



# Annual Report

## MS4 Phase II General Permit

National Pollutant Discharge Elimination System

MS4 Stormwater Discharge Permit

**2019-2020  
Monitoring Year**

**City of Central Point  
Prepared/Submitted October 28, 2020**

**File Number 12614**

### 1.0 Certification and Signature

1. Permit Registrant(s): City of Central Point

2. Legally Authorized Representative: Mike Ono

3. Title: Environmental Services / GIS Coordinator

4. Email: [mike.ono@centralpointoregon.gov](mailto:mike.ono@centralpointoregon.gov)

5. Phone: 541-423-1030

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations (40 CFR 122.22(d)).

Signature:

A handwritten signature in black ink, appearing to read "Mike Ono", is written over a light blue horizontal line.

Date: 10/28/2020

# Table of Contents

<b>1.0</b>	<b>Certification and Signature .....</b>	<b>1</b>
	<b>Instructions.....</b>	<b>3</b>
<b>2.0</b>	<b>General Information .....</b>	<b>4</b>
2.1	Registrant Information.....	4
2.2	Municipal Separate Storm Sewer System (MS4) Information .....	4
2.3	MS4 Stormwater Discharge Information.....	4
2.4	Coordination Among Registrants and Joint Agreements.....	5
2.5	Stormwater Management Program Information .....	5
2.6	Stormwater Management Program Information .....	5
<b>3.0</b>	<b>Stormwater Management Program Control Measures.....</b>	<b>7</b>
3.1	Public Education and Outreach .....	7
3.2	Public Involvement and Participation.....	8
3.3	Illicit Discharge Detection and Elimination .....	10
3.4	Construction Site Runoff Control.....	14
3.5	Post-Construction Site Runoff for New Development and Redevelopment.....	16
3.6	Pollution Prevention and Good Housekeeping for Municipal Operations .....	19
<b>4.0</b>	<b>Monitoring .....</b>	<b>22</b>
4.1	Wood Village Monitoring Requirements .....	22
<b>5.0</b>	<b>Water Quality Standards.....</b>	<b>23</b>

# Instructions

At least once per year, the permit registrant must evaluate compliance with the requirements of the MS4 Phase II general permit using this Annual Report template. This self-evaluation includes assessment of progress made towards implementing the SWMP control measures in Schedule A, and implementation of actions to comply with any additional requirements identified pursuant to Schedule D.1 (Requirements for Discharges to Impaired Waterbodies).

For each SWMP control measure or activity listed below, please answer all the questions and in the comments field cite any relevant information and/or statistics that helps to illustrate implementation or compliance. If your answer is “No,” in the comments field explain the reasons and outline the anticipated implementation timeline. If the requirement does not apply, explain why it is not applicable in the comments field.

No later than November 1 each year, beginning in 2020, the permit registrant must submit an Annual Report to DEQ. One signed copy and one electronic copy must be submitted to DEQ using the address provided in permit. DEQ can provide an FTP site for submittal of the electronic copy, upon request.

**2.0 General Information**  
**2.1 Registrant Information**

6. Permit Registrant(s): City of Central Point

7. Type(s):  City /  County /  Special District /  Other:

8. Registrant Type:  
Existing Registrant:  New Registrant:

9. Community Type:  
Large Community:  Small Community:

10. DEQ Permit No: ORS126214

11. EPA File No: 126214

12. Physical Address: 140 S. 3<sup>rd</sup> Street

City: Central Point	State: OR	Zip: 97502
---------------------	-----------	------------

13. Point of Contact: Mike Ono

Title: Environmental Services Coordinator	Email: mike.ono@centralpointoregon.gov	Phone: 541-423-1030
---	--	---------------------

14. Mailing Address (if different):

City:	State:	Zip:
-------	--------	------

**2.2 Municipal Separate Storm Sewer System (MS4) Information**

15. Estimate the area in square mileage served by the MS4: 3.9 square miles

16. Estimate the population served by the MS4: 17,895

**2.3 MS4 Stormwater Discharge Information**  
Identify the names of all known waters that receive a discharge from your MS4.

Receiving Waterbody	# of Outfalls	Impaired waterbody		Impairment(s)
		303d listed	TMDL issued	
a. Bear Creek	6	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Algae, Chlorophyll, E. Coli, Fecal, Nutrients, Phosphorus, Sedimentation, Temp., pH.
b. Daisy Creek	17	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
c. Elk Creek	3	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
d. Griffin Creek	26	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	DO, E. Coli, Fecal, Nutrients, Sedimentation, Temp., pH
e. Horn Creek	3	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
f. Jackson Creek	11	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	E. Coli, Fecal, Temp., pH
g. Mingus Creek	26	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
h.		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
i.		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
j.		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	

<p><b>2.4 Coordination Among Registrants and Joint Agreements</b> Required for permit registrants relying on another entity to satisfy one or more of the requirements of the permit.</p>
<p>17. Is there a joint agreement in place for the implementation of one or more stormwater management program control measures? <i>Schedule A.2</i>    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></p> <p>18. If yes, has there been any change to the joint agreement(s) submitted previously?    Yes <input type="checkbox"/>    No <input type="checkbox"/> If yes, include, as an attachment, a summary of the changes. <i>The summary must identify the other co-registrants/co-implementers or other entities</i></p>
<p><b>2.5 Stormwater Management Program Information</b></p>
<p>19. Discuss the status and overall progress of establishing legal authority to control pollutant discharges into and discharges from the MS4 and to implement and enforce the conditions of this permit. <i>Schedule A.2.c</i> The City has in place Ordinance Chapter 8.05 Storm Drain Protection which addresses illicit discharges to the MS4 stormdrain systems. It gives the city the ability to fine and shut down any illegal discharges that are being put into the City's stormdrain system.</p>
<p><b>2.6 Stormwater Management Program Information</b></p>
<p>20. Is an updated SWMP Document attached? <i>Schedule A.2.c</i> Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    (<i>must be submitted with the second Annual Report</i>) If necessary, provide an explanation: We are in the process of updating the SWMP document now. A new SWAMP will be submitted with the second Annual Report.</p>
<p>21. Identify the publicly accessible website where the SWMP Document is posted. <i>Schedule 2.c &amp; A.3.b.ii</i> <a href="https://www.centralpointoregon.gov/publicworks/page/stormwater-quality-documents-information">https:// www.centralpointoregon.gov/publicworks/page/stormwater-quality-documents-information</a> If necessary, provide an explanation: City Website</p>
<p>22. Does the SWMP Document include an implementation schedule for control measures that have yet to be or are partially implemented? <i>Schedule A.2.c</i> Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/> If necessary, provide an explanation: The updated document will have implementation schedules</p>
<p>23. Describe the method used to gather, track, and use SWMP information to set priorities or assess compliance: <i>Schedule A.2.d</i> We will be using different ways of keeping track of activities through spreadsheets, software programs, maps, forms and reports.</p>
<p>24. Have adequate finances, staff, equipment and other support capabilities been provided to implement the permit? <i>Schedule A.2.e</i> Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/> If necessary, provide an explanation: We have 2 FTE and a separate stormwater fund.</p>
<p>25. During this monitoring year was compliance with the requirements of this permit evaluated? <i>Schedule B.1</i> Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/> If necessary, provide an explanation: Public Education and Outreach and Public Involvement and Participation were implemented according to the schedule. The elements required were met and are included with this report.</p>
<p>26. During this monitoring year was it determined or reported that discharge from the MS4 caused or contributed to an excursion of an applicable water quality standard? <i>Schedule A.1.a</i> Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/> <i>If "Yes", complete section 3.7, Water Quality Standards of this template.</i></p>



<b>3.0 Stormwater Management Program Control Measures</b>
<b>3.1 Public Education and Outreach</b>
<p>27. Provide a brief summary of the ongoing public education and outreach program. <i>Schedule A.3.a</i></p> <p>The City publishes at least 5-6 articles a year in the monthly newsletter that address pet waste, fertilizers impacts, storm drain education, and litter and trash control. Our goal is to try to educate and change the thinking and behavior of our customers to be more aware of what they do and how it impacts the environment. We also use brochures, flyers, social media, websites and other printed materials as tools to get the word out.</p>
<p>28. Were the required components in place by the implementation date? <i>Schedule A.3.a.i</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (<i>Implementation date: Feb. 28, 2020 for Existing Registrants and Sept. 1, 2023 for New Registrants</i>)</p>
<p>29. Provide the number of education and outreach activities conducted: <i>Schedule A.3.a.iii</i></p> <p>During this reporting year: 10</p> <p>30. During the permit term: 10</p> <p>If necessary, provide an explanation:</p> <p style="padding-left: 20px;">We find that the newsletter and social media are the best way to reach our audiences.</p>
<p>31. Indicate target audiences addressed during this reporting year: <i>Schedule A.3.a.iv</i></p> <p><input checked="" type="checkbox"/> General public, homeowners, homeowner association, schoolchildren, and businesses</p> <p><input checked="" type="checkbox"/> Local elected officials, land use planners and engineers</p> <p><input checked="" type="checkbox"/> Construction site operators</p>
<p>32. Have each target audience been addressed during the permit term? <i>Schedule A.3.a.iv</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>33. Indicate target topics addressed during this reporting year: <i>Schedule A.3.a.iv</i></p> <p><input checked="" type="checkbox"/> Impacts of illicit discharges on receiving waters and how to report them</p> <p><input checked="" type="checkbox"/> Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts</p> <p><input checked="" type="checkbox"/> BMPs for proper use, application and storage of pesticides and fertilizer</p> <p><input checked="" type="checkbox"/> BMPs for litter and trash control</p> <p><input checked="" type="checkbox"/> BMPs for recycling programs</p> <p><input checked="" type="checkbox"/> BMPs for power washing, carpet cleaning and auto repair and maintenance</p> <p><input checked="" type="checkbox"/> Low impact development/green infrastructure</p> <p><input type="checkbox"/> Information pertaining to maintenance of septic systems</p> <p><input checked="" type="checkbox"/> Watershed awareness and how storm drains lead to local creeks and rivers, and potential impacts to fish and other wildlife</p> <p><input type="checkbox"/> Other:</p>
<p>34. Describe the types of educational messages or activities distributed and/or offered during this reporting year. <i>Schedule A.3.a.iii</i></p> <p>Since this is our first year as the permittee, we had to do a lot learning and changing as a City. One of our first goals was to inform the developers and contractors that RVSS was no longer holding the Phase 2 permit for Central Point and that the City will now be doing the monitoring of construction sites and the enforcement of illicit discharges to the stormdrains in the city.</p> <p>We developed several educational brochures to hand out to contractors, residents, and business owners to help them understand what chemicals, sediment, concrete and other harmful things can do to our streams. We also ran articles in the City newsletter and social media that informed our residents about pet poop, fertilizers, and where stormdrains go and how these things affect the streams.</p>
<p>35. Was outreach to construction site operators working within your community offered during this reporting year? <i>Schedule A.3.a.v</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>36. Total number during the permit term: 10</p>
<p>37. Identify and describe the assessment/evaluation of, at least, one education and outreach activity that occurred during this reporting year. Include the assessment process or metric for evaluation, and why this activity was considered successful. <i>Schedule A.3.a.vi</i></p>

We found that the brochures were very helpful, they aided in correcting bad behavior or habits that residents and contractors were doing and allowed us to be more of an educator instead of an enforcer. It helped disperse the fears and anxieties of the people that thought we were trying to punish them, but in fact we were there trying to help them. It also gives them the proper information that they need to accomplish their job without hurting the environment.

38. Will the assessment be used to inform future stormwater education and outreach efforts? *Schedule A.3.a.vi*

Yes  No

39. Provide an explanation:

We plan to develop more brochures that will cover other topics and audiences.

### 3.2 Public Involvement and Participation

40. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.b*

We have upgraded our City and a regional website to meet all the provision in this chapter. We have an ongoing agreement with local schools and other agencies to provide stewardship opportunities every year including stream team activities, riparian plantings, low impact development activities, adopt-a-street, stream litter pickup.

41. Were the required components in place by the implementation date? *Schedule A.3.b.i*

Yes  No  (*Implementation date: Feb. 28, 2020 for Existing Registrants and Sept. 1, 2023 for New Registrants*)

42. Is the SWMP Document posted on a publicly accessible website? *Schedule A.3.b.ii*

Yes  No

43. Was the publicly accessible website updated during this reporting year? *Schedule A.3.b.ii*

Yes  No

If necessary, provide an explanation:

We updated the City's Stormwater website with 2 new pages, Reporting a Spill Page for illicit discharges and an Erosion Prevention and Sediment Control Requirement page. We also participate in a regional website, Stream Smart that is funded and organized by the local agency's to help improve water quality by changing people's habits and increase awareness of our local streams and rivers.

44. Does the publicly accessible website include illicit discharge complaint/reporting information or procedures? *Schedule A.3.b.ii.A*

Yes  No

If necessary, provide an explanation:

It was added just this year.

45. Does the publicly accessible website include draft documents issued for public comment, final reports, plans and other official SWMP policy documents? *Schedule A.3.b.ii.B*

Yes  No

If necessary, provide an explanation:

We do not usually publish draft documents for the public to comment on.

46. Does the publicly accessible website include links to all ordinances, policies and/or guidance documents related to the construction and post-construction stormwater management control programs, including education, training, licensing, and permitting? *Schedule A.3.b.ii.C*

Yes  No

If necessary, provide an explanation:

We provide a link to the Rogue Valley Stormwater Manual that is the regional guide for Stormwater quality treatment and standards for this area. We also provide a links to the regional maintained "Stream Smart" website that includes educational material, event dates, cultural enlightenment of what pollution is such as Pet poop, Pervious materials, Pesticides.

47. Does the publicly accessible website include contact information for relevant staff, including phone numbers, mailing addresses and email addresses? *Schedule A.3.b.ii.D*

Yes  No

If necessary, provide an explanation:

Both FTE and after hour phone contacts are listed.



48. During this reporting year, was a stewardship opportunity created or partnered with another entity? *Schedule A.3.b.iii*

Yes  No

If "Yes", summarize the stewardship opportunity(s).

Listed below are some of the local and regional events:

Arbor Day events - Local

Bear Creek Stewardship Day - Regional

Rogue Valley Earth Day - Regional

Salmon Watch - Local and Regional

Leaf Collection - Local and Regional

**3.3 Illicit Discharge Detection and Elimination**

49. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.c*

This was the City’s first year having its own Phase 2 Permit, so we are making sure that everything is in place that is needed to comply with DEQ’s requirements. We take any illicit discharges seriously because there are 7 stream that flow through the City so any kind of pollutant that enters the streams can harm the fish and its other inhabitants.

- MS4 Mapping – The City currently has all the stromdrain lines and infrastructure in the Cities GIS mapping program, which includes all the outfalls and chronic illicit discharge areas. We are currently assigning an identifier codes for each asset, we plan to have this complete by the end of the implementation date.
- Ordinance or Regulatory Mechanism- Central Point Municipal Code 8.05 provides the health and safety of the residents through the regulation of non-stormwater discharges to the stormdrain system. Below are some of the chapters with a brief description.
  - Discharge prohibitions – list of illicit discharges that are covered but not limited to these.
  - Watercourse protection – owners along creek or streams are responsible to keep their property free of trash and debris and maintain structures that can become hazards to the water.
  - Right of entry – Inspection and sampling – Provided that the City gives 24 hr. notice the city shall be granted permission to enter and inspect or set up testing if there is suspected illicit discharging coming from the property.
  - Requirement to prevent, control, and reduce stormwater pollutants by the use of best management practices.
  - Low impact development – refers to using the Rogue Valley Stormwater Development Guidelines for post construction guidelines to construction.
  - Violation, enforcement and penalties – The violation penalties are set up in an escalating enforcement so that they start with a warning and go up to suspension or stop work order.
  - Appeal of notice of violation
  - Civil penalties - monetary fines for violations up to \$1,000 per day.

Program to Detect and Eliminate Illicit Discharges – the City will use their website to be able to respond to public comments and concerns or to report and illicit discharges.

50. Were the required components in place by the implementation date? *Schedule A.3.c.i*

Yes  No  (*Implementation date: Feb. 28, 2022 for Existing Registrants and Sept. 1, 2023 for New Registrants*)  
They will be by the Implementation date.

51. Is the MS4 map(s) current? *Schedule A.3.c.ii.A*

Yes  No

52. Describe the MS4 map(s) format(s):

ArcMap GIS

53. Is the MS4 map(s) included as attachment? Yes  No

Or are the digital shapefiles available for electronic submittal? Yes  No

(*Existing Registrants must submit their MS4 map with the third Annual Report; New Registrants must submit by Sept. 1, 2023*)

If necessary, provide an explanation:

We will include it in our third Annual Report

54. Is the digital inventory of all known outfalls, with the associated receiving waterbody current? *Schedule A.3.c.ii.A*

Yes  No

If necessary, provide an explanation:

They are based on as-built plans and inspections.

55. Indicate if the following features are included on your MS4 map:

- Location of all known outfalls, including the requirements in *Schedule A.3.c.ii.B*
- Stormwater collection and conveyance system, including the requirements in *Schedule A.3.c.ii.C*
- Stormwater structural controls, including the requirements in *Schedule A.3.c.ii.C*
- Location of known chronic discharges *Schedule A.3.c.ii.D*

If necessary, provide an explanation:

They will be included in the map that will be submitted in the third Annual Report.

56. Have non-stormwater discharges into the MS4 been prohibited through enforcement of an ordinance or other regulatory mechanism? *Schedule A.3.c.iii*

Yes  No

<p>If necessary, provide an explanation: Ordinance 8.05 of our City code prohibits any illicit connections or discharges to our City streams</p>
<p>57. Indicate which of the following have an ordinance or other regulatory mechanism to prohibit discharge to the MS4: <i>Schedule A.3.c.iii</i></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Septic, sewage, and dumping or disposal of liquids or materials other than stormwater into the MS4</li> <li><input checked="" type="checkbox"/> Discharges of washwater resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities</li> <li><input checked="" type="checkbox"/> Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.</li> <li><input checked="" type="checkbox"/> Discharges of washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing, and carpet cleaning, etc.</li> <li><input checked="" type="checkbox"/> Discharges of washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, or residential areas (including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.) where detergents are used and spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed)</li> <li><input checked="" type="checkbox"/> Discharges of runoff from material storage areas, which contain chemicals, fuels, grease, oil, or other hazardous materials from material storage areas</li> <li><input checked="" type="checkbox"/> Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water</li> <li><input checked="" type="checkbox"/> Discharges of sediment, unhardened concrete, pet waste, vegetation clippings, or other landscape or construction-related wastes</li> <li><input checked="" type="checkbox"/> Discharges of trash, paints, stains, resins, or other household hazardous wastes</li> <li><input checked="" type="checkbox"/> Discharges of food-related wastes (grease, restaurant kitchen mat and trash bin washwater, etc.)</li> </ul> <p>If necessary, provide an explanation: Ordinance 8.05 of our City code prohibits any illicit connections or discharges to our City streams</p>
<p>58. Is the written escalating enforcement and response procedure included as an attachment? <i>Schedule A.3.c.iv</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>(For Existing Registrant must be submitted with the third Annual Report. New Registrants must submit by September 1, 2023)</i> If necessary, provide an explanation: The City Code provides enforcement from a warning up to a fine of \$1,000 per day per violation</p>
<p>59. Is there a phone number, webpage, and/or other communication channel publicized for the public use to report illicit discharges? <i>Schedule A.3.c.v.A</i></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Phone number(s)</li> <li><input checked="" type="checkbox"/> Webpage(s)</li> <li><input checked="" type="checkbox"/> Other communication channels</li> </ul> <p>If necessary, provide an explanation: The City website provides information for the public to report an illicit discharge which includes phone numbers during and after hours and what kind of information they need to provide us.</p>
<p>60. Provide the number of complaints received during this reporting year. <i>Schedule A.3.c.v.D</i> Number: 1 (<i>complaints related to IDDE</i>)</p>
<p>61. On average, how long did it take to respond to complaints? <i>Schedule A.3.c.v.B</i> In working days: 1</p>
<p>62. Provide the number of complaints that included notification of the Oregon Emergency Response System during this reporting year. <i>Schedule A.3.c.v.B</i> Number of notification: 1</p>
<p>63. Provide the number of complaints where staff performed an investigation during this reporting year. <i>Schedule A.3.c.v</i> Number: 1 (<i>investigations related to IDDE</i>)</p>
<p>64. On average, how long did it take to conduct an initial investigation? <i>Schedule A.3.c.v.B</i> In working days: 2</p>

<p>65. Provide the number of illicit discharges discovered and eliminated during this reporting year. <i>Schedule A.3.c.v</i> Number: 1</p> <p>66. On average, how long did it take to eliminate an illicit discharge? <i>Schedule A.3.c.v.B</i> In working days: 2</p>
<p>67. Provide the number times escalating enforcement procedure was used to eliminate illicit discharge during this reporting year. <i>Schedule A.3.c.v.D</i> Number of times: 1</p> <p>Do any of the illicit discharges involve the repair or replacement of the wastewater and/or storm sewer conveyance systems? <i>Schedule A.3.c.v.B</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> If necessary, provide an explanation: The owner had to replace the pump in a grease/ sewer pump in the parking lot for the complex.</p>
<p>68. Provide the number of illicit discharges that were referred to another entity during this reporting year. <i>Schedule A.3.c.v.C</i> Number: 0</p> <p>69. On average, how long did it take to notify the entity(s)? In working days: 0 If necessary, provide an explanation: We've had no reports of illicit discharges outside our city limits.</p>
<p>70. Indicate which of the following are included in the complaints or reports tracking documentation: <i>Schedule A.3.c.v.D</i></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Date the complaint was received and, if available, the complainant's name and contact information</li> <li><input checked="" type="checkbox"/> Name of staff responding to the complaint</li> <li><input checked="" type="checkbox"/> Date the investigation was initiated</li> <li><input checked="" type="checkbox"/> The outcome of the staff investigation</li> <li><input checked="" type="checkbox"/> Corrective action(s) taken to eliminate the illicit discharge</li> <li><input checked="" type="checkbox"/> The responsible party for the corrective action(s)</li> <li><input checked="" type="checkbox"/> The status of enforcement procedure(s), when necessary</li> <li><input checked="" type="checkbox"/> The date the corrective action(s) was completed and staff who evaluated final compliance</li> </ul> <p>If necessary, provide an explanation: We use the DEQ Spill/Release Report Form.</p>
<p>71. Provide percentage of outfalls inspected. <i>Schedule A.3.c.vi.A/B</i> Known outfalls screened this reporting year: 55</p> <p>72. Known outfalls screened during the permit term: 387 If necessary, provide an explanation: Rogue Valley Sewer Services had the permit prior to the City having it and has done outfall inspections since 2005. The City obtained the MS4 Permit March 2019 and is working on getting a dry weather screening software in place.</p>
<p>73. Provide percentage of outfalls inspected as part of field screening of priority location. <i>Schedule A.3.c.vi.C</i> Priority location outfalls screened this reporting year: 0</p> <p>74. Priority location outfalls screened during the permit term: 0 If necessary, provide an explanation: No priority location has been identified in the City.</p>
<p>75. Indicate which of the following dry-weather field screening activities have been performed in the last year: <i>Schedule A.3.c.vi</i></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> General observation</li> <li><input type="checkbox"/> Field Screening and Analysis</li> <li><input type="checkbox"/> Pollutant Parameter Action</li> <li><input type="checkbox"/> Laboratory Analysis</li> </ul> <p>If necessary, provide an explanation: We are in the process of setting up a paperless data collection program.</p>

<p>76. If flow is observed and the source is unknown, provide a brief description of the field investigation and analysis process. <i>Schedule A.3.c.vi.D,E,G</i></p> <p>If there is an unknown source flow in the outfall or nearest inlet, then a field analysis must be conducted to find out what might the source be.</p>
<p>77. Have pollutant parameter action levels been established and are they included as an attachment? <i>Schedule A.3.vi.F</i></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>(For Existing Registrant must be submitted with the third Annual Report. New Registrants must submit by September 1, 2023)</i></p> <p>If necessary, provide an explanation:</p> <p>We will submit them in the third Annual Report.</p>
<p>78. Are all persons responsible for investigating and eliminating illicit discharges and illicit connections into the MS4 appropriately trained to conduct such activities? <i>Schedule A.3.c.vii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation:</p> <p>Both of our FTE have training and been through training and certified, but due to COVID it is difficult to find additional training.</p>
<p>79. Are all new staff working to implement the IDDE program trained within 30 days of their assignment to this program? <i>Schedule A.3.c.vii</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation:</p> <p>Any new staff member that will be involved with the IDDE program will be trained in some type of illicit discharge or sediment control management class.</p>

**3.4 Construction Site Runoff Control**

80. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.d*  
 The City has made great progress in implementing this program. Our goal is to become an agent for DEQ and get our 1200CN permit. We have applied for the permit and hope that we can serve our community in the best way we can by protecting our streams and natural resources. Here is a quick overview of the implementation.

- Ordinance or Other Regulatory Mechanism – Currently the City Ord. 8.05 addresses illicit discharges including sediment, paints, chemicals and other harmful pollutants. We plan to add an erosion and sediment control section to the ordinance by the end of the implementation date. The RVSQDM and the Public Works Standard Spec. and Uniform Detail Manual both address erosion and sediment control guidelines.
- Compliance with other NPDES Permits – There will be two regulatory documents and the City website that refer contractors to DEQ for a 1200C permit if the project disturbs one or more acres and/or is less than one acre and part of a common plan of development or sale.
- Erosion and Sediment Control Plans- Chapter 800 of the Public Works Standard Spec. and Uniform Detail Manual addresses, Submittals, Site Monitoring, Erosion and Sediment Control Manager, Erosion Prevention Permits, Requirement, Material, Construction and Workmanship, Construction Site Practices, and Maintenance and Removal of erosion and sediment controls. The City website has an ESCP template link, when the City gets its 1200CN Permit there will be one included with the instructions for applications and one added to the PW Standard Spec. and Uniform Detail Manual.
- Erosion and Sediment Control Plan Review – The City has a contract with an outside Engineering firm to review ESCP that come in to make sure need stormwater protection is in place. Plans are also reviewed in-house to familiarize the site and any needed protection. A ESCP checklist is being drafted for the City to be used in conjunction with plan reviews.
- Construction Site Inspections – Minimum triggers for inspection will be the same as the 1200C Permit requirements. Minimum Inspection Documentation Requirements – The City will be using DEQ’s Construction Site BMP Inspection Report Form for reporting.
- Enforcement Procedures – Erosion and Sediment is considered an illicit discharge and civil penalties can go from a Stop work orders up to \$1,000 a day.

---

81. Were the required components in place by the implementation date? *Schedule A.3.d.i*  
 Yes  No  (Implementation date: Feb. 28, 2023 for Existing Registrants and Sept. 1, 2023 for New Registrants)  
 They will be by the implementation date.

---

82. Do ordinances or other regulatory mechanisms require erosion controls, sediment controls, and waste materials management controls to be used and maintained at all qualifying construction projects? *Schedule A.3.d.ii*  
 Yes  No  NA   
 If necessary, provide an explanation:  
 City Ordinance 8.05, Rogue Valley Stormwater Quality Design Manual and the City Public Works Standard Spec. and Uniform Detail Manual.

---

83. Indicate the minimum land disturbance where construction site operators are required to complete and implement an Erosion and Sediment Control Plan (ESCP) for construction project sites: *Schedule A.3.d.ii*  
 In square feet or portion of an acre: 0 ft<sup>2</sup> , acres   
 If necessary, provide an explanation:  
 Currently section 810 of the Public Works Standard Spec. Manual has no threshold but includes all sites commercial and residential, but will be revised to 7,000 sq.ft. to match that of the Permit language in the next revision.

---

84. For construction projects that disturb one or more acres (or that disturb less than one acre, if it is part of a “common plan of development or sale” disturbing one or more acres), provide a brief description how these project are referred to DEQ or the appropriate DEQ agent, to obtain a NPDES Construction Stormwater General Permit. *Schedule A.3.d.iii*  
 Through the RV Stomwater Quality Design Manual and through the City web site. In the next update for the Public Works Spec. Manual we will include a reference to obtain the correct permit through DEQ.

---

85. Provide the written specifications that address the proper installation and maintenance of such controls during all phases of construction activity as an attachment *Schedule A.3.d.iv*

<p>Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: Section 810 of the Public Works Standard Spec. Manual address erosion control and sediment prevention.</p>
<p>86. Provide the Erosion and Sediment Control Plan template as an attachment. <i>Schedule A.3.d.iv.A</i></p> <p>Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: We will be using DEQ Erosion and Sediment Control Plan template and will be included in the next revision of the Public Works Standard Spec. Manual. It is available at the City website to download.</p>
<p>87. Indicate which of the following are required for qualifying construction projects: <i>Schedule A.3.d.iv</i></p> <p><input checked="" type="checkbox"/> Site operator required to complete a ESCP template prior to beginning construction/land disturbance  <input type="checkbox"/> Site operator required to keep the ESCP on site  <input checked="" type="checkbox"/> Site operator required maintain and update the ESCP as site conditions change, or as needed.  <input type="checkbox"/> Site operator required to provide the ESCP to the permit registrant, DEQ, or another administrating entity</p> <p>If necessary, provide an explanation: Unchecked items will be included with the next revision of the Public Works Standard Spec. Manual.</p>
<p>88. ESCP templates [from construction projects that will result in land disturbance of one or more acres (or that disturb less than one acre, if it is part of a “common plan of development or sale” disturbing one or more acres)] are reviewed using a checklist or similar document to determine compliance. <i>Schedule A.3.d.v</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>89. Provide the ESCP review template as an attachment. <i>Schedule A.3.d.v</i></p> <p>Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>90. Indicate the minimum land disturbance where you require the ESCP to be reviewed, if different than one acre: 0 ft<sup>2</sup> <input checked="" type="checkbox"/>, acres <input type="checkbox"/></p> <p>If necessary, provide an explanation: This will be changed to 7,000 sq.ft. in the next revision of the Public Works Standard Spec. Manual to match the Permit language.</p>
<p>91. All construction projects [that will result in land disturbance of one or more acres (or that disturb less than one acre, if it is part of a “common plan of development or sale” disturbing one or more acres)] are expected or scheduled to be inspected at least once per permit term. <i>Schedule A.3.d.vi.A.1</i></p> <p>Indicate the number of inspections completed to comply with this requirement during this reporting year: 7</p> <p>Indicate the number of inspections completed to comply with this requirement during the permit term: 7</p> <p>If necessary, provide an explanation: City stomrwater inspector reguarly inspects all onging construction site for compliance.</p>
<p>92. Are construction projects with visible sediment in stormwater/dewatering discharge or when a complaint is received inspected? <i>Schedule A.3.d.vi.A.2</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>93. Indicate number of projects that were inspected based on this inspection trigger: 1</p> <p>If necessary, provide an explanation: The construction sites had sediment coming off the work sites and were told to stop work and pump water back onto site and the City came in and jetted and cleaned out inlet, no sediment reached nearby waterways.</p>
<p>94. Indicate the total number of construction projects that were inspected this monitoring year: 45</p>
<p>95. Indicate the total number of construction projects that were inspected during the permit term: 45</p>
<p>96. Indicate which of the following are documented during an inspection: <i>Schedule A.3.d.vi.B</i></p> <p><input checked="" type="checkbox"/> That the ESCP is reviewed to determine if the described  <input checked="" type="checkbox"/> Control measures were installed, implemented, and maintained appropriately  <input checked="" type="checkbox"/> Assessment of the site’s compliance with the ordinances or requirements  <input checked="" type="checkbox"/> Visual observation of any existing or potential non-stormwater discharges, illicit connections, and/or discharge of pollutants from the site  <input checked="" type="checkbox"/> Recommendations to the construction site operator for follow-up</p>

<input checked="" type="checkbox"/> Education or instruction provided to the site operator related to stormwater pollution prevention practices If necessary, provide an explanation:
97. If available, provide a copy of the written or electronic inspection report form. <i>Schedule A.3.d.vi.B</i> Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
98. For Existing Large Communities: Indicate the number of new construction projects inspected that disturb less one acre during this monitoring year. Is this number at least 25% of the qualifying new construction sites? <i>Schedule A.3.d.vi.C</i> Yes If necessary, provide an explanation: There were about 40 new projects less than 1 acre in the City and all were inspected and monitored.
99. Provide the written escalating enforcement and response procedure as an attachment. <i>Schedule A.3.d.vii</i> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (For Existing Registrant must be submitted with the third Annual Report. New Registrants must submit by September 1, 2023) If necessary, provide an explanation: We will include it in our third Annual Report.
100. Was the escalating enforcement procedure used to achieve compliance at any construction projects? <i>Schedule A.3.d.vii</i> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Indicate number of times during this reporting year: 0
101. Indicate number of times during the permit term: 0 If necessary, provide an explanation: It was not necessary contractors were very cooperative.
102. Were all persons responsible for ESCP reviews, site inspections, and enforcement appropriately trained to conduct such activities? <i>Schedule A.3.d.viii</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If necessary, provide an explanation: The City's field inspector is certified through the National Stormwater Center
103. Were all new staff working to implement the construction site runoff control program appropriately trained within 30 days of their assignment to this program? <i>Schedule A.3.d.viii</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

**3.5 Post-Construction Site Runoff for New Development and Redevelopment**

104. Provide a brief summary of the overall progress towards implementation of this control measure. <i>Schedule A.3.e</i> The City of Medford, Ashland, Central Point, Phoenix, Talent and Jackson County have developed a regional manual (Rogue Valley Stormwater Quality Design Manual or RVSQDM) that contractor can use as a guide for developing stormwater quality and flow control here in the Rogue Valley. All the Cities have adopted the manual to ensure that there is consistency in stormwater management and treatment in our area.
105. Were the required components in place by the implementation date? <i>Schedule A.3.e.i</i> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Implementation date: Feb. 28, 2023 for Existing Registrants and Sept. 1, 2023 for New Registrants) They will be by the implementation date.
106. For projects creating or replacing impervious area, indicate the area (or threshold) where the site is required to implement the post-construction site runoff program requirements: <i>Schedule A.3.e.ii</i> In square feet: 2500ft <sup>2</sup> If necessary, provide an explanation: In Chapter 1.2 of the RVSQDM it is defined.
107. Indicate which of the following are required at qualifying sites: <i>Schedule A.3.e.ii</i> <input checked="" type="checkbox"/> The use of stormwater controls



<input checked="" type="checkbox"/> A site-specific stormwater management approach that targets natural surface or predevelopment hydrological function through the installation and long-term operation and maintenance of stormwater controls <input checked="" type="checkbox"/> Long-term O&M of stormwater controls at project sites that are under the ownership of a private entity If necessary, provide an explanation: Chapter 2 of the RVSQDM defines Performance Standards, Chapter 6 .6 defines Operations and Maintenance Plans.
108. Were ordinance(s), code(s) and development standards reviewed to identify, minimize or eliminate barriers that inhibit design and implementation techniques intended to minimize impervious surfaces and reduce stormwater runoff? <i>Schedule A.3.e.iii</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 109. If barriers were identified or if necessary, provide an explanation: We are still reviewing all of the documentation relating to development standards that might be a barrier to LID or Green Infrastructure.
110. Provide an explanation of the timeline for removal of barriers or if removal is outside your authority: By the September 1, 2023 or sooner a complete review should be complete.
111. Indicate which of the following technical standards are used to determine the retention requirement: <i>Schedule A.3.e.iv.A</i> <input type="checkbox"/> Volume-based method <input checked="" type="checkbox"/> Storm event percentile-based method <input type="checkbox"/> Annual average runoff-based method If necessary, provide an explanation: See attachment - PC WG ToDo List 9-30-19.pdf for more details.
112. For projects that are unable to meet the retention requirement, is the remainder of the rainfall/runoff treated prior to discharge with a structural stormwater control? <i>Schedule A.3.e.iv.B</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 113. Was the stormwater structural control designed to remove, at minimum, 80 percent of the total suspended solids? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If necessary, provide an explanation: Retention is not yet included in the RVSQDM but the details and plans have been worked out and will be included in before the implementation date.
114. Are the allowable structural stormwater controls and specifications available for review? <i>Schedule A.3.e.iv.C</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 115. Indicate if they are attached or the location where they can be viewed: Attached <input type="checkbox"/> Location: <a href="https://www.centralpointoregon.gov/publicworks/page/stormwater-quality-documents-information">https://www.centralpointoregon.gov/publicworks/page/stormwater-quality-documents-information</a> If necessary, provide an explanation: See City Website Stormwater Quality Documents & Information - Stormwater Development Guidelines- Rogue Valley Stormwater Quality Design Manual (RVSQDM).
116. Have alternatives for projects complying with the retention requirement been approved? <i>Schedule A.3.e.iv.D</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 117. If yes, are the written technical justifications evaluated? <i>Schedule A.3.e.iv.D</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 118. Provide a brief description of the factors of technical infeasibility or site constraints that prevented the on-site management of the runoff amount stipulated in the stormwater retention requirement or a portion thereof. <i>Schedule A.3.e.iv.D</i> Some of the Technical Infeasibility Factor will be; <ul style="list-style-type: none"> <li>• Separation distance from seasonal high groundwater and bedrock</li> <li>• Steep slopes</li> </ul>

<ul style="list-style-type: none"> <li>• Distance to drinking well water</li> <li>• Land use planning</li> <li>• Transportation related projects</li> <li>• Infiltration Rate</li> <li>• Contaminated soils</li> <li>• Mitigation alternatives</li> <li>• Other requirements</li> </ul> <p>If necessary, provide an explanation: See attachment - Water Quality Requirements 2020-07-15.doc for more details. These will be included in the RVSQDM before the implementation date.</p>
<p>119. Before the allowance of alternative compliance, were mitigation options established? <i>Schedule A.3.e.iv.E</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: See attachment - Water Quality Requirements 2020-07-15.doc - Technical Infeasibility Factors to determine for the allowance of an alternative compliance. These will be included in the RVSQDM before the implementation date.</p>
<p>120. If applicable, indicate which of the following mitigation options have been used and provide a narrative description of the implementation of the mitigation option? <i>Schedule A.3.e.iv.E</i></p> <p><input type="checkbox"/> Off-Site Mitigation</p> <p style="text-align: center;">--</p> <p><input type="checkbox"/> Groundwater Replenishment Projects</p> <p><input checked="" type="checkbox"/> Treatment Equivalent to the Retention Requirement</p> <p>If necessary, provide an explanation: See attachment - PC WG ToDo List 9-30-19.pdf and Water Quality Requirements 2020-07-15.pdf for more details.</p>
<p>121. Was a procedure developed for the review and approval of structural stormwater control plans for new development and redevelopment projects? <i>Schedule A.3.e.v</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: Chapter 4 in the RVSQDM it outlines steps to submit stormwater treatment systems not listed in the manual.</p>
<p>122. Indicate the minimum land disturbance or creation of new impervious area where plans are required to be reviewed: 2500 ft<sup>2</sup> <input checked="" type="checkbox"/>, acres <input type="checkbox"/> of land disturbance <input type="checkbox"/> creation of new impervious area <input checked="" type="checkbox"/></p> <p>123. Are all sites that use alternative compliance to meet the retention requirement reviewed?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: Retention is not yet included in the RVSQDM but the details and plans have been worked out and will be included in before the implementation date.</p>
<p>124. Indicate if an inventory and implementation strategy is used to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv of the permit? <i>Schedule A.3.e.vi</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If necessary, provide an explanation: All the LID, Green Infrastructures, Detention/Retention ponds, underground detention facilities, Water Quality devices and other stormwater control are entered in the City GIS system. Each year we inspect as many as we can and make sure they are working and maintained. The City owned features planned be stored in Cartegraph which will keep track of them as assets and will track the maintenance.</p>
<p>125. Indicate which of the following strategies have been developed to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv.: <i>Schedule A.3.e.vi</i></p>

<input checked="" type="checkbox"/> Legal authority to inspect and require effective operation and maintenance of privately owned and operated stormwater controls <input checked="" type="checkbox"/> Inspection procedures and an inspection schedule to ensure compliance with the O&M requirements of each stormwater control operated by the permit registrant and by other private entities <input checked="" type="checkbox"/> A tracking mechanism for documenting inspections and the O&M requirements for each stormwater control <input checked="" type="checkbox"/> Reporting requirements for privately owned and operated stormwater controls that document compliance with the O&M requirement in Schedule A.3.f. If necessary, provide an explanation: Tracking and reporting for public and private stormwater controls are being tracked through GIS and Excel spreadsheets, but the City plans to incorporate them into an existing software that will make it easier and better to keep track of the O&M and inspections.
126. Are the location of all public and private stormwater controls installed during this permit term are documented on the MS4 Map? <i>Schedule A.3.e.vi</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If necessary, provide an explanation: All stormwater controls and facilities are entered into the City GIS system.
127. Were all persons responsible for performing post-construction runoff site plan reviews, administering the alternative compliance program, or performing O&M practices or evaluating compliance with long-term O&M requirements appropriately trained to conduct such activities? <i>Schedule A.3.e.vii</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If necessary, provide an explanation: We have a contract with an outside Engineering Firm to review and check all hydrolic calculation that are submitted to the City for compliance.
128. Were all new staff working to implement the post-construction site runoff for new development and redevelopment program appropriately trained within 30 days of their assignment to this program? <i>Schedule A.3.e.vii</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If necessary, provide an explanation: All FTE that work in the stormwater quality control are.
<b>3.6 Pollution Prevention and Good Housekeeping for Municipal Operations</b>
129. Provide a brief summary of the overall progress towards implementation of this control measure. <i>Schedule A.3.f</i> The City is in the process of building a new Public Works Operations Yard, and best management practices will be incorporated into the design, such as: <ul style="list-style-type: none"> <li>• covered or contained areas that prevent contaminates from getting into storm drains or the environment.</li> <li>• recycling of used products.</li> <li>• cleaning vehicle and equipment practices.</li> <li>• Product and waste storage.</li> <li>• Spill preventions.</li> </ul> Everyday operations are also being reviewed to see if pollutants can be reduced by better procedures or technology. City stormwater asset are entered into software that keeps tracks of the operations and maintenance of the inlets, manholes and pipes, and are also enter into a GIS data base
130. Were the required components in place by the implementation date? <i>Schedule A.3.f.i</i> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> ( <i>Implementation date: Feb. 28, 2022 for Existing Registrants and Sept. 1, 2023 for New Registrants</i> ) They will be by the implementation date or sooner.
131. Were O&M strategies for existing controls developed for both permit registrant-owned controls and controls owned and operated by another entity discharging to the MS4? <i>Schedule A.3.f.ii</i> 132. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> If necessary, provide an explanation: The City owned controls are maintained and inspected each year and privately owned controls are required to submit a signed Operation and Maintenance agreement and are also inspected each year.

133. Indicate the percentage of catch basins inspected/cleaned: *Schedule A.3.f.iii*

Percentage inspected this reporting year: 30% ; Percentage cleaned: 30%

134. If known, estimate of material removed: 10 Cu.Yds.

135. Percentage inspected during the permit term: 30% ; Percentage cleaned: 30%

136. If known, estimate of material removed: 10 Cu.Yds.

If necessary, provide an explanation:

The City Stormdrain system is cleaned on an regular basis so not a lot of debris is recovered

137. Indicate if a catch basin inspection prioritization system and/or an alternate inspection frequency has been established. *Schedule A.3.f.iii*

Yes  No

If necessary, provide an explanation:

Parts of the city get more traffic than others so those areas will be cleaned more often, also there are storm drains systems that have bigger drainage areas which means more sediment and will require more frequent cleaning.

138. During the permit term were existing procedures for inspection and maintenance schedules reviewed/updated to ensure pollution prevention and good housekeeping practices were conducted for the following activities? *Schedule A.3.f.iv*

- Pipe cleaning for stormwater and wastewater conveyance systems
- Cleaning of culverts conveying stormwater in roadside ditches - (not applicable)
- Ditch maintenance- (not applicable)
- Road and bridge maintenance- (not applicable)
- Road repair and resurfacing including pavement grinding- (not applicable)
- Dust control for roads and municipal construction sites- (not applicable)
- Winter road maintenance, including salt or de-icing storage areas - (not applicable)
- Fleet maintenance and vehicle washing
- Building and sidewalk maintenance including washing
- Solid waste transfer and disposal areas
- Municipal landscape maintenance
- Material storage and transfer areas, including fertilizer and pesticide, hazardous materials, used oil storage, and fuel
- Fire fighting training activities- (not applicable)
- Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots, swimming pools, marinas, etc.

If necessary, provide an explanation:

139. Do any permit registrant-owned facilities have coverage under DEQ's 1200-Z Industrial Stormwater Discharge Permit? *Schedule A.3.f.v*

Yes  No  NA

If "Yes", provide DEQ File Number(s):

If necessary, provide an explanation:

140. Are practices in place to reduce the discharge of pollutants to the MS4 associated with the application and storage of pesticides and fertilizers? *Schedule A.3.f.vi*

Yes  No

If necessary, provide an explanation:

141. Are methods/practices in place to reduce the discharge of litter within the jurisdiction? *Schedule A.3.f.vii*

Yes  No

If necessary, provide an explanation:

The City has place over 100 garbage cans throughout the city so people can deposit their garbage in the proper place. The cans are checked and emptied on a regular schedule.

142. Are practices in place to ensure that collected material or pollutants removed in the course of maintenance are managed and disposed of in a manner such as to prevent such pollutants from entering the waters of the state in accordance with state and federal rules? *Schedule A.3.f.viii*

Yes  No

If necessary, provide an explanation:

All waste material collected from the street sweeper, vac trucks, trash cans, scrap metal and any other collected wastes are taken to the proper places of disposal and discarded.

143. Were all persons responsible for evaluating O&M practices, evaluating compliance with long-term O&M requirements or ensuring pollution prevention at facilities and during operations appropriately trained to conduct such activities? *Schedule A.3.f.ix*

Yes  No

If necessary, provide an explanation:

144. Were all new staff working to implement the pollution prevention and good housekeeping for municipal operations program appropriately trained within 30 days of their assignment to this program? *Schedule A.3.f.ix*

Yes  No

If necessary, provide an explanation:

Training is not easy to get at this time.

#### 4.0 Monitoring

If the requirement does not apply, mark "NA" and explain why it does not apply to you in the comments field.

145. Was municipal stormwater monitoring performed at outfall locations, in the receiving waterbody, or to demonstrate compliance with this permit? *Schedule B.3*

Yes  No

146. If "Yes" is the data included in the Annual Report?

Yes  No

If necessary, provide an explanation:

See attachment Quarterly-TMDL-Report-October-December-2019.xlsx

#### 4.1 Wood Village Monitoring Requirements

147. Provide a summary of the following to evaluate the control strategies established for the Lower Columbia Slough Phosphate, Lead, and Bacteria TMDLs: *Schedule D.1.b*

Phosphate:

Lead:

Bacteria:

148. Indicate which of the following were completed:

For phosphate, monitor influent and effluent dissolved orthophosphate concentrations and total phosphate concentrations at a representative site in Fairview Lake (Reach 4) and Fairview Creek (Reach 5)

For lead, estimates of the effectiveness of controls to remove TSS

For bacteria, measuring E. coli concentrations and its distribution over flows (for example, flow duration intervals) to demonstrate compliance with E. coli criteria

If necessary, provide an explanation:

## 5.0 Water Quality Standards

149. During this monitoring year was it determined or reported that the MS4 discharge caused or contributed to an excursion of an applicable water quality standard? *Schedule A.1.b*

Yes  No

If necessary, provide an explanation:

150. How and when did the excursion of an applicable water quality standard occur? *Schedule A.1.b*

If necessary, provide an explanation:

There was no excursion identified.

151. Was the excursion self-reported or did DEQ send written notification? *Schedule A.1.b*

Self-reported: Yes  No

If necessary, provide an explanation:

NA

152. Within 48 hours was an investigation started into the cause of the water quality excursion? *Schedule A.1.b.i*

Yes  No

If necessary, provide an explanation:

NA

153. Within 30 days of becoming aware of the excursion, was DEQ notified in writing, if self-reporting? *Schedule A.1.b.ii*

Yes  No

If necessary, provide an explanation:

NA

154. Within 60 days of becoming aware of or being notified of the excursion, was a report submitted to DEQ that documents the following: *Schedule A.1.b.iii*

The results of the investigation, including the date the excursion was discovered

A brief description of the conditions that triggered the violation or the cause

Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed

If necessary, provide an explanation:

NA

155. Were the corrective actions implemented in accordance with the schedule approved by DEQ? *Schedule A.1.b*

Yes  No

If necessary, provide an explanation:

NA

156. Provide any additional comments or narrative description, if necessary:

## **Attachments**

For Item:

- 85. Section 810 Public Works Standard Spec. Manual.
- 86. DEQ Erosion and Sediment Control Example plan.
- 89. ESCP review template checklist.
- 97. Construction Site Inspection Form
- 111, 118. Water Quality Requirements 2020-07-15
- 146. Quarterly-TMDL-Report-October-December-2019.xlsx



## **800 – EROSION CONTROL and SEDIMENT PREVENTION**

### **810.00.00 – General**

#### ***810.01.01 - Description***

All construction sites of any size, included but not limited to, commercial or residential developments, lot(s), utilities, streets, or other types of construction related activities that may produce any soil erosion, sediments or other undesirable substances shall implement and maintain erosion and sedimentation prevention best management practices for preventing and minimizing such erosion, or sedimentation that may adversely affect storm water quality and adjacent property.

This work consists of installation, maintenance and removal of erosion and sediment prevention measures such as berms, dikes, swales, weirs, dams, sediment traps, sediment basins, erosion matting, temporary and permanent seeding, sodding, temporary and permanent mulching, slope drains, sediment fences and other sediment barriers, gravel construction accesses used to prevent erosion and off-site sedimentation.

**No construction work may proceed until the Public Works Department has issued an “Erosion Prevention Permit” in combination with a “Public Works Construction Permit”.**

#### ***810.10.01 - References***

Oregon Administrative Rules (OAR) and Oregon Revised Statutes (ORS) current standards and revisions as may apply to Erosion and Sediment Control.

Oregon Department of Fish and Wildlife (ODFW) current standards and revisions as may apply to Erosion and Sediment Control.

Oregon Department of State Lands (ODL) current standards and revisions as may apply to Erosion and Sediment Control.

Oregon Standard Specifications for Construction and Standard Drawings, 2008, as they may apply to Erosion and Sediment Control.

Oregon Department of Environmental Quality current standards and revisions as may apply to Erosion and Sediment Control.

American Society for Testing and Materials (ASTM) as they may apply to Erosion and Sediment Control materials.

American Public Works Association (APWA), 2009, "Standard Specifications for Public Works Construction" as may apply to Erosion and Sediment Control.

City of Central Point Municipal Code (CPMC) as may apply to Erosion and Sediment Control Public Storm Water Systems.

Rogue Valley Sanitary Services, Standards and Specifications as may apply to Erosion and Sediment Control and Storm Water systems.

City of Central Point, Department of Public Works, Standards and Specifications as may apply to Erosion and Sediment Control and Storm Water systems.

Rogue Valley Stormwater Quality Design Manual, Jan. 2006

Illicit Discharge Detection and Elimination Manual, Oct 2004

## **820.00.00 - CONSTRUCTION SITE MANAGEMENT PLAN (CSMP)**

### ***820.10.01 – Submittals***

The Construction Site Management Plan (CSMP) shall be prepared for all projects.

The Applicant shall submit a CSMP for approval to the Public Works Department in conjunction with any commercial or private development plans prior to issuance of a Public Works Department Construction Permit.

Contractors shall submit a CSMP developed in coordination with the project work schedule not less than 10 working days prior to the start of construction for all other work not included in the development process noted above. This would normally include but not be limited to utility work projects, publicly funded construction or re-construction projects and maintenance projects.

The Construction Site Management Plan shall contain sufficient information to describe the site development and the system(s) intended to control erosion and prevent off-site damage from erosion and sedimentation. The CSMP shall include, but not be limited to, the following:

1. A site location and vicinity map.
2. A site development drawing at a standardized engineering scale, such as 1" 40', containing the following site conditions:
  - a) Soil type
  - b) On-site elevations and/or topographic information adequate to determine drainage patterns and slopes.
  - c) Hydrology, including surface drainage and wetlands.
  - d) Existing vegetation.
  - e) Natural resource sites and designated buffer areas.
3. Plans that show site control measures for preventing erosion and sedimentation into

the City's storm water sewer systems and related resources, including supporting calculations, such as hydraulics and soil loss equation, and assumptions for a 5-year or 10-year storm event as required by City design policy.

4. Off-site and on-site access routes for construction and maintenance vehicles.
5. Borrow and waste disposal areas.
6. Debris and garbage disposal areas.
7. Vegetation specifications for temporary and permanent stabilization.
8. Construction schedule, including the implementation of construction site management practices and expected time period of land disturbance activities.
9. Manners of storage and disposal of materials (e.g., sand, lumber, insulation, paints, thinners, fertilizers, fuels).
10. Temporary and permanent storm drainage facilities.
11. Measures to be undertaken to minimize the extent of exposed soils.
12. Areas where construction vehicles' wheels will be washed.
13. Methods and places for concrete-wash disposal.
14. Disturbed areas and other areas that are physically protected from potential disturbance, such as fencing.

The PWD will provide a written evaluation of the submitted CSMP to the applicant indicating any required modifications within 15 business days of receipt. During the life of the contract, the Applicant or Contractor shall submit any proposed changes to the approved CSMP to the PWD for approval before implementing the changes.

PWD approval of the CSMP does not necessarily reflect concurrence by the City of Central Point that the proposed measures will work. The Engineer or Contractor shall inspect, maintain, and adjust the erosion and sedimentation control measures in place to prevent and minimize negative impacts to storm water quality. Inspecting, maintaining, and adjusting the erosion control measures in place, is considered incidental work and no separate payment will be made.

The Contractor shall install additional measures to the CSMP as directed by the Engineer to improve the functionality of the CSMP.

## **820.20.00 – Site Monitoring**

### ***820.20.01 - Erosion and Sedimentation Control Manager (ESCM)***

The contractor shall designate one employee, thoroughly experienced in all aspects of construction, as Erosion and Sedimentation Control Manager (ESCM). Any change in the appointment of this individual during the term of the contract requires written submission and approval by the Engineer. The ESCM duties include:

1. Inspect erosion controls on active construction sites daily.
2. Inspect erosion controls on inactive sites at least monthly.
3. Inspect erosion controls during rainy periods on both inactive and active sites at least daily.
4. Immediately correct and modify erosion and sedimentation controls, maintaining compliance with the approved CSMP at all times.
5. Update the CSMP on a weekly basis to reflect necessary changes made.
6. Accompany the Engineer and/or the PWD on inspections and, if requested, on inspections made by other regulating agency representatives.
7. Mobilize crews to make immediate repairs to the controls or install controls during working and nonworking hours.

No work shall start until the CSMP and ESCM have been approved by the PWD and a Public Works Construction Permit has been issued.

## **820.30.00 – Erosion Prevention Permits**

### ***820.30.01 - Requirements***

Erosion Prevention Permits in combination with Public Works Construction Permits are required for all construction related activity that will:

1. Disturb any area of land being developed or constructed upon, which has the potential for erosion, production of sediment or production of other undesirable materials that may adversely affect storm water. Or:
2. is located in a sensitive area.

Criteria for a Sensitive Area:

- a. The slope of the parcel in the area of disturbance is greater than 10%
- b. The site contains highly erodible soils or soils that produce sediment; or
- c. The parcel or tax lot of record has the potential to directly drain into a water or wetland feature, or its designated buffer area.
- d. Is located in such a manner as to adversely affect the City storm water sewer system.
- e. Is located in such a manner as to erode soil material from or deposit sediment on adjacent property.

The Contractor shall have a certified professional prepare the permit application and the CSMP.

The Contractor shall be responsible for performing all construction activities in accordance with the approved Erosion Prevention Permit and the CSMP.

Non Compliance

The Contractor's operation will be suspended whenever construction related activities are being done contrary to and in violation of applicable requirements of Central Point Municipal Code (CPMC), these specifications or the Erosion Prevention Permit.

Upon determination that the Contractor is violating (CPMC), these specifications, or the Erosion Prevention Permit, the City may issue a citation and/or penalty. Where such citation is issued, the Contractor shall pay to the City or property owner(s), or both if deemed by the court of jurisdiction, the penalties for each and every such day in violation. The Contractor shall also be required to promptly repair and remedy any damages to property at his own expense.

## **830.00.00 – MATERIALS**

### ***830.10.01 – Plastic Sheeting***

Plastic sheeting shall be Polyethylene plastic with a minimum thickness of 6 mils.

### **830.20.00 – Erosion Control Matting**

#### ***830.20.01 – Jute Matting***

The yarn shall be loosely twisted construction and shall not vary in thickness by more than one half of its normal diameter. The weave shall provide openings of about 1 square inch.

Furnish the matting in widths of 45 inches or more, continuous lengths of not less than 150 feet, and weigh not less than 0.9 pounds per square yard.

Use 12 gauge staples or heavier steel wire that is bent to a U-shape 2 inches wide. Staples shall not be less than 10 inches long unless the Engineer allows a shorter length for hardpan soil conditions.

#### ***830.20.02 – Excelsior Matting***

Excelsior matting shall consist of a machine-produced blanket of curled-wood fibers, of which 80% are 6 inches or longer. Furnish a blanket of uniform thickness, with the fiber evenly distributed over the entire area of the mat.

Cover the topside of the matting with a maximum 3" x 3" size mesh of high wet-strength, twisted Kraft paper, or a maximum 2" x 2" biodegradable, extended plastic mesh. Make the matting smolder-resistant without the use of chemical additives.

Excelsior matting shall have a minimum dry weight of 0.8 pounds per square yard ( $\pm 10\%$ ).

Furnish in minimum 36-inch wide rolls.

Wire staples for excelsior matting shall be the same as specified for jute matting.

**830.20.03 - Alternate Matting Material**

Submit any proposed alternate material with specifications, costs, and manufacturer's literature to the Engineer for consideration. Alternate material may be used only if approved by the Engineer.

**830.30.00 – Silt Fences**

The Geo-textile Fabric shall conform to Section 940, Geo-Textile Construction Fabric and the following:

	Test Methods	Units	Requirements		
			Supported Silt Fence	Unsupported Silt Fence	
				Geotextile Elongation >50%(I)	Geotextile Elongation <50%(I)
Grab Strength	ASTM	Lbs	90	124	124
MD	D 4632	force	90	100	100
CD					
Permeability (1)	ASTM D 4491	Sec	0.05	0.05	0.05
Apparent Opening Size	ASTM D 4751	In.	0.20 max. Avg. roll value	0.20 max. Avg. roll value	0.20 max. Avg. roll value
Ultraviolet Stability (Retained Strength)	ASTM D 4355	%	70% after 500 hrs of exposure		70% after 500 hrs of exposure



### **830.30.01 – Field Fabricated Silt Fence**

As a basis of acceptance, furnish either a manufacturer's brochure or a manufacturer's certification. The silt fence system shall be able to withstand sediment, water, and wind loads associated with the intended use.

### **830.30.02 – Manufactured Silt Fence**

Submit catalog descriptions of the silt fence system to the Engineer for approval prior to installation. As a minimum the silt fence system shall have post pockets and be able to withstand sediment, water, and wind loads associated with the intended use.

### **830.40.00 – Other Silt Barrier Materials**

#### **830.40.01 – Straw Bales**

Standard 40 to 60 pound rectangular bales of cereal grain straw or grass seed straw which are wire-bound or string-tied.

#### **830.40.02 – Bio-bags**

18" x 8" x 30" bags made of ½-inch plastic mesh, weighing approx. 45 pounds, and filled with clean,  
100 percent recycled wood product waste.

#### **830.40.03 - Sandbags**

24" X 12" X 6" tightly woven sacks of durable weather-resistant material filled with sand filler material.

## **830.50.00 – Seed**

### ***830.50.01 – Seed Certification***

All rates are for pure live seed. Submit bag tags for verification.

Deliver all grass seed in standard, sealed containers. Label each container with the following:

- a) The kind and variety of the seed.
- b) The kind and variety of each seed in a mixture, of 3 % or more.
- c) Percent of germination (each kind).
- d) Percent of pure seed (each kind).
- e) Percent and kind of other crop.
- f) Percent of inert (not to exceed 1.5%).
- g) Percent of weed seed.
- h) Percent of noxious weed seed.
- i) Date of test.

In addition, tag all grass seed “Oregon Certified Seed” or the equivalent tag from another state, and be from the most recent crop available. Test and label each kind according to the Oregon Seed Law and Federal Seed Act. Test the seed within 9 months of the delivery date and shall not be sprouted, moldy, or show evidence of having been wet or otherwise damaged.

The minimum requirements of Oregon certified seed are as published in the current year’s [Oregon Certified Seed Handbook](#) available from County Extension Offices or Oregon State University.

Each lot of seed shall be subject to inspection, sampling, and testing upon delivery to the project. Reject seed that is not labeled or that does not conform to specifications replace at the providers expense.

### **830.50.02 – Seed Type**

Erosion control seed will be mixed and applied in accordance to the following:

Temporary application: Annual rye grass or perennial rye grass at 200 pounds per acre.

Permanent application: Perennial rye grass at 200 pounds per acre.

### **830.60.00 – Mulching**

#### **830.60.01 – Hydro Mulch**

A cellulose fiber produced from virgin wood, grass straw, or a paper fiber product. Product shall be approved by City PWD.

#### **830.60.02 – Grass Straw Mulch**

Straw mulch for non-hydro seeding applications shall be grass straw from bent grass, bluegrass, fescue or ryegrass, singly or in combination. The straw shall not be moldy, caked, decayed or of otherwise low quality. Use a straw binder or tackifier.

- 1) Tracer - Approved Hydro mulch fibers.
- 2) Tackifier(s) - Approved commercial tackifier per Oregon Standard Specifications for Construction, Section 00280.44(d).

### **830.70.00 – Fertilizer**

#### **830.70.01 – Requirements**

General Use - 22-16-8 inorganic fertilizer shall be analyzed to contain 22% nitrogen, 16%

available phosphoric acid, 8% soluble potash, and include a minimum of 2% sulfur. The fertilizer shall contain not less than 30% available water-insoluble nitrogen derived by incorporating one of the following:

1. A minimum 800 lbs. of urea formaldehyde per ton of fertilizer that has a minimum Activity Index (AI) of 40. The AI will be determined by the Association of Official Agricultural Chemists method.
2. A minimum of 500 lbs. of Isobutylidene Diurea (IBDU) per ton of fertilizer.
3. Non-phosphorous - Polymer coated-sulfur coated urea, PCSCU, (39-0-0)

### **830.80.00 – Protection Fence**

The Fence shall be a minimum of (four) 4 ft high of poly construction or snow fencing capable of protecting the area from foot traffic. Other suitable barriers or warning devices shall be installed where required to warn or prevent vehicular traffic from entering the area.

## **840.00.00 – Construction and Workmanship**

### ***840.10.01 - General***

Install the erosion and sedimentation control measures prior to all clearing, grading, and other land alteration activities, ensuring that erosion and sediment-laden water does not enter the drainage system or waterways or violate applicable water standards. Disturbed areas will be limited to the amount that the Contractor can effectively control. Incorporate all permanent erosion and sedimentation control features into the project prior to construction. During construction activities, all erosion and sedimentation control measures shown on the plans shall be maintained to prevent and minimize negative impacts to water quality and related natural resources. Correct operational procedures and repair equipment that cause erosion, sedimentation, and/or contamination such as fueling operations and leaking equipment. Remove and dispose of contaminated soils.

No construction activities shall be performed which result in:

1. The deposit or discharge of sediment from a site onto adjacent properties or into water features and related natural resources.
2. Degradation of water features due to removal of stream bank vegetation from construction sites.
3. The deposition of mud, dirt, sediment, concrete washout, trash, or other similar construction related material exceeding one-half cubic foot in volume for every 1,000 square feet of disturbed area onto public rights of way and private streets, and into the City's storm water system and related natural resources, either by direct deposit, dropping, discharge, erosion, or tracking by construction vehicles. Any such discharge shall be cleaned-up at the end of the current work shift in which the deposit occurred, or at the end of the current workday, whichever comes first.
4. Exposure of soils and stockpile areas to storm water runoff without secondary containment and treatment measures.
5. Earth slides, mudflows, earth sloughing, or other earth movement that may leave the project limits.
6. The discharge of runoff containing construction related contaminants into the City's storm water system or related natural resources.
7. Release onto the site of hazardous substances, such as paints, thinners, fuels, and other chemical due to improper handling or storage.

Design and implement management measures to meet the above outcomes with the seasonal variation of rainfall, temperature, and other climatic factors relative to the timing of land disturbance activities.

Adjust management measures to meet increased storm water runoff flows and velocities between November 1 and April 30.

No permit or other approval issued by the City shall be deemed to authorize any violation of the above prohibitions.

#### **840.10.02 – Construction Site Practices**

The Contractor shall establish and implement construction site management practices that will prevent toxic materials and other debris from entering the City's storm drainage and waterway systems. The Contractor shall:

1. Properly store chemicals (pesticides, fertilizers, fuels, paints, thinners, etc.) at the construction site;
2. Properly dispose of construction waste materials, garbage, rubbish, and sanitary waste
3. Immediately clean up spills of toxic materials
4. Wash excess concrete material in an approved disposal site;
6. Cover stockpiles;
7. Clean construction vehicles before entering streets or public rights of way.
8. Clean up "Track-out" mud and debris resulting from construction vehicles at each end of shift daily.

#### **840.10.04 – Wet Season (November to May) and Temporary Work Suspension**

Prior to the wet season (November 1 through April 30) and temporary work suspension the Contractor shall meet with the Engineer to review and update the CSMP to assure that appropriate controls are in place and maintained during the wet season work and temporary work suspension periods.

#### **840.10.05 – Disturbance Limits**

Construction site clearing limits will be clearly flagged by the Engineer and/or Contractor. No ground disturbance shall be permitted beyond the flagged boundary. The contractor shall maintain the flagging for the duration of the construction.

#### **840.10.06 – Perimeter Controls**

Install all appropriate perimeter controls prior to any site grubbing operation. Perimeter controls

include side ditches or berms in fill areas, silt fence along the banks of existing streams, streets, toes of slopes and construction accesses.

#### ***840.10.07 – Soil and slope Protection and Stabilization***

The Contractor shall temporarily or permanently protect and stabilize all soils that are exposed and disturbed during construction.

Protection and stabilization shall consist of any method or combination of methods that will produce the desired end result.

#### ***840.10.08 – Temporary Protection and Stabilization***

The Contractor shall immediately protect and stabilize all exposed or disturbed soils which will not be disturbed by grading or other earthwork activities for (fourteen) 14 calendar days or longer. Exemptions to temporary protection and stabilization include areas of embankment sub-grade or excavation where pavement will be placed.

From September 1 to May 1, there are no exemptions to temporary protection and stabilization requirements.

#### ***840.10.09 – Permanent Protection and Stabilization***

The Contractor shall complete permanent protection and stabilization within 7 (seven) calendar days following the completed construction of finished grades.

Permanent protection and stabilization methods include permanent seeding and mulching, riprap protection, engineered slope protection and stabilization as shown on the plans or as directed by the Engineer.

Permanent seeding work done in conjunction with permanent mulching outside the spring and fall seeding dates shall be considered temporary until (three) 3 weeks into the next permanent

seeding season. A suitable stand of grass consists of a uniform stand having a 3-inch minimum height with bare spots not larger than 6 inches square will be allowed to a maximum of 3 percent of the seeded area. If a suitable stand of grass has not been achieved by the seeding dates, fertilize and reseed.

Seeding dates are as follows:

- a.) February 1 to April 30 (spring seeding)
- b.) September 1 to October 15 (fall seeding).

During the seeding dates, use Hydro mulch or straw mulch. For all other seeding, use straw mulch.

## **840.20.00 – Seeding**

### ***850.20.01 - Requirements***

These specifications apply to all temporary and permanent protection and stabilization. Uniformly apply seed and fertilizer at the rates indicated and by one of the following kinds of equipment as the Contractor elects.

Thoroughly mix seeds when more than one kind of seed is to be used. Seed and fertilizer may be combined in water for application by hydraulic means. When fertilizer and seed are to be applied in dry condition, apply them separately. Applied from separate compartments, the application may be done in one operation.

Place the seed and fertilizer before placing the mulch, except the fertilizer and seed may be applied after mulching under the following conditions:

1. If the mulch is punched into the soil by mechanized means.
2. If it is necessary to hold down the mulch with netting or like material.
3. On 1 ½:1 or steeper slopes where a slurry mixture would tend to run down the slope
4. Double the rate of application and add a green dye to visibly aid in uniform application.



Prevent the seed and fertilizer from falling or drifting onto areas occupied by rock base, rock shoulders, plant beds or other areas where grass is detrimental or undesirable.

#### **840.20.02 – Application Methods**

For both temporary and permanent protection and stabilization seeding work, apply seed and fertilizer using one of the following kinds of equipment.

1. Grass seed drills or seeders that work fertilizer into the soil and place the seed under about a ¼ inch soil cover.
2. Hydraulic equipment that continuously mixes and agitates the slurry and applies the mixture uniformly through a pressure-spray system providing a continuous, non-fluctuating delivery. Apply the materials using a sweeping, horizontal motion of the nozzle.

Add a nontoxic tracer to the seed and fertilizer mixture to visibly aid uniform application. Do not exceed 250 pounds per acre when wood cellulose fiber is used as a tracer.

3. Blower equipment using air pressure and an adjustable spout that uniformly applies dry fertilizer and dry seed in separate and successive applications at constant measured rates. Apply the materials using a sweeping, horizontal motion of the spout.
4. Hand-operated mechanical spreaders that uniformly apply dry fertilizer and dry seed separately and successively in prescribed quantities.

Regardless of equipment methods used, prevent drift and displacement of seed and fertilizer. If equipment and methods of application results in wasting material, make corrections as directed.

Do not disturb areas previously completed. If areas are disturbed, re-treat as directed at the Contractor's expense.

Area Preparation:

1. On cut slopes 1-1/2:1 or flatter, roughen the surface parallel with slope contours and loosen soil to a depth of 3" to 5".
2. On cut slopes steeper than 1-1/2:1, when seedbed preparation is difficult, cut furrows along the contours or stair-step during construction. On fill slopes 3:1 or steeper, make dozer tracks so that the ridges run parallel to slope contours.
3. Remove rocks, weeds, debris and other matter detrimental or toxic to the growth of grass from areas to be seeded. On slopes 3:1 or less, remove all loose stones larger than 2 inches in areas that will be maintained by mowing equipment.
5. When topsoil is specified, loosen existing ground surface to a depth of 4" to 6" before placing topsoil.

Application rate

Uniformly apply at the rate of 200 pounds of seed per acre.

Fertilizer

Apply as specified. The contractor shall notify the Engineer at least 2 calendar days in advance of starting operations, and keep the Engineer advised of the operations.

1. General-Use - Apply general use fertilizer at distances greater than 50 feet from permanent bodies of water, creek channels, or other running streams including irrigation channels at a rate of 400 pounds per acre.
2. Non-phosphorous - Apply non-phosphorous fertilizers within 50 feet of permanent bodies of water, creek channels, or other running streams including irrigation channels at a rate of 200 pounds per acre.

## **840.30.00 – Mulching**

### ***840.30.01 – Requirements***

These specifications apply to all temporary and permanent stabilization. Evenly apply mulch material according to these provisions and the special provisions within 48 hours after seeding and fertilizing.

Place mulch after seeding and fertilizing, except for those conditions such as hydro seeding allowing the seed and mulch to be applied together.

Replace material that becomes displaced before acceptance of the work.

Mulch areas not accessible to heavy equipment by approved methods.

Prevent damage to prepared areas and to fertilizer, seed and mulch in place.

Prevent mulch material from plants, roadways, gravel shoulders, structures, areas where mulching is not specified, or which collects at the ends of culverts or accumulates to excessive depths, as directed.

If tacking agents are used with mulch, use protective covering on structures and objects where coverage and stains would be objectionable. Protect vehicles and persons from drifting spray.

Apply one of the following mulches at the rate indicated:

1. Place grass straw mulch to a reasonably uniform thickness of 1-½ to 2-½ inches, and average approximately 2 inches in loose condition. This rate requires between 2 and 3 tons of dry mulch per acre. The grass straw mulch shall be loose enough for sunlight to penetrate and air to circulate; but dense enough to shade the ground, reduce water evaporation, and materially reduce soil erosion. Retain grass straw mulch in place, with the addition of one of the following tackifiers.

- J-TAC, 40 pounds per acre on slopes of 2:1 or less and 80 pounds per acre on slopes greater than 2:1. Green-colored wood cellulose fiber may be added after the tackifier has been mixed.
  - Wood or grass straw cellulose fiber, 750 pounds per acre.
2. Place waterborne mulch as specified in Oregon Standard Specifications for Construction, 2008, Section 280.44(d), where fibers are uniformly suspended in water, to the seeded areas using hydraulic pressure equipment. Unless otherwise specified apply at least 2,000 pounds per acre, based on dry fiber weight. On slopes steeper than 1 1/2:1, use Hydro mulch, at 1 ½ times the specified rate with tackifier at 80 pounds per acre. If wood or grass cellulose fiber is used as a tracer for seed application, this weight may be included as part of the required 2,000 pounds per acre minimum.

## **840.40.00 – Plastic Sheet Covering**

### ***840.40.01 – Requirements***

Cover and secure tightly in place. Overlap seams 12 inches. For seams parallel to the slope contour, lap the uphill sheet over the downhill sheet. Control drainage from areas covered by plastic sheeting so that no discharge occurs directly onto uncontrolled disturbed areas of the construction site. Direct water away from areas above the plastic to prevent erosion and undermining beneath the plastic sheeting.

## **840.50.00 – Erosion Control Matting**

### ***840.50.01 - Requirements***

Prepare soil for seeding. Apply matting so it is in complete contact with the soil to prevent erosion occurring beneath it. Place and securely anchor erosion matting to the slope per manufacturer's recommendations.

**840.60.00 – Silt Fence**

**840.60.01 - Requirements**

Supported (mesh) and unsupported are as follows:

1. Field-Fabricated Silt Fence

Install supported fence by fastening mesh and geo-textile securely to the up-slope side of the posts. Use stitched loops over posts for unsupported silt fence. Eliminate the mesh for unsupported fence. Only manufacturer’s factory seams are acceptable; field-sewn seams are not. When using geo-textile and wire fabric, use a continuous roll of geo-textile cut to the length of the barrier to avoid joints. When joints are necessary, splice geo-textile only at a support post and use a minimum 6-inch overlap. Securely fasten each end of the fence to the end post. Bury the silt fence a minimum on 6 inches.

2. Manufactured Silt Fence System

Install in accordance with plans, special provisions, and manufacturer’s recommendations.

	Requirements		
	Supported  Silt Fence	Unsupported Silt Fence	
		Geo-textile Elongation> 50% (1)	Geo-textile Elongation <50% (1)
Maximum Post Spacing	4 ft	4 ft	6.5 ft

(1) As measured in accordance with ASTM D4632

## **850.00.00 – Construction Access and Control**

### ***850.10.01 - Requirements***

Place and arrange controls as shown in the CSMP or as directed by the Engineer. Install temporary gravel construction entrance/exit structures for construction traffic moving directly onto a public road or rights of way.

Track-out of mud, dirt, debris or other undesirable materials onto streets or sidewalks is not allowed and will not be permitted. Prompt cleanup of such materials is required.

### ***850.10.02 – Straw Bales, Bio-bags, and Sand bags***

Place and arrange controls as shown in the CSMP or as directed by the Engineer.

### ***850.10.03 – Storm Water System Inlet Protection***

Construct controls as required for directing the flow of water through the filters to the inlet in such a manner as to prevent inlet bypass or blockage.

### ***850.10.04 – Protection Fencing***

Construct protection fencing as shown in the CSMP or as directed by the Engineer. The fence supports shall have a maximum spacing of ten feet.

## **860.00.00 – Maintenance and Removal**

### **860.10.01 - Requirements**

The Contractor shall maintain installed erosion and sedimentation controls in good working order at all times and retain the controls until the project is completed, stabilized, and final acceptance is issued. Should a control measure not function effectively, the Contractor shall perform one of the following:

1. Immediately repair the control.
2. Remove and restore the control.
3. Provide additional controls.

Remove and re-grade sediment into slopes or remove and dispose of sediment off site. Do not flush sediment-laden water into the downstream system.

### **860.10.02 – Maintenance**

1. Catch Basins - Maintain catch basins (inlets with sumps or inverted siphons) so that no more than one-half foot sediment depth accumulates within traps or sumps.
2. Sediment Controls - Remove sediment from controls such as silt fences, straw bale barriers, check dams and sediment ponds once it has reached 1/3 of the exposed height of the control.
3. Paved Areas - Keep all paved areas and gutters clean until the notice of completion is issued.
4. Construction Access Points - Add and remove gravel, aggregate or other material specified as needed to maintain proper function of the access pad.
5. Permanent Vegetative Stabilization - At the Contractors expense, reestablish

permanent stabilized areas disturbed by Contractor's operations or other activities within 7 calendar days from the time of disturbance. At the Contractor's expense, repair anchored straw displaced by wind, water, or Contractors operations within 2 days of displacement.

**860.10.03 - Removal**

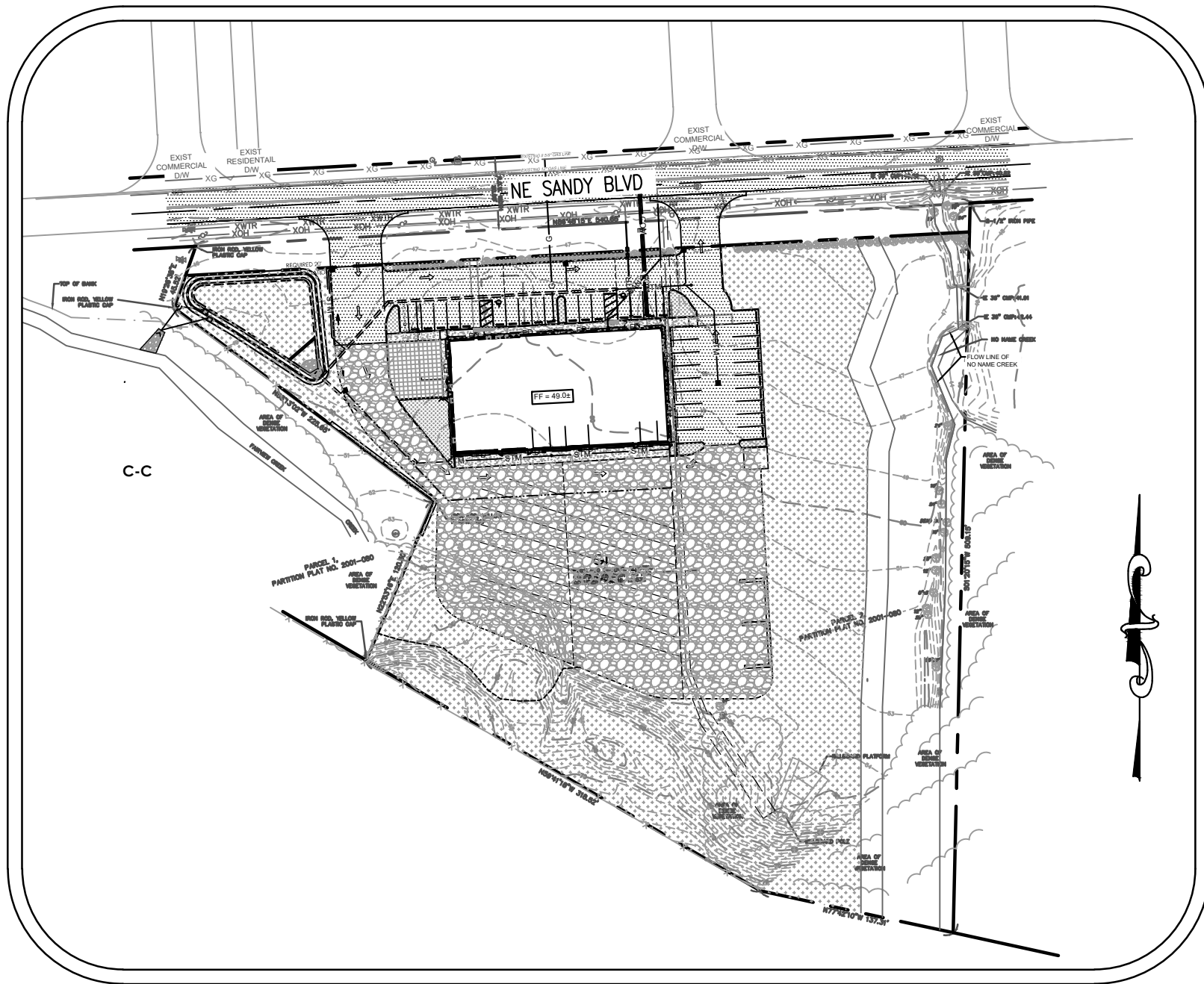
The contractor shall remove all temporary protection measures and any sediment at the completion of the work. Immediately shape and permanently protect and stabilize the areas affected by the removal process.

All materials associated with temporary erosion and sedimentation control that are not incorporated into the permanent work become the property of the Contractor.

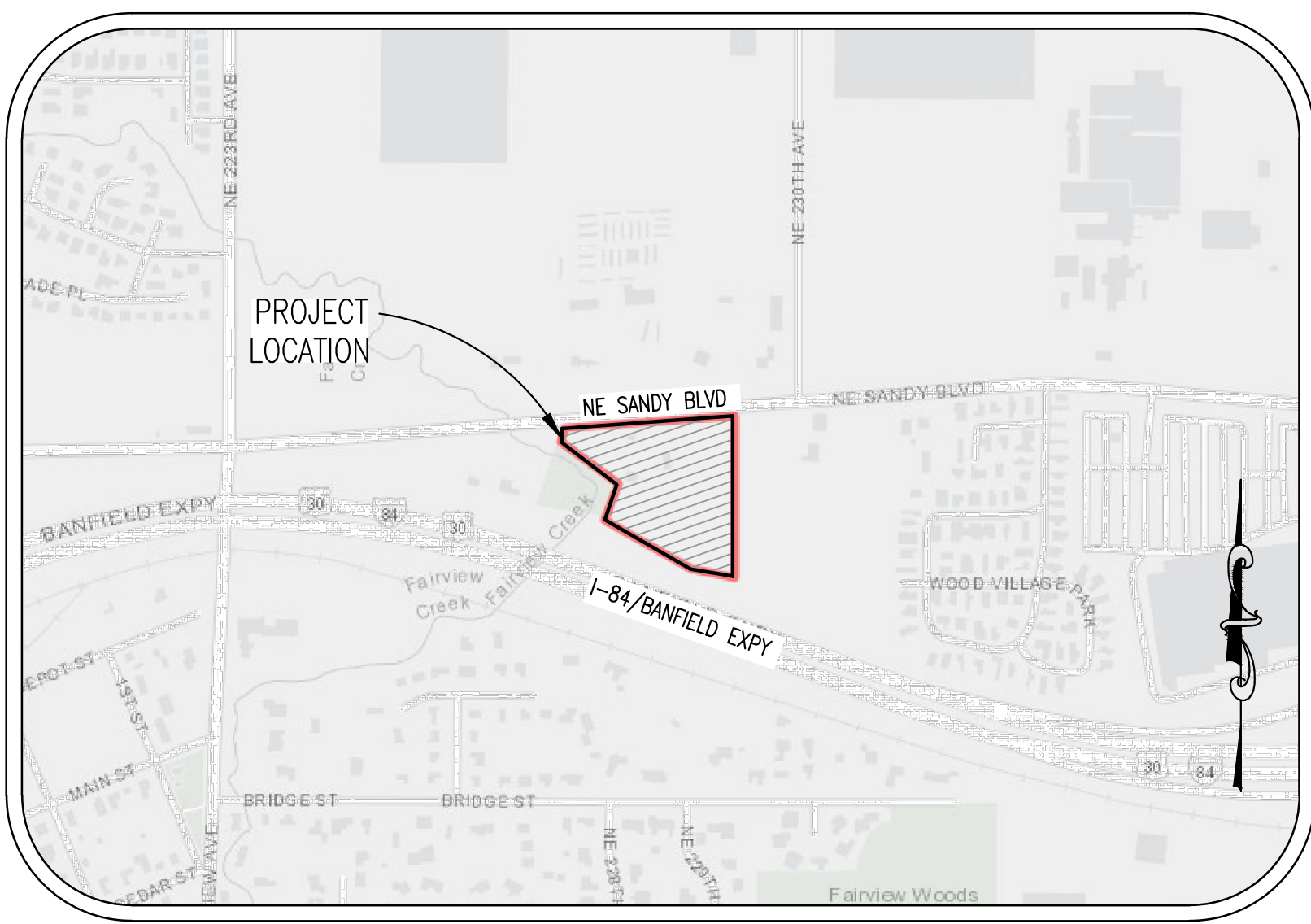
Remove the materials from the area and dispose of materials in accordance with local, State, and Federal laws and to a suitable offsite location.



# SAMPLE EROSION AND SEDIMENT CONTROL PLAN (ESCP) DRAWINGS



**SITE MAP** 1" = 100' - 0"



**VICINITY MAP** NTS

**PROJECT LOCATION:**

XXXXX NE SANDY BLVD  
 THE CITY OF FAIRVIEW, OREGON  
 LATITUDE = XXXX, LONGITUDE = XXX

**PROPERTY DESCRIPTION:**

TAX LOT: XXXX (MULTNOMAH COUNTY TAX MAP (XXXXXX)) LOCATED IN A PORTION OF THE SE 1/4 OF THE NW 1/4 OF SECTION 27, TOWNSHIP 1 NORTH, RANGE 3 EAST, WILLAMETTE MERIDIAN, MULTNOMAH COUNTY, OREGON.

**ATTENTION EXCAVATORS:**

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

**OWNER**

**ARCHITECT**

**CIVIL ENGINEERS**

**SURVEYOR**

**NARRATIVE DESCRIPTIONS**

**EXISTING SITE CONDITIONS**

\* THE EXISTING SITE IS A SINGLE TAX LOT WITH TWO GRAVEL ACCESS DRIVEWAYS, THREE CONCRETE SLABS FROM PREVIOUS BUILDINGS, GRAVEL PARKING AREAS, AND NATIVE DENSE GRASS, BRUSH AND TREE AREAS. THERE ARE TREES ON THE EAST SIDE OF THE PROPERTY NEAR "NO NAME CREEK". "FAIRVIEW CREEK" IS JUST WEST OF THE PROPERTY. THE SITE SLOPES FROM THE SOUTH TO THE NORTHWEST WITH A STEEPLY SLOPING FILL SLOPE BANK BOUNDING THE SOUTH PROPERTY LINE WHICH ABUTS THE I-84 FREEWAY AND SLOPES MORE GRADUALLY FROM THE TOE OF THE EMBANKMENT TO SANDY BLVD. THE ONSITE PROPERTY IS APPROXIMATELY 172,433 SF IN SIZE AFTER THE NEW 20 FT SANDY BLVD RIGHT-OF-WAY DEDICATION. SANDY BLVD ROW INCLUDES AN ASPHALT ROADWAY AND ROADSIDE DITCHES AND GENERALLY SLOPES WEST.

**DEVELOPED CONDITIONS**

\* THE PROPOSED ONSITE DEVELOPMENT CONSISTS OF THE CONSTRUCTION OF 1 STEEL FRAME BUILDING, CONCRETE SIDEWALKS, A PAVED ASPHALT PARKING LOT, A GRAVEL PARKING FLEET AREA, A STORM WATER QUALITY AND DETENTION FACILITY AND LANDSCAPING AREAS.  
 \* NEW BUILDING, CONCRETE SIDEWALK, AC PAVEMENT = 24,503 SF  
 \* NEW GRAVEL PARKING AREA = 44,311 SF  
 \* NEW STORM BASIN AREA & NEW OR EXISTING TO REMAIN LANDSCAPING AND VEGETATION = 100,772 SF  
 \* THE PROPOSED OFFSITE DEVELOPMENT CONSISTS OF (2) NEW DRIVEWAYS CONNECTING THE SITE TO NE SANDY BLVD AND NEW OR EXISTING LANDSCAPING.  
 \* NEW AC PAVEMENT DRIVEWAYS = 3,433 SF  
 \* NEW OR EXISTING TO REMAIN LANDSCAPING AND VEGETATION = 13,629 SF

**NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE**

\* CLEARING (Oct - Dec 2018)  
 \* MASS GRADING (Oct-Dec 2018)  
 \* UTILITY INSTALLATION (Nov 2018 - April 2019)  
 \* PAVING CONSTRUCTION (March 2019 - May 2019)  
 \* FINAL STABILIZATION (March 2019 - Nov 2019)

**ESTIMATE OF TOTAL PERMITTED PROJECT AREA**

\* TOTAL ESTIMATED PERMITTED SITE AREA = 192,468 SF = 4.42 ACRES

**TOTAL DISTURBED AREA**

\* TOTAL PRIVATE ONSITE AREA = 111,021 SF = 2.55 ACRE  
 \* TOTAL PUBLIC OFFSITE AREA = 17,063 SF = 0.39 ACRE  
 TOT. = 2.94 ACRES

**SITE SOIL CLASSIFICATION:**

WOLLENT SILT LOAM, 0-3% SLOPES  
 HYDROLOGIC SOIL GROUP C/D  
 EROSION POTENTIAL IS LOW TO MODERATE

**RECEIVING WATER BODIES:**

FAIRVIEW CREEK AND NO NAME CREEK

**PERMITTEE'S SITE INSPECTOR:**

COMPANY/AGENCY: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 FAX: \_\_\_\_\_  
 E-MAIL: \_\_\_\_\_  
 DESCRIPTION OF EXPERIENCE: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**INSPECTION FREQUENCY:**

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOW MELT, IS OCCURRING.  AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY MONTH.
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.
5. PERIODS DURING WHICH DISCHARGE IS UNLIKELY DUE TO FROZEN CONDITIONS.	MONTHLY. RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

Fill out these parts

Draft an ESCP sheet for each of these stages. More if necessary and depending on the size of the project.

Consider the soil type and topography when selecting BMPs. Erosion control methods are not one size fits all.

Don't forget to update DEQ if a new inspector is selected.

**STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:**

- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SCHEDULE A.12.B AND SCHEDULE B.1)
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SCHEDULE B.1.C AND B.2)
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (SCHEDULE B.2.C)
- ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.A)
- THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SCHEDULE A.12.C.I)
- SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SCHEDULE A.12.C.IV. AND V)
- PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.7.A.III)
- IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) AND (2))
- PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.A.V)
- MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FOOT WATERS OF THE STATE. (SCHEDULE A.7.B.II AND (2)(A)(B))
- INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SCHEDULE A.8.C.I.(5))
- CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SCHEDULE A.7.C)
- CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SCHEDULE A.7.D.I)
- ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATION MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS. (SCHEDULE A.8.C.II.(3))
- ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
- PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPs SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPs MUST BE IN PLACE PRIOR TO LANDDISTURBING ACTIVITIES. (SCHEDULE A.7.D.II AND A.8.C.I.(4))
- WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(5))
- CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SCHEDULE A.6)
- USE BMPs TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS, VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
- IMPLEMENT THE FOLLOWING BMPs WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A.7.E.III)
- USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.A.VI)
- THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.II)
- IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
- TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.B)
- AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A.7.E.II.(2))
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND BARE GROUND ACTIVITIES DURING WET WEATHER. (SCHEDULE A.7.A.I)
- SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
- OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.I)
- CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
- WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
- THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
- THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
- PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
- DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (SCHEDULE A.8.C.II.(1) AND D.3.C.II AND III)

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

**BMP MATRIX FOR CONSTRUCTION**

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

	CLEARING	MASS GRADING	UTILITY INSTALLATION	PAVING CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1 - MAY 31ST)
<b>EROSION PREVENTION</b>						
PRESERVE NATURAL VEGETATION	X	X	X	X	X	X
GROUND COVER		X			X	X
<b>HYDRAULIC APPLICATIONS</b>						
PLASTIC SHEETING	X	X	X	X	X	X
STRAW MULCH COVER		X	X	X	X	X
ROCK COVER					X	X
DUST CONTROL	X	X	X	X	X	X
TEMPORARY/PERMANENT SEEDING		X			X	X
BUFFER ZONE	X	X	X	X	X	X
<b>OTHER:</b>						
<b>SEDIMENT CONTROL</b>						
SEDIMENT FENCE (INTERIOR)	**X	X	X	X	X	X
STRAW WATTLES						
FILTER BERM						
INLET PROTECTION	**X	X	X	X	X	X
DEWATERING						
SEDIMENT TRAP						
NATURAL BUFFER ENCROACHMENT	X	X	X	X	X	X
<b>OTHER:</b>						
<b>RUN OFF CONTROL</b>						
CONSTRUCTION ENTRANCE	**X	X	X	X	X	X
PIPE SLOPE DRAIN						
OUTLET PROTECTION	X	X	X	X	X	X
SURFACE ROUGHENING		X			X	X
CHECK DAMS						
<b>OTHER:</b>						
<b>POLLUTION PREVENTION</b>						
PROPER SIGNAGE	X	X	X	X	X	X
HAZ WASTE MGMT	X	X	X	X	X	X
SPILL KIT ON-SITE	X	X	X	X	X	X
CONCRETE WASHOUT AREA			X	X	X	X
<b>OTHER:</b>						

\* SIGNIFIES ADDITIONAL BMP'S REQUIRED FOR WORK WITHIN 50' OF WATER OF THE STATE.  
 \*\* SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

**SHEET INDEX**

**EROSION AND SEDIMENT CONTROL PLANS**

- ESC050 EROSION AND SEDIMENT CONTROL COVER SHEET
- ESC051 CLEARING AND DEMOLITION EROSION AND SEDIMENT CONTROL PLAN
- ESC052 MASS GRADING AND STABILIZATION CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN
- ESC053 UTILITY CONSTRUCTION EROSION CONTROL PLAN
- ESC054 FOUNDATION PLAN EROSION CONTROL PLAN
- ESC055 EROSION AND SEDIMENT CONTROL DETAILS

**REVISIONS:**

10.23.2018	ESC PL CK
11.02.2018	ESC PL CK

**EROSION AND SEDIMENT CONTROL COVER SHEET**

CLIENT: \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_  
 DRAWING NO.: ESC050  
 DRAWN BY: \_\_\_\_\_  
 SCALE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DATE: SEPTEMBER 5, 2018

**PREPARED FOR:**  
 MULTNOMAH COUNTY  
 TAX LOTS: XXX

**PROJECT NAME**  
 OREGON  
 MULTNOMAH COUNTY TAX MAP XXX

Engineer Stamp Here  
 JOB NUMBER 18005  
 SHEET ESC050

# LEGEND

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT)
- PROPERTY LINE
- SEDIMENT FENCING
- CHAIN LINK CONSTRUCTION FENCE
- 50' BUFFER FROM OHWL
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- CONSTRUCTION ENTRANCE
- BIO-BAG
- EXISTING DRAINAGE FLOW DIRECTION

## PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
- SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.

Don't crowd the map! Provide the minimum amount of information necessary to communicate the erosion and sediment control needs for the specific stage of development. Also consider scale, don't try to fit a 10+ acre site on one sheet. Tile your drawings and make a key map. Review time is greatly reduced when the plan is easy to read and interpret.

The Natural Buffer is measured from the edge of the waterbody toward the upland.

When drafting your Erosion and Sediment Control Plan, consider the different stages of your project and the specific erosion and sediment control needs of each stage. Also consider your audience: make sure the construction crews can read and understand the plans.

Removing a lot of trees? Draft a sheet specifically for that. Cutting trees and removing root balls, especially on multiple acres, generates a large amount of disturbed and loose soil. Make sure to have a plan for proper management of that activity.

If less than 50' of the Natural Buffer is maintained, be sure to provide additional erosion controls and the rationale for choosing the selected BMP.

PRE-DEVELOPED STORM WATER RUN-OFF OF THE EXISTING AREA SHEET FLOWS NORTH WESTERLY TOWARDS NE SANDY BLVD TO A DITCH AND INTO FAIRVIEW CREEK.

### NOTES TO CONTRACTOR:

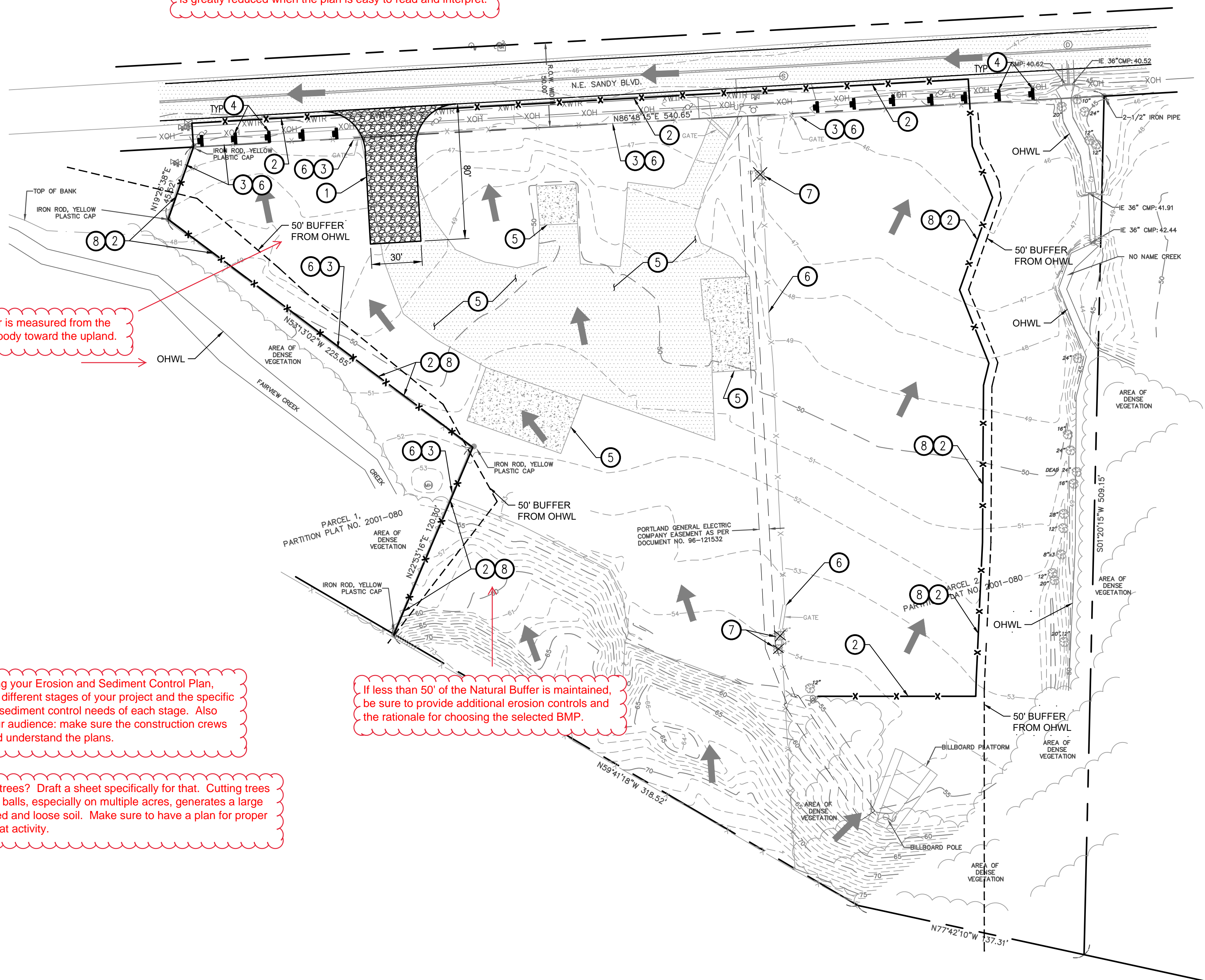
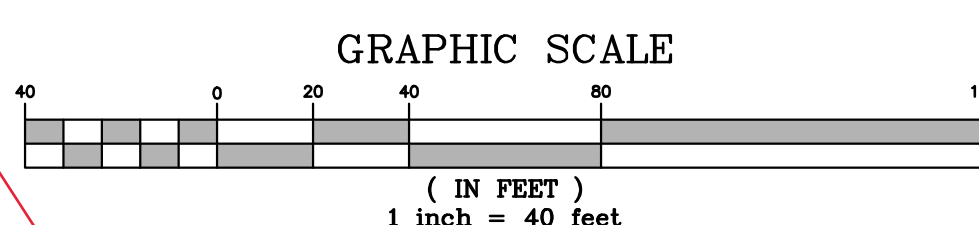
- PROVIDE COMBINATION INLET PROTECTION AND BIO BAGS AT ALL DISCOVERED CATCH BASIN AND STORM DRAIN INLETS (TYP) PER DETAIL 1 AND 2 ON SHEET ESC053.
- COORDINATE WITH OWNER TO PROTECT ANY DISCOVERED TREES TO REMAIN WITHIN THE CONSTRUCTION AREAS PER DETAIL 8 ON SHEET ESC055.
- CONSTRUCTION DEWATERING MUST FOLLOW THE NOTES ON SHEETS ESC052, ESC053, ESC054.

A legend is always necessary. Any symbol you use needs to be defined here. You can use numbered or lettered keynotes for descriptions as well.

### PROJECT INFORMATION KEYNOTES

- GRAVEL CONSTRUCTION ENTRANCE 30' WIDE X 80' LONG SIM TO DETAIL 3 ON SHEET ESC055.
- SEDIMENT FENCE, SEE DETAIL 4 ON SHEET ESC055.
- MAINTAIN EXISTING CHAIN LINK FENCE WITH GATE AROUND PERIMETER OF AREA OF CONSTRUCTION AND DISTURBANCE. SEDIMENT FENCE MAY FOLLOW CHAIN LINK FENCE WHERE APPLICABLE (TYP).
- PROVIDE BIO-BAG CHECK DAMS IN EXISTING DITCH AND FLOW LINE AT 20' O.C. MIN. SEE DETAIL 2 ON SHEET ESC055.
- EXISTING AC PAVEMENT/GRAVEL AND CONCRETE PADS TO BE REMOVED AND PROPERLY DISPOSED OF.
- EXISTING FENCE AND GATE(S) TO BE REMOVED AND/OR RELOCATED UNDER BUILDING PERMIT.
- EXISTING TREE TO BE REMOVED.
- INSTALL COMPOST SOCK ALONG EAST AND WEST PROPERTY LINE INSIDE THE SEDIMENT FENCE TO PROTECT CREEK'S BUFFER ZONE.

The first sheet should communicate the existing conditions - how is stormwater flowing at the beginning of the project? What structures will be demolished? The beginning stages of the project may not involve grading, but have a level of ground disturbance and staging that have specific erosion and sediment control needs.



REVISIONS:
10.23.2018 ESC PL CK
11.02.2018 ESC PL CK

## CLEARING AND DEMOLITION EROSION AND SEDIMENT CONTROL PLAN

CLIENT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_ DRAWING NO.: ESC051

DRAWN BY: \_\_\_\_\_ SCALE: 1" = 40'

CHECKED BY: \_\_\_\_\_ DATE: SEPTEMBER 5, 2018

PREPARED FOR: \_\_\_\_\_

MULTNOMAH COUNTY  
TAX LOTS: \_\_\_\_\_

OREGON  
MULTNOMAH COUNTY TAX MAP \_\_\_\_\_

JOB NUMBER  
18005

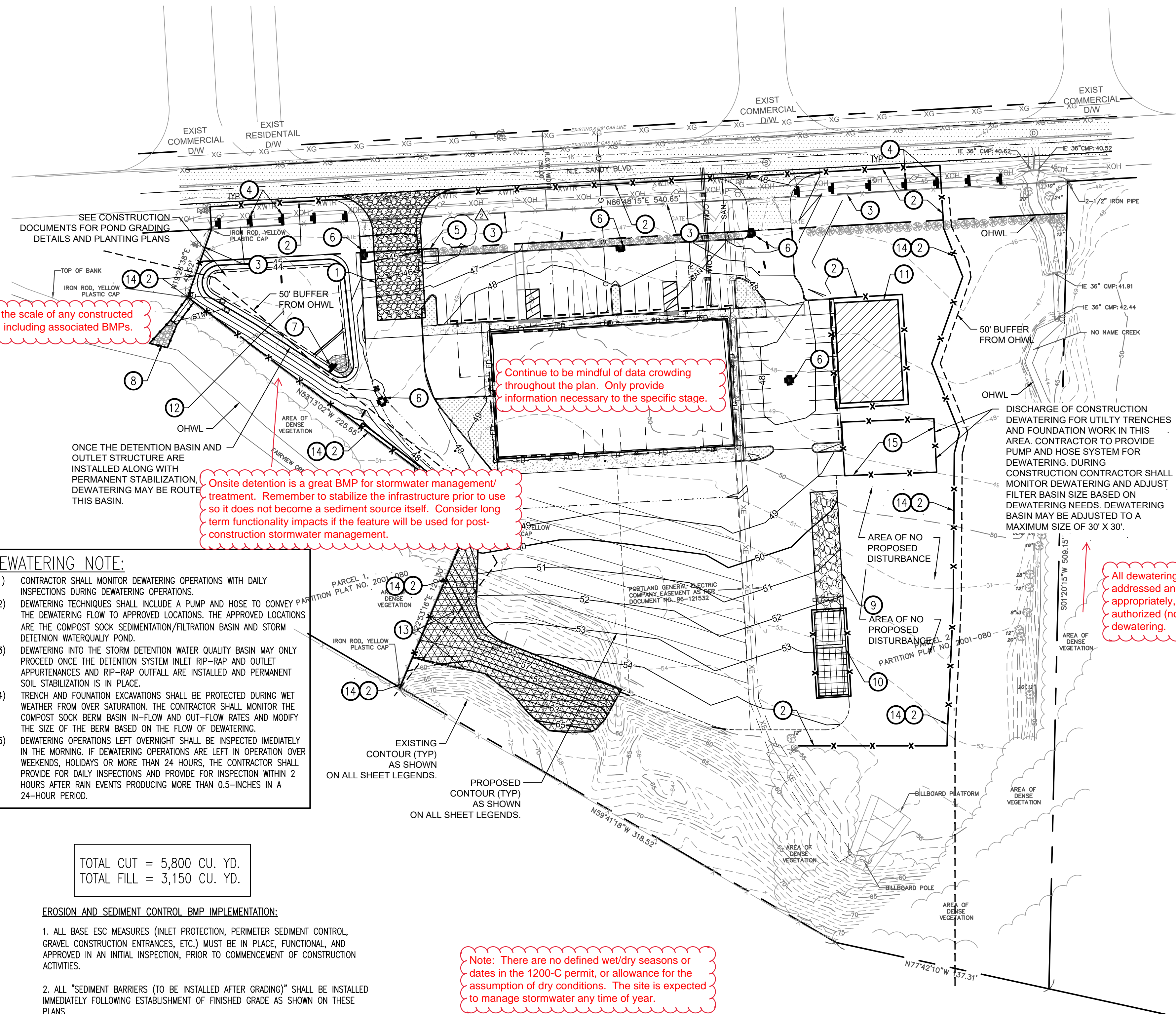
SHEET  
ESC051

# LEGEND

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT)
- NEW GROUND CONTOUR (1 FT)
- NEW GROUND CONTOUR (5 FT)
- PROPERTY LINE
- SILT FENCING
- CHAIN LINK CONSTRUCTION FENCE
- EXISTING TREE TO REMAIN
- CONSTRUCTION ENTRANCE
- BIO-BAG
- GRAVEL PARKING
- TEMPORARY SOIL STOCKPILE AREA
- CONCRETE WASHOUT
- TEMPORARY SOLID & HAZARDOUS WASTE STORAGE
- COCONUT OR JUTTE MATTING AREA

## GRADING, STREET AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

1. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
  - A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.
  - B. DWARF GRASS MIX (MIN. 100 LB./AC.)
    1. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
    2. CREEPING RED FESCUE (20% BY WEIGHT)
  - C. STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
    1. ANNUAL RYEGRASS (40% BY WEIGHT)
    2. TURF-TYPE FESCUE (60% BY WEIGHT)
2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
14. USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.



### DEWATERING NOTE:

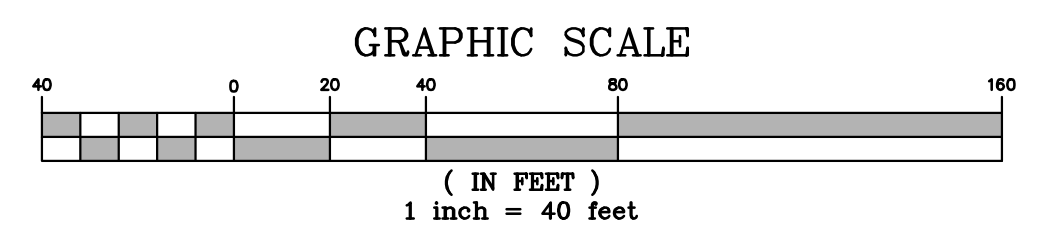
- 1) CONTRACTOR SHALL MONITOR DEWATERING OPERATIONS WITH DAILY INSPECTIONS DURING DEWATERING OPERATIONS.
- 2) DEWATERING TECHNIQUES SHALL INCLUDE A PUMP AND HOSE TO CONVEY THE DEWATERING FLOW TO APPROVED LOCATIONS. THE APPROVED LOCATIONS ARE THE COMPOST SOCK SEDIMENTATION/FILTRATION BASIN AND STORM DETENTION WATERQUALITY POND.
- 3) DEWATERING INTO THE STORM DETENTION WATER QUALITY BASIN MAY ONLY PROCEED ONCE THE DETENTION SYSTEM INLET RIP-RAP AND OUTLET APPURTENANCES AND RIP-RAP OUTFALL ARE INSTALLED AND PERMANENT SOIL STABILIZATION IS IN PLACE.
- 4) TRENCH AND FOUNDATION EXCAVATIONS SHALL BE PROTECTED DURING WET WEATHER FROM OVER SATURATION. THE CONTRACTOR SHALL MONITOR THE COMPOST SOCK BERM BASIN IN-FLOW AND OUT-FLOW RATES AND MODIFY THE SIZE OF THE BERM BASED ON THE FLOW OF DEWATERING.
- 5) DEWATERING OPERATIONS LEFT OVERNIGHT SHALL BE INSPECTED IMMEDIATELY IN THE MORNING. IF DEWATERING OPERATIONS ARE LEFT IN OPERATION OVER WEEKENDS, HOLIDAYS OR MORE THAN 24 HOURS, THE CONTRACTOR SHALL PROVIDE FOR DAILY INSPECTIONS AND PROVIDE FOR INSPECTION WITHIN 2 HOURS AFTER RAIN EVENTS PRODUCING MORE THAN 0.5-INCHES IN A 24-HOUR PERIOD.

TOTAL CUT = 5,800 CU. YD.  
TOTAL FILL = 3,150 CU. YD.

### EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
3. LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS AND IMMEDIATELY AFTER GRADING IS COMPLETE.
4. THE STORM WATER FACILITY SHALL BE CONSTRUCTED AND LANDSCAPED PRIOR TO THE STORM WATER SYSTEM FUNCTIONING AND SITE PAVING.
5. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

Note: There are no defined wet/dry seasons or dates in the 1200-C permit, or allowance for the assumption of dry conditions. The site is expected to manage stormwater any time of year.



POST-DEVELOPED STORM WATER RUN-OFF OF THE PROPOSED DEVELOPMENT AREA IS COLLECTED VIA CATCH BASINS AND ROOF DOWNSPOUTS. IT IS DIRECTED TO 18" DIA HDPE DETENTION PIPES, FLOWS THROUGH A STORM WATER QUALITY AND DETENTION BASIN, DIRECTED INTO A DETENTION CONTROL MANHOLE AND THEN DISCHARGES INTO FAIRVIEW CREEK.

### PROJECT INFORMATION KEYNOTES

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1) GRAVEL CONSTRUCTION ENTRANCE 30' WIDE X 80' LONG SIM TO DETAIL 3 ON SHEET ESC055.</li> <li>2) SEDIMENT FENCE, SEE DETAIL 4 ON SHEET ESC055.</li> <li>3) MAINTAIN EXISTING CHAIN LINK FENCE WITH GATE AROUND PERIMETER OF AREA OF CONSTRUCTION AND DISTURBANCE. SEDIMENT FENCE MAY FOLLOW CHAIN LINK FENCE WHERE APPLICABLE (TYP).</li> <li>4) PROVIDE BIO-BAG CHECK DAMS IN EXISTING DITCH AND FLOW LINE AT 20' O.C. MIN. SEE DETAIL 2 ON SHEET ESC053.</li> <li>5) SEE SHEET ESC054 FOR CONCRETE WASHOUT PIT.</li> <li>6) PROVIDE COMBINATION INLET PROTECTION AT ALL INLETS (TYP) PER DETAILS 1 AND 2 ON SHEET ESC055.</li> <li>7) PROVIDE RIP-RAP PROTECTION AND TEMPORARY BIO-BAGS SIM TO DETAIL 9 ON SHEET ESC055.</li> <li>8) PROVIDE RIP-RAP PROTECTION AT BASIN OUTFALL INTO FAIRVIEW CREEK. SEE DETAIL 9 ON SHEET ESC055. INSTALL COMPOST SOCK AROUND WORK AREA. COMPOST SOCK TO REMAIN IN PLACE AND DECOMPOSE NATURALLY OR UNTIL SOIL STABILIZATION IS MATURE.</li> <li>9) AREA FOR JOB TRAILERS, EQUIPMENT AND MATERIAL STAGING AND PORTABLE RESTROOMS. BASE ROCK SECTION SIMILAR TO ROAD PAVEMENT SECTION OF 1 1/2" - 0" COMPACTED CRUSHED ROCK.</li> </ol> | <ol style="list-style-type: none"> <li>10) AREA FOR SOLID AND HAZARDOUS WASTE, FUEL STORAGE AND REFUELING AND EQUIPMENT STORAGE AND MAINTENANCE. PROVIDE PERIMETER SEDIMENT FENCE PER DETAIL 4 ESC055.</li> <li>11) AREA FOR TEMPORARY SOIL STOCK PILE FROM EARTHWORK CUTTINGS TO BE REMOVED FROM THE SITE. COVER PER DETAIL 7 ON SHEET ESC055.</li> <li>12) PROVIDE AND MAINTAIN 2" THICK COVER LAYER OF COMPOST OVER FINAL GRADING LAYER OF DISTURBED SOIL AREA OF STORMWATER FACILITY AREA UNTIL PERMANENT GROUND COVER PLANTINGS ARE ESTABLISHED.</li> <li>13) AT EMBANKMENT CUT SLOPES, IMMEDIATELY FOLLOWING FINAL CUT SLOPE GRADING WORK, PROVIDE VEHICLE TRACKING AND INSTALL EROSION CONTROL COCONUT JUTTE MESH BLANKET. PLANT BY HYDROSEEDING OR HAND PLANT PER LANDSCAPE PLANS. THIS AREA OF CUT SHALL BE PERFORMED AND STABILIZED AS QUICKLY AS POSSIBLE. IF THIS AREA IS LEFT EXPOSED FOR MORE THAN 8 HOURS INSTALL PLASTIC SHEATHING SIM TO STOCK PILE DETAIL 7 ON SHEET ESC055.</li> <li>14) INSTALL COMPOST SOCK ALONG EAST AND WEST SEDIMENT FENCE INSIDE THE SEDIMENT FENCE TO PROTECT CREEK'S BUFFER ZONE. (TYP.)</li> <li>15) INSTALL 15' WIDE X 30' LONG COMPOST SOCK DEWATERING DISCHARGE BASIN TO PROTECT THE CREEK'S BUFFER ZONE FROM DEWATERING SEDIMENTATION.</li> </ol> |
|---|--|

REVISIONS:
10.23.2018 ESC PL CK
11.02.2018 ESC PL CK

## MASS GRADING, AND STABILIZATION CONSTRUCTION EROSION/SED. CONTROL PLAN

CLIENT:	ENGINEER:	DESIGNED BY:	DRAWING NO.:	ESC053	JOB NUMBER 18005
		DRAWN BY:	SCALE:	1" = 40'	
		CHECKED BY:	DATE:	SEPTEMBER 5, 2018	SHEET ESC052
PREPARED FOR:			MULTNOMAH COUNTY		
			TAX LOTS:		OREGON MULTNOMAH COUNTY TAX MAP

# LEGEND

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT)
- NEW GROUND CONTOUR (1 FT)
- NEW GROUND CONTOUR (5 FT)
- PROPERTY LINE
- SILT FENCING
- EXISTING CHAIN LINK CONSTRUCTION FENCE
- EXISTING TREE TO REMAIN
- CONSTRUCTION ENTRANCE
- BIO-BAG
- GRAVEL PARKING
- TEMPORARY SOIL STOCKPILE AREA
- CONCRETE WASHOUT
- TEMPORARY SOLID & HAZARDOUS WASTE STORAGE

## GRADING, STREET AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

1. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
  - A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.
  - B. DWARF GRASS MIX (MIN. 100 LB./AC.)
    1. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
    2. CREEPING RED FESCUE (20% BY WEIGHT)
  - C. STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
    1. ANNUAL RYEGRASS (40% BY WEIGHT)
    2. TURF-TYPE FESCUE (60% BY WEIGHT)
2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
14. USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

Features that will be present through multiple stages or throughout the duration of the project need to be reflected on each sheet. Examples include construction entrances, natural buffer areas, and dewatering.

If possible, determine the background turbidity of the receiving waterbody. Make sure that the discharges from your site are no more than 10% higher than that number.

- ### DEWATERING NOTE:
- 1) CONTRACTOR SHALL MONITOR DEWATERING OPERATIONS WITH DAILY INSPECTIONS DURING DEWATERING OPERATIONS.
  - 2) DEWATERING TECHNIQUES SHALL INCLUDE A PUMP AND HOSE TO CONVEY THE DEWATERING FLOW TO APPROVED LOCATIONS. THE APPROVED LOCATIONS ARE THE COMPOST SOCK SEDIMENTATION/FILTRATION BASIN AND STORM DETENTION WATERQUALITY POND.
  - 3) DEWATERING INTO THE STORM DETENTION WATER QUALITY BASIN MAY ONLY PROCEED ONCE THE DETENTION SYSTEM INLET RIP-RAP AND OUTLET APPURTENANCES AND RIP-RAP OUTFALL ARE INSTALLED AND PERMANENT SOIL STABILIZATION IS IN PLACE.
  - 4) TRENCH AND FOUNDATION EXCAVATIONS SHALL BE PROTECTED DURING WET WEATHER FROM OVER SATURATION. THE CONTRACTOR SHALL MONITOR THE COMPOST SOCK BERM BASIN IN-FLOW AND OUT-FLOW RATES AND MODIFY THE SIZE OF THE BERM BASED ON THE FLOW OF DEWATERING.
  - 5) DEWATERING OPERATIONS LEFT OVERNIGHT SHALL BE INSPECTED IMMEDIATELY IN THE MORNING. IF DEWATERING OPERATIONS ARE LEFT IN OPERATION OVER WEEKENDS, HOLIDAYS OR MORE THAN 24 HOURS, THE CONTRACTOR SHALL PROVIDE FOR DAILY INSPECTIONS AND PROVIDE FOR INSPECTION WITHIN 2 HOURS AFTER RAIN EVENTS PRODUCING MORE THAN 0.5-INCHES IN A 24-HOUR PERIOD.

TOTAL CUT = 5,800 CU. YD.  
TOTAL FILL = 3,150 CU. YD.

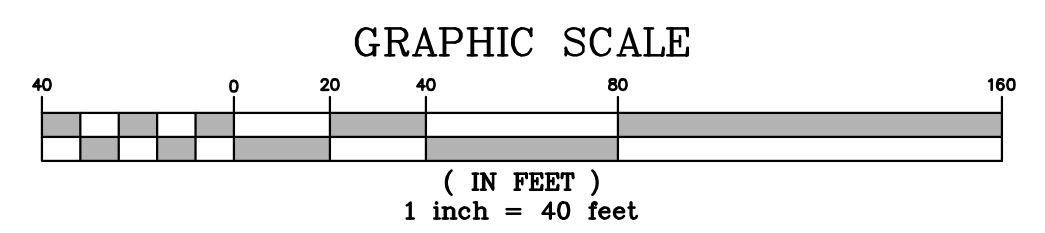
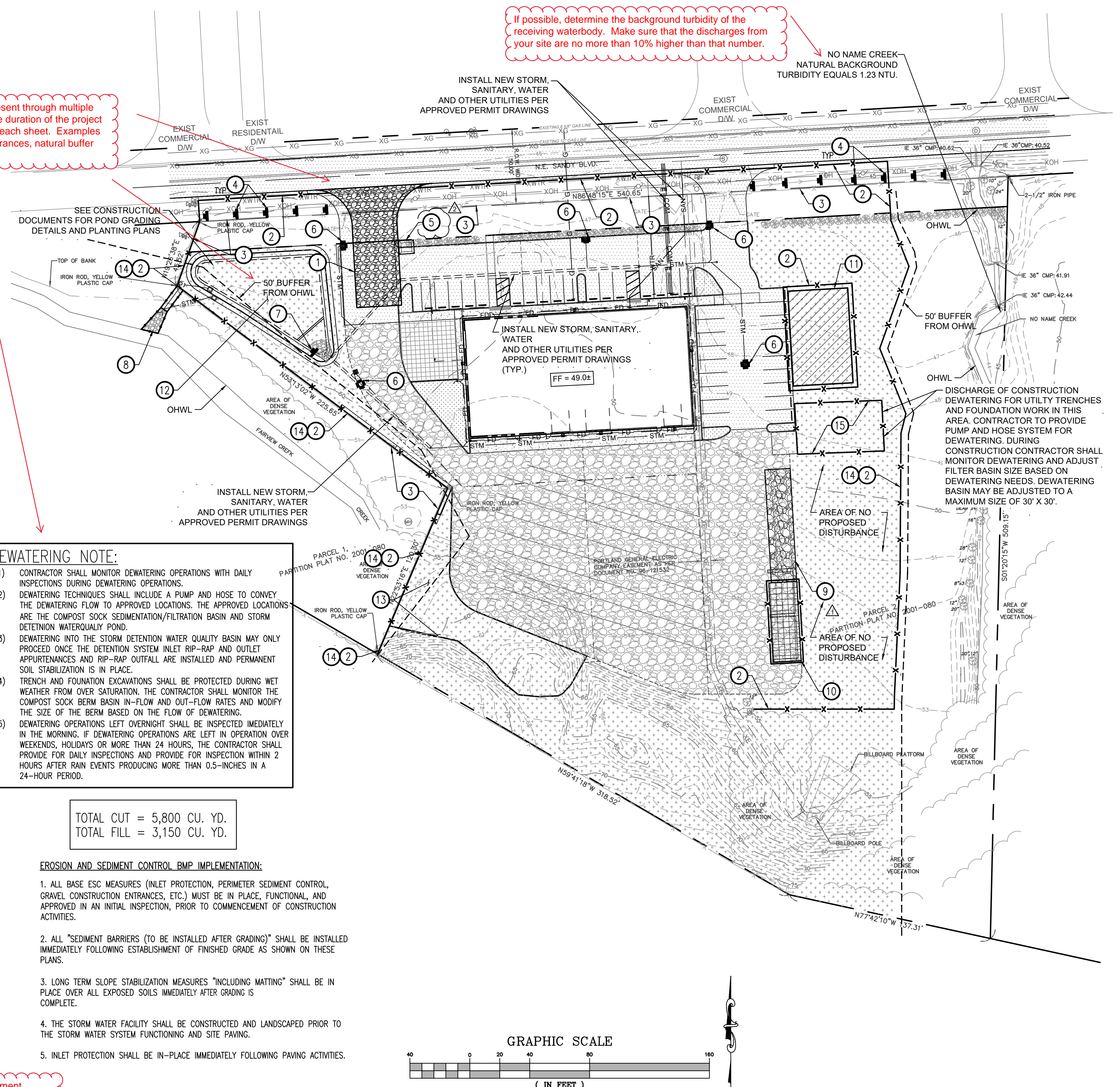
- ### EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:
1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
  2. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
  3. LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS IMMEDIATELY AFTER GRADING IS COMPLETE.
  4. THE STORM WATER FACILITY SHALL BE CONSTRUCTED AND LANDSCAPED PRIOR TO THE STORM WATER SYSTEM FUNCTIONING AND SITE PAVING.
  5. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

POST-DEVELOPED STORM WATER RUN-OFF OF THE PROPOSED DEVELOPMENT AREA IS COLLECTED VIA CATCH BASINS AND ROOF DOWNSPOUTS. IT IS DIRECTED TO 18" DIA HDPE DETENTION PIPES, FLOWS THROUGH A STORM WATER QUALITY AND DETENTION BASIN, DIRECTED INTO A DETENTION CONTROL MANHOLE AND THEN DISCHARGES INTO FAIRVIEW CREEK.

### PROJECT INFORMATION KEYNOTES

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1) GRAVEL CONSTRUCTION ENTRANCE 30' WIDE X 80' LONG SIM TO DETAIL 3 ON SHEET ESC055.</li> <li>2) SEDIMENT FENCE, SEE DETAIL 4 ON SHEET ESC055.</li> <li>3) MAINTAIN EXISTING CHAIN LINK FENCE WITH GATE AROUND PERIMETER OF AREA OF CONSTRUCTION AND DISTURBANCE. SEDIMENT FENCE MAY FOLLOW CHAIN LINK FENCE WHERE APPLICABLE (TYP).</li> <li>4) PROVIDE BIO-BAG CHECK DAMS IN EXISTING DITCH AND FLOW LINE AT 20' O.C. MIN. SEE DETAIL 2 ON SHEET ESC053.</li> <li>5) SEE SHEET ESC054 FOR CONCRETE WASHOUT PIT.</li> <li>6) PROVIDE COMBINATION INLET PROTECTION AT ALL INLETS (TYP) PER DETAILS 1 AND 2 ON SHEET ESC055.</li> <li>7) PROVIDE RIP-RAP PROTECTION AND TEMPORARY BIO-BAGS SIM TO DETAIL 9 ON SHEET ESC055.</li> <li>8) PROVIDE RIP-RAP PROTECTION AT BASIN OUTFALL INTO FAIRVIEW CREEK. SEE DETAIL 9 ON SHEET ESC055. INSTALL COMPOST SOCK AROUND WORK AREA. COMPOST SOCK TO REMAIN IN PLACE AND DECOMPOSE NATURALLY OR UNTIL SOIL STABILIZATION IS MATURE.</li> <li>9) AREA FOR JOB TRAILERS, EQUIPMENT AND MATERIAL STAGING AND PORTABLE RESTROOMS. BASE ROCK SECTION SIMILAR TO ROAD PAVEMENT SECTION OF 1 1/2" - 0" COMPACTED CRUSHED ROCK.</li> </ol> | <ol style="list-style-type: none"> <li>10) AREA FOR SOLID AND HAZARDOUS WASTE, FUEL STORAGE AND REFUELING AND EQUIPMENT STORAGE AND MAINTENANCE. PROVIDE PERIMETER SEDIMENT FENCE PER DETAIL 4 ESC055.</li> <li>11) AREA FOR TEMPORARY SOIL STOCK PILE FROM EARTHWORK CUTTINGS TO BE REMOVED FROM THE SITE. COVER PER DETAIL 7 ON SHEET ESC055.</li> <li>12) PROVIDE AND MAINTAIN 2" THICK COVER LAYER OF COMPOST OVER FINAL GRADING LAYER OF DISTURBED SOIL AREA OF STORMWATER FACILITY AREA UNTIL PERMANENT GROUND COVER PLANTINGS ARE ESTABLISHED.</li> <li>13) AT EMBANKMENT CUT SLOPES, IMMEDIATELY FOLLOWING FINAL CUT SLOPE GRADING WORK, PROVIDE VEHICLE TRACKING AND INSTALL EROSION CONTROL COCONUT JUTTE MESH BLANKET. PLANT BY HYDROSEEDING OR HAND PLANT PER LANDSCAPE PLANS. THIS AREA OF CUT SHALL BE PERFORMED AND STABILIZED AS QUICKLY AS POSSIBLE. IF THIS AREA IS LEFT EXPOSED FOR MORE THAN 8 HOURS INSTALL PLASTIC SHEATHING SIM TO STOCK PILE DETAIL 7 ON SHEET ESC055.</li> <li>14) INSTALL COMPOST SOCK ALONG EAST AND WEST SEDIMENT FENCE INSIDE THE SEDIMENT FENCE TO PROTECT CREEK'S BUFFER ZONE. (TYP.)</li> <li>15) INSTALL 15' WIDE X 30' LONG COMPOST SOCK DEWATERING DISCHARGE BASIN TO PROTECT THE CREEK'S BUFFER ZONE FROM DEWATERING SEDIMENTATION.</li> </ol> |
|---|--|

Utility installation presents unique erosion and sediment control challenges. Developing a separate sheet for this stage of the project helps ensure compliance with the 1200-C.



### REVISIONS:

10.23.2018	ESC PL CK
11.02.2018	ESC PL CK

## UTILITY CONSTRUCTION EROSION/SED. CONTROL PLAN

ENGINEER:	DESIGNED BY:	DRAWING NO.:	ESC053
	DRAWN BY:	SCALE:	1" = 40'
	CHECKED BY:	DATE:	SEPTEMBER 5, 2018
PREPARED FOR:			

**MULTNOMAH COUNTY**  
TAX LOTS:

**OREGON**  
MULTNOMAH COUNTY TAX MAP

JOB NUMBER	18005
SHEET	ESC053

# LEGEND

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT)
- NEW GROUND CONTOUR (1 FT)
- NEW GROUND CONTOUR (5 FT)
- PROPERTY LINE
- SILT FENCING
- EXISTING CHAIN LINK CONSTRUCTION FENCE
- EXISTING TREE TO REMAIN
- CONSTRUCTION ENTRANCE
- BIO-BAG
- GRAVEL PARKING
- TEMPORARY SOIL STOCKPILE AREA
- CONCRETE WASHOUT
- TEMPORARY SOLID & HAZARDOUS WASTE STORAGE

## GRADING, STREET AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

1. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
  - A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.
  - B. DWARF GRASS MIX (MIN. 100 LB./AC.)
    1. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
    2. CREEPING RED FESCUE (20% BY WEIGHT)
  - C. STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
    1. ANNUAL RYEGRASS (40% BY WEIGHT)
    2. TURF-TYPE FESCUE (60% BY WEIGHT)
2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
14. USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

## DEWATERING NOTE:

- 1) CONTRACTOR SHALL MONITOR DEWATERING OPERATIONS WITH DAILY INSPECTIONS DURING DEWATERING OPERATIONS.
- 2) DEWATERING TECHNIQUES SHALL INCLUDE A PUMP AND HOSE TO CONVEY PUMPING FLOW TO APPROVED LOCATIONS. THE APPROVED LOCATIONS ARE THE COMPOST SOCK SEDIMENTATION/FILTRATION BASIN AND STORM DETENTION WATERQUALITY POND.
- 3) DEWATERING INTO THE STORM DETENTION WATER QUALITY BASIN MAY ONLY PROCEED ONCE THE DETENTION SYSTEM INLET RIP-RAP AND OUTLET APPURTENANCES AND RIP-RAP OUTFALL ARE INSTALLED AND PERMANENT SOIL STABILIZATION IS IN PLACE.
- 4) TRENCH AND FOUNDATION EXCAVATIONS SHALL BE PROTECTED DURING WET WEATHER FROM OVER SATURATION. THE CONTRACTOR SHALL MONITOR THE COMPOST SOCK BERM BASIN IN-FLOW AND OUT-FLOW RATES AND MODIFY THE SIZE OF THE BERM BASED ON THE FLOW OF DEWATERING.
- 5) DEWATERING OPERATIONS LEFT OVERNIGHT SHALL BE INSPECTED IMMEDIATELY IN THE MORNING. IF DEWATERING OPERATIONS ARE LEFT IN OPERATION OVER WEEKENDS, HOLIDAYS OR MORE THAN 24 HOURS, THE CONTRACTOR SHALL PROVIDE FOR DAILY INSPECTIONS AND PROVIDE FOR INSPECTION WITHIN 2 HOURS AFTER RAIN EVENTS PRODUCING MORE THAN 0.5-INCHES IN A 24-HOUR PERIOD.

TOTAL CUT = 5,800 CU. YD.  
TOTAL FILL = 3,150 CU. YD.

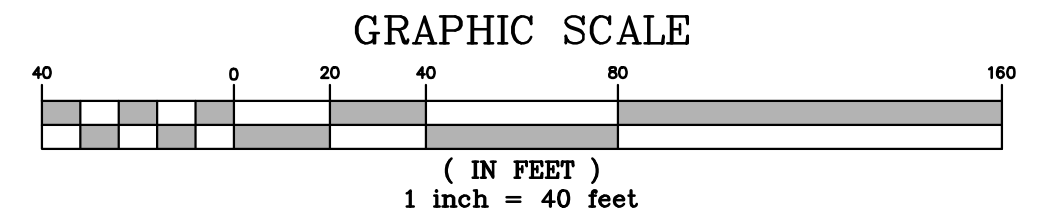
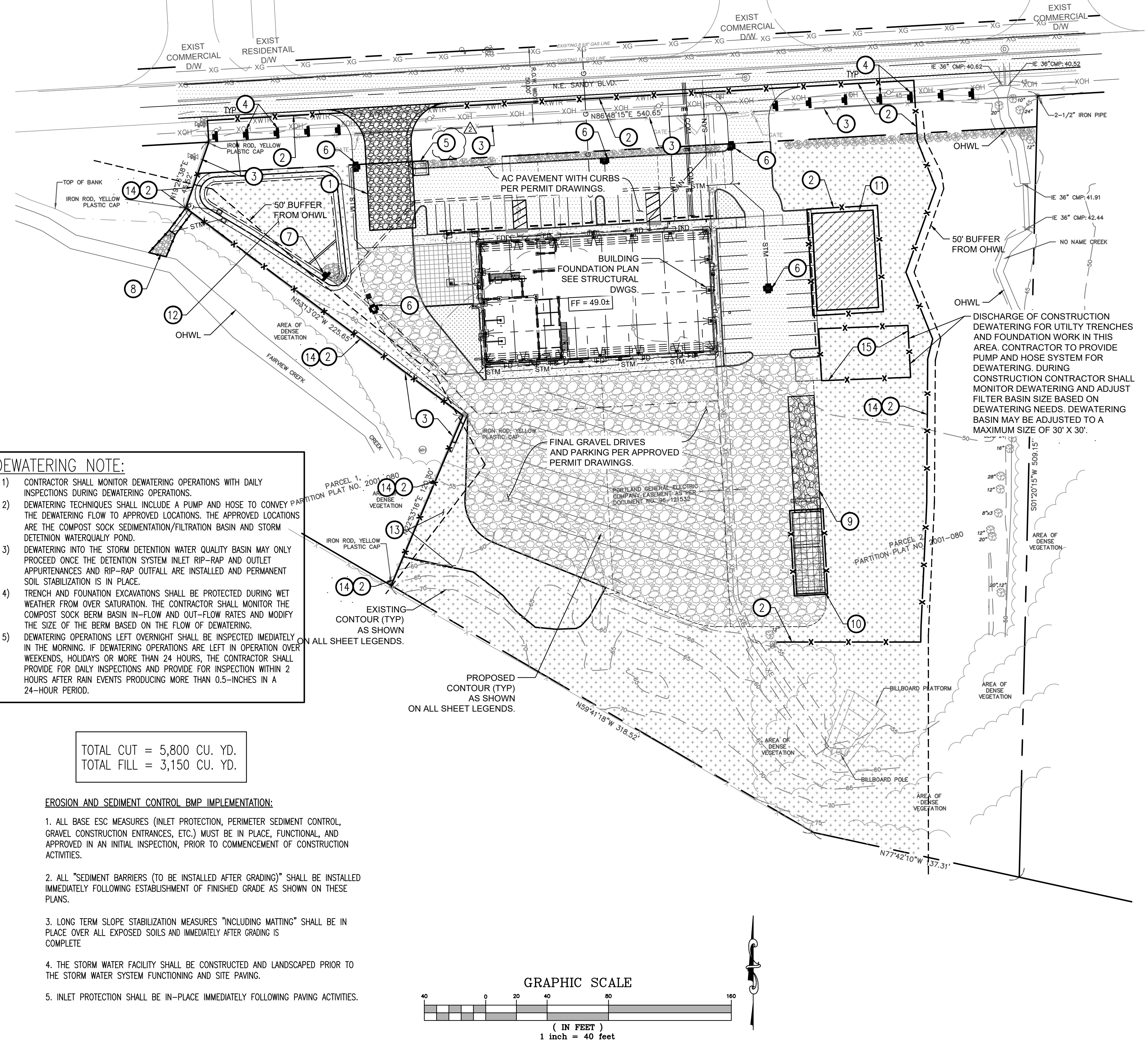
## EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
3. LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS AND IMMEDIATELY AFTER GRADING IS COMPLETE.
4. THE STORM WATER FACILITY SHALL BE CONSTRUCTED AND LANDSCAPED PRIOR TO THE STORM WATER SYSTEM FUNCTIONING AND SITE PAVING.
5. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

POST-DEVELOPED STORM WATER RUN-OFF OF THE PROPOSED DEVELOPMENT AREA IS COLLECTED VIA CATCH BASINS AND ROOF DOWNSPOUTS. IT IS DIRECTED TO 18" DIA HDPE DETENTION PIPES, FLOWS THROUGH A STORM WATER QUALITY AND DETENTION BASIN, DIRECTED INTO A DETENTION CONTROL MANHOLE AND THEN DISCHARGES INTO FAIRVIEW CREEK.

## PROJECT INFORMATION KEYNOTES

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1) GRAVEL CONSTRUCTION ENTRANCE 30' WIDE X 80' LONG SIM TO DETAIL 3 ON SHEET ESC055.</li> <li>2) SEDIMENT FENCE, SEE DETAIL 4 ON SHEET ESC055.</li> <li>3) MAINTAIN EXISTING CHAIN LINK FENCE WITH GATE AROUND PERIMETER OF AREA OF CONSTRUCTION AND DISTURBANCE. SEDIMENT FENCE MAY FOLLOW CHAIN LINK FENCE WHERE APPLICABLE (TYP).</li> <li>4) PROVIDE BIO-BAG CHECK DAMS IN EXISTING DITCH AND FLOW LINE AT 20' O.C. MIN. SEE DETAIL 2 ON SHEET ESC053.</li> <li>5) SEE SHEET ESC054 FOR CONCRETE WASHOUT PIT.</li> <li>6) PROVIDE COMBINATION INLET PROTECTION AT ALL INLETS (TYP) PER DETAILS 1 AND 2 ON SHEET ESC055.</li> <li>7) PROVIDE RIP-RAP PROTECTION AND TEMPORARY BIO-BAGS SIM TO DETAIL 9 ON SHEET ESC055.</li> <li>8) PROVIDE RIP-RAP PROTECTION AT BASIN OUTFALL INTO FAIRVIEW CREEK. SEE DETAIL 9 ON SHEET ESC055. INSTALL COMPOST SOCK AROUND WORK AREA. COMPOST SOCK TO REMAIN IN PLACE AND DECOMPOSE NATURALLY OR UNTIL SOIL STABILIZATION IS MATURE.</li> <li>9) AREA FOR JOB TRAILERS, EQUIPMENT AND MATERIAL STAGING AND PORTABLE RESTROOMS. BASE ROCK SECTION SIMILAR TO ROAD PAVEMENT SECTION OF 1 1/2" - 0" COMPACTED CRUSHED ROCK.</li> </ol> | <ol style="list-style-type: none"> <li>10) AREA FOR SOLID AND HAZARDOUS WASTE, FUEL STORAGE AND REFUELING AND EQUIPMENT STORAGE AND MAINTENANCE. PROVIDE PERIMETER SEDIMENT FENCE PER DETAIL 4 ESC055.</li> <li>11) AREA FOR TEMPORARY SOIL STOCK PILE FROM EARTHWORK CUTTINGS TO BE REMOVED FROM THE SITE. COVER PER DETAIL 7 ON SHEET ESC055.</li> <li>12) PROVIDE AND MAINTAIN 2" THICK COVER LAYER OF COMPOST OVER FINAL GRADING LAYER OF DISTURBED SOIL AREA OF STORMWATER FACILITY AREA UNTIL PERMANENT GROUND COVER PLANTINGS ARE ESTABLISHED.</li> <li>13) AT EMBANKMENT CUT SLOPES, IMMEDIATELY FOLLOWING FINAL CUT SLOPE GRADING WORK, PROVIDE VEHICLE TRACKING AND INSTALL EROSION CONTROL COCONUT JUTTE MESH BLANKET. PLANT BY HYDROSEEDING OR HAND PLANT PER LANDSCAPE PLANS. THIS AREA OF CUT SHALL BE PERFORMED AND STABILIZED AS QUICKLY AS POSSIBLE. IF THIS AREA IS LEFT EXPOSED FOR MORE THAN 8 HOURS INSTALL PLASTIC SHEATHING SIM TO STOCK PILE DETAIL 7 ON SHEET ESC055.</li> <li>14) INSTALL COMPOST SOCK ALONG EAST AND WEST SEDIMENT FENCE INSIDE THE SEDIMENT FENCE TO PROTECT CREEK'S BUFFER ZONE. (TYP.)</li> <li>15) INSTALL 15' WIDE X 30' LONG COMPOST SOCK DEWATERING DISCHARGE BASIN TO PROTECT THE CREEK'S BUFFER ZONE FROM DEWATERING SEDIMENTATION.</li> </ol> |
|---|--|



REVISIONS:	
▲	10.23.2018 ESC PL CK
▲	11.02.2018 ESC PL CK

# FOUNDATION PLAN EROSION/SED. CONTROL PLAN

CLIENT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

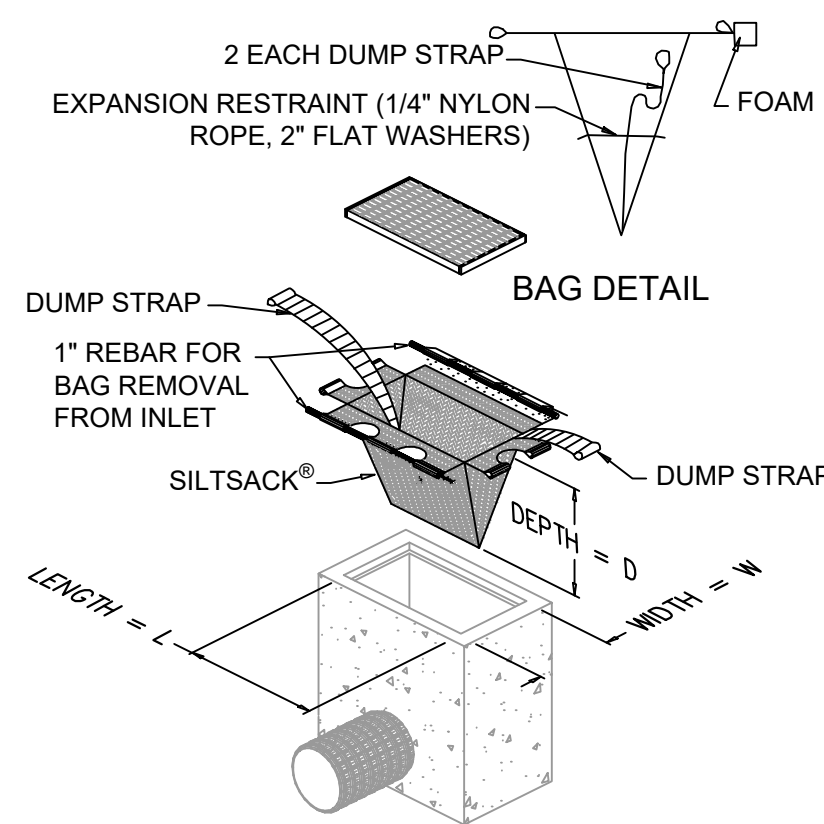
DESIGNED BY:	DRAWING NO.:	ESC053
DRAWN BY:	SCALE:	1" = 40'
CHECKED BY:	DATE:	SEPTEMBER 5, 2018
PREPARED FOR:		

MULTNOMAH COUNTY  
TAX LOTS:

OREGON  
MULTNOMAH COUNTY TAX MAP

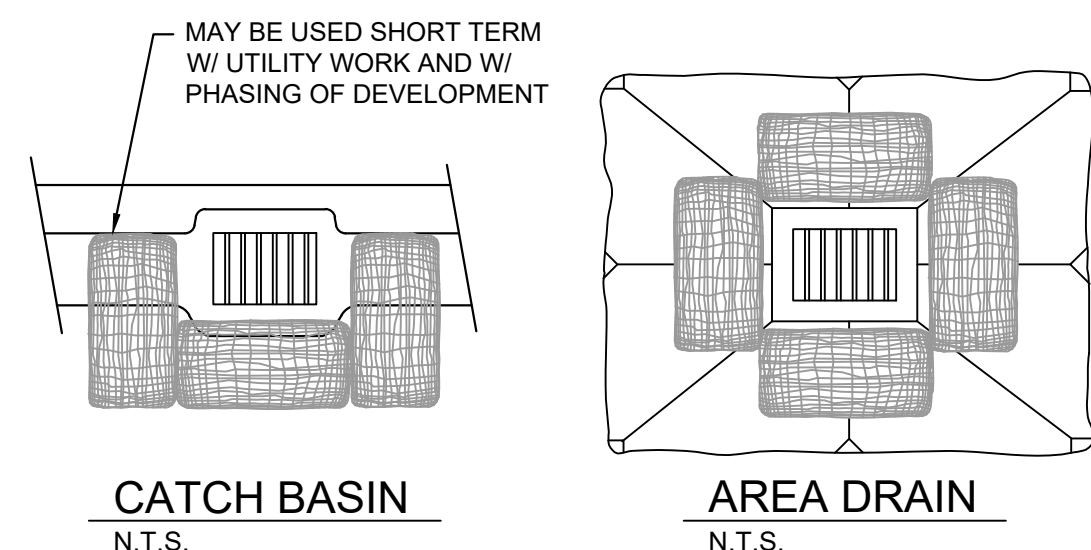
JOB NUMBER  
18005

SHEET  
ESC054

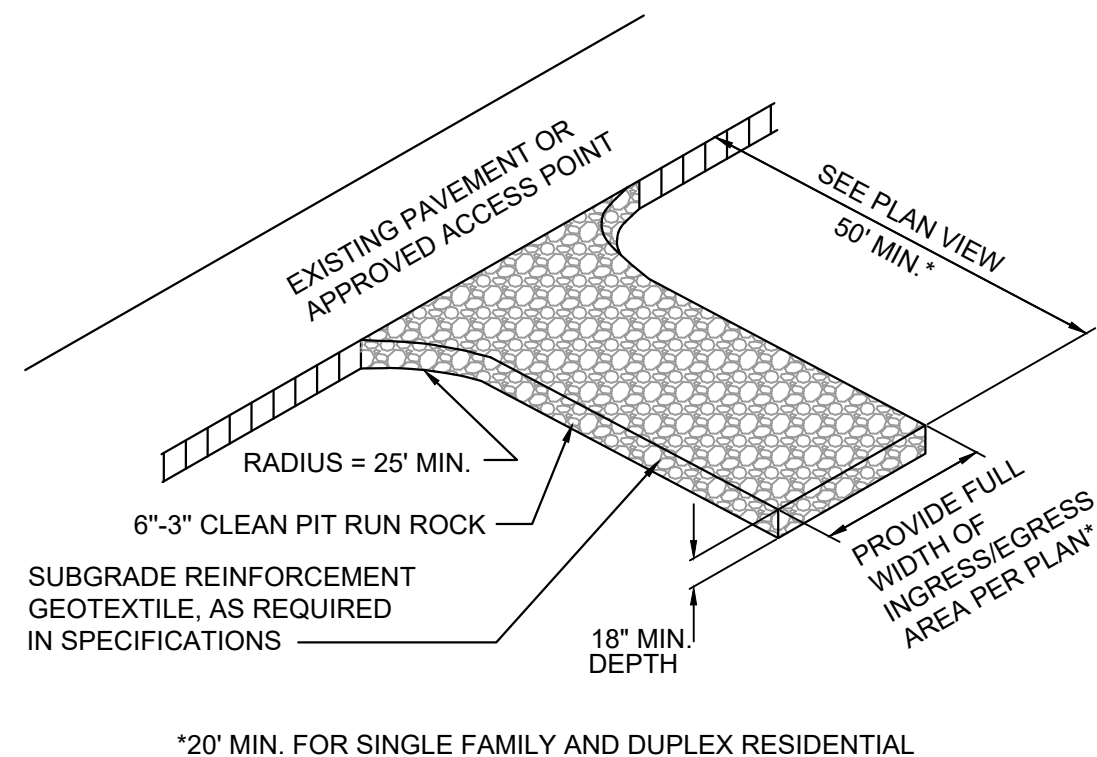


Regular Flow Only  
Do not use High Flow Insert Bags.

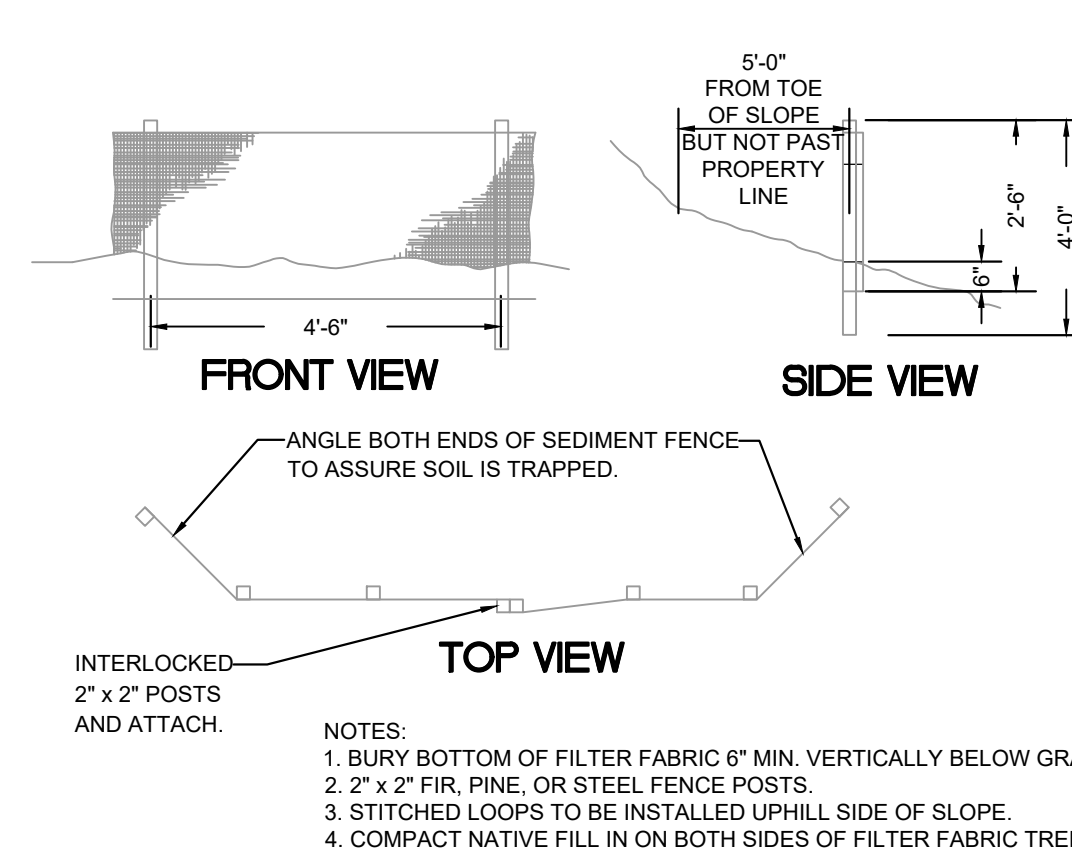
**1**  
**055** FILTER BAG INLET  
N.T.S.



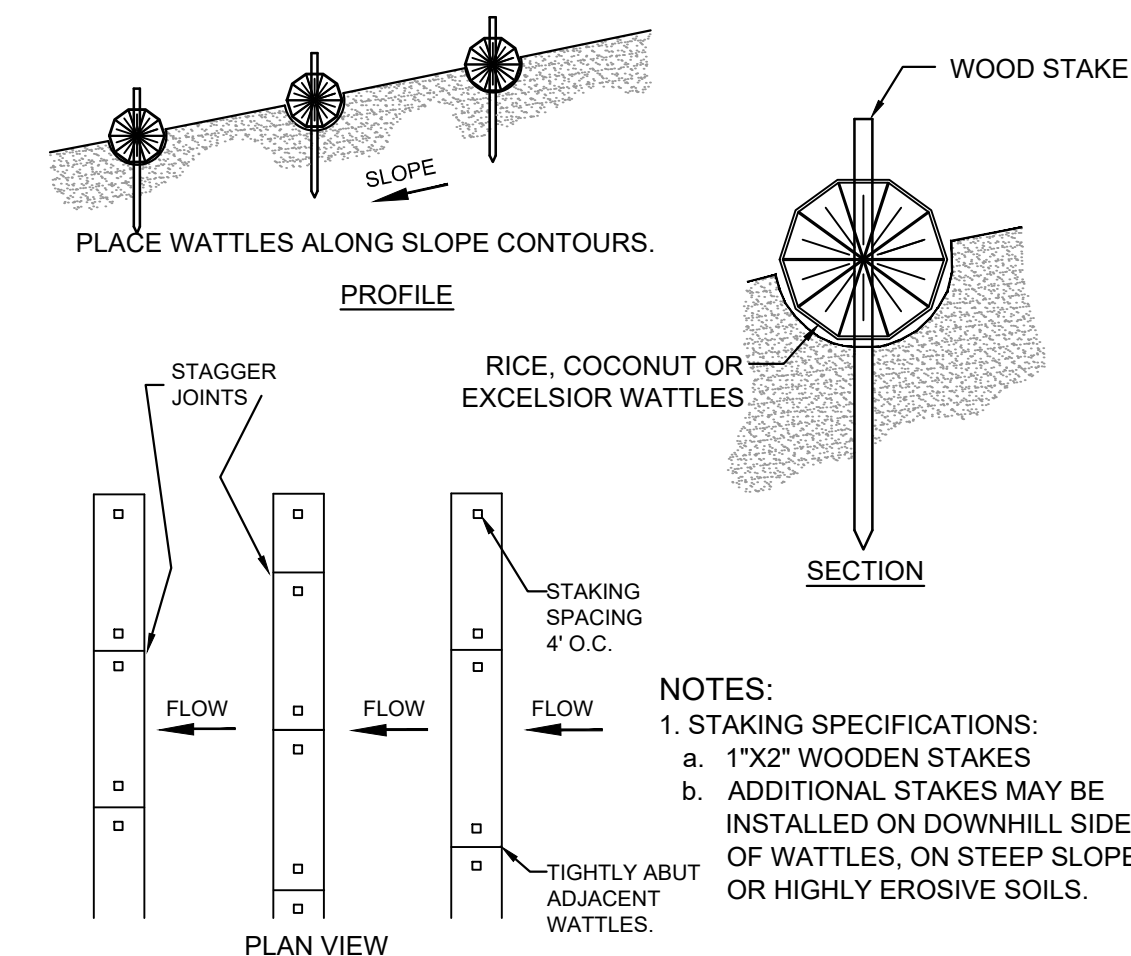
**2**  
**055** BIOFILTER BAGS - TEMPORARY  
N.T.S.



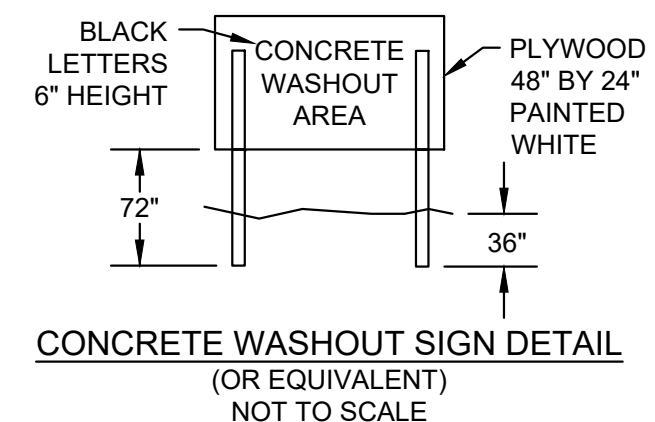
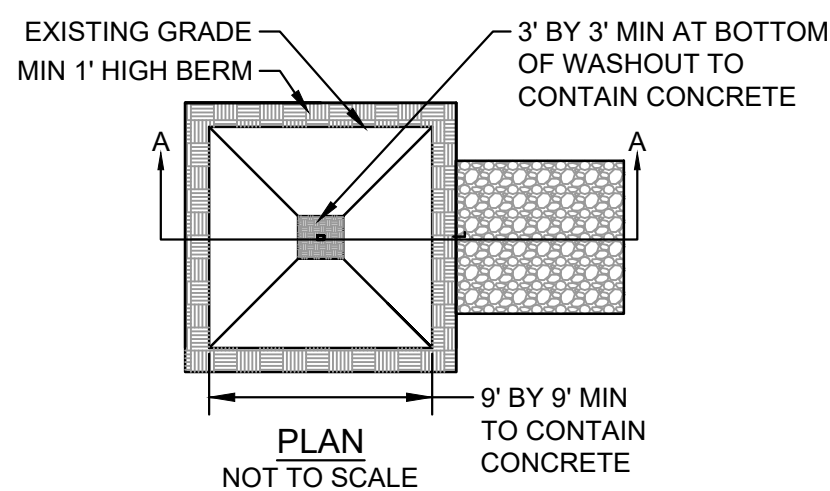
**3**  
**055** GRAVEL CONSTRUCTION ENTRANCE  
N.T.S. (SEE EROSION CONTROL NOTES)



**4**  
**055** SEDIMENT FENCE  
N.T.S.



**5**  
**055** SEDIMENT CONTROL WATTLES  
N.T.S. (EROSION/StrawBaleBarrier.dwg)



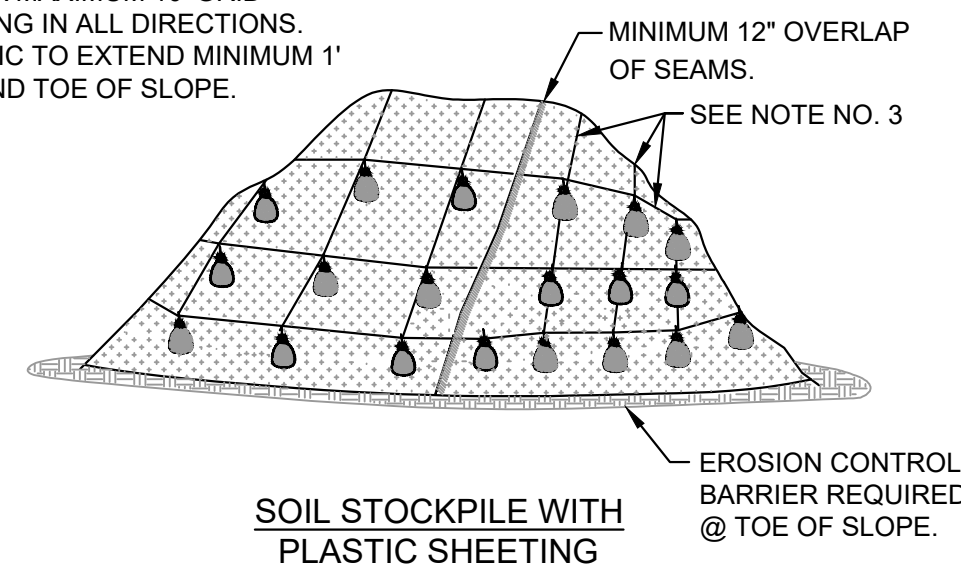
**NOTES:**

1. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
2. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
3. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING OPEN DRAINAGE FACILITIES AND WATER SOURCES.
5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. INSTALL CONCRETE WASHOUT SIGN WITHIN 30 FEET OF TEMPORARY CONCRETE WASHOUT FACILITY.
7. TEMPORARY CONCRETE WASHOUTS MAY BE A PREFABRICATED CONTAINER THAT IS PORTABLE AND REUSABLE.

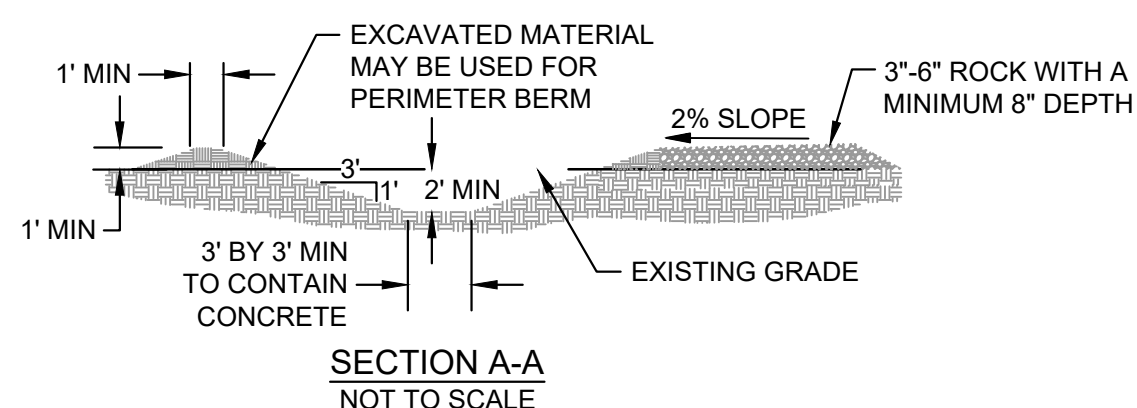
**NOTES:**

1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. BARRIER REQUIRED @ TOE OF STOCKPILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR APPROVED EQUAL ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.
4. PLASTIC TO EXTEND MINIMUM 1' BEYOND TOE OF SLOPE.

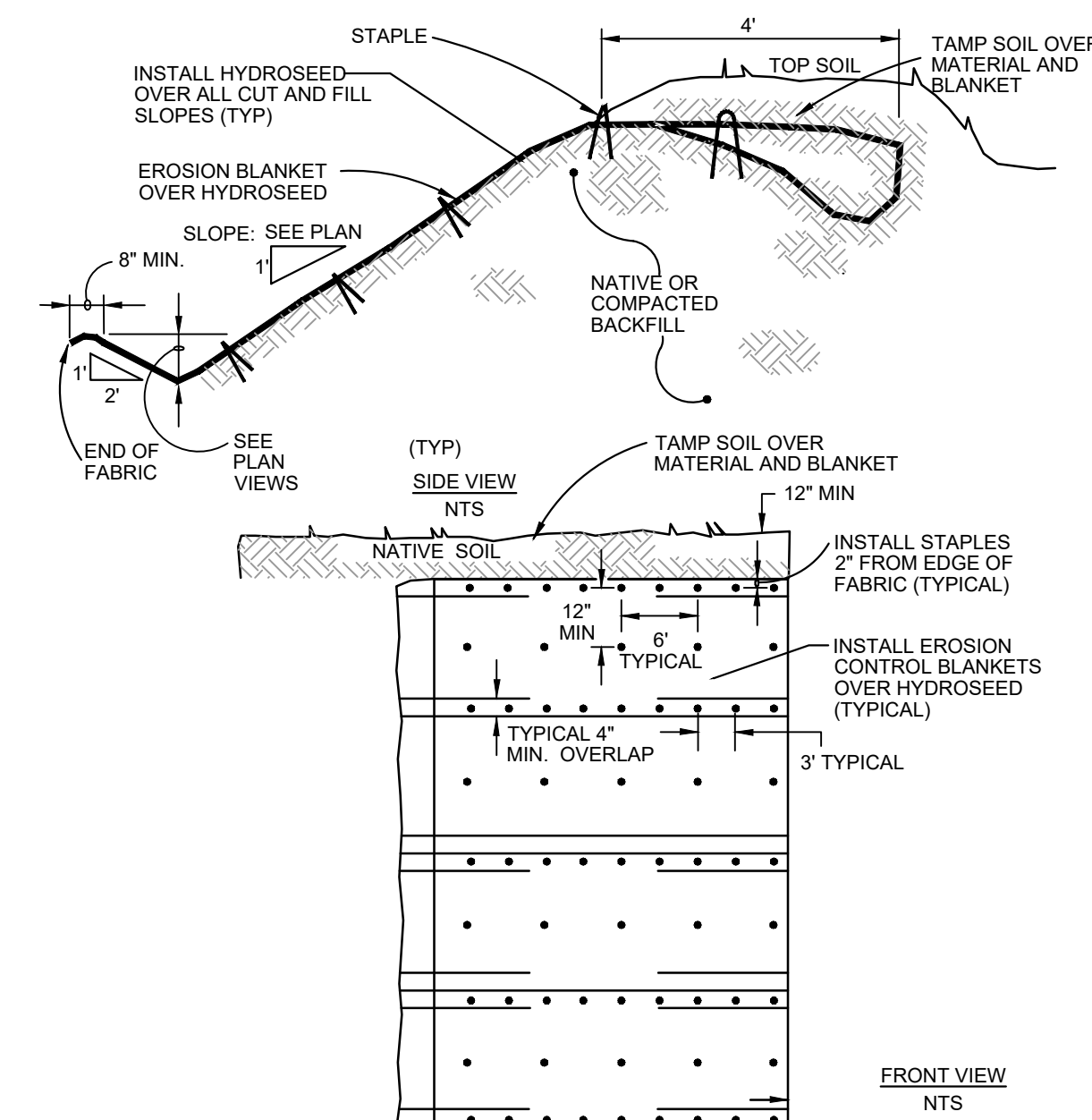
FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



**7**  
**055** SOIL STOCKPILE DETAIL  
N.T.S.



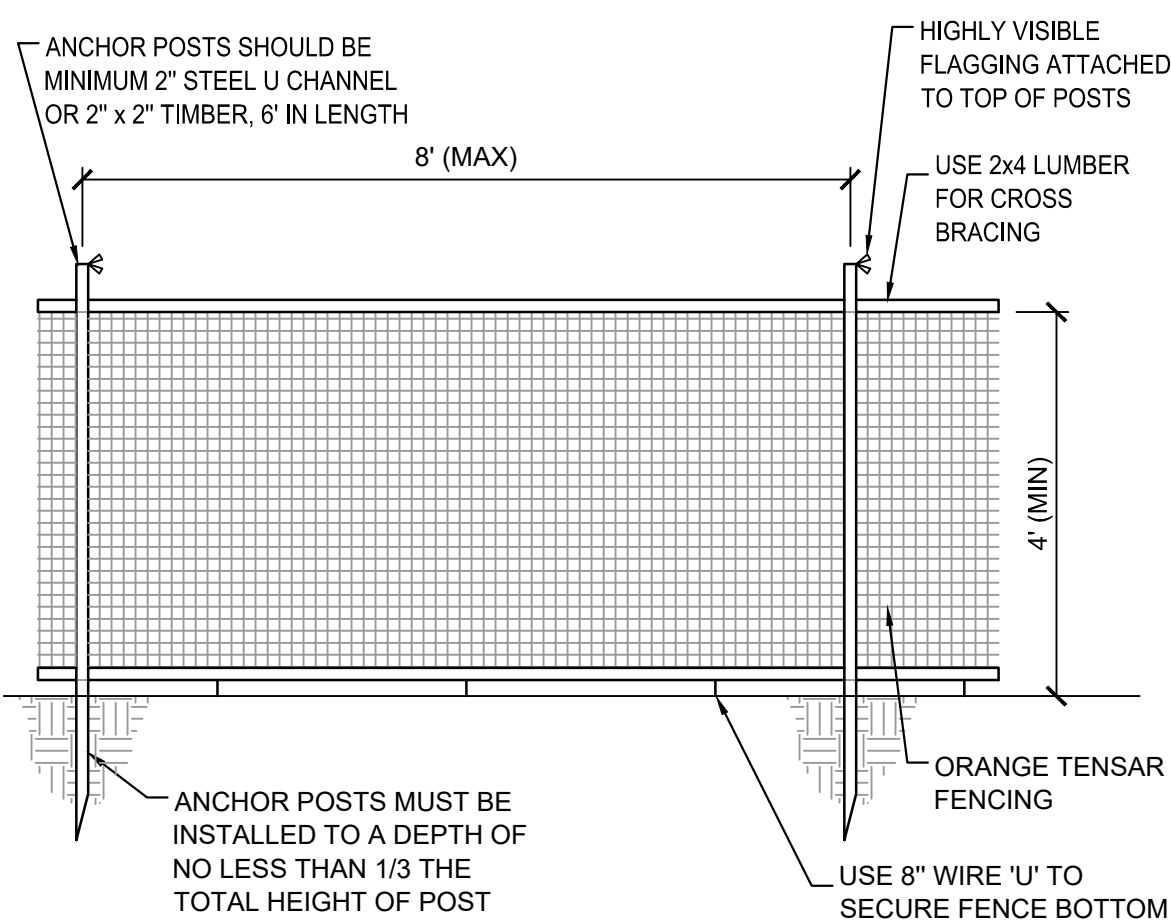
**6**  
**055** CONCRETE WASHOUT  
N.T.S.



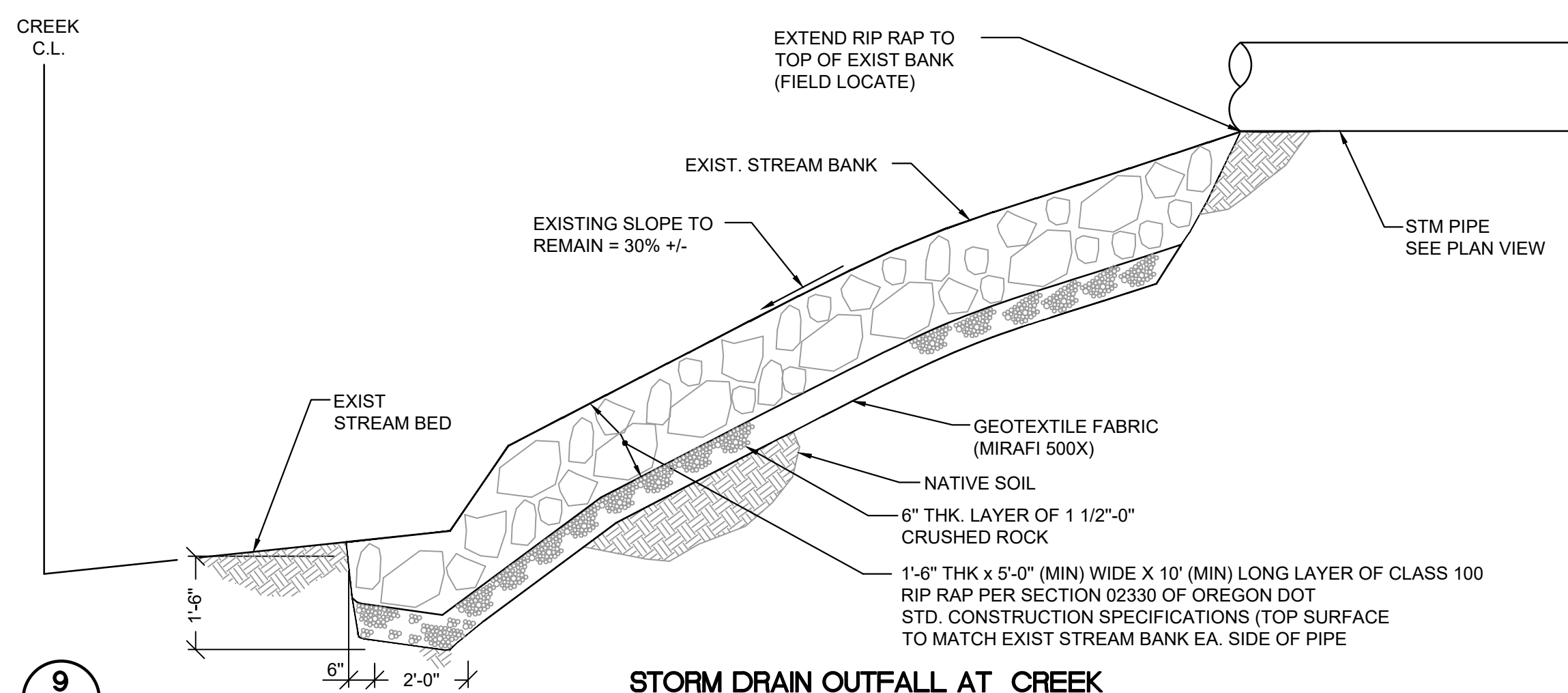
**GENERAL NOTES:**

- PLACE EROSION BLANKET OVER HYDROSEED WITHIN (7) DAYS OF SLOPE GRADING.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
- BLANKETS MUST BE STAPLED USING STAPLES A MINIMUM OF 6" IN LENGTH AND SPACED AS SPECIFIED IN THE FRONT VIEW. 12" LONG STAPLES MAY BE REQUIRED DEPENDING ON SOIL CONDITIONS.

**10**  
**055** EROSION BLANKET INSTALLATION DETAIL  
N.T.S. (EROSION/Blanket.dwg)



**8**  
**055** TREE PROTECTION FENCE  
N.T.S.



**9**  
**055** STORM DRAIN OUTFALL AT CREEK  
N.T.S. (SD & SS/RipRapOutfall.dwg)

REVISIONS:
10.23.2018 ESC PL CK
11.02.2018 ESC PL CK

# EROSION AND SEDIMENT CONTROL DETAILS

CLIENT: \_\_\_\_\_  
ENGINEER: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_ DRAWING NO.: ESC054  
DRAWN BY: \_\_\_\_\_ SCALE: AS NOTED  
CHECKED BY: \_\_\_\_\_ DATE: SEPTEMBER 5, 2018  
PREPARED FOR: \_\_\_\_\_

MULTNOMAH COUNTY  
TAX LOTS: \_\_\_\_\_

OREGON  
MULTNOMAH COUNTY TAX MAP

JOB NUMBER  
18005

SHEET  
ESC055



## **Public Works Checklist**

### **FOR EROSION AND SEDIMENT CONTROL PLANS**

For projects that disturb 1 or more acres or is part of a  
“common plan of development or sale”

Project Name: \_\_\_\_\_

Applicant \_\_\_\_\_

Address: \_\_\_\_\_

Date: \_\_\_\_\_

Reviewed by: \_\_\_\_\_

#### **NARRATIVE**

- Project description - Briefly describes the nature and purpose of the land- disturbing activity, and the area (acres) to be disturbed.
- Existing site conditions - A description of the existing topography, vegetation and drainage.
- Adjacent areas - A description of neighboring areas such as streams, residential areas, roads, etc., which might be affected by the land disturbance.
- Off-site areas - Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.). Will any other areas be disturbed?
- Soils - A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil structure.
- Critical areas - A description of areas on the site which have potentially serious erosion problems (e.g., steep slopes, channels, wet weather/ underground springs, etc.).
- Erosion and sediment control measures - A description of the methods which will be used to control erosion and sedimentation on the site.
- Permanent stabilization - A brief description, including specifications, of how the site will be stabilized after construction is completed.
- Stormwater runoff considerations - Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff.
- Maintenance of ESC measures - A schedule of regular inspections, maintenance, and repair of erosion and sediment control structures should be set forth.
- Specifications / Detail Drawings for erosion and sediment control measures - For each erosion and sediment control measure employed in the plan, include, at a minimum a detail or drawing for the device. Include any approved variances or revisions to the standards and specifications.
- Permitters Site Inspector – List the name and contact information of responsible party for upkeep and inspection of BMP's.
- Comments:

## **SITE PLAN**

- Vicinity map - A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site.
- Indicate north - The direction of north in relation to the site.
- Limits of clearing and grading - Areas which to be cleared and graded.
- Existing contours - The existing contours of the site.
- Final contours - Changes to the existing contours, including final drainage patterns.
- Existing vegetation - The existing tree lines, grassed areas, or unique vegetation.
- Existing drainage patterns - The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area.
- Protected areas – Show area that need to be protected from compaction, such as areas to be used for LID or green infiltrations areas.
- Critical erosion areas - Areas with potentially serious erosion problems.
- Site Development - Show all improvements such as buildings, parking lots, access roads, utility construction, etc.
- Off-site areas - Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.). Show location of erosion controls. (Is there sufficient information to assure adequate protection and stabilization?)
- Maintenance - A schedule of regular inspections and repair of erosion and sediment control structures should be set forth.
- Comments:

## **EROSION AND SEDIMENT CONTROL**

- Locations and details of erosion and sediment control BMPs (type, and why being used).
- Planned perimeter controls and methods to delineate limits of grading.
- Show storm drain inlets where runoff from site could enter the storm drain system and detail how the inlets shall be protected from silt and debris from the site.
- Show stabilized entrance for trucks and other equipment to enter and leave.
- Show location of and detail of washout area/waste pit of disposal of “wet” construction materials such as concrete, stucco and paint.
- Add note: Natural features, including vegetation, terrain, watercourse and similar resources shall be preserved, where possible.
- Show locations of porta-potties with secondary containment.
- Show erosion and sediment control legend.
- Comments:





NO.	DESCRIPTION	Reference (ESC Manual unless noted)	YES	NO	N/A
4	Are all perimeter sediment controls in-place where required by the ESCP, properly installed and well maintained?	§6.2.1			
Notes:					
5	Are all storm drain inlets properly protected where required by the ESCP, and well maintained?	§6.2.2			
Notes:					
6	Are construction site entrances and exits properly protected (i.e., using stabilized entrance, tire wash, street sweeping, etc.) to control off-site tracking of sediment and construction related pollutants?	§6.2.4			
Notes:					
7	Are all sediment traps, barriers, and basins constructed in accordance with the ESCP, well maintained and functioning properly?	§6.2.3			
Notes:					
8	Have all disturbed soil areas not being actively worked been temporarily stabilized to protect against erosion in accordance with the ESCP?	§5			
Notes:					
9	Are all other erosion prevention measures in-place and functioning in accordance with the ESCP?	§5			
Notes:					
10	Are all stockpiles located in designated areas and properly protected (inactive - covered or perimeter controls; active - properly located away from storm drains)?	§7.2			
Notes:					

NO.	DESCRIPTION	Reference (ESC Manual unless noted)	YES	NO	N/A
11	Are construction materials and equipment properly stored in dedicated areas away from storm drain discharge locations with secondary containment where appropriate?	§7.2			
Notes:					
12	Are all material handling and storage areas clean and free of spills, leaks, or other deleterious materials?	§7.2			
Notes:					
13	Are all equipment storage and maintenance areas clean and free of spills, leaks, or any other deleterious materials?	§7.2			
Notes:					
14	Are dust control measures being appropriately implemented?	§5.3			
Notes:					
15	Is the site generally free of litter and debris and do construction wastes appear to be properly managed?	§7.2			
Notes:					
16	Are hazardous materials and wastes properly stored, including being covered and stored within berms to provide secondary containment?	§7.2			
Notes:					
17	Have spills or discharges occurred on-site (since the last inspection) that require notification to DEQ (i.e., visible sheen on public waters, over 42 gallons of oil on ground, wastewater overflows, or significant quantities of sediment)? DEQ must be notified orally within 24-hours of reportable discharges.	§ General Permit 1200-C Sch. A, Item 1 Sch. F, B.3 Sch F, B.6 Sch F, D.5			
Notes:					

## Post Construction Working Group

### Water Quality Requirements draft text - Stormwater Mitigation Options

- Calculate and retain the difference in runoff between the pre and post 80<sup>th</sup> (0.46in) percentile storm event, unless factors of technical infeasibility are present.
- Treat all runoff from the 95<sup>th</sup> (0.84in) percentile storm event, prioritizing (LID/green infrastructure).
- If 100% of the 80<sup>th</sup> percentile storm is retained, no treatment is required.

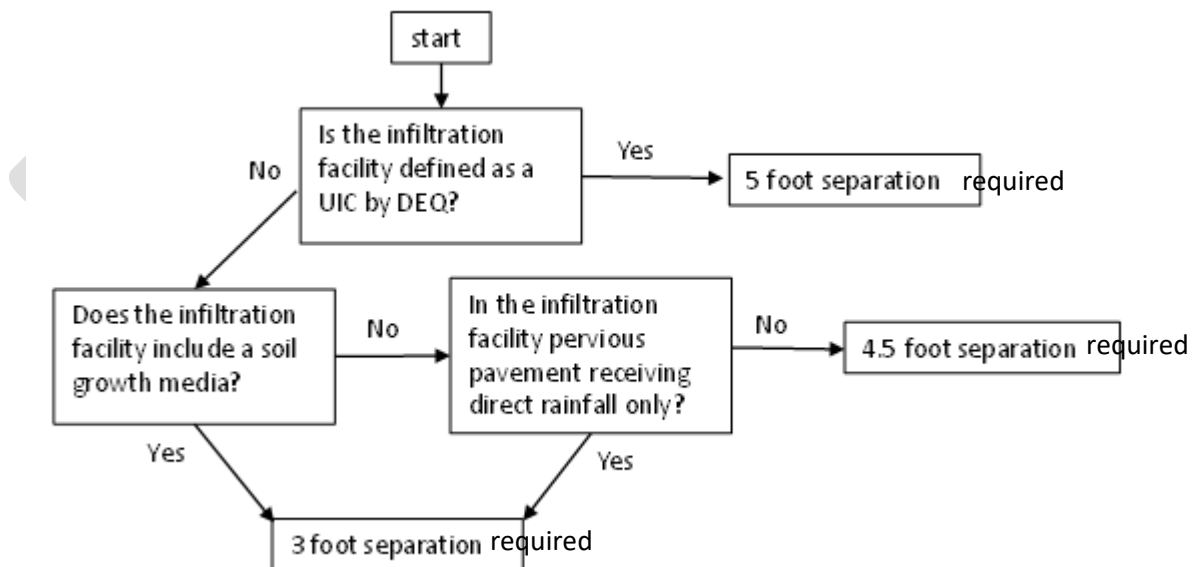
### Technical Infeasibility Factors as of 4-14-20

The technical factors described below make a site infeasible for retention based stormwater facilities. Treatment of the water quality (95<sup>th</sup> percentile) storm is still required.

#### Separation distance from seasonal high groundwater and bedrock

Separation distance shall be measured from stormwater facility subgrade:

- Less than five feet for Stormwater Facilities classified as UIC's by DEQ.
- Less than three feet for Stormwater facilities that are not UICs, and have a soil growth media and Pervious facilities receiving rainfall only.
- Less than 4.5 feet for Stormwater facilities that do not have a soil growth media and Pervious facilities receiving run-on.



#### Steep Slopes

Slopes of 15% or more, or as recommended by a registered geologist licensed in the state of Oregon.

#### Distance to drinking Water Wells

Less than 100 feet of separation from a SW facility to a drinking water well.

### **Land Use Planning**

Jurisdictional planning requirements that make infiltration stormwater facilities infeasible. If using this infeasibility criteria, the designer shall seek prior approval from the local jurisdiction.

### **Transportation**

The following transportation related projects would be considered infeasible for retention:

- Any project that would require the purchase of right-of-way for a retention feature.
- Repair of road base within the existing impervious footprint.

Transportation related projects that are exclusively limited to maintenance and improvement of existing roadways are considered infeasible for both retention and water quality requirements, these activities include:

- Widening less than a single lane
- Shoulder additions
- Correcting substandard intersections, for reasons of function, capacity or safety
- Improving existing drainage systems
- Pavement preservation, preventive maintenance, or rehabilitation within the existing impervious footprint
- Emergency roadwork that occurs outside the normal Capital Improvement Process.

Bike and Pedestrian Improvement Projects in the following situations would be exempt from both retention and water quality requirements:

- Exclusive bike and pedestrian projects
- Bike and pedestrian projects part of a larger project, if they have no curb and gutter

### **Utility Trenches**

- Utility trenches are exempt from retention and water quality requirements.

### **Infiltration Rate**

A measured infiltration rate of 1.5inches/hour or less, following the protocol outlined in Appendix B or as recommended by an engineer or registered geologist licensed in the state of Oregon.

### **Contaminated Soils**

Contaminated soils deemed by DEQ to be infeasible for infiltration.

### **Other Requirements**

If other requirements are applied to the site, such as SLOPES, that may impact the ability to incorporate retention, discuss these with the local jurisdiction prior to design.

### **Mitigation Alternatives**

If an applicant is unable to meet requirements a and b on their project site, applicants may propose alternatives to their local jurisdiction to achieve retention and water quality treatment.

<i>Site Description</i>	<i>Site #</i>	<i>Jurisdictions Affected</i>
Walker Creek @ Belle Fiore	E1	ASH, CNTY
Emigrant Creek @ Gun Club	E2	ASH, CNTY
Neil Creek @ Dead Indian	E3	ASH, CNTY
Ashland Creek @ Granite St.	E4	ASH, CNTY
Ashland Creek below STP	E5	ASH, CNTY
TID Canal @ Eagle Mill Rd.	E6	TID, ASH, CNTY
Bear Ck. @ S. Valley View Rd.	E7	ASH, CNTY
Bear Ck. @ Greenway (S.Talent)	E8	TAL, CNTY
Bear Ck. @ Lynn Newbry Park	E9	TAL, CNTY
MID Diversion @ Suncrest Rd.	E10	MID, CNTY
Bear Ck. @ B.H. Park (Phoenix)	E11	PHO, CNTY
Bear Ck. @ Fern Valley Rd.	E12	PHO, CNTY
Bear Ck. @ JNC (S. Medford)	E13	MED, CNTY
Bear Ck. @ 9th St. in Medford	E14	MED, CNTY
Bear Ck. @ Table Rock Rd.	E15	MED, CNTY
Griffin Creek @ Beall Ln.	E16	JVLLE, CPT, CNTY
Jackson Creek @ Beall Ln.	E17	JVLLE, CPT, CNTY
Jackson Creek @ Jacksonville	E18	JVLLE, CPT, CNTY
Jackson Creek @ W. Ross Ln.	E19	JVLLE, CPT, CNTY
Bear Ck. @ Pine St. (CP)	E20	CPT, CNTY
Bear Ck. above Griffin (CP)	E21	CPT, CNTY
Griffin Creek @ I-5	E22	CPT, CNTY
Jackson Creek @ Blackwell Rd.	E23	JVLLE, CPT, CNTY
Bear Ck. @ Kirtland Rd.	E24	CNTY, All
Bear Ck. @ S. Valley View Rd.	DUP 1	ASH, CNTY
Bear Ck. @ 9th St. in Medford	DUP 2	MED, CNTY
Bear Ck. @ Kirtland Rd. QA/QC	QA/QC1	CNTY, All
Rogue River, Hwy 234 in GH QA/QC	QA/QC2	CNTY, All

***Water Quality Standards***

	May 16th-Oct 14th	Oct 15th-May 15th
Temperature	18.0 C (64.4 F)	13.0 C (55.4 F)
Turbidity		
E. Coli (single sample)		

<i>Sample Date</i>	<i>Time of Day</i>	<i>Temp. (Celsius)</i>	<i>pH</i>	<i>Conductivity (umho/cm)</i>
7/16/2019	13:20	18.3	7.99	284.2
7/16/2019	13:33	19.2	8.00	122.4
7/16/2019	12:45	16.3	7.90	54.7
7/16/2019	12:17	20.2	7.54	222.1
7/16/2019	11:58	17.2	8.17	133.3
7/16/2019	11:35	17.4	8.16	147.8
7/16/2019	11:20	16.7	8.07	150.3
7/16/2019	11:07	17.2	7.96	167.1
7/16/2019	10:50	17.4	8.16	181.0
7/16/2019	10:33	18.4	8.05	215.9
7/16/2019	10:15	18.2	8.33	224.0
7/16/2019	9:55	19.3	8.12	226.1
7/16/2019	14:05	22.8	8.91	246.8
7/16/2019	14:35	25.0	9.07	281.2
7/16/2019	9:02	18.7	8.10	249.9
7/16/2019	9:10	20.0	8.14	237.5
7/16/2019	9:23	20.1	7.93	215.2
7/16/2019	14:53	25.5	9.26	248.8
7/16/2019	15:36	26.4	9.34	266.8
7/16/2019	15:44	21.5	8.29	281.2
7/16/2019	15:09	21.7	8.14	251.8
7/16/2019	16:10	24.9	8.68	284.1
7/16/2019	11:37	17.4	8.18	148.1
7/16/2019	14:07	22.9	8.87	247.1
7/24/2019	13:02	21.8	8.33	287.6
7/24/2019	13:40	17.0	7.84	62.9

Year Round

50 ntus

406 mpn

<i>Turbidity (NTU)</i>	<i>E. coli (MPN)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Ammonia-Nitrate (mg/L)</i>
0.90	88.6	0.043	-
4.21	248.1	0.117	-
0.00	4.1	0.028	0.073
1.70	228.2	0.085	0.139
41.9	290.9	0.098	-
8.96	161.6	0.071	-
9.36	261.3	0.078	-
8.86	151.5	0.074	-
9.50	1119.9	0.079	-
15.95	218.7	0.091	-
12.18	172.5	0.089	-
14.69	248.1	0.117	-
20.0	1119.9	0.121	-
10.59	325.5	0.107	-
13.99	325.5	0.082	-
10.69	727.0		-
3.03	57.6	0.039	-
12.55	133.3	0.112	-
12.18	547.5	0.127	-
13.27	160.7	0.084	-
10.30	387.3	0.112	-
8.00	139.6	0.101	-
9.01	231.0	0.074	-
19.33	1553.1	0.125	-
7.83	187.2	0.123	0.300
4.53	23.3	0.070	-

LE =Lab Error  
FE = Field Error  
ND = not detectable



**Post-Construction Working Group**  
**To Do Items for alignment of the Design Manual with the new MS4 permit.**

permit #	Item # Requirement to Develop	Status
iv. (A)	1 Numeric stormwater retention requirement to target natural surface or predevelopment hydrologic function	Done spring 2020.
	a. select impervious area threshold for retention requirement	5,000sf. Spring 2019.
	b. select storm event size	80th percentile, 0.46in
	2 select WQ storm event size calculation methodology:	11-2019: agreed to use storm event percentile
	volume based	
	storm event percentile-based method	
	annual average runoff-based method	
	3 definition of pre-development: align RVDM with DEQ definition?	11-2019: agreed to align w/ new std
iv. (B)	4 Develop manual language for retention standard.	Done. July 2020.
iv ©	5 Structural SW control Design and Specifications	Done. RVDM includes all of this.
iv (D)	6 Allowance for Alternative Compliance	
	a. establish requirements for technical infeasibility	Done. July 2020
	b. develop manual language on technical infeasibility	Starting September 2020
iv E	7 Stormwater Mitigation Options	
	establish standards for valuing, estimating and accounting for how mitigation projects retain	WG is proposing a 3 part standard to address this, see the Water Quality Requirements text, parts a-c.
	a. unmet volume of SW	
	b. establish subwatershed definition for mitigation site location	
	c. select mitigation option	
d. develop mitigation option		
	8 Detention Requirements in RVSDM	
	a. Should the detention requirements change in light of the new retention requirements?	July 2020 began reviewing this.