

OPERATIONS AND MAINTENANCE MANUAL

DFI No.: D01135

Facility Type: Water Quality Biofiltration Swale



April, 2020

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2. Facility Contact Information
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5. Facility Haz Mat Spill Feature(s)
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1. Identification

Drainage Facility ID (DFI): **D01135**
Facility Types: Water Quality Biofiltration Swale
Construction 52V-013
Drawings:

Location: District: 5
Florence-Eugene Highway 62
Milepost: 31.77/31.79 (beg./end)

2. Facility Contact Information

Contact the Engineer of Record, Region Technical Center, or Geo-Environmental's Senior Hydraulics Engineer for:

- Operational clarification
- Maintenance clarification
- Repair or restoration assistance

Engineering Contacts:

Region Technical Center Hydraulics Engineer (503) 986-2691

Or

Geo-Environmental Senior Hydraulic Engineer (503) 986-3365

3. Construction

Engineer of Record: ODOT Designer - Region 2 Tech. Center,
Chris Carman, (503) 986-2691

Facility construction: 2019
Contractor: TBD
Contract #: 15126

4. Facility Overview

The swale is located at milepost 31.77 on the Florence-Eugene highway 62 on the south side of the highway. Treatment of pollutants from the highway are achieved through sedimentation and infiltration through the water quality mix shown in section B-B in the operational plan.

5. Facility Haz Mat Spill Feature(s)

The swale can be used to store a volume of liquid by blocking the outlet of the swale. A barrier such as a temporary berm made of sandbags could be used to prevent liquid from draining from the swale.

6. Auxiliary Outlet (High Flow Bypass)

This facility does not contain an auxiliary outlet feature. The facility was designed to receive runoff from the road and discharge into cross pipes.

7. Maintenance Requirements

Routine maintenance table for non-proprietary stormwater treatment and storage/detention facilities have been incorporated into ODOT's Maintenance Guide. These tables summarize the maintenance requirements for ponds, swales, filter strips, bioslopes, and detention tanks and vaults. Special maintenance requirements in addition to the routine requirements are noted below when applicable.

The ODOT Maintenance Guide can be viewed at the following website:

https://www.oregon.gov/ODOT/HWY/OOM/mg/02/act125_waterqualityfacil_andtables.pdf

The following stormwater facility maintenance table (See ODOT Maintenance Guide) should be used to maintain the facility outlined in this Operation and Maintenance Manual or follow the Maintenance requirements outlined in Appendix C when proprietary structure is selected below:

- Table 1 (general maintenance)
- Table 2 (stormwater ponds)
- Table 3 (water quality biofiltration swales)
- Table 4 (water quality filter strips)
- Table 5 (water quality bioslopes)
- Table 6 (detention tank)
- Table 7 (detention vault)
- Appendix C (proprietary structure)
- Special Maintenance requirements:

8. Waste Material Handling

Material removed from the facility is defined as waste by DEQ. Refer to the roadwaste section 5.18 of the ODOT Maintenance Yard Environmental Management System (EMS) Policy and Procedures Manual for disposal options:

https://www.oregon.gov/ODOT/HWY/OOM/EMSdoc/ems_manual.pdf

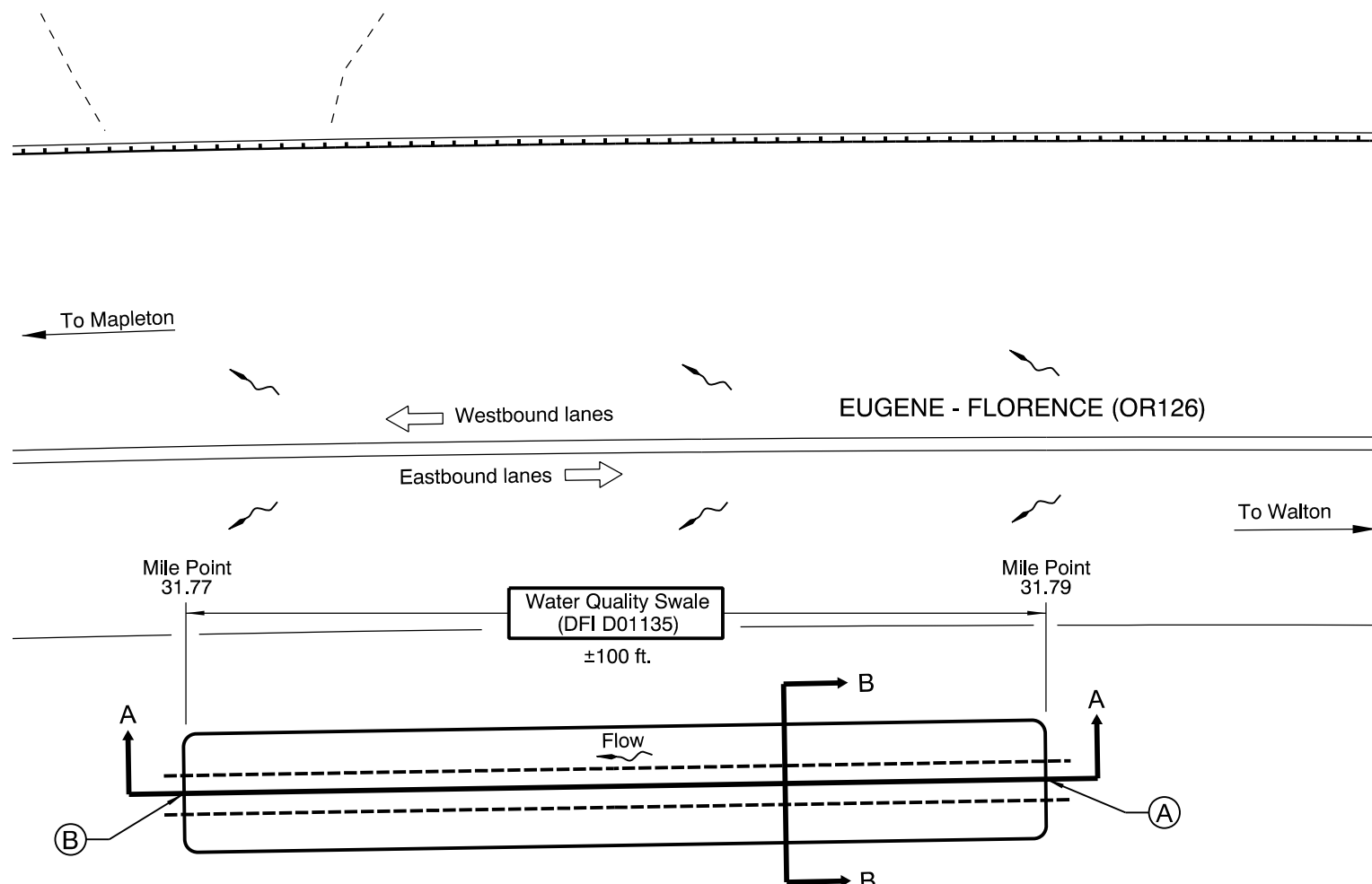
Contact any of the following for more detailed information about management of waste materials found on site:

| | |
|-----------------------------------|----------------|
| ODOT Clean Water Unit | (503) 986-3008 |
| ODOT Statewide Hazmat Coordinator | (503) 229-5129 |
| ODOT Region Hazmat Coordinator | (503) 986-2647 |
| ODEQ Northwest Region Office | (503) 229-5263 |

Appendix A

Content:

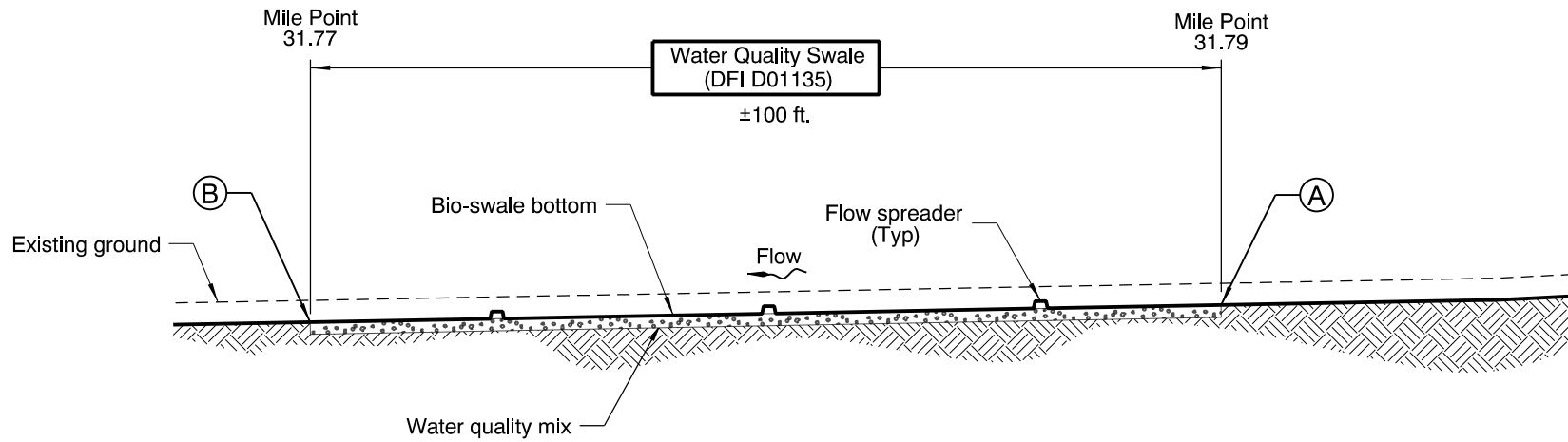
- **Operational Plan and Profile Drawing(s)**



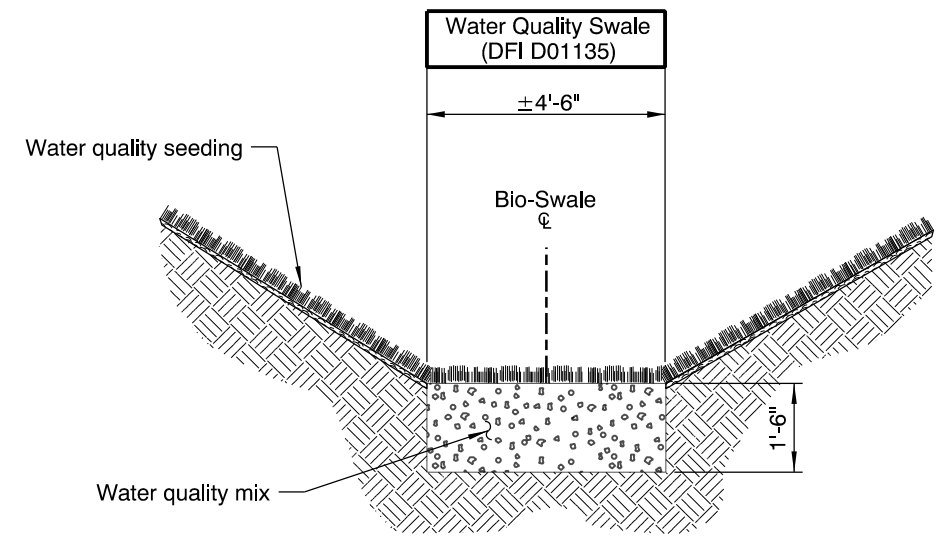
PLAN
NTS



- LEGEND:**
- (A) Swale Inlet
 - (B) Swale Outlet
 - ~ Pavement / Facility Flow Path
 - - - Ditch Line
 - - - - Storm Pipe (Facility)
 - ▭ Swale Boundary
 - Traffic Direction



Section A-A
NTS



Section B-B
NTS

OREGON DEPARTMENT OF TRANSPORTATION

Prepared By: Chris Carman
 Drafted By: Jeff Coon

DFI D01135
MAINTENANCE DISTRICT 5 HWY 62
FACILITY TYPE
 HIGHWAY MP 31.77
 LANE COUNTY

Appendix B

Content:

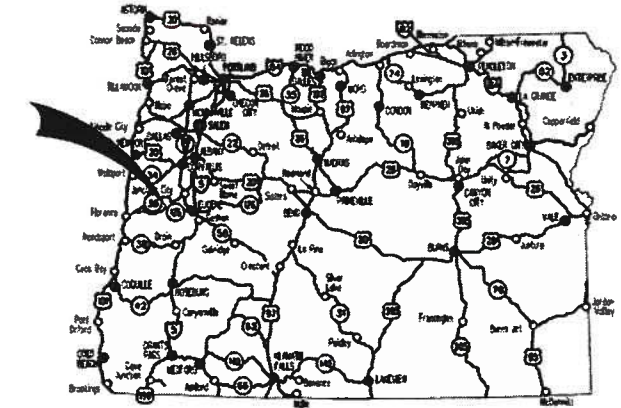
- **ODOT Project Plan Sheets**
 - *Cover/Title Sheet*
 - *Water Quality/Detention Plan Sheets*
 - *Other Details*

| INDEX OF SHEETS | |
|-----------------------|--|
| SHEET NO. | DESCRIPTION |
| A01 | Title Sheet |
| A02 | Index Of Sheets Cont'd. & Std. Drg. Nos. |
| A03 Thru A07 Incl. | Survey Control Data |

STATE OF OREGON
 DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED PROJECT
 GRADING, PAVING & SIGNING

OR126: WALKER CREEK - CHICKAHOMINY CREEK SEC.
 FLORENCE - EUGENE HWY.



Overall Length Of Project - 0.8 Miles

ATTENTION:
 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 The Rules By Calling The Center. (Note: The Telephone Number For The Oregon Utility Center Is (503) 232-1987.)



OREGON TRANSPORTATION COMMISSION
 Tammy Boney CHAIR
 Bob Van Brocklin VICE-CHAIR
 Alando Simpson COMMISSIONER
 Julie Brown COMMISSIONER
 Martin Callery COMMISSIONER
 Matthew L. Garrett DIRECTOR OF TRANSPORTATION

These plans were developed using ODOT design standards. Exceptions to these standards, if any, have been submitted and approved by the ODOT Chief Engineer or their delegated authority.

Approving Authority: James E. West Dec 12 2018 8:26 AM
 Signature & date
 James E. West - R2 Tech Center Manager
 Print name and title
 Steven B Cooley Dec 14 2018 11:12 AM
 Concurrence by ODOT Chief Engineer

OR126: WALKER CREEK - CHICKAHOMINY CREEK SEC.
 FLORENCE - EUGENE HWY.
 LANE COUNTY

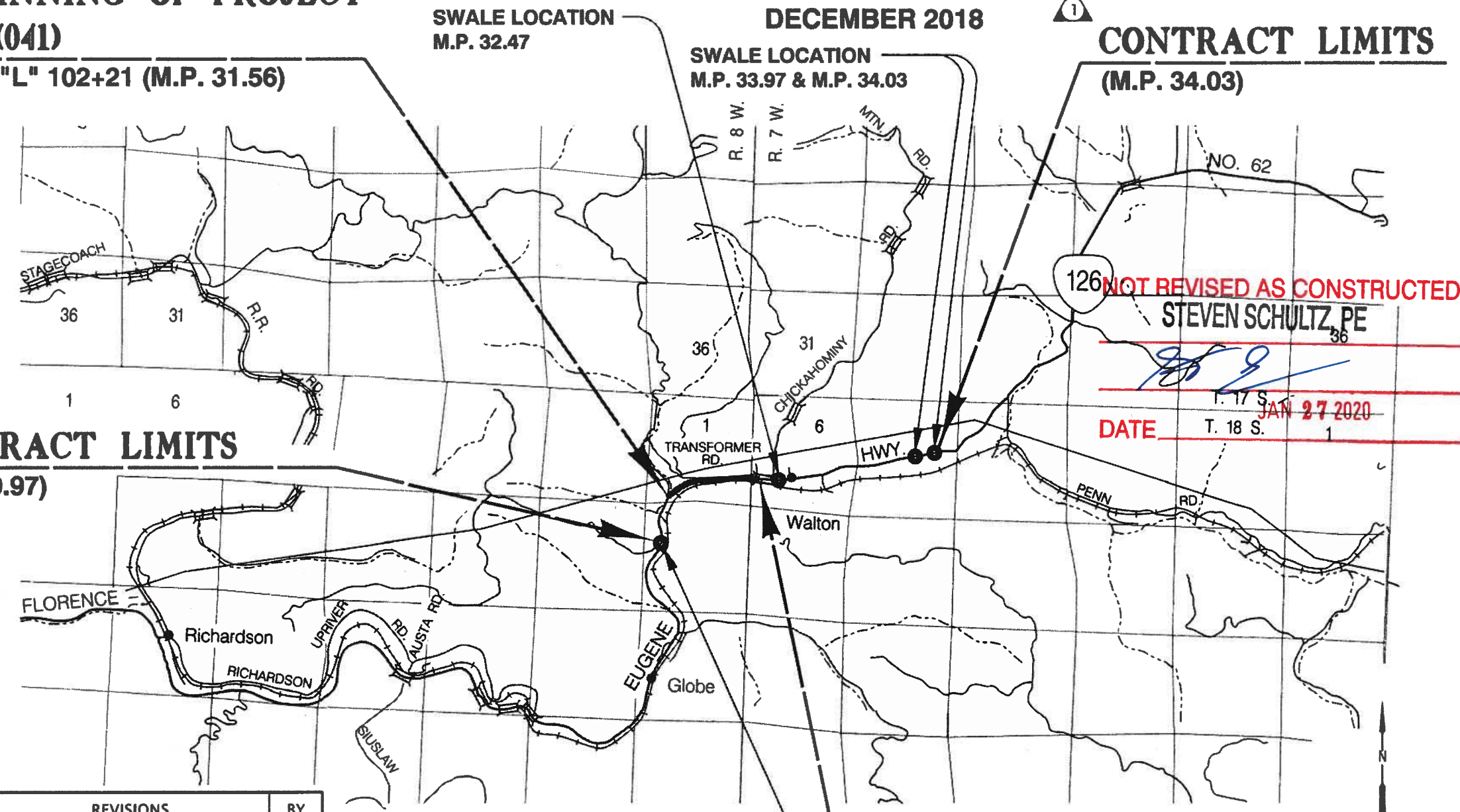
| | | |
|--------------------------------|----------------|-----------|
| FEDERAL HIGHWAY ADMINISTRATION | PROJECT NUMBER | SHEET NO. |
| OREGON | STATE | A01 |

LANE COUNTY
 DECEMBER 2018

CONTRACT LIMITS
 (M.P. 34.03)

BEGINNING OF PROJECT
 S062(041)
 STA. "L" 102+21 (M.P. 31.56)

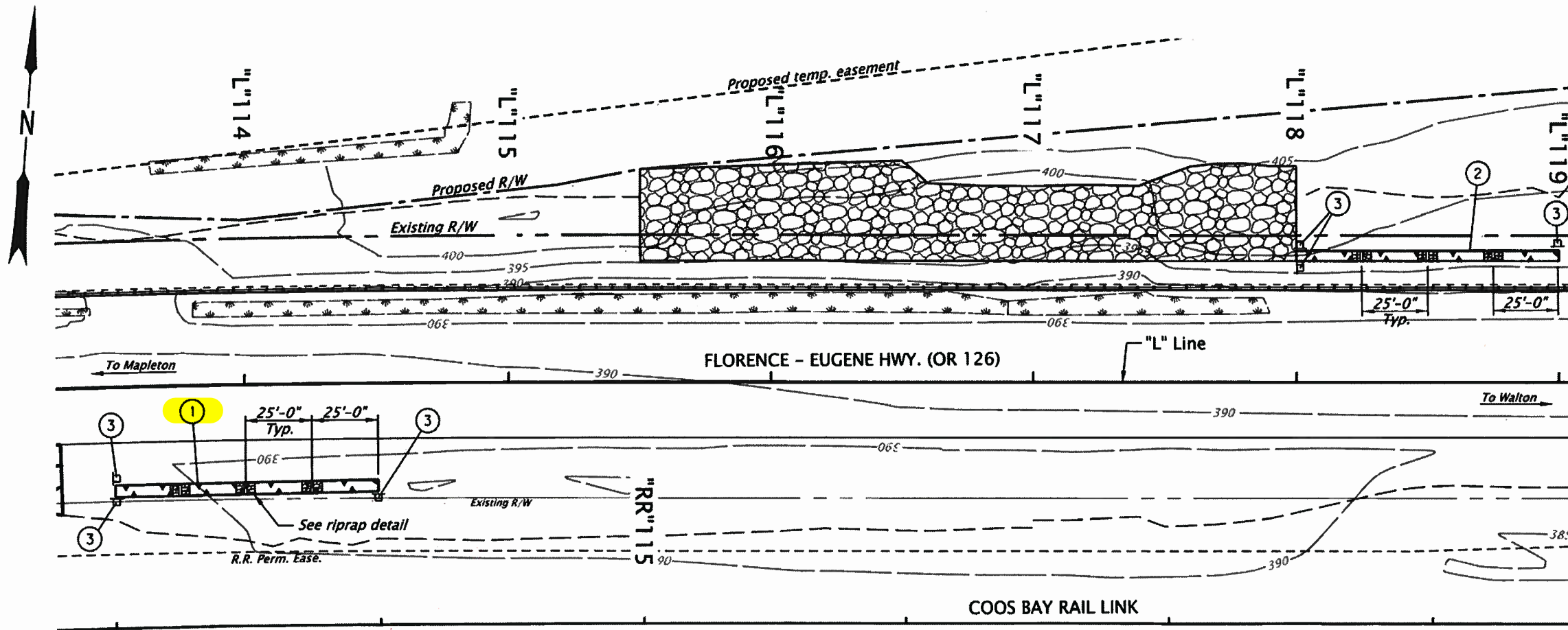
CONTRACT LIMITS
 (M.P. 30.97)



NOT REVISED AS CONSTRUCTED
 STEVEN SCHULTZ, PE
 DATE T. 17 S. JAN 27 2020
 T. 18 S. 1

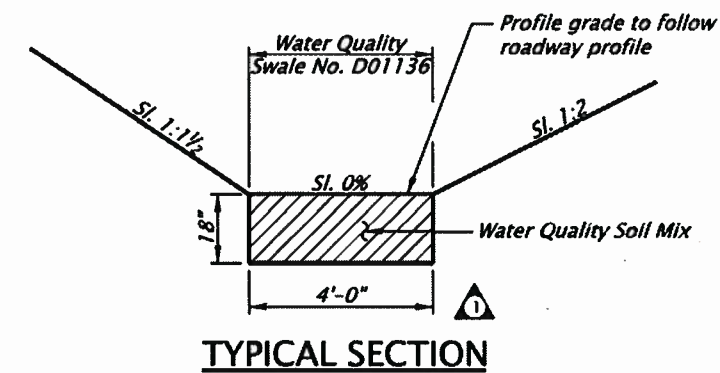
| No. | DATE | REVISIONS | BY |
|-----|----------|-----------------------|------|
| 1 | 12-13-18 | Added contract limits | S.T. |
| | | | |
| | | | |

PE002619



PLAN

- ① Sta. "L" 113+50 to Sta. "L" 114+50 Rt. Construct Water Quality Swale No. D01135 Water Quality Soil Mix - 25 cu. yd. Construct loose riprap (Class 50) - 5 cu. yd.
- ② Sta. "L" 118+00 to Sta. "L" 119+00 Lt. Construct Water Quality Swale No. D01136 Water Quality Soil Mix - 25 cu. yd. Construct loose riprap (Class 50) - 5 cu. yd.
- ③ Install stormwater facility marker (See RD399)

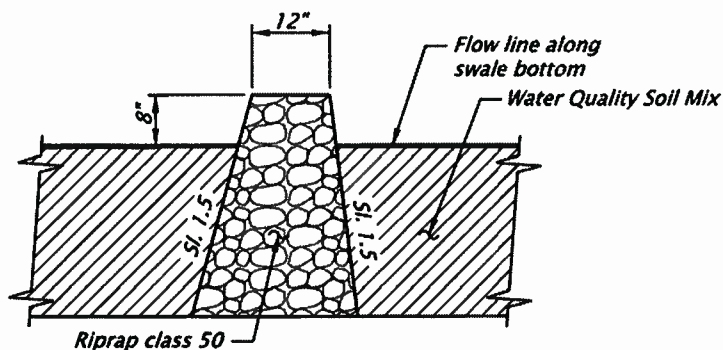


TYPICAL SECTION

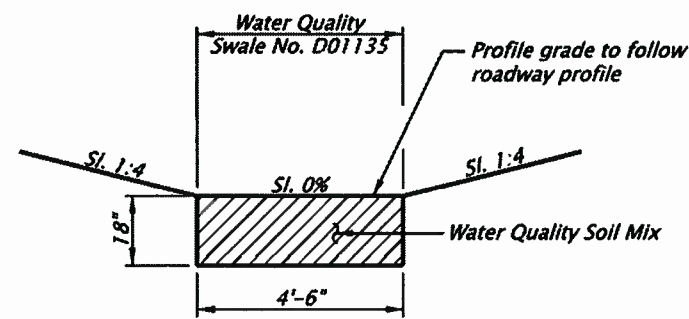
REVISED AS CONSTRUCTED

STEVEN SCHULTZ, PE

DATE JAN 27 2020



RIPRAP DETAIL



TYPICAL SECTION

Notes:
 1. All slopes shown as vertical to horizontal or percentage.
 2. See Roadway plans for the profile.

| No. | DATE | REVISIONS | BY |
|-----|----------|------------------|------|
| ① | 12-13-18 | Change dimension | C.C. |

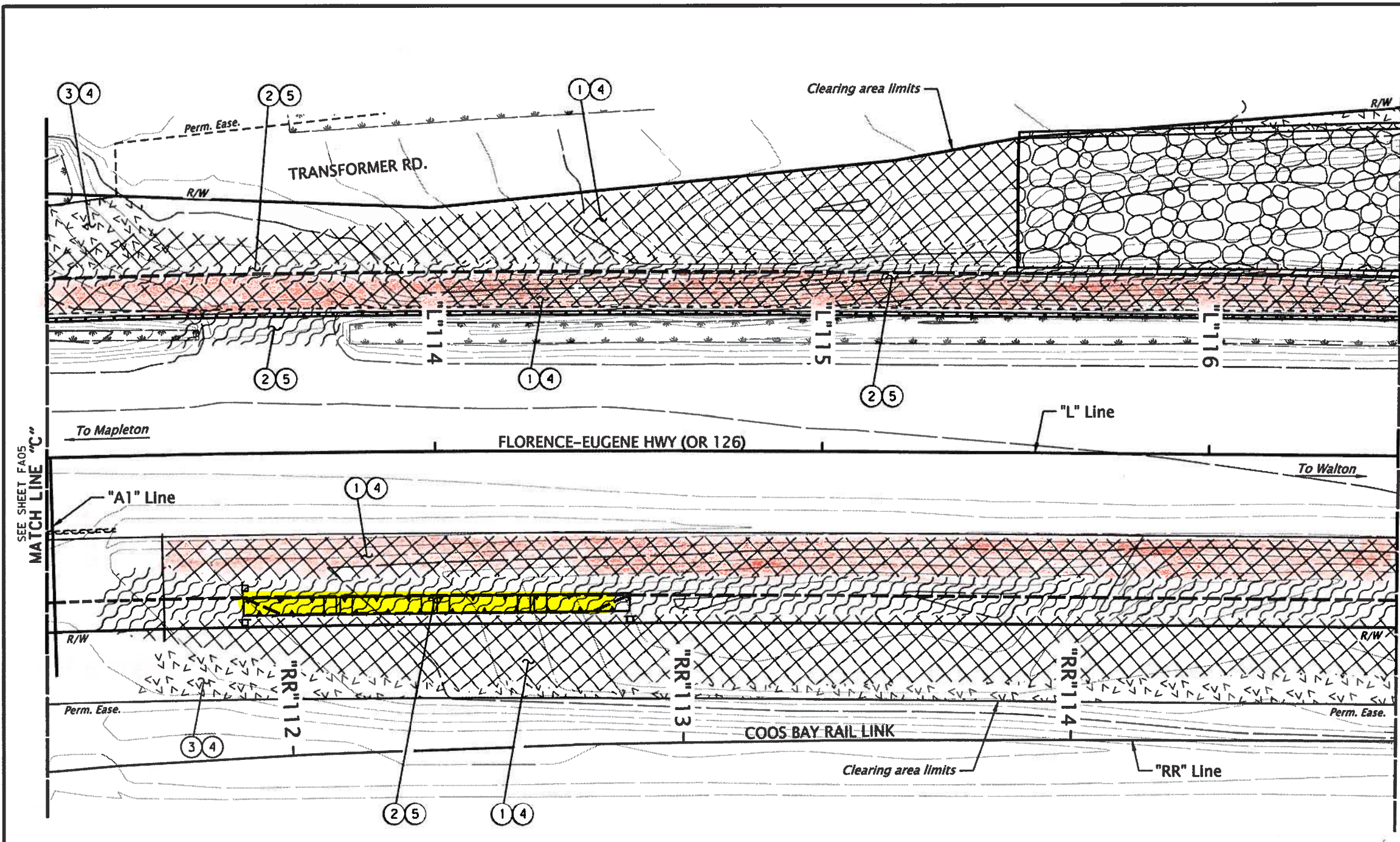
REGISTERED PROFESSIONAL ENGINEER
 17,807
 Chris Carman Dec 12 2018 3:10 PM
 OREGON
 JULY 25, 1995
 CHRIS CARMAN
 RENEWS: 12-31-2019

OREGON DEPARTMENT OF TRANSPORTATION

OR126: WALKER CREEK - CHICKAHOMINY CREEK SEC.
 FLORENCE - EUGENE HIGHWAY.
 LANE COUNTY

Designer: Chris Carman Reviewer: Bo Miller
 Drafter: Julie Rentz Checker: N/A

STORMWATER SHEET NO. HA02



LEGEND AND NOTES:

- ① Inst. Permanent seeding mix #1
At cut and fill slopes
 - ② Inst. Permanent seeding mix #2
 - ③ Inst. Permanent seeding mix #1
At tree clearing area
 - ④ Inst. matting, Type D over
Permanent seeding mix #1
 - ⑤ Inst. matting, Type F over
Permanent seeding mix #2 and
on slopes 1V:2H or greater
- Wetlands
 Water Quality Biofiltration Swale

 = No seed, stone
embankment fill

REVISED AS CONSTRUCTED
STEVEN SCHULTZ, PE

DATE JAN 27 2020



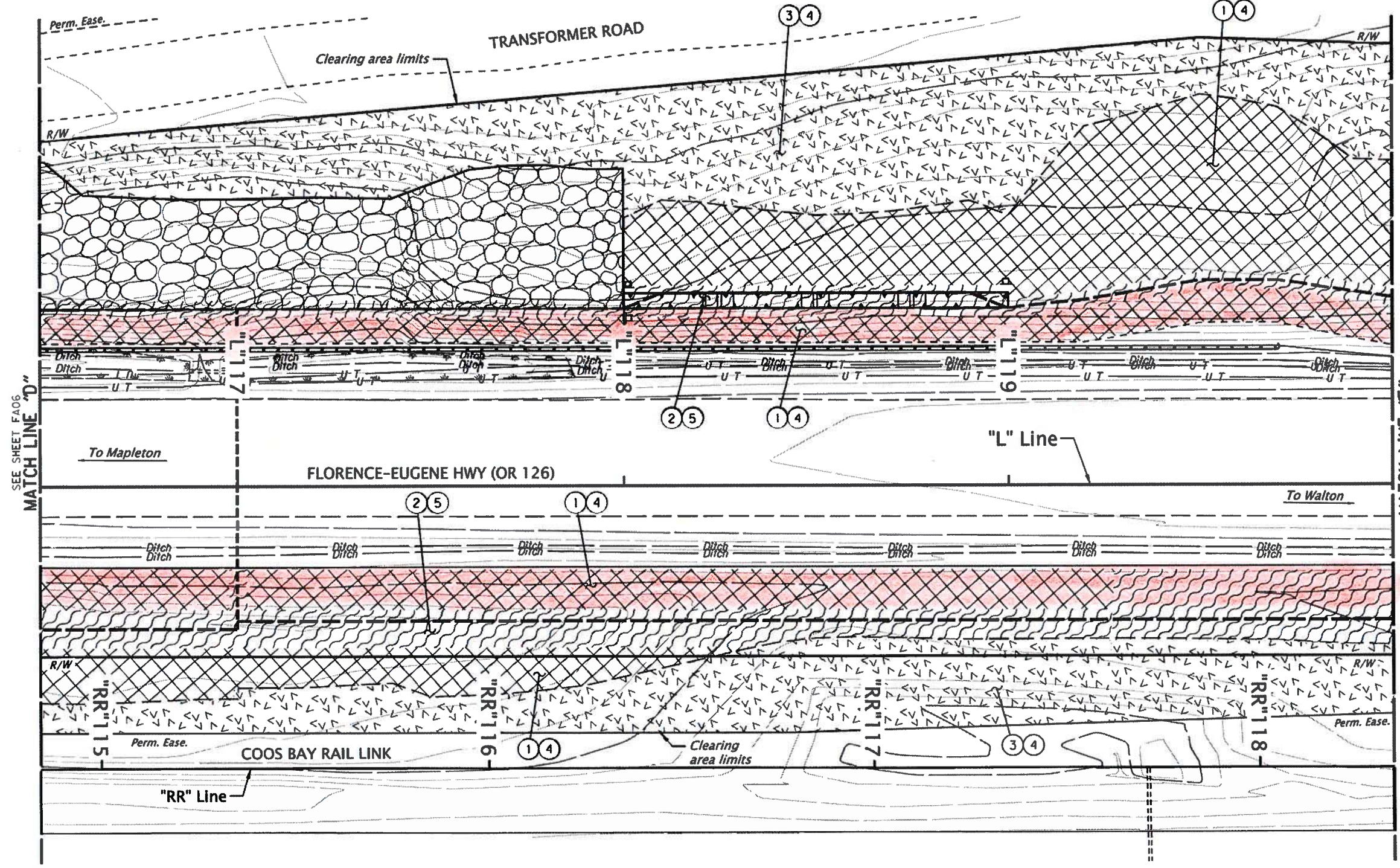
REGISTERED
 0938
 Digital Signature Nov 8 2018 6:29 PM
CELINE LIVENGOOD
 OREGON
 06/06/17
LANDSCAPE ARCHITECT
 EXPIRES: 06-30-2019

OREGON DEPARTMENT OF TRANSPORTATION

OR126: WALKER CREEK - CHICKAHOMINY CREEK SEC.
 FLORENCE - EUGENE HIGHWAY,
 LANE COUNTY

Designer: Celine Livengood Reviewer: Bob Marshall
 Drafter: Michael Skelton Checker: N/A

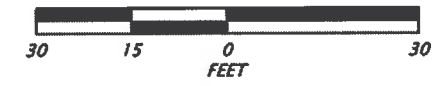
ROADSIDE DEVELOPMENT PLAN SHEET NO. FA06



- LEGEND AND NOTES:**
- ① Inst. Permanent seeding mix #1
At cut and fill slopes
 - ② Inst. Permanent seeding mix #2
 - ③ Inst. Permanent seeding mix #1
At tree clearing area
 - ④ Inst. matting, Type D over
Permanent seeding mix #1
 - ⑤ Inst. matting, Type F over
Permanent seeding mix #2 and
on slopes 1V:2H or greater
 - Wetlands
 - Water Quality Biofiltration Swale

[Red hatched box] = No seed, stone embankment fill

REVISED AS CONSTRUCTED
 STEVEN SCHULTZ, PE
 [Signature]
 DATE JAN 27 2020



REGISTERED
 0938
 Digital Signature Nov 13 2018 7:21 AM
CELINE LIVENGOOD
 OREGON
 06/06/17
LANDSCAPE ARCHITECT
 EXPIRES: 06-30-2019

OREGON DEPARTMENT OF TRANSPORTATION

OR126: WALKER CREEK - CHICKAHOMINY CREEK SEC.
 FLORENCE - EUGENE HIGHWAY.
 LANE COUNTY

Designer: Celine Livengood Reviewer: Bob Marshall
 Drafter: Michael Skelton Checker: N/A

ROADSIDE DEVELOPMENT PLAN SHEET NO. FA07

Appendix C

Content:

- Photos





