

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A01	Title Sheet
A02	Index Of Sheets Cont. & Std. Dwg. Nos.

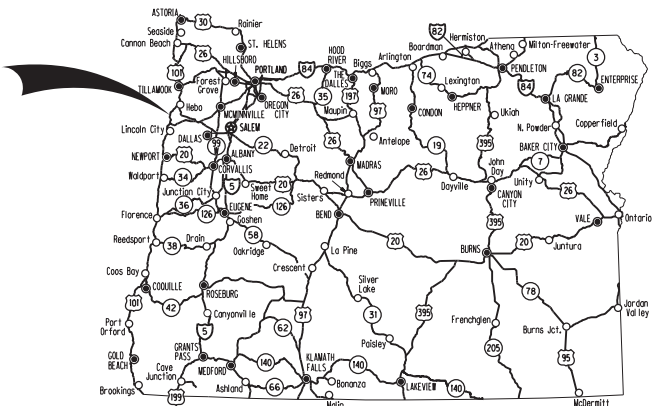
STATE OF OREGON
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED PROJECT

GRADING, DRAINAGE, STRUCTURE, PAVING,
SIGNING & ROADSIDE DEVELOPMENT

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY

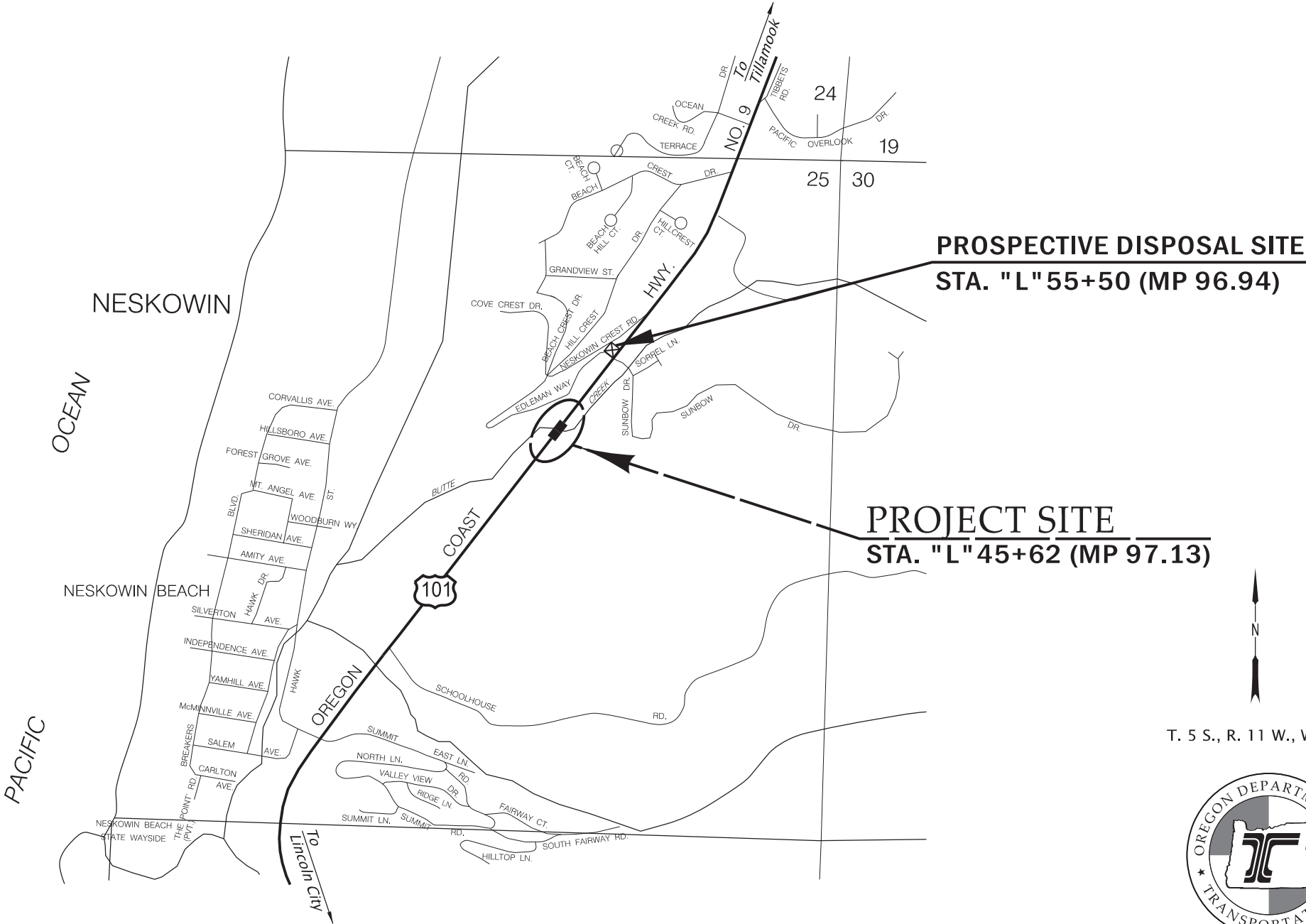
TILLAMOOK COUNTY
SEPTEMBER 2026



Overall Length Of Project - 0.35 Miles

ATTENTION:
Oregon Law Requires You To Follow Rules Adopted
By The Oregon Utility Notification Center.
Those Rules Are Set Forth In OAR 952-001-0001
Through OAR 952-001-0100.
You May Obtain Copies Of The Rules By Calling
The Center (Note: The Telephone Number For
The Oregon Utility Notification Center Is
(503) 232-1987).

LET'S ALL
WORK TOGETHER
TO MAKE THIS
JOB SAFE



T. 5 S., R. 11 W., W.M.



OREGON TRANSPORTATION COMMISSION
Julie Brown
Lee Beyer
Jeff Baker
Phil Chang
Vacant
Chris Warner
CHAIR
VICE CHAIR
COMMISSIONER
COMMISSIONER
INTERIM 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:

HARRISON Robert
Digitally signed by HARRISON Robert
Date: 2026.07.15 08:30:15 -07'00'

Signature & date
Robert E. Harrison-R2 Tech Center Manager
Print name and title

PELTZ Tova R
Digitally signed by PELTZ Tova R
Date: 2026.08.07 09:36:39 -07'00'

Concurrence by ODOT Chief Engineer

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION	S009(526)	A01

INDEX OF SHEETS, CONT.	
SHEET NO.	DESCRIPTION
AD01	Survey Control Data
ROADWAY DETAILS	
BA01 Thru BA04 Incl.	Typical Sections
BB01 Thru BB05 Incl.	Details
ROADWAY CONSTRUCTION	
C01	Alignment
C01A	General Construction
C01B	General Construction Notes
C01C	Diversion Plan
C01D, C01E	"L" & "D" Profile
C02	Alignment
C02A	General Construction
C02B	Diversion Plan
C02C, C02D	"L", "Ew", & "D" Profile
TRAFFIC CONTROL	
EA01 Thru EA03 Incl.	Traffic Control Plan
ROADSIDE DEVELOPMENT / EROSION CONTROL	
FA01	Roadside Development Planting Plan
FA02	Roadside Development Details
FA03	Roadside Development Plant Schedule
FB01	Erosion And Sediment Control Notes
FB02 Thru FB11 Incl.	Erosion And Sediment Control Plan
GEOTECHNICAL	
GE01	Prospective Disposal Site
HYDRAULIC	
HA01	Stormwater Plan
HD01 Thru HD03 Incl.	Temporary Water Management Concept
HD04	Details
HF01 Thru HF07 Incl.	Waterway Enhancement Plan
HF08	Details

Standard Dwg. Nos.

- RD300
- RD316
- RD318
- RD319
- RD320
- RD386
- RD399
- Trench Backfill, Bedding, Pipe Zone And Multiple Installations
- Sloped Ends For Metal Pipe
- Sloped Ends For Concrete Pipe
- Miscellaneous Culvert Details
- Paved End Slope For Culverts 60" Maximum Pipe Size
- Fill Height Tables For Circular Concrete Pipe
- Stormwater Treatment And Storage Facility Field Markers

INDEX OF SHEETS, CONT.		
BRIDGE		
SHEET NO.	BDS DRAWING NO.	DESCRIPTION
STRUCTURE NO. 24348		
J01	113477	Plan And Elevation
J02	113478	General Notes
J03	113479	Staging Plan
J04	113480	Geotechnical Data
J05	113481	Footing Plan
J06	113482	Deck Plan
J07	113483	Typical Deck Section
J08	113484	Girder Schedule
J09	113485	Girder Details - 1
J10	113486	Bent 1 Details (Bent 2 Sim.)
J11	113487	Bent Sections And Bearing Details
J12	113488	Exterior Wingwall Details
J13	113707	Interior Wingwall Details
SIGNS		
LA01		Signing Plan
LB01		Sign Details
LC01		Sign & Post Data Table
PERMANENT PAVEMENT MARKINGS		
QA01		Pavement Marking Plan And Details

Standard Dwg. Nos. Cont.

- RD402
- RD403
- RD404
- RD407
- RD410
- RD412
- RD416
- RD417
- RD420
- RD421
- RD442B
- RD450
- RD482
- Midwest Guardrail System Types
- Midwest Guardrail System Wood Post And Block
- Midwest Guardrail System Steel Post And Block
- Midwest Guardrail System (W-Beam)
- Thrie Beam Guardrail Transition
- Midwest Guardrail System Installation At Bridge Deck Expansion Joint
- Midwest Guardrail System Standard Hardware (Nuts, Bolts, Washers And Misc.)
- Midwest Guardrail System End Sections
- Midwest Guardrail System Non-Flared Energy-Absorbing Terminal
- Midwest Guardrail System Flared Energy-Absorbing Terminal (MFLEAT)
- Midwest Guardrail System Placement At Bridge Ends (Sheet 2 of 2)
- Guardrail Anchors (Steel)
- Midwest Guardrail System Type 3 (Nested W-Beam)

- RD503
- RD516
- Precast Concrete Barrier Pin and Loop Assembly For Temporary Installation And Maintenance Purposes Only
- Securing Concrete Barrier To Roadway For Temporary Installation And Maintenance Purposes Only

- RD615
- Surface Edge Details

- RD701
- Drainage Curbs

- RD1000
- RD1030
- RD1032
- RD1040
- RD1055
- RD1070
- Construction Entrances
- Sediment Barrier Type 2, 3 and 4
- Sediment Barrier Type 8
- Sediment Fence
- Slope and Channel Matting
- Concrete Truck Wash Out

Standard Dwg. Nos. Cont.

- BR165
- BR195
- BR203
- BR207
- BR208
- BR209
- Bridge Approach Slab
- Bridge ID Marker
- Transition Type "F" Concrete Rail to Guardrail
- 2-Tube Curb Mount Rail Transition
- 3-Tube Curb Mount Rail
- 3-Tube Curb Mount Rail Transition

- BR350
- Temporary Diaphragm Beam For Prestressed Concrete Girders

- TM200
- TM201
- TM223
- TM226
- Sign Installation Details
- Miscellaneous Sign Placement Details
- Street Name Sign Layout
- Conventional Roads Directional Sign Layout

- TM500
- TM502
- TM503
- TM515
- TM517
- TM521
- TM530
- TM560
- TM561
- TM570
- TM571
- TM576
- Pavement Marking Standard Detail Blocks
- Pavement Marking Standard Detail Blocks
- Pavement Marking Standard Detail Blocks
- Pavement Markers
- Recessed Pavement Markers
- Durable & High Performance Pavement Markings Surface & Groove Installed Non-Profiled
- Intersection Pavement Markings (Crosswalk, Stop Bar & Bike Lane Stencil)
- Alignment Layout: General
- Alignment Layout: Left Turn Lane, Centerline & Medians
- Traffic Delineators
- Traffic Delineators Steel Post Details
- Traffic Delineator Installation for Non-Freeways

- TM600
- TM602
- TM635
- TM670
- TM671
- TM676
- TM681
- TM687
- TM688
- Multi-Post Breakaway Sign Supports Notes
- Triangular Base Breakaway Multi-Directional Slip Base Design
- Breakaway Sign & Luminaire Supports - Support Location Guidelines
- Wood Post Sign Supports
- 3 Second Gust Wind Speed Map
- Sign Attachments
- Perforated Steel Square Tube (PSST) Sign Support Installation
- Perforated Steel Square Tube (PSST) Anchor Foundation
- Perforated Steel Square Tube (PSST) Slip Base Foundation

- TM800
- TM820
- TM821
- TM822
- TM830
- TM840
- TM841
- TM850
- TM851
- TM854
- Tables, Abrupt Edge And PCMS Details
- Temporary Barricades
- Temporary Sign Supports
- Temporary Sign Supports
- Temporary Concrete Barrier And Rumble Strip Details
- Closure Details
- Intersection Work Zone Details
- 2-Lane, 2-Way Roadways
- Non-Freeway Multi-Lane Sections
- 2-Lane, 2-Way Roadway

R/W Map No. 10041M



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION	SEE SHEET A01	A02

Standard Drawings located on the web at:
<http://www.oregon.gov/ODOT/Engineering/Pages/Standards.aspx>

SEC. 25, T. 5 S., R. 11 W., W.M.

NOTES:

Coordinate System:
Oregon Coordinate Reference System (OCRS)
Oregon Coast Zone

Horizontal Datum:
NAD83(2011) Epoch 2010.00

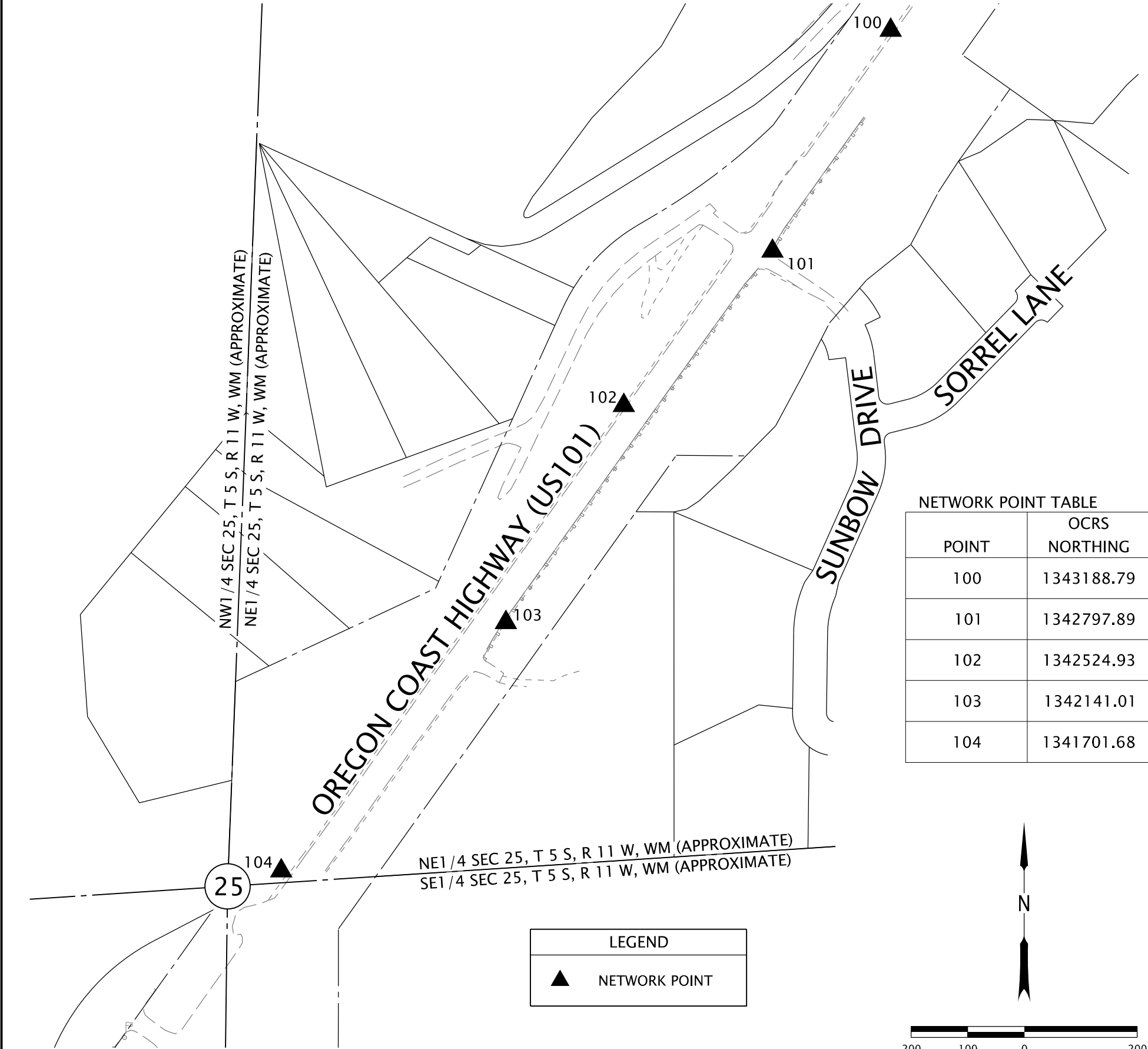
Vertical Datum:
NAVD88 (Vertical values shown are derived from GNSS RTK observations.)

Units: International Feet

Date of Survey: September 2022 – March 2025

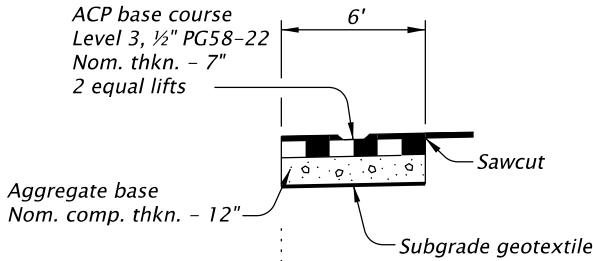
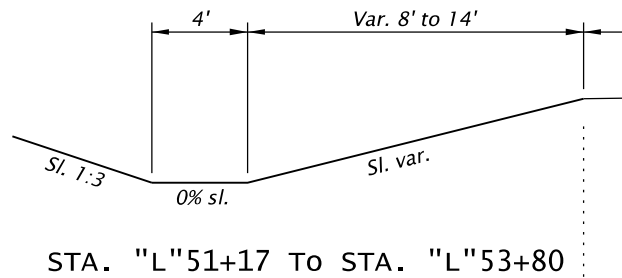
Field Verify All Control Before Use!

NETWORK POINT TABLE				
POINT	OCRS NORTHING	OCRS EASTING	NAVD ELEVATION	DESCRIPTION
100	1343188.79	462217.21	61.81	SET 5/8" X 30" REBAR WITH RED PLASTIC CAP STAMPED "ODOT 100", 0.2' BELOW SURFACE
101	1342797.89	462008.02	46.31	SET 5/8" X 30" REBAR WITH RED PLASTIC CAP STAMPED "ODOT 101", 0.2' BELOW SURFACE
102	1342524.93	461744.72	38.53	FOUND 1/2" IRON ROD WITH RED PLASTIC CAP MARKED "AKS CONTROL", FLUSH WITH SURFACE
103	1342141.01	461536.15	34.08	SET 5/8" X 30" REBAR WITH RED PLASTIC CAP STAMPED "ODOT 103", 0.2' BELOW SURFACE
104	1341701.68	461138.43	29.55	SET 5/8" X 30" REBAR WITH RED PLASTIC CAP STAMPED "ODOT 104", 0.2' BELOW SURFACE



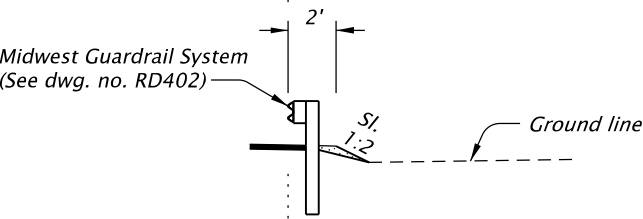
LEGEND
▲ NETWORK POINT

REGISTERED PROFESSIONAL LAND SURVEYOR	OREGON DEPARTMENT OF TRANSPORTATION		
	US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY		
Digitally Signed	Date: 2026.06.29 17:10:28 -07'00'	Designer: Jamison Best, PLS	Reviewer: Ciara Chertude, PLS
OREGON JULY 12, 2016 JAMISON L. BEST 85112	Drafter: Jamison Best, PLS	Checker: N/A	
RENEWS: 12-31-2027	SURVEY CONTROL DATA		SHEET NO. AD01

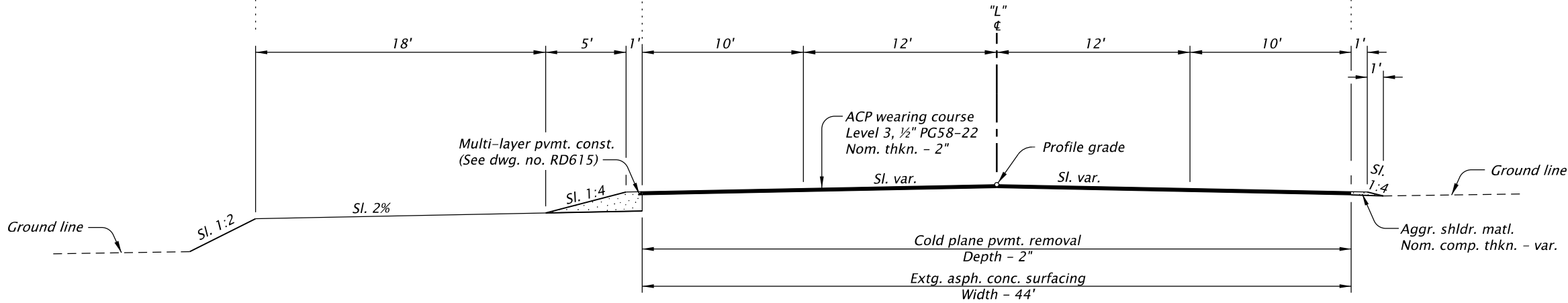


STA. "L"42+33 To STA. "L"43+00
"L"48+53 To "L"49+80

STA. "L"52+28 To STA. "L"55+45

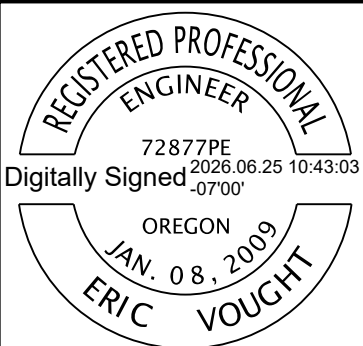


STA. "L"48+53 To STA. "L"51+77



STA. "L"37+31 To STA. "L"43+00
"L"48+53 To "L"55+45

- NOTES:
1. Side-slopes are shown as vert. to horiz.
 2. Extend subgrade geotextile 1 foot beyond the edge of pavement or back of curb. Where guardrail is indicated, terminate the subgrade geotextile at the edge of pavement.



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION

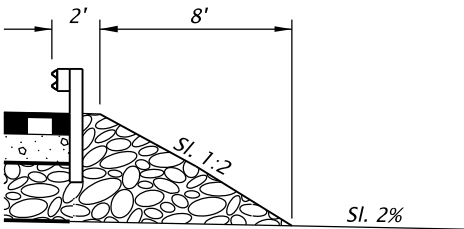


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

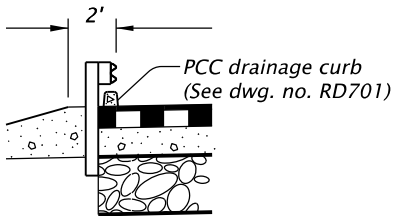
Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

TYPICAL SECTIONS

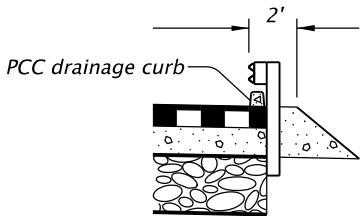
SHEET NO.
BA01



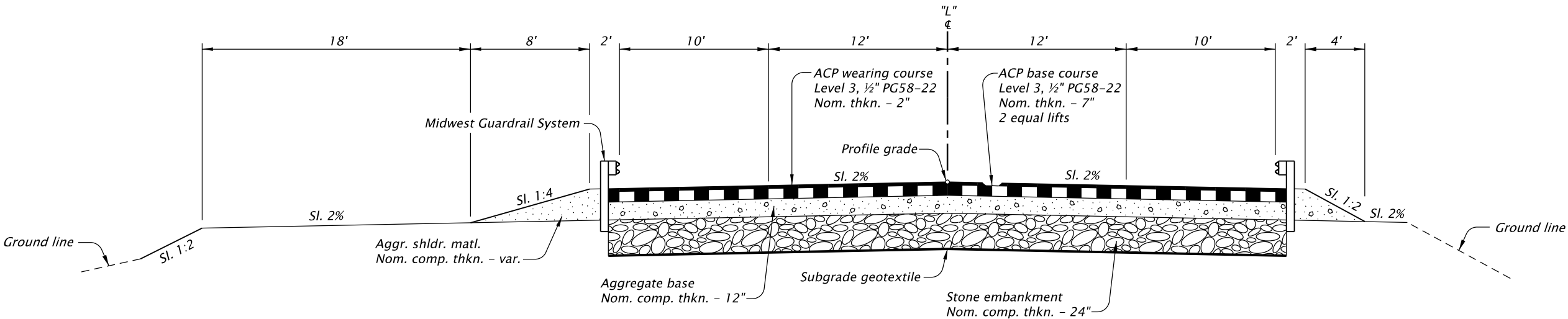
STA. "L"46+53.2 To STA. "L"47+00



STA. "L"44+70 To STA. "L"45+00.3

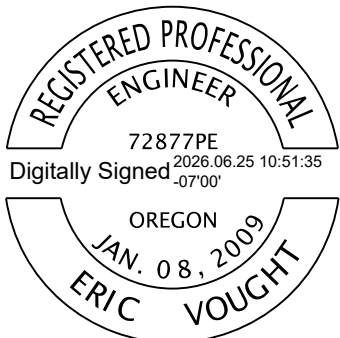


STA. "L"44+83 To STA. "L"45+13.3



STA. "L"43+00 To STA. "L"45+06.8
"L"45+06.8 To "L"46+53.2 (Structure no. BR24348)
"L"46+53.2 To "L"48+53

- NOTES:
1. Side-slopes are shown as vert. to horiz.
 2. Extend subgrade geotextile 1 foot beyond the edge of pavement or back of curb. Where guardrail is indicated, terminate the subgrade geotextile at the edge of pavement.



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION

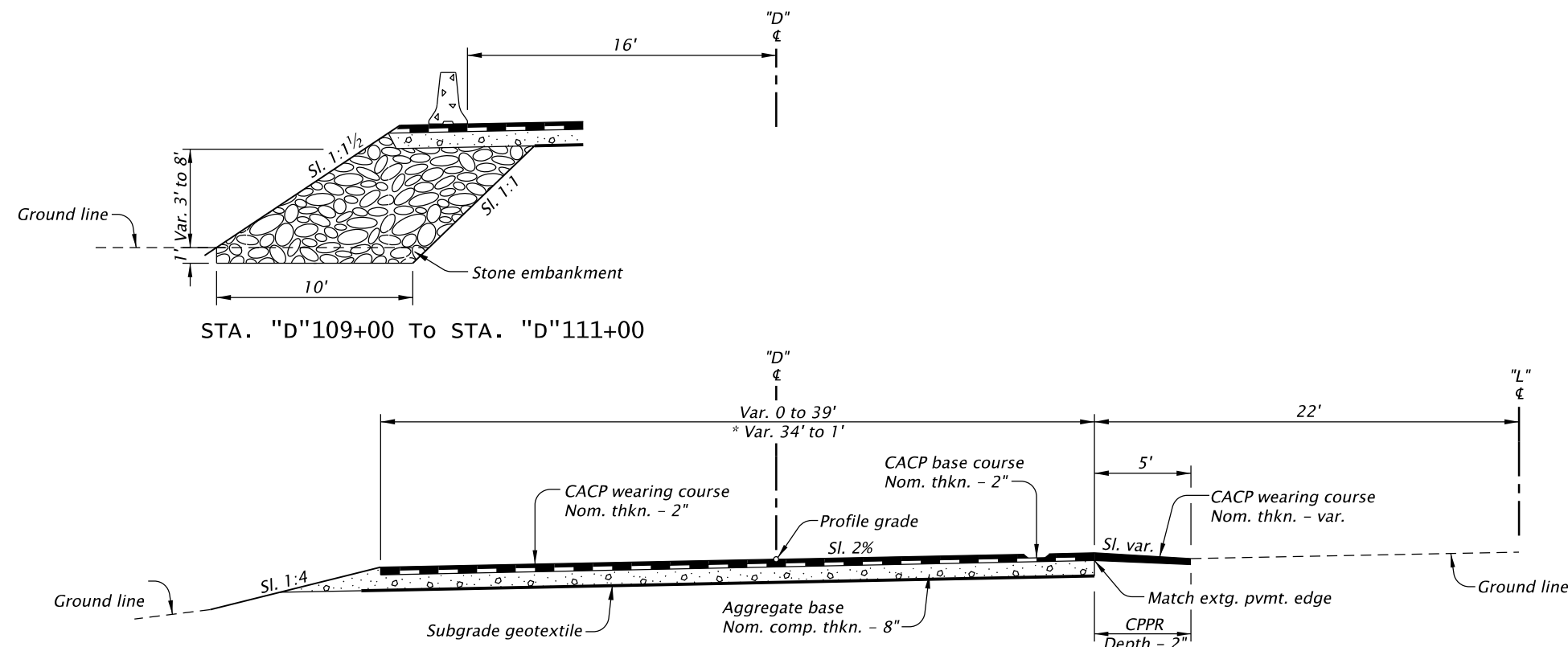


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

TYPICAL SECTIONS

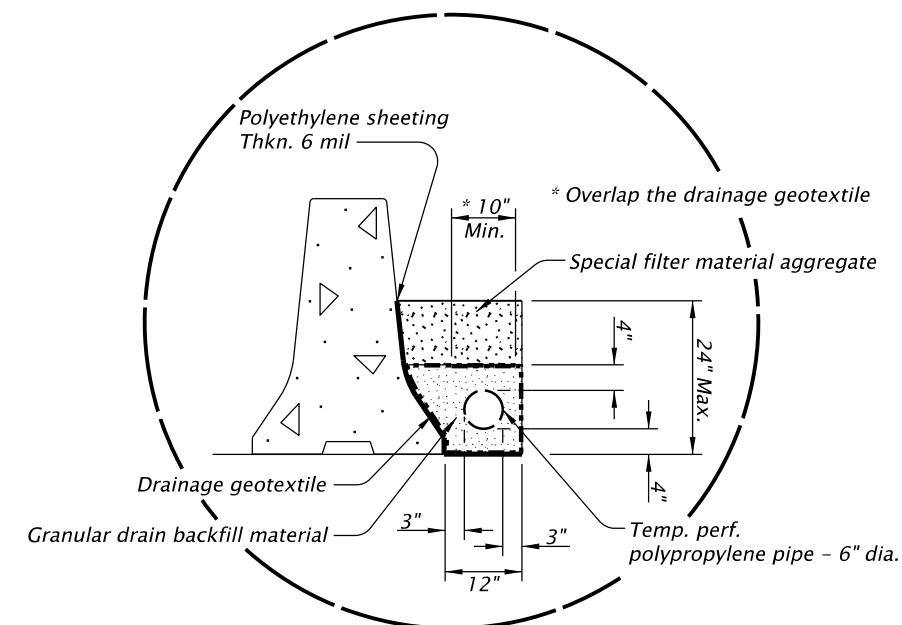
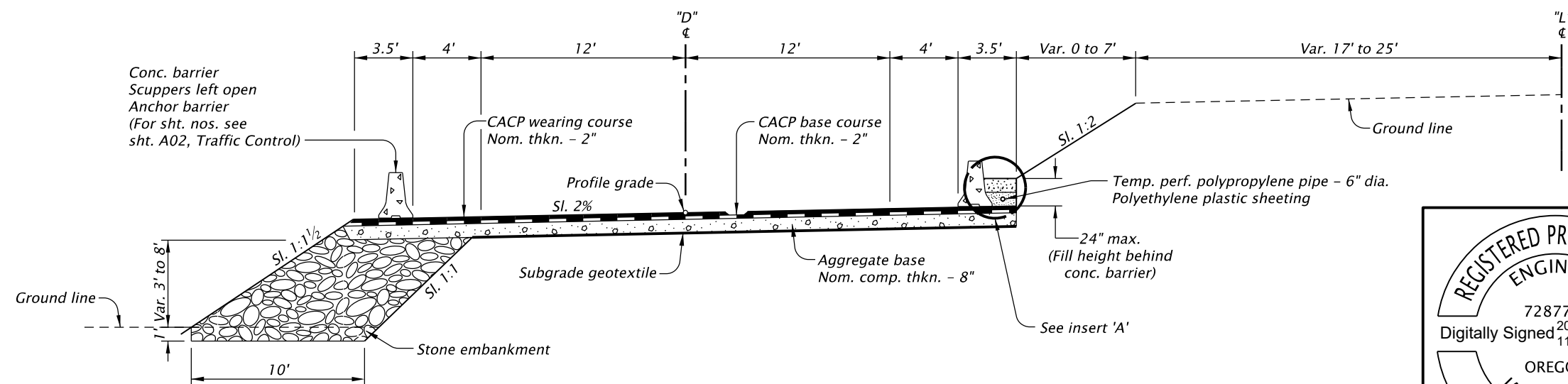
SHEET NO.
BA02



STA. "D"107+29 To STA. "D"111+00
 * "D"117+80 To "D"122+00

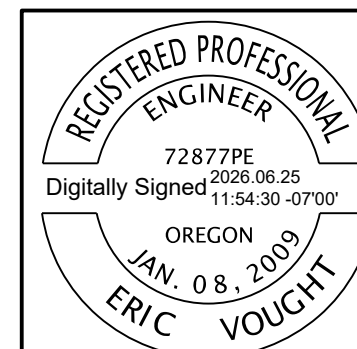


STA. "D"111+00 To STA. "D"112+63
 "D"116+29 To "D"117+80



NOTES:

1. Side-slopes are shown as vert. to horiz.
2. Loaded wheeled equipment and loaded tracked equipment shall only cross any portion of extg. pipe culvert in a direction parallel to "D" centerline.
3. Install subgrade geotextile base and subgrade within the limits of CACP.
4. Prevent storm water passage under barrier. Install 6 mil. polyethylene plastic sheeting along joint between concrete barrier and CACP.



RENEWS: 06-30-2028

FINAL ELECTRONIC DOCUMENT
 AVAILABLE UPON REQUEST

OREGON DEPARTMENT
 OF TRANSPORTATION



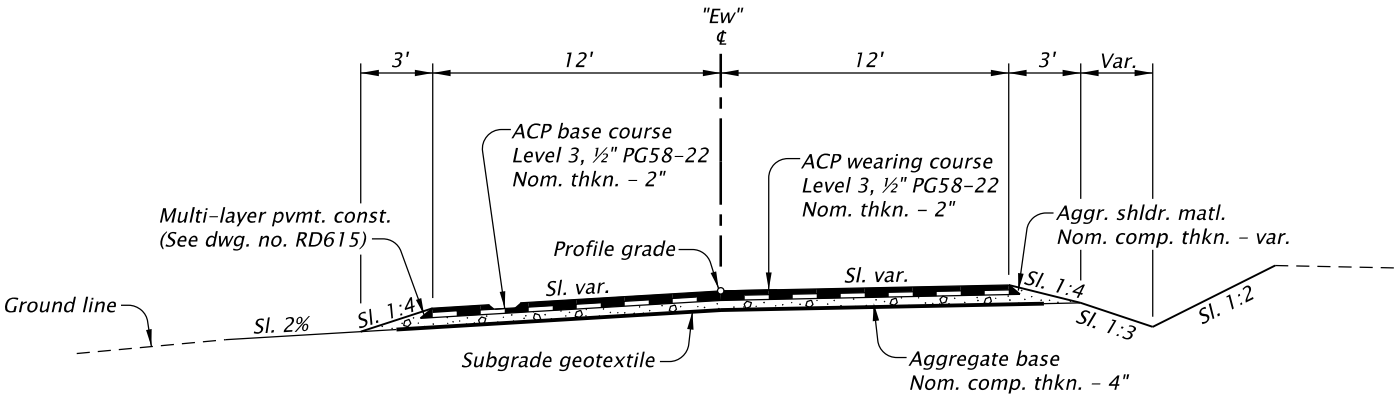
US101: BUTTE CREEK CULVERT PROJECT
 OREGON COAST HIGHWAY
 TILLAMOOK COUNTY

Designer: Eric Vought
 Drafter: Charlotte Gerken

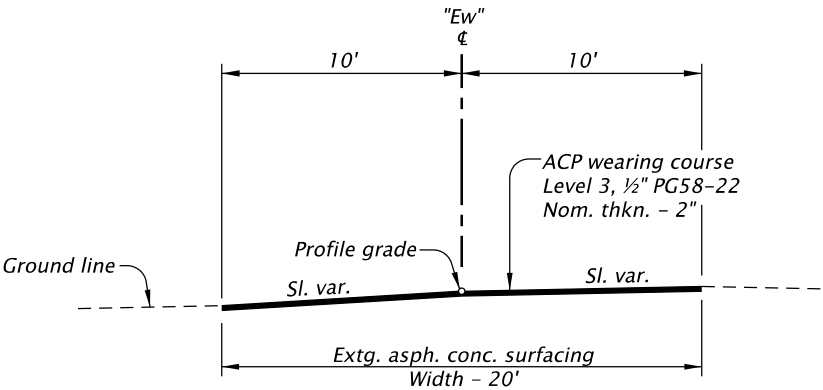
Reviewer: Calvin Larwood
 Checker: N/A

TYPICAL SECTIONS

SHEET NO.
 BA03

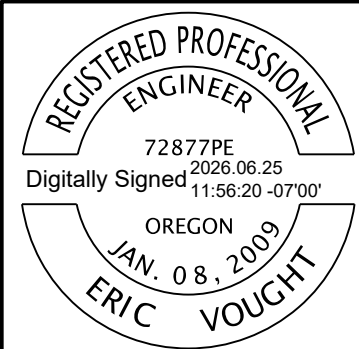


STA. "Ew"90+22 To STA. "Ew"90+80



STA. "Ew"90+80 To STA. "Ew"96+38

- NOTES:
1. Side-slopes are shown as vert. to horiz.
 2. For standard superelevation, see dwg. no. RD140.
 3. Extend subgrade geotextile 1 foot beyond the edge of pavement or back of curb. Where guardrail is indicated, terminate the subgrade geotextile at the edge of pavement.



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION

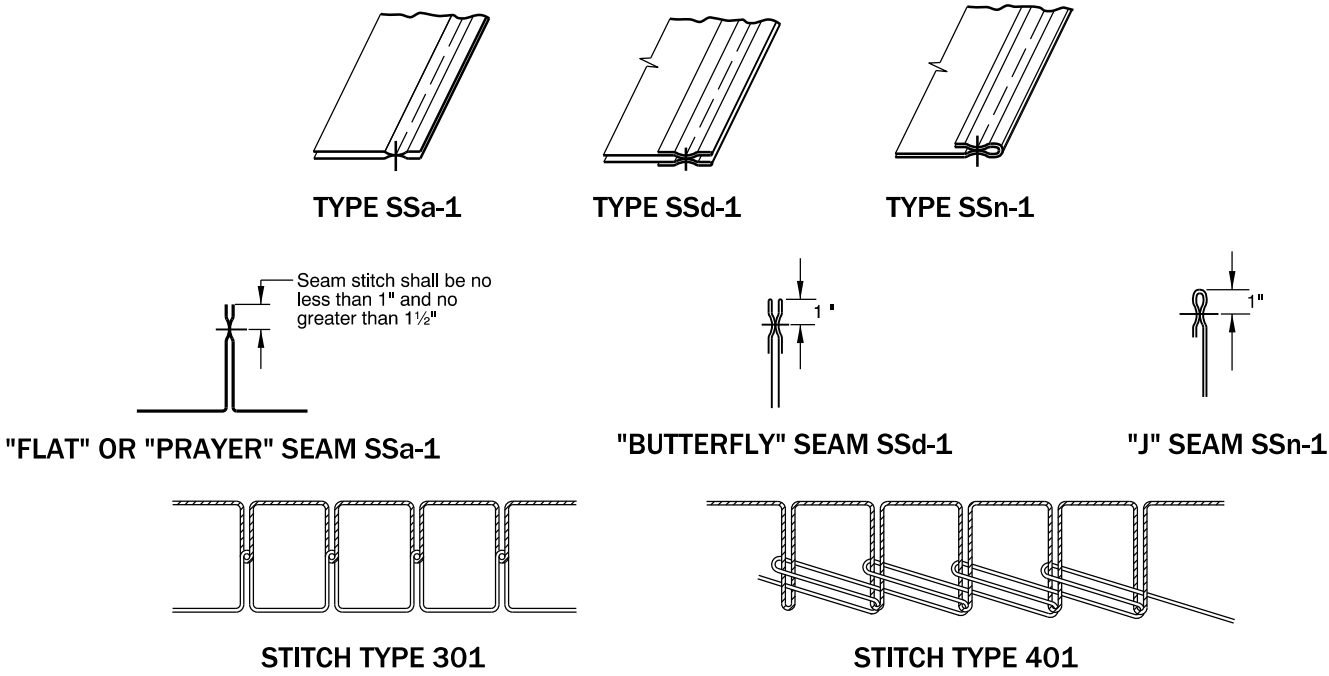


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

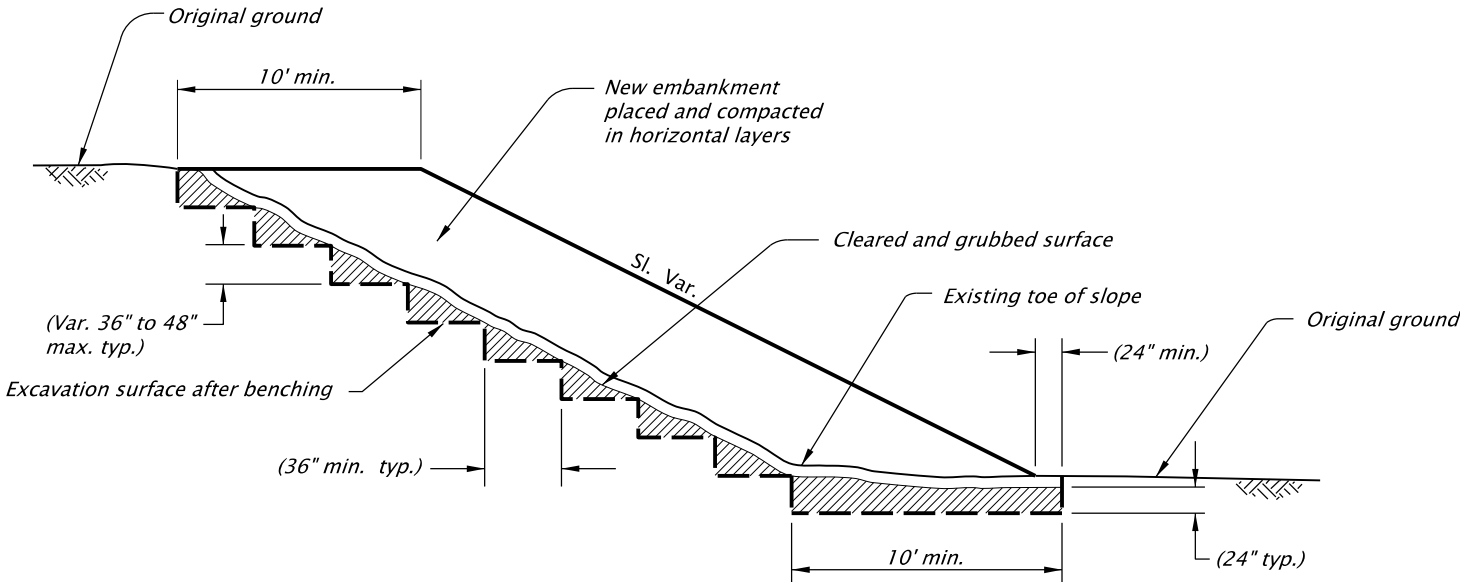
Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

TYPICAL SECTIONS

SHEET NO.
BA04



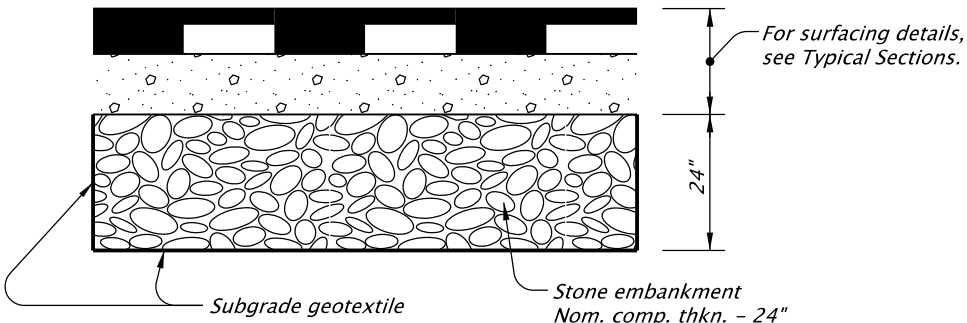
GEOTEXTILE STITCHING



STANDARD EMBANKMENT GENERAL NOTES:
1. Construct benches on slopes steeper than 1: 5 (v: h) to provide positive bond with existing ground.
2. Benching work is incidental to embankment construction.

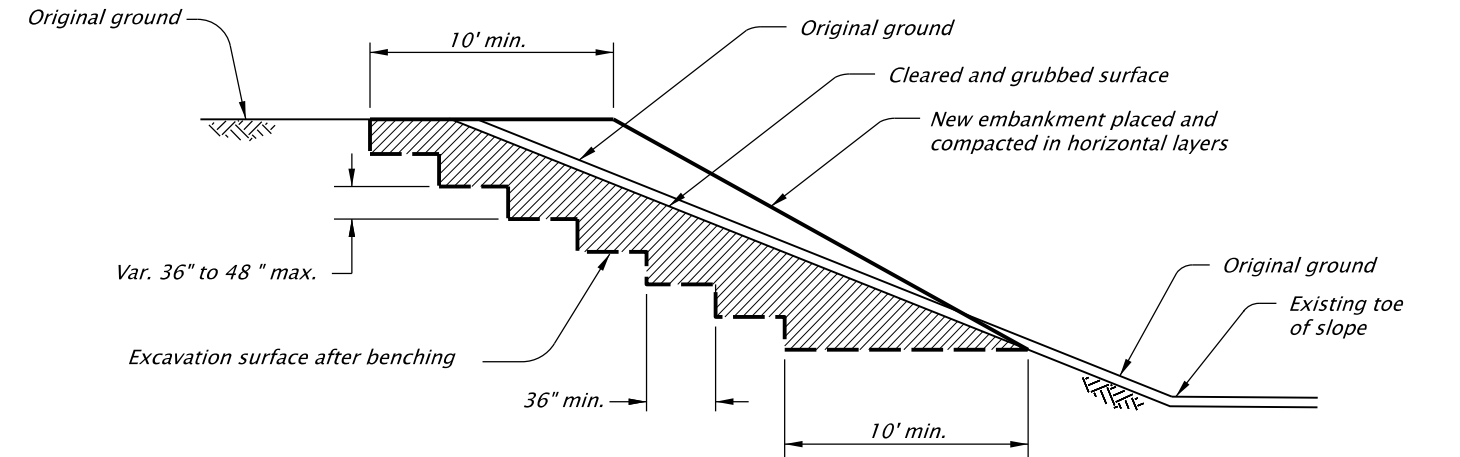
Excavation

STANDARD EMBANKMENT CONSTRUCTION



STABILIZATION NOTES:
1. Subgrade stabilization may be omitted as directed, where subgrade is firm and unyielding.
2. Excavate to a depth of 24" (in.) below subgrade.
3. Replace with stone embankment prior to placement of Roadway Section.
4. Over excavation, if necessary, will be directed by the Engineer.
5. Subgrade stabilization to be used only in area of excavation.
6. Subgrade geotextile is omitted above stone embankment

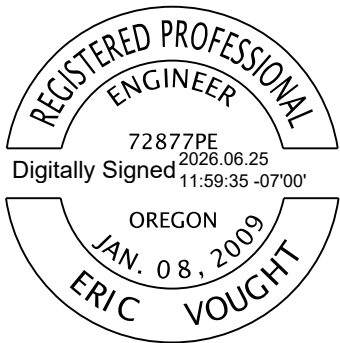
Locate as directed
(For surfacing details not shown, see Typical Sections)
24" SUBGRADE STABILIZATION



SLIVER FILL GENERAL NOTES:
1. Construct benches on slopes steeper than 1:5 (v: h) to provide positive bond with existing ground.
2. Benching work is incidental to embankment construction.

Excavation

SLIVER FILL BENCHING



RENEWS: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION

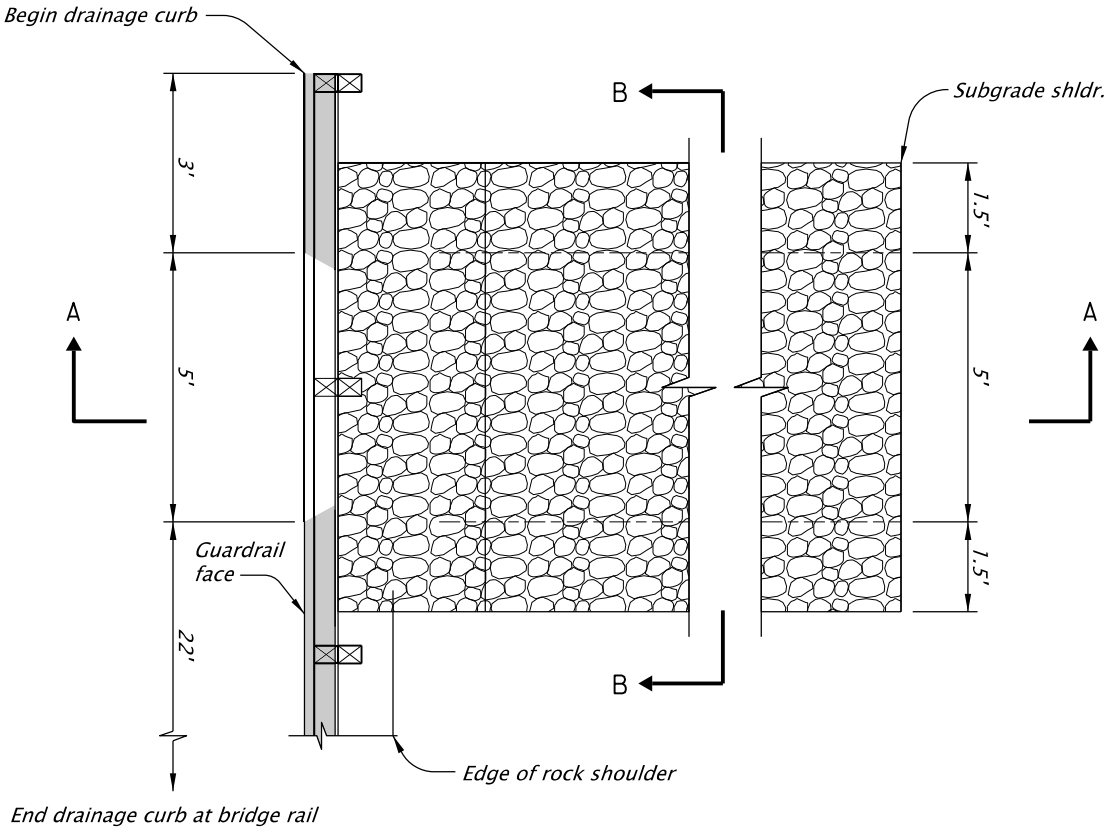


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

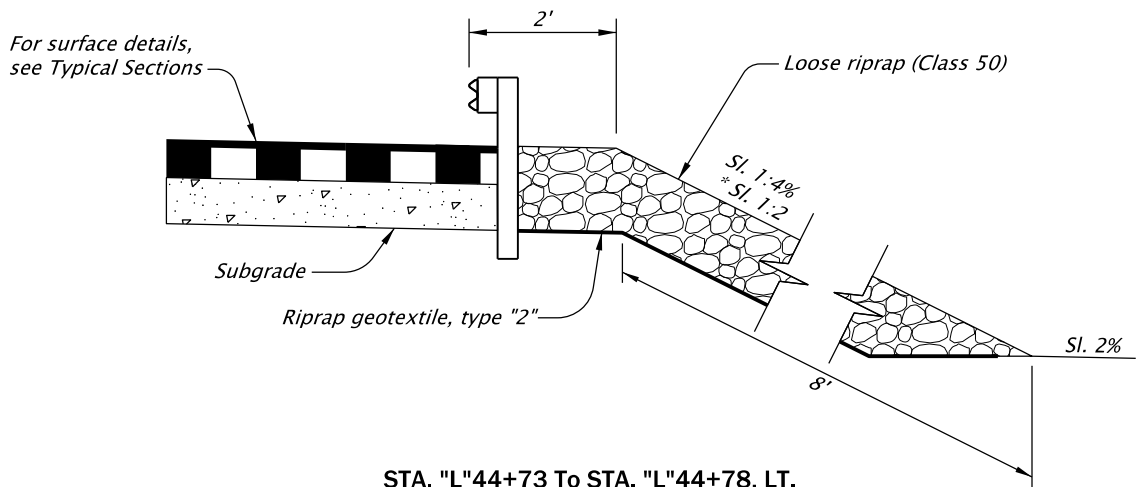
Designer: Eric Vought Reviewer: Calvin Larwood
Drafter: Charlotte Gerken Checker: N/A

DETAILS

SHEET NO.
BB01



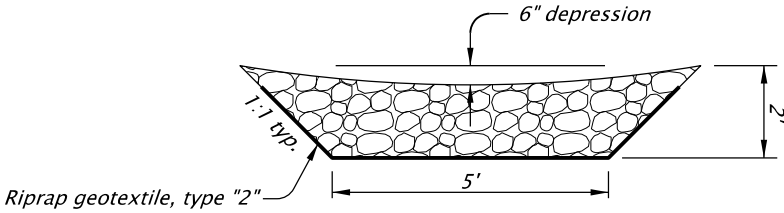
PLAN



STA. "L"44+73 To STA. "L"44+78, LT.
* STA. "L"44+86 To STA. "L"44+91, RT.

SECTION A-A

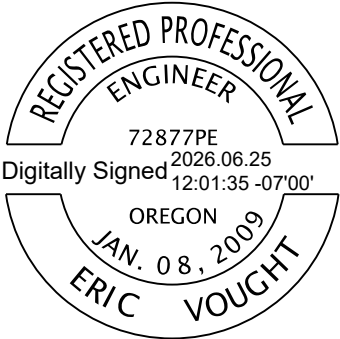
DRAINAGE CURB OPENING AT LOOSE RIPRAP



SECTION B-B

STATION	LT./RT.	DESCRIPTION
"L"43+40	RT.	Along guardrail radius
"L"44+04	LT.	Along non-flared guardrail terminal
"L"47+90	LT.	Along non-flared guardrail terminal
"L"50+81	RT.	Along non-flared guardrail terminal

EXTRA FOR ASPHALT APPROACH ITEMS



OREGON DEPARTMENT
OF TRANSPORTATION

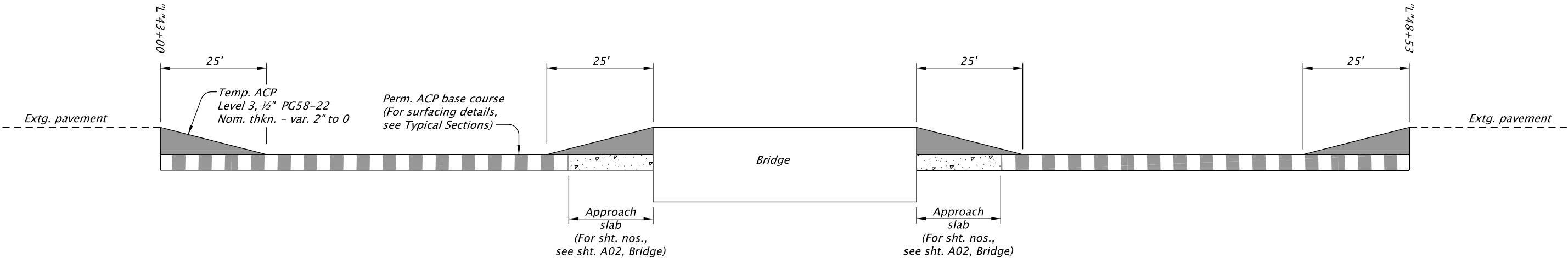


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

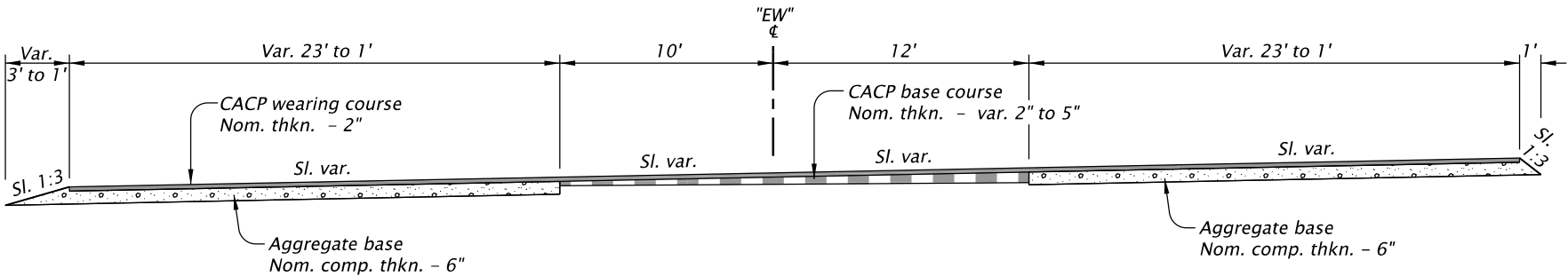
DETAILS

SHEET NO.
BB02



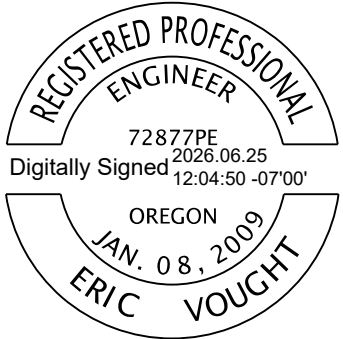
Wedge taper rate 1V:60H
Thkn. - 2" to 0

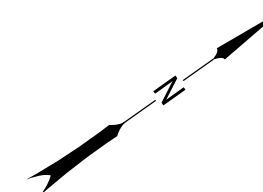
TEMPORARY ACP WEDGE LOCATIONS UNDER TEMPORARY TRAFFIC



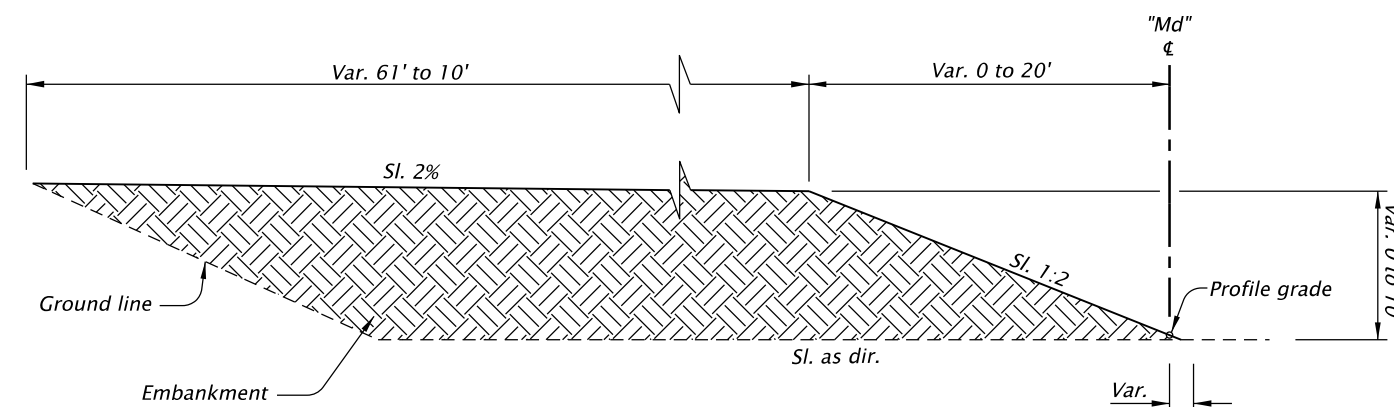
STA. "EW"90+36 To STA. "EW"90+72

TEMPORARY APPROACH CONNECTION TO "D"

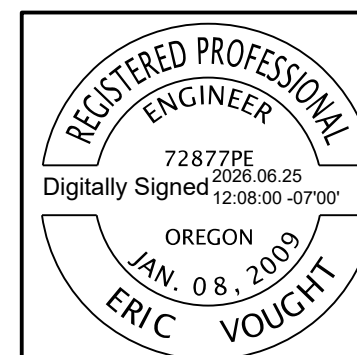
 RENEWS: 06-30-2028	OREGON DEPARTMENT OF TRANSPORTATION		
	US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY		
	Designer: Eric Vought Reviewer: Calvin Larwood		SHEET NO. BB03
	Drafter: Charlotte Gerken Checker: N/A		



- NOTES:
1. Embankment material may include shoulder soil.
(For sht. nos., see sht. A02, Geotechnical)
 2. Const. standard embankment benching.
For details, see sht. BB01.



STA. "Md"400+07 To STA. "Md"402+45



RENEWS: 06-30-2028

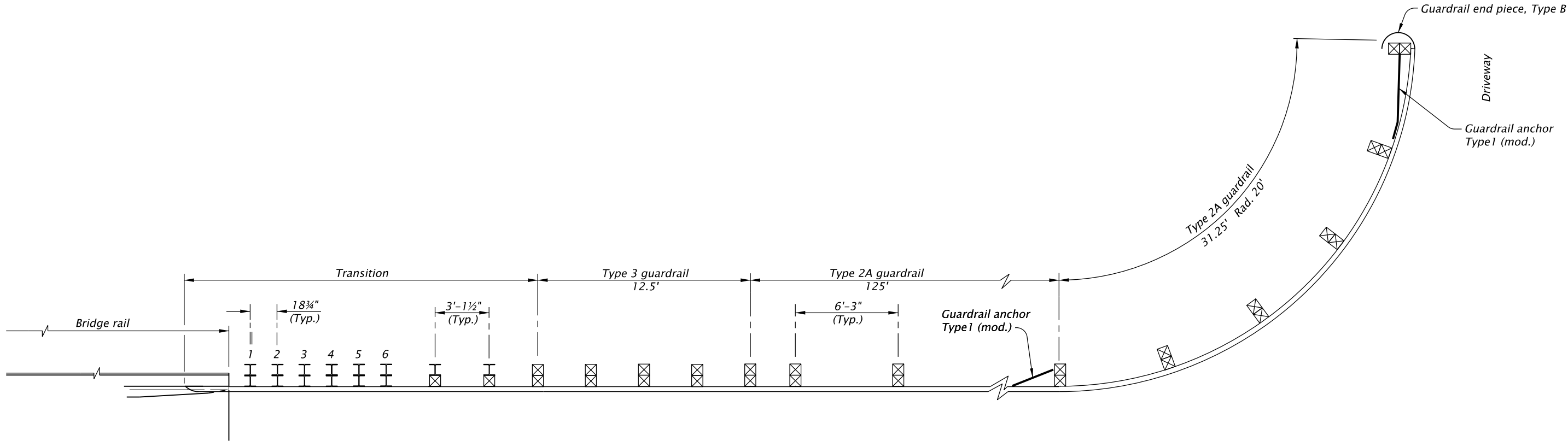
FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST



Designer: Eric Vought	Reviewer: Calvin Larwood
Drafter: Charlotte Gerken	Checker: N/A

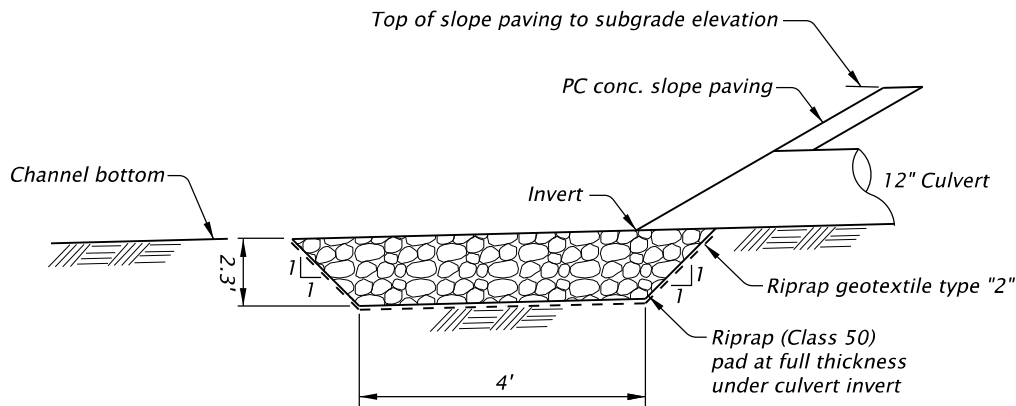
DETAILS

SHEET NO.
BB04

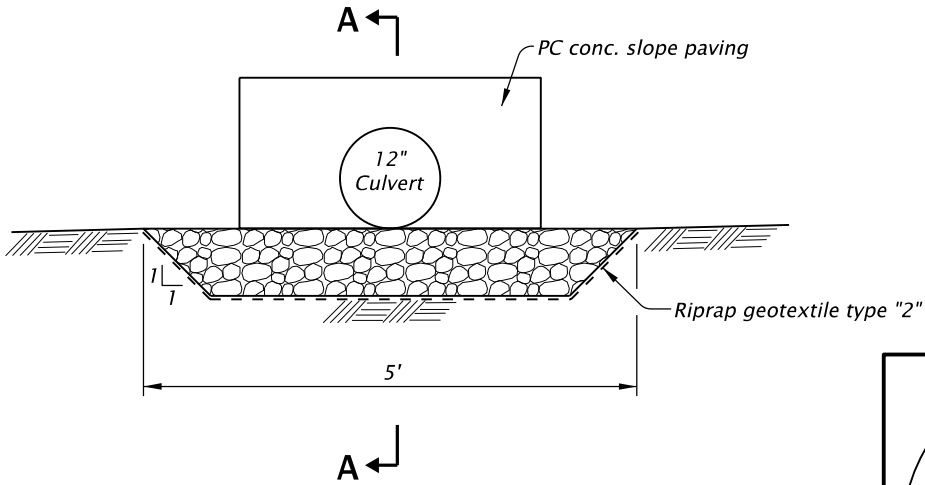


PLAN
MIDWEST GUARDRAIL SYSTEM LAYOUT

GUARDRAIL NOTES:
1. For transition details, see appropriate Bridge Standard Drawings.
2. Place radius identification plate (For details, see dwg. no. RD416)
3. Shop fabricate all radius rail to dimensions shown.

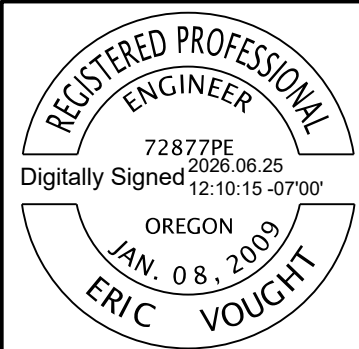


SECTION A-A



PAD/PAVING/CULVERT NOTES:
1. Do not excavate non-erodible rock in order to place riprap.
2. See dwg. no. RD316 for culvert sloped ends.
3. See dwg. no. RD320 for slope paving.

RIPRAP PAD & SLOPE PAVING @ CULVERT ENDS



RENEWALS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

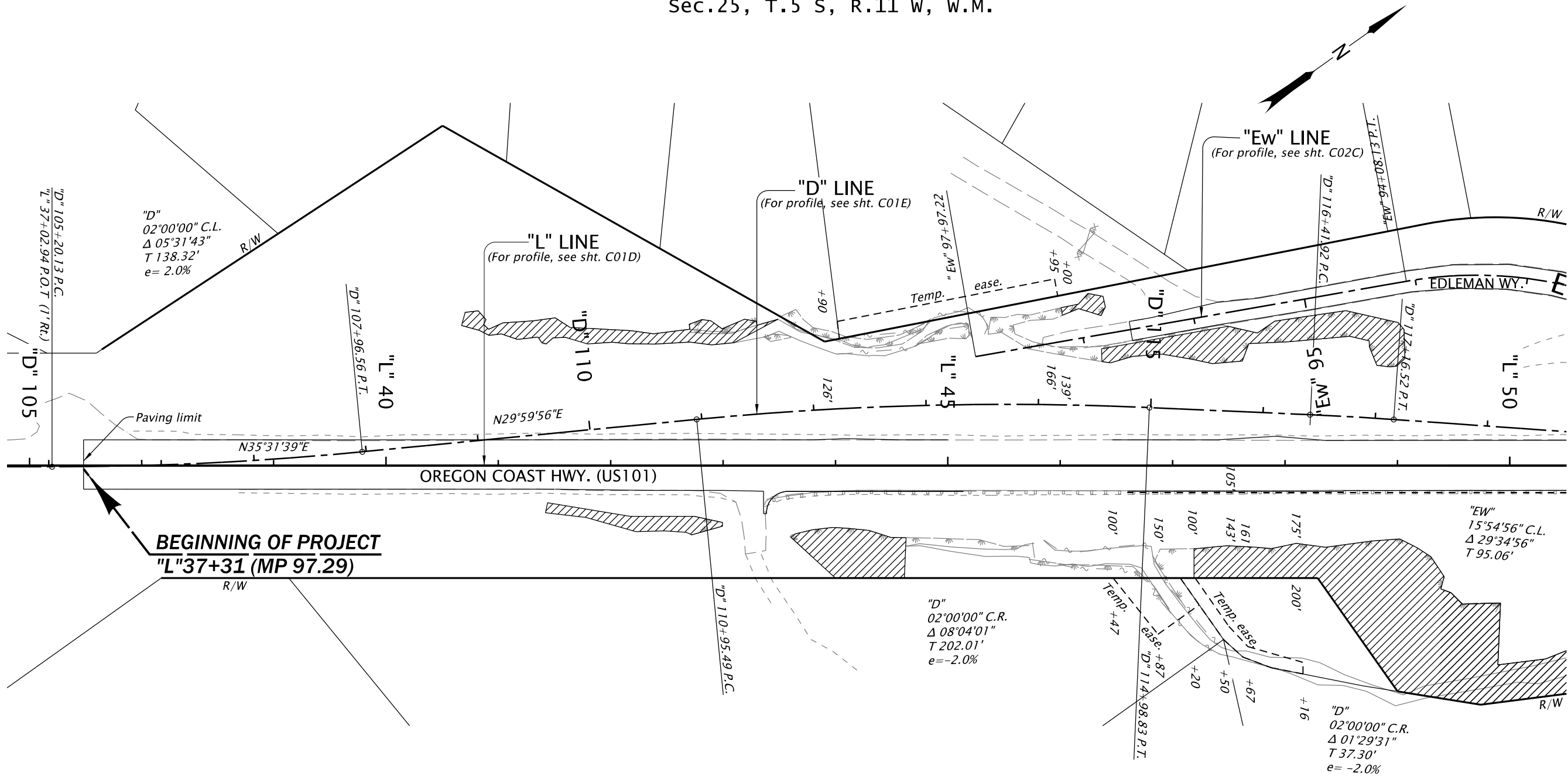
Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

DETAILS

SHEET NO.
BB05

Sec.25, T.5 S, R.11 W, W.M.

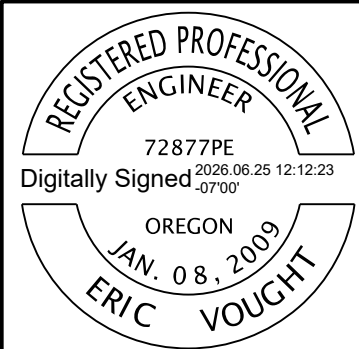
59V-017



BEGINNING OF PROJECT
"L"37+31 (MP 97.29)

OHW - Regulated work area, shown thus: — ~ — ~

No work zone shown thus: 



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

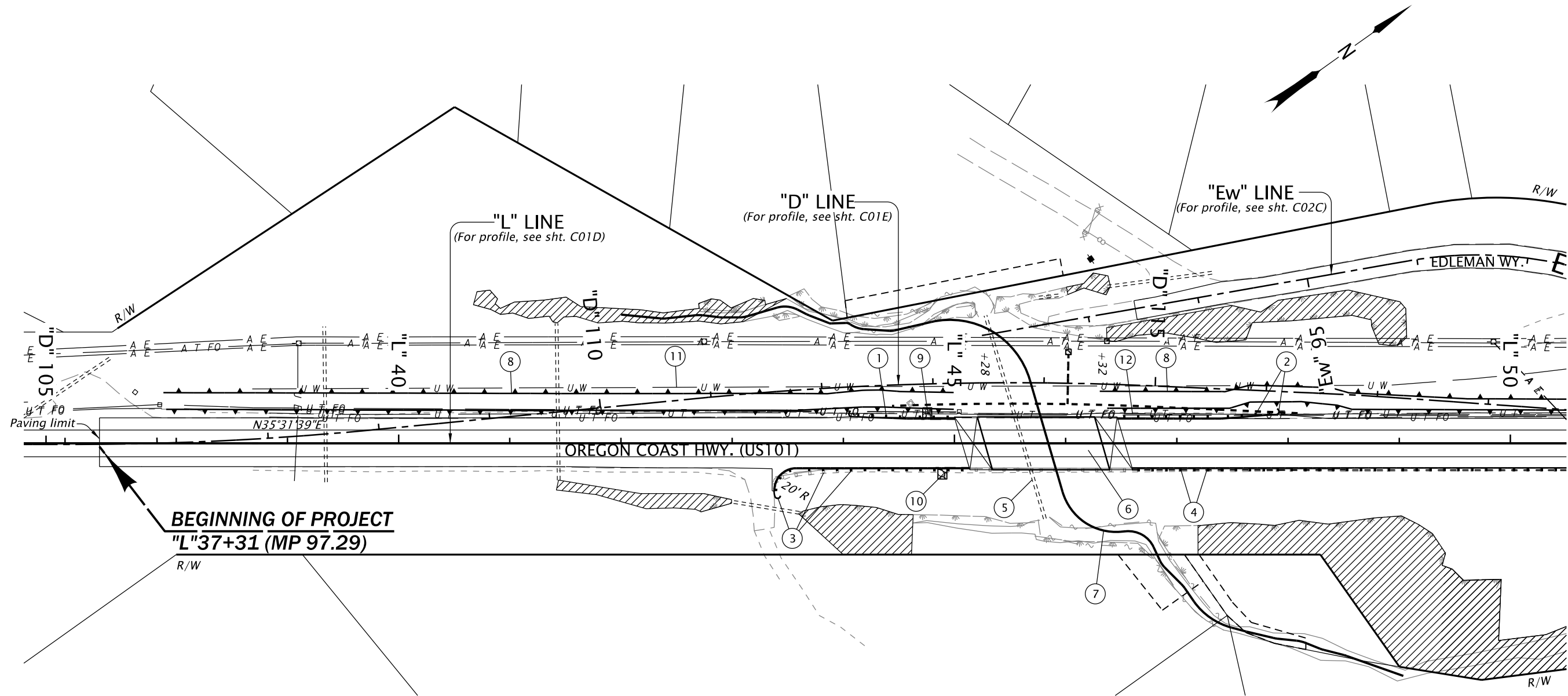
Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

ALIGNMENT

SHEET NO.
C01

Sec.25, T.5 S, R.11 W, W.M.

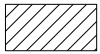
59V-017

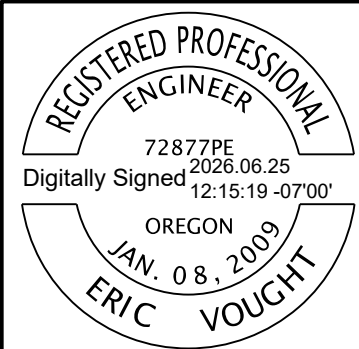


BEGINNING OF PROJECT
"L"37+31 (MP 97.29)

NOTE:
Clearing and grubbing prohibited
East of US101 before September 1, 2026.

OHW - Regulated work area, shown thus: — ~ — ~

No work zone shown thus: 



RENEWES: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

GENERAL CONSTRUCTION

SHEET NO.
C01A

CONSTRUCTION NOTES

- 1

Sta. "L"44+07 to Sta. "L"45+00, Lt.
Const. Midwest Guardrail System – 12.5' (Type 2A)
Const. Midwest Guardrail System – 12.5' (Type 3)
W=2', E=0
Const. guardrail terminal, non-flared
Test level 3
Const. 31" guardrail to bridge transition
(See dwg. nos. BR203, RD402, RD403, RD404, RD407, RD410, RD412, RD416, RD420, RD421, RD442B & RD482)
- 2

Sta. "L"46+47 to Sta. "L"47+90, Lt.
Const. Midwest Guardrail System – 62.5' (Type 2A)
Const. Midwest Guardrail System – 12.5' (Type 3)
W=4', E=0
Const. guardrail terminal, non-flared
Test level 3
Const. 31" guardrail to bridge transition
- 3

Sta. "L"43+38 to Sta. "L"45+14, Rt.
Remove extg. guardrail – 844'
Const. Midwest Guardrail System – 156.25' (Type 2A)
Const. Midwest Guardrail System – 12.5' (Type 3)
Const. anchor – 2 (Type 1, mod.)
Inst. end piece (Type B)
Const. 31" guardrail to bridge transition
(For details, see sht. BB05)
(See dwg. nos. RD416, RD417 & RD450)
- 4

Sta. "L"46+60 to Sta. "L"51+84, Rt.
Const. Midwest Guardrail System – 437.5' (Type 2A)
Const. Midwest Guardrail System – 12.5' (Type 3)
W=1', E=0
Const. guardrail terminal, non-flared
Test level 3
Const. 31" guardrail to bridge transition
- 5

Structure no. BR04666
Remove pipe – 180'
- 6

Structure no. BR24348
Const. structure – 104'
Const. approach slab at bridge ends
(For sht. nos., see sht. A02, Bridge)
- 7

Const. channel change
(For sht. nos., see sht. A02, Hydraulic)
- 8

Const. water quality filter strip
No. D01511
(For sht. nos., see sht. A02, Hydraulic)
- 9

Const. PC conc. drainage curb
Riprap geotextile type "2" – 11 sq.yd.
Const. loose riprap (Class 50) – 4 cu.yd.
(For details, see sht. BB02)
(See dwg. no. RD701)
- 10

Const. PC conc. drainage curb
Riprap geotextile type "2" – 11 sq.yd.
Const. loose riprap (Class 50) – 4 cu.yd.
(For details, see sht. BB02)
- 11

Relocate utilities
Buried water
(By others)
- 12

Relocate utilities
Buried communication lines
(By others)

REGISTERED PROFESSIONAL
ENGINEER
72877PE
Digitally Signed
2026.06.25 12:22:56
JAN. 08, 2009
ERIC VOUGHT
RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

GENERAL CONSTRUCTION NOTES

SHEET NO.
C01B

R_K22419_nt_01.dgn :: Default6/25/2026 9:31:51 AMtdb081

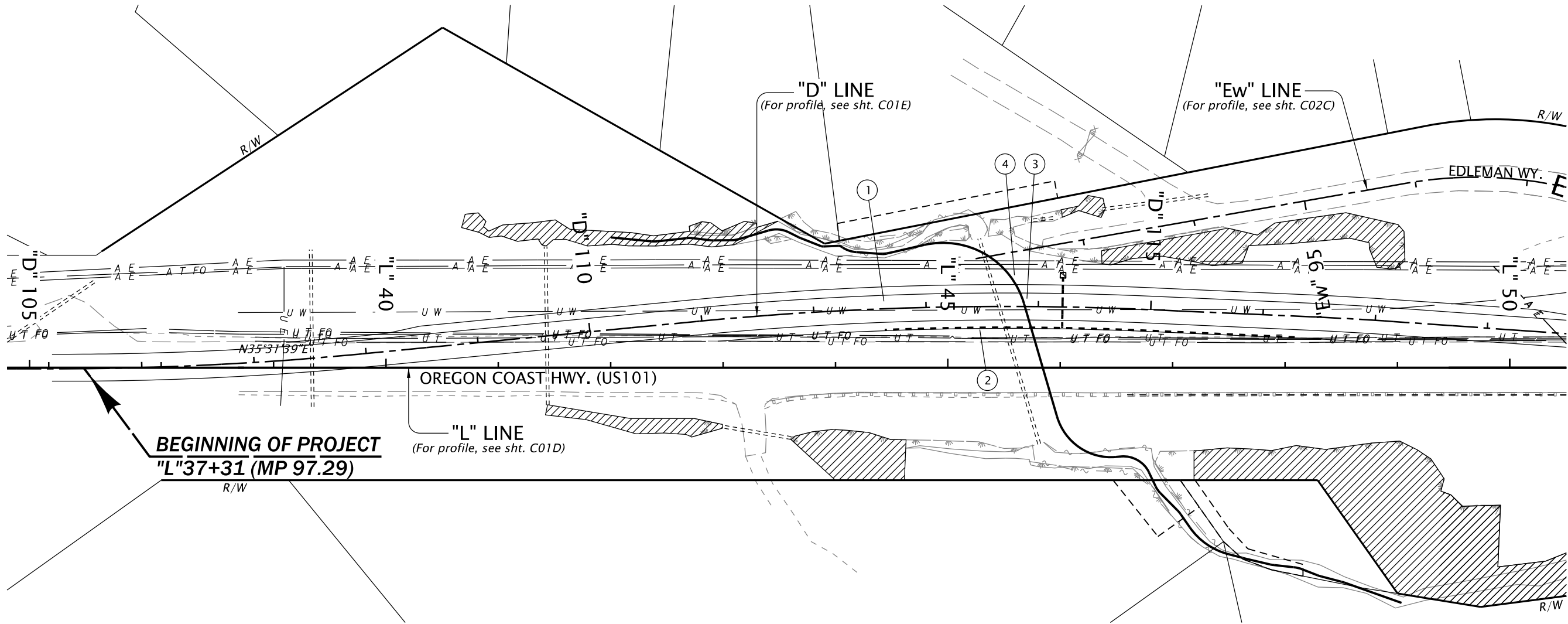
FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST

Sec.25, T.5 S, R.11 W, W.M.

59V-017

CONSTRUCTION NOTES

- 1 Const. diversion
Remove diversion
- 2 Sta. "D"112+63 to 116+29, Rt.
Inst. temp 6" polypropylene perf. drain pipe - 370'
- 3 Sta. "D"113+93
Inst. temp. 12" polypropylene pipe - 56'
FL - 29.50 Rt.
FL - 27.00 Lt.
- 4 Const. temp. loose riprap (Class 50) - 2 cu.yd.
Remove temp. loose riprap drainage pad
(For details, see sht. BB02)

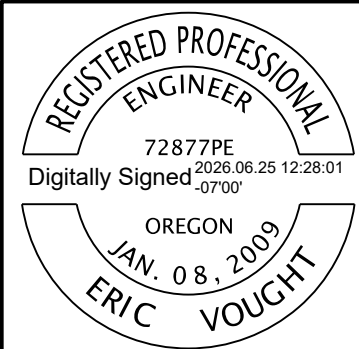


BEGINNING OF PROJECT
"L"37+31 (MP 97.29)

NOTE:
1. Construct temporary riprap drainage pad to allow discharge toward the creek. Prevent sediment laden water from entering creek.
2. Replace approx. 200' (ft.) of perforated pipe with solid wall pipe during bridge substructure excavation and maintain flow to drain outlet.

OHW - Regulated work area, shown thus: — ~ — ~

No work zone shown thus: [hatched box]



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



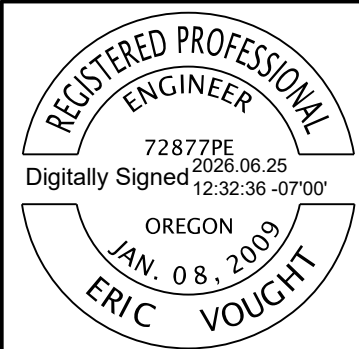
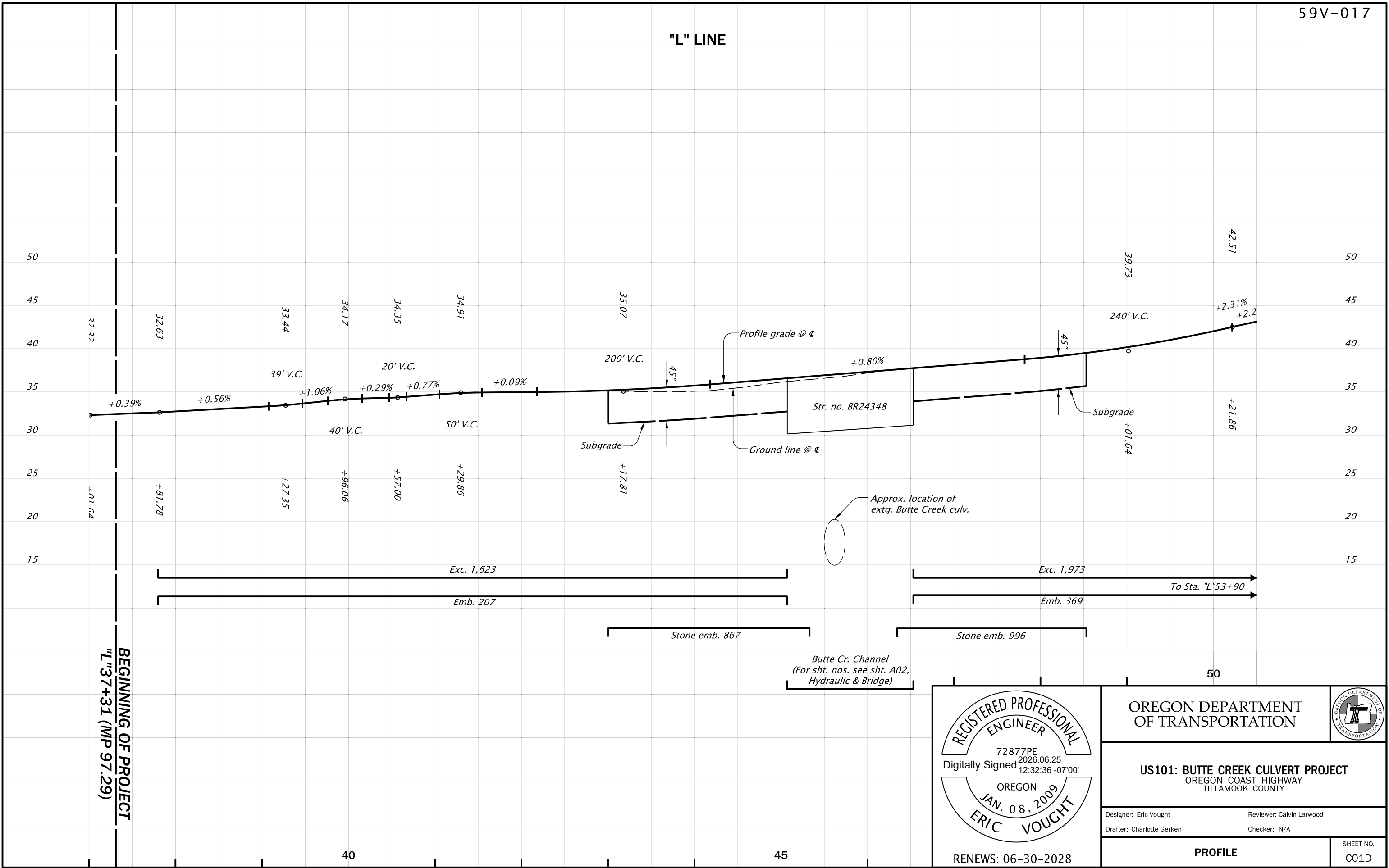
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

DIVERSION PLAN

SHEET NO.
C01C

"L" LINE



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



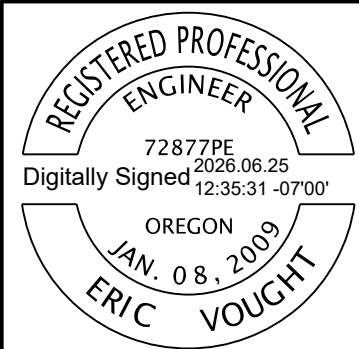
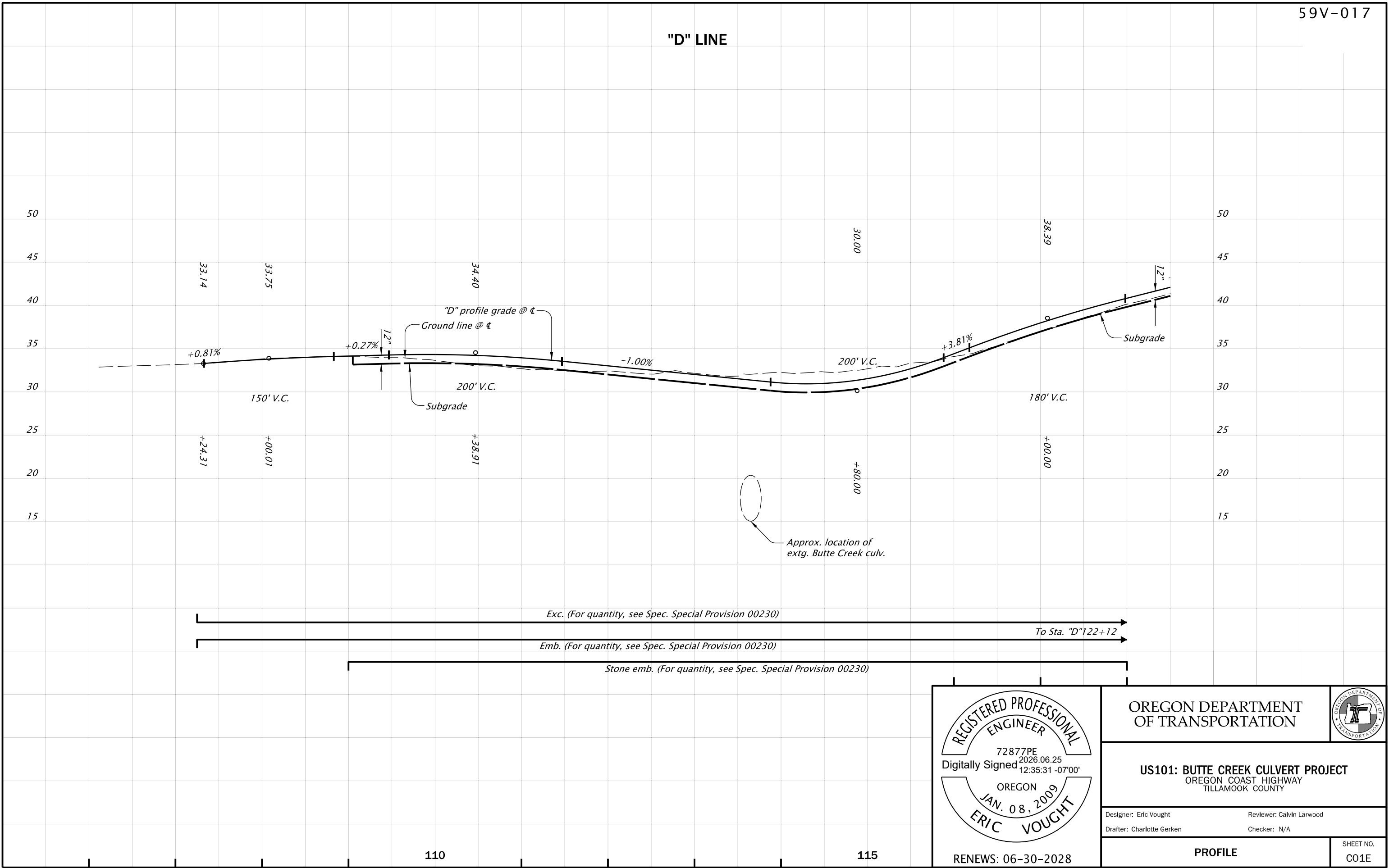
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

PROFILE

SHEET NO.
C01D

"D" LINE



RENEWES: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought

Reviewer: Calvin Larwood

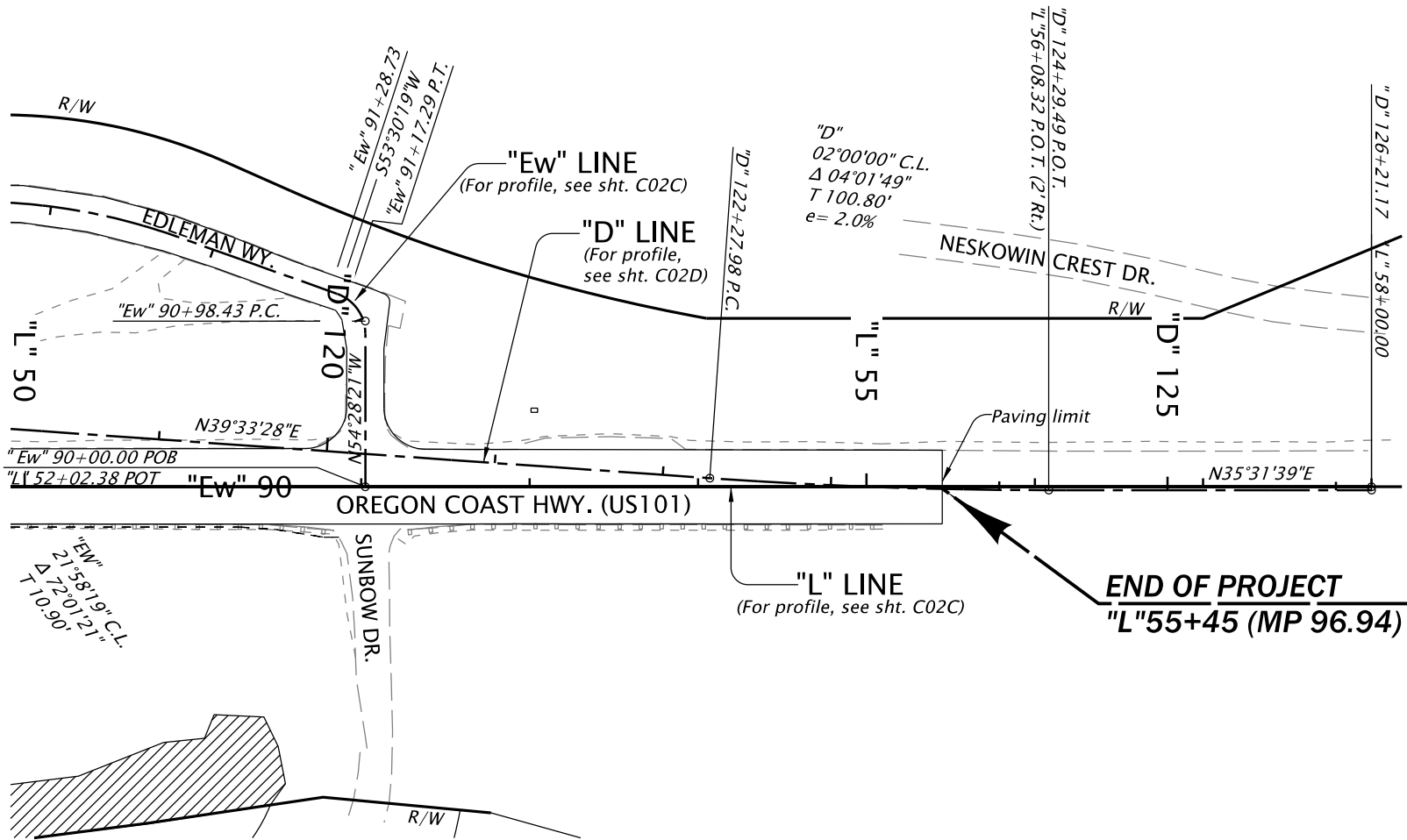
Drafter: Charlotte Gerken

Checker: N/A

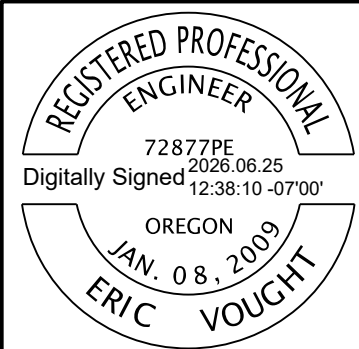
PROFILE

SHEET NO.
C01E

Sec.25, T.5 S, R.11 W, W.M.



No work zone shown thus: 



RENEWS: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought Reviewer: Calvin Larwood
Drafter: Charlotte Gerken Checker: N/A

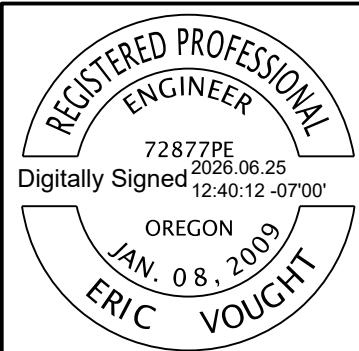
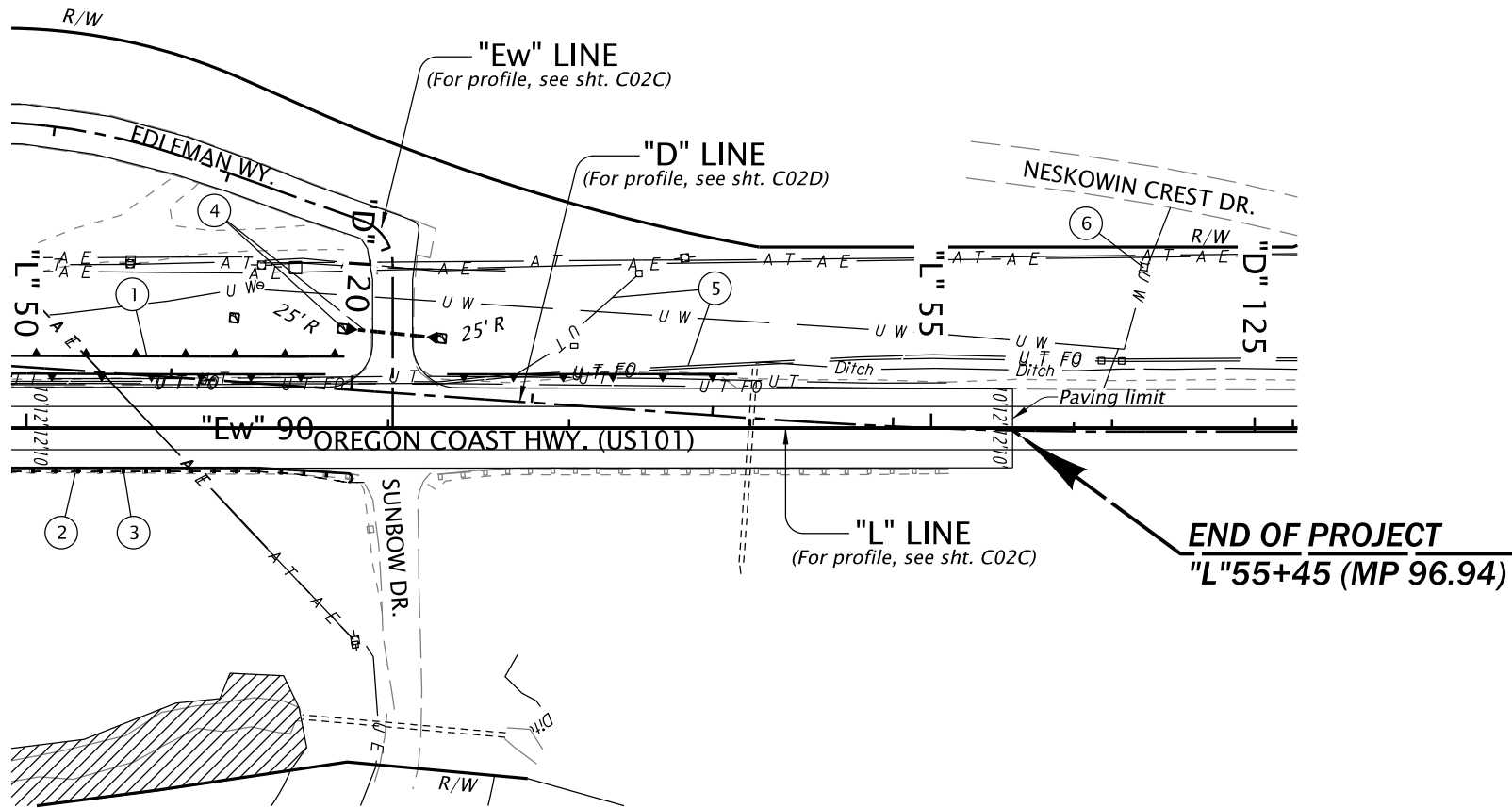
ALIGNMENT

SHEET NO.
C02

Sec.25, T.5 S, R.11 W, W.M.

CONSTRUCTION NOTES

- 1 See sht. C01B, note 8
Const. water quality filter strip
- 2 See sht. C01B, note 3
Remove guardrail
- 3 See sht. C01B, note 4
Const. Midwest Guardrail System
Const. guardrail terminal, non-flared
- 4 Sta. "Ew"90+55
Inst. 12" culv. pipe - 38'
5' depth
End treatment 1:3 sl.
FL - 44.20 Rt.
FL - 43.37 Lt.
Class V precast concrete pipe
Const. sloped end - 2
Const. paved end slope, Lt. & Rt.
Riprap geotextile type "2" - 14 sq.yd.
Const. loose riprap (Class 50) - 4 cu.yd.
(For details, see sht. BB05)
(See dwg. nos. RD300, RD316, RD318, RD319, RD320 & RD386)
- 5 Relocate utilities
Buried communication lines
(By others)
- 6 Preserve and protect water utility box
- 7 Riprap geotextile - 5 sq.yd.
Riprap geotextile type "2" - 7 sq.yd.
Const. loose riprap (Class 50) - 2 cu.yd.
(For details, see sht. BB05)



RENEWS: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Eric Vought
Reviewer: Calvin Larwood
Drafter: Charlotte Gerken
Checker: N/A

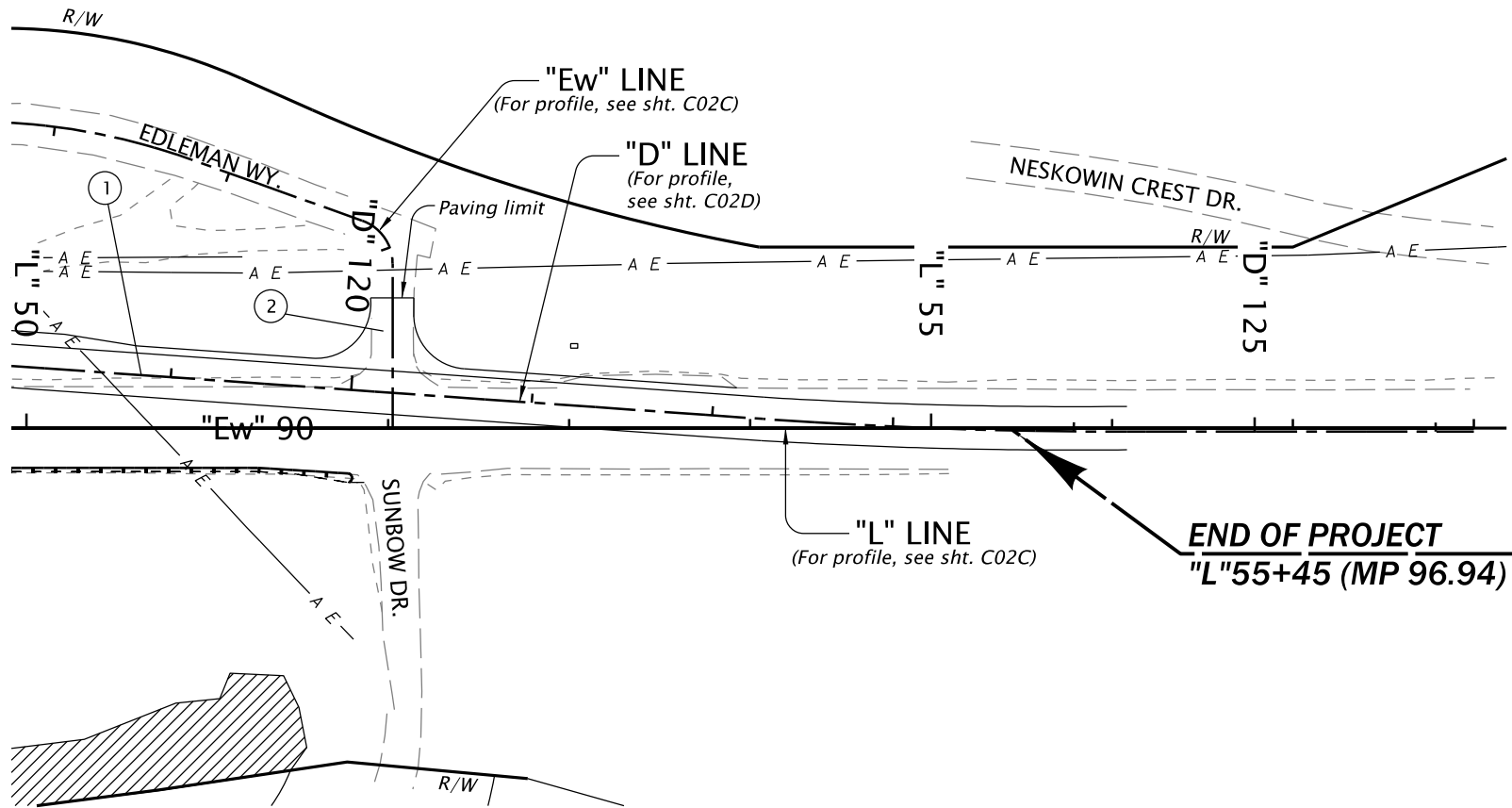
GENERAL CONSTRUCTION

SHEET NO.
C02A

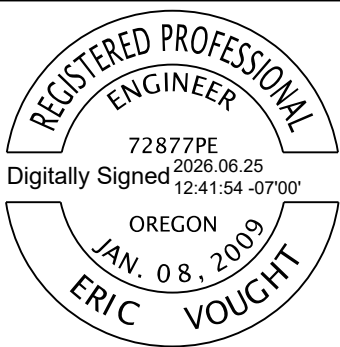
Sec.25, T.5 S, R.11 W, W.M.

CONSTRUCTION NOTES

- ① See sht. C01C, note 1
Const. diversion
Remove diversion
- ② Const. temp. approach
Remove temp. approach
(For details, see sht. BB03)



No work zone shown thus: 



RENEWS: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION

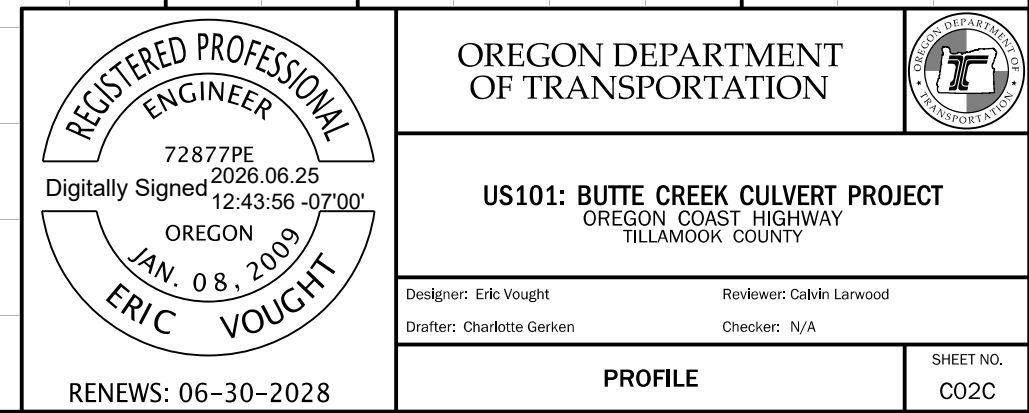


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

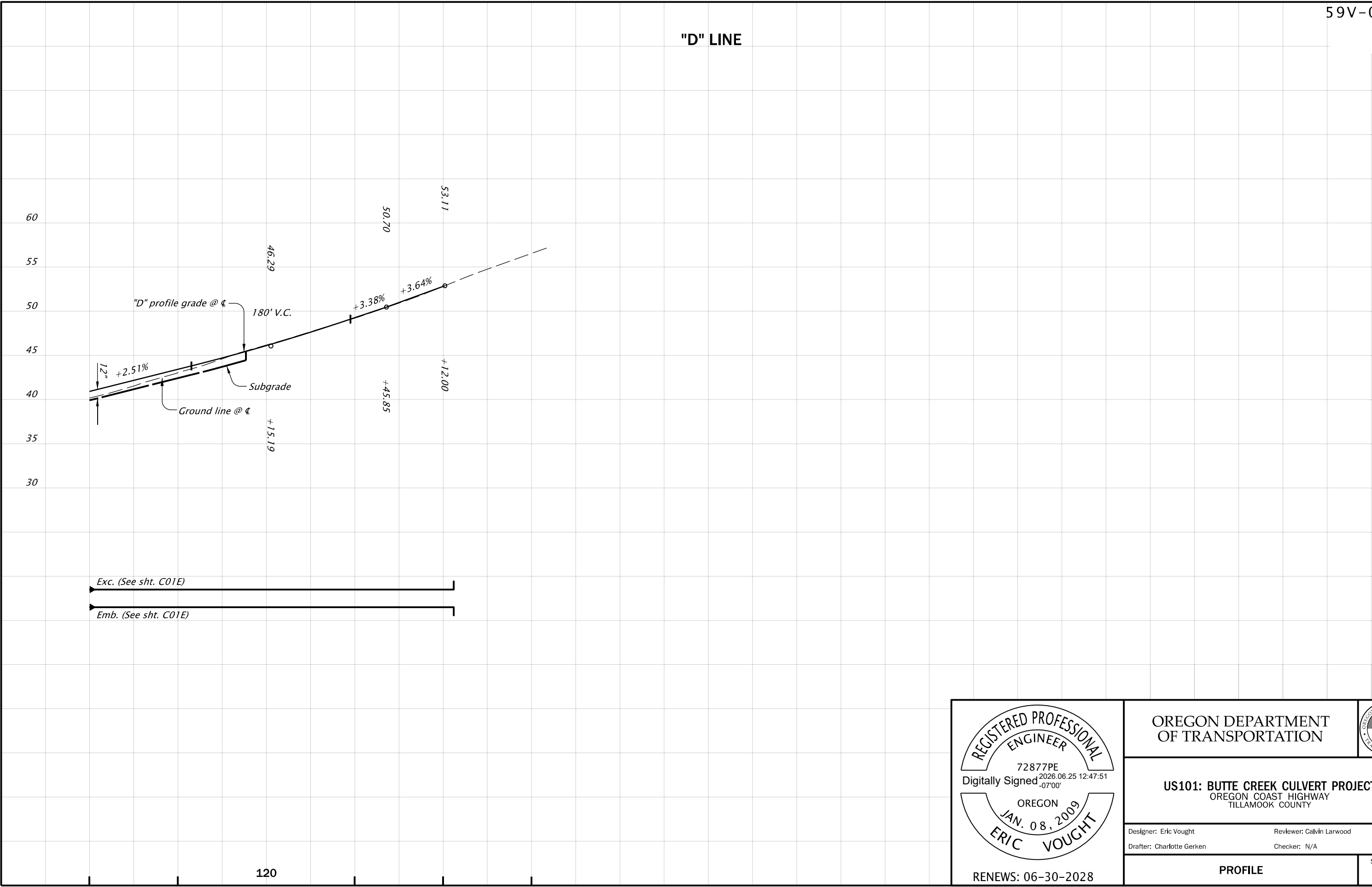
Designer: Eric Vought Reviewer: Calvin Larwood
Drafter: Charlotte Gerken Checker: N/A

DIVERSION PLAN

SHEET NO.
C02B

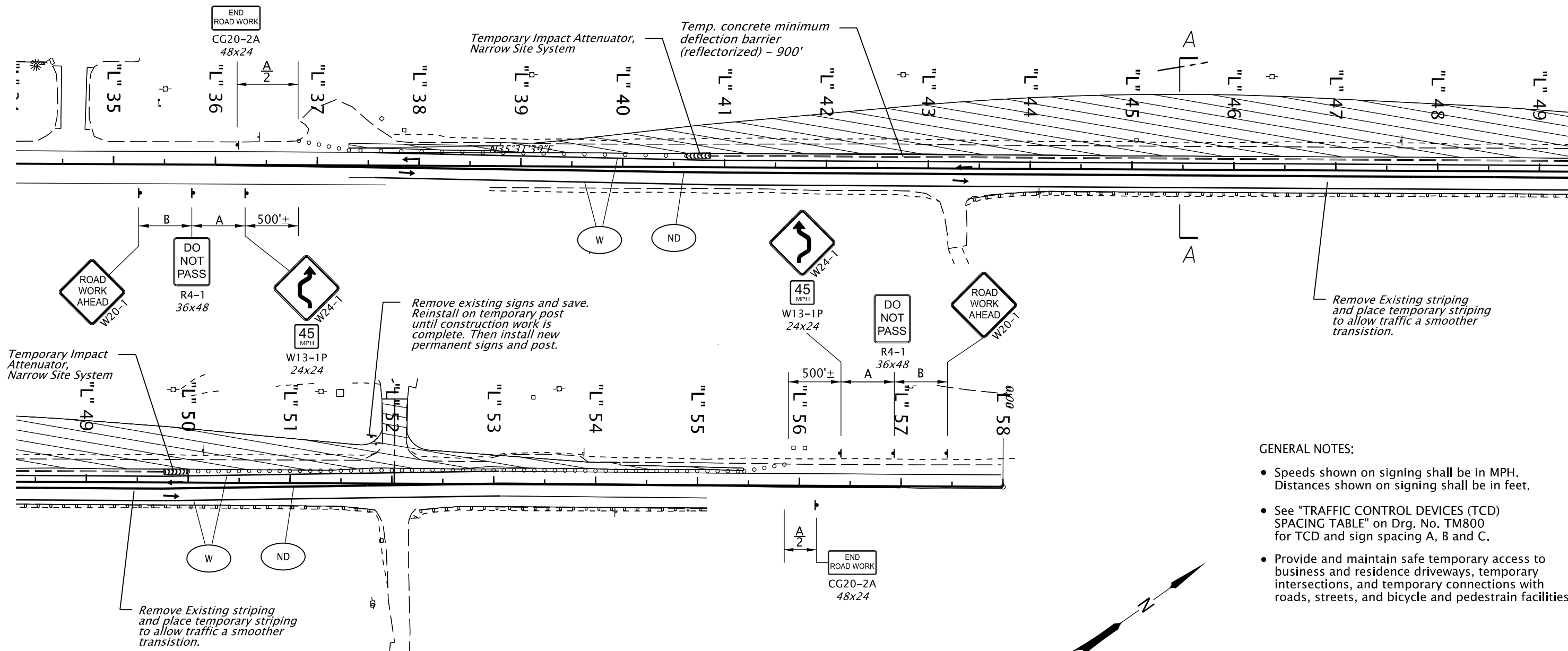


"D" LINE

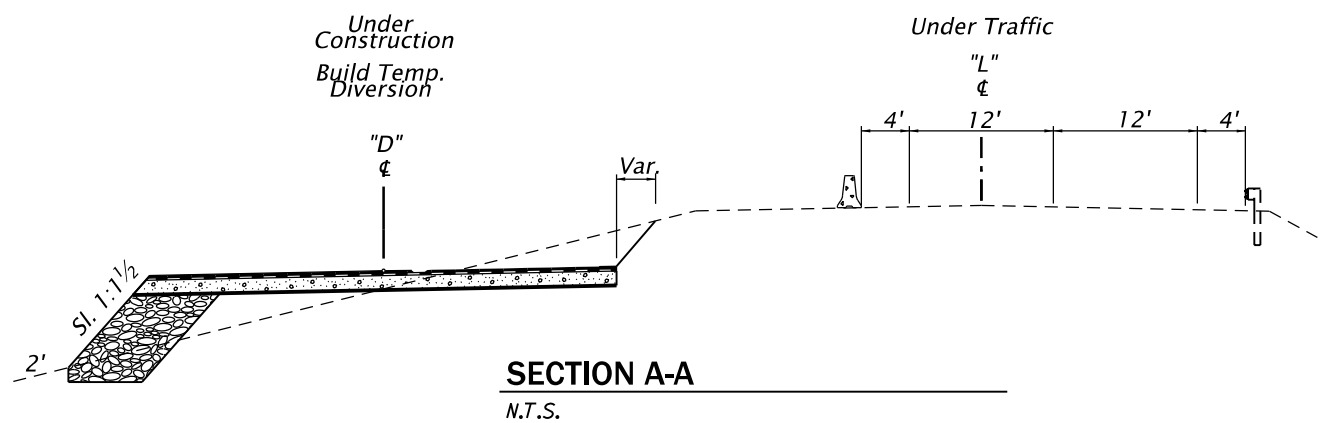


REGISTERED PROFESSIONAL ENGINEER 72877PE Digitally Signed 2026.06.25 12:47:51 -07'00' OREGON JAN. 08, 2009 ERIC VOUGHT RENEWES: 06-30-2028 FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST	OREGON DEPARTMENT OF TRANSPORTATION	
	US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
	Designer: Eric Vought	Reviewer: Calvin Larwood
	Drafter: Charlotte Gerken	Checker: N/A
PROFILE		SHEET NO. C02D

ROAD DIVERSION
STAGE 1



- GENERAL NOTES:
- Speeds shown on signing shall be in MPH. Distances shown on signing shall be in feet.
 - See "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Drg. No. TM800 for TCD and sign spacing A, B and C.
 - Provide and maintain safe temporary access to business and residence driveways, temporary intersections, and temporary connections with roads, streets, and bicycle and pedestrian facilities.



- LEGEND
- ND Inst. narrow double no-pass two 4" yellow lines
 - W Inst. 4" white line
 - Temp. plastic drums on 20' max. spacing
 - Temp. plastic drums on 10' max. spacing
 - Under construction

ACCOMPANIED BY DWGS:
TM800, TM820, TM821, TM822,
TM830, TM840, TM841, TM850,
TM851, TM854

REGISTERED PROFESSIONAL
ENGINEER
92,009
Digitally Signed Date: 2026.04.06
08:17:01-07'00"
OREGON
SEPT. 14, 2021
JAKOB B EIBEL

RENEWES: 12-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION

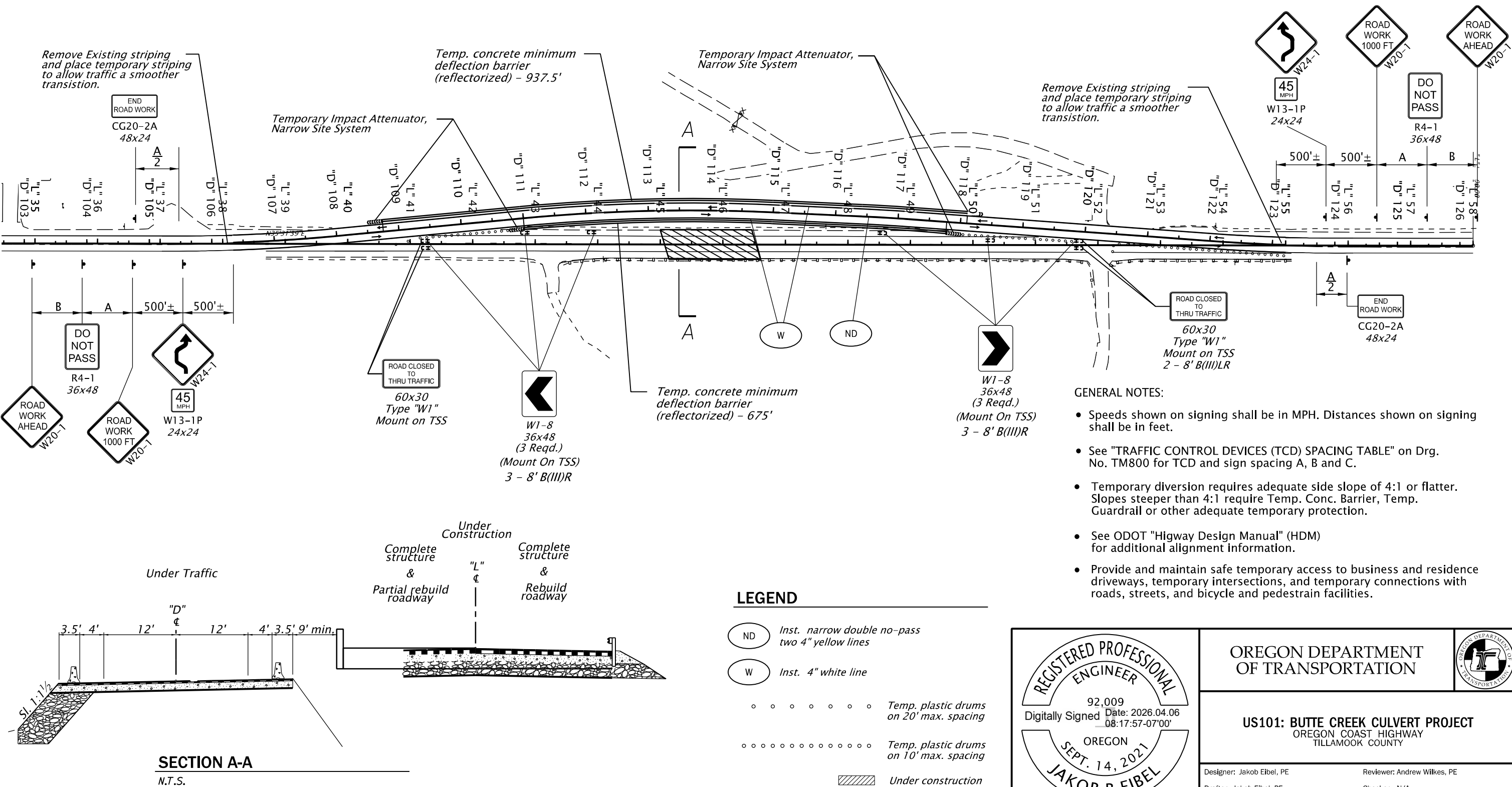
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Jakob Eibel, PE Reviewer: Andrew Wilkes, PE
Drafter: Jakob Eibel, PE Checker: N/A

TRAFFIC CONTROL PLAN

SHEET NO.
EA01

ROAD DIVERSION
STAGE 2



RENEWES: 12-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Jakob Eibel, PE
Drafter: Jakob Eibel, PE

Reviewer: Andrew Wilkes, PE
Checker: N/A

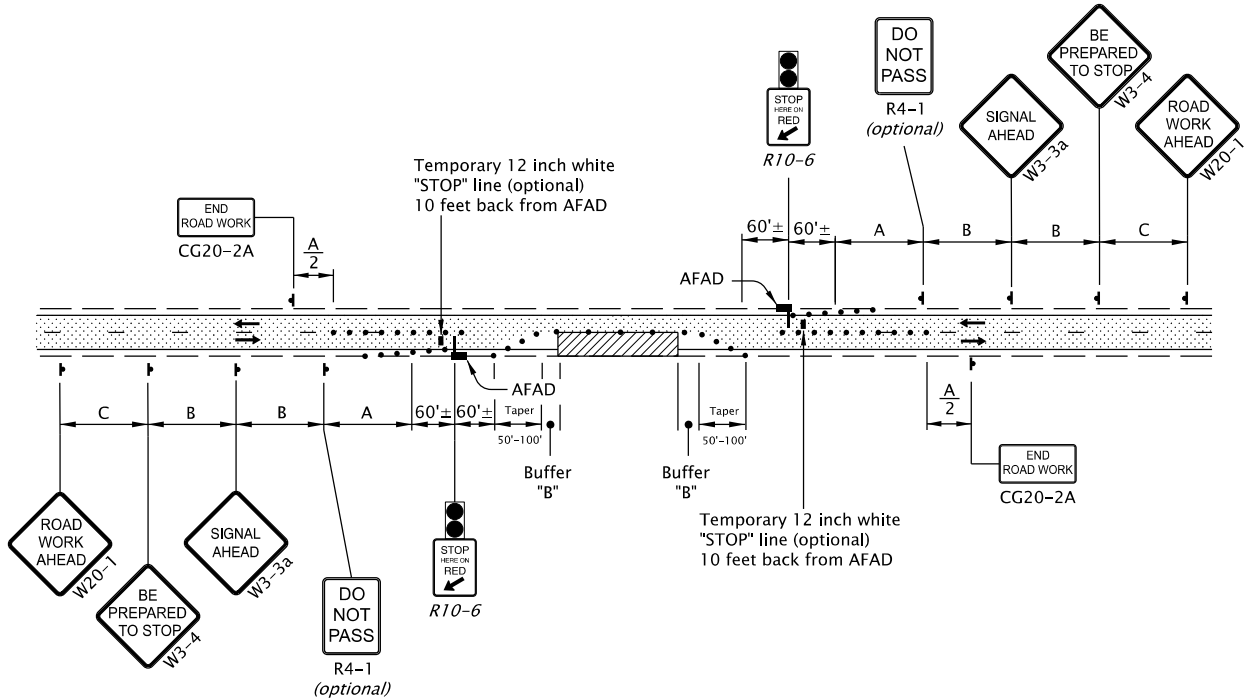
TRAFFIC CONTROL PLAN

SHEET NO.
EA02

ROAD DIVERSION
2-LANE, 2-WAY ROADWAYS
STAGE 3

NOTES:

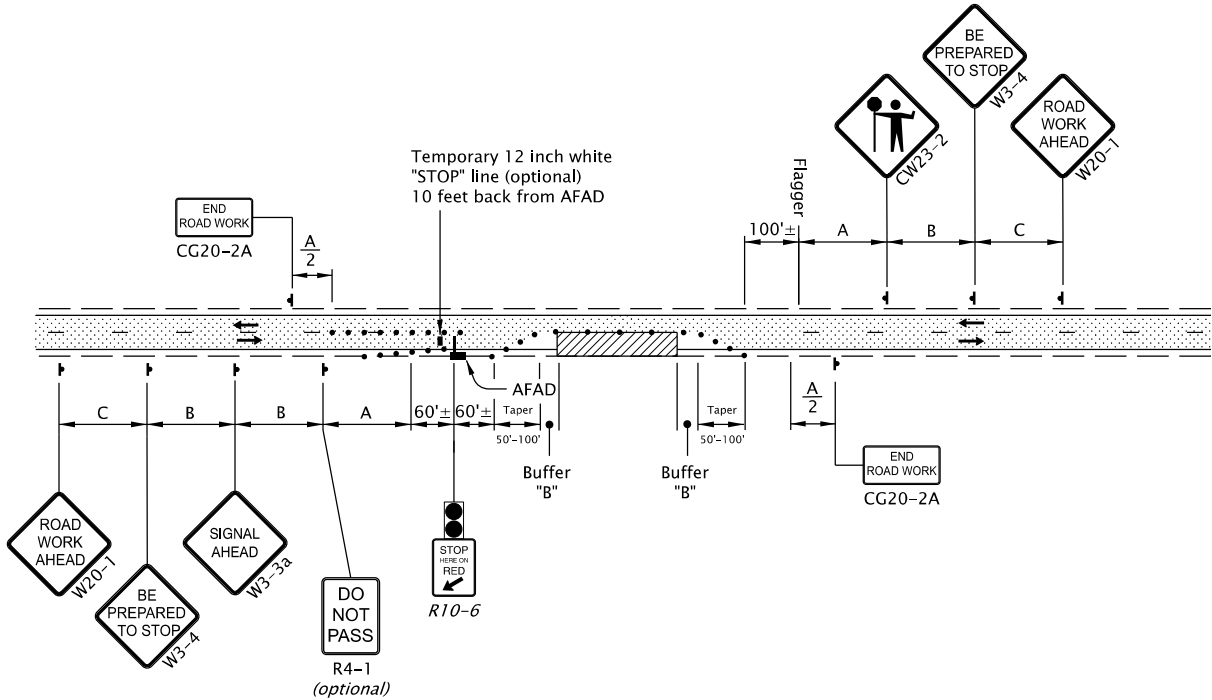
- An AFAD operator shall be provided for each AFAD. A single operator may not simultaneously operate two AFADs.
- See Sheet BB03 for ACP wedge locations under temp. traffic.



2-Lane, 2-Way Roadway
ONE LANE CLOSURE, TWO AFADs

NOTES:

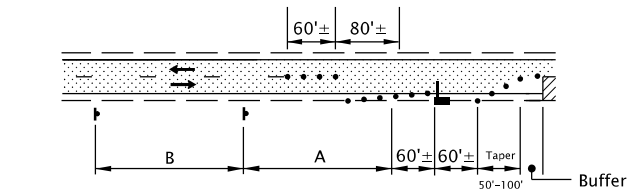
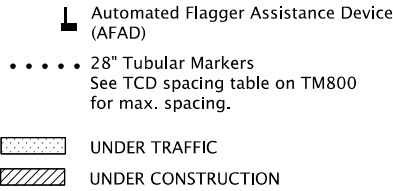
- The AFAD operator shall not flag traffic and operate an AFAD at the same time.
- See Sheet BB03 for ACP wedge locations under temp. traffic.



2-Lane, 2-Way Roadway
ONE LANE CLOSURE, ONE AFAD & ONE FLAGGER

GENERAL NOTES FOR ALL DETAILS:

- Flagger station shall be delineated according to "FLAGGER STATION" detail shown on Standard Drawing TM800
- Bottom of lens housing shall be a minimum of 7 ft. above surface when mounted on shoulder and at least 17 ft. above any portion of the travel lane.
- The gate arm shall cover at least one half of the approaching vehicle travel lane.
- Signing and other TCD installed in conjunction with the work area, shall move with the work area.
- Use 1/3 "L" taper for shoulder closure, where necessary.
- For Taper Length ("L") and Buffer Length ("B") shown on this sheet, use the "MINIMUM LENGTHS TABLE" shown on Drg. No. TM800.
- The AFAD operator shall be a certified flagger who has been trained in the operation of the AFAD in use.
- Operator shall operate AFAD from a designated area. Designated area should maintain visual presence of the AFAD and should be at least 50' away from the AFAD and have an escape route available for the operator.
- Remove existing striping and install temporary striping as required.
- See "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Drg. TM800 for sign spacing A, B, and C.
- Cover existing passing lane signing (as directed)
- When extended traffic queues develop during AFAD operations, protect traffic by providing advance flaggers(s) and signing according to the "Extended Traffic Queues Detail" shown on Standard Drawing TM850.
- When AFAD is not in use for less than one work shift, turn off AFAD, or switch YELLOW lens to flashing mode, and cover or remove all accompanying signing.
- When AFAD is not in use for longer than one work shift, remove AFAD and all accompanying signing from the roadway.
- Do not use the AFAD to control more than one lane of approaching traffic.
- Use temporary pavement markings or a white portable rumble strip for temporary stop line. Remove temporary stop line when AFAD is no longer in use.
- Tubular markers along centerline placed in advance of AFAD to first sign are optional, unless the DO NOT PASS sign is used.



OVER-DIMENSIONAL VEHICLE ACCOMMODATION DETAIL



RENEWES: 12-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION

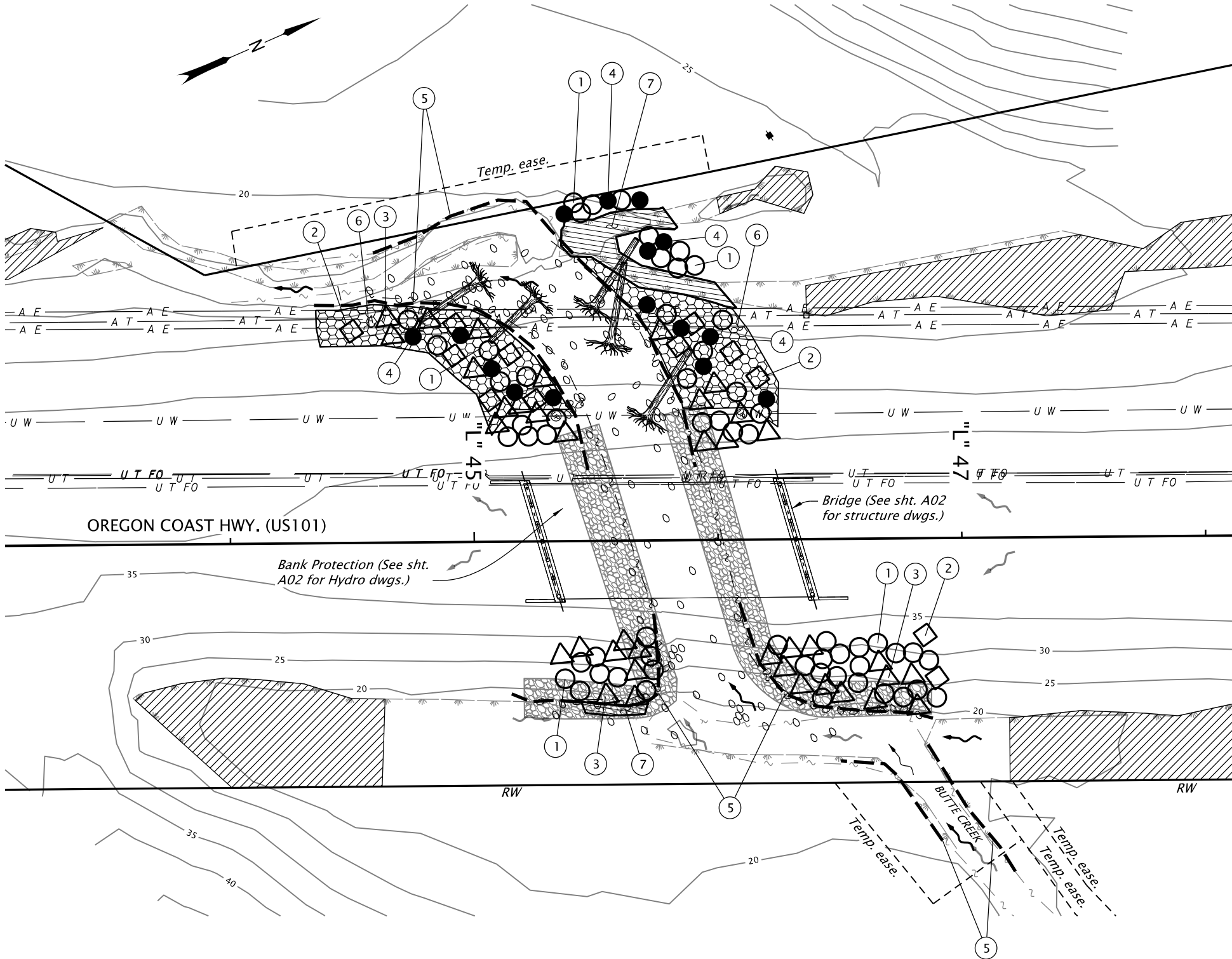


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Jakob Eibel, PE
Reviewer: Andrew Wilkes, PE
Drafter: Jakob Eibel, PE
Checker: N/A

TRAFFIC CONTROL PLAN

SHEET NO.
EA03



CONSTRUCTION NOTES

- 1 Inst. 1 *Alnus rubra* seedling per symbol. Work seedling into rock embankment where show and as directed. (See dwg. FA02 for details)
- 2 Inst. 1 *Picea sitchensis* seedling per symbol. (See dwg. FA02 for details).
- 3 Inst. 2 *Salix hooeriana* live stakes per symbol/hole. Work live stake into rock embankment where show and as directed. (See dwg. FA02 for details).
- 4 Inst. 1 *Sambucus racemosa* per symbol.
- 5 Inst. 1 *Salix hooeriana* live stake every 1' O.C. (See dwg. FA02 for details).
- 6 Inst. Plant Mix 'B' See dwg. FA02 for details).
- 7 Inst. Plant Mix 'C' (See dwg. FA02 for details).

PLANT LEGEND

Plant Mix 'A'

- *Alnus rubra*
- *Picea sitchensis*
- ▽ *Salix hookeriana* (Live stake) – 3 stakes per symbol/hole
- *Sambucus racemosa*
- *Salix hookeriana* (Live stake at OHW) 1' O.C. Part of Mix 'C'
- Plant Mix 'B'
- Plant Mix 'C'

LEGEND

- xxx Proposed contours
- xxx Existing contours
- Fill slope
- Cut slope
- Existing wetland boundary
- Ordinary high water (OHW)
- No Work Area

REGISTERED
424
Magnus P. Bernhardt
OREGON
05/14/99
EXPIRES: 05-31-2027

Digitally Signed 2026.06.25 12:41:21 -07'00'

LANDSCAPE ARCHITECT

FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST

OREGON DEPARTMENT
OF TRANSPORTATION

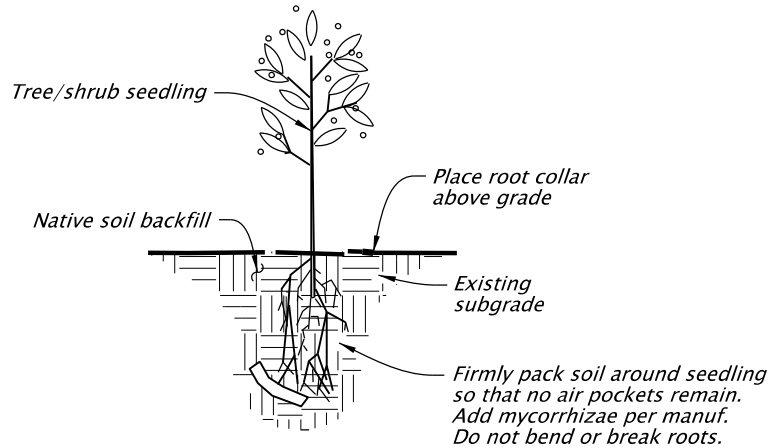


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

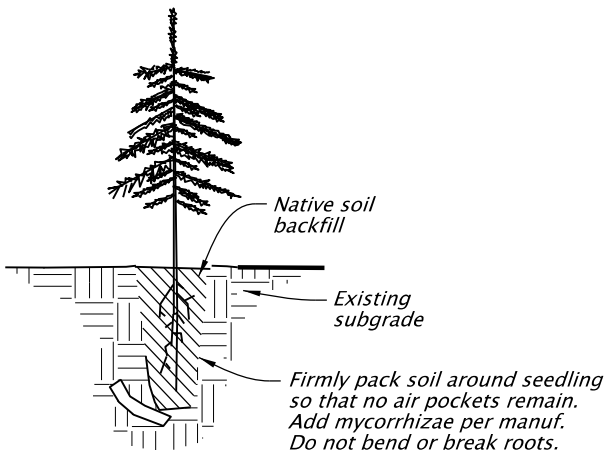
Designer: Magnus Bernhardt Reviewer: Robert Marshall
Drafter: Julie Rentz Checker: N/A

ROADSIDE DEVELOPMENT
PLANTING PLAN

SHEET NO.
FA01



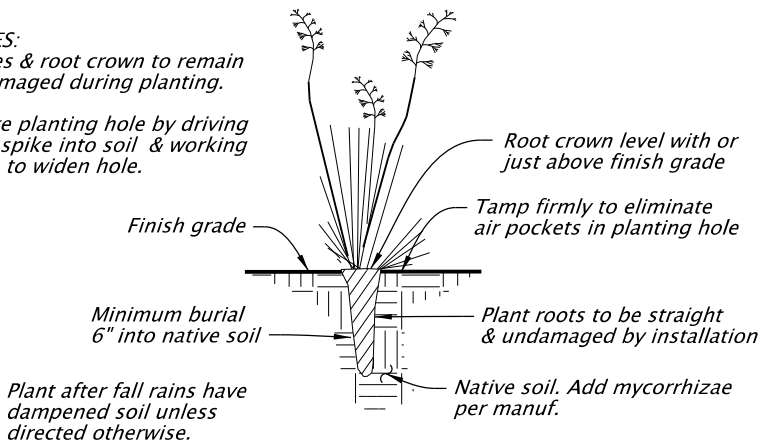
BAREROOT PLANTING
Not to Scale



SEEDLING PLANTING
Not to Scale

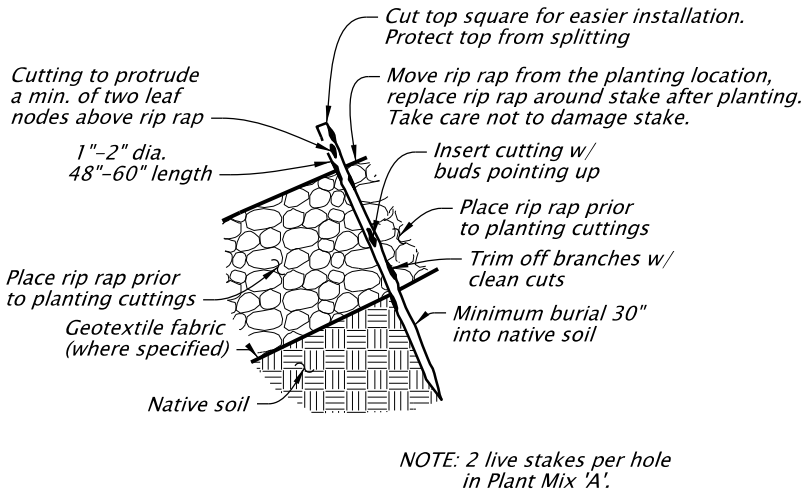
NOTES:
Leaves & root crown to remain undamaged during planting.

Create planting hole by driving steel spike into soil & working spike to widen hole.



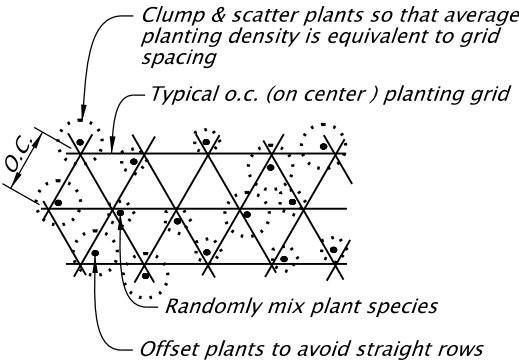
Plant after fall rains have dampened soil unless directed otherwise.

STYRO-BLOC PLUG PLANTING
Not to Scale



NOTE: 2 live stakes per hole in Plant Mix 'A'.

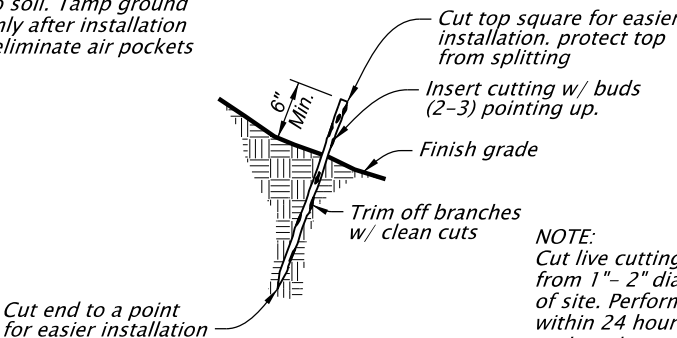
PLANT CUTTING INSTALLATION IN RIP-RAP/ROCK EMBANKMENT
Not to Scale



RANDOM PLANTING PATTERN
Not to Scale

Insert 75-80% of total cutting length into soil. Tamp ground firmly after installation to eliminate air pockets

NOTE: 2 live stakes per hole in Plant Mix 'A'.



NOTE: Cut live cuttings in 48"-60" lengths, from 1"-2" dia. stock within 20 miles of site. Perform cutting and installation within 24 hours. Keep cuttings cool and moist prior to installation.

PLANT CUTTING INSTALLATION
Not to Scale

REGISTERED
424
Digitally Signed 2026.06.25 12:42:00 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

ROADSIDE DEVELOPMENT DETAILS

SHEET NO.
FA02

Butte Creek Bridge Plant and Material Schedule

Plant Type	Botanical Name	Common Name	Size	Spacing	Root Type	Percent Mix	Plant Condition	Layout	Notes	Irrigation	Plant Mix 'A'	Plant Mix 'B'	Plant Mix 'C'	Totals
Plant Mix 'A'														
	Alnus rubra	red alder	Seedling	As Shown	Seedling	N/A	Single trunk	Stake locations for approval prior to planting	As Shown	See specifications	56			56
	Picea sitchensis	Sitka spruce	Seedling	As Shown	Seedling	N/A	Single trunk	Stake locations for approval prior to planting	As Shown	See specifications	12			12
	Salix hookeriana	coast willow	48"-60"	As Shown	Live Stake (cutting)	N/A	1.5"-2" Diam.	Stake locations for approval prior to planting	As Shown	See specifications	76			76
	Sambucus racemosa	red Elderberry	Bareroot	As Shown	Bare root	N/A	Multi-stem	Stake locations for approval prior to planting	As Shown	See specifications	15			15
	Total In Mix													159
Plant Mix 'B'														
	Physocarpus capitatus	ninebark	Bareroot	6' O.C.	Bare root	12%	Multi-stem	Mix with group	Install in groups of 3-5	See specifications		19		19
	Ribes sanguineum	red currant	Bareroot	6' O.C.	Bare root	12%	Multi-stem	Mix with group	Install in groups of 3-5	See specifications		19		19
	Rosa nutkana	Nootka rose	Bareroot	4' O.C.	Bare root	20%	Multi-stem	Mix with group	Install in groups of 3-7	See specifications		31		31
	Spiraea douglasii	Western spirea	Bareroot	5' O.C.	Bare root	20%	Multi-stem	Mix with group	Install in groups of 3-7	See specifications		31		31
	Salix hookeriana	coast willow	Live Stake 48"-60"	5' O.C.	Live Stake (cutting)	11%	1.5"-2" Diam.	Mix with group	Install in groups of 3-5	See specifications		14		14
	Symphoricarpus albus	snowberry	Bareroot	4' O.C.	Bare root	25%	Multi-stem	Mix with group	Install in groups of 3-10	See specifications		38		38
	Total In Mix													152
Plant Mix 'C'														
	Carex obnupta	slough sedge	Plugs	1' O.C.	Plug	50%		Stake area for approval prior to planting	Install in groups of 30-50	See specifications			480	480
	Eleocharis palustris	creeping spike rush	Plugs	1' O.C.	Plug	25%		Stake area for approval prior to planting	Install in groups of 30-50	See specifications			240	240
	Scirpus microcarpus	Small-fruited Bulrush	Plugs	1' O.C.	Plug	25%		Stake area for approval prior to planting	Install in groups of 30-50	See specifications			240	240
	Total In Mix													960
	Salix hookeriana	coast willow	48"-60"	1' O.C.	Live Stake (cutting)	N/A	1.5"-2" Diam.	1' O.C.	As Shown	See specifications			669	669

REGISTERED

424

• Digitally Signed 2026.06.25 12:42:33 -07'00' •

Magnus P. Bernhardt

OREGON

05/14/99

LANDSCAPE ARCHITECT

EXPIRES: 05-31-2027

OREGON DEPARTMENT OF TRANSPORTATION

US101: BUTTE CREEK CULVERT PROJECT

OREGON COAST HIGHWAY

TILLAMOOK COUNTY

Designer: Magnus Bernhardt

Reviewer: Robert Marshall

Drafter: Julie Rentz

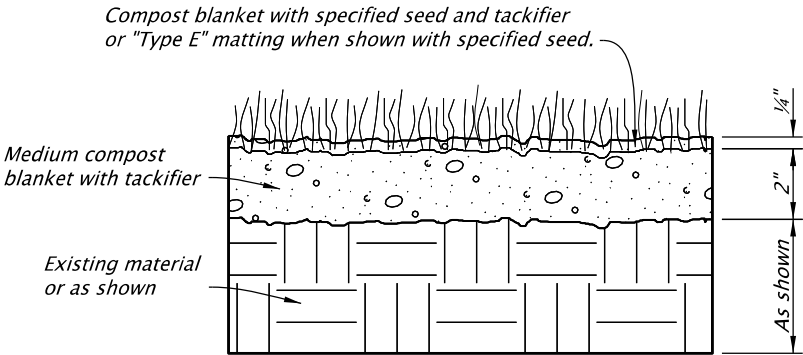
Checker: N/A

ROADSIDE DEVELOPMENT PLANT SCHEDULE

SHEET NO. FA03

LEGEND

- Fill slope
- — — Cut slope
- — — Sediment fence (Orange color)
- - - - - Orange plastic fence/work zone fencing (no work area)
- ▨ Sediment barrier, straw wattle
- ▨ Sediment barrier, compost sock
- ▨ Construction entrance
- ▨ Erosion control matting
- ▨ Seeding and mulching
- ▨ Compost blanket
- ~ Flow direction
- Slope direction
- ▨ No Work Area
- ~~~~~ Existing tree canopy



COMPOST EROSION BLANKET WITH SEED
No Scale

EROSION AND SEDIMENT CONTROL GENERAL NOTES

The construction, adjustment, maintenance, and upgrading of these Erosion and Sediment Control measures is the responsibility of the contractor for the duration of the project to comply with Section 00280 of the Oregon Standard Specifications for construction and, when applicable, the NPDES 1200-CA permit.

Erosion and Sediment Control measures shown on this plan are for anticipated site conditions. Adjust or upgrade these measures for unexpected storm events to ensure that sediment and sediment-laden water does not leave the site.

Develop a revised plan of the Erosion and Sediment Control measures shown as required by Section 00280, Oregon Standard Specifications for Construction. Implement this plan for all clearing and grading activities and in segments applicable to each staging phase. Construct in such a manner so as to ensure that sediment and sediment-ladenwater does not enter the roadway or drainage system, or violate applicable water standards.

Install measures within the right-of-way unless directed otherwise.

STANDARD DRAWINGS

- RD1000 Construction Entrances
- RD1005 Check Dams Type 1, 3 and 4
- RD1006 Check Dams Type 2 and 6
- RD1010 Inlet Protection Type 2, 3, 6, 7 10 and 11
- RD1015 Inlet Protection Type 4
- RD1030 Sediment Barrier Type 2, 3 and 4
- RD1031 Sediment Barrier Type 5 and 6
- RD1032 Sediment Barrier Type 8
- RD1033 Sediment Barrier Type 9
- RD1040 Sediment Fence
- RD1045 Temporary Slope Drain With Energy Dissipator
- RD1050 Temporary Scour Basin / Energy Dissipator
- RD1055 Slope and Channel Matting
- RD1060 Tire Wash Facility Type 1 and 2
- RD1065 Sediment Trap
- RD1070 Concrete Truck Wash Out

- NOTES:
- Graphic symbols are approximate. Place Erosion Control measures as required or directed.
 - Areas bounded by temporary orange fence denote protected no work areas such as trees, wetlands, cultural resources, etc.

REGISTERED
424
Magnus P. Bernhardt
OREGON
05/14/99
EXPIRES: 05-31-2027
LANDSCAPE ARCHITECT

Digitally Signed
2026.06.25
12:43:08 -07'00'

OREGON DEPARTMENT
OF TRANSPORTATION



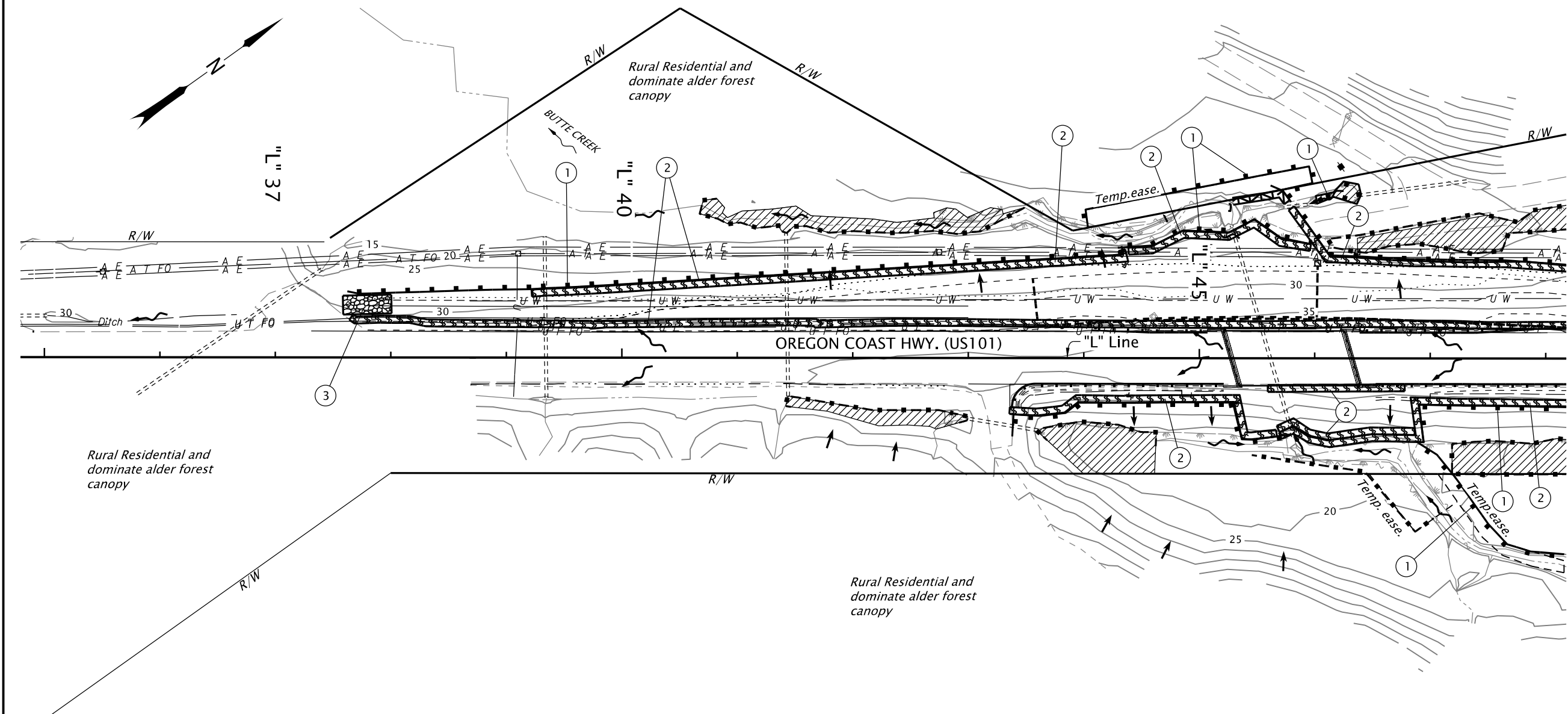
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL NOTES

SHEET NO.
FB01

STAGE 1
PERIMETER CONTROL W/CONSTRUCTION
ENTRANCES FOR CLEARING AND GRUBBING



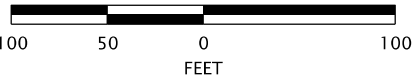
CONSTRUCTION NOTES

- 1 Const. Orange colored sediment fence (See dwg. RD1040)
- 2 Inst. sediment barrier Type 8 (See dwg. RD1032)
- 3 Const. construction entrance (See dwg. RD1000)

LEGEND

- Fill slope
- Cut slope
- Flow direction
- Slope direction
- Sediment fence (Orange color)
- Sediment barrier, compost sock
- Construction entrance
- No Work Area
- Existing tree canopy

NOTES:
Areas bounded by temporary orange fence denote protected no work areas such as trees, wetlands, cultural resources, etc.



REGISTERED
424
Digitally Signed 2026.06.25 12:43:37 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027
FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB02

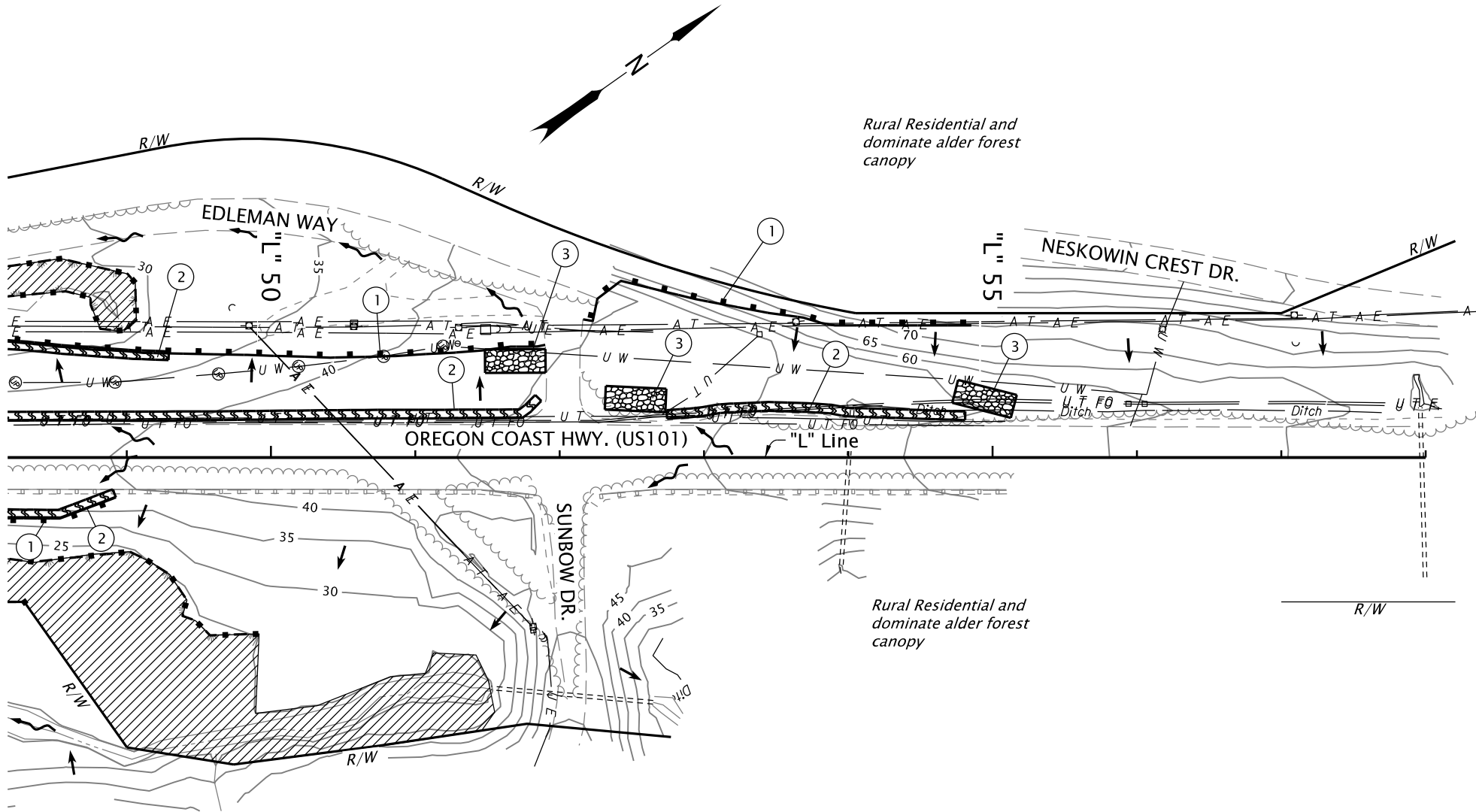
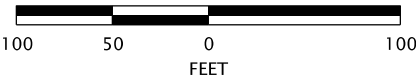
STAGE 1
PERIMETER CONTROL W/CONSTRUCTION
ENTRANCES FOR CLEARING AND GRUBBING

CONSTRUCTION NOTES

- 1 Const. Orange colored sediment fence (See dwg. RD1040)
- 2 Inst. sediment barrier Type 8, (See dwg. RD1032)
- 3 Const. construction entrance (See dwg. RD1000)

LEGEND

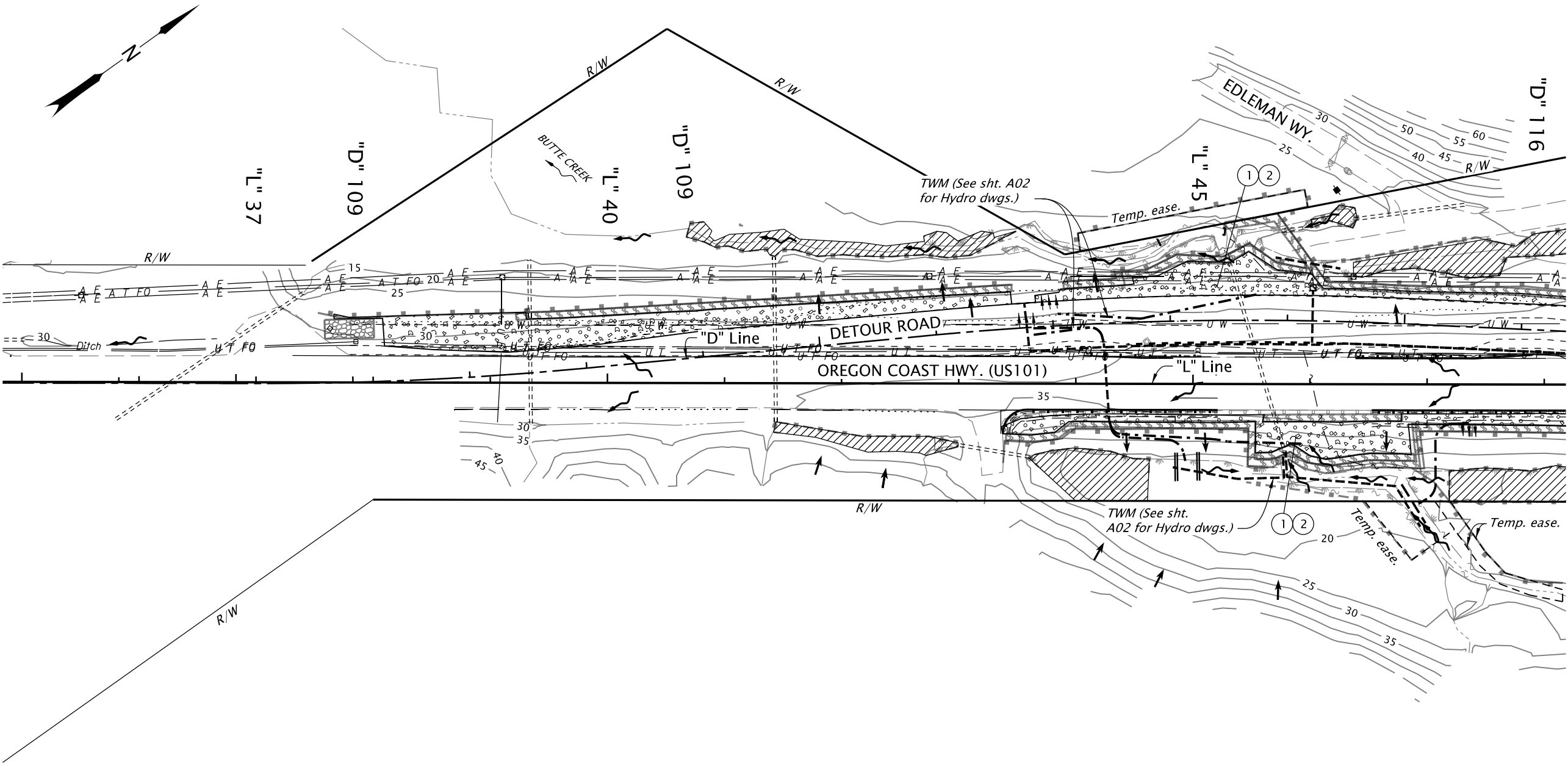
- Fill slope
- Cut slope
- Sediment fence (Orange color)
- Orange plastic fence/work zone fencing (no work area)
- Sediment barrier, compost sock
- Construction entrance
- Flow direction
- Slope direction
- No Work Area
- Existing tree canopy



REGISTERED
424
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT OF TRANSPORTATION	
US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
Designer: Magnus Bernhardt	Reviewer: Robert Marshall
Drafter: Julie Rentz	Checker: N/A
EROSION AND SEDIMENT CONTROL PLAN	
SHEET NO. FB03	

STAGE 2
EXISTING BMPS FROM STAGE 1 ARE MAINTAINED
HYDRAULIC MATTING AND TEMP. SEEDING INSTALLED



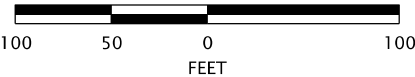
CONSTRUCTION NOTES

- ① Apply hydraulic matting Type 'A'
- ② Apply Temporary Seeding

LEGEND

- Fill slope
- Cut slope
- Seeding and mulching
- Flow direction
- Slope direction
- No Work Area

- NOTES:
- 1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 - 2. Maintain previous phased ESC BMPS as shown or directed.



REGISTERED
424
• Digitally Signed 2026.06.25 12:44:39 -07'00' •
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027
FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB04

STAGE 2
EXISTING BMPS FROM STAGE 1 ARE MAINTAINED
HYDRAULIC MATTING AND TEMP. SEEDING INSTALLED

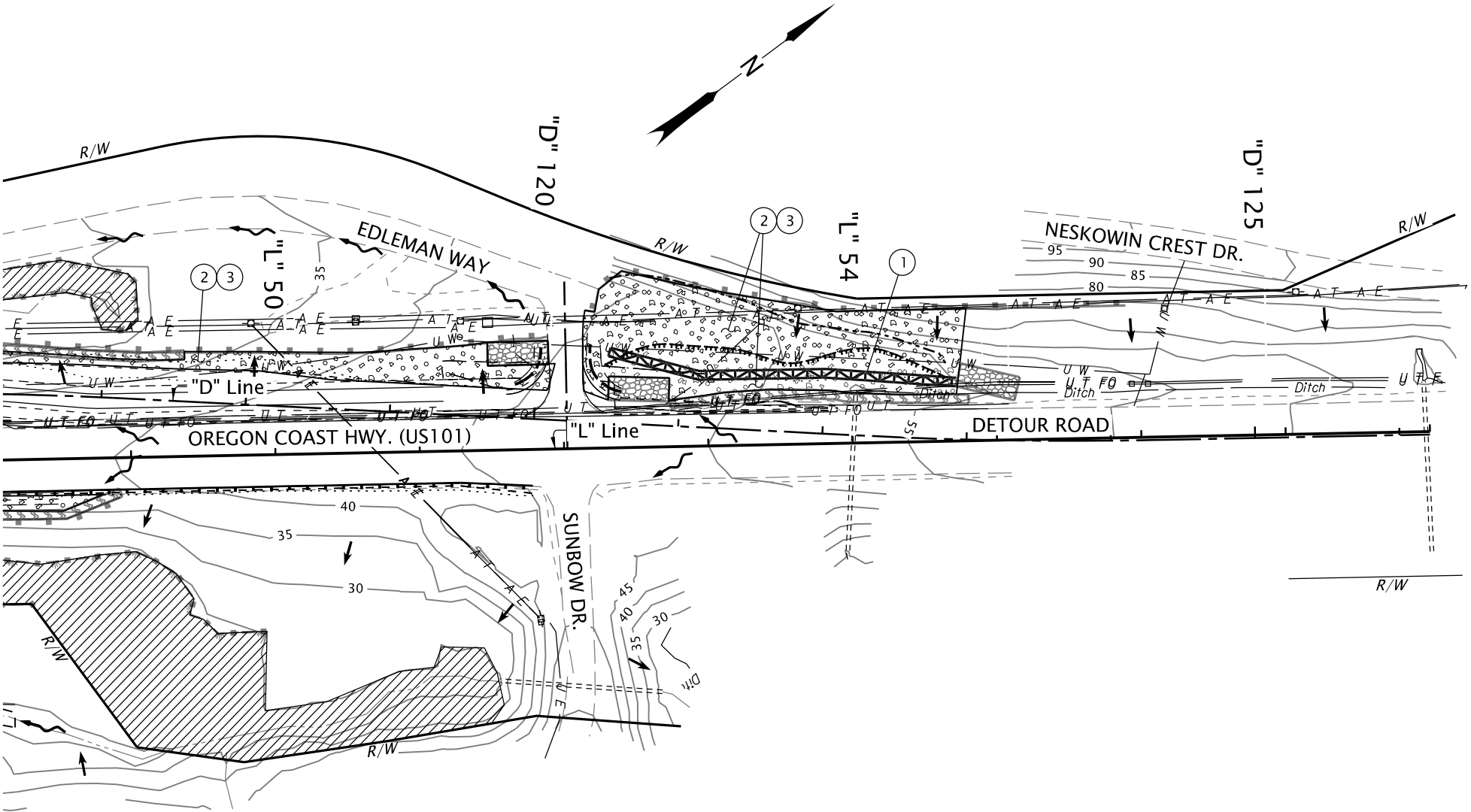
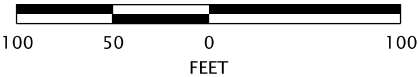
CONSTRUCTION NOTES

- 1 Inst. sediment barrier
Type 3
(See dwg. RD1030)
- 2 Apply hydraulic matting Type 'A'
- 3 Apply Temporary Seeding

LEGEND

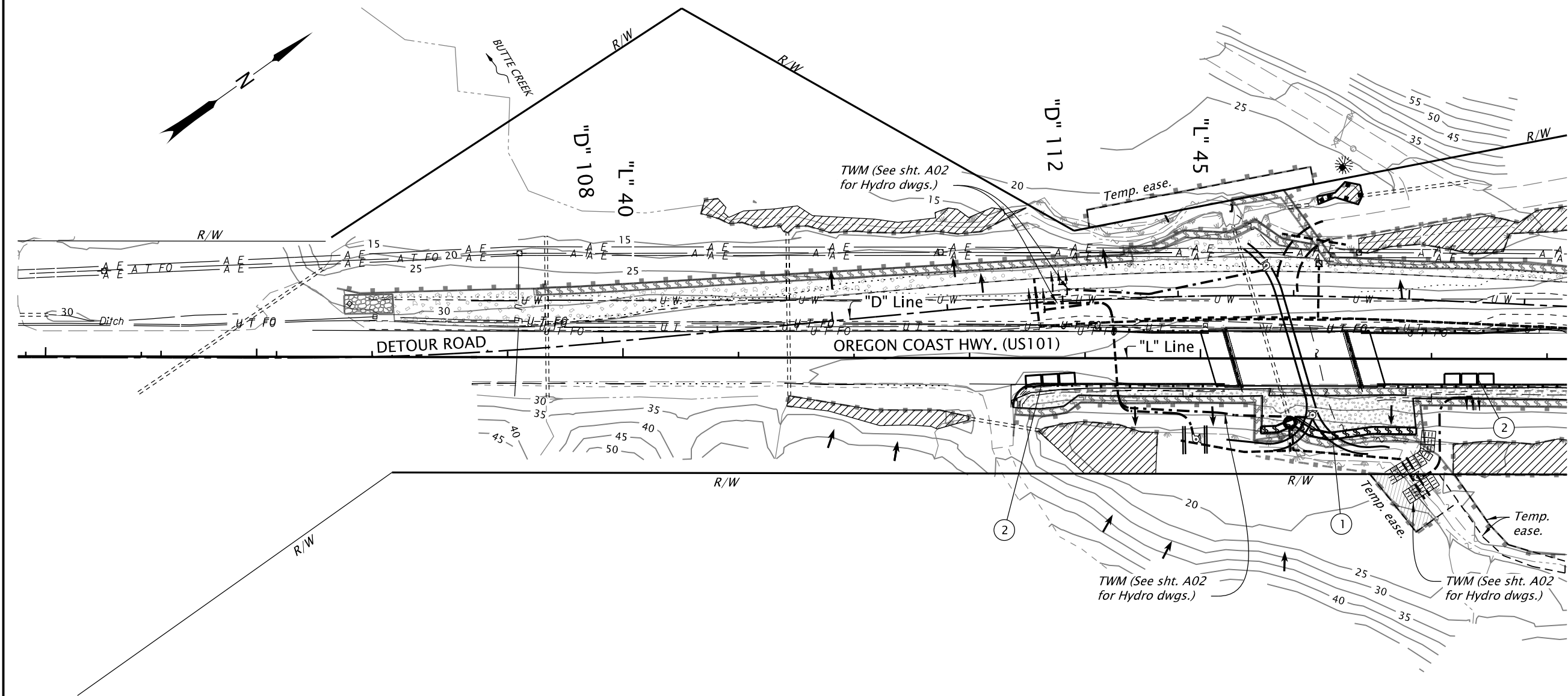
- Fill slope
- Cut slope
-  Sediment barrier, straw wattle
-  Seeding and mulching
-  Flow direction
-  Slope direction
-  No Work Area

- NOTES:
- 1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 - 2. Maintain previous phased ESC BMPS as shown or directed.



REGISTERED 424 • Digitally Signed 2026.06.25 12:45:06 -07'00' Magnus P. Bernhardt OREGON 05/14/99 LANDSCAPE ARCHITECT EXPIRES: 05-31-2027 FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST	OREGON DEPARTMENT OF TRANSPORTATION	
	US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
	Designer: Magnus Bernhardt Drafter: Julie Rentz	Reviewer: Robert Marshall Checker: N/A
	EROSION AND SEDIMENT CONTROL PLAN	
	SHEET NO. FB05	

STAGE 3
EXISTING BMPS STAGE 1 AND 2 ARE MAINTAINED



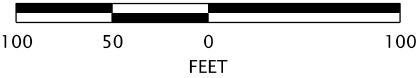
CONSTRUCTION NOTES

- 1. Inst. sediment barrier Type 8, (See dwg. RD1032)
- 2. Const. concrete truck wash out facility (See dwg. RD1070)

LEGEND

- Fill slope
- Cut slope
- ▨ Sediment barrier, compost sock
- ▢ Truck wash
- ~ Flow direction
- Slope direction
- ▨ No Work Area

- NOTES:
- 1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 - 2. Maintain previous phased ESC BMPS as shown or directed.



REGISTERED
424
Digitally Signed 2026.06.25 12:45:31 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



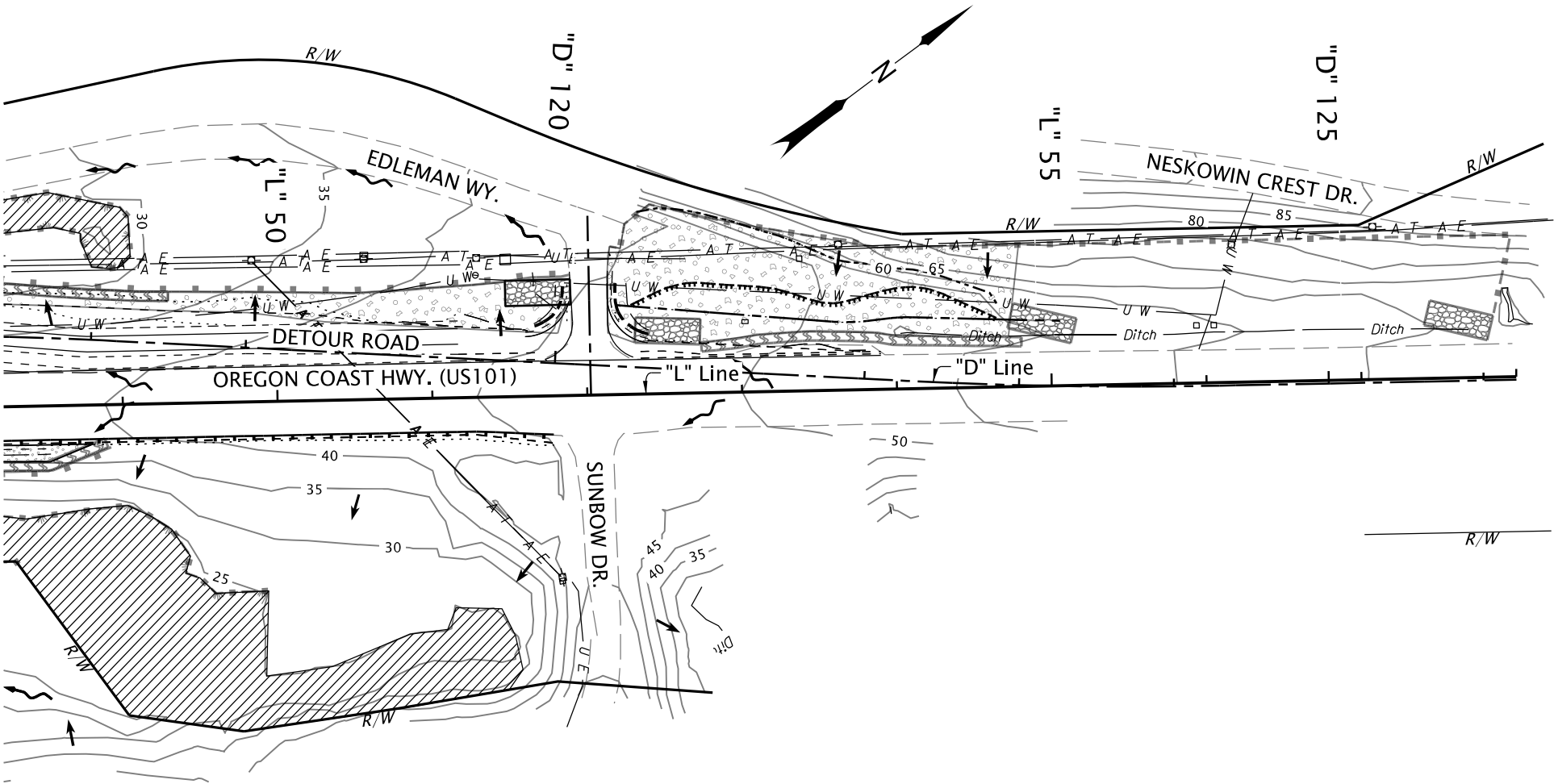
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB06

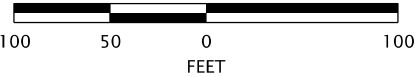
STAGE 3
EXISTING BMPs FROM STAGE 1 AND 2 ARE MAINTAINED



LEGEND

- Fill slope
- Cut slope
- ~ Flow direction
- Slope direction
- [Hatched Box] No Work Area

- NOTES:
- No new Stage 3 BMP's on this sheet.
Maintain BMP's from previous Stages.
 - Areas bounded by temporary orange fence denote protected no work areas such as trees, wetlands, cultural resources, etc.



REGISTERED
424
• Digitally Signed 2026.06.25 12:45:57 -07'00' •
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



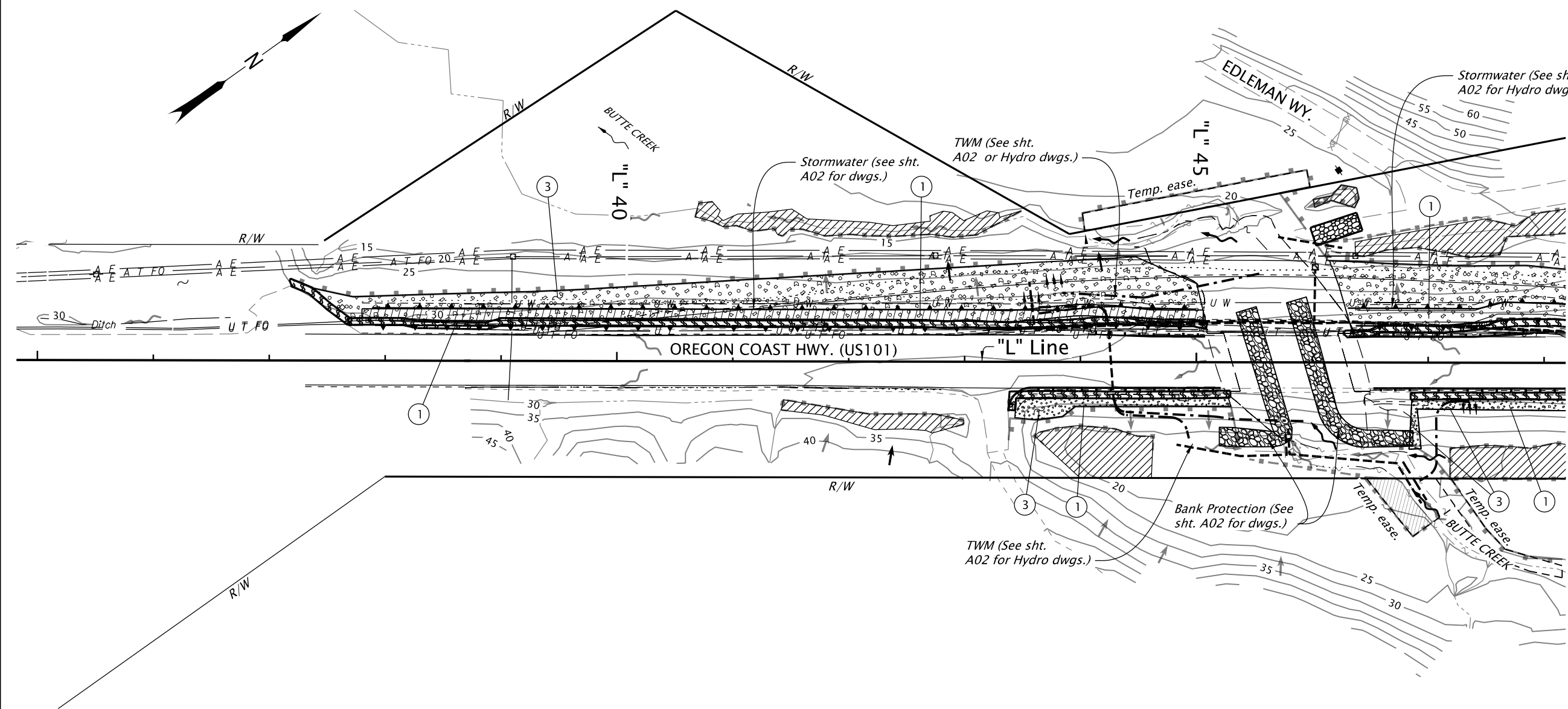
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB07

STAGE 4
EXISTING BMPS FROM STAGE 1-3 ARE MAINTAINED
SEDIMENT BARRIER TYPE 8 ADDED FOR PERIMETER CONTROL
AND HYDRO. MATTING IS APPLIED FOR TEMP. EROSION



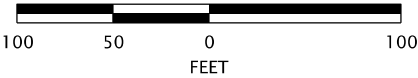
CONSTRUCTION NOTES

- 1. Inst. sediment barrier Type 8 (See dwg. RD1032)
- 2. Const. construction entrance (See dwg. RD1000)
- 3. Apply hydraulic matting Type 'A'

LEGEND

- Fill slope
- Cut slope
- Sediment barrier, compost sock
- Construction entrance
- Seeding and mulching
- Flow direction
- Slope direction
- No Work Area

- NOTES:**
- 1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 - 2. Maintain previous phased ESC BMPS as shown or directed.



REGISTERED
424
Digitally Signed 2026.06.25 12:46:25 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



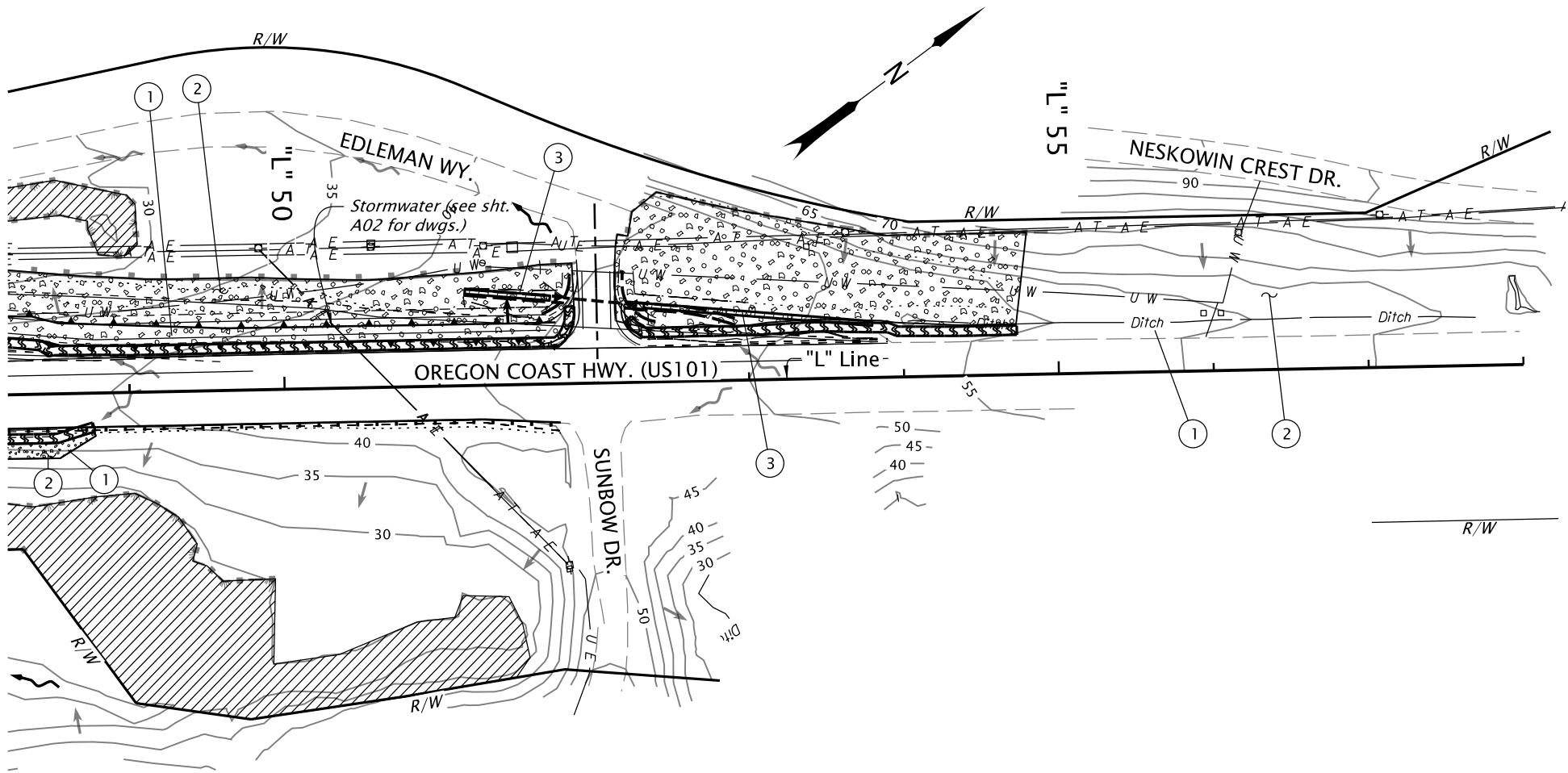
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB08

STAGE 4
EXISTING BMPS FROM STAGE 1-3 ARE MAINTAINED
SEDIMENT BARRIER TYPE 8 ADDED FOR PERIMETER CONTROL
AND HYDRO. MATTING IS APPLIED FOR TEMP. EROSION



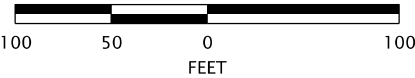
CONSTRUCTION NOTES

1. Inst. sediment barrier Type 8 (See dwg. RD1032)
2. Apply hydraulic matting Type 'A'
3. Inst. slope and channel matting Type 'E' (see dwg. RD1055)

LEGEND

- Fill slope
- Cut slope
- Sediment barrier, compost sock
- Construction entrance
- Seeding and mulching
- Erosion control matting
- Flow direction
- Slope direction
- No Work Area

- NOTES:**
1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 2. Maintain previous phased ESC BMPS as shown or directed.



REGISTERED
424
Digitally Signed 2026.06.25 12:46:46 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



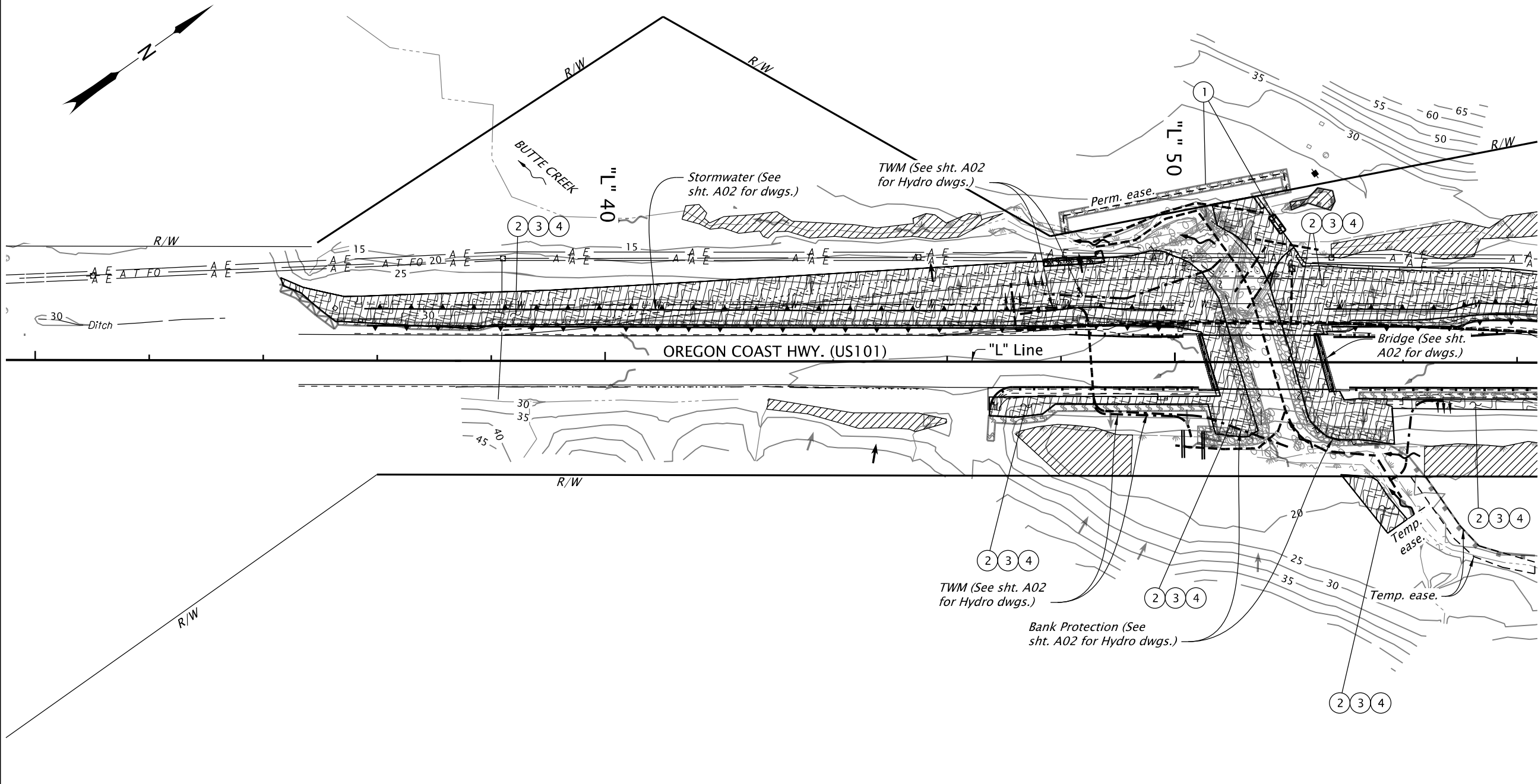
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt Reviewer: Robert Marshall
Drafter: Julie Rentz Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB09

STAGE 5
FINAL ESC W/CEB, COMPOST SOCK
SEEDING AND MATTING. REMOVE BMPS
FROM PREVIOUS STAGES. AS DIRECTED.



CONSTRUCTION NOTES

- 1. Inst. sediment barrier Type 8 (See dwg. RD1032)
- 2. Inst. slope and channel matting Type 'E' (See dwg. RD1055)
- 3. Inst. compost 2" thick (For details, see sht. FB01)
- 4. Apply Permanent Seeding

LEGEND

- Fill slope
- Cut slope
- Sediment barrier, compost sock
- Erosion control matting
- Compost erosion blanket and seeding
- Flow direction
- Slope direction
- No Work Area

- NOTES:
- 1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 - 2. Maintain previous phased ESC BMPS as shown or directed.

REGISTERED
424
Digitally Signed 2026.06.25 12:47:10 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB10

STAGE 5
FINAL ESC W/CEB, COMPOST SOCK
SEEDING AND MATTING. REMOVE BMPS
FROM PREVIOUS STAGES. AS DIRECTED

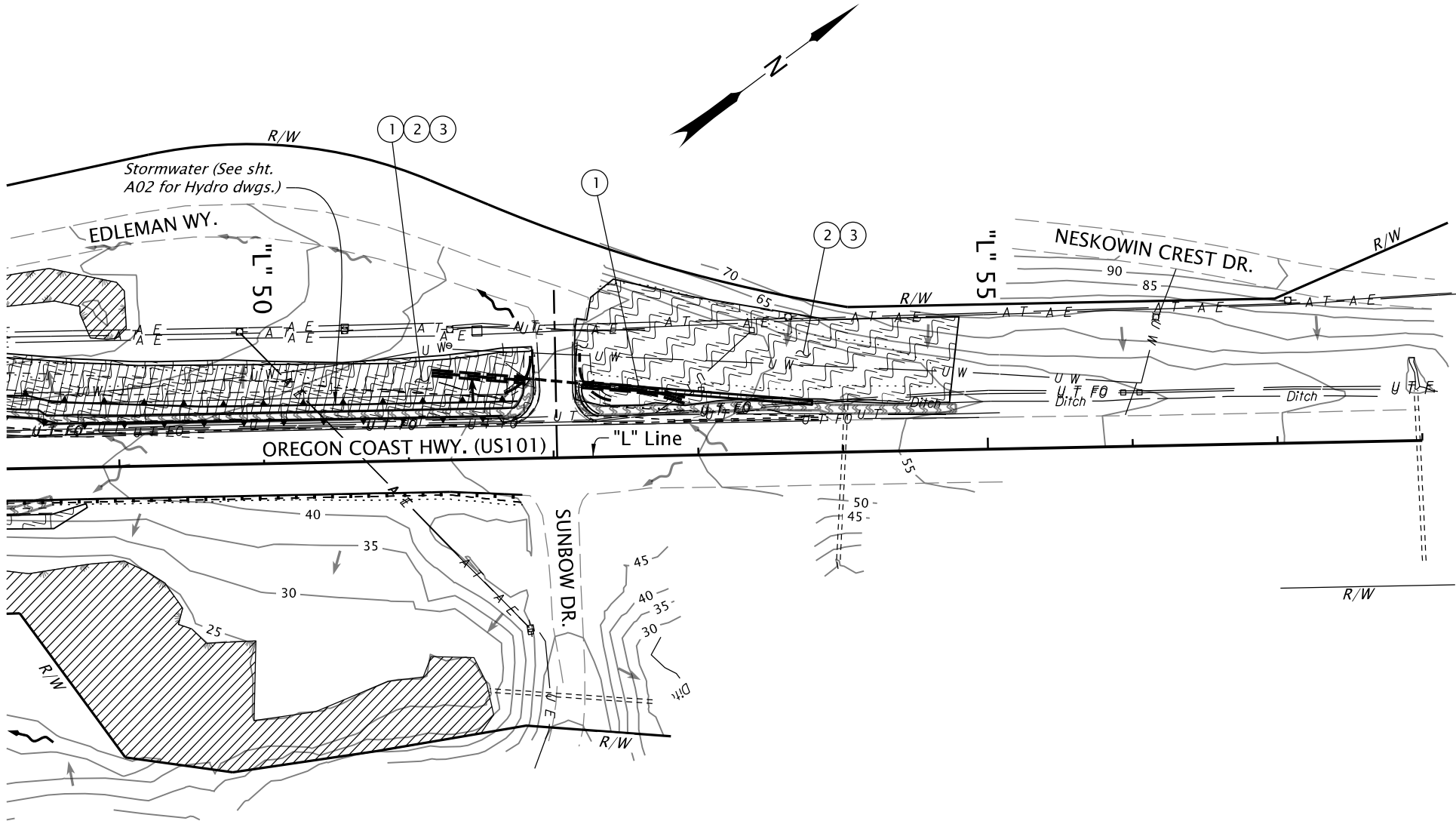
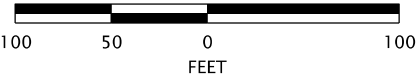
CONSTRUCTION NOTES

- 1. Inst. slope and channel matting Type 'E' (See dwg. RD1055)
- 2. Inst. compost 2" thick (For details, see sht. FB01)
- 3. Apply Permanent Seeding

LEGEND

- Fill slope
- Cut slope
- Erosion control matting
- Compost erosion blanket and seeding
- Flow direction
- Slope direction
- No Work Area

- NOTES:
- 1. Areas bounded by temporary orange fence denote protected no work areas such as trees wetlands, cultural resources, etc.
 - 2. Maintain previous phased ESC BMPS as shown or directed.



REGISTERED
424
Digitally Signed 2026.06.25 12:47:33 -07'00'
Magnus P. Bernhardt
OREGON
05/14/99
LANDSCAPE ARCHITECT
EXPIRES: 05-31-2027

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

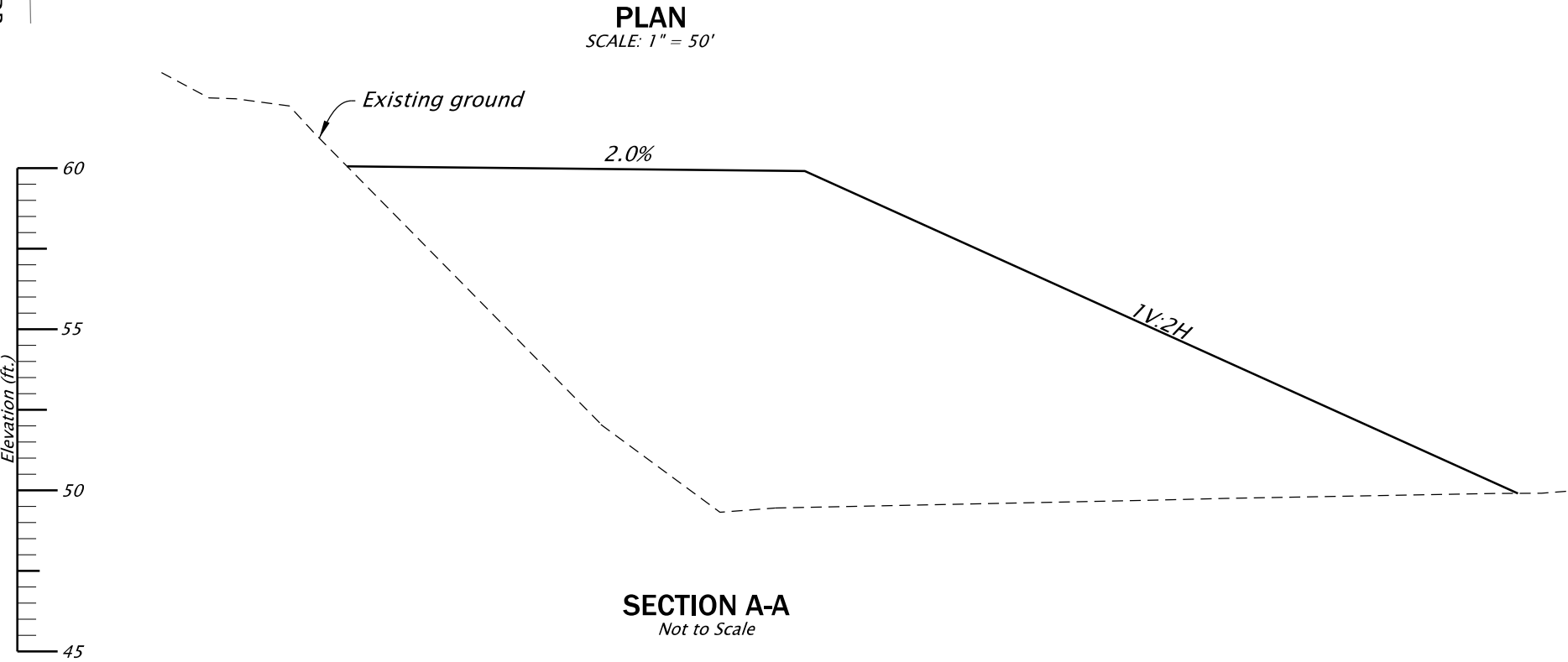
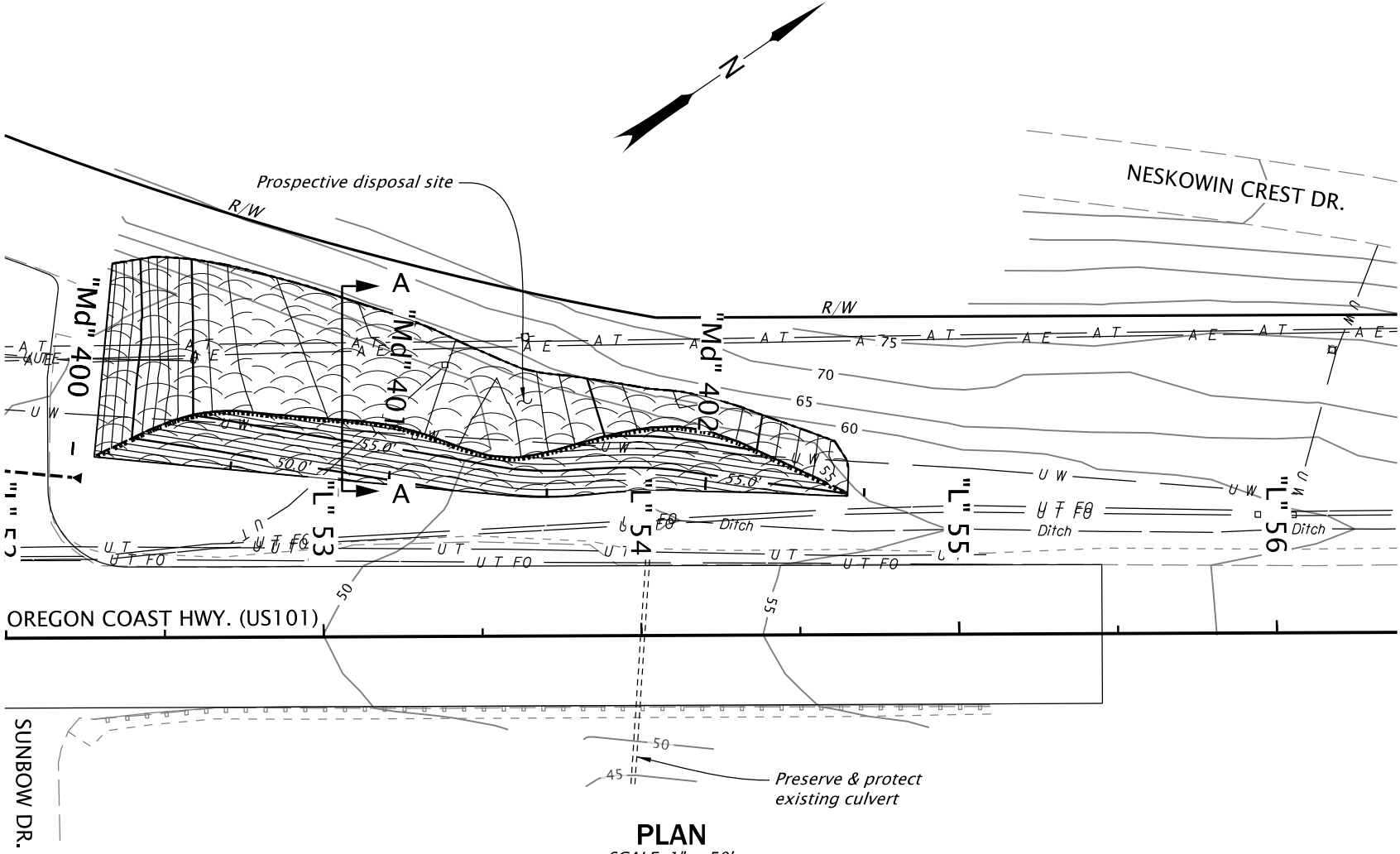
Designer: Magnus Bernhardt
Reviewer: Robert Marshall
Drafter: Julie Rentz
Checker: N/A

EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
FB11

GENERAL NOTES:

- 1. Prepare and construct the site according to Section 00236.
- 2. Handle contaminated media according to Section 00294.
- 3. Construct side slopes with a maximum slope of 1V:2H or as approved by the Engineer. For details see sheet A02 for Roadway dwgs.
- 4. See sheet A02 for Erosion and Sediment Control drawings.



LEGEND



Prospective Disposal Site

New contours at 5 foot intervals

00

Existing contours at 5 foot intervals

00



EXPIRES: 12-1-2026

OREGON DEPARTMENT OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Michael Tardif

Reviewer: Larry Robinson

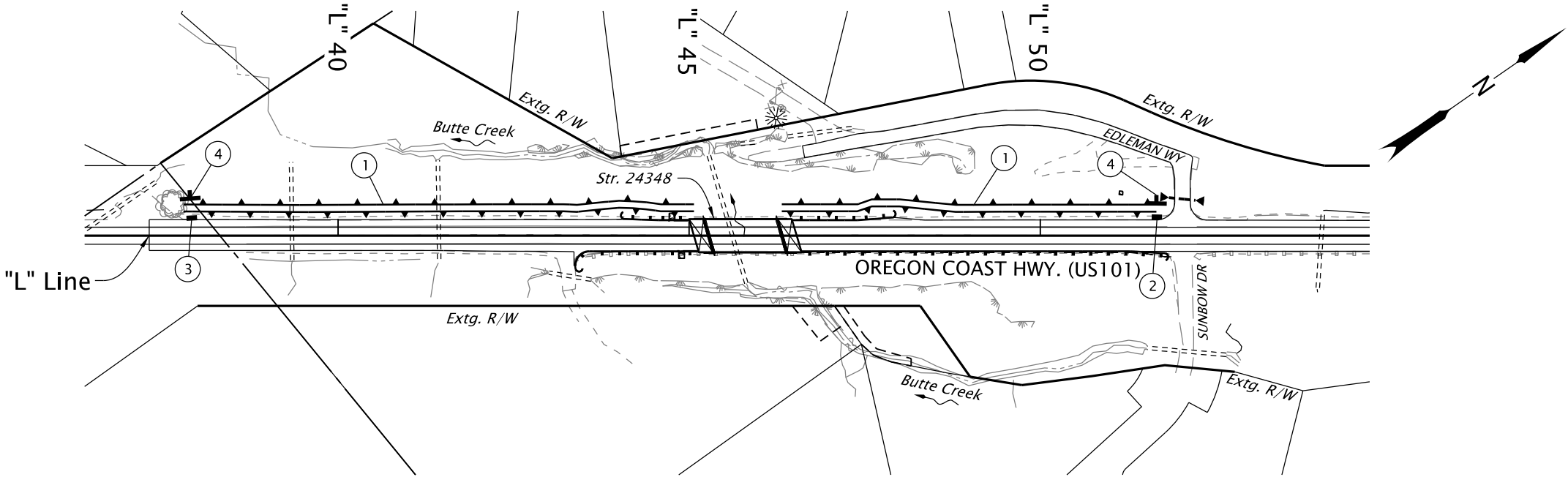
Drafter: Julie Rentz

Checker: N/A

PROSPECTIVE DISPOSAL SITE

SHEET NO.

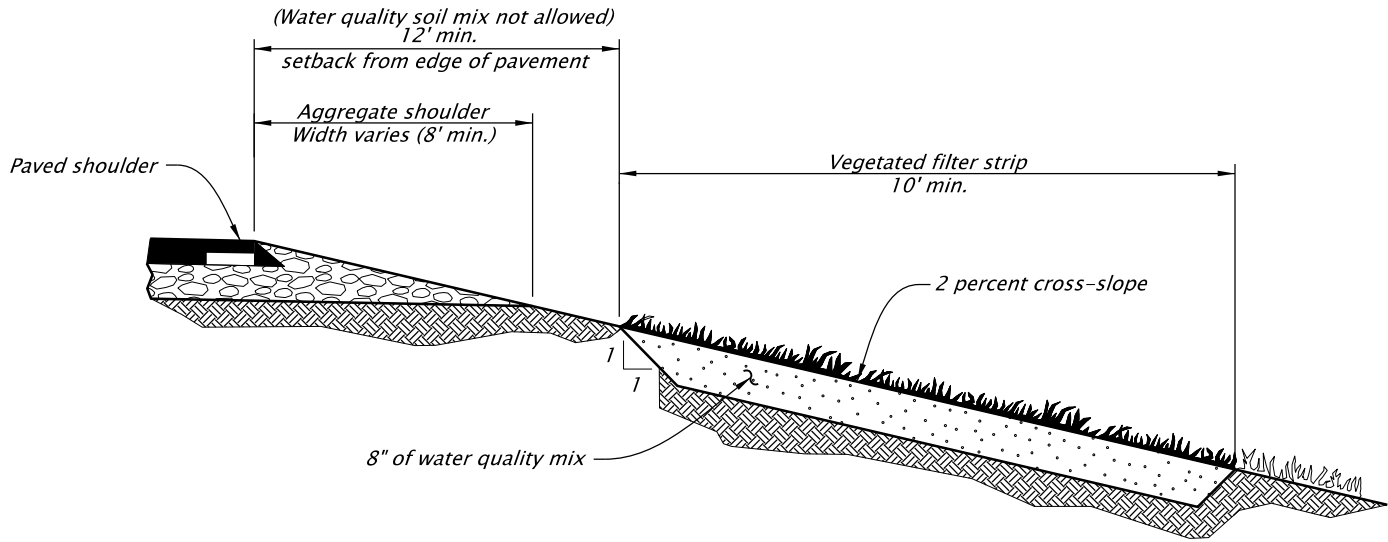
GE01



PLAN
SCALE: 1"=200'

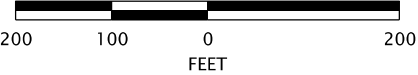
CONSTRUCTION NOTES:

- 1 Sta. "L" 37+90 Lt. to Sta. "L" 51+65 Lt.
Const. veg. filter strip - DFI# D01511
- 2 Inst. type S-1 marker - red
(See dwg. no. RD399)
- 3 Inst. type S-1 marker - green
(See dwg. no. RD399)
- 4 Inst. type S-2 marker



GRASSED FILTER STRIP SECTION
Not To Scale

FACILITY ID MARKER TABLE						
Facility Location		DFI Number	Type S2 Marker		Type S1 Marker	
Station	MP		Begin	End	Red	Green
"L" 51+65, Lt.	97.00	D01511	✓		✓	
"L" 37+90, Lt.	97.27	D01511		✓		✓



RENEWS: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION

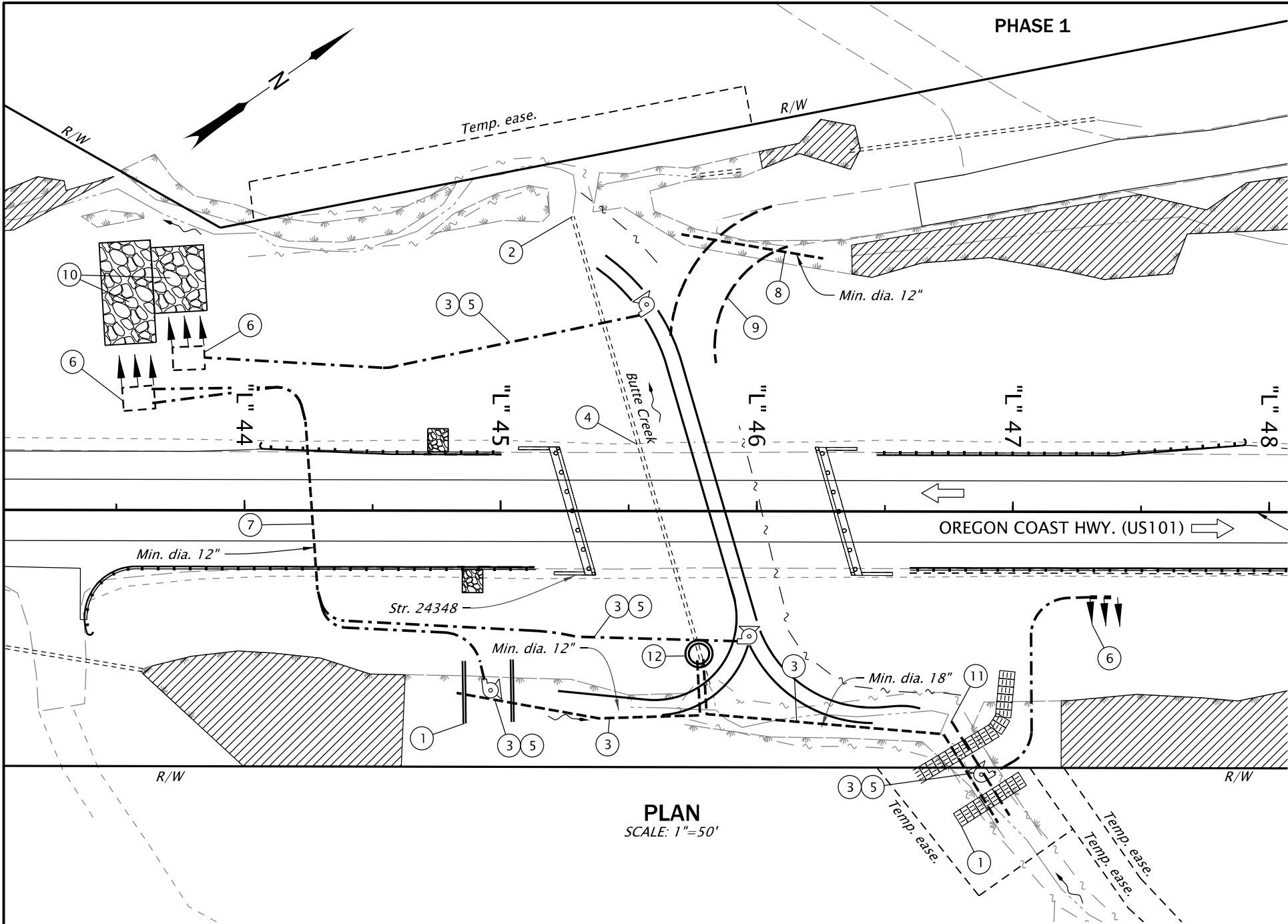


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard Reviewer: Wade Holaday
Drafter: Matthew W. Jones Checker: N/A

STORMWATER PLAN

SHEET NO.
HA01



GENERAL NOTES

1. Phase 1 utilizes the existing Butte Creek culvert to bypass flow. The primary purpose of phase 1 is to construct the east revetment, and portions of the stream channel. The construction, maintenance, replacement, and upgrading of this facility is the responsibility of the contractor.
2. Ensure the existing Butte Creek culvert is water tight. If seepage into the project site occurs, appropriate corrective measures shall be applied, including but not limited to installing a bypass pipe through the existing structure.
3. The Temporary Water Management Facility shown on this plan is the minimum requirements for anticipated site conditions. During the construction periods, this facility shall be upgraded for unexpected storm events and to insure that sediment and sediment-laden water does not leave the site.

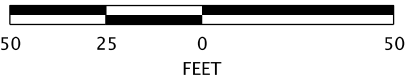
LEGEND

- Sandbag barrier
- Dewatering pipe
- Bypass pipe
- Perforated pipe
- Sandbag fish landing pool
- Riprap energy dissipator
- Dewatering sump pump
- Sediment control facility
- No Work Zone
- Wood slat wall
- Ordinary high water
- Low flow channel

FULL ISOLATION NOTES

- 1 Isolating the work site upstream: Install primary isolation barrier across the stream channel. If Needed, install secondary barrier.
- 2 Downstream: Install primary isolation barrier if needed. Location to be set based on work area and easements available.
- 3 Size the temporary water management facility based on site conditions. Route water around work area utilizing a pipe with water tight joints. Refer to HD03 for Discharge Table.
- 4 Existing 92" x 65" structural pipe arch: Prevent water from entering into the project site. Repair or seal existing culvert as necessary to prevent seepage.
- 5 Water seeping through the primary barrier and contained by the secondary barrier shall be returned to a temporary settling basin or other approved location.
- 6 Provide adequate sediment control measures during dewatering of the work area to insure sediment laden water does not leave the site.
- 7 Optional 12" carrier pipe. Temporary pipe, install to provide conduit to pass pumped water to an approved facility on the other side of the highway. Fill and abandon pipe according to section 00490 of the standard specification.
- 8 Install temporary culvert.
- 9 Provide temporary access road into the worksite.
- 10 Const. temporary pad to allow discharge back into the stream. Prevent sediment laden water from entering into stream.
- 11 Bypass pipe. Stage and seal secondary pipe, allowing to be utilized for the construction of Phase 2.
- 12 Provide safe passage around or through the isolated work area for adult and juvenile migratory fish. Safe passage and landing pools shall be constructed for fish as directed.

NOTE:
For details see sheet HD03, & HD04.



RENEWES: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION



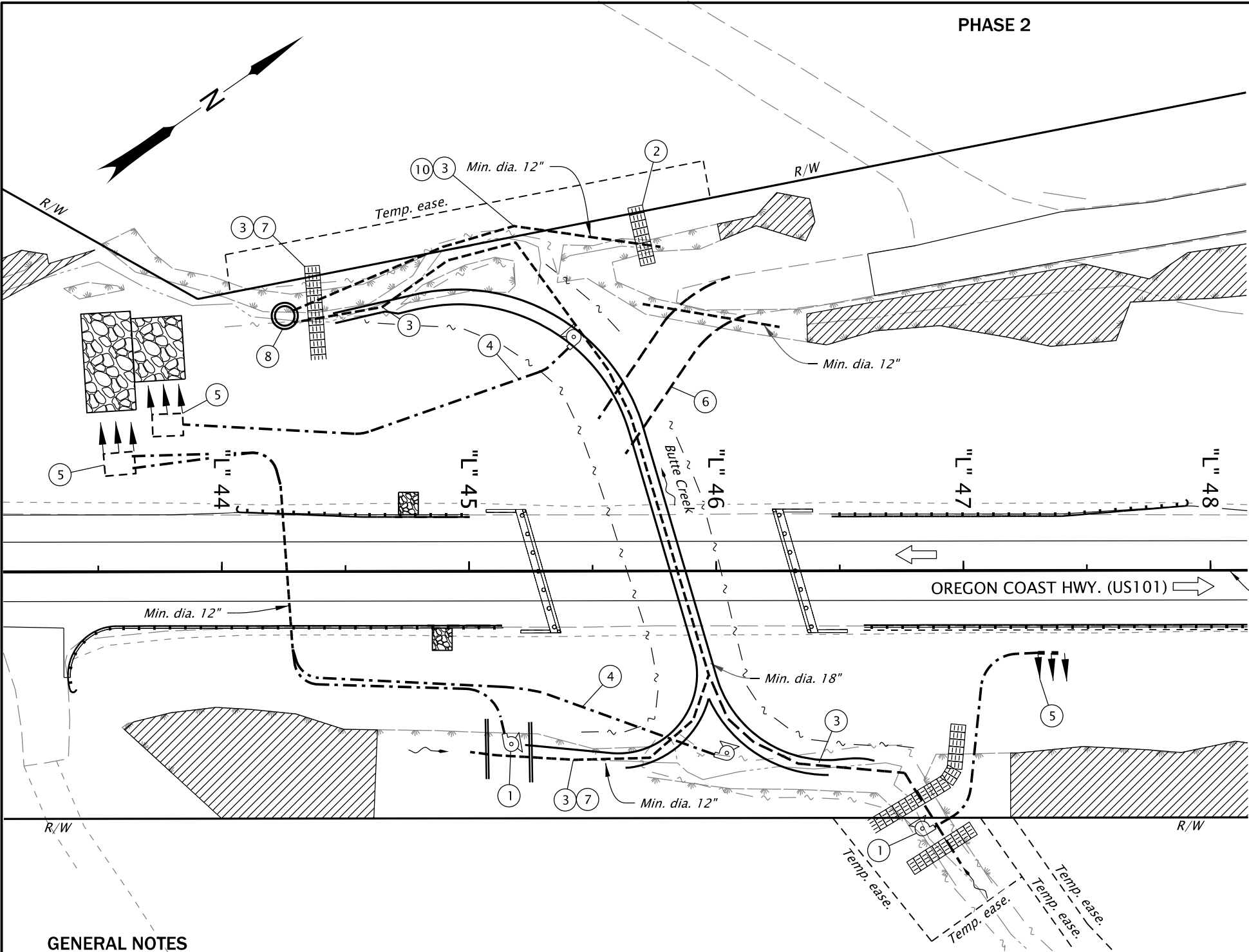
US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard
Reviewer: Wade Holaday
Drafter: Matthew W. Jones
Checker: N/A

TEMPORARY WATER
MANAGEMENT CONCEPT

SHEET NO.
HD01

PHASE 2



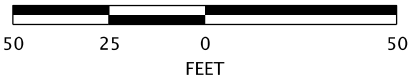
LEGEND

- Sandbag barrier
- Dewatering pipe
- Bypass pipe
- Perforated pipe
- Sandbag fish landing pool
- Riprap energy dissipator
- Dewatering sump pump
- Sediment control facility
- No Work Zone
- Wood slat wall
- Ordinary high water
- Low flow channel

FULL ISOLATION NOTES

- Maintain full isolation. Utilize the secondary pipe for Phase 2. Seal initial pipe to prevent water entering into the project site.
- Downstream: Install primary isolation barrier across stream downstream from work area. Location to be set based on work area and easements available.
- Route water around work area utilizing a pipe with water tight joints. Refer to HD03 for Discharge Table for more info.
- Relocate facility as needed for Phase 2.
- Provide adequate sediment control measures during the duration of the project. Ensure sediment laden water does not leave the site.
- Adjust temporary access road for Phase 2 operations.
- Install a temporary bypass pipe as needed.
- Provide safe passage around or through the isolated work area for adult and juvenile migratory fish. Safe passage and landing pools shall be constructed for fish as directed.

NOTE:
For details see sheet HD03.



GENERAL NOTES

- Phase 2 utilizes the low flow channel and pipe to bypass flows. The primary purpose of phase 2 is to construct the west revetment, stream channel, and to remove the existing Butte Creek culvert. The construction, maintenance, replacement, and upgrading of this facility is the responsibility of the contractor.
- The Temporary Water Management Facility shown on this plan is the minimum requirements for anticipated site conditions. During the construction periods, this facility shall be upgraded for unexpected storm events and to insure that sediment and sediment-laden water does not leave the site.
- Remove all Temporary Water Management features and restore site as per plans and specifications.

PLAN
SCALE: 1"=50'



RENEWES: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION

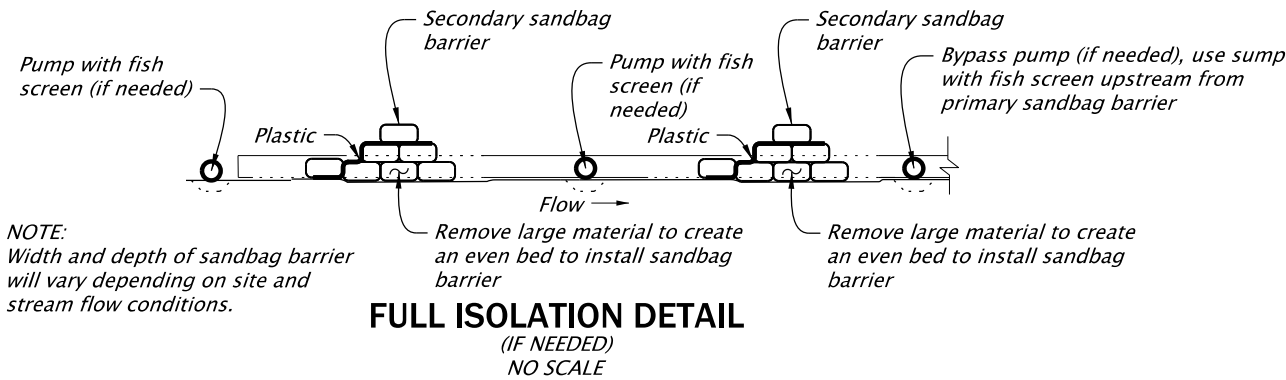


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard
Reviewer: Wade Holaday
Drafter: Matthew W. Jones
Checker: N/A

TEMPORARY WATER
MANAGEMENT CONCEPT

SHEET NO.
HD02



BUTTE CREEK CROSSING
ESTIMATED DISCHARGES FOR ALL INFLOWS
TEMPORARY WATER MANAGEMENT

	AVERAGE DAILY DISCHARGE IN CUBIC FEET PER SECOND (GALLONS PER MINUTE)		
NOTE	1	2	3
July	5	2.5	1
August	3	1	0.5
September	5	2	0.5

- 1) Average daily discharge expected to be exceeded 2 days each month.
2) Average daily discharge expected to be exceeded 8 days each month.
3) Average daily discharge expected to be exceeded 16 days each month.

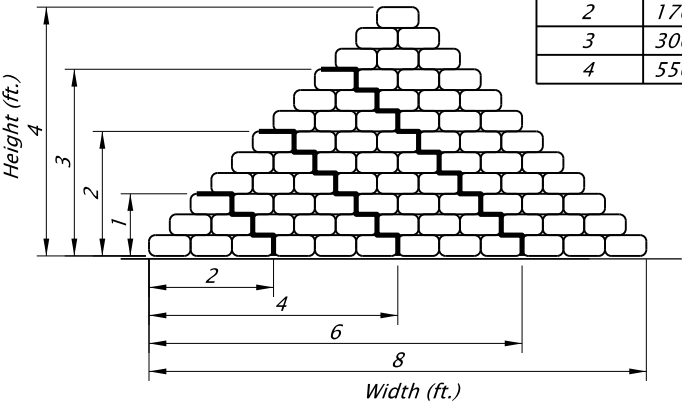
In-water work period extends from 1 July through 15 September.

Listed discharges are surface water from the upstream watershed. The estimated discharges are based on nearby gauged basins. Discharges in the subject watershed may differ.

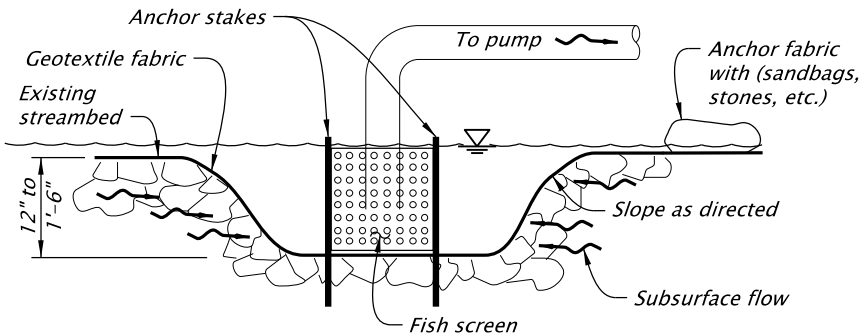
NOTES:
A common recommendation is to make the sandbag barrier twice as wide as its height (e.g., a one foot high wall would have a base width of 2 feet). This is the minimum width-to-height ratio that should be used to construct a sandbag barrier. This is based on each bag having a placed dimension of about 4 to 5 inches high by 9 to 10 inches wide by 14 inches long. This is a 30 pound bag of dry sand.

The estimated number of bags needed for 100 linear feet of barrier that is twice as wide as its height is:

Height (ft)	# bags
1	600
2	1700
3	3000
4	5500



SANDBAG FOOTPRINT DETAIL
NO SCALE



FISH SCREEN SUMP DETAIL
NO SCALE

NOTE:
For details see sheet HD02.



RENEWES: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION

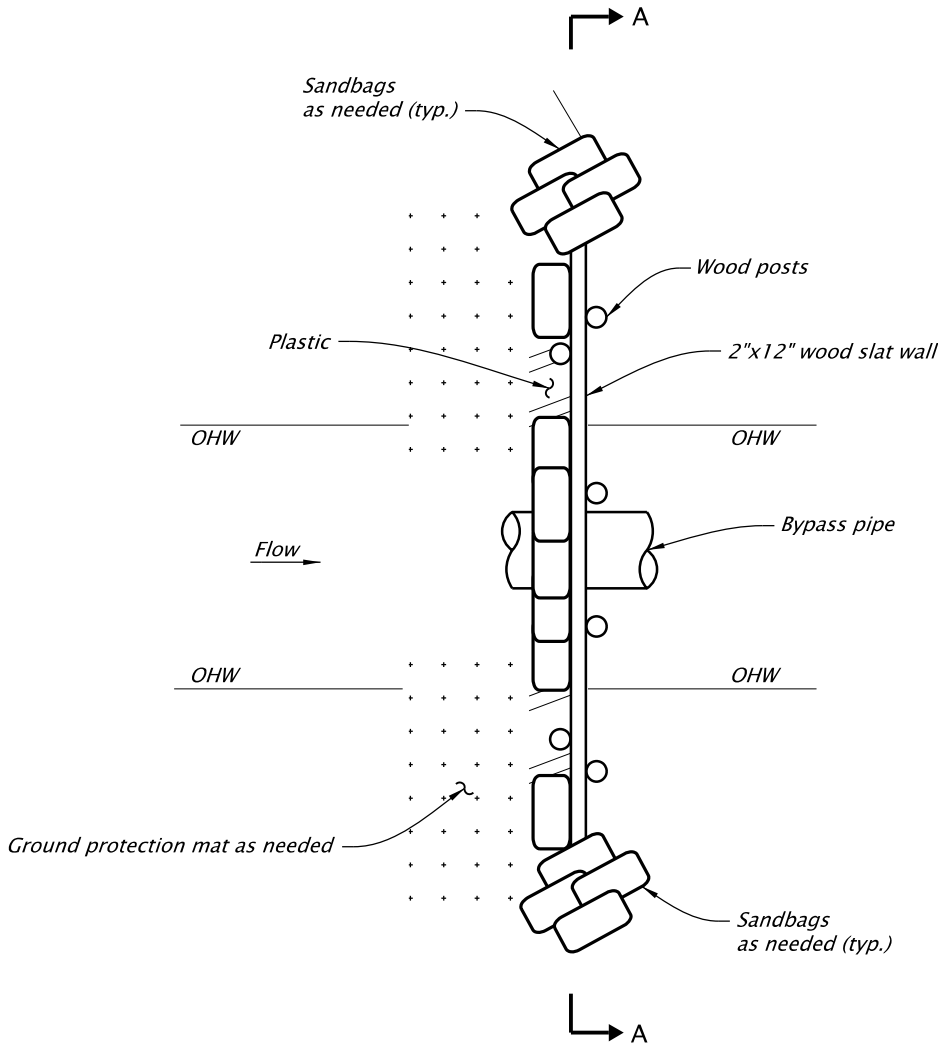


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard
Reviewer: Wade Holaday
Drafter: Matthew W. Jones
Checker: N/A

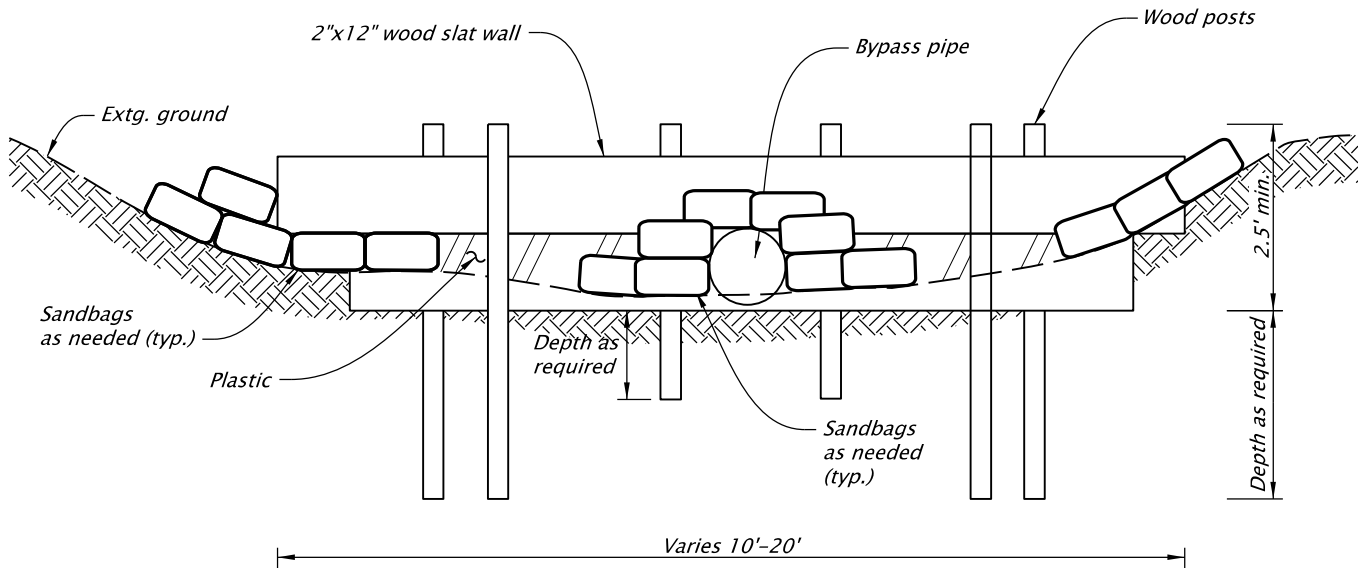
**TEMPORARY WATER
MANAGEMENT CONCEPT**

SHEET NO.
HD03



WOOD SLAT WALL DETAIL
NO SCALE

NOTE:
Fasten the 2"x12" slats to the wood posts as necessary



SECTION A-A
NO SCALE

REGISTERED PROFESSIONAL
ENGINEER
88141PE
Digitally Signed 2026.07.06 12:51:20 -07'00'
OREGON
NOV 14, 2017
CHAD M. HOWARD
RENEWES: 06-30-2027
FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST

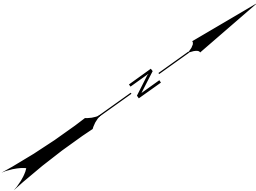
OREGON DEPARTMENT OF TRANSPORTATION	
US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
Designer: Chad M. Howard	Reviewer: Wade Holaday
Drafter: Matthew W. Jones	Checker: N/A
DETAILS	SHEET NO. HD04

GENERAL NOTES:

- 1. Install stream enhancement material to the elevations and extents as shown on the typical sections. See shts. HF03 - HF06
- 2. Install class 700 keyed riprap to elevation 21.0 ft.
- 3. Transition stream bed material seamlessly into native slopes.
- 4. The bank slopes varies. Finish slopes should be between 1V:2H to 1V:20H
- 5. Reconstruction width varies. Reconstruct the stream to excavation limits. Blend material and shape material to represent the native channel. Full construction width, approx. 45 - 55 feet.

CONSTRUCTION NOTES:

- 1 Const. stream enhancement
General excavation - 8,132 cu. yd.
Toe trench excavation - 2,848 cu. yd.
Stream enhancement material - 985 cu. yd.
- 2 Const. revetment
Class 700 keyed riprap - 690 cu. yd.
Stone embankment - 1,155 cu. yd.
Top soil - 18 cu. yd.
- 3 Inst. fish rocks in asymmetrical arrangement, Type 1 - 45 ea.
- 4 Inst. fish rocks in boulder grouping arrangement, Type 1 - 40 ea.
- 5 Inst. fish rocks in bank protection arrangement, Type 2 - 45 ea.
- 6 Inst. large woody material - 5 ea.
Rootwad arrangement
- 7 Live fascine on contour at ordinary high water.
- 8 Const. low flow stream channel

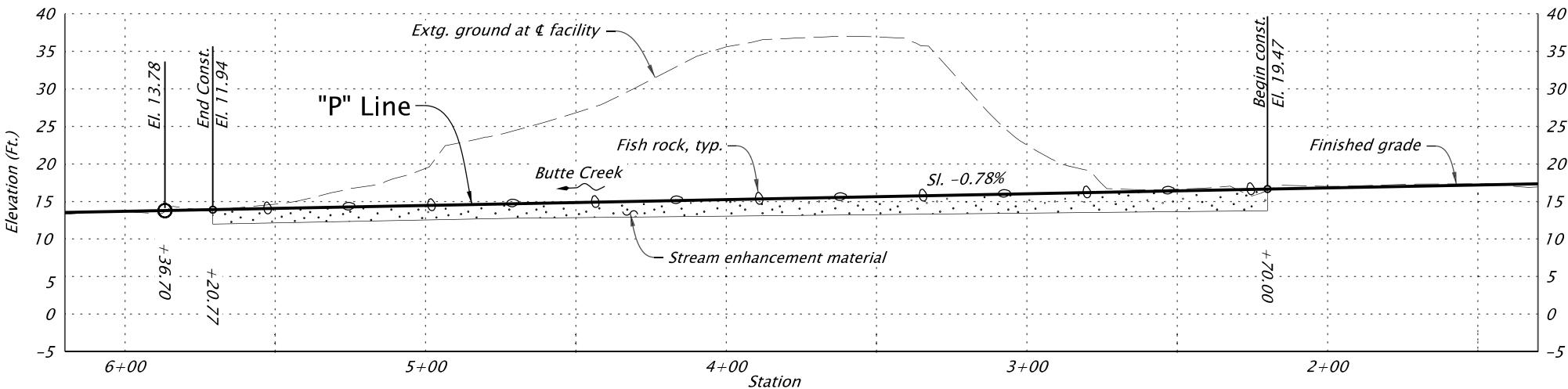


LEGEND

- ~ — Ordinary high water (OHW)
- Revetment
- Stream enhancement material
- No work zone
- Fascine
- Large woody material
- Fish Rocks

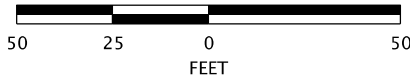
NOTE:
Excavation is in addition to the structural excavation limits. For details see A02, Stormwater, Bank Protection, and Bridge sheets.

PLAN
SCALE: 1"=50'



PROFILE AT "P" LINE
HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=20'

NOTE:
For details see sheet HF03, HF04, HF05, HF06, HF07, & HF08



OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

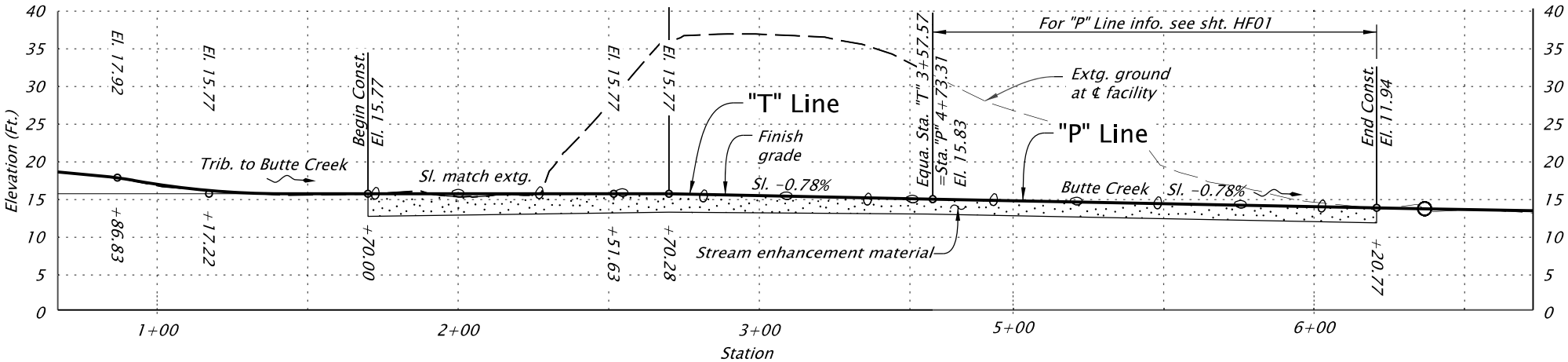
Designer: Chad M. Howard
Reviewer: Wade Holaday
Drafter: Matthew W. Jones
Checker: N/A

WATERWAY ENHANCEMENT PLAN

SHEET NO.
HF01

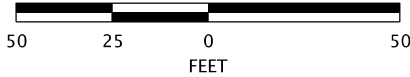
RENEWES: 06-30-2027

FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST



PROFILE AT "T" LINE

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=20'



RENEWS: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION

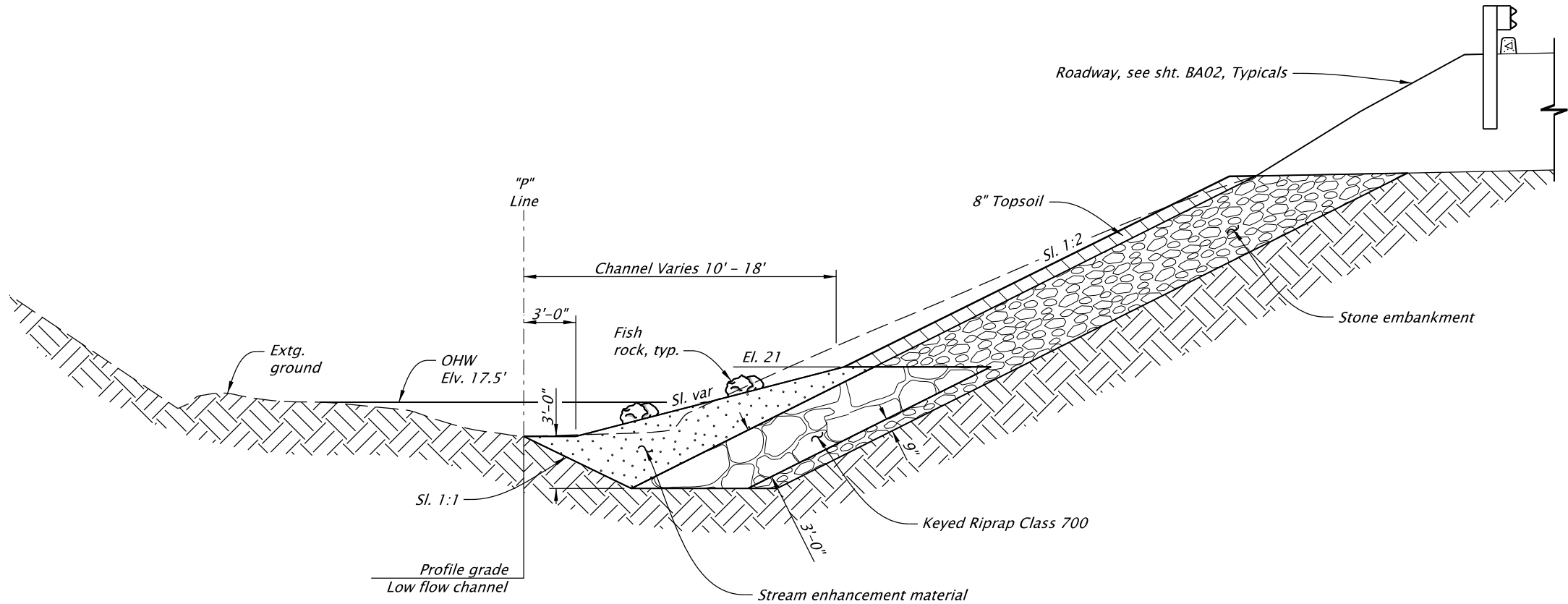


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard Reviewer: Wade Holaday
Drafter: Matthew W. Jones Checker: N/A

WATERWAY ENHANCEMENT PLAN

SHEET NO.
HF02



STA. "P" 2+70 TO STA. "P" 3+57
NO SCALE

GENERAL NOTES:
1. Bottom elevation of Class 700 riprap varies, ranges from 14.0' to 12.9'.
2. Approx, elevation of roadway subgrade varies, from 33.6' to 33.2'.



RENEWS: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION

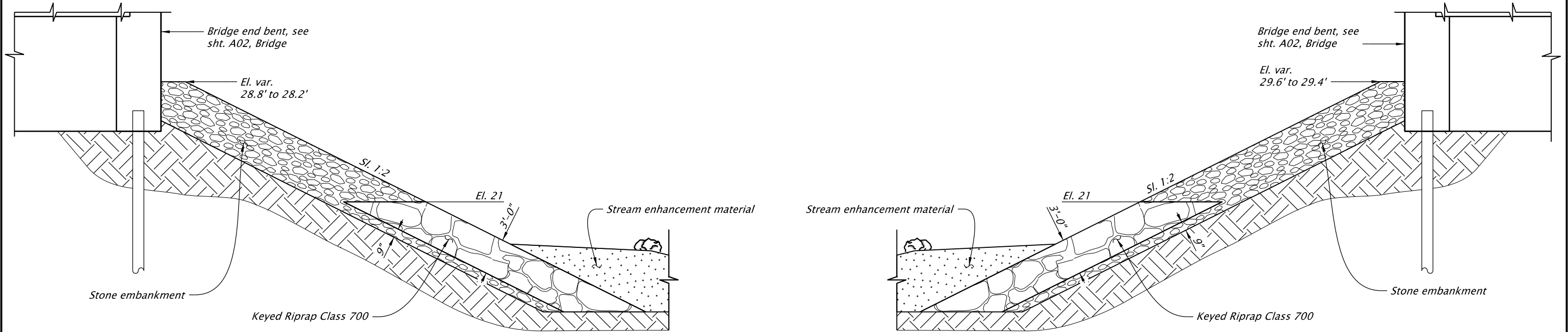


US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard Reviewer: Wade Holaday
Drafter: Matthew W. Jones Checker: N/A

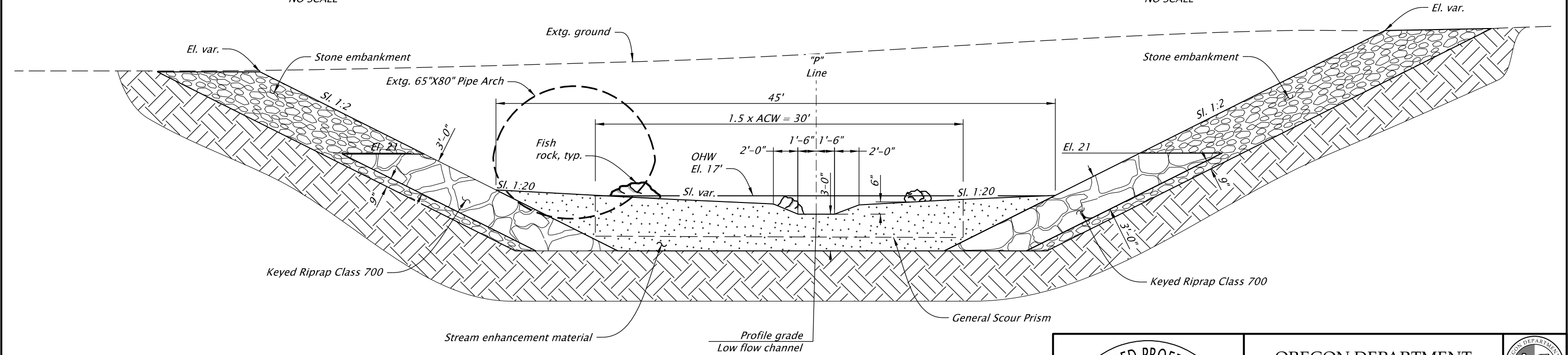
WATERWAY ENHANCEMENT PLAN

SHEET NO.
HF03



STA. "P" 4+03 TO STA. "P" 4+55
NO SCALE

STA. "P" 3+75 TO STA. "P" 4+27
NO SCALE



STA. "P" 3+57 TO STA. "P" 4+70
NO SCALE

GENERAL NOTE:
1. Bottom elevation of Class 700 riprap varies, ranges from 12.9' to 12.1'.



RENEWS: 06-30-2027

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Chad M. Howard

Reviewer: Wade Holaday

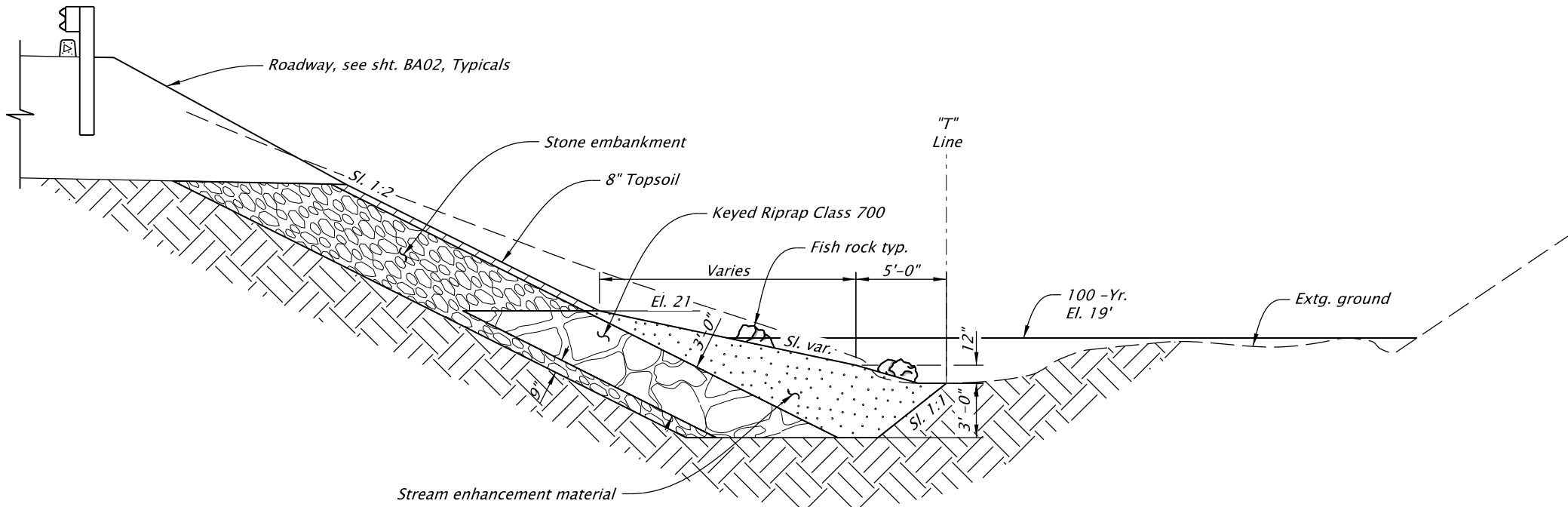
Drafter: Matthew W. Jones

Checker: N/A

WATERWAY ENHANCEMENT PLAN

SHEET NO.

HFO4



GENERAL NOTE:
1 Ordinary high water is negligible, thus the 100-year flood elevation from the backwater from Butte Creek was utilized.

STA. "T" 1+60 TO STA. "T" 2+25
NO SCALE

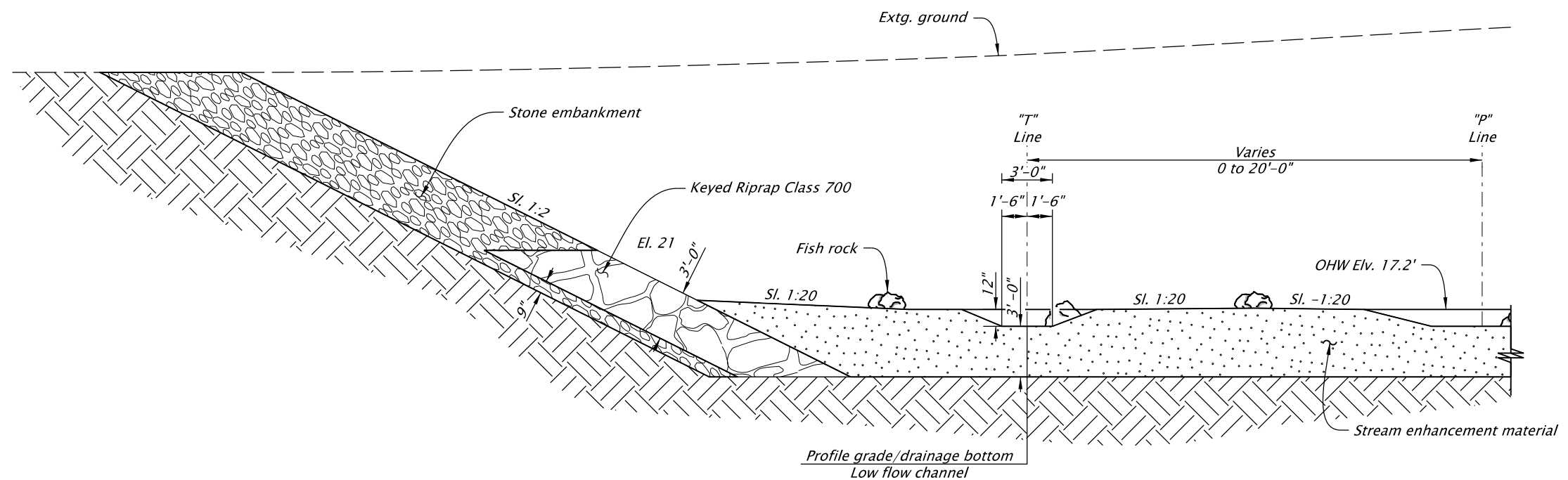
REGISTERED PROFESSIONAL
ENGINEER

88141PE
Digitally Signed 2026.07.06 13:01:00 -07'00'

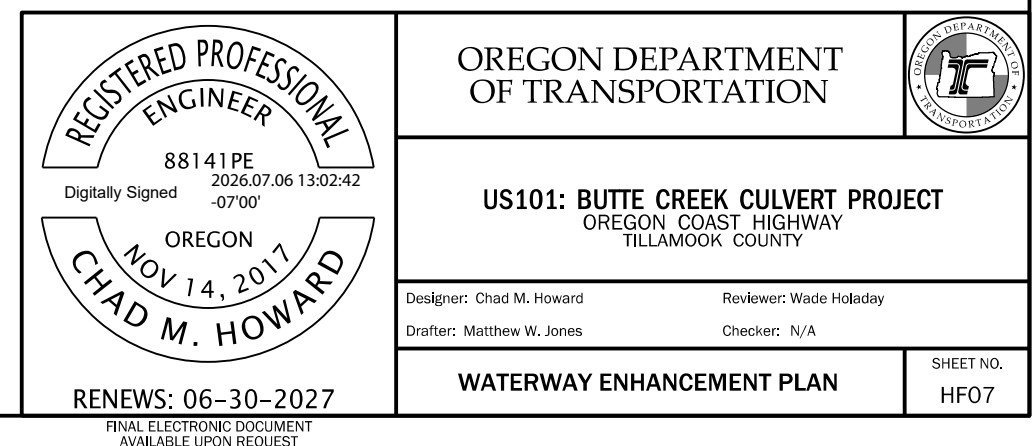
OREGON
NOV 14, 2017
CHAD M. HOWARD

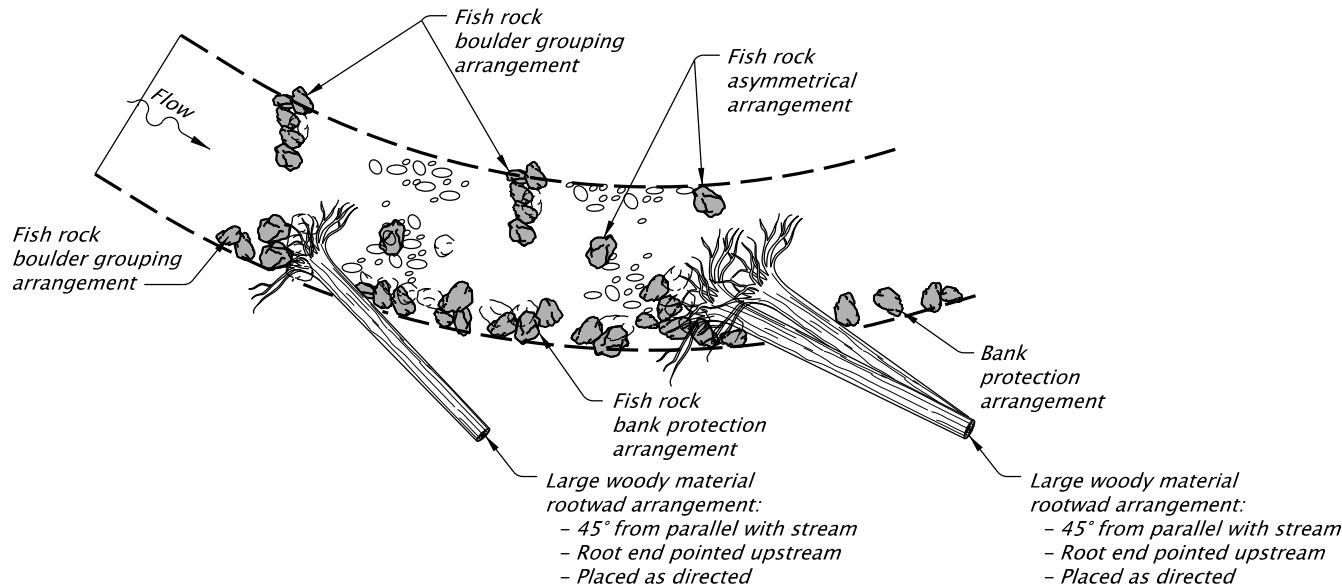
RENEWES: 06-30-2027

OREGON DEPARTMENT OF TRANSPORTATION		
US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY		
Designer: Chad M. Howard		Reviewer: Wade Holaday
Drafter: Matthew W. Jones		Checker: N/A
WATERWAY ENHANCEMENT PLAN		SHEET NO. HF06

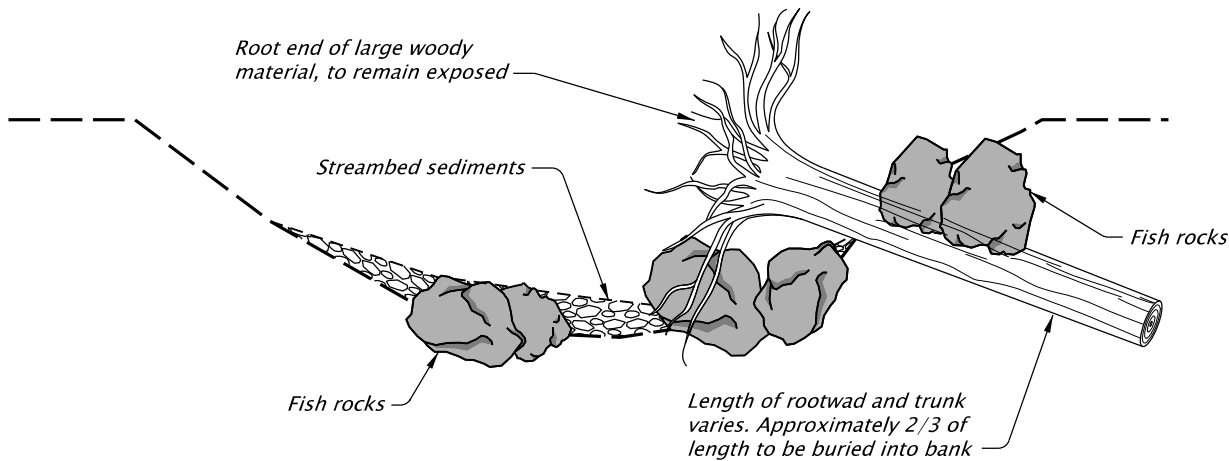


STA. "T" 2+25 TO STA. "T" 4+25
NO SCALE

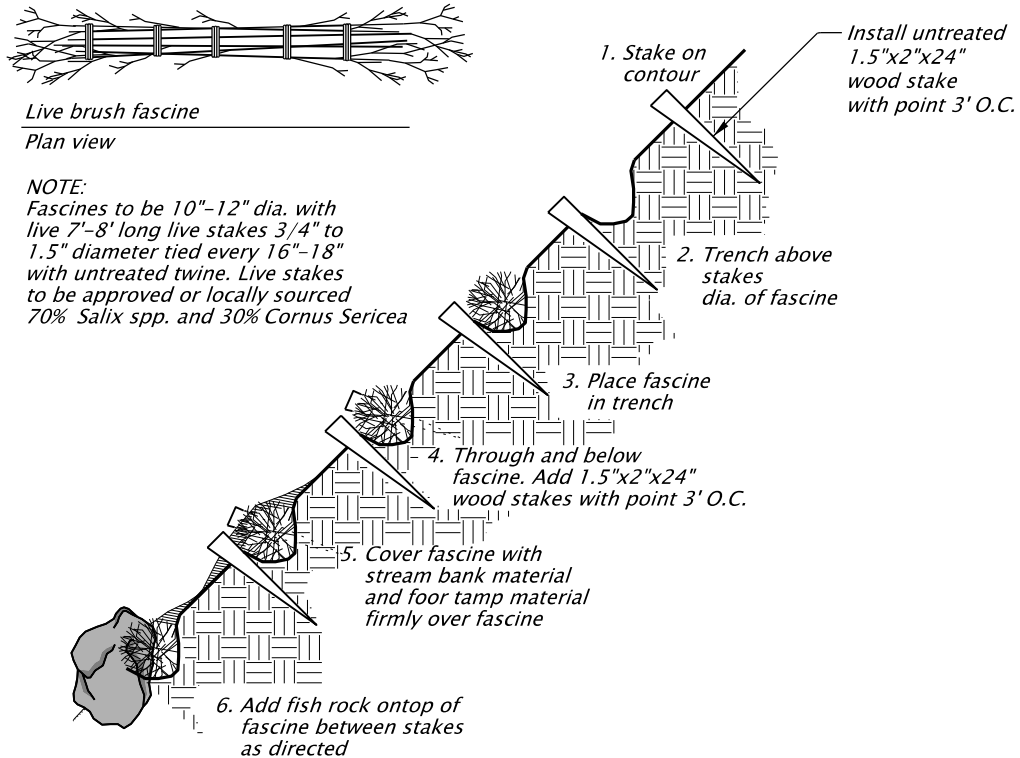




LARGE WOODY MATERIAL & FISH ROCK ARRANGEMENT DETAIL
Not To Scale

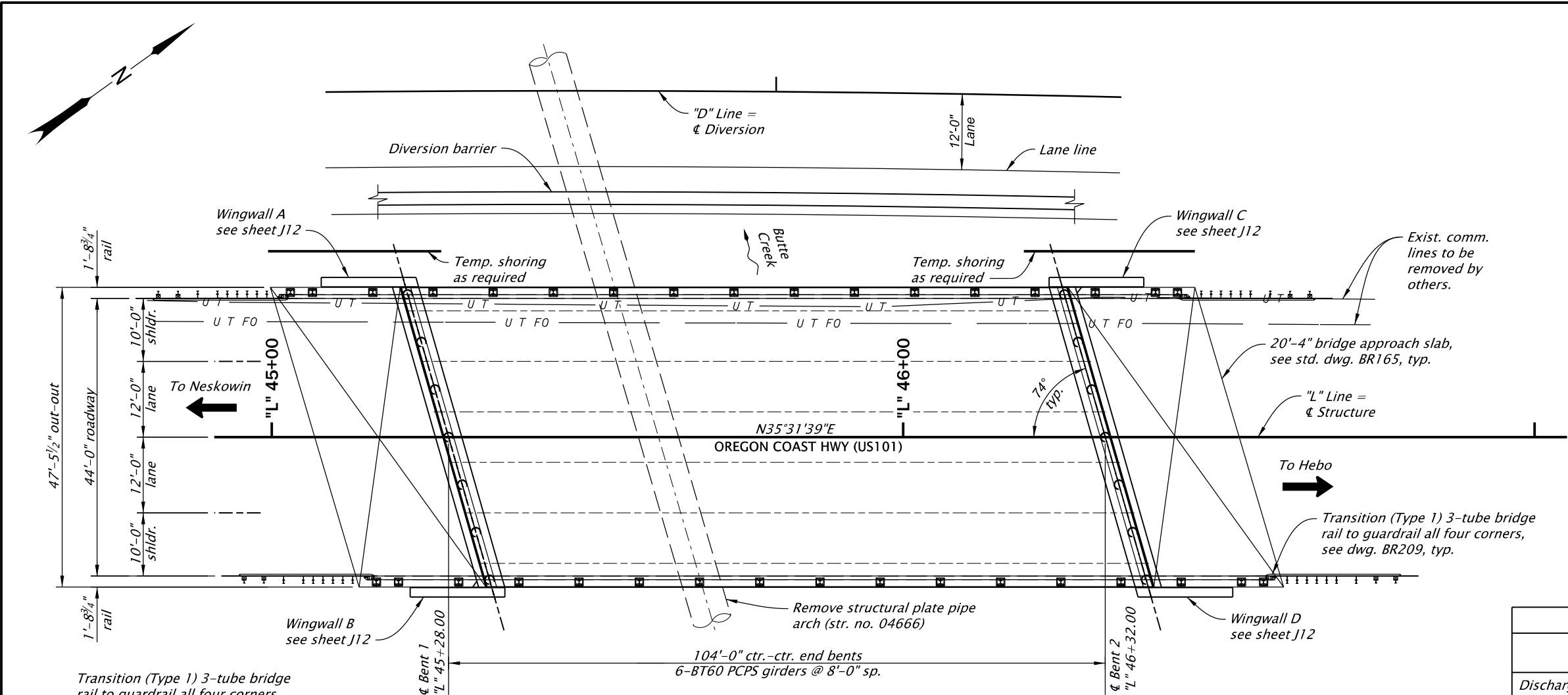


ROOTWAD ARRANGEMENT DETAIL
Not To Scale



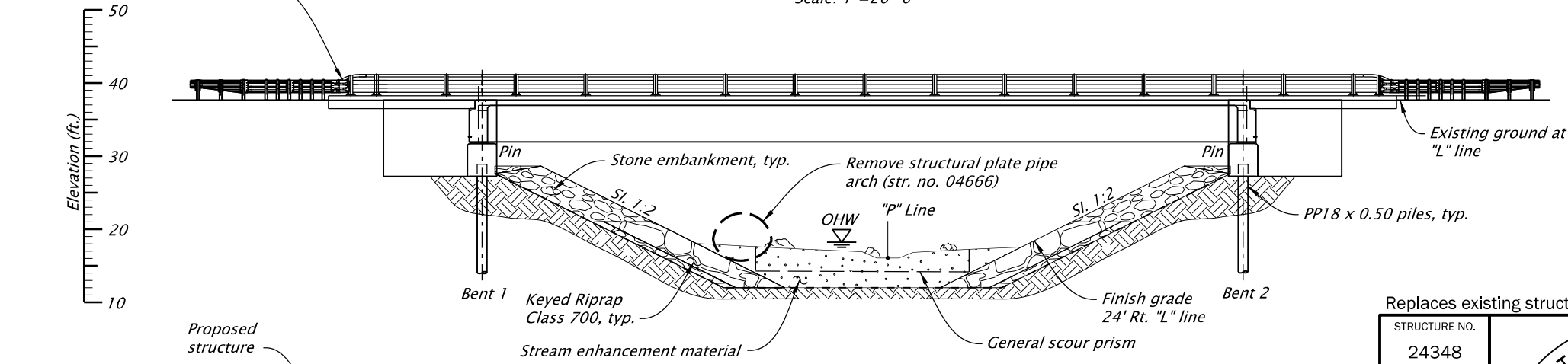
CONTOUR FASCINE INSTALLATION SEQUENCING
Not To Scale

REGISTERED PROFESSIONAL ENGINEER 88141PE Digitally Signed 2026.07.06 13:04:00 -07'00' OREGON NOV 14, 2017 CHAD M. HOWARD RENEWES: 06-30-2027	OREGON DEPARTMENT OF TRANSPORTATION	
	US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
	Designer: Chad M. Howard Drafter: Matthew W. Jones	Reviewer: Wade Holaday Checker: N/A
	DETAILS	
		SHEET NO. HF08

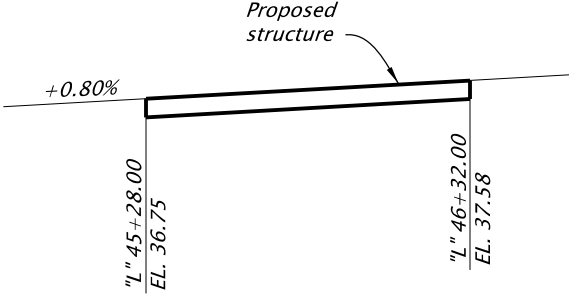


PLAN
Scale: 1"=20'-0"

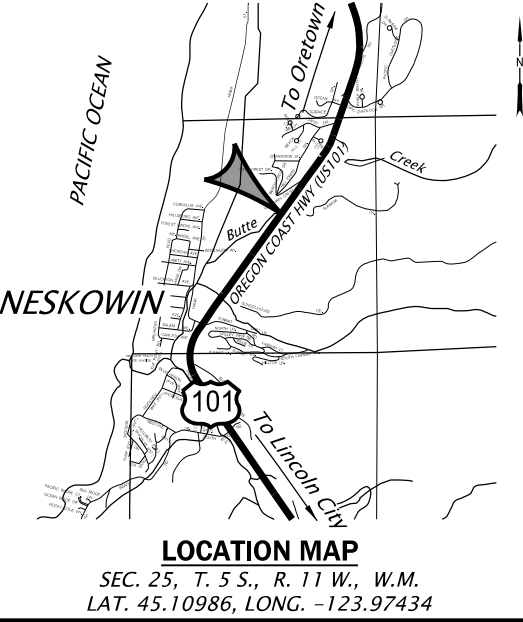
HYDRAULIC DATA				
Items	Units	Design Flood	Base Flood	Maximum Probable Flood
Discharge	cfs	288	327	419
Recurrence interval	yrs.	50	100	500
High water elevation at Upstream Face of Bridge	ft.	18.39	18.57	18.97
Scour Elevation	ft.	14.70	14.72	14.58



ELEVATION
Scale: 1"=20'-0"



GRADELINE DIAGRAM
Not to scale



LOCATION MAP

SEC. 25, T. 5 S., R. 11 W., W.M.
LAT. 45.10986, LONG. -123.97434

ACCOMPANIED BY DWGS.:
BR165, BR195, BR207, BR208, BR209, BR350

Replaces existing structure no. 04666.

STRUCTURE NO.	24348
BDS DWG NO.	113477
CALC. BOOK	7996
HWY: 009	
M.P.: 97.13	
COUNTY	Tillamook
DATE	11/2025



RENEW: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION

Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Matthew Stucker, PE
Reviewer: Zach Beget, PE
Drafter: James Schaefer
Checker: John Adkins, PE

PLAN AND ELEVATION

SHEET NO.
J01

GENERAL NOTES:

Provide all materials and perform all work according to the "Oregon Standard Specifications for Construction 2024".

DESIGN NOTES:

Bridge is designed in accordance with the 2020, 9th edition of the "AASHTO LRFD Bridge Design Specifications and Apr. 2024 edition of the "Oregon Bridge Design Manual" with an allowance of 25 psf for future wearing surface and all of the following Live Loads :

Service and Strength I Limit States:

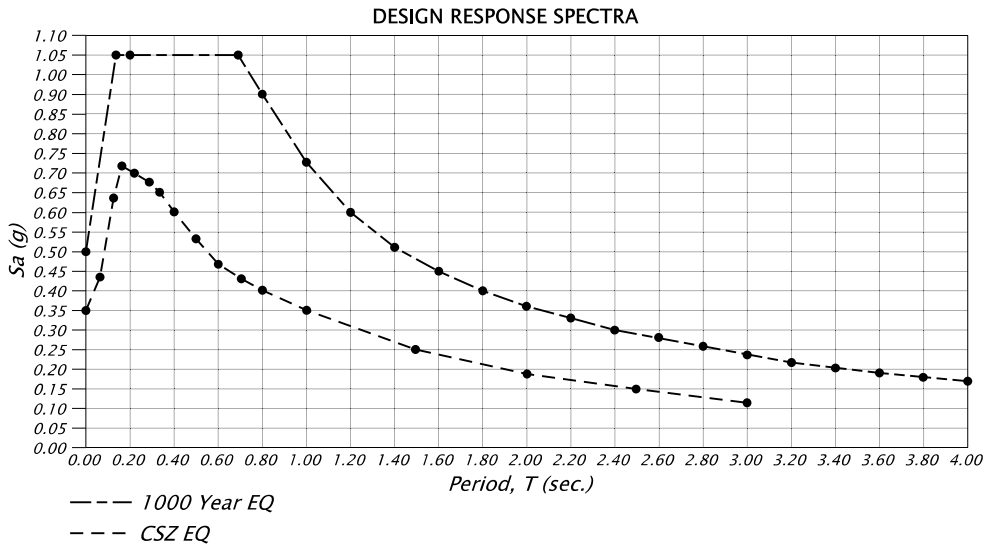
HL-93: Design truck (or trucks per LRFD 3.6.1.3)
or the design tandems and the design lane load.

Strength II Limit State:

ODOT Type STP-5BW Permit truck
ODOT Type STP-4E Permit truck
EV3 truck

Seismic design is performed in accordance with the "AASHTO Guide Specifications for LRFD Seismic Bridge Design" as modified by the April 2024 ODOT Bridge Design Manual. The 2014 USGS Seismic Hazard Maps (Site-Specific Ground Motion Response Analysis) have been used to collect the Seismic Hazard Values for the bridge site with Latitude 45.109869N and Longitude 123.97434W:

Seismic Performance Criteria	Earthquake	Mapped Hazard Values			Site Class	Design Hazard Values			Seismic Design Category
		PGA	S _s	S ₁		A _s	S _{DS}	S _{D1}	
Life Safety	1000 – Year Return	0.44	0.93	0.38	D	0.51	1.05	0.73	D
Operational	CSZ	0.36	0.70	0.34	D	0.43	0.84	0.62	D



CONCRETE NOTES:

Provide Deck Concrete HPC4500-1½" concrete for deck and approach slabs.

Provide General Structural Concrete, Class 4000 - ¾ concrete for crossbeams and wingwalls.

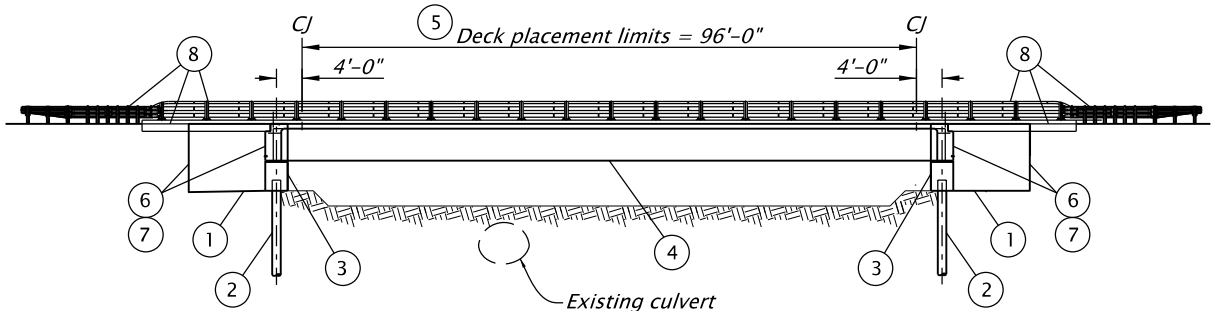
Provide General Structural Concrete Class 3300 - 1 or ¾ concrete for all other concrete.

See sht. J08 for precast prestressed girder concrete.

Provide prestressing steel according to detail plans.

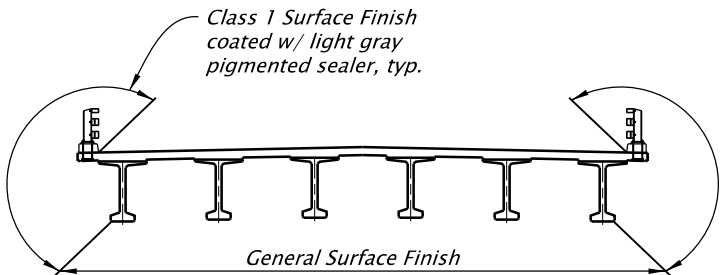
Provide structural steel according to ASTM Specifications specified in detail plans.

All plan dimensions shown are measured horizontally or vertically unless otherwise noted and reflect the ultimate geometric shape and location of all elements. Adjust for grade as required.



CONSTRUCTION SEQUENCE

- 1 Construct temporary shoring and perform Structure Excavation for the crossbeams, wingwalls and Beam "E". Perform General Excavation for the girders and maintain a minimum cover of 3'-0" over the crown of the existing culvert.
- 2 Install pipe pile.
- 3 Construct crossbeams and wingwalls.
- 4 Place precast prestressed girders and Beam "D".
- 5 Place deck within limits shown. Prepare vertical construction joint (CJ) as shown.
- 6 Construct Beam "E" and deck above Beam "E" a minimum of 3 days after deck placement.
- 7 Place Granular Structure Backfill and drainage pipe behind abutments and wingwalls.
- 8 Construct approach slabs, and curb for standard 3-tube curb mount rail.



CONCRETE FINISH DIAGRAM

Scale: ¾"=1'-0"

SCALE WARNING

IF THIS SCALE LINE DOES NOT MEASURE ONE INCH, THEN DRAWING IS NOT TO SCALE

CONSTRUCTION NOTES:

Provide reinforcing steel according to ASTM A1035 CM, Grade 100.

Provide glass fiber reinforced polymer (GFRP) reinforcement conforming to Special Provision 00531 in locations noted in the plans. Glass Fiber Reinforced Polymer reinforcement is identified in the plan sheets by the acronym, "GFRP".

Provide uncoated reinforcing steel in the approach slabs and bridge rail curb on approach slabs according to ASTM Specification A706, or AASHTO M31 (ASTM A615) Grade 60.

Use the following splice lengths (unless shown otherwise):

	Reinforcing Splice Lengths (Class B) f'c = 3.3 ksi					
Cover	2 in. min.					
Bar Size	#3	#4	#5	#6	#8	
Uncoated, Grade 60	n/a	1'-9"	2'-2"	2'-7"	3'-5"	
Uncoated, Grade 100	2'-2"	2'-11"	3'-6"	4'-4"	5'-9"	
GFRP	n/a	n/a	2'-8"	3'-3"	n/a	

	Reinforcing Splice Lengths (Class B) f'c = 4.0 ksi				
Cover	2 in. min.				
Bar Size	#4	#5	#6	#8	
Uncoated, Grade 60	1'-7"	2'-0"	2'-5"	3'-2"	
Uncoated, Grade 100	2'-8"	3'-3"	3'-11"	5'-3"	
GFRP	n/a	2'-7"	3'-3"	n/a	

	Reinforcing Splice Lengths (Class B) f'c = 4.5 ksi					
Cover	2 in. min.				1.5 in. min.	
Bar Size	#4	#5	#6	#8	#5	#6
Uncoated, Grade 60	1'-6"	1'-11"	2'-3"	3'-0"	n/a	n/a
Uncoated, Grade 100	2'-6"	3'-1"	3'-8"	4'-11"	n/a	n/a
GFRP	n/a	2'-8"	3'-3"	n/a	2'-6"	3'-1"

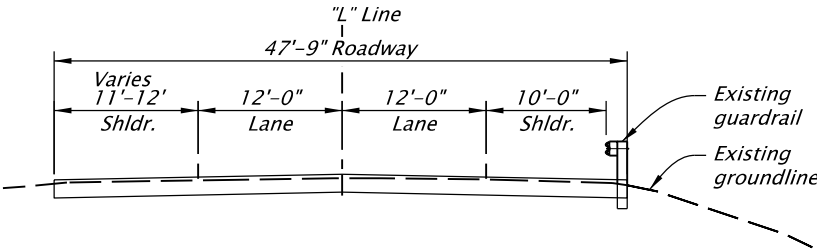
Increase all splice lengths 30% for horizontal or nearly horizontal bars so placed that more than 12" of fresh concrete is cast below the bar.

Splice reinforcement at alternate bars, staggered at least one splice length, or as far as possible, unless noted otherwise.

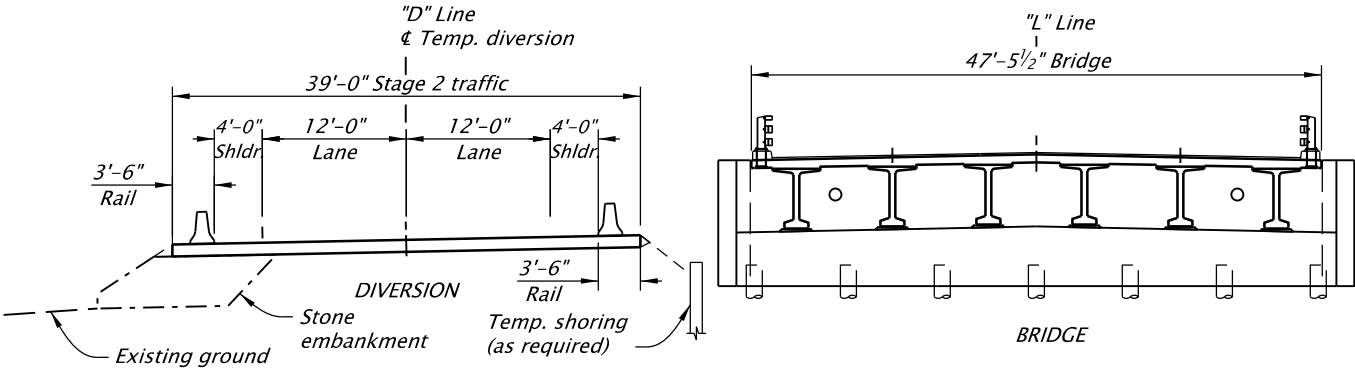
Place bars 2" clear of the nearest face of concrete (unless shown otherwise).

For accompanied by drawings, see sht. J01

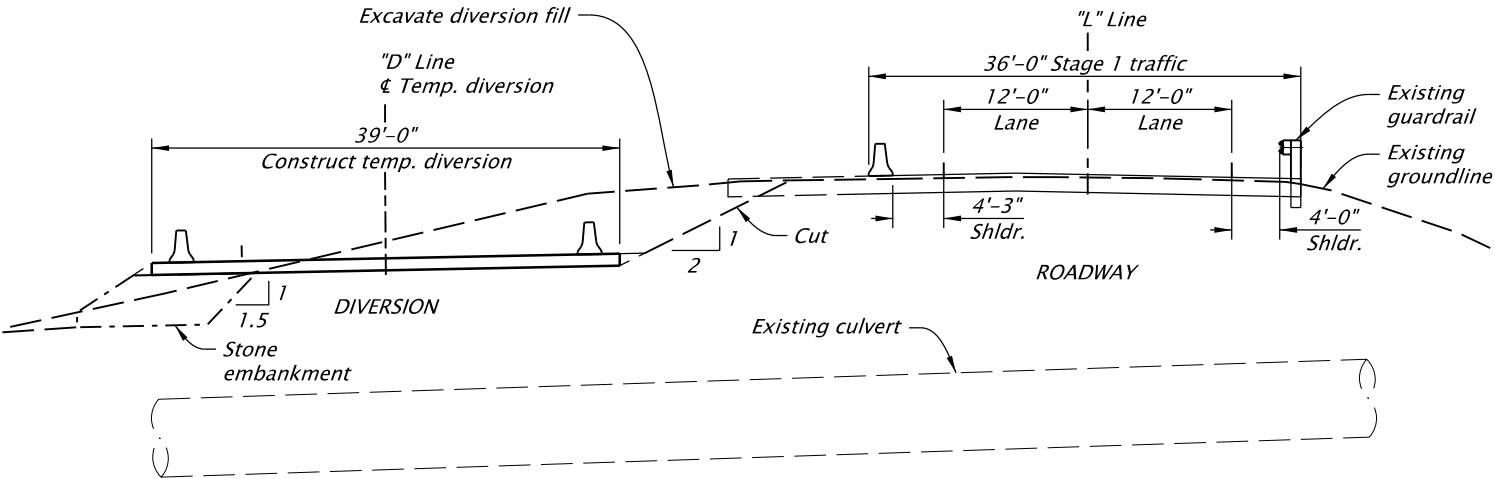
STRUCTURE NO. 24348	REGISTERED PROFESSIONAL ENGINEER 57,752 Digitally Signed 2026.06.30 14:59:57-07'00' OREGON JULY 9, 2002 MATTHEW A. STUCKER	OREGON DEPARTMENT OF TRANSPORTATION	
BDS DWG NO. 113478		Butte Creek_Hwy 9_MP97.13	
CALC. BOOK 7996		US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
HWY: 009 M.P.: 97.13		Designer: Matthew Stucker, PE	Reviewer: Zach Beget, PE
COUNTY Tillamook		Drafter: James Schaefer	Checker: John Adkins, PE
DATE 11/2025	RENEW: 06-30-2028	GENERAL NOTES	
		SHEET NO. J02	



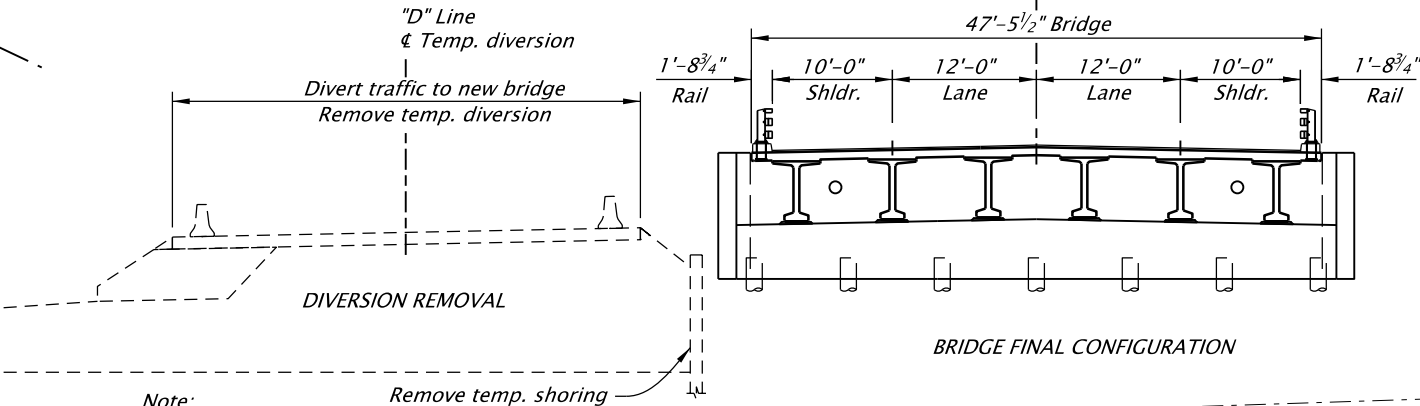
EXISTING ROADWAY
Scale: 1/16"=1'-0"



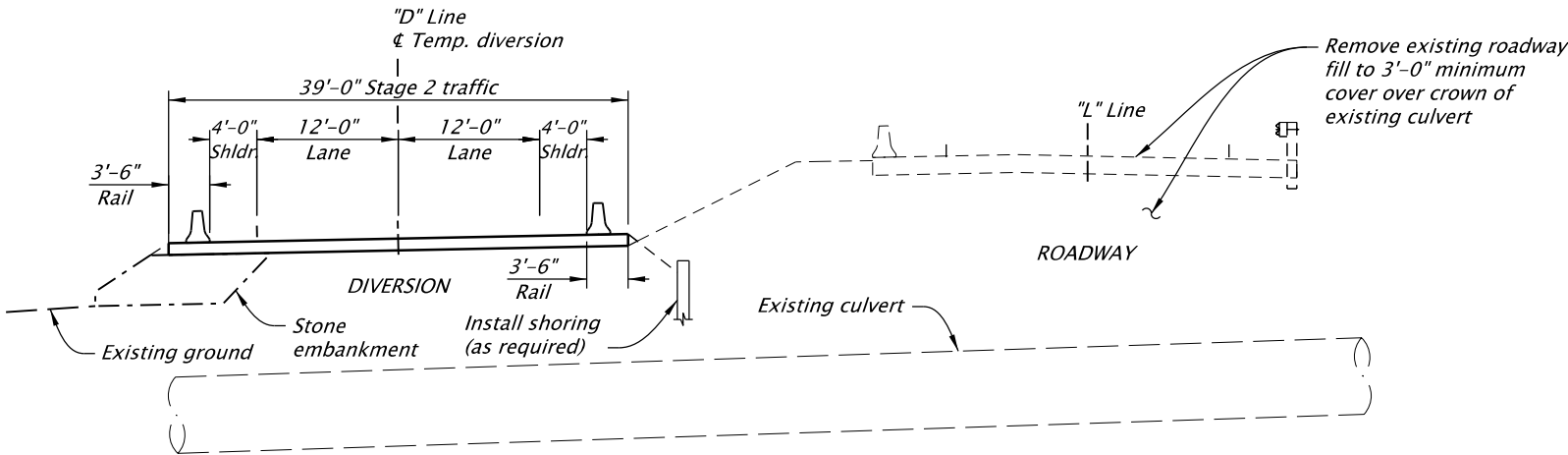
STAGE 2B - CONSTRUCT BRIDGE
Scale: 1/16"=1'-0"



STAGE 1 - CONSTRUCT DIVERSION
Scale: 1/16"=1'-0"



STAGE 3 - CONSTRUCT NEW CHANNEL
Scale: 1/16"=1'-0"



STAGE 2A - DIVERT TRAFFIC ONTO DIVERSION
Scale: 1/16"=1'-0"

SCALE WARNING
IF THIS SCALE LINE DOES NOT
MEASURE ONE INCH, THEN
DRAWING IS NOT TO SCALE

For accompanied by drawings, see sht. J01

STRUCTURE NO.	24348
BDS DWG NO.	113479
CALC. BOOK	7996
HWY: 009	
M.P.: 97.13	
COUNTY	Tillamook
DATE	11/2025



RENEW: 06-30-2028

OREGON DEPARTMENT
OF TRANSPORTATION



Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Matthew Stucker, PE
Reviewer: Zach Beget, PE
Drafter: James Schaefer
Checker: John Adkins, PE

STAGING PLAN

SHEET NO.
J03

UNIT DESCRIPTIONS

- Clayey SILT with some sand to Sandy GRAVEL with some silt; ML, SC, SM, GM, GP-GM; Brown and Gray; Nonplastic to Low Plasticity; Damp to Wet, Medium Stiff to Stiff and Very Loose to Medium Dense; Fine- to coarse-grained sand, angular to rounded gravel up to 2.75-inch max size recovered (Fill)
- Organic SILT with some sand to Sandy GRAVEL with some silt; OH, OL, MH, ML, SM, SP-SM, SW-SM, GM, GP-GM; Dark Brown, Dark Gray, and Black; Nonplastic to Low Plasticity; Damp to Wet; Very Soft to Low Plasticity; Damp to Wet; Very Soft to Medium Stiff and Very Loose to Medium Dense; Fine- to coarse-grained sand, angular to rounded gravel up to 1.75-inch max size recovered (Organic Estuarine Deposits)
- Silty SAND with some gravel to Sandy GRAVEL with some silt; SM, SP-SM, GM, GP-GM; Brown and Dark Gray; Nonplastic to Low Plasticity; Moist to Wet; Medium Dense to Very Dense; Fine- to coarse-grained sand, angular to rounded gravel up to 1.75-inch max size recovered (Estuarine Deposits)
- Sandy SILT to Silty Gravelly SAND; ML, SM; Orange Brown, Brown, and Dark Gray; Nonplastic and Low Plasticity; Damp to Wet; Stiff to Hard and Medium Dense to Very Dense; Fine- to coarse-grained sand, angular to subangular gravel to 1.5-inch max size recovered (Decomposed Basalt of Cascade Head)
- Altered SILTSTONE to BASALT; Gray and Dark Gray; Moderately Weathered to Fresh; R1 to R5 (Basalt of Cascade Head)

LEGEND

- = Drill hole
- = Groundwater level
- 00.00'

= Elevation
- MM/DD/YY

= Date of measurement
- C-1

= Core sample
- RQD

= Rock Quality Designation
- 50/1st #"

= Standard Penetration Test refusal length
- 24

= Standard Penetration Test - N value
- U-1

= Undisturbed sample
- ~

= Ordinary High Water (OHW)
- = Wetland

GENERAL NOTES

1. Elevations are based on North American Vertical Datum (1988).
2. Geotechnical data shown on this drawing are a consolidation of information and/or revision in terminology from the drill logs. Estimated groundwater levels, if provided, are for reference only; the absence of a groundwater symbol may indicate that groundwater was not specifically measured. More detailed subsurface data is available on the drill logs in the geotechnical report, which is available from the Engineer.
3. In accordance with ASTM D1586, N values are reported for an interval of 1 ft. except as noted.
4. 5' Contour Interval.

STRUCTURE NO.	24348
BDS DWG NO.	113480
CALC. BOOK	—
HWY: 009	
M.P.: 97.13	
COUNTY	Tillamook
DATE	11/25



EXPIRES: 12-1-2026

FINAL ELECTRONIC DOCUMENT
AVAILABLE UPON REQUEST

OREGON DEPARTMENT
OF TRANSPORTATION



Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Michael Tardif

Reviewer: Larry Robinson

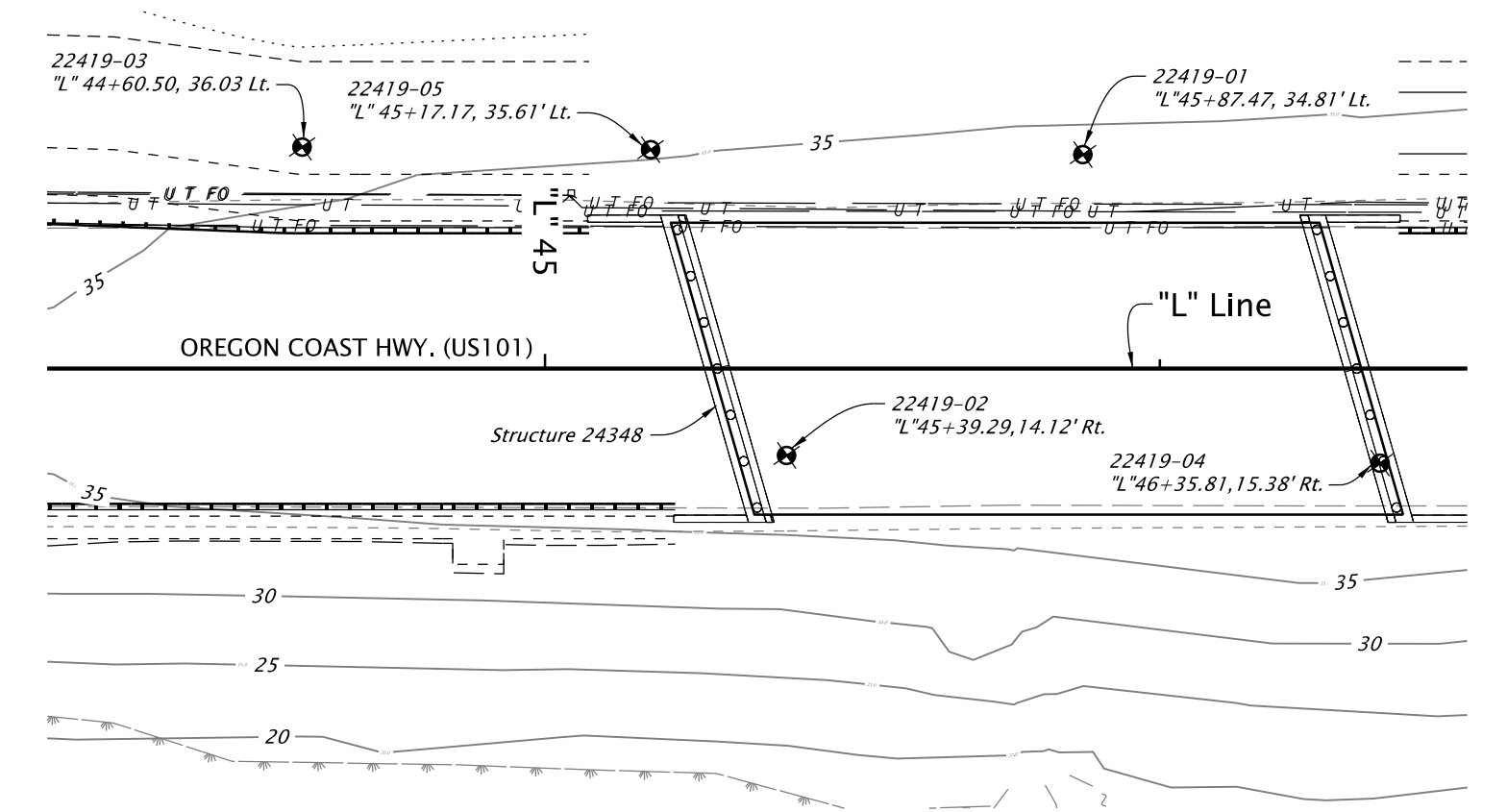
Drafter: Julie Rentz

Checker: N/A

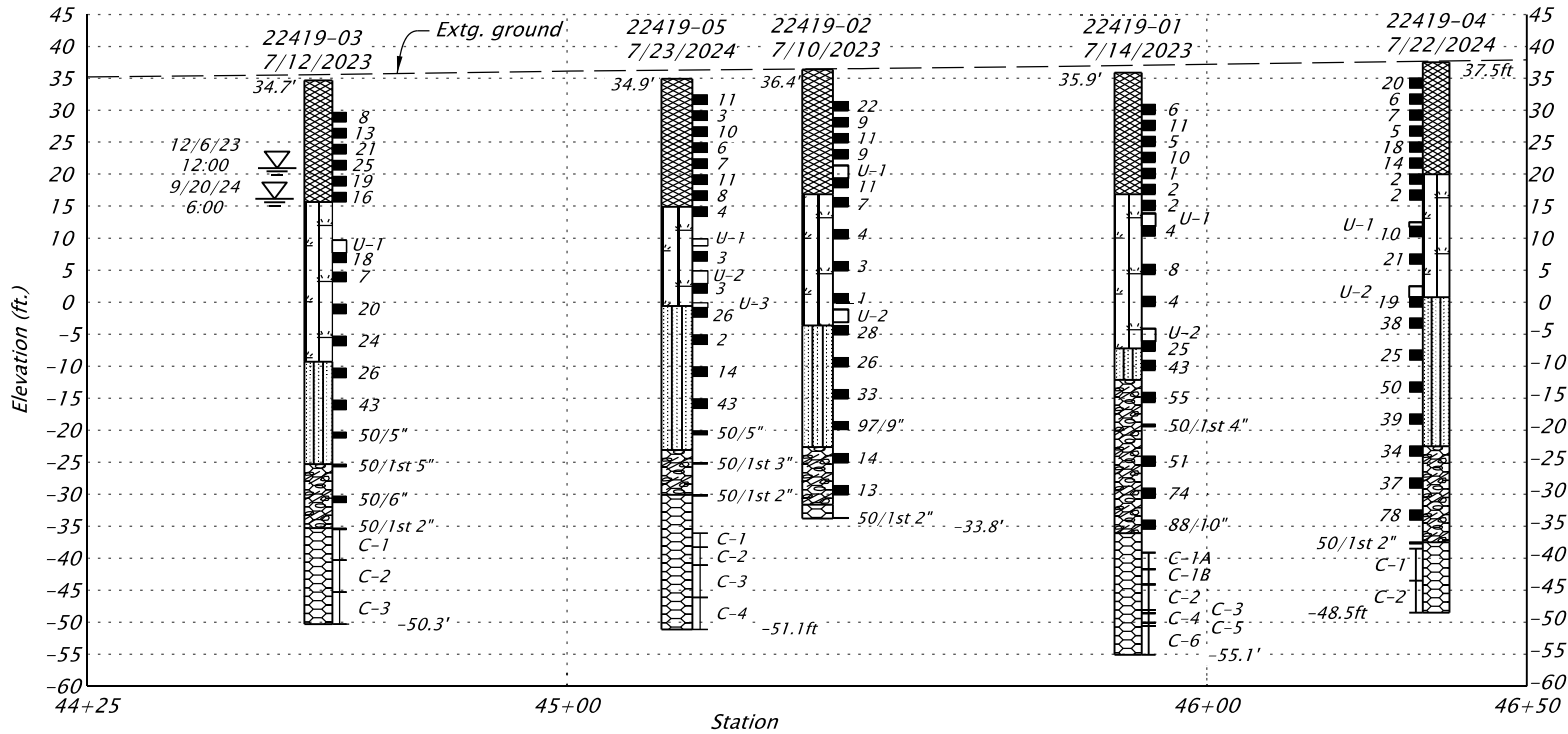
GEOTECHNICAL DATA

SHEET NO.

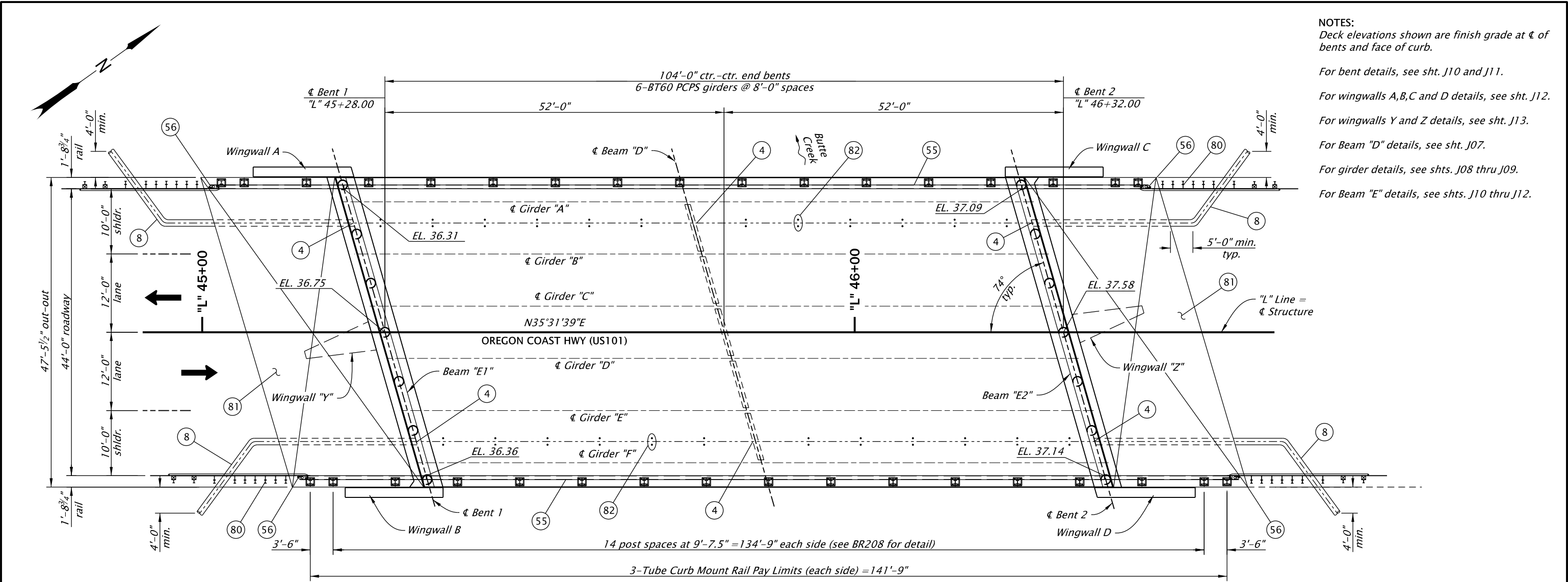
J04



PLAN
SCALE: 1" = 30'



PROFILE "L" LINE
HORIZ. SCALE: 1" = 30'
VERT. SCALE: 1" = 30'



NOTES:
Deck elevations shown are finish grade at ϵ of bents and face of curb.
For bent details, see sht. J10 and J11.
For wingwalls A,B,C and D details, see sht. J12.
For wingwalls Y and Z details, see sht. J13.
For Beam "D" details, see sht. J07.
For girder details, see shts. J08 thru J09.
For Beam "E" details, see shts. J10 thru J12.

DECK PLAN
Scale: 1"=15'-0"

- CONSTRUCTION NOTES:
- 13" dia. utility hole through Beams "E" and Beam "D", see sheets J07 & J10. Plug utility holes at each location with a snug, inside-fitting, circular plug constructed of four, 3/4" layers of sponge rubber (ASTM D1056, Grade 2A5) adhered to a piece of 3/4" thick marine grade plywood.
 - Install 12" dia. PVC pipe (Sch. 80) under approach slabs to align with utility holes cast into Beam "E". Extend tangent portion of pipe a minimum of 5'-0" beyond end of approach slab and as needed to center pipe between guardrail posts with 3'-1.5" spacing. Use 45-degree sweep to orient pipe between guardrail transition posts. Terminate pipe a minimum of 3'-6" beyond outside limits of approach slab. Mark pipe and cap ends with compressible material. Match longitudinal slope of pipe to bridge longitudinal grade.
 - Construct std. 3-Tube Curb Mount Rail, see dwg. no. BR208. After galvanizing, powder coat bridge rail components (steel posts and plates and rail elements) with a top-coat color of "ODOT Green".
 - Construct Type 1 Transition, see dwg. no. BR209.
 - Install Bridge ID Marker, see dwg. no. BR195 and Bridge ID Marker Table on this sheet.
 - 20'-4" Approach slab w/ 2" ACP, see BR165 for details, typ. each end. See dwg. BR207 for top rebar at rail posts in approach slab.
 - 3/4" Hot-dip galvanized expanded coil concrete inserts within 2'-0" of Beam "E" and @ 8'-0" max. spacing. Inserts to have closed-back, threaded ferrule with a minimum insert length = 4.5" and a min. safe working load tension = 5660 lbs., typ.

BRIDGE ID MARKER TABLE	
Phone Number (Agency Dispatch Center)	(541) 362-0457
Route (RTE)	US101
Highway No. (HWY)	HWY 09
Milepoint (MP)	MP 97.13
Bridge No. (BR)	24348
Structure Name	Butte Creek

For accompanied by drawings, see sht. J01

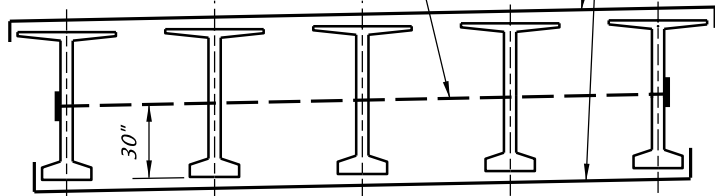
STRUCTURE NO. 24348		OREGON DEPARTMENT OF TRANSPORTATION	
BDS DWG NO. 113482		Butte Creek_Hwy 9_MP97.13	
CALC. BOOK 7996		US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
HWY: 009 M.P.: 97.13		Designer: Matthew Stucker, PE Drafter: James Schaefer	Reviewer: Zach Beget, PE Checker: John Adkins, PE
COUNTY Tillamook	RENEW: 06-30-2028		SHEET NO. J06
DATE 11/2025	DECK PLAN		

SCALE WARNING
IF THIS SCALE LINE DOES NOT MEASURE ONE INCH, THEN DRAWING IS NOT TO SCALE

GIRDER SCHEDULE																									
Girder type	Girder number	Number required	LT=Lt. exterior RT=Rt. exterior	Span number	Span ctr.-ctr. bents along girder ¶	"A" o-o Girder (Horiz. length after shortening)	"W" Width of Top Flange	Concrete strength at 28 days (KSI)	Concrete strength at release (KSI)	Number of strands per girder ("N")	Deflected strands per girder ("D")	Back end (on station)				Ahead end (on station)				Estimated midspan deflection (In.)					
												End block	Negative value indicates point beyond girder end (ft.)				End block	Negative value indicates point beyond girder end (ft.)				Upward at release	Upward 3 months after release	Down due to deck dead load	Down due to composite dead load
													"FL"	"EL"	"ER"	"FR"		"FL"	"EL"	"ER"	"FR"				
BT60	A	1	LT.	1	104'-0"	105'-5"	48"	8.0	7.0	48	18	NO	12-5/8"	7-5/8"	9-3/8"	19-1/2"	NO	19-1/2"	9-3/8"	7-5/8"	12-5/8"	2.6"	3.8"	1.7"	0.1"
BT60	B	1	INT.	1	104'-0"	105'-5"	48"	8.0	7.0	48	18	NO	12-5/8"	7-5/8"	9-3/8"	19-1/2"	NO	19-1/2"	9-3/8"	7-5/8"	12-5/8"	2.6"	3.8"	1.7"	0.1"
BT60	C	1	INT.	1	104'-0"	105'-5"	48"	8.0	7.0	48	18	NO	12-5/8"	7-5/8"	9-3/8"	19-1/2"	NO	19-1/2"	9-3/8"	7-5/8"	12-5/8"	2.6"	3.8"	1.7"	0.1"
BT60	D	1	INT.	1	104'-0"	105'-5"	48"	8.0	7.0	48	18	NO	12-5/8"	7-5/8"	9-3/8"	19-1/2"	NO	19-1/2"	9-3/8"	7-5/8"	12-5/8"	2.6"	3.8"	1.7"	0.1"
BT60	E	1	INT.	1	104'-0"	105'-5"	48"	8.0	7.0	48	18	NO	12-5/8"	7-5/8"	9-3/8"	19-1/2"	NO	19-1/2"	9-3/8"	7-5/8"	12-5/8"	2.6"	3.8"	1.7"	0.1"
BT60	F	1	RT.	1	104'-0"	105'-5"	48"	8.0	7.0	48	18	NO	12-5/8"	7-5/8"	9-3/8"	19-1/2"	NO	19-1/2"	9-3/8"	7-5/8"	12-5/8"	2.6"	3.8"	1.7"	0.1"

(Alternate A)
One cable restraint at each Beam D.
After restraint is removed, fill hole with concrete and finish flush with surface of girder-exterior girders only.

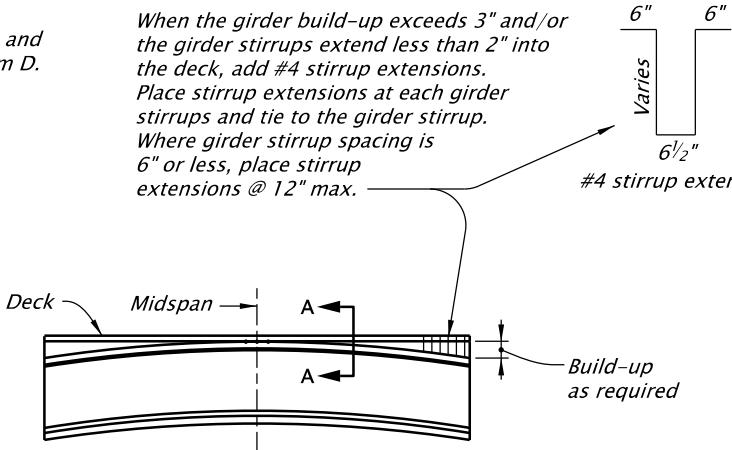
(Alternate B)
Cable restraints top and bottom at each Beam D.



NOTE
Snug fit prestressed girders against forms prior to Beam "D" pour. Keep restraints in place a minimum of two days after completion of Beam "D" pour.

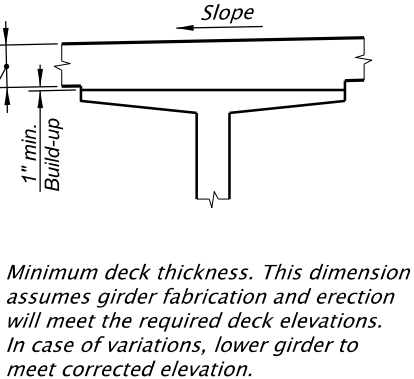
GIRDER RESTRAINT DIAGRAM
Not to Scale

When the girder build-up exceeds 3" and/or the girder stirrups extend less than 2" into the deck, add #4 stirrup extensions. Place stirrup extensions at each girder stirrups and tie to the girder stirrup. Where girder stirrup spacing is 6" or less, place stirrup extensions @ 12" max.

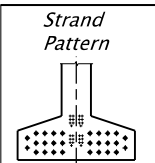


Ensure girder soffits are on level grade prior to prestressing. Use build-up over girders to compensate for the difference between deck elevation and girder camber.

BUILD-UP DECK DETAIL
Not to Scale

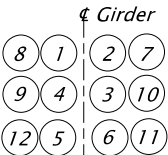


SECTION A-A
Not to Scale

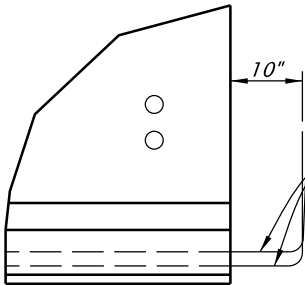


"N"	48
"D _s "	18
"Y _c "	4.18"
"h _c "	3"
	Back Ahead
"Y _e "	20.12"
"h _e "	39"

DETENSIONING NOTE
Detension strands in a systematic order about girder ¶ to limit eccentricity.

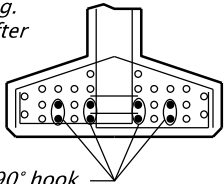


TYPICAL DETENSIONING ORDER



PARTIAL END ELEVATION

Extend 8 strands, 24" long. Bend strands as shown after forms are removed.



Extended strands w/90° hook

PARTIAL END VIEW

STRAND EXTENSION
Not to Scale

NOTES
See sheet J09 for bulb-T girder general details.
See standard drawing BR350 for temporary diaphragm beam details.
Transport members in accordance with section 550.49 of the Standard Specifications for Highway Construction. Place members no less than 90 days after casting.

SCALE WARNING
IF THIS SCALE LINE DOES NOT MEASURE ONE INCH, THEN DRAWING IS NOT TO SCALE

For accompanied by drawings, see sht. J01

STRUCTURE NO.	24348
BDS DWG NO.	113484
CALC. BOOK	7996
HWY: 009 M.P.: 97.13	
COUNTY	Tillamook
DATE	11/2025



RENEW: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION



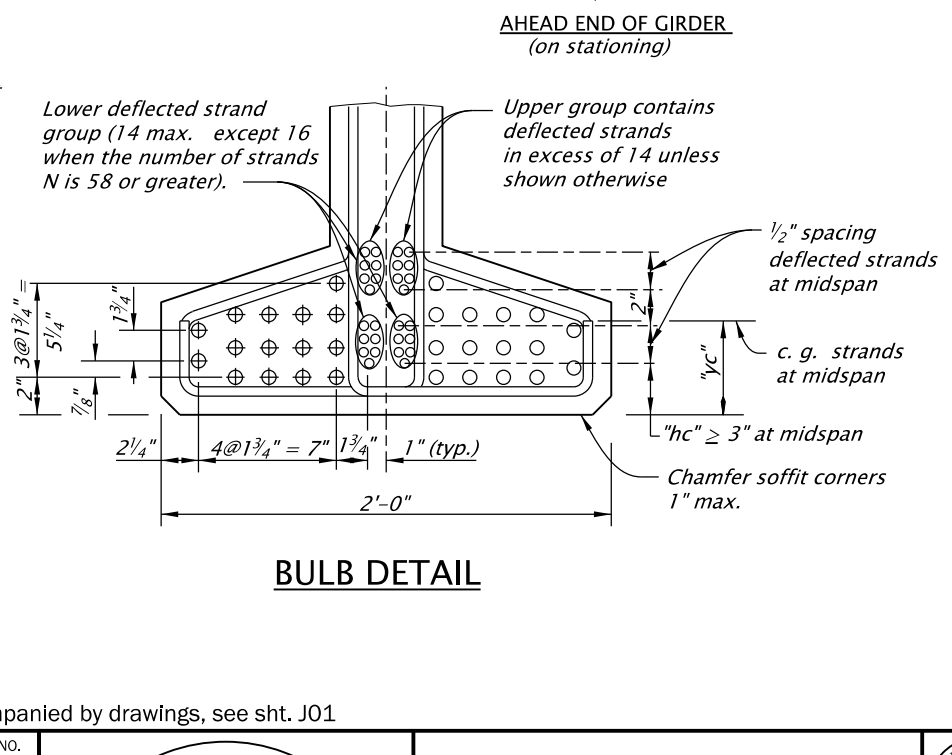
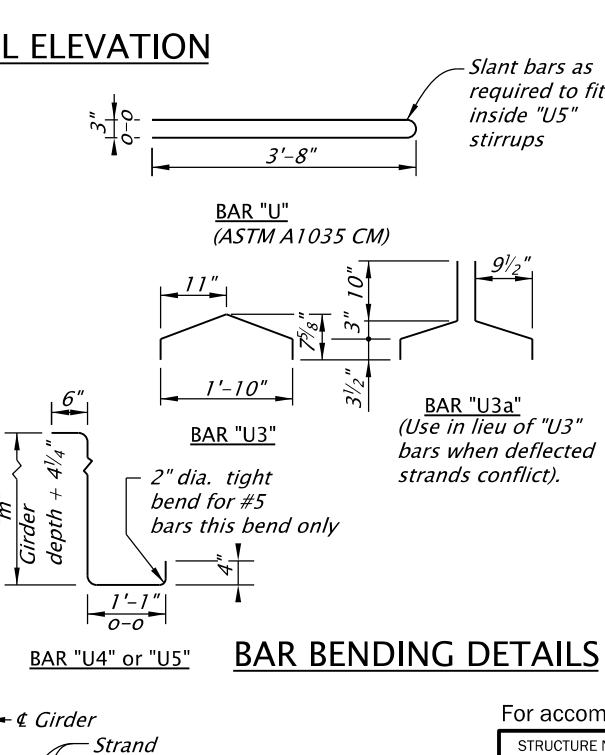
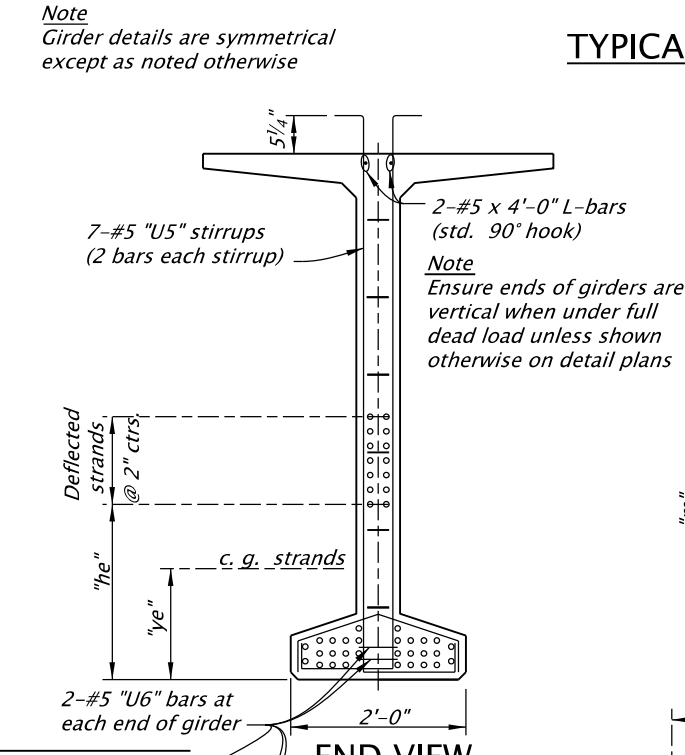
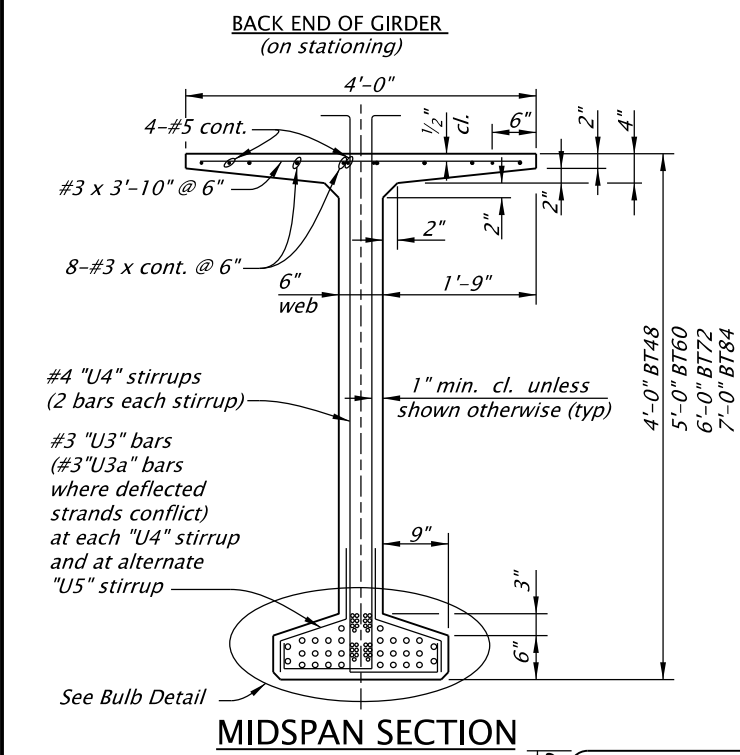
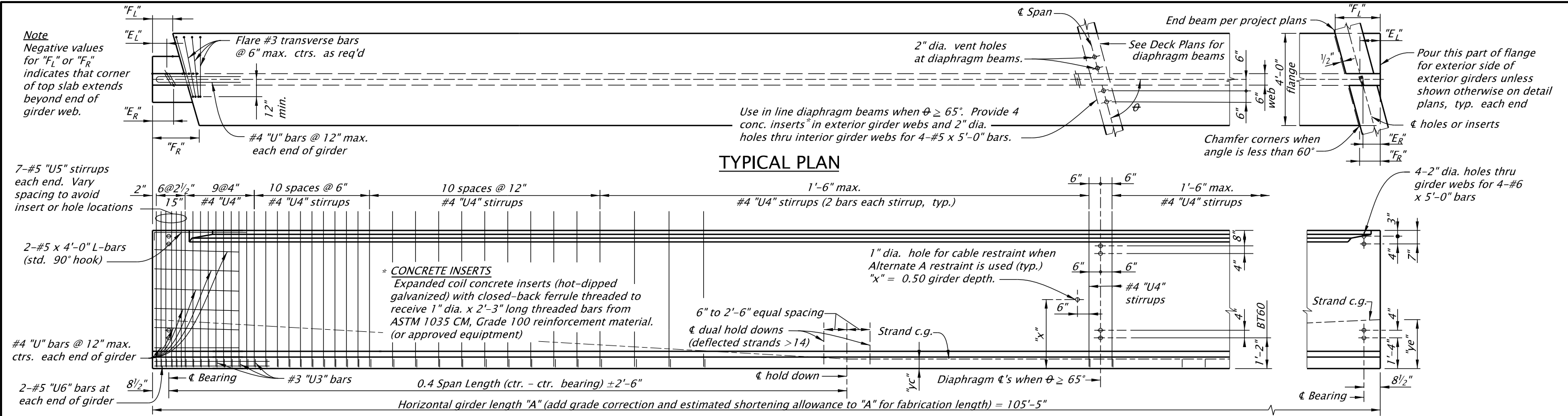
Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Matthew Stucker, PE
Reviewer: Zach Beget, PE
Drafter: James Schaefer
Checker: John Adkins, PE

GIRDER SCHEDULE

SHEET NO.
J08



BULB-T GIRDER NOTES

Girders designed for live loading and superimposed dead load as shown in the General Notes. Provide reinforcing steel as shown in the General Notes except as noted. Provide reinforcement conforming to ASTM A1035 CM, Grade 100. Provide 1/2" dia. 7-wire low relaxation prestressing strands conforming to AASHTO M203 (ASTM A416), Grade 270, Supplement 1. Provide an initial tensioning (after harping deflected strands) of 31.0 kips per strand unless shown otherwise on Girder Schedule.

DETENSIONING NOTE

Detension strands in a systematic order about girder ϵ to limit eccentricity.

TYPICAL DETENSIONING ORDER

Provide the class of concrete shown on Girder Schedule. Keep girders in an upright position w/the support points within 2'-0" of the girder ends. Deflected strands may be bundled between hold-down points. Provide temporary diaphragm beams as required, see BR350.

SCALE WARNING

IF THIS SCALE LINE DOES NOT MEASURE ONE INCH, THEN DRAWING IS NOT TO SCALE

For accompanied by drawings, see sht. J01

STRUCTURE NO.	24348
BDS DWG NO.	113485
CALC. BOOK	7996
HWY: 009	
M.P.: 97.13	
COUNTY	Tillamook
DATE	11/2025

REGISTERED PROFESSIONAL ENGINEER

57,752

Digitally Signed 2026.06.30 15:35:57-07'00'

OREGON

JULY 9, 2002

MATTHEW A. STUCKER

RENEW: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION

Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT

OREGON COAST HIGHWAY

TILLAMOOK COUNTY

Designer: Matthew Stucker, PE

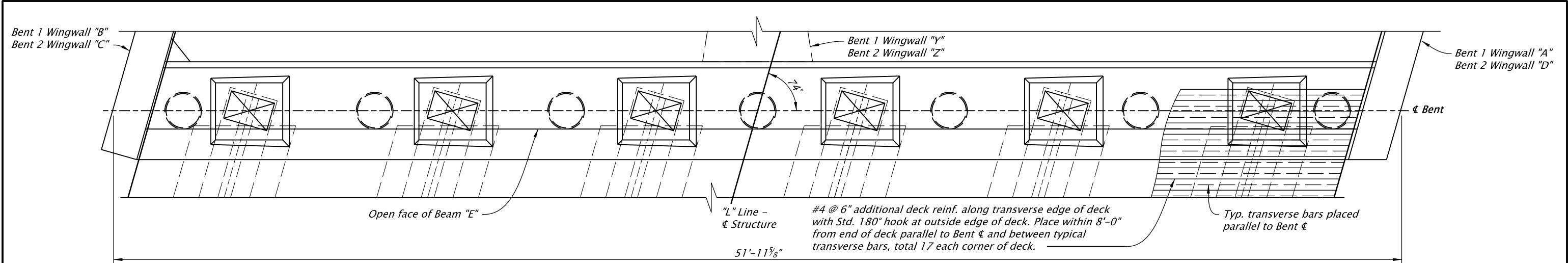
Reviewer: Zach Beget, PE

Drafter: James Schaefer

Checker: John Adkins, PE

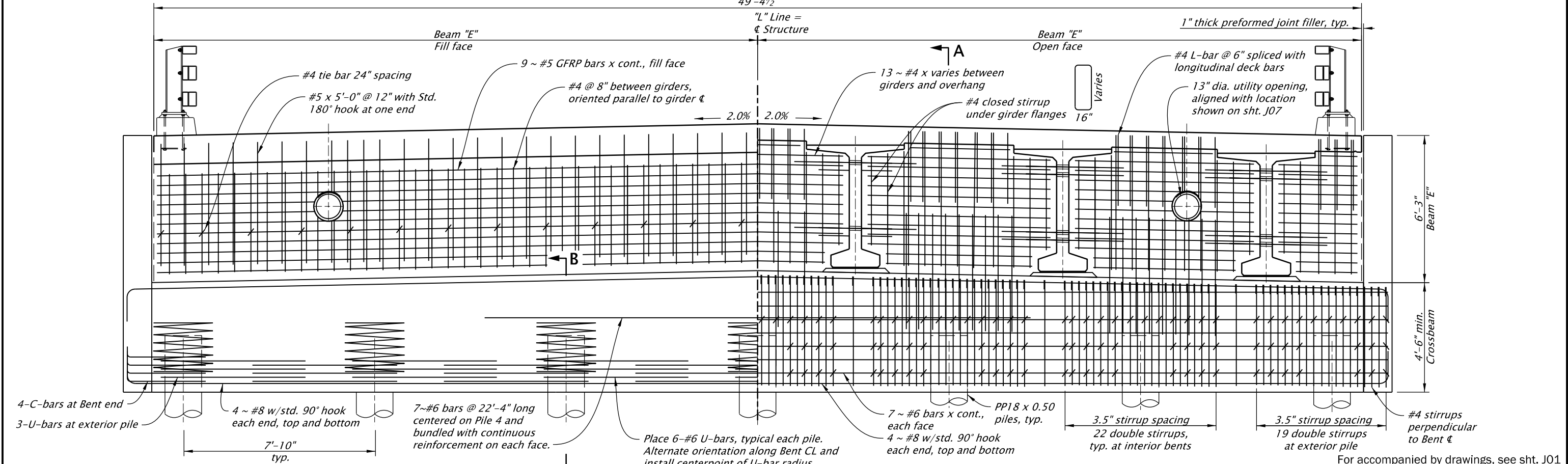
GIRDER DETAILS-1

SHEET NO. J09



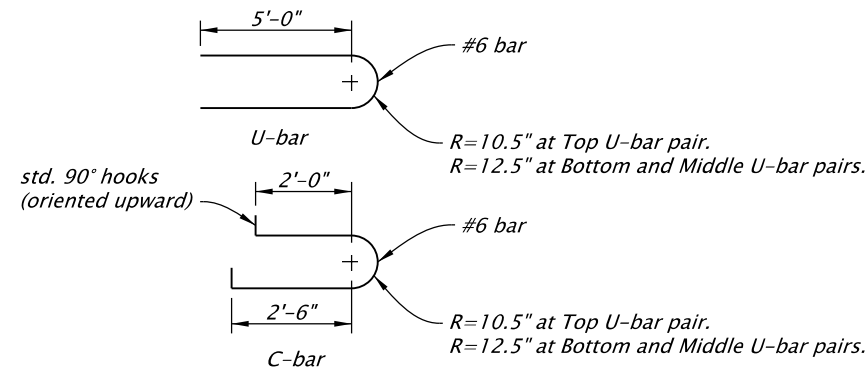
BENT 1 - PLAN (BENT 2 SIM.)

Scale: 1/4"=1'-0"
49'-4¹/₂"



BENT 1 - ELEVATION (BENT 2 SIM.)

Scale: 1/4"=1'-0"
See Section A-A and Section B-B on sheet J11



SCALE WARNING

IF THIS SCALE LINE DOES NOT MEASURE ONE INCH, THEN DRAWING IS NOT TO SCALE

STRUCTURE NO.	24348
BDS DWG NO.	113486
CALC. BOOK	7996
HWY: 009	
M.P.: 97.13	
COUNTY	Tillamook
DATE	11/2025



RENEWES: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION



Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Matthew Stucker, PE

Reviewer: Zach Beget, PE

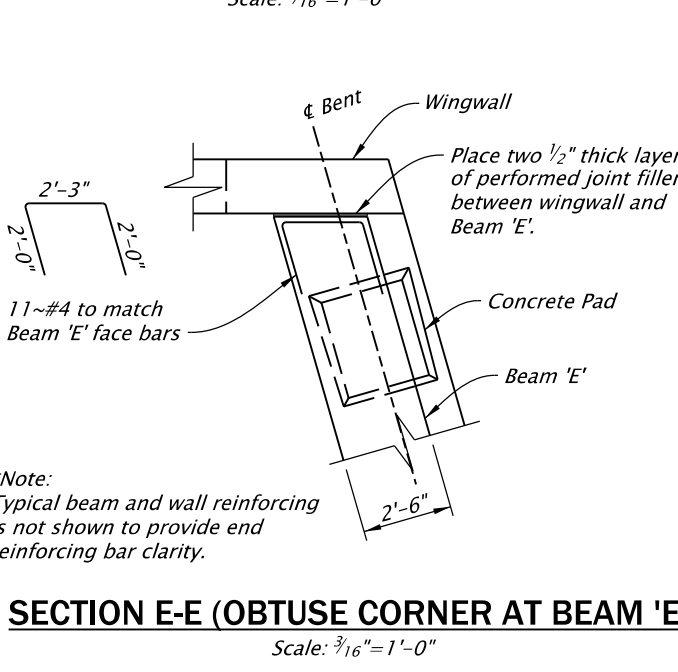
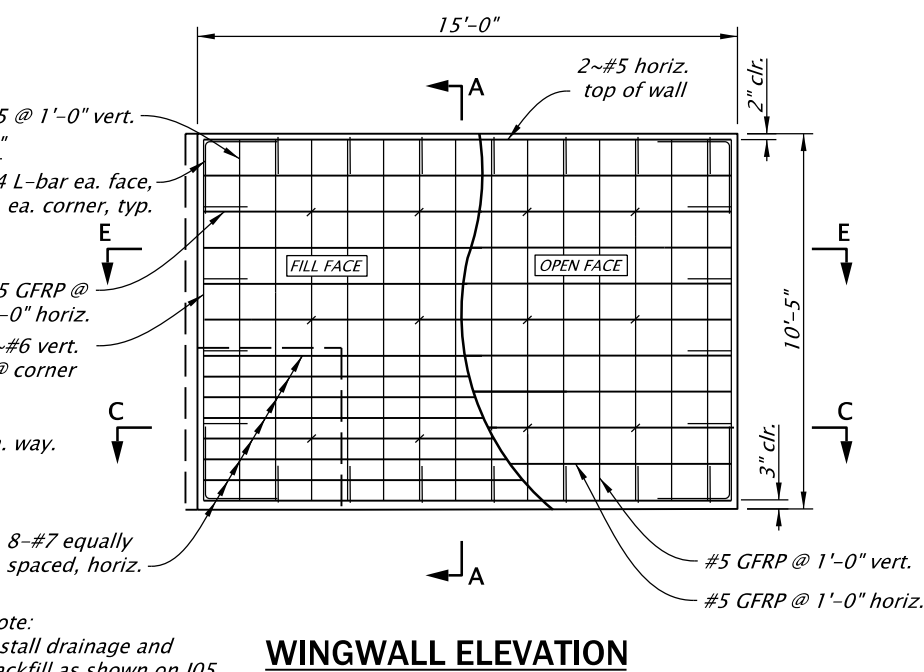
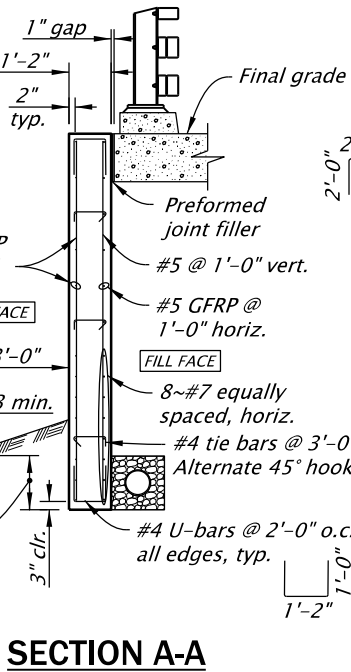
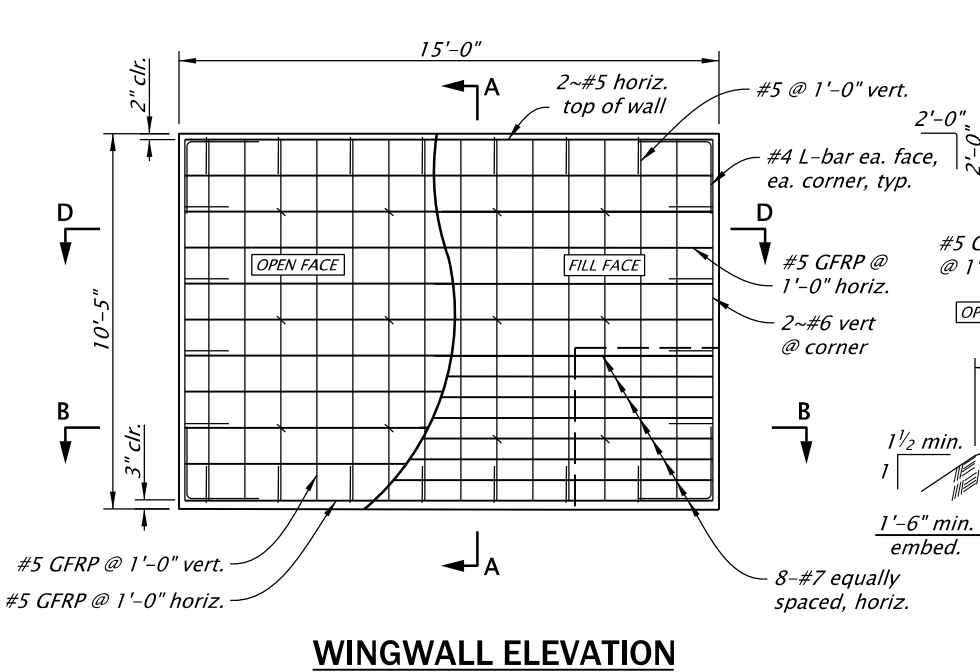
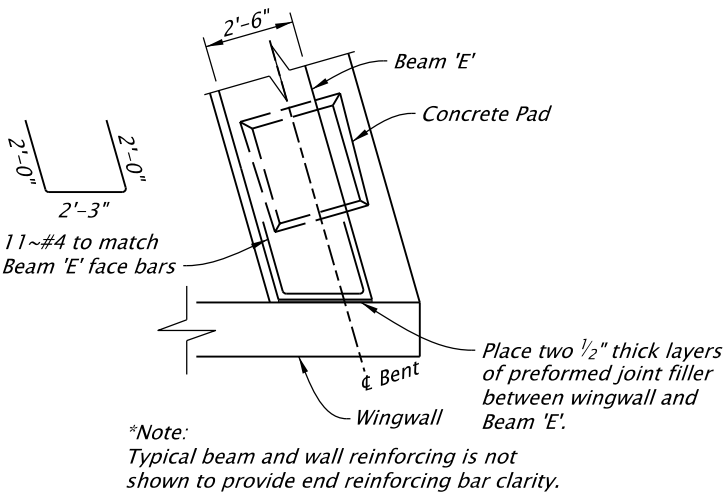
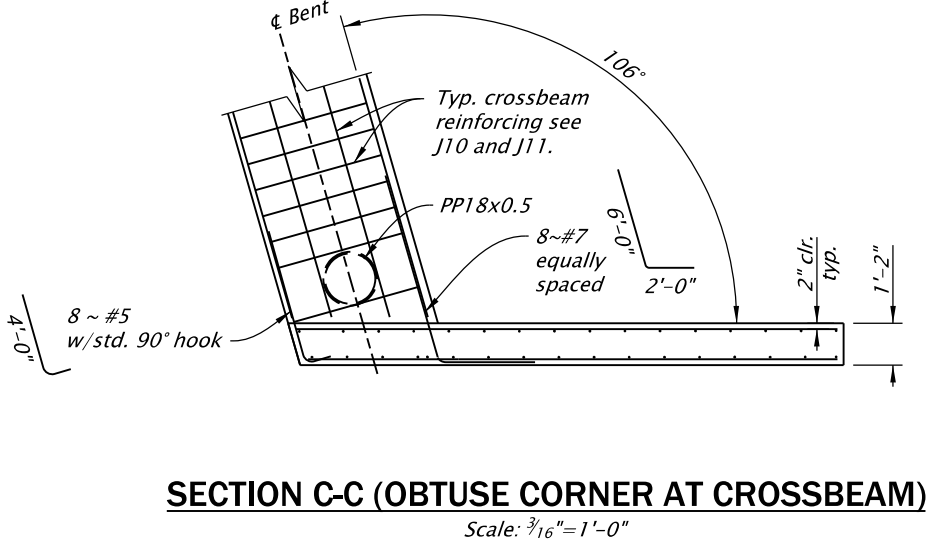
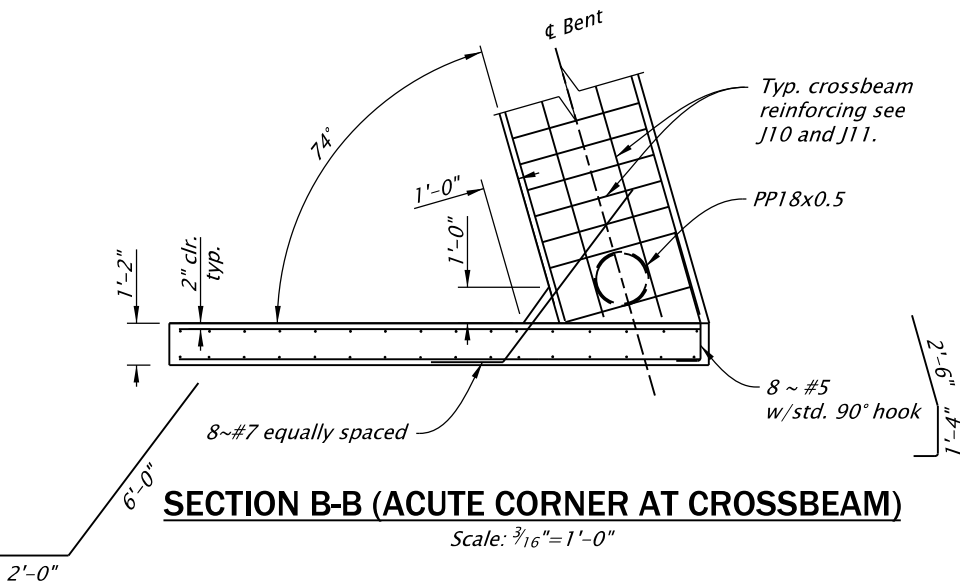
Drafter: James Schaefer

Checker: John Adkins, PE

BENT 1 DETAILS (BENT 2 SIM.)

SHEET NO.

J10



BENT 1 WINGWALL B (BENT 2 WINGWALL C SIMILAR)
Scale: 3/16"=1'-0"

BENT 1 WINGWALL A (BENT 2 WINGWALL D SIMILAR)
Scale: 3/16"=1'-0"

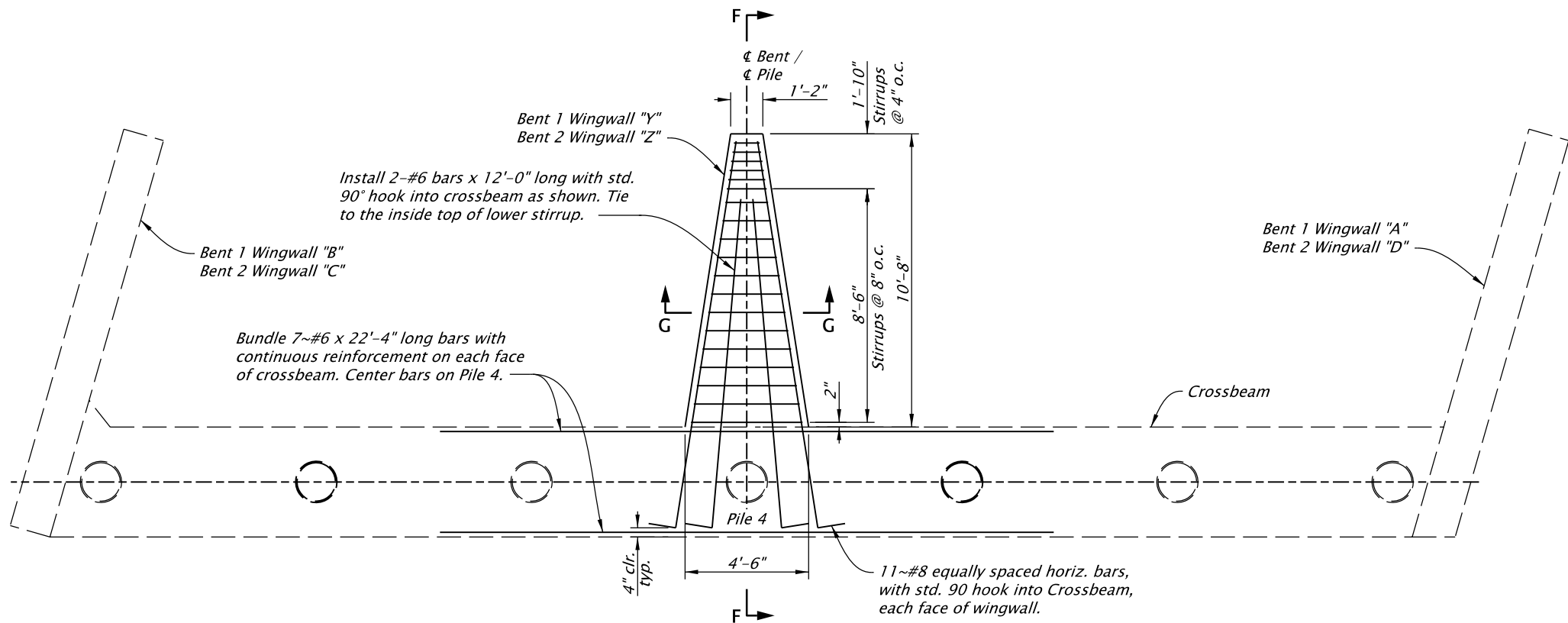
Note:
Install drainage and
backfill as shown on J05.

For accompanied by drawings, see sht. J01

STRUCTURE NO. 24348	
BDS DWG NO. 113488	
CALC. BOOK 7996	
HWY: 009 M.P.: 97.13	
COUNTY Tillamook	
DATE 11/2025	RENEW: 06-30-2028

SCALE WARNING
IF THIS SCALE LINE DOES NOT
MEASURE ONE INCH, THEN
DRAWING IS NOT TO SCALE

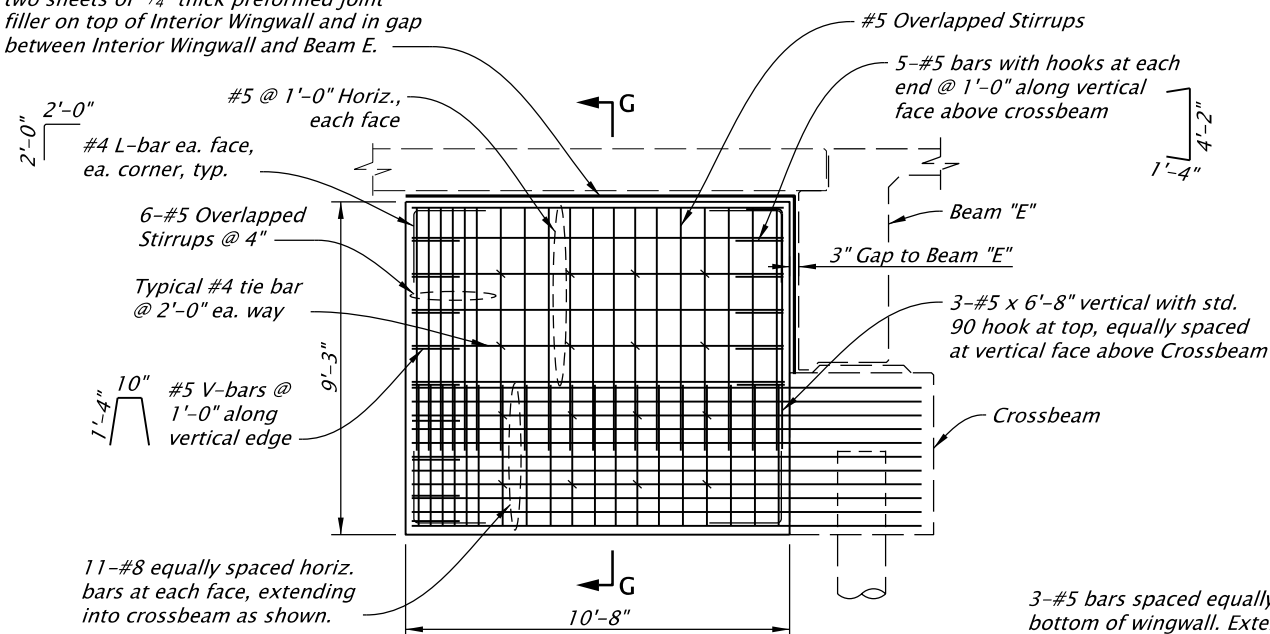
OREGON DEPARTMENT OF TRANSPORTATION	
Butte Creek_Hwy 9_MP97.13	
US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
Designer: Matthew Stucker, PE	Reviewer: Zach Beget, PE
Drafter: James Schaefer	Checker: John Adkins, PE
EXTERIOR WINGWALL DETAILS	
SHEET NO. J12	



INTERIOR WINGWALL - PLAN (AT CROSSBEAM)

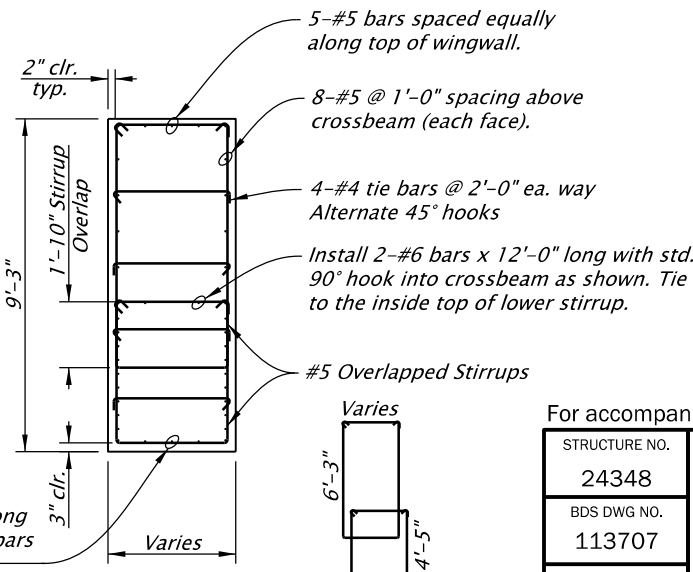
Scale: 3/16"=1'-0"

Install two layers of 3/4" thick sponge rubber (ASTM D1056, Grade 2A5) between two sheets of 3/4" thick preformed joint filler on top of Interior Wingwall and in gap between Interior Wingwall and Beam E.



SECTION F-F

Scale: 3/16"=1'-0"



SECTION G-G

Scale: 3/16"=1'-0"

SCALE WARNING

IF THIS SCALE LINE DOES NOT MEASURE ONE INCH, THEN DRAWING IS NOT TO SCALE

For accompanied by drawings, see sht. J01

STRUCTURE NO.	24348
BDS DWG NO.	113707
CALC. BOOK	7996
HWY: 009	
M.P.: 97.13	
COUNTY	Tillamook
DATE	11/2025



RENEW: 06-30-2028

OREGON DEPARTMENT OF TRANSPORTATION

Butte Creek_Hwy 9_MP97.13

US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Matthew Stucker, PE
Reviewer: Zach Beget, PE
Drafter: James Schaefer
Checker: John Adkins, PE

INTERIOR WINGWALL DETAILS

SHEET NO.
J13

LEGEND

- N
M

Install new sign (N) on new (M) sign support
- RXN
M

Remove existing sign (N) and (M) sign support
- N

Install new sign (N)
- RXN

Remove existing sign (N)
- RSN

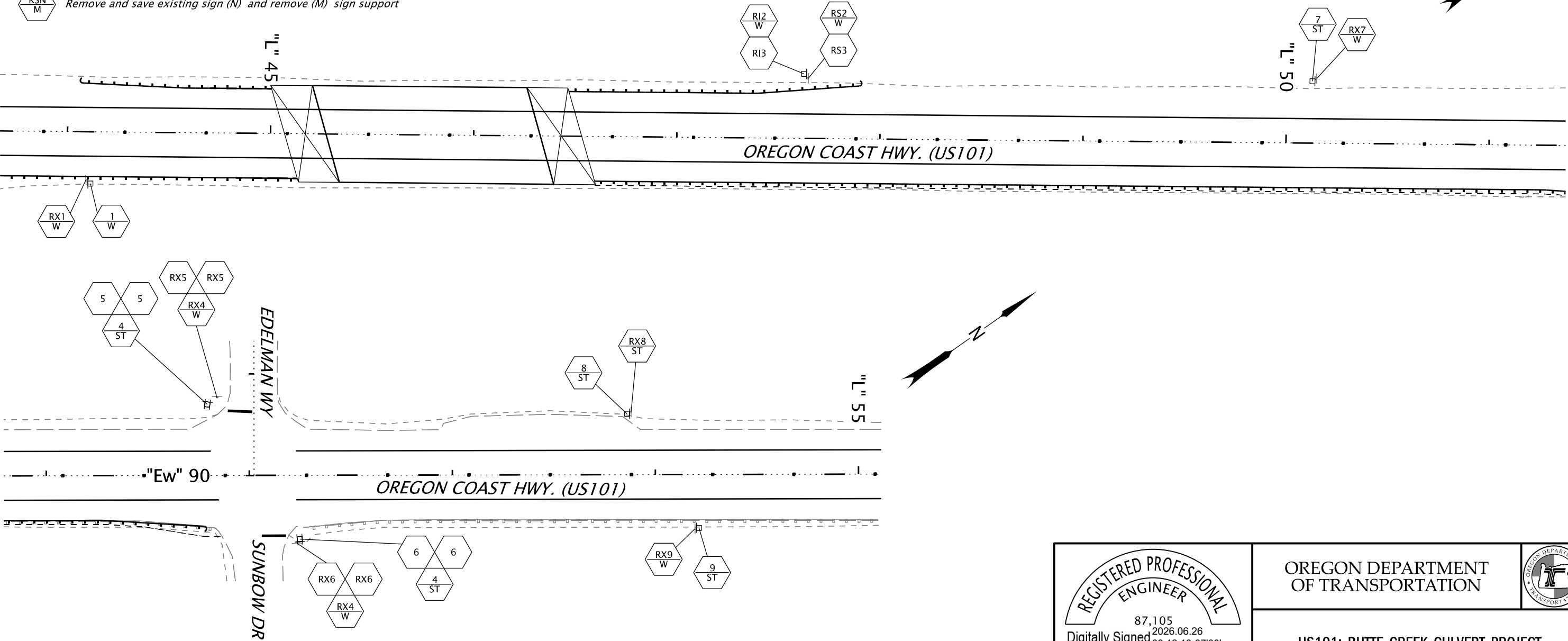
Remove and save existing sign (N)
- RSN
M

Remove and save existing sign (N) and remove (M) sign support

- RIN

Reinstall existing sign (N)
- RIN
M

Reinstall existing sign (N) on new (M) sign support
- N = Sign Number
- M = Material
- Material options:
- W = Wood Sign Post
- ST = Perforated Steel Square Tube Sign Support



NOTE:
The locations of sign installations shown are approx. with exact locations to be determined in the field.

NOTE:
Existing signs not shown are to remain in place unless otherwise directed by the Engineer.

NOTE:
See Sheet LB01 for Sign Details.

ACCOMPANIED BY DWGS.:
TM200, TM201, TM223, TM226,
TM600, TM602, TM635, TM670,
TM671, TM676, TM681, TM687,
TM688

HWY: 009 M.P.: 97.13
UNIT FILE CODE S-23213
DFI/TSSU NO. N/A

REGISTERED PROFESSIONAL
ENGINEER
87,105
Digitally Signed 2026.06.26 08:12:10-07'00"
OREGON
NOV. 13, 2012
CHRISTINA L. LAFLEUR

RENEWES: 12-31-2026

OREGON DEPARTMENT OF TRANSPORTATION	
US101: BUTTE CREEK CULVERT PROJECT OREGON COAST HIGHWAY TILLAMOOK COUNTY	
Designer: Sophia Ginsbach Drafter: Sophia Ginsbach	Reviewer: John Hampton, P.E. Checker: Christina LaFleur, P.E.
SIGNING PLAN	SHEET NO. LA01



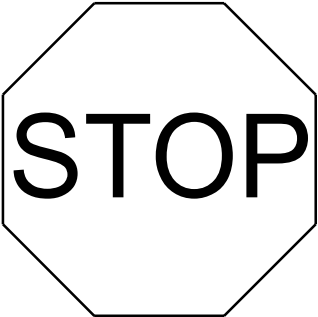
Sign No. 1
D-482



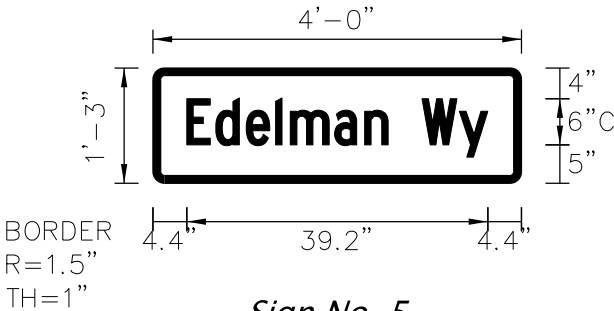
Sign No. 2



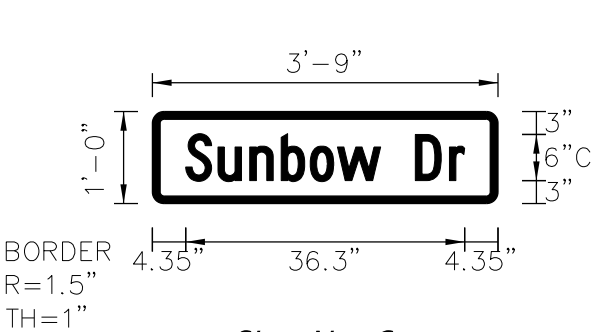
Sign No. 3



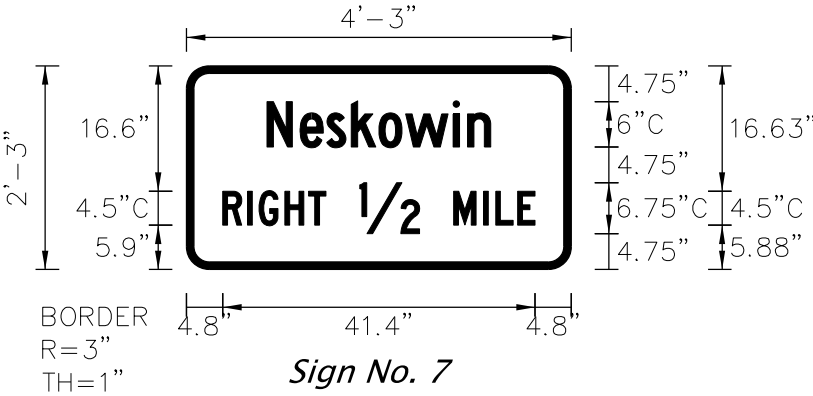
Sign No. 4
R1-1



Sign No. 5



Sign No. 6



Sign No. 7



Sign No. 8
OD-465



Sign No. 9
OD-466

NOTE:
Signs shown with broken borders are existing signs.

HWY: 009
M.P.: 97.13

UNIT FILE CODE
S-23214

DFI/TSSU NO.
N/A



RENEWS: 12-31-2026

OREGON DEPARTMENT OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Sophia Ginsbach
Reviewer: John Hampton, P.E.
Drafter: Sophia Ginsbach
Checker: Christina LaFleur, P.E.

SIGN DETAILS

SHEET NO.
LB01

SIGN & POST DATA TABLE																											
SIGN NO.	SIGN LOCATION 4/ (TM200-TM201, TM635)	SIGN DIMENSIONS		SUB-STRATE		COLOR 1/ BACKGROUND		LEGEND		SIGN NO. 2/ 3/ 4/ 5/ 6/ 7/ 8/ 9/ 10/ 11/ 12/ 13/ 14/ 15/ 16/ 17/ 18/ 19/ 20/ 21/ 22/ 23/ 24/ 25/ 26/ 27/ 28/ 29/ 30/ 31/ 32/ 33/ 34/ 35/ 36/ 37/ 38/ 39/ 40/ 41/ 42/ 43/ 44/ 45/ 46/ 47/ 48/ 49/ 50/ 51/ 52/ 53/ 54/ 55/ 56/ 57/ 58/ 59/ 60/ 61/ 62/ 63/ 64/ 65/ 66/ 67/ 68/ 69/ 70/ 71/ 72/ 73/ 74/ 75/ 76/ 77/ 78/ 79/ 80/ 81/ 82/ 83/ 84/ 85/ 86/ 87/ 88/ 89/ 90/ 91/ 92/ 93/ 94/ 95/ 96/ 97/ 98/ 99/ 100/ 101/ 102/ 103/ 104/ 105/ 106/ 107/ 108/ 109/ 110/ 111/ 112/ 113/ 114/ 115/ 116/ 117/ 118/ 119/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 128/ 129/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 138/ 139/ 140/ 141/ 142/ 143/ 144/ 145/ 146/ 147/ 148/ 149/ 150/ 151/ 152/ 153/ 154/ 155/ 156/ 157/ 158/ 159/ 160/ 161/ 162/ 163/ 164/ 165/ 166/ 167/ 168/ 169/ 170/ 171/ 172/ 173/ 174/ 175/ 176/ 177/ 178/ 179/ 180/ 181/ 182/ 183/ 184/ 185/ 186/ 187/ 188/ 189/ 190/ 191/ 192/ 193/ 194/ 195/ 196/ 197/ 198/ 199/ 200/ 201/ 202/ 203/ 204/ 205/ 206/ 207/ 208/ 209/ 210/ 211/ 212/ 213/ 214/ 215/ 216/ 217/ 218/ 219/ 220/ 221/ 222/ 223/ 224/ 225/ 226/ 227/ 228/ 229/ 230/ 231/ 232/ 233/ 234/ 235/ 236/ 237/ 238/ 239/ 240/ 241/ 242/ 243/ 244/ 245/ 246/ 247/ 248/ 249/ 250/ 251/ 252/ 253/ 254/ 255/ 256/ 257/ 258/ 259/ 260/ 261/ 262/ 263/ 264/ 265/ 266/ 267/ 268/ 269/ 270/ 271/ 272/ 273/ 274/ 275/ 276/ 277/ 278/ 279/ 280/ 281/ 282/ 283/ 284/ 285/ 286/ 287/ 288/ 289/ 290/ 291/ 292/ 293/ 294/ 295/ 296/ 297/ 298/ 299/ 300/ 301/ 302/ 303/ 304/ 305/ 306/ 307/ 308/ 309/ 310/ 311/ 312/ 313/ 314/ 315/ 316/ 317/ 318/ 319/ 320/ 321/ 322/ 323/ 324/ 325/ 326/ 327/ 328/ 329/ 330/ 331/ 332/ 333/ 334/ 335/ 336/ 337/ 338/ 339/ 340/ 341/ 342/ 343/ 344/ 345/ 346/ 347/ 348/ 349/ 350/ 351/ 352/ 353/ 354/ 355/ 356/ 357/ 358/ 359/ 360/ 361/ 362/ 363/ 364/ 365/ 366/ 367/ 368/ 369/ 370/ 371/ 372/ 373/ 374/ 375/ 376/ 377/ 378/ 379/ 380/ 381/ 382/ 383/ 384/ 385/ 386/ 387/ 388/ 389/ 390/ 391/ 392/ 393/ 394/ 395/ 396/ 397/ 398/ 399/ 400/ 401/ 402/ 403/ 404/ 405/ 406/ 407/ 408/ 409/ 410/ 411/ 412/ 413/ 414/ 415/ 416/ 417/ 418/ 419/ 420/ 421/ 422/ 423/ 424/ 425/ 426/ 427/ 428/ 429/ 430/ 431/ 432/ 433/ 434/ 435/ 436/ 437/ 438/ 439/ 440/ 441/ 442/ 443/ 444/ 445/ 446/ 447/ 448/ 449/ 450/ 451/ 452/ 453/ 454/ 455/ 456/ 457/ 458/ 459/ 460/ 461/ 462/ 463/ 464/ 465/ 466/ 467/ 468/ 469/ 470/ 471/ 472/ 473/ 474/ 475/ 476/ 477/ 478/ 479/ 480/ 481/ 482/ 483/ 484/ 485/ 486/ 487/ 488/ 489/ 490/ 491/ 492/ 493/ 494/ 495/ 496/ 497/ 498/ 499/ 500/ 501/ 502/ 503/ 504/ 505/ 506/ 507/ 508/ 509/ 510/ 511/ 512/ 513/ 514/ 515/ 516/ 517/ 518/ 519/ 520/ 521/ 522/ 523/ 524/ 525/ 526/ 527/ 528/ 529/ 530/ 531/ 532/ 533/ 534/ 535/ 536/ 537/ 538/ 539/ 540/ 541/ 542/ 543/ 544/ 545/ 546/ 547/ 548/ 549/ 550/ 551/ 552/ 553/ 554/ 555/ 556/ 557/ 558/ 559/ 560/ 561/ 562/ 563/ 564/ 565/ 566/ 567/ 568/ 569/ 570/ 571/ 572/ 573/ 574/ 575/ 576/ 577/ 578/ 579/ 580/ 581/ 582/ 583/ 584/ 585/ 586/ 587/ 588/ 589/ 590/ 591/ 592/ 593/ 594/ 595/ 596/ 597/ 598/ 599/ 600/ 601/ 602/ 603/ 604/ 605/ 606/ 607/ 608/ 609/ 610/ 611/ 612/ 613/ 614/ 615/ 616/ 617/ 618/ 619/ 620/ 621/ 622/ 623/ 624/ 625/ 626/ 627/ 628/ 629/ 630/ 631/ 632/ 633/ 634/ 635/ 636/ 637/ 638/ 639/ 640/ 641/ 642/ 643/ 644/ 645/ 646/ 647/ 648/ 649/ 650/ 651/ 652/ 653/ 654/ 655/ 656/ 657/ 658/ 659/ 660/ 661/ 662/ 663/ 664/ 665/ 666/ 667/ 668/ 669/ 670/ 671/ 672/ 673/ 674/ 675/ 676/ 677/ 678/ 679/ 680																	

1 /

BK=BLACK

BL=BLUE

BR=BROWN

FY=FLUORESCENT YELLOW

G=GREEN

O=ORANGE

P=PURPLE

R=RED

RB=RED-BLUE

W=WHITE

Y=YELLOW

YG=FLUORESCENT YELLOW-GREEN

2/
NOTE: L,C,R ARE LOCATIONS
OF POSTS FACING THE SIGN.

L = LEFT POST
C = CENTER POST
R = RIGHT POST

3/
DISTANCE FROM ALIGNMENT TO
CENTERLINE OF FOOTING, FOR
ADDITIONAL INFORMATION SEE STANDARD
DRAWINGS TM600, TM602, AND TM635

4/
NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE
EXCEPT FOR SPEED ZONES, SCHOOL ZONES, OBJECT
MARKERS AND MILEPOST MARKERS. EXACT LOCATIONS
ARE TO BE DETERMINED BY THE ENGINEER

5/
MINIMUM DEPTH OF FOOTING FOR TRIANGULAR
BASE BREAKAWAY AND MULTI-POST BREAKAWAY
INSTALLATIONS IS FOR A 2' DIAMETER FOOTING.
FOR ADDITIONAL INFORMATION SEE STANDARD
DRAWINGS TM601 AND TM602.

MINIMUM DEPTH OF FOOTING FOR TRIANGULAR
BASE BREAKAWAY AND MULTI-POST BREAKAWAY
INSTALLATIONS IS FOR A 2' DIAMETER FOOTING.
FOR ADDITIONAL INFORMATION SEE STANDARD
DRAWINGS TM601 AND TM602.

HWY: 009
M.P.: 97.13
UNIT FILE CODE
S-23215
DFI/TSSU NO.
N/A



RENEWS: 12-31-2026

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Sophia Ginsbach
 Drafter: Sophia Ginsbach
 Reviewer: John Hampton, P.E.
 Checker: Christina LaFleur, P.E.

SIGN & POST DATA TABLE

SHEET NO.
LC01

LEGEND

- W

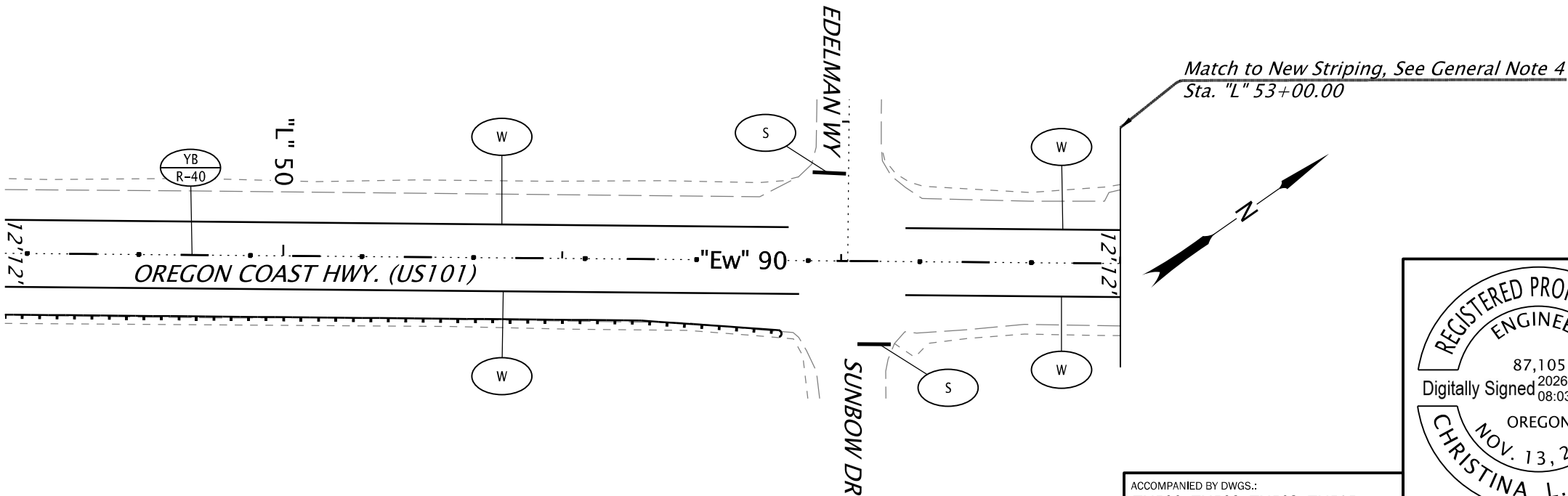
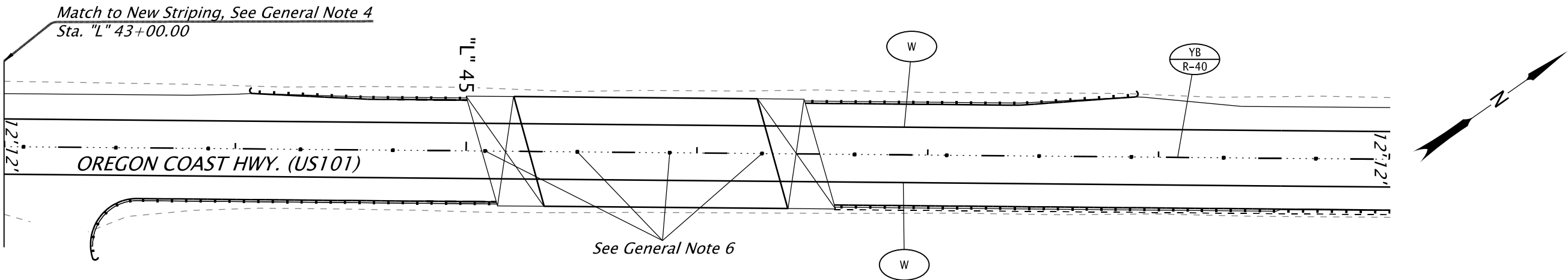
Inst. 4" white line
- YB
R-40

Inst. yellow broken line supplementation
reflectors with 4" yellow broken line
- S

Inst. stop bar 1' white bar

General Notes:

1. Match points to existing striping and station call-outs are approximate and shall be field verified.
2. All permanent pavement striping and legends are surface mounted "thermoplastic". See Sections 00840, 00855, 00865, and 00867 in the Special Provisions.
3. Contact Engineer of Record for in-depth layout details.
4. Replace pavement markings in kind from "L" 37+31.00 to "L" 43+00.00 and "L" 53+00.00 to "L" 55+45.00.
5. Type 4 Alt. 2 delineators will be installed on the new guardrail. Type 1U delineators will be replaced in kind from "L" 37+31.00 to "L" 55+45.00.
6. Recessed RPMs are not allowed to be installed on the concrete bridge deck. Install Raised Pavement Markers on the bridge deck and approach slabs.



ACCOMPANIED BY DWGS.:
TM500, TM502, TM503, TM515,
TM517, TM521, TM530, TM560,
TM561, TM570, TM571, TM576



RENEWS: 12-31-2026

OREGON DEPARTMENT
OF TRANSPORTATION



US101: BUTTE CREEK CULVERT PROJECT
OREGON COAST HIGHWAY
TILLAMOOK COUNTY

Designer: Sophia Ginsbach
Reviewer: Vanessa C. Cid
Drafter: Sophia Ginsbach
Checker: Christina LaFleur, P.E.

PAVEMENT MARKING PLAN AND DETAILS

SHEET NO.
QA01