mountain Crest)**

May 1 through September 30	17 Acres
October 1 through April 30	5 Acres

April 1 through October 31	17 Acres
November 1 through March 31	5 Acres

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The Engineer may increase or decrease the limits based on project conditions.

Erodible earth is defined as any surface where soils, grindings, or other materials may be capable of being displaced and transported by rain, wind, or surface water runoff.

Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time period (see the table below), using BMPs for erosion control.

Western Washington (West of the Cascade Mountain Crest)	
October 1 through April 30	2 days maximum
May 1 to September 30	7 days maximum

Eastern Washington (East of the Cascade Mountain Crest)	
October 1 through June 30	5 days maximum
November 1 through March 31	10 days maximum

10

When applicable, the Contractor shall be responsible for all Work required for compliance with the CSWGP including annual permit fees.

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16

If the Engineer, under Section 1-08.6, orders the Work suspended, the Contractor shall continue to comply with this division during the suspension.

17

8-01.3(1)A Submittals

18

This section's content is deleted.

19

20

This section is supplemented with the following new subsection:

21

8-01.3(1)A1 Temporary Erosion and Sediment Control Plan

22

Temporary Erosion and Sediment Control (TESC) Plans consist of a narrative section and plan sheets that meets the Washington State Department of Ecology's Stormwater Pollution Prevention Plan (SWPPP) requirement in the CSWGP. For projects that do not require a CSWGP but have the potential to discharge to surface waters of the state, an abbreviated TESC plan shall be used, which may consist of a narrative and/or plan sheets and shall demonstrate compliance with applicable codes, ordinances and regulations, including the water quality standards for surface waters; Chapter 173-201A of the Washington Administrative Code (WAC) and water quality standards for groundwaters in accordance with Chapter 173-200 WAC.

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The Contractor shall either adopt the TESC Plan in the Contract or develop a new TESC Plan. If the Contractor adopts the TESC Plan in scenarios in which the CSWGP is transferred to the Contractor, the Contractor shall modify the TESC Plan to match the Contractor's schedule, method of construction, and to include all areas that will be used to directly support construction activity such as equipment staging yards, material storage areas, or borrow areas. TESC Plans shall include all high visibility fence shown

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1 in the Plans. All TESC Plans shall meet the requirements of the current edition of the
2 WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adaptively
3 managed throughout construction based on site inspections and required sampling to
4 maintain compliance with the CSWGP, or WQS when no CSWGP applies. The
5 Contractor shall develop a schedule for implementation of the TESC work and
6 incorporate it into the Contractor's progress schedule.
7

8 The Contractor shall submit their TESC Plan (either the adopted plan or new plan) as
9 Type 2 Working Drawings. At the request of the Engineer, updated TESC Plans shall be
10 submitted as Type 1 Working Drawings.
11

12 **8-01.3(1)B Erosion and Sediment Control (ESC) Lead**

13 This section is revised to read:
14

15 The Contractor shall identify the ESC Lead at the preconstruction discussions and in the
16 TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate
17 of Training in Construction Site Erosion and Sediment Control from a course approved
18 by the Washington State Department of Ecology. The ESC Lead must be onsite or on
19 call at all times throughout construction. The ESC Lead shall be listed on the
20 Emergency Contact List required under Section 1-05.13(1).
21

22 The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not
23 limited to:
24

- 25 1. Installing, adaptively managing, and maintaining temporary erosion and
26 sediment control BMPs to assure continued performance of their intended
27 function. Damaged or inadequate BMPs shall be corrected immediately.
28
- 29 2. Updating the TESC Plan to reflect current field conditions.
30
- 31 3. Discharge sampling and submitting Discharge Monitoring Reports (DMRs) to
32 the Washington State Department of Ecology in accordance with the CSWGP.
33
- 34 4. Develop and maintain the Site Log Book as defined in the CSWGP. When the
35 Site Log Book or portion thereof is electronically developed, the electronic
36 documentation must be accessible onsite. As a part of the Site Log Book, the
37 Contractor shall develop and maintain a tracking table to show that identified
38 TESC compliance issues are fully resolved within 10 calendar days. The table
39 shall include the date an issue was identified, a description of how it was
40 resolved, and the date the issue was fully resolved.
41

42 The ESC Lead shall also inspect all areas disturbed by construction activities, all on-site
43 erosion and sediment control BMPs, and all stormwater discharge points at least once
44 every calendar week and within 24-hours of runoff events in which stormwater
45 discharges from the site. Inspections of temporarily stabilized, inactive sites may be
46 reduced to once every calendar month. The Washington State Department of Ecology's
47 Erosion and Sediment Control Site Inspection Form, located at
48 [https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-](https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit)
49 [permits/Construction-stormwater-permit](https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit), shall be completed for each inspection and a
50 copy shall be submitted to the Engineer no later than the end of the next working day
51 following the inspection.
52

1 **8-01.3(1)C Water Management**

2 This section is supplemented with the following new subsections:

3

4 **8-01.3(1)C5 Water Management for In-Water Work Below Ordinary High Water**
5 **Mark (OHWM)**

6 Work over surface waters of the state (defined in WAC 173-201A-010) or below the
7 OHWM (defined in RCW 90.58.030) shall comply with water quality standards for
8 surface waters of the State of Washington.

9

10 **8-01.3(1)C6 Environmentally Acceptable Hydraulic Fluid**

11 All equipment containing hydraulic fluid that extends from a bridge deck over surface
12 waters of the state or below the OHWM, shall be equipped with a biodegradable
13 hydraulic fluid. The fluid shall achieve either a Pw1 Environmental Persistence
14 Classification stated in ASTM D6046 (≥60% biodegradation in 28 days) or equivalent
15 standard. Alternatively, hydraulic fluid that meets International Organization for
16 Standardization (ISO 15380), the European Union Ecolabel, or equivalent certification
17 will also be accepted.

18

19 The Contractor shall submit a Type 1 Working Drawing consisting of a manufacturer
20 catalog cut of the hydraulic fluid used.

21

22 The designation of biodegradable hydraulic fluid does not mean fluid spills are
23 acceptable. The Contractor shall respond to spills to land or water in accordance with
24 the Contract, the associated SPCC Plan, and all applicable local, state, and federal
25 regulations.

26

27 **8-01.3(1)C7 Turbidity Curtain**

28 All Work for the turbidity curtain shall be in accordance with the manufacturer's
29 recommendations for the site conditions. Removal procedures shall be developed and
30 used to minimize silt release and disturbance of silt. The Contractor shall submit a Type
31 2 Working Drawing, detailing product information, installation and removal procedures,
32 equipment and workforce needs, maintenance plans, and emergency
33 repair/replacement plans.

34

35 Turbidity curtain materials, installation, and maintenance shall be sufficient to comply
36 with water quality standards.

37

38 The Contractor shall notify the Engineer 10 days in advance of removing the turbidity
39 curtain. All components of the turbidity curtain shall be removed from the project.

40

41 **8-01.3(1)C1 Disposal of Dewatering Water**

42 This section is revised to read:

43

44 When uncontaminated groundwater is encountered in an excavation on a project it may
45 be infiltrated within vegetated areas of the right of way not designated as Sensitive
46 Areas or incorporated into an existing stormwater conveyance system at a rate that will
47 not cause erosion or flooding in any receiving surface water.

48

49 Alternatively, the Contractor may pursue independent disposal and treatment
50 alternatives that do not use the stormwater conveyance system provided it is in
51 compliance with the applicable WACs and permits.

52

1 **8-01.3(1)C2 Process Wastewater**

2 This section is revised to read:

3

4 Wastewater generated on-site as a byproduct of a construction process shall not be
5 discharged to surface waters of the State. Some sources of process wastewater may be
6 infiltrated in accordance with the CSWGP. Some sources of process wastewater may
7 be disposed via independent disposal and treatment alternatives in compliance with the
8 applicable WACs and permits.

9

10 **8-01.3(1)C4 Management of Off-Site Water**

11 This section is revised to read:

12

13 Prior to clearing and grubbing, the Contractor shall intercept all sources of off-site
14 surface water and overland flow that will run-on to the project. Off-site surface water
15 run-on shall be diverted through or around the project in a way that does not introduce
16 construction related pollution. It shall be diverted to its preconstruction discharge
17 location in a manner that does not increase preconstruction flow rate and velocity and
18 protects contiguous properties and waterways from erosion. The Contractor shall submit
19 a Type 2 Working Drawing consisting of the method for performing this Work.

20

21 **8-01.3(1)E Detention/Retention Pond Construction**

22 This section is revised to read:

23

24 Permanent or temporary ponds shall be constructed before beginning other grading and
25 excavation Work in the area that drains into that pond. Detention/retention ponds may
26 be constructed concurrently with grading and excavation when allowed by the Engineer.
27 Temporary conveyances shall be installed concurrently with grading in accordance with
28 the TESC Plan so that newly graded areas drain to the pond as they are exposed.

29

30 **8-01.3(2) Seeding, Fertilizing, and Mulching**

31 This section's title is revised to read:

32

33 **8-01.3(2) Temporary Seeding and Mulching**

34

35 **8-01.3(2)A Preparation for Application**

36 This section is revised to read:

37

38 A cleated roller, crawler tractor, or similar equipment, which forms longitudinal
39 depressions at least 2 inches deep shall be used for compaction and preparation of the
40 surface to be seeded. The entire area shall be uniformly covered with longitudinal
41 depressions formed perpendicular to the natural flow of water on the slope. The soil
42 shall be conditioned with sufficient water so the longitudinal depressions remain in the
43 soil surface until completion of the seeding.

44

45 **8-01.3(2)A1 Seeding**

46 This section is deleted in its entirety.

47

48 **8-01.3(2)A2 Temporary Seeding**

49 This section is deleted in its entirety.

50

1 **8-01.3(2)B Seeding and Fertilizing**

2 This section, including title, is revised to read:

3
4 **8-01.3(2)B Temporary Seeding**

5 Temporary grass seed shall be a commercially prepared mix, made up of low growing
6 grass species that will grow without irrigation at the project location, and accepted by
7 the Engineer. The application rate shall be two pounds per 1000 square feet.

8
9 The Contractor shall notify the Engineer not less than 24 hours in advance of any
10 seeding operation and shall not begin the Work until areas prepared or designated for
11 seeding have been accepted. Following the Engineer's acceptance, seeding of the
12 accepted slopes shall begin immediately.

13
14 Temporary seeding may be sown at any time allowed by the Engineer. Temporary
15 seeding shall be sown by one of the following methods:

- 16
17 1. A hydro seeder that utilizes water as the carrying agent, and maintains
18 continuous agitation through paddle blades. It shall have an operating capacity
19 sufficient to agitate, suspend, and mix into a homogeneous slurry the specified
20 amount of seed and water or other material. Distribution and discharge lines
21 shall be large enough to prevent stoppage and shall be equipped with a set of
22 hydraulic discharge spray nozzles that will provide a uniform distribution of the
23 slurry.
24
25 2. Blower equipment with an adjustable disseminating device capable of
26 maintaining a constant, measured rate of material discharge that will ensure an
27 even distribution of seed at the rates specified.
28
29 3. Power-drawn drills or seeders.
30
31 4. Areas in which the above methods are impractical may be seeded by hand
32 methods.

33
34 When seeding by hand, the seed shall be incorporated into the top ¼ inch of soil by
35 hand raking or other method that is allowed by the Engineer.

36
37 Seed applied using a hydroseeder shall have a tracer added to visibly aid uniform
38 application. This tracer shall not be harmful to plant, aquatic, or animal life. If Short-
39 Term Mulch is used as a tracer, the application rate shall not exceed 250 pounds
40 per acre.

41
42 Seed and fertilizer may be applied in one application provided that the fertilizer is placed
43 in the hydroseeder tank no more than 1 hour prior to application.

44
45 **8-01.3(2)D Mulching**

46 This section, including title, is revised to read:

47
48 **8-01.3(2)D Temporary Mulching**

49 Temporary mulch shall be straw, wood strand, or HECP mulch and shall be used for the
50 purpose of erosion control by protecting bare soil surface from particle displacement.
51 Mulch shall not be applied below the anticipated water level of ditch slopes, pond
52 bottoms, and stream banks. HECP mulch shall not be used within the Ordinary High

1 Water Mark. Non-HECP mulches applied below the anticipated water level shall be
2 removed or anchored down so that it cannot move or float, at no additional expense to
3 the Contracting Agency.

4
5 Straw or wood strand mulch shall be applied at a rate to achieve at least 95 percent
6 visual blockage of the soil surface.

7
8 Short Term Mulch shall be hydraulically applied at the rate of 2500 pounds per acre and
9 may be applied in one lift.

10
11 Moderate Term Mulch and Long Term Mulch shall be hydraulically applied at the rate of
12 3500 pounds per acre with no more than 2000 pounds applied in any single lift.

13
14 Mulch sprayed on signs or sign Structures shall be removed the same day.

15
16 Areas not accessible by mulching equipment shall be mulched by accepted
17 hand methods.

18
19 **8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch**

20 This section is deleted in its entirety.

21
22 **8-01.3(2)G Protection and Care of Seeded Areas**

23 This section is deleted in its entirety.

24
25 **8-01.3(2)H Inspection**

26 This section is deleted in its entirety.

27
28 **8-01.3(2)I Mowing**

29 This section is deleted in its entirety.

30
31 **8-01.3(5) Plastic Covering**

32 The first paragraph is revised to read:

33
34 **Erosion Control** – Plastic coverings used to temporarily cover stockpiled materials,
35 slopes or bare soils shall be installed and maintained in a way that prevents water from
36 intruding under the plastic and prevents the plastic cover from being damaged by wind.
37 Plastic coverings shall be placed with at least a 12-inch overlap of all seams and be a
38 minimum of 6 mils thick. Use soil stabilization and energy dissipation BMPs to minimize
39 the erosive energy flows coming off sloped areas of plastic (e.g., toe of slope). When
40 feasible, prevent the clean runoff from plastic from hitting bare soil. Direct flows from
41 plastic to stabilized outlet areas.

42
43 **8-01.3(7) Stabilized Construction Entrance**

44 The first paragraph is revised to read:

45
46 Temporary stabilized construction entrance shall be constructed in accordance with the
47 *Standard Plans*, prior to construction vehicles entering the roadway from locations that
48 generate sediment track out on the roadway. Material used for stabilized construction
49 entrance shall be free of extraneous materials that may cause or contribute to track out.

50
51 **8-01.3(8) Street Cleaning**

52 This section is revised to read:

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Self-propelled pickup street sweepers shall be used to remove and collect dirt and other debris from the Roadway. The street sweeper shall effectively collect these materials and prevent them from being washed or blown off the Roadway or into waters of the State. Street sweepers shall not generate fugitive dust and shall be designed and operated in compliance with applicable air quality standards. Material collected by the street sweeper shall be disposed of in accordance with Section 2-03.3(7)C.

When allowed by the Engineer, power broom sweepers may be used in non-sensitive areas. The broom sweeper shall sweep dirt and other debris from the roadway into the work area. The swept material shall be prevented from entering or washing into waters of the State.

Street washing with water will require the concurrence of the Engineer.

8-01.3(13) Temporary Curb

The last two sentences of the second paragraph are revised to read:

Temporary curbs shall be a minimum of 4 inches in height. Temporary curb shall be installed so that ponding does not occur in the adjacent roadway.

8-01.3(14) Temporary Pipe Slope Drain

The third and fourth paragraphs are revised to read:

The pipe fittings shall be water tight and the pipe secured to the slope with metal posts, wood stakes, or sand bags.

The water shall be discharged to a stabilized conveyance, sediment trap, stormwater pond, rock splash pad, or vegetated strip, in a manner to prevent erosion and maintain water quality compliance.

The last paragraph is deleted.

8-01.3(15) Maintenance

This section is revised to read:

Erosion and sediment control BMPs shall be maintained or adaptively managed as required by the CSWGP until the Engineer determines they are no longer needed. When deficiencies in functional performance are identified, the deficiencies shall be rectified immediately.

The BMPs shall be inspected on the schedule outlined in Section 8-01.3(1)B for damage and sediment deposits. Damage to or undercutting of BMPs shall be repaired immediately.

In areas where the Contractor's activities have compromised the erosion control functions of the existing grasses, the Contractor shall overseed at no additional cost to the Contracting Agency.

The quarry spalls of construction entrances shall be refreshed, replaced, or screened to maintain voids between the spalls for collecting mud and dirt.

1 Unless otherwise specified, when the depth of accumulated sediment and
2 debris reaches approximately $\frac{1}{3}$ the height of the BMP the deposits shall be removed.
3 Debris or contaminated sediment shall be disposed of in accordance with Section 2-
4 03.3(7)C. Clean sediments may be stabilized on-site using BMPs as allowed by the
5 Engineer.
6

7 **8-01.3(16) Removal**

8 This section is revised to read:
9

10 The Contractor shall remove all temporary BMPs, all associated hardware and
11 associated accumulated sediment deposition from the project limits prior to Physical
12 Completion unless otherwise allowed by the Engineer. When the temporary BMP
13 materials are made of natural plant fibers unaltered by synthetic materials the Engineer
14 may allow leaving the BMP in place.
15

16 The Contractor shall remove BMPs and associated hardware in a way that minimizes
17 soil disturbance. The Contractor shall permanently stabilize all bare and disturbed soil
18 after removal of BMPs. If the installation and use of the erosion control BMPs have
19 compacted or otherwise rendered the soil inhospitable to plant growth, such as
20 construction entrances, the Contractor shall take measures to rehabilitate the soil to
21 facilitate plant growth. This may include, but is not limited to, ripping the soil,
22 incorporating soil amendments, or seeding with the specified seed.
23

24 At the request of the Contractor and at the sole discretion of the Engineer the CSWGP
25 may be transferred back to the Contracting Agency. Approval of the Transfer of
26 Coverage request will require the following:
27

- 28 1. All other Work required for Contract Completion has been completed.
- 29 2. All Work required for compliance with the CSWGP has been completed to the
30 maximum extent possible. This includes removal of BMPs that are no longer
31 needed and the site has undergone all Stabilization identified for meeting the
32 requirements of Final Stabilization in the CSWGP.
33
- 34 3. An Equitable Adjustment change order for the cost of Work that has not been
35 completed by the Contractor.
36
- 37 4. Submittal of the Washington State Department of Ecology Transfer of
38 Coverage form (Ecology form ECY 020-87a) to the Engineer.
39
40

41 If the Engineer approves the transfer of coverage back to the Contracting Agency, the
42 requirement in Section 1-07.5(3) for the Contractor's submittal of the Notice of
43 Termination form to the Washington State Department of Ecology will not apply.
44

45 **8-01.4 Measurement**

46 This section's content is deleted and replaced with the following new subsections:
47

48 **8-01.4(1) Lump Sum Bid for Project (No Unit Items)**

49 When the Bid Proposal contains the item "Erosion Control and Water Pollution
50 Prevention" there will be no measurement of unit or force account items for Work
51 defined in Section 8-01 except as described in Sections 8-01.4(3) and 8-01.4(4). Also,

1 except as described in Section 8-01.4(3), all of Sections 8-01.4(2) and 8-01.5(2) are
2 deleted.

3
4 **8-01.4(2) Item Bids**

5 When the Proposal does not contain the items “Erosion Control and Water Pollution
6 Prevention”, Section 8-01.4(1) and 8-01.5(1) are deleted and the Bid Proposal will
7 contain some or all of the following items measured as noted.

8
9 ESC lead will be measured per day for each day that an inspection is made and a
10 report is filed.

11
12 Erosion control blanket and plastic covering will be measured by the square yard
13 along the ground slope line of surface area covered and accepted.

14
15 Turbidity curtains will be measured by the linear foot along the ground line of the
16 installed curtain.

17
18 Check dams will be measured per linear foot one time only along the ground line of
19 the completed check dam. No additional measurement will be made for check
20 dams that are required to be rehabilitated or replaced due to wear.

21
22 Stabilized construction entrances will be measured by the square yard by ground
23 slope measurement for each entrance constructed.

24
25 Tire wash facilities will be measured per each for each tire wash installed.

26
27 Street cleaning will be measured by the hour for the actual time spent cleaning
28 pavement, refilling with water, dumping and transport to and from cleaning
29 locations within the project limits, as authorized by the Engineer. Time to mobilize
30 the equipment to or from the project limits on which street cleaning is required will
31 not be measured.

32
33 Inlet protections will be measured per each for each initial installation at a
34 drainage structure.

35
36 Silt fence, gravel filter, compost berms, and wood chip berms will be measured by
37 the linear foot along the ground line of the completed barrier.

38
39 Wattles and compost socks will be measured by the linear foot.

40
41 Temporary curbs will be measured by the linear foot along the ground line of the
42 completed installation.

43
44 Temporary pipe slope drains will be measured by the linear foot along the flow line
45 of the pipe.

46
47 Coir logs will be measured by the linear foot along the ground line of the completed
48 installation.

49
50 Outlet protections will be measured per each initial installation at an outlet location.

51

1 Temporary seeding, temporary mulching, and tackifiers will be measured by the
2 acre by ground slope measurement.

3
4 Compost blanket will be measured by the square yard by ground slope surface
5 area covered and accepted.

6
7 **8-01.4(3) Reinstating Unit Items with Lump Sum Erosion Control and Water
8 Pollution Prevention**
9 The Contract Provisions may establish the project as lump sum, in accordance with
10 Section 8-01.4(1) and also include one or more of the items included above in Section
11 8-01.4(2). When that occurs, the corresponding measurement provision in Section 8-
12 01.4(2) is not deleted and the Work under that item will be measured as specified.

13
14 **8-01.4(4) Items not included with Lump Sum Erosion Control and Water Pollution
15 Prevention**
16 Compost blanket will be measured by the square yard by ground slope surface area
17 covered and accepted.

18
19 Temporary mulch will be measured by the acre by ground slope surface area covered
20 and accepted.

21
22 High visibility fence will be measured by the linear foot along the ground line of the
23 completed fence.

24
25 **8-01.5 Payment**

26 This section's content is deleted and replaced with the following new subsections:

27
28 **8-01.5(1) Lump Sum Bid for Project (No Unit Items)**
29 Payment will be made for the following Bid item when it is included in the Proposal:

30
31 "Erosion Control and Water Pollution Prevention", lump sum.

32
33 The lump sum Contract price for "Erosion Control and Water Pollution Prevention"
34 shall be full pay to perform the Work as described in Section 8-01 except for costs
35 compensated by Bid Proposal items inserted through Contract Provisions as
36 described in Section 8-01.4(2). Progress payments for the lump sum item "Erosion
37 Control and Water Pollution Prevention" will be made as follows:

- 38
39 1. The Contracting Agency will pay 15 percent of the bid amount for the
40 initial set up for the item. Initial set up includes the following:
41
42 a. Acceptance of the TESC Plan provided by the Contracting Agency or
43 submittal of a new TESC Plan,
44
45 b. Submittal of a schedule for the installation of the BMPs, and
46
47 c. Identifying water quality sampling locations.
48
49 2. 70 percent of the bid amount will be paid in accordance with Section 1-
50 09.9.
51

- 1 3. Once the project is physically complete and copies of the all reports
2 submitted to the Washington State Department of Ecology have been
3 submitted to the Engineer, and, if applicable, transference of the CSWGP
4 back to the Contracting Agency is complete, the remaining 15 percent of
5 the bid amount shall be paid in accordance with Section 1-09.9.
6

7 **8-01.5(2) Item Bids**

- 8 "ESC Lead", per day.
9
10 "Turbidity Curtain", per linear foot.
11
12 "Erosion Control Blanket", per square yard.
13
14 "Plastic Covering", per square yard.
15
16 "Check Dam", per linear foot.
17
18 "Inlet Protection", per each.
19
20 "Gravel Filter Berm", per linear foot.
21
22 "Stabilized Construction Entrance", per square yard.
23
24 "Street Cleaning", per hour.
25
26 "Silt Fence", per linear foot.
27
28 "Wood Chip Berm", per linear foot.
29
30 "Compost Berm", per linear foot.
31
32 "Wattle", per linear foot.
33
34 "Compost Sock", per linear foot.
35
36 "Coir Log", per linear foot.
37
38 "Temporary Curb", per linear foot.
39
40 "Temporary Pipe Slope Drain", per linear foot.
41
42 "Temporary Seeding", per acre.
43
44 "Temporary Mulching", per acre.
45
46 "Compost Blanket", per square yard.
47
48 "Outlet Protection", per each.
49
50 "Tackifier", per acre.
51
52 "Erosion/Water Pollution Control", by force account as provided in Section 1-09.6.

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Maintenance and removal of erosion and water pollution control devices including removal and disposal of sediment, stabilization and rehabilitation of soil disturbed by these activities, and any additional Work deemed necessary by the Engineer to control erosion and water pollution will be paid by force account in accordance with Section 1-09.6.

To provide a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the Contractor's total Bid.

8-01.5(3) Reinstating Unit Items with Lump Sum Erosion Control and Water Pollution Prevention

The Contract may establish the project as lump sum, in accordance with Section 8-01.4(1) and also reinstate the measurement of one or more of the items described in Section 8-01.4(2), except for Erosion/Water Pollution Control, by force account. When that occurs, the corresponding payment provision in Section 8-01.5(2) is not deleted and the Work under that item will be paid as specified.

8-01.5(4) Items not included with Lump Sum Erosion Control and Water Pollution Prevention

Payment will be made for the following Bid item when it is included in the Proposal:

“High Visibility Fence”, per linear foot.

8-02.AP8

**Section 8-02, Roadside Restoration
April 1, 2019**

This section, including all subsections, is revised to read:

8-02.1 Description

This Work consists of preserving, maintaining, establishing and augmenting vegetation on the roadsides and within mitigation or sundry site areas. It includes vegetation preservation, weed and pest control, furnishing and placing topsoil, compost, and soil amendments, and furnishing and planting seed, sod and plants of all forms and container types. It includes performing plant establishment activities and soil bioengineering. Work shall be performed in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

Trees, whips, shrubs, ground covers, cuttings, live stakes, live poles, live branches, rhizomes, tubers, rootstock, and seedlings will hereinafter be referred to collectively as “plants” or “plant material”. Grass, wildflowers, and other plant materials installed in seed form will hereinafter be referred to collectively as “seed”.

8-02.2 Materials

Materials shall meet the requirements of the following sections:

Erosion Control and Roadside Planting 9-14
Water 9-25.2

Botanical identification and nomenclature of plant materials shall be based on descriptions by Hitchcock and Cronquist in “Flora of the Pacific Northwest”. Botanical

1 identification and nomenclature of plant material not found in "Flora" shall be based on
2 Bailey in "Hortus Third" or superseding editions and amendments or as referenced in
3 the Plans.
4

5 **8-02.3 Construction Requirements**

6 **8-02.3(1) Responsibility During Construction**

7 The Contractor shall prepare, install, and ensure adequate and proper care of all
8 roadside seeded, planted, and lawn areas on the project until all plant
9 establishment periods required by the Contract are complete or until Physical
10 Completion of the project, whichever is last.
11

12 Adequate and proper care shall include, but is not limited to, keeping all plant
13 material in a healthy, growing condition by watering, pruning, and other actions
14 deemed necessary for plant health. This Work shall include keeping the project
15 area free from insect infestation, weeds or unwanted vegetation, litter, and other
16 debris along with retaining the finished grades and mulch in a neat uniform
17 condition.
18

19 Existing desirable vegetation shall be saved and protected unless removal is
20 required by the Contract or allowed by the Engineer.
21

22 The Contractor shall have sole responsibility for the maintenance and appearance
23 of the roadside restoration.
24

25 **8-02.3(2) Work Plans**

26 Three Work Plan submittals exist under this Section:
27

- 28 1. Roadside Work Plan: This plan is required when Work will disturb the
29 roadside beyond 20 feet from the pavement or where trees or native
30 vegetation will be removed, the Contractor shall submit a Type 2 Working
31 Drawing.
32
- 33 2. Weed and Pest Control Plan: This plan is required when the proposal
34 contains the item "Weed and Pest Control," and prior to application of any
35 chemicals or weed control activities, the Contractor shall submit a Type 2
36 Working Drawing.
37
- 38 3. Plant Establishment Plan: This plan is required when the proposal
39 contains the item "PSIPE__", and prior to completion of Initial Planting, the
40 Contractor shall submit a Type 2 Working Drawing.
41

42 **8-02.3(2)A Roadside Work Plan**

43 The Roadside Work Plan shall define the expected impacts to the roadside
44 and restoration resulting from Work necessary to meet all Contract
45 requirements. The Contractor shall define how the roadside restoration Work
46 included in the Contract will be phased and coordinated with project Work such
47 as earthwork, staging, access, erosion and water pollution control, irrigation,
48 etc. The Roadside Work Plan shall include the following:
49

- 50 1. Limiting impacts to roadsides:
51
52 a. Limits of Work including locations of staging or parking.

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- b. Means and methods for vegetation protection (in accordance with Section 1-07.16(2)).
- c. Locations outside of clearing limits where vegetation shall be removed to provide access routes or other needs to accomplish the Work.
- d. Plans for removal, preservation and stockpile of topsoil or other native materials, if outside of clearing and grubbing limits and within the project limits.

2. Roadside Restoration:

- a. Plan for propagation and procurement of plants, ground preparation for planting, and installation of plants.
- b. Means and methods to limit soil compaction where seeding and planting are to occur, such as steel plates, hog fuel access roads, wood mats for sensitive areas (including removal) and decompaction for unavoidable impacts.
- c. Plan and timing to incorporate or remove erosion control items.

3. Lawn Installation:

- a. Schedule for lawn installation work.
- b. Establishment and maintenance of lawns.

8-02.3(2)B Weed and Pest Control Plan

The Weed and Pest Control Plan shall describe all weed and pest control needs for the project.

The plan shall be prepared and signed by a licensed Commercial Pest Control Operator or Consultant. The plan for control of weeds and pests on the Contract in accordance with Section 8-02.3(3) shall include the following:

1. Names of plan preparer and pesticide operators, including contact information. The Contractor shall furnish the Engineer evidence that all operators are licensed with appropriate endorsements, and that the pesticide used is registered for use by the Washington State Department of Agriculture.
2. Means and methods of weed control, including mechanical and/or chemical.
3. Schedule for weed control including re-entry times for pesticide application by pesticide type.
4. Proposed pesticide use in accordance with Section 8-02.3(3)A: name, application rate, and Safety Data Sheets of all proposed

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pesticides. Include a copy of the current product label for each pesticide to be used.

- 5. Plan to ensure worker safety until pesticide re-entry periods are met.

8-02.3(2)C Plant Establishment Plan

The Plant Establishment Plan shall describe activities necessary to ensure continued health and vigor of planted and seeded areas in accordance with the requirements of Sections 8-02.3(12) and 8-02.3(13). Should the plan become unworkable at any time during the first-year plant establishment, the Contractor shall submit a revised plan prior to proceeding with further Work. The Plant Establishment Plan shall include:

- 1. Proposed scheduling of joint inspection meetings, activities, materials, equipment to be utilized for the first-year plant establishment.
- 2. Proposed adaptive management activities to ensure successful establishment of seeded, sodded, and planted areas.
- 3. A contact person.
- 4. Management of the irrigation system, when applicable.

8-02.3(3) Weed and Pest Control

The Contractor shall control weed and pest species within the project limits using integrated pest management principles consisting of mechanical, biological, and chemical controls that are outlined in the Weed and Pest Control Plan or as designated by the Engineer. Controlling weeds consists of killing and removing weeds by chemical, mechanical, and hand methods.

8-02.3(3)A Chemical Pesticides

Chemical pesticides include, but are not restricted to, any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest, including but not limited to, insecticides, herbicides, fungicides, adjuvants, and additives, including plant regulators, defoliant and desiccants. The Contractor shall apply chemical pesticides in accordance with the label recommendations, the Washington State Department of Ecology, local sensitive area ordinances, and Washington State Department of Agriculture laws and regulations. Only those pesticides listed in the table Herbicides Approved for Use on WSDOT Rights of Way and accepted as part of the Weed and Pest Control Plan or by written authorization from the Engineer may be used (www.wsdot.wa.gov/maintenance/roadside/herbicide_use.htm).

The applicator shall be licensed by the State of Washington as a Commercial Applicator or Commercial Operator, with additional endorsements as required by the Special Provisions or the proposed weed control plan. All chemical pesticides shall be delivered to the job site in the original containers, or if pre-mixed off-site, a certification of the components and formulation from the supplier is required. The licensed applicator or operator shall complete WSDOT Form 540-509, Commercial Pesticide Application Record, each day

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the pesticide is applied and furnish a copy to the Engineer by the following business day.

The Contractor shall ensure confinement of the chemicals within the designated areas. The use of spray chemical pesticides shall require the use of anti-drift and activating agents and a spray pattern indicator unless otherwise allowed by the Engineer.

The Contractor shall assume all responsibility for rendering any area unsatisfactory for planting by reason of chemical application. Damage to adjacent areas, either on or off the Highway Right of Way, shall be repaired to the satisfaction of the Engineer or the property owner at no additional cost to the Contracting Agency.

8-02.3(3)B Planting and Lawn Area Weed Control

Planting and lawn area weed control consists of controlling weeds and pests in planted and lawn areas shown in the Plans. This Work is included in the bid items for planting and lawn installation.

All planting and lawn areas shall be prepared so that they are weed and debris free at the time of planting and until completion of the project. The planting areas shall include the entire ground surface, regardless of cover, areas around plants, and those areas shown in the Plans.

Within planting or lawn areas, all species that are not shown in the Plans are unwanted and shall be controlled unless specifically allowed by the Engineer to remain.

Grass growing within the mulch ring of a plant, including grass applied in accordance with Sections 8-01.3(2)A1, 8-02.3(9) or 8-02.3(10), shall be considered a weed and shall be controlled on the project in accordance with the weed and pest control plan.

All applications of post-emergent herbicides shall be made while green and growing tissue is present. Residual herbicides shall not be used where rhizomatous species or perennial species are indicated.

Should unwanted vegetation reach the flowering and seed stage in violation of these Specifications, the Contractor shall physically remove and bag the seed heads prior to seed dispersion. All physically removed vegetation and seed heads shall be disposed of off-site at no cost to the Contracting Agency.

8-02.3(3)C Project Area Weed and Pest Control

The Contractor shall control weeds not otherwise covered in accordance with Section 8-02.3(3)B, in all areas within the project limits, including erosion control seeding areas and vegetation preservation areas, as designated by the Engineer.

When the Bid Item "Project Area Weed and Pest Control" is included in the Contract, the Contractor shall also control all weeds specified as noxious by the Washington State Department of Agriculture, the local Weed District, or the

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County Noxious Weed Control Board outside of planting areas within the project limits.

8-02.3(4) Topsoil

Topsoil shall not be worked or placed when the ground or topsoil is frozen, or excessively wet.

The Contractor shall protect topsoil stockpiled for project use to prevent erosion and weed growth. Weed growth on topsoil stockpile sites shall be immediately eliminated in accordance with the accepted Weed and Pest Control Plan and Section 8-02.3(3)C.

The subsoil where topsoil is to be placed shall be tilled to a depth of 1 foot or as specified in the Special Provisions or the Plans. Topsoil of the type specified shall be evenly spread over the specified areas to the depth shown in the Plans or as otherwise ordered by the Engineer. Topsoil depths greater than 6 inches shall be placed in lifts no more than 6 inches in depth. The first lift of topsoil shall be incorporated with sub-soil to a depth of 8 inches and subsequent lifts placed and lightly tamped between lifts. After the topsoil has been spread, all large clods, hard lumps, and rocks 2 inches in diameter and larger, and litter shall be raked up, removed, and disposed.

8-02.3(4)A Topsoil Type A

Topsoil Type A shall be as specified in the Special Provisions. The Contractor shall submit a certification by the supplier that the contents of the Topsoil meet the requirements in the Special Provisions.

8-02.3(4)B Topsoil Type B

Topsoil Type B shall be naturally occurring topsoil taken from within the project limits and shall meet the requirements of Section 9-14.1(2). Topsoil Type B shall be taken from areas shown in the Plans to the designated depth and stockpiled at locations that will not interfere with the construction of the project, and outside of sensitive areas, as allowed by the Engineer. A minimum of two weeks prior to excavation of Topsoil Type B, the Contractor shall pre-treat the vegetation on the designated Topsoil Type B areas according to the Weed and Pest Control Plan. Areas beyond the slope stakes shall be disturbed as little as possible in the above operations and under no circumstances shall Topsoil Type B be stockpiled within 10 feet of any existing tree or vegetation area designated to be saved and protected. The Contractor shall protect topsoil stockpile from weed infestation.

The Contractor shall set aside sufficient material to satisfy the needs of the project.

Upon completion of topsoil placement, the Contractor shall dispose of remaining stockpiled Topsoil Type B not required for use on the project at no additional expense to the Contracting Agency in accordance with Section 2-03.3(7)C.

Should a shortage of Topsoil Type B occur, and the Contractor has wasted or otherwise disposed of topsoil material, the Contractor shall furnish Topsoil Type A or C at no additional expense to the Contracting Agency.

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8-02.3(4)C Topsoil Type C

Topsoil Type C shall be naturally occurring topsoil obtained from a source provided by the Contractor outside of the Contracting Agency-owned Right of Way. Topsoil Type C shall meet the requirements of Sections 8-02.3(4)B and 9-14.1(3). The Contractor shall not begin removal of Topsoil Type C from the proposed source until the material has been allowed for use by the Engineer.

8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation

This Work includes preparing worked areas for the installation of all types of permanent erosion control planting. Work shall be conducted so the flow lines in drainage channels are maintained. Material displaced by the Contractor's operations that interferes with drainage shall be removed from the channel and disposed of as allowed by the Engineer.

8-02.3(6) Soil Amendments

The Contractor shall place soil amendments of the type, quality, and quantities specified where shown in the Plans or as specified in the Special Provisions. Areas receiving soil amendments shall be bare soil or vegetation free prior to application. All soil amendments shall be installed as shown in the Plans within 30 calendar days after delivery to the project site.

8-02.3(6)A Compost

Compost used for soil amendments shall be Fine Compost unless otherwise designated in the Plans. When compost blanket is used for temporary erosion control, the compost blanket may be incorporated into the soil immediately prior to planting when used as compost soil amendment. The area shall be prepared in accordance with Section 8-02.3(5) prior to placing compost.

8-02.3(6)B Fertilizers

The Contractor shall apply fertilizer in the form, mixture, and rate specified in the Special Provisions or as directed by the Engineer. Application procedures shall be in accordance with the manufacturer's recommendations unless otherwise specified in the Special Provisions.

The Contractor shall submit a guaranteed fertilizer analysis label for the selected product a minimum of one week prior to application for acceptance. Following the Engineer's acceptance, fertilizing of the accepted ground or vegetated surfaces shall begin immediately.

In seeding and lawn areas to be fertilized, the fertilizer shall be applied concurrently with the seed. When fertilizer is hydraulically applied, the fertilizer shall be suitable for application with seeding as specified in Section 8-02.3(9)C. If hydroseeding, the fertilizer shall be placed in the hydroseeder tank no more than 1 hour prior to application.

Fertilizers for planting areas shall be applied concurrently with compost and applied prior to incorporation, unless tablet form fertilizer is specified. Where tablet form fertilizer is specified, fertilizer shall be applied concurrently with plant installation.

Fertilizer sprayed on signs or sign structures shall be removed the same day.

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Areas not accessible by fertilizing equipment shall be fertilized by allowed hand methods.

Second Application: A second application of fertilizer shall be applied as specified in the Special Provisions at the locations designated in the Plans. The fertilizer shall be applied during the months of March, April, or May of the following year after the initial seeding, planting, or lawn installation. The fertilizer shall be dry granular pellets or pearls and applied in accordance with the manufacturer's recommendations or as specified in the Special Provisions.

8-02.3(7) Layout of Planting, Lawn and Seeding Areas

The Contractor shall lay out and prepare planting and lawn areas and receive the Engineer's acceptance of layout and preparation prior to any installation activities. The Contractor shall stake the location of all trees larger than 1-inch caliper and the perimeter of all planting areas for acceptance by the Engineer prior to any installation activities.

The Contractor shall locate all trees to be planted in mowable grass areas a minimum of 10 feet from the edge of planting areas, other trees, fence lines, and bottom of ditches unless otherwise specified.

Tree locations shown in the Plans shall be considered approximate unless shown with stationing and offset distance. In irrigated areas, trees shall be located so their trunk is a minimum of 1/3 of the spray radius away from the nearest sprinkler head.

Unless otherwise shown, planting areas located adjacent to Roadways shall begin 6 feet from the edge of shoulder on roadway fills and begin 5 feet up on the back slope from the bottom on roadway cut sections. Plants within planting areas shall be located such that mature branching pattern will not block sight distance, signs, or other traffic-related devices. No trees shall be placed where the mature canopy will grow to within 10 feet of existing power lines. Where roadside ditches are present, planting areas shall begin 5 feet from the centerline of the ditch unless shown otherwise in the Plans.

8-02.3(8) Planting

8-02.3(8)A Dates and Conditions for Planting

No plant material shall be planted until it has been inspected and accepted for planting by the Engineer. Rejected material shall be removed from the project site immediately. All plants for the project or a sufficient quantity to plant 1-acre of the site, whichever is less, shall be received on site prior to the Engineer beginning inspection of the plants.

Under no circumstances will planting be permitted during unsuitable soil or weather conditions as determined by the Engineer. Unsuitable conditions may include frozen soil, freezing weather, saturated soil, standing water, high winds, heavy rains, and high water levels. The ground shall be moist at the time of planting. All planting shall be accomplished during the following periods:

- 1. Non-Irrigated Plant Material

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Western Washington (West of the Cascade Mountain Crest) –
October 1 to March 1.
Eastern Washington (East of the Cascade Mountain Crest) – October
1 to November 15.

2. Irrigated Plant Material

In irrigated areas, plant material shall not be installed until the irrigation system is fully operational and accepted by the Engineer. Trees and shrubs may be planted in irrigated areas during the non-irrigated planting window before the irrigation system is functional with the written concurrence of the Engineer only if the irrigation system is guaranteed to be operational prior to the end of the non-irrigated planting window.

8-02.3(8)B Plant Installation

The Contractor shall handle plant material in the following manner:

1. Root systems shall be kept covered and damp at all times. Plant material shall be kept in containers until the time of planting.
2. Roots shall not be bunched, curled, twisted, or unreasonably bent when placed in the planting hole. Bare root plant material shall be dormant at the time of harvesting and planting. The root systems of all bare root plant material shall be dipped in a slurry immediately prior to planting.
3. Plant material supplied in wrapped balls shall not be removed from the wrapping until the time of planting at the planting location. The root system of balled plant material shall be moist at the time of planting. Root balls shall be loosened prior to planting. All burlap, baskets, string, wire and other such materials shall be removed from the hole when planting balled plants.
4. Plant cutting material shall be dormant at the time of cutting and planting. All cuttings shall be installed immediately if buds begin to swell.
5. Plants shall be placed with the crown at the finished grade. In their final position, plants shall have their top true root (not adventitious root) no more than 1 inch below the soil surface, no matter where that root was located in the original root ball or container. The backfill material, including container and root ball soil, shall be thoroughly watered on the same day that planting occurs regardless of season.

When installing plants, the Contractor shall dig planting holes three times the diameter of the container or root ball size. Any glazed surface of the planting hole shall be roughened prior to planting.

8-02.3(8)C Pruning, Staking, Guying, and Wrapping

Plants shall be pruned at the time of planting, only to remove minor broken or damaged twigs, branches or roots. Pruning shall be performed with a sharp tool and shall be done in such a manner as to retain or to encourage natural

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growth characteristics of the plants. All other pruning shall be performed only after the plants have been in the ground at least 1 year and when plants are dormant.

Trees shall only be staked when so noted in the Plans. Each tree shall be staked or guyed before completion of the backfilling in accordance with the details shown in the Plans.

Trees shall be wrapped when so noted in the Plans.

8-02.3(9) Seeding, Fertilizing, and Mulching

For all seed, the Contractor shall furnish the following documentation to the Engineer:

1. The state or provincial seed dealer license and endorsements.
2. Copies of Washington State Department of Agriculture (WSDA) test results on each lot of seed. Test results shall be within six months prior to the date of application.

8-02.3(9)A Dates for Application of Seed

Unless otherwise allowed by the Engineer, the Contractor shall apply seed for permanent erosion control during the following periods:

Western Washington ¹ (West of the Cascade Mountain Crest)	Eastern Washington (East of the Cascade Mountain Crest)
March 1 through May 15 September 1 through October 1	October 1 through November 15
¹ Seeding may be allowed outside these dates when allowed by the Engineer.	

All roadway excavation and embankment ground surfaces that are completed to final grades shall be prepared and seeded during the first available seeding window. When environmental conditions are not conducive to satisfactory results, the Engineer may suspend the seeding Work until such time that the desired results are likely to be obtained. If seeding is suspended, temporary erosion control methods according to Section 8-01 shall be used to protect the bare soil until seeding conditions improve.

8-02.3(9)B Seeding and Fertilizing

The Contractor shall prepare the seeding area in accordance with Section 8-02.3(5)A and apply seed at the rate and mix specified in the Special Provisions. The Contractor shall notify the Engineer within 5 days in advance of any seeding operation and shall not begin the Work until areas prepared or designated for seeding have been accepted. Following the Engineer's acceptance, seeding of the accepted ground surfaces shall begin immediately.

Seeding shall not be done during windy weather or when the ground is frozen, or excessively wet.

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When seeding by hand, the seed shall be incorporated into the top ¼ inch of soil by hand raking or other method that is allowed by the Engineer.

Seed applied as a separate operation using a hydroseeder shall have a tracer added to visibly aid uniform application. The tracer shall be HECF Short-Term Mulch applied at a rate of 200 to 250 pounds per acre and the tracer shall carry the measured specified seeding rate.

8-02.3(9)C Seeding with Fertilizers and Mulches

When the Proposal includes any variation of seeding, fertilizing, and without mulching, the seed and fertilizer shall be applied in one application followed by mulching. West of the Cascade Mountains, seed, fertilizer, and mulch may be completely applied in one application. East of the Cascades, seeding, fertilizing, and mulching shall not be applied as a single application unless allowed by the Engineer in writing prior to application. The fertilizing and mulching shall meet the requirements of Sections 8-02.3(6) and 8-02.3(11).

8-02.3(9)D Inspection

Seeded areas will be inspected upon completion of seeding, fertilizing, and mulching. The Work in any area will not be measured for payment until a uniform distribution of the materials is accomplished at the specified rate. Areas that have not received a uniform application of seed, fertilizer, and mulch at the specified rate, as determined by the Engineer, shall be re-seeded, re-fertilized, or re-mulched prior to payment for seeding within a designated area.

8-02.3(9)E Protection and Care of Seeded Areas

The Contractor shall install and establish a stable and weed free stand of grass as specified within all designated permanent seeding areas. A stable stand of grass shall meet the following requirements:

1. A dense and uniform canopy cover, 70% for Western Washington and 50% for Eastern Washington, of specified species covers all seeded areas after 3 months of active growth following germination during the growing season. Canopy cover is defined as the cover of living and vigorous grass blades, leaves, and shoots of specified species. Volunteer species, weeds, woody plants, or other undesirable vegetation shall not factor into the canopy cover. Growth and establishment may require supplemental irrigation to meet cover requirements.
2. Stand health is evident by vigorously growing planted species having a uniform rich-green appearance and with no dead patches or major gaps of growth. A stand of grass that displays rusting, wilting, stunted growth, disease, yellowing or browning of leaves, or bare patches does not meet the stand health requirement.
3. The Contractor shall establish a stable stand of grass free of all weeds, non-specified grasses, and other undesirable vegetation. Weed control shall be in accordance with the Weed and Pest Control Plan and occur on a monthly basis during the establishment period and through the life of the Contract.

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- 4. Remove all trash, rocks, construction debris, and other obstructions that may be detrimental to the continued establishment of future seeding.

In addition to the requirements of Section 1-07.13(1), restoration of eroded areas including clean up, removal, and proper disposal of eroded material, filling and raking of eroded areas with Topsoil Type A or fine compost, and re-application of the specified seed, fertilizer, and mulch shall occur at no additional cost to the Contracting Agency.

8-02.3(10) Lawn Installation

8-02.3(10)A Dates and Conditions for Lawn Installation

In irrigated areas, lawn installation shall not begin until the irrigation system is fully operational.

Unless otherwise allowed by the Engineer, seeded lawn installation shall be performed during the following time periods at the location shown:

Western Washington (West of the Cascade Mountain Crest)	Eastern Washington (East of the Cascade Mountain Crest)
March 1 through May 15 September 1 through October 1	October 1 through November 15
When irrigation system is operational March 1 through October 1	When irrigation system is operational March 1 through November 1

8-02.3(10)B Lawn Seeding and Sodding

The Contractor shall prepare the lawn area in accordance with Section 8-02.3(5) and apply seed at the mix and rate of application as specified in the Special Provisions.

The Contractor shall have the option of sodding in lieu of seeding for lawn installation at no additional expense to the Contracting Agency. Seeding in lieu of sodding will not be allowed.

Seed placed by hand shall be raked into the soil. Following raking, the seeded soil shall be rolled with a smooth 50-pound roller. Sod strips shall be placed within 48 hours of being cut. Placement shall be without voids and have the end joints staggered. Following placement, the sod shall be rolled with a smooth roller to establish contact with the soil.

Barriers shall be erected, with warning signs where necessary, to preclude pedestrian traffic access to the newly placed lawn during the establishment period.

8-02.3(10)C Lawn Establishment

Lawn establishment shall consist of caring for all new lawn areas within the limits of the project.

The lawn establishment period shall begin immediately after the lawn seeding or sodding has been accepted by the Engineer and shall extend to the end of

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four mowings or 20 working days whichever is longer. The mowings shall be done in accordance with Section 8-02.3(10)D.

During the lawn establishment period, the Contractor shall ensure the continuing healthy growth of the turf. This care shall include keeping the project in a presentable condition including, but not limited to, removal of litter, mowing, trimming, removal of grass clippings, edging, fertilization, insecticide and fungicide applications, weed control, watering, repairing the irrigation system, and repair and reseeding all damaged areas.

Temporary barriers shall be removed only when directed by the Engineer.

All Work performed under lawn establishment shall comply with established turf management practices.

Acceptance of lawn planting as specified will be based on a uniform stand of grass and a uniform grade at the time of final inspection. The Contractor shall recultivate, re-grade, reseed, and refertilize areas that are bare or have a poor stand of grass or not having a uniform grade through any cause before final inspection at no additional cost to the Contracting Agency.

8-02.3(10)D Lawn Mowing

Lawn mowing shall begin immediately after the lawn establishment period has been accepted by the Engineer and shall extend to the end of the Contract or the first-year plant establishment, whichever is last.

The Contractor shall accomplish the following minimum requirements:

1. Mow, trim, and edge as often as conditions dictate, at a minimum, once per week between April and September. Maximum height of lawn shall not exceed 3 inches. The cutting height shall be 2 inches. Cuttings, trimmings, and edgings shall be disposed of off the project site. When the Engineer allows the use of a mulching mower, trimmings may be left in place.
2. Water as often as conditions dictate depending on weather and soil conditions.
3. Provide fertilizer, weed control, water, and other measures as necessary to establish and maintain a healthy stand of grass.

8-02.3(11) Mulch

Mulches associated with seeding and planting shall be of the type specified in the Special Provisions or as indicated in the Plans. The Contractor shall evenly apply mulch at the rates indicated in the Plans. Mulches shall not be placed below the anticipated water level of ditch slopes, pond bank slopes, and stream banks, or in areas of standing or flowing water.

8-02.3(11)A Mulch for Seeding Areas

The Contractor shall furnish and evenly apply Hydraulically Applied Erosion Control Product (HECP) Long Term Mulch at the rates indicated and in accordance with the Manufacturer's specifications unless otherwise specified.

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HECP 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. HECP mulch shall not be used within the Ordinary High Water Mark.

Mulch sprayed on signs or sign Structures shall be removed the same day.

Areas not accessible by mulching equipment shall be mulched by accepted hand methods.

HECP Long Term Mulch may be applied with seed and fertilizer west of the summit of the Cascade Range. East of the summit of the Cascade Range, seed and fertilizer shall be applied in a single application followed by the application of mulch.

8-02.3(11)B Bark or Woodchip Mulch

The Contractor shall apply bark or wood chip mulch of the type and depth specified where shown in the Plans or as specified in the Special Provisions.

The Contractor shall complete final grading and placement/incorporation of soil amendments within the planting area prior to placement of mulch. Areas receiving bark mulch shall be bare soil or vegetation free before application, except where trees and other plants are specifically identified in the Plans or designated by the Engineer to be saved and protected.

Bark or wood chip mulch shall be placed to a uniform non-compacted depth of 3 inches over all planting areas unless otherwise specified. Mulch shall be feathered to the base of the plant and 1 inch below the top of junction and valve boxes, curbs, and pavement edges.

Any contamination of the mulch due to the Contractor's operations shall be corrected to its former condition at no additional cost to the Contracting Agency. Mulch placed to a thickness greater than specified shall be at no additional cost to the Contracting Agency.

The Contractor shall keep plant material crowns, runners, and branches free of mulch at all times.

8-02.3(11)C Bark or Woodchip Mulch Rings

The Contractor shall apply mulch rings around plants installed within existing vegetation areas or within seeded areas as shown in the Plans. Bark or wood chip mulch rings shall be applied to the surface of vegetation free amended soil in the isolated plant locations where shown in the Plans or as specified in the Special Provisions. Bark or wood chip mulch shall be placed to a uniform non-compacted depth of 3 inches to a radius of 2 feet around all plants within interplanted plant locations.

8-02.3(12) Completion of Initial Planting

Upon completion of the initial planting within a designated area, the Engineer will make an inspection of all planting areas. The Engineer will notify the Contractor, in writing, of any replacements or corrective action necessary to meet the plant

1 installation requirements. The Contractor shall replace all plants and associated
2 materials rejected or missing and correct unsatisfactory conditions.

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4 Completion of the initial planting within a designated area includes the following
5 conditions:

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7 1. 100 percent of each of the plant material categories are installed as
8 shown in the Plans.
- 9
10 2. Planting Area is cleaned up.
- 11
12 3. Repairs are completed, including but not limited to, full operation of the
13 irrigation system.
- 14
15 4. Mulch coverage is complete.
- 16
17 5. All weeds are controlled.

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19 **8-02.3(13) Plant Establishment**

20 Plant establishment consists of caring for all plants and planting areas within the
21 project limits. The provisions of Sections 1-07.13(2) and 1-07.13(3) do not apply to
22 this Section.

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24 When the Proposal includes the bid item PSIFE_____ (Plant Selection Including
25 Plant Establishment), that bid item includes one year of plant establishment Work.
26 The first year of plant establishment shall begin immediately upon written
27 notification from the Engineer of the completion of initial planting for the project.
28 The first-year plant establishment period shall be a minimum of one calendar year.
29 The one calendar year shall be extended an amount equal to any periods where
30 the Contractor does not comply with the plant establishment requirements and
31 plan.

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33 During the first-year plant establishment period, the Contractor shall perform all
34 Work necessary to ensure the resumption and continued growth of the transplanted
35 material. This Work shall include, but is not limited to, applying water, removing
36 foreign, dead, or rejected plant material, maintaining all planting areas in a weed-
37 free condition, and replacing all unsatisfactory plant material planted under the
38 Contract. If plants are stolen or damaged by the acts of others, the Contracting
39 Agency will pay invoice cost only for the replacement plants with no mark-up and
40 the Contractor will be responsible for the labor to install the replacement plants.
41 Other weed control within the project limits but outside of planting, lawn, or seeding
42 areas shall be as specified in Section 8-02.3(3)C.

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44 During the first year of plant establishment, the Contractor shall meet monthly or at
45 an agreed upon schedule with the Engineer for the purpose of joint inspection of
46 the planting material. The Contractor shall correct all unsatisfactory conditions
47 identified by the Engineer within a 10-day period immediately following the
48 inspection. If plant replacement is required, the Contractor shall, within the 10-day
49 period, submit a plan and schedule for the plant procurement and replacement to
50 occur during the planting period as designated in Section 8-02.3(8). At the end of
51 the plant establishment period, plants that do not show normal growth shall be

1 replaced and all staking and guying that remain on the project shall be removed
2 unless otherwise allowed by the Engineer.
3
4 All automatic irrigation systems shall be operated fully automatic during the plant
5 establishment period and until final acceptance of the Contract. Payment for water
6 used to water in plants, or hand watering of plant material or lawn areas unless
7 otherwise specified, is the responsibility of the Contractor during the first-year plant
8 establishment period.
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10 Subsequent year plant establishment periods shall begin immediately at the
11 completion of the preceding year's plant establishment period. Each subsequent
12 plant establishment period shall be one full calendar year in duration.
13
14 During the plant establishment period(s) after the first year plant establishment, the
15 Work necessary for the continued healthy and vigorous growth of all plants material
16 shall be performed as directed by the Engineer.
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18 Payment for water used to water plants during the subsequent year(s) of plant
19 establishment will be paid under the plant establishment item.
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21 **8-02.3(14) Plant Replacement**
22 The Contractor shall be responsible for growing or arrange to provide sufficient
23 plants for replacement of all plant material rejected through first-year plant
24 establishment. All replacement plant material shall be inspected and accepted by
25 the Engineer prior to installation. All rejected plant material shall be replaced with
26 acceptable plants meeting the specifications and installed according to the
27 requirements of this Section at dates allowed by the Engineer.
28
29 All replacement plants shall be of the same species as the plants they replace and
30 meet the requirements of Section 9-14.8 unless otherwise allowed by the Engineer.
31 Plants may vary in size reflecting one season of growth should the Contractor elect
32 to hold plant material under nursery conditions for an additional year to serve as
33 replacement plants. Replacement plant material larger than specified in the Plans
34 shall meet the applicable section requirements of the ASNS for container class, ball
35 size, spread, and branching characteristics.
36
37 **8-02.3(16) Roadside Maintenance Under Construction**
38 When the Contract includes the item, Roadside Maintenance Under Construction,
39 this Work includes roadside mowing and ditch maintenance, and noxious weed
40 control outside of planting areas according to Section 8-02.3(3)C.
41
42 **8-02.3(16)A Roadside Mowing**
43 The Contractor shall mow designated roadside grass areas to the limits
44 designated by the Engineer. Roadside mowing is limited to slopes not steeper
45 than 3(H) to 1(V).
46
47 The Contractor shall mow according to the following requirements:
48
49 1. Trim around traffic equipment, structures, planting areas, or other
50 features extending above ground preceding or simultaneously with
51 each mowing.
52

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2. Maintain grass between 4 and 12 inches in height.
3. Operate mowing equipment with suitable guards to prevent throwing rocks or debris onto the traveled way or off of the Contracting Agency property. Power driven equipment shall not cause ruts, deformation, and compaction of the vegetated soil.
4. Removing clippings is required on the traveled way, shoulders, walkways, or Structures.
5. Restore soil rutting to a smooth and even grade at the direction of the Engineer.

8-02.3(16)B Ditch Maintenance

The Contractor shall maintain drainage for the duration of the Contract according to the following requirements:

1. Maintain flow lines in drainage channels and roadside ditches.
2. Cutting or trimming vegetation within drainage channels to maintain positive flow.
3. Remove dirt and debris from inside of culverts or any drainage area where runoff has allowed accumulations and re-seed for erosion control.
4. Restore channels to previous operational condition.

8-02.4 Measurement

Topsoil, bark or woodchip mulch and soil amendments will be measured by the acre or the square yard along the grade and slope of the area covered immediately after placement. Weed control pre-treatment of topsoil areas, excavation, and stockpiling are included in the bid item "Topsoil Type ____."

Bark or woodchip mulch rings will be measured per each.

Compost will be measured by the acre or the square yard along the grade and slope of the area covered immediately after application.

Seeding, fertilizing, and mulching will be measured by the acre or the square yard by ground slope measurement or through the use of design data.

Seeding and fertilizing by hand will be measured by the square yard. No adjustment in area size will be made for the vegetation free zone around each plant.

Seeded lawn, sod installation, and lawn mowing will be measured along the ground slope and computed in square yards of actual lawn completed, established, and accepted.

Plant selection will be measured per each.

PSIPE __ (Plant Selection Including Plant Establishment) will be measured per each.

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Live Pole will be measured per each.

Live Stake Row will be measured by the linear foot along the ground slope line.

The pay quantities for plant materials will be determined by count of the number of satisfactory plants in each category accepted by the Engineer.

Fascine and PSIFE live fascine will be measured by the linear foot along the ground slope line.

Brush mattress and PSIFE live brush mattress will be measured by the surface square yard along the ground slope line.

Brush layer and PSIFE brush layer will be measured by the linear foot along the ground slope line.

Water will be measured in accordance with Section 2-07.4. Measurement will be made of only that water hauled in tank trucks or similar equipment.

8-02.5 Payment

Payment will be made for each of the following listed Bid items that are included in the Proposal:

“Project Area Weed and Pest Control” will be paid in accordance with Section 1-09.6.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency entered an amount for “Project Area Weed and Pest Control” in the Proposal to become a part of the total Bid by the Contractor. Payment under this item will be made only when the Work is not already covered by other items.

“Topsoil Type ____”, per acre.

The unit Contract price per acre for “Topsoil Type ____” shall be full payment for all costs for the specified Work.

“Fine Compost”, per acre or per square yard.

“Medium Compost”, per acre or per square yard.

“Coarse Compost”, per acre or per square yard.

The unit Contract price per acre for “Fine Compost”, “Medium Compost” or “Coarse Compost” shall be full pay for furnishing and spreading the compost onto the existing soil.

“Soil Amendment”, per acre.

The unit Contract price per acre for “Soil Amendment” shall be full pay for furnishing and incorporating the soil amendment into the existing soil.

“Plant Selection ____”, per each.

The unit Contract price for “Plant Selection ____”, per each shall be full pay for all Work to perform the work as specified within the planting area prior to planting for weed control, planting area preparation and installation of plants with initial watering.

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As the plants that do not include plant establishment are obtained, propagated, and grown, partial payments will be made as follows:

Payment of 15 percent of the unit Contract price per each when the plant materials have been contracted, propagated, and are growing under nursery conditions. The Contractor shall provide the Engineer with certification that the plant material has been procured or contracted for delivery to the project for planting within the time limits of the project. The certification shall state the location, quantity, and size of all material.

Payment will be increased to 100 percent of the unit Contract price per each for contracted plant material at the completion of the initial planting.

All partial payments shall be limited to the actual number of healthy vigorous plants that meet the stage requirements, limited to plan quantity. Previous partial payments made for materials rejected or missing will be deducted from future payments due the Contractor.

“PSIPE ___”, per each.

The unit Contract price for “PSIPE ___”, per each, shall be full pay for all Work necessary to perform as specified within the planting area for weed control and planting area preparation, planting, cleanup, and water necessary to complete planting operations as specified to the end of first year plant establishment.

As the plants that include plant establishment are obtained, propagated, and grown, partial payments will be made as follows after inspection by the Engineer:

Payment of 5 percent of the unit Contract price, per each, when the plant materials have been contracted, propagated, and are growing under nursery conditions. The Contractor shall provide the Engineer with certification that the plant material has been procured or contracted for delivery to the project for planting within the time limits of the project. The certification shall state the location, quantity, and size of all material.

Payment will be increased to 15 percent of the unit Contract price, per each, upon completion of the initial weed control and planting area preparation Work.

Payment will be increased to 60 percent of the unit Contract price per each for the contracted plant material in a designated unit area when planted.

Payment will be increased to 70 percent of the unit Contract price per each for contracted plant material at the completion of the initial planting.

Payment will be increased to the appropriate percentage upon reaching the following plant establishment milestones:

June 30th 80 percent

September 30th 90 percent

Completion of first-year plant establishment or after all replacement plants have been installed, whichever is 100 percent

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later.

Plant establishment milestones are achieved when planting areas meet conditions described in Section 8-02.3(13).

“Seeding, Fertilizing and Mulching”, per acre.

“Seeding and Fertilizing”, per acre or per square yard.

“Seeding and Fertilizing by Hand”, per square yard.

“Second Application of Fertilizer”, per acre.

“Seeding and Mulching”, per acre.

“Seeded Lawn Installation”, per square yard.

“Sod Installation”, per square yard.

“Lawn Mowing”, per square yard.

The unit Contract price per square yard for “Seeded Lawn Installation” or “Sod Installation” shall be full pay for all costs necessary to prepare the area, plant or sod the lawn, erect barriers, control weeds, and establish lawn areas and for furnishing all labor, tools, equipment, and materials necessary to complete the Work as specified and shall be paid in the following sequence for healthy, vigorous lawn:

Completion of Lawn Planting	60 percent of individual areas
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Mid Lawn Establishment (after two mowings)	85 percent of individual areas
--	--------------------------------

Completion of Lawn Establishment (after four mowings)	100 percent of individual areas
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“Plant Establishment Year ____” will be paid in accordance with Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency entered an amount for “Plant Establishment - ____ Year” in the Proposal to become a part of the total Bid by the Contractor.

“Live Pole”, per each.

“Live Stake Row”, per linear foot.

“Bark or Wood Chip Mulch”, per acre.

“Bark or Wood Chip Mulch Rings”, per each.

The unit Contract price per acre for “Bark or Wood Chip Mulch” shall be full pay for furnishing and spreading the mulch onto the existing soil.

“Fascine” and “PSIPE Live Fascine”, per linear foot.

“Brush Mattress” and “PSIPE Live Brush Mattress”, per square yard.

“Brush Layer” and “PSIPE Brush Layer”, per linear foot.

When PSIPE is included with Fascine, Brush Mattress, or Brush Layer, the payment schedule for PSIPE ____ will apply.

1
2 "Roadside Maintenance under Construction" will be paid in accordance with
3 Section 1-09.6.
4 For the purpose of providing a common Proposal for all Bidders, the Contracting
5 Agency has entered an amount for "Roadside Maintenance Under Construction" in
6 the Proposal to become a part of the total Bid by the Contractor.

7
8 "Water", per M Gal.
9

10
11 8-04.AP8

12 **Section 8-04, Curbs, Gutters, and Spillways**
13 **April 2, 2018**

14 **8-04.2 Materials**

15 In the first paragraph, the reference to "Portland Cement" is revised to read:

16
17 Cement 9-01
18

19 **8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways**

20 The first paragraph is supplemented with the following:

21
22 Roundabout truck apron cement concrete curb and gutter shall be constructed with air
23 entrained concrete Class 4000 conforming to the requirements of Section 6-02.
24

25 8-06.AP8

26 **Section 8-06, Cement Concrete Driveway Entrances**
27 **April 2, 2018**

28 **8-06.2 Materials**

29 In the first paragraph, the reference to "Portland Cement" is revised to read:

30
31 Cement 9-01
32

33 **8-06.3 Construction Requirements**

34 The first paragraph is revised to read:

35
36 Cement concrete driveway approaches shall be constructed with air entrained concrete
37 Class 4000 conforming to the requirements of Section 6-02 or Portland Cement or
38 Blended Hydraulic Cement Concrete Pavement conforming to the requirements of
39 Section 5-05.
40

41 8-09.AP8

42 **Section 8-09, Raised Pavement Markers**
43 **April 1, 2019**

44 **8-09.5 Payment**

45 The last paragraph is revised to read:

46
47 The unit Contract price per hundred for "Raised Pavement Marker Type 1", "Raised
48 Pavement Marker Type 2", "Raised Pavement Marker Type 3 _____ In.", and

1 "Recessed Pavement Marker" shall be full pay for furnishing and installing the markers
2 in accordance with these Specifications.

3
4 8-11.AP8

5 **Section 8-11, Guardrail**
6 **April 1, 2019**

7 **8-11.3(1)A Erection of Posts**

8 The first sentence of the first paragraph is revised to read:

9
10 Posts shall be set to the true line and grade of the Highway after the grade is in place
11 and compaction is completed.

12
13 **8-11.3(1)C Terminal and Anchor Installation**

14 The first paragraph is revised to read:

15
16 All excavation and backfilling required for installation of anchors shall be performed in
17 accordance with Section 2-09, except that the costs thereof shall be included in the unit
18 Contract price for the anchor installed.

19
20 The first sentence of the second to last paragraph is revised to read:

21
22 Assembly and installation of Beam Guardrail Non-flared Terminals for Type 31 guardrail
23 shall be supervised at all times by a manufacturer's representative, or an installer who
24 has been trained and certified by the manufacturer.

25
26 The last paragraph is revised to read:

27
28 Beam Guardrail Non-flared Terminals for Type 31 guardrail shall meet the crash test
29 and evaluation criteria in the Manual for Assessing Safety Hardware (MASH).

30
31 **8-11.4 Measurement**

32 The third paragraph is revised to read:

33
34 Measurement of beam guardrail _____ terminal will be per each for the
35 completed terminal.

36
37 The fourth paragraph is revised to read:

38
39 Measurement of beam guardrail Type 31 buried terminal Type 2 will be per linear foot
40 for the completed terminal.

41
42 The sixth paragraph is revised to read:

43
44 Measurement of beam guardrail anchor Type 10 will be per each for the completed
45 anchor, including the attachment of the anchor to the guardrail.

46
47 **8-11.5 Payment**

48 The Bid item "Beam Guardrail Anchor Type ____", per each is revised to read "Beam
49 Guardrail Anchor Type 10", per each.

50

1 The Bid item “Beam Guardrail Buried Terminal Type 1”, per each is deleted from this
2 section.

3
4 The Bid item “Beam Guardrail Buried Terminal Type 2”, per linear foot and the following
5 paragraph are revised to read:

6
7 “Beam Guardrail Type 31 Buried Terminal Type 2”, per linear foot.

8
9 The unit Contract price per linear foot for “Beam Guardrail Type 31 Buried Terminal
10 Type 2” shall be full payment for all costs to obtain and provide materials and perform
11 the Work as described in Section 8-11.3(1)C.

12
13 8-14.AP8

14 **Section 8-14, Cement Concrete Sidewalks**
15 **April 2, 2018**

16 **8-14.2 Materials**

17 In the first paragraph, the reference to “Portland Cement” is revised to read:

18
19 Cement 9-01

20
21 In the second paragraph, each reference to “Federal Standard 595” is revised to read “SAE
22 AMS Standard 595”.

23
24 8-16.AP8

25 **Section 8-16, Concrete Slope Protection**
26 **April 2, 2018**

27 **8-16.2 Materials**

28 In the first paragraph, the last two material references are revised to read:

29
30 Poured Portland Cement or Blended Hydraulic Cement
31 Concrete Slope Protection 9-13.5(2)
32 Pneumatically Placed Portland Cement or Blended
33 Hydraulic Cement Concrete Slope Protection 9-13.5(3)

34
35 8-20.AP8

36 **Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation**
37 **Systems, and Electrical**
38 **August 6, 2018**

39 **8-20.1(1) Regulations and Code**

40 The last paragraph is revised to read:

41
42 Persons performing electrical Work shall be certified in accordance with and supervised
43 as required by RCW 19.28.161. Proof of certification shall be worn at all times in
44 accordance with WAC 296-46B-942. Persons failing to meet these certification
45 requirements may not perform any electrical work, and shall stop any active electrical
46 work, until their certification is provided and worn in accordance with this Section.

47

1 **8-20.2(2) Equipment List and Drawings**

2 This section is renumbered:

3

4 **8-20.2(1) Equipment List and Drawings**

5

6 **8-20.3(4) Foundations**

7 The second sentence of the first paragraph is revised to read:

8

9 Concrete for Type II, III, IV, V, and CCTV signal standards and light standard
10 foundations shall be Class 4000P and does not require air entrainment.

11

12 **8-20.3(5)A General**

13 The last two sentences of the last paragraph is deleted.

14

15 This section is supplemented with the following:

16

17 All conduits shall include a pull tape with the equipment grounding conductor. The pull
18 tape shall be attached to the conduit near the end bell or grounded end bushing, or to
19 duct plugs or caps if present, at both ends of the conduit.

20

21 **8-20.3(8) Wiring**

22 The seventeenth paragraph is supplemented with the following:

23

24 Pulling tape shall meet the requirements of Section 9-29.1(10). Pull string may not be
25 used.

26

27 8-21.AP8

28 **Section 8-21, Permanent Signing**

29 **January 7 2019**

30 **8-21.3(5) Sign Relocation**

31 The second sentence of the first paragraph is revised to read:

32

33 Where the existing sign Structure is mounted on concrete pedestals, the Contractor
34 shall remove the pedestal to a minimum of 2 feet below finished grade and backfill the
35 remaining hole with material similar to that surrounding the hole.

36

37 **8-21.3(9)F Foundations**

38 Item number 3 of the twelfth paragraph is supplemented with the following new sentence:

39

40 Class 4000P concrete for roadside sign structures does not require air entrainment.

41

42 8-22.AP8

43 **Section 8-22, Pavement Marking**

44 **January 7, 2019**

45 **8-22.3(2) Preparation of Roadway Surfaces**

46 The second paragraph is revised to read:

47

48 Remove all other contaminants from pavement surfaces that may adversely affect the
49 installation of new pavement marking.

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8-22.3(3)F Application Thickness

The second to last sentence of the last paragraph is revised to read:

After grinding, clean the groove.

9-00.AP9

Section 9-00, Definitions and Tests

January 7, 2019

9-00.4 Sieves for Testing Purposes

This section is revised to read:

Test sieves shall be made of either: (1) woven wire cloth conforming to ASTM E11, or
(2) square-hole, perforated plates conforming to ASTM E323.

9-00.7 Galvanized Hardware, AASHTO M 232

The first sentence is revised to read:

An acceptable alternate to hot-dip galvanizing in accordance with AASHTO M 232 will be zinc coatings mechanically deposited in accordance with ASTM B695, providing the minimum thickness of zinc coating is not less than that specified in AASHTO M 232, and the process will not produce hydrogen embrittlement in the base metal.

9-02.AP9

Section 9-02, Bituminous Materials

January 7, 2019

9-02.1 Asphalt Material, General

The second paragraph is revised to read:

The Asphalt Supplier of Performance Graded (PG) asphalt binder and emulsified asphalt shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 2 “Standard Practice for Asphalt Suppliers That Certify Performance Graded and Emulsified Asphalts”. The Asphalt Supplier’s QCP shall be submitted and receive the acceptance of the WSDOT State Materials Laboratory. Once accepted, any change to the QCP will require a new QCP to be submitted for acceptance. The Asphalt Supplier of PG asphalt binder and emulsified asphalt shall certify through the Bill of Lading that the PG asphalt binder or emulsified asphalt meets the Specification requirements of the Contract.

9-02.1(4) Performance Graded Asphalt Binder (PGAB)

This section’s title is revised to read:

Performance Graded (PG) Asphalt Binder

The first paragraph is revised to read:

PG asphalt binder meeting the requirements of AASHTO M 332 Table 1 of the grades specified in the Contract shall be used in the production of HMA. For HMA with greater than 20 percent RAP by total weight of HMA, or any amount of RAS, the new asphalt

1 binder, recycling agent and recovered asphalt (RAP and/or RAS) when blended in the
 2 proportions of the mix design shall meet the PG asphalt binder requirements of
 3 AASHTO M 332 Table 1 for the grade of asphalt binder specified by the Contract.
 4

5 The second paragraph, including the table, is revised to read:
 6

7 In addition to AASHTO M 332 Table 1 specification requirements, PG asphalt binders
 8 shall meet the following requirements:
 9

		Additional Requirements by Performance Grade (PG) Asphalt Binders					
Property	Test Method	PG58S-22	PG58H-22	PG58V-22	PG64S-28	PG64H-28	PG64V-28
RTFO Residue: Average Percent Recovery @ 3.2 kPa	AASHTO T 350 ¹			30% Min.	20% Min.	25% Min.	30% Min.
¹ Specimen conditioned in accordance with AASHTO T 240 – RTFO.							

10
 11 The third paragraph is revised to read:
 12

13 The RTFO $J_{nr\text{diff}}$ and the PAV direct tension specifications of AASHTO M 332 are not
 14 required.
 15

16
 17 **9-02.1(6) Cationic Emulsified Asphalt**

18 This section is revised to read:
 19

20 Cationic Emulsified Asphalt meeting the requirements of AASHTO M 208 Table 1 of the
 21 grades specified in the Contract shall be used.
 22

23 9-03.AP9

24 **Section 9-03, Aggregates**
 25 **January 7, 2019**

26 **9-03.1 Aggregates for Portland Cement Concrete**

27 This section's title is revised to read:
 28

29 **Aggregates for Concrete**
 30

31 **9-03.1(1) General Requirements**

32 The first two sentences of the first paragraph are revised to read:
 33

34 Concrete aggregates shall be manufactured from ledge rock, talus, or sand and gravel
 35 in accordance with the provisions of Section 3-01. Reclaimed aggregate may be used if
 36 it complies with the specifications for concrete.
 37

38 The second paragraph (up until the colon) is revised to read:
 39

1 Aggregates for concrete shall meet the following test requirements:

2

3 The second sentence of the second to last paragraph is revised to read:

4

5 The Contractor shall submit test results according to ASTM C1567 through the Engineer
6 to the State Materials Laboratory that demonstrate that the proposed fly ash when used
7 with the proposed aggregates and cement will control the potential expansion to 0.20
8 percent or less before the fly ash and aggregate sources may be used in concrete.

9

10 **9-03.1(2) Fine Aggregate for Portland Cement Concrete**

11 This section's title is revised to read:

12

13 **Fine Aggregate for Concrete**

14

15 **9-03.1(4) Coarse Aggregate for Portland Cement Concrete**

16 This section's title is revised to read:

17

18 **Coarse Aggregate for Concrete**

19

20 **9-03.1(4)C Grading**

21 The first paragraph (up until the colon) is revised to read:

22

23 Coarse aggregate for concrete when separated by means of laboratory sieves shall
24 conform to one or more of the following gradings as called for elsewhere in these
25 Specifications, Special Provisions, or in the Plans:

26

27 **9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete**

28 This section's title is revised to read:

29

30 **Combined Aggregate Gradation for Concrete**

31

32 **9-03.1(5)B Grading**

33 In the last paragraph, "WSDOT FOP for WAQTC/AASHTO T 27/T 11" is revised to read
34 "FOP for WAQTC/AASHTO T 27/T 11".

35

36 **9-03.2 Aggregate for Job-Mixed Portland Cement Mortar**

37 This section's title is revised to read:

38

39 **Aggregate for Job-Mixed Portland Cement or Blended Hydraulic Cement Mortar**

40

41 The first sentence of the first paragraph is revised to read:

42

43 Fine aggregate for portland cement or blended hydraulic cement mortar shall consist of
44 sand or other inert materials, or combinations thereof, accepted by the Engineer, having
45 hard, strong, durable particles free from adherent coating.

46

47 **9-03.4(1) General Requirements**

48 The first paragraph (up until the colon) is revised to read:

49

50 Aggregate for bituminous surface treatment shall be manufactured from ledge rock,
51 talus, or gravel, in accordance with Section 3-01. Aggregates for Bituminous Surface
52 Treatment shall meet the following test requirements:

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9-03.8(1) General Requirements

The first paragraph (up until the colon) is revised to read:

Aggregates for Hot Mix Asphalt shall meet the following test requirements:

9-03.8(2) HMA Test Requirements

The two tables in the second paragraph are replaced with the following three tables:

Mix Criteria	HMA Class							
	3/8 inch		1/2 inch		3/4 inch		1 inch	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Voids in Mineral Aggregate (VMA), %	15.0		14.0		13.0		12.0	
Voids Filled With Asphalt (VFA), %								
ESAL's (millions)	VFA							
< 0.3	70	80	70	80	70	80	67	80
0.3 to < 3	65	78	65	78	65	78	65	78
≥ 3	73	76	65	75	65	75	65	75
Dust/Asphalt Ratio	0.6	1.6	0.6	1.6	0.6	1.6	0.6	1.6

Test Method	ESAL's (millions)	Number of Passes
Hamburg Wheel-Track Testing, FOP for AASHTO T 324 Minimum Number of Passes with no Stripping Inflection Point and Maximum Rut Depth of 10mm	< 0.3	10,000
	0.3 to < 3	12,500
	≥ 3	15,000
Indirect Tensile (IDT) Strength (psi) of Bituminous Materials FOP for ASTM D6931	175 Maximum	

	ESAL's (millions)	N initial	N design	N maximum
% Gmm	< 0.3	≤ 91.5	96.0	≤ 98.0
	0.3 to < 3	≤ 90.5	96.0	≤ 98.0
	≥ 3	≤ 89.0	96.0	≤ 98.0
Gyratory Compaction (number of gyrations)	< 0.3	6	50	75
	0.3 to < 3	7	75	115
	> 3	8	100	160

9-03.8(7) HMA Tolerances and Adjustments

In the table in item number 1, the fifth row is revised to read:

Asphalt binder	-0.4% to 0.5%		±0.7%
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In the table in item number 1, the following new row is inserted before the last row:

Voids in Mineral Aggregate, VMA	-1.0%		
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9-03.9(1) Ballast

The second paragraph (up until the colon) is revised to read:

1 Aggregates for ballast shall meet the following test requirements:

2

3 **9-03.14(4) Gravel Borrow for Structural Earth Wall**

4 The second sentence of the first paragraph is revised to read:

5

6 The material shall be substantially free of shale or other soft, poor durability particles,
7 and shall not contain recycled materials, such as glass, shredded tires, concrete rubble,
8 or asphaltic concrete rubble.

9

10 **9-03.21(1)B Recycled Concrete Aggregate Approval and Acceptance**

11 The first sentence of the second paragraph is revised to read:

12

13 Recycled concrete aggregate may be used as coarse aggregate or blended with coarse
14 aggregate for Commercial Concrete, Class 3000 concrete, or Cement Concrete
15 Pavement.

16

17 Item number 4 of the second paragraph is revised to read:

18

- 19 4. For Cement Concrete Pavement mix designs using recycled concrete aggregates,
20 the Contractor shall submit evidence that ASR mitigating measures control
21 expansion in accordance with Section 9-03.1(1).

22

23 This section is supplemented with the following new subsection:

24

25 **9-03.21(1)B1 Recycled Concrete Aggregate Approval and Acceptance**

26 Recycled concrete aggregate may be approved through a three tiered system that
27 consists of the following:

28

Tier 1	
Approval Requirements	Approval of the Reclamation Facility is not required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1). Field acceptance testing in accordance with Section 3-04.
Approved to provide the following Aggregate Materials:	
9-03.10 Aggregate for Gravel Base 9-03.12(1)B Gravel Backfill for Foundations Class B 9-03.12(2) Gravel Backfill for Walls 9-03.12(3) Gravel Backfill for Pipe Zone Bedding 9-03.14(1) Gravel Borrow 9-03.14(2) Select Borrow 9-03.14(2) Select Borrow (greater than 3 feet below subgrade and side slope) 9-03.14(3) Common Borrow 9-03.14(3) Common Borrow (greater than 3 feet below subgrade and side slope) 9-03.17 Foundation Material Class A and Class B 9-03.18 Foundation Material Class C 9-03.19 Bank Run Gravel for Trench Backfill	

29

Tier 2	
Approval Requirements	The Reclamation Facility shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 9 "Standard Practice for Approval of Reclamation

	Facilities of WSDOT Recycled Concrete and Returned Concrete”. The Reclamation Facility’s QCP shall be submitted and approved by the WSDOT State Materials Laboratory. Once accepted, any changes to the QCP will require a new QCP to be submitted for acceptance. Evaluation of aggregate source properties (LA Wear and Degradation) for the recycled concrete aggregate is not required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1), required if requested. Field acceptance testing in accordance with Section 3-04 is required. Provide certification in accordance with WSDOT QC 9 for every lot. A lot shall be no larger than 10,000 tons.
Approved to provide the following Aggregate Materials:	
Tier 1 aggregate materials 9-03.1 Coarse Aggregate for Commercial Concrete or Concrete class 3000 9-03.9(1) Ballast 9-03.9(2) Permeable Ballast 9-03.9(3) Crushed Surfacing 9-03.12(1)A Gravel Backfill for Foundations Class A	

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Tier 3	
Approval Requirements	The Reclamation Facility shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 10 “Standard Practice for Approval of Reclamation Facilities of Recycled Concrete Aggregates from Stockpiles of Unknown Sources”. The Reclamation Facility’s QCP shall be submitted and approved by the WSDOT State Materials Laboratory. Once accepted, any changes to the QCP will require a new QCP to be submitted for acceptance. Evaluation of aggregate source properties (LA Wear and Degradation) for the recycled concrete aggregate is required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1) is required. Field acceptance testing in accordance with Section 3-04 is required. Provide certification in accordance with WSDOT QC 10 for every lot. A lot shall be no larger than 10,000 tons
Approved to provide the following Aggregate Materials:	
Tier 1 aggregate materials 9-03.1 Coarse Aggregate for Commercial Concrete or Concrete class 3000 9-03.9(1) Ballast 9-03.9(2) Permeable Ballast 9-03.9(3) Crushed Surfacing 9-03.12(1)A Gravel Backfill for Foundations Class A	

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For Reclamation Facilities that do not participate in Tier 2 and Tier 3, approval of recycled concrete aggregate will be in accordance with Section 9-03.21(1), and acceptance will be in accordance with Section 3-04.

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

“Portland Cement” is deleted from the first two rows in the table.

The following new row is inserted after the second row:

Coarse Aggregate for Concrete Pavement	9-03.1(4)	0	100	0	0
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The first column of the fourth row (after the preceding Amendment is applied) is revised to read:

Coarse Aggregate for Commercial Concrete and Class 3000 Concrete