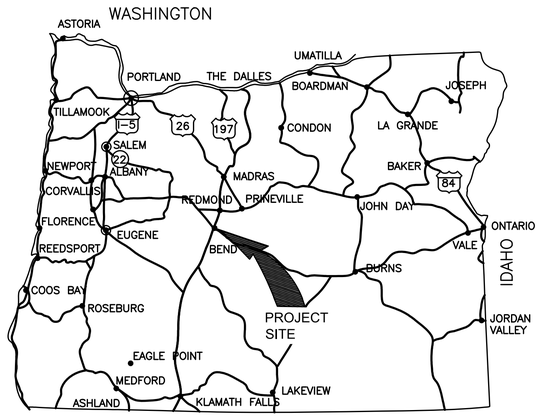
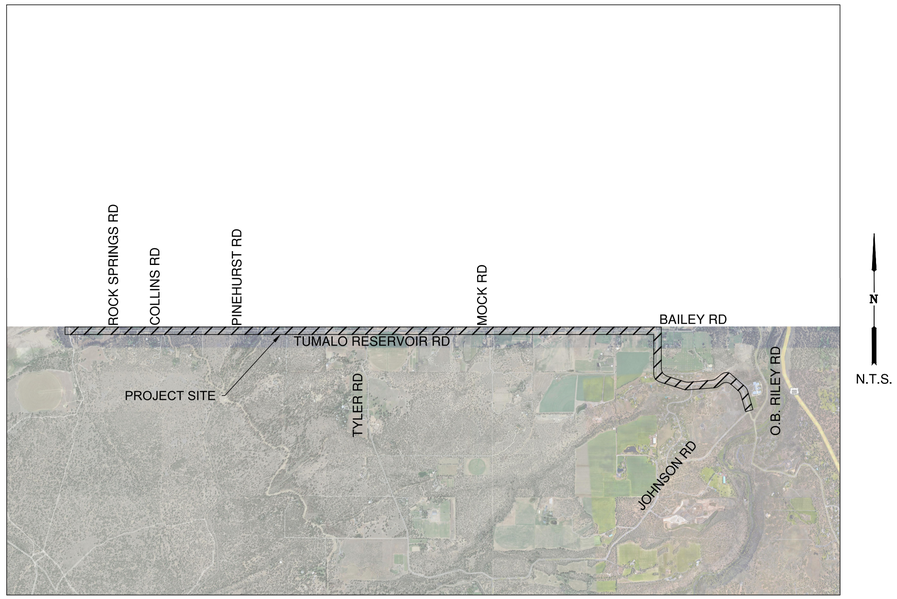
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

AUGUST 2025

VICINITY MAP



LOCATION MAP



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APPROVALS:

Cody Smith
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14:25:35-08'00'

DESCHUTES COUNTY ROAD DEPARTMENT

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
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DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

COVER SHEET

DRAWING NO. 1 OF 117
SHEET NO. G-01

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GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT SPECIAL PROVISIONS AND THE 2024 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.
2. A TOPOGRAPHICAL SURVEY WAS PERFORMED BY S&F LAND SERVICES. FIELD SURVEYS REFERENCE THE VERTICAL AND HORIZONTAL DATUMS LISTED IN THE PLANS, SURVEYS OF RECORD, AND INFORMATION OBTAINED FROM UTILITY COMPANIES.
3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT PROJECT SITE BEFORE START OF WORK. IF THE CONTRACTOR DISCOVERS DIFFERING SITE CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE AGENCY, IN WRITING, OF THE SPECIFIC DIFFERING CONDITIONS BEFORE THEY ARE DISTURBED AND BEFORE THE AFFECTED WORK IS PERFORMED. CONTRACTOR SHALL NOT CONTINUE WORK IN THE AFFECTED AREA UNTIL THE AGENCY HAS INSPECTED SUCH CONDITION ACCORDING TO OSSC 00195.30 TO DETERMINE WHETHER AN ADJUSTMENT TO CONTRACT AMOUNT OR CONTRACT TIME IS REQUIRED.
4. CONTRACTOR SHALL FOLLOW APPLICABLE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THE OREGON UTILITY NOTIFICATION CENTER CAN BE REACHED BY DIALING 811, OR ONLINE AT WWW.CALLBEFOREYOUDIG.ORG/OREGON. CONTRACTOR SHALL ALSO COMPLY WITH ALL PROVISIONS OF SECTION 00150.50 OF THE OSSC AND SPECIAL PROVISIONS.
5. ALL UTILITIES SHOWN ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE AGENCY DOES NOT GUARANTEE THE ACCURACY NOR THE COMPLETENESS OF SUCH RECORDS. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE EXCAVATING WITHIN THE TOLERANCE ZONE ACCORDING TO OAR 952-001-0090(3)(c).
6. CONTRACTOR SHALL RESTRICT ALL OPERATIONS TO THE PROJECT LIMITS. CONTRACTOR SHALL NOT ENTER ONTO PRIVATE PROPERTY WITH EQUIPMENT OR MATERIAL UNLESS WRITTEN PERMISSION IS OBTAINED FROM A PROPERTY OWNER. ANY DISRUPTION TO PRIVATE PROPERTY AND/OR LANDSCAPING OUTSIDE THE PROJECT LIMITS INDICATED ON THE PLANS SHALL BE RESTORED AT CONTRACTOR'S EXPENSE.
7. IN THE EVENT OF REMOVAL, DISTURBANCE OR DESTRUCTION OF A SURVEY MONUMENT OF RECORD, IT IS THE CONTRACTOR'S RESPONSIBILITY TO RE-ESTABLISH THE MONUMENT ACCORDING TO OSSC 00170.82. THE CONTRACTOR SHALL NOTIFY THE COUNTY SURVEYOR OF MONUMENT DISTURBANCE TO COORDINATE NECESSARY RESTORATION REQUIREMENTS.
8. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY ACCORDING TO OSSC 00170.60. DESCHUTES COUNTY AND THEIR REPRESENTATIVES AND OFFICIALS SHALL NOT BE RESPONSIBLE FOR ENFORCING SAFETY REGULATIONS.
9. CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. THIS INCLUDES PROVIDING A CLEAR AND UNOBSTRUCTED ROUTE FOR EMERGENCY VEHICLES TO SAFELY PASS THROUGH THE WORK ZONE. WHEN EMERGENCY ACCESS IS NOT POSSIBLE, THE CONTRACTOR MUST COORDINATE WITH LOCAL EMERGENCY SERVICES TO ENSURE THAT ANY RESTRICTIONS ARE COMMUNICATED TO THE APPROPRIATE EMS PROVIDERS.
10. CONTRACTOR SHALL COORDINATE AND ACCOMMODATE OTHER CONTRACTORS PERFORMING WORK IN THE AREA INCLUDING, BUT NOT LIMITED TO: CONSTRUCTION CONTRACTORS IN THE AREA, UTILITY COMPANIES, IRRIGATION DISTRICTS AND/OR COUNTY MAINTENANCE CREWS.
11. CONTRACTOR SHALL CONDUCT PRE-CONSTRUCTION SURVEY ACCORDING TO ODOT CONSTRUCTION SURVEYING MANUAL FOR CONTRACTORS, CHAPTER 7, PRIOR TO BEGINNING WORK ONSITE.
12. UTILITIES, OR INTERFERING PORTIONS OF UTILITIES, THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK, OR AS DIRECTED.
13. ALL EXISTING TREES ARE TO BE PROTECTED IN PLACE, UNLESS NOTED OTHERWISE. IF NOTED, DEMO & REMOVE EXISTING TREES AND VEGETATION WHERE IT IS IN CONFLICT WITH OR IS IMPACTED BY PROPOSED IMPROVEMENTS TO THE EXTENT THAT NO ROOTS ARE LEFT IN PLACE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DISPOSE OF ALL VEGETATION OFF SITE.
14. CONTRACTOR SHALL NOTIFY RESIDENTS AND/OR BUSINESSES WITHIN THE PROJECT LIMITS AND AFFECTED AREAS WITHIN TWO BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION BY PROVIDING WRITTEN NOTICE TO THE AFFECTED RESIDENTS SUMMARIZING THE NATURE OF THE IMPACTS AND LISTING THE CONTRACTORS CONTACT INFORMATION.
15. CONTRACTOR SHALL RESTRICT ALL OPERATIONS TO THE AREAS WITHIN THE PROJECT BOUNDARIES. ANY DISRUPTION TO NATIVE LANDSCAPES, OUTSIDE OF THE PROJECT AREA, SHALL BE RESTORED AT NO COST TO THE AGENCY.
16. ALL FINAL CUT SLOPES SHALL NOT EXCEED A GRADE OF 1 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE APPROVED. FILL SLOPES SHALL NOT EXCEED A GRADE OF 1 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE APPROVED BY THE ENGINEER OR SHOWN ON THESE PLANS.
17. THE CONTRACTOR SHALL EMPLOY ALL LABOR, EQUIPMENT, AND METHODS REQUIRED TO PREVENT DUST IN AMOUNTS DAMAGING TO PROPERTY, CULTIVATED VEGETATION AND DOMESTIC ANIMALS, OR CAUSING A NUISANCE TO PERSONS OCCUPYING BUILDINGS IN THE VICINITY OF THE JOB SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST RESULTING FROM CONSTRUCTION.
18. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE INDUSTRIAL SAFETY REGULATIONS. DESCHUTES COUNTY AND THEIR OFFICIALS, THE ENGINEER, AND THE OWNER SHALL NOT BE RESPONSIBLE FOR ENFORCING SAFETY REGULATIONS.
19. MATERIAL QUANTITIES USED, NOTED, OR PROVIDED IN A SEPARATE ITEMIZED QUANTITY TAKE-OFF ARE AN ENGINEER'S OPINION OF PROBABLE MATERIAL REQUIREMENTS, AND ARE AN ESTIMATE ONLY. CONTRACTORS HAVE THE SOLE RESPONSIBILITY OF MAKING THEIR OWN QUANTITY TAKE-OFF AND COST ESTIMATE.
20. CONTRACTOR SHALL PROTECT IN PLACE EXISTING ADDRESS MARKERS. SHOULD MARKERS CONFLICT WITH CONSTRUCTION, CONTRACTOR SHALL REMOVE AND REINSTALL AT LOCATION APPROVED BY THE ENGINEER.

LEGEND - LINETYPES

	EXISTING	PROPOSED
RIGHT OF WAY		
EASEMENT		
TAXLOTS		
STORMWATER CULVERT	SD SD	SD SD
WATER LINE	W W	
OVERHEAD WIRE	OHP	
UNDERGROUND COMM LINE	COMM	
UNDERGROUND IRRIGATION LINE	IRR IRR	
UNDERGROUND ELECTRIC LINE	E E	
UNDERGROUND ELECTRIC LINE (ABANDONED)	E E	
EDGE OF ASPHALT		
CONTOUR (MINOR)	3519	3519
CONTOUR (MAJOR)	3520	3520
BARBED WIRE FENCE	*	x x x
SPLITRAIL FENCE		x x x
MISCELLANEOUS FENCE	X	x x x
MISCELLANEOUS GATE		
GUARDRAIL		
EDGE OF GRAVEL		
GRADING LIMITS - CUT	C C C	C C C
GRADING LIMITS - FILL	F F F	F F F
SEDIMENT FENCE	SF SF SF	SF SF SF
WALL		
LANDSCAPING/RETAINING WALL ROCKS		
EDGE OF CONCRETE		
ASPHALT PAVEMENT		
ASPHALT PAVEMENT (WITHIN EXISTING ROADWAY LIMITS)		
GRAVEL (SURFACING)		
WATER QUALITY MIXTURE		
RIP RAP		

LEGEND - SYMBOLS

	EXISTING	PROPOSED
MONITORING WELL	MW	
IRRIGATION VALVE	ICV	
IRRIGATION METER		
IRRIGATION STANDPIPE		
IRRIGATION MANHOLE		
POWER VAULT		
POWER METER		
POWER TRANSFORMER		
POWER CABINET	PCAB	
TELEPHONE VAULT	T	
TELEPHONE PEDESTAL	T	
TELEPHONE RISER	TV	
GUY WIRE		
UTILITY POLE		
SINGLE POST SIGN		
CONIFEROUS TREE		
JUNIPER TREE		
DECIDUOUS TREE		
SURVEY CONTROL POINT		
FOUND MONUMENT		
MAILBOX	MB	
UNKNOWN VAULT	U	
UNKNOWN RISER	UR	
UNKNOWN MANHOLE		
CLEANOUT	UCO	
WATER VALVE	WV	
WATER AIR RELEASE VALVE		
WATER METER		
WATER MANHOLE		
GATE POST		

ABBREVIATIONS

ACP	ASPHALT CONCRETE PAVEMENT
BCVS	BEGIN VERTICAL CURVE STATION
BCVE	BEGIN VERTICAL CURVE ELEVATION
CL	CENTERLINE
DI	DUCTILE IRON
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
FDR	FULL DEPTH RECLAMATION
GB	GRADE BREAK
IE	INVERT ELEVATION
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY/POINT
PVI	POINT OF VERTICAL INTERSECTION
STA	STATION
VC	VERTICAL CURVE

POTENTIAL UNDERGROUND FACILITY OWNERS "ONE CALL" UTILITY NOTIFICATION CENTER 1-800-332-2344 OR 811

CALL BEFORE YOU DIG

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER 87553PE OREGON NOV. 13, 2018 ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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TUMALO RESERVOIR ROAD IMPROVEMENT

GENERAL NOTES, ABBREVIATIONS, & LEGEND

DRAWING NO. 2 OF 117
SHEET NO. G-02

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TM850	2-LANE, 2-WAY ROADWAYS
TM855	2-LANE, 2-WAY ROADWAYS

DESCHUTES COUNTY ROAD DEPARTMENT

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87553PE
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NOV. 13, 2018
ALEC VEIKKO FRANSEN
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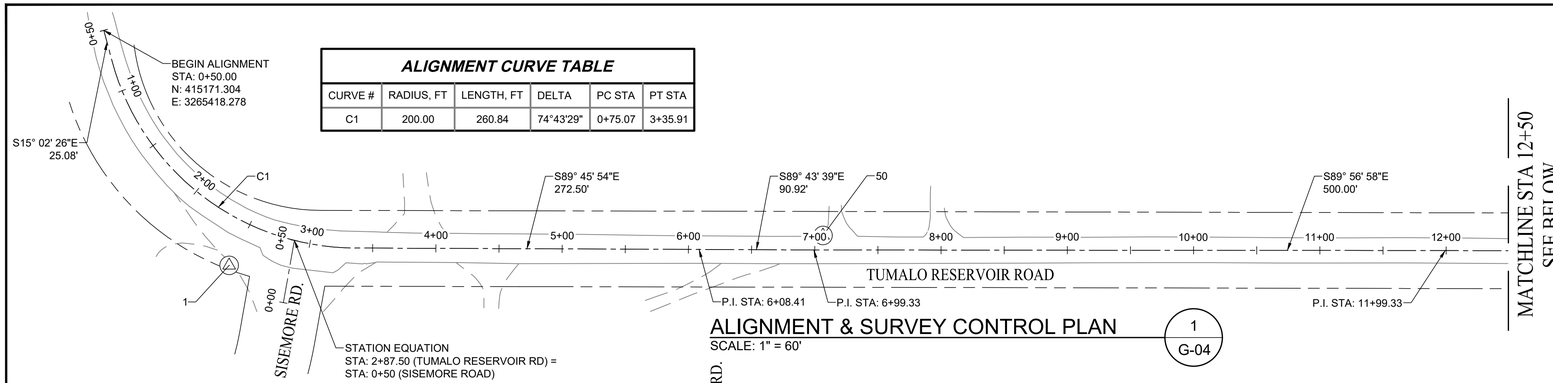
SHEET NO. G-03

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\G-01 COVER SHEET.dwg

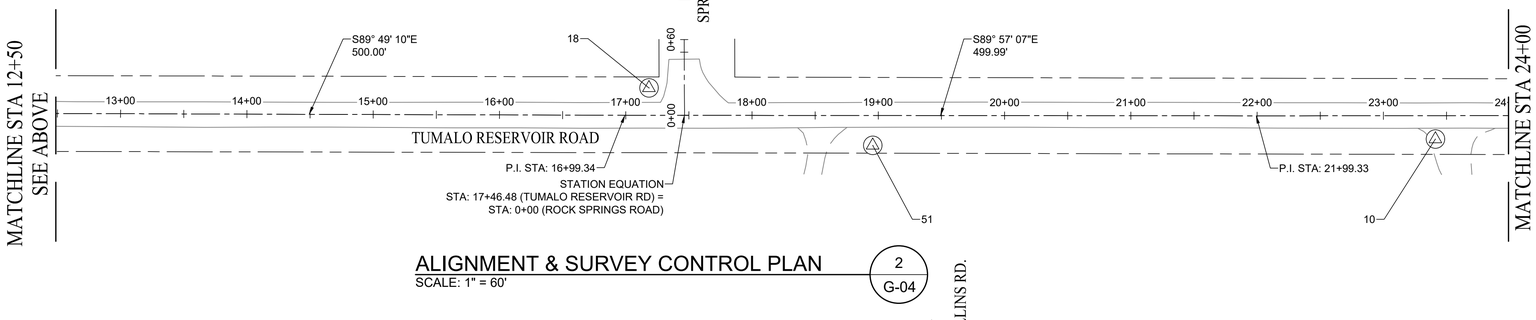


ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

1 / G-04

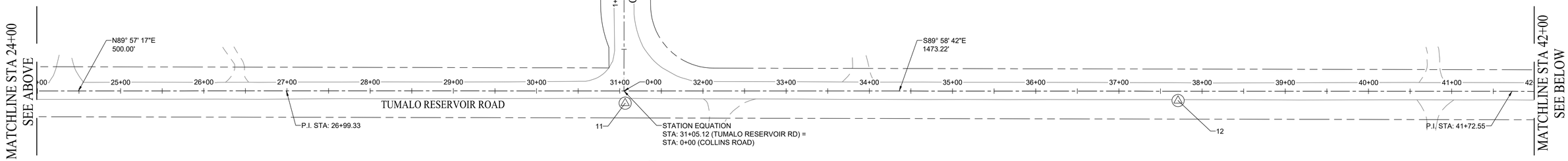
ALIGNMENT CURVE TABLE					
CURVE #	RADIUS, FT	LENGTH, FT	DELTA	PC STA	PT STA
C1	200.00	260.84	74°43'29"	0+75.07	3+35.91



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

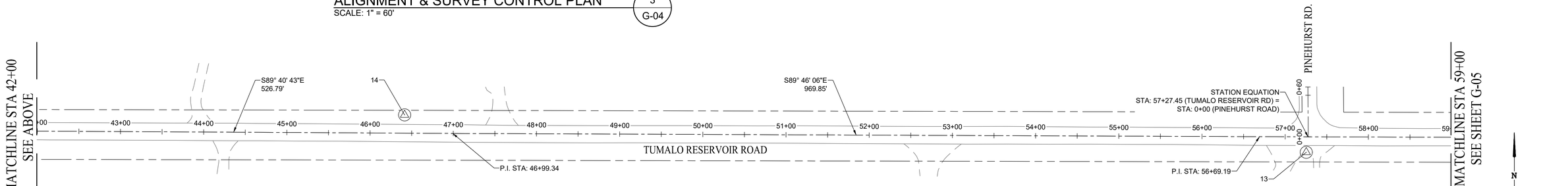
2 / G-04



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

3 / G-04



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

4 / G-04

60 0 60 120

SCALE OF FEET
SCALE: 1"=60'

CONTROL POINT DATA TABLE						
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STATION	OFFSET
1	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414985.215'	3265517.500'	3527.64'	2+49.17'	36.75' (RT)
10	12" SPIKE	414976.630'	3267622.345'	3520.76'	23+41.13'	18.49' (RT)
11	HUB AND TACK	414980.606'	3268387.652'	3524.28'	31+06.46'	14.64' (RT)
12	HUB AND TACK	414983.636'	3269052.239'	3517.19'	37+71.05'	11.36' (RT)
13	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414969.212'	3271006.460'	3500.52'	57+25.34'	18.59' (RT)
14	5/8" IRON ROD IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	415014.130'	3269922.644'	3510.51'	46+41.33'	-21.91' (LT)
18	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	415017.110'	3266999.592'	3517.17'	17+18.38'	-21.70' (LT)
50	MAG NAIL WITH 1-1/2 INCH WASHER STAMPED "S&F LANDS CONTROL"	415008.914'	3265987.708'	3522.14'	7+06.50'	-11.48' (LT)
51	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414971.625'	3267176.768'	3520.76'	18+95.59'	23.64' (RT)

NOTES:

HORIZONTAL DATUM: NAD83(91) BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION. DISTANCES ARE AT GROUND, INTERNATIONAL FEET.

VERTICAL DATUM: NGVD29 BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION.

CONTRACTOR SHALL OBSERVE REQUIREMENTS OF OSSC 00170.82(C) WITH RESPECT TO SURVEY MONUMENTS. CONTACT COUNTY SURVEYOR TO COORDINATE RESTORATION OF DISTURBED MONUMENTS.

SEE ACCOMPANYING RIGHT-OF-WAY SURVEY FOR DETAILED INFORMATION ON PUBLIC LAND SURVEY MONUMENTS.

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

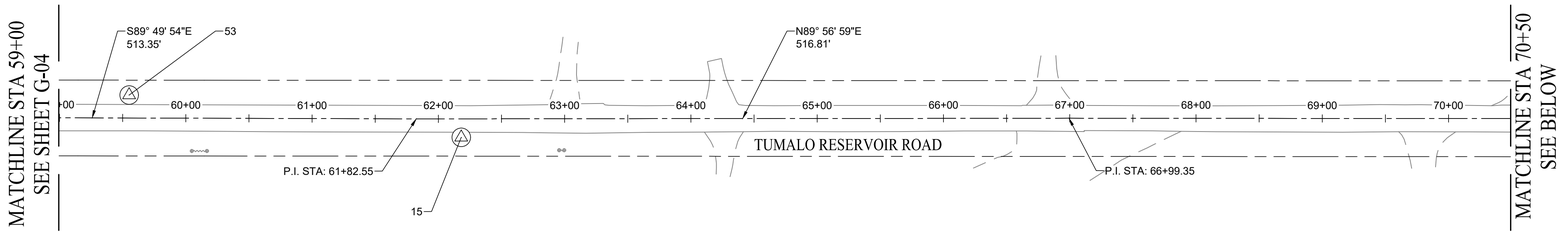
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ALIGNMENT & SURVEY CONTROL PLAN
STA 0+50 TO STA 59+00

DRAWING NO. 4 OF 117
SHEET NO. G-04

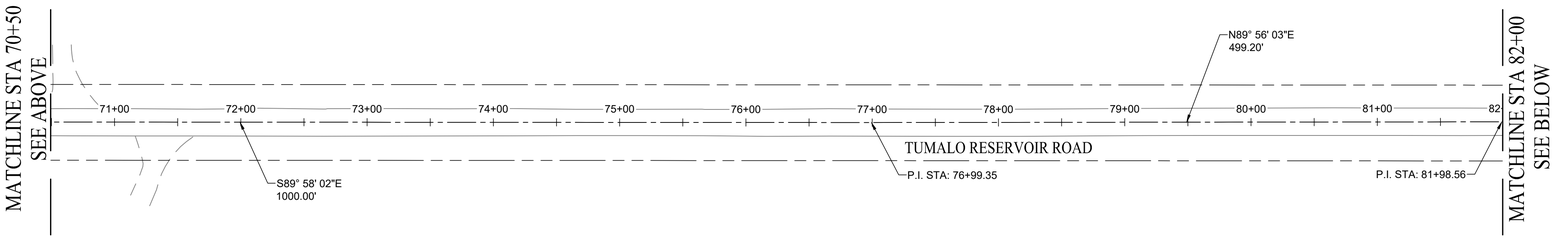
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\G-04 SURVEY CONTROL PLAN.dwg



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

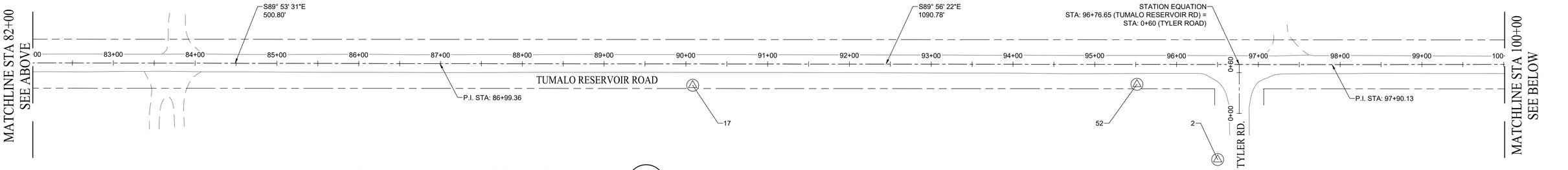
1 G-05



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

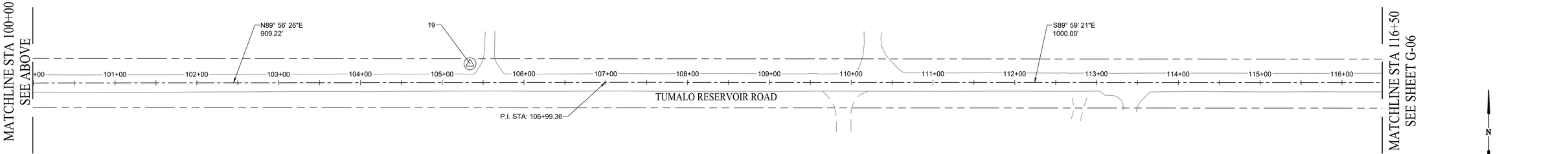
2 G-05



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

3 G-05



ALIGNMENT & SURVEY CONTROL PLAN

SCALE: 1" = 60'

4 G-05

N

60 0 60 120

SCALE OF FEET
SCALE: 1"=60'

CONTROL POINT DATA TABLE						
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STATION	OFFSET
2	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414868.503'	3274931.405'	3458.63'	96+50.35'	116.47' (RT)
15	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414971.802'	3271499.288'	3498.86'	62+18.10'	14.69' (RT)
17	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414959.512'	3274289.501'	3471.24'	90+08.35'	26.14' (RT)
19	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	415008.615'	3275815.078'	3418.14'	105+33.93'	-23.02' (LT)
52	HUB AND TACK	414960.706'	3274832.739'	3461.40'	95+51.59'	24.37' (RT)
53	60D NAIL	415005.303'	3271236.291'	3504.07'	59+55.06'	-18.17' (LT)

NOTES:

HORIZONTAL DATUM: NAD83(91) BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION. DISTANCES ARE AT GROUND, INTERNATIONAL FEET.

VERTICAL DATUM: NGVD29 BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION.

CONTRACTOR SHALL OBSERVE REQUIREMENTS OF OSSC 00170.82(C) WITH RESPECT TO SURVEY MONUMENTS. CONTACT COUNTY SURVEYOR TO COORDINATE RESTORATION OF DISTURBED MONUMENTS.

SEE ACCOMPANYING RIGHT-OF-WAY SURVEY FOR DETAILED INFORMATION ON PUBLIC LAND SURVEY MONUMENTS.

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ALIGNMENT & SURVEY CONTROL PLAN
STA 59+00 TO STA 116+50

DRAWING NO. 5 OF 117
SHEET NO. G-05

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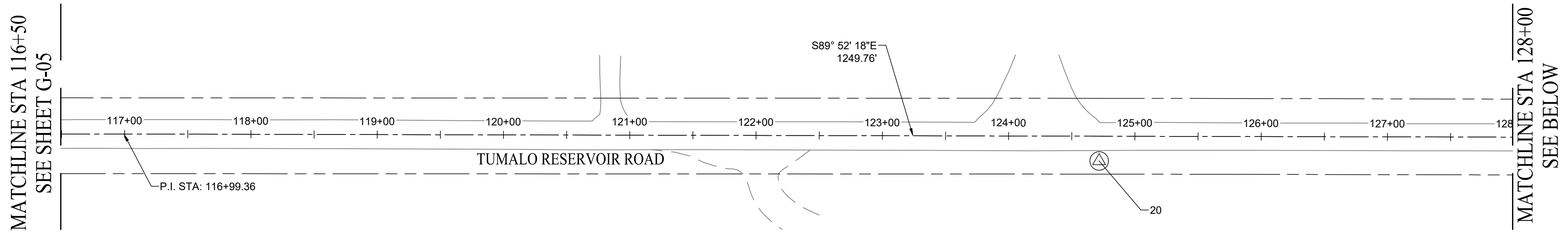
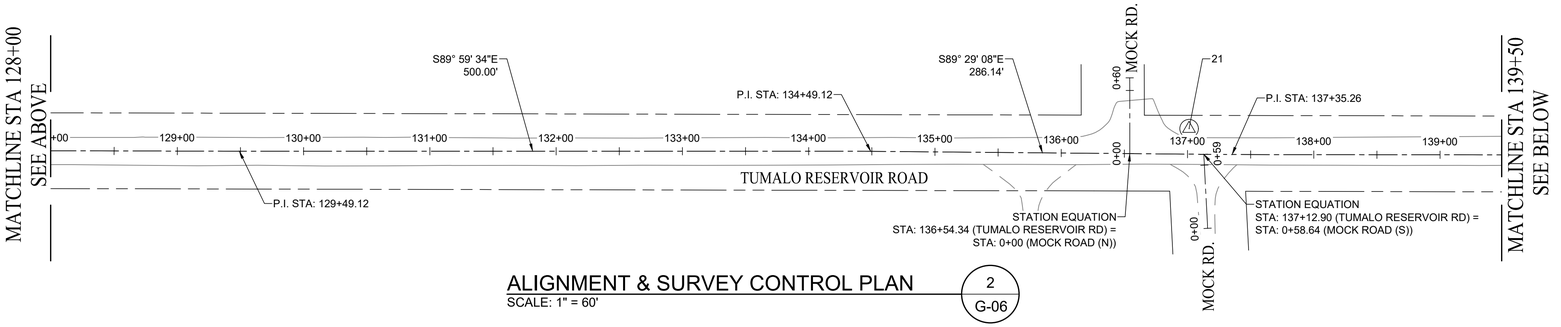


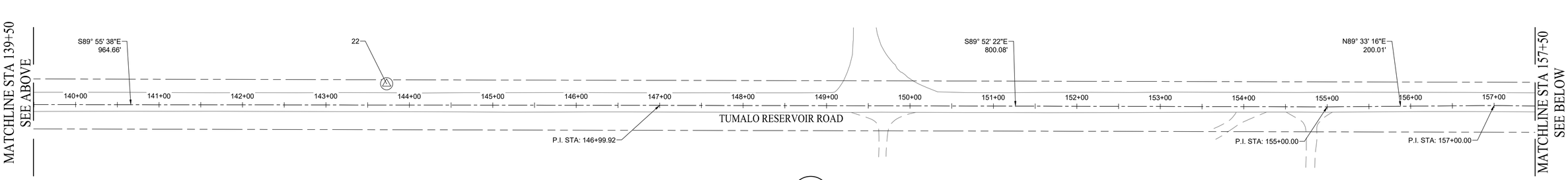
ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

1
G-06



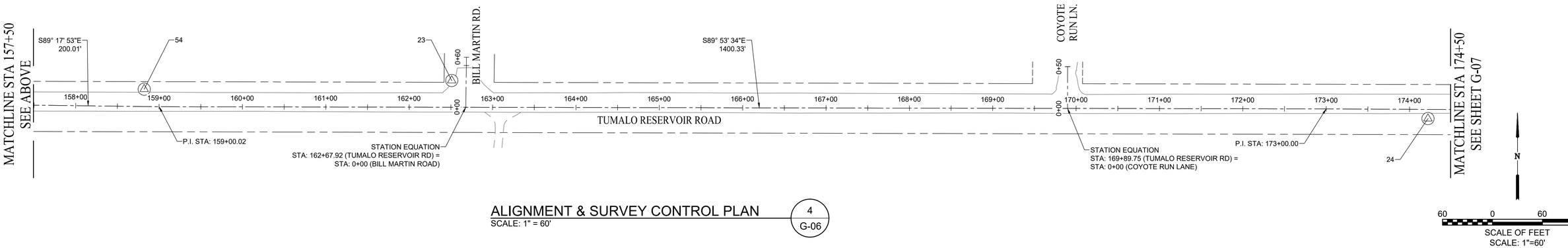
ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

2
G-06



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

3
G-06



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

4
G-06

CONTROL POINT DATA TABLE						
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STATION	OFFSET
20	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414964.250'	3277752.835'	3430.62'	124+71.71'	19.60' (RT)
21	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	415000.574'	3278982.318'	3382.30'	137+01.13'	-17.46' (LT)
22	HUB AND TACK	415004.850'	3279653.892'	3380.81'	143+72.71'	-22.18' (LT)
23	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	415007.610'	3281532.164'	3328.27'	162+50.94'	-26.08' (LT)
24	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	414961.988'	3282703.199'	3370.59'	174+22.05'	17.89' (RT)
54	60D NAIL	414997.228'	3281163.247'	3346.73'	158+82.04'	-14.88' (LT)

NOTES:

HORIZONTAL DATUM: NAD83(91) BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION. DISTANCES ARE AT GROUND, INTERNATIONAL FEET.

VERTICAL DATUM: NGVD29 BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION.

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SEE ACCOMPANYING RIGHT-OF-WAY SURVEY FOR DETAILED INFORMATION ON PUBLIC LAND SURVEY MONUMENTS.

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ALIGNMENT & SURVEY CONTROL PLAN
STA 116+50 TO STA 174+50

DRAWING NO. 6 OF 117
SHEET NO. G-06

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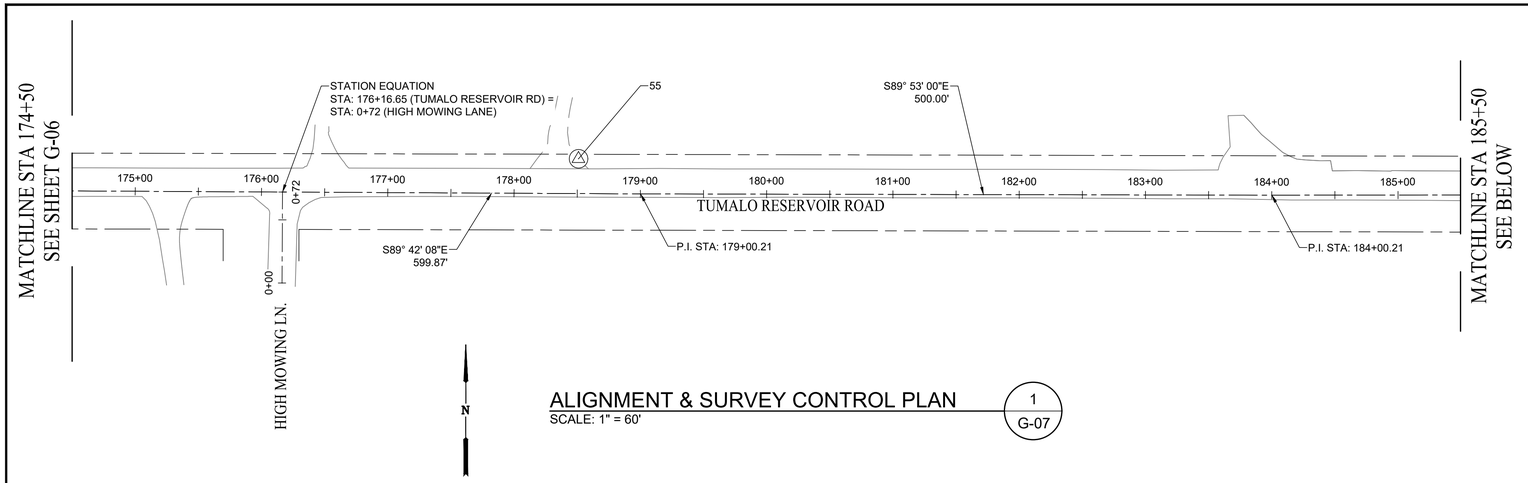

ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'
1
G-07

CONTROL POINT DATA TABLE						
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STATION	OFFSET
25	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	415000.061'	3284212.320'	3372.80'	189+30.68'	-28.83' (LT)
26	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	413442.780'	3284300.678'	3358.43'	215+67.65'	46.63' (RT)
55	60D NAIL	414998.293'	3283132.114'	3371.02'	178+50.91'	-18.97' (LT)

NOTES:

HORIZONTAL DATUM: NAD83(91) BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION. DISTANCES ARE AT GROUND, INTERNATIONAL FEET.

VERTICAL DATUM: NGVD29 BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION.

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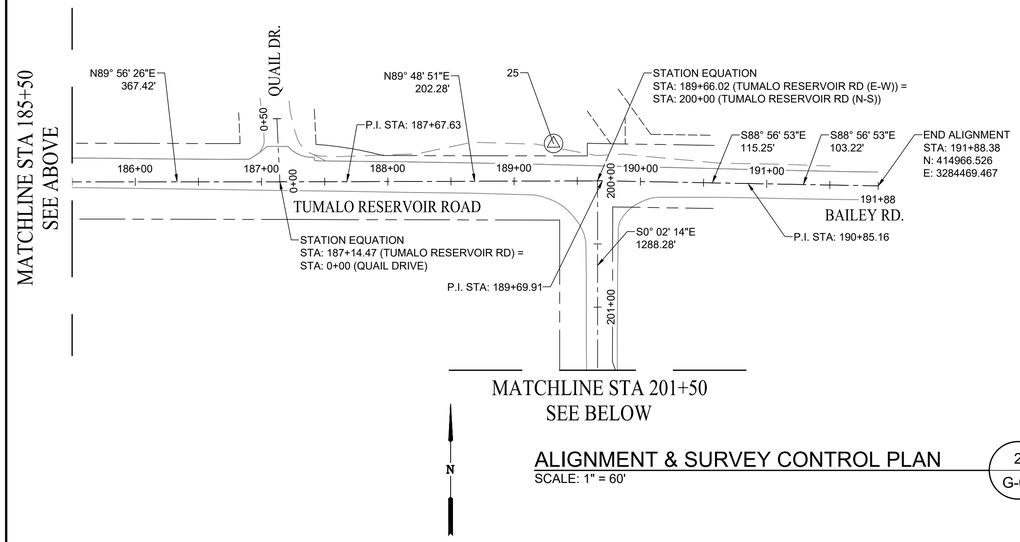
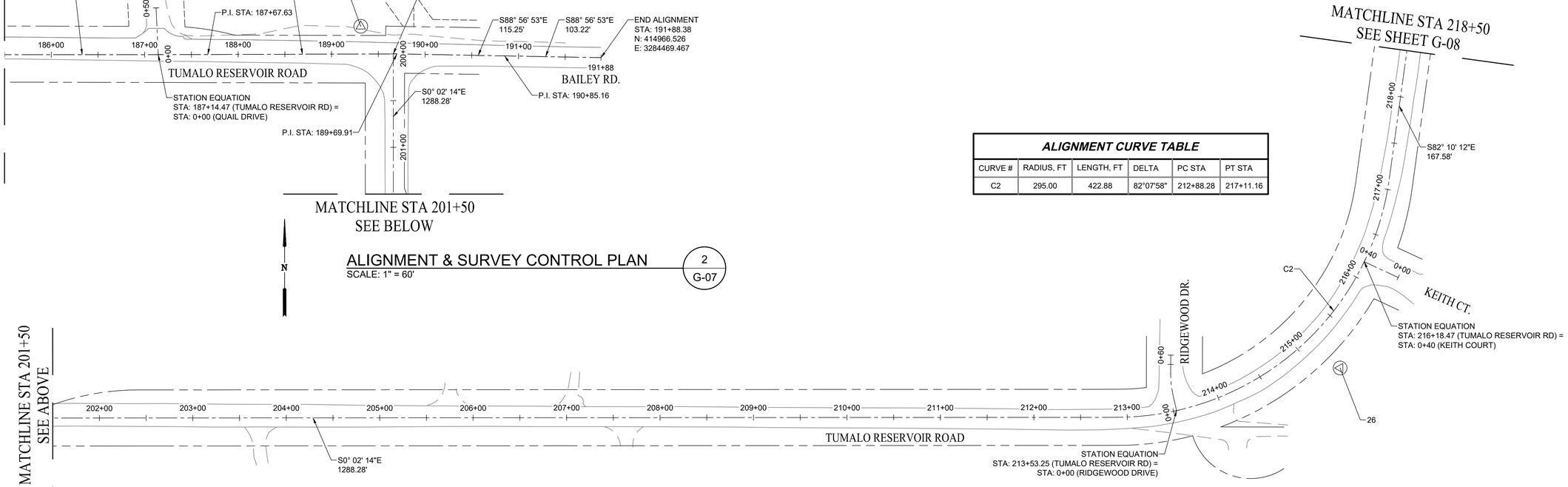
SEE ACCOMPANYING RIGHT-OF-WAY SURVEY FOR DETAILED INFORMATION ON PUBLIC LAND SURVEY MONUMENTS.



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'
2
G-07

ALIGNMENT CURVE TABLE					
CURVE #	RADIUS, FT	LENGTH, FT	DELTA	PC STA	PT STA
C2	295.00	422.88	82°07'58"	212+88.28	217+11.16



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'
3
G-07

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ■■■■■ 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

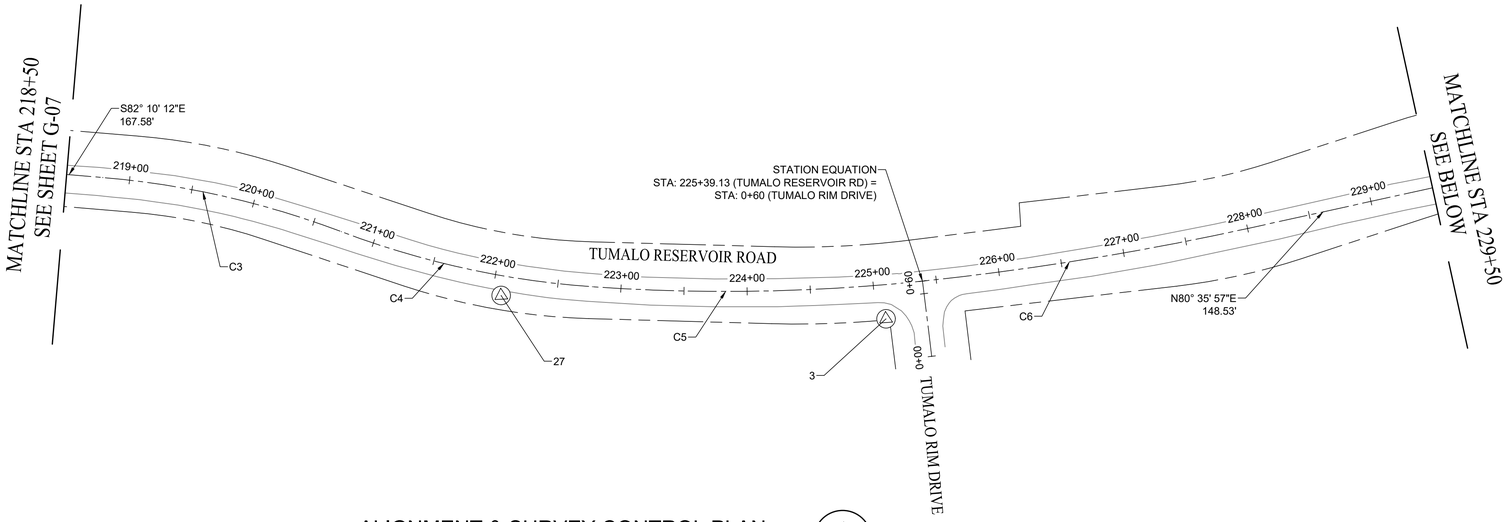
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ALIGNMENT & SURVEY CONTROL PLAN
STA 174+50 TO STA 218+50

DRAWING NO. 7 OF 117
SHEET NO. G-07

X:\Projects\Deschutes County\Tumalo Reservoir Road\CADD_WORKING\G-04 SURVEY CONTROL PLAN.dwg



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

1
G-08

CONTROL POINT DATA TABLE						
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STATION	OFFSET
3	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	413223.157'	3285282.259'	3307.72'	225+55.67'	29.11' (RT)
27	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	413257.522'	3284978.957'	3324.26'	222+56.30'	18.66' (RT)

NOTES:

HORIZONTAL DATUM: NAD83(91) BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION. DISTANCES ARE AT GROUND, INTERNATIONAL FEET.

VERTICAL DATUM: NGVD29 BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION.

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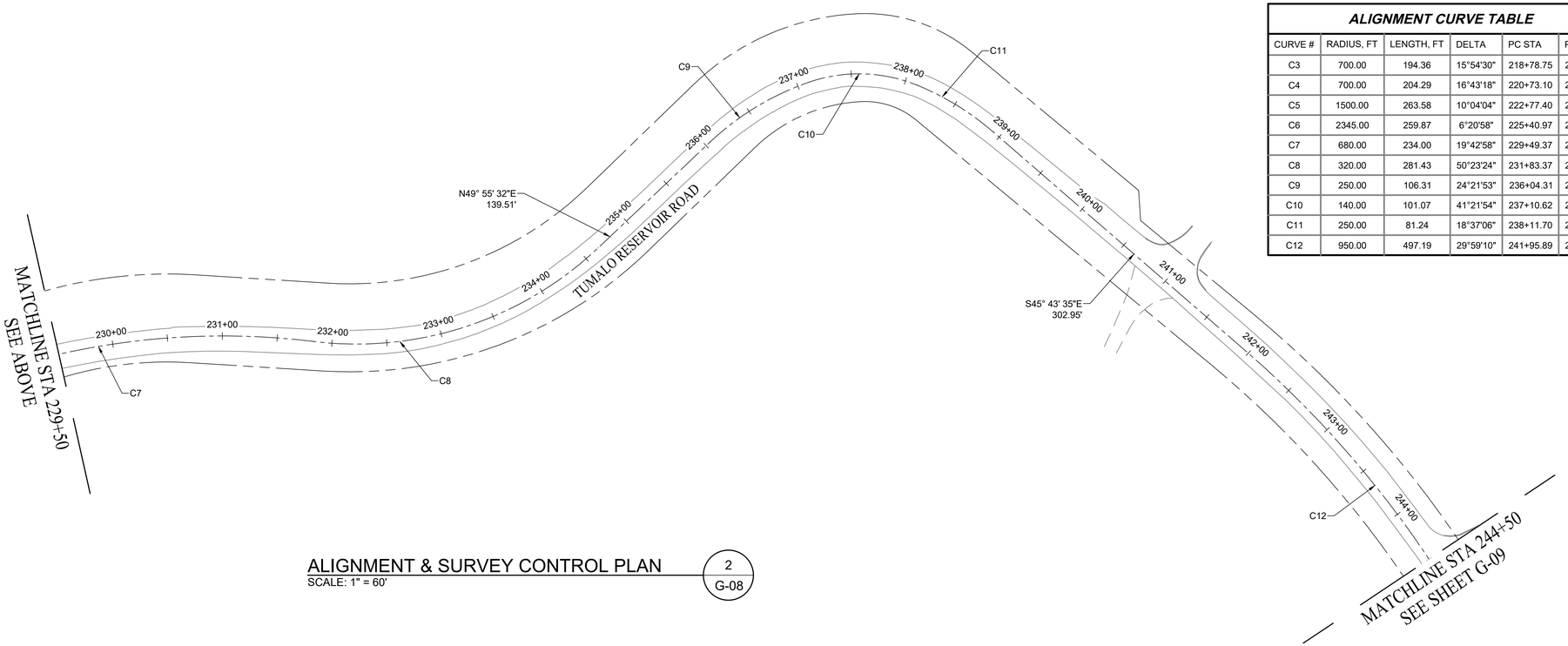
SEE ACCOMPANYING RIGHT-OF-WAY SURVEY FOR DETAILED INFORMATION ON PUBLIC LAND SURVEY MONUMENTS.



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

2
G-08

ALIGNMENT CURVE TABLE					
CURVE #	RADIUS, FT	LENGTH, FT	DELTA	PC STA	PT STA
C3	700.00	194.36	15°54'30"	218+78.75	220+73.10
C4	700.00	204.29	16°43'18"	220+73.10	222+77.40
C5	1500.00	263.58	10°04'04"	222+77.40	225+40.97
C6	2345.00	259.87	6°20'58"	225+40.97	228+00.84
C7	680.00	234.00	19°42'58"	229+49.37	231+83.37
C8	320.00	281.43	50°23'24"	231+83.37	234+64.80
C9	250.00	106.31	24°21'53"	236+04.31	237+10.62
C10	140.00	101.07	41°21'54"	237+10.62	238+11.70
C11	250.00	81.24	18°37'06"	238+11.70	238+92.93
C12	950.00	497.19	29°59'10"	241+95.89	246+93.08

N

60 0 60 120

SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

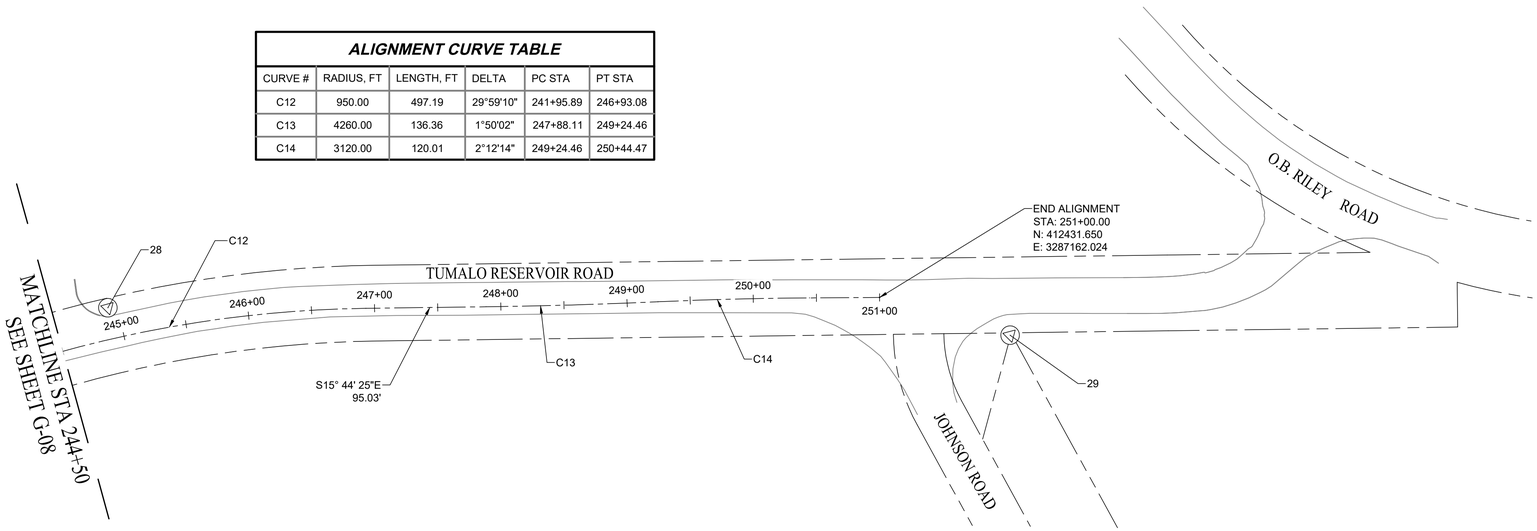
ALIGNMENT & SURVEY CONTROL PLAN
STA 218+50 TO STA 244+50

DRAWING NO.
8 OF 117

SHEET NO.
G-08

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKINGS\G-04 SURVEY CONTROL PLAN.dwg

ALIGNMENT CURVE TABLE					
CURVE #	RADIUS, FT	LENGTH, FT	DELTA	PC STA	PT STA
C12	950.00	497.19	29°59'10"	241+95.89	246+93.08
C13	4260.00	136.36	1°50'02"	247+88.11	249+24.46
C14	3120.00	120.01	2°12'14"	249+24.46	250+44.47



ALIGNMENT & SURVEY CONTROL PLAN
SCALE: 1" = 60'

1
G-09

CONTROL POINT DATA TABLE						
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STATION	OFFSET
28	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	413019.814'	3286995.967'	3247.97'	245+45.97'	-22.42' (LT)
29	5/8" IRON ROD WITH RED PLASTIC CAP STAMPED "S&F LANDS CONTROL"	412324.117'	3287159.855'	3220.51'	252+56.83'	31.90' (RT)

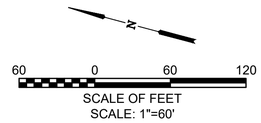
NOTES:

HORIZONTAL DATUM: NAD83(91) BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION. DISTANCES ARE AT GROUND, INTERNATIONAL FEET.

VERTICAL DATUM: NGVD29 BASED ON THE CENTRAL OREGON COORDINATE SYSTEM (COCS) DERIVED FROM A LEAST SQUARES ADJUSTED STATIC NETWORK HOLDING COCS CONTROL POINT GIS 016 AND THE OREGON REAL-TIME GNSS NETWORK (ORGN) BEND MAINTENANCE STATION.

CONTRACTOR SHALL OBSERVE REQUIREMENTS OF OSSC 00170.82(C) WITH RESPECT TO SURVEY MONUMENTS. CONTACT COUNTY SURVEYOR TO COORDINATE RESTORATION OF DISTURBED MONUMENTS.

SEE ACCOMPANYING RIGHT-OF-WAY SURVEY FOR DETAILED INFORMATION ON PUBLIC LAND SURVEY MONUMENTS.



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
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SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ALIGNMENT & SURVEY CONTROL PLAN
STA 244+50 TO STA 251+00

DRAWING NO. 9 OF 117
SHEET NO. G-09

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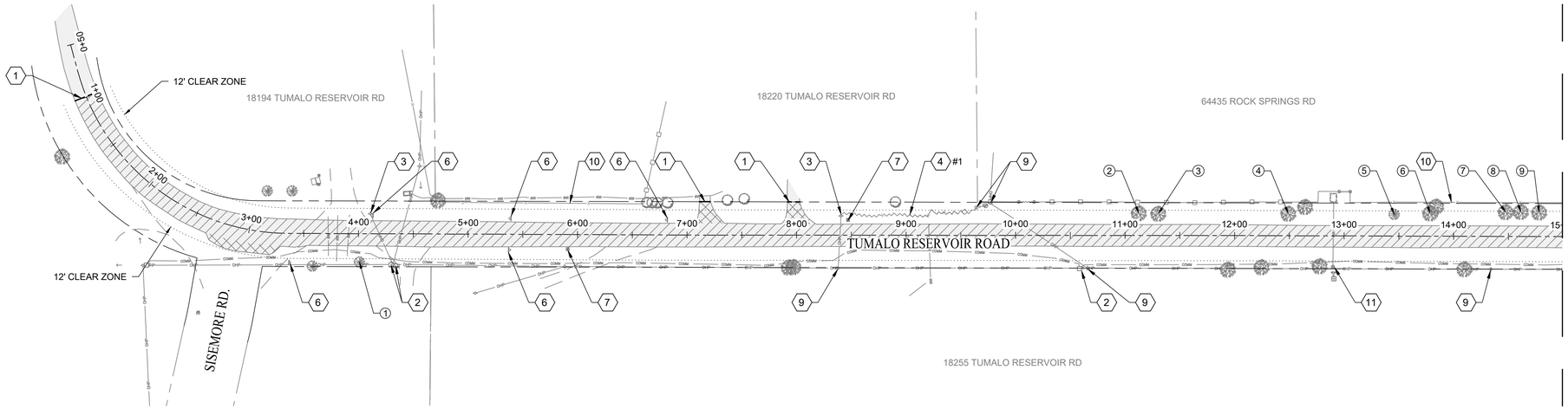
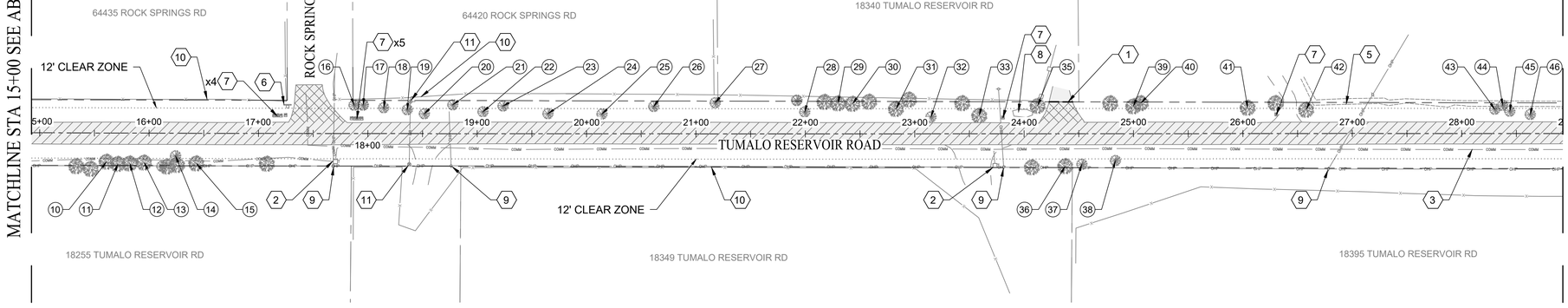


DEMOLITION PLAN
SCALE: 1" = 60'

1
G-10



DEMOLITION PLAN
SCALE: 1" = 60'

2
G-10

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
1	STA 4+00.89	25.88' (RT)	TREE (CNFR 8" DBH)
2	STA 11+12.51	-20.32' (LT)	TREE (JPR 15" DBH)
3	STA 11+30.30	-19.88' (LT)	TREE (JPR 16" DBH)
4	STA 12+49.02	-20.14' (LT)	TREE (JPR 12" DBH)
5	STA 13+45.64	-19.87' (LT)	TREE (CNFR 22" DBH)
6	STA 13+78.54	-20.85' (LT)	TREE (JPR 16" DBH)
7	STA 14+47.50	-22.22' (LT)	TREE (JPR 16" DBH)
8	STA 14+61.38	-22.44' (LT)	TREE (JPR 14" DBH)
9	STA 14+78.03	-21.97' (LT)	TREE (JPR 10" DBH)
10	STA 15+61.31	26.17' (RT)	TREE (JPR 10" DBH)
11	STA 15+71.69	28.13' (RT)	TREE (JPR 10" DBH)
12	STA 15+82.44	27.73' (RT)	TREE (JPR 8" DBH)
13	STA 15+95.57	26.84' (RT)	TREE (JPR 8" DBH)
14	STA 16+24.32	20.71' (RT)	TREE (CNFR SIZE UNKNOWN)
15	STA 16+43.33	27.45' (RT)	TREE (JPR 20" DBH)
16	STA 17+87.42	-25.88' (LT)	TREE (JPR 22" DBH)
17	STA 17+95.69	-26.05' (LT)	TREE (CNFR SIZE UNKNOWN)
18	STA 18+14.51	-23.61' (LT)	TREE (CNFR 20" DBH)
19	STA 18+36.05	-21.80' (LT)	TREE (CNFR 20" DBH)
20	STA 18+51.69	-18.15' (LT)	TREE (CNFR 30" DBH)
21	STA 18+77.67	-26.33' (LT)	TREE (CNFR 16" DBH)
22	STA 19+05.25	-19.94' (LT)	TREE (CNFR 26" DBH)
23	STA 19+23.59	-25.27' (LT)	TREE (CNFR 14" DBH)
24	STA 19+64.68	-18.31' (LT)	TREE (CNFR 16" DBH)
25	STA 20+14.08	-18.00' (LT)	TREE (CNFR 32" DBH)
26	STA 20+61.37	-24.95' (LT)	TREE (CNFR 18" DBH)
27	STA 21+17.57	-28.35' (LT)	TREE (CNFR 26" DBH)
28	STA 21+99.47	-20.04' (LT)	TREE (CNFR 27" DBH)
29	STA 22+29.95	-27.97' (LT)	TREE (JPR 12" DBH)
30	STA 22+43.17	-27.47' (LT)	TREE (JPR 15" DBH)
31	STA 22+82.86	-22.75' (LT)	TREE (JPR 13" DBH)
32	STA 23+14.86	-15.44' (LT)	TREE (CNFR 16" DBH)
33	STA 23+59.04	-16.49' (LT)	TREE (JPR 6" DBH)
35	STA 24+12.44	-25.47' (LT)	TREE (JPR 12" DBH)
34	STA 24+12.44	-25.47' (LT)	TREE (JPR 12" DBH)
36	STA 24+37.64	29.58' (RT)	TREE (JPR 9" DBH)
37	STA 24+52.81	27.90' (RT)	TREE (CNFR 10" DBH)
38	STA 24+83.48	24.52' (RT)	TREE (CNFR 8" DBH)
39	STA 24+99.95	-25.00' (LT)	TREE (JPR 8" DBH)
40	STA 25+06.78	-27.85' (LT)	TREE (JPR 9" DBH)
41	STA 26+04.43	-23.58' (LT)	TREE (JPR 10" DBH)
42	STA 26+57.91	-21.71' (LT)	TREE (JPR 14" DBH)
43	STA 28+30.29	-22.20' (LT)	TREE (CNFR 6" DBH)
44	STA 28+37.49	-25.72' (LT)	TREE (CNFR 8" DBH)
45	STA 28+44.01	-20.41' (LT)	TREE (CNFR 6" DBH)
46	STA 28+62.72	-17.43' (LT)	TREE (CNFR 8" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
3. UTILITY TO BE RELOCATED BY OTHERS.
4. REMOVE EXISTING FENCE. SEE SHEET G-19 FOR REMOVAL INFORMATION.
5. REMOVE EXISTING ROCK WALL AND SALVAGE TO PROPERTY OWNER.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
8. REMOVE ORNAMENTAL IRON OBJECT. SALVAGE AND RETURN TO PROPERTY OWNER.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
11. PROTECT EXISTING IRRIGATION STRUCTURE.

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

N

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 0+50 TO STA 29+00

DRAWING NO. 10 OF 117
SHEET NO. G-10

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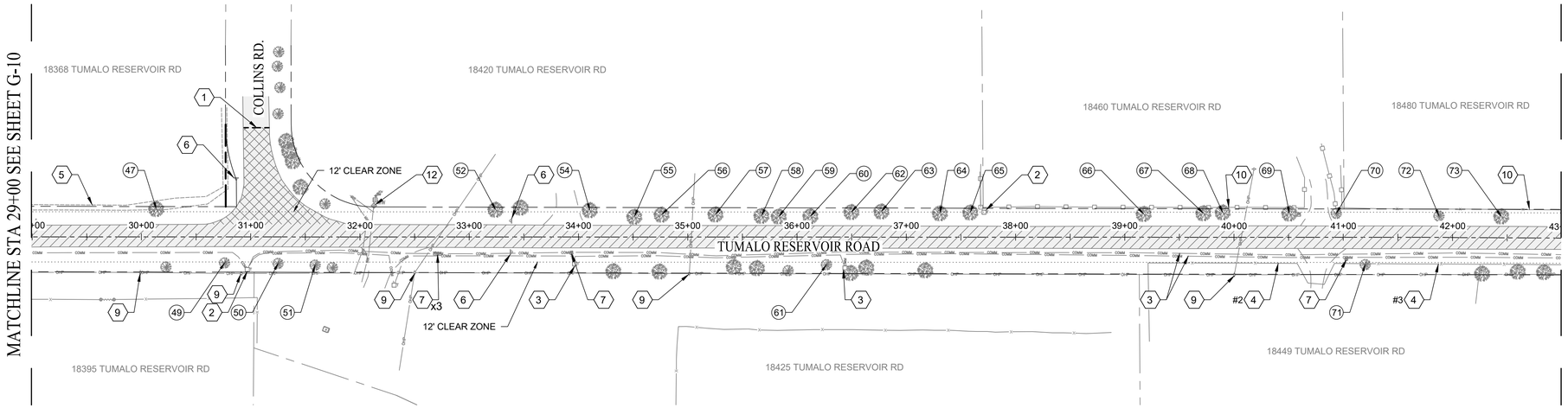
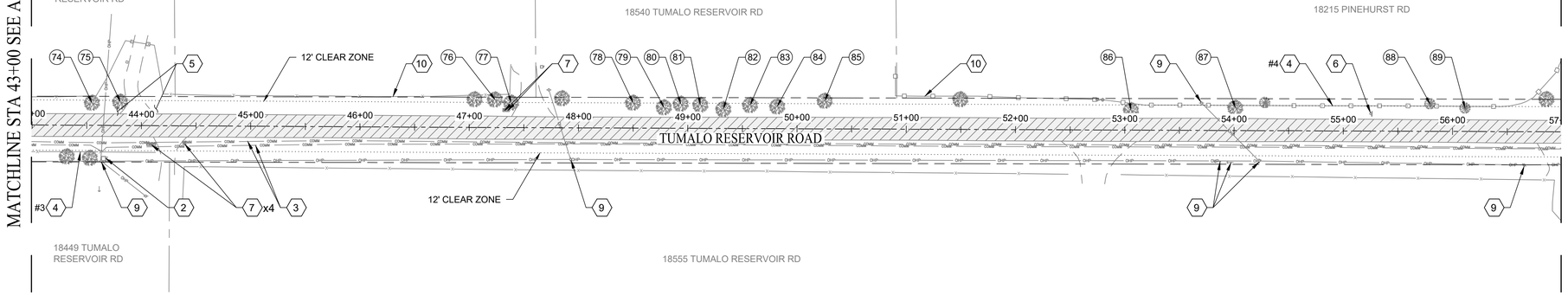


DEMOLITION PLAN
SCALE: 1" = 60'

1
G-11



DEMOLITION PLAN
SCALE: 1" = 60'

2
G-11

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
47	STA 30+13.64	-25.54' (LT)	TREE (JPR 8" DBH)
49	STA 30+76.14	23.87' (RT)	TREE (CNFR 11" DBH)
48	STA 30+76.14	23.87' (RT)	TREE (CNFR 11" DBH)
50	STA 31+25.10	24.32' (RT)	TREE (CNFR 18" DBH)
51	STA 31+59.02	25.84' (RT)	TREE (CNFR 12" DBH)
52	STA 33+24.11	-25.02' (LT)	TREE (JPR 8" DBH)
54	STA 34+10.39	-24.62' (LT)	TREE (JPR 12" DBH)
53	STA 34+10.39	-24.62' (LT)	TREE (JPR 12" DBH)
55	STA 34+51.19	-18.63' (LT)	TREE (JPR 12" DBH)
56	STA 34+76.12	-20.53' (LT)	TREE (JPR 15" DBH)
57	STA 35+25.46	-20.76' (LT)	TREE (JPR 11" DBH)
58	STA 35+67.52	-19.45' (LT)	TREE (JPR 14" DBH)
59	STA 35+83.39	-18.90' (LT)	TREE (JPR 12" DBH)
60	STA 36+12.33	-19.12' (LT)	TREE (JPR 10" DBH)
61	STA 36+26.97	25.29' (RT)	TREE (CNFR 9" DBH)
62	STA 36+49.82	-23.00' (LT)	TREE (JPR 6" DBH)
63	STA 36+77.33	-23.52' (LT)	TREE (JPR 6" DBH)
64	STA 37+30.84	-21.89' (LT)	TREE (JPR 16" DBH)
65	STA 37+58.65	-22.66' (LT)	TREE (JPR 14" DBH)
66	STA 39+17.32	-21.32' (LT)	TREE (JPR 12" DBH)
67	STA 39+71.96	-22.00' (LT)	TREE (JPR 12" DBH)
68	STA 39+89.63	-22.77' (LT)	TREE (JPR 12" DBH)
69	STA 40+50.69	-21.77' (LT)	TREE (JPR 9" DBH)
70	STA 40+93.60	-21.87' (LT)	TREE (CNFR 6" DBH)
71	STA 41+20.11	24.99' (RT)	TREE (CNFR 6" DBH)
72	STA 41+87.46	-19.63' (LT)	TREE (CNFR 6" DBH)
73	STA 42+44.55	-19.59' (LT)	TREE (JPR 8" DBH)
74	STA 43+54.65	-20.74' (LT)	TREE (JPR 13" DBH)
75	STA 43+80.52	-21.82' (LT)	TREE (JPR 10" DBH)
76	STA 47+23.52	-25.75' (LT)	TREE (JPR 12" DBH)
77	STA 47+38.29	-22.91' (LT)	TREE (JPR 10" DBH)
78	STA 48+49.88	-23.33' (LT)	TREE (JPR 14" DBH)
79	STA 48+78.14	-19.22' (LT)	TREE (JPR 9" DBH)
80	STA 48+93.56	-22.51' (LT)	TREE (JPR 12" DBH)
81	STA 49+11.55	-21.62' (LT)	TREE (JPR 11" DBH)
82	STA 49+32.58	-17.78' (LT)	TREE (JPR 13" DBH)
83	STA 49+57.00	-21.57' (LT)	TREE (JPR 10" DBH)
84	STA 49+81.88	-20.40' (LT)	TREE (JPR 8" DBH)
85	STA 50+25.38	-25.79' (LT)	TREE (JPR 9" DBH)
86	STA 53+05.65	-18.27' (LT)	TREE (JPR 24" DBH)
87	STA 54+01.13	-20.99' (LT)	TREE (JPR 26" DBH)
88	STA 55+79.22	-25.20' (LT)	TREE (CNFR 20" DBH)
89	STA 56+11.30	-21.46' (LT)	TREE (CNFR 21" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
3. UTILITY TO BE RELOCATED BY OTHERS.
4. REMOVE EXISTING FENCE. SEE SHEET G-19 FOR REMOVAL INFORMATION.
5. REMOVE EXISTING ROCK WALL AND SALVAGE TO PROPERTY OWNER.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
12. PROTECT EXISTING MONITORING WELL IN PLACE.

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

N

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

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1020 SW EMKAY DRIVE, #100
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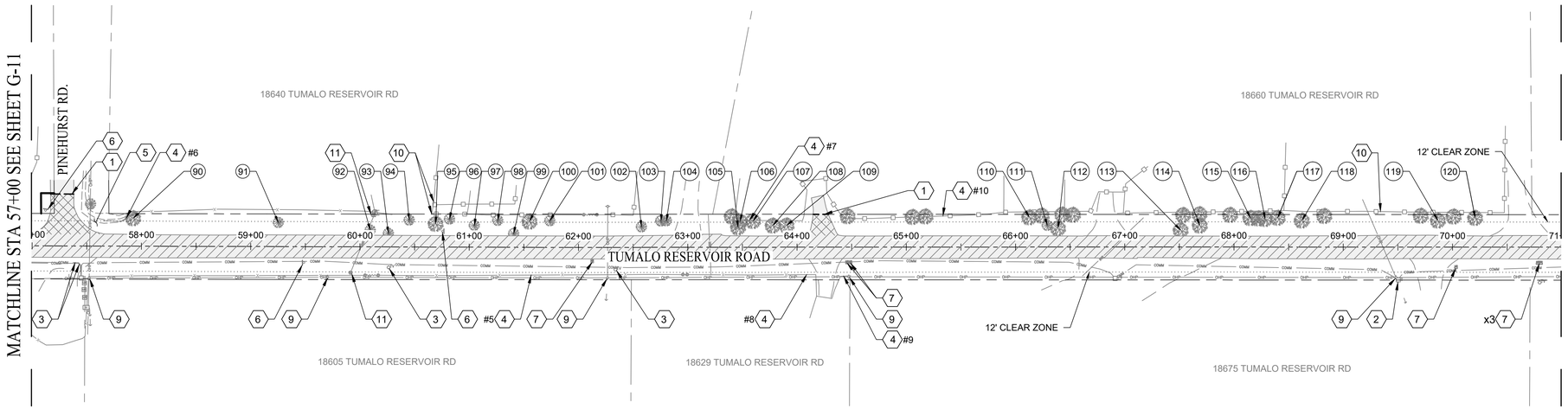
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

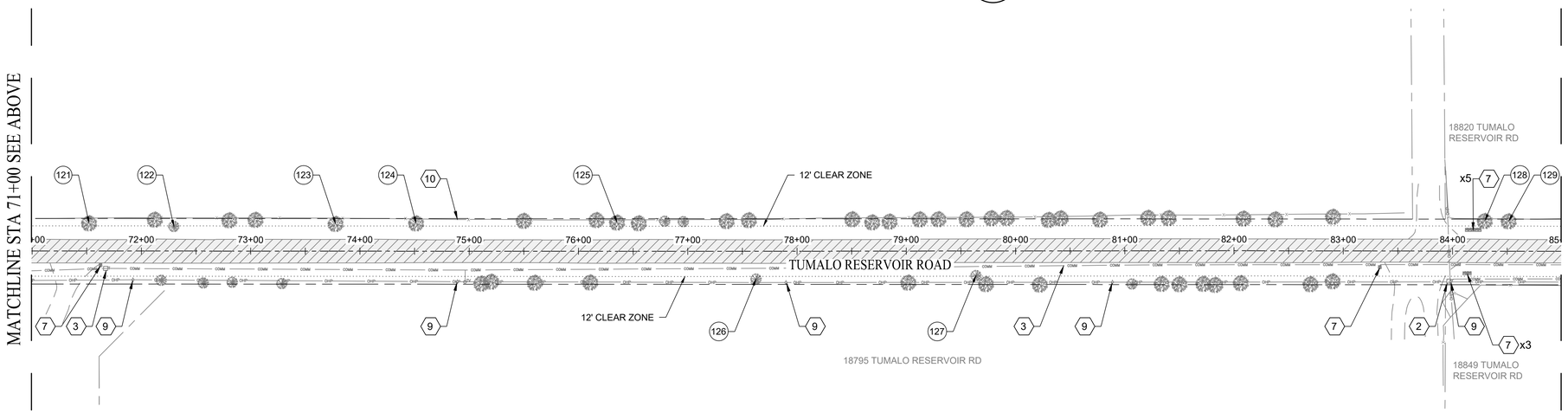
DEMOLITION PLAN
STA 29+00 TO STA 57+00

DRAWING NO. 11 OF 117
SHEET NO. G-11



DEMOLITION PLAN
SCALE: 1" = 60'

1
G-12



DEMOLITION PLAN
SCALE: 1" = 60'

2
G-12

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
90	STA 57+92.42	-25.61' (LT)	TREE (JPR 17" DBH)
91	STA 59+25.22	-22.12' (LT)	TREE (CNFR 12" DBH)
92	STA 60+09.36	-15.33' (LT)	TREE (CNFR 28" DBH)
93	STA 60+26.02	-12.41' (LT)	TREE (CNFR 19" DBH)
94	STA 60+44.99	-24.70' (LT)	TREE (CNFR 21" DBH)
95	STA 60+69.31	-21.33' (LT)	TREE (JPR 22" DBH)
96	STA 60+81.89	-25.78' (LT)	TREE (CNFR 15" DBH)
97	STA 61+04.62	-20.03' (LT)	TREE (CNFR 18" DBH)
98	STA 61+26.03	-24.61' (LT)	TREE (CNFR 20" DBH)
99	STA 61+40.65	-12.63' (LT)	TREE (CNFR 19" DBH)
100	STA 61+55.17	-23.61' (LT)	TREE (JPR 17" DBH)
101	STA 61+73.73	-24.43' (LT)	TREE (CNFR 19" DBH)
102	STA 62+57.63	-18.82' (LT)	TREE (CNFR 22" DBH)
103	STA 62+75.50	-24.21' (LT)	TREE (CNFR SIZE UNKNOWN)
104	STA 62+80.51	-24.37' (LT)	TREE (CNFR 20" DBH)
105	STA 63+46.16	-18.27' (LT)	TREE (JPR 12" DBH)
106	STA 63+47.99	-23.65' (LT)	TREE (JPR SIZE UNKNOWN)
107	STA 63+59.86	-24.03' (LT)	TREE (JPR 16" DBH)
108	STA 63+77.89	-19.89' (LT)	TREE (JPR 11" DBH)
109	STA 63+90.57	-19.97' (LT)	TREE (JPR 10" DBH)
110	STA 66+12.67	-27.24' (LT)	TREE (JPR 10" DBH)
111	STA 66+29.06	-19.89' (LT)	TREE (CNFR 12" DBH)
112	STA 66+39.01	-17.13' (LT)	TREE (JPR 13" DBH)
113	STA 67+51.20	-15.36' (LT)	TREE (JPR 10" DBH)
114	STA 67+68.73	-19.65' (LT)	TREE (JPR 10" DBH)
115	STA 68+14.95	-26.60' (LT)	TREE (JPR 9" DBH)
116	STA 68+28.46	-25.69' (LT)	TREE (JPR 16" DBH)
117	STA 68+40.02	-26.77' (LT)	TREE (JPR 14" DBH)
118	STA 68+62.04	-24.29' (LT)	TREE (JPR 14" DBH)
119	STA 69+86.65	-24.34' (LT)	TREE (JPR 16" DBH)
120	STA 70+20.71	-26.82' (LT)	TREE (JPR 14" DBH)
121	STA 71+52.19	-25.36' (LT)	TREE (JPR 6" DBH)
122	STA 72+29.66	-22.49' (LT)	TREE (CNFR 6" DBH)
123	STA 73+77.83	-24.88' (LT)	TREE (JPR 6" DBH)
124	STA 74+51.49	-25.43' (LT)	TREE (JPR 19" DBH)
125	STA 76+35.38	-26.30' (LT)	TREE (JPR 10" DBH)
126	STA 77+62.52	25.41' (RT)	TREE (CNFR 9" DBH)
127	STA 79+63.79	22.48' (RT)	TREE (CNFR 6" DBH)
128	STA 84+29.50	-27.61' (LT)	TREE (JPR 12" DBH)
129	STA 84+51.35	-27.40' (LT)	TREE (JPR 15" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
3. UTILITY TO BE RELOCATED BY OTHERS.
4. REMOVE EXISTING FENCE. SEE SHEET G-19 FOR REMOVAL INFORMATION.
5. REMOVE EXISTING ROCK WALL AND SALVAGE TO PROPERTY OWNER.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
11. PROTECT EXISTING IRRIGATION STRUCTURE.

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

N

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 57+00 TO STA 85+00

DRAWING NO. 12 OF 117
SHEET NO. G-12

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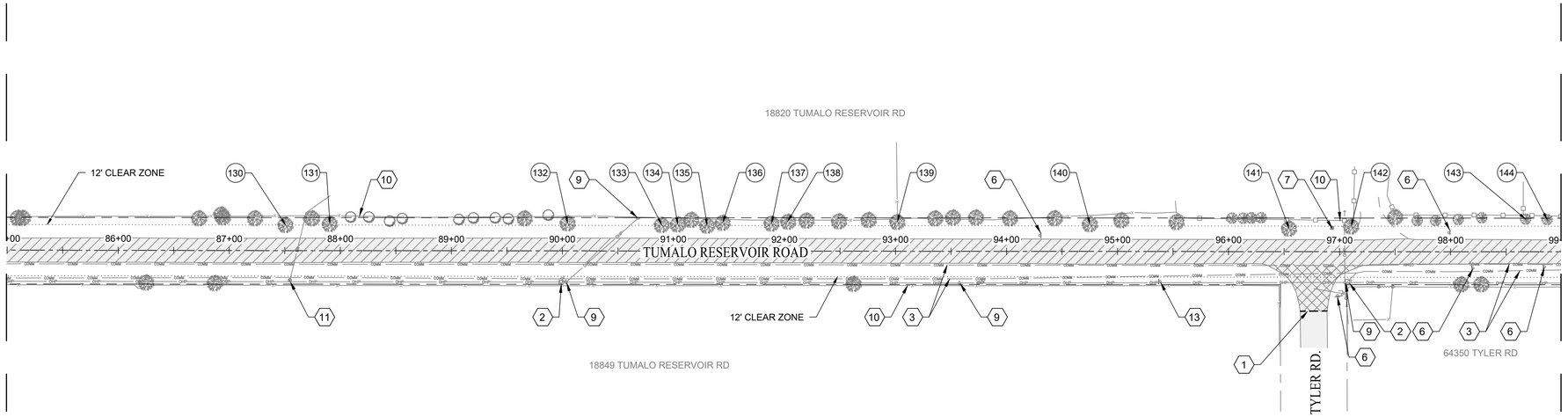
MATCHLINE STA 85+00 SEE SHEET G-12



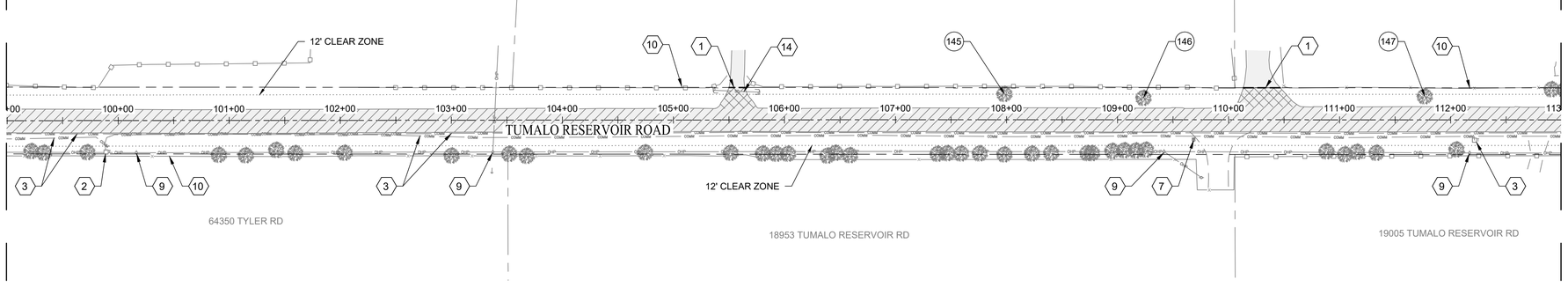
MATCHLINE STA 99+00 SEE BELOW

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
130	STA 87+50.70	-23.05' (LT)	TREE (JPR 19" DBH)
131	STA 87+90.64	-24.07' (LT)	TREE (JPR 17" DBH)
132	STA 90+04.80	-24.83' (LT)	TREE (JPR 18" DBH)
133	STA 90+89.54	-23.46' (LT)	TREE (JPR 16" DBH)
134	STA 91+03.97	-23.92' (LT)	TREE (JPR 24" DBH)
135	STA 91+30.43	-22.86' (LT)	TREE (JPR 16" DBH)
136	STA 91+44.48	-25.45' (LT)	TREE (JPR 16" DBH)
137	STA 91+88.43	-24.78' (LT)	TREE (JPR 16" DBH)
138	STA 92+02.70	-26.40' (LT)	TREE (JPR SIZE UNKNOWN)
139	STA 93+01.67	-26.39' (LT)	TREE (JPR 18" DBH)
140	STA 94+75.15	-24.51' (LT)	TREE (JPR 20" DBH)
141	STA 96+54.52	-20.68' (LT)	TREE (JPR SIZE UNKNOWN)
142	STA 97+10.44	-22.86' (LT)	TREE (JPR SIZE UNKNOWN)
143	STA 98+67.58	-29.34' (LT)	TREE (CNFR 8" DBH)
144	STA 98+87.00	-28.91' (LT)	TREE (CNFR 7" DBH)
145	STA 107+98.17	-23.31' (LT)	TREE (JPR 10" DBH)
146	STA 109+23.42	-19.80' (LT)	TREE (JPR 7" DBH)
147	STA 111+76.72	-21.27' (LT)	TREE (JPR 10" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN
SCALE: 1" = 60'
1
G-13

MATCHLINE STA 99+00 SEE ABOVE



MATCHLINE STA 113+00 SEE SHEET G-14

DEMOLITION PLAN
SCALE: 1" = 60'
2
G-13

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
3. UTILITY TO BE RELOCATED BY OTHERS.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
11. PROTECT EXISTING IRRIGATION STRUCTURE.
13. REMOVE EXISTING SIGN AND SALVAGE TO PROPERTY OWNER.
14. PROTECT EXISTING CULVERT.

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

N

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 85+00 TO STA 113+00

DRAWING NO. 13 OF 117
SHEET NO. G-13

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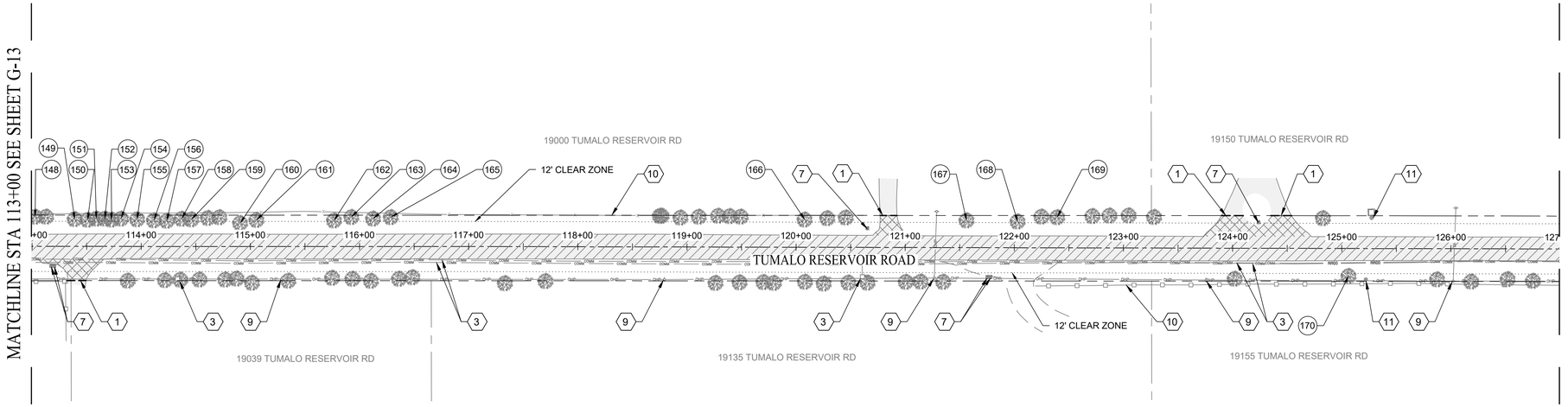
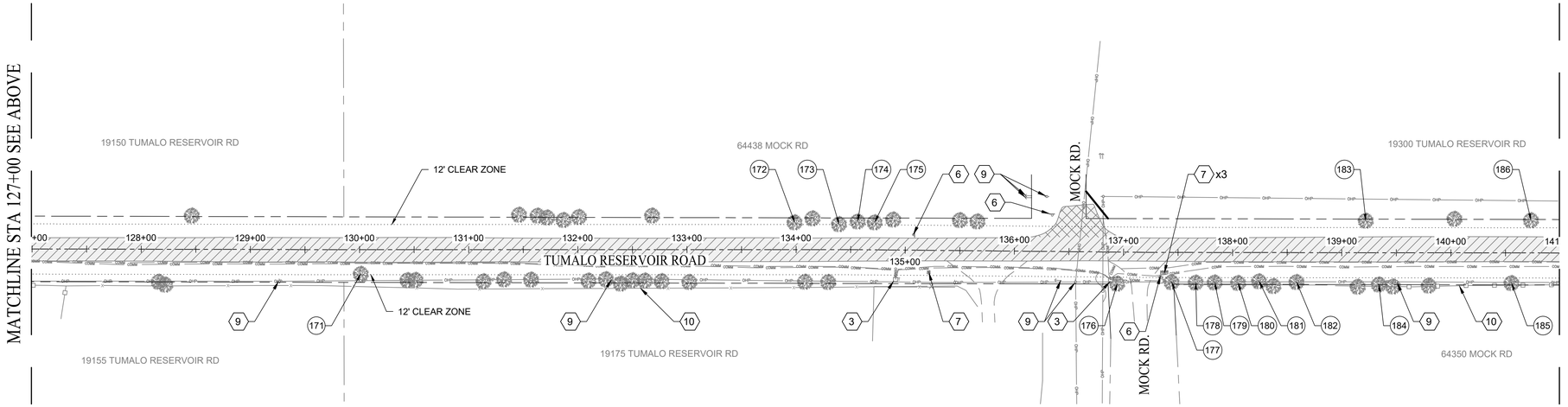


DEMOLITION PLAN
SCALE: 1" = 60'

1
G-14



DEMOLITION PLAN
SCALE: 1" = 60'

2
G-14

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
148	STA 113+02.80	-27.25' (LT)	TREE (JPR 8" DBH)
149	STA 113+39.08	-25.09' (LT)	TREE (JPR 14" DBH)
150	STA 113+50.95	-24.49' (LT)	TREE (JPR 11" DBH)
151	STA 113+58.83	-25.52' (LT)	TREE (JPR 16" DBH)
152	STA 113+66.70	-25.52' (LT)	TREE (JPR 10" DBH)
153	STA 113+72.81	-24.63' (LT)	TREE (JPR 10" DBH)
154	STA 113+81.59	-25.52' (LT)	TREE (JPR 11" DBH)
155	STA 113+96.29	-24.92' (LT)	TREE (JPR 13" DBH)
156	STA 114+11.66	-23.99' (LT)	TREE (JPR 15" DBH)
157	STA 114+23.52	-23.57' (LT)	TREE (JPR 12" DBH)
158	STA 114+37.06	-25.40' (LT)	TREE (JPR 12" DBH)
159	STA 114+46.02	-24.84' (LT)	TREE (JPR 13" DBH)
160	STA 114+90.68	-21.43' (LT)	TREE (JPR 16" DBH)
161	STA 115+05.63	-24.30' (LT)	TREE (JPR 20" DBH)
162	STA 115+76.68	-23.87' (LT)	TREE (JPR 14" DBH)
163	STA 115+92.59	-27.04' (LT)	TREE (JPR 15" DBH)
164	STA 116+12.48	-25.58' (LT)	TREE (JPR 14" DBH)
165	STA 116+28.71	-26.91' (LT)	TREE (JPR 26" DBH)
166	STA 120+07.84	-25.44' (LT)	TREE (JPR 10" DBH)
167	STA 121+56.16	-25.01' (LT)	TREE (JPR 20" DBH)
168	STA 122+02.93	-24.12' (LT)	TREE (JPR 20" DBH)
169	STA 122+39.28	-28.09' (LT)	TREE (JPR 9" DBH)
170	STA 125+06.30	25.19' (RT)	TREE (JPR 12" DBH)
171	STA 130+01.26	22.23' (RT)	TREE (JPR 16" DBH)
172	STA 133+98.72	-25.04' (LT)	TREE (JPR 24" DBH)
173	STA 134+39.36	-23.38' (LT)	TREE (JPR 11" DBH)
174	STA 134+56.28	-25.89' (LT)	TREE (JPR 16" DBH)
175	STA 134+71.83	-25.24' (LT)	TREE (JPR 14" DBH)
176	STA 136+94.53	28.96' (RT)	TREE (JPR 18" DBH)
177	STA 137+44.12	27.21' (RT)	TREE (JPR 22" DBH)
178	STA 137+66.21	27.58' (RT)	TREE (JPR 18" DBH)
179	STA 137+83.59	27.44' (RT)	TREE (JPR 11" DBH)
180	STA 138+05.10	27.88' (RT)	TREE (JPR 16" DBH)
181	STA 138+24.25	26.33' (RT)	TREE (JPR 15" DBH)
182	STA 138+58.62	26.93' (RT)	TREE (JPR 19" DBH)
183	STA 139+21.99	-29.35' (LT)	TREE (JPR 6" DBH)
184	STA 139+34.04	29.10' (RT)	TREE (JPR 18" DBH)
185	STA 140+55.57	27.64' (RT)	TREE (JPR 22" DBH)
186	STA 140+73.36	-29.90' (LT)	TREE (JPR 18" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
3. UTILITY TO BE RELOCATED BY OTHERS.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
11. PROTECT EXISTING IRRIGATION STRUCTURE.

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

N

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 113+00 TO STA 141+00

DRAWING NO. 14 OF 117
SHEET NO. G-14

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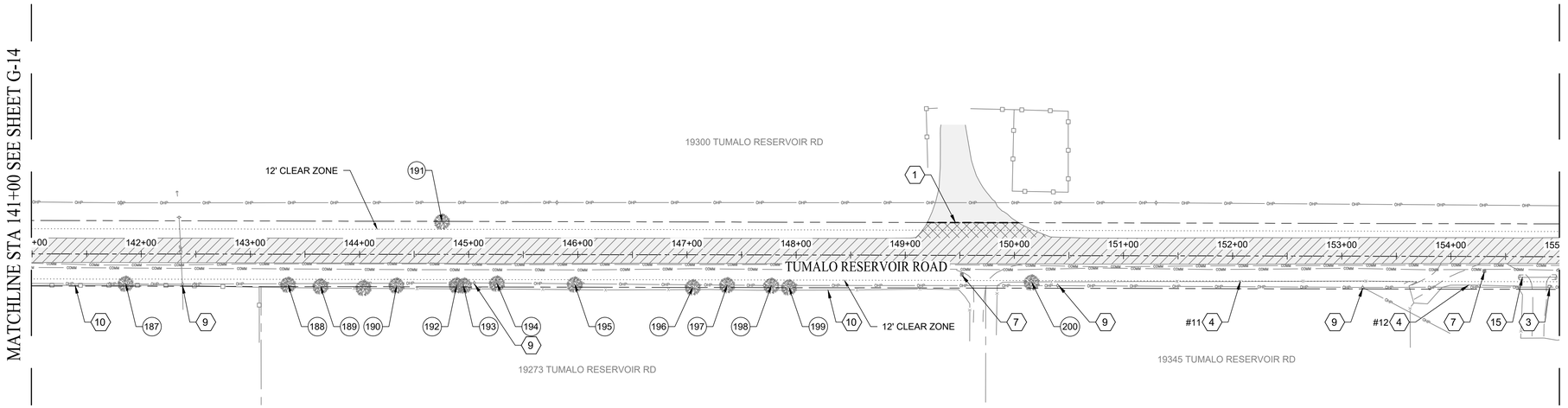
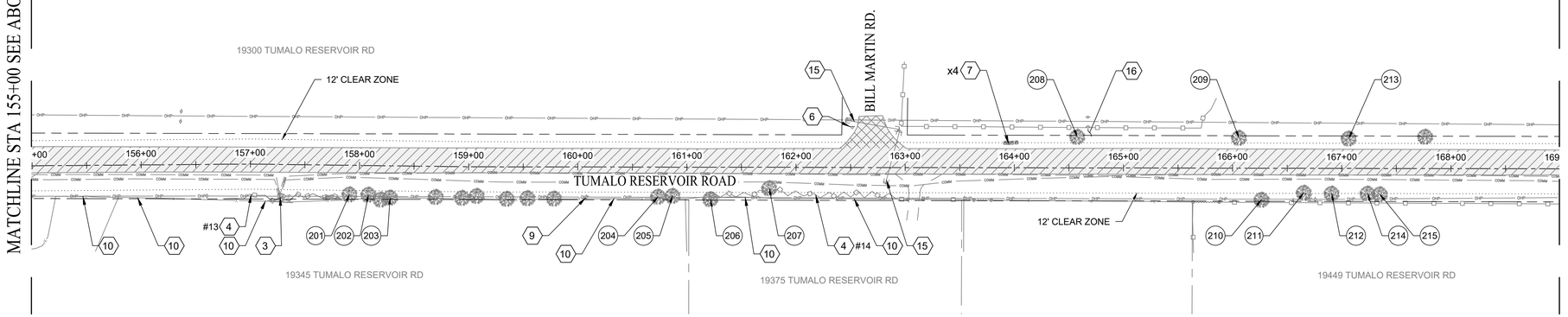


DEMOLITION PLAN
SCALE: 1" = 60'
1
G-15



DEMOLITION PLAN
SCALE: 1" = 60'
2
G-15

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
187	STA 141+85.79	27.31' (RT)	TREE (JPR 22" DBH)
188	STA 143+34.64	28.00' (RT)	TREE (JPR 10" DBH)
189	STA 143+64.32	29.43' (RT)	TREE (JPR 24" DBH)
190	STA 144+34.01	28.58' (RT)	TREE (JPR 16" DBH)
191	STA 144+75.64	-30.00' (LT)	TREE (JPR 12" DBH)
192	STA 144+89.05	28.31' (RT)	TREE (JPR 18" DBH)
193	STA 144+95.24	28.61' (RT)	TREE (JPR SIZE UNKNOWN)
194	STA 145+25.97	26.67' (RT)	TREE (JPR 16" DBH)
195	STA 145+97.25	27.44' (RT)	TREE (JPR 28" DBH)
196	STA 147+05.49	29.84' (RT)	TREE (JPR 21" DBH)
197	STA 147+36.95	27.85' (RT)	TREE (JPR 22" DBH)
198	STA 147+77.42	28.26' (RT)	TREE (JPR 14" DBH)
199	STA 147+93.61	29.73' (RT)	TREE (JPR 17" DBH)
200	STA 150+15.93	24.69' (RT)	TREE (JPR 15" DBH)
201	STA 157+91.19	26.62' (RT)	TREE (JPR 11" DBH)
202	STA 158+08.49	26.66' (RT)	TREE (JPR 11" DBH)
203	STA 158+28.41	29.12' (RT)	TREE (JPR 13" DBH)
204	STA 160+73.71	27.08' (RT)	TREE (JPR 13" DBH)
205	STA 160+86.91	26.28' (RT)	TREE (JPR 16" DBH)
206	STA 161+21.58	29.29' (RT)	TREE (JPR 19" DBH)
207	STA 161+75.45	19.11' (RT)	TREE (JPR 27" DBH)
208	STA 164+57.63	-28.51' (LT)	TREE (JPR 10" DBH)
209	STA 166+05.79	-27.86' (LT)	TREE (JPR 8" DBH)
210	STA 166+26.56	28.87' (RT)	TREE (JPR 11" DBH)
211	STA 166+65.33	22.35' (RT)	TREE (JPR 10" DBH)
212	STA 166+90.77	23.11' (RT)	TREE (JPR 12" DBH)
213	STA 167+06.31	-27.43' (LT)	TREE (JPR 5" DBH)
214	STA 167+23.69	23.03' (RT)	TREE (JPR 9" DBH)
215	STA 167+34.95	23.61' (RT)	TREE (JPR 7" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
3. UTILITY TO BE RELOCATED BY OTHERS.
4. REMOVE EXISTING FENCE. SEE SHEET G-19 FOR REMOVAL INFORMATION.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
15. REMOVE EXISTING CULVERT.
16. REMOVE EXISTING PICNIC TABLE AND DECORATIVE MAILBOX AND RETURN TO PROPERTY OWNER.

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

N

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 141+00 TO STA 169+00

DRAWING NO. 15 OF 117
SHEET NO. G-15

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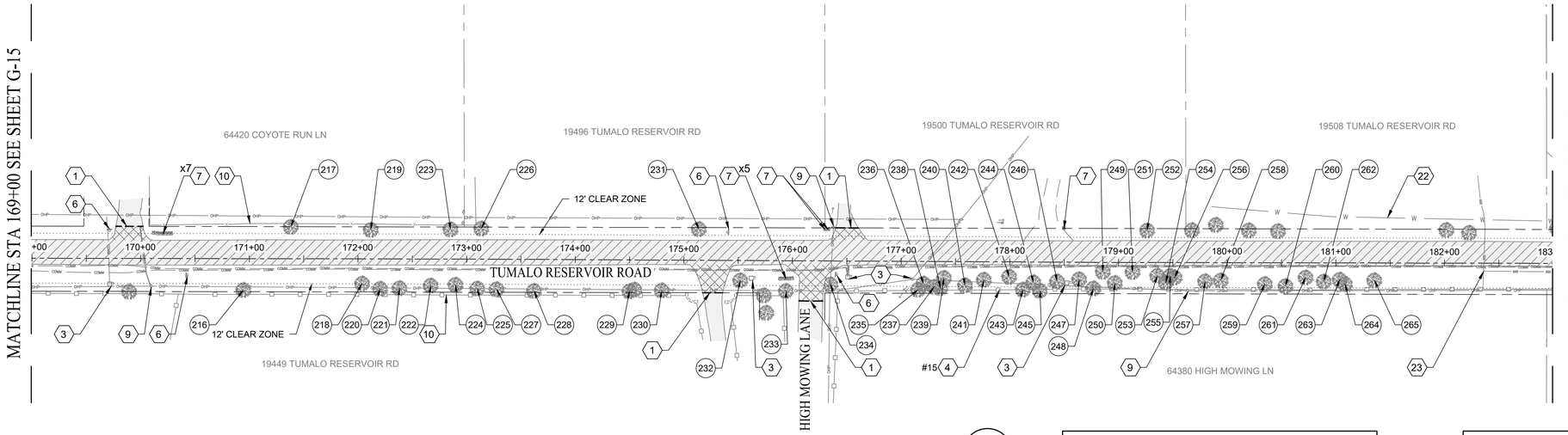
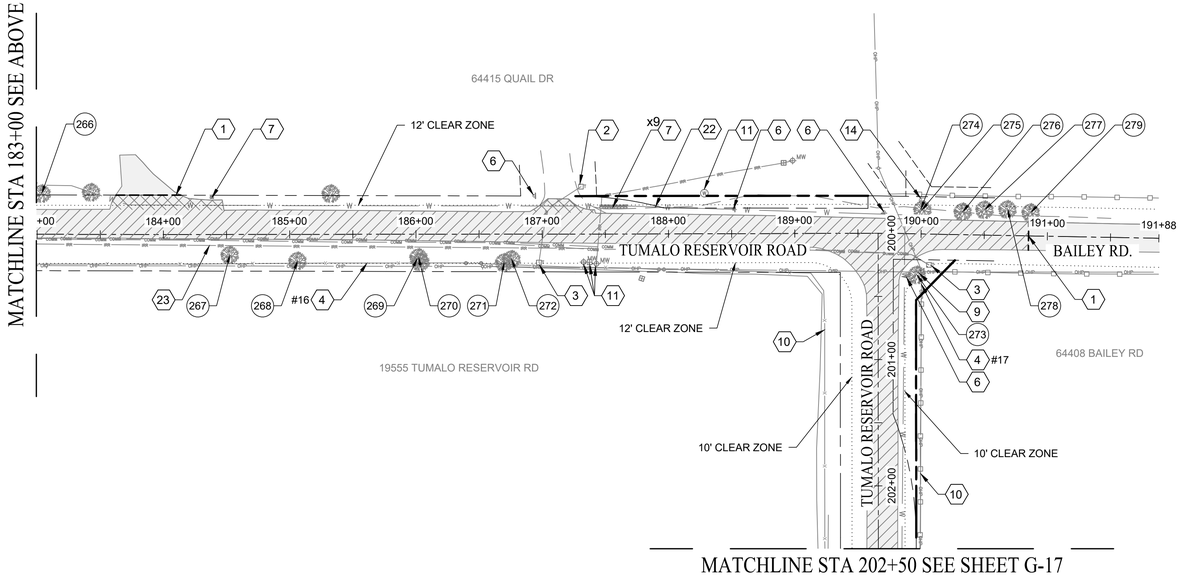




GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
3. UTILITY TO BE RELOCATED BY OTHERS.
4. REMOVE EXISTING FENCE. SEE SHEET G-19 FOR REMOVAL INFORMATION.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
11. PROTECT EXISTING IRRIGATION STRUCTURE.
14. PROTECT EXISTING CULVERT.
22. PROTECT EXISTING WATER LINE IN PLACE.
23. PROTECT EXISTING PRIVATE IRRIGATION LINE, DEPTH UNKNOWN.

DEMOLITION PLAN

SCALE: 1" = 60'

1 / G-16

DEMOLITION PLAN

SCALE: 1" = 60'

2 / G-16

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
216	STA 170+94.68	28.83' (RT)	TREE (JPR 18" DBH)
217	STA 171+38.25	-29.48' (LT)	TREE (JPR 8" DBH)
218	STA 172+03.97	22.69' (RT)	TREE (JPR 7" DBH)
219	STA 172+11.90	-26.90' (LT)	TREE (JPR 8" DBH)
220	STA 172+20.57	27.48' (RT)	TREE (JPR 17" DBH)
221	STA 172+38.34	26.92' (RT)	TREE (JPR 20" DBH)
222	STA 172+67.07	24.44' (RT)	TREE (JPR 13" DBH)
223	STA 172+85.20	-27.35' (LT)	TREE (JPR 10" DBH)
224	STA 172+89.79	23.64' (RT)	TREE (JPR 16" DBH)
225	STA 173+10.00	27.12' (RT)	TREE (JPR 18" DBH)
226	STA 173+13.40	-28.18' (LT)	TREE (JPR 6" DBH)
227	STA 173+27.70	27.65' (RT)	TREE (JPR 14" DBH)
228	STA 173+62.24	29.00' (RT)	TREE (JPR 17" DBH)
229	STA 174+50.04	28.87' (RT)	TREE (JPR 24" DBH)
230	STA 174+79.79	27.93' (RT)	TREE (JPR 22" DBH)
231	STA 175+13.63	-28.79' (LT)	TREE (JPR 10" DBH)
232	STA 175+52.01	18.27' (RT)	TREE (JPR 12" DBH)
233	STA 175+94.08	27.76' (RT)	TREE (JPR 6" DBH)
234	STA 176+34.94	21.50' (RT)	TREE (JPR 8" DBH)
235	STA 177+15.69	26.07' (RT)	TREE (JPR 14" DBH)
236	STA 177+20.62	20.35' (RT)	TREE (JPR 16" DBH)
237	STA 177+30.34	23.36' (RT)	TREE (JPR 12" DBH)
238	STA 177+36.22	24.35' (RT)	TREE (JPR 8" DBH)
239	STA 177+39.49	15.09' (RT)	TREE (JPR 12" DBH)
240	STA 177+58.83	21.71' (RT)	TREE (JPR 6" DBH)
241	STA 177+76.18	16.53' (RT)	TREE (JPR 6" DBH)
242	STA 177+99.47	13.55' (RT)	TREE (JPR 14" DBH)
243	STA 178+12.08	25.43' (RT)	TREE (JPR 16" DBH)
244	STA 178+21.83	18.71' (RT)	TREE (JPR 10" DBH)
245	STA 178+27.78	26.37' (RT)	TREE (JPR 16" DBH)
246	STA 178+43.57	17.71' (RT)	TREE (JPR 18" DBH)
247	STA 178+63.80	15.67' (RT)	TREE (JPR 14" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
248	STA 178+77.04	24.03' (RT)	TREE (JPR 14" DBH)
249	STA 178+85.70	8.61' (RT)	TREE (JPR 18" DBH)
250	STA 178+96.68	18.94' (RT)	TREE (JPR 12" DBH)
251	STA 179+12.95	8.71' (RT)	TREE (JPR 16" DBH)
252	STA 179+26.32	-29.63' (LT)	TREE (JPR 14" DBH)
253	STA 179+35.77	12.06' (RT)	TREE (JPR 12" DBH)
254	STA 179+43.50	18.40' (RT)	TREE (JPR 8" DBH)
255	STA 179+47.48	12.24' (RT)	TREE (JPR 10" DBH)
256	STA 179+51.67	13.72' (RT)	TREE (JPR 10" DBH)
257	STA 179+79.78	17.14' (RT)	TREE (JPR 28" DBH)
258	STA 179+94.16	16.27' (RT)	TREE (JPR 16" DBH)
259	STA 180+34.77	19.62' (RT)	TREE (JPR 6" DBH)
260	STA 180+53.77	21.41' (RT)	TREE (JPR 26" DBH)
261	STA 180+72.21	13.46' (RT)	TREE (JPR 12" DBH)
262	STA 180+88.96	17.11' (RT)	TREE (JPR 14" DBH)
263	STA 181+03.61	15.39' (RT)	TREE (JPR 10" DBH)
264	STA 181+08.47	19.42' (RT)	TREE (JPR 12" DBH)
265	STA 181+35.44	15.93' (RT)	TREE (JPR 12" DBH)
266	STA 183+03.66	-32.24' (LT)	TREE (JPR 12" DBH)
267	STA 184+52.59	16.21' (RT)	TREE (JPR 10" DBH)
268	STA 185+06.28	20.99' (RT)	TREE (JPR 6" DBH)
269	STA 186+01.02	19.36' (RT)	TREE (JPR 16" DBH)
270	STA 186+02.08	18.29' (RT)	TREE (JPR 16" DBH)
271	STA 186+69.89	22.33' (RT)	TREE (JPR 24" DBH)
272	STA 186+75.73	19.92' (RT)	TREE (JPR 10" DBH)
273	STA 189+97.38	32.50' (RT)	TREE (CNFR 10" DBH)
274	STA 189+99.55	-19.39' (LT)	TREE (JPR 22" DBH)
275	STA 190+00.22	-18.70' (LT)	TREE (JPR 24" DBH)
276	STA 190+32.74	-18.08' (LT)	TREE (JPR 16" DBH)
277	STA 190+50.00	-20.07' (LT)	TREE (JPR 14" DBH)
278	STA 190+68.16	-20.67' (LT)	TREE (JPR 12" DBH)
279	STA 190+86.54	-18.55' (LT)	TREE (JPR 10" DBH)

N

60 0 60 120

SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

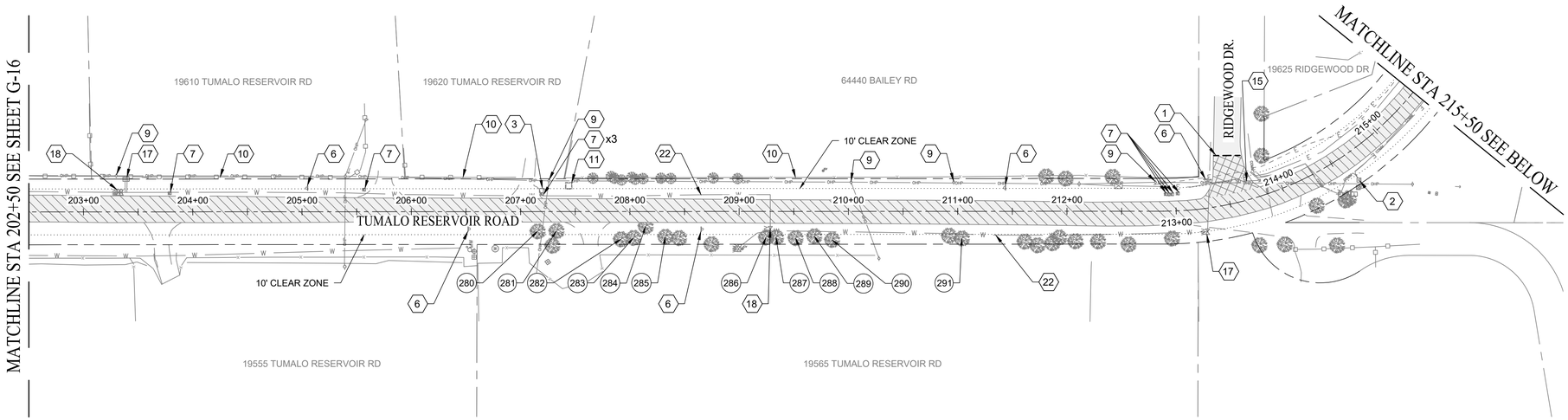
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 169+00 TO STA 202+50

DRAWING NO. 16 OF 117
SHEET NO. G-16

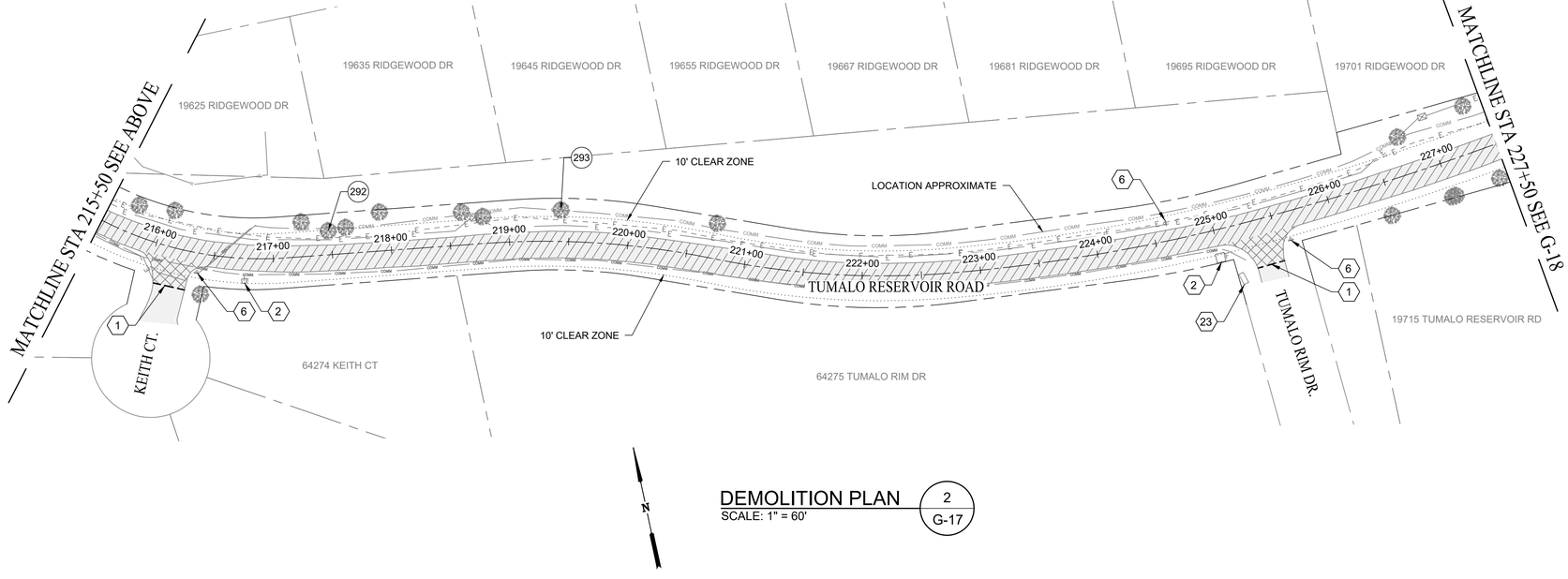
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\G-03 DEMOLITION PLAN.dwg



DEMOLITION PLAN
SCALE: 1" = 60'
1
G-17

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
280	STA 207+15.58	17.98' (RT)	TREE (JPR 18" DBH)
281	STA 207+32.84	17.63' (RT)	TREE (JPR 14" DBH)
282	STA 207+91.83	25.27' (RT)	TREE (JPR 18" DBH)
283	STA 208+03.30	24.01' (RT)	TREE (JPR 20" DBH)
284	STA 208+14.47	13.43' (RT)	TREE (JPR 24" DBH)
285	STA 208+32.45	23.03' (RT)	TREE (JPR 26" DBH)
286	STA 209+24.67	23.84' (RT)	TREE (JPR 8" DBH)
287	STA 209+33.79	23.58' (RT)	TREE (JPR 14" DBH)
288	STA 209+51.61	24.26' (RT)	TREE (JPR 14" DBH)
289	STA 209+68.77	22.60' (RT)	TREE (JPR 22" DBH)
290	STA 209+85.09	25.93' (RT)	TREE (JPR 30" DBH)
291	STA 211+03.83	24.73' (RT)	TREE (JPR 22" DBH)
292	STA 217+47.94	-20.35' (LT)	TREE (JPR 6" DBH)
293	STA 219+43.04	-26.75' (LT)	TREE (JPR 8" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.



DEMOLITION PLAN
SCALE: 1" = 60'
2
G-17

DEMOLITION PLAN LEGEND

- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
3. UTILITY TO BE RELOCATED BY OTHERS.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
9. PROTECT EXISTING POWER POLE AND GUY WIRE(S) IN PLACE.
10. PROTECT EXISTING FENCE IN PLACE.
11. PROTECT EXISTING IRRIGATION STRUCTURE.
15. REMOVE EXISTING CULVERT.
17. PROTECT EXISTING WATER STRUCTURE IN PLACE.
18. ADJUST EXISTING WATER STRUCTURE TO FINISH GRADE.
22. PROTECT EXISTING WATER LINE IN PLACE.
23. PROTECT EXISTING BUS STOP STRUCTURE IN PLACE.

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

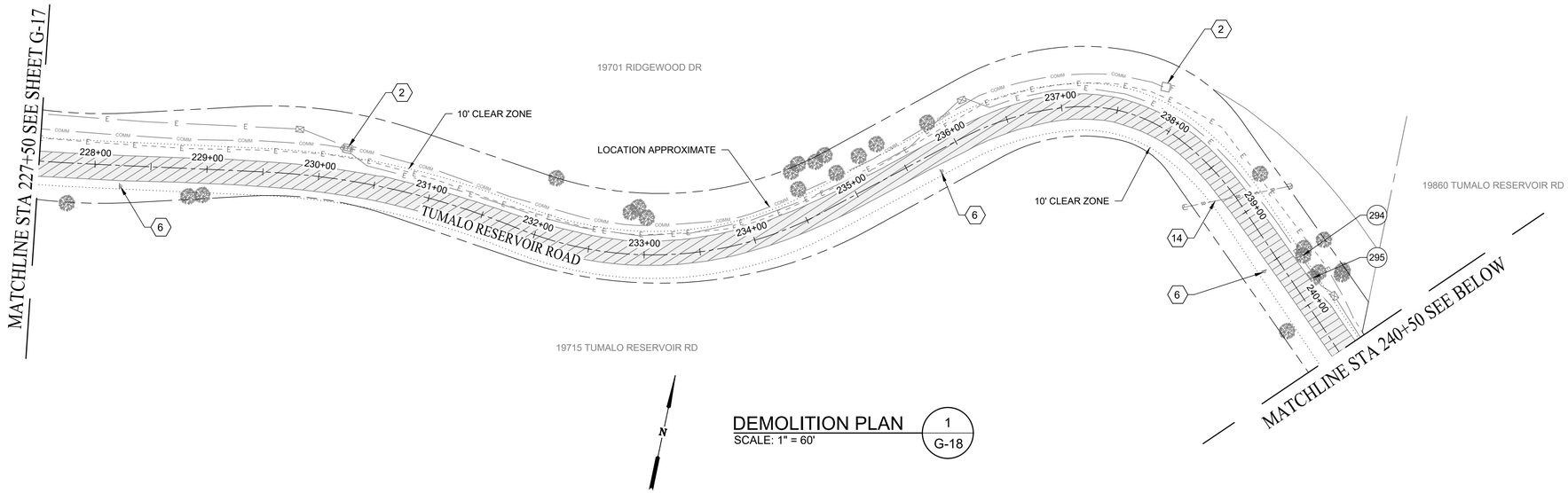
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 202+50 TO STA 227+50

DRAWING NO. 17 OF 117
SHEET NO. G-17

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\G-03 DEMOLITION PLAN.dwg



DEMOLITION PLAN
SCALE: 1" = 60'

1
G-18

TREE REMOVAL TABLE			
TREE NUMBER	STATION	OFFSET	DESCRIPTION
294	STA 239+60.65	-21.28' (LT)	TREE (JPR 18" DBH)
295	STA 239+82.28	-17.50' (LT)	TREE (JPR 14" DBH)
296	STA 246+66.37	17.22' (RT)	TREE (JPR 6" DBH)

NOTE: TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE.

DEMOLITION PLAN LEGEND

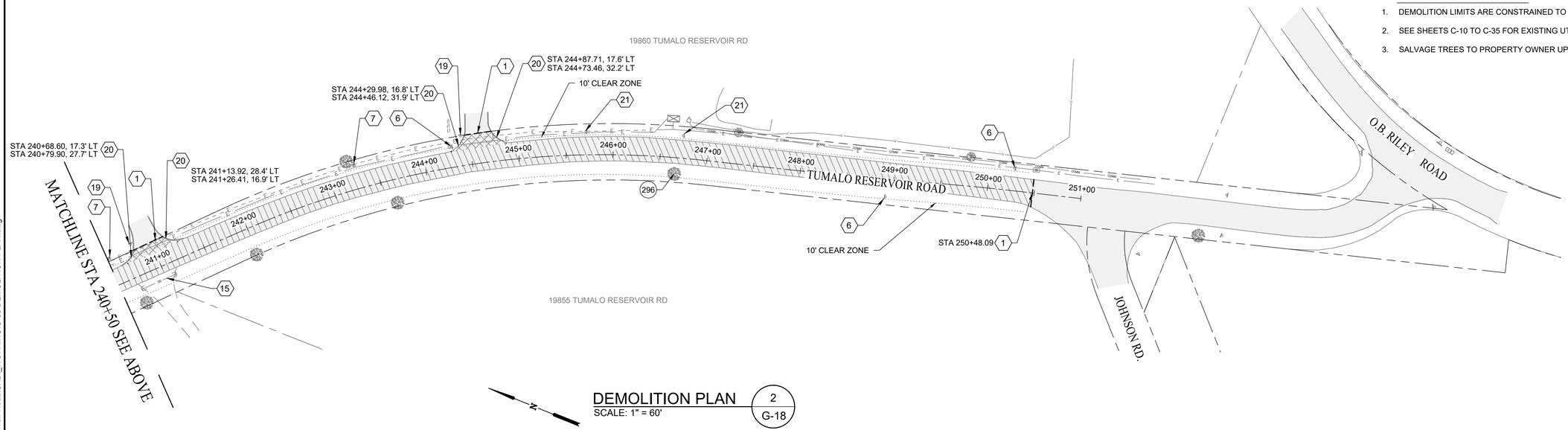
- REMOVE EXISTING ASPHALT (FDR ALLOWABLE)
- REMOVE EXISTING ASPHALT (NO FDR)
- SAWCUT EXISTING ASPHALT

DEMOLITION PLAN KEY NOTES

1. SAWCUT EXISTING ASPHALT PAVEMENT.
2. PROTECT EXISTING COMMUNICATIONS STRUCTURE IN PLACE.
6. REMOVE EXISTING SIGN. SEE SHEETS SS-01 TO SS-23 FOR REPLACEMENT INFORMATION.
7. REMOVE EXISTING MAILBOX. SEE SHEET C-10 TO C-35 FOR REPLACEMENT INFORMATION. CONTRACTOR SHALL MAINTAIN DELIVERY ACCESS TO MAILBOX AT ALL TIMES.
14. PROTECT EXISTING CULVERT.
15. REMOVE EXISTING CULVERT.
19. PROTECT EXISTING SIGN IN PLACE.
20. REMOVE EXISTING CURB WITHIN EXTENTS NOTED ON PLAN.
21. REMOVE EXISTING FREEZING INDICATOR AND RETURN TO PROPERTY OWNER.

GENERAL NOTES

1. DEMOLITION LIMITS ARE CONSTRAINED TO RIGHT-OF-WAY UNLESS OTHERWISE SHOWN.
2. SEE SHEETS C-10 TO C-35 FOR EXISTING UTILITY POTHOLING INFORMATION.
3. SALVAGE TREES TO PROPERTY OWNER UPON REQUEST.



DEMOLITION PLAN
SCALE: 1" = 60'

2
G-18

60 0 60 120
SCALE OF FEET
SCALE: 1"=60'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DEMOLITION PLAN
STA 227+50 TO STA 251+00

DRAWING NO. 18 OF 117
SHEET NO. G-18

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\G-03 DEMOLITION PLAN.dwg

FENCE DEMOLITION AND RECONSTRUCTION DATA TABLE

FENCE NUMBER	DEMO LIMITS					REBUILD LIMITS					FENCE TYPE	COMMENTS	ADDRESSES AFFECTED
	START		END		DEMO LENGTH (FT)	START		END		REBUILD LENGTH (FT)			
	STATION	OFFSET (FT)	STATION	OFFSET (FT)		STATION	OFFSET (FT)	STATION	OFFSET (FT)				
1	8+41.72	-19.43 (LT)	9+69.91	-30.19 (LT)	132	N/A					PALLET FENCE	REMOVE, DO NOT REPLACE	18220 TUMALO RESERVOIR ROAD, 64435 ROCK SPRINGS ROAD
2	39+21.51	23.52 (RT)	40+57.75	23.94 (RT)	158	39+21.51	33.74 (RT)	40+63.25	33.97 (RT)	142	WOOD POST WITH TOP RAIL AND MESH	REMOVE AND REPLACE	18449 TUMALO RESERVOIR ROAD
3	40+91.93	23.94 (RT)	44+13.05	24.44 (RT)	342	40+87.02	34.01 (RT)	44+13.15	33.30 (RT)	326	WOOD POST WITH TOP RAIL AND MESH	REMOVE AND REPLACE	18449 TUMALO RESERVOIR ROAD
4	52+80.29	-27.64 (LT)	56+70.97	-29.68 (LT)	393	52+79.67	-28.79 (LT)	56+70.97	-29.68 (LT)	393	METAL POST WITH TOP RAIL AND MESH	REMOVE AND REPLACE; RELOCATE EXISTING GATE ACCESS	18215 PINEHURST ROAD
5	57+51.82	27.94 (RT)	64+05.14	25.13 (RT)	657	57+51.68	30.25 (RT)	64+17.84	29.82 (RT)	654	T-POST AND MESH WITH TOP WIRE	REMOVE AND REPLACE ; RELOCATE EXISTING GATE ACCESS (X2)	18605 TUMALO RESERVOIR ROAD, 18629 TUMALO RESERVOIR ROAD
6	57+65.44	-23.27 (LT)	57+81.15	-22.66 (LT)	29	N/A					WOOD POST WITH BARBED WIRE	REMOVE, DO NOT REPLACE	18640 TUMALO RESERVOIR ROAD
7	63+42.78	-24.49 (LT)	64+05.03	-24.28 (LT)	74	63+43.54	-30.26 (LT)	64+06.55	-30.17 (LT)	63	WOOD POST 3-RAIL AND MESH	REMOVE AND REPLACE	18660 TUMALO RESERVOIR ROAD
8	64+05.14	25.13 (RT)	64+17.40	25.04 (RT)	17	64+05.14	29.82 (RT)	64+17.40	29.84 (RT)	12	WOOD POST WITH TOP RAIL AND MESH	REMOVE AND REPLACE	18629 TUMALO RESERVOIR ROAD
9	64+39.67	26.69 (RT)	64+49.26	26.11 (RT)	13	64+38.32	29.87 (RT)	64+52.57	29.89 (RT)	14	WOOD POST WITH TOP RAIL AND MESH	REMOVE AND REPLACE	18660 TUMALO RESERVOIR ROAD
10	64+42.74	-26.36 (LT)	65+72.13	-29.95 (LT)	134	64+40.03	-30.13 (LT)	65+72.13	-29.95 (LT)	132	WOOD POST 3-RAIL AND MESH	REMOVE AND REPLACE	18629 TUMALO RESERVOIR ROAD
11	149+89.34	24.63 (RT)	153+68.94	23.56 (RT)	449	N/A					T-POST WITH BARBED WIRE	REMOVE, DO NOT REPLACE	19345 TUMALO RESERVOIR ROAD
12	153+99.54	26.43 (RT)	154+60.86	27.04 (RT)	75	153+90.51	30.00 (RT)	154+62.67	30.00 (RT)	72	WOOD POST WITH TOP RAIL AND MESH	REMOVE AND REPLACE	19345 TUMALO RESERVOIR ROAD
13	156+74.58	31.60 (RT)	157+82.85	30.17 (RT)	115	N/A					WOOD SPLIT RAIL FENCE	REMOVE, DO NOT REPLACE	19345 TUMALO RESERVOIR ROAD
14	161+16.28	26.84 (RT)	162+92.07	28.88 (RT)	177	N/A					WOOD SPLIT RAIL FENCE	REMOVE, DO NOT REPLACE	19375 TUMALO RESERVOIR ROAD
15	176+41.91	27.77 (RT)	182+94.07	23.68 (RT)	659	176+41.85	29.51 (RT)	182+94.07	28.84 (RT)	652	WOOD POST 3-RAIL AND MESH	REMOVE AND REPLACE	64380 HIGH MOWING LANE
16	182+94.07	23.68 (RT)	188+86.85	30.70 (RT)	598	182+94.07	28.84 (RT)	188+86.85	30.70 (RT)	593	T-POST AND MESH WITH TOP WIRE	REMOVE AND REPLACE; RELOCATE EXISTING GATE ACCESS (X2)	19555 TUMALO RESERVOIR ROAD
17	200+30.45	51.94 (RT)	200+48.55	34.32 (RT)	36	200+30.45	51.94 (RT)	200+48.55	34.32 (RT)	26	PLASTIC POST 3-RAIL	REMOVE AND REPLACE	64408 BAILEY ROAD

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

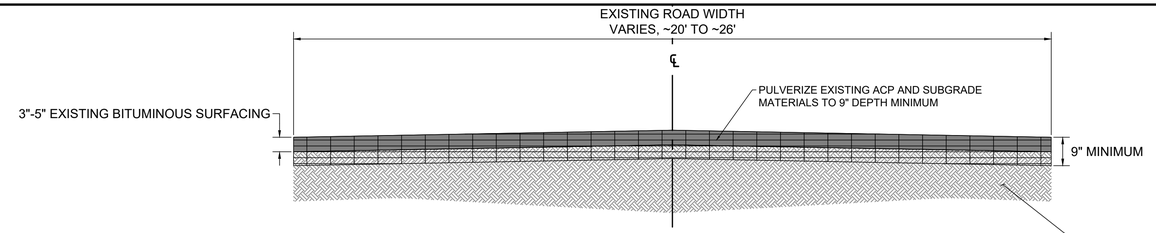
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

FENCE DEMOLITION AND RECONSTRUCTION DATA TABLE

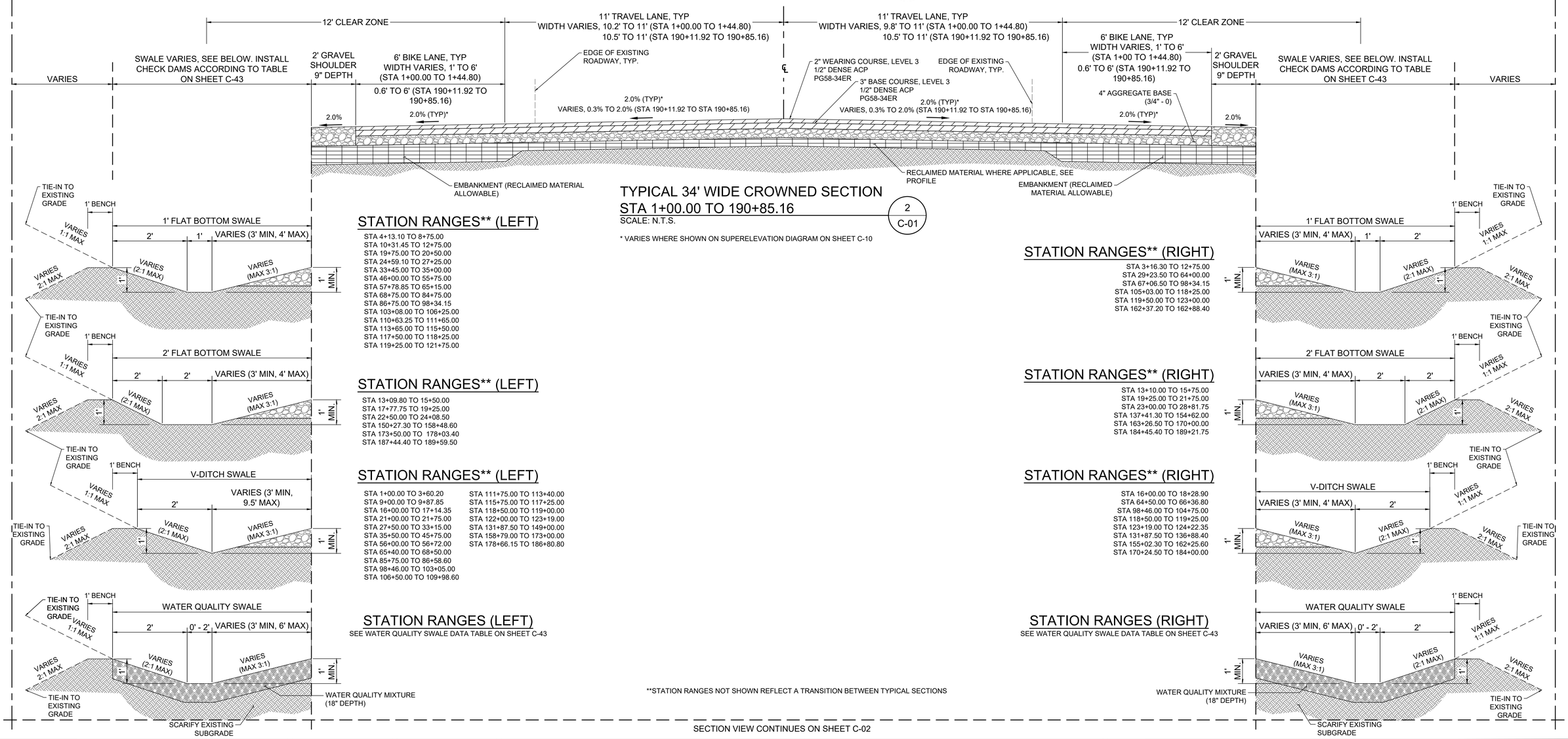
DRAWING NO. 19 OF 117
SHEET NO. G-19

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\XREF_VOID\Fence Data 2024.12.10\XBASE_FNC_AF.dwg



FULL DEPTH RECLAMATION
STA 1+00.00 TO 250+48.09
SCALE: N.T.S.

1 / C-01



TYPICAL 34' WIDE CROWNED SECTION
STA 1+00.00 TO 190+85.16
SCALE: N.T.S.

2 / C-01

* VARIES WHERE SHOWN ON SUPERELEVATION DIAGRAM ON SHEET C-10

STATION RANGES** (LEFT)

STA 4+13.10 TO 8+75.00
STA 10+31.45 TO 12+75.00
STA 19+75.00 TO 20+50.00
STA 24+59.10 TO 27+25.00
STA 33+45.00 TO 35+00.00
STA 46+00.00 TO 55+75.00
STA 57+78.85 TO 65+15.00
STA 68+75.00 TO 84+75.00
STA 86+75.00 TO 98+34.15
STA 103+08.00 TO 106+25.00
STA 110+63.25 TO 111+65.00
STA 113+65.00 TO 115+50.00
STA 117+50.00 TO 118+25.00
STA 119+25.00 TO 121+75.00

STATION RANGES** (LEFT)

STA 13+09.80 TO 15+50.00
STA 17+77.75 TO 19+25.00
STA 22+50.00 TO 24+08.50
STA 150+27.30 TO 158+48.60
STA 173+50.00 TO 178+03.40
STA 187+44.40 TO 189+59.50

STATION RANGES** (LEFT)

STA 1+00.00 TO 3+60.20
STA 9+00.00 TO 9+87.85
STA 16+00.00 TO 17+14.35
STA 21+00.00 TO 21+75.00
STA 27+50.00 TO 33+15.00
STA 35+50.00 TO 45+75.00
STA 56+00.00 TO 56+72.00
STA 65+40.00 TO 68+50.00
STA 85+75.00 TO 86+58.60
STA 98+46.00 TO 103+05.00
STA 106+50.00 TO 109+98.60
STA 111+75.00 TO 113+40.00
STA 115+75.00 TO 117+25.00
STA 118+50.00 TO 119+00.00
STA 122+00.00 TO 123+19.00
STA 131+87.50 TO 149+00.00
STA 158+79.00 TO 173+00.00
STA 178+66.15 TO 186+80.80

STATION RANGES (LEFT)

SEE WATER QUALITY SWALE DATA TABLE ON SHEET C-43

STATION RANGES** (RIGHT)

STA 3+16.30 TO 12+75.00
STA 29+23.50 TO 64+00.00
STA 67+06.50 TO 98+34.15
STA 105+03.00 TO 118+25.00
STA 119+50.00 TO 123+00.00
STA 162+37.20 TO 162+88.40

STATION RANGES** (RIGHT)

STA 13+10.00 TO 15+75.00
STA 19+25.00 TO 21+75.00
STA 23+00.00 TO 28+81.75
STA 137+41.30 TO 154+62.00
STA 163+26.50 TO 170+00.00
STA 184+45.40 TO 189+21.75

STATION RANGES** (RIGHT)

STA 16+00.00 TO 18+28.90
STA 64+50.00 TO 66+36.80
STA 98+46.00 TO 104+75.00
STA 118+50.00 TO 119+25.00
STA 123+19.00 TO 124+22.35
STA 131+87.50 TO 136+88.40
STA 155+02.30 TO 162+25.60
STA 170+24.50 TO 184+00.00

STATION RANGES (RIGHT)

SEE WATER QUALITY SWALE DATA TABLE ON SHEET C-43

**STATION RANGES NOT SHOWN REFLECT A TRANSITION BETWEEN TYPICAL SECTIONS

SECTION VIEW CONTINUES ON SHEET C-02

X:\Projects\Deschutes County\Tumalo Reservoir Road\CADD_WORKING\C-01 CROSS SECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

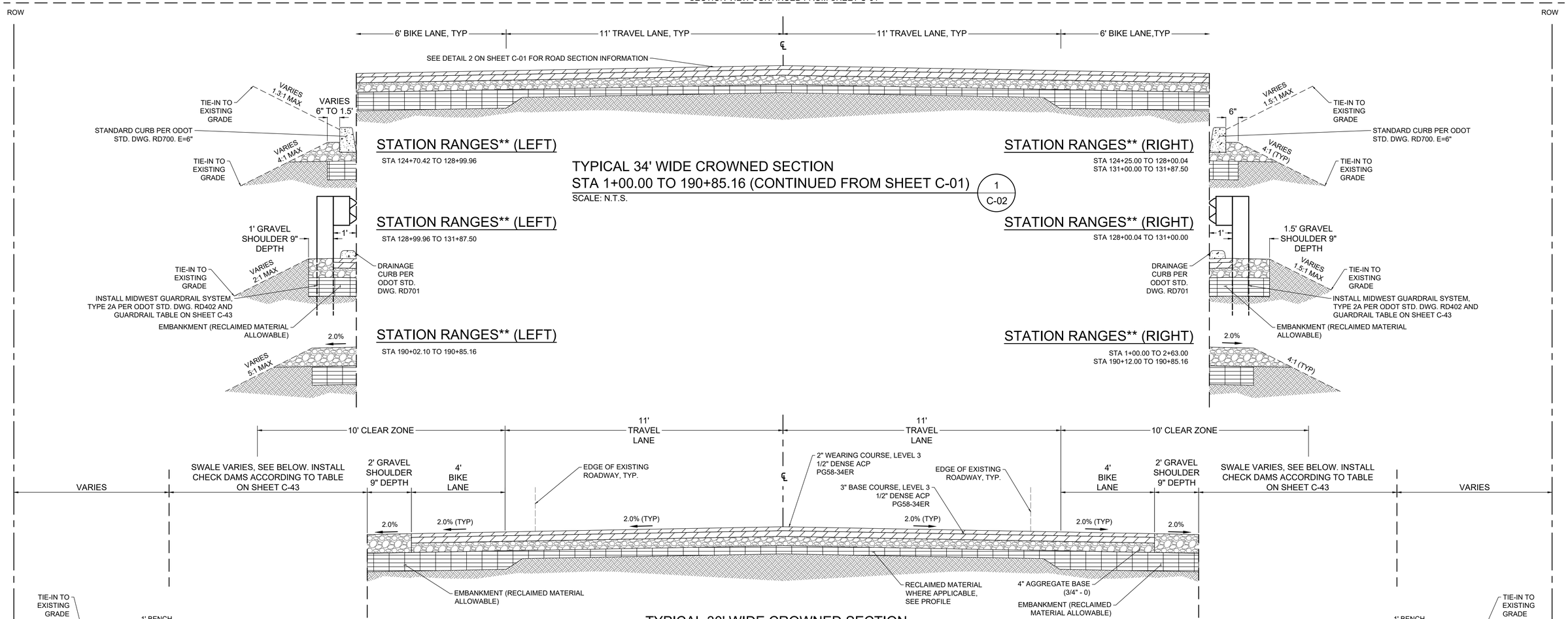
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TYPICAL SECTIONS

DRAWING NO. 20 OF 117

SHEET NO. C-01

SECTION VIEW CONTINUED FROM SHEET C-01



STATION RANGES** (LEFT)

STA 124+70.42 TO 128+99.96

STA 128+99.96 TO 131+87.50

STA 190+02.10 TO 190+85.16

STATION RANGES** (RIGHT)

STA 124+25.00 TO 128+00.04
STA 131+00.00 TO 131+87.50

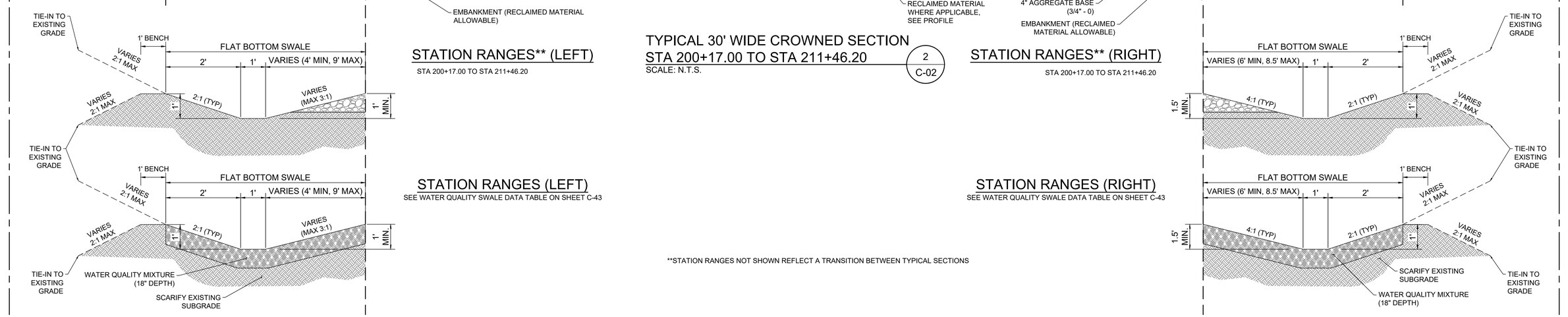
STA 128+00.04 TO 131+00.00

STA 1+00.00 TO 2+63.00
STA 190+12.00 TO 190+85.16

TYPICAL 34' WIDE CROWNED SECTION
STA 1+00.00 TO 190+85.16 (CONTINUED FROM SHEET C-01)

SCALE: N.T.S.

1 / C-02



STATION RANGES** (LEFT)

STA 200+17.00 TO STA 211+46.20

STATION RANGES (LEFT)

SEE WATER QUALITY SWALE DATA TABLE ON SHEET C-43

TYPICAL 30' WIDE CROWNED SECTION
STA 200+17.00 TO STA 211+46.20

SCALE: N.T.S.

2 / C-02

STATION RANGES** (RIGHT)

STA 200+17.00 TO STA 211+46.20

STATION RANGES (RIGHT)

SEE WATER QUALITY SWALE DATA TABLE ON SHEET C-43

**STATION RANGES NOT SHOWN REFLECT A TRANSITION BETWEEN TYPICAL SECTIONS

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-01 CROSS SECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

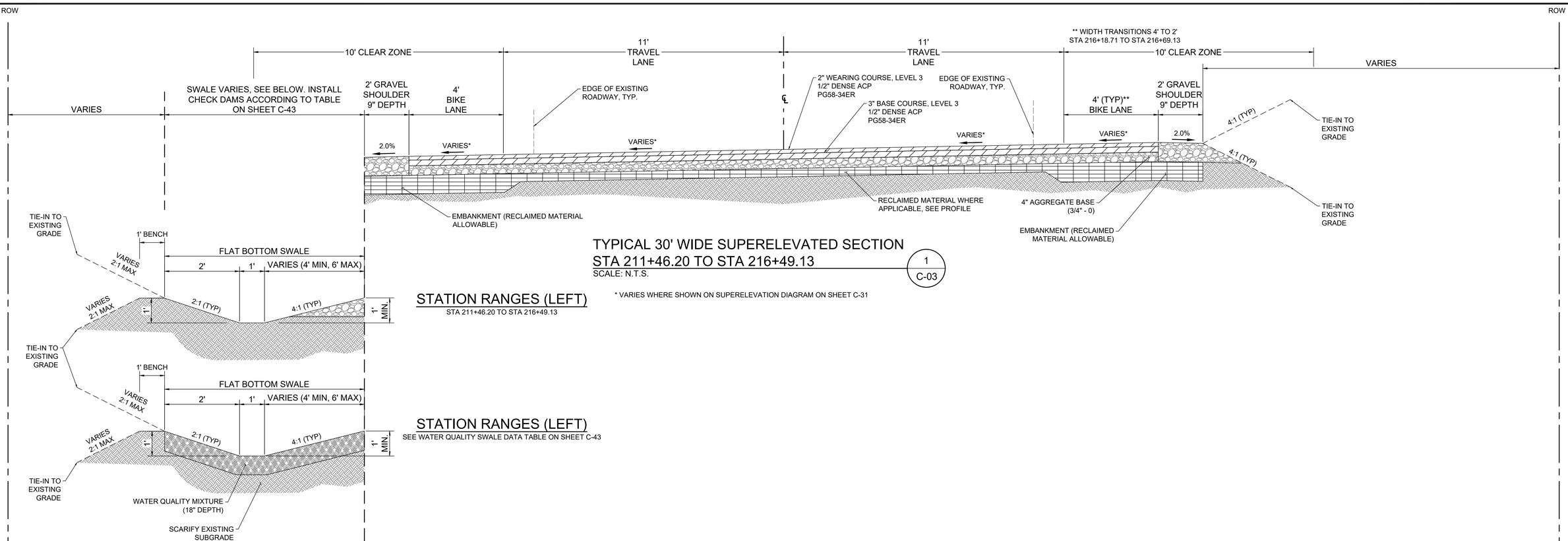
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TYPICAL SECTIONS

DRAWING NO. 21 OF 117
SHEET NO. C-02



TYPICAL 30' WIDE SUPERELEVATED SECTION
STA 211+46.20 TO STA 216+49.13

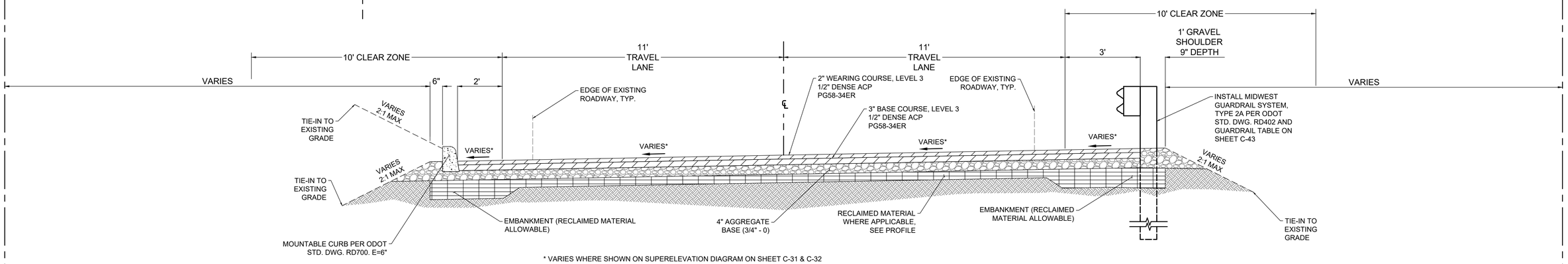
1 / C-03

SCALE: N.T.S.

STATION RANGES (LEFT)
STA 211+46.20 TO STA 216+49.13

STATION RANGES (LEFT)
SEE WATER QUALITY SWALE DATA TABLE ON SHEET C-43

* VARIES WHERE SHOWN ON SUPERELEVATION DIAGRAM ON SHEET C-31



* VARIES WHERE SHOWN ON SUPERELEVATION DIAGRAM ON SHEET C-31 & C-32

TYPICAL 26' SUPERELEVATED SECTION W/ DRAINAGE CURB
STA 216+49.13 TO STA 217+75.75

2 / C-03

SCALE: N.T.S.

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-01 CROSS SECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — 87553PE — OREGON — NOV. 13, 2018 — ALEC VEIKKO FRANSEN — RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

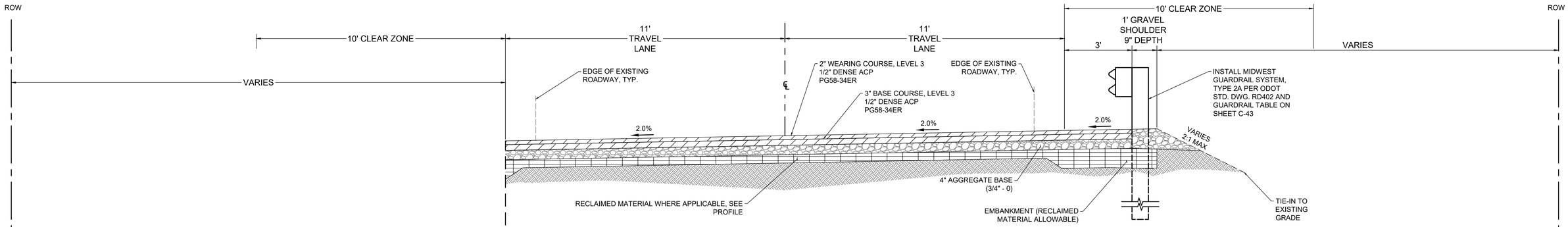
DATE: AUGUST 2025 | PROJECT NO: 12602.002.01 | SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TYPICAL SECTIONS

DRAWING NO. 22 OF 117

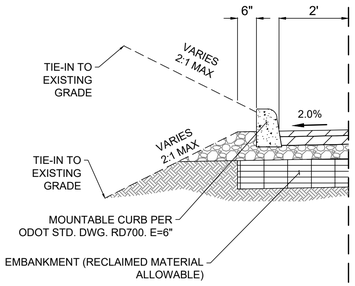
SHEET NO. C-03



TYPICAL 26' WIDE SHED SECTION
STA 217+75.75 TO STA 231+18.78

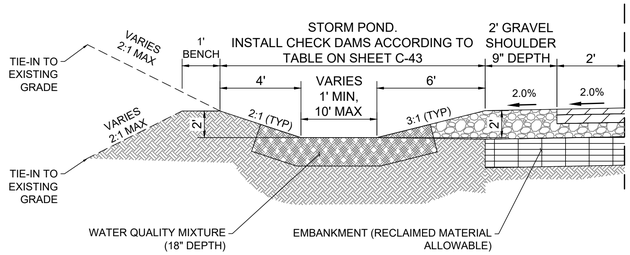
SCALE: N.T.S.

1 / C-04



STATION RANGES (LEFT)

STA 217+75.75 TO STA 218+99.40
STA 219+90.00 TO STA 227+00.00
STA 230+00.00 TO STA 231+18.78



STATION RANGES (LEFT)

STA 218+99.40 TO STA 219+90.00
STA 227+00.00 TO STA 230+00.00

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKINGIC-01 CROSS SECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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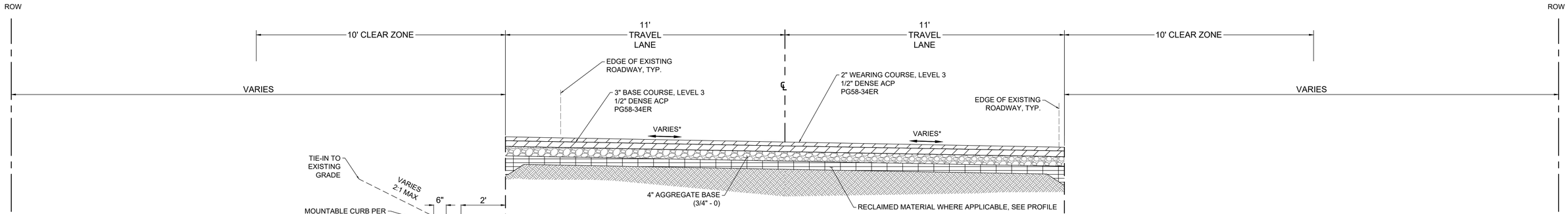
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TYPICAL SECTIONS

DRAWING NO. 23 OF 117
SHEET NO. C-04



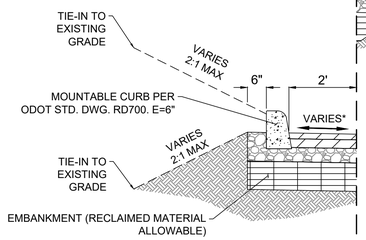
TYPICAL 26' WIDE SUPERELEVATED SECTION
STA 231+18.78 TO STA 239+36.53

SCALE: N.T.S.

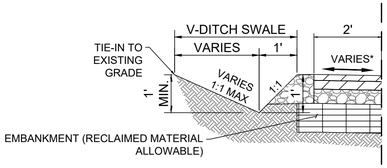
1 / C-05

* VARIES WHERE SHOWN ON SUPERELEVATION DIAGRAM ON SHEETS C-33 & C-34

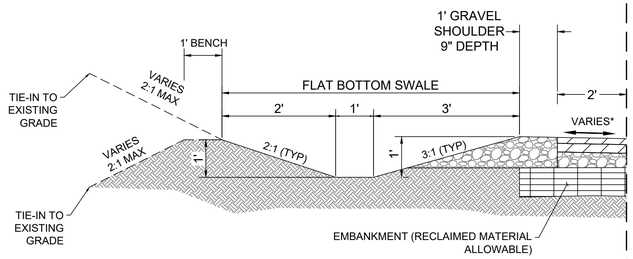
STATION RANGES (LEFT)
STA 231+18.78 TO STA 233+80.83



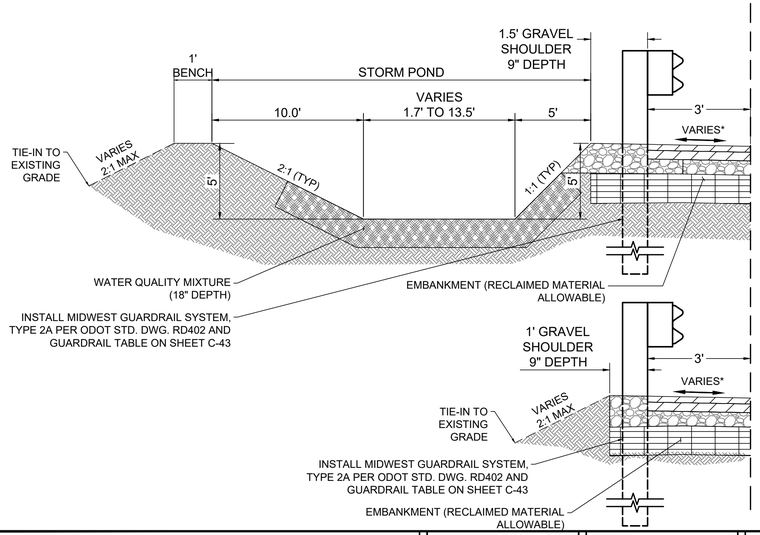
STATION RANGES** (LEFT)
STA 231+18.78 TO STA 233+80.83



STATION RANGES** (LEFT)
STA 233+80.83 TO STA 235+82.19



STATION RANGES** (LEFT)
STA 236+20.00 TO STA 237+69.40

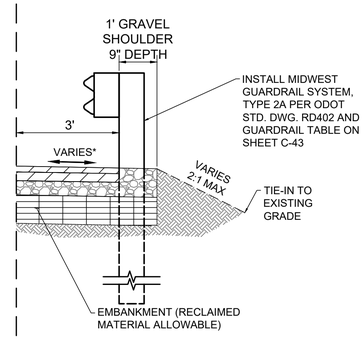


STATION RANGES** (LEFT)
STA 237+90.10 TO STA 238+37.33

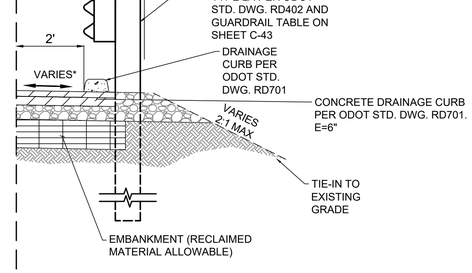
STATION RANGES** (LEFT)
STA 238+48.63 TO STA 239+36.53

**STATION RANGES NOT SHOWN REFLECT A TRANSITION BETWEEN TYPICAL SECTIONS

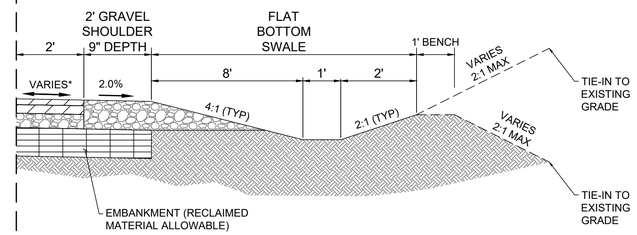
STATION RANGES** (RIGHT)
STA 231+18.78 TO STA 235+25.00



STATION RANGES** (RIGHT)
STA 235+25.00 TO STA 239+25.90



STATION RANGES** (RIGHT)
STA 239+25.90 TO STA 239+36.53



X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-01 CROSS SECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

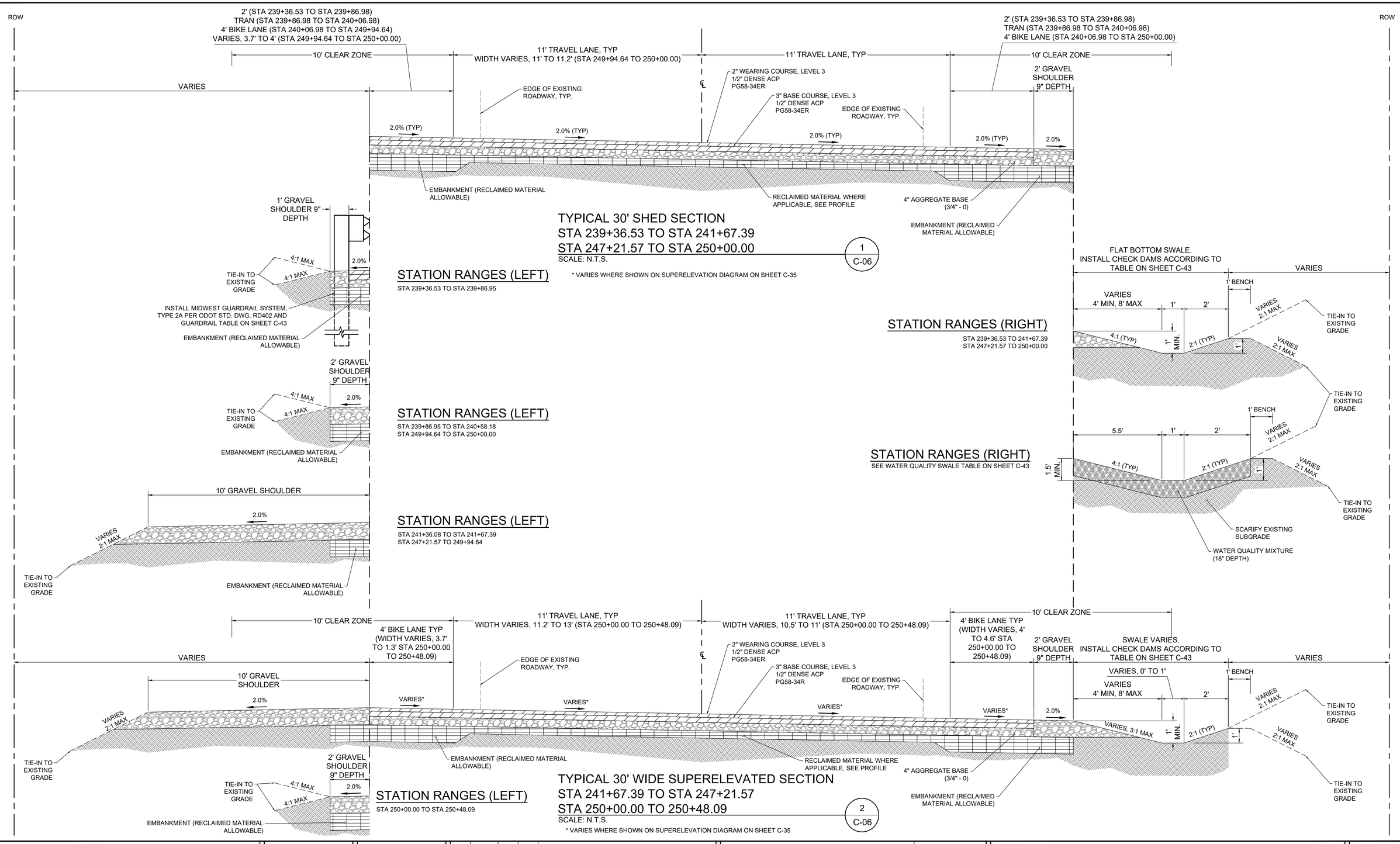
DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TYPICAL SECTIONS

DRAWING NO. 24 OF 117

SHEET NO. C-05



X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-01 CROSS SECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING
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1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

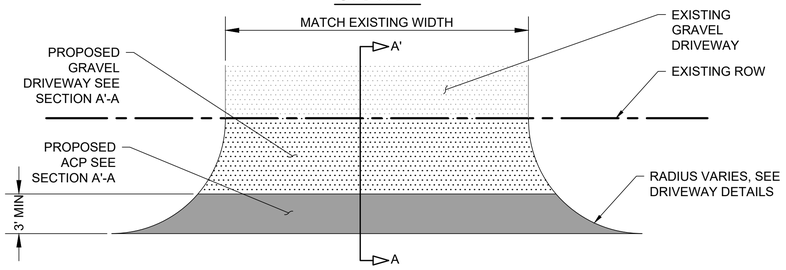
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

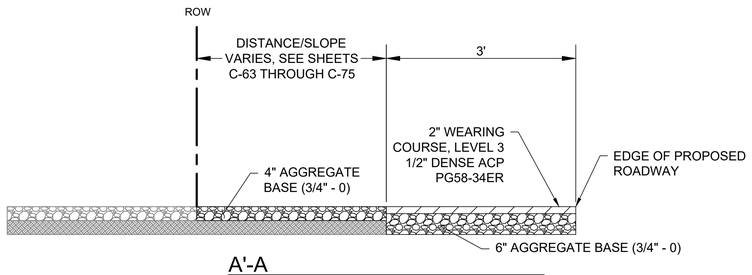
TYPICAL SECTIONS

DRAWING NO. 25 OF 117

SHEET NO. C-06

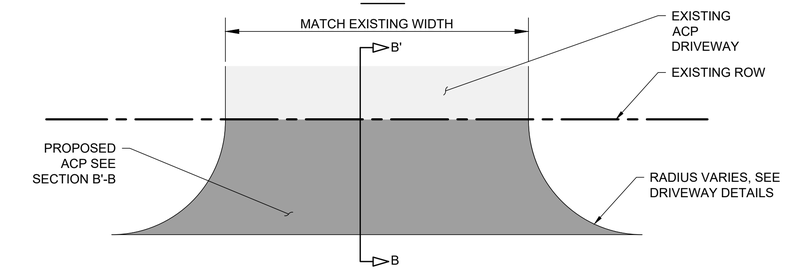
GRAVEL

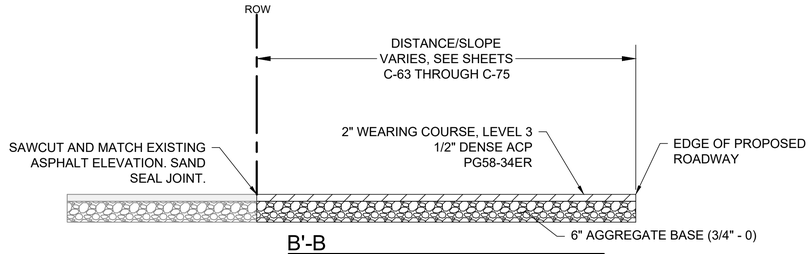




A'-A
N.T.S.

ACP

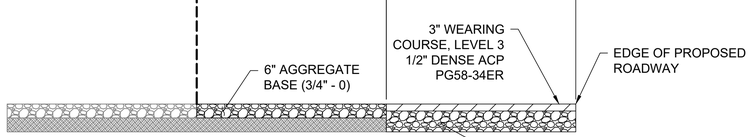




B'-B
N.T.S.

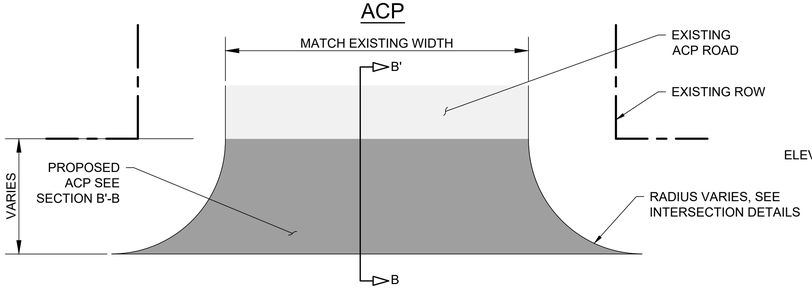
RESIDENTIAL DRIVEWAY DETAIL
N.T.S.
1
C-07

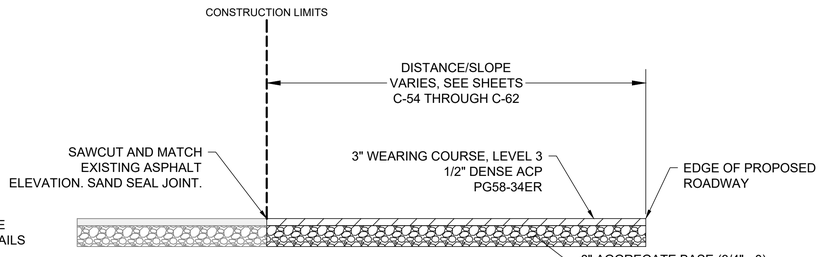
GRAVEL



A'-A
N.T.S.

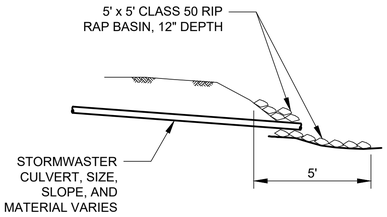
ACP



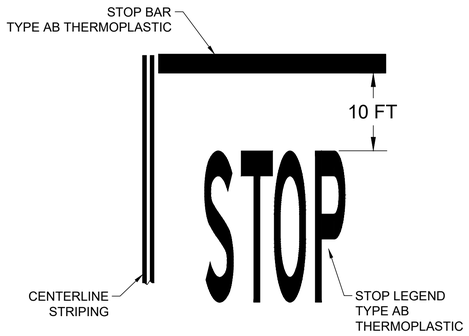


B'-B
N.T.S.

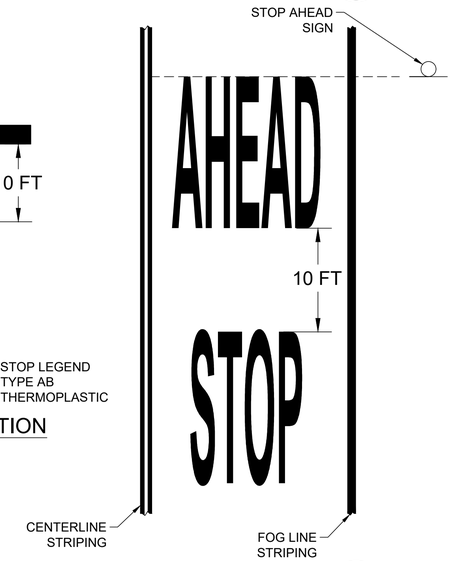
INTERSECTION DETAIL
N.T.S.
3
C-07



STORMWATER CULVERT OUTFALL
NO SCALE
2
C-07



STOP LEGEND INSTALLATION
PLAN VIEW



STOP AND STOP AHEAD LEGENDS
N.T.S.
4
C-07

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-07 STANDARD DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

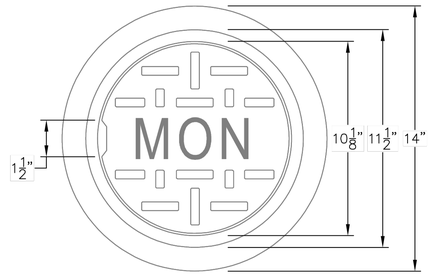
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

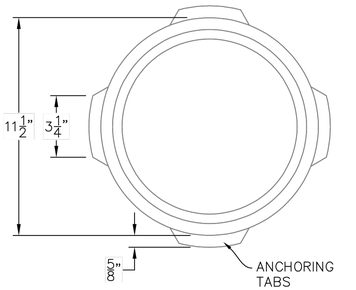
STANDARD DETAILS

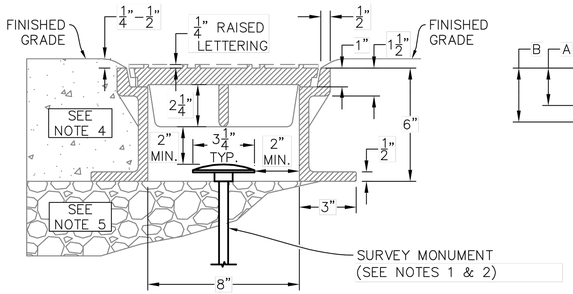
DRAWING NO. 26 OF 117
SHEET NO. C-07

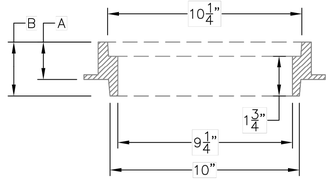
MONUMENT WELL & COVER
(OLYMPIC FOUNDRY PART NO. M1010)

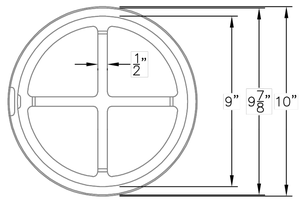


RISER RING
(OLYMPIC FOUNDRY PART NO. M1015R)









RISER RING TABLE

RISER HEIGHT (DIM. A)	DIM. B
1 1/2"	2 1/2"
2"	3"
3"	4"

CONSTRUCTION NOTES:

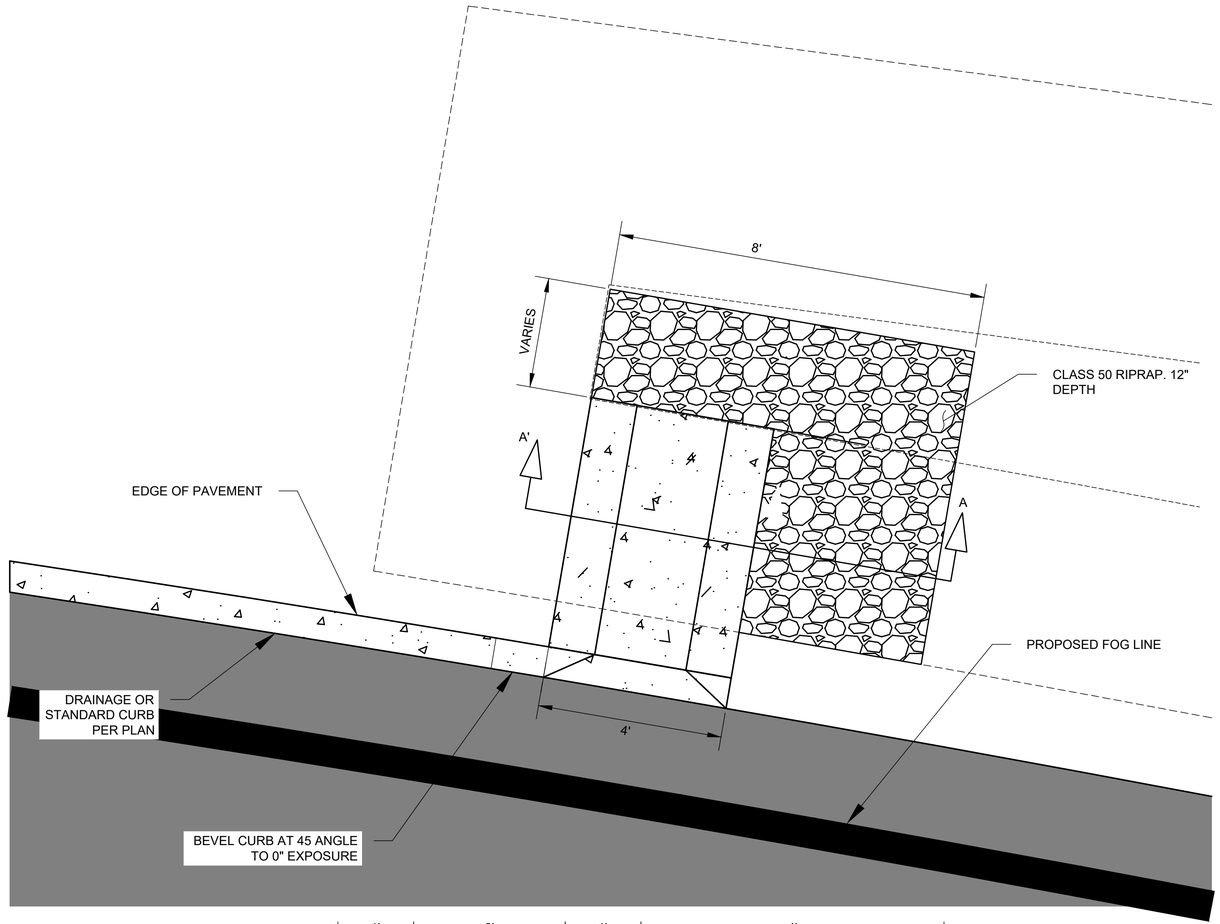
1. CENTER OF MONUMENT WELL TO BE STAKED BY SURVEYOR.
2. SURVEY MONUMENT TO BE INSTALLED BY COUNTY SURVEYOR, OR APPROVED CONSULTING SURVEYOR.
3. RISER RINGS MAY HAVE OPTIONAL ANCHORING TABS. SEE PLAN FOR SPECIFICATIONS.
4. HMAC OR PCC PAVEMENT PER PLAN.
5. BASE ROCK SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR PRIOR TO MONUMENT WELL INSTALLATION. BASE ROCK THICKNESS PER PLAN.

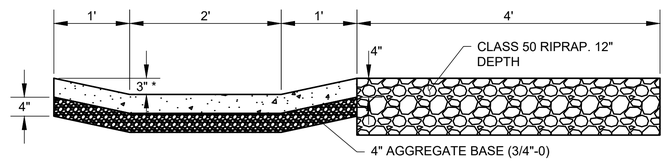
DESCHUTES COUNTY ROAD DEPARTMENT

TITLE: STANDARD MONUMENT WELL & RISER RINGS		DWG NO: 3–1
DATE: 1/18/2024	SCALE: NTS	APPROVED BY: C. SMITH

\\Street\ACADData\CAD\Projects\Surveying\Survey Monument Well Stnd Dwg\dwg\MON WELL DCSO.dwg

DESCHUTES COUNTY MONUMENT WELL
N.T.S.
1
C-08





A'-A
N.T.S.

* TRANSITION TO MATCH EDGE OF PROPOSED ROADWAY

CONCRETE AND RIP RAP BASIN
N.T.S.
2
C-08

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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BEND, OR 97702
541.322.8962
541.382.2423 FAX

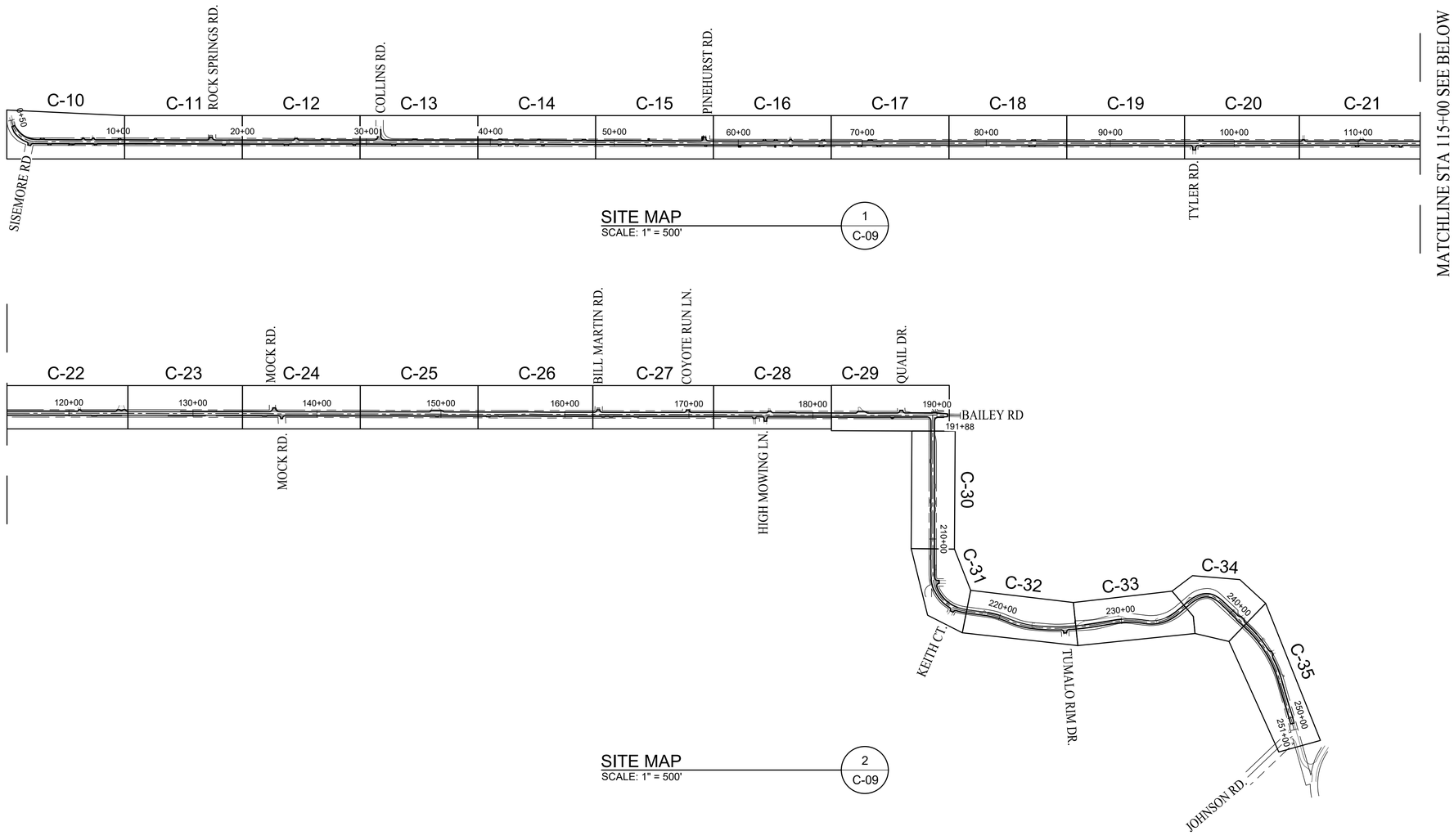
DESIGNED BY: AVF	DRAWN BY: SCL	CHECKED BY: RDV
DATE: AUGUST 2025	PROJECT NO: 12602.002.01	SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

STANDARD DETAILS

DRAWING NO. 27 OF 117
SHEET NO. C-08

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-07 STANDARD DETAILS.dwg



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

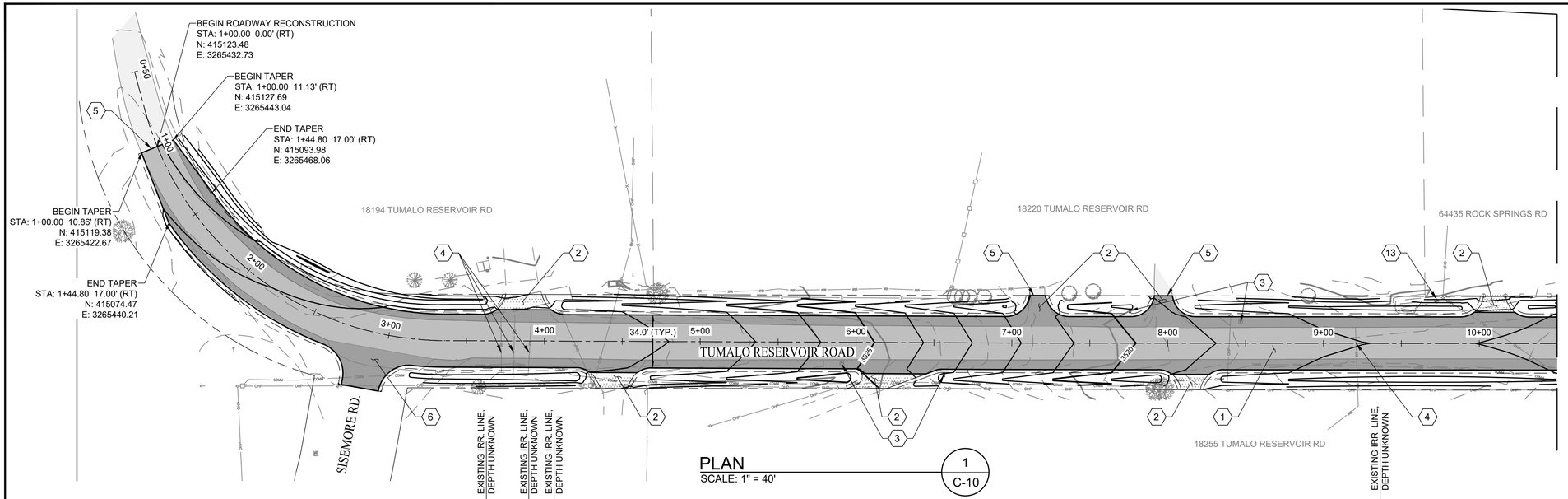
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY DESIGN SHEET INDEX

DRAWING NO. 28 OF 117
SHEET NO. C-09



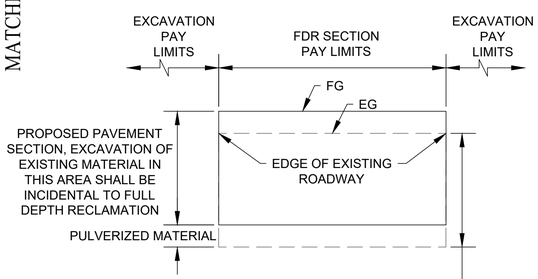
PLAN
SCALE: 1" = 40'

1 C-10

MATCHLINE STA 10+50 SEE SHEET C-11

PLAN AND PROFILE KEY NOTES

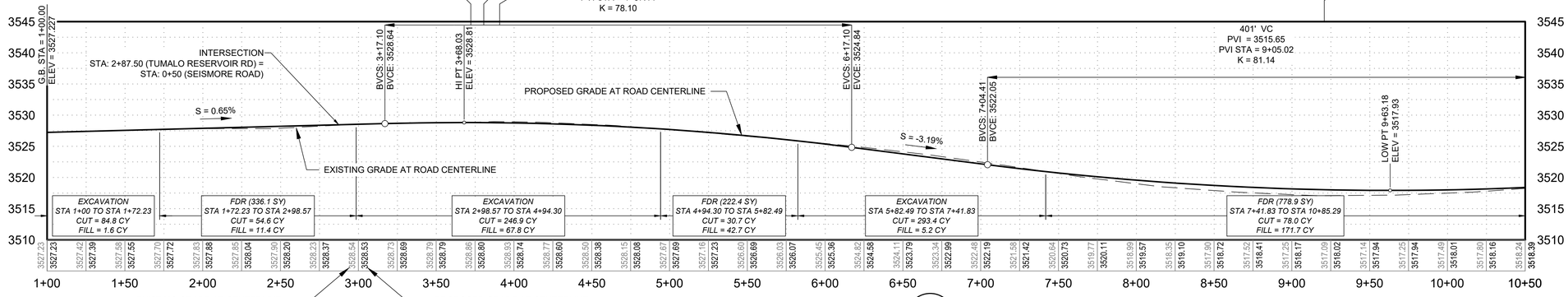
1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
13. ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.



9" PULVERIZATION DEPTH. PAY LIMITS SHALL BE BASED ON SURFACE AREA OF EXISTING BITUMINOUS SURFACING

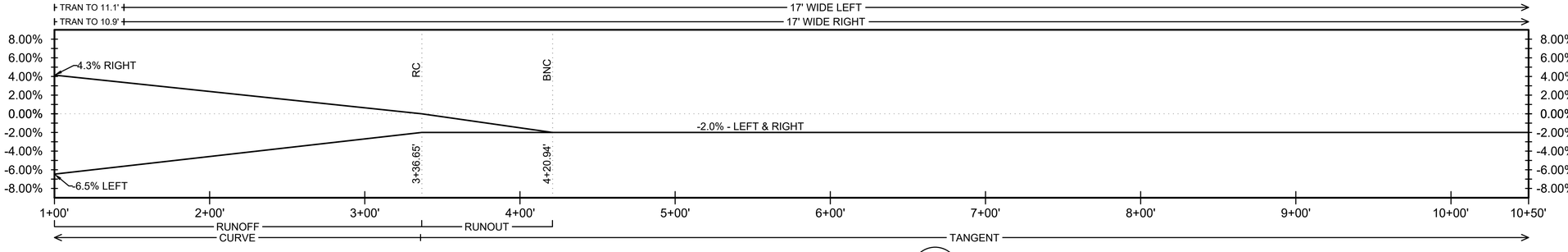
TYPICAL FDR SECTION PAY LIMITS
SCALE: N.T.S.

3 C-10



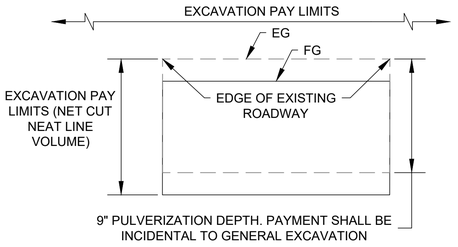
PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2 C-10



SUPERELEVATION
SCALE: 1" = 20' HORZONTAL

3 C-10



9" PULVERIZATION DEPTH. PAYMENT SHALL BE INCIDENTAL TO GENERAL EXCAVATION

TYPICAL EXCAVATION SECTION PAY LIMITS
SCALE: N.T.S.

4 C-10

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 0+50 TO STA 10+50

DRAWING NO. 29 OF 117
SHEET NO. C-10

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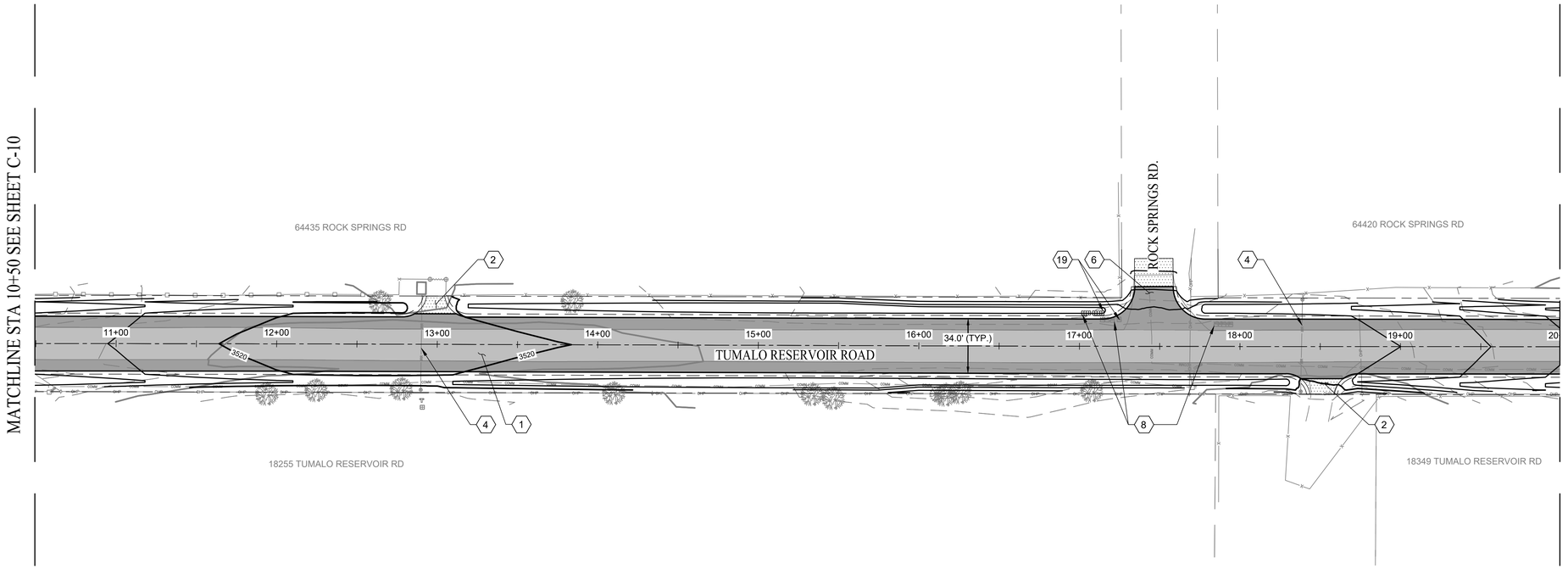
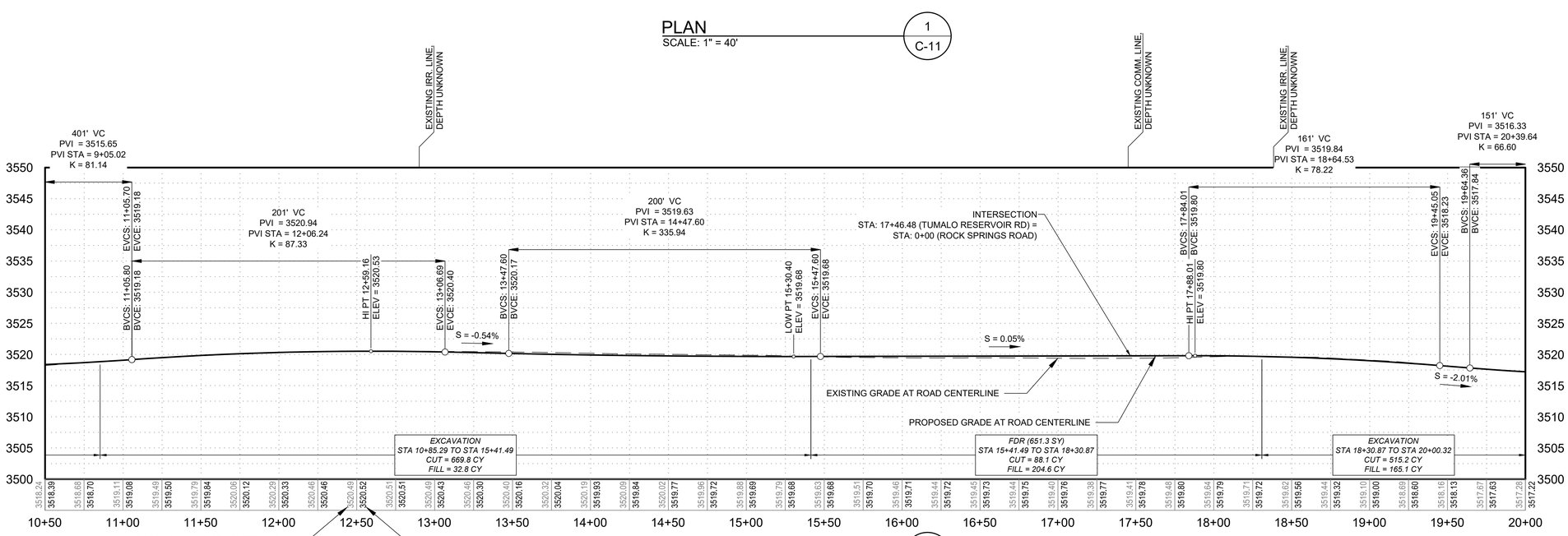


PLAN
SCALE: 1" = 40'

1
C-11

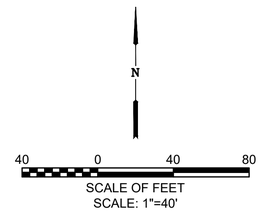
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.
19. INSTALL NEW MAILBOX ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100. MAILBOX TO APPROVED BY ENGINEER PRIOR TO INSTALLATION.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-11



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

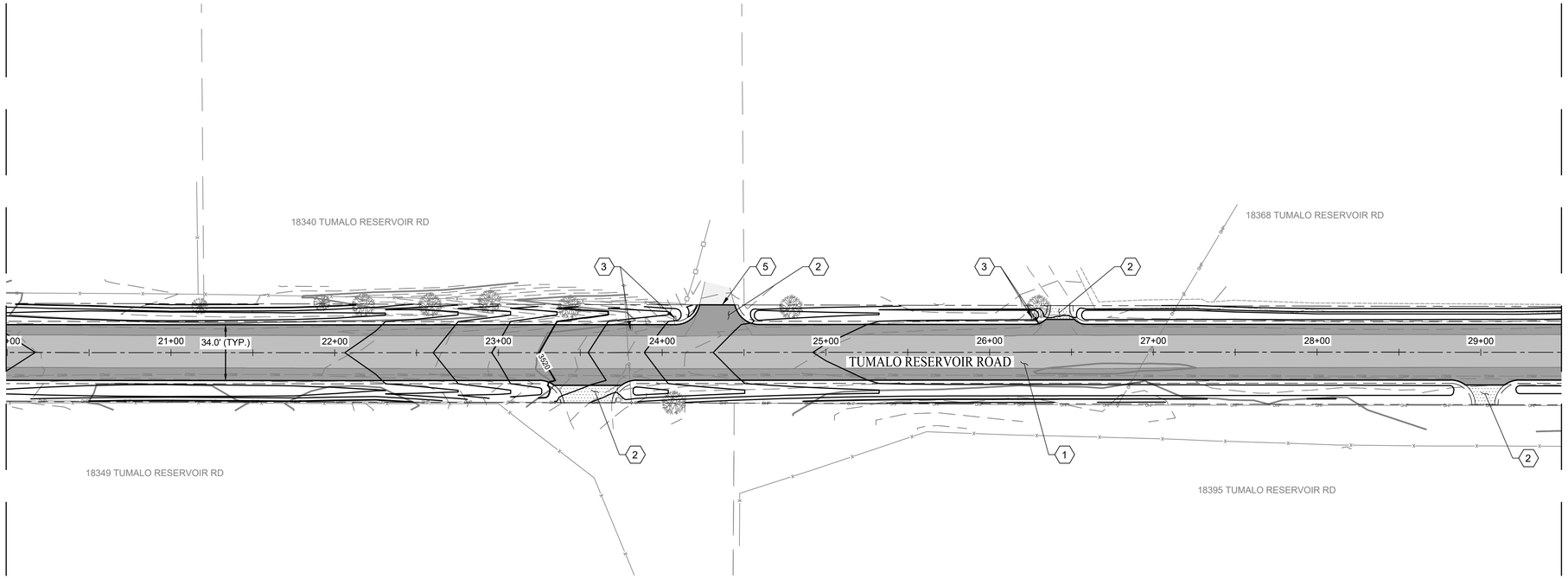
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 10+50 TO STA 20+00

DRAWING NO. 30 OF 117
SHEET NO. C-11

MATCHLINE STA 20+00 SEE SHEET C-11

MATCHLINE STA 29+50 SEE SHEET C-13

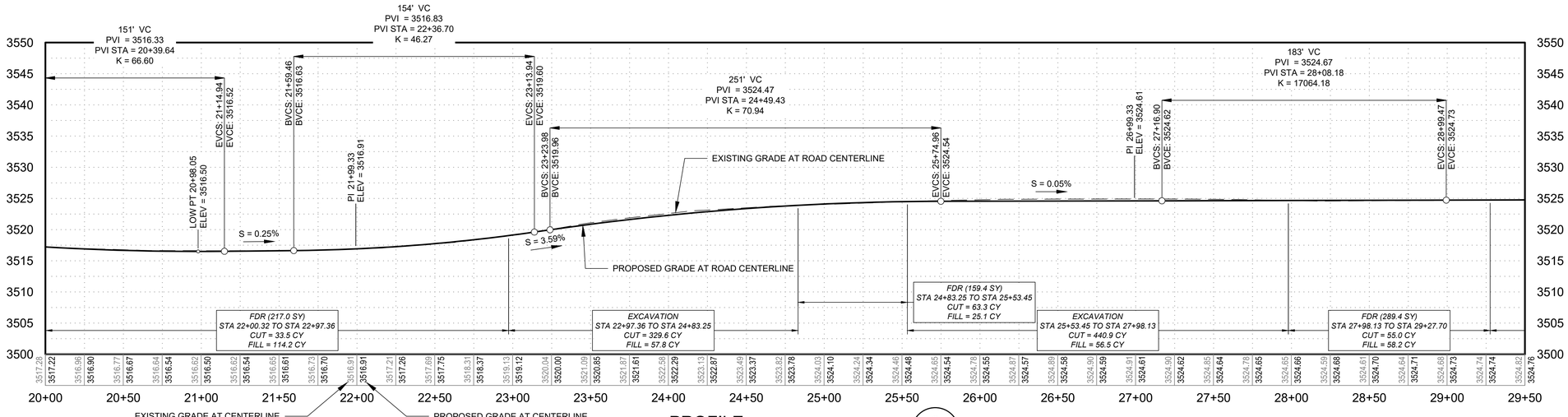


PLAN
SCALE: 1" = 40'

1
C-12

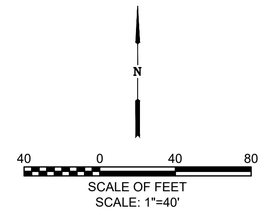
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-12



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
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NO.	DATE	BY	APPR	REVISIONS

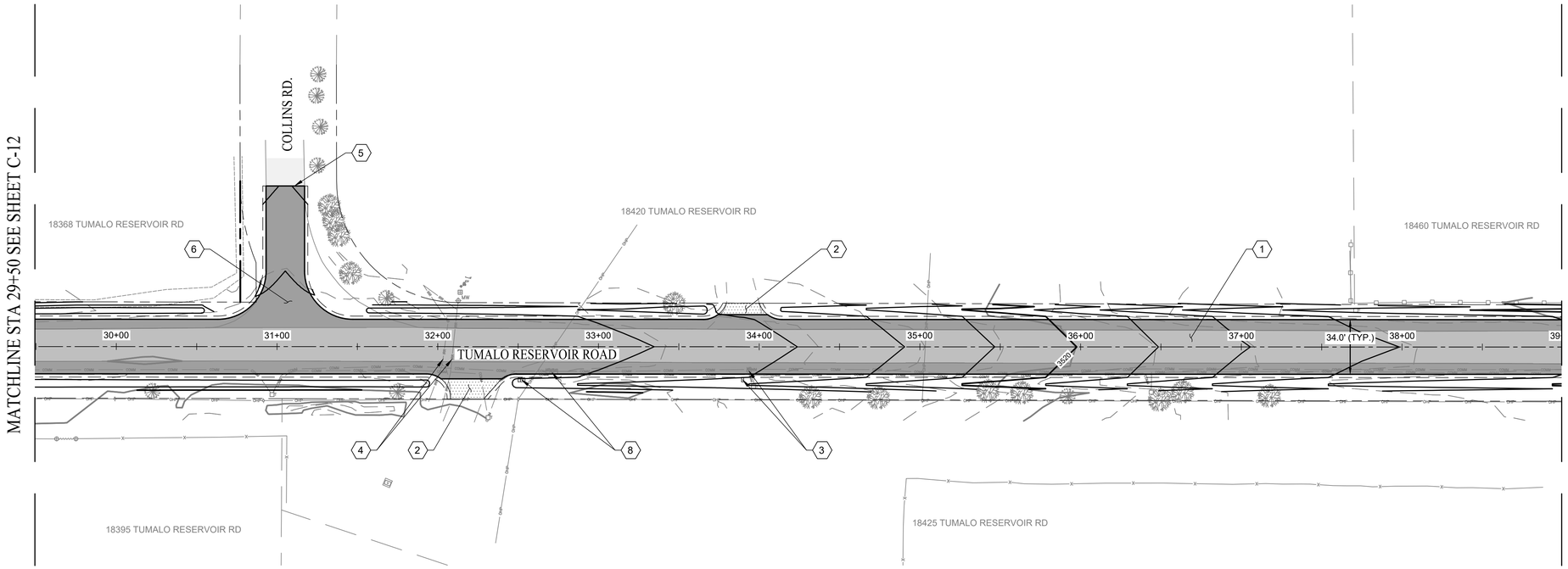
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

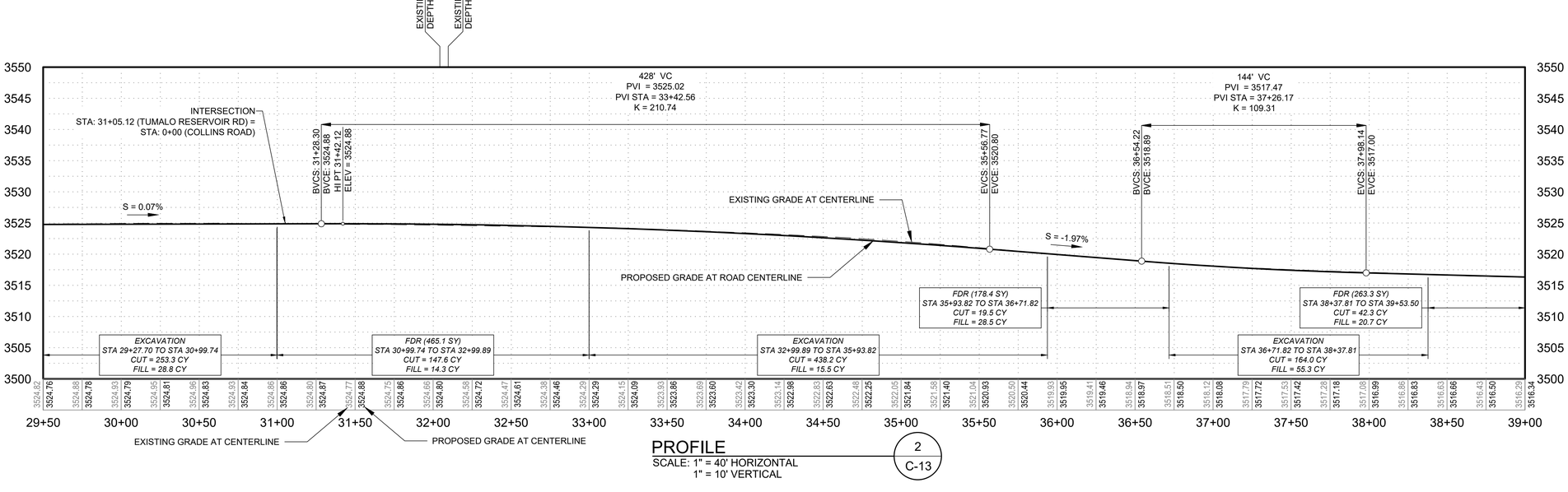
ROADWAY PLAN & PROFILE
STA 20+00 TO STA 29+50

DRAWING NO. 31 OF 117
SHEET NO. C-12



PLAN
SCALE: 1" = 40'

1
C-13



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-13

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 29+50 TO STA 39+00

DRAWING NO. 32 OF 117
SHEET NO. C-13

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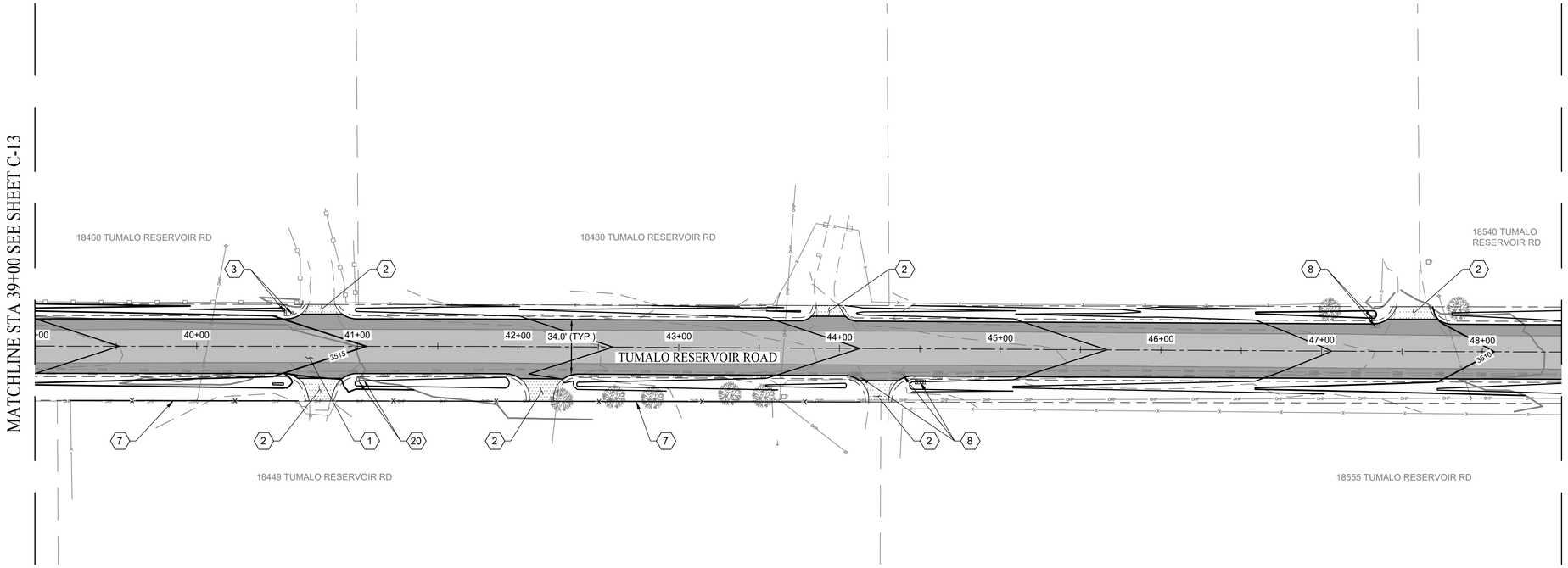
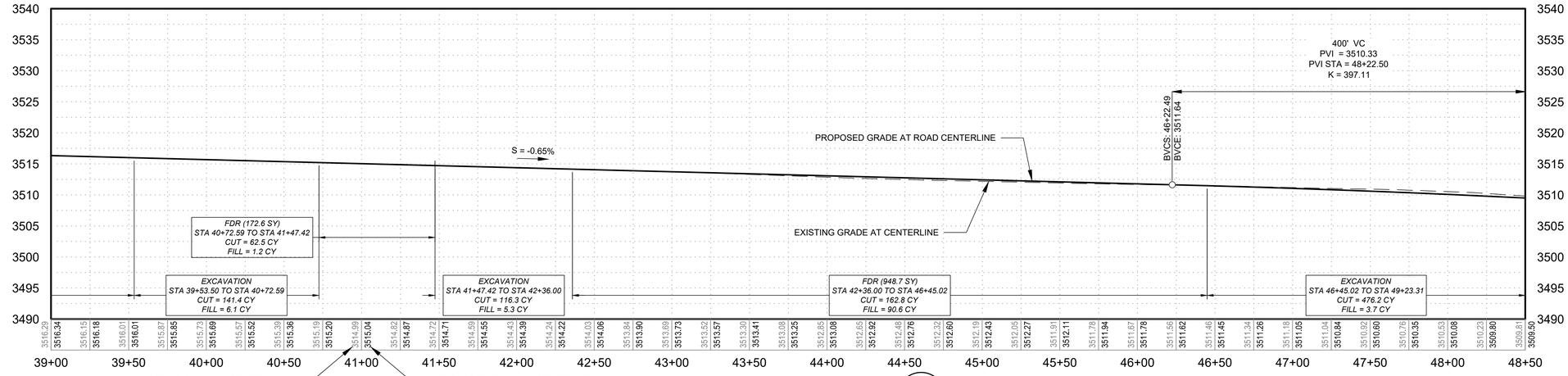


PLAN
SCALE: 1" = 40'

1
C-14

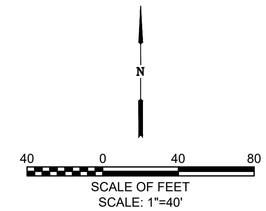
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.
20. INSTALL NEW MAILBOX ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100. MAILBOX TO APPROVED BY ENGINEER PRIOR TO INSTALLATION.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-14



SCALE OF FEET
SCALE: 1"=40'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

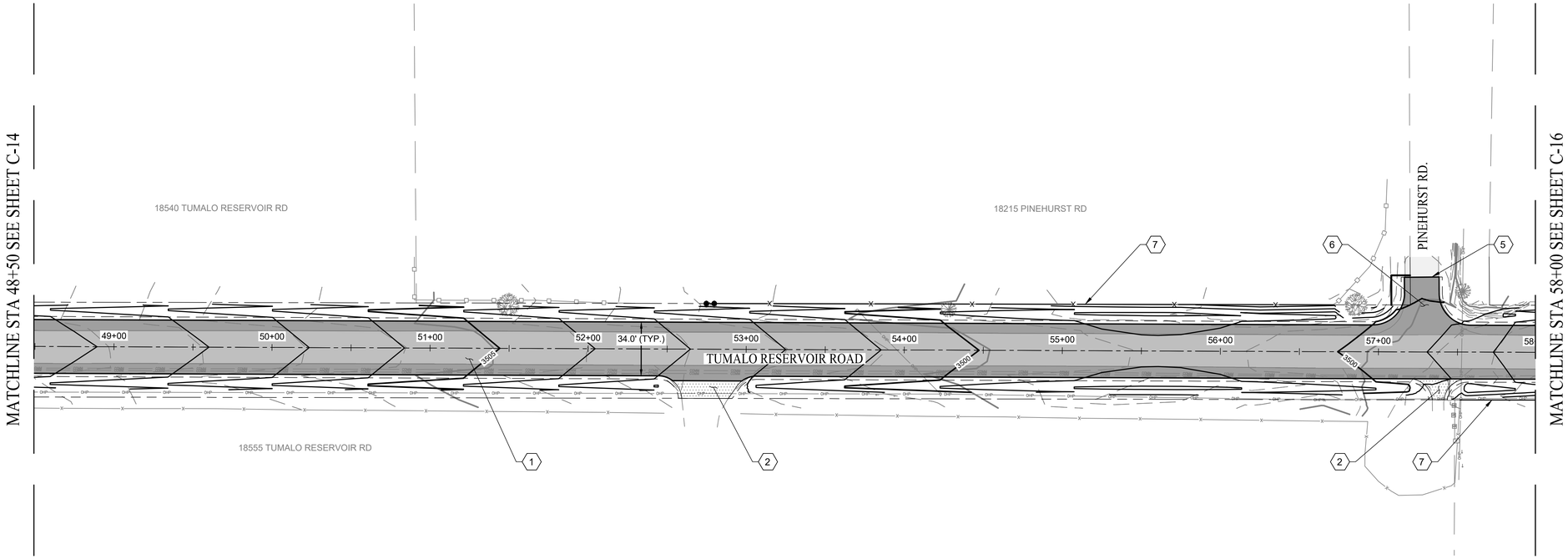
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 39+00 TO STA 48+50

DRAWING NO. 33 OF 117
SHEET NO. C-14

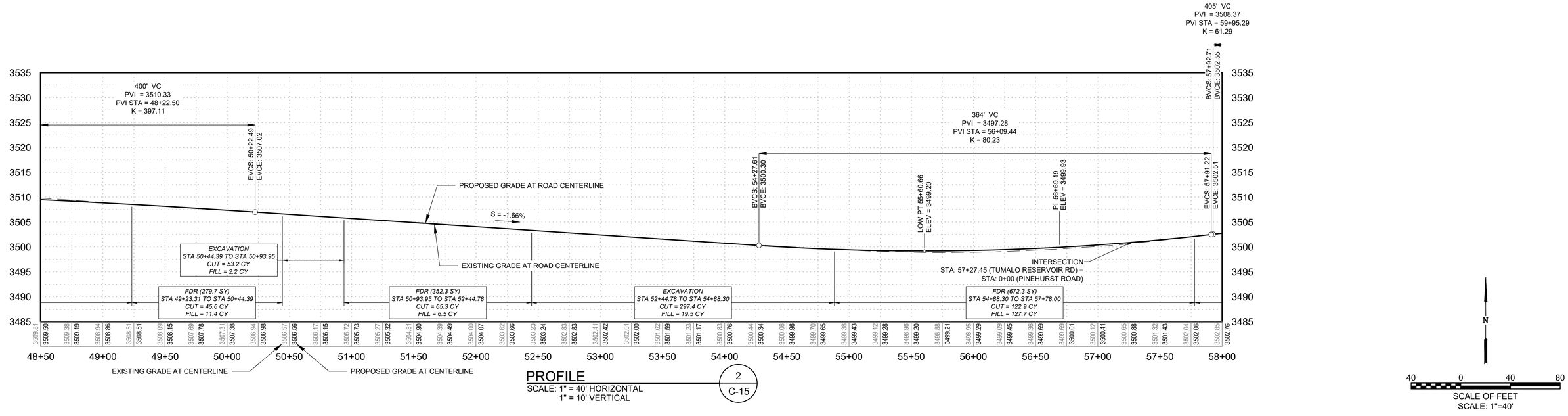


PLAN
SCALE: 1" = 40'

1
C-15

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-15

SCALE OF FEET
SCALE: 1"=40'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CADD_WORKING\G-02 PLAN AND PROFILE.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — 87553PE — OREGON — NOV. 13, 2018 — ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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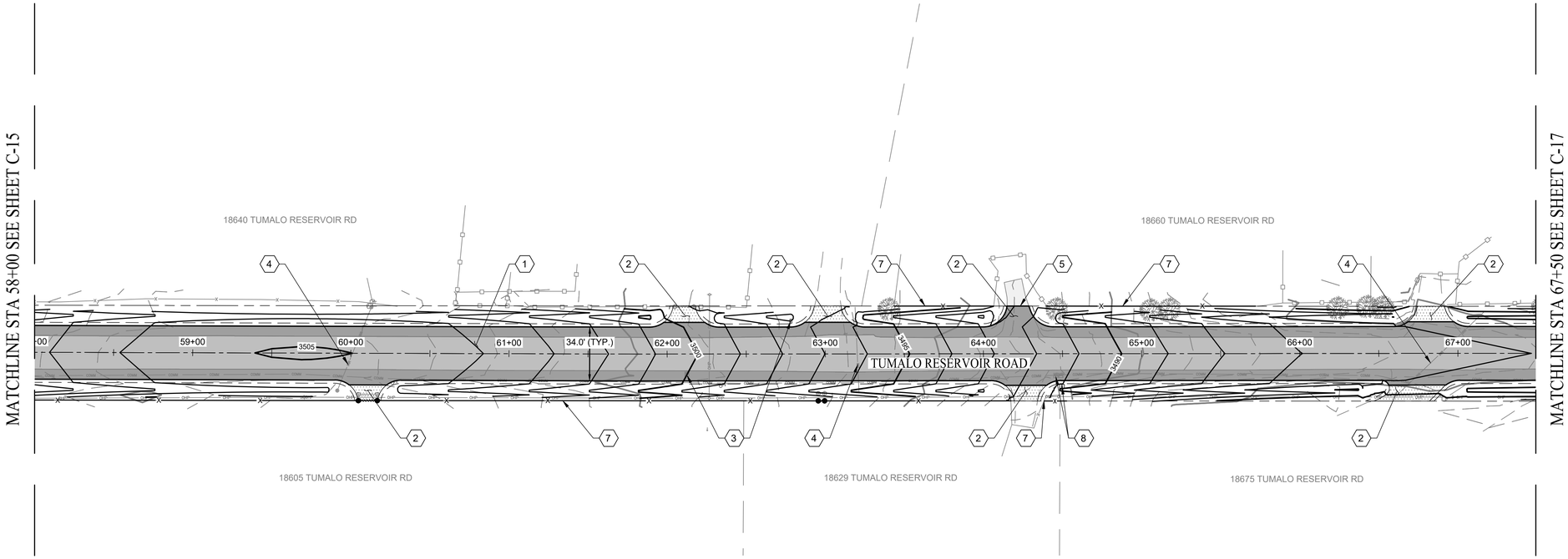
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

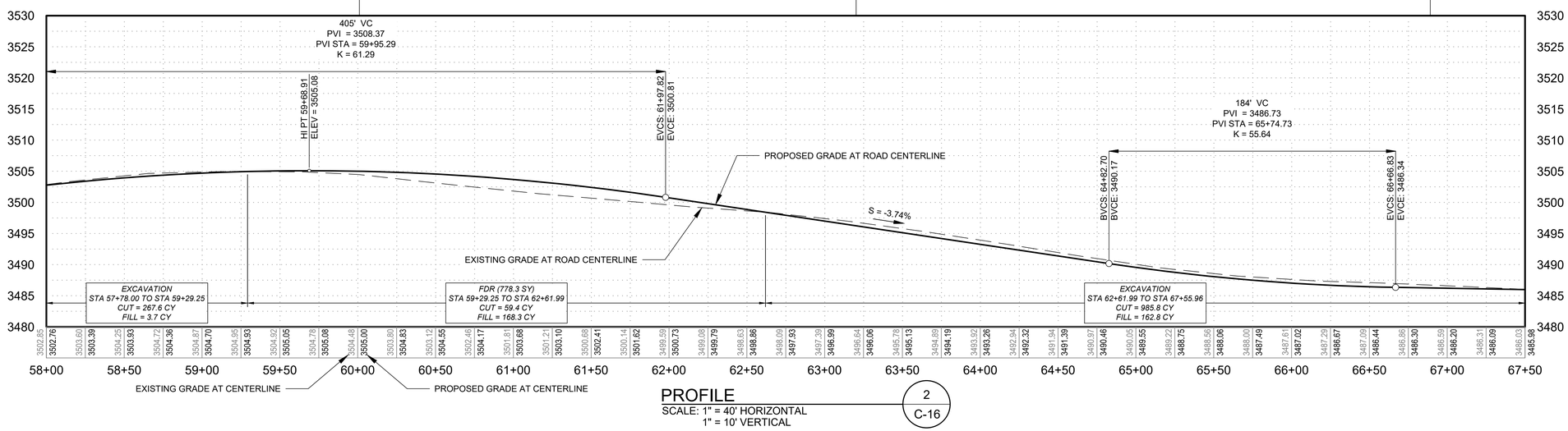
ROADWAY PLAN & PROFILE
STA 48+50 TO STA 58+00

DRAWING NO. 34 OF 117
SHEET NO. C-15



PLAN
SCALE: 1" = 40'

1
C-16

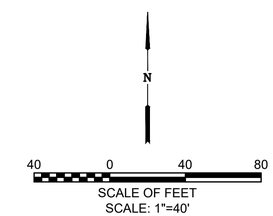


PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-16

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

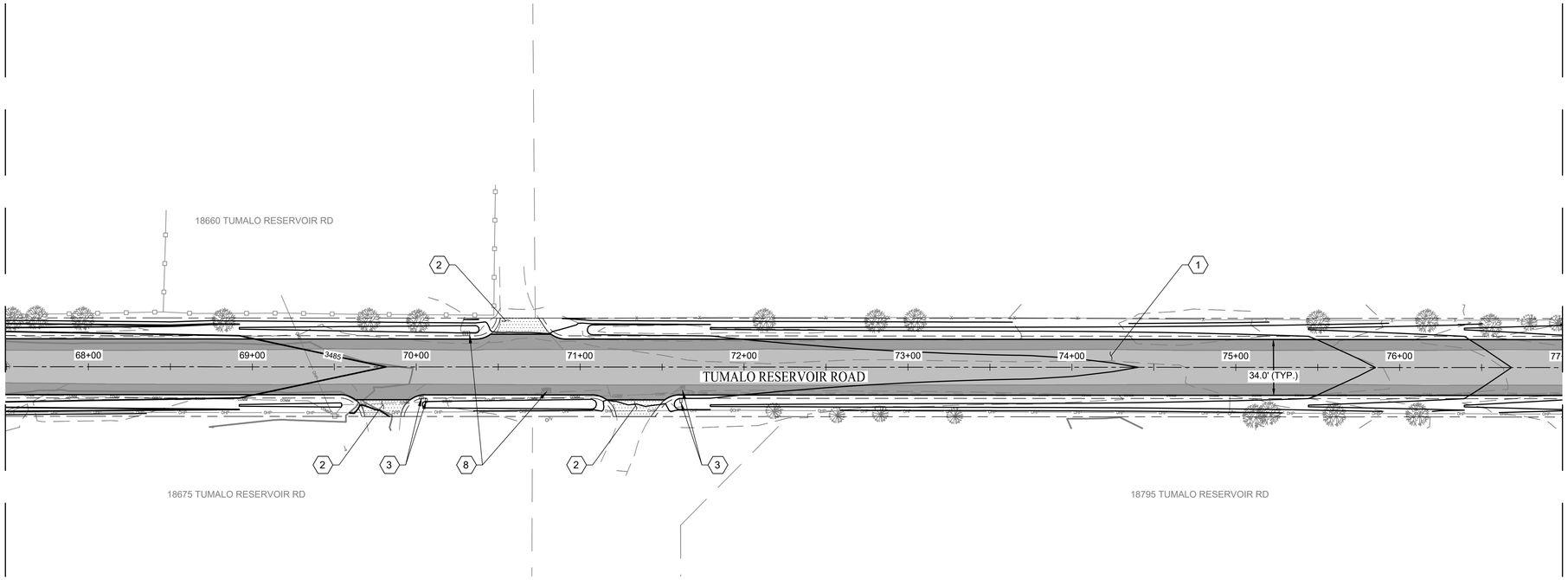
ROADWAY PLAN & PROFILE
STA 58+00 TO STA 67+50

DRAWING NO.
35 OF 117

SHEET NO.
C-16

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

MATCHLINE STA 67+50 SEE SHEET C-16



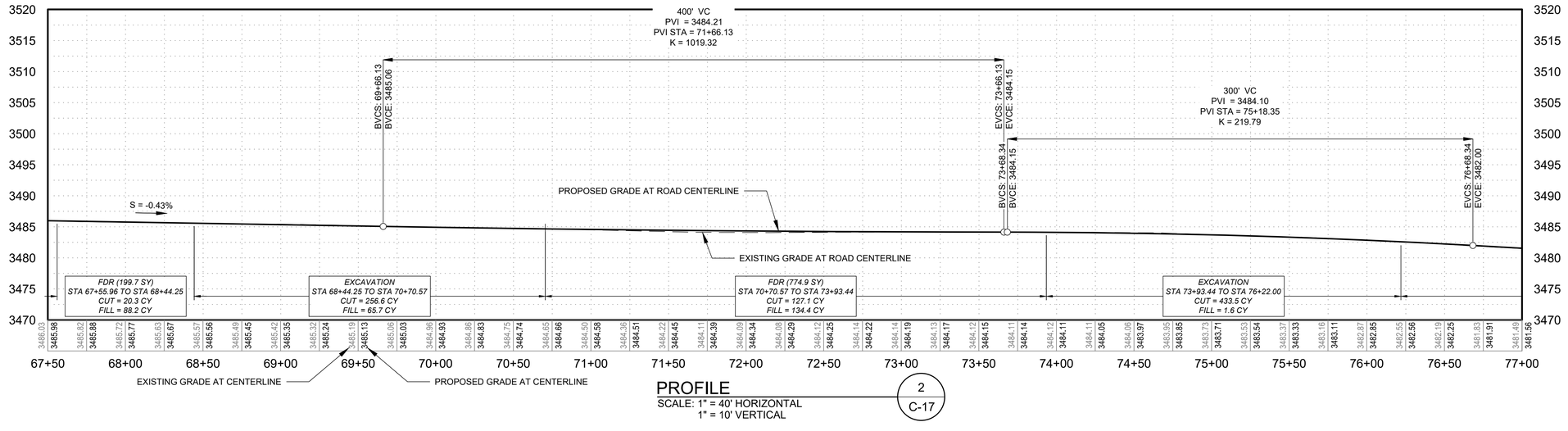
MATCHLINE STA 77+00 SEE SHEET C-18

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.

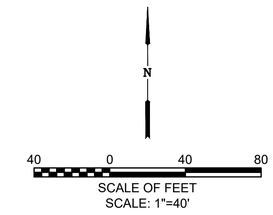
PLAN
SCALE: 1" = 40'

1
C-17



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-17



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

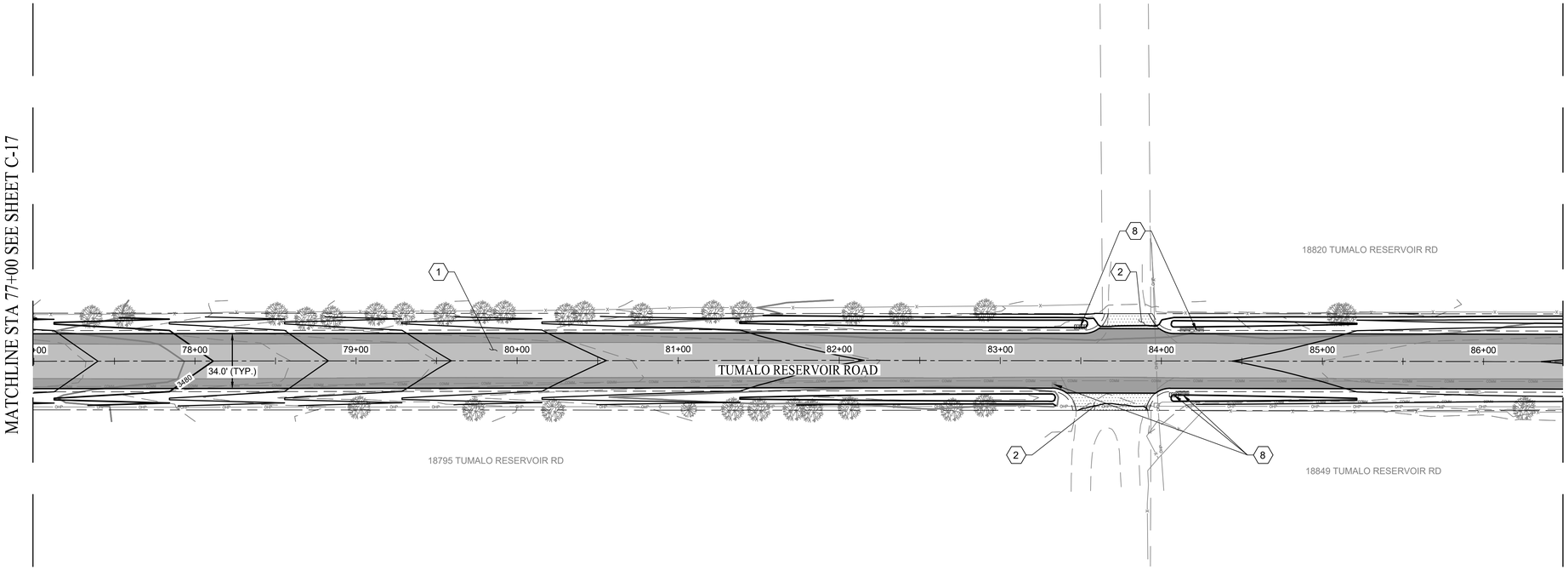
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 67+50 TO STA 77+00

DRAWING NO. 36 OF 117
SHEET NO. C-17

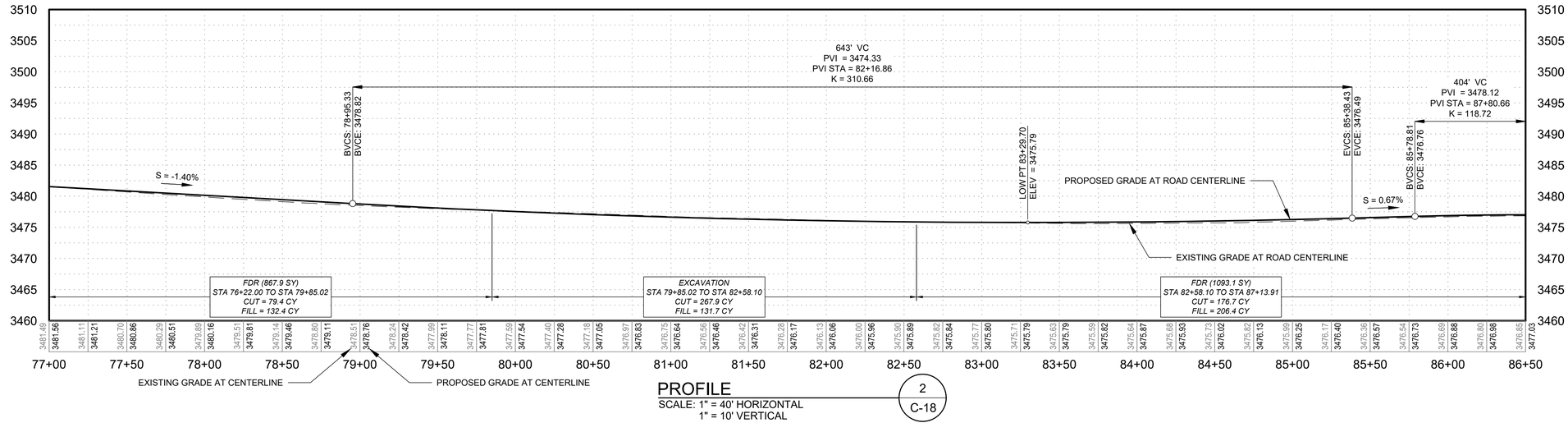


PLAN
SCALE: 1" = 40'

1
C-18

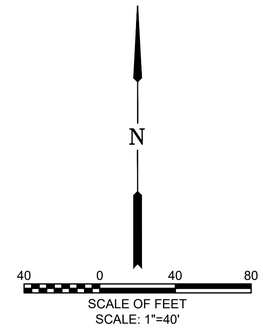
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-18



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

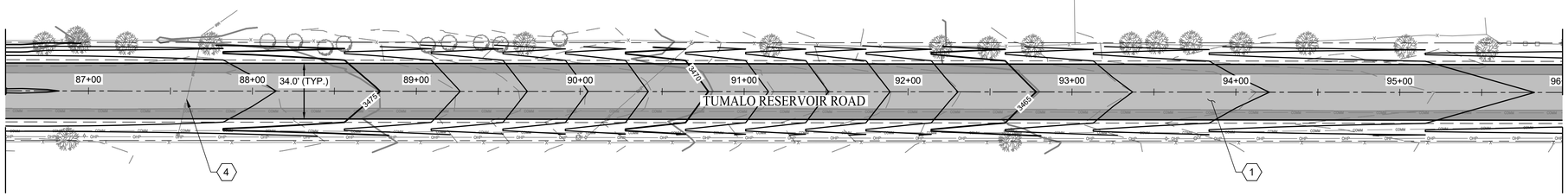
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 77+00 TO STA 86+50

DRAWING NO. 37 OF 117
SHEET NO. C-18

MATCHLINE STA 86+50 SEE SHEET C-18



MATCHLINE STA 96+00 SEE SHEET C-20

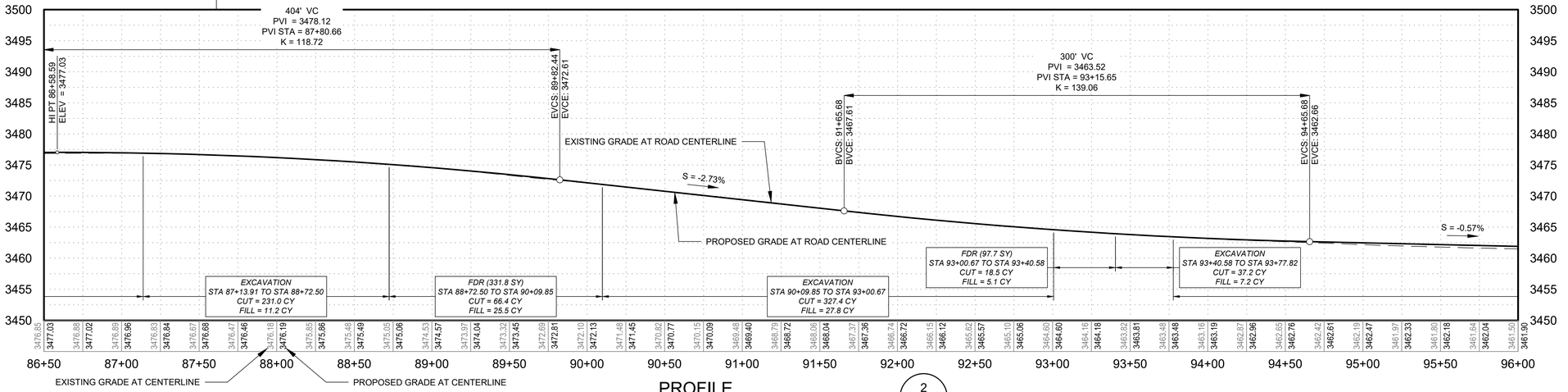
PLAN

SCALE: 1" = 40'

1
C-19

PLAN AND PROFILE KEY NOTES

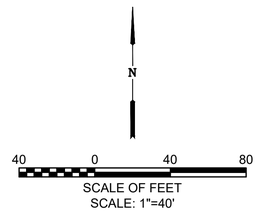
1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.



PROFILE

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-19



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

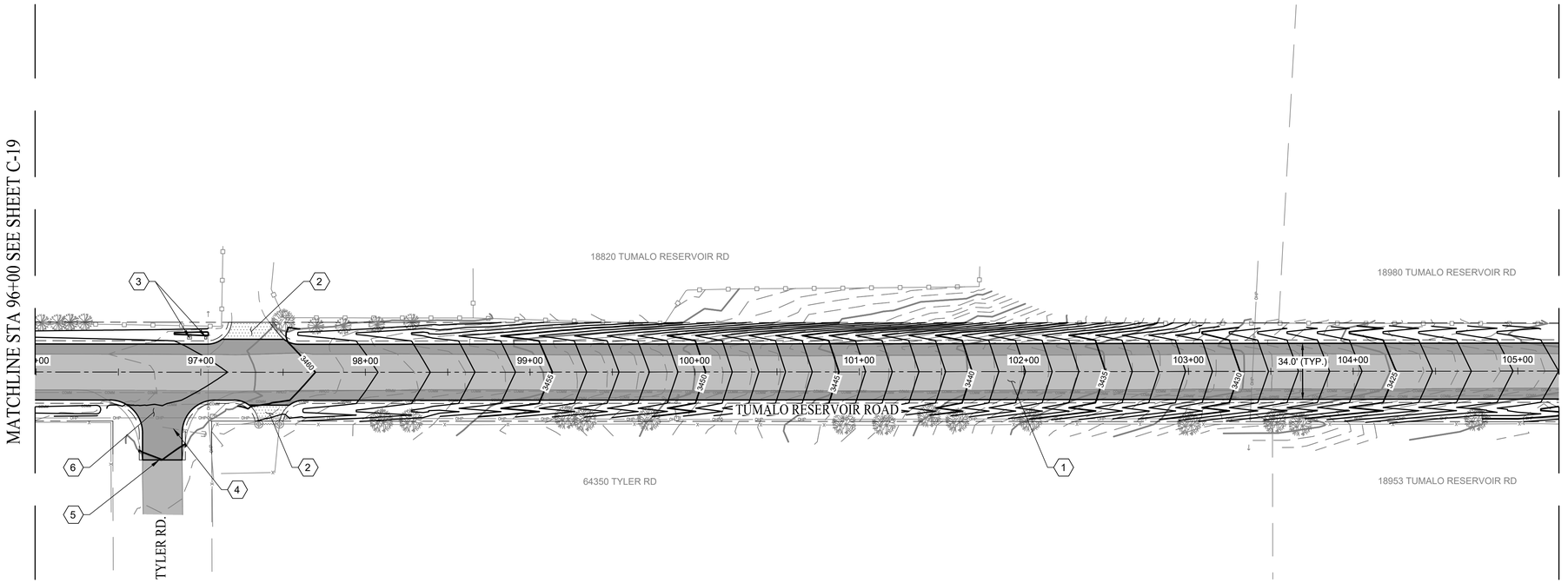
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 86+50 TO STA 96+00

DRAWING NO. 38 OF 117
SHEET NO. C-19

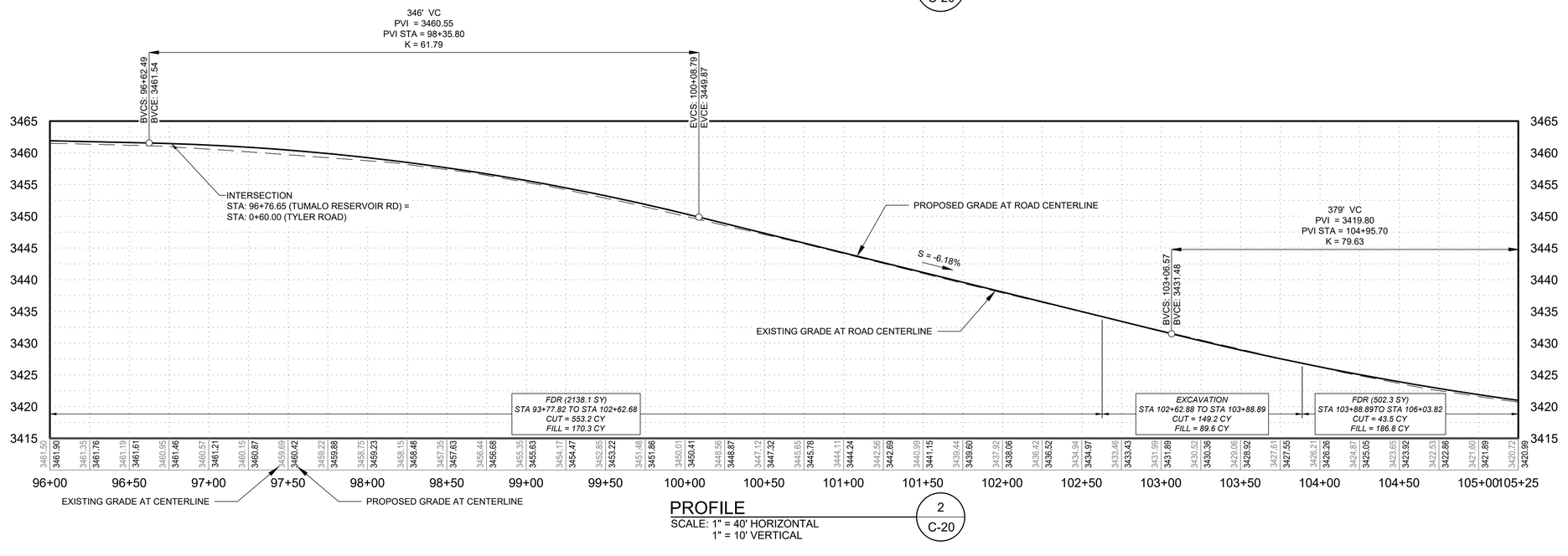


PLAN
SCALE: 1" = 40'

1
C-20

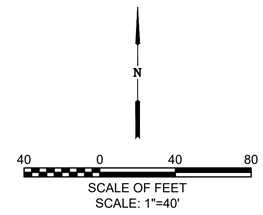
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-20



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DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87583PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

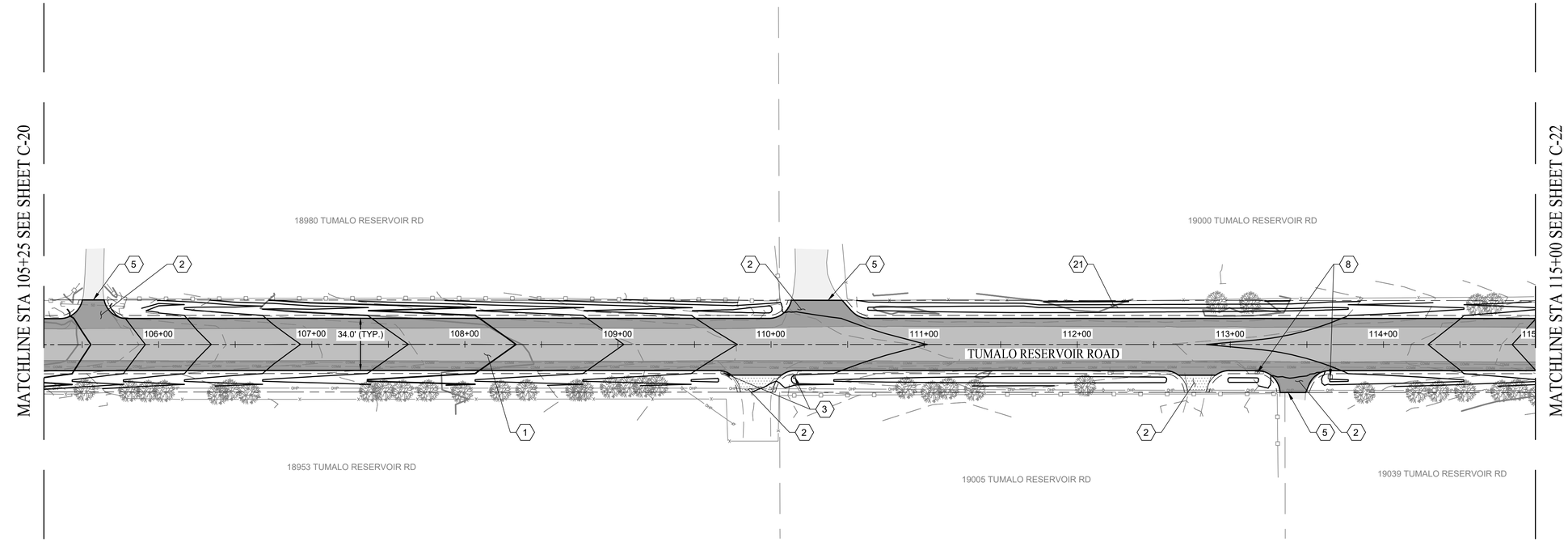
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 96+00 TO STA 105+25

DRAWING NO. 39 OF 117
SHEET NO. C-20

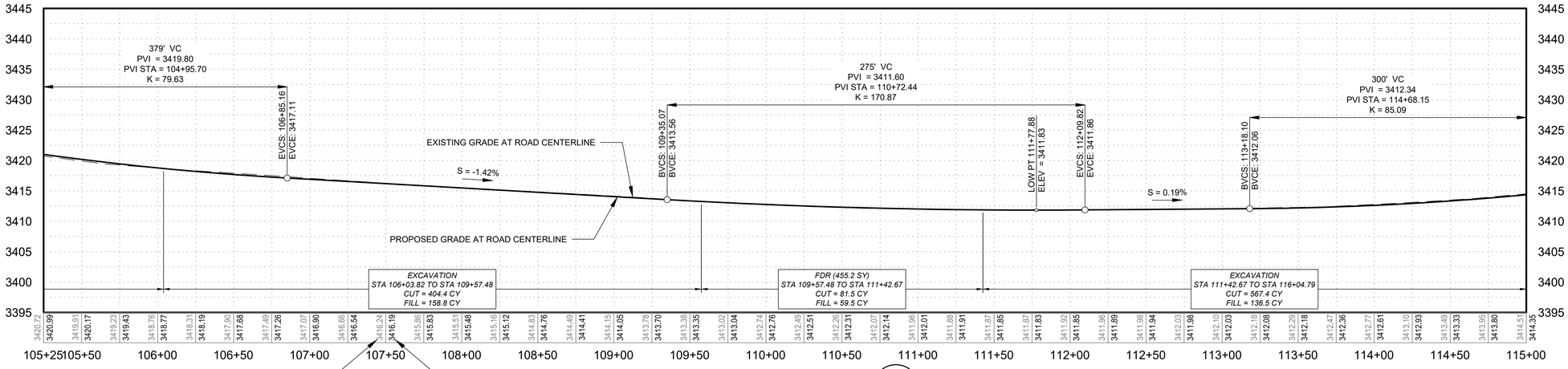


PLAN
SCALE: 1" = 40'

1
C-21

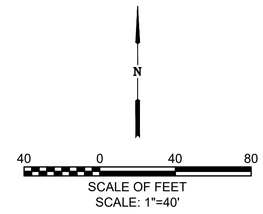
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.
21. PERFORM SUBGRADE STABILIZATION AS DIRECTED.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-21



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

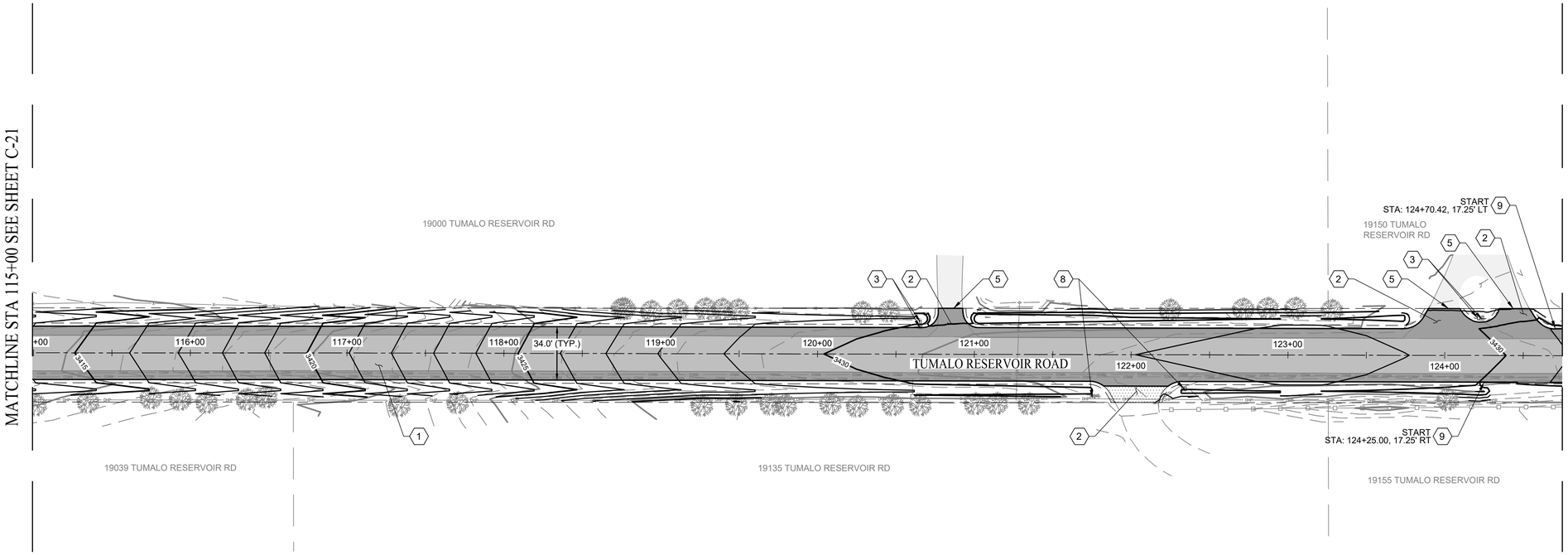
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 105+25 TO STA 115+00

DRAWING NO. 40 OF 117
SHEET NO. C-21

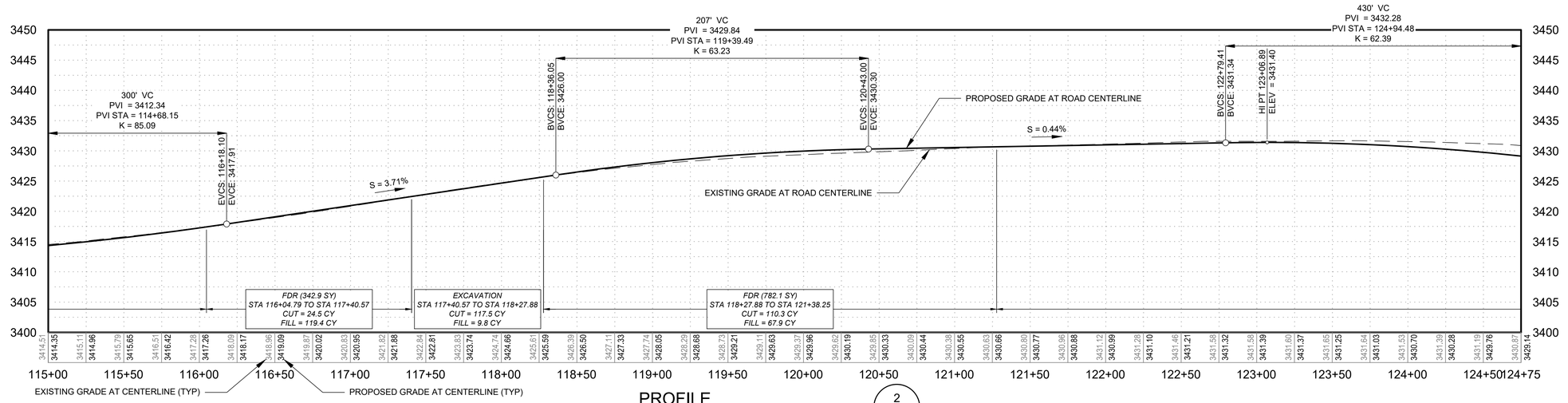


PLAN
SCALE: 1" = 40'

1
C-22

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.
9. INSTALL STANDARD CURB PER ODOT STD. DWG. RD700. E = 6".



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-22

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" ——— 1"
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NO.	DATE	BY	APPR	REVISIONS

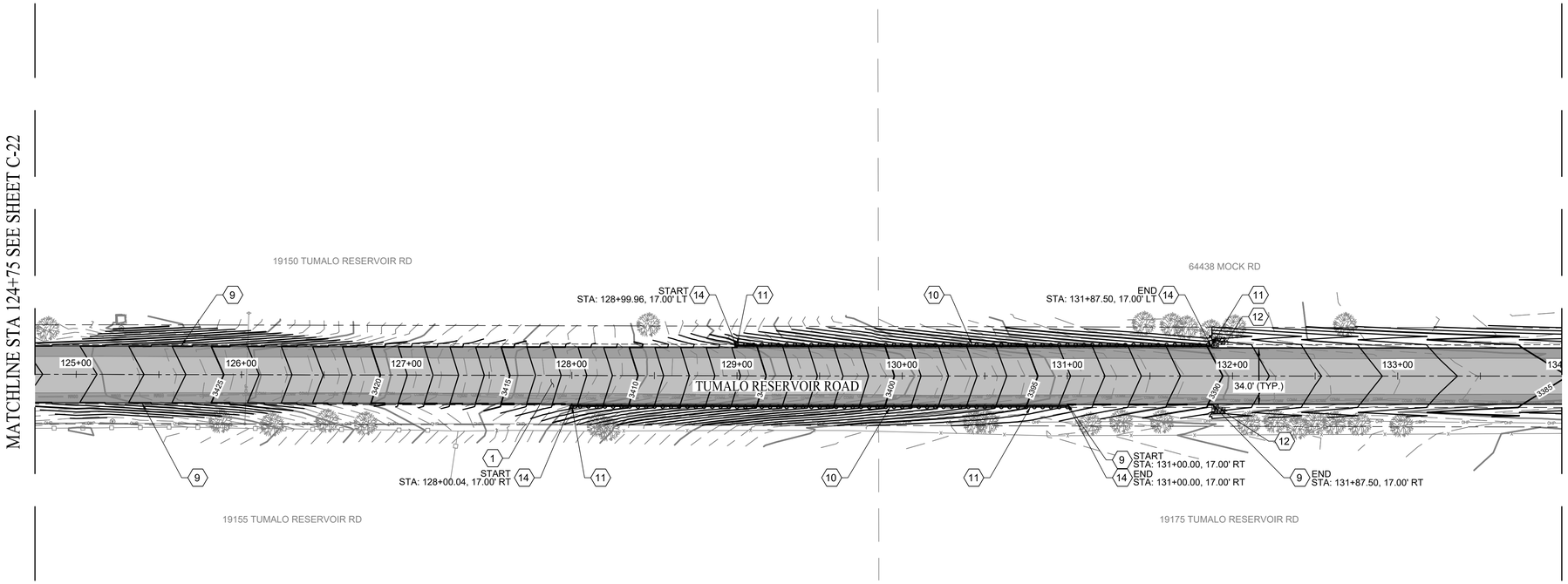
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 115+00 TO STA 124+75

DRAWING NO. 41 OF 117
SHEET NO. C-22

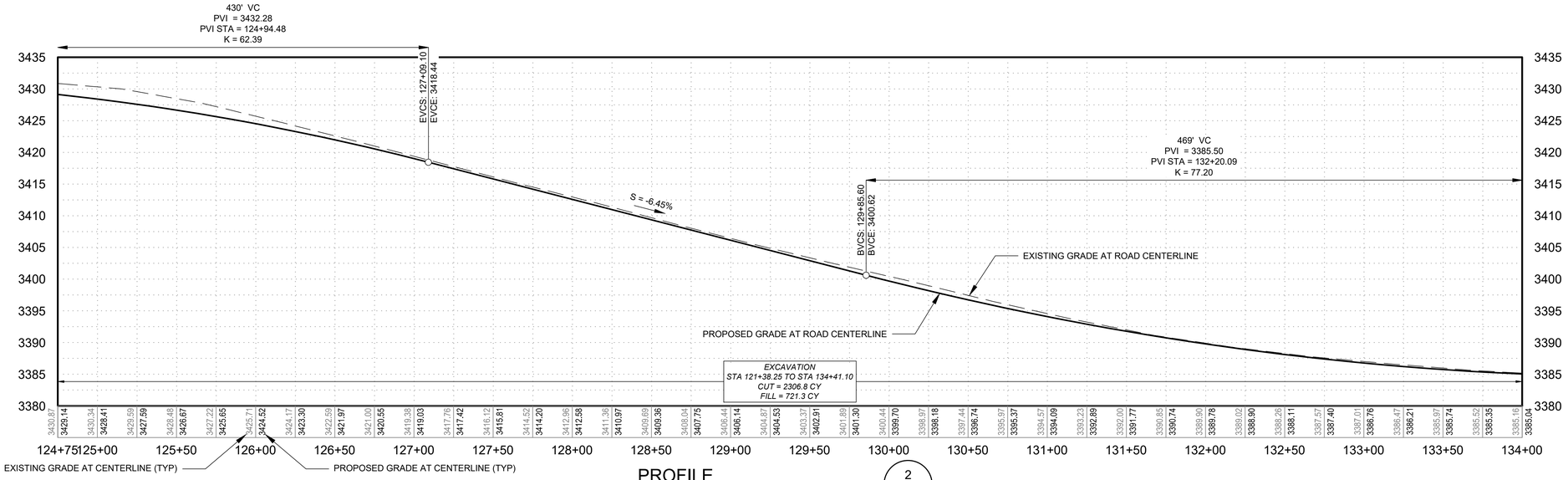


PLAN
SCALE: 1" = 40'

1
C-23

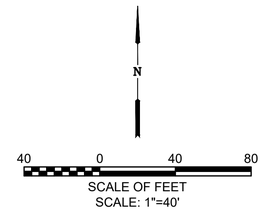
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
9. INSTALL STANDARD CURB PER ODOT STD. DWG. RD700. E = 6".
10. INSTALL TYPE 2A W-BEAM MIDWEST GUARDRAIL PER ODOT STD. DWG. RD402. SEE TABLE ON SHEET C-43.
11. INSTALL TL-2, NON-FLARED ENERGY ABSORBING GUARDRAIL TERMINAL PER ODOT STD. DWG. RD420. SEE TABLE ON SHEET C-43.
12. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.
14. INSTALL CONCRETE DRAINAGE CURB PER ODOT STD. DWG. RD701.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-23



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

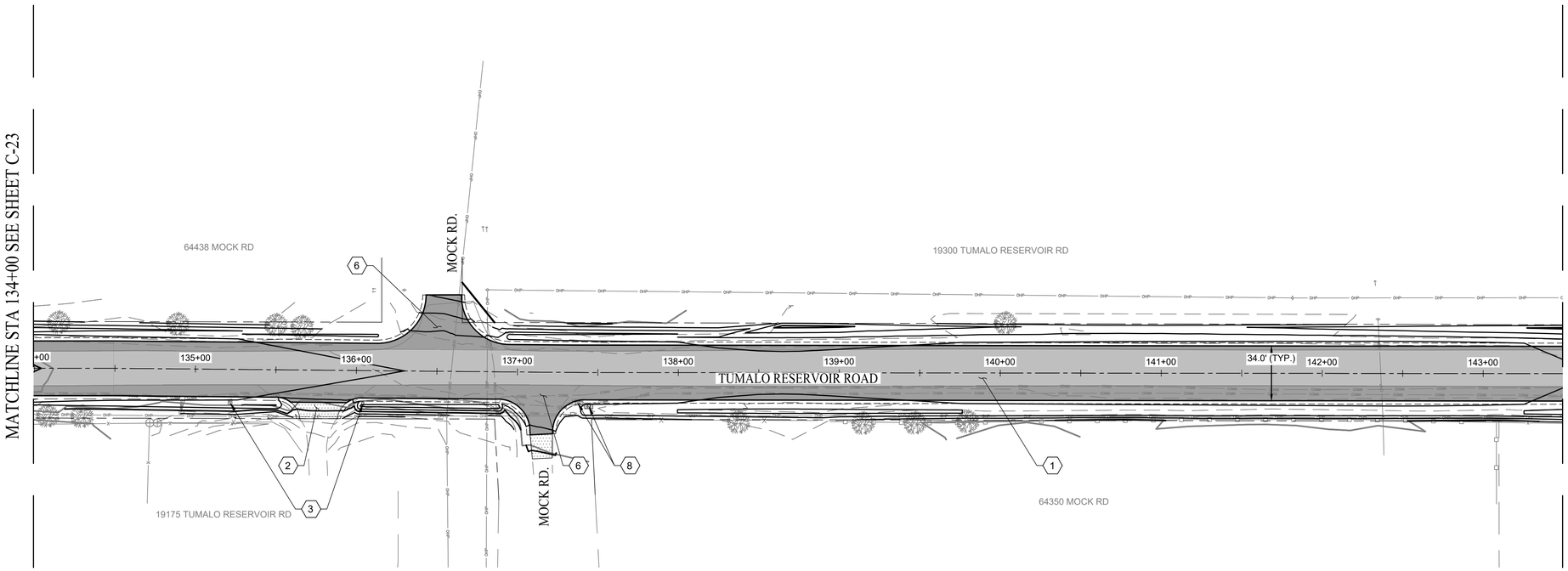
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 124+75 TO STA 134+00

DRAWING NO. 42 OF 117
SHEET NO. C-23

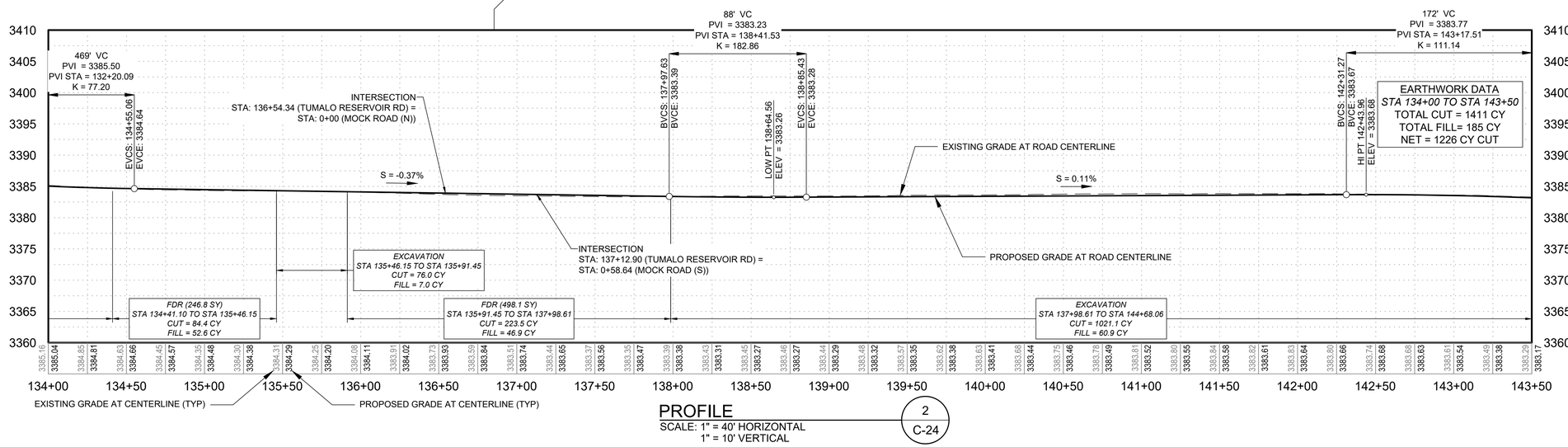


PLAN
SCALE: 1" = 40'

1
C-24

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-24

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87583PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

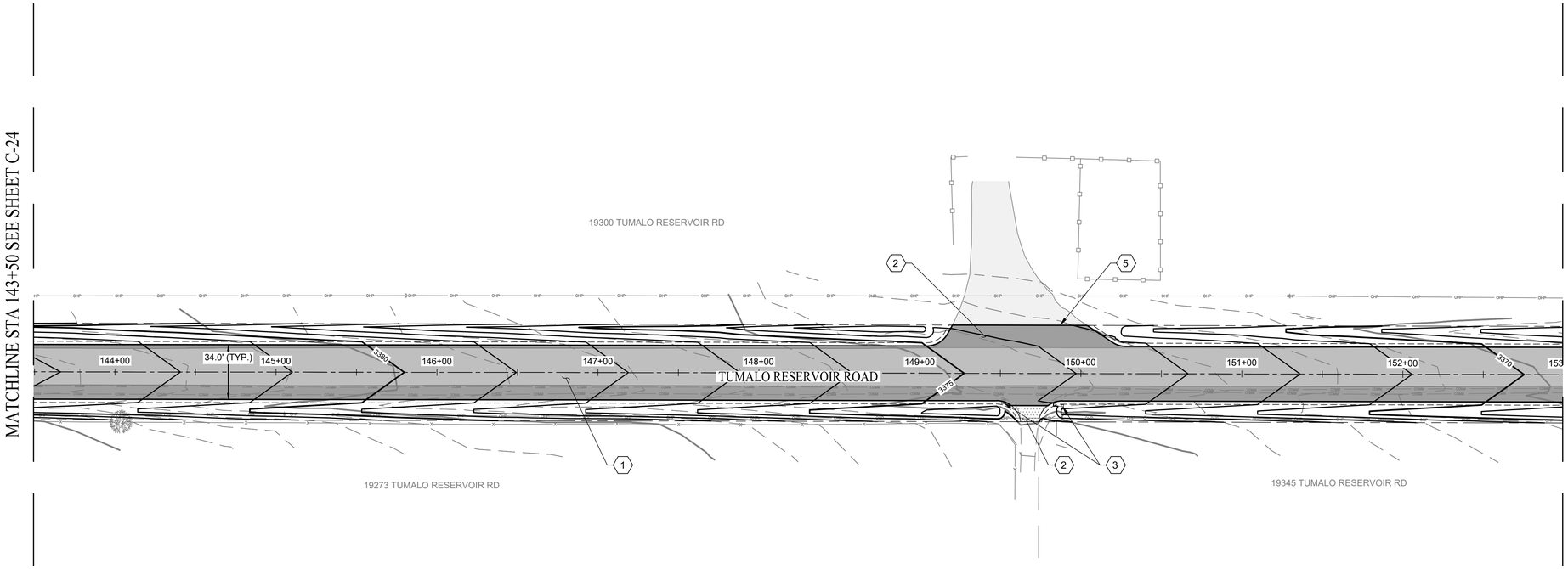
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 134+00 TO STA 143+50

DRAWING NO.
43 OF 117

SHEET NO.
C-24

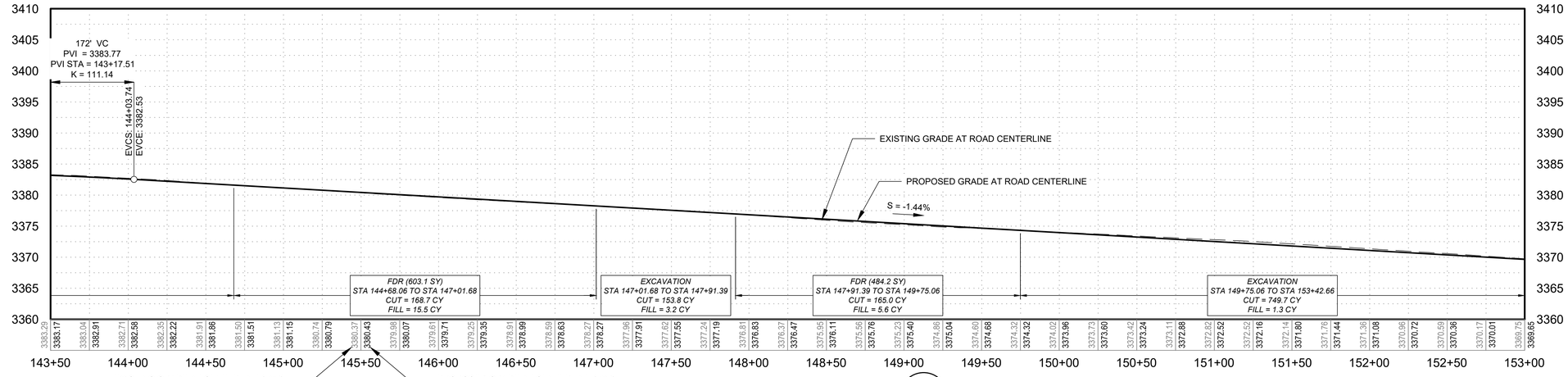


PLAN
SCALE: 1" = 40'

1
C-25

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-25

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

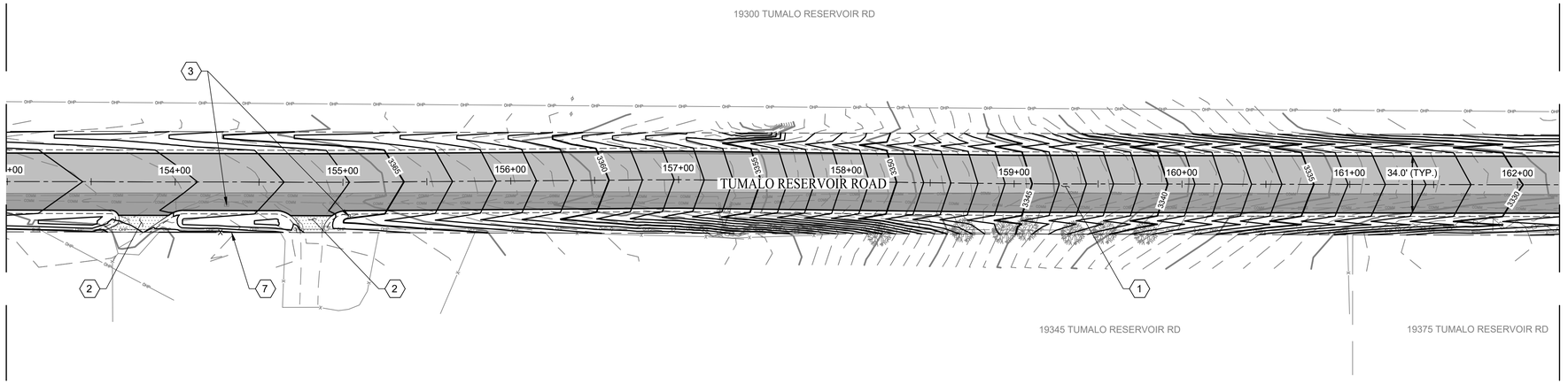
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 143+50 TO STA 153+00

DRAWING NO. 44 OF 117
SHEET NO. C-25

MATCHLINE STA 153+00 SEE SHEET C-25

MATCHLINE STA 162+25 SEE SHEET C-27

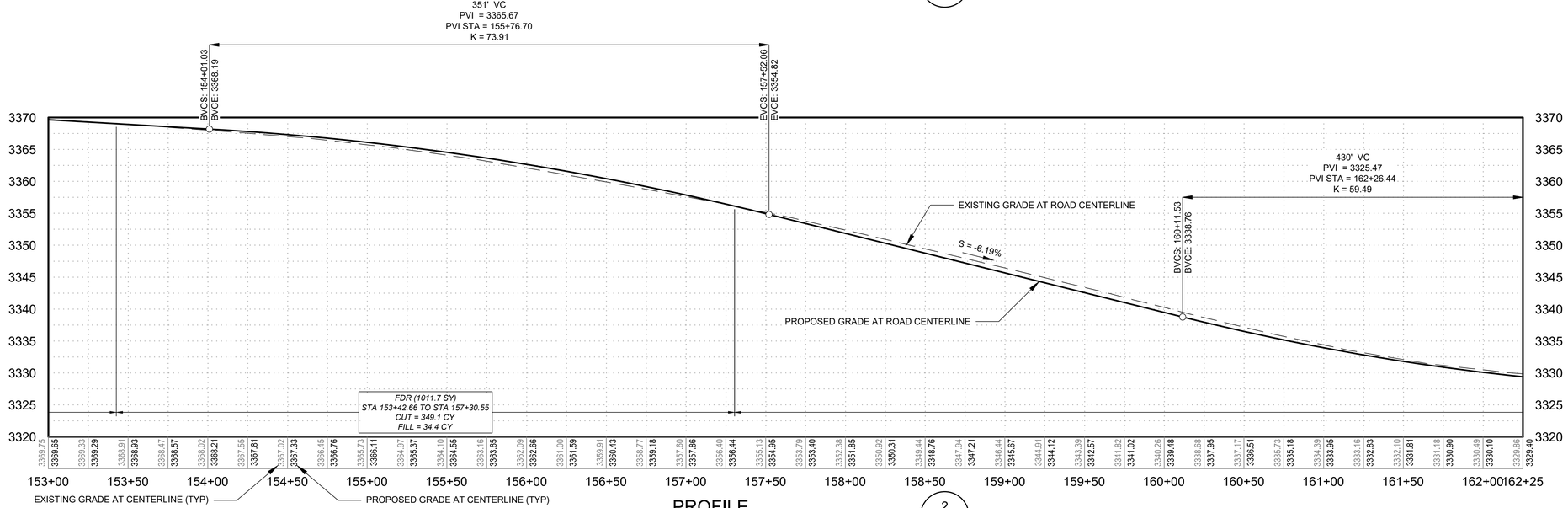


PLAN
SCALE: 1" = 40'

1
C-26

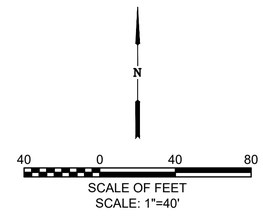
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-26



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

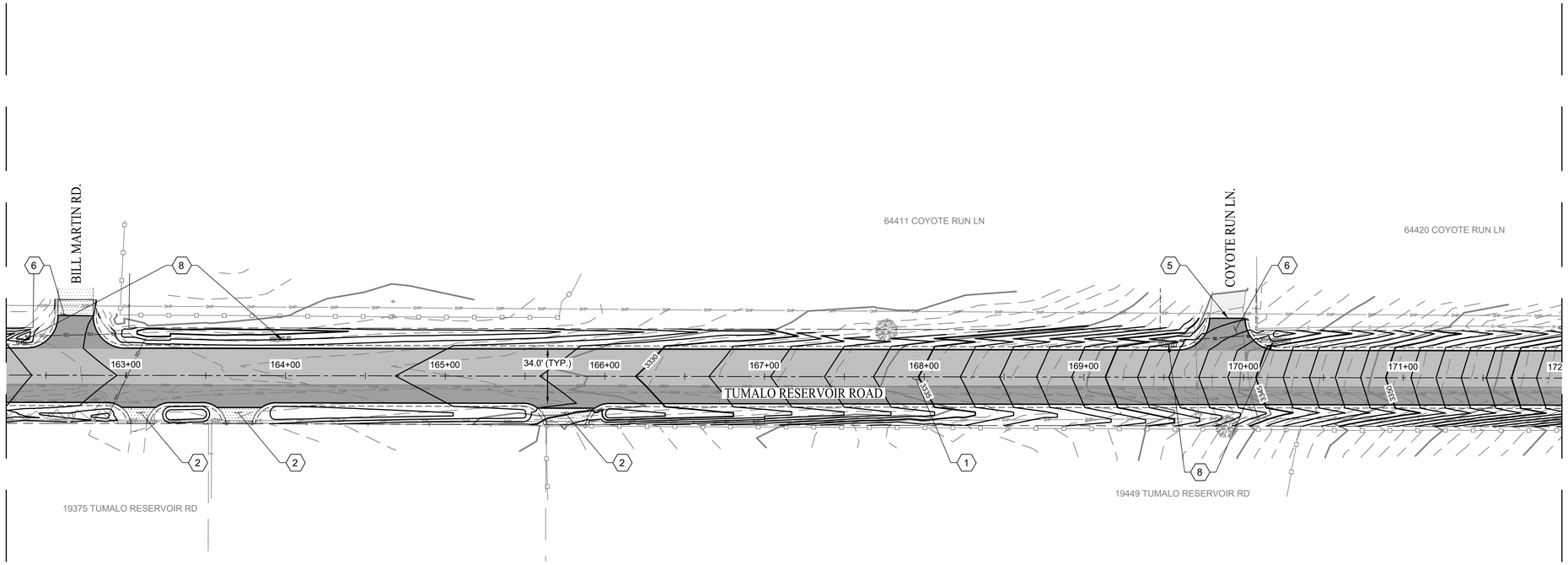
ROADWAY PLAN & PROFILE
STA 153+00 TO STA 162+25

DRAWING NO. 45 OF 117
SHEET NO. C-26

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

MATCHLINE STA 162+25 SEE SHEET C-26

MATCHLINE STA 172+00 SEE SHEET C-28

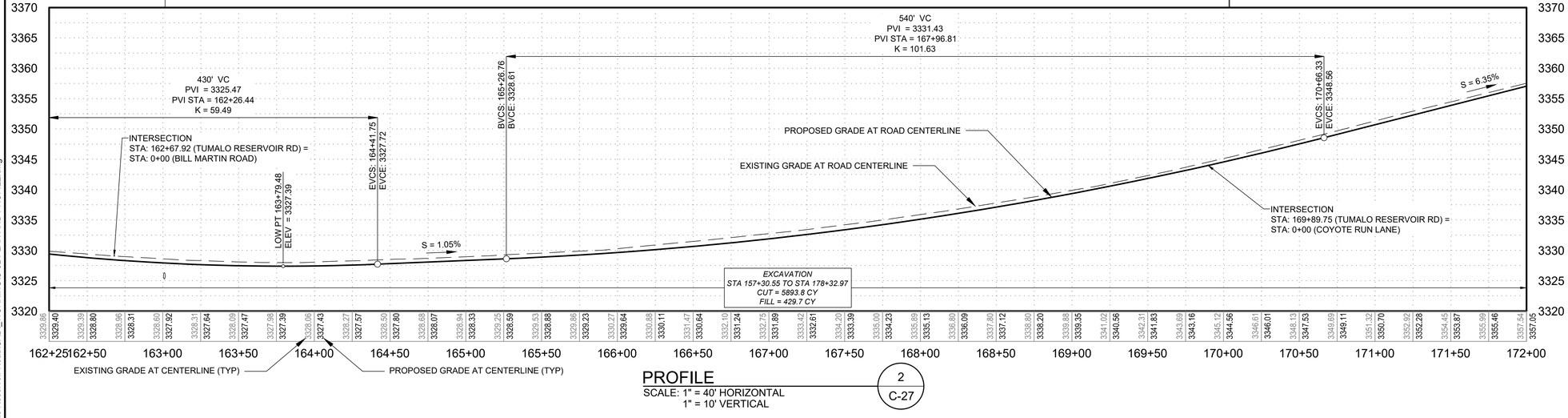


PLAN
SCALE: 1" = 40'

1
C-27

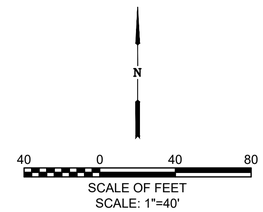
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-27



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

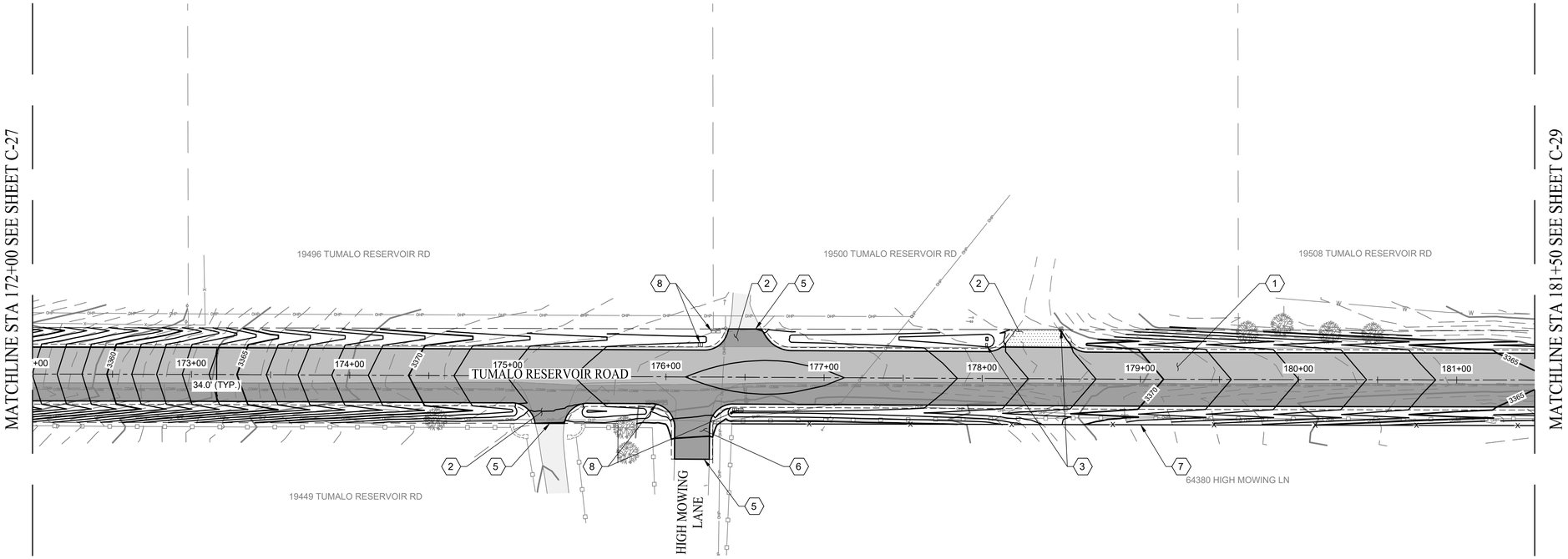
DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 162+25 TO STA 172+00

DRAWING NO. 46 OF 117

SHEET NO. C-27

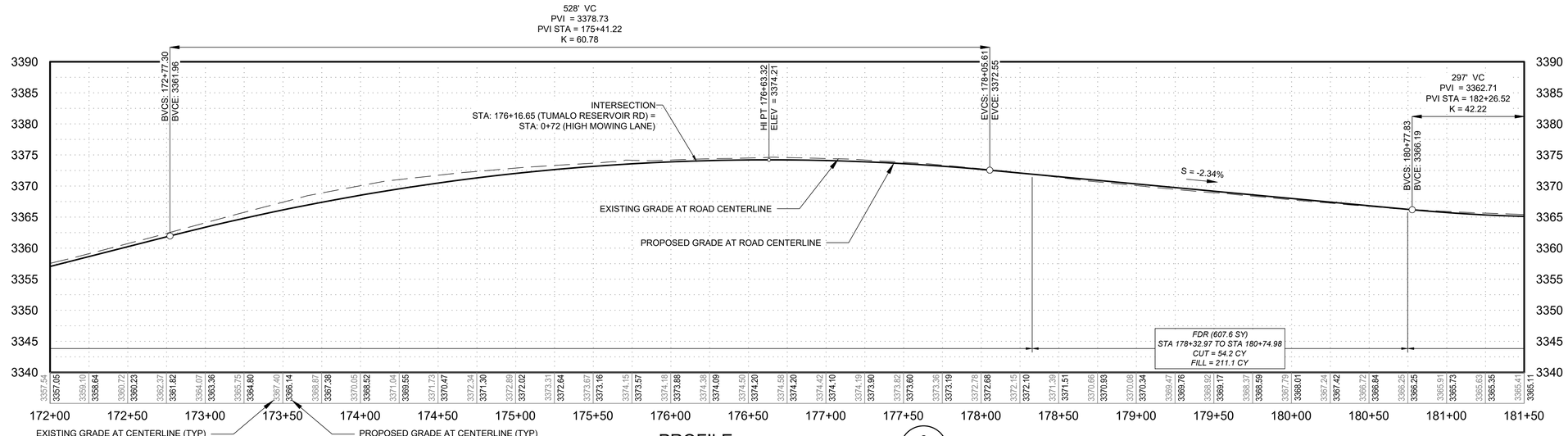


PLAN
SCALE: 1" = 40'

1
C-28

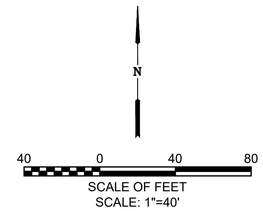
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-28



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

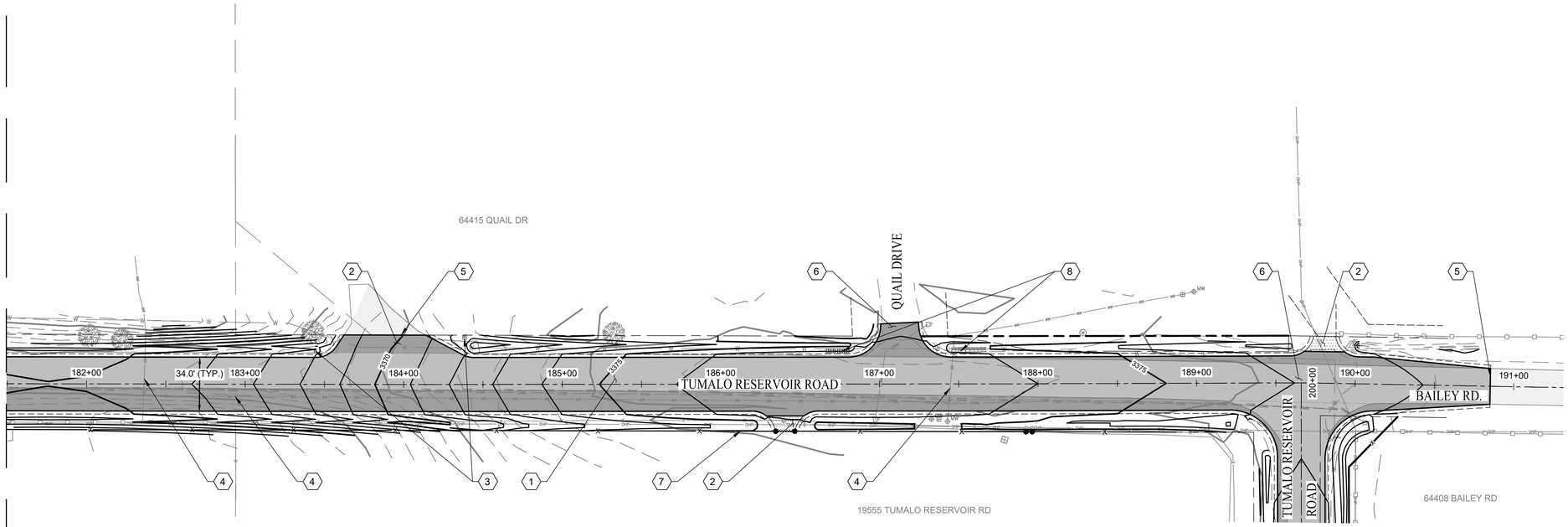
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 172+00 TO STA 181+50

DRAWING NO. 47 OF 117
SHEET NO. C-28

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

MATCHLINE STA 181+50 SEE SHEET C-28

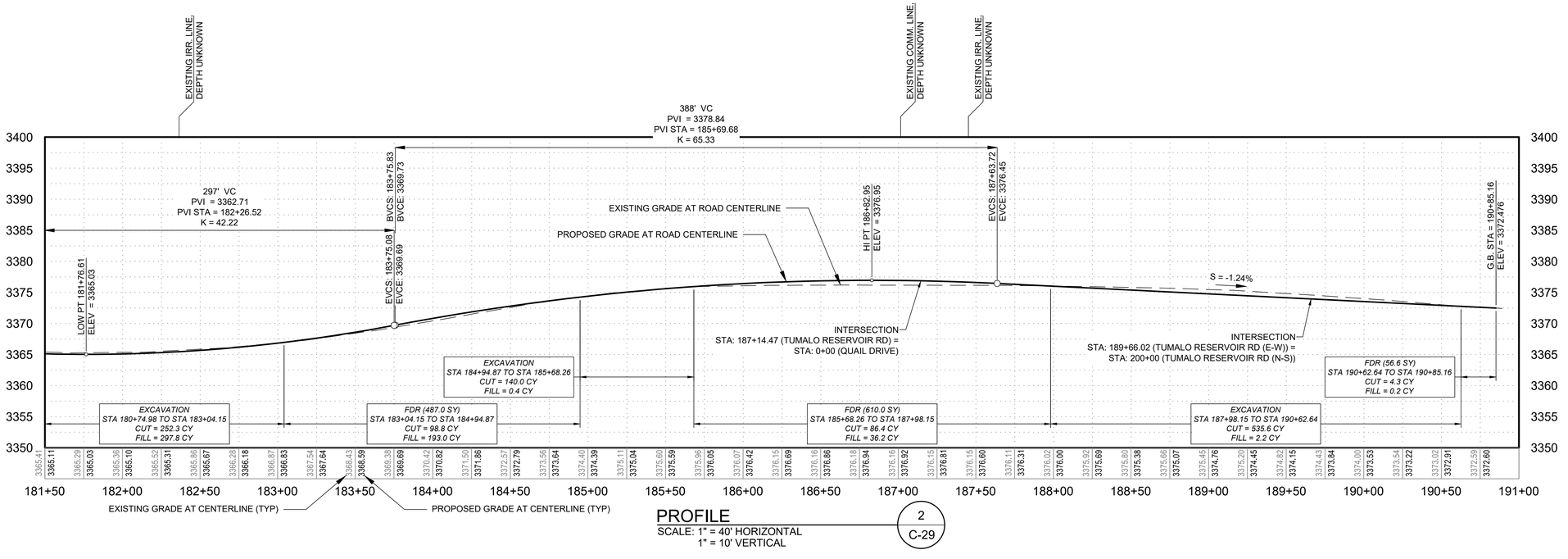


SEE SHEET C-30 FOR CONTINUATION

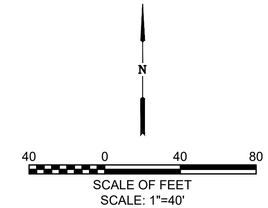
PLAN
SCALE: 1" = 40'
1
C-29

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEET C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL
2
C-29



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87583PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

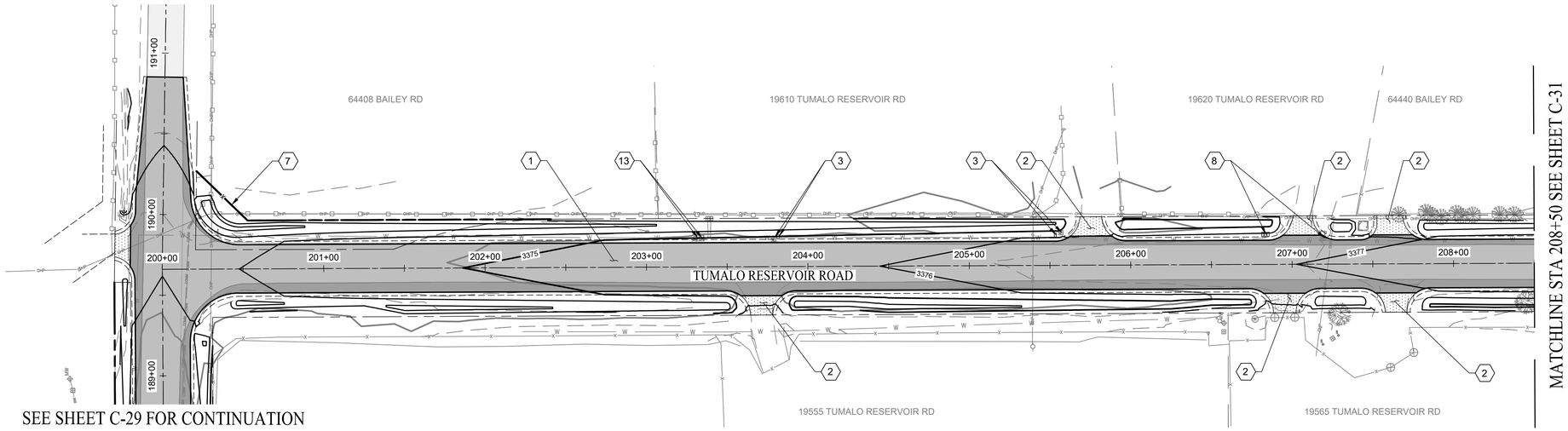
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 181+50 TO STA 191+00

DRAWING NO. 48 OF 117
SHEET NO. C-29

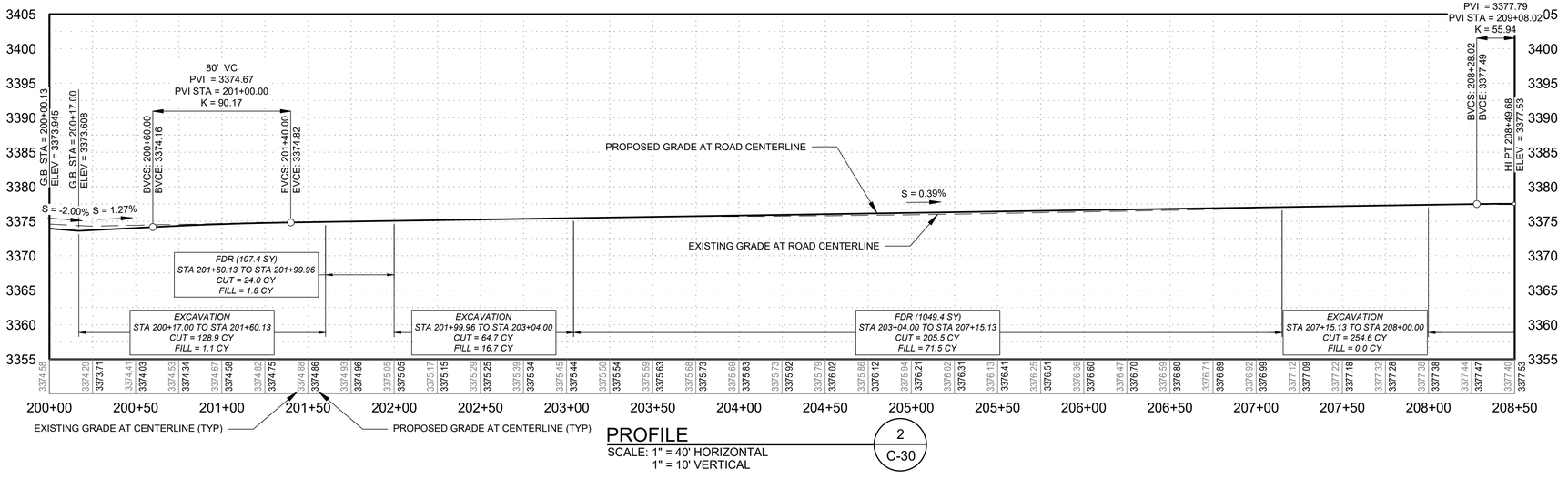
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
3. RELOCATE EXISTING MAILBOX & INSTALL ON NEW SINGLE SUPPORT PER ODOT STD. DWG. RD100.
7. RECONSTRUCT FENCE AT RIGHT OF WAY LINE, MATCH EXISTING MATERIAL/STYLE. SEE TABLE ON SHEET G-19 FOR FENCE RECONSTRUCTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.
13. ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.



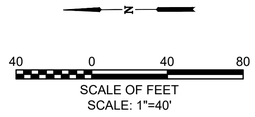
PLAN
SCALE: 1" = 40'

1
C-30



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2
C-30



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

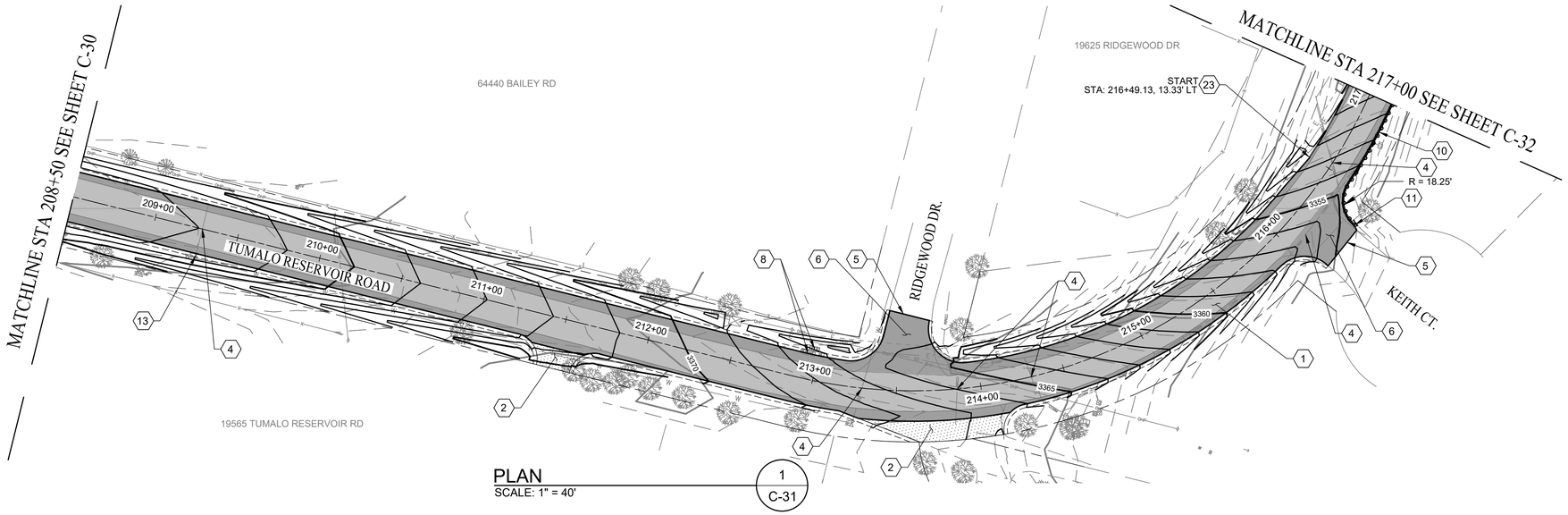
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 200+00 TO STA 208+50

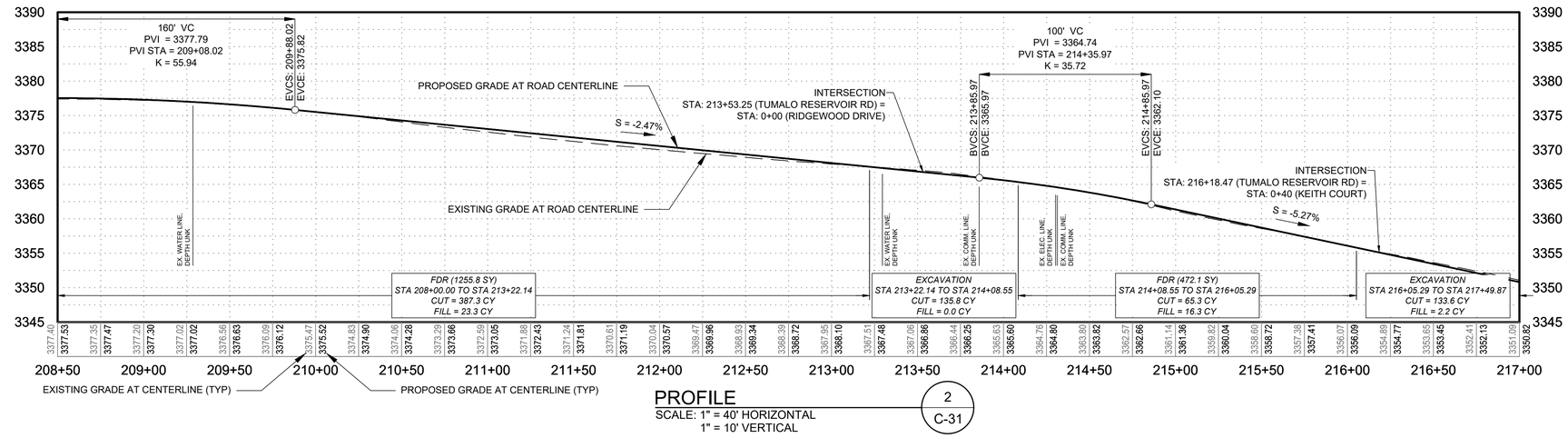
DRAWING NO. 49 OF 117
SHEET NO. C-30



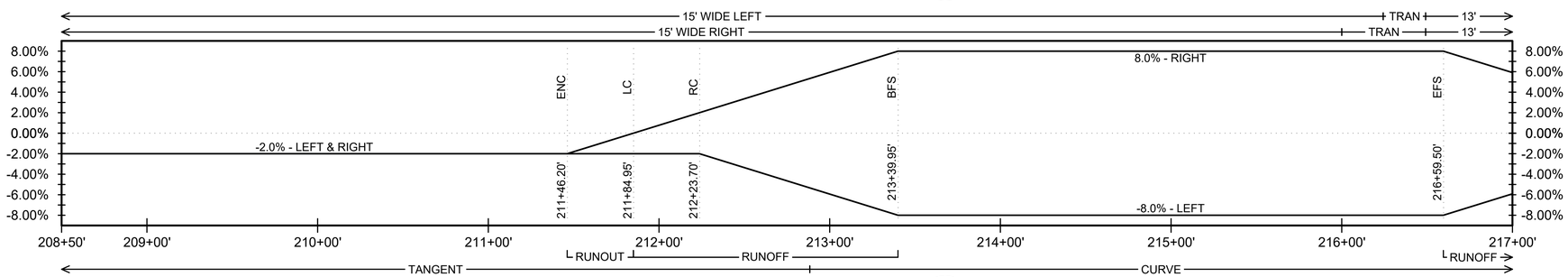
PLAN
SCALE: 1" = 40'
1
C-31

PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
4. POTHOLE EXISTING UTILITY AND PROVIDE DEPTH, LOCATION, MATERIAL, AND SIZE TO ENGINEER PRIOR TO CONSTRUCTION.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
8. RELOCATE EXISTING MAILBOXES & INSTALL ON NEW MULTIPLE SUPPORT PER ODOT STD. DWG. RD100.
10. INSTALL MIDWEST GUARDRAIL SYSTEM, TYPE 2A PER ODOT STD. DWG. RD402. SEE TABLE ON SHEET C-43.
11. INSTALL TL-2, NON-FLARED ENERGY ABSORBING GUARDRAIL TERMINAL PER ODOT STD. DWG. RD420. SEE TABLE ON SHEET C-43.
13. ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.
23. INSTALL MOUNTABLE CURB PER ODOT ST. DWG. RD700. E = 6".



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL
2
C-31



SUPERELEVATION VIEW
SCALE: 1" = 40'
3
C-31

SCALE OF FEET
SCALE: 1"=40'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKINGIC-02 PLAN AND PROFILE.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

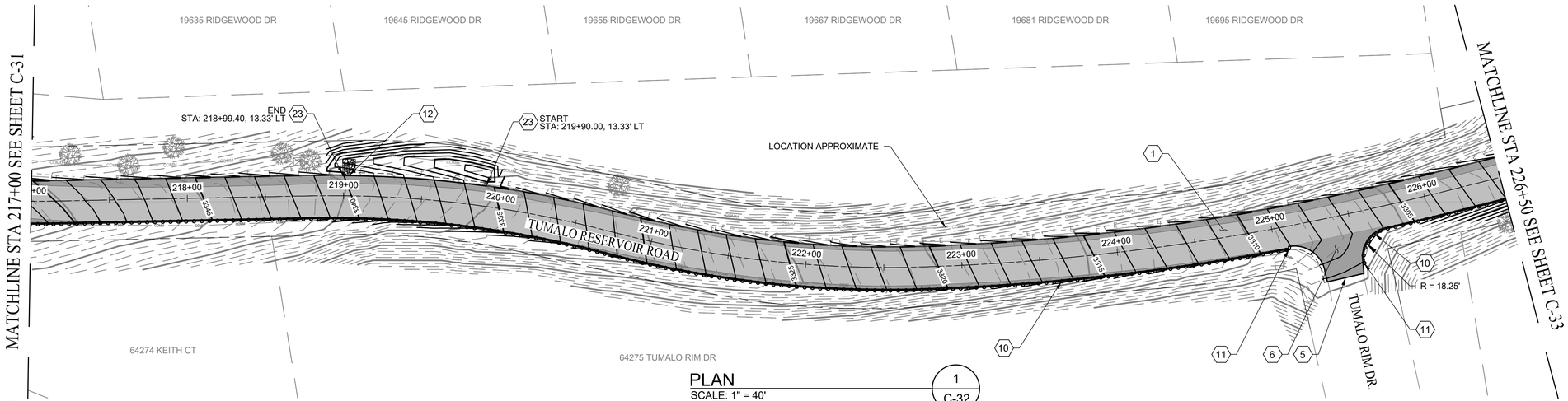
DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 208+50 TO STA 217+00

DRAWING NO.
50 OF 117

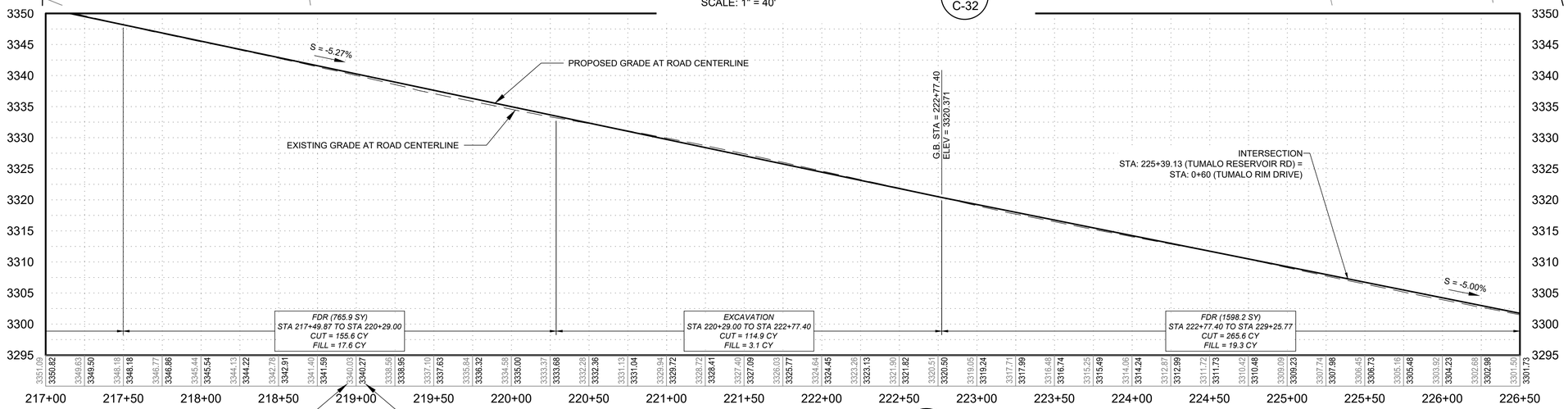
SHEET NO.
C-31



PLAN

SCALE: 1" = 40'

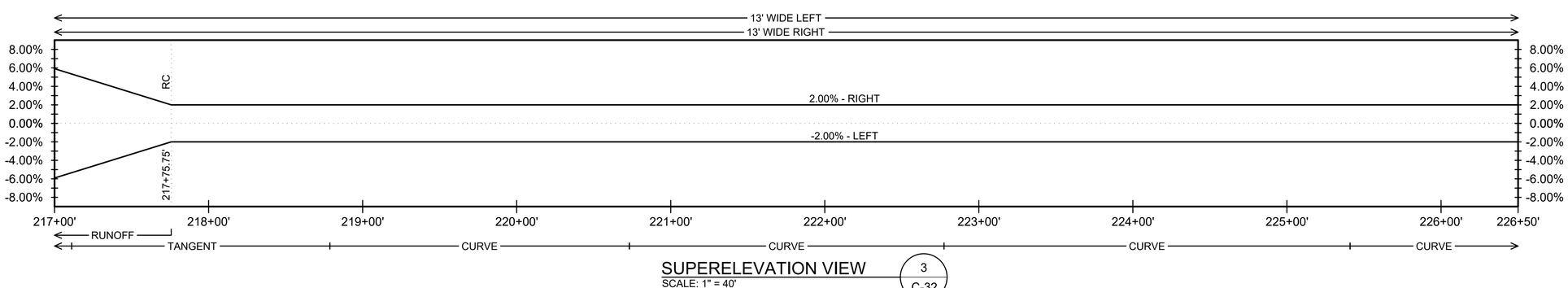
1 / C-32



PROFILE

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

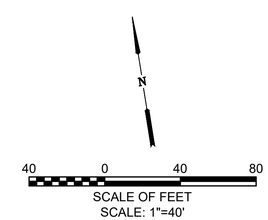
2 / C-32



SUPERELEVATION VIEW

SCALE: 1" = 40'

3 / C-32



PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
6. SEE SHEETS C-54 THROUGH C-62 FOR INTERSECTION DETAILS.
10. INSTALL MIDWEST GUARDRAIL SYSTEM, TYPE 2A PER ODOT STD. DWG. RD402. SEE TABLE ON SHEET C-43.
11. INSTALL TL-2, NON-FLARED ENERGY ABSORBING GUARDRAIL TERMINAL PER ODOT STD. DWG. RD420. SEE TABLE ON SHEET C-43.
12. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.
23. INSTALL MOUNTABLE CURB PER ODOT STD. DWG. RD700. E = 6".

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

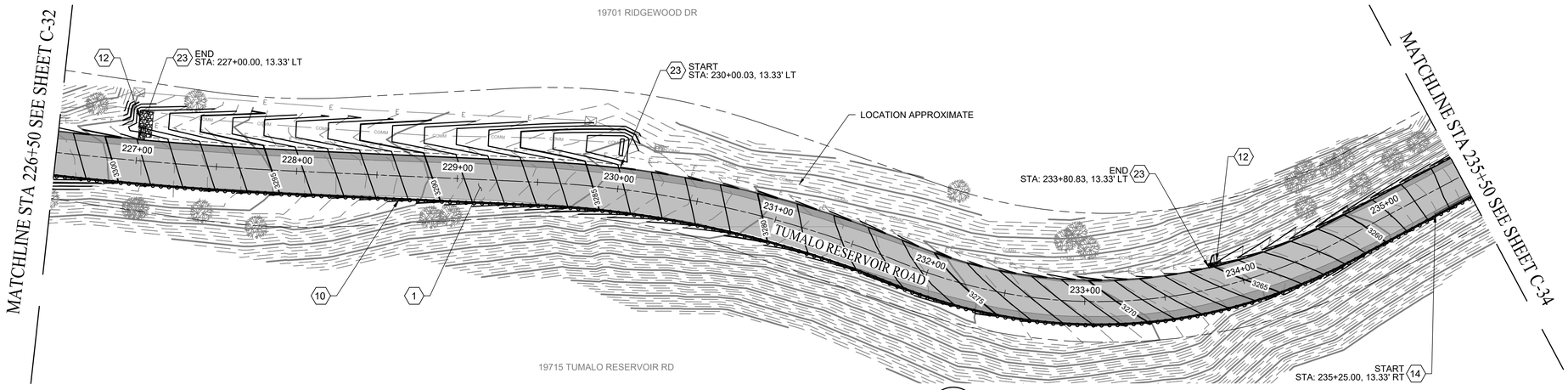
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 217+00 TO STA 226+50

DRAWING NO. 51 OF 117

SHEET NO. C-32

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-02 PLAN AND PROFILE.dwg

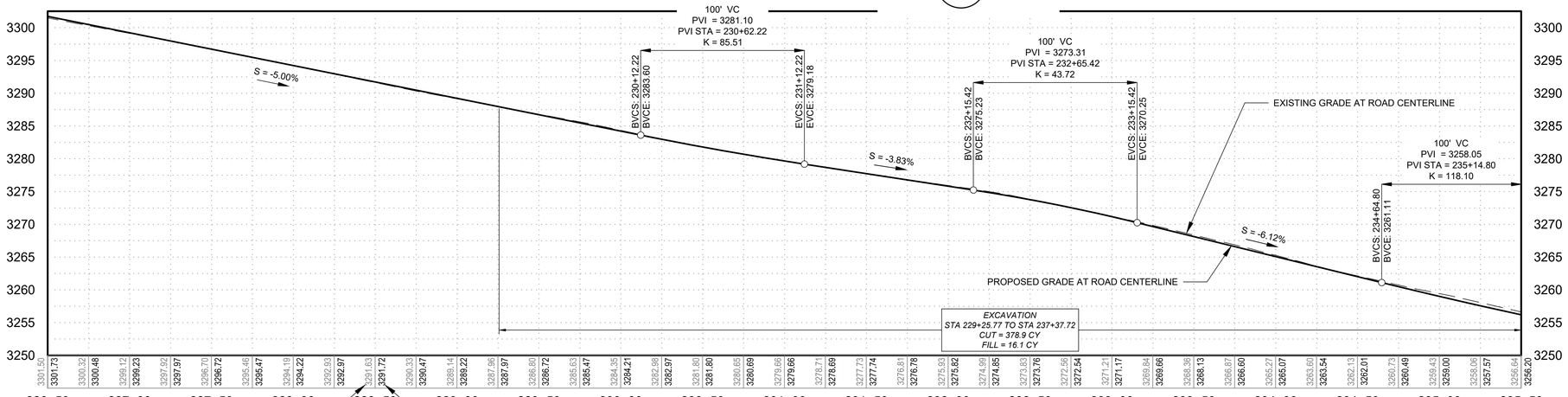


PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
10. INSTALL MIDWEST GUARDRAIL SYSTEM, TYPE 2A PER ODOT STD. DWG. RD402. SEE TABLE ON SHEET C-43.
12. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.
14. INSTALL CONCRETE DRAINAGE CURB PER ODOT STD. DWG. RD701.
23. INSTALL MOUNTABLE CURB PER ODOT STD. DWG. RD700. E = 6".

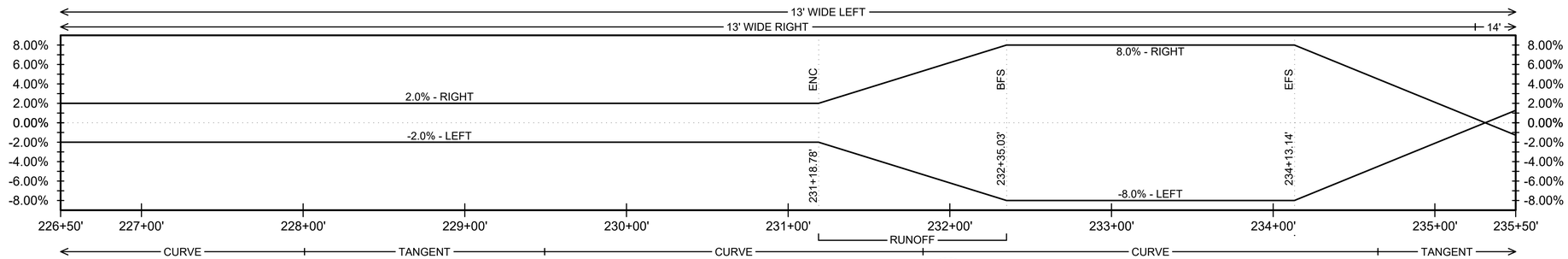
PLAN
SCALE: 1" = 40'

1 / C-33



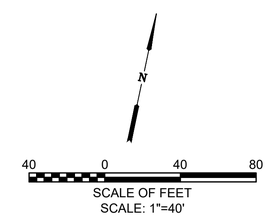
PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2 / C-33



SUPERELEVATION VIEW
SCALE: 1" = 40'

3 / C-33



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 226+50 TO STA 235+50

DRAWING NO. 52 OF 117
SHEET NO. C-33

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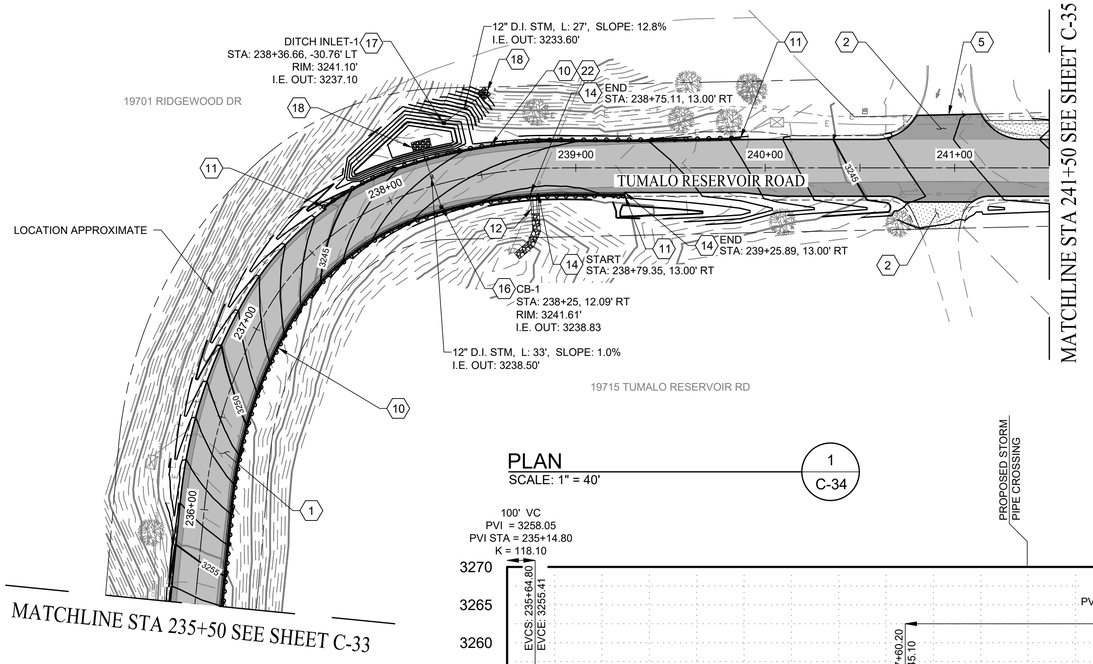
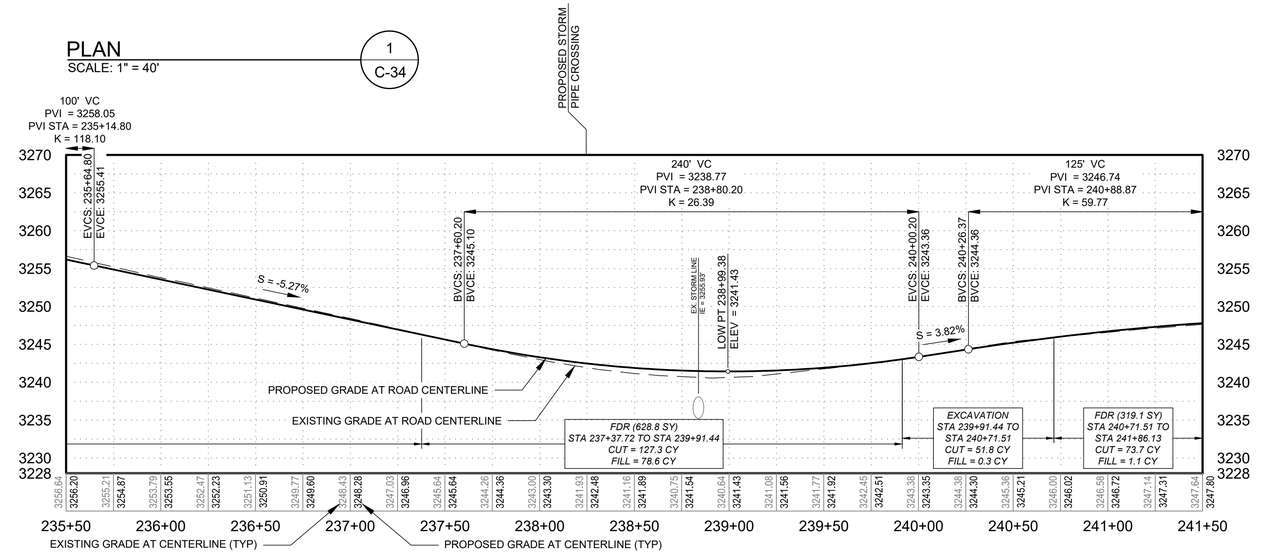


PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
10. INSTALL MIDWEST GUARDRAIL SYSTEM, TYPE 2A PER ODOT STD. DWG. RD402. SEE TABLE ON SHEET C-43.
11. INSTALL TL-2, NON-FLARED ENERGY ABSORBING GUARDRAIL TERMINAL PER ODOT STD. DWG. RD420. SEE TABLE ON SHEET C-43.
12. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.
14. INSTALL CONCRETE DRAINAGE CURB PER ODOT STD. DWG. RD701.
16. INSTALL TYPE G-2 INLET PER ODOT STD. DWG. RD364.
17. INSTALL DITCH INLET PER ODOT STD. DWG. RD370.
18. INSTALL CLASS 50 RIP RAP ARMORING IN LIMITS SHOWN, MIN. 1' DEPTH
22. HAND DIG FOR GUARDRAIL POST INSTALLATION

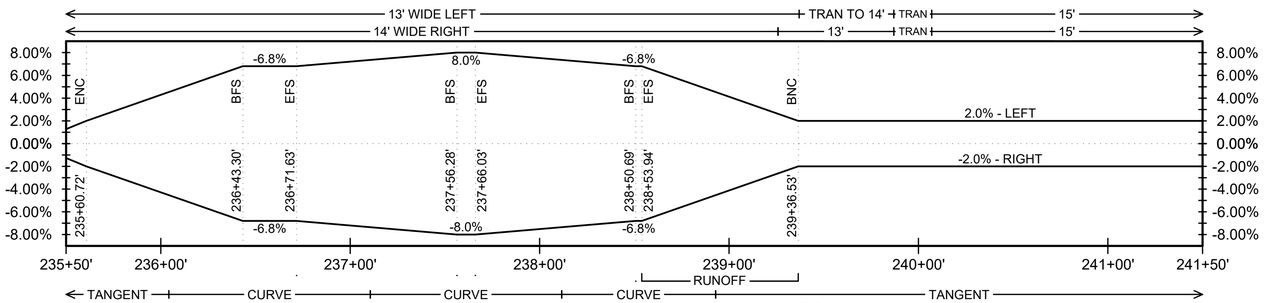
PLAN
SCALE: 1" = 40'

1 / C-34



PROFILE
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

2 / C-34



SUPERELEVATION VIEW
SCALE: 1" = 40'

3 / C-34

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 235+50 TO STA 241+50

DRAWING NO. 53 OF 117
SHEET NO. C-34

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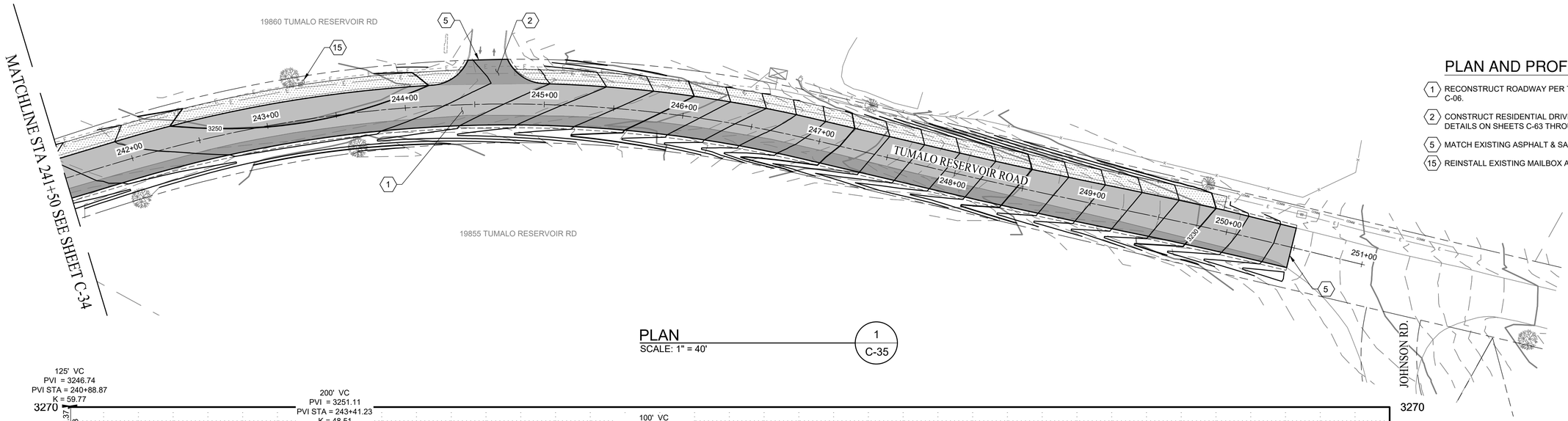


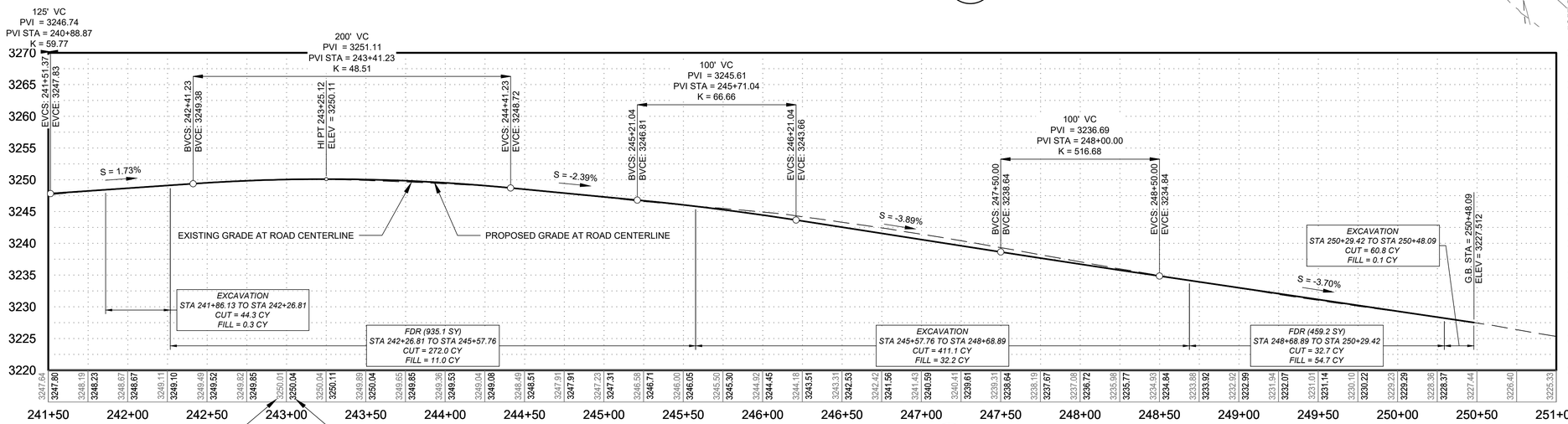
PLAN AND PROFILE KEY NOTES

1. RECONSTRUCT ROADWAY PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT RESIDENTIAL DRIVEWAY PER DETAIL 1 ON SHEET C-07. SEE DETAILS ON SHEETS C-63 THROUGH C-75.
5. MATCH EXISTING ASPHALT & SAND SEAL JOINT.
15. REINSTALL EXISTING MAILBOX AND SECURE MAILBOX SUPPORT.

PLAN

SCALE: 1" = 40'

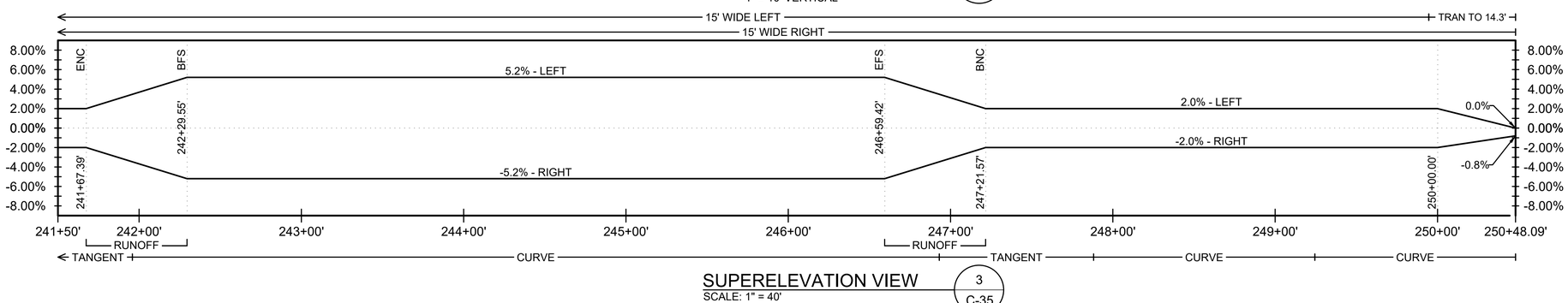
1 / C-35



PROFILE

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

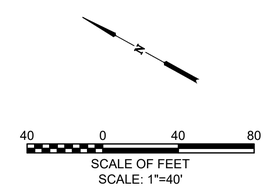
2 / C-35



SUPERELEVATION VIEW

SCALE: 1" = 40'

3 / C-35



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

ROADWAY PLAN & PROFILE
STA 241+50 TO STA 251+00

DRAWING NO. 54 OF 117

SHEET NO. C-35

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CONSTRUCTION PHASING PLAN (1 / C-36)
SCALE: N.T.S.

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

CONSTRUCTION PHASING PLAN

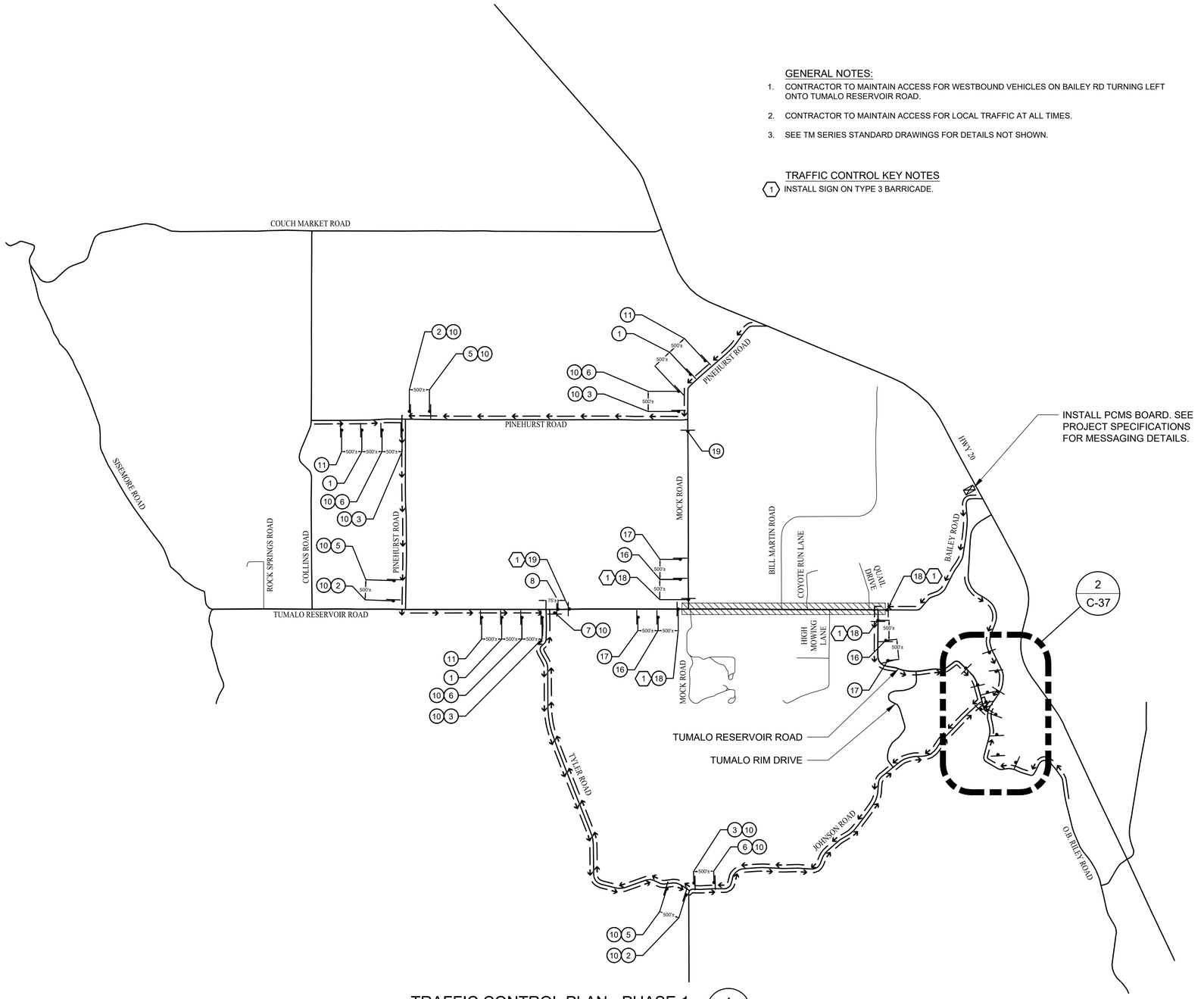
DRAWING NO. 55 OF 117
SHEET NO. C-36

GENERAL NOTES:

1. CONTRACTOR TO MAINTAIN ACCESS FOR WESTBOUND VEHICLES ON BAILEY RD TURNING LEFT ONTO TUMALO RESERVOIR ROAD.
2. CONTRACTOR TO MAINTAIN ACCESS FOR LOCAL TRAFFIC AT ALL TIMES.
3. SEE TM SERIES STANDARD DRAWINGS FOR DETAILS NOT SHOWN.

TRAFFIC CONTROL KEY NOTES

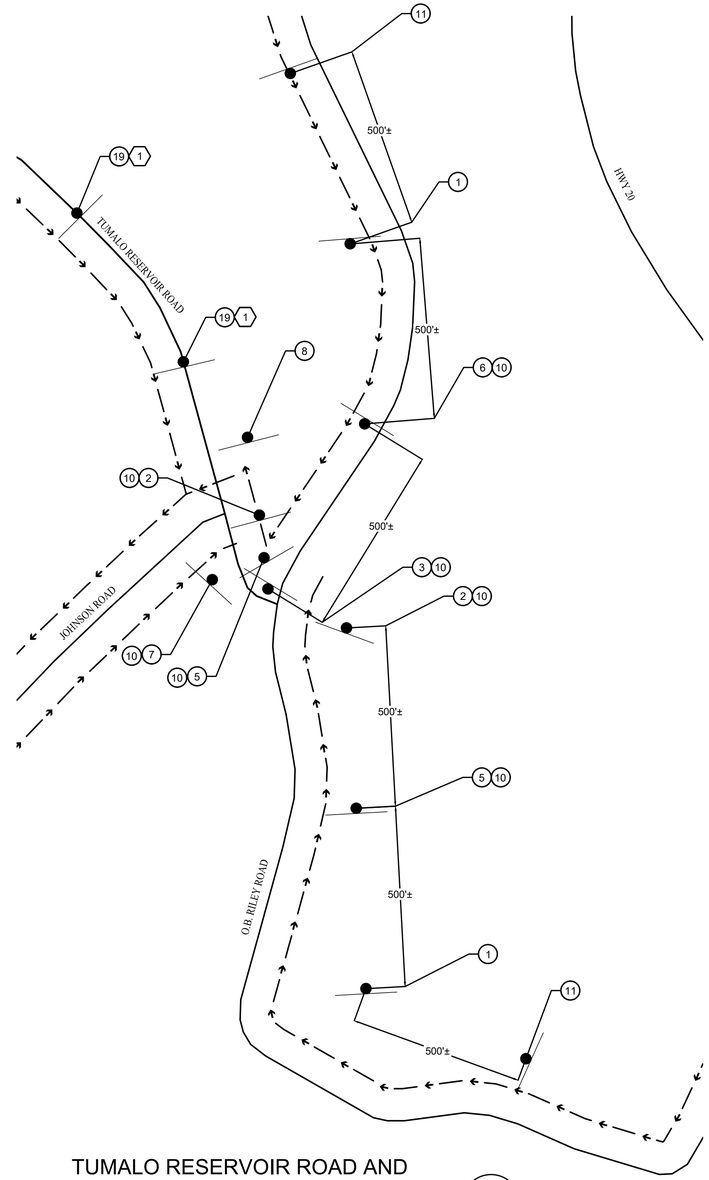
(1) INSTALL SIGN ON TYPE 3 BARRICADE.



TRAFFIC CONTROL PLAN - PHASE 1

SCALE: N.T.S.

1
C-37



TUMALO RESERVOIR ROAD AND O.B. RILEY ROAD INTERSECTION

SCALE: N.T.S.

2
C-37

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\TC-01 TRAFFIC CONTROL PLAN.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TRAFFIC CONTROL PLAN - PHASE 1

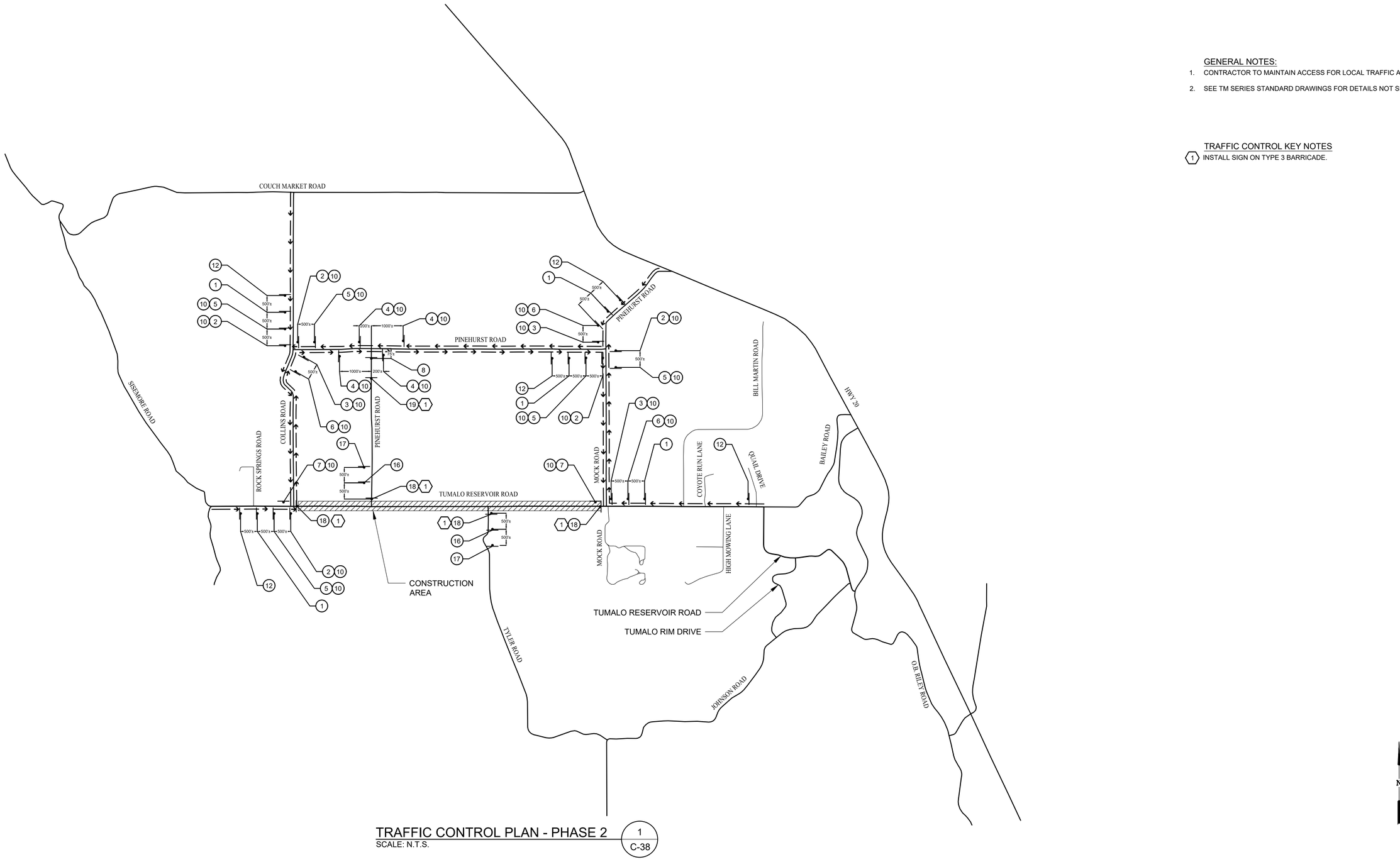
DRAWING NO. 56 OF 117
SHEET NO. C-37

GENERAL NOTES:

1. CONTRACTOR TO MAINTAIN ACCESS FOR LOCAL TRAFFIC AT ALL TIMES.
2. SEE TM SERIES STANDARD DRAWINGS FOR DETAILS NOT SHOWN.

TRAFFIC CONTROL KEY NOTES

(1) INSTALL SIGN ON TYPE 3 BARRICADE.



TRAFFIC CONTROL PLAN - PHASE 2 (1 / C-38)
SCALE: N.T.S.

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\TC-01 TRAFFIC CONTROL PLAN.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TRAFFIC CONTROL PLAN - PHASE 2

DRAWING NO. 57 OF 117

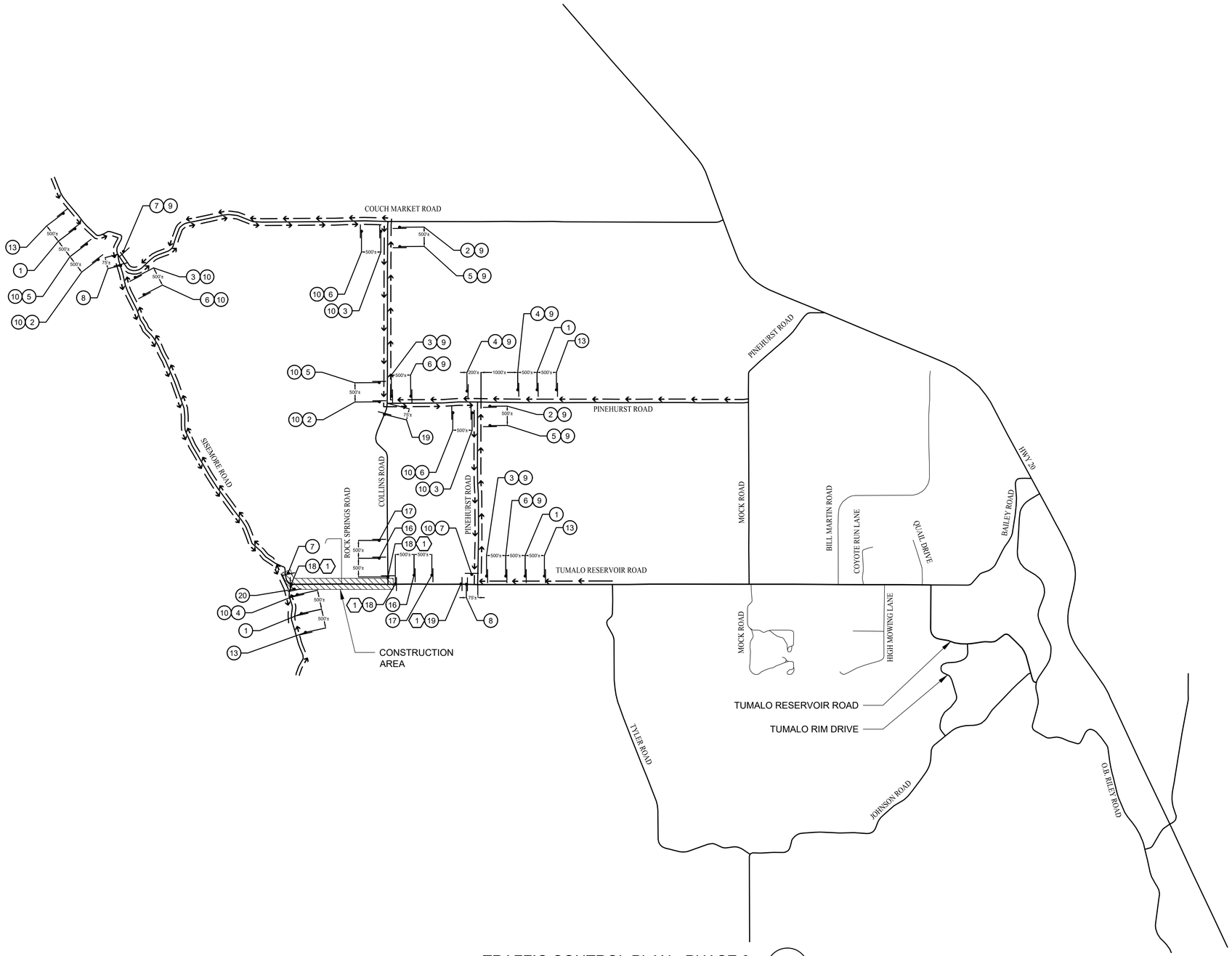
SHEET NO. C-38

GENERAL NOTES:

1. CONTRACTOR TO MAINTAIN ACCESS FOR LOCAL TRAFFIC AT ALL TIMES.
2. SEE TM SERIES STANDARD DRAWINGS FOR DETAILS NOT SHOWN.

TRAFFIC CONTROL KEY NOTES

(1) INSTALL SIGN ON TYPE 3 BARRICADE.



TRAFFIC CONTROL PLAN - PHASE 3

SCALE: N.T.S.

1
C-39

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TRAFFIC CONTROL PLAN - PHASE 3

DRAWING NO. 58 OF 117
SHEET NO. C-39

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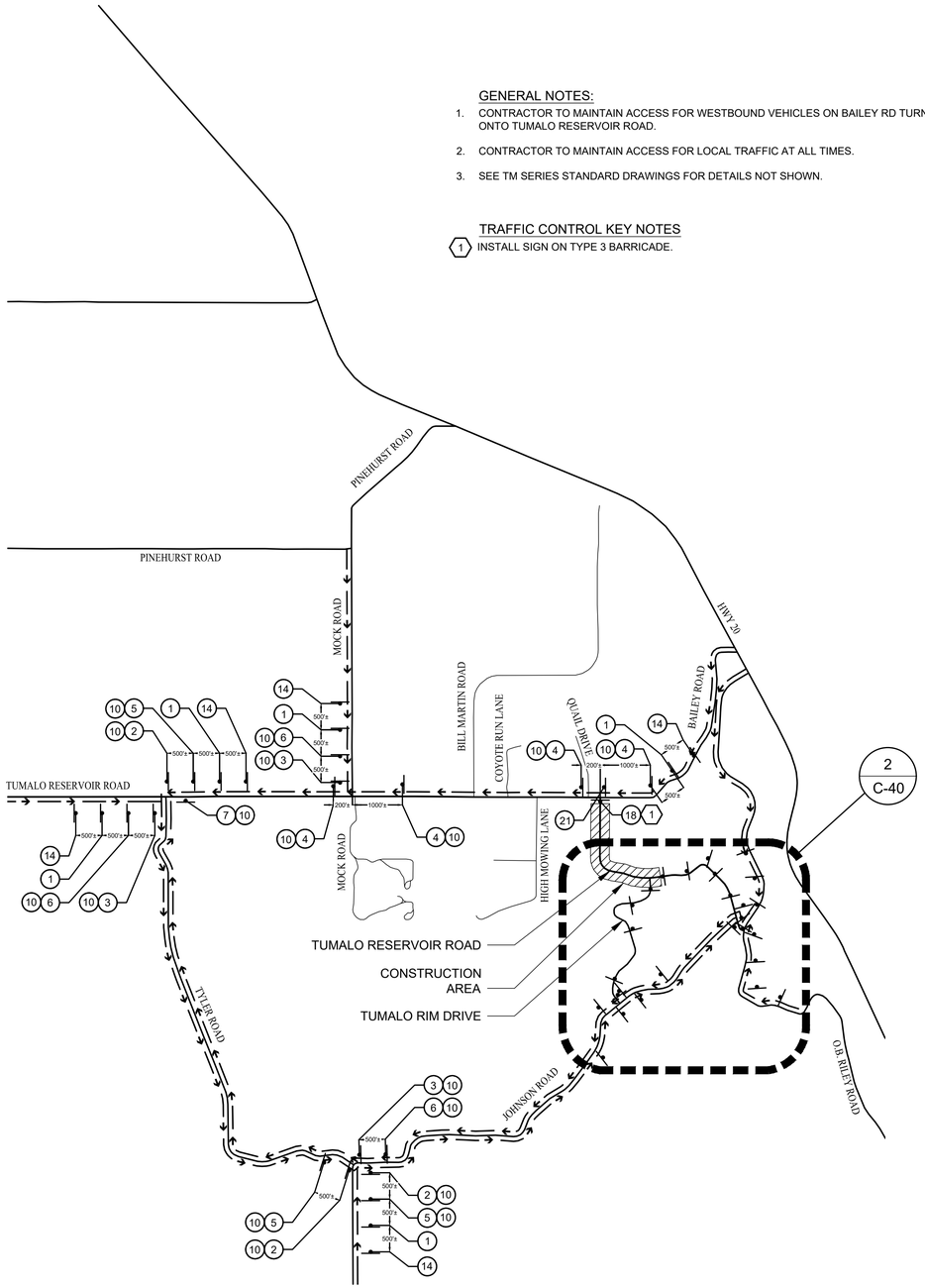
GENERAL NOTES:

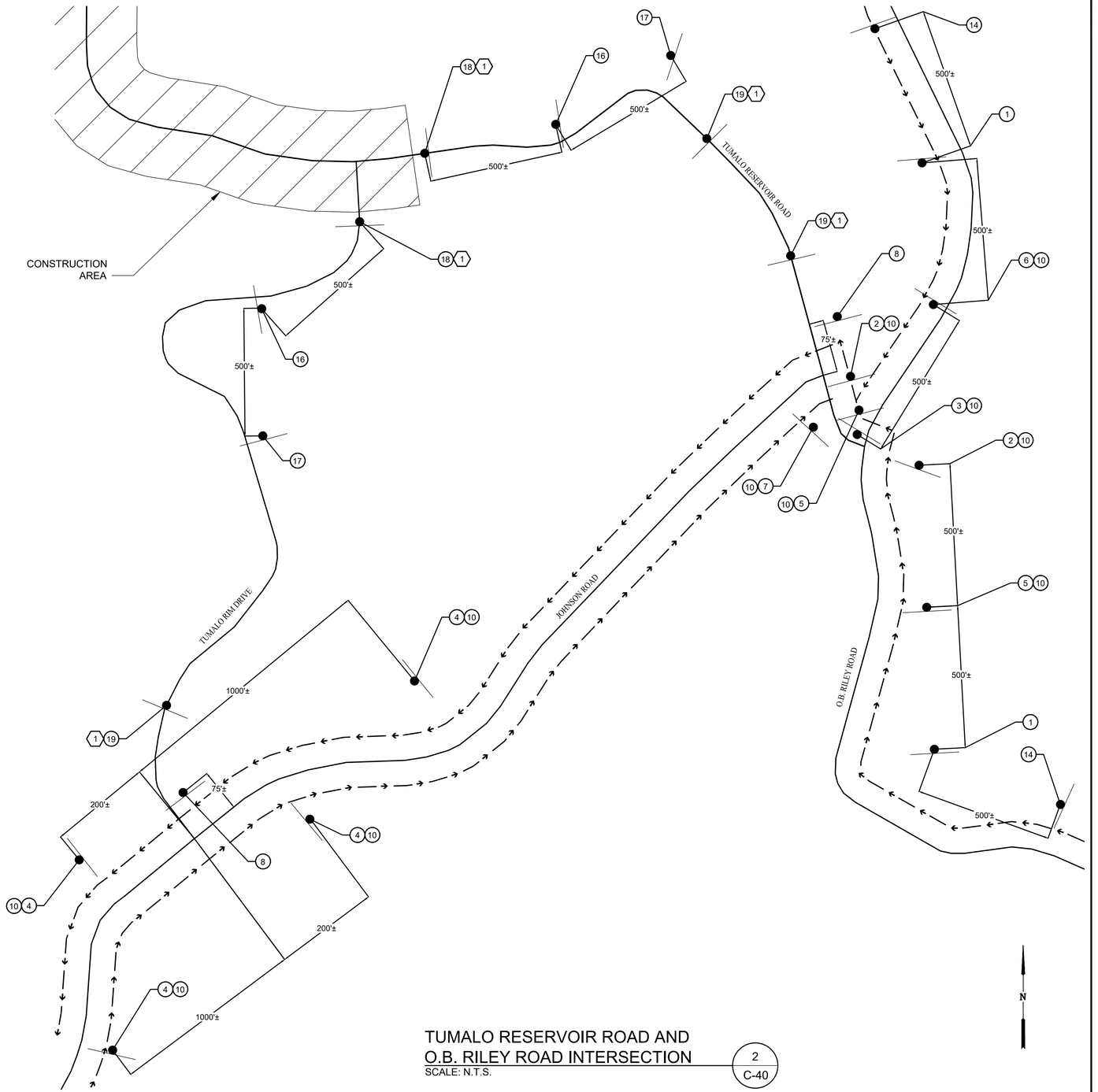
1. CONTRACTOR TO MAINTAIN ACCESS FOR WESTBOUND VEHICLES ON BAILEY RD TURNING LEFT ONTO TUMALO RESERVOIR ROAD.
2. CONTRACTOR TO MAINTAIN ACCESS FOR LOCAL TRAFFIC AT ALL TIMES.
3. SEE TM SERIES STANDARD DRAWINGS FOR DETAILS NOT SHOWN.

TRAFFIC CONTROL KEY NOTES

(1) INSTALL SIGN ON TYPE 3 BARRICADE.



TRAFFIC CONTROL PLAN - PHASE 4 (1 C-40)
SCALE: N.T.S.



TUMALO RESERVOIR ROAD AND O.B. RILEY ROAD INTERSECTION (2 C-40)
SCALE: N.T.S.

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — 87553PE — OREGON — NOV. 13, 2018 — ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TRAFFIC CONTROL PLAN - PHASE 4

DRAWING NO. 59 OF 117
SHEET NO. C-40

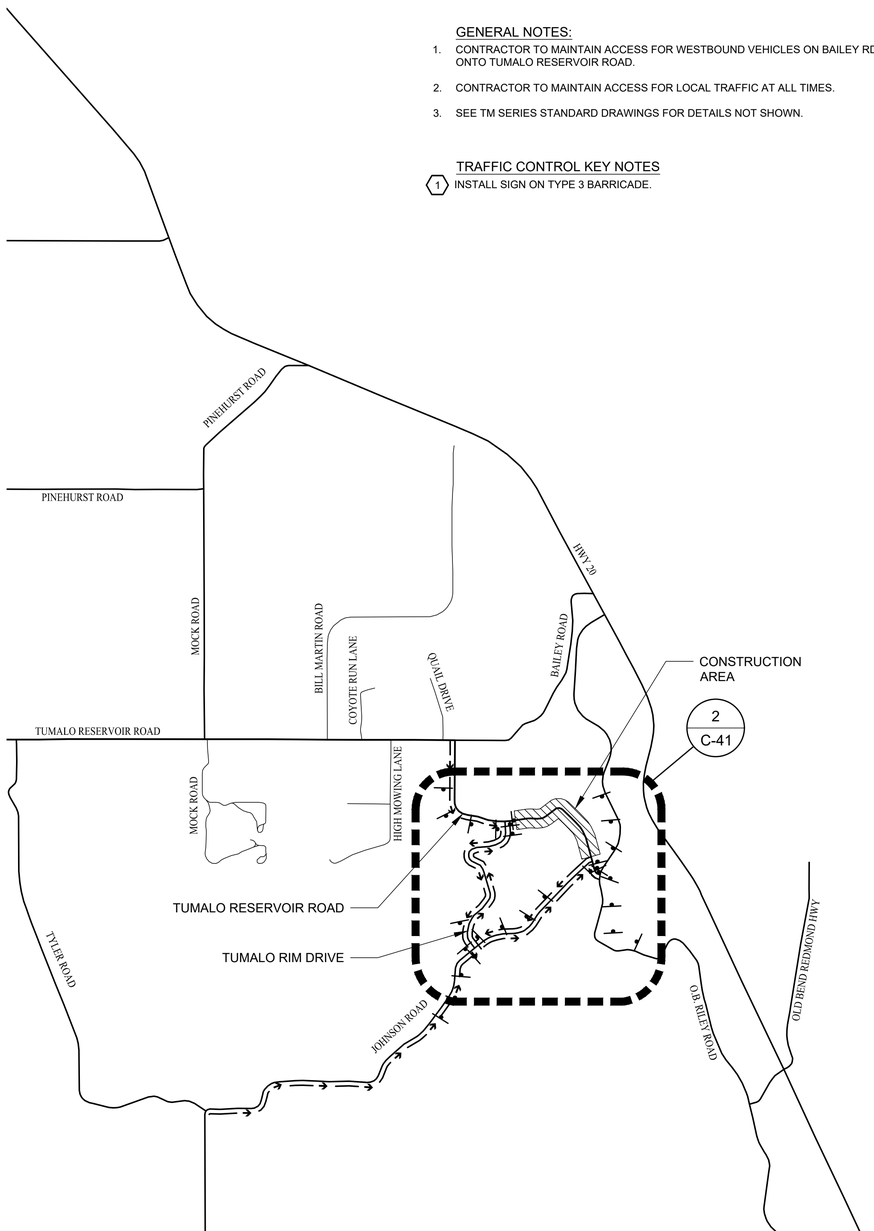
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\TC-01 TRAFFIC CONTROL PLAN.dwg

GENERAL NOTES:

1. CONTRACTOR TO MAINTAIN ACCESS FOR WESTBOUND VEHICLES ON BAILEY RD TURNING LEFT ONTO TUMALO RESERVOIR ROAD.
2. CONTRACTOR TO MAINTAIN ACCESS FOR LOCAL TRAFFIC AT ALL TIMES.
3. SEE TM SERIES STANDARD DRAWINGS FOR DETAILS NOT SHOWN.

TRAFFIC CONTROL KEY NOTES

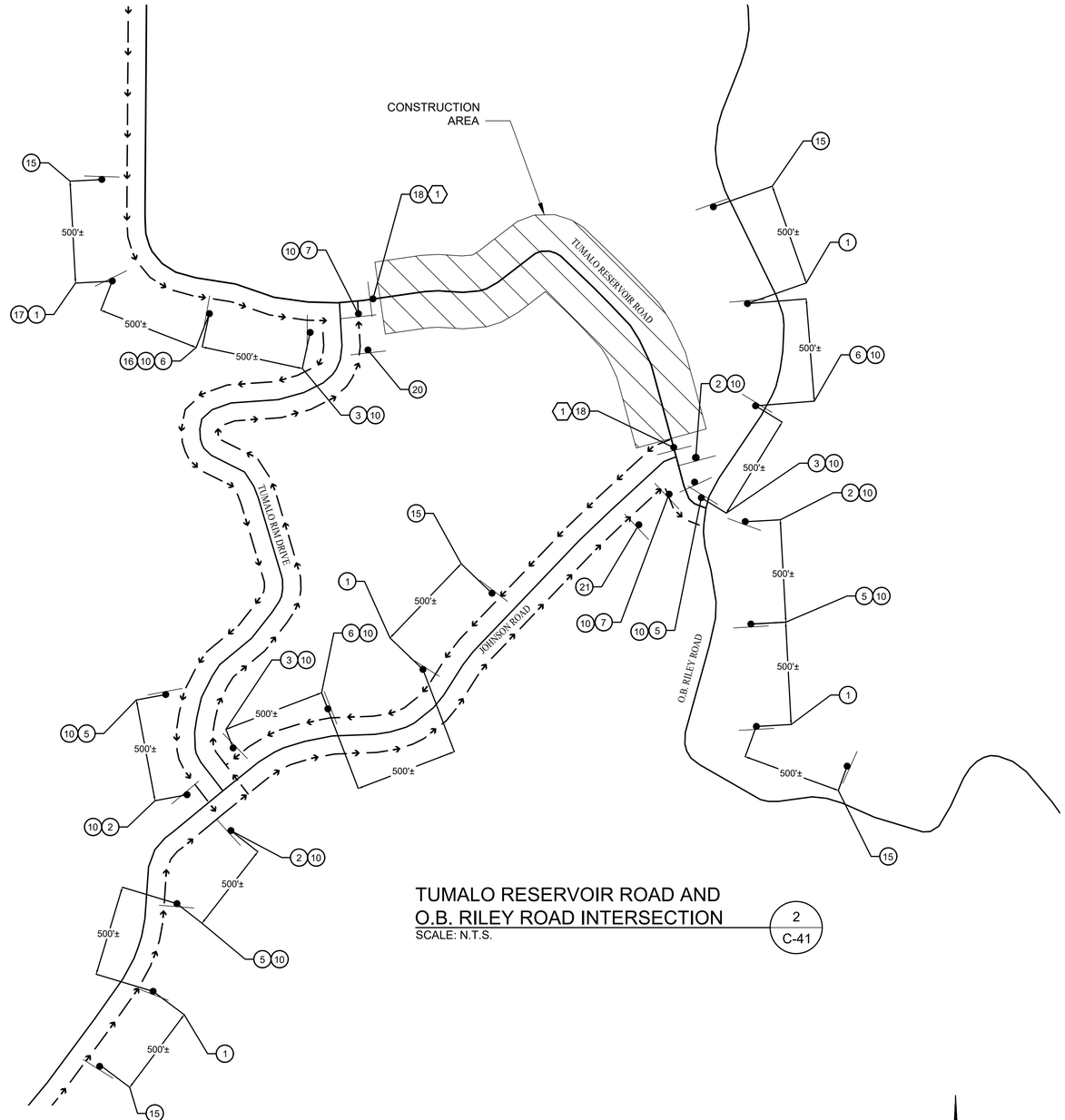
(1) INSTALL SIGN ON TYPE 3 BARRICADE.



TRAFFIC CONTROL PLAN - PHASE 5

SCALE: N.T.S.

1
C-41



TUMALO RESERVOIR ROAD AND
O.B. RILEY ROAD INTERSECTION

SCALE: N.T.S.

2
C-41

N

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

TRAFFIC CONTROL PLAN - PHASE 5

DRAWING NO. 60 OF 117

SHEET NO. C-41

W20-2 (MOD.)
48 X 48

1

M4-9L
30 X 24

2

M4-9R
30 X 24

3

CG20-6
30 X 24

4

CG20-6 (MOD.)
30 X 24

5

CG20-6 (MOD.)
30 X 24

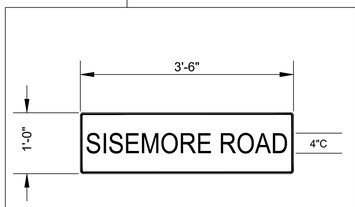
6

M4-8A
18 X 24

7

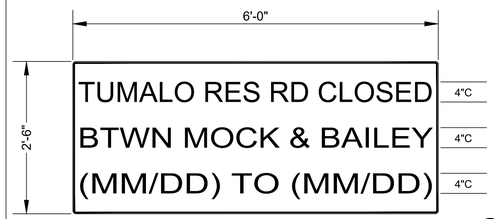
W20-3
48 X 48

8

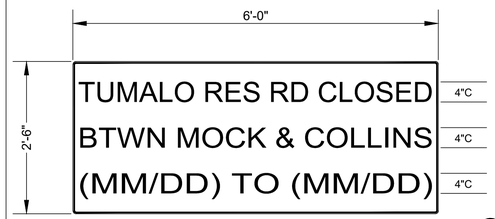


9

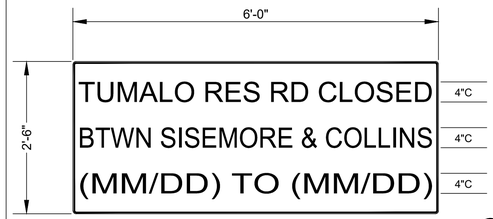
10



11



12



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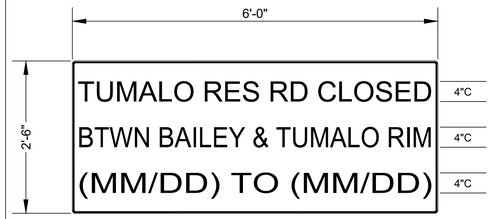

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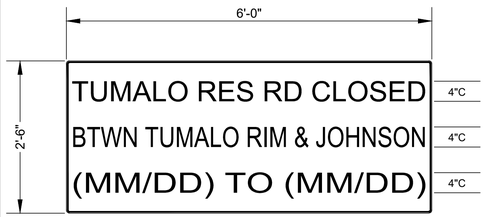

15

W20-3
48 X 48

16

W20-3
48 X 48

17

W20-3
48 X 48

18

R11-3A (MOD.)
60 X 30

19

R3-1 (R)
24 X 24

20

R3-1 (L)
24 X 24

21

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\TC-01 TRAFFIC CONTROL PLAN.dwg

DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DETOUR SIGN DETAILS

DRAWING NO. 61 OF 117
SHEET NO. C-42

WATER QUALITY SWALE DATA				
NUMBER	BEGIN STA/OFF	END STA/OFF	PLAN SHEET	LOCATION
1	6+68.4, -23.4' (LT)	6+96.4, -23.4' (LT)	C-44	DRIVEWAY
2	9+42.4, 23.5' (RT)	9+84.4, 23.5' (RT)	C-44	LOW POINT
3	10+31.5, -23.3' (LT)	10+55.5, -23.3' (LT)	C-44	DRIVEWAY
4	15+03.2, 24.1' (RT)	15+59.2, 23.9' (RT)	C-44	LOW POINT
5	15+08.7, -24.0' (LT)	15+53.7, -24.1' (LT)	C-44	LOW POINT
6	20+68, -23.3' (LT)	21+32, -23.0' (LT)	C-44	LOW POINT
7	20+77.4, 24.0' (RT)	21+22.4, 24.0' (RT)	C-44	LOW POINT
8	23+83.8, 24.0' (RT)	24+33.8, 24.0' (RT)	C-44	DRIVEWAY
9	24+59.1, -23.5' (LT)	24+76.1, -23.5' (LT)	C-44	DRIVEWAY
10	33+44.6, -23.5' (LT)	33+65.6, -23.5' (LT)	C-45	DRIVEWAY
11	39+74.1, 23.6' (RT)	40+54.1, 23.5' (RT)	C-45	DRIVEWAY
12	39+90, -22.0' (LT)	40+54, -22.0' (LT)	C-45	DRIVEWAY
13	43+47.4, -21.5' (LT)	43+75.4, -21.4' (LT)	C-45	DRIVEWAY
14	43+73.4, 23.6' (RT)	44+03.4, 23.5' (RT)	C-45	DRIVEWAY
15	47+00.2, -23.4' (LT)	47+32.2, -23.5' (LT)	C-45	DRIVEWAY
16	51+64.4, 23.5' (RT)	52+44.4, 23.5' (RT)	C-45	DRIVEWAY
17	55+15.3, -23.5' (LT)	56+05.3, -22.8' (LT)	C-45	LOW POINT
18	55+42.5, 23.5' (RT)	55+78.5, 23.6' (RT)	C-45	LOW POINT
19	57+56, 23.5' (RT)	57+79, 23.5' (RT)	C-45	DRIVEWAY
20	57+79.2, -23.5' (LT)	57+99.2, -23.5' (LT)	C-45	INTERSECTION
21	61+66.1, -24.0' (LT)	61+91.2, -24.0' (LT)	C-46	DRIVEWAY
22	63+63.2, 23.4' (RT)	64+00.2, 23.5' (RT)	C-46	DRIVEWAY
23	66+17.8, 23.0' (RT)	66+36.8, 23.0' (RT)	C-46	DRIVEWAY
24	66+38.6, -23.0' (LT)	66+59.6, -22.9' (LT)	C-46	DRIVEWAY
25	70+03.4, -23.5' (LT)	70+36.4, -23.4' (LT)	C-46	DRIVEWAY
26	82+15.4, 23.6' (RT)	83+32.4, 23.6' (RT)	C-46	DRIVEWAY
27	82+27.3, -23.5' (LT)	83+52.3, -23.5' (LT)	C-46	DRIVEWAY
28	84+07.5, -23.5' (LT)	84+32.5, -23.5' (LT)	C-46	DRIVEWAY
29	84+07.5, 23.5' (RT)	84+32.5, 23.5' (RT)	C-46	DRIVEWAY
30	95+39.1, 23.5' (RT)	96+37.1, 23.4' (RT)	C-47	INTERSECTION
31	95+98.9, -23.5' (LT)	97+03.9, -23.5' (LT)	C-47	DRIVEWAY
32	108+40.1, 23.5' (RT)	109+65.1, 23.5' (RT)	C-47	DRIVEWAY

WATER QUALITY SWALE DATA				
NUMBER	BEGIN STA/OFF	END STA/OFF	PLAN SHEET	LOCATION
33	108+74, -22.0' (LT)	109+99, -23.4' (LT)	C-47	DRIVEWAY
34	111+28, -23.4' (LT)	112+28, -22.9' (LT)	C-47	LOW POINT
35	111+66.1, 23.5' (RT)	111+90.1, 23.5' (RT)	C-47	LOW POINT
36	113+65, 23.6' (RT)	114+46, 23.5' (RT)	C-47	DRIVEWAY
37	121+02.6, -23.5' (LT)	121+22.6, -23.5' (LT)	C-48	DRIVEWAY
38	134+24.8, 22.0' (RT)	135+50, 22.0' (RT)	C-48	DRIVEWAY
39	135+03.1, -21.7' (LT)	136+13.1, -22.0' (LT)	C-48	INTERSECTION
40	137+41.1, -28.9' (LT)	137+80.1, -28.9' (LT)	C-48	LOW POINT
41	138+39.4, 24.0' (RT)	138+89.4, 24.1' (RT)	C-48	LOW POINT
42	148+21.2, -27.9' (LT)	149+02.4, -27.9' (LT)	C-49	DRIVEWAY
43	148+77.9, 24.0' (RT)	149+47.9, 24.0' (RT)	C-49	DRIVEWAY
44	153+15.1, 24.0' (RT)	153+51.1, 24.0' (RT)	C-49	DRIVEWAY
45	161+16.7, -23.0' (LT)	162+37.4, -24.4' (LT)	C-49	INTERSECTION
46	162+08.3, 22.3' (RT)	162+88.3, 25.6' (RT)	C-49	DRIVEWAY
47	163+17.7, -26.8' (LT)	165+10.7, -27.7' (LT)	C-49	INTERSECTION
48	166+02.5, 23.6' (RT)	167+02.5, 23.6' (RT)	C-49	DRIVEWAY
49	170+21.9, -27.1' (LT)	170+85.1, -27.1' (LT)	C-49	INTERSECTION
50	181+24.7, 22.0' (RT)	182+26.7, 22.0' (RT)	C-50	LOW POINT
51	181+51.9, -22.0' (LT)	181+99.9, -22.0' (LT)	C-50	LOW POINT
52	184+44.3, -24.0' (LT)	184+69.3, -24.0' (LT)	C-50	DRIVEWAY
53	189+01.8, 25.9' (RT)	189+21.8, 25.9' (RT)	C-50	INTERSECTION
54	189+37.1, -23.2' (LT)	189+59.1, -23.2' (LT)	C-50	DRIVEWAY
55	200+27.7, -41.1' (LT)	200+75.4, -25.6' (LT)	C-50	INTERSECTION
56	200+47.1, 21.5' (RT)	200+77.1, 21.5' (RT)	C-50	INTERSECTION
57	203+93.1, 23.5' (RT)	204+21.1, 23.5' (RT)	C-51	DRIVEWAY
58	210+96.4, 26.5' (RT)	211+24.4, 26.5' (RT)	C-51	DRIVEWAY
59	211+98, -23.4' (LT)	212+36.7, -23.2' (LT)	C-51	DRIVEWAY
60	216+25.4, -21.5' (LT)	216+52.3, -21.2' (LT)	C-51	LOW POINT
61	239+25.1, 23.3' (RT)	239+39.1, 23.1' (RT)	C-52	LOW POINT
62	241+18.3, 21.5' (RT)	241+39.3, 21.5' (RT)	C-53	DRIVEWAY
63	249+73.9, 23.0' (RT)	250+44.5, 23.0' (RT)	C-53	INTERSECTION

CHECK DAM DATA							
BEGIN STA/OFF	END STA/OFF	PLAN SHEET	LENGTH	MAX GRADE	MAX SPACING	QUANTITY	HEIGHT
99+00	104+85	C-47	585.00'	6.2%	100'	6	4"
155+95	161+60	C-49	565.00'	6.4%	100'	6	4"
168+20	174+08	C-50	588.00'	6.2%	100'	6	4"
214+50, -21.5' (LT)	216+50, -21.5' (LT)	C-51	200.00'	5.3%	100'	2 (LT ONLY)	4"
219+10, -22.5' (LT)	219+70, -23.4' (LT)	C-51	60.00'	5.3%	20'	4 (LT ONLY)	18"
227+20, -25.9' (LT)	229+80, -26.5' (LT)	C-52	260.00'	5.0%	20'	14 (LT ONLY)	18"

CHECK DAM NOTES

1. CONSTRUCT TYPE 1 AGGREGATE CHECK DAMS PER ODOT STD. DWG. RD1005.
2. QUANTITY IS NUMBER OF CHECK DAMS ON EACH SIDE OF ROAD UNLESS OTHERWISE NOTED.

CULVERT DATA								
NUMBER	PLAN SHEET	CULVERT MATERIAL/SIZE	BEGIN STA/OFF	BEGIN INVERT ELEVATION	END STA/OFF	END CULVERT ELEVATION	LENGTH	PIPE SLOPE
SD CULV-1	C-49	12" D.I. STORM PIPE	162+37.4, -24.4' (LT)	3326.00	163+02.3, -26.1' (LT)	3325.35	64.98'	1.00%
SD CULV-2	C-49	12" D.I. STORM PIPE	162+89.4, 24.3' (RT)	3325.59	163+12.3, -23.3' (LT)	3325.03	52.95'	1.06%
SD CULV-3	C-49	12" D.I. STORM PIPE	169+41.8, -21.9' (LT)	3340.10	170+21.8, -27.5' (LT)	3340.50	80.20'	0.50%

GUARDRAIL DATA							
NUMBER	START STATION	START OFFSET	END STATION	END OFFSET	LENGTH	PLAN SHEETS	MINIMUM POST HEIGHT
1	128+00.04	18.75' RT	131+00.01	18.75' RT	299.97	C-23	8'
2	128+99.96	18.75' LT	131+87.50	18.75' LT	287.54	C-23	6'
3	216+32.71	31.92' RT	225+08.38	14.75' RT	891.91	C-31 AND C-32	6'
4	225+53.25	33.13' RT	239+25.89	14.75' RT	1371.00	C-32, C-33, AND C-34	6'
5	237+69.41	14.75' LT	239+86.95	15.75' LT	226.79	C-34	6' TYP, SEE NOTE BELOW

NOTE: FOR GUARDRAIL SEGMENT #5, MINIMUM POST HEIGHT SHALL BE 8' FROM STA 237+85 TO STA 238+50

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

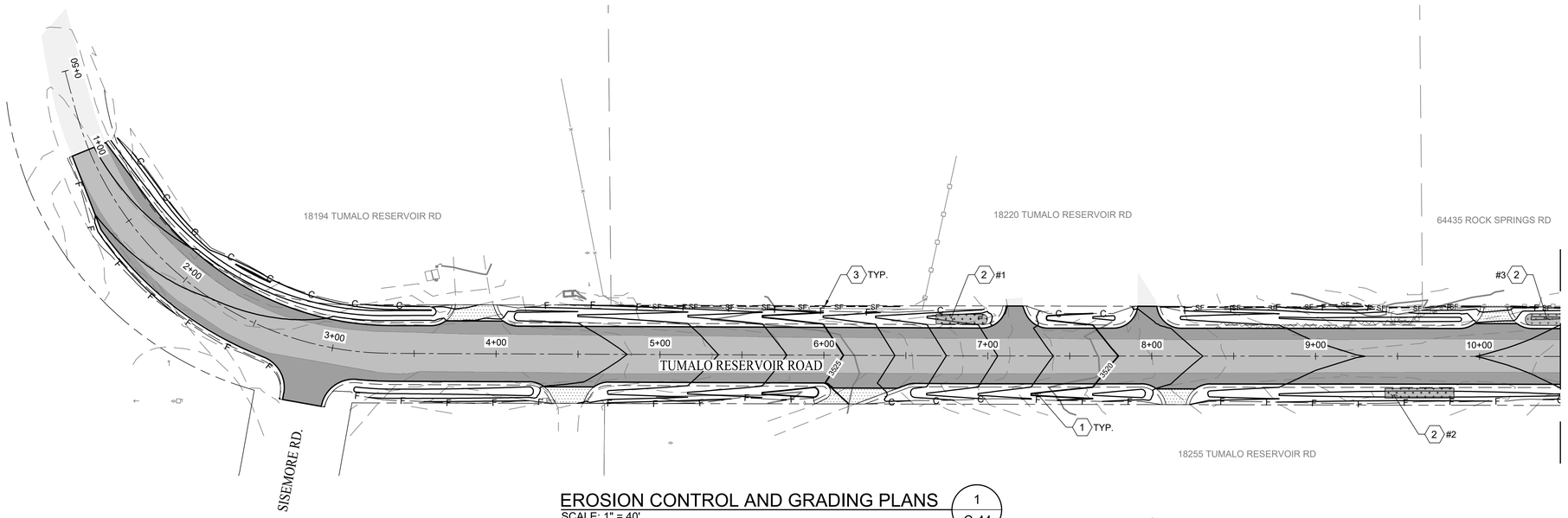
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRAINAGE AND GUARDRAIL DATA

DRAWING NO. 62 OF 117
SHEET NO. C-43



MATCHLINE STA 10+50
SEE BELOW

EROSION CONTROL AND GRADING PLANS

SCALE: 1" = 40'

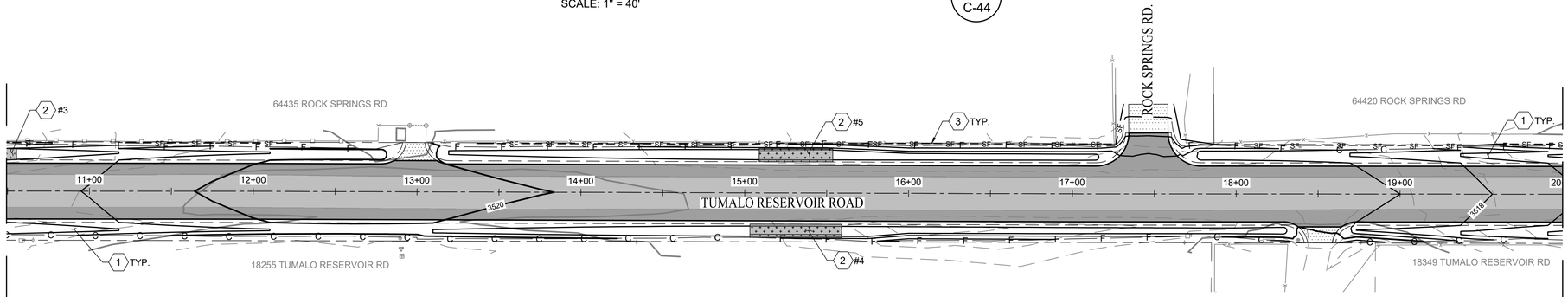
1
C-44

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.



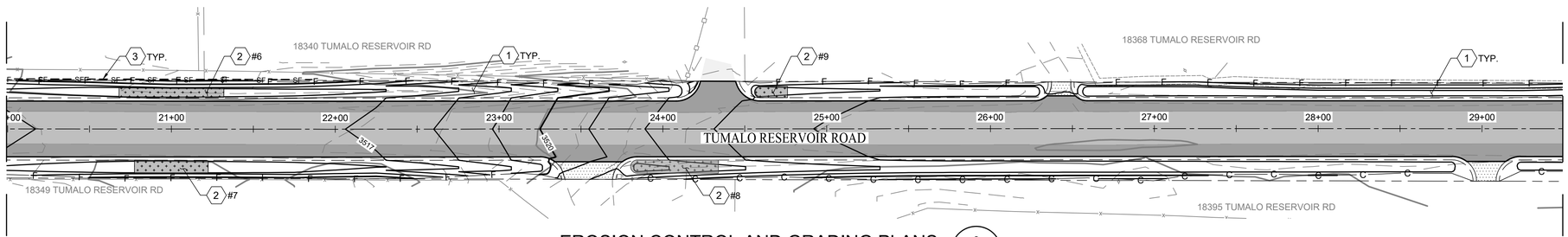
MATCHLINE STA 10+50
SEE ABOVE

MATCHLINE STA 20+00
SEE BELOW

EROSION CONTROL AND GRADING PLANS

SCALE: 1" = 40'

2
C-44



MATCHLINE STA 20+00
SEE ABOVE

MATCHLINE STA 29+50
SEE SHEET C-45

EROSION CONTROL AND GRADING PLANS

SCALE: 1" = 40'

3
C-44

N

40 0 40 80

SCALE OF FEET
SCALE: 1"=40'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-31 EROSION CONTROL AND GRADING PLANS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

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OREGON
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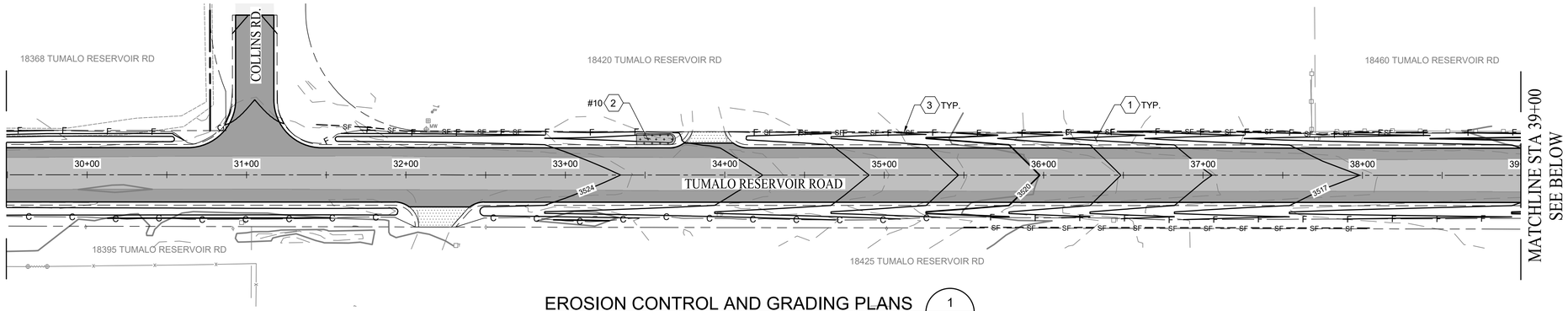
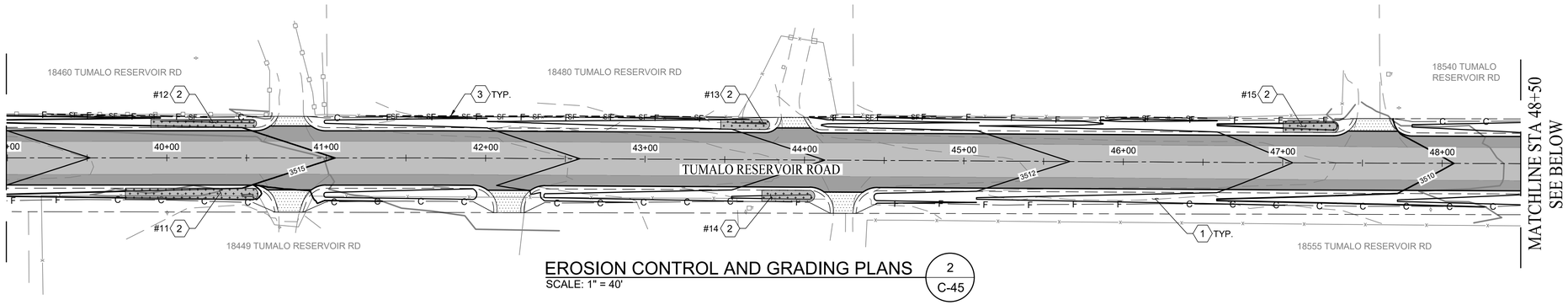
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 0+50 TO STA 29+50

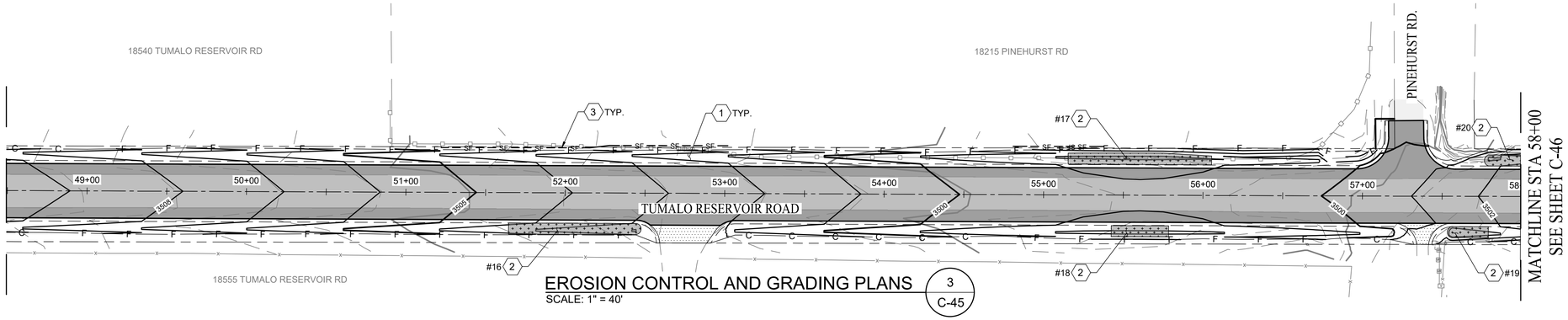
DRAWING NO. 63 OF 117
SHEET NO. C-44



EROSION CONTROL AND GRADING PLANS (1 / C-45)
SCALE: 1" = 40'



EROSION CONTROL AND GRADING PLANS (2 / C-45)
SCALE: 1" = 40'



EROSION CONTROL AND GRADING PLANS (3 / C-45)
SCALE: 1" = 40'

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 29+50 TO STA 58+00

DRAWING NO. 64 OF 117
SHEET NO. C-45

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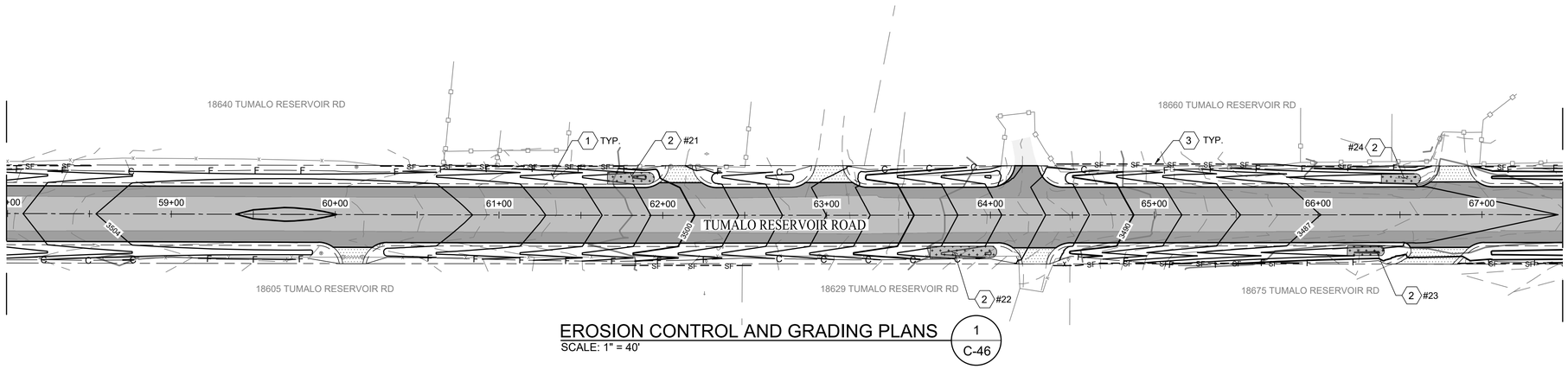

EROSION CONTROL AND GRADING PLANS (1 / C-46)
SCALE: 1" = 40'

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
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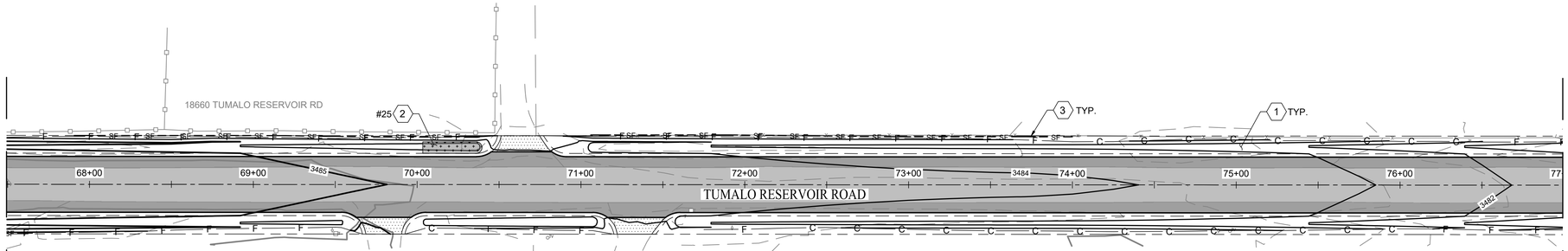

EROSION CONTROL AND GRADING PLANS (2 / C-46)
SCALE: 1" = 40'

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
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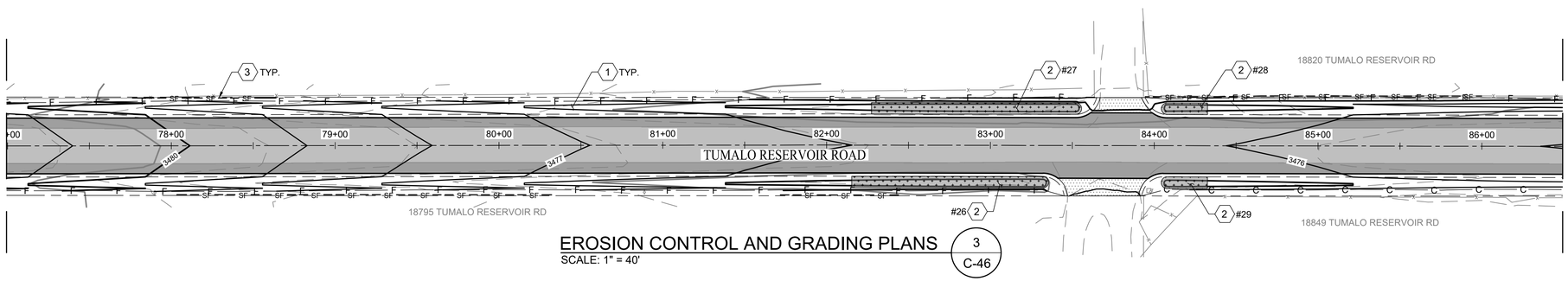
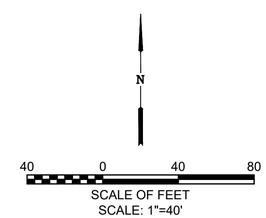


EROSION CONTROL AND GRADING PLANS (3 / C-46)
SCALE: 1" = 40'



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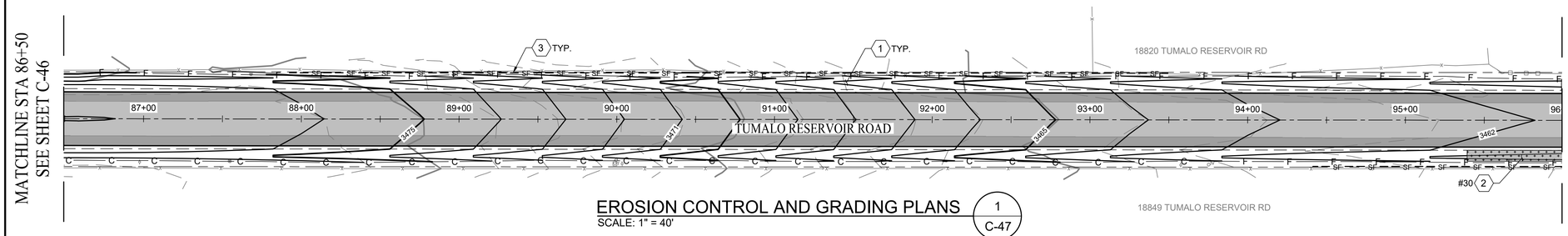
DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO:	SCALE:
AVF	SCL	RDV	AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 58+00 TO STA 86+50

DRAWING NO. 65 OF 117
SHEET NO. C-46

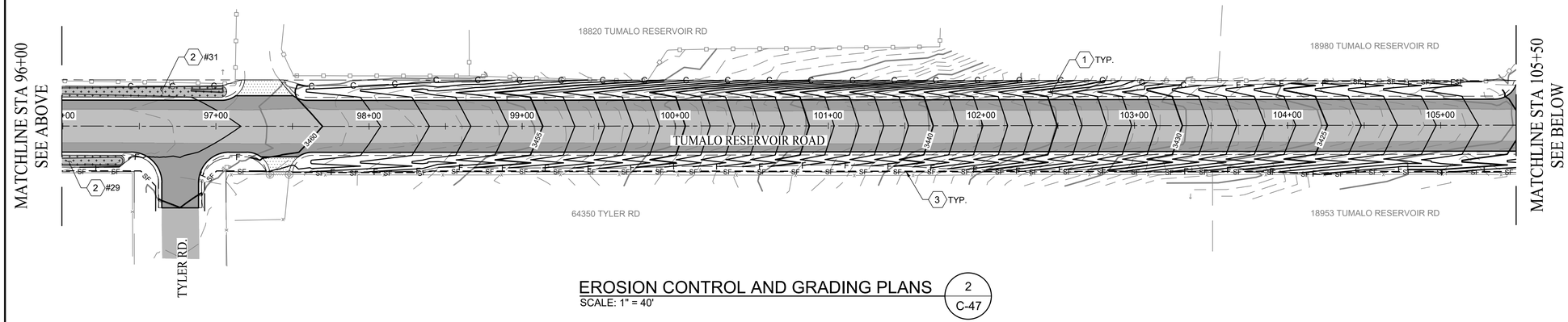
X:\Projects\Deschutes County\Tumalo Reservoir Road\CADD_WORKING\C-31 EROSION CONTROL AND GRADING PLANS.dwg



EROSION CONTROL AND GRADING PLANS (1 / C-47)
SCALE: 1" = 40'

EROSION CONTROL AND GRADING NOTES

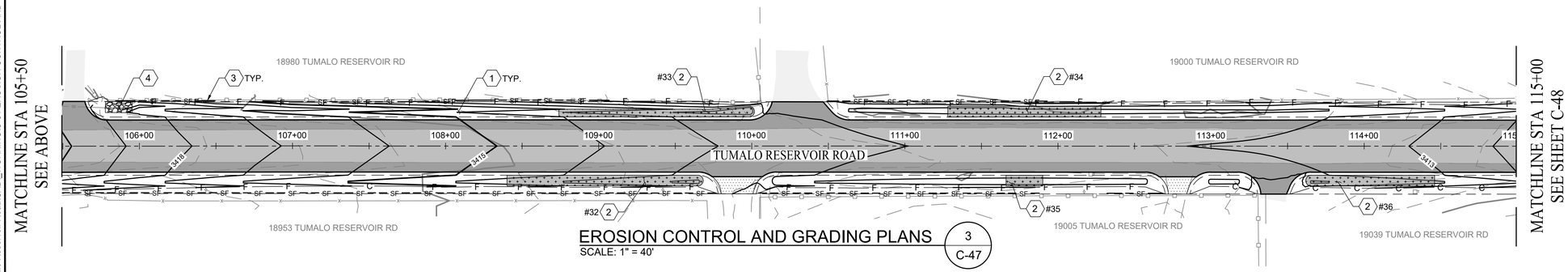
1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.
4. INSTALL CLASS 50 RIP RAP ARMORING IN LIMITS SHOWN, MIN. 1' DEPTH.



EROSION CONTROL AND GRADING PLANS (2 / C-47)
SCALE: 1" = 40'

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.



EROSION CONTROL AND GRADING PLANS (3 / C-47)
SCALE: 1" = 40'

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

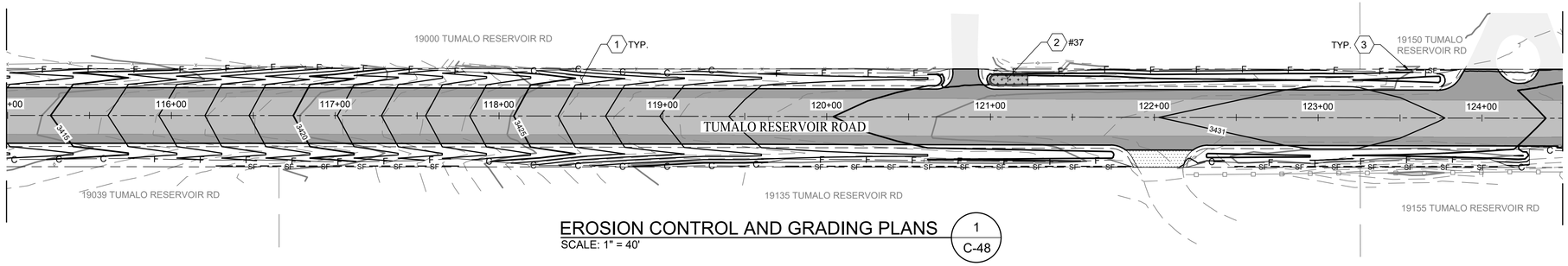
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 86+50 TO STA 115+00

DRAWING NO. 66 OF 117

SHEET NO. C-47

X:\Projects\Deschutes County\Tumalo Reservoir Road\CADD_WORKING\C-31 EROSION CONTROL AND GRADING PLANS.dwg

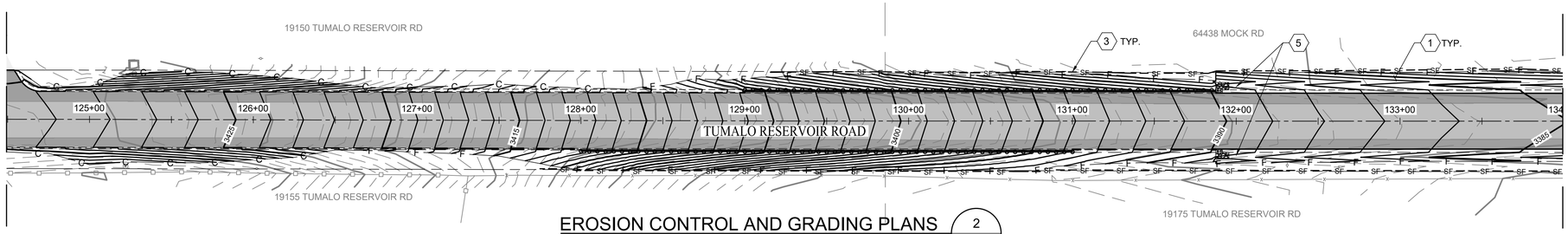


EROSION CONTROL AND GRADING PLANS
SCALE: 1" = 40'

1
C-48

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.
5. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.

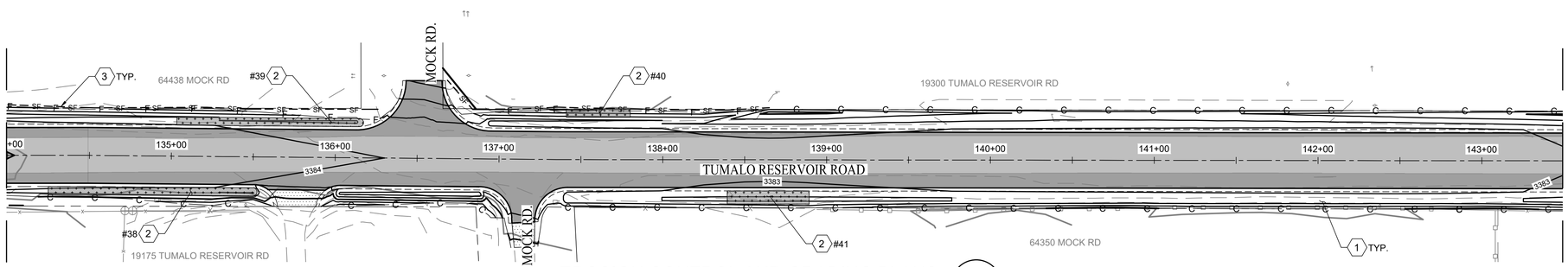


EROSION CONTROL AND GRADING PLANS
SCALE: 1" = 40'

2
C-48

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.



EROSION CONTROL AND GRADING PLANS
SCALE: 1" = 40'

3
C-48

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 115+00 TO STA 143+50

DRAWING NO. 67 OF 117
SHEET NO. C-48

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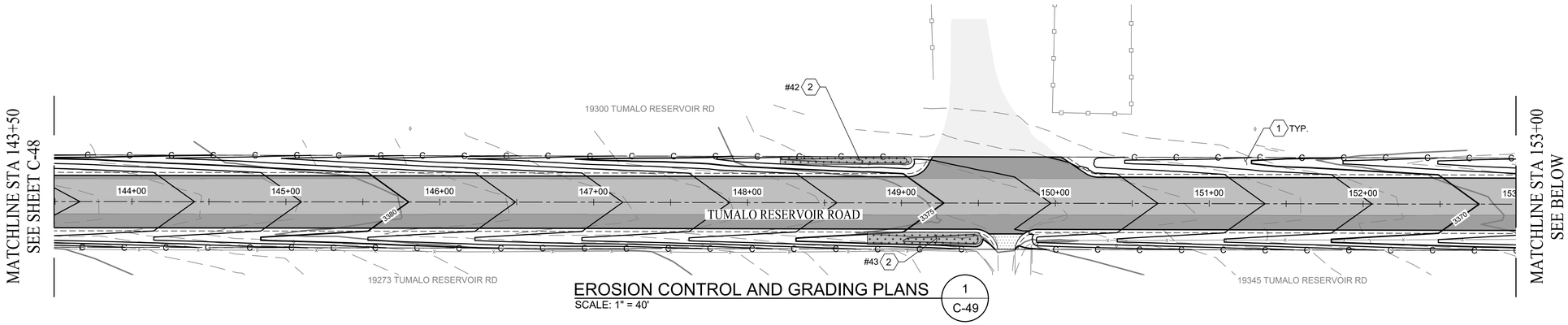
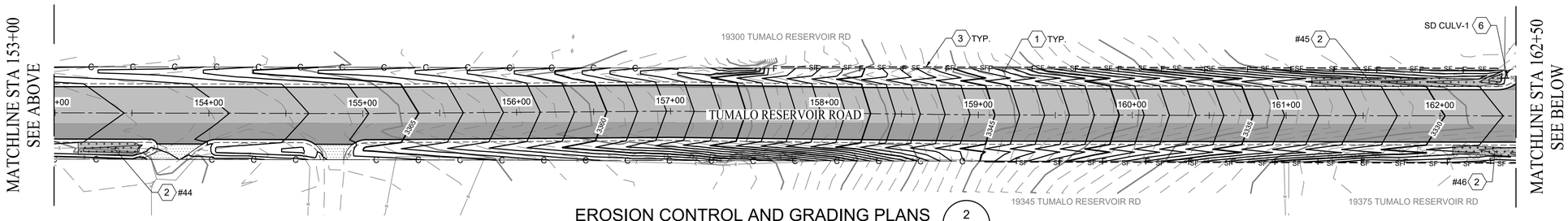
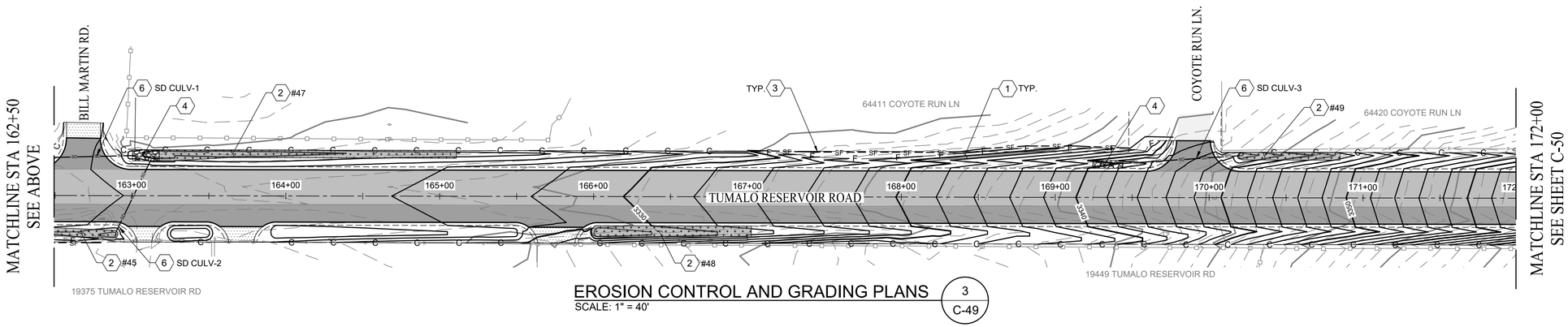


EROSION CONTROL AND GRADING PLANS (1 / C-49)
SCALE: 1" = 40'



EROSION CONTROL AND GRADING PLANS (2 / C-49)
SCALE: 1" = 40'



EROSION CONTROL AND GRADING PLANS (3 / C-49)
SCALE: 1" = 40'

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.
4. INSTALL CLASS 50 RIP RAP ARMORING IN LIMITS SHOWN, MIN. 1' DEPTH.
6. INSTALL CULVERT, SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 143+50 TO STA 172+00

DRAWING NO. 68 OF 117
SHEET NO. C-49

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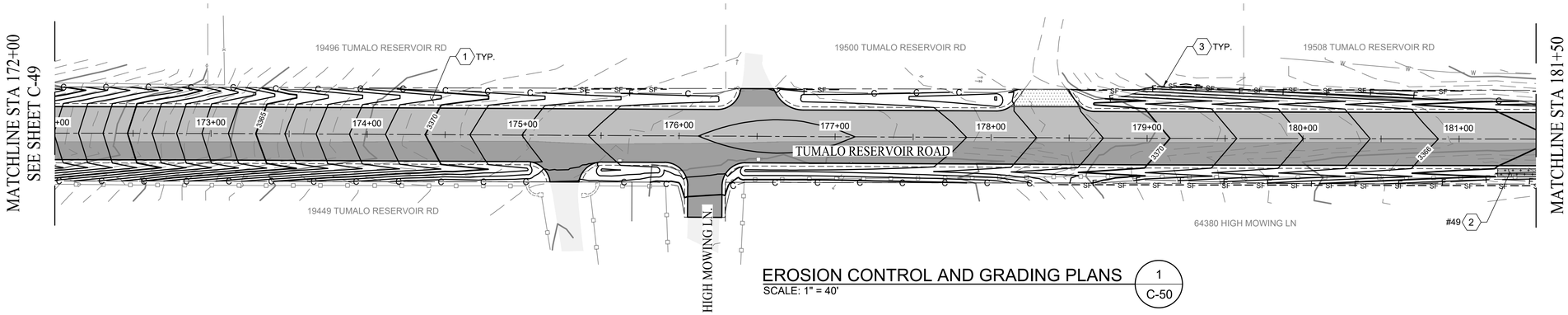
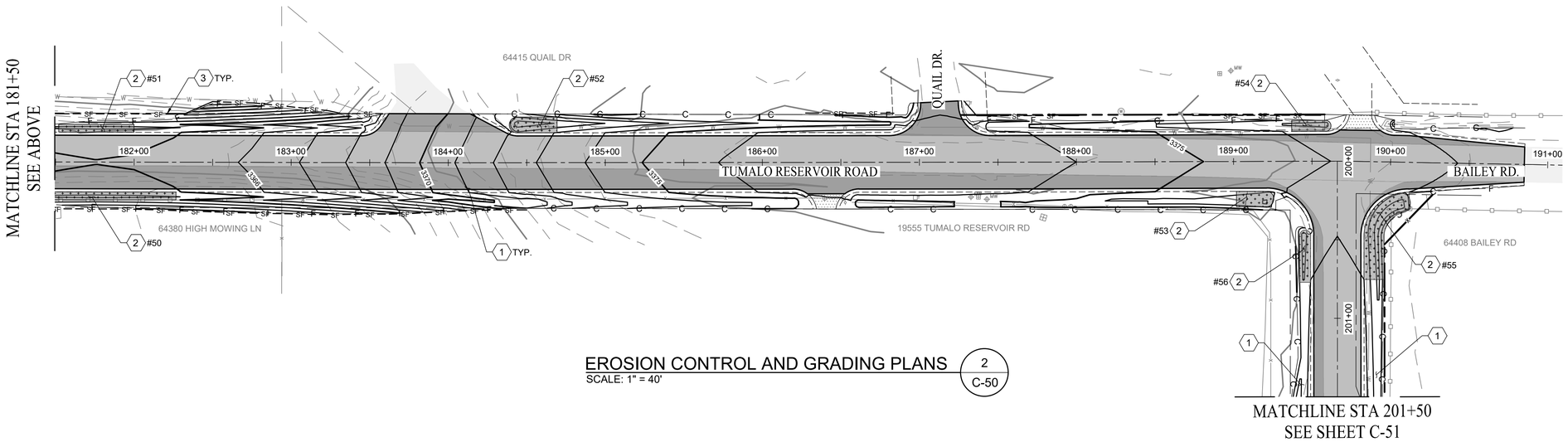


EROSION CONTROL AND GRADING PLANS
SCALE: 1" = 40'
1
C-50

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.



EROSION CONTROL AND GRADING PLANS
SCALE: 1" = 40'
2
C-50

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 172+00 TO STA 201+50

DRAWING NO.
69 OF 117

SHEET NO.
C-50

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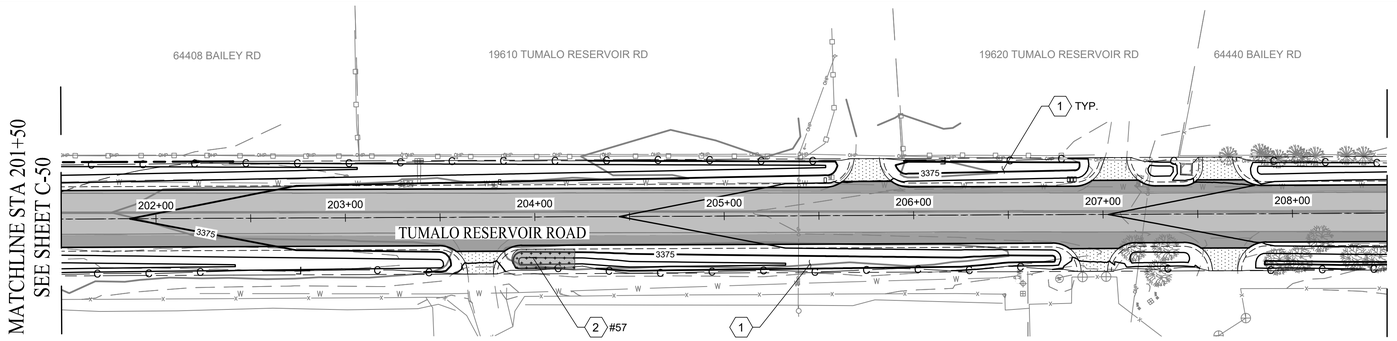
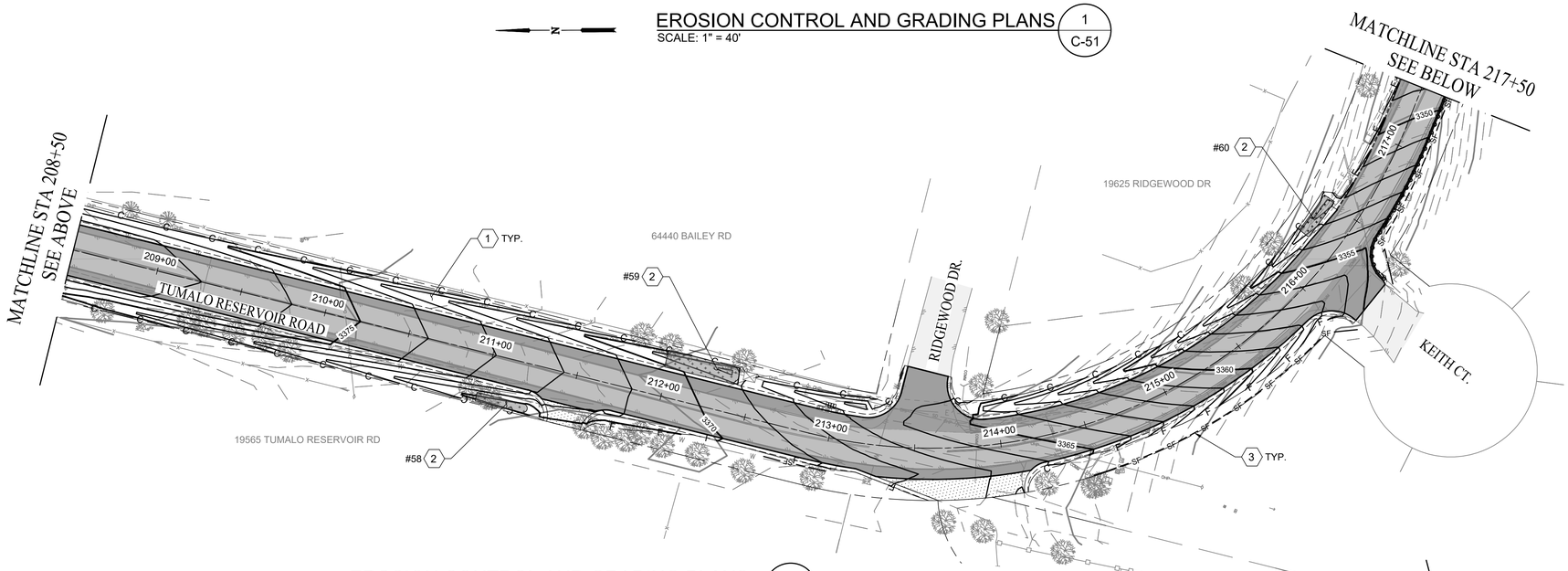


EROSION CONTROL AND GRADING PLANS

SCALE: 1" = 40'

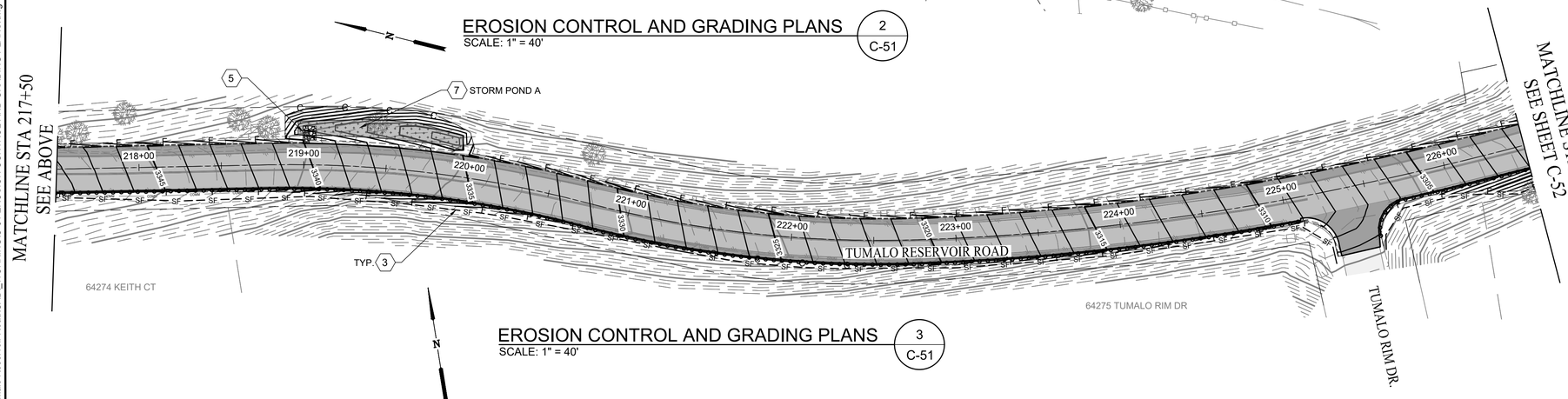
1 / C-51



EROSION CONTROL AND GRADING PLANS

SCALE: 1" = 40'

2 / C-51



EROSION CONTROL AND GRADING PLANS

SCALE: 1" = 40'

3 / C-51

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.
5. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.
7. CONSTRUCT STORMWATER POND PER TYPICAL SECTIONS ON SHEETS C-04 AND C-05.

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.

40 0 40 80

SCALE OF FEET
SCALE: 1"=40'

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

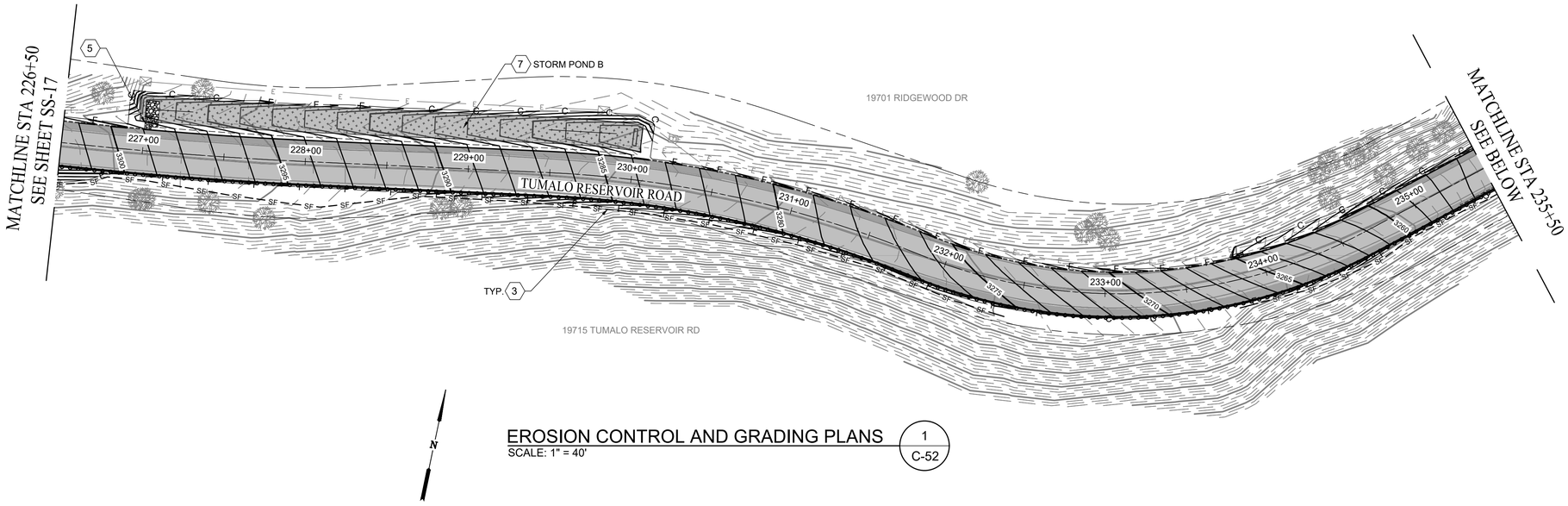
DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 201+50 TO STA 226+50

DRAWING NO. 70 OF 117

SHEET NO. C-51



N

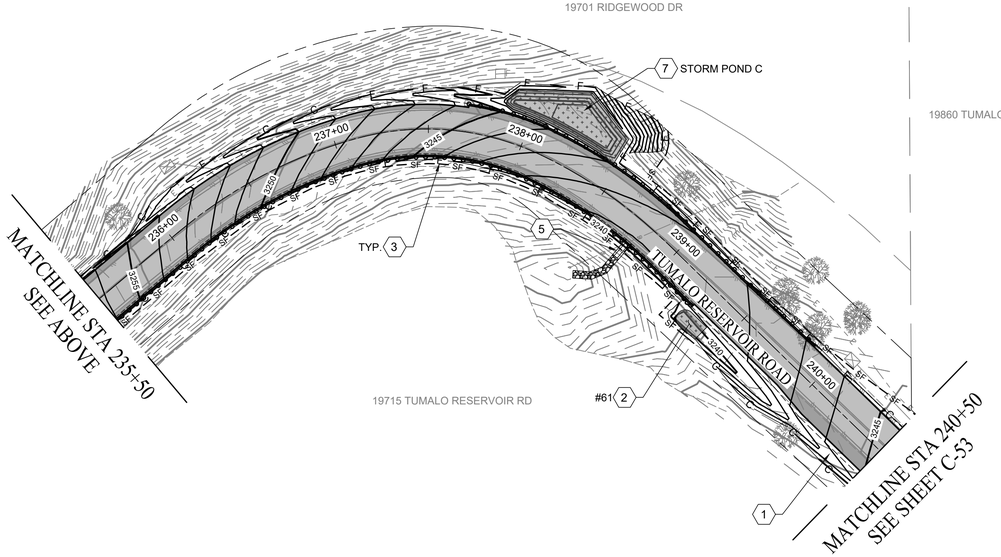
EROSION CONTROL AND GRADING PLANS (1 / C-52)
SCALE: 1" = 40'

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.
5. INSTALL CONCRETE APRON & RIPRAP BASIN PER DETAIL 2 ON SHEET C-08.
7. CONSTRUCT STORMWATER POND PER TYPICAL SECTIONS ON SHEETS C-04 AND C-05.

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.



N

EROSION CONTROL AND GRADING PLANS (2 / C-52)
SCALE: 1" = 40'

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — 87553PE — OREGON — NOV. 13, 2018 — ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 226+50 TO STA 240+50

DRAWING NO. 71 OF 117
SHEET NO. C-52

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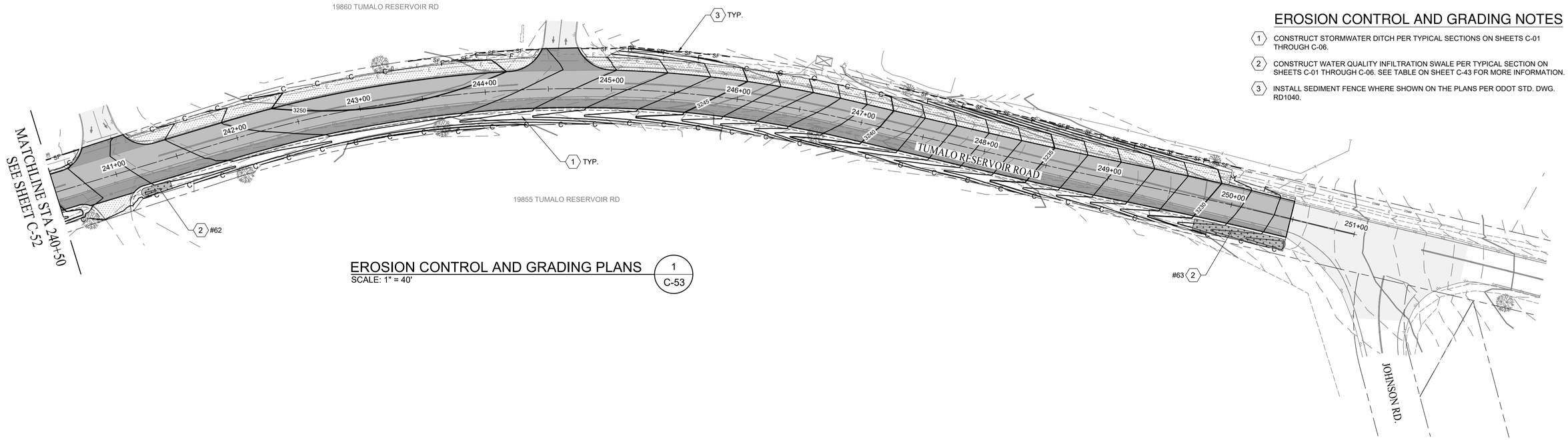

EROSION CONTROL AND GRADING PLANS
SCALE: 1" = 40'

1
C-53

EROSION CONTROL AND GRADING NOTES

1. CONSTRUCT STORMWATER DITCH PER TYPICAL SECTIONS ON SHEETS C-01 THROUGH C-06.
2. CONSTRUCT WATER QUALITY INFILTRATION SWALE PER TYPICAL SECTION ON SHEETS C-01 THROUGH C-06. SEE TABLE ON SHEET C-43 FOR MORE INFORMATION.
3. INSTALL SEDIMENT FENCE WHERE SHOWN ON THE PLANS PER ODOT STD. DWG. RD1040.

GENERAL NOTES

1. SEE SHEETS C-54 THROUGH C-75 FOR DRIVEWAY AND INTERSECTION GRADING INFORMATION.
2. CONTRACTOR TO INSTALL PERMANENT SEEDING ON ALL DISTURBED EARTH.

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

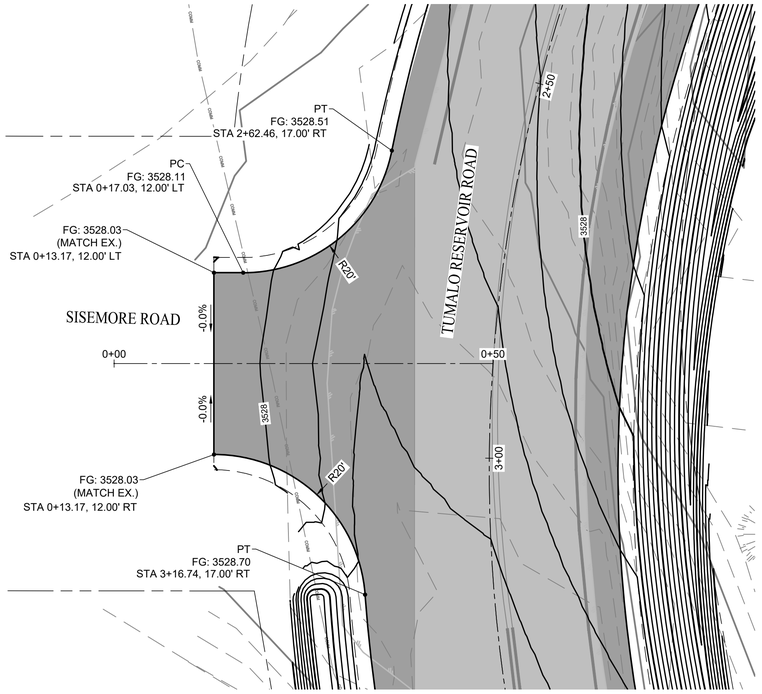
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EROSION CONTROL AND GRADING PLANS
STA 240+50 TO STA 251+00

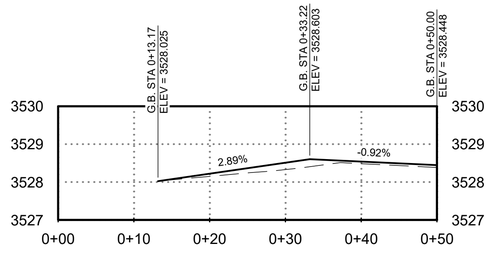
DRAWING NO. 72 OF 117
SHEET NO. C-53



INTERSECTION DETAIL - SISEMORE RD

SCALE: 1" = 10'

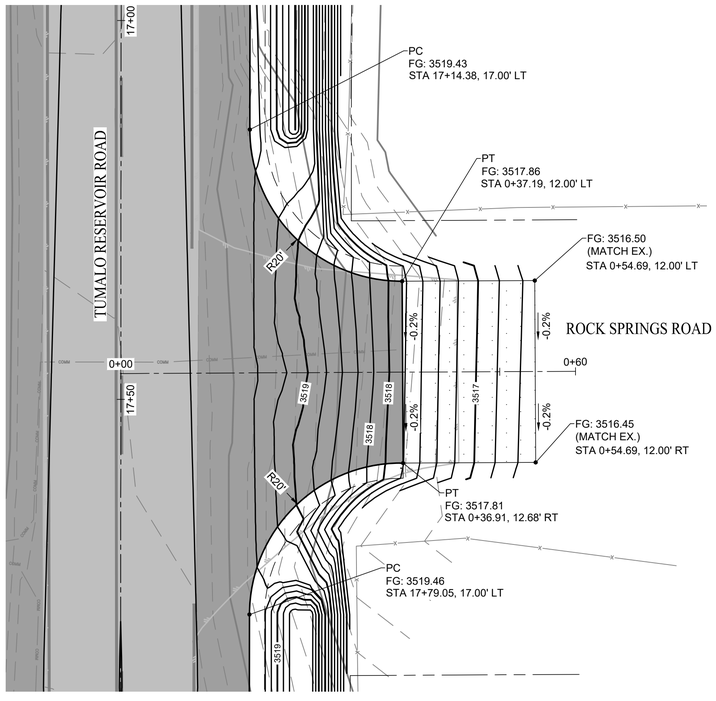
1 / C-54



INTERSECTION PROFILE - SISEMORE RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

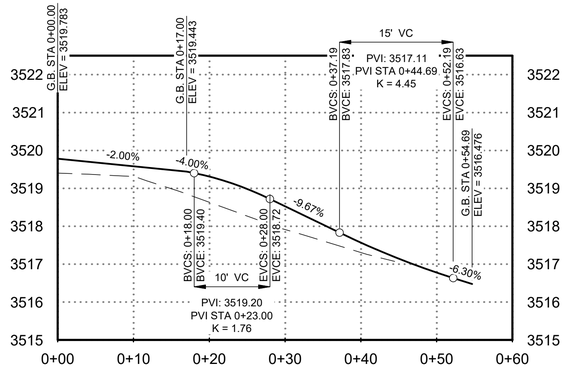
2 / C-54



INTERSECTION DETAIL - ROCK SPRINGS RD

SCALE: 1" = 10'

3 / C-54



INTERSECTION PROFILE - ROCK SPRINGS RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

4 / C-54

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

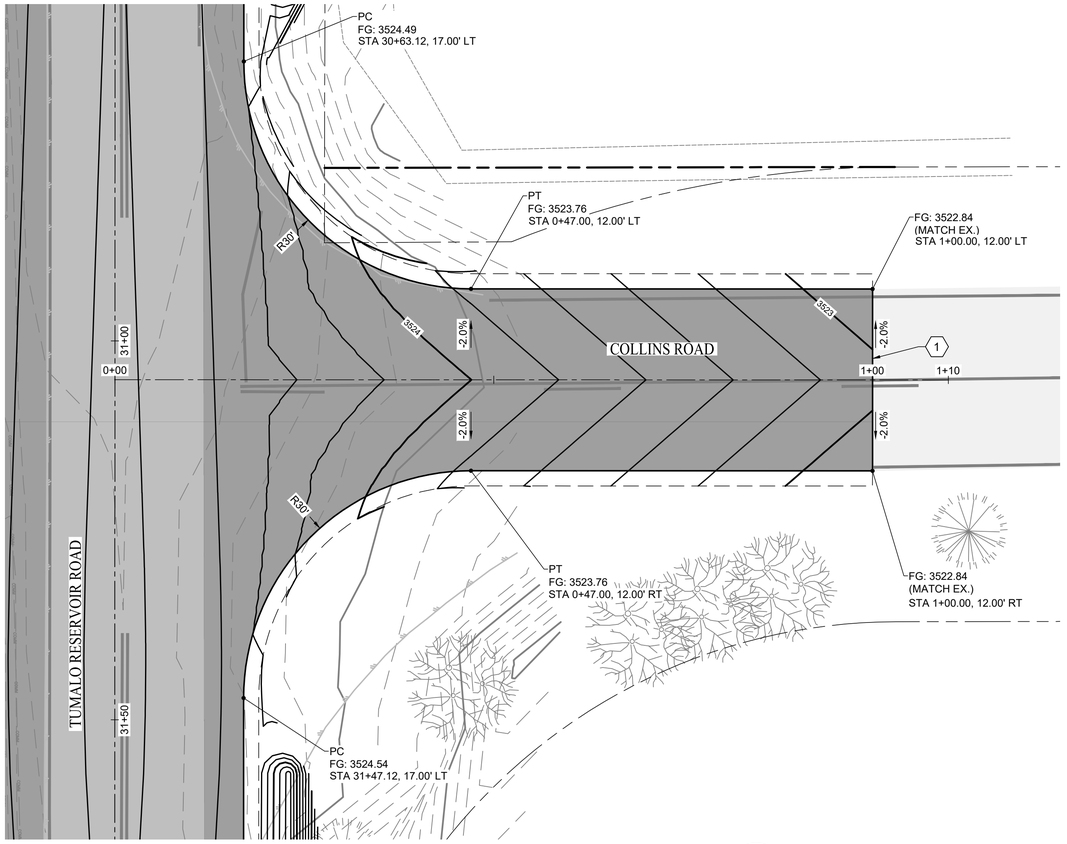
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

DRAWING NO. 73 OF 117
SHEET NO. C-54

INTERSECTION KEY NOTES

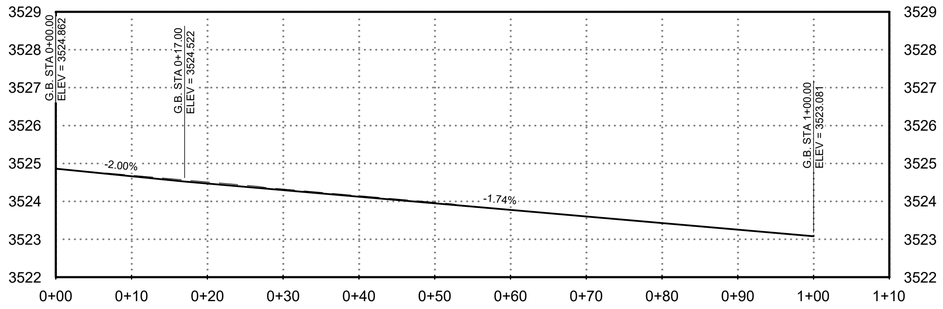
1. SAWCUT AT ASPHALT TIE IN. MATCH EXISTING ASPHALT & SAND SEAL JOINT.



INTERSECTION DETAIL - COLLINS RD

SCALE: 1" = 10'

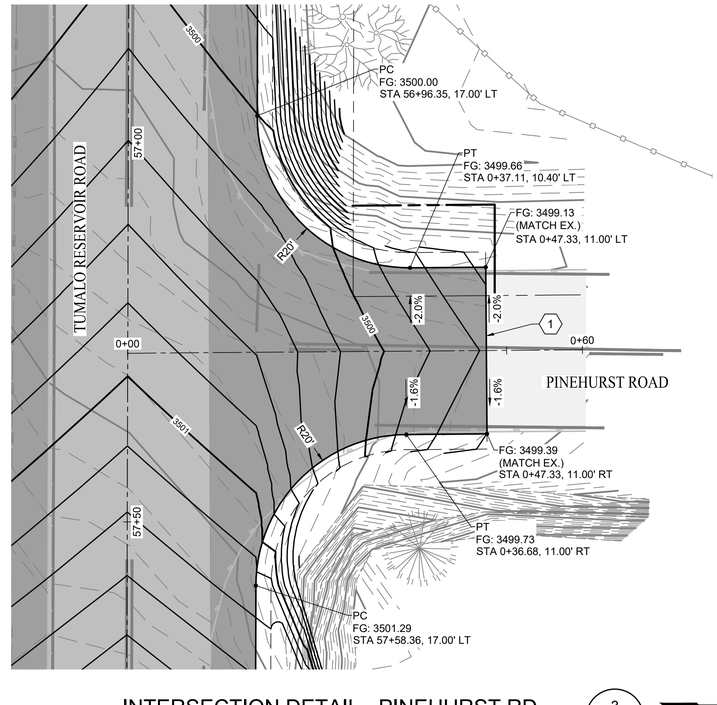
1 / C-55



INTERSECTION PROFILE - COLLINS RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

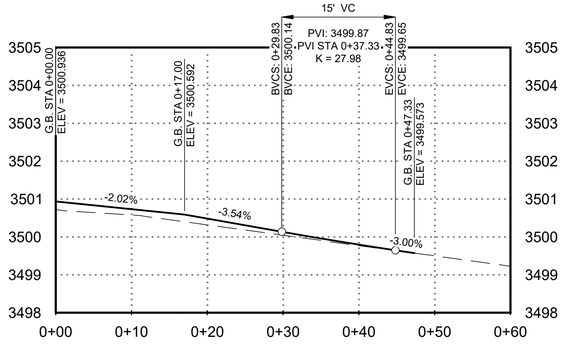
2 / C-55



INTERSECTION DETAIL - PINEHURST RD

SCALE: 1" = 10'

3 / C-55



INTERSECTION PROFILE - PINEHURST RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

4 / C-55

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

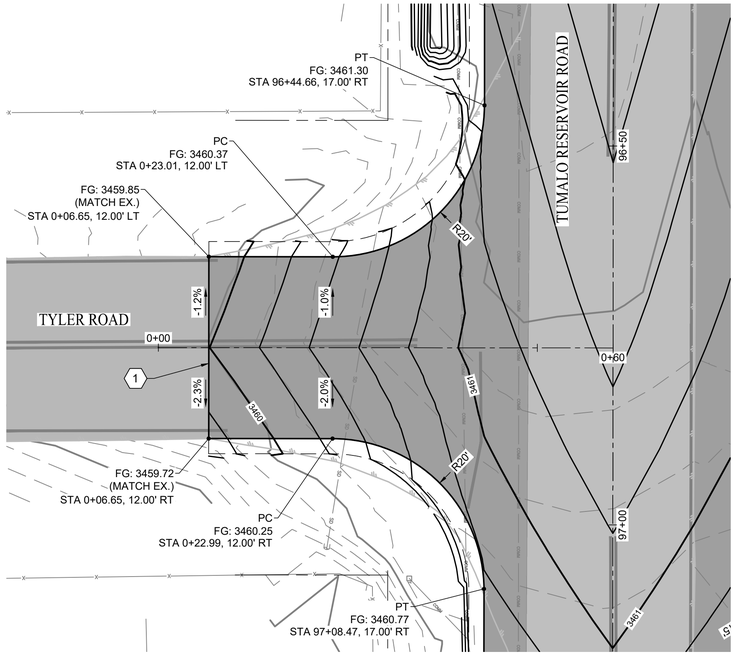
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

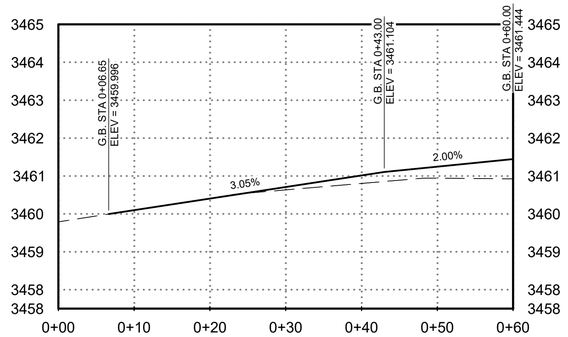
DRAWING NO. 74 OF 117
SHEET NO. C-55



INTERSECTION DETAIL - TYLER RD

SCALE: 1" = 10'

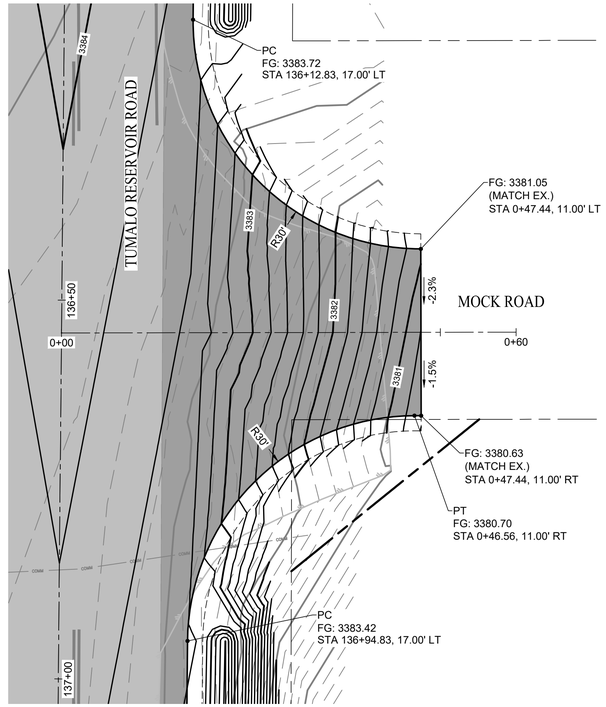
1 / C-56



INTERSECTION PROFILE - TYLER RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

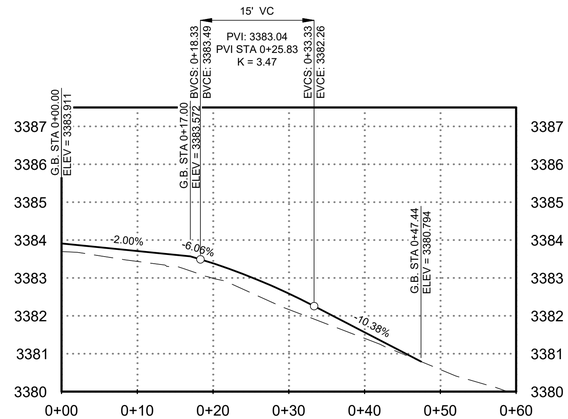
2 / C-56



INTERSECTION DETAIL - MOCK RD

SCALE: 1" = 10'

3 / C-56



INTERSECTION PROFILE - MOCK RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

4 / C-56

INTERSECTION KEY NOTES

1. SAWCUT AT ASPHALT TIE IN. MATCH EXISTING ASPHALT & SAND SEAL JOINT.

10 0 10 20

SCALE OF FEET
SCALE: 1"=10'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

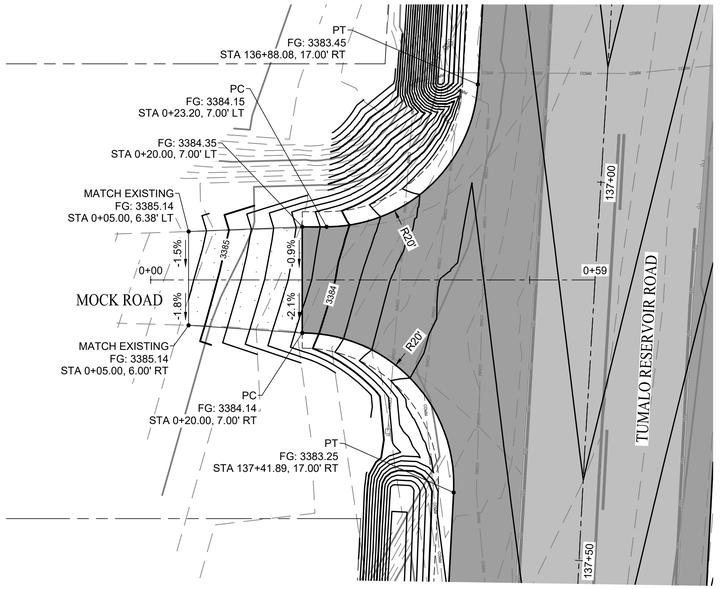
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

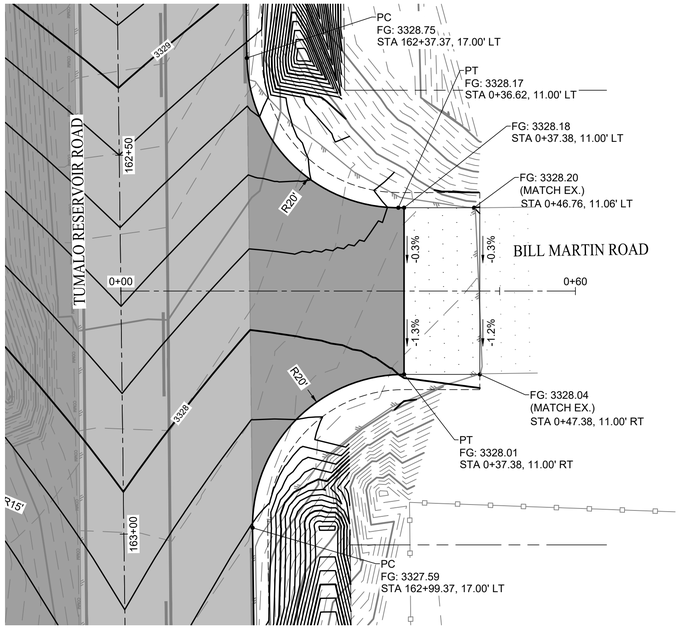
DRAWING NO. 75 OF 117
SHEET NO. C-56



INTERSECTION DETAIL - MOCK RD

SCALE: HORIZ: 1" = 10'

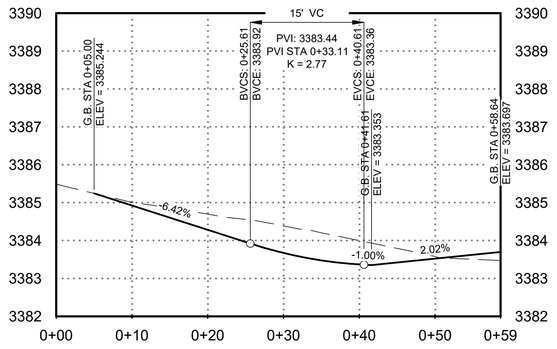
1
C-57



INTERSECTION DETAIL - BILL MARTIN RD

SCALE: 1" = 10'

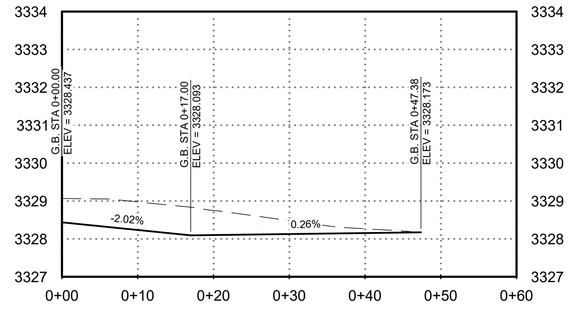
3
C-57



INTERSECTION PROFILE - MOCK RD

SCALE: HORIZ: 1" = 10'

2
C-57



INTERSECTION PROFILE - BILL MARTIN RD

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

4
C-57

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

DRAWING NO. 76 OF 117
SHEET NO. C-57

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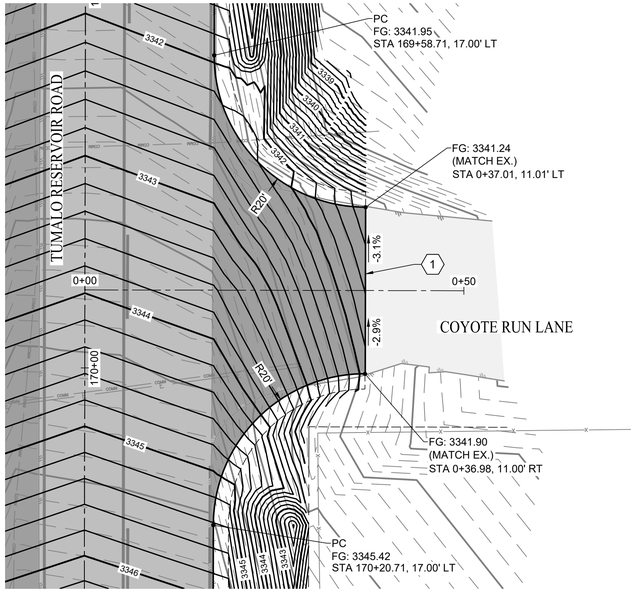
INTERSECTION KEY NOTES

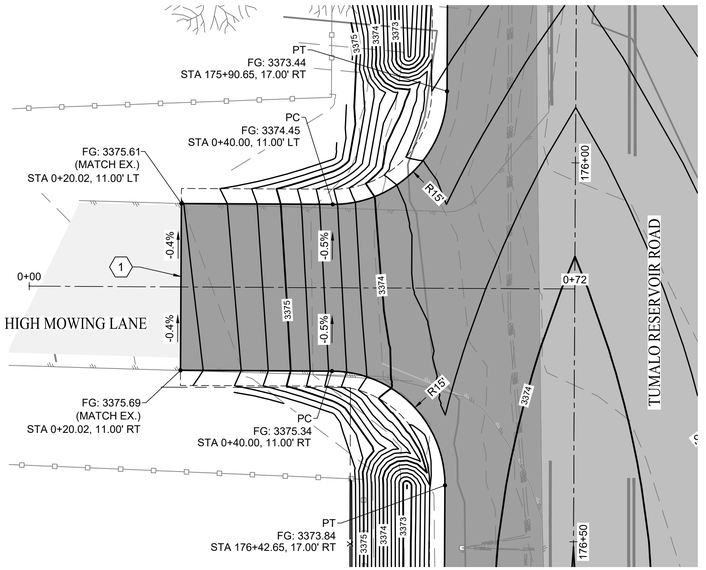
1. SAWCUT AT ASPHALT TIE IN. MATCH EXISTING ASPHALT & SAND SEAL JOINT.



INTERSECTION DETAIL - COYOTE RUN LN

SCALE: 1" = 10'

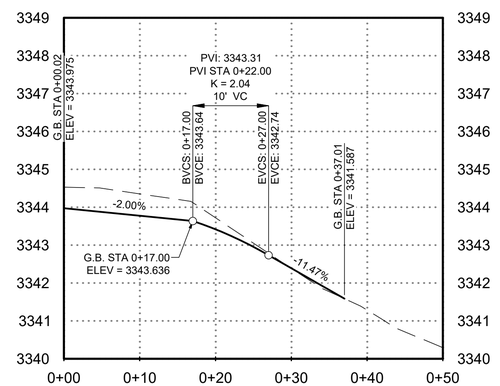
1 / C-58



INTERSECTION DETAIL - HIGH MOWING LN

SCALE: 1" = 10'

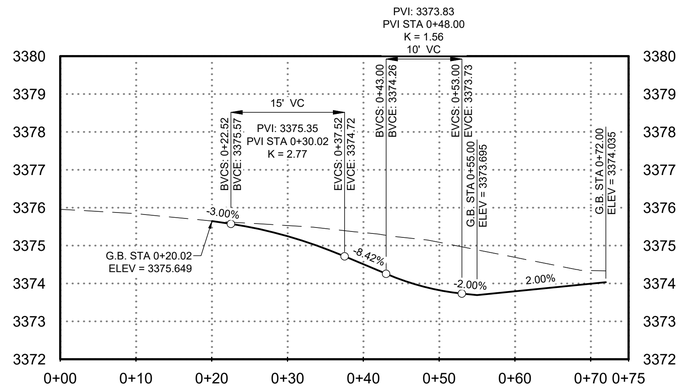
3 / C-58



INTERSECTION PROFILE - COYOTE RUN LN

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

2 / C-58



INTERSECTION PROFILE - HIGH MOWING LN

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

4 / C-58

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
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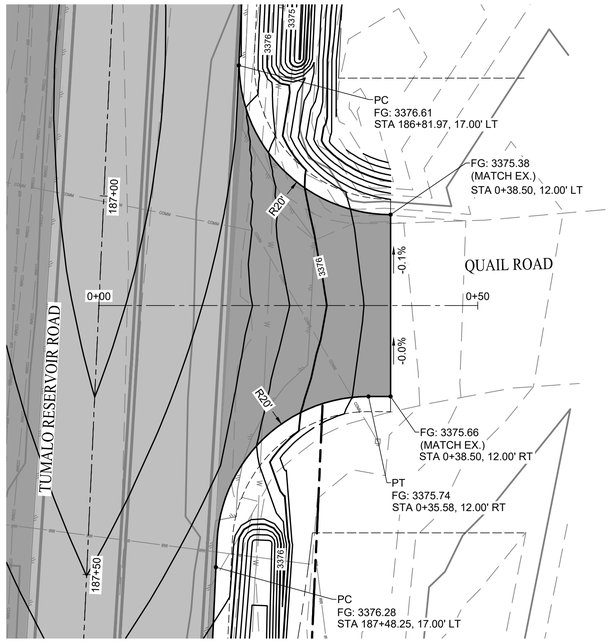
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

DRAWING NO. 77 OF 117
SHEET NO. C-58

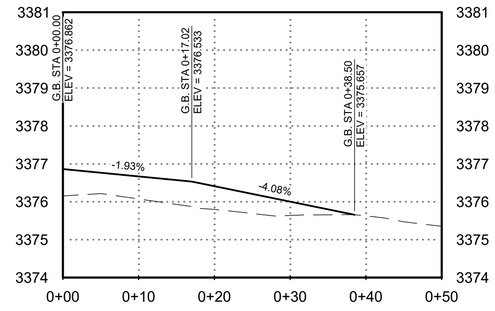


INTERSECTION DETAIL - QUAIL DR

SCALE: 1" = 10'

1
C-59

N



INTERSECTION PROFILE - QUAIL DR

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

2
C-59

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

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DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
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CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

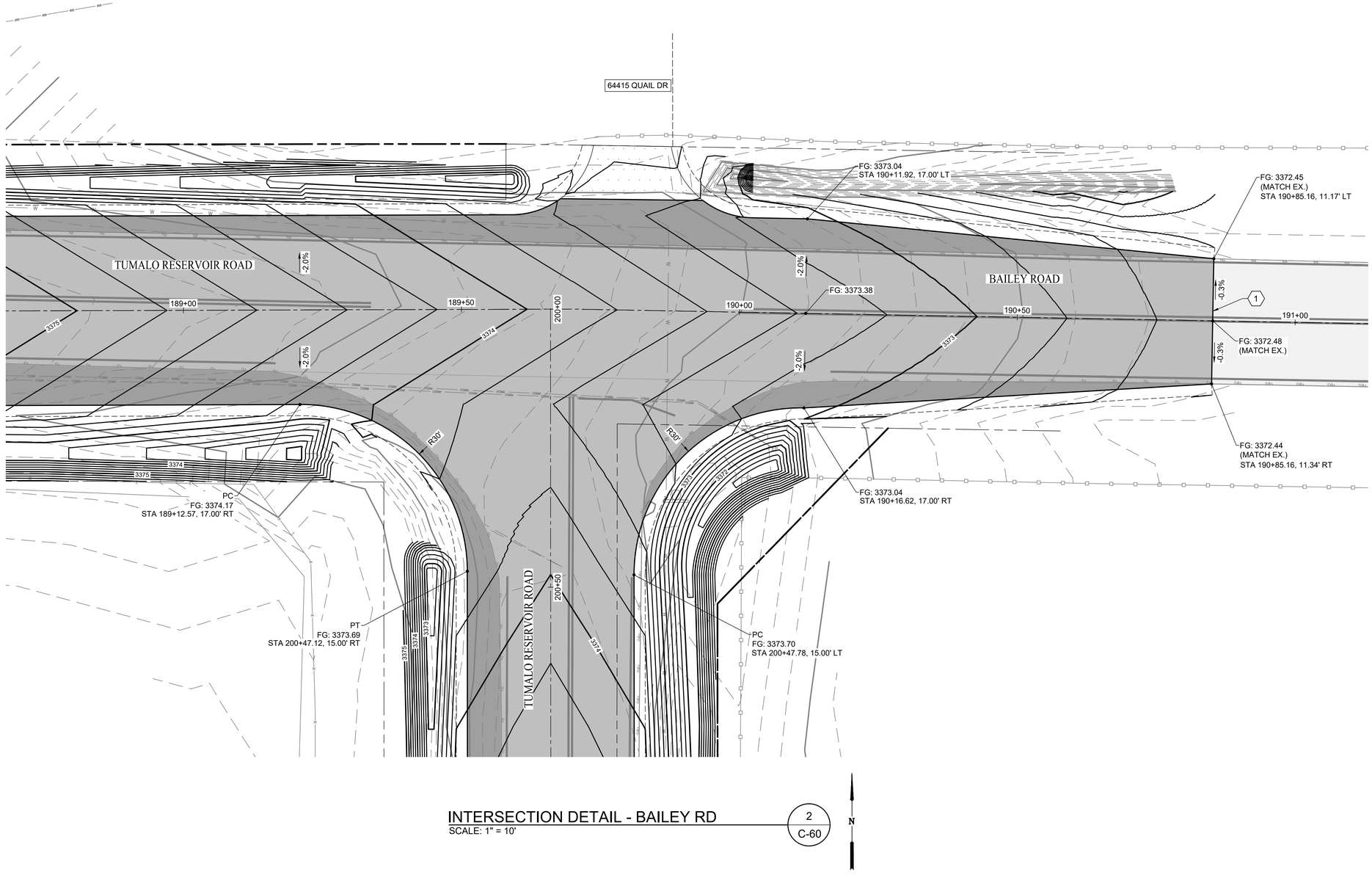
DRAWING NO. 78 OF 117
SHEET NO. C-59

INTERSECTION KEY NOTES

1 SAWCUT AT ASPHALT TIE IN. MATCH EXISTING ASPHALT & SAND SEAL JOINT.

GENERAL NOTES

1. SEE SHEETS C-29 AND C-30 FOR ROADWAY PROFILE INFORMATION.



INTERSECTION DETAIL - BAILEY RD
SCALE: 1" = 10'

2
C-60

N

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
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541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
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DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

DRAWING NO. 79 OF 117
SHEET NO. C-60

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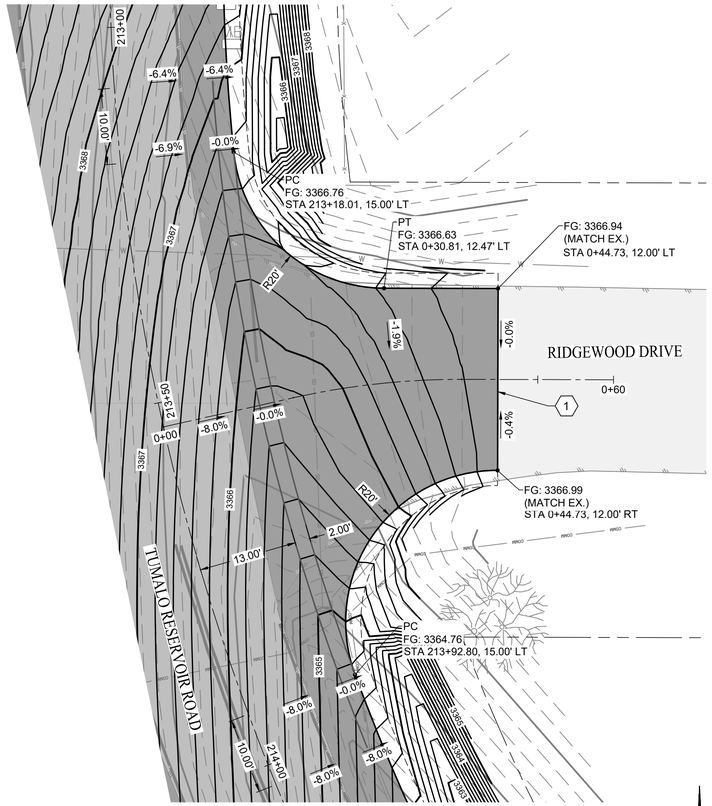
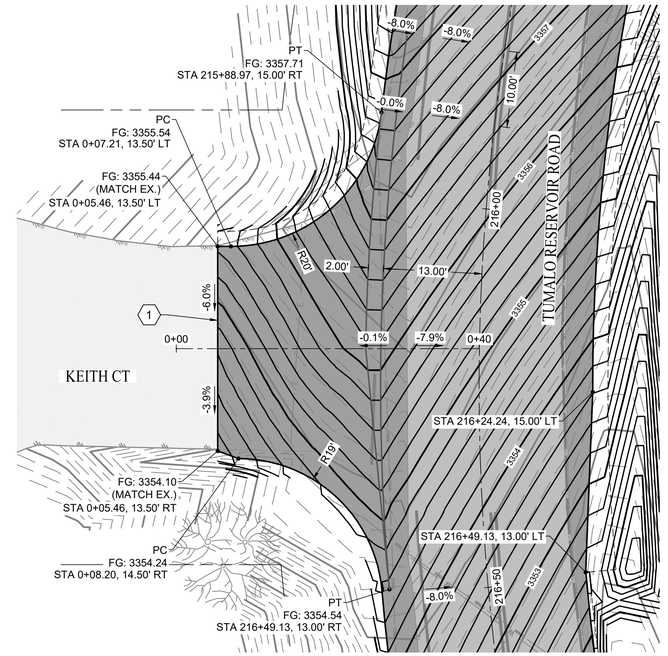


INTERSECTION DETAIL - RIDGEWOOD DR

SCALE: 1" = 10'

1 / C-61



INTERSECTION DETAIL - KEITH CT

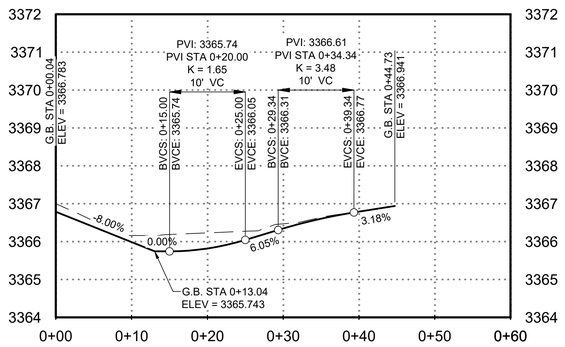
SCALE: 1" = 10'

3 / C-61

N

INTERSECTION KEY NOTES

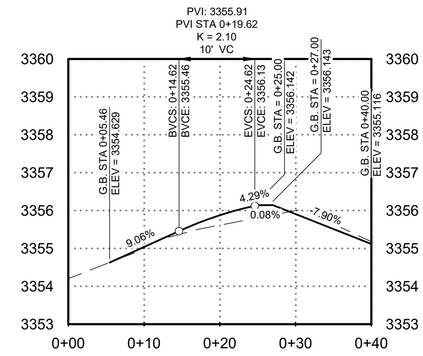
1. SAWCUT AT ASPHALT TIE IN. MATCH EXISTING ASPHALT & SAND SEAL JOINT.



INTERSECTION PROFILE - RIDGEWOOD DR

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

2 / C-61



INTERSECTION PROFILE - KEITH CT

SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

4 / C-61

10 0 10 20

SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

DRAWING NO. 80 OF 117
SHEET NO. C-61

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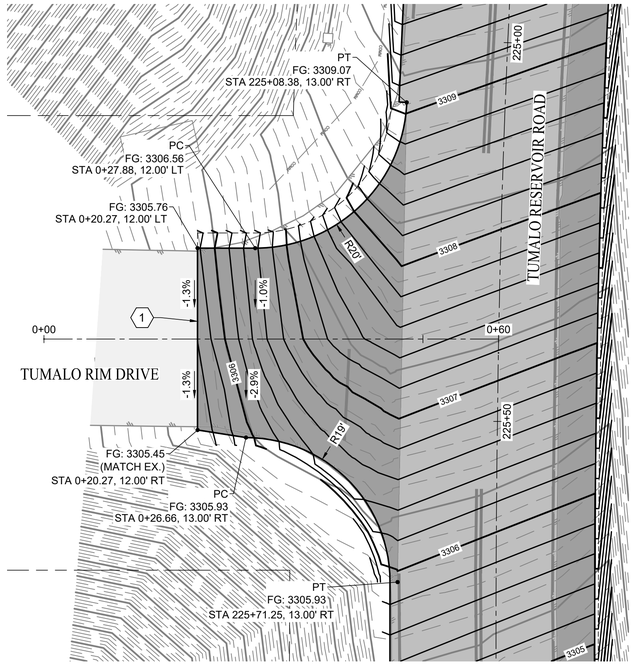
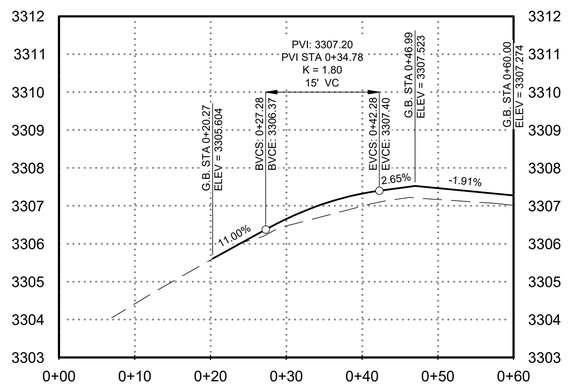
INTERSECTION KEY NOTES

1. SAWCUT AT ASPHALT TIE IN. MATCH EXISTING ASPHALT & SAND SEAL JOINT.



INTERSECTION DETAIL - TUMALO RIM DR
SCALE: 1" = 10'

1
C-62



INTERSECTION PROFILE - TUMALO RIM DR
SCALE: HORIZ: 1" = 10'
VERT: 1" = 2'

2
C-62

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

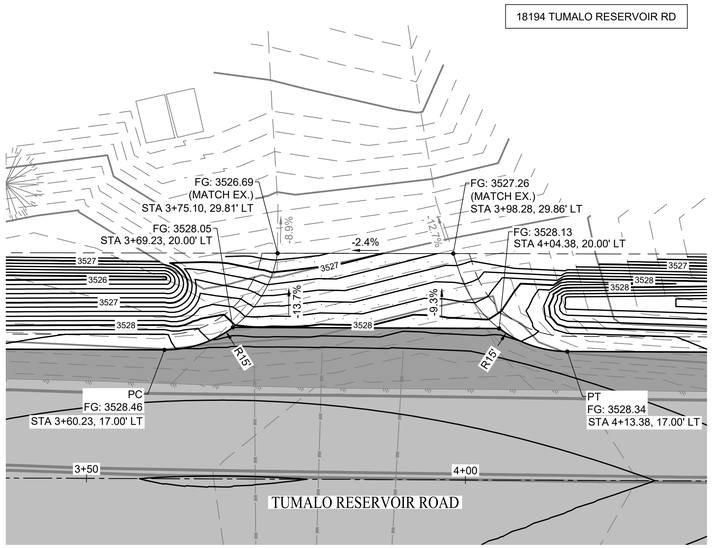
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

INTERSECTION DETAILS

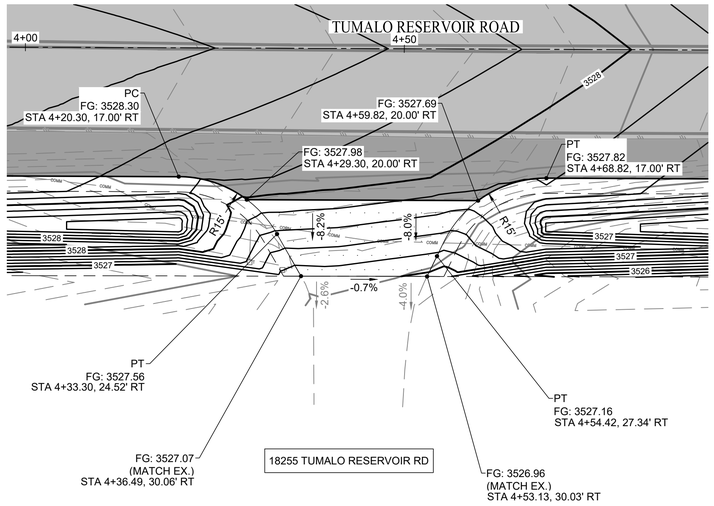
DRAWING NO. 81 OF 117

SHEET NO. C-62

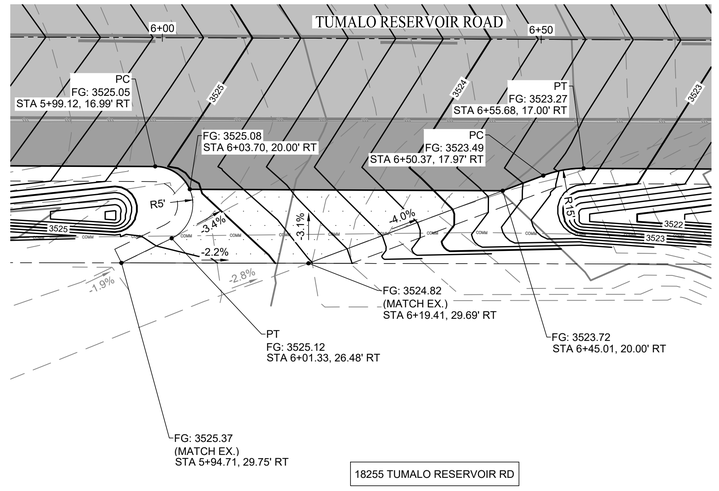
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg



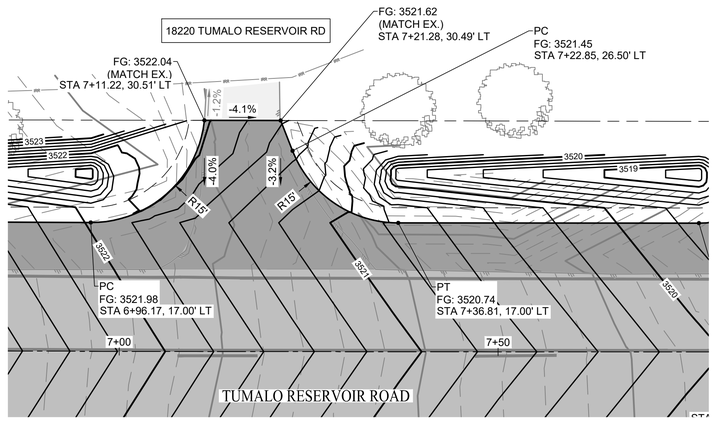
DRIVEWAY STA 3+88 DETAIL
SCALE: 1" = 10'
1
C-63



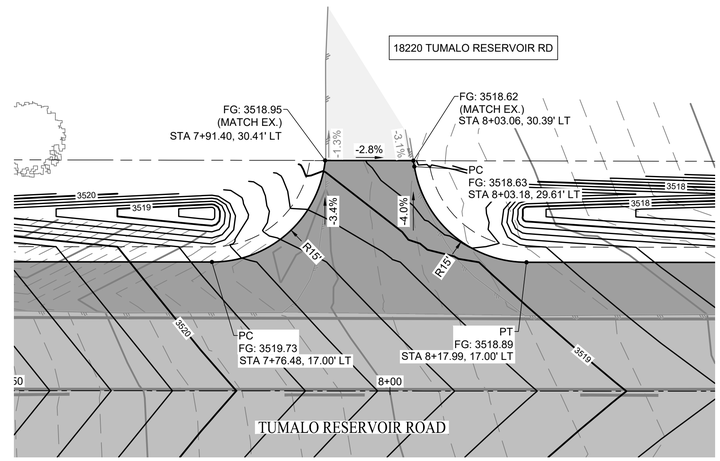
DRIVEWAY STA 4+45 DETAIL
SCALE: 1" = 10'
2
C-63



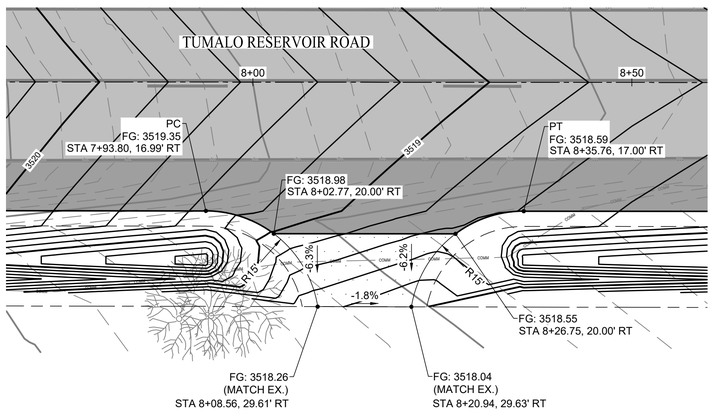
DRIVEWAY STA 6+25 DETAIL
SCALE: 1" = 10'
3
C-63



DRIVEWAY STA 7+17 DETAIL
SCALE: 1" = 10'
4
C-63



DRIVEWAY STA 7+98 DETAIL
SCALE: 1" = 10'
5
C-63



DRIVEWAY STA 8+14 DETAIL
SCALE: 1" = 10'
6
C-63

N

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

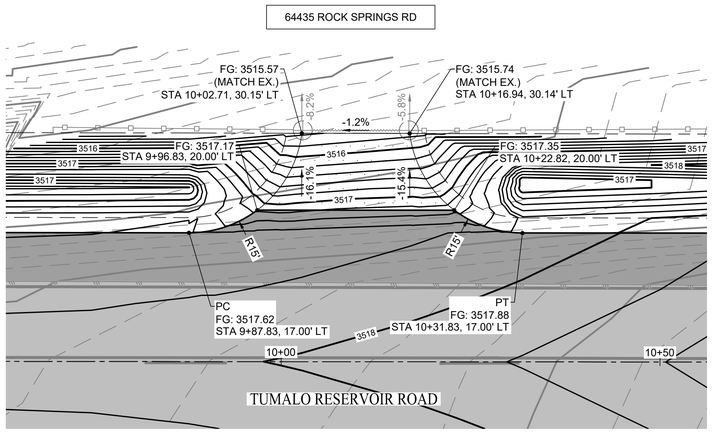
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 82 OF 117
SHEET NO. C-63

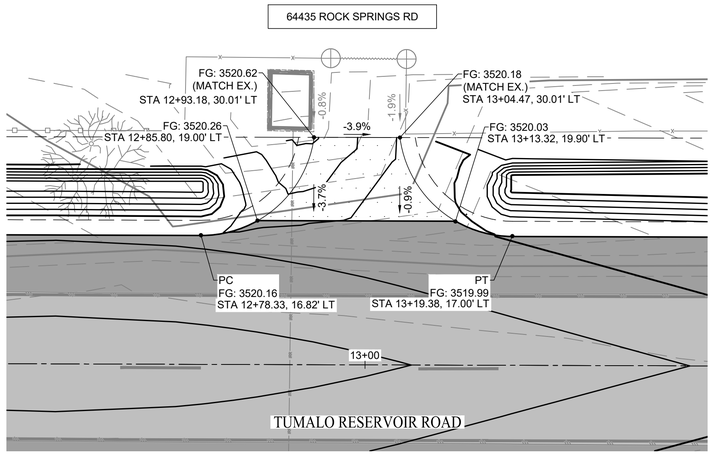
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg



DRIVEWAY STA 10+10 DETAIL

SCALE: 1" = 10'

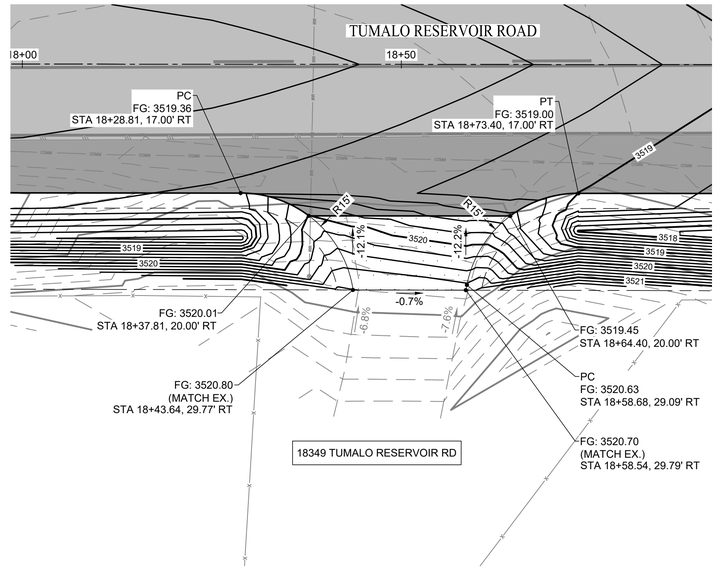
1 / C-64



DRIVEWAY STA 12+99 DETAIL

SCALE: 1" = 10'

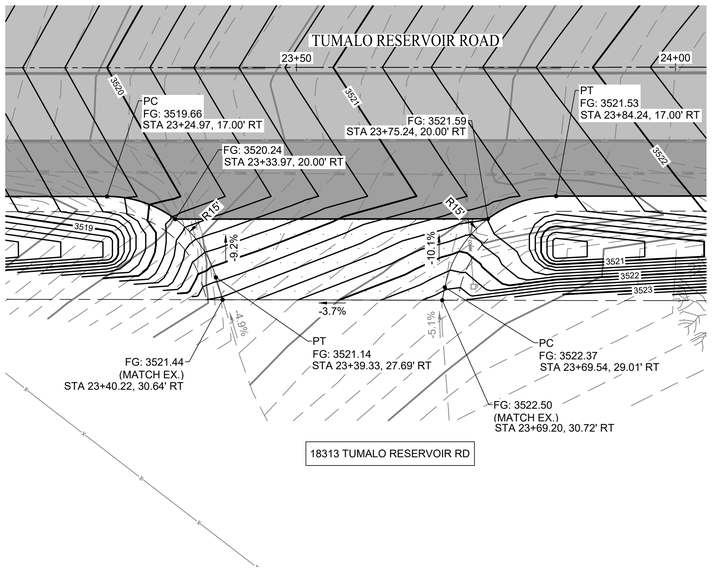
2 / C-64



DRIVEWAY STA 18+52 DETAIL

SCALE: 1" = 10'

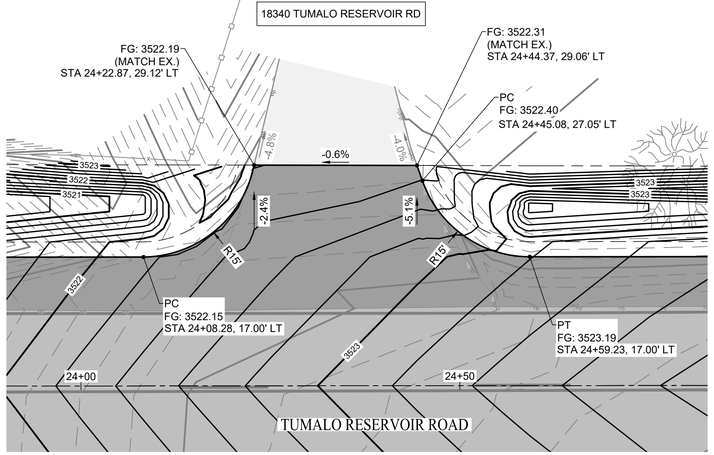
3 / C-64



DRIVEWAY STA 23+55 DETAIL

SCALE: 1" = 10'

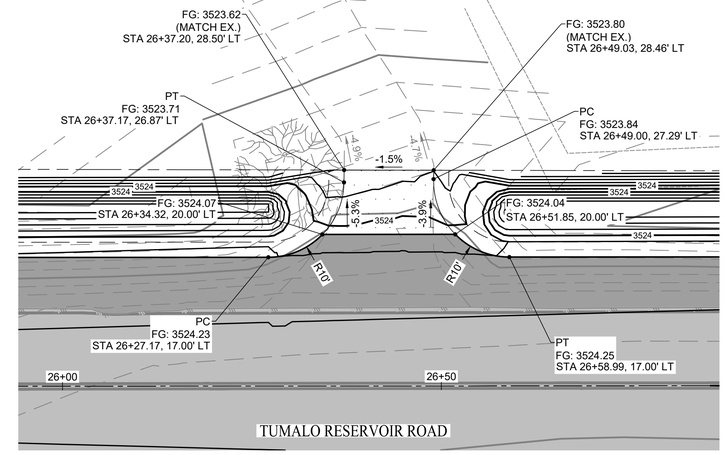
4 / C-64



DRIVEWAY STA 24+34 DETAIL

SCALE: 1" = 10'

5 / C-64



DRIVEWAY STA 26+44 DETAIL

SCALE: 1" = 10'

6 / C-64

N

10 0 10 20

SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

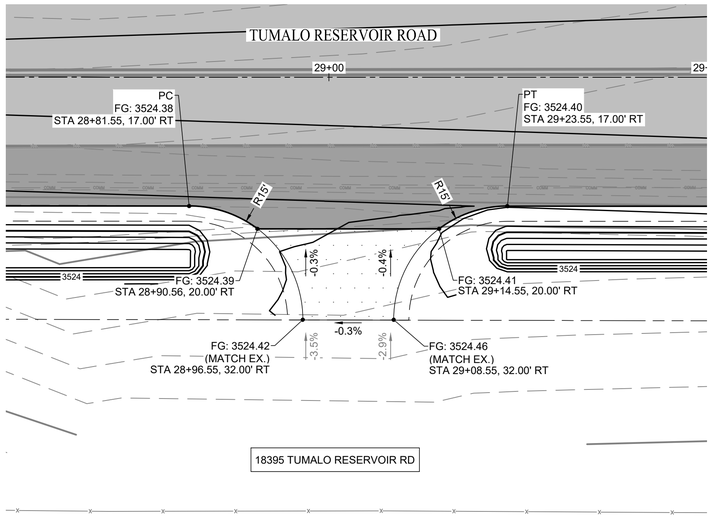
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 83 OF 117
SHEET NO. C-64

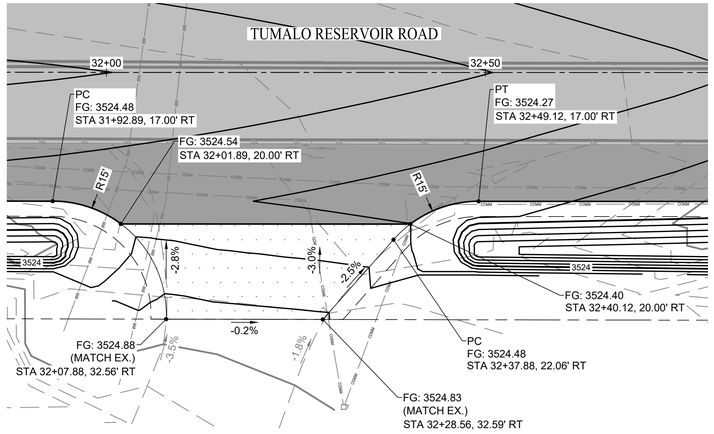
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg



DRIVEWAY STA 29+03 DETAIL

SCALE: 1" = 10'

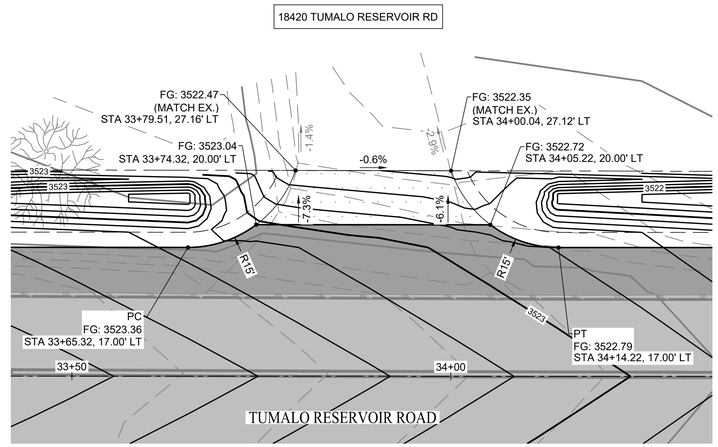
1 C-65



DRIVEWAY STA 32+22 DETAIL

SCALE: 1" = 10'

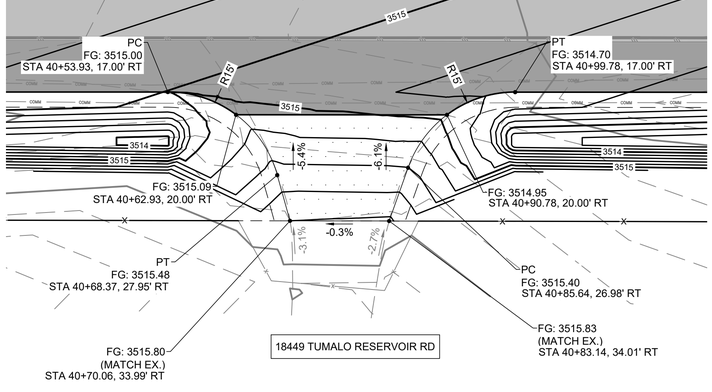
2 C-65



DRIVEWAY STA 33+90 DETAIL

SCALE: 1" = 10'

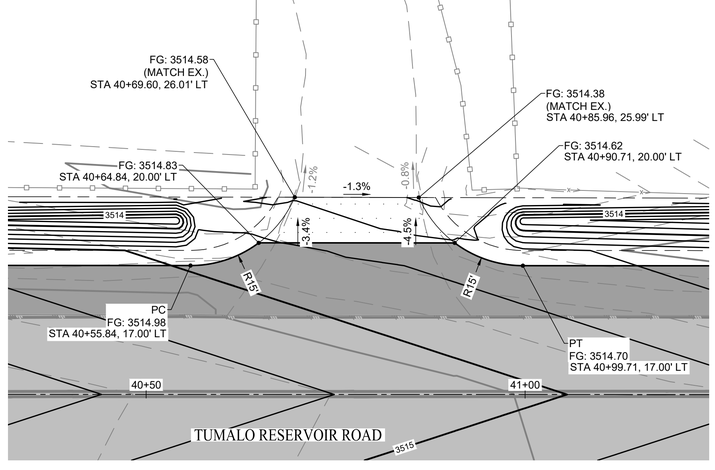
3 C-65



DRIVEWAY STA 40+77 DETAIL

SCALE: 1" = 10'

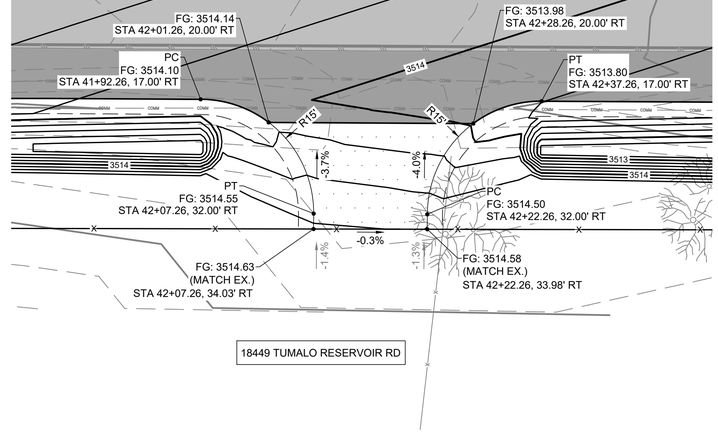
4 C-65



DRIVEWAY STA 40+78 DETAIL

SCALE: 1" = 10'

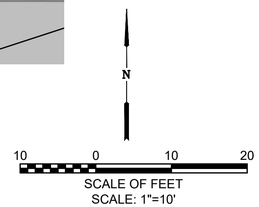
5 C-65



DRIVEWAY STA 42+15 DETAIL

SCALE: 1" = 10'

6 C-65



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 84 OF 117
SHEET NO. C-65

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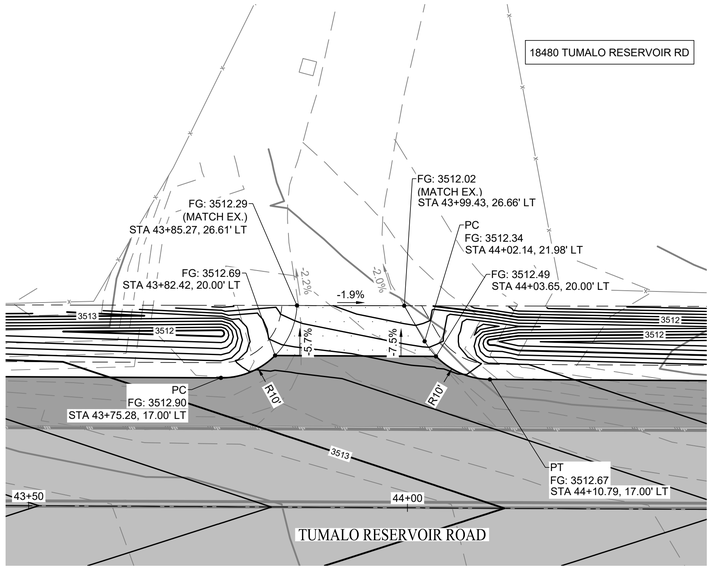
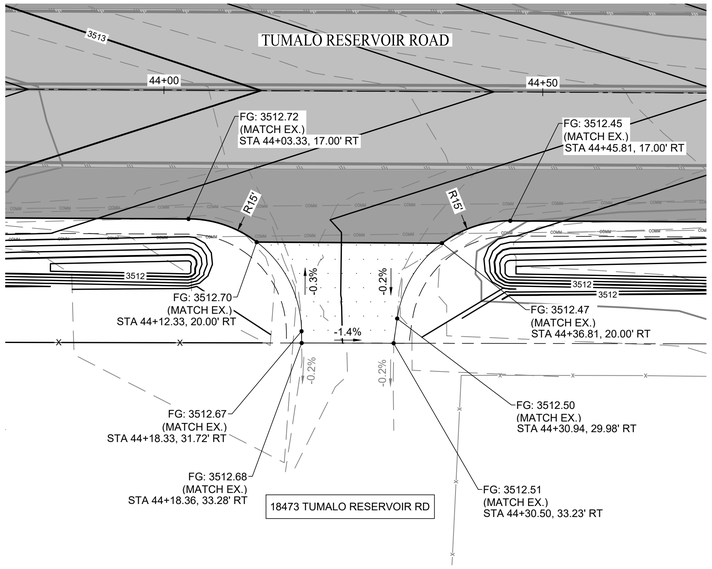


DRIVEWAY STA 43+91 DETAIL

SCALE: 1" = 10'

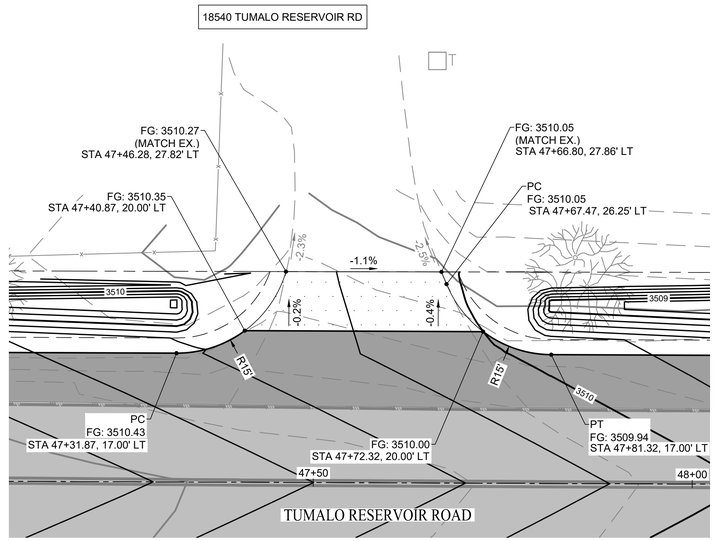
1 / C-66



DRIVEWAY STA 44+25 DETAIL

SCALE: 1" = 10'

2 / C-66



DRIVEWAY STA 47+57 DETAIL

SCALE: 1" = 10'

3 / C-66

DRIVEWAY STA 52+76 DETAIL

SCALE: 1" = 10'

4 / C-66

DRIVEWAY STA 57+15 DETAIL

SCALE: 1" = 10'

5 / C-66

SCALE OF FEET
SCALE: 1"=10'

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
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541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
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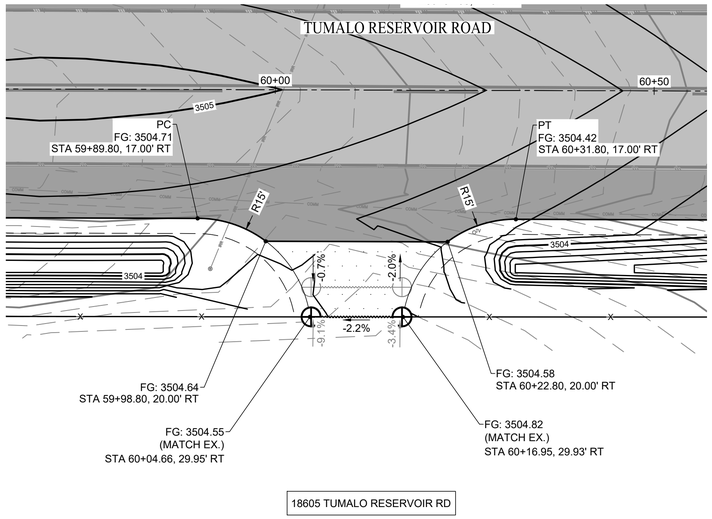
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

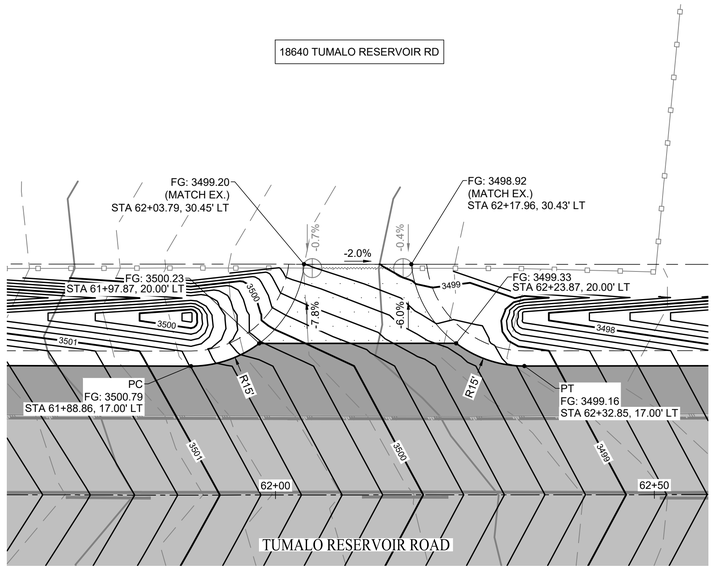
DRAWING NO. 85 OF 117
SHEET NO. C-66



DRIVEWAY STA 60+10 DETAIL

SCALE: 1" = 10'

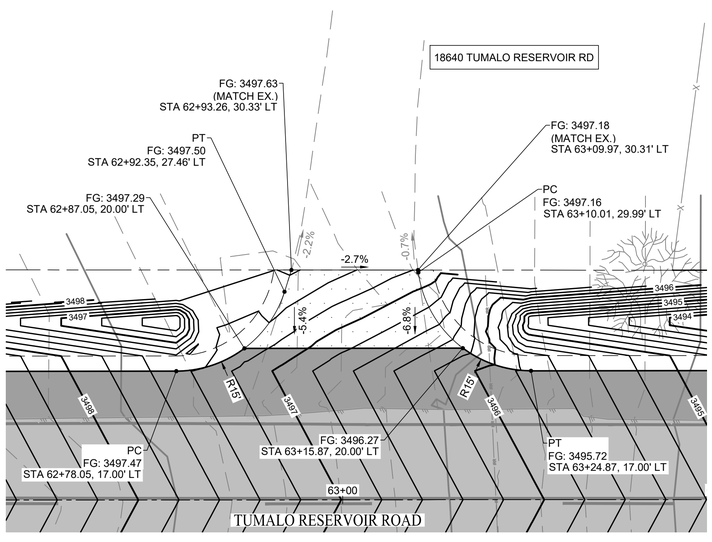
1 / C-67



DRIVEWAY STA 62+10 DETAIL

SCALE: 1" = 10'

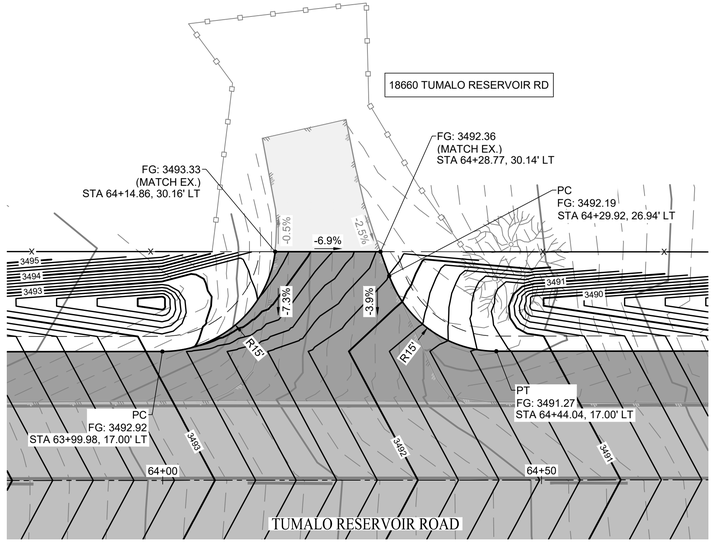
2 / C-67



DRIVEWAY STA 63+02 DETAIL

SCALE: 1" = 10'

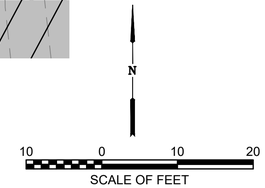
3 / C-67



DRIVEWAY STA 64+23 DETAIL

SCALE: 1" = 10'

4 / C-67



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 86 OF 117
SHEET NO. C-67

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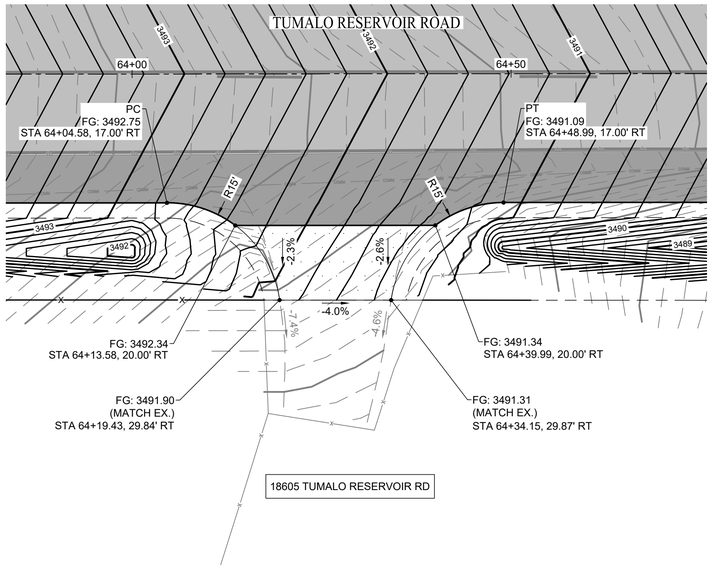
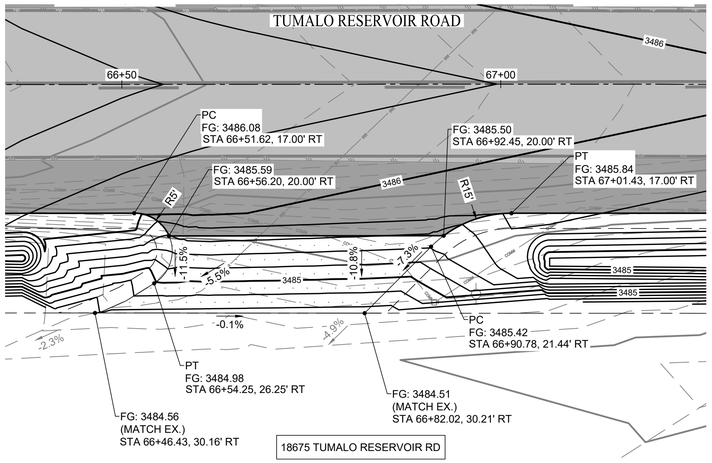


DRIVEWAY STA 64+28 DETAIL

SCALE: 1" = 10'

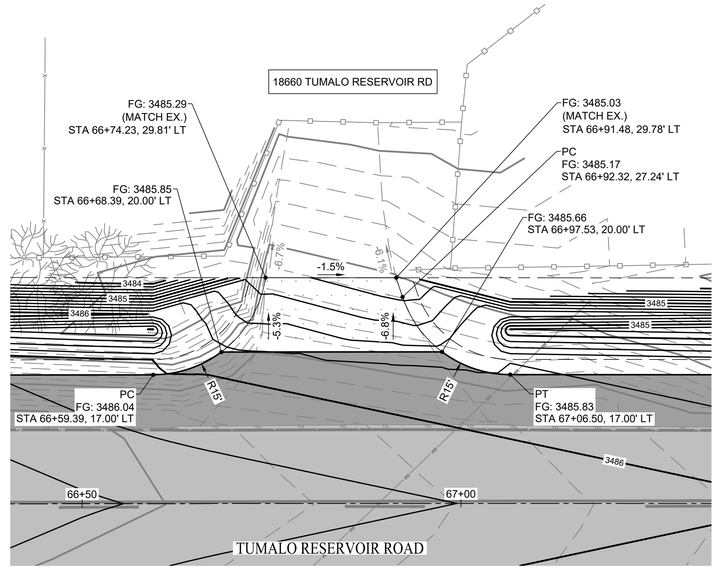
1 / C-68



DRIVEWAY STA 66+77 DETAIL

SCALE: 1" = 10'

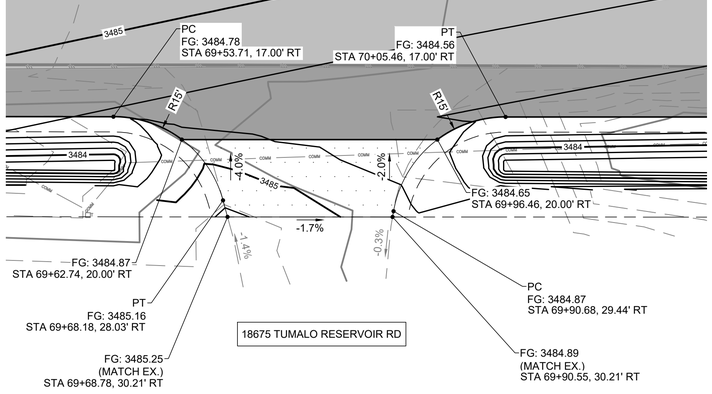
2 / C-68



DRIVEWAY STA 66+84 DETAIL

SCALE: 1" = 10'

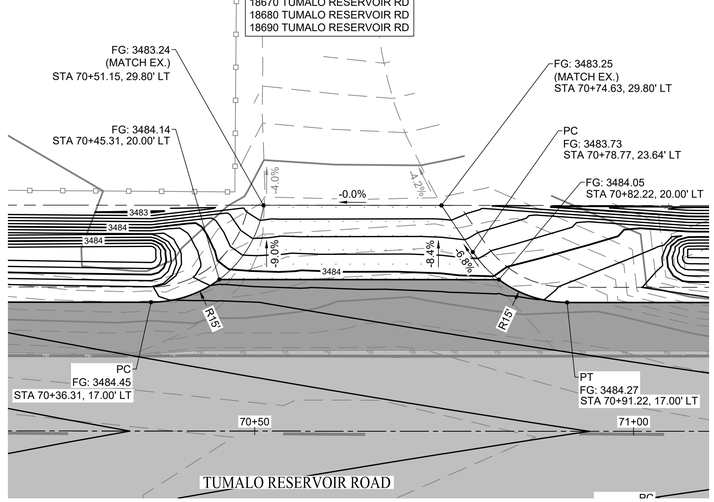
3 / C-68



DRIVEWAY STA 69+80 DETAIL

SCALE: 1" = 10'

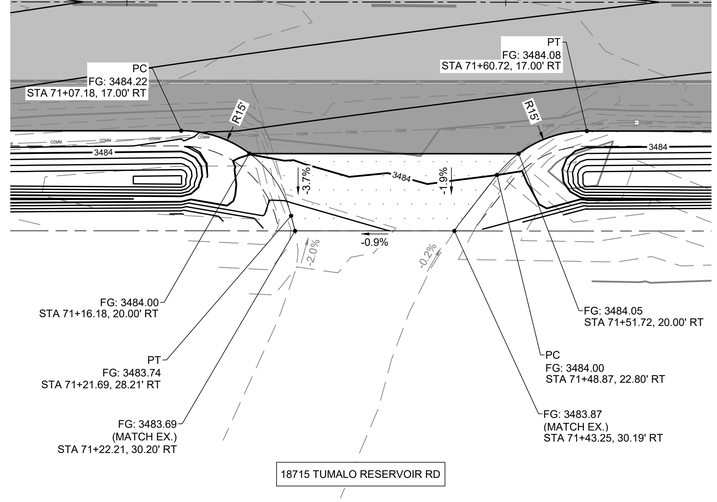
4 / C-68



DRIVEWAY STA 70+65 DETAIL

SCALE: 1" = 10'

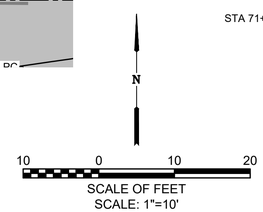
5 / C-68



DRIVEWAY STA 71+35 DETAIL

SCALE: 1" = 10'

6 / C-68



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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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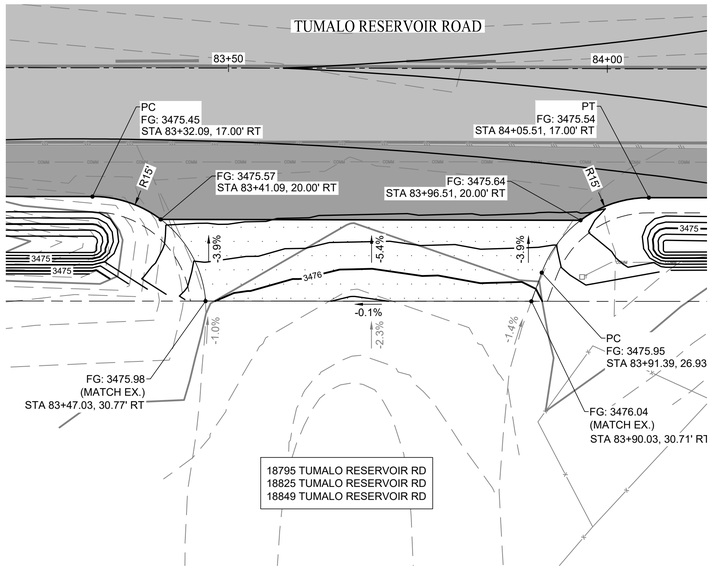
CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

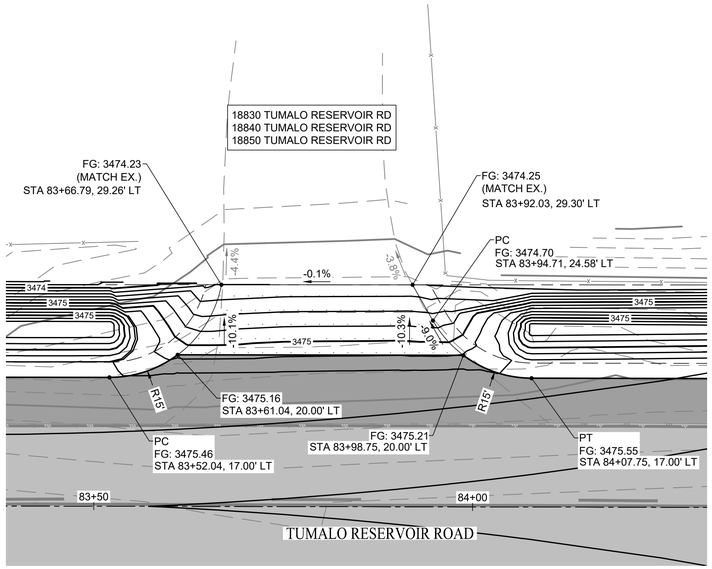
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

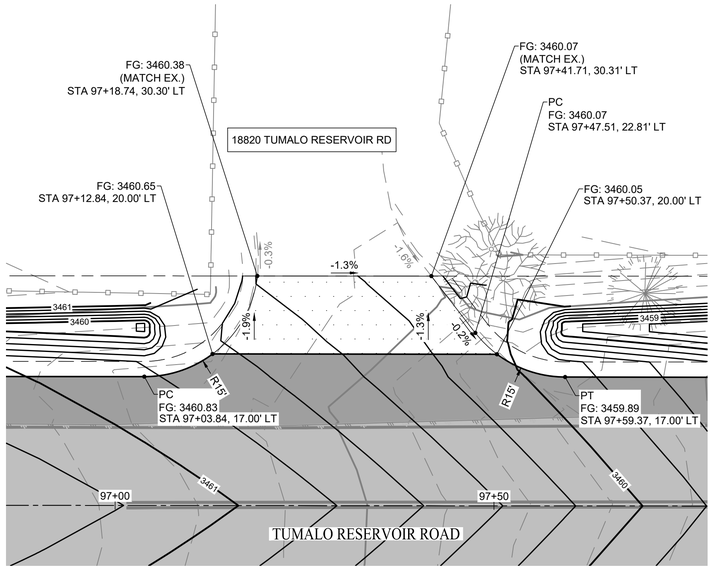
DRAWING NO. 87 OF 117
SHEET NO. C-68



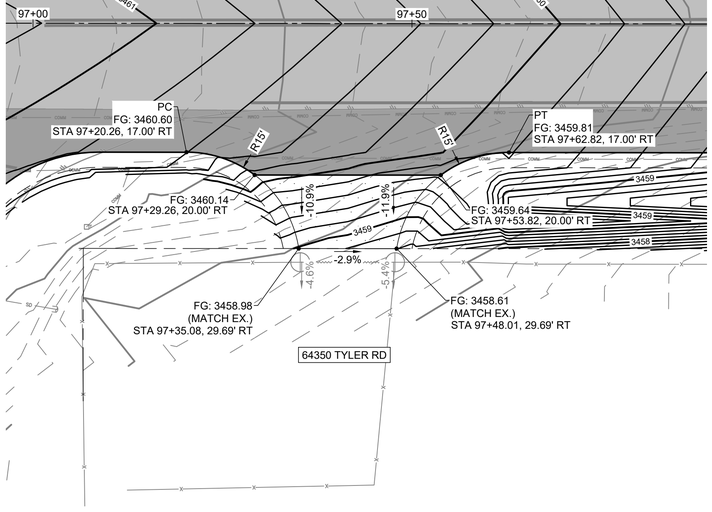
DRIVEWAY STA 83+70 DETAIL (1 / C-69)
SCALE: 1" = 10'



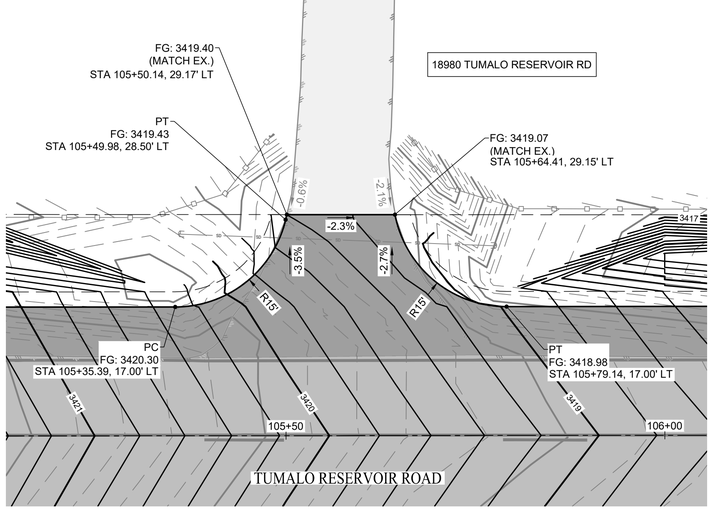
DRIVEWAY STA 83+81 DETAIL (2 / C-69)
SCALE: 1" = 10'



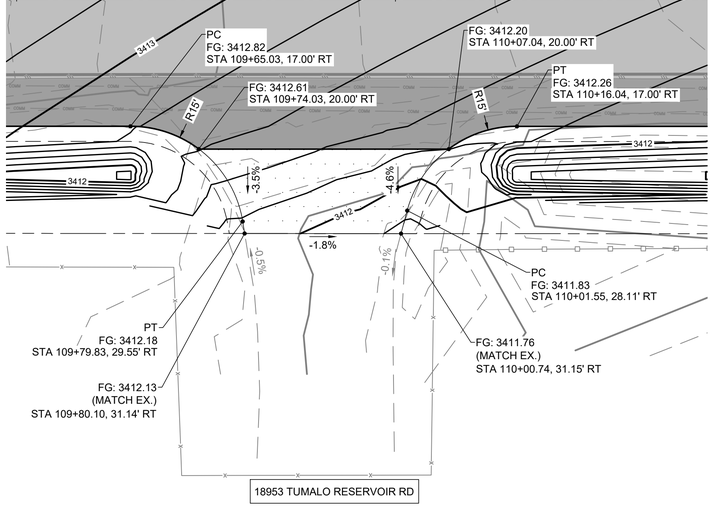
DRIVEWAY STA 97+32 DETAIL (3 / C-69)
SCALE: 1" = 10'



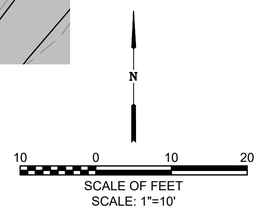
DRIVEWAY STA 97+42 DETAIL (4 / C-69)
SCALE: 1" = 10'



DRIVEWAY STA 105+58 DETAIL (5 / C-69)
SCALE: 1" = 10'



DRIVEWAY STA 109+91 DETAIL (6 / C-69)
SCALE: 1" = 10'



DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

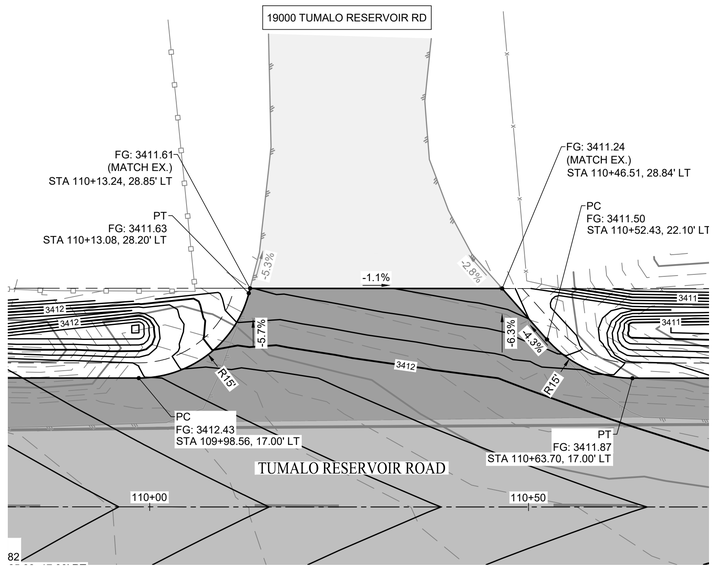
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 88 OF 117
SHEET NO. C-69

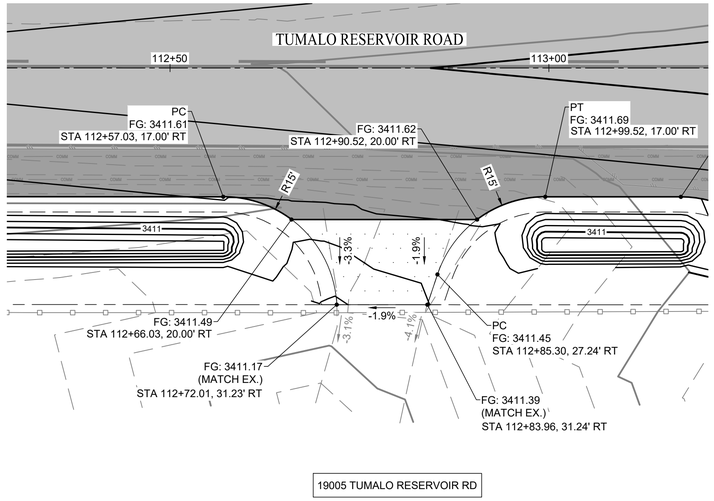
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg



DRIVEWAY STA 110+31 DETAIL

1 / C-70

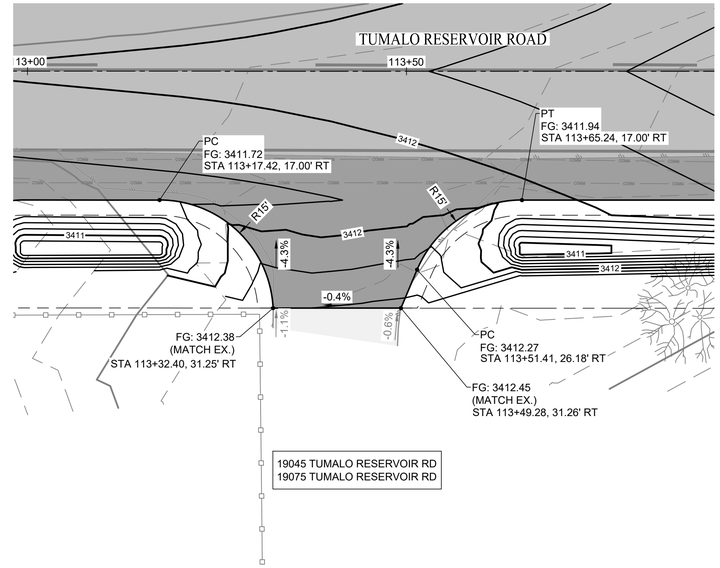
SCALE: 1" = 10'



DRIVEWAY STA 112+79 DETAIL

2 / C-70

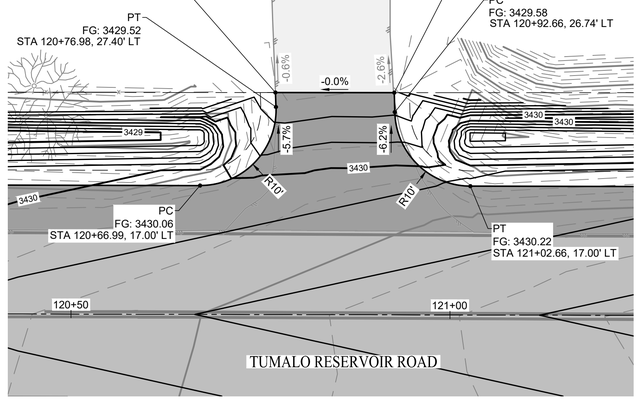
SCALE: 1" = 10'



DRIVEWAY STA 113+42 DETAIL

3 / C-70

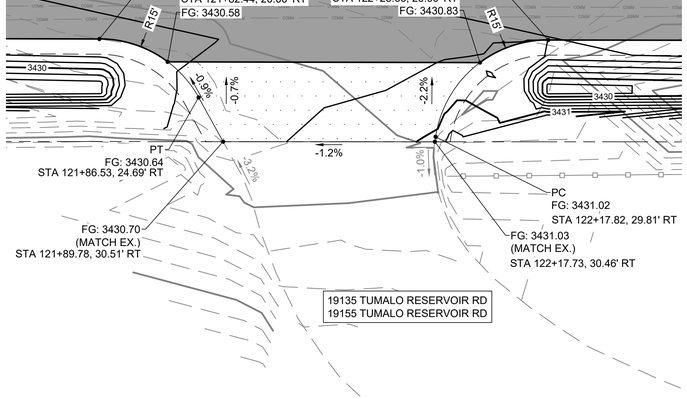
SCALE: 1" = 10'



DRIVEWAY STA 120+85 DETAIL

4 / C-70

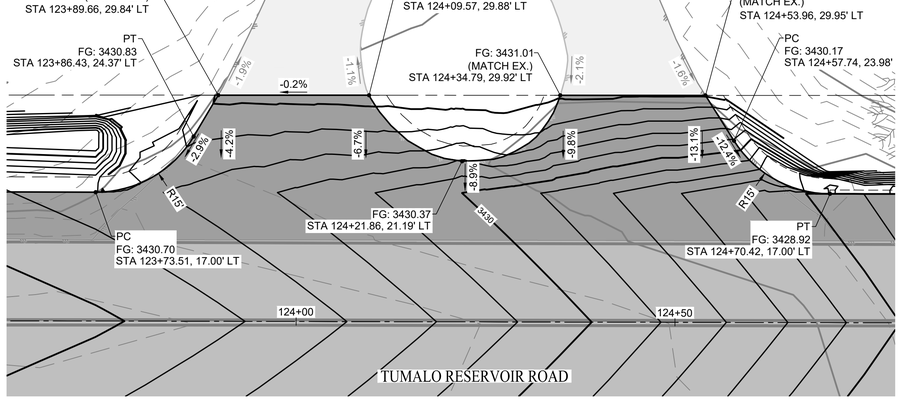
SCALE: 1" = 10'



DRIVEWAY STA 122+04 DETAIL

5 / C-70

SCALE: 1" = 10'



DRIVEWAY STA 124+24 DETAIL

6 / C-70

SCALE: 1" = 10'

N

10 0 10 20

SCALE OF FEET

SCALE: 1"=10'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES

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CENTURY WEST ENGINEERING

BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

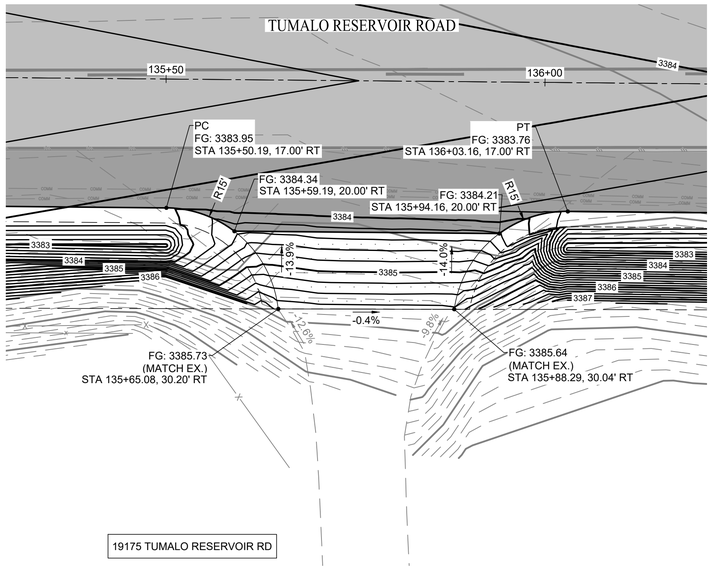
DESIGNED BY:	AVF
DRAWN BY:	SCL
CHECKED BY:	RDV
DATE:	AUGUST 2025
PROJECT NO:	12602.002.01
SCALE:	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 89 OF 117

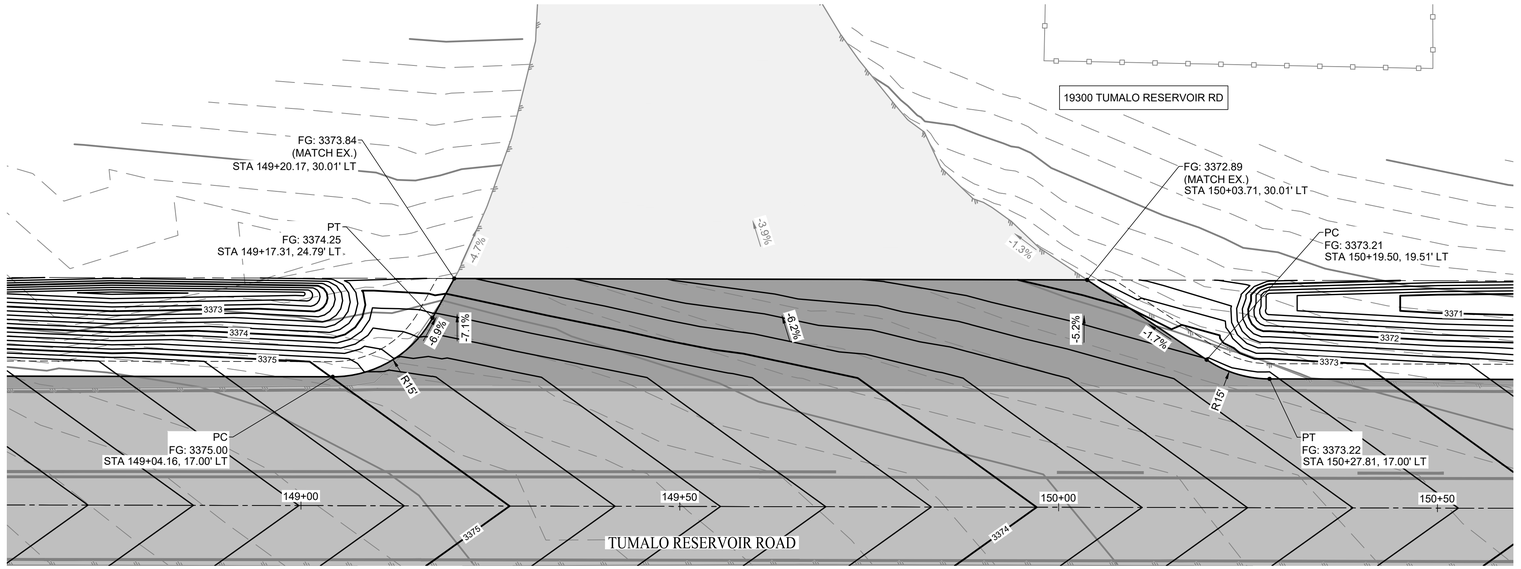
SHEET NO. C-70



DRIVEWAY STA 135+78 DETAIL

SCALE: 1" = 10'

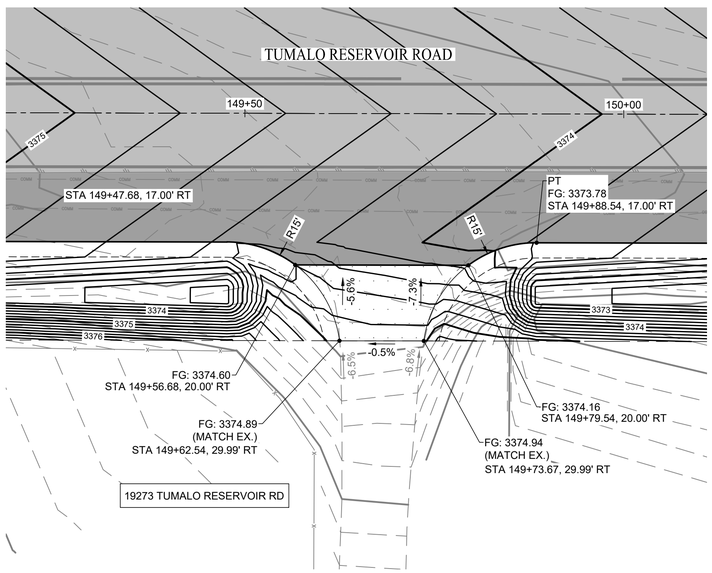
1 / C-71



DRIVEWAY STA 149+63 DETAIL

SCALE: 1" = 10'

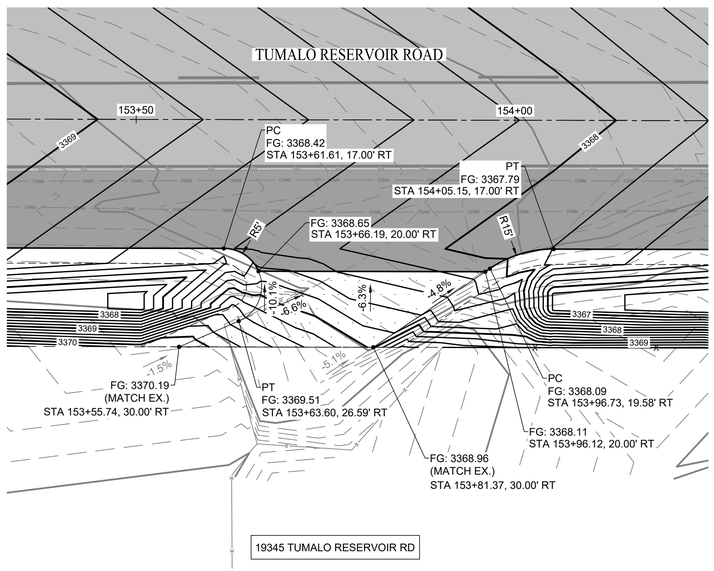
2 / C-71



DRIVEWAYSTA 149+69 DETAIL

SCALE: 1" = 10'

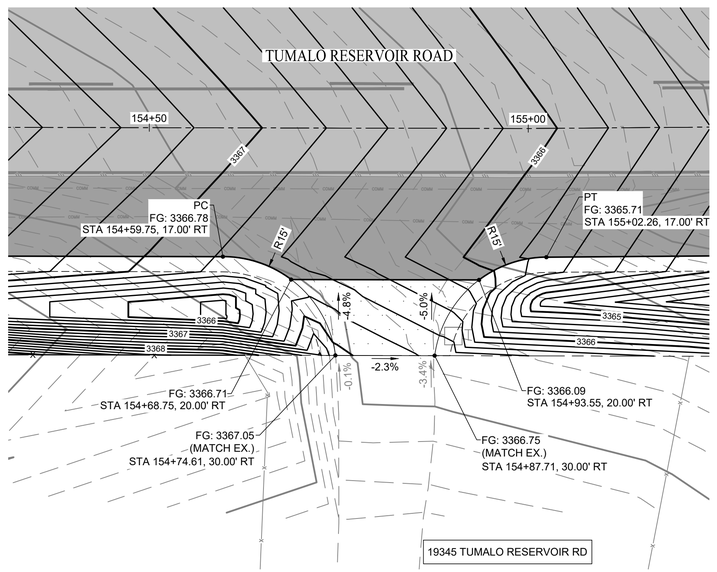
3 / C-71



DRIVEWAY STA 153+92 DETAIL

SCALE: 1" = 10'

4 / C-71



DRIVEWAY STA 154+81 DETAIL

SCALE: 1" = 10'

5 / C-71

N

10 0 10 20

SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 90 OF 117
SHEET NO. C-71

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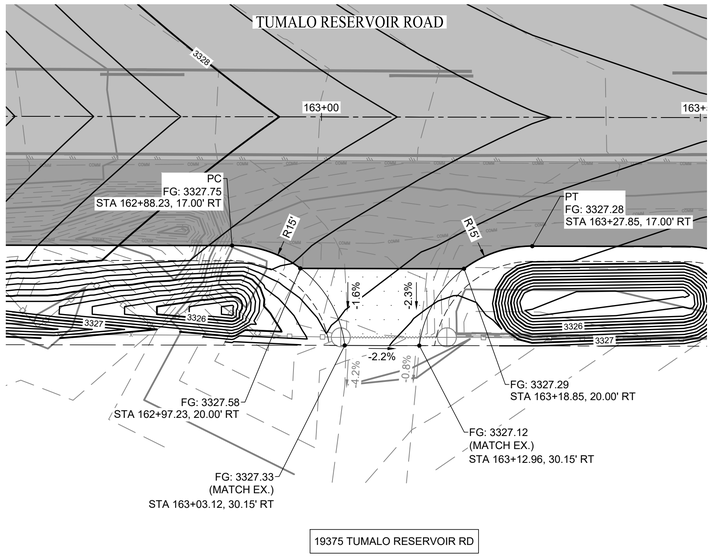
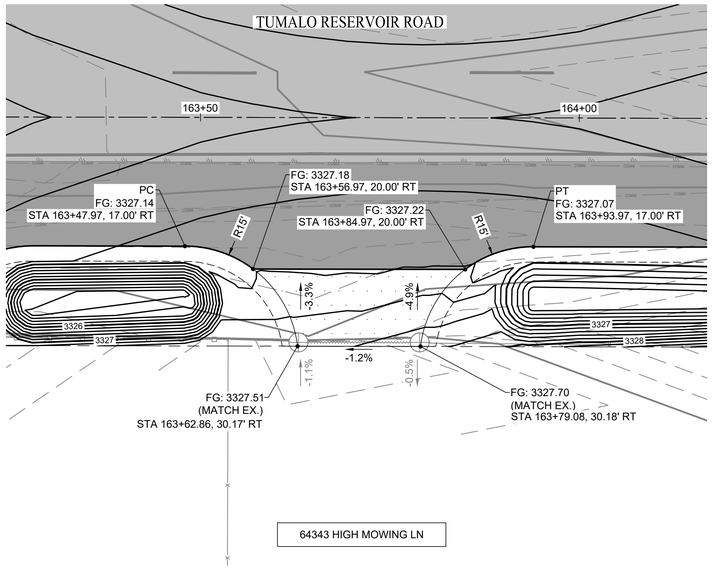
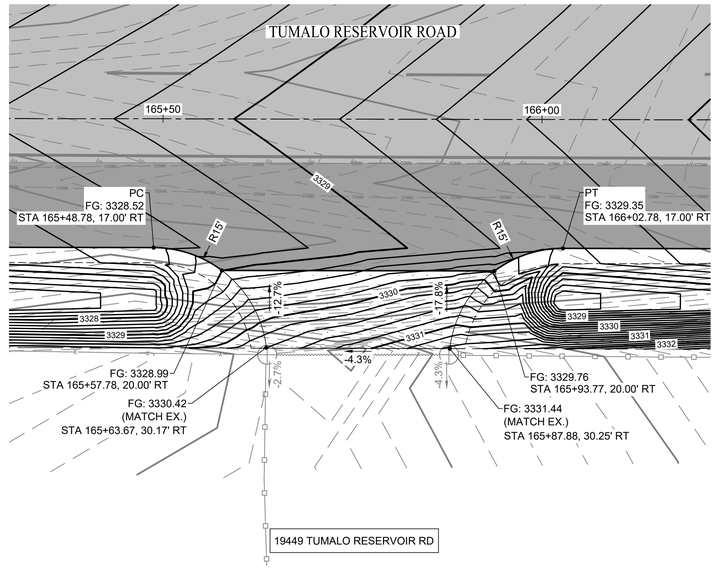


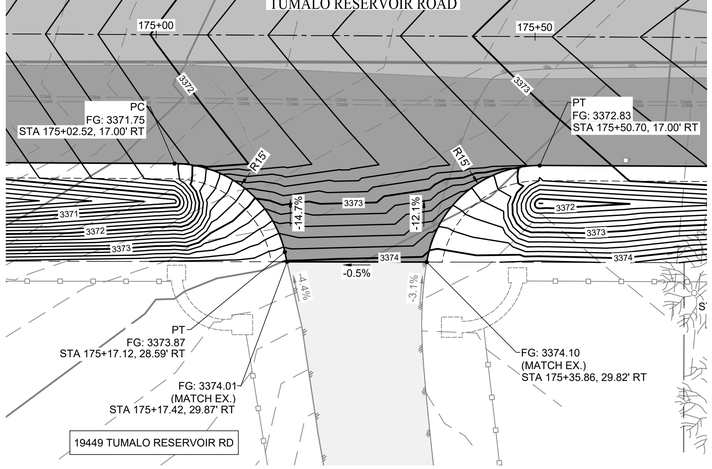
DRIVEWAY STA 163+09 DETAIL (1 / C-72)
SCALE: 1" = 10'



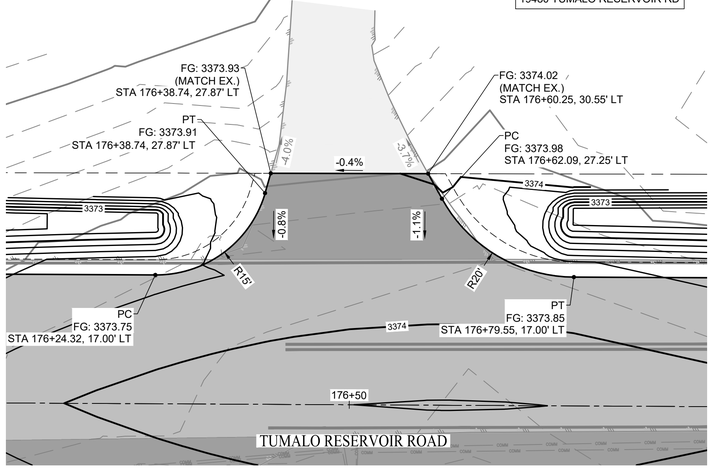
DRIVEWAY STA 163+75 DETAIL (2 / C-72)
SCALE: 1" = 10'



DRIVEWAY STA 165+75 DETAIL (3 / C-72)
SCALE: 1" = 10'



DRIVEWAY STA 175+27 DETAIL (4 / C-72)
SCALE: 1" = 10'



DRIVEWAY STA 176+51 DETAIL (5 / C-72)
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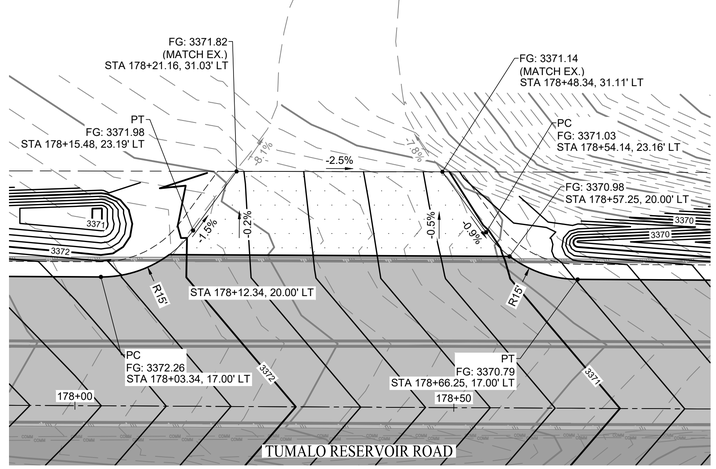

DRIVEWAY STA 178+35 DETAIL (6 / C-72)
SCALE: 1" = 10'

N

10 0 10 20
SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
ALEC VEIKKO FRANSEN
87553PE
OREGON
NOV. 13, 2018
RENEWS: DEC 31, 2025

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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 91 OF 117

SHEET NO. C-72

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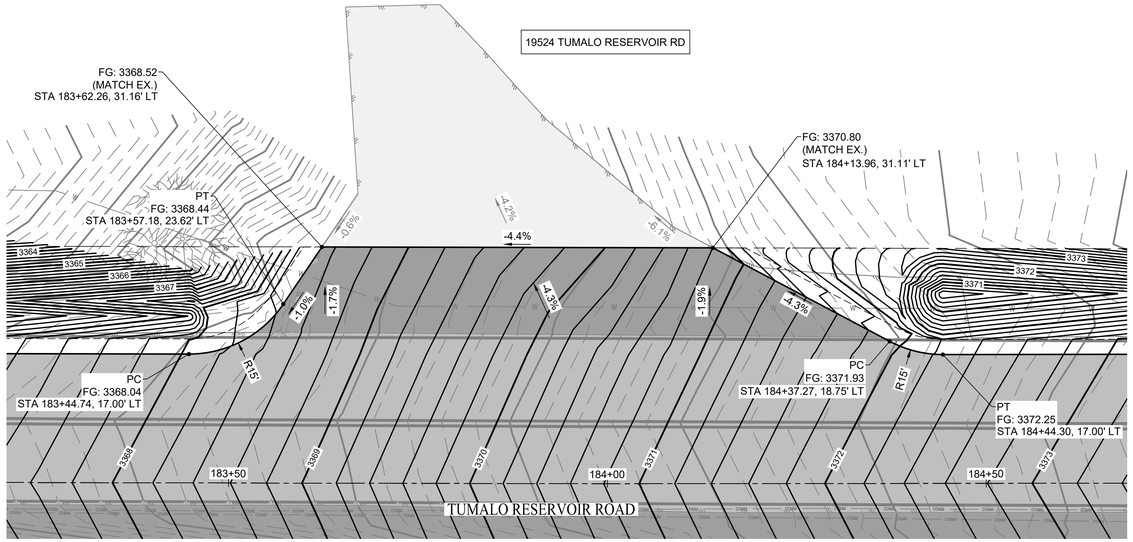
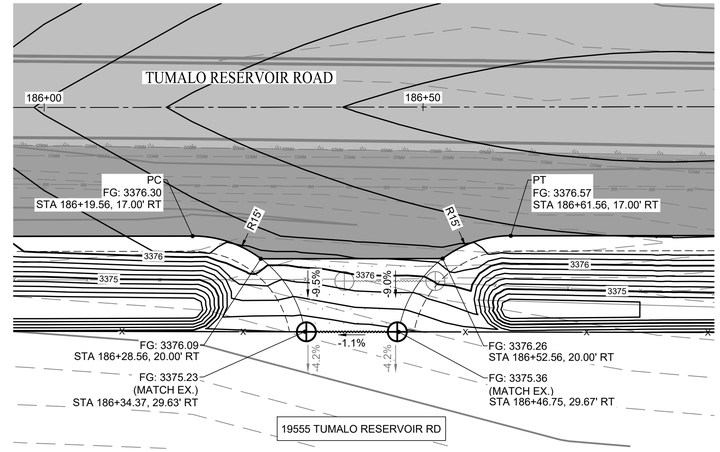


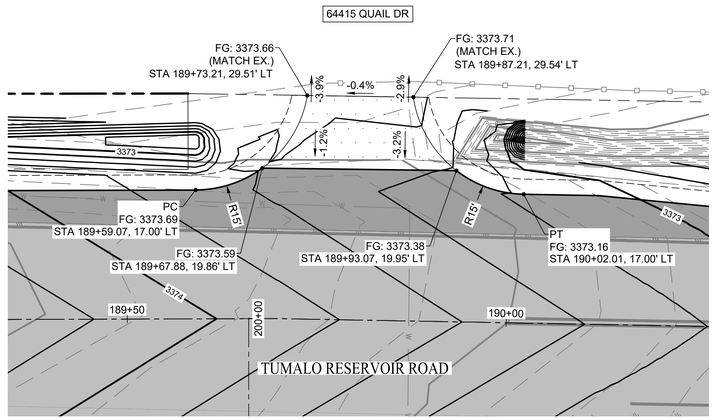
DRIVEWAY STA 184+00 DETAIL (1 / C-73)

SCALE: 1" = 10'



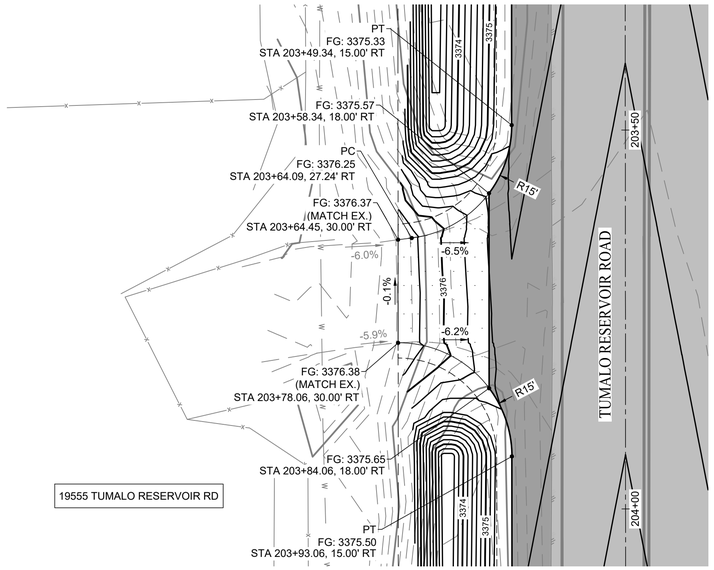
DRIVEWAY STA 186+50 DETAIL (2 / C-73)

SCALE: 1" = 10'



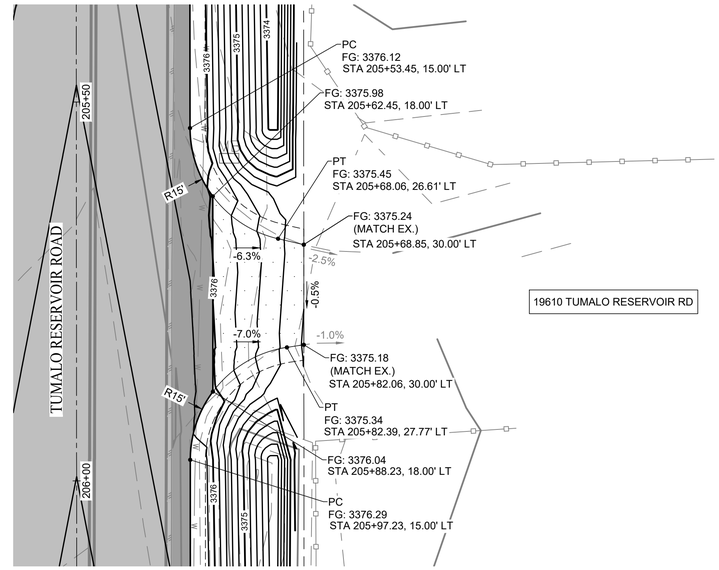
DRIVEWAY STA 189+80 DETAIL (3 / C-73)

SCALE: 1" = 10'



DRIVEWAY STA 203+72 DETAIL (4 / C-73)

SCALE: 1" = 10'



DRIVEWAY STA 205+75 DETAIL (5 / C-73)

SCALE: 1" = 10'

N

10 0 10 20

SCALE OF FEET
SCALE: 1"=10'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — ALEC VEIKKO FRANSEN — 87553PE — OREGON — NOV. 13, 2018 — RENEWS: DEC 31, 2025

VERIFY SCALES
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CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

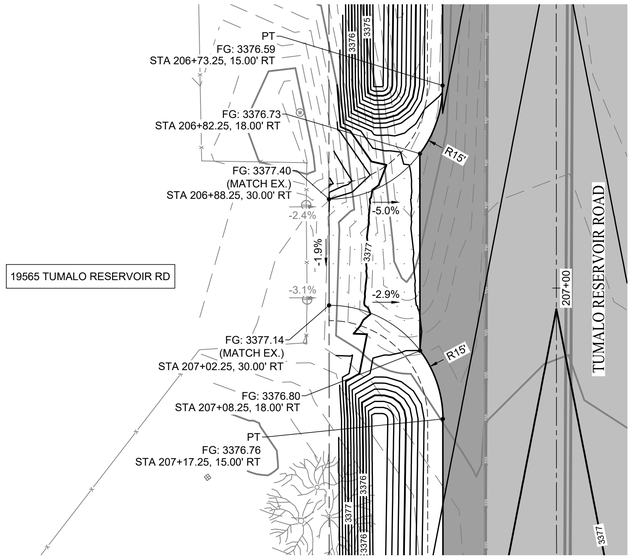
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 92 OF 117
SHEET NO. C-73

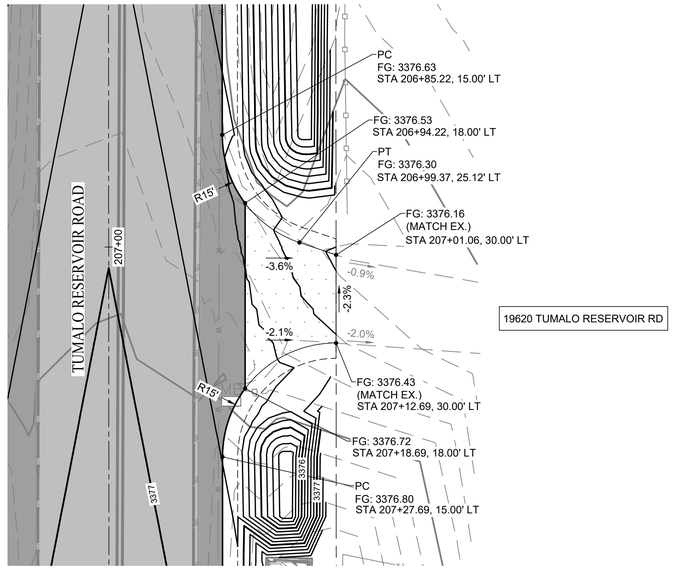
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg



DRIVEWAY STA 206+95 DETAIL

SCALE: 1" = 10'

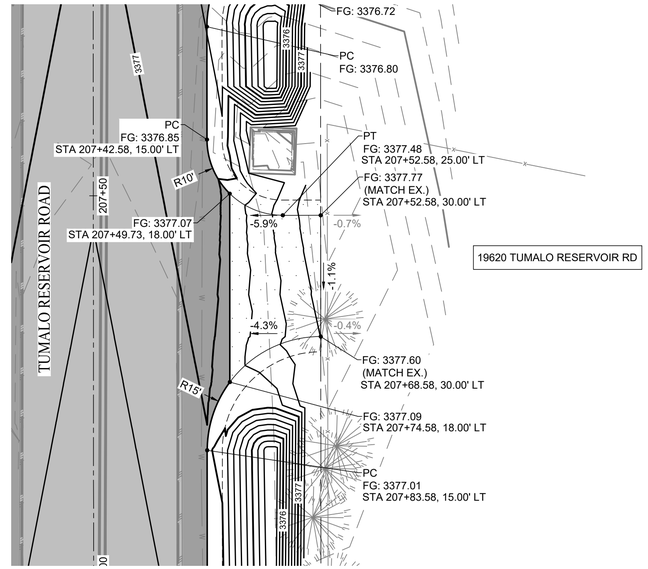
1 / C-74



DRIVEWAY STA 207+06 DETAIL

SCALE: 1" = 10'

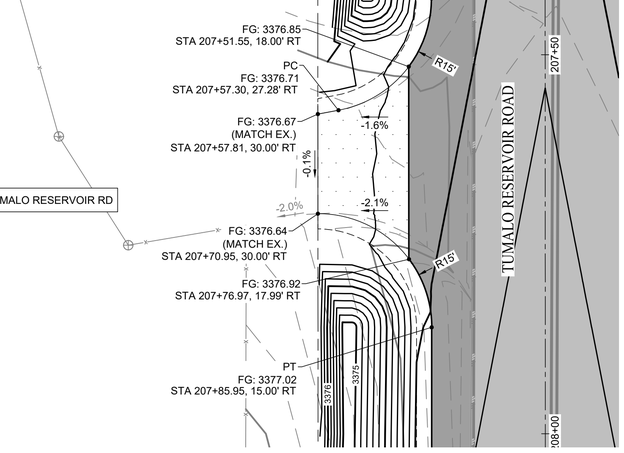
2 / C-74



DRIVEWAY STA 207+61 DETAIL

SCALE: 1" = 10'

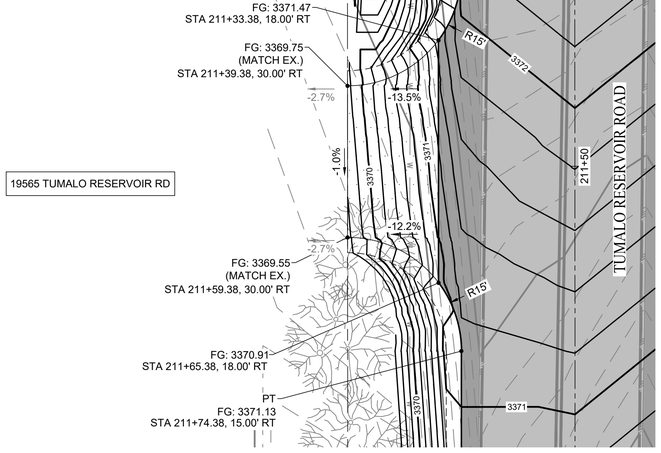
3 / C-74



DRIVEWAY STA 207+64 DETAIL

SCALE: 1" = 10'

4 / C-74



DRIVEWAY STA 211+49 DETAIL

SCALE: 1" = 10'

5 / C-74

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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541.322.8962
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DATE: AUGUST 2025
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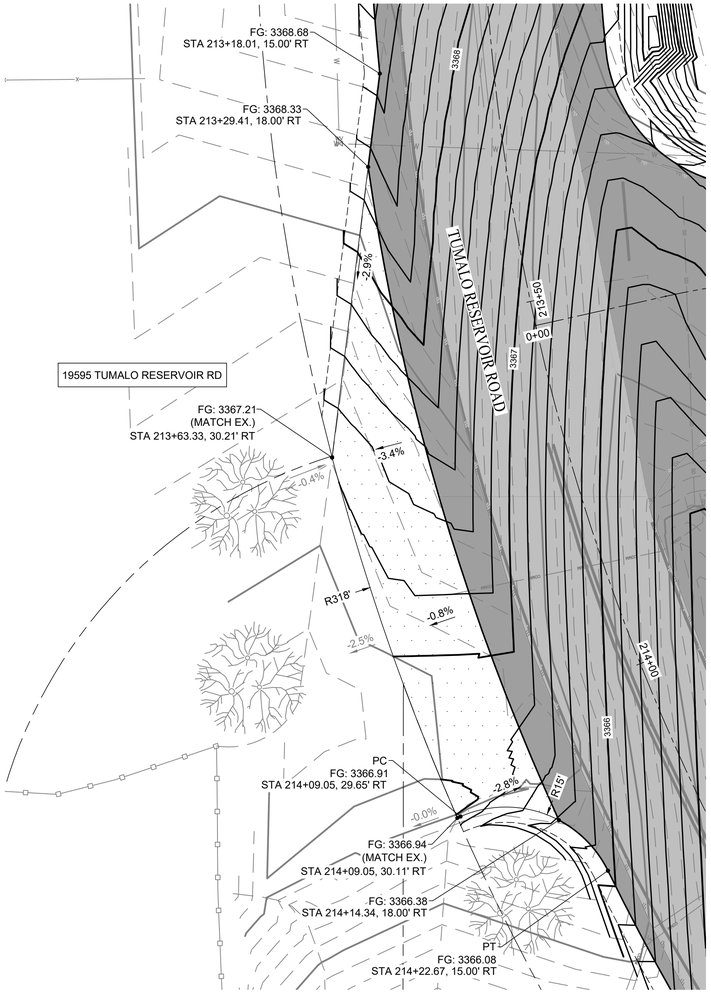
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

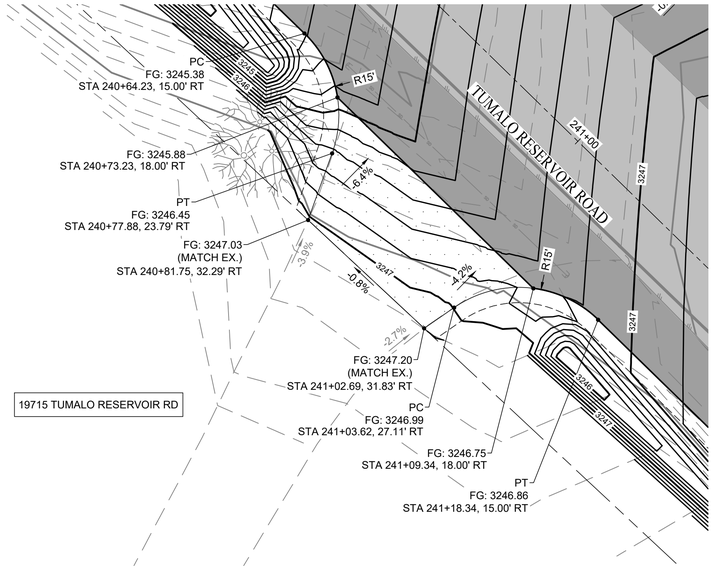
DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

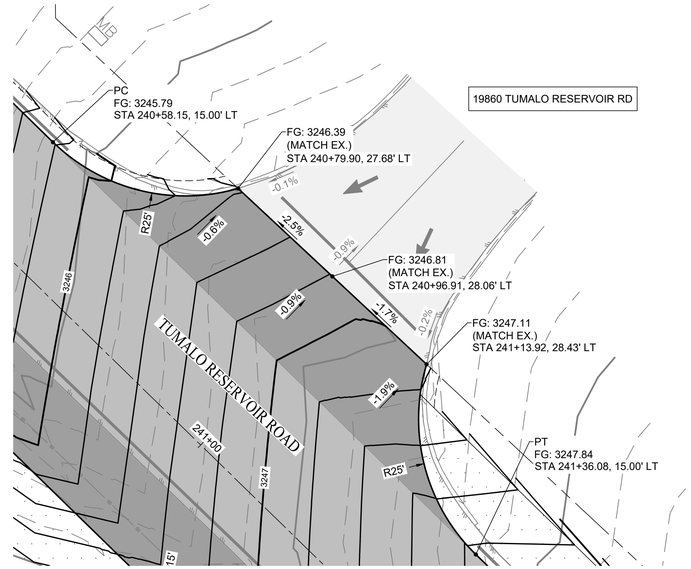
DRAWING NO. 93 OF 117
SHEET NO. C-74



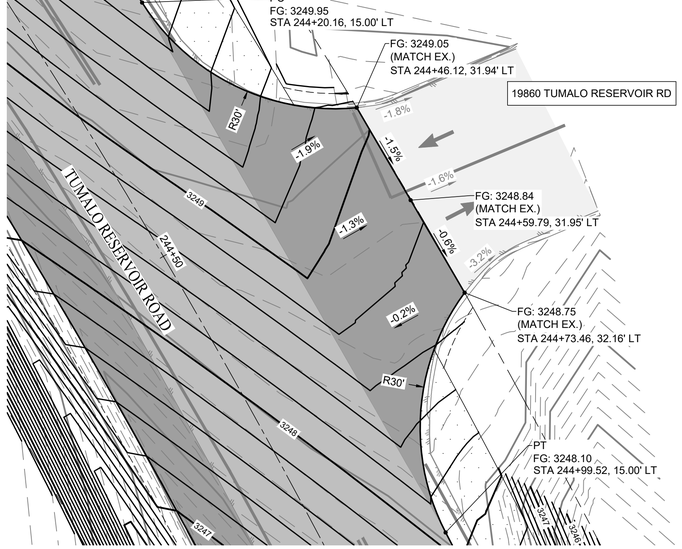
DRIVEWAY STA 213+72 DETAIL
SCALE: 1" = 10'
1
C-75



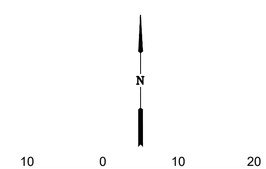
DRIVEWAY STA 240+91 DETAIL
SCALE: 1" = 10'
2
C-75



DRIVEWAY STA 240+97 DETAIL
SCALE: 1" = 10'
3
C-75



DRIVEWAY STA 244+60 DETAIL
SCALE: 1" = 10'
4
C-75



SCALE OF FEET
SCALE: 1"=10'

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\C-04 DRIVEWAY AND INTERSECTION DETAILS.dwg

DESCHUTES COUNTY ROAD DEPARTMENT

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OREGON
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ALEC VEIKKO FRANSEN
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DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

DRIVEWAY DETAILS

DRAWING NO. 94 OF 117
SHEET NO. C-75

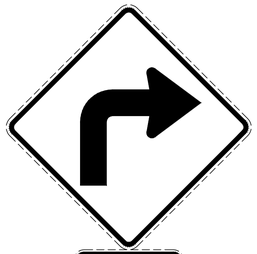
SIGN NO. 1
CUSTOM
30"x36"

SIGN NO. 1A
CUSTOM
30"x24"

SIGN NO. 2
OM-3L
12"x36"

SIGN NO. 3
W8-3
PAVEMENT ENDS
30"x30"

SIGN NO. 4
R2-1
SPEED LIMIT
30"x36"



SIGN NO. 5
W1-1R
TURN
30"x30"

SIGN NO. 5A
W13-1
ADVISORY SPEED
18"x18"

SIGN NO. 6 (D3-1)
30"x8"

SIGN NO. 6A (D3-1)
30"x8"

SIGN NO. 7A (D3-1)
24"x8"

SIGN NO. 7B (D3-1)
30"x8"

SIGN NO. 7
R1-1
STOP
30"x30"

SIGN NO. 8
CUSTOM
30"x42"

SIGN NO. 9A (D3-1)
24"x8"

SIGN NO. 9B (D3-1)
30"x8"

SIGN NO. 9
R1-1
STOP
30"x30"

SIGN NO. 10
W2-2R
SIDE ROAD
30"x30"

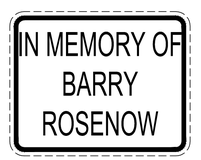
SIGN NO. 10A
CUSTOM
24"x8"

SIGN NO. 11A (D3-1)
24"x8"

SIGN NO. 11B (D3-1)
30"x8"

SIGN NO. 11
R1-1
STOP
30"x30"

SIGN NO. 12
CUSTOM
30"x36"



SIGN NO. 12A
CUSTOM
30"x24"

= EXISTING SIGN

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EXISTING SIGN DETAILS

DRAWING NO. 95 OF 117
SHEET NO. SS-01

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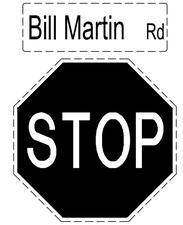
SIGN NO. 13
W11-20
ELK TRAFFIC
30"x30"

SIGN NO. 14A (D3-1)
24"x8"

SIGN NO. 14B (D3-1)
30"x8"

SIGN NO. 14
R1-1
STOP
30"x30"

SIGN NO. 15 (D3-1)
24"x8"



SIGN NO. 16A (D3-1)
30"x8"

SIGN NO. 16
R1-1
STOP
30"x30"

SIGN NO. 17 (D3-1)
30"x8"

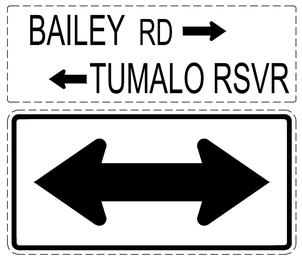
SIGN NO. 18
CUSTOM
30"x30"

SIGN NO. 19 (D3-1)
30"x8"

SIGN NO. 20A (D3-1)
24"x8"

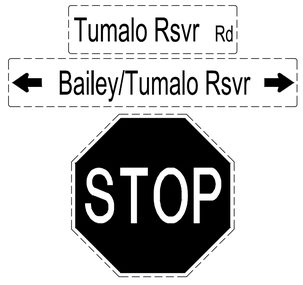
SIGN NO. 20B (x2)
CUSTOM
18"x8"

SIGN NO. 20
R1-1
STOP
30"x30"



SIGN NO. 21
CUSTOM
48"x16"

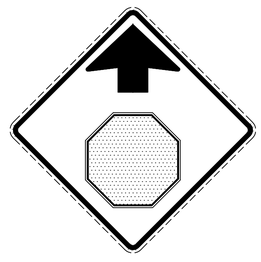
SIGN NO. 21A
W1-7
TWO DIRECTIONAL
LARGE ARROW
48"x24"



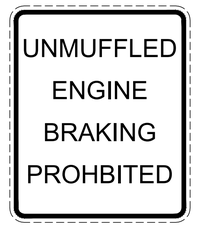
SIGN NO. 22A (D3-1)
30"x8"

SIGN NO. 22B
CUSTOM
48"x8"

SIGN NO. 22
R1-1
STOP
30"x30"



SIGN NO. 23
W3-1
STOP AHEAD
30"x30"



SIGN NO. 24
CUSTOM
30"x36"

= EXISTING SIGN

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EXISTING SIGN DETAILS

DRAWING NO. 96 OF 117
SHEET NO. SS-02

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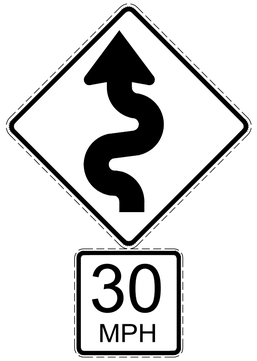

SIGN NO. 25
W1-5L
TURN
30"x30"

SIGN NO. 24A
W13-1
ADVISORY SPEED
18"x18"

SIGN NO. 29A (D3-1)
30"x8"

SIGN NO. 29B (D3-1)
30"x8"

SIGN NO. 28
R1-1
STOP
30"x30"

SIGN NO. 26A (D3-1)
36"x8"

SIGN NO. 26B (D3-1)
36"x8"

SIGN NO. 26
R1-1
STOP
30"x30"

SIGN NO. 30
W1-5R
TURN
30"x30"

SIGN NO. 30A
W13-1
ADVISORY SPEED
18"x18"

SIGN NO. 31
S1-1
SCHOOL
36"x36"

SIGN NO. 31A
W16-9p
AHEAD PLAQUE
24"x12"

SIGN NO. 27A (D3-1)
24"x8"

SIGN NO. 27
R1-1
STOP
30"x30"

SIGN NO. 28
W1-5R
TURN
30"x30"

SIGN NO. 28A
W13-1
ADVISORY SPEED
18"x18"

SIGN NO. 32
S1-1
SCHOOL
36"x36"

SIGN NO. 32A
S4-3
SCHOOL
24"x8"

SIGN NO. 33
W1-5R
TURN
30"x30"

SIGN NO. 33A
W13-1
ADVISORY SPEED
18"x18"

= EXISTING SIGN

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DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING

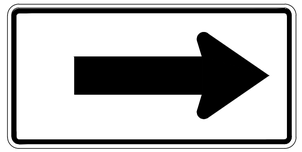
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

EXISTING SIGN DETAILS

DRAWING NO. 97 OF 117
SHEET NO. SS-03



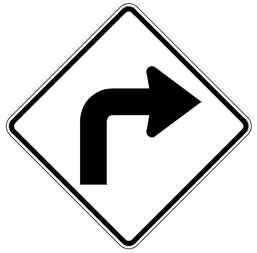
SIGN NO. 101
W1-6R
RIGHT ARROW
WARNING SIGN
48"x24"

SIGN NO. 102
R1-1
STOP
30"x30"

SIGN NO. 103 (D3-1)
24"x8"

SIGN NO. 104 (D3-1)
30"x8"

SIGN NO. 105
CUSTOM
30"x36"



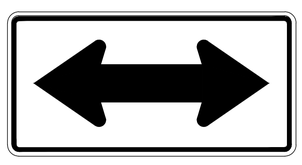
SIGN NO.106
W1-1R
TURN
30"x30"

SIGN NO. 107
W13-1
ADVISORY SPEED
18"x18"

SIGN NO. 108
W8-3
PAVEMENT ENDS
30"x30"

SIGN NO. 109
R2-1
SPEED LIMIT
30"x36"

SIGN NO. 110 (D3-1)
30"x8"



SIGN NO. 111
W1-7
TWO DIRECTIONAL
LARGE ARROW
48"x24"

SIGN NO. 112
W2-2L
SIDE ROAD
30"x30"

SIGN NO. 113 (D3-1)
24"x8"

SIGN NO. 114
CUSTOM
30"x42"

SIGN NO. 115
W2-2R
SIDE ROAD
30"x30"

DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

PROPOSED SIGN DETAILS

DRAWING NO. 98 OF 117
SHEET NO. SS-04

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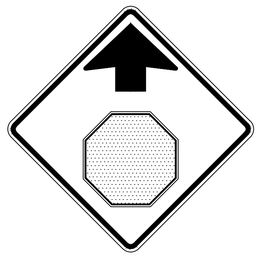
SIGN NO. 116
CUSTOM
24"x8"

SIGN NO. 117 (D3-1)
24"x8"

SIGN NO. 118
CUSTOM
24"x8"

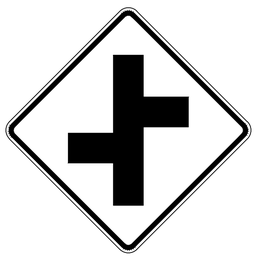
SIGN NO. 119
CUSTOM
24"x8"

SIGN NO. 120 (D3-1)
24"x8"



SIGN NO. 121
W3-1
STOP AHEAD
30"x30"

SIGN NO. 122
CUSTOM
ELK
30"x30"



SIGN NO. 123
W2-7L
OFFSET SIDE ROADS
30"x30"

SIGN NO. 124
CUSTOM
24"x8"

SIGN NO. 125
24"x8"

SIGN NO. 126
CUSTOM
24"x8"

SIGN NO.127
24"x8"

SIGN NO.128 (D3-1)
30"x8"

SIGN NO. 129
CUSTOM
30"x30"

SIGN NO. 130 (D3-1)
30"x8"

DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

PROPOSED SIGN DETAILS

DRAWING NO. 99 OF 117
SHEET NO. SS-05

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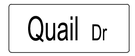
SIGN NO. 131
CUSTOM
48"x16"

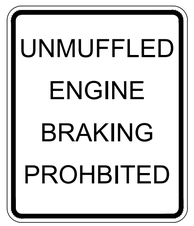


SIGN NO. 132 (D3-1)
24"x8"

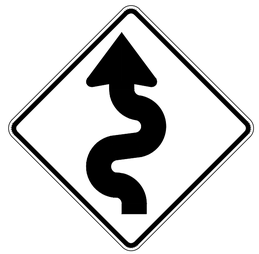
SIGN NO. 133
CUSTOM
18"x8"

SIGN NO. 134
CUSTOM
48"x16"

SIGN NO. 135
CUSTOM
48"x8"

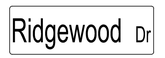


SIGN NO. 136
CUSTOM
30"x36"



SIGN NO. 137
W1-5L
TURN
30"x30"

SIGN NO. 138
W13-1
ADVISORY SPEED
18"x18"



SIGN NO. 139 (D3-1)
24"x8"

SIGN NO. 140
W9-5
30"x30"

SIGN NO. 141 (D3-1)
24"x8"

SIGN NO. 142
W11-1
30"x30"

SIGN NO. 143 (W16-1P)
18"x12"

SIGN NO. 144
CUSTOM
30"x8"

SIGN NO. 145 (D3-1)
30"x8"

DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

PROPOSED SIGN DETAILS

DRAWING NO. 100 OF 117
SHEET NO. SS-06

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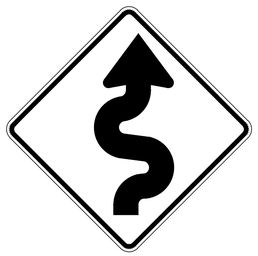

SIGN NO. 146
W1-5R
TURN
30"x30"

SIGN NO. 147
W13-1
ADVISORY SPEED
18"x18"

SIGN NO. 148
S1-1
SCHOOL
36"x36"

SIGN NO. 149
S4-3
SCHOOL
24"x8"

SIGN NO. 150
CUSTOM
24"x8"

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DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

PROPOSED SIGN DETAILS

DRAWING NO. 101 OF 117
SHEET NO. SS-07

SIGN AND POST DATA TABLE

SIGN NUMBER	POST LOCATION	SIGN WIDTH	SIGN HEIGHT	BACKGROUND COLOR	LEGEND/TEXT COLOR	OFFSET	POST SIZE	POST HEIGHT	NOTES
101	2+00	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	10'-0"	
102	3+09	30"	30"	R	SW	27.99 (RT)	2 ½"-12 ga.	10'-0"	
103	3+09	24"	8"	G	SW	27.99 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	3+09	30"	8"	G	SW	27.99 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 103
105	3+50	30"	36"	G	SW	24.50 (RT)	2 ½"-10 ga.	13'-0"	
1A	3+50	30"	24"	G	SW	24.50 (RT)			MOUNT BELOW SIGN NO. 105
106	4+36	30"	30"	Y	BLK*	-24.50 (LT)	2 ½"-12 ga.	13'-0"	
107	4+36	18"	18"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 106
108	5+36	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	12'-0"	
109	5+38	30"	36"	SW	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
102	17+25	30"	30"	R	SW	-26.78 (LT)	2 ½"-12 ga.	10'-0"	
104	17+25	30"	8"	G	SW	-26.78 (LT)			MOUNT ABOVE SIGNS NO. 102 AND BELOW SIGN NO. 110
110	17+25	30"	8"	G	SW	-26.78 (LT)			MOUNT ABOVE SIGN NO. 102 AND NO. 104
111	17+46	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	10'-0"	
112	27+03	30"	30"	Y	BLK*	24.50 (RT)	2 ½"-12 ga.	13'-0"	
113	27+03	24"	8"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 112
109	29+02	30"	36"	SW	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	
102	30+79	30"	30"	R	SW	-31.09 (LT)	2 ½"-12 ga.	10'-0"	
116	30+79	24"	8"	G	SW	-31.09 (LT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	30+79	30"	8"	G	SW	-31.09 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 116
111	31+05	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	10'-0"	
114	33+37	30"	42"	SW	G	-24.50 (LT)	2 ½"-12 ga.	12'-0"	
109	33+37	30"	36"	SW	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
115	35+07	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	12'-0"	
113	35+07	24"	8"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 115
112	53+36	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
117	53+36	24"	8"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 112
109	55+25	30"	36"	SW	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	
102	57+07	30"	30"	R	SW	-26.45 (LT)	2 ½"-12 ga.	11'-0"	
118	57+07	24"	8"	G	SW	-26.45 (LT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	57+07	30"	8"	G	SW	-26.45 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 118
111	57+26	48"	24"	Y	BLK*	25.50 (RT)	2"-12 ga.	10'-0"	
109	59+49	30"	36"	SW	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
115	61+18	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	12'-0"	
117	61+18	24"	8"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 115
115	92+84	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
119	92+84	24"	8"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 115
109	94+29	30"	36"	SW	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	

* BLACK LEGEND/TEXT SHALL BE PERMANENT, NON-REFLECTIVE.

SIGN AND POST DATA TABLE

SIGN NUMBER	POST LOCATION	SIGN WIDTH	SIGN HEIGHT	BACKGROUND COLOR	LEGEND/TEXT COLOR	OFFSET	POST SIZE	POST HEIGHT	NOTES
111	96+77	48"	24"	Y	BLK*	-24.50 (LT)	2"-12 ga.	10'-0"	
102	97+00	30"	30"	R	SW	28.16 (RT)	2 ½"-12 ga.	10'-0"	
120	97+00	24"	8"	G	SW	28.16 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	97+00	30"	8"	G	SW	28.16 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 120
121	97+01	30"	30"	Y	BLK*/RED	515.94 (RT)	2"-12 ga.	11'-0"	
109	97+98	30"	36"	SW	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
105	98+98	30"	36"	G	SW	24.50 (RT)	2 ½"-12 ga.	12'-0"	
12A	98+98	30"	24"	G	SW	24.50 (RT)			MOUNT BELOW SIGN NO. 105
105	98+98	30"	36"	G	SW	-24.50 (LT)	2 ½"-12 ga.	13'-0"	
1A	98+98	30"	24"	G	SW	-24.50 (LT)			MOUNT BELOW SIGN NO. 105
122	99+98	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
112	100+20	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	12'-0"	
119	100+20	24"	8"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 112
123	132+52	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
124	132+52	24"	8"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 123
122	135+10	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	
102	136+29	30"	30"	R	SW	-31.19 (LT)	2"-12 ga.	10'-0"	
125	136+29	24"	8"	G	SW	-31.19 (LT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	136+29	30"	8"	G	SW	-31.19 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 125
111	136+54	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	9'-0"	
111	137+13	48"	24"	Y	BLK*	-24.50 (LT)	2 ½"-12 ga.	12'-0"	
102	137+33	30"	30"	R	SW	28.41 (RT)	2 ½"-12 ga.	10'-0"	
125	137+33	24"	8"	G	SW	28.41 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	137+33	30"	8"	G	SW	28.41 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 125
123	140+55	30"	30"	Y	BLK*	-24.50 (LT)	2 ½"-12 ga.	13'-0"	
124	140+55	24"	8"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 123
112	158+77	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
126	158+77	24"	8"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 112
102	162+46	30"	30"	R	SW	-28.11 (LT)	2"-12 ga.	10-0"	
127	162+46	24"	8"	G	SW	-28.11 (LT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	162+46	30"	8"	G	SW	-28.11 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 127
111	162+67	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
115	166+59	30"	30"	Y	BLK*	-24.50 (LT)	2 ½"-12 ga.	13'-0"	
126	166+59	24"	8"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 115
102	169+68	30"	30"	R	SW	-28.16 (LT)	2"-12 ga.	11'-0"	
128	169+68	30"	8"	G	SW	-28.16 (LT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	169+68	30"	8"	G	SW	-28.16 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 128
111	169+89	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	

* BLACK LEGEND/TEXT SHALL BE PERMANENT, NON-REFLECTIVE.

TABLE CONTINUES ON SHEET SS-09

SIGNING KEY NOTES

- (N, M) INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- (RXN, M) REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).
- (RSN, M) REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE EXISTING SIGN SUPPORT (M).
- (RIN, M) REINSTALL EXISTING SIGN (N) ON NEW SIGN SUPPORT (M).

SIGN AND POST GENERAL NOTES

1. ALL SIGNS SHALL BE SHEET ALUMINUM.
2. ALL BACKGROUND, LEGENDS, AND TEXT SHALL BE PERMANENT, ASTM TYPE III OR TYPE IV UNLESS OTHERWISE NOTED.
3. SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD WITH THE ENGINEER. SIGNS SHALL BE CENTERED ON THE POST UNLESS OTHERWISE NOTED OR DIRECTED.
4. ALL SIGN POSTS SHALL BE PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS (PSST) AND INSTALLED PER ODOT STD. DWGS. TM671, TM676, TM681, TM687-TM689.
5. FOOTING DEPTHS FOR ALL SIGNS SHALL BE 3.0' MINIMUM.
6. INSTALL SIGNS ACCORDING TO TM200.
7. POST HEIGHTS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION.
8. SIGN TEXT HEIGHT AND FONTS SHALL BE IN ACCORDANCE WITH MUTCD STANDARDS.

ABBREVIATIONS

BLK = BLACK
FYG = FLUORESCENT YELLOW-GREEN
G = GREEN
M = MATERIAL
N = SIGN NUMBER
ST = PERFORATED STEEL SQUARE TUBE SIGN SUPPORT
SW = SILVER-WHITE
W = WOOD SIGN POST
Y = YELLOW

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGN AND POST DATA TABLE

DRAWING NO. 102 OF 117
SHEET NO. SS-08

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\SS-01 SIGNING & STRIPING PLAN.dwg

SIGN AND POST DATA TABLE

SIGN NUMBER	POST LOCATION	SIGN WIDTH	SIGN HEIGHT	BACKGROUND COLOR	LEGEND/TEXT COLOR	OFFSET	POST SIZE	POST HEIGHT	NOTES
129	170+90	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
129	175+15	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	12'-0"	
111	176+17	48"	24"	Y	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	
102	176+33	30"	30"	R	SW	25.08 (RT)	2 ½"-12 ga.	10'-0"	
130	176+33	30"	8"	G	SW	25.08 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	176+33	30"	8"	G	SW	25.08 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 130
115	185+60	30"	30"	Y	BLK*	24.50 (RT)	2 ½"-12 ga.	14'-0"	
131	185+60	48"	16"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 115
102	186+90	30"	30"	R	SW	-28.36 (LT)	2 ½"-12 ga.	11'-0"	
132	186+90	24"	8"	G	SW	-28.36 (LT)			MOUNT ABOVE SIGNS NO. 102, NO. 133, AND NO. 104
133	186+90	18"	8"	Y	BLK*	-28.36 (LT)			MOUNT ABOVE SIGNS NO. 102 AND 104 AND BELOW SIGN NO. 132
104	186+90	30"	8"	G	SW	-28.36 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGNS NO. 132 AND 133
111	187+12	48"	24"	Y	BLK*	24.50 (RT)	2"-12 ga.	11'-0"	
109	188+40	30"	36"	SW	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	
111	189+66	48"	24"	Y	BLK*	-25.50 (LT)	2 ½"-12 ga.	11'-0"	
134	189+66	48"	16"	G	SW	-25.50 (LT)			MOUNT ABOVE SIGN NO. 111
102	189+96	30"	30"	R	SW	31.24 (RT)	2 ½"-12 ga.	11'-0"	
104	189+96	30"	8"	G	SW	31.24 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 134
135	189+96	48"	8"	G	SW	31.24 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 104
121	202+98	30"	30"	Y	BLK*/RED	-24.50 (LT)	2"-12 ga.	13'-0"	
136	206+53	30"	36"	SW	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
105	211+43	30"	36"	G	SW	-24.50 (LT)	2 ½"-12 ga.	14'-0"	
12A	211+43	30"	24"	G	SW	-24.50 (LT)			MOUNT BELOW SIGN NO. 105
137	211+88	30"	30"	Y	BLK*	24.50 (RT)	2 ½"-12 ga.	13'-0"	
138	211+88	18"	18"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 136
102	213+27	30"	30"	R	SW	-25.58 (LT)	2 ½"-12 ga.	10'-0"	
104	213+27	24"	8"	G	SW	-25.58 (LT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 138
139	213+27	30"	8"	G	SW	-25.58 (LT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 104
111	213+47	48"	24"	Y	BLK*	27.89 (RT)	2"-12 ga.	10'-0"	
140	214+89	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
102	216+42	30"	30"	R	SW	18.40 (RT)	2"-12 ga.	10'-0"	
141	216+42	24"	8"	G	SW	18.40 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	216+42	30"	8"	G	SW	18.40 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 140
142	217+45	30"	30"	Y	BLK*	17.00 (RT)	2"-12 ga.	12'-0"	
143	217+45	18"	12"	Y	BLK*	17.00 (RT)			MOUNT BELOW SIGN NO. 142
115	222+58	30"	30"	Y	BLK*	17.00 (RT)	2 ½"-12 ga.	12'-0"	
145	222+58	30"	8"	Y	BLK*	17.00 (RT)			MOUNT BELOW SIGN NO. 115
146	223+78	30"	30"	Y	BLK*	-17.00 (LT)	2 ½"-12 ga.	12'-0"	
138	223+78	18"	18"	Y	BLK*	-17.00 (LT)			MOUNT BELOW SIGN NO. 146
111	225+39	48"	24"	Y	BLK*	-17.00 (LT)	2"-12 ga.	9'-0"	
102	225+60	30"	30"	R	SW	21.38 (RT)	2 ½"-12 ga.	11'-0"	
144	225+60	30"	8"	G	SW	21.38 (RT)			MOUNT ABOVE SIGNS NO. 102 AND NO. 104
104	225+60	30"	8"	G	SW	21.38 (RT)			MOUNT ABOVE SIGN NO. 102 AND BELOW SIGN NO. 144
142	226+60	30"	30"	Y	BLK*	17.00 (RT)	2 ½"-12 ga.	13'-0"	
143	226+60	18"	12"	Y	BLK*	17.00 (RT)			MOUNT BELOW SIGN NO. 142
142	226+60	30"	30"	Y	BLK*	-17.00 (LT)	2 ½"-12 ga.	13'-0"	
143	226+60	18"	12"	Y	BLK*	-17.00 (LT)			MOUNT BELOW SIGN NO. 142
112	228+22	30"	30"	Y	BLK*	-24.50 (LT)	2 ½"-12 ga.	12'-0"	
145	228+22	30"	8"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 112
146	228+79	30"	30"	Y	BLK*	17.00 (RT)	2 ½"-12 ga.	13'-0"	
147	228+79	18"	18"	Y	BLK*	17.00 (RT)			MOUNT BELOW SIGN NO. 146
142	231+55	30"	30"	Y	BLK*	17.00 (RT)	2 ½"-12 ga.	14'-0"	
143	231+55	18"	12"	Y	BLK*	17.00 (RT)			MOUNT BELOW SIGN NO. 142
142	231+55	30"	30"	Y	BLK*	-17.00 (LT)	2"-12 ga.	12'-0"	
143	231+55	18"	12"	Y	BLK*	-17.00 (LT)			MOUNT BELOW SIGN NO. 142
142	238+58	30"	30"	Y	BLK*	-17.00 (LT)	2 ½"-12 ga.	11'-0"	
143	238+58	18"	12"	Y	BLK*	-17.00 (LT)			MOUNT BELOW SIGN NO. 142
148	239+52	36"	36"	FYG	BLK*	24.50 (RT)	2 ½"-12 ga.	13'-0"	
149	239+52	24"	8"	FYG	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 148
146	239+58	30"	30"	Y	BLK*	-24.50 (LT)	2 ½"-12 ga.	15'-0"	
147	239+58	18"	18"	Y	BLK*	-24.50 (LT)			MOUNT BELOW SIGN NO. 146
140	240+58	30"	30"	Y	BLK*	-24.50 (LT)	2"-12 ga.	11'-0"	
115	247+98	30"	30"	Y	BLK*	24.50 (RT)	2"-12 ga.	12'-0"	
150	247+98	24"	8"	Y	BLK*	24.50 (RT)			MOUNT BELOW SIGN NO. 115
114	248+92	30"	42"	SW	G	24.50 (RT)	2"-12 ga.	11'-0"	
148	250+27	36"	36"	FYG	BLK*	-25.70 (LT)	2 ½"-12 ga.	11'-0"	
149	250+27	24"	8"	FYG	BLK*	-25.70 (LT)			MOUNT BELOW SIGN NO. 148

* BLACK LEGEND/TEXT SHALL BE PERMANENT, NON-REFLECTIVE.

SIGNING KEY NOTES

- N M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).
- RSN M — REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE EXISTING SIGN SUPPORT (M).
- RIN M — REINSTALL EXISTING SIGN (N) ON NEW SIGN SUPPORT (M).

SIGN AND POST GENERAL NOTES

1. ALL SIGNS SHALL BE SHEET ALUMINUM.
2. ALL BACKGROUND, LEGENDS, AND TEXT SHALL BE PERMANENT, ASTM TYPE III OR TYPE IV UNLESS OTHERWISE NOTED.
3. SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD WITH THE ENGINEER. SIGNS SHALL BE CENTERED ON THE POST UNLESS OTHERWISE NOTED OR DIRECTED.
4. ALL SIGN POSTS SHALL BE PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS (PSST) AND INSTALLED PER ODOT STD. DWGS. TM671, TM676, TM681, TM687-TM689.
5. FOOTING DEPTHS FOR ALL SIGNS SHALL BE 3.0' MINIMUM.
6. INSTALL SIGNS ACCORDING TO TM200.
7. POST HEIGHTS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION.
8. SIGN TEXT HEIGHT AND FONTS SHALL BE IN ACCORDANCE WITH MUTCD STANDARDS.

ABBREVIATIONS

BLK = BLACK
FYG = FLUORESCENT YELLOW-GREEN
G = GREEN
M = MATERIAL
N = SIGN NUMBER
ST = PERFORATED STEEL SQUARE TUBE SIGN SUPPORT
SW = SILVER-WHITE
W = WOOD SIGN POST
Y = YELLOW

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — 87553PE — OREGON — NOV. 13, 2018 — ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

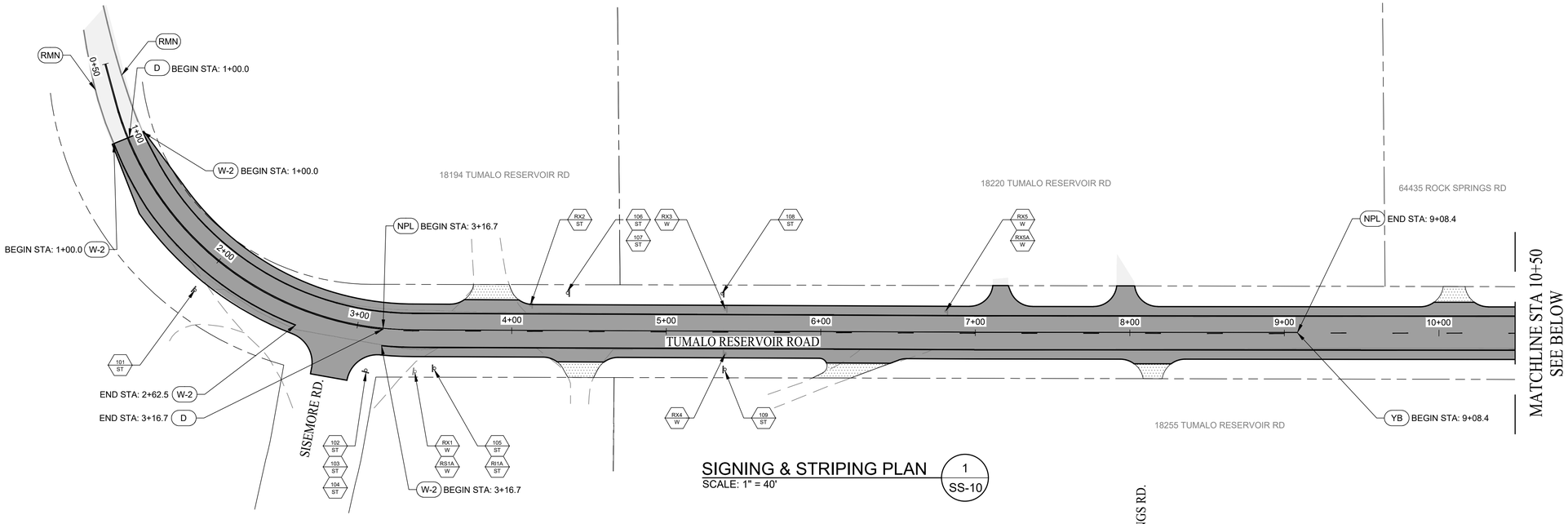
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGN AND POST DATA TABLE

DRAWING NO. 103 OF 117
SHEET NO. SS-09

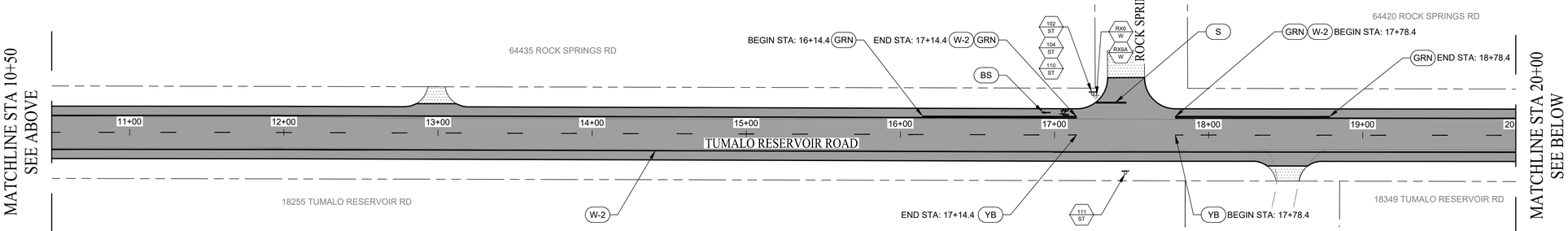
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\SS-01 SIGNING & STRIPING PLAN.dwg



SIGNING & STRIPING PLAN

SCALE: 1" = 40'

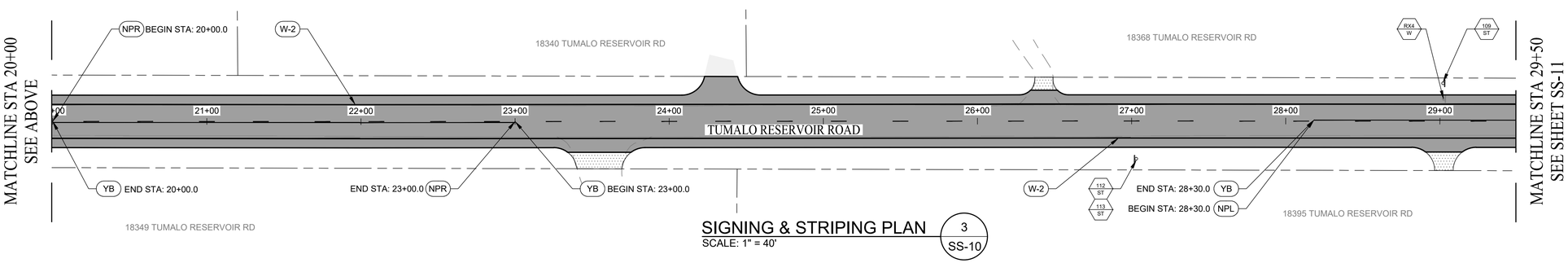
1 / SS-10



SIGNING & STRIPING PLAN

SCALE: 1" = 40'

2 / SS-10



SIGNING & STRIPING PLAN

SCALE: 1" = 40'

3 / SS-10

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- D — INSTALL DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- YB — INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR — INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL — INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- RMN — EXISTING STRIPING TO REMAIN.
- S — INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER ODOT STANDARD DRAWING TM503.

SIGNING KEY NOTES

- N M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).
- RSN M — REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE EXISTING SIGN SUPPORT (M).
- RIN M — REINSTALL EXISTING SIGN (N) ON NEW SIGN SUPPORT (M).

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEETS SS-08 & SS-09 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80

SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER — 87553PE — OREGON — NOV. 13, 2018 — ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ▬ 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

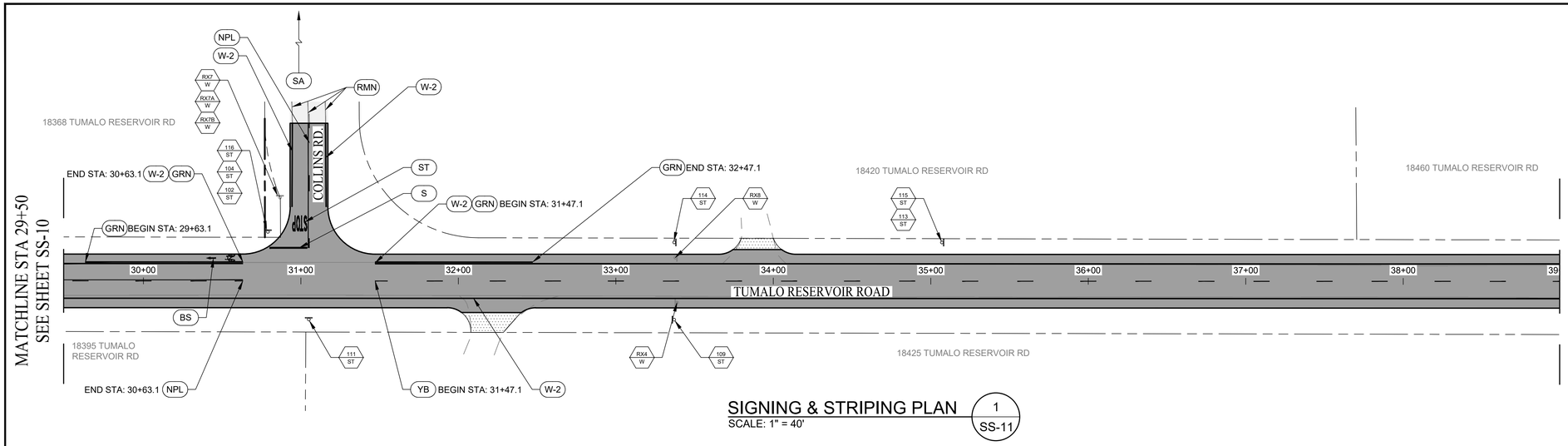
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

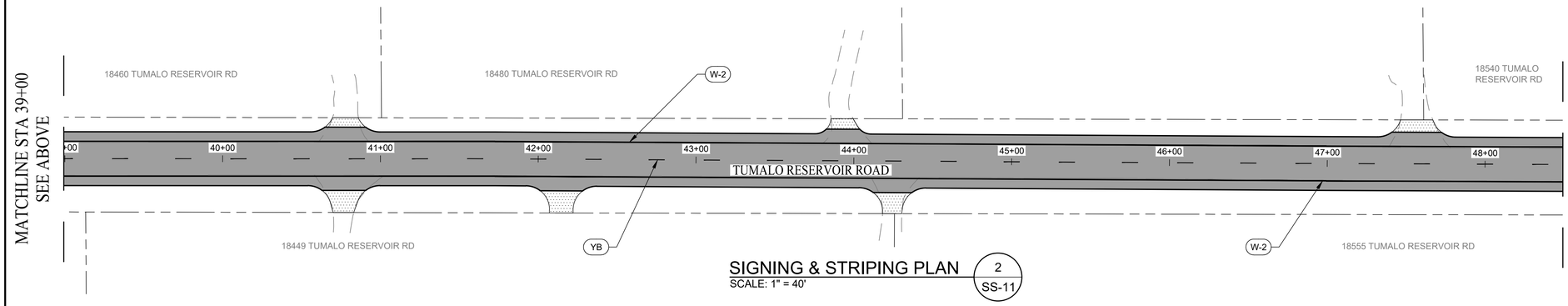
SIGNING & STRIPING PLAN
STA 0+50 TO STA 29+50

DRAWING NO. 104 OF 117
SHEET NO. SS-10

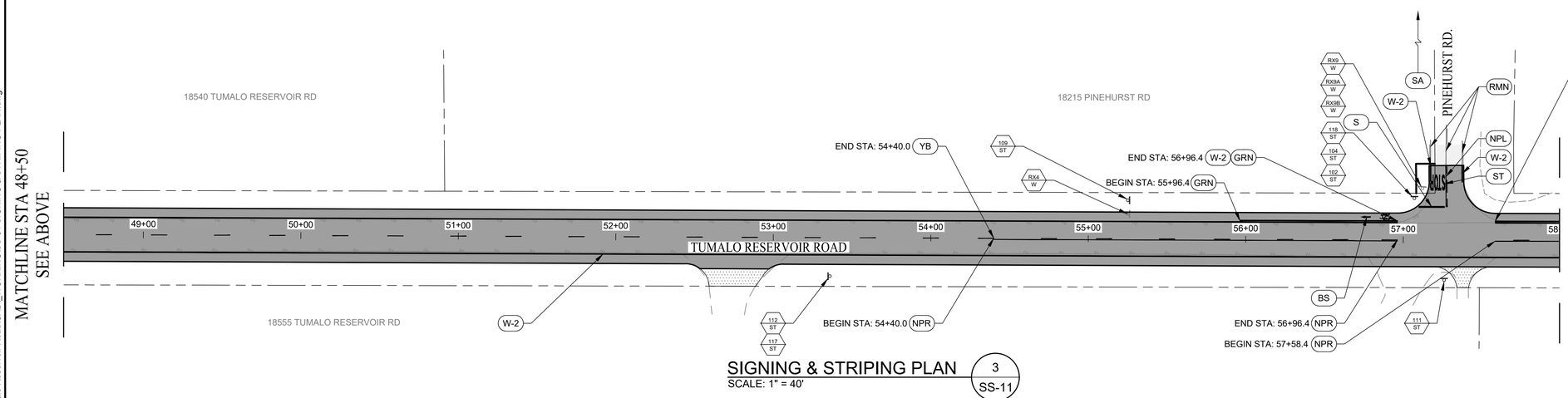
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\SS-01 SIGNING & STRIPING PLAN.dwg



SIGNING & STRIPING PLAN
SCALE: 1" = 40'
1
SS-11



SIGNING & STRIPING PLAN
SCALE: 1" = 40'
2
SS-11



SIGNING & STRIPING PLAN
SCALE: 1" = 40'
3
SS-11

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- YB — INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR — INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL — INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- RMN — EXISTING STRIPING TO REMAIN.
- S — INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- ST — INSTALL 'STOP' LEGEND PER DETAIL 4 ON SHEET C-08.
- SA — INSTALL 'STOP AHEAD' LEGEND PER DETAIL 4 ON SHEET C-08 ADJACENT TO 'STOP AHEAD' (W3-1) SIGN.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER ODOT STANDARD DRAWING TM503.

SIGNING KEY NOTES

- N / M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN / M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO:	SCALE:
AVF	SCL	RDV	AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGNING & STRIPING PLAN
STA 29+50 TO STA 58+00

DRAWING NO. 105 OF 117
SHEET NO. SS-11

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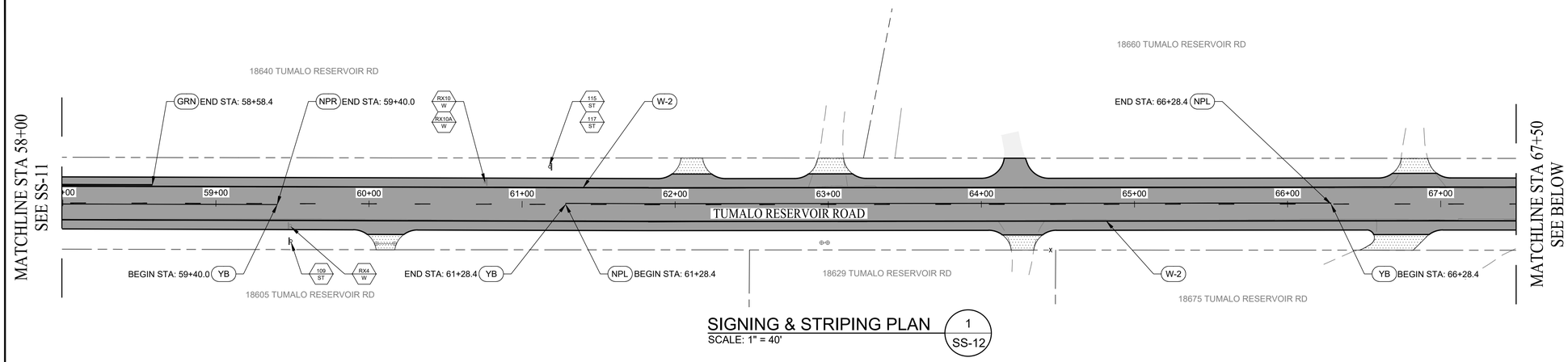
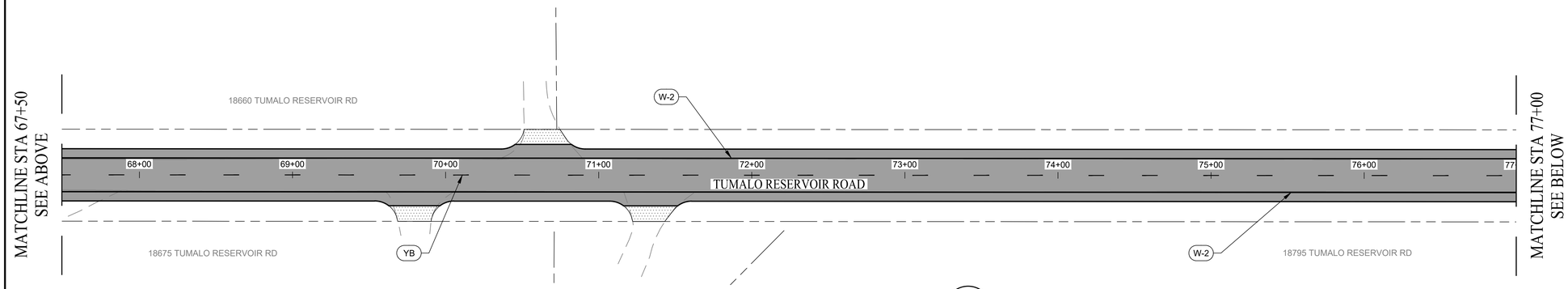
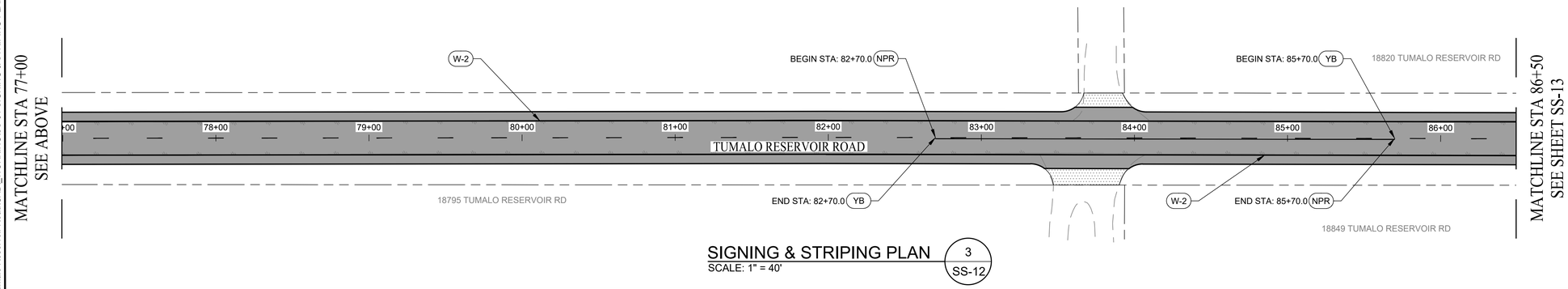


SIGNING & STRIPING PLAN (1 / SS-12)
SCALE: 1" = 40'



SIGNING & STRIPING PLAN (2 / SS-12)
SCALE: 1" = 40'



SIGNING & STRIPING PLAN (3 / SS-12)
SCALE: 1" = 40'

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- YB — INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR — INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL — INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.

SIGNING KEY NOTES

- N M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGNING & STRIPING PLAN
STA 58+00 TO STA 86+50

DRAWING NO. 106 OF 117
SHEET NO. SS-12

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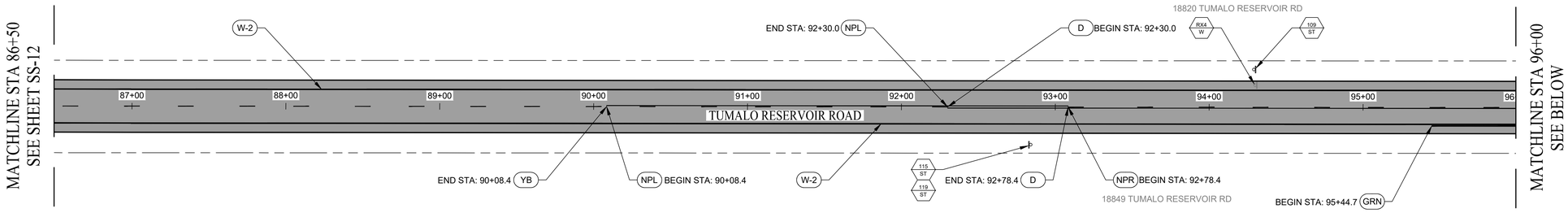
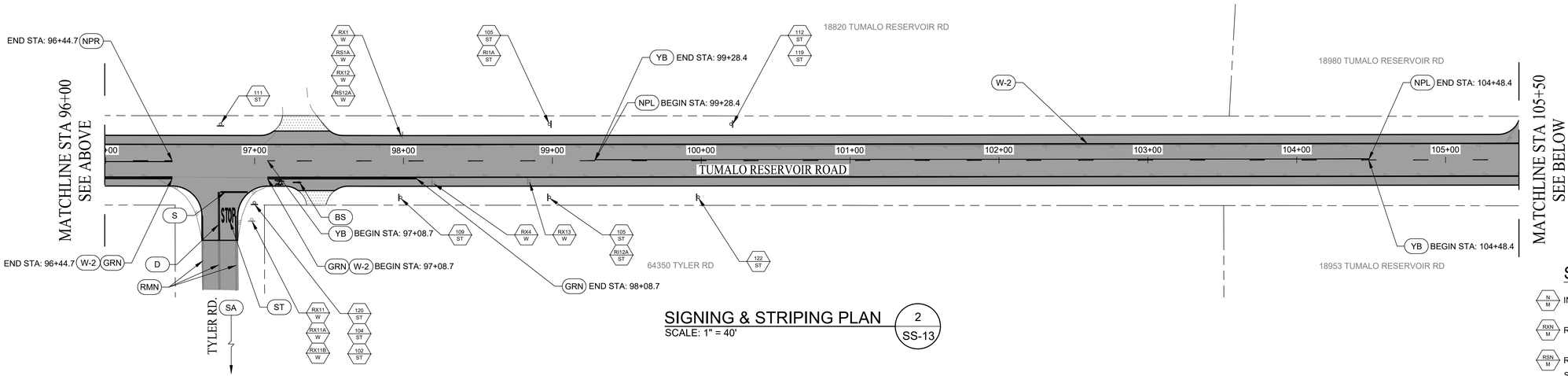


SIGNING & STRIPING PLAN
SCALE: 1" = 40'

1
SS-13

STRIPING LEGEND

- W-2 INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- D INSTALL DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- YB INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN INSTALL 8" WIDE GREEN STRIPE.
- RMN EXISTING STRIPING TO REMAIN.
- S INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- ST INSTALL 'STOP' LEGEND PER DETAIL 4 ON SHEET C-07.
- SA INSTALL 'STOP AHEAD' LEGEND PER DETAIL 4 ON SHEET C-07 ADJACENT TO 'STOP AHEAD' (W3-1) SIGN.
- BS INSTALL BIKE LANE STANDARD STENCIL PER ODOT STANDARD DRAWING TM503.

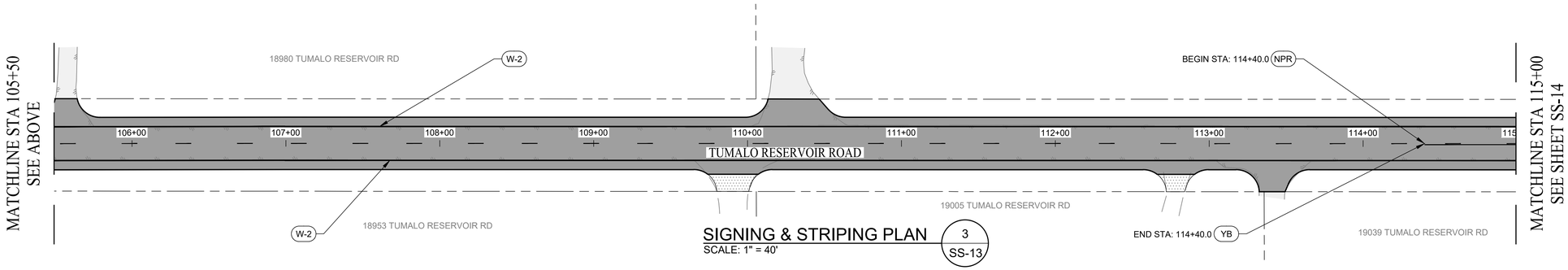


SIGNING & STRIPING PLAN
SCALE: 1" = 40'

2
SS-13

SIGNING KEY NOTES

- N M INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).
- RSN M REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE EXISTING SIGN SUPPORT (M).
- RIN M REINSTALL EXISTING SIGN (N) ON NEW SIGN SUPPORT (M).



SIGNING & STRIPING PLAN
SCALE: 1" = 40'

3
SS-13

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGNING & STRIPING PLAN
STA 86+50 TO STA 115+00

DRAWING NO. 107 OF 117
SHEET NO. SS-13

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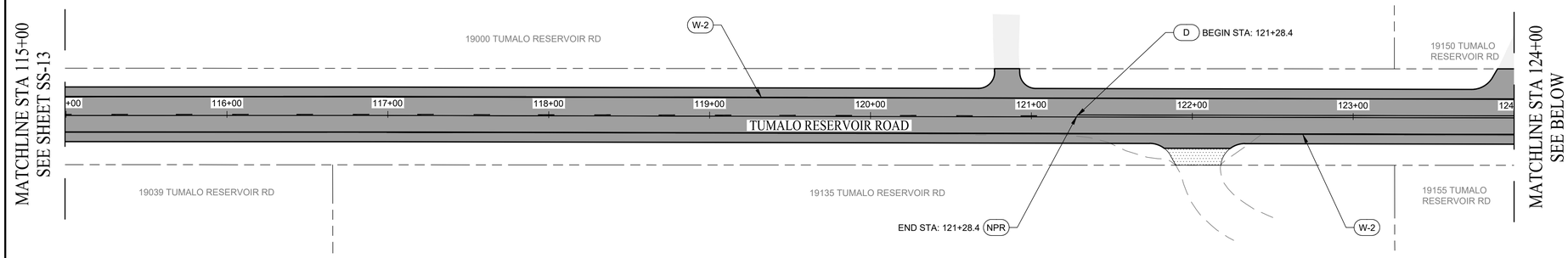


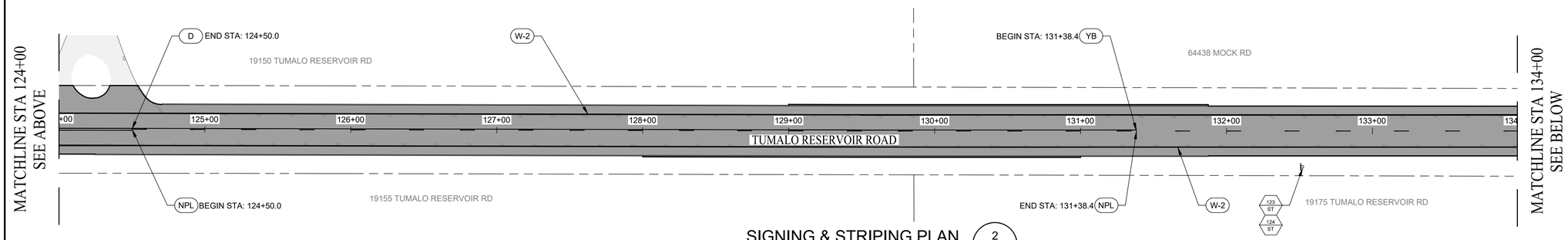
SIGNING & STRIPING PLAN

SCALE: 1" = 40'

1 / SS-14

STRIPING LEGEND

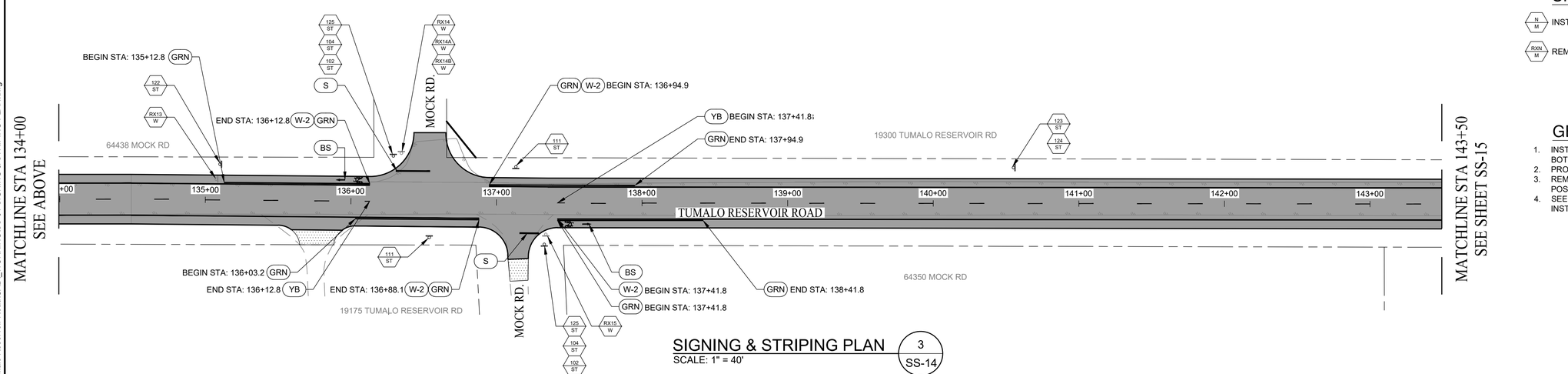
- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- D — INSTALL DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- YB — INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR — INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL — INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- S — INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER DOOT STANDARD DRAWING TM503.



SIGNING & STRIPING PLAN

SCALE: 1" = 40'

2 / SS-14



SIGNING & STRIPING PLAN

SCALE: 1" = 40'

3 / SS-14

SIGNING KEY NOTES

- N M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80

SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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0" 1"
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGNING & STRIPING PLAN
STA 115+00 TO STA 143+50

DRAWING NO. 108 OF 117

SHEET NO. SS-14

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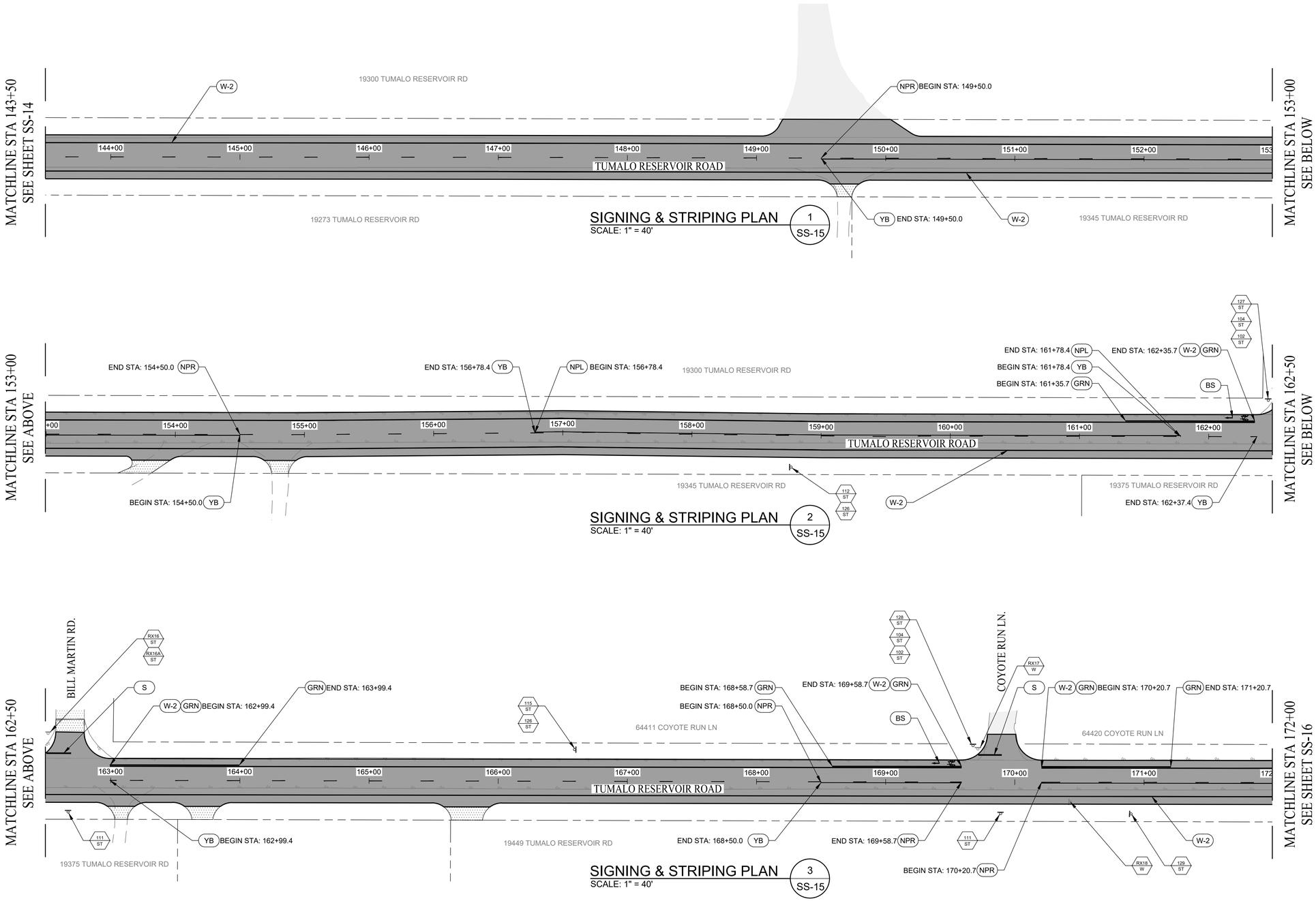

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- YB — INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR — INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL — INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- S — INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER DOOT STANDARD DRAWING TM503.

SIGNING KEY NOTES

- N / M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN / M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80

SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
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NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DATE: AUGUST 2025
PROJECT NO: 12602.002.01

DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGNING & STRIPING PLAN
STA 143+50 TO STA 172+00

DRAWING NO. 109 OF 117
SHEET NO. SS-15

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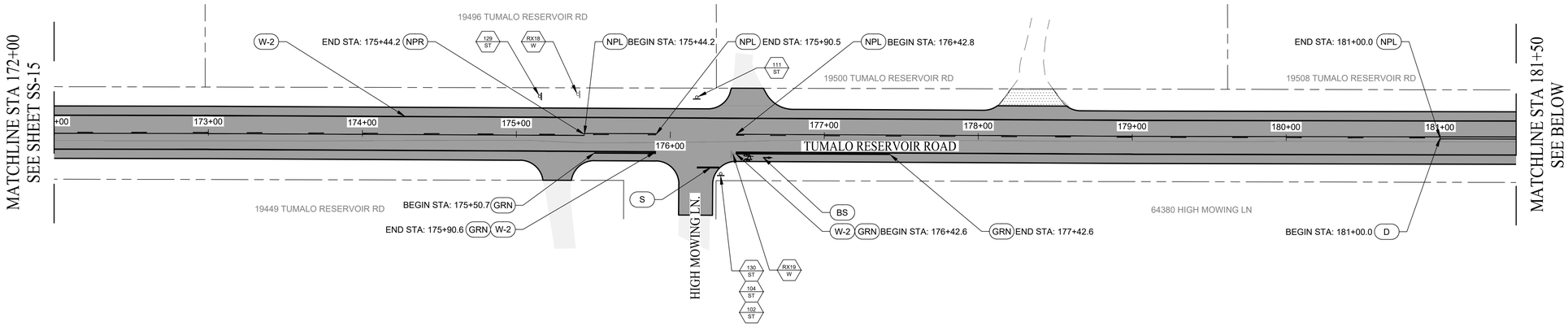


SIGNING & STRIPING PLAN

SCALE: 1" = 40'

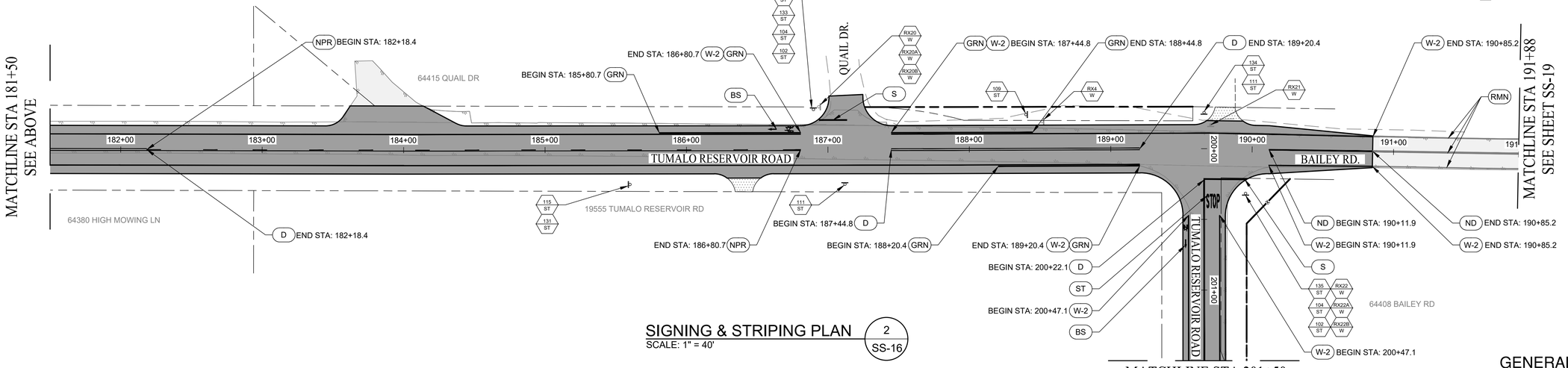
1 / SS-16

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- D — INSTALL DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- ND — INSTALL NARROW DOUBLE NO-PASS TWO 4" YELLOW LINES.
- YB — INSTALL 4" YELLOW BROKEN LINE PER ODOT STANDARD DRAWING TM500.
- NPR — INSTALL NO-PASS RIGHT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- NPL — INSTALL NO-PASS LEFT 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- RMN — EXISTING STRIPING TO REMAIN.
- S — INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- ST — INSTALL 'STOP' LEGEND PER DETAIL 4 ON SHEET C-07.
- SA — INSTALL 'STOP AHEAD' LEGEND PER DETAIL 4 ON SHEET C-07 ADJACENT TO 'STOP AHEAD' (W3-1) SIGN.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER DOOT STANDARD DRAWING TM503.

SIGNING KEY NOTES

- N / M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN / M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).



SIGNING & STRIPING PLAN

SCALE: 1" = 40'

2 / SS-16

MATCHLINE STA 201+50
SEE SHEET SS-17

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

N

40 0 40 80

SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY
ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

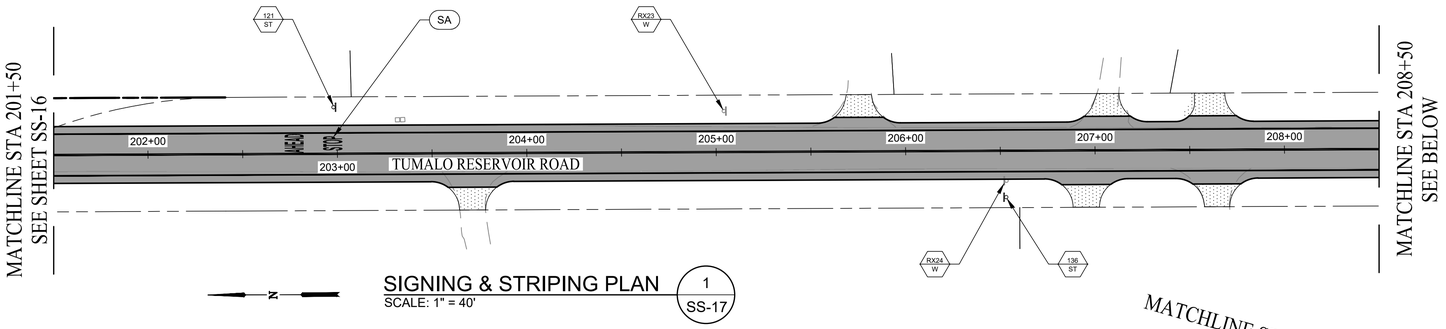
DATE: AUGUST 2025
PROJECT NO: 12602.002.01
DESIGNED BY: AVF
DRAWN BY: SCL
CHECKED BY: RDV
SCALE: AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

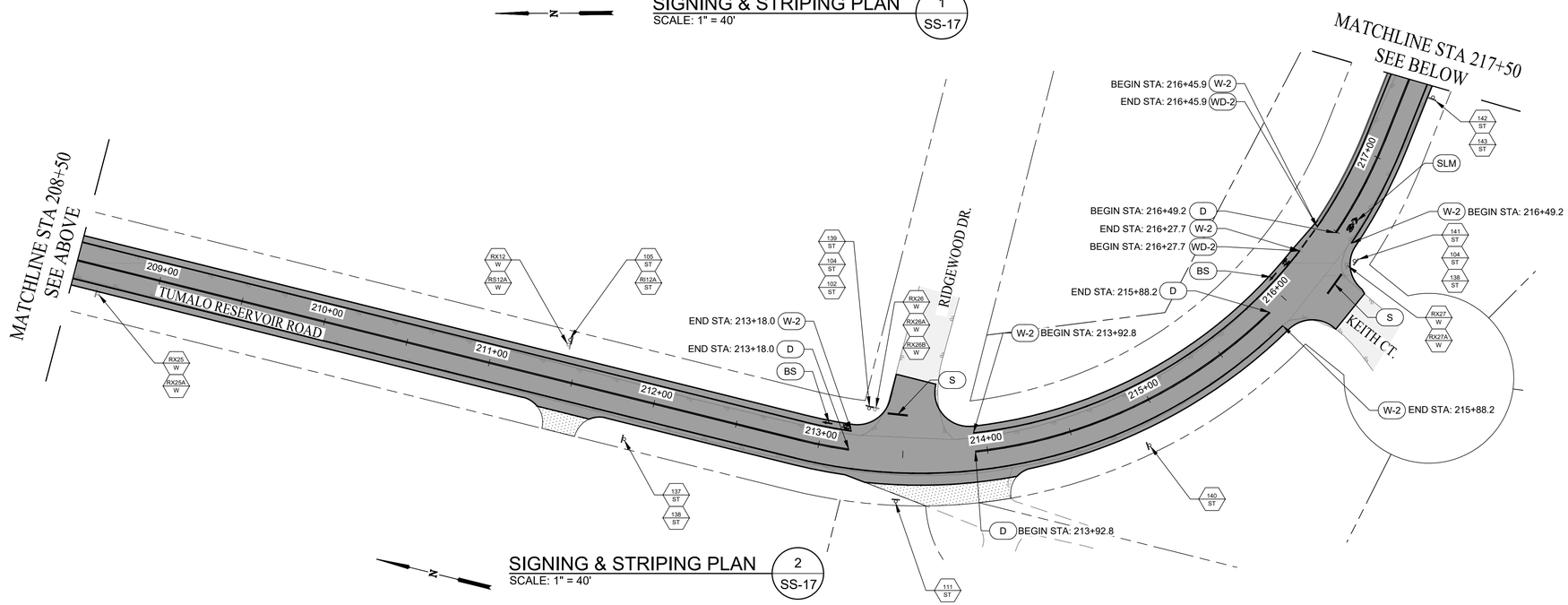
SIGNING & STRIPING PLAN
STA 172+00 TO STA 201+50

DRAWING NO. 110 OF 117
SHEET NO. SS-16

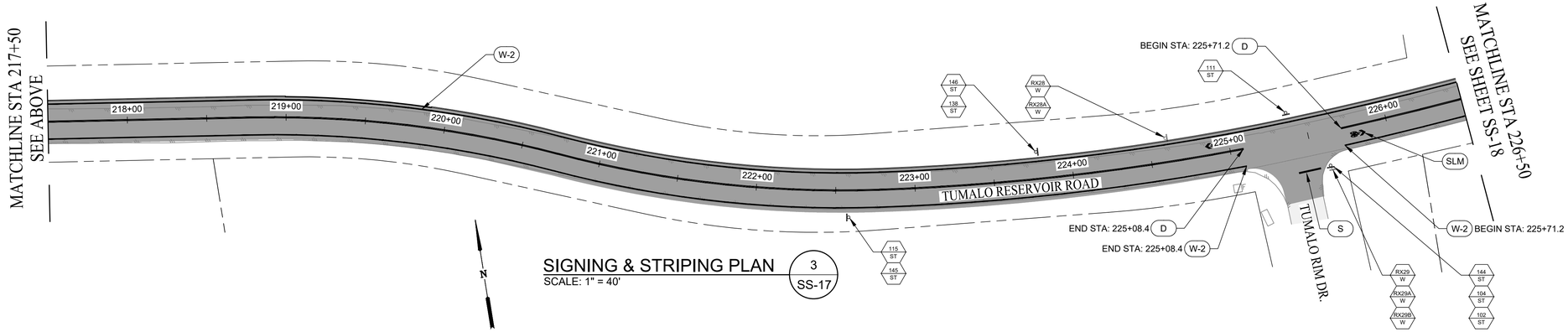
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\SS-01 SIGNING & STRIPING PLAN.dwg



SIGNING & STRIPING PLAN
SCALE: 1" = 40'
1 / SS-17



SIGNING & STRIPING PLAN
SCALE: 1" = 40'
2 / SS-17



SIGNING & STRIPING PLAN
SCALE: 1" = 40'
3 / SS-17

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- D — INSTALL DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- S — INSTALL 1' WIDE STOP BAR PER ODOT STANDARD DRAWING TM503.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER ODOT STANDARD DRAWING TM503.
- SA — INSTALL 'STOP AHEAD' LEGEND PER DETAIL 4 ON SHEET C-07 ADJACENT TO 'STOP AHEAD' (W3-1) SIGN.
- WD-2 — INSTALL 8" WHITE DOTTED LINE PER ODOT STANDARD DRAWING TM500.
- SLM — INSTALL "SHARED LANE MARKING" PER ODOT STANDARD DRAWING TM503.

SIGNING KEY NOTES

- N M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).
- RSN M — REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE EXISTING SIGN SUPPORT (M).
- RIN M — REINSTALL EXISTING SIGN (N) ON NEW SIGN SUPPORT (M).

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

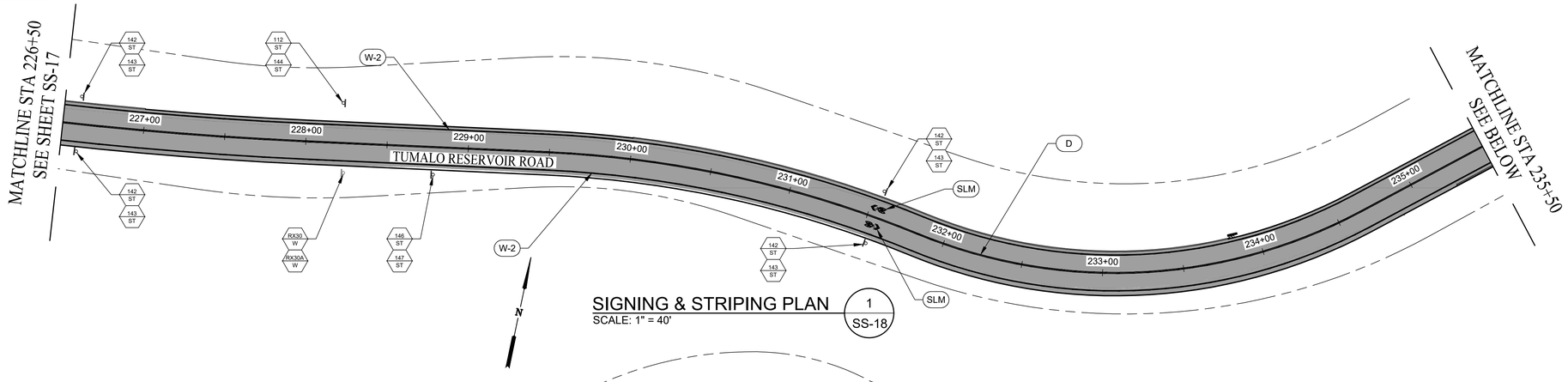
DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

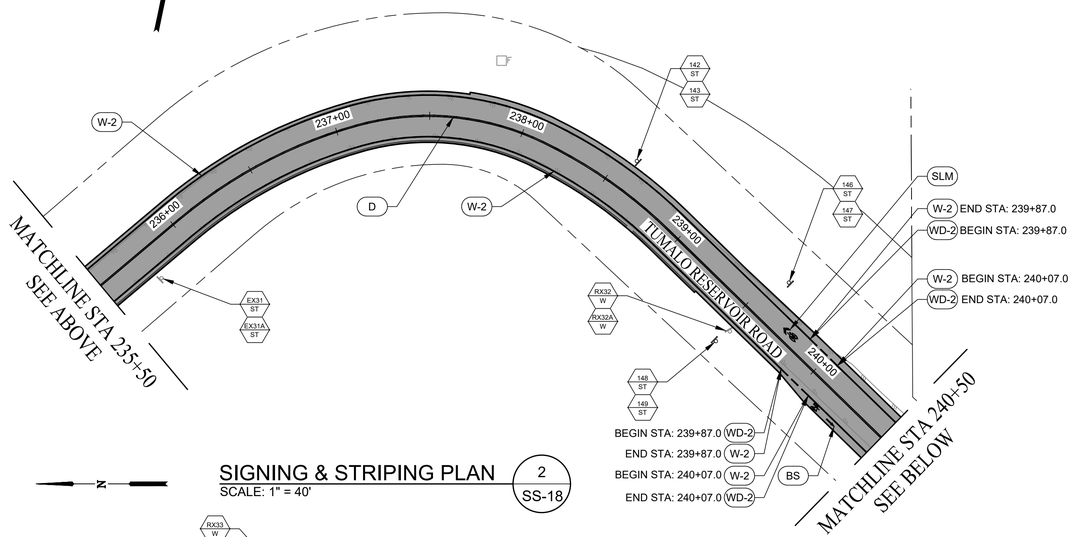
SIGNING & STRIPING PLAN
STA 200+00 TO STA 226+50

DRAWING NO. 111 OF 117
SHEET NO. SS-17

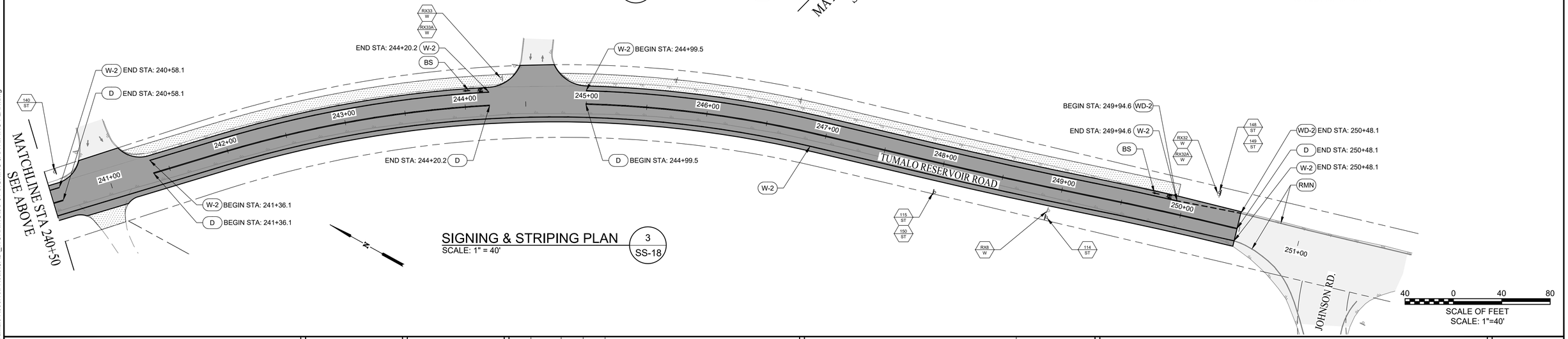
X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\SS-01 SIGNING & STRIPING PLAN.dwg



SIGNING & STRIPING PLAN 1
SCALE: 1" = 40'
SS-18



SIGNING & STRIPING PLAN 2
SCALE: 1" = 40'
SS-18



SIGNING & STRIPING PLAN 3
SCALE: 1" = 40'
SS-18

40 0 40 80
SCALE OF FEET
SCALE: 1"=40'

STRIPING LEGEND

- W-2 — INSTALL 8" WHITE LINE PER ODOT STANDARD DRAWING TM500.
- WD-2 — INSTALL 8" WHITE DOTTED LINE PER ODOT STAND DRAWING TM500.
- D — INSTALL DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STANDARD DRAWING TM500.
- GRN — INSTALL 8" WIDE GREEN STRIPE.
- RMN — EXISTING STRIPING TO REMAIN.
- BS — INSTALL BIKE LANE STANDARD STENCIL PER ODOT STANDARD DRAWING TM503.
- SLM — INSTALL "SHARED LANE MARKING" PER ODOT STANDARD DRAWING TM503.

SIGNING KEY NOTES

- N M — INSTALL NEW SIGN (N) ON NEW SIGN SUPPORT (M).
- RXN M — REMOVE EXISTING SIGN (N) AND EXISTING SIGN SUPPORT (M).
- RSN M — REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE EXISTING SIGN SUPPORT (M).
- RIN M — REINSTALL EXISTING SIGN (N) ON NEW SIGN SUPPORT (M).
- EXN M — MAINTAIN AND PROTECT EXISTING SIGN (N) AND (M) SIGN SUPPORT.

GENERAL NOTES

1. INSTALL TYPE 1 TRAFFIC DELINEATORS PER ODOT STD. DWG. TM570 ON BOTH SIDES OF ROAD.
2. PROTECT EXISTING PAVEMENT MARKINGS DESIGNATED TO REMAIN.
3. REMOVE AND SALVAGE EXISTING MILE POST MARKERS. REINSTALL MILE POST MARKERS PER ODOT STANDARD DRAWINGS TM221 AND TM222.
4. SEE SIGN AND POST DATA TABLE ON SHEET SS-08 FOR SIGN INSTALLATION INFORMATION.

DESCHUTES COUNTY ROAD DEPARTMENT

REGISTERED PROFESSIONAL ENGINEER
87553PE
OREGON
NOV. 13, 2018
ALEC VEIKKO FRANSEN
RENEWS: DEC 31, 2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

CENTURY WEST ENGINEERING
BEND OFFICE
1020 SW EMKAY DRIVE, #100
BEND, OR 97702
541.322.8962
541.382.2423 FAX

DESIGNED BY:	DRAWN BY:	CHECKED BY:
AVF	SCL	RDV

DATE:	PROJECT NO:	SCALE:
AUGUST 2025	12602.002.01	AS NOTED

DESCHUTES COUNTY
TUMALO RESERVOIR ROAD IMPROVEMENT

SIGNING & STRIPING PLAN
STA 226+50 TO STA 251+00

DRAWING NO. 112 OF 117

SHEET NO. SS-18

X:\Projects\Deschutes County\Tumalo Reservoir Road\CAD_WORKING\SS-01 SIGNING & STRIPING PLAN.dwg

HIGH-RESOLUTION AERIAL IMAGERY CAPTURED BY DESCHUTES COUNTY, OCT. 2024

NOTES

INSTALL ALL SIGNS ON SLIP BASE SIGN SUPPORT PER TM688

LATERAL OFFSET 10FT FROM EDGE OF TRAVELLED WAY TO EDGE OF SIGN

DESCHUTES COUNTY ROAD DEPARTMENT

LEGEND

SIGN ASSEMBLY

SHARED LANE LEGEND

0 12.5 25 50 Feet

DESCHUTES COUNTY
TUMALO RESERVOIR RD IMPROVEMENT

BAILEY RD IMPROVEMENTS
STA "B" 0+00 TO "B" 11+00

DRAWING NO. 113 OF 117

SHEET NO. SS-19

REGISTERED PROFESSIONAL ENGINEER
83448PE
Digitally signed by Cody Smith
Date: 2025.11.25 14:24:06-08'00'
OREGON
NOVEMBER 10, 2009
CODY C. SMITH
RENEWS: JUNE 30, 2026

HIGH-RESOLUTION AERIAL IMAGERY CAPTURED BY DESCHUTES COUNTY, OCT. 2024

DESCHUTES COUNTY ROAD DEPARTMENT

LEGEND

0 12.5 25 50 Feet

DESCHUTES COUNTY
TUMALO RESERVOIR RD IMPROVEMENT

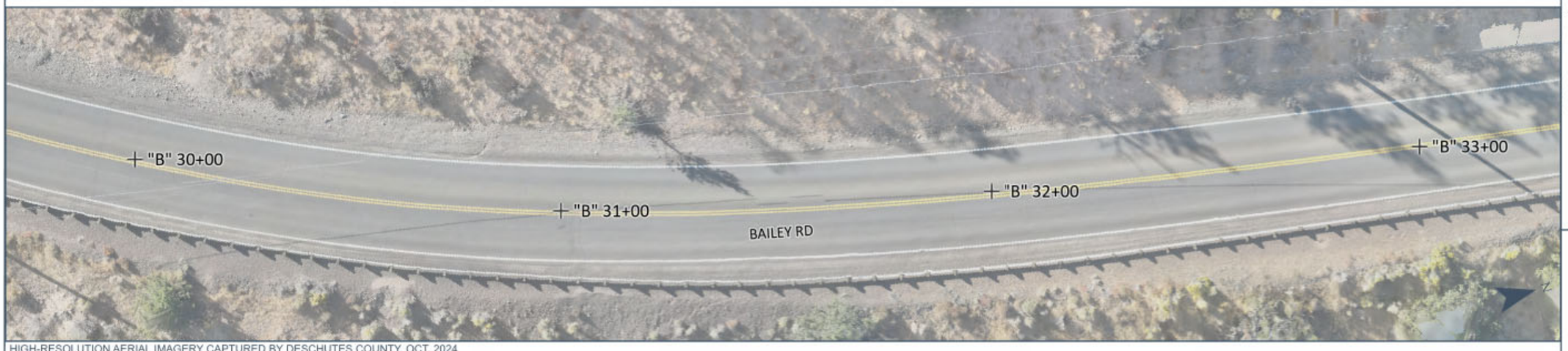
DRAWING NO. 114 OF 117

BAILEY RD IMPROVEMENTS
STA "B" 11+00 TO "B" 22+00

SHEET NO. SS-20

NOTES

REGISTERED PROFESSIONAL ENGINEER
83448PE
Digitally signed by Cody Smith
Date: 2025.11.25 14:24:20-08'00'
OREGON
NOVEMBER 10, 2009
CODY C. SMITH
RENEWS: JUNE 30, 2026



HIGH-RESOLUTION AERIAL IMAGERY CAPTURED BY DESCHUTES COUNTY, OCT. 2024

DESCHUTES COUNTY ROAD DEPARTMENT

LEGEND

SIGN ASSEMBLY

SHARED LANE LEGEND

0 12.5 25 50 Feet

DESCHUTES COUNTY
TUMALO RESERVOIR RD IMPROVEMENT

BAILEY RD IMPROVEMENTS
STA "B" 22+00 TO "B" 33+00

DRAWING NO.
115 OF 117

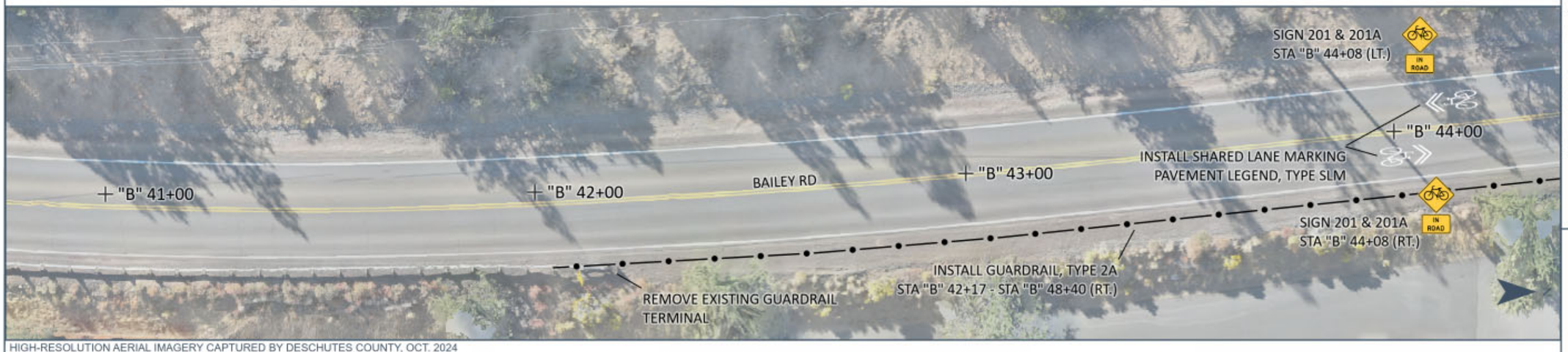
SHEET NO.
SS-21

NOTES

INSTALL ALL SIGNS ON SLIP BASE SIGN SUPPORT PER TM688

LATERAL OFFSET 10FT FROM EDGE OF TRAVELLED WAY TO EDGE OF SIGN

REGISTERED PROFESSIONAL ENGINEER
83448PE
Digitally signed by Cody Smith
Date: 2025.11.25 14:24:33-08'00'
OREGON
NOVEMBER 10, 2009
CODY C. SMITH
RENEWS: JUNE 30, 2026



NOTES

INSTALL ALL SIGNS ON SLIP BASE SIGN SUPPORT PER TM688

LATERAL OFFSET 10FT FROM EDGE OF TRAVELLED WAY TO EDGE OF SIGN

INSTALL TYPE 2A GUARDRAIL (29" RAIL HEIGHT) ACCORDING TO RD400

HIGH-RESOLUTION AERIAL IMAGERY CAPTURED BY DESCHUTES COUNTY, OCT. 2024

DESCHUTES COUNTY ROAD DEPARTMENT

LEGEND

SIGN ASSEMBLY

GUARDRAIL

SHARED LANE LEGEND

0 12.5 25 50 Feet

DESCHUTES COUNTY
TUMALO RESERVOIR RD IMPROVEMENT

DRAWING NO. 116 OF 117

BAILEY RD IMPROVEMENTS
STA "B" 33+00 TO "B" 44+00

SHEET NO. SS-22

REGISTERED PROFESSIONAL ENGINEER
83448PE
Digitally signed by Cody Smith
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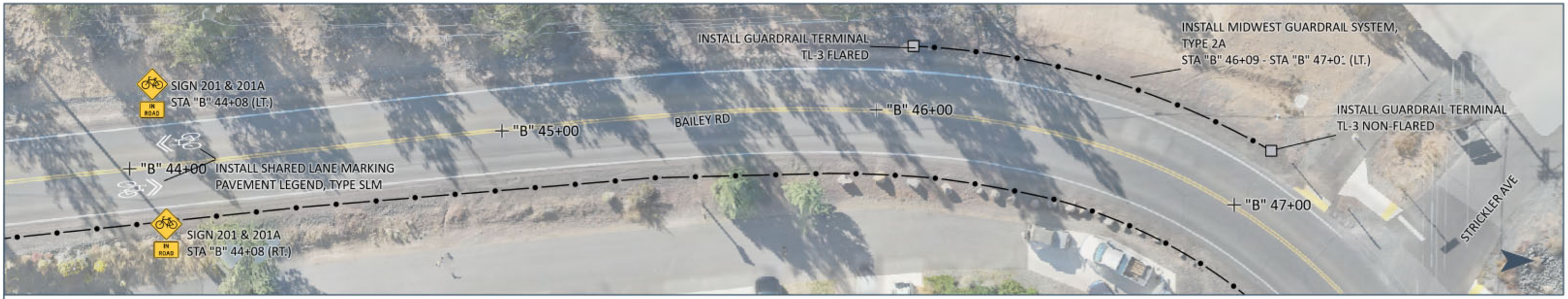
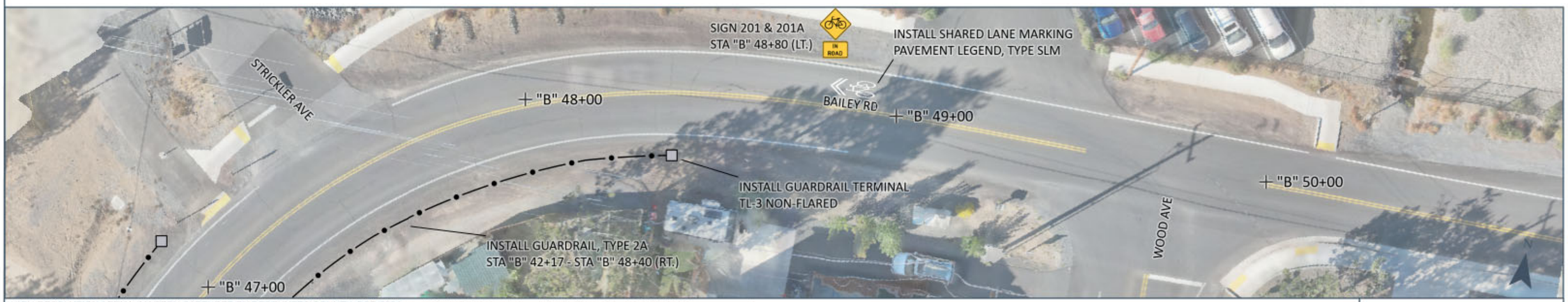
OREGON
NOVEMBER 10, 2009
CODY C. SMITH
RENEWS: JUNE 30, 2026





HIGH-RESOLUTION AERIAL IMAGERY CAPTURED BY DESCHUTES COUNTY, OCT. 2024

SIGN NO. 142
W11-1

IN ROAD

SIGN NO. 143
W16-1P

SHARED LANE MARKING, TYPE SLM
SEE OREGON STD. DWG. TM503

SIGN NO.	SIGN LOCATION	DIMENSIONS		COLOR		FOOTING	REMARKS
		WIDTH, INCHES	HEIGHT, INCHES	BACK-GROUND	LEGEND	OFFSET, FEET	
142	"B" 1+12 RT.	30	30	Y	BK	11-1/4	
143	"B" 1+12 RT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 9+18 LT.	30	30	Y	BK	11-1/4	
143	"B" 9+18 LT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 9+18 RT.	30	30	Y	BK	11-1/4	
143	"B" 9+18 RT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 23+01 LT.	30	30	Y	BK	11-1/4	
143	"B" 23+01 LT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 23+01 RT.	30	30	Y	BK	11-1/4	
143	"B" 23+01 RT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 33+52 LT.	30	30	Y	BK	11-1/4	
143	"B" 33+52 LT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 33+52 RT.	30	30	Y	BK	11-1/4	
143	"B" 33+52 RT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 44+08 LT.	30	30	Y	BK	11-1/4	
143	"B" 44+08 LT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 44+08 RT.	30	30	Y	BK	11-1/4	
143	"B" 44+08 RT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142
142	"B" 48+80 LT.	30	30	Y	BK	11-1/4	
143	"B" 48+80 LT.	18	12	Y	BK	-	MOUNT BELOW SIGN 142

SIGN NOTES:
1) OFFSET DISTANCE IS RELATIVE TO EDGE OF TRAVEL LANE
2) SIGN LEGEND TO BE NON-REFLECTIVE UNLESS OTHERWISE DIRECTED
3) ALL SIGN POSTS TO BE 2" PERFORATED STEEL SQUARE TUBE (PSST) UNLESS OTHERWISE DIRECTED

NOTES

INSTALL ALL SIGNS ON SLIP BASE SIGN SUPPORT PER TM688

LATERAL OFFSET 10FT FROM EDGE OF TRAVELLED WAY TO EDGE OF SIGN

INSTALL GUARDRAIL TERMINALS, TL-3, AT LOCATIONS SHOWN.

INSTALL TYPE 2A GUARDRAIL (29" RAIL HEIGHT) ACCORDING TO RD400

DESCHUTES COUNTY ROAD DEPARTMENT

LEGEND
SIGN ASSEMBLY
GUARDRAIL
GUARDRAIL TERMINAL
SHARED LANE LEGEND

0 12.5 25 50 Feet

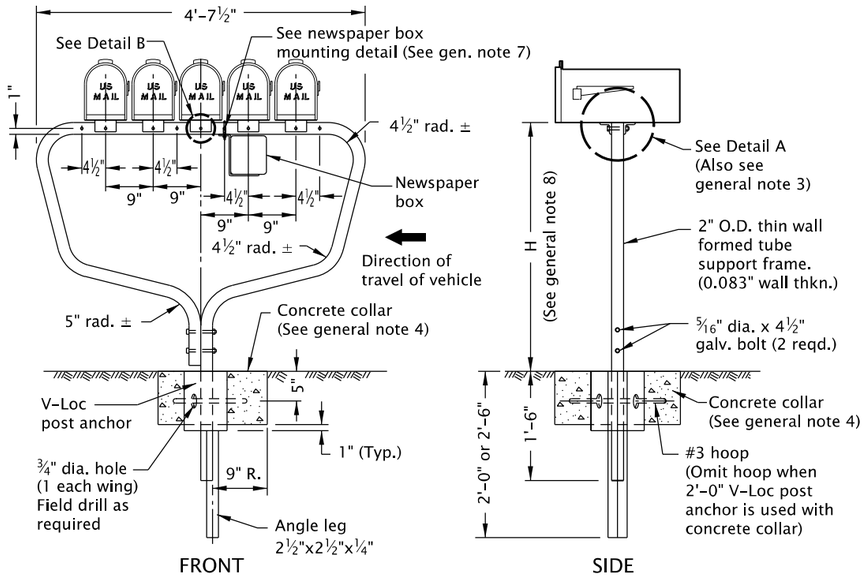
DESCHUTES COUNTY
TUMALO RESERVOIR RD IMPROVEMENT

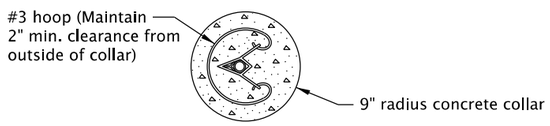
BAILEY RD IMPROVEMENTS
STA "B" 44+00 TO END

DRAWING NO.
117 OF 117

SHEET NO.
SS-23

REGISTERED PROFESSIONAL ENGINEER
83448PE
Digitally signed by Cody Smith
Date: 2025.11.25 14:25:00-08'00'
OREGON
NOVEMBER 10, 2009
CODY C. SMITH
RENEWS: JUNE 30, 2026

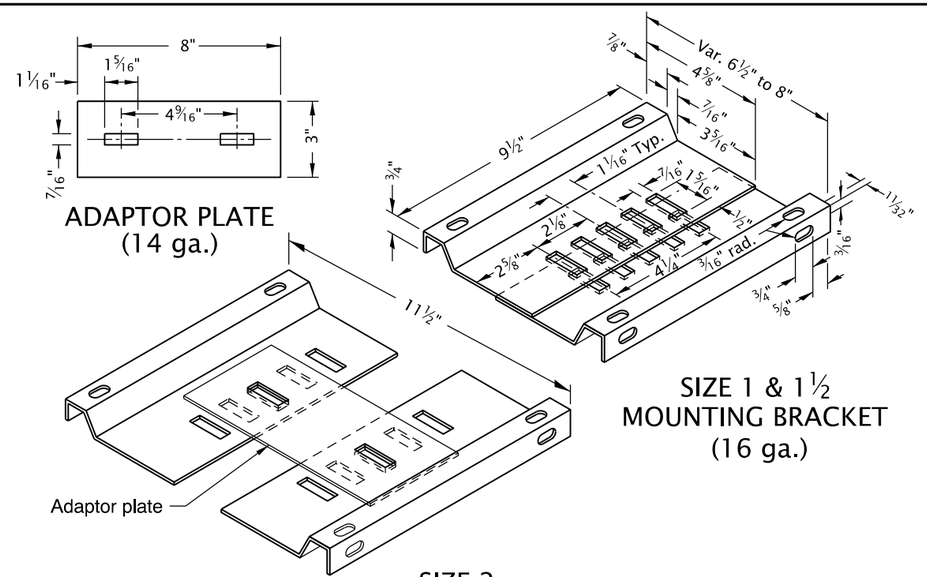




CONCRETE COLLAR
(See general note 4)

MULTIPLE SUPPORT

(Supports 5 standard (Sizes 1 & 1½) mailboxes or 4 large (Size 2) mailboxes)



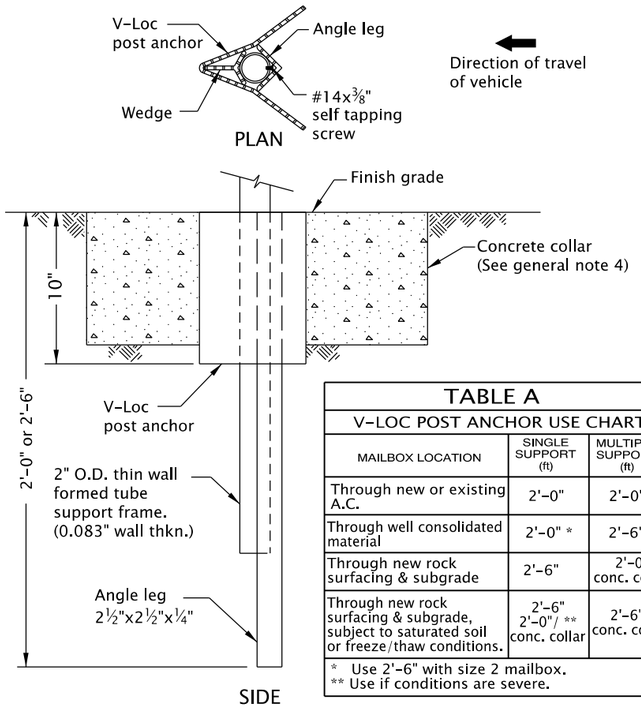


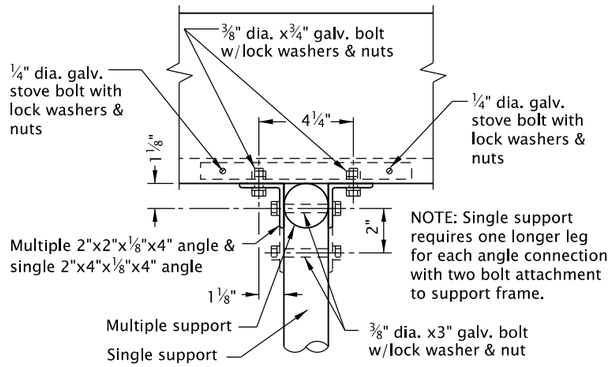
TABLE A

V-LOC POST ANCHOR USE CHART

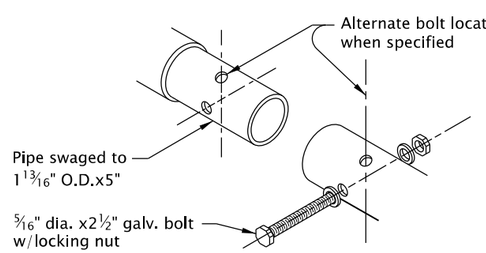
MAILBOX LOCATION	SINGLE SUPPORT (ft)	MULTIPLE SUPPORT (ft)
Through new or existing A.C.	2'-0"	2'-0"
Through well consolidated material	2'-0" *	2'-6"
Through new rock surfacing & subgrade	2'-6"	2'-0" conc. collar
Through new rock surfacing & subgrade, subject to saturated soil or freeze/thaw conditions.	2'-6" 2'-0"/ ** conc. collar	2'-6"/ conc. collar

* Use 2'-6" with size 2 mailbox.
** Use if conditions are severe.

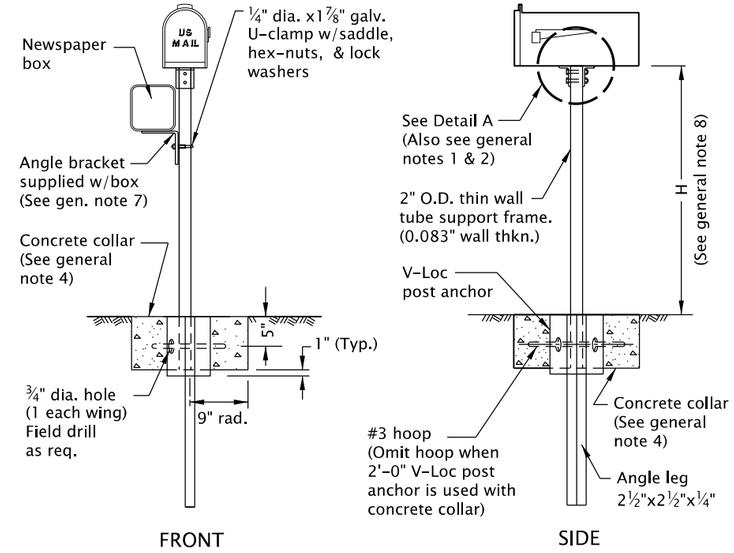
POST MOUNTING SOCKET



DETAIL A



DETAIL B



SINGLE SUPPORT

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Angle connections to be parallel to traffic flow for Size 2 mailbox mounted on single post.
2. All holes in the tube support frame are to be predrilled by the manufacturer.
3. Size 2 mailbox mounted on a multiple support requires 2 each ⅜" dia. x⅝" galv. bolts with lock washers and nuts to attach the adaptor plate to the mounting bracket. The unit will then require 4 angle connections to attach to the formed tube support frame. See Detail A.
4. Provide concrete collar when any of the following conditions exist:
   a) when required in Table A
   b) when required by project plans
   c) as directed by the Engineer
   Concrete collar, when required, to be poured in place after V-Loc post anchor has been installed, level and plumb. Do not excavate below bottom of V-Loc post anchor. Care shall be taken that no concrete is placed within anchor.
5. Other proprietary products available as listed in ODOT's QPL.
6. For mailbox installation locations, see Std. Dwg. RD101 and project plans.
7. For Newspaper Box Mounting Detail, see Std. Dwg. RD101.
8. Mounting height (H) shall be from 41″ Min. to 45″ Max. (42" nominal), measured from vehicle driving surface.
9. See project plans for detail not shown.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX SUPPORT

2024

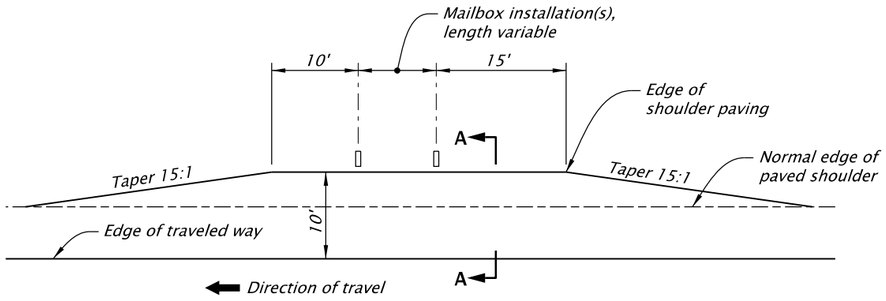
DATE	REVISION DESCRIPTION
12-2023	REVISED NOTES AND DETAILS

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **RD100**

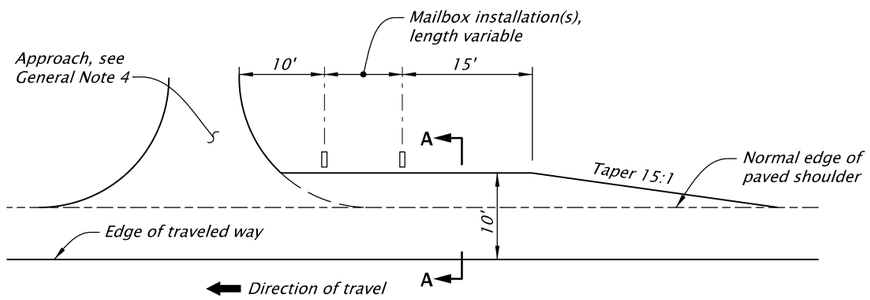
19-JAN-2024

RD100.dgn

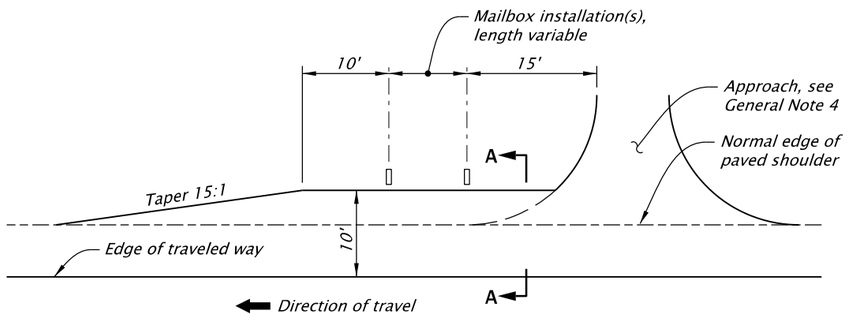
Effective Date: December 1, 2025 - May 31, 2026



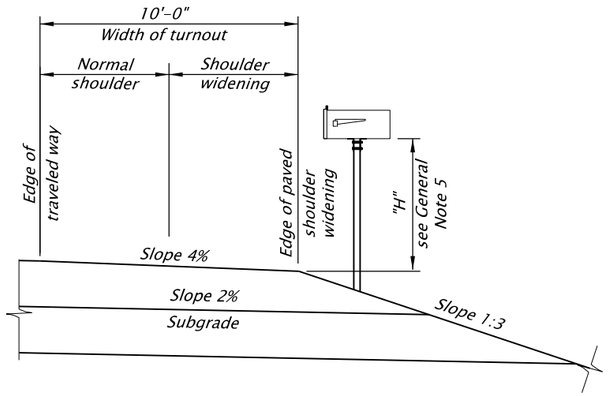
MAILBOX SERVICE TURNOUT



MAILBOX SERVICE TURNOUT BEFORE APPROACH

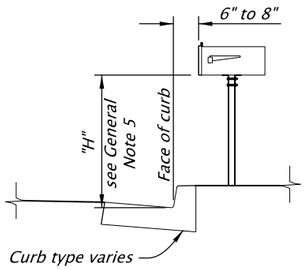


MAILBOX SERVICE TURNOUT AFTER APPROACH

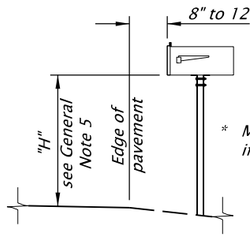


INSTALLATION AT MAILBOX TURNOUT

SECTION A-A

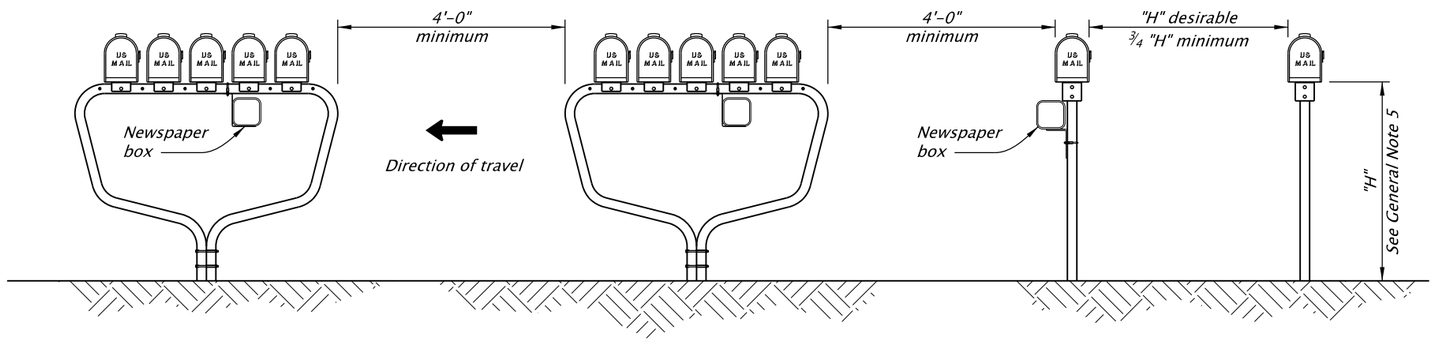


CURBED SECTION



NON-CURBED SECTION

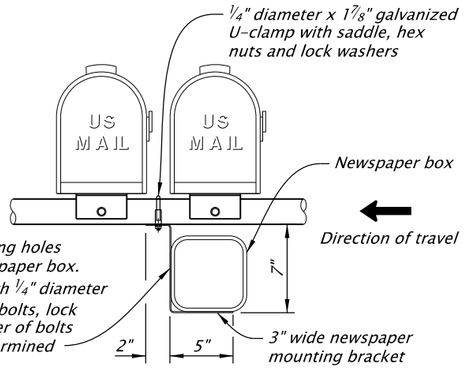
TYPICAL MAILBOX INSTALLATIONS



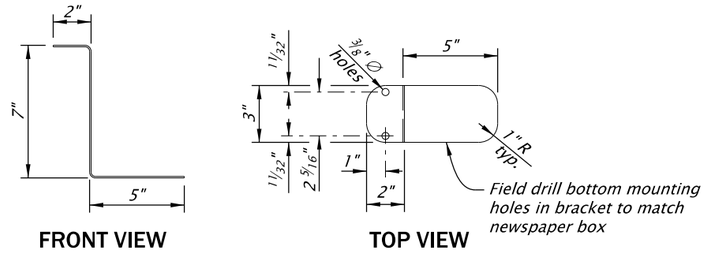
TYPICAL MAILBOX SUPPORT SPACING

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *All holes in the tube support frame are to be predrilled by the manufacturer.*
2. *Other proprietary products available as listed in ODOT's QPL.*
3. *For mailbox support details, see Std. Dwg. RD100.*
4. *For approach details, see Std. Dwg. RD715.*
5. *Mounting height ("H") shall be from 41 inches minimum to 45 inches maximum (42 inches nominal), measured from vehicle driving surface.*
6. *See project plans for details not shown.*



NEWSPAPER BOX MOUNTING DETAIL



NEWSPAPER BOX MOUNTING BRACKET

(14 ga.)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX INSTALLATION

2024

DATE	REVISION DESCRIPTION
01-2024	REVISED NOTES AND DETAILS, UPDATED DRAWING CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **RD101**

Effective Date: December 1, 2025 - May 31, 2026

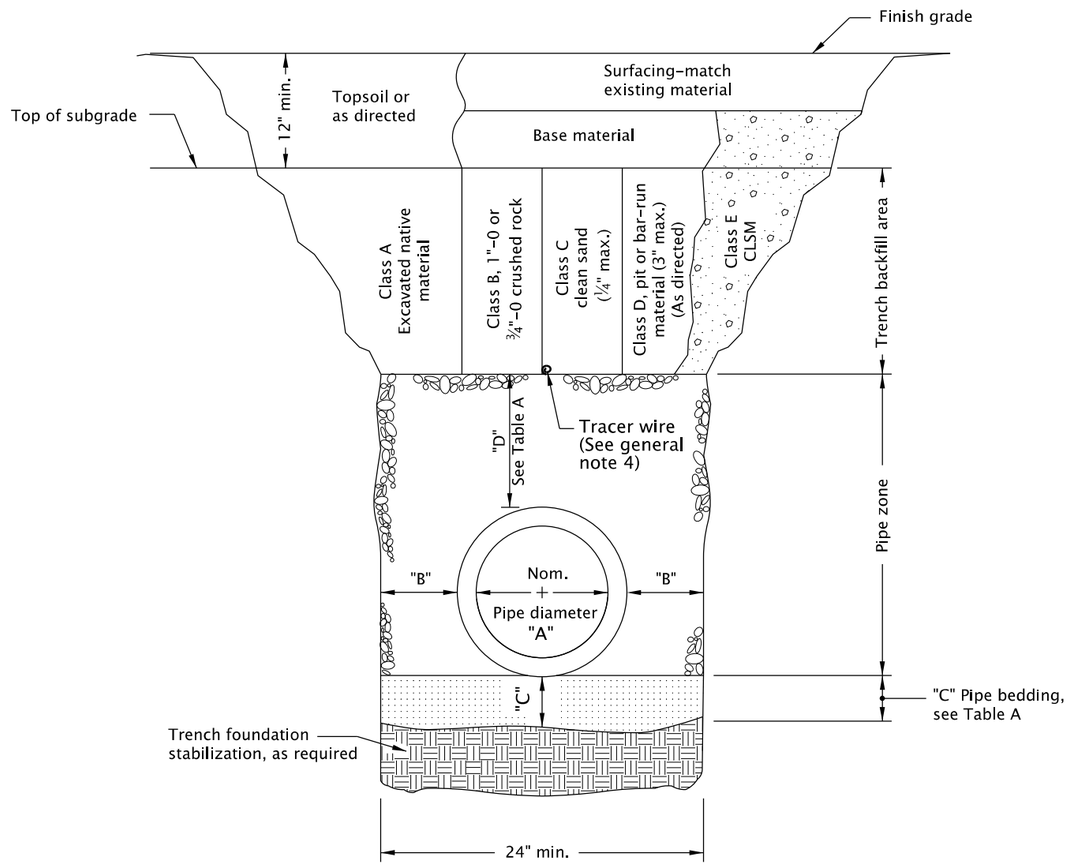
20-JUL-2020

RD300.dgn

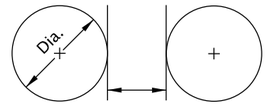
TABLE A

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

For pipes over 72" diameter, see general note 3.



MULTIPLE INSTALLATIONS



DIAMETER	MIN. SPACE BETWEEN PIPES
Up to 48"	24"
48" to 72"	One half (½) dia. of pipe

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Surfacing of paved areas shall comply with street cut Std. Dwg. RD302.
2. For pipe installation in embankment areas where the trench method will not be used and the pipe is ≥ 36" diameter, increase dimension "B" to nominal pipe diameter.
3. Pipes over 72" diameter are structures, and are not applicable to this drawing.
4. See Std. Dwg. RD336 for tracer wire details (When required).

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

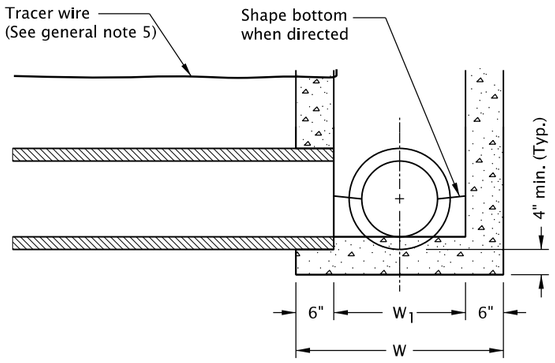
TRENCH BACKFILL, BEDDING, PIPE ZONE AND MULTIPLE INSTALLATIONS

2024

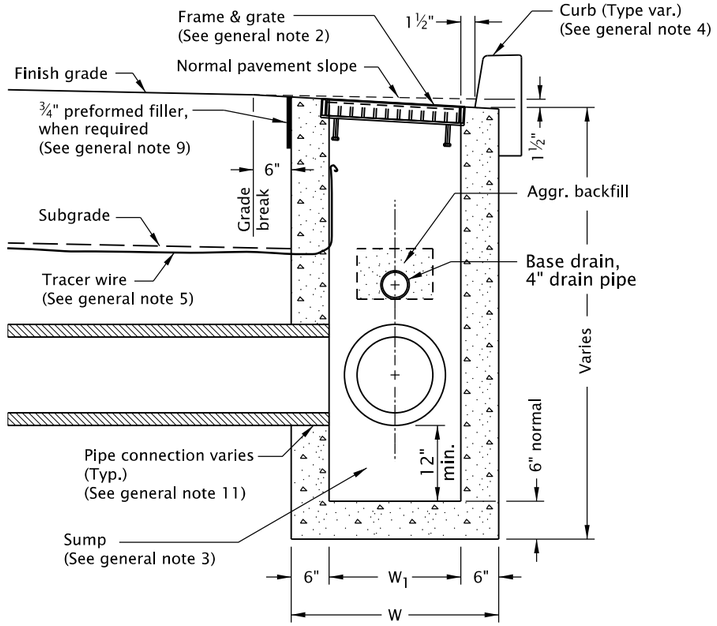
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2014 | **RD300**

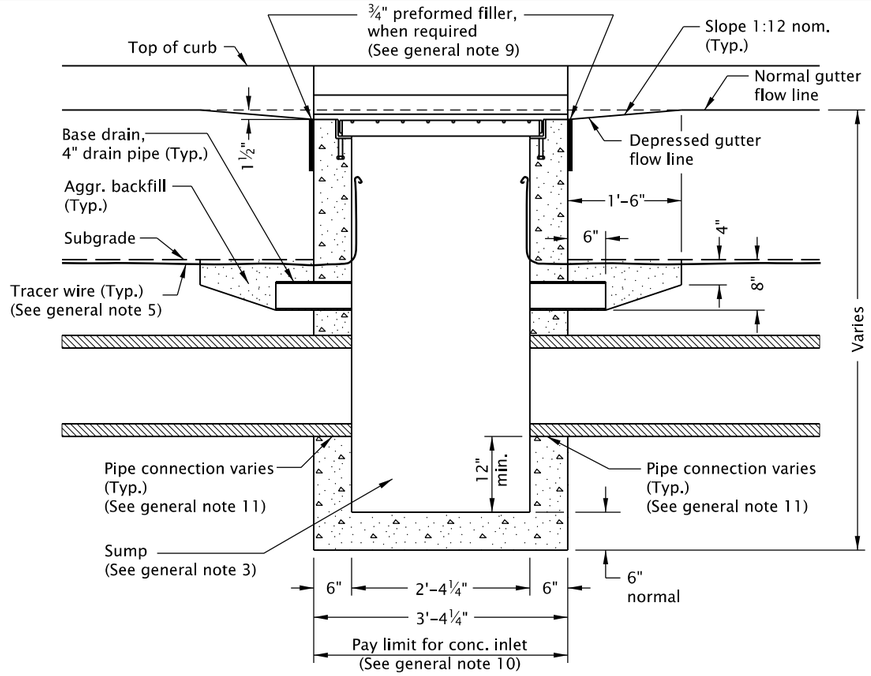
Effective Date: December 1, 2025 – May 31, 2026



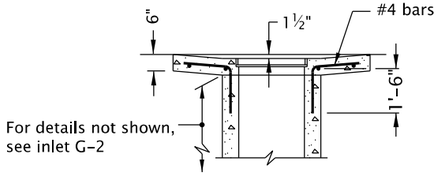
DETAIL A
WITHOUT SUMP



SECTION B - B



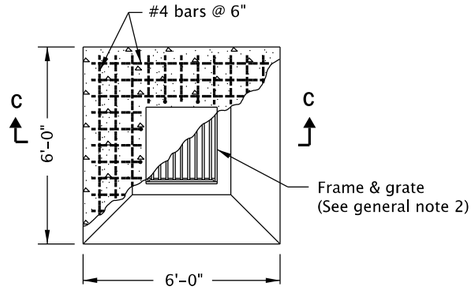
SECTION A - A



SECTION C-C

NOTE:

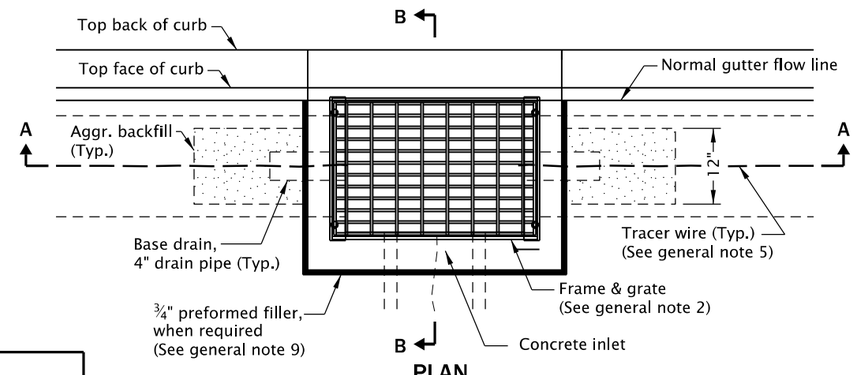
All reinforcement to be placed 2" clear of nearest face of concrete unless shown or noted otherwise



PLAN

TYPE G-2MA

TABLE A		
INLET TYPE	W	W_1
G-1	2'-8⅞"	1'-8⅞"
G-2, G-2M, G-2MA	3'-3⅜"	2'-3⅜"



PLAN

TYPE G-1, G-2, G-2M

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
2. Graphics show G-1 inlet with Type 2 grate. See Table A for inlet dimensions.
   Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
   For frame and grate details, see Std. Dwg. RD365.
3. Provide sump only where shown on plans, and allowed by jurisdiction. See Detail A for inlet without sump.
4. For curb details, see Std. Dwgs. RD700 & RD701.
5. See Std. Dwg. RD336 for tracer wire details, or approved alternate.
6. Max. pipe diameter varies with pipe material.
7. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
8. All concrete shall be commercial grade concrete.
9. ¾" preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete.
10. See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required.
11. See Std. Dwg. RD339 for pipe to structure connections.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CONCRETE INLETS
TYPE G-1, G-2, G-2M, & G-2MA

2024

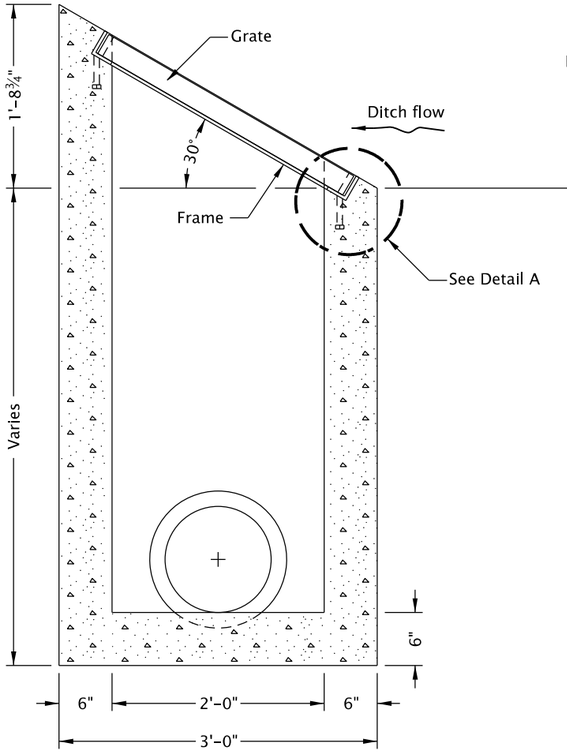
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUL-2015 | **RD364**

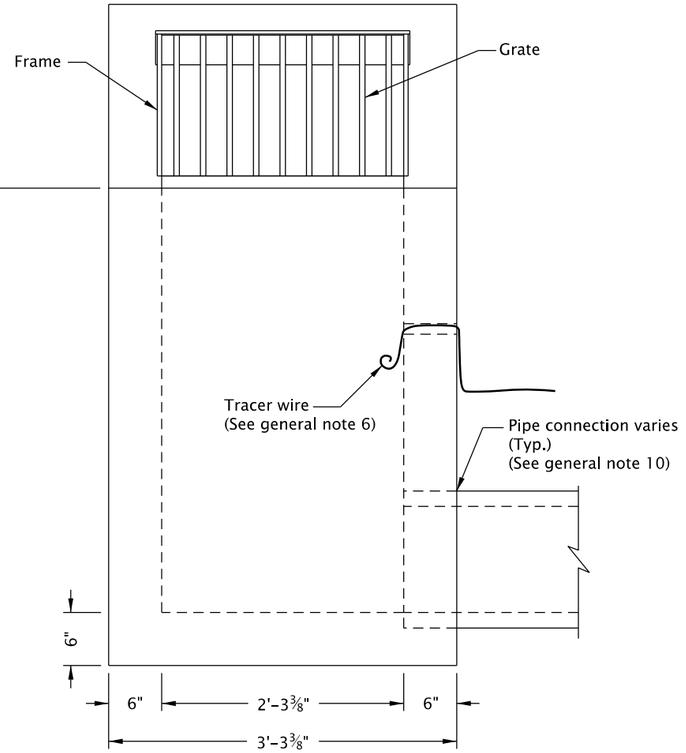
20-JUL-2020

RD364.dgn

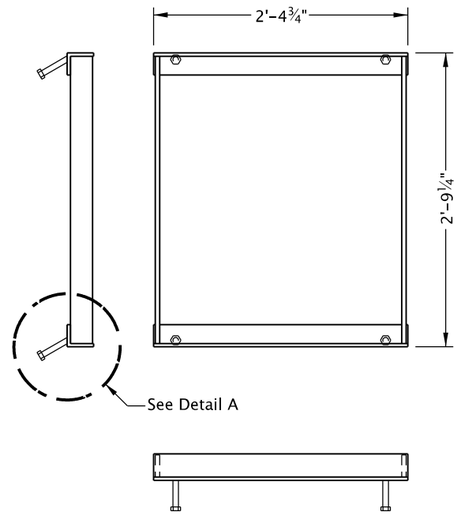
Effective Date: December 1, 2025 - May 31, 2026



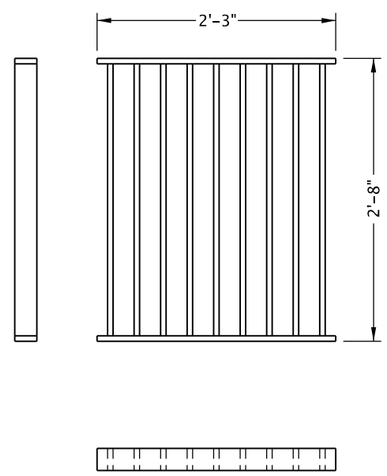
SECTION A - A



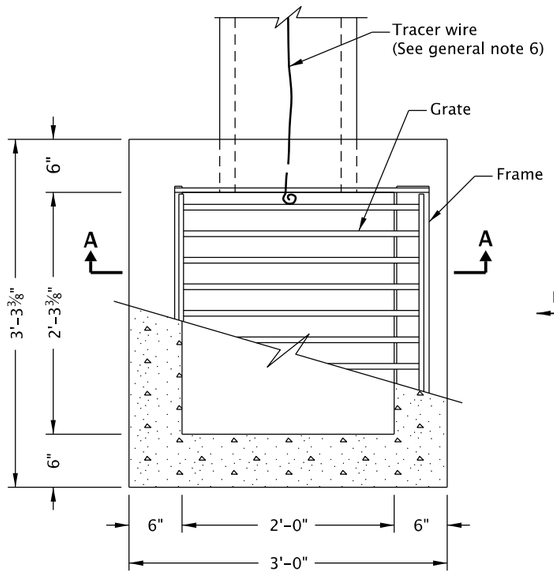
ELEVATION



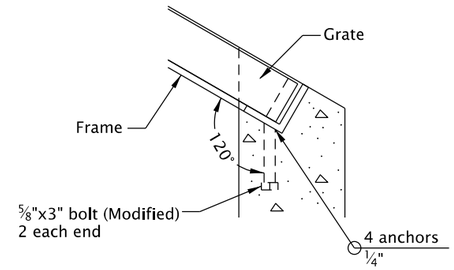
G-2 FRAME
(See general note 2)



G-2 GRATE (TYPE 1)
(See general note 2)



PLAN



DETAIL A
(Anchor bolt modication, see general note 2)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All concrete shall be commercial grade concrete.
2. For frame & grate details not shown, see Std. Dwg. RD365.
   Modify anchor bolt attachment to frame as shown in Detail A.
   G-2 (Type 2) grates may be used if approved by the engineer.
3. Catch basin, frame, and grates shall meet H20 loading.
4. Provide sump only when shown on plans, and allowed by jurisdiction. For sump details, see Std. Dwg. RD364.
5. ⅝" cross bars shall be flush with the grate surface and may be fillet welded, resistance welded or electroforged to bearing bars.
6. See Std. Dwg. RD336 for tracer wire details, or approved alternate.
7. Max. pipe diameter varies with pipe material.
8. Do not use in locations where inlet can be struck by an errant vehicle, or provide shielding of inlet.
9. Inlet base may be cast-in-place or precast. Where precast inlet base is used as an alternate, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided.
   All precast inlets shall conform to requirements of ASTM C913.
10. See Std. Dwg. RD339 for pipe to structure connections.
11. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

DITCH INLET TYPE D

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUL-2015 | **RD370**

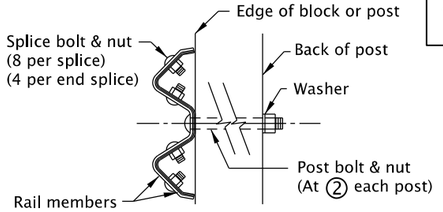
Effective Date: December 1, 2025 - May 31, 2026

20-JUL-2020

RD370.dgn

20-JUL-2020

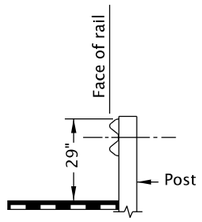
RD400.dgn



NOTES:
1. When required by the plans, post bolts to extend beyond the tightened nuts within limits of ¼" to ½".
2. When steel posts are used see "APPURTENANCES" for modified bolt detail, Std. Dwg. RD415.
3. All post bolt threads to be set after assembly for wrench removal only.

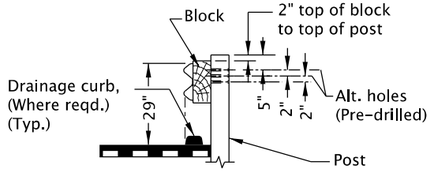
FITTINGS

NOTES:
1. Rail height measured from final paved surface at face of rail to top of rail (Typ. all types).
2. Final paved surfacing to extend to face of post.
3. Drainage curb alignment same as face of guardrail.

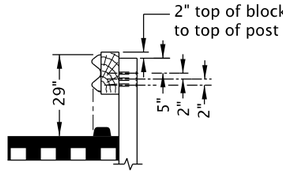


TYPE 1 GUARDRAIL

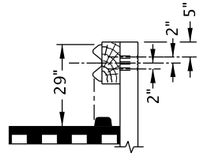
(Use restricted to non-roadway applications)



INITIAL INSTALLATION



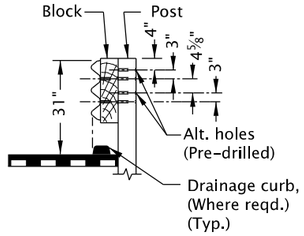
FUTURE ADJUSTMENT



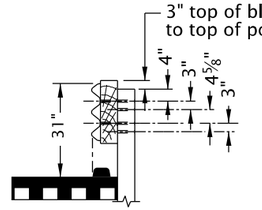
ALTERNATE INITIAL INSTALLATION OR FUTURE ADJUSTMENT

TYPES 2A & 3 GUARDRAIL

(See general note 2)
(For Type 3 use double thickness (2) rail elements)



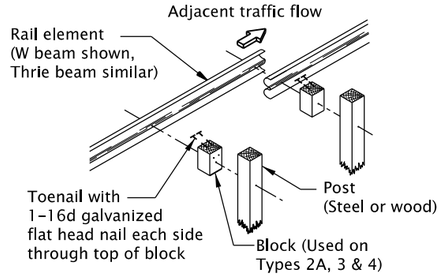
INITIAL INSTALLATION



RAIL AFTER OVERLAY

(Adjust as shown)

TYPE 4 GUARDRAIL



ASSEMBLY DETAILS (RELATION OF PARTS)

TABLE OF POST SPACING

TYPE	1	2A	3	4
SPACING	12'-6"	6'-3"	3'-1½"	6'-3"

NORMAL RAIL ELEMENT DATA

Type	Rail	Effective Lengths	Thkn. *
1, 2A, 3	W beam	6.25', 12.5', 25'	0.105" & 0.135"
4	Thrie beam	6.25', 12.5', 25'	0.105" & 0.135"

* Base metal thkn. nom. (Before galv.)

POST

NOTE:
Median barrier post spacing 6'-3".
See end construction for variations.

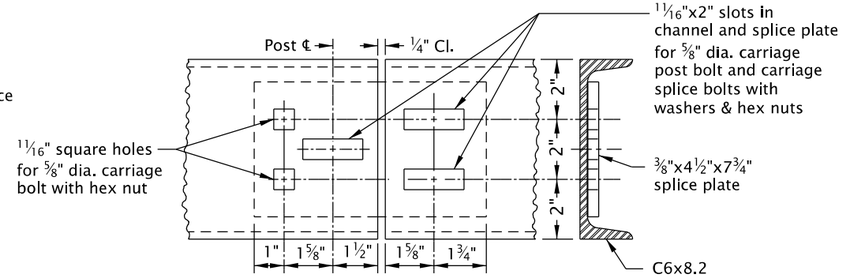
SECTION

(See "Guardrail" details and general note 2)

1. Post bolts to extend beyond the tightened nuts within limits of ¼" to ½".
2. When barrier separates to double post mounting:
   a) Use ⅝" dia. button or alternate bolt with washer and hex nut.
   b) Use ⅝" dia. carriage bolt with washer and nut.

METAL MEDIAN BARRIER

NOTE:
Clearance to be 1 9/16" at rail splice for bridge expansion joints.



CHANNEL RAIL AND SPLICE PLATE (METAL MEDIAN BARRIER)

ASSEMBLY DETAILS (RELATION OF PARTS)

NOTE:
THIS DRAWING IS RETAINED FOR MAINTENANCE PURPOSES.
DO NOT USE FOR NEW CONSTRUCTION.

PLAN

CORRUGATED RAIL

CHANNEL RAIL AND SPLICE PLATE

NOTES:
① Place 2 – 1/32" polytetrafluoroethylene (TFE) sheets between corrugated rail members. The sheets shall be 12½" x 1'-7".
② Adjust nuts to provide a sliding fit and set threads to prevent loosening.

METAL MEDIAN BARRIER/SHOULDER GUARDRAIL INSTALLATION AT BRIDGE DECK EXPANSION JOINT

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See appropriate guardrail standard drawing(s) for details not shown.
2. Use "Alternate Initial Installation", at bridge ends (See Std. Dwg. RD440), adjacent to P.C.C. pvmt. for temporary guardrail, to match existing guardrail, for Type 1 rail or as directed.
3. See Std. Dwg. RD701 for drainage curbs, where required.
4. Lap guardrail in direction of adjacent traffic.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

GUARDRAIL AND METAL MEDIAN BARRIER (29" RAIL HEIGHT)

2024

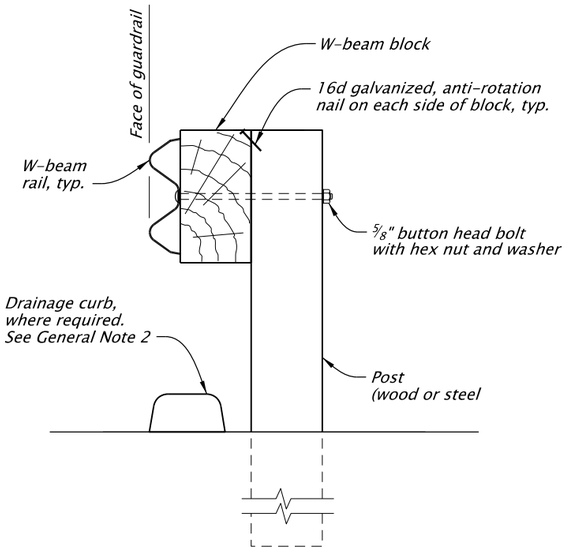
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD400**

Effective Date: December 1, 2025 – May 31, 2026

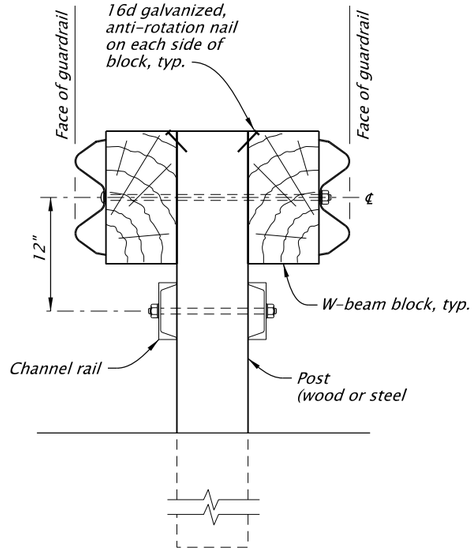
11-JUL-2025

RD402.dgn



TYPES 2A AND 3

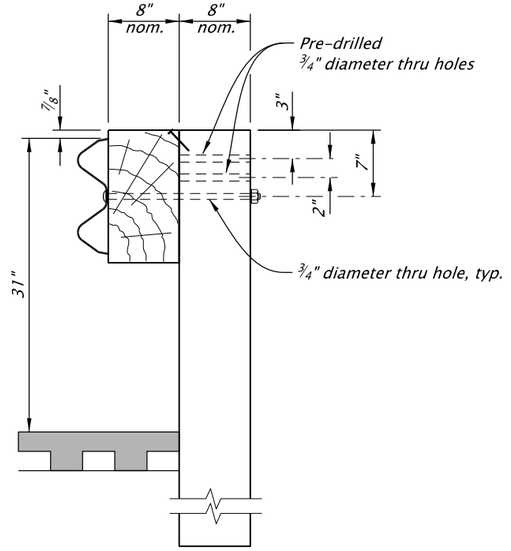
For Type 3 use double thickness (2) rail elements



METAL MEDIAN BARRIER DOUBLE SIDED WITH CHANNEL RAIL

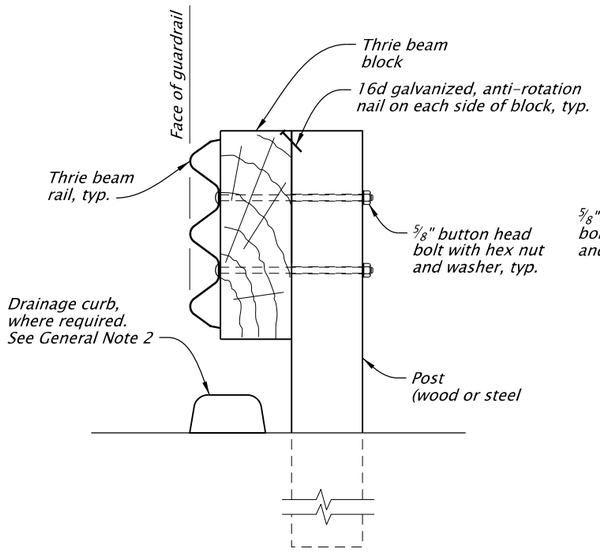
See General Note 3

W-BEAM GUARDRAIL

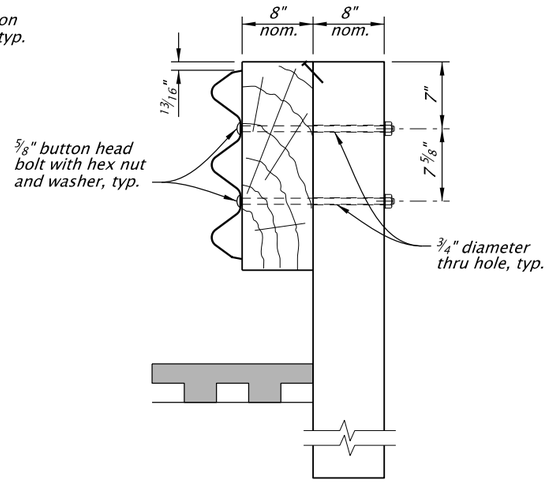


TYPICAL INSTALLATION

W-BEAM GUARDRAIL ASSEMBLY



TYPE 4 AND 4 TRANSITION



INITIAL INSTALLATION

THRIE BEAM GUARDRAIL

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *See appropriate guardrail standard drawing(s) for details not shown.*
2. *When required by the plans, drainage curb alignment same as face of guardrail.*
3. *Orient post bolts with the button head located on the side nearest the traffic lane. The bolt's threaded portion is not permitted to extend beyond limits of 1/4 inch to 1/2 inch from the face of the tightened nut; trim the treated portion as needed.*
4. *Lap guardrail in direction of adjacent traffic.*
5. *Final paved surfacing to extend to face of post. Rail height measured from final paved surface at face of rail, typical all types. 1-inch ± tolerance.*
6. *Wood block shall be toenailed to the post with two 16d galvanized nails in top of block to prevent block rotation.*
7. *Wood blocks shown. Blocks of an approved alternate material may be used, see ODOT's QPL.*
8. *Existing posts shall not be raised. Replace posts as necessary to achieve required guardrail height.*

NORMAL RAIL ELEMENT DATA

TYPE	RAIL	EFFECTIVE LENGTHS	GAUGE
2A	*W-beam*	*6.25', 12.5', 25'*	*10 and 12*
3	*W-beam*	*6.25', 12.5', 25'*	*10 and 12*
4	*Thrie beam*	*6.25', 12.5', 25'*	*10 and 12*
4 TRANSITION	*Thrie beam*	*6.25'*	*10 and 12*

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MIDWEST GUARDRAIL SYSTEM TYPES

2024

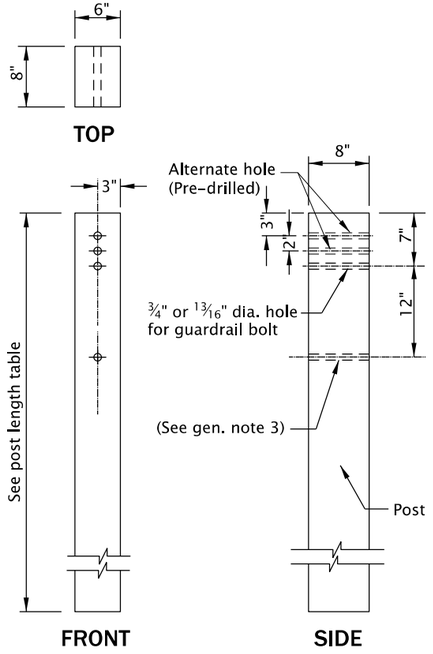
DATE	REVISION DESCRIPTION
07-2021	REVISED DETAILS AND NOTES
07-2025	REVISED DETAILS AND NOTES, UPDATED CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **RD402**

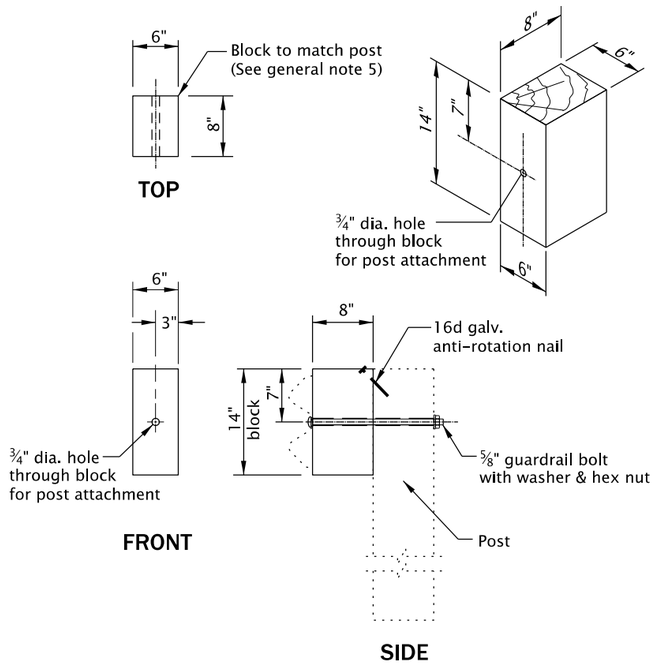
Effective Date: December 1, 2025 - May 31, 2026

19-JUL-2021

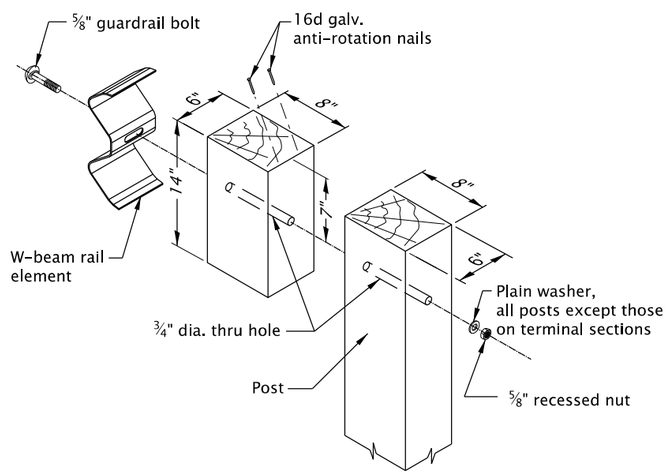
RD403.dgn



W-BEAM WOOD POST
(6x8 post shown)



W-BEAM WOOD BLOCK FOR WOOD POST
(6x8 wood block shown)



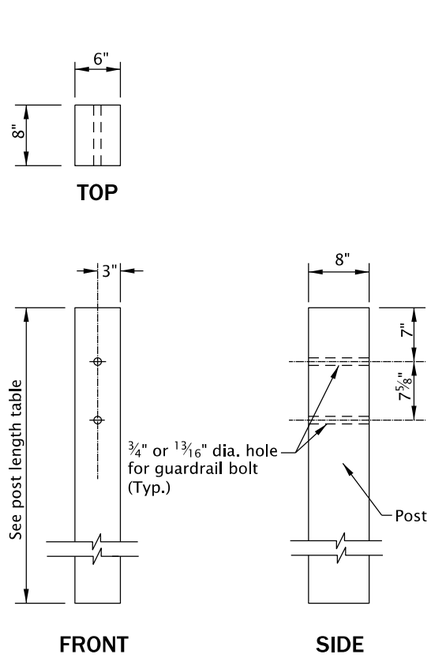
W-BEAM ASSEMBLY DETAIL
(6x8 wood post and 6x8 wood block shown)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

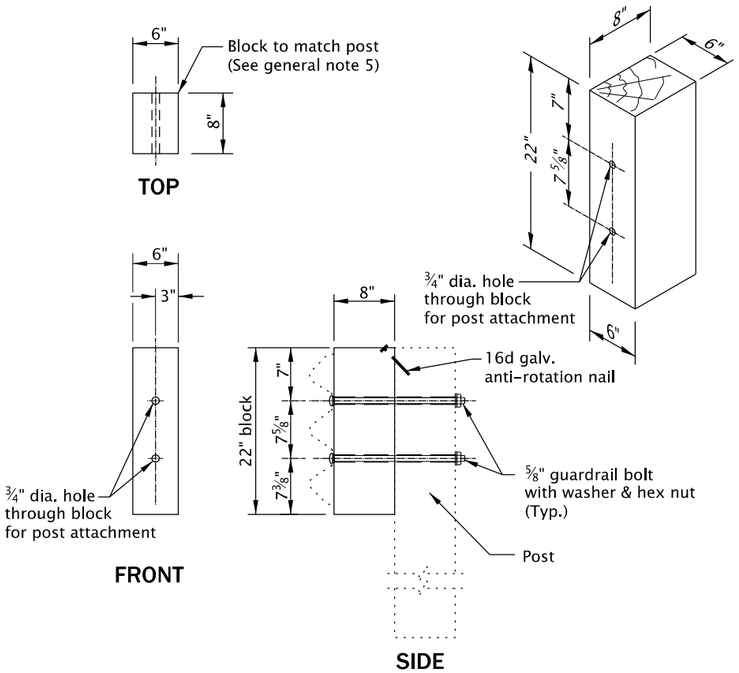
1. See appropriate guardrail standard drawing(s) for details not shown.
2. See Bridge Dwgs. for bridge transition guardrail post and block requirements.
3. Lowest hole(s) required only when channel rail is to be installed. Drill 12" below top ¾" or 13⁄16" hole(s) used.
4. Dimensions shown are for nominal posts and blocks.
5. Wood blocks shown. Blocks of an approved alternate material may be used. See ODOT's QPL.
6. When required by the plans, nested thrie beam wood post shall be 8"x8".
7. Wood block shall be toe-nail to the post with 2 - 16d galvanized nails in top of block to prevent block rotation.

GUARDRAIL WOOD POST TABLE

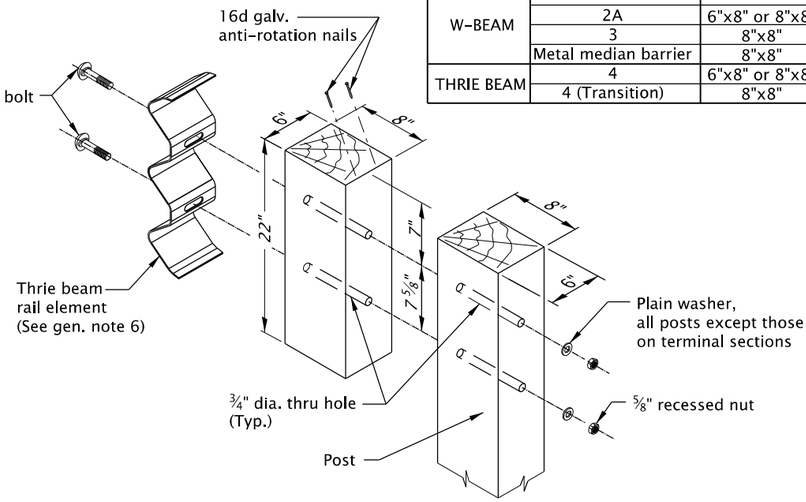
	GUARDRAIL TYPE	POST SIZE	POST LENGTH	POST SPACING
W-BEAM				
	2A	6"x8" or 8"x8"	6'-0"	6'-3"
	3	8"x8"	6'-0"	3'-1½"
	Metal median barrier	8"x8"	6' 6"	6'-3"
THRIE BEAM	4	6"x8" or 8"x8"	7'-0"	6'-3"
	4 (Transition)	8"x8"	6'-0"	3'-1½"



THRIE BEAM WOOD POST
(6x8 post shown)



THRIE BEAM WOOD BLOCK FOR WOOD POST
(6x8 wood block shown)



THRIE BEAM ASSEMBLY DETAIL
(6x8 wood post and 6x8 wood block shown)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MIDWEST GUARDRAIL SYSTEM WOOD POST AND BLOCK

2024

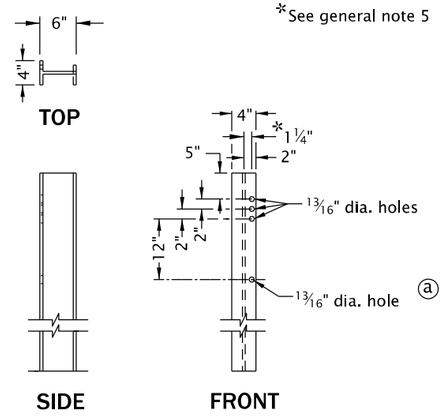
DATE	REVISION DESCRIPTION
07-2021	REVISED DETAILS AND NOTES

CALC. BOOK NO. N/A | SDR DATE 19-JUL-2021 | **RD403**

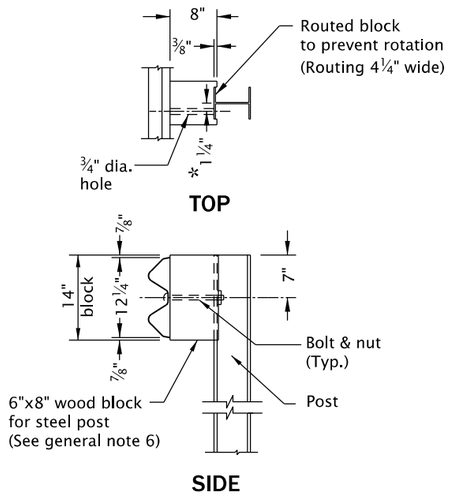
Effective Date: December 1, 2025 - May 31, 2026

POSTS

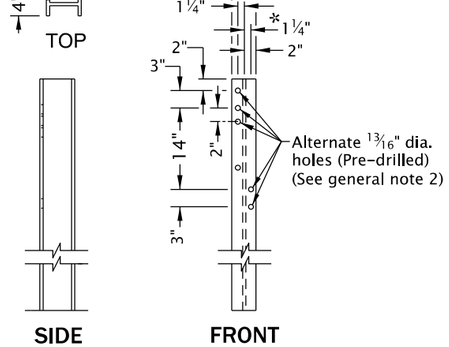
STEEL



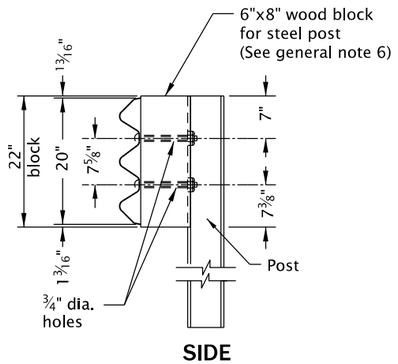
TYPE 2A, 3 OR METAL MEDIAN BARRIER



TYPE 2A, 3 OR METAL MEDIAN BARRIER WOOD BLOCK FOR STEEL POST



TYPE 4 OR TYPE 4 (TRANSITION) POST

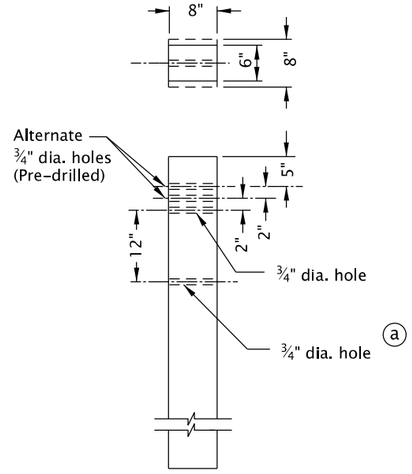


TYPE 4 OR TYPE 4 (TRANSITION) BLOCK

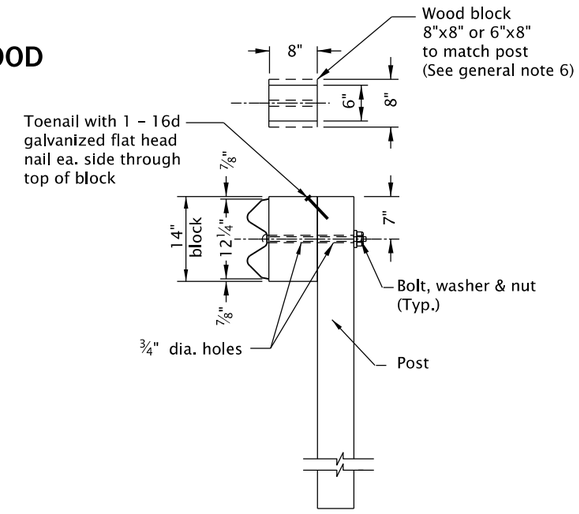
(Routing not required)

ⓐ Lowest hole(s) required only where channel rail is to be installed. Drill 12" below top 13⁄16" hole(s) used. (See general note 3)

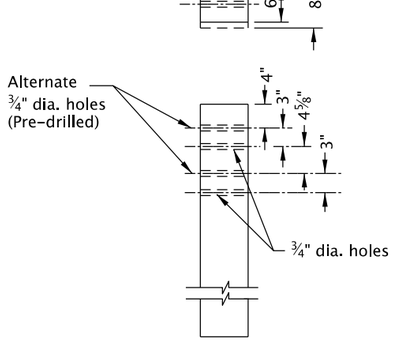
WOOD



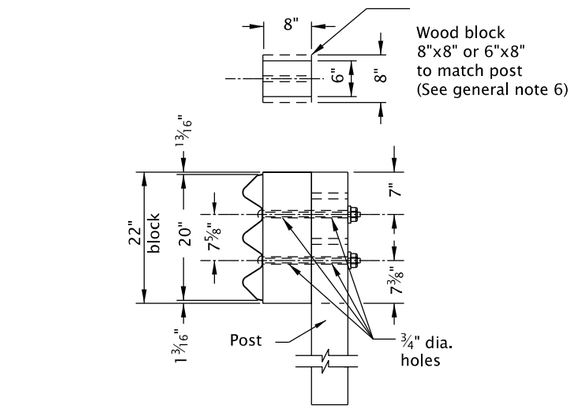
TYPE 1, 2A, 3 OR METAL MEDIAN BARRIER



TYPE 2A, 3 OR METAL MEDIAN BARRIER



TYPE 4 OR TYPE 4 (TRANSITION) POST



TYPE 4 OR TYPE 4 (TRANSITION) BLOCK

NOTE:
THIS DRAWING IS RETAINED FOR MAINTENANCE PURPOSES.
DO NOT USE FOR NEW CONSTRUCTION.

GUARDRAIL POST TABLE				
GUARDRAIL TYPE	POST SIZE		POST LENGTH	
	WOOD	STEEL *	WOOD	STEEL
1	6"x8" or 8"x8"	——	6'-0"	——
2A	6"x8" or 8"x8"	W6x9 or W6x8.5	6'-0"	6'-6" or 6'-0"
3	8"x8"	W6x9 or W6x8.5	6'-0"	6'-6"
Metal median barrier	8"x8"	W6x9 or W6x8.5	6' 6"	6'-6"
4	6"x8" or 8"x8"	W6x9 or W6x8.5	7'-0"	7'-0"
4 (Transition)	8"x8"	W6x9 or W6x8.5	6'-0"	6'-9"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See appropriate guardrail standard drawing(s) for details not shown.
2. See Bridge Dwgs. for bridge transition guardrail post & block requirements. Multiple holes are not required in bridge transition rail posts.
3. Posts and blocks to be pre-drilled for the intended guardrail installation.
4. Post and block dimensions are nominal.
5. Steel posts are shifted to accommodate bolt holes. Holes may be on left, right, or both sides of web.
6. Wood blocks shown. Blocks of an approved alternate material may be used. See ODOT's QPL.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

GUARDRAIL AND METAL MEDIAN BARRIER PARTS (29" RAIL HEIGHT)

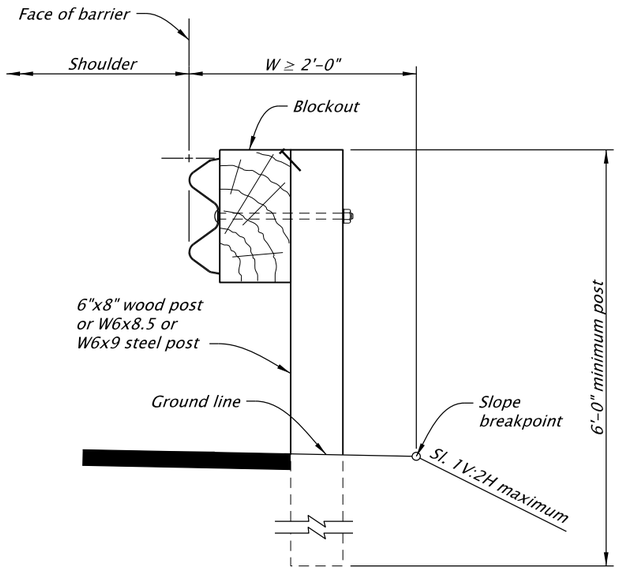
2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD405**

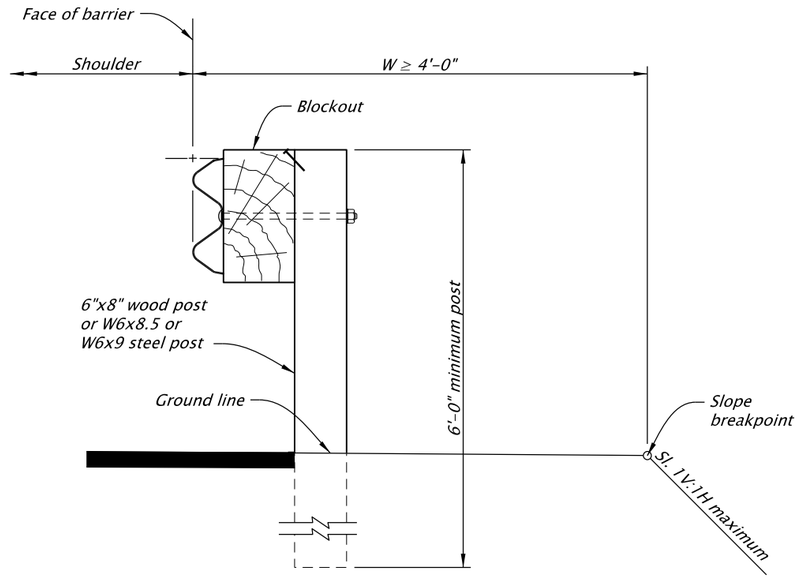
RD405.dgn 20-JUL-2020

Effective Date: December 1, 2025 - May 31, 2026



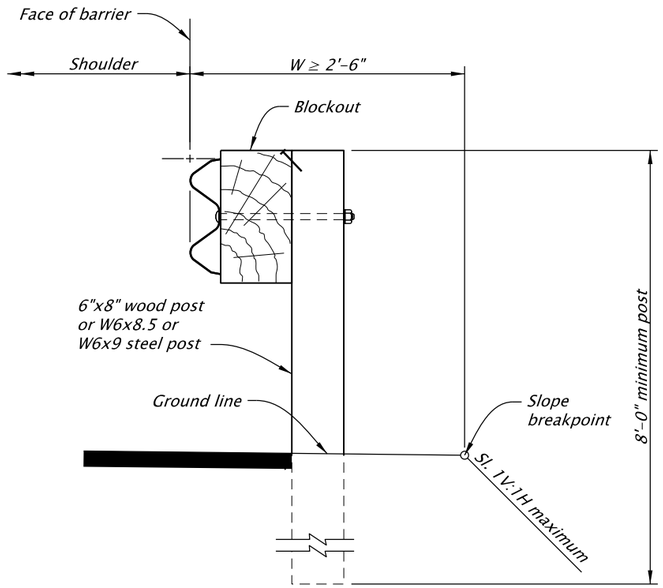
CASE 1

(Wood post shown)



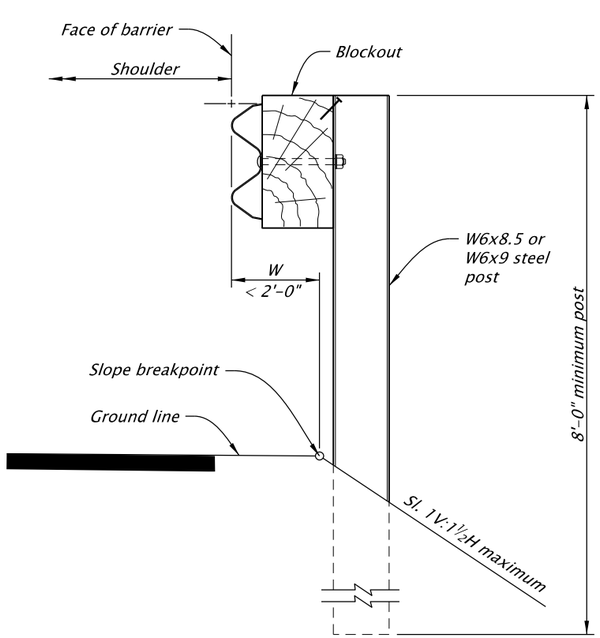
CASE 2

(Wood post shown)
Use when there is a 4'-0" or greater shoulder widening from face of guardrail to the slope breakpoint



CASE 3

(Wood post shown)
Use when there is a 2'-6" or greater shoulder widening from face of guardrail to the slope breakpoint



CASE 4

(Steel post shown)
Do not use in weak soil conditions.
Use when there is less than a 2'-0" shoulder widening from face of guardrail to the slope breakpoint

PLACEMENT OF GUARDRAIL ON SLOPES

NOTE: Cases shown do not apply to terminals, transition sections or anchors.

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *See appropriate guardrail standard drawing(s) for details not shown.*
2. *Wood blocks shown. Blocks of an approved alternate material may be used. See ODOT's QPL.*
3. *All posts for guardrail run shall be of the same type: wood or steel.*

SLOPE / EMBANKMENT TABLE			
POST LENGTH (ft)	POST TYPE	SLOPE (V:H)	W (ft) (Face of barrier to slope of breakpoint)
6	*Wood/Steel*	*1:2 or flatter*	*2'-0" minimum*
6	*Wood/Steel*	*1:1 or flatter*	*4'-0" minimum*
8	*Wood/Steel*	*1:1 or flatter*	*2'-6" minimum*
8	*Steel*	*1:1½ or flatter*	*Less than 2'-0"*

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PLACEMENT OF GUARDRAILS ON SLOPES

2024

DATE	REVISION DESCRIPTION
07-2021	NEW DRAWING CREATED
12-2021	REVISED DETAILS AND NOTES
12-2022	REVISED NOTE

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2023 | **RD406**

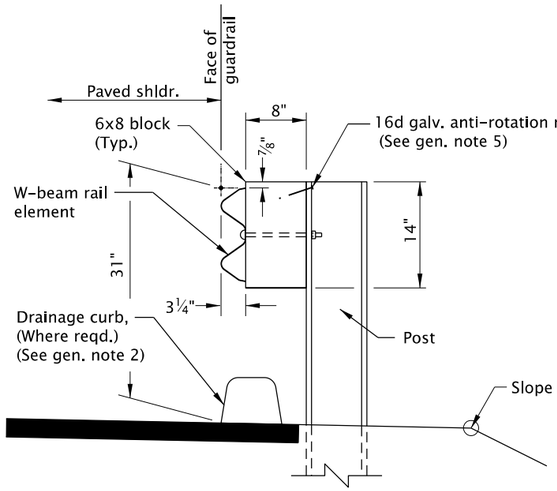
20-JAN-2023

RD406.dgn

Effective Date: December 1, 2025 – May 31, 2026

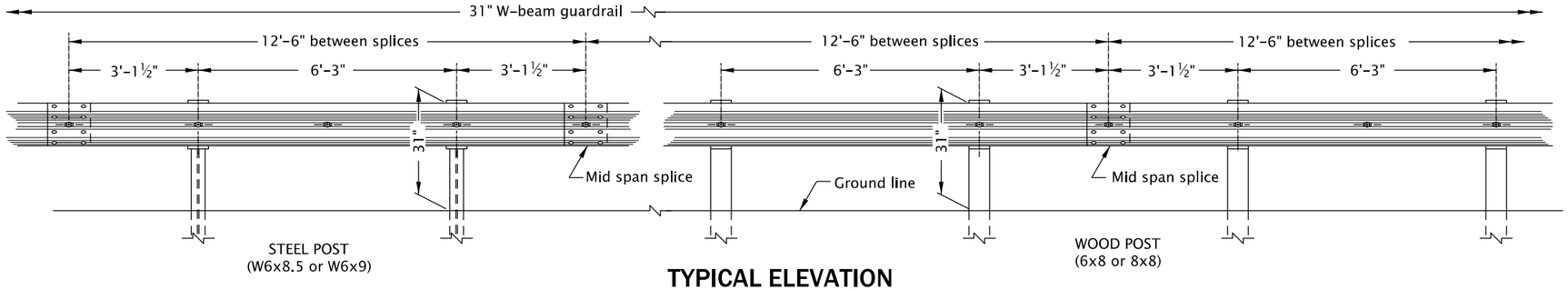
19-JUL-2021

RD407.dgn

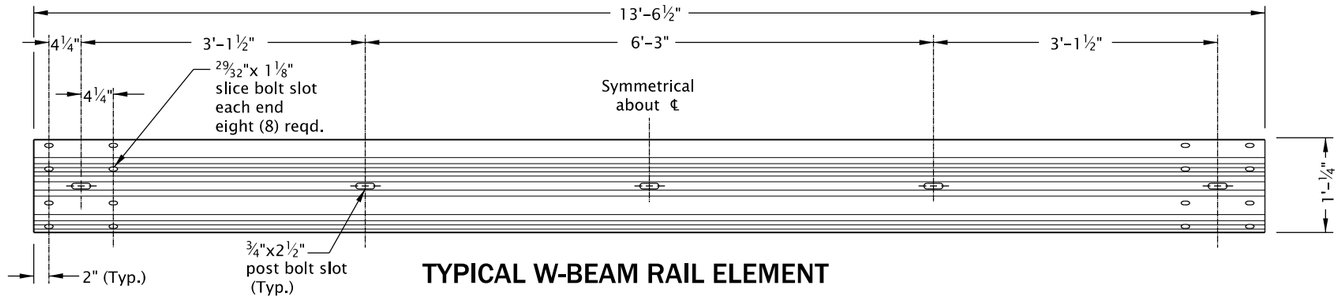


TYPICAL SECTION

(Steel post shown)



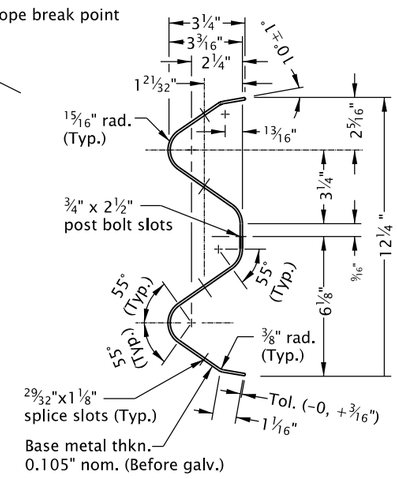
TYPICAL ELEVATION



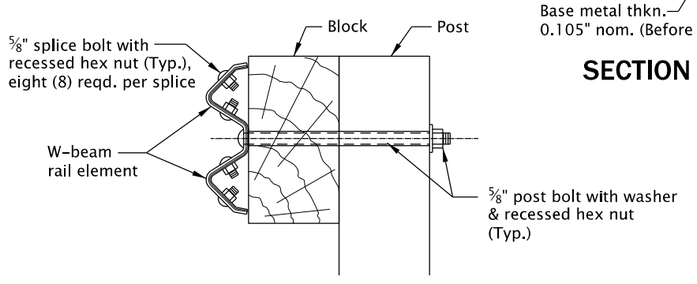
TYPICAL W-BEAM RAIL ELEMENT

NORMAL RAIL ELEMENT DATA

Type	Effective Lengths	Thkn. (Galv.)
2A, 3	6.25', 12.5', 25'	10 ga. & 12 ga.



SECTION THRU RAIL ELEMENT

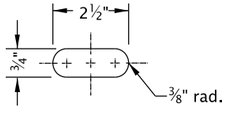


FITTINGS

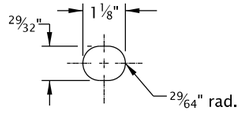
NOTES:

a. When required by the plans, post bolts to extend beyond the tightened nuts within limits of ¼" to ½".

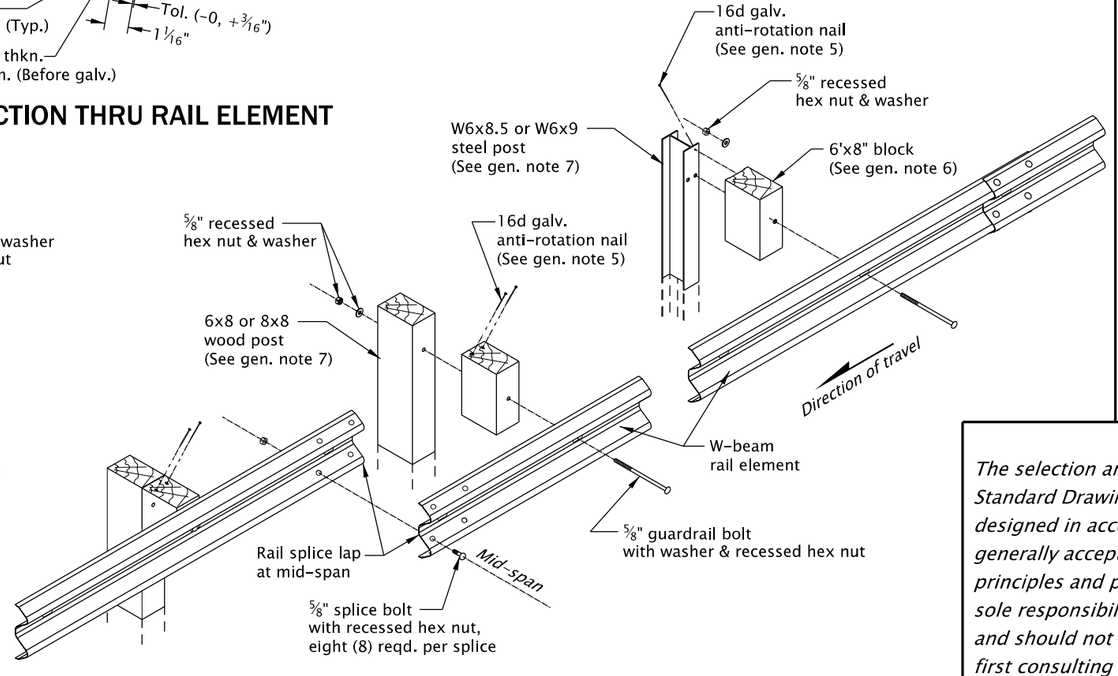
b. All post bolt threads to be set after assembly for wrench removal only.



POST BOLT SLOT



SPLICE BOLT SLOT



W-BEAM ASSEMBLY DETAILS

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See appropriate guardrail standard drawing(s) for details not shown.
2. When required by the plans, drainage curb alignment same as face of guardrail.
3. Lap guardrail in direction of adjacent traffic.
4. Final paved surfacing to extend to face of post. Rail height measured from final paved surface at face of rail to top of rail (typ. all types). 1" ± tolerance.
5. Blocks shall be toe-nailed to prevent rotation when wood posts are used (see Std. Dwg. RD403). Blocks shall be rounted or toe-nailed when steel posts are used to prevent rotation (see Std. Dwg. RD404).
6. Wood blocks shown. Blocks of an approved alternate material may be used. See ODOT's QPL.
7. All posts for guardrail run shall be of the same type: wood or steel.
8. For guardrail installed on radii of 150' or less (5' min. radius) use rail elements pre-curved to industry standard. Install "Radius Identification Plate".

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MIDWEST GUARDRAIL SYSTEM W-BEAM

2024

DATE	REVISION DESCRIPTION
07-2021	REVISED DETAILS AND NOTES

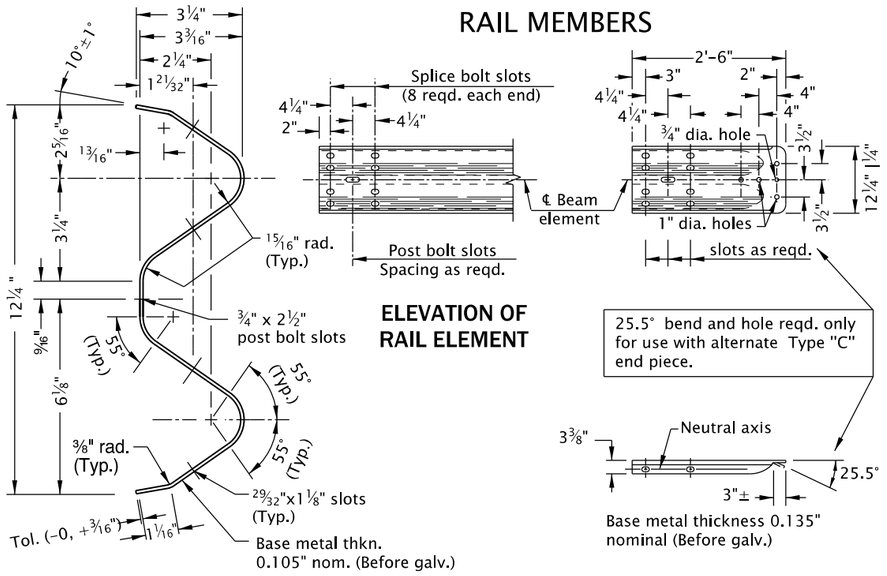
CALC. BOOK NO. N/A | SDR DATE ~~19-JUL-2021~~ | **RD407**

Effective Date: December 1, 2025 - May 31, 2026

20-JUL-2020

RD415.dgn

RAIL MEMBERS



SECTION THRU RAIL ELEMENT

ELEVATION OF RAIL ELEMENT

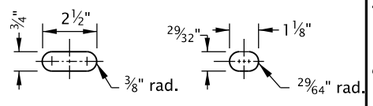
25.5° bend and hole reqd. only for use with alternate Type "C" end piece.

Base metal thickness 0.135" nominal (Before galv.)

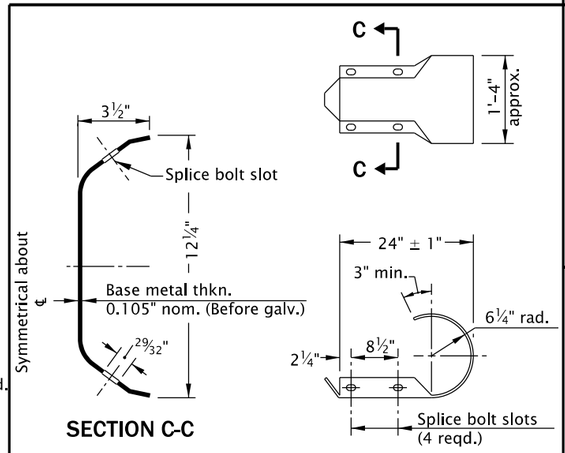
TERMINAL CONNECTOR

NOTES:

1. For guardrail installed on radii of 150' or less (5' min. radius) use rail elements pre-curved to industry standard. Install "Radius Identification Plate" (See detail right).
2. Effective length of rail sections shall be 12'-6".



POST BOLT SLOT | SPLICE BOLT SLOT



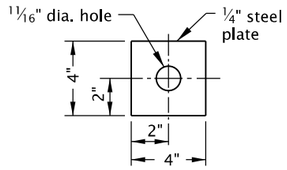
SECTION C-C

TYPE B END PIECE

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

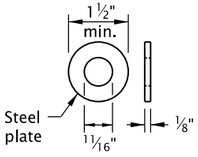
1. See appropriate guardrail standard drawing(s) for details not shown.
2. For details of guardrail connections to structural handrails, see special details or Standard Drawings as called for on plans.
3. All indicated welds shall attain the full strength of the section welded.
4. Radius dimensions, in feet to the nearest 0.5 foot, shall be placed on the plate with a raised weld bead replacing the letters "HHH", shown on the Radius Identification Plate detail. Digits shall be 1½" min. height and ¾" max. width. Plate shall be galvanized after placement of digits.
5. The guardrail radius identification plate is to be mounted on the back side of the rail element with the lowest splice bolt nearest the P.C. of the guardrail radius.

APPURTENANCES



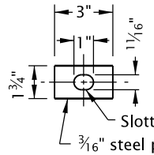
SNOW LOAD (OPTIONAL)

(In area of heavy snow, as directed by the engineer)



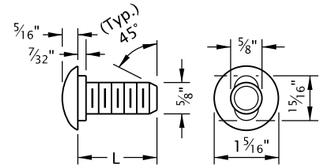
PLAIN ③

USE ON BACK OF POST



RECTANGULAR

USE ON RAIL ELEMENT FACE ON TYPE C END PIECE

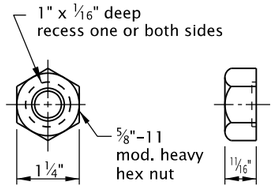


ALTERNATIVE No. 2

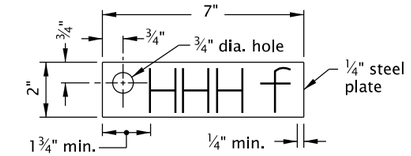
ALTERNATIVE No. 1

WASHERS ④

L (in.)	Thread Length (in.)
1¼	1⅛ min.
2	1¾ min.
10	4 min.
18	4 min.
25	4 min.

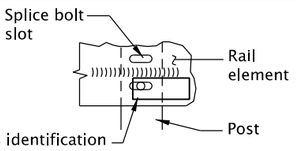


POST OR SPLICE BOLT AND NUT



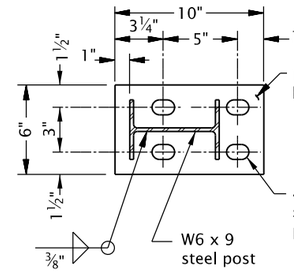
RADIUS IDENTIFICATION PLATE

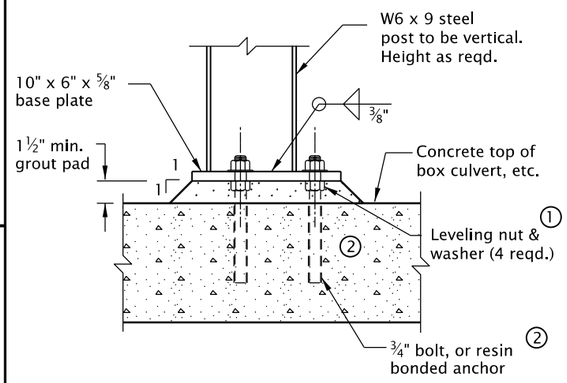
(See general note 4)



RADIUS IDENTIFICATION PLATE MOUNTING DETAIL

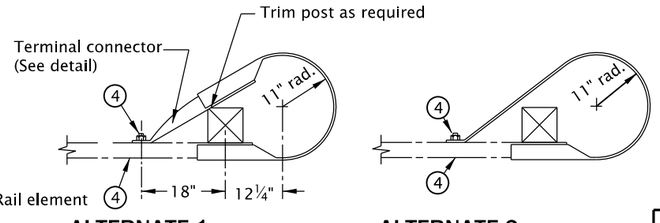
(See general note 5)





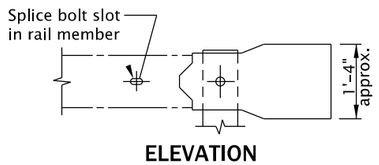
BASE PLATE DETAILS

(For additional details, see Std. Dwg. BR266)
(Use when depth of cover is less than normal for post installation.)



ALTERNATE 1

ALTERNATE 2



ELEVATION

TYPE C END PIECE

(For details not shown, see Type B End Piece)

NOTES:

① Furnished & installed by structure contractor when shown on structure plans.

② 6" min. penetration into concrete slabs other than bridge decks. Cast in place or core and install using approved resin bonding system.

③ Not required if "Snow Load" washer option is used.

④ Use rectangular washer under bolt head and nut on Type C End Piece as shown.

NOTES: THIS DRAWING IS RETAINED FOR MAINTENANCE PURPOSES. DO NOT USE FOR NEW CONSTRUCTION.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

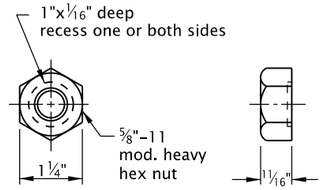
GUARDRAIL AND METAL MEDIAN BARRIER PARTS (29" RAIL HEIGHT)

2024

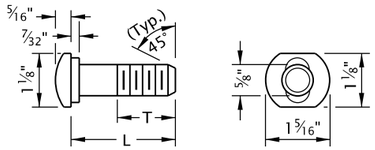
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD415**

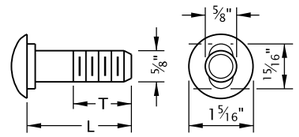
Effective Date: December 1, 2025 - May 31, 2026



5⁄8" DIA. RECESSED HEX NUT

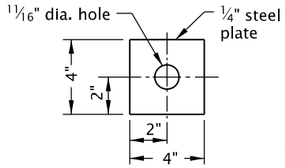


ALTERNATIVE No. 1

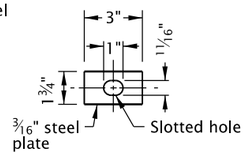


ALTERNATIVE No. 2

5⁄8" GUARDRAIL POST/SPICE BOLT (BUTTON HEADED)

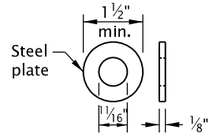


SNOW LOAD POST WASHER



SNOW LOAD RAIL WASHER ⓑ

Use in area of heavy snow,
as directed by the engineer
(See general note 6)

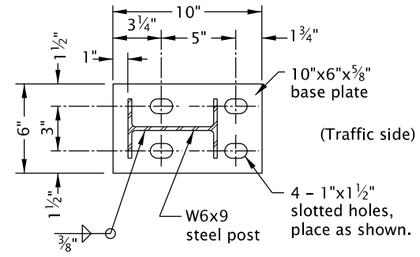


PLAIN WASHER ⓐ

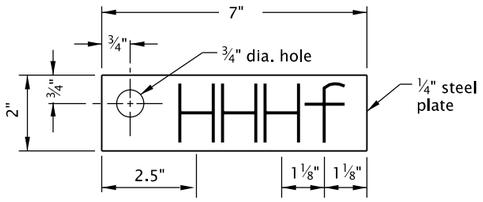
Use on back of post.

BOLT DIMENSION TABLE

Length (L) (in.)	Thread Length (T) (in.)
1 1⁄4	1 1⁄8 min.
2	1 3⁄4 min.
10	4 min.
18	4 min.
25	4 min.

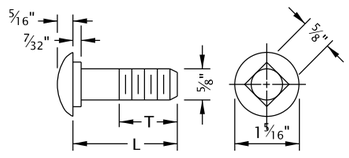


PLAN

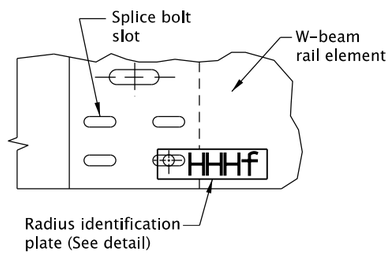


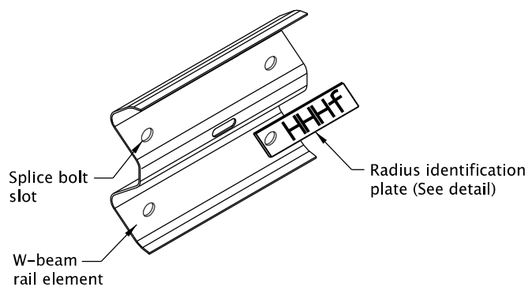
RADIUS IDENTIFICATION PLATE

(See general note 4)



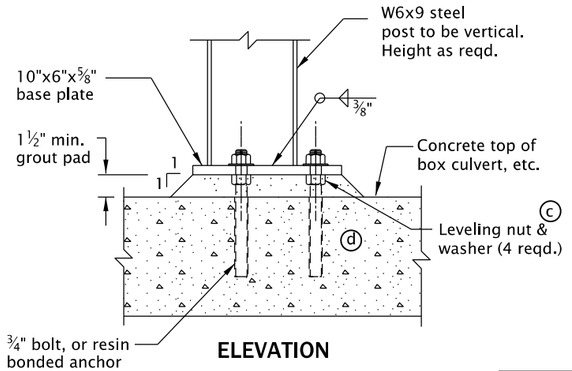
5⁄8" DIA. CARRIAGE BOLT





RADIUS IDENTIFICATION PLATE MOUNTING DETAIL

(See general note 5)



ELEVATION

BASE PLATE DETAILS

(For additional details, see Std. Dwg. BR266)
(Use when depth of cover is less
than normal for post installation.)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See appropriate guardrail standard drawing(s) for details not shown.
2. For details of guardrail connections to structural handrails, see special details or Standard Drawings as called for on plans.
3. All indicated welds shall attain the full strength of the section welded.
4. Radius dimensions, in feet to the nearest 0.5 foot, shall be placed on the plate with a raised weld bead replacing the letters "HHH", shown on the Radius Identification Plate detail. Digits shall be 1½" min. height and ¾" max. width. Plate shall be galvanized after placement of digits.
5. The guardrail radius identification plate is to be mounted on the back side of the rail element with the lowest splice bolt nearest the P.C. of the guardrail radius.
6. When required by the plans, a Snow Load Post Washer shall be used on the backside of the post and a Snow Load Rail Washer shall be placed on rail element face. Snow Load Rail Washers shall not be installed on terminals.

SUPPLEMENTARY NOTES:

ⓐ Not required if Snow Load Post washer option is used.

ⓑ Use rectangular Snow Load Rail washer under bolt head and nut on Type C End Piece as shown.

ⓒ Furnished & installed by structure contractor when shown on structure plans.

ⓓ 6" min. penetration into concrete slabs other than bridge decks. Cast in place or core and install using approved resin bonding system.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MIDWEST GUARDRAIL SYSTEM STANDARD HARDWARE (NUTS, BOLTS, WASHERS AND MISC.)

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD416**

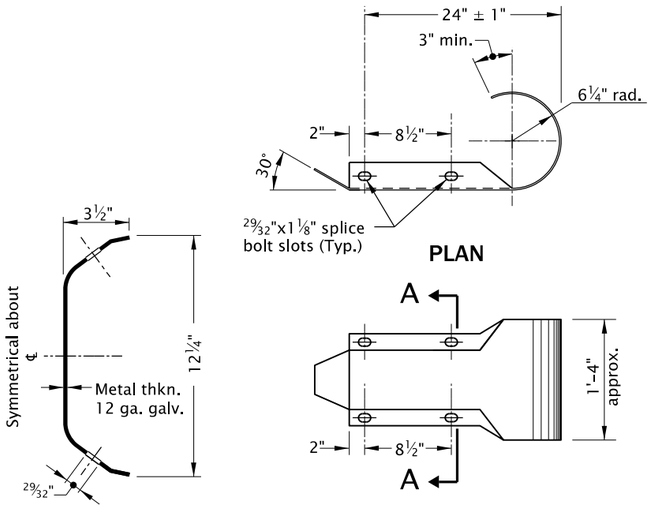
Effective Date: December 1, 2025 – May 31, 2026

20-JUL-2020

RD416.dgn

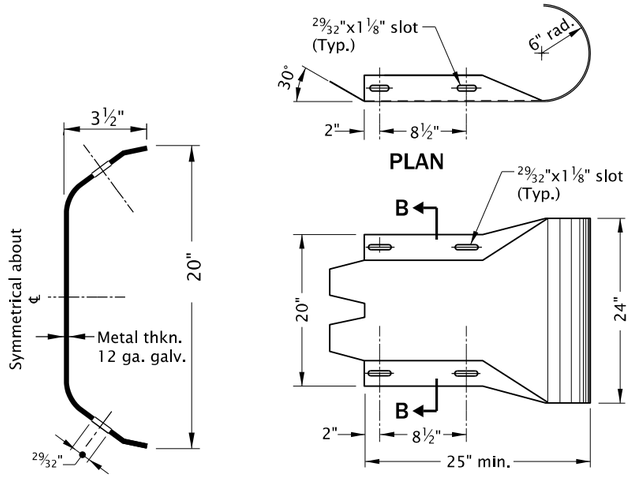
20-JUL-2020

RD417.dgn



SECTION A-A ELEVATION

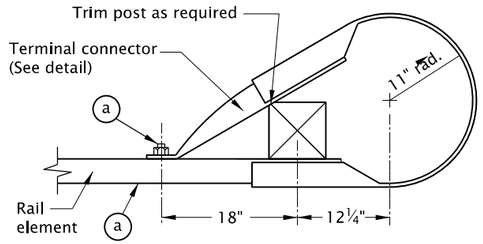
W-BEAM TYPE B END PIECE



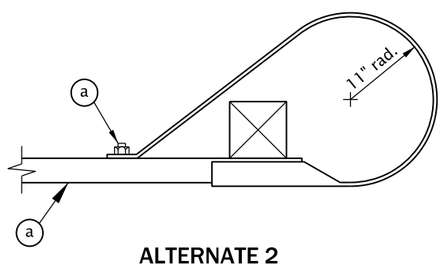
SECTION B-B ELEVATION

THRIE BEAM TYPE B END PIECE

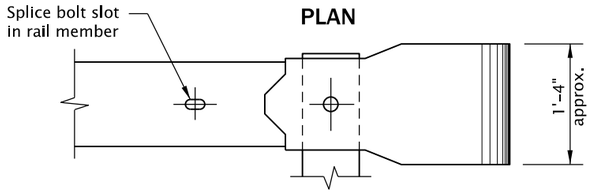
(a) Use rectangular washer under bolt head and nut on Type C End Piece as shown.



ALTERNATE 1



ALTERNATE 2

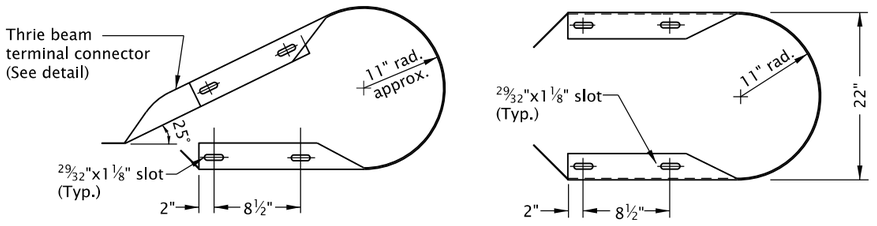


PLAN

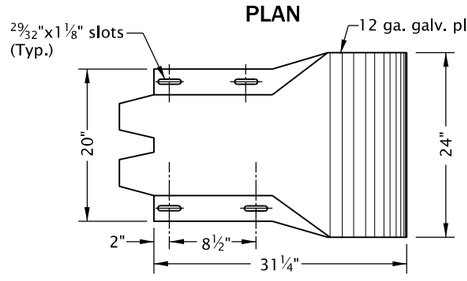
ELEVATION

W-BEAM TYPE C END PIECE

(For details not shown, see Type B End Piece)

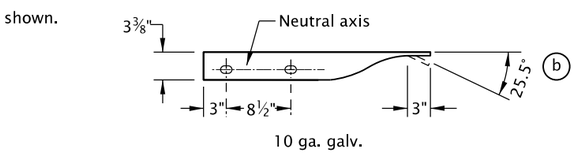


ALTERNATE 1 ALTERNATE 2



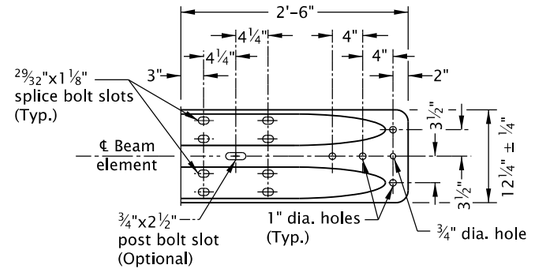
ELEVATION

THRIE BEAM TYPE C END PIECE



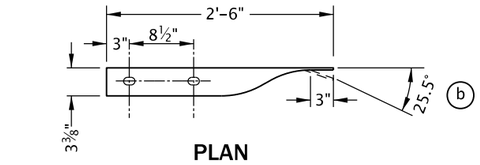
PLAN

(b) 25.5" bend and hole reqd. only for use with alternate Type "C" end piece.

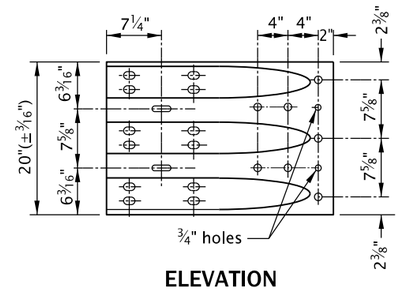


ELEVATION

W-BEAM TERMINAL CONNECTOR



PLAN



ELEVATION

THRIE BEAM TERMINAL CONNECTOR

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See appropriate guardrail standard drawing(s) for details not shown.
2. For details of guardrail connections to structural handrails, see special details or Standard Drawings as called for on plans.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

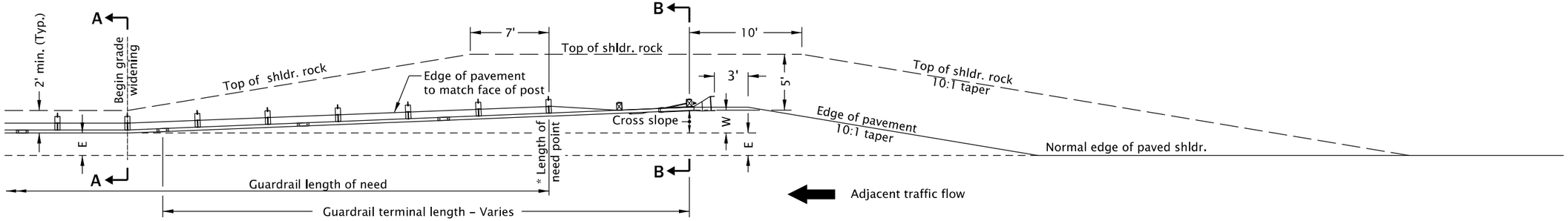
MIDWEST GUARDRAIL SYSTEM END SECTIONS

2024

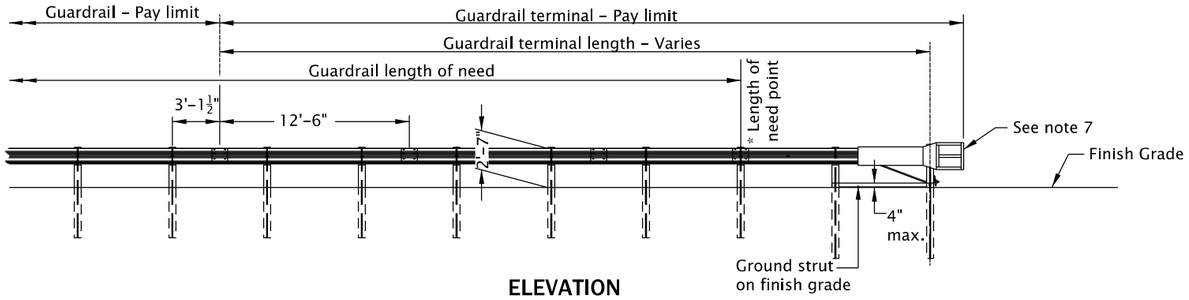
DATE	REVISION DESCRIPTION

CALC BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD417**

Effective Date: December 1, 2025 – May 31, 2026

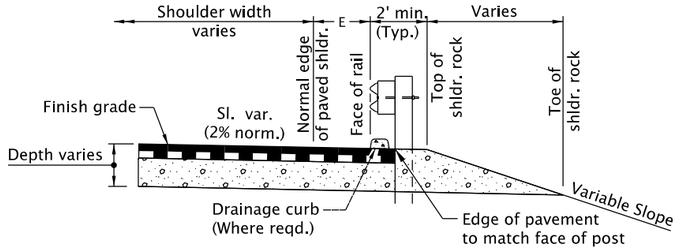


PLAN

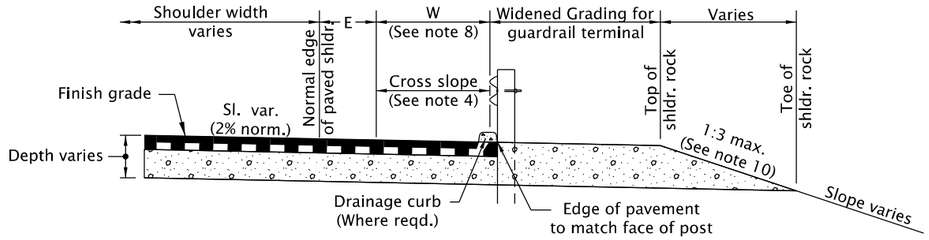


ELEVATION

* See note 6 and 9

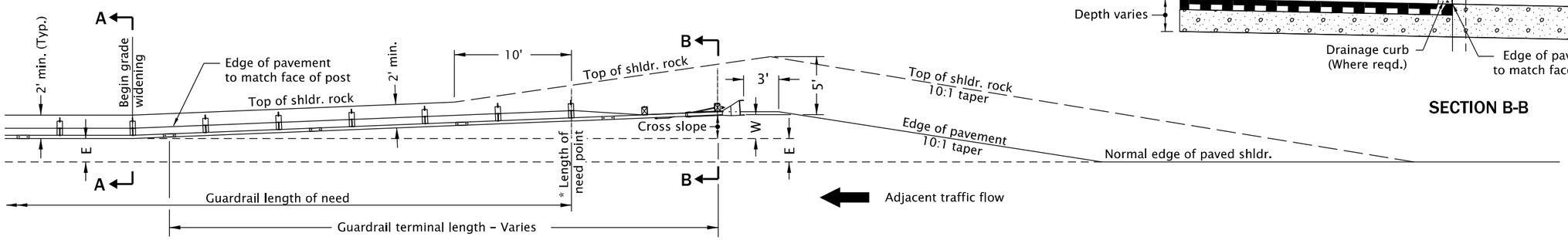


SECTION A-A



SECTION B-B

PREFERRED GRADING



ALTERNATIVE GRADING

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Use details shown as a general guide since manufacturer's details may vary. Install a guardrail terminal system that meets MASH requirements per manufacturer's recommendations. Ensure that guardrail terminal meets appropriate test level for the project.
2. See appropriate guardrail standard drawing(s) for details not shown. See project plans for details not shown. See Std. Dwg. RD701 for drainage curbs, where required. E=2' or as shown on project plans.
3. Guardrail Non-flared terminal shall be installed with a minimum 1 foot offset ensuring that the end piece is entirely off normal shoulder.
4. Cross slope to match adjacent roadway cross slope (preferred). If required, maximum shoulder slope 10% for guardrail widening. If required, maximum grade break at normal edge of shoulder 8%.
5. On two way two lane highways, both ends of guardrail runs shall be provided with a terminal flared or non-flared. Paving of widened shoulder to the face of posts on both ends of guardrail runs is required.
6. Provide guardrail terminal from ODOT's QPL. Install according to manufacturer's recommendations (post count varies). Provide shop drawings to Engineer.
7. Install a reflectorized object marker on head of every guard rail terminal with "W" 4 feet or less according to manufacturer's recommendations.
8. "W" distance is measured to face of guardrail at end post, exclusive of end piece.
9. Length of need post location varies by manufacturer.
10. 1:4 slope or flatter preferable, 1:3 maximum.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MIDWEST GUARDRAIL SYSTEM GRADING FOR TERMINALS

2024

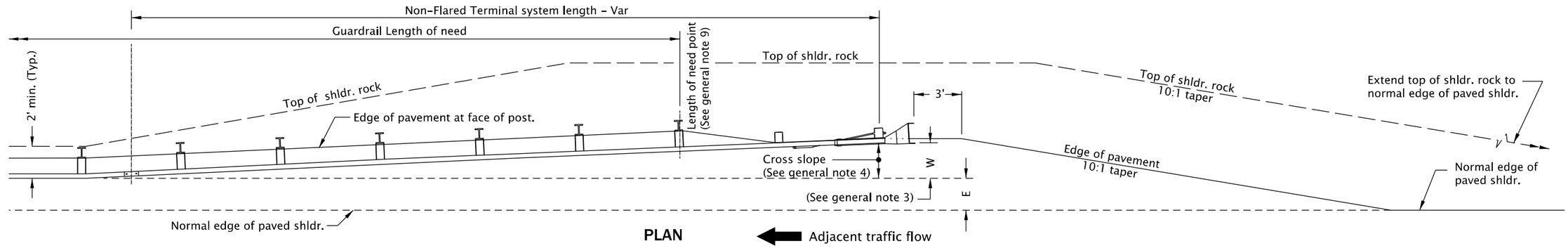
DATE	REVISION DESCRIPTION

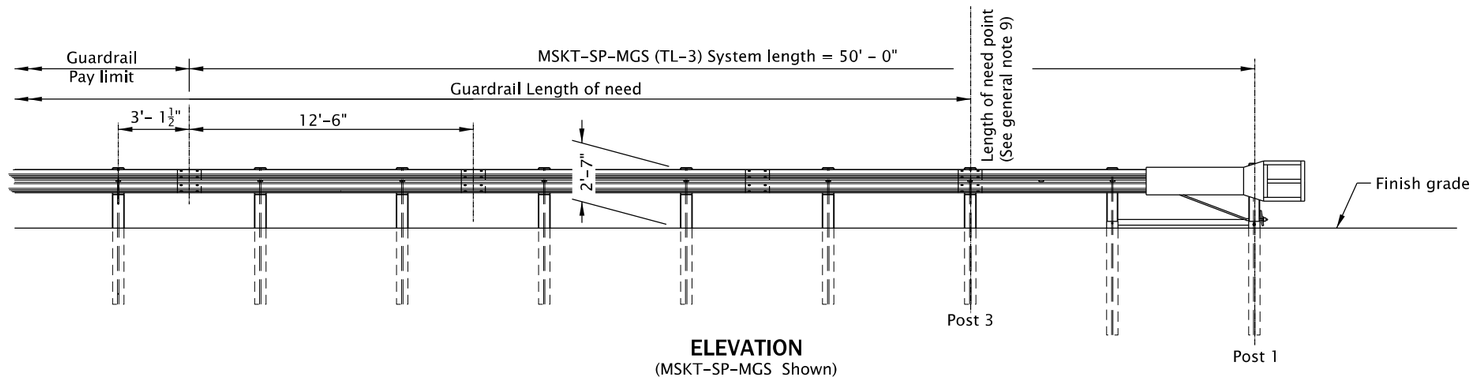
CALC. BOOK NO. N/A | SDR DATE 19-JUL-2021 | **RD419**

Effective Date: December 1, 2025 – May 31, 2026

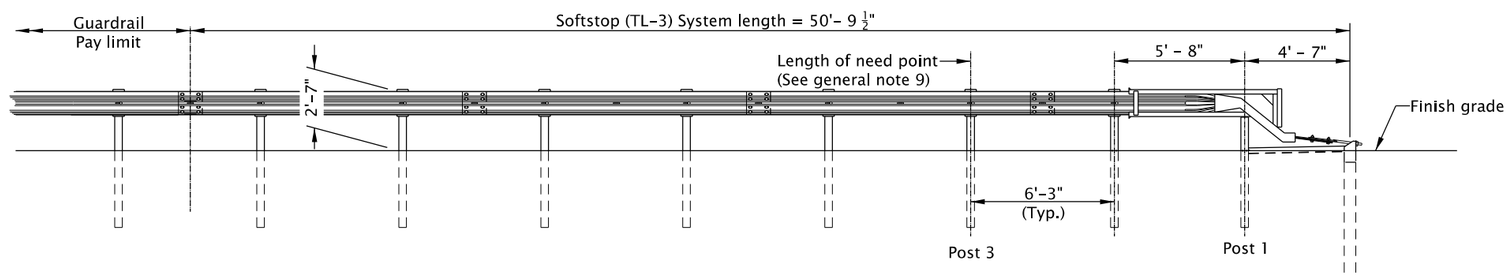
19-JUL-2021

RD419.dgn

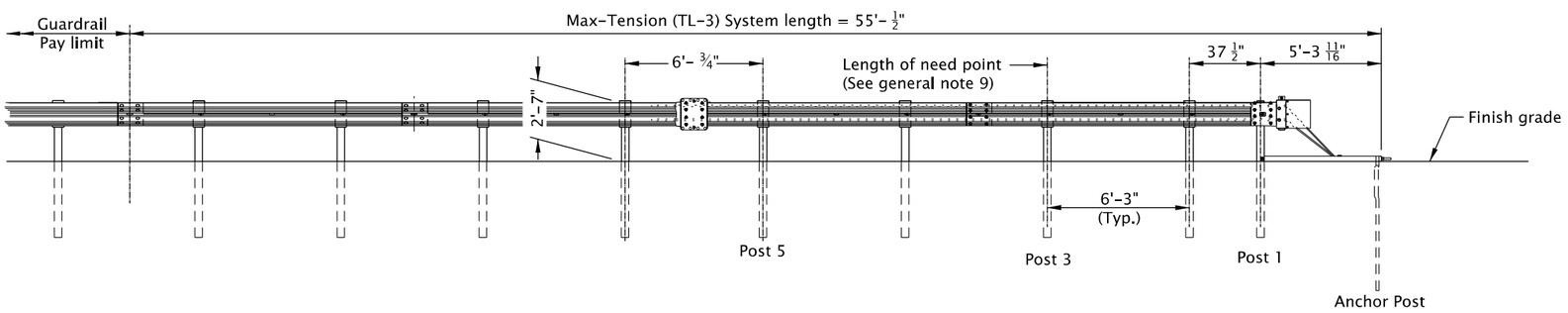




ELEVATION
(MSKT-SP-MGS Shown)



ELEVATION
(SOFTSTOP Shown)



ELEVATION
(MAX-TENSION Shown)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Use details shown as a general guide since manufacturer's details may vary. Install a guardrail terminal system that meets MASH requirements per manufacturer's recommendations. Ensure that guardrail terminal meets appropriate test level for the project.
2. See appropriate guardrail standard drawing(s) for details not shown. See project plans for details not shown. See Std. Dwg. RD701 for drainage curbs, where required. E=2' or as shown on project plans.
3. Guardrail Non-flared terminal shall be installed with a min. 1 foot offset ensuring that the end piece is entirely off normal shldr.
4. Cross slope to match adjacent roadway cross slope (preferred). If required, maximum shoulder slope 10% for guardrail widening. If required, maximum grade break at normal edge of shoulder 8%.
5. On two way two lane highways, both ends of guardrail runs shall be provided with a crashworthy terminal flared or non-flared. Paving of widened shldr. to the face of posts on both ends of guardrail runs is required. See Std. Dwgs. RD443 and RD444.
6. Provide guardrail terminal from ODOT's QPL. Install according to manufacturer's recommendations (post count varies). Provide shop drawings to Engineer.
7. Install a reflectorized object marker on head of every guard rail terminal with "W" 4 feet or less according to manufacturer's recommendations.
8. "W" distance is measured to face of guardrail at end post, exclusive of end piece.
9. Length of need post location varies by manufacturer.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

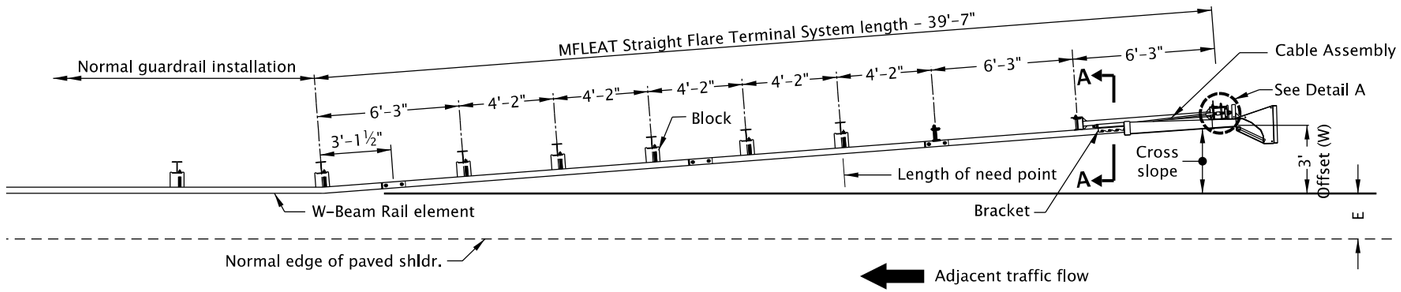
MIDWEST GUARDRAIL SYSTEM NON-FLARED ENERGY-ABSORBING TERMINAL

2024

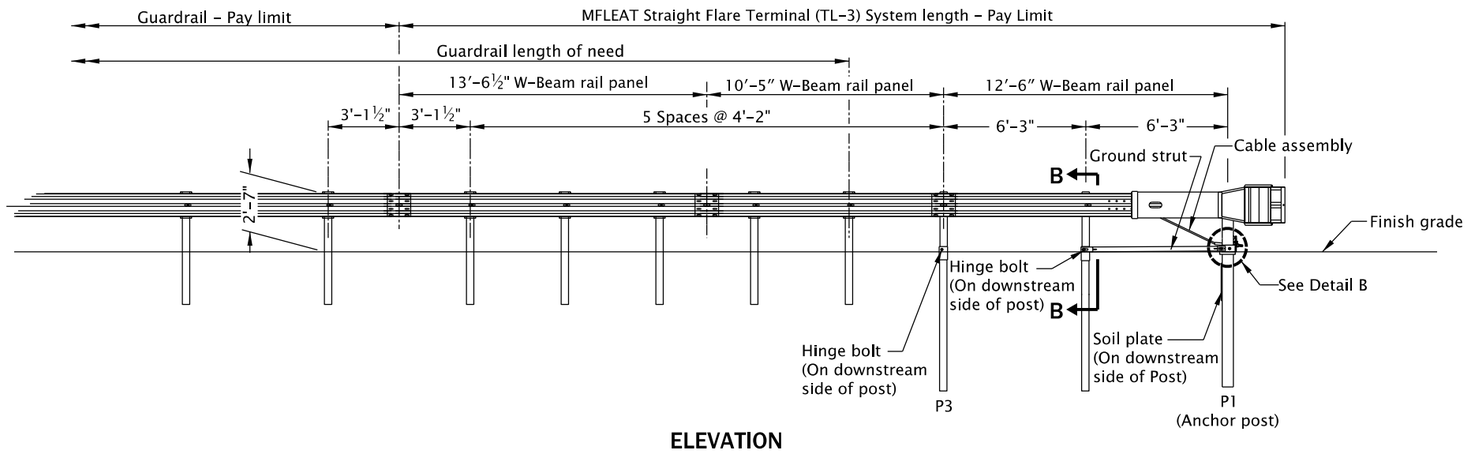
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **RD420**

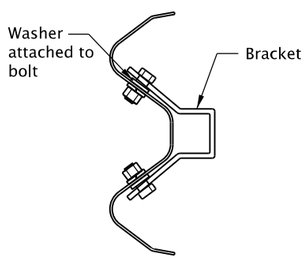
Effective Date: December 1, 2025 - May 31, 2026



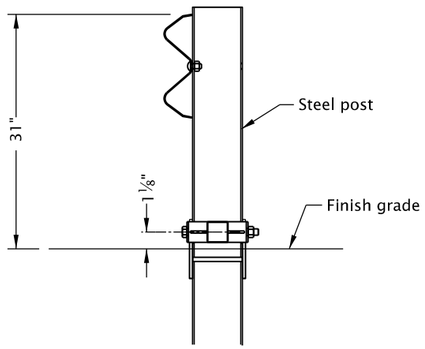
PLAN



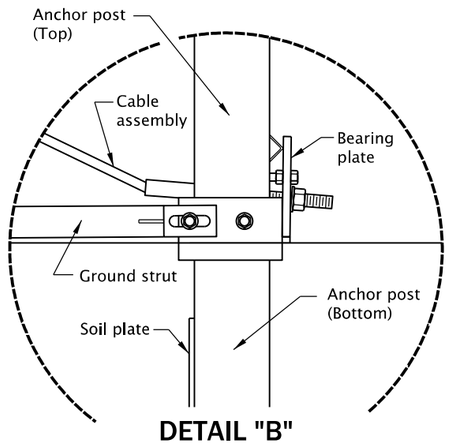
ELEVATION



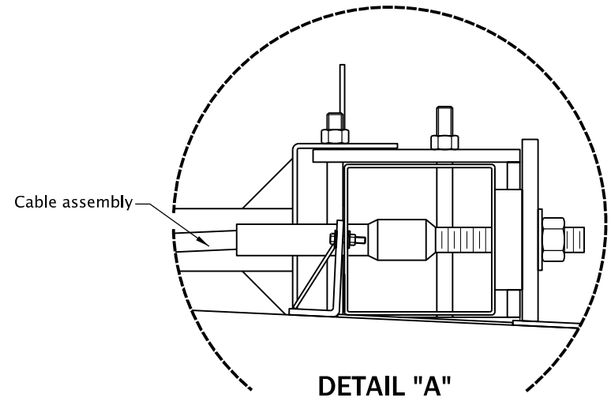
SECTION A-A
ANCHOR BRACKET



SECTION B-B
POST #2



DETAIL "B"
ANCHOR POST CONNECTION



DETAIL "A"
IMPACT HEAD CONNECTION

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Use details shown as a general guide since manufacturer's details may vary. Install a guardrail terminal system that meets MASH requirements per manufacturer's recommendations. Ensure that guardrail terminal meets appropriate test level for the project.

2. See appropriate guardrail standard drawing(s) for details not shown. See project plans for details not shown. See Std. Dwg. RD701 for drainage curbs, where required. E=2' or as shown on project plans.

3. Cross slope to match adjacent roadway cross slope (preferred). If required, maximum shoulder slope 10% for guardrail widening. If required, maximum grade break at normal edge of shoulder 8%.

5. Paving of widened shldr. to the face of posts on both ends of guardrail runs is required.

6. Provide guardrail terminal from ODOT's QPL. Install according to manufacturer's recommendations (post count varies). Provide shop drawings to Engineer.

7. Install a reflectorized object marker on head of every guard rail terminal with

8. "W" distance is measured to face of guardrail at end post, exclusive of end piece.

9. Length of need post location varies by manufacturer.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MIDWEST GUARDRAIL SYSTEM FLARED ENERGY-ABSORBING TERMINAL (MFLEAT)

2024

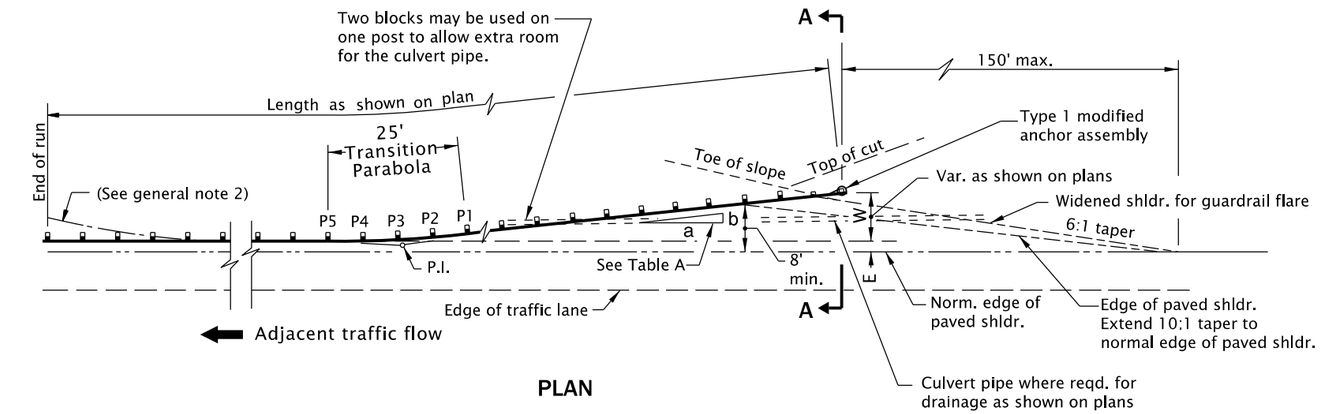
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD421**

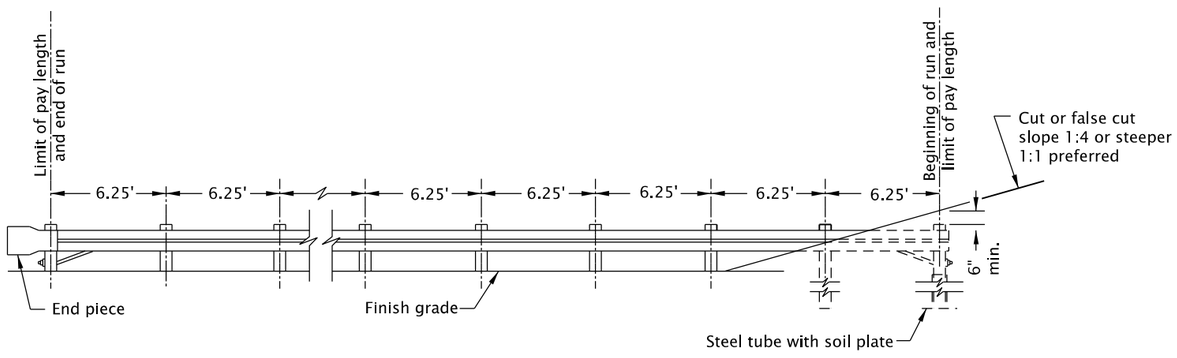
Effective Date: December 1, 2025 – May 31, 2026

20-JUL-2020

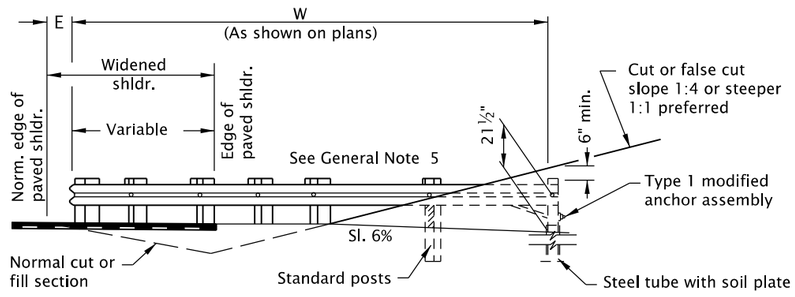
RD421.dgn



PLAN



ELEVATION

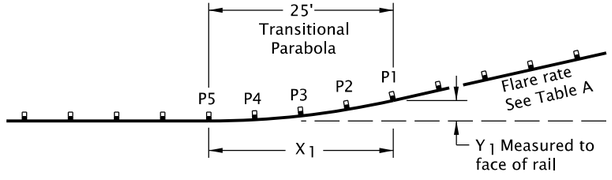


SECTION A-A
(CUT OR FALSE CUT)

TABLE A
FLARE RATE & 25' TRANSITION PARABOLA

FLARE RATE a : b		POST NUMBER				
		P5	P4	P3	P2	P1
15:1	X (ft)	0	6.25	12.49	18.72	24.92
	Y (ft)	0	0.05	0.21	0.47	0.83

E= 2' where shown on plans.



TERMINALS
(Cut or false cut)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See appropriate guardrail standard drawing(s) for details not shown.
2. On two way, two lane highways, both ends of guardrail runs shall be provided with a flared or non-flared terminal from ODOT's QPL if not buried, as detailed on plans.
3. Type 2A guardrail shown.
4. Where terminal end is buried, a Type 1 modified anchor will be attached to the end post.
5. Trailing ends (freeways, multilane and similar one-way facilities) not exposed to opposing traffic:
   (a) Guardrail terminals, use a Type 1 modified anchor, Type B end piece and do not flare.
   (b) At bridge ends, omit Transition Guardrail & Type 3 guardrail and substitute the normal required guardrail.
6. (a) All bolts except adjustment bolts shall be drawn tight on rails and components on initial installation.
   (b) Final tightness check on rail and component bolts and retightening as required to be done 30 days after initial installation.
7. If the cut or false cut slope is flatter than 1:1 ensure that there is a clear recovery area behind the guardrail, with no funneling effect to the back of the obstruction.
8. "W" distance is measured to face of guardrail at end post.

NOTE:
THIS DRAWING IS RETAINED FOR MAINTENANCE PURPOSES.
DO NOT USE FOR NEW CONSTRUCTION.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

GUARDRAIL INSTALLATION TERMINAL (CUT OR FALSE-CUT) (29" RAIL HEIGHT)

2024

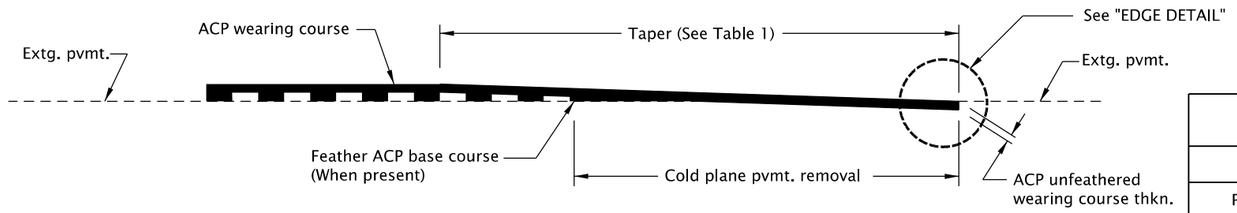
DATE	REVISION DESCRIPTION
01-2023	REVISED NOTES

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2023 | **RD435**

20-JAN-2023

RD435.dgn

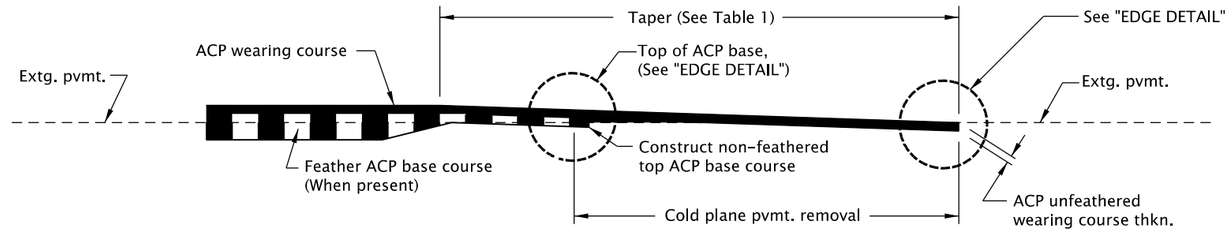
Effective Date: December 1, 2025 - May 31, 2026



METHOD A *

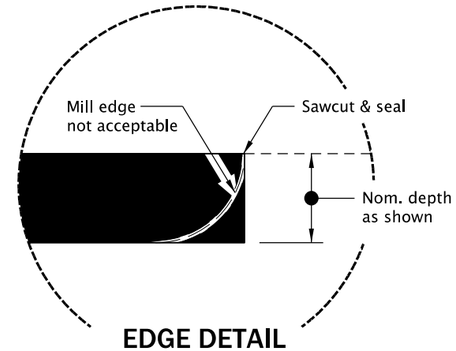
* See project plans for method.

TABLE 1	
TAPER LENGTHS	
Posted Speed	Taper Length
< 45 mph	1" per 50'
≥ 45 mph	1" per 100'

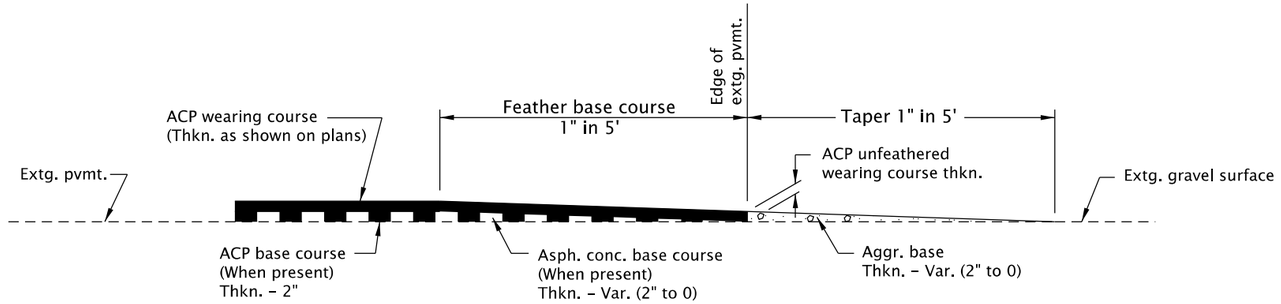


METHOD B *

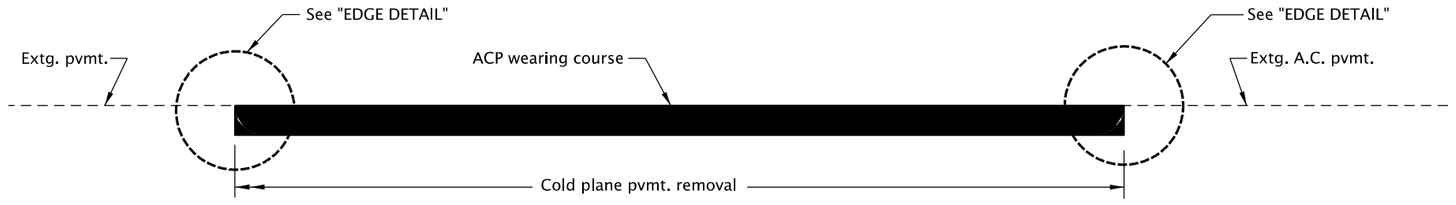
ACP PAVEMENT MATCH AT PROJECT ENDS OR BRIDGE ENDS WHEN NOT OVERLAYING THE BRIDGE



EDGE DETAIL



METHOD OF FEATHERING ACP PAVEMENT AT GRAVEL APPROACHES



METHOD OF MATCHING EXTG. ACP INLAY SURFACING

(Inlay to extg. asphalt conc. pvmt.)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

ASPHALT CONCRETE PAVEMENT (ACP) DETAILS

2024

DATE	REVISION DESCRIPTION

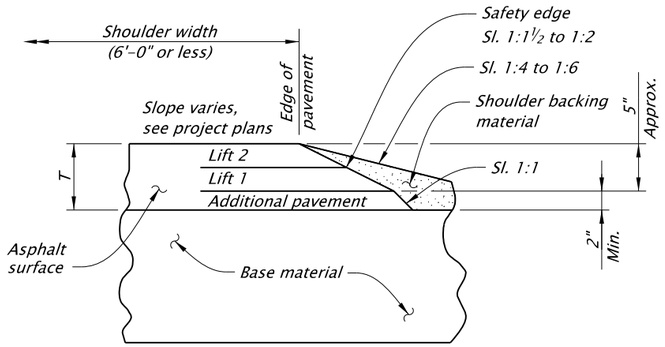
CALC. BOOK NO. N/A | SDR DATE 25-JUL-2017 | **RD610**

Effective Date: December 1, 2025 – May 31, 2026

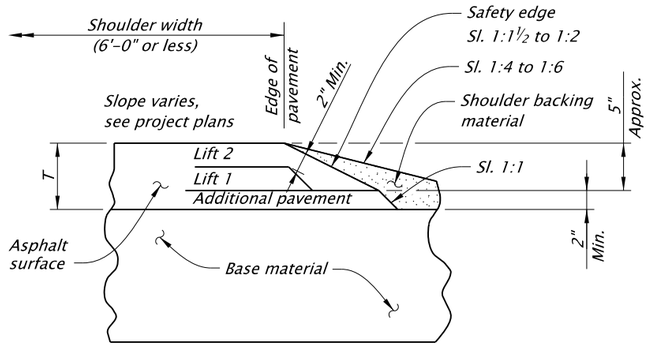
20-JUL-2020

RD610.dgn

19-JUL-2021
RD615.dgn

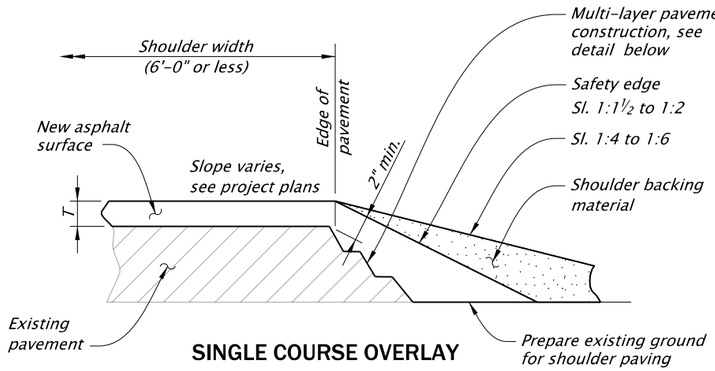


SAFETY EDGE PLACED WITH LIFTS

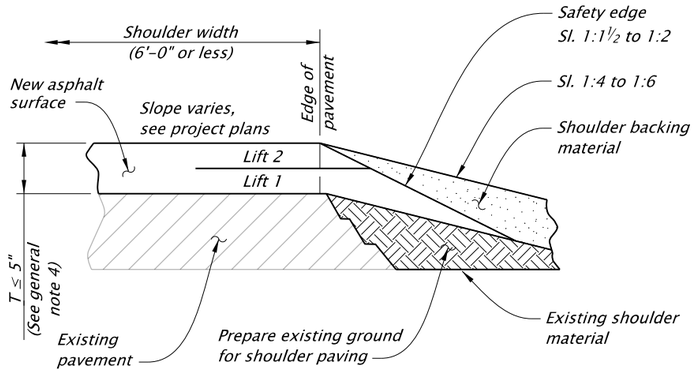


SAFETY EDGE PLACED ONLY WITH FINAL LIFT

SAFETEY EDGE FOR ASPHALT CONCRETE (NEW CONSTRUCTION)

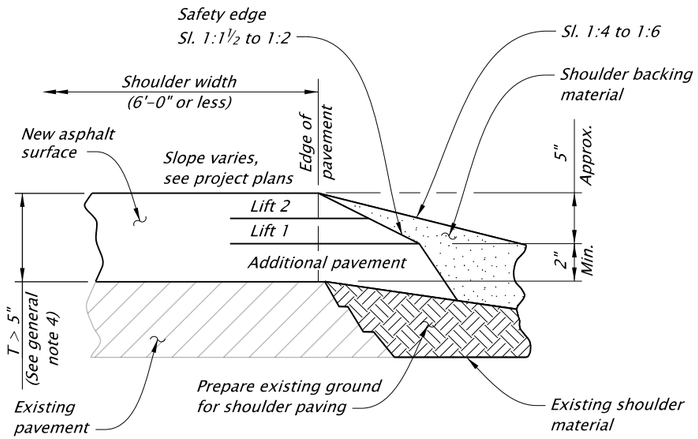


SINGLE COURSE OVERLAY



PAVEMENT THICKNESS (T) 5" OR LESS

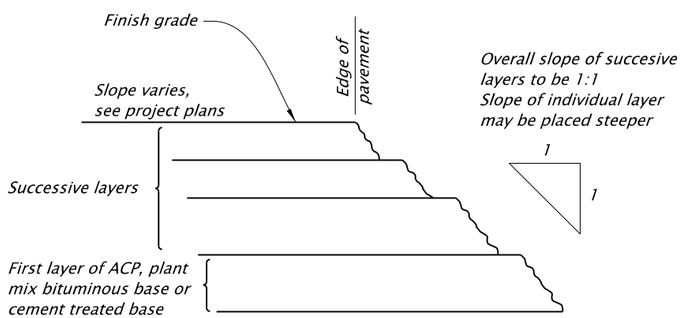
SAFETY EDGE FOR ASPHALT CONCRETE RECONSTRUCTION (INCLUDING MILL, INLAY AND OVERLAY)



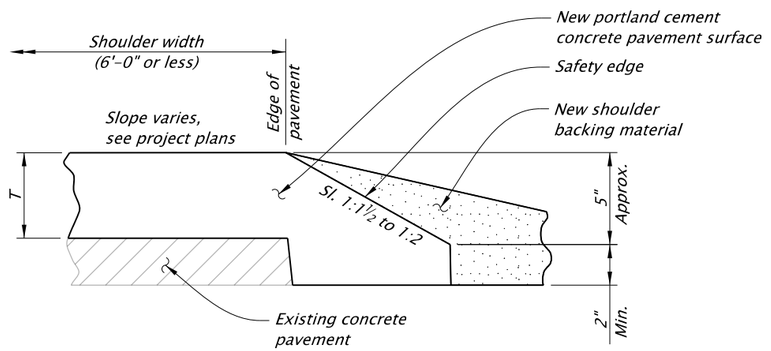
PAVEMENT THICKNESS (T) GREATER THAN 5"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *Safety edges are required at the outside edges of the paved roadway (edge of travel lane or edge of paved shoulders), where the wearing surface thickness is 2" or greater, except where indicated in the plans.*
2. *Construct the safety edge at a slope of 1:1½ to 1:2 measured from the pavement surface.*
3. *Do not construct safety edge at intersections, paved drives, or other obstructions.*
4. *For total new asphalt depth of "T"≤5", construct the safety edge to the full thickness of the surface and intermediate courses. For total new asphalt depth of "T" > 5", construct the safety edge to a depth of 5" approximately with a 1:1 sloped face below the safety edge.*



MULTI-LAYER PAVEMENT CONSTRUCTION



SAFETY EDGE FOR PORTLAND CEMENT CONCRETE PAVEMENT OVERLAY

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SURFACE EDGE DETAILS

2024

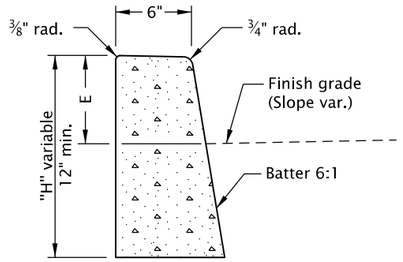
DATE	REVISION DESCRIPTION
07-2021	TITLE CHANGED, REVISED DETAILS AND NOTES

CALC. BOOK NO. N/A | SDR DATE 19-JUL-2021 | **RD615**

Effective Date: December 1, 2025 - May 31, 2026

20-JUL-2020

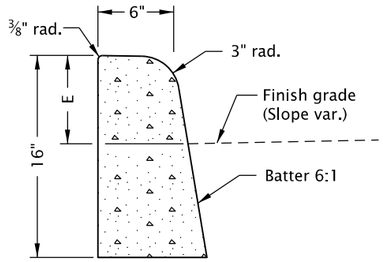
RD700.dgn



O.D.O.T. & City of Portland Standard "H"=16"

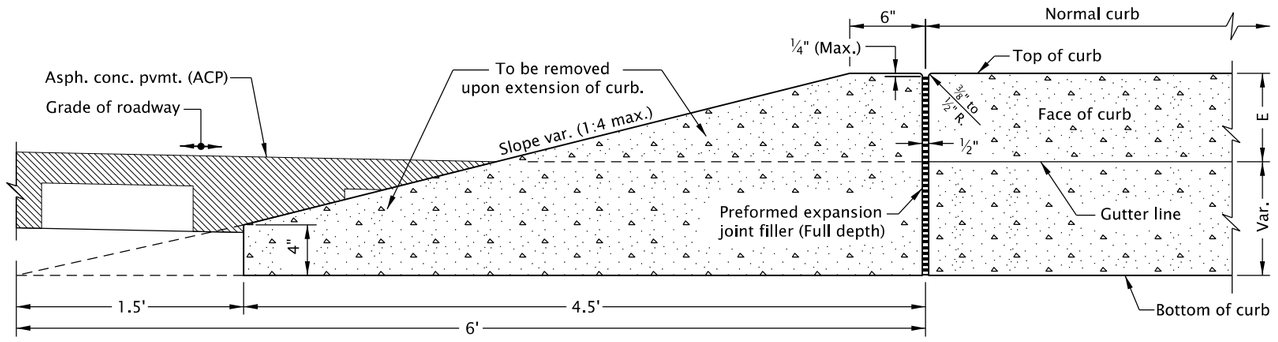
STANDARD CURB

(See general note 11)

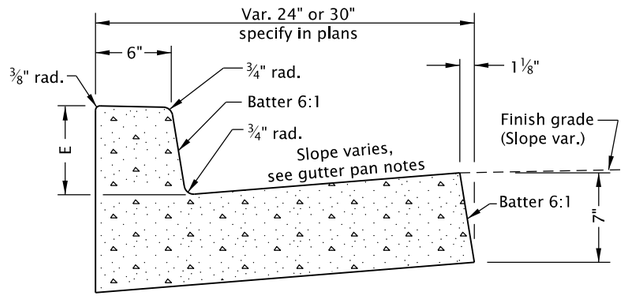


MOUNTABLE CURB

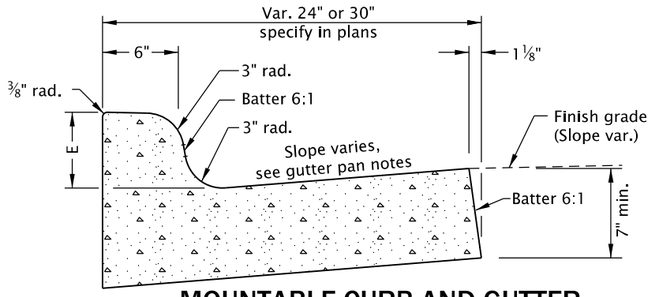
(See general note 11)



CURB ENDING DETAIL



CURB AND GUTTER



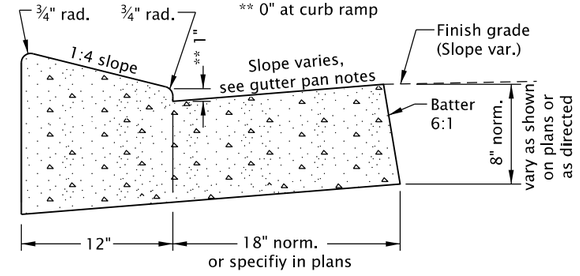
MOUNTABLE CURB AND GUTTER

GUTTER PAN NOTES:

Slope 5.0% normal.

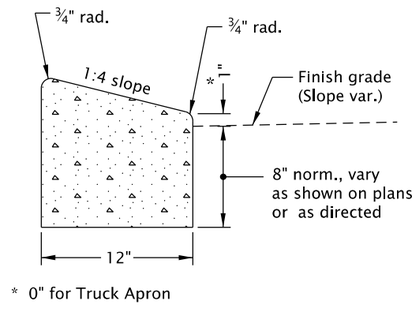
Slope 4.0% max. at curb ramps.

Vary slope as reqd. for drainage. Vary where shown on plans, and allowed by jurisdiction.



LOW PROFILE MOUNTABLE CURB AND GUTTER

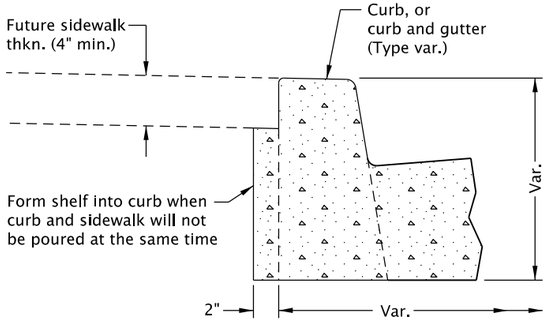
(Where shown on plans)



* 0" for Truck Apron

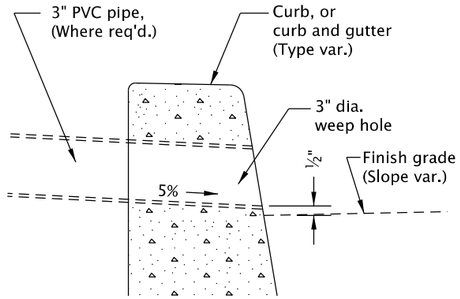
LOW PROFILE MOUNTABLE CURB

(See general note 11)



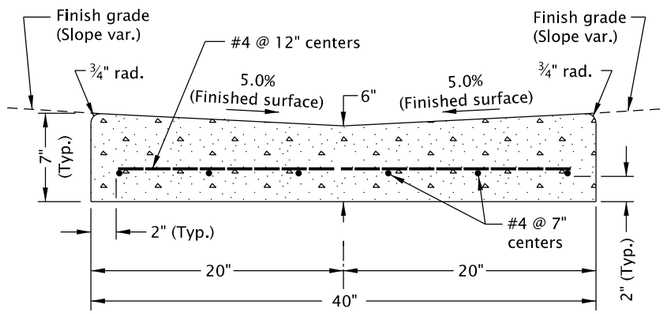
MODIFICATION FOR KEYWAY

(Where shown on plans)



WEEP HOLE DETAIL

(Where shown on plans, and allowed by jurisdiction)



VALLEY GUTTER

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb exposure "E" = 6" to 9", as measured vertically from flowline to highest point on curb. Vary as shown on plans or as directed. O.D.O.T standard "E"=7".
2. Const. curb expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. curb contraction joints at 15' maximum spacing, and at ends of each inlet and curb ramp.
4. Transitions shall be used to connect curbs of different exposures "E". ("E" Is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
5. Tops of all curbs shall slope toward the roadway at 1.5% max. (Max. 2.0% finished surface slope), unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
7. Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb & sidewalk, see Std. Dwgs. RD720 & RD721.
9. For drainage curbs, see Std. Dwg. RD701.
10. For curb ramp details, see Std. Dwgs. RD900 series.
11. On or along state highways, curb and gutter is required at curb ramp.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

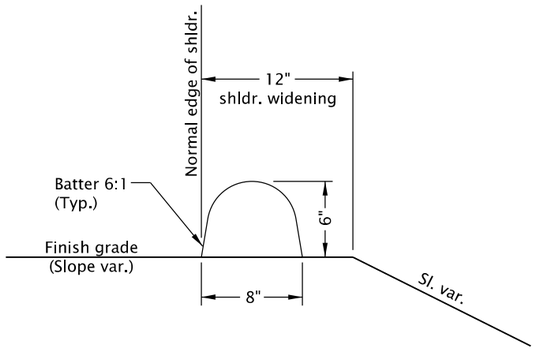
CURBS

2024

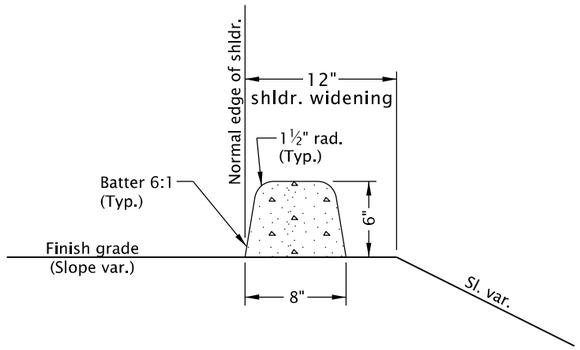
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD700**

Effective Date: December 1, 2025 - May 31, 2026



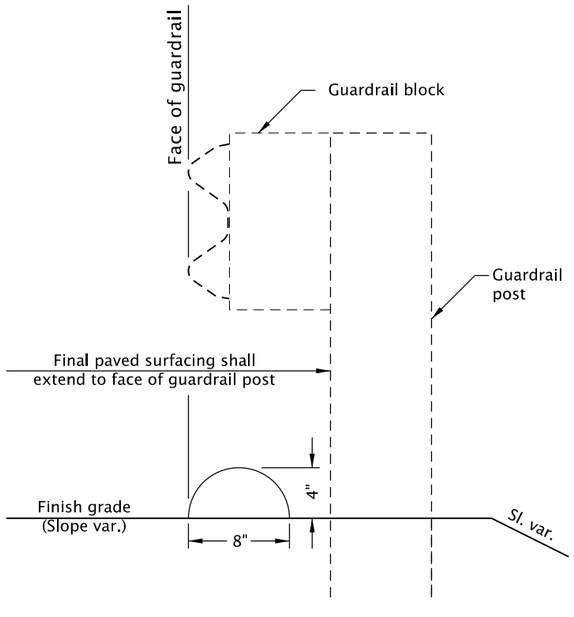
ASPHALT CONCRETE



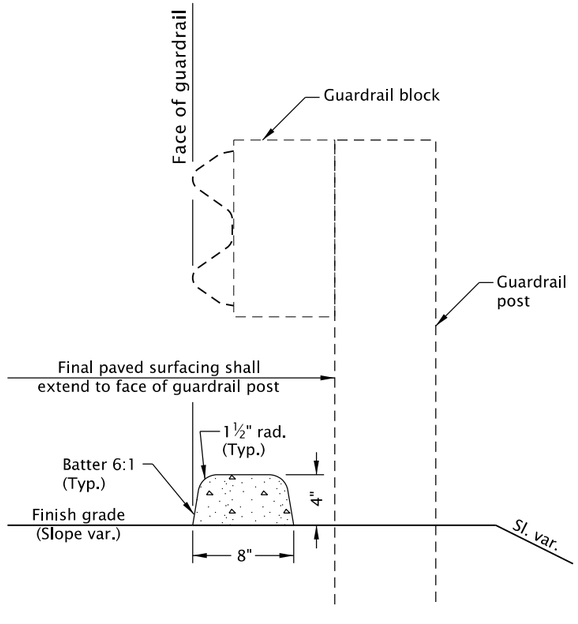
PORTLAND CEMENT CONCRETE

DRAINAGE CURBS

(See general note 4)



ASPHALT CONCRETE



PORTLAND CEMENT CONCRETE

DRAINAGE CURBS UNDER GUARDRAIL

(See general note 4)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. For PCC drainage curbs, construct curb expansion joints at 200' maximum spacing, and at points of tangency.
2. For PCC drainage curbs, construct curb contraction joints at 15' maximum spacing.
3. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
4. When bonding to dense graded ACP, apply epoxy cement between surfaces.
5. When drainage curb is required, curb alignment shall be the same as face of guardrail, as shown above. When a run of drainage curb, or any part thereof, is placed under guardrail, curb height shall be 4".
6. For other curb types, see Std. Dwg. RD700.
7. For guardrail details not shown, see Std. Dwg. RD400.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

DRAINAGE CURBS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD701**

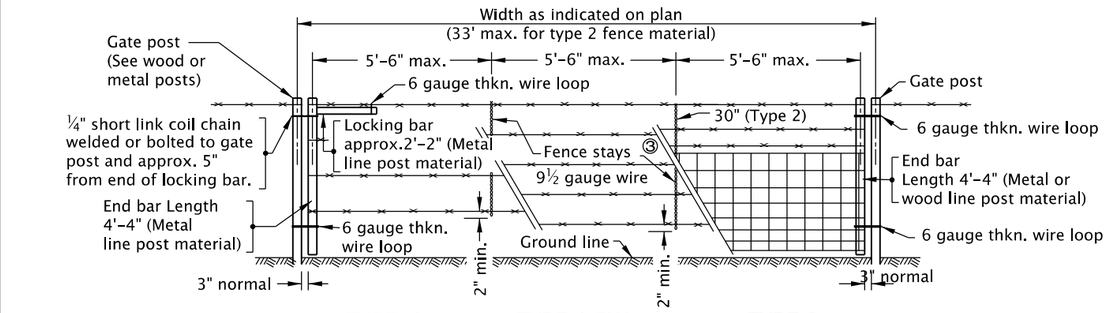
20-JUL-2020

RD701.dgn

Effective Date: December 1, 2025 - May 31, 2026

20-JUL-2020

RD810.dgn



TYPE 1 Fence material ①②

TYPE 1-5W Fence material ①②

TYPE 2 Fence material ①②

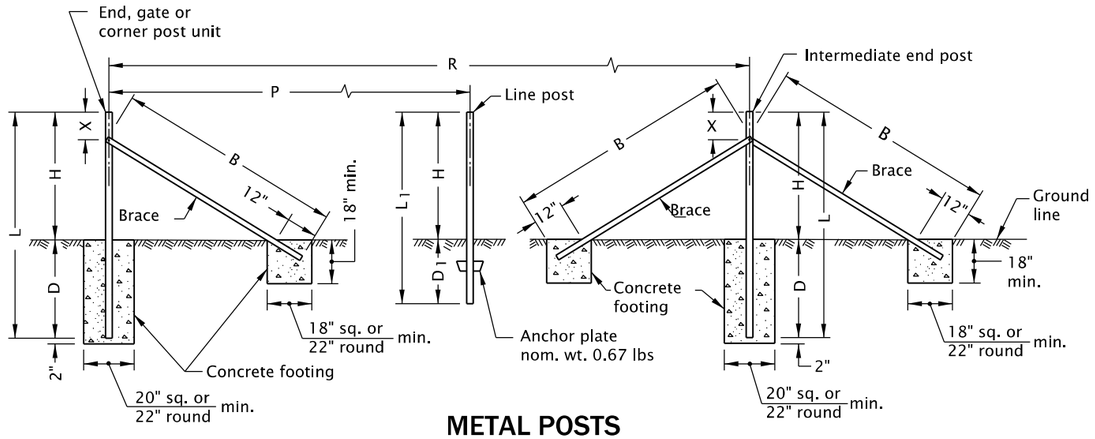
NOTES:

① Match adjointing fence type.

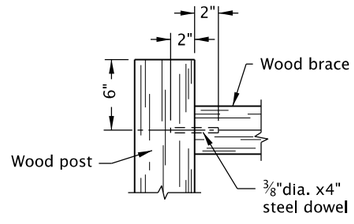
② For details not shown see fence type.

③ For wooden stays, see Type 1 fence details.

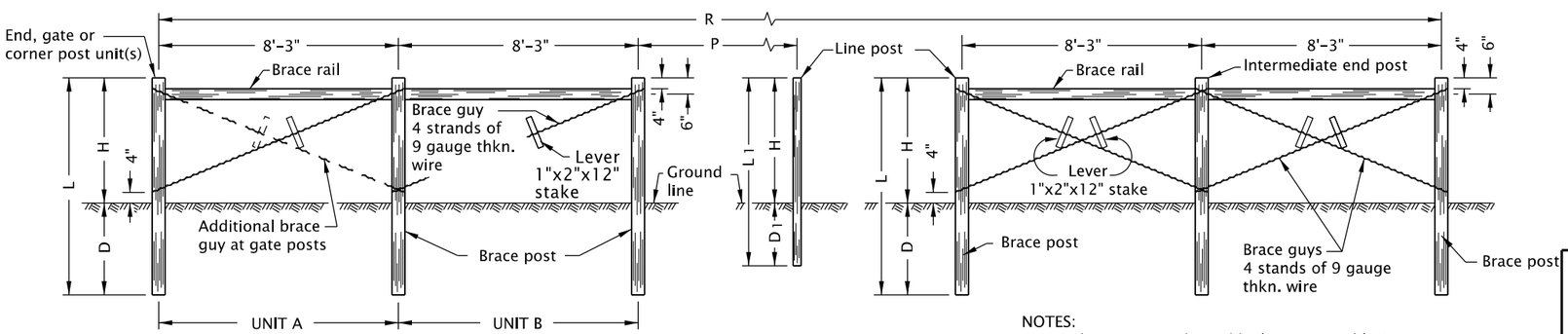
GATEWAY



METAL POSTS



BRACE RAIL CONNECTION



For units required see Table 1

WOOD POSTS

NOTES:
1. For dimensions indicated by letter see Table 2.
2. Line post spacing same as dimension P.
3. For cross sectional dimensions of members see Table 3.

① Fence stays 9½ gauge thkn. wire

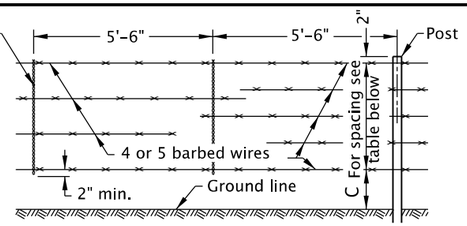


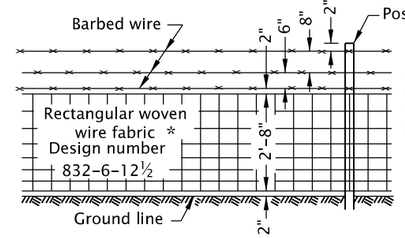
TABLE OF DIMENSIONS

FENCE	C	SPACING	NO. OF WIRES
Type 1	14"	12"	4
Type 1-5W	10"	10"	5

① NOTE:

Wooden Stays to be used in areas of heavy snowfall or snow drifts over 36". Stays to be 2"x2"x52" min. length, sound, untreated Douglas Fir, Western Hemlock or Western Pine, spaced as shown for wire stays and to rest firmly on the ground.
Horizontal wires to be stapled are: single wires and a minimum of 4 wires for woven wire fabric.

TYPES 1 , & 1-5W



* U.S. Dept. of Commerce Simplified Practice Recommendation R9-47.

② NOTE:
For wooden stays, see Type 1 fence details

② **TYPE 2**

TABLE 1 (For wood posts)

FENCE	R (ft)	UNITS REQUIRED
Types 1, 1-5W & 2	20 or Less	* None
	20-330	A
	Over 330	A & B

* Unit A required at gate post.

Either Unit A or Units A & B are required in existing fence line at intersection with new fence line.

TABLE 2

FENCE	R max.	P	L min.	L1 min.	H	D min.	D1 min.	B min.	X min.-max.
All Types	660'	16'-6"	7'-6"	6'-6"	4'-4"	3'-2"	2'-2"	7'-8"	9"-22"

TABLE 3

MEMBER	WOOD			METAL		
	* ROUND		SQUARE	SHAPE	WEIGHT PER (ft) nominal	SIZE nominal
	DIAMETER OF SMALL END (in)		SIZE nominal (in)			
	min.-max.	min. avg.				
Line Post	3" to 4"	3"	† 3"x3"	Tee Channel ⓐ or U-bar	1.33 lb	ASTM A-702
Brace or Brace Rail	3½" to 5½"	4"	4"x4"	Tubular	ⓑ	1½" +/- O.D.
				ⓐ Angle	3.19 lb	2"x2"x¼"
Other Post	4" to 7"	5"	† 5"x5"	Tubular	b	2⅜" O.D.
				ⓐ Angle	4.1 lb	2½"x2½"x¼"

* Max. taper 1":48".

† Max. allowable size 1" additional in each dimension.

ⓐ In accordance with ASTM A 702.

ⓑ In accordance with AASHTO M 181.

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. For dimensions indicated by letter see Table 2.
2. Line post spacing same as dimension P.
3. For shapes, weights and dimensions of members see Table 3.
4. All concrete shall be commercial grade concrete.
5. See Std. Dwg. RD820 for fence gates.
6. See project plans for details not shown.
7. Add fence grounding as required.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

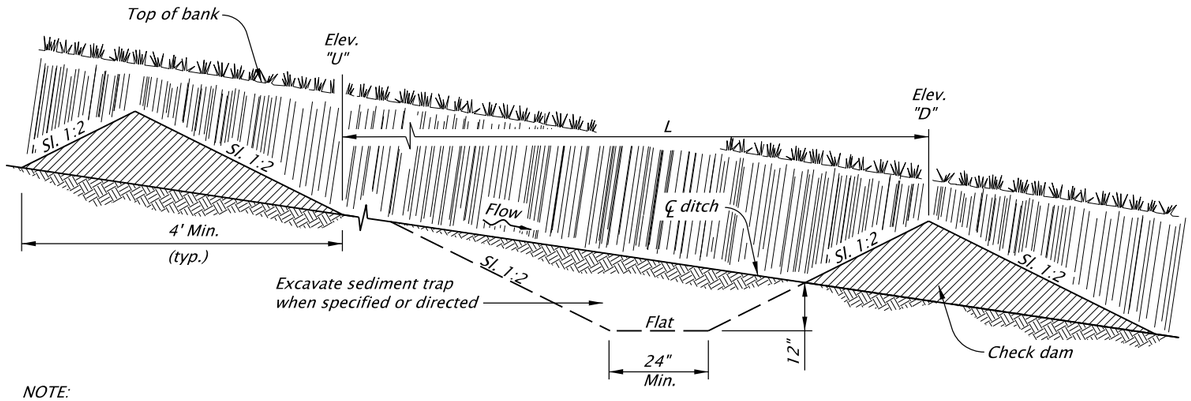
BARBED AND WOVEN WIRE FENCES

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD810**

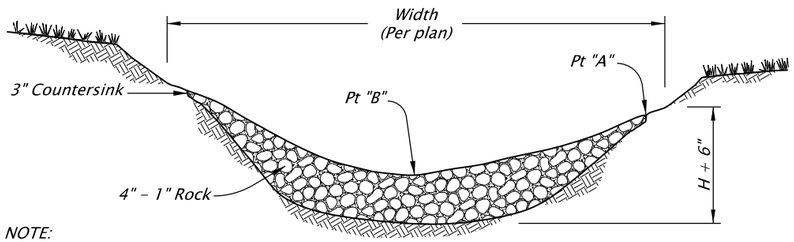
Effective Date: December 1, 2025 - May 31, 2026



NOTE:
L = Spacing along swale or ditch so that Elevation "U" equals Elevation "D".

TYPICAL PROFILE SECTION CHECK DAMS (SHOWN WITH AGGREGATE)

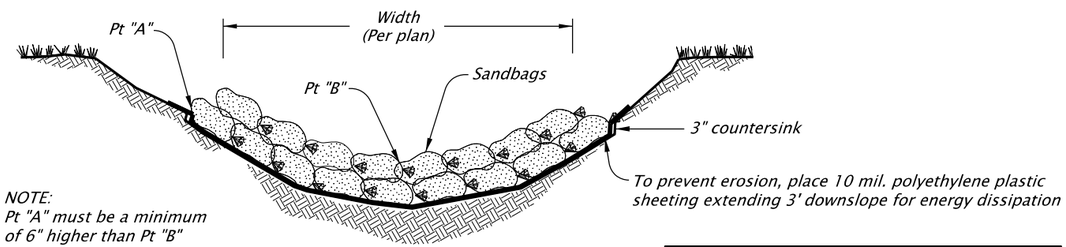
NOT TO SCALE



NOTE:
Pt "A" must be a minimum of 6" higher than Pt "B"

AGGREGATE CHECK DAM - TYPE 1

NOT TO SCALE



NOTE:
Pt "A" must be a minimum of 6" higher than Pt "B"

SANDBAG CHECK DAM - TYPE 4

NOT TO SCALE

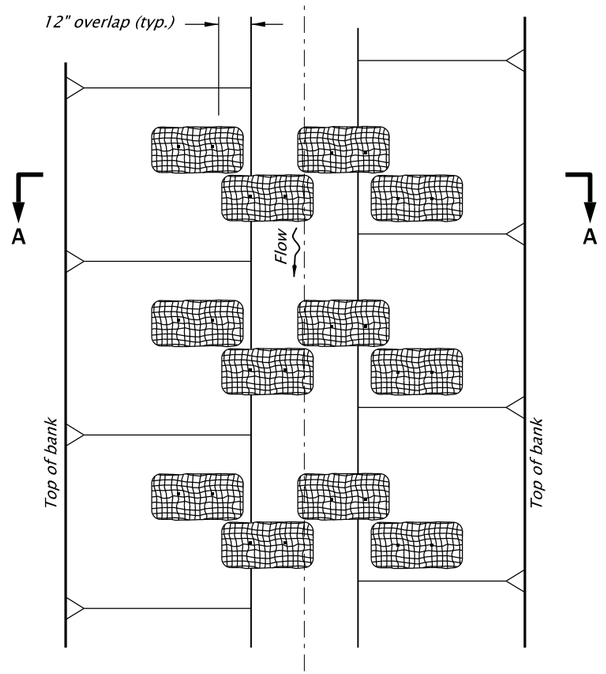
NOTES:

1. *Type 3 - stake biofilter bags with two 2"x2"x18" (minimum) wood stakes per bag. Drive stakes a minimum of 6" into the ground and flush with the top of the bags. Omit stakes if placed over paved surfaces. Overlap bags 12" minimum at each joint.*
2. *Type 4 - Tightly abut or overlap ends of sandbags at each joint.*
3. *Spacing between check dams for all check dam types shall comply with the typical profile section shown above.*
4. *Construct check dams Type 3 or 4 with two bags when installed in paved gutter with curb section.*

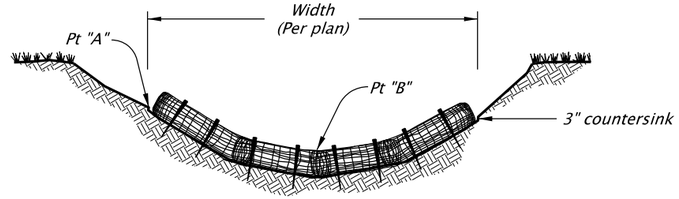
MAXIMUM CHECK DAM SPACING "L"

Ditch Grade	H=8"	H=12"	H=18"	H=24"
10%	* *	* *	15'	20'
9%	* *	* *	16'	22'
8%	* *	* *	18'	25'
7%	* *	* *	21'	28'
6%	* *	16'	25'	33'
5%	* *	20'	30'	40'
4%	16'	25'	37'	50'
3%	22'	33'	50'	66'
2%	33'	50'	75'	100'

** * Not allowed* *H = Min. dam height*



PLAN



SECTION A-A

BIOFILTER BAG CHECK DAM - TYPE 3

NOT TO SCALE

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CHECK DAMS TYPE 1, 3 AND 4

2024

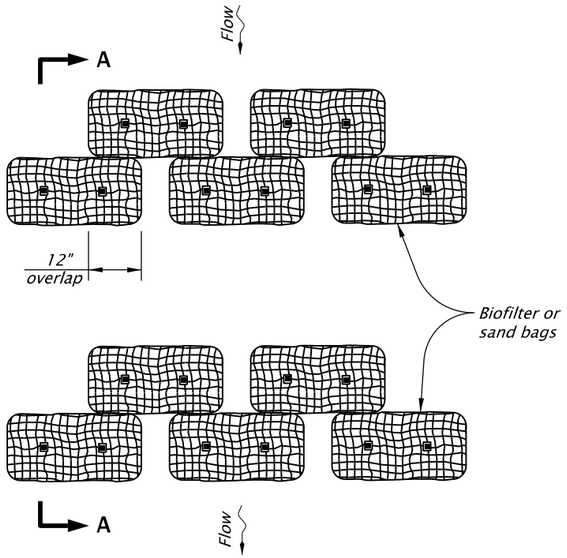
DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS
07-2024	ADDED NOTE 4

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **RD1005**

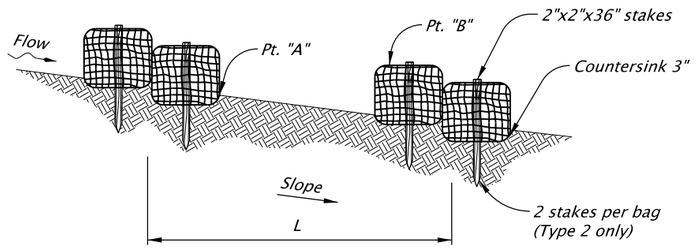
12-JUL-2024

RD1005.dgn

Effective Date: December 1, 2025 - May 31, 2026



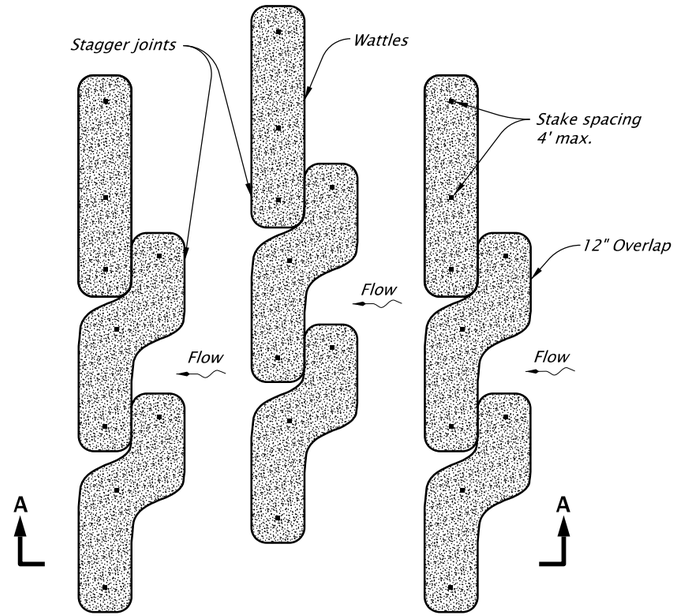
PLAN



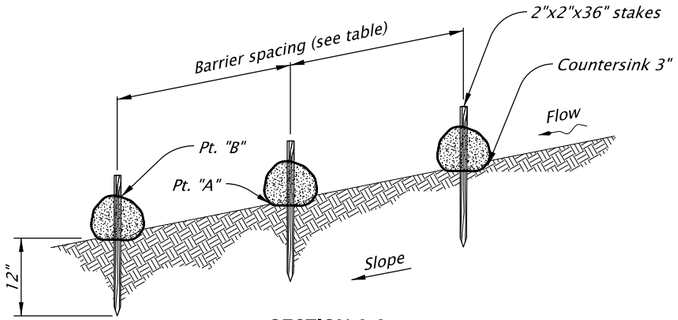
SECTION A-A

BIOFILTER BAG / SAND BAG BARRIER - TYPE 2 AND 4

NOT TO SCALE



PLAN



SECTION A-A

FIBER ROLL BARRIER - TYPE 3

NOT TO SCALE

NOTES:

1. *For Type 2 barrier, drive stakes flush with top of bag and into undisturbed ground a min. of 12". Omit stakes if bags are placed on paved surface.*

2. *For Type 2 and Type 4 barriers, space bags (L) so that the elevation of point "A" is less than or equal to the elevation of point "B".*

Type 2 – Biofilter bags
Type 3 – Wattles
Type 4 – Sand bags

BARRIER SPACING		
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS		
% SLOPE	% SLOPE	MAXIMUM SPACING ON SLOPE
10% Flatter	1:10 or Flatter	300'
10 > % ≥ 15	10 > X ≥ 7.5	150'
15 > % ≥ 20	7.5 > X ≥ 5	100'
20 > % ≥ 30	5 > X ≥ 3	50'
Steeper than 30%	Steeper than 1:3	25'

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

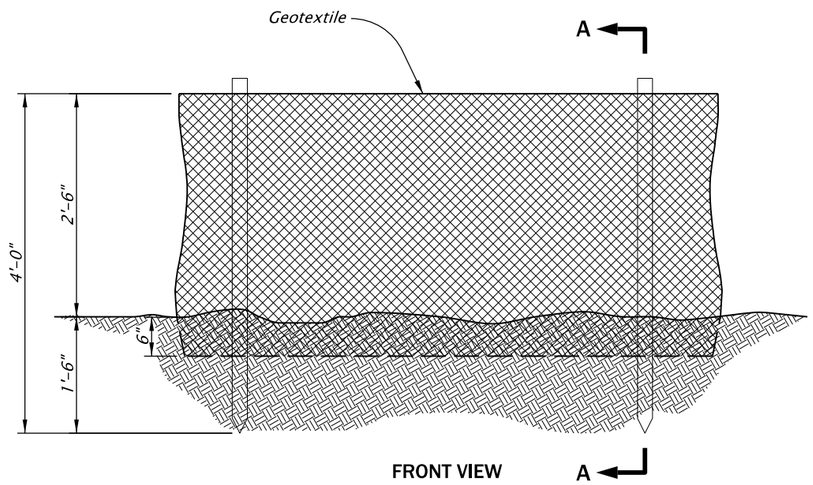
SEDIMENT BARRIER TYPE 2, 3 AND 4

2024

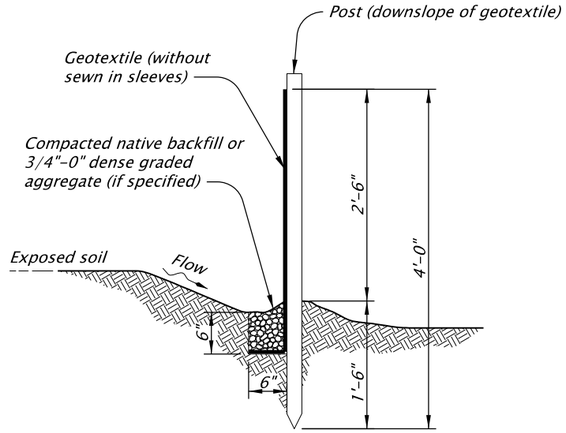
DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | RD1030

Effective Date: December 1, 2025 – May 31, 2026



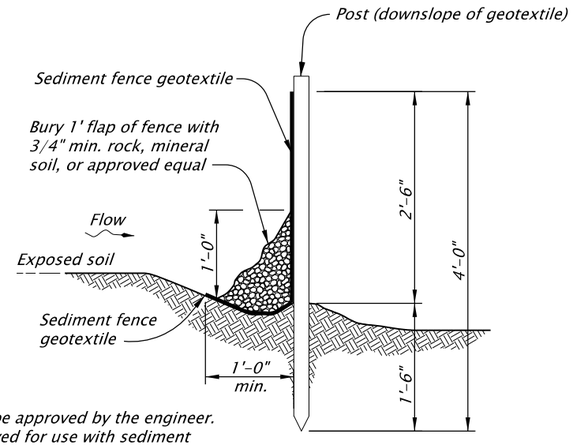
FRONT VIEW



SECTION A-A

SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1

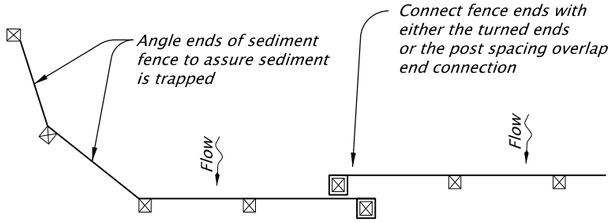
NOT TO SCALE



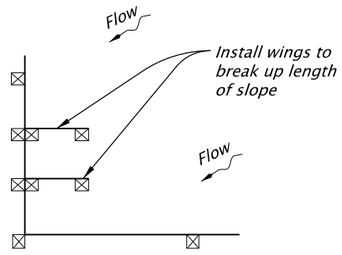
NOTES:
1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post sleeves.

ALTERNATE SEDIMENT FENCE WITHOUT TRENCHING - TYPE 2

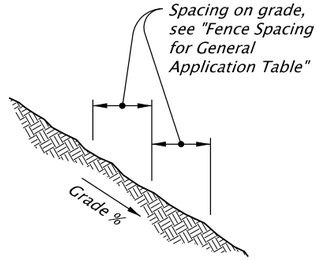
NOT TO SCALE



PLAN VIEW



TERMINATION AT CORNER OR PROPERTY LINE



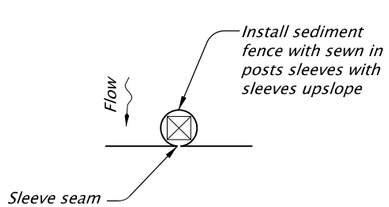
GENERAL NOTES:
1. Use 2"x2" wood fence posts.
2. Posts to be installed on downhill side of sediment fence geotextile. Position posts to prevent separation from geotextile.
3. Compact filter fabric trench backfill and soil on uphill side of fence.
4. Locate fence no closer than three feet to the toe of a slope.
5. Wing spacing shall comply with "Fence Spacing for General Application Table".

FENCE SPACING FOR GENERAL APPLICATION TABLE

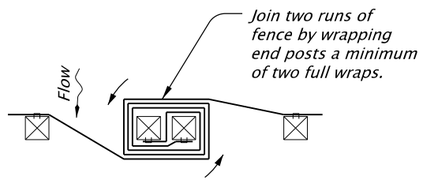
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAXIMUM SPACING ON GRADE
Grade < 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'

POST SPACING TABLE

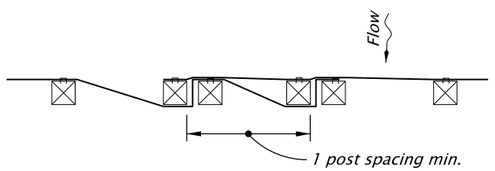
6'	Sediment Fence with Geotextile elongation less than 50%
4'	Sediment Fence with Geotextile elongation 50% or more



GEOTEXTILE WITH POST SLEEVES



TURNED ENDS CONNECTION



POST SPACING OVERLAP CONNECTION

GEOTEXTILE END CONNECTIONS

NOT TO SCALE

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

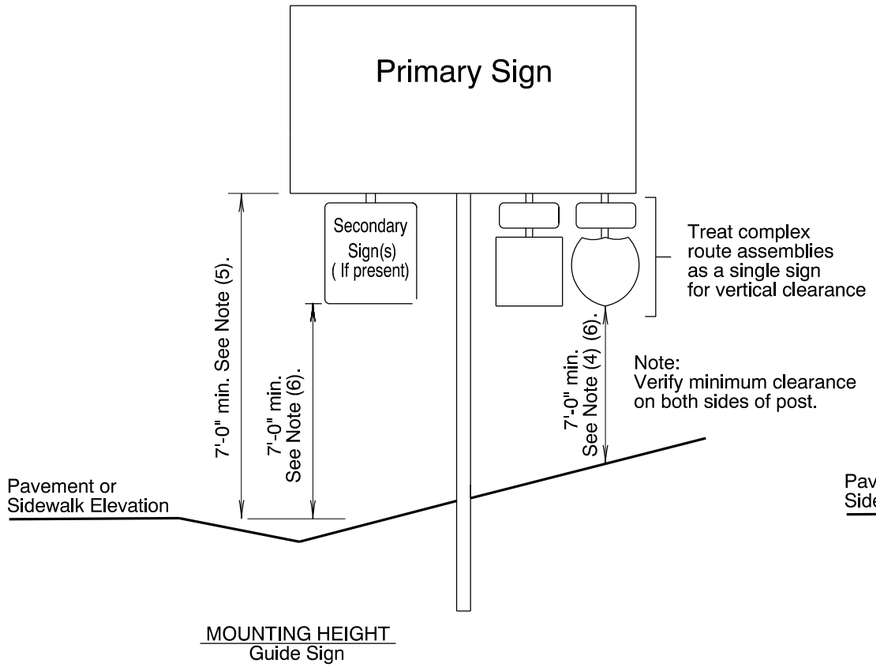
SEDIMENT FENCE

2024

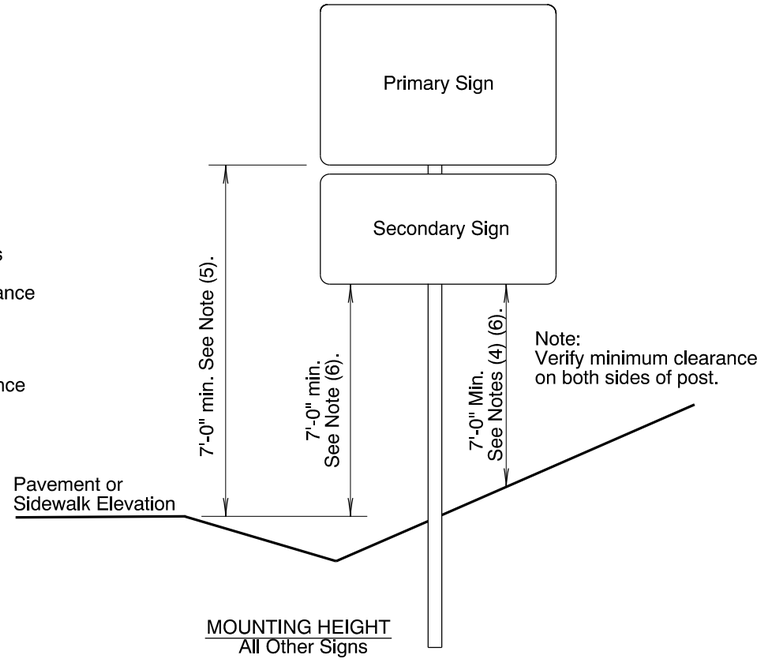
DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1040**

Effective Date: December 1, 2025 - May 31, 2026



MOUNTING HEIGHT
Guide Sign



MOUNTING HEIGHT
All Other Signs

General Installation Notes:

a. Signing details shown on this sheet are intended to convey "typical" conditions only. Individual locations may require installation different from those shown.
For guidance regarding unique installations or exceptions call the Project Sign Designer or Region Traffic Section.

b. Locate breakaway supports away from ditches to avoid problems with erosion, corrosion, debris, maintenance and breakaway performance. See Dwg. No. TM635 for more information.

c. For wood post support details see Dwg. No. TM670.

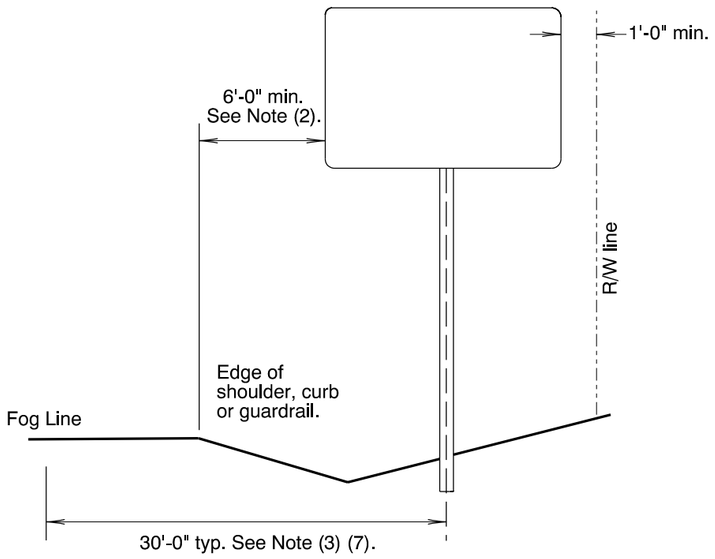
d. For perforated steelsquare tube support details see Dwg. No. TM681.

e. For triangular base breakaway support details see Dwg. No. TM602.

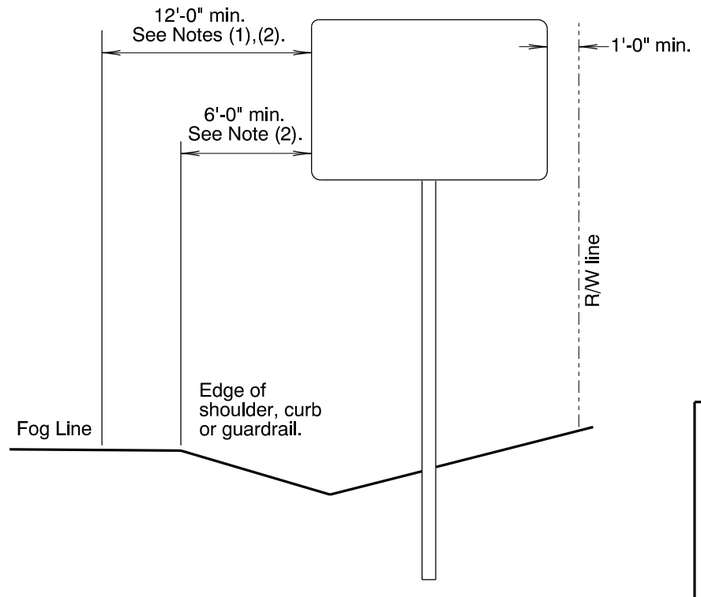
f. For multi-post breakaway support details see Dwg. No. TM600.

g. Mounting heights should not be more than 3 inches more than the minimum heights shown, where practical.

h. 2" vertical spacing between all signs.



LATERAL OFFSET
Guide Signs



LATERAL OFFSET
All Other Signs

Notes:

1). 6' minimum if behind barrier.

2). 2' minimum if restricted R/W.

3). 20' for ramp terminals.

4). 8' minimum if bicycle path underneath.

5). 8' minimum if secondary signs attached.

6). 5' minimum if outside clearzone, in rural areas and no pedestrians underneath.

7). For multi-post installations measure distance from post closest to roadway.

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OREGON STANDARD DRAWINGS

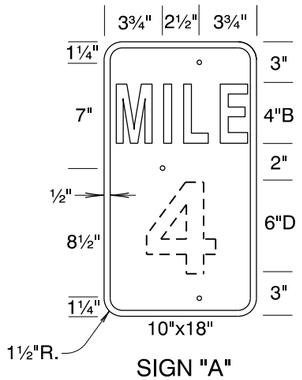
SIGN INSTALLATION DETAILS

2024

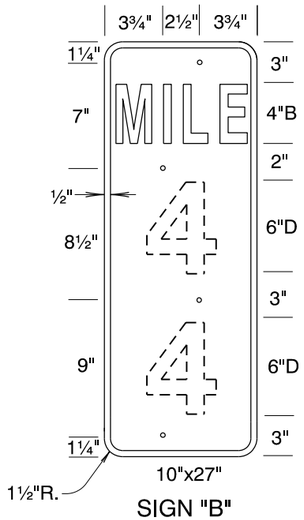
DATE	REVISION DESCRIPTION
01/22	Edited elevation text in Mounting Height details

CALC. BOOK NO. N/A | SDR DATE 07 JAN 2022 | **TM200**

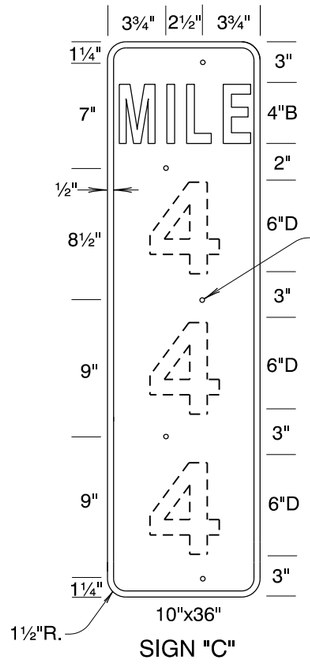
Effective Date: December 1, 2025 - May 31, 2026



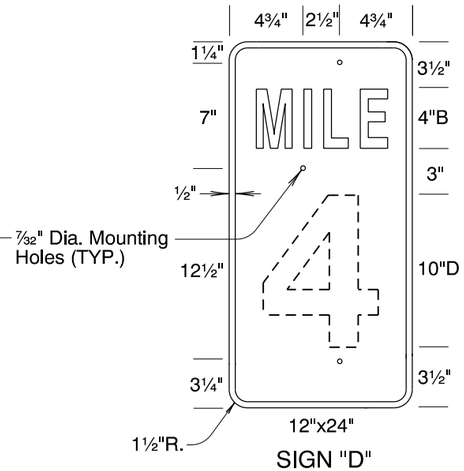
SIGN "A"



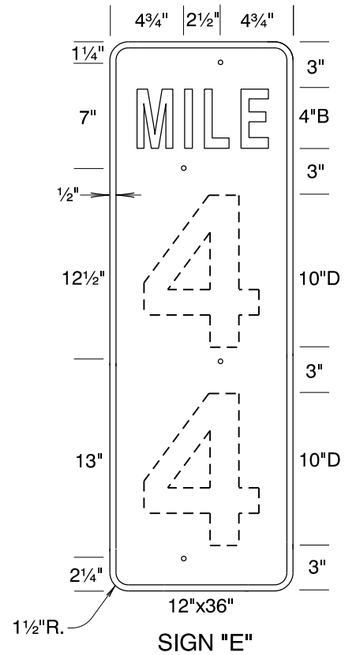
SIGN "B"



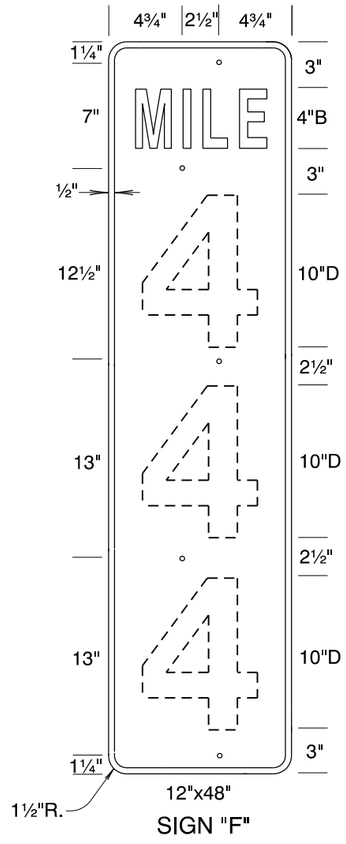
SIGN "C"



SIGN "D"



SIGN "E"



SIGN "F"

CONVENTIONAL ROADS
(2 Lanes)

EXPRESSWAYS & FREEWAYS
(4 Lanes or More)

GENERAL NOTES:

1. SIGNS
   (a) Signs shall be fabricated from sheet aluminum with a nominal thickness of 0.063".
   (b) Signs shall have white ASTM Type III or Type IV retroreflective sheeting permanent legend and border on a green ASTM Type III or Type IV retroreflective sheeting background.
   (c) The Federal Highway Administration's standard rounded capital letter alphabet shall be used.
   (d) The corners of signs shall be rounded to match the border.
   (e) 7/32" dia. mounting holes
   (f) Signs shall conform to sections 940 and 2910 of the current Oregon Standard Specifications for Construction.
   (g) The rivet hole pattern is unique for each sign and corresponds to a specific post length on ODOT Standard Drawing TM222.
   (h) Border for all signs is ½" wide. This dimension supersedes ODOT Standard specification 00940.45(c)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SIGNING DETAILS MILEPOST MARKERS

2024

DATE	REVISION DESCRIPTION
6/21	Replaced reference to "silver-white" with "white"

CALC. BOOK NO. N/A | SDR DATE 30-JUN-2021 | **TM221**

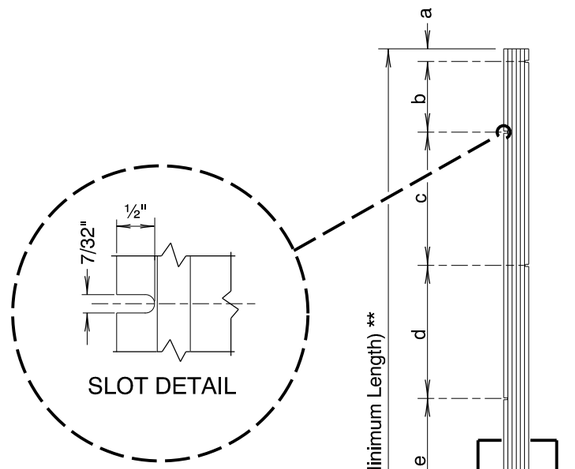
Effective Date: December 1, 2025 - May 31, 2026

30-JUN-2021

TM221.dgn

10-DEC-2009

TM222.dgn

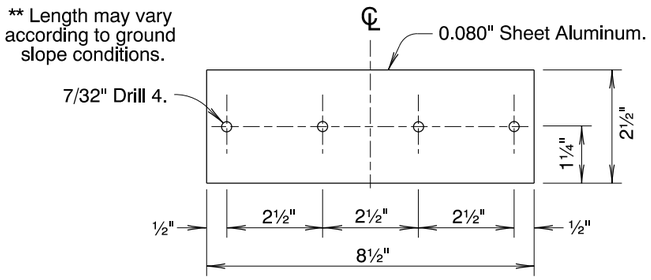


POST DETAILS

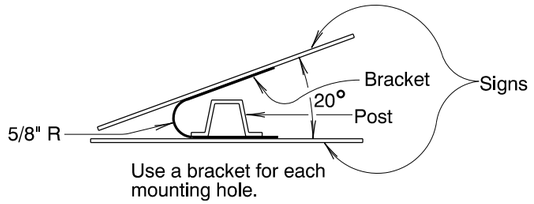
POST DIMENSION TABLE						
SIGN *	a	b	c	d	e	f **
A	1"	7"	8½"	——	——	8'-6"
B	1"	7"	8½"	9"	——	9'-3"
C	1"	7"	8½"	9"	9"	10'-0"
D	1"	7"	12½"	——	——	9'-0"
E	1"	7"	12½"	13"	——	10'-6"
F	1"	7"	12½"	13"	13"	12'-0"

* See TM221

** Length may vary according to ground slope conditions.



Bend around centerline.

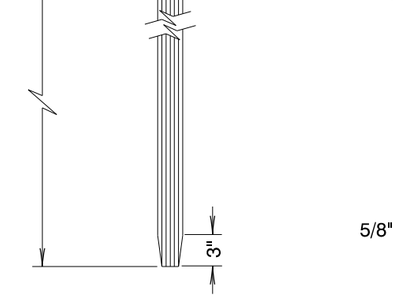


Use a bracket for each mounting hole.

BRACKET ASSEMBLY
(Use only on 2 lane roads)

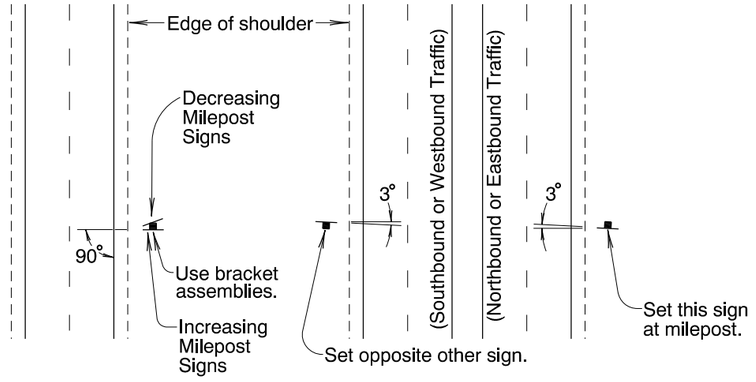
GENERAL NOTES:

1. POST AND BRACKET ASSEMBLIES
   (a) The nominal weight of the post shall be 2 pounds per lineal foot.
   (b) Bracket assemblies shall conform to subsection 2910.10 of the current Oregon Standard Specifications for Construction.
2. INSTALLATION
   (a) If roadway conditions prohibit locating the milepost sign at the milepoint, it may be moved up to 50 feet in either direction. If it cannot be located within this variation, it should be omitted.
   (b) Signs shall be mounted to posts with ⅜" diameter aluminum blind rivets that conform to subsection 2910.40 of the current Oregon Standard Specifications for Construction.
   (c) If the milepost sign is located within 25 feet of a delineator, the delineator should be moved or deleted.
   (d) Installation of the post and sign panel shall conform to subsection 840.41 of the current "Oregon Standard Specifications".



At guard rail locations the milepost sign is to be installed back of the rail

INSTALLATION



CONVENTIONAL ROADS EXPRESSWAYS & FREEWAYS

INSTALLATION

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

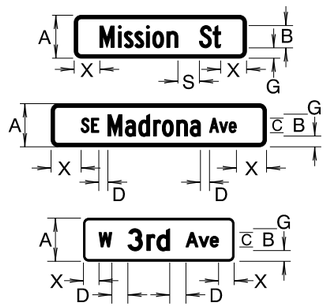
INSTALLATION DETAILS MILEPOST MARKER POSTS

2024

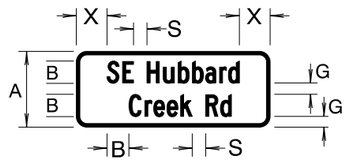
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 10-DEC-2009 | **TM222**

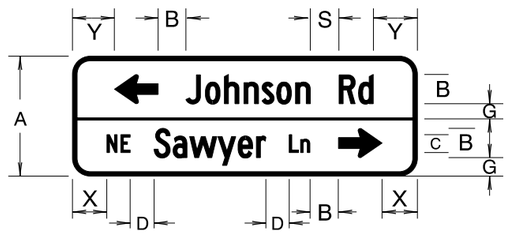
Effective Date: December 1, 2025 - May 31, 2026



LEGEND EXAMPLES FOR STREET NAME SIGNS



STACKED LEGEND FOR STREET NAME SIGN
(GROUND-MOUNTED)



STACKED LEGEND FOR STREET NAME SIGN
(MAST ARM MOUNTED)

Notes: If 12"C font on mast arm mounted sign yields signs larger than 21 square feet, the 10" Alternate may be used.

White border and legend on mast-arm signs are to be ASTM Type IX retroreflective sheeting. Borders shall be flush with edge of sign. Dividers, where used, shall be same width as border.

New Projects: Include mast-arm signs on Signing Plans.

Existing Poles: Perform pole analysis prior to adding or enlarging signs.

STREET NAME SIGN DETAILS

	A	A*	B	C	D**	E	F	G	G*
GROUND-MOUNTED SIGN (2-3 LANE HWYS)	12"	15"	6"	4"	2½"	1"	1½"	3"	5"
GROUND-MOUNTED SIGN (4+ LANES AND 40 MPH OR LESS)	12"	15"	6"	4"	2½"	1"	1½"	3"	5"
GROUND-MOUNTED SIGN (4+ LANES AND > 40 MPH)	15"	18"	8"	5"	3⅛"	1"	1½"	3½"	6"
GROUND-MOUNTED SIGN (LOCAL ROAD, 25 MPH OR LESS)	9"	12"	5"	3"	1⅞"	½"	1½"	2"	4"
MAST ARM MOUNTED SIGN *** (12" STANDARD)	21"	24"	12"	8"	5"	1"	3"	4½"	7½"
MAST ARM MOUNTED SIGN (10" ALTERNATE)	21"	21"	10"	6"	3¾"	1"	3"	5½"	7"
STACKED LEGEND SIGN (GROUND-MOUNTED)	21"	24"	6"	N/A	N/A	1"	3"	3"	4"
STACKED LEGEND SIGN *** (MAST ARM MOUNTED)	30"	33"	8"	5"	3⅛"	1"	3"	3½"	5"

E = BORDER WIDTH
F = BORDER RADIUS
H = LETTER HEIGHT
S = SPACE BETWEEN WORDS
X = 1/2 OF REMAINING SPACE
* = USE FOR TEXT INCLUDING LOWER-CASE g, j, p, q and y
** = MINIMUM SIZE; CAN BE LARGER TO MATCH STANDARD HIGHWAY SIGN'S D3-1
*** = SIGNS EXCEEDING THE MAXIMUM SIGN HEIGHT "Z" COLUMN OF THE MAST ARM STREET NAME SIGN MOUNT DETAIL ON TM679 WILL REQUIRE STRUCTURAL ANALYSIS OF THE MAST ARM AND POLE.

SERIES (FONT)				
	B	C	D	E
S	.531 H	.625 H	.836 H	1.00 H

SPACING BETWEEN WORDS

X-Dimension should be approximately the same dimension as the letter Height (H). At a minimum the X-Dimension shall be no less than one-half the letter height (1/2 H)

Sign examples shown here are not drawn to scale, but to illustrate the layout of the legend items.

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

STREET NAME SIGN LAYOUT

2024

DATE	REVISION DESCRIPTION
01-2024	MOVED DIRECTIONAL SIGN CONTENT TO NEW STD DWG TM226
01-2024	ADDED STREET SIGN EXAMPLE AND EDITED DIMENSION TABLE

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **TM223**

Effective Date: December 1, 2025 - May 31, 2026

19-JAN-2024

TM223.dgn

07-01-2020

TM500.dgn

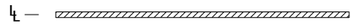
W

4" WHITE LINE

W-2

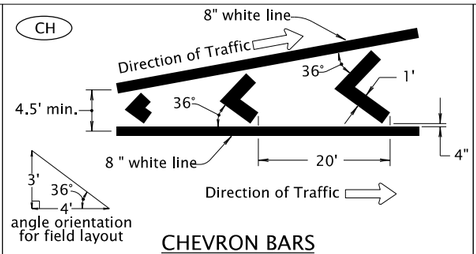
8" WHITE LINE

Y



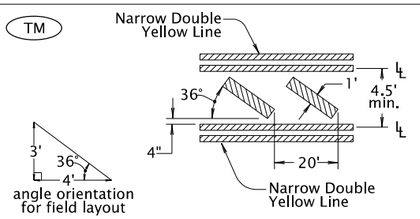
4" YELLOW LINE

CH



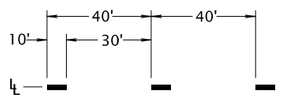
CHEVRON BARS
1' WHITE BARS AT 20' SPACING

TM



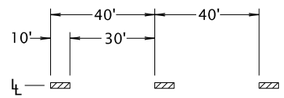
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 20' SPACING

WB



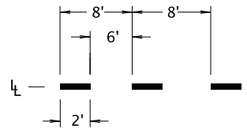
4" WHITE BROKEN LINE

YB



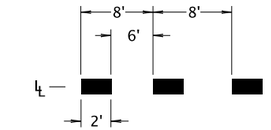
4" YELLOW BROKEN LINE

WD



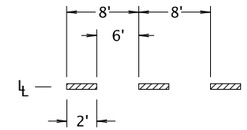
4" WHITE DOTTED LINE
For lane extensions

WD-2



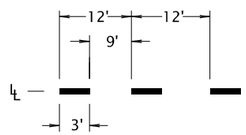
8" WHITE DOTTED LINE
For lane extensions and bike lane extensions

YD



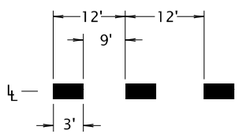
4" YELLOW DOTTED LINE
For lane extensions

DLL



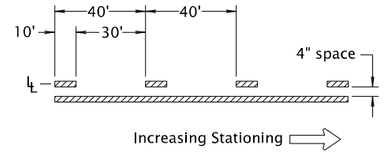
4" WHITE DOTTED LANE LINE
For lane lines in acceleration/deceleration lanes

DLL-2



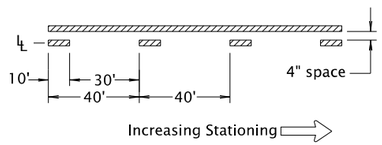
8" WHITE DOTTED LANE LINE
For lane lines in drop lanes

NPR



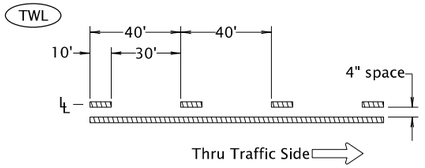
NO-PASS RIGHT
4" YELLOW LINES

NPL



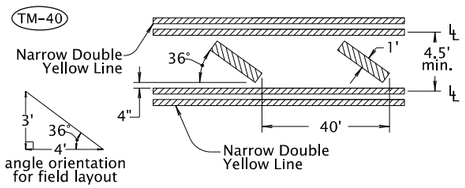
NO-PASS LEFT
4" YELLOW LINES

TWL



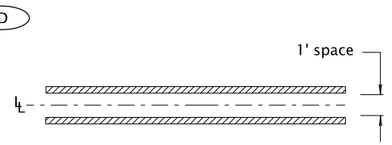
TWO-WAY LEFT TURN
4" YELLOW LINES

TM-40



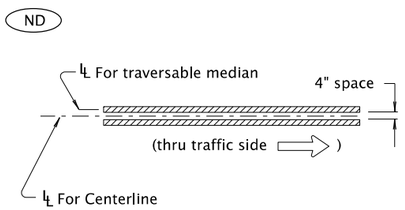
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 40' SPACING
For use at painted medians where
distance between left turn refuges exceeds 200'

D



DOUBLE NO-PASS
TWO 4" YELLOW LINES

ND

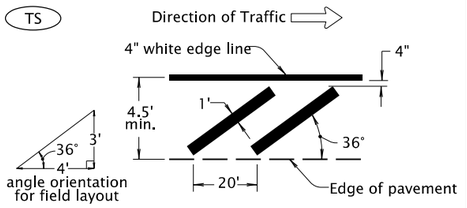


NARROW DOUBLE NO-PASS
TWO 4" YELLOW LINES

NDW

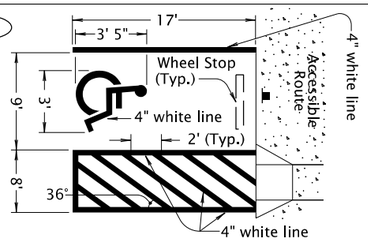
NARROW DOUBLE NO-LANE CHANGE
TWO 4" WHITE LINES

TS



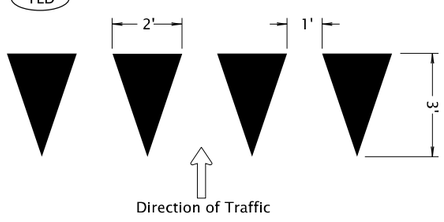
TRANSVERSE SHOULDER BARS
1' WHITE BARS AT 20' SPACING

HC



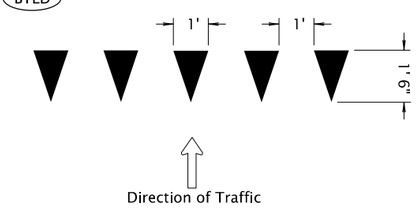
DISABLED PARKING DETAIL (white)

YLD



YIELD LINE (white)

BYLD



BICYCLE YIELD LINE (white)

LEGEND

Direction Of Traffic, Increasing Stationing Or Thru Traffic Side

℄ — Lane line dimensions are shown on the striping plans

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OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Changed Min. widths for CH, TM, TM-40, and TS

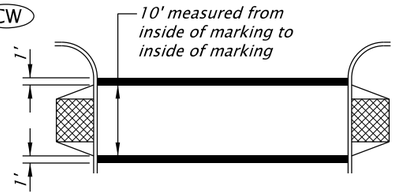
CALC. BOOK NO. N/A | SDR DATE 07-01-2020 | **TM500**

Effective Date: December 1, 2025 - May 31, 2026

11-JUL-2025

TM503.dgn

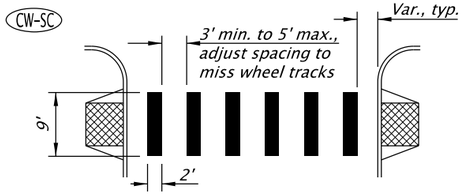
CW



STANDARD CROSSWALK
TWO 1' WHITE BARS

Install per Standard Drawing TM530

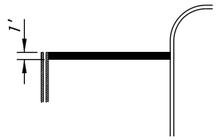
CW-SC



STAGGERED CONTINENTAL CROSSWALK
2'WHITE BARS

Install per Standard Drawing TM530

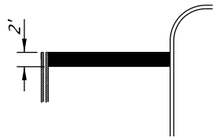
S



STOP BAR
1' WHITE BAR

Install per Standard Drawing TM530

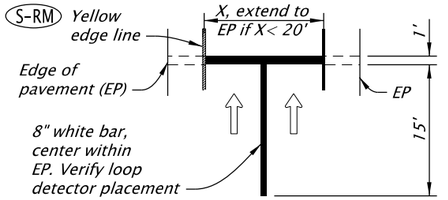
S-2



STOP BAR - LARGE
2' WHITE BAR

Install per Standard Drawing TM530

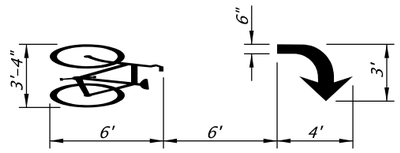
S-RM



RAMP METER STOP BAR
1' AND 8" WHITE BARS

For multi-lane ramp meter applications

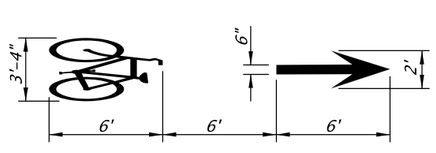
BR



BIKE RIGHT TURN STENCIL (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

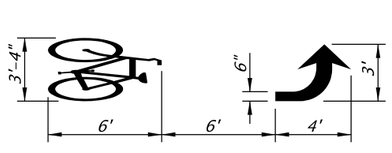
BS



BIKE LANE STANDARD STENCIL (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

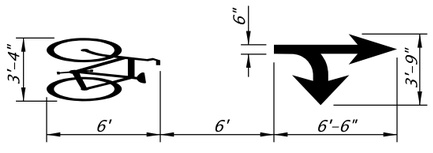
BL



BIKE LEFT TURN STENCIL (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

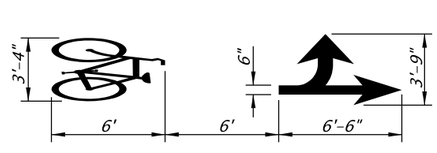
BRS



BIKE RIGHT TURN STRAIGHT STENCIL (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

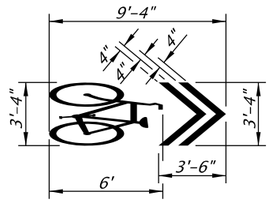
BLS



BIKE LEFT TURN STRAIGHT STENCIL (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

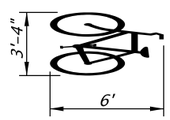
SLM



SHARED LANE MARKING (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

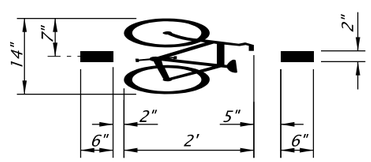
B



BIKE STENCIL (white)

Used for Intersection Bicycle Box applications. Place markings within bicycle box, centered with motor vehicle lane width

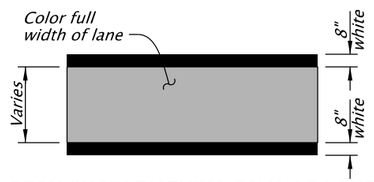
BD



BICYCLE DETECTOR MARKING (white)

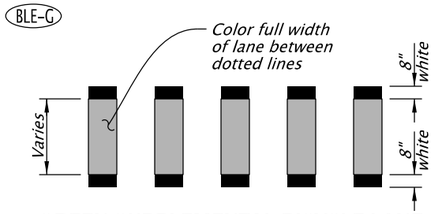
Place Bicycle Detector Pavement Marking in optimum location where bicycle actuates the traffic signal

GRN



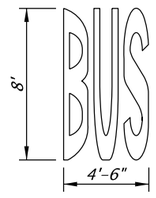
GREEN SUPPLEMENTAL BICYCLE LANE
SOLID GREEN (green)

BLE-G



GREEN SUPPLEMENTAL BICYCLE LANE
DOTTED LINE EXTENSION (green)

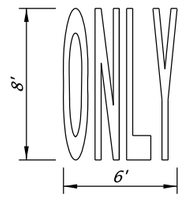
BUS



BUS (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

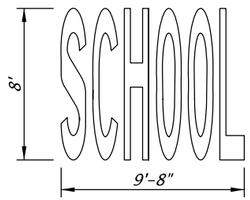
ON



ONLY (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

SCH



SCHOOL (white)

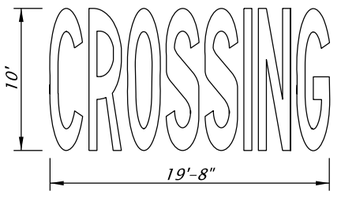
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

SCH-LG

SCHOOL LARGE (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

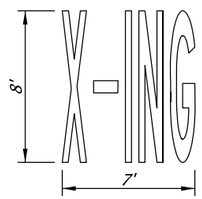
CRS-LG



CROSSING - LARGE (white)

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

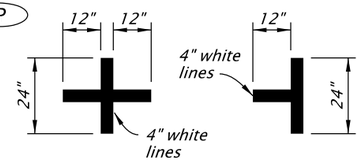
XNG



X-ING - WHITE

Center marking within lane width, for proportion details, see current version of Standard Highway Signs

P



INTERMEDIATE MARKING **END MARKING**

ON-STREET PARKING DETAIL - WHITE

GENERAL NOTES:

1. *Arrow, letter, and bicycle symbol dimensions nominal.*

LEGEND

⇦ Direction of Travel

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

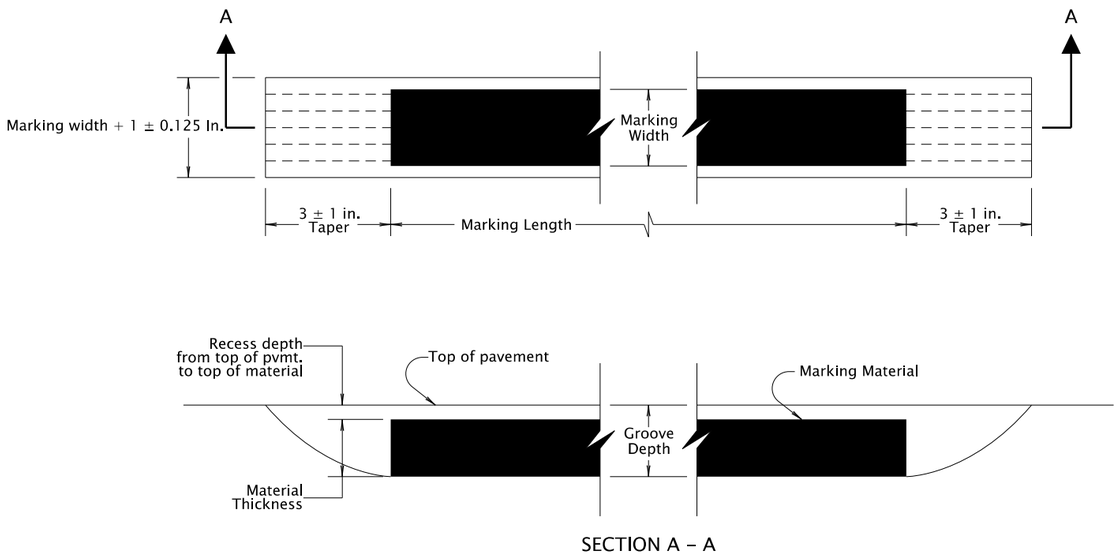
PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2022	ADDED NOTE FOR MEASUREMENT OF STANDARD CROSSWALK
07-2025	REPLACED HELMETED BICYCLIST SYMBOL WITH BICYCLE SYMBOL
07-2025	UPDATED CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **TM503**

Effective Date: December 1, 2025 - May 31, 2026

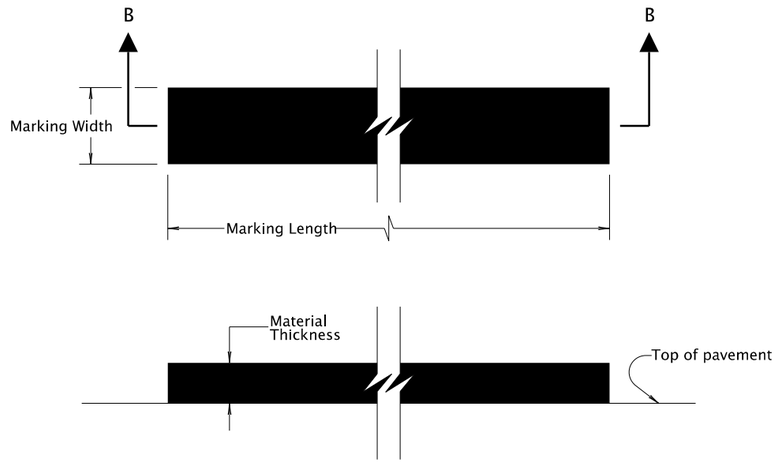


SECTION A – A

GROOVE INSTALLED GROOVE AND MATERIAL DIMENSIONS

Pavement Marking Material Type	Groove Depth	Recess Depth	Material Thickness
Durable Method 'A' & Method 'D'	220 ± 20 mils	45 ± 5 mils	Var.
High Performance	60 ± 10 mils	Var.	25 mils

GROOVE INSTALLED MARKINGS



SECTION B – B

SURFACE INSTALLED MATERIAL THICKNESS

Pavement Marking Material Type	Thickness
Durable Method 'A' & Method 'B' & Method 'D'	120 mils
High Performance	25 mils

SURFACE INSTALLED MARKINGS

General Notes:

1) See Standard Drawing TM500 and/or project plans for marking length and width dimensions.
2) See Standard Specification 00850.46 for marking installation tolerances.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

DURABLE & HIGH PERFORMANCE PAVEMENT MARKINGS SURFACE & GROOVE INSTALLED NON-PROFILED

2024

DATE	REVISION DESCRIPTION
07-2021	Changed groove width for 4 In. markings
01-2023	Changed groove width back to previous width for 4 in. markings

CALC. BOOK NO. N/A

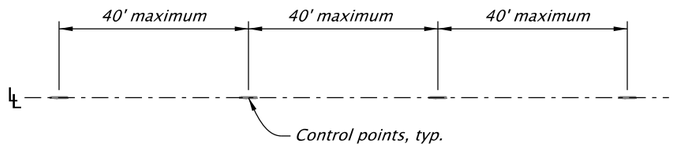
SDR DATE 20-JAN-2023

TM521

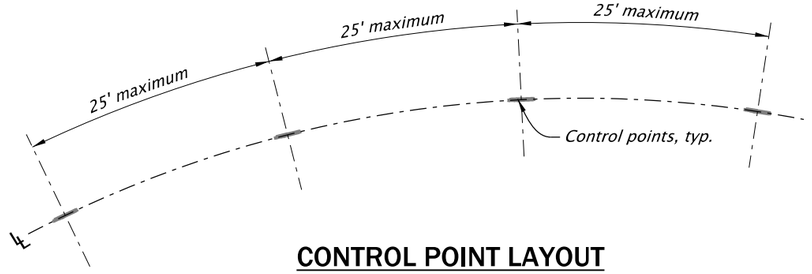
Effective Date: December 1, 2025 – May 31, 2026

11-JUL-2025

TM560.dgn



CONTROL POINT LAYOUT TANGENT SECTIONS



CONTROL POINT LAYOUT CURVE SECTIONS

GENERAL NOTES:

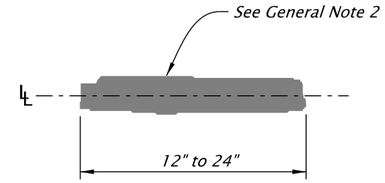
1. *Use control points to make continuous narrow guideline as specified.*
2. *Use aerosol paint to mark layout transition details and control point; white paint on asphalt surfaces and black paint on concrete pavement surfaces.*
3. *Use pavement marking transition detail marks at the start of pavement markings, where pavement markings transition to a different pavement marking and at the end of pavement markings.*
4. *Typical layout transition details are marked by lines denoting location of permanent pavement markings. These lines will be followed by three dots if the line is broken.*

LEGEND

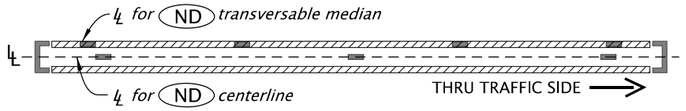
℄ = *Lane line dimensions are shown on the Striping plans.*

SOLID LINE LAYOUT TRANSITION DETAIL

W Y W-2

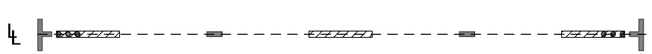


CONTROL POINT



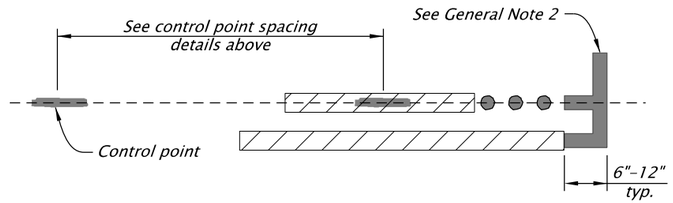
DOUBLE LINES 4" TO 12" WIDTH LAYOUT TRANSITION DETAIL

ND D NDW



BROKEN LINE LAYOUT TRANSITION DETAIL

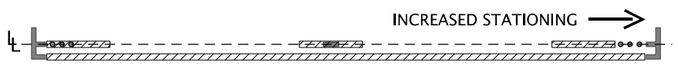
WB YB WD YD DLL DLL-2 WD-2



EXAMPLE LAYOUT TRANSITION DETAIL

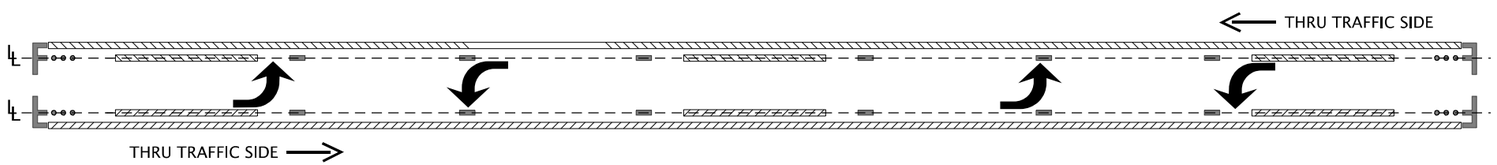
NO PASS LEFT LAYOUT TRANSITION DETAIL

NPL



NO PASS RIGHT LAYOUT TRANSITION DETAIL

NPR



TWO WAY LEFT LAYOUT TRANSITION DETAIL

TWL

ACCOMPANIED BY DWGS.:
TM500, TM501, TM502, TM503, TM504

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

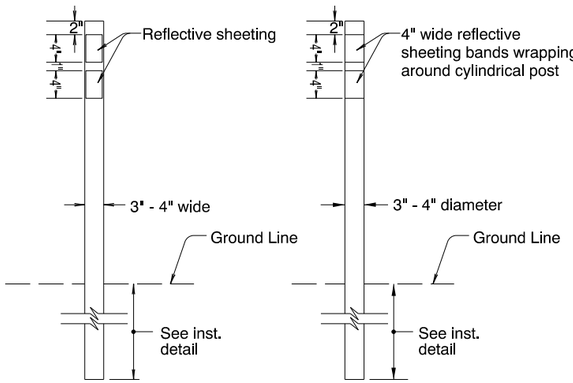
ALIGNMENT LAYOUT: GENERAL

2024

DATE	REVISION DESCRIPTION
07-2025	MODIFIED CONTROL POINTS, ADDED NEW LAYOUT REQUIREMENTS AND DETAILS

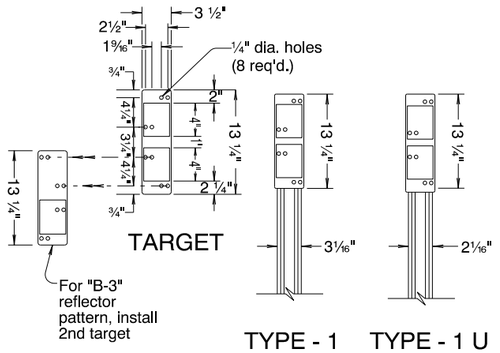
CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **TM560**

Effective Date: December 1, 2025 - May 31, 2026

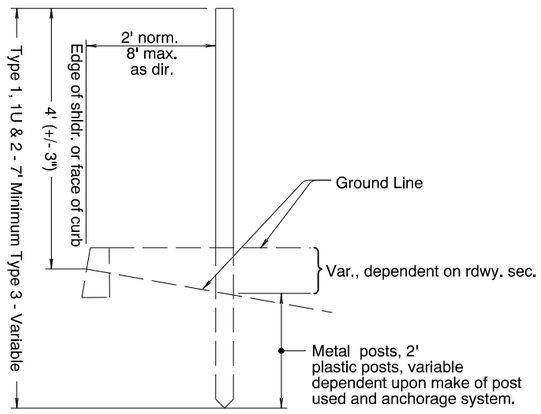


TYPE - 2 TYPE - 3

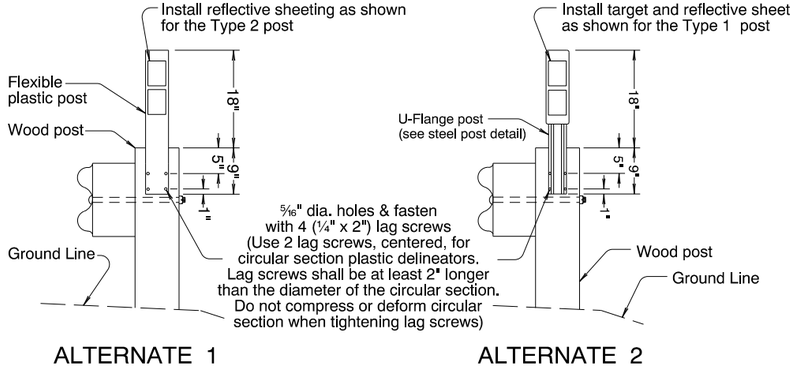
FLEXIBLE PLASTIC POSTS



STEEL POSTS

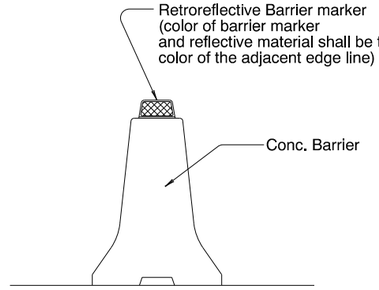


INSTALLATION DETAIL



TYPE - 4

GUARDRAIL AREAS (WITH WOOD POSTS)



TYPE - 5

CONCRETE BARRIER AREAS

(Install barrier markers at 50' spacing unless otherwise noted in plans)

NOTES:

POST:
Galv. steel, nominal weight Type 1, 2 lb/ft, Type 1 U, 1.12 lb/ft.

See Standard Drawing TM571 for steel post dimensions and details.

TARGET:
Aluminum sheet, nominal thickness .050". Fasten to post with⅜" dia. aluminum blind rivets and washers.

For "B-3" reflector pattern, top target shall overlap bottom target.

REFLECTORS:
3" x 4" reflective sheeting unless otherwise shown.
(3½" x 4" reflective sheeting is an acceptable alternate unless otherwise shown.)
Acrylic prismatic reflectors acceptable on Type 1, 1 U, 2 and 4 posts and Type 5 barrier mounts.
Place required number in sequence from top of target.

GENERAL NOTES:

1. Spacing shall be measured along the shoulder.
2. On roads with less than 500 vehicle ADT, delineators are not to be used except where situations such as sharp horizontal curves, etc. exist.
3. To clear driveways, crossroads etc., or for required adjustments at ramps and at intersections, either:
   (a) vary placement of that post up to 25% of spacing shown, or;
   (b) eliminate said post if limit of variation must be exceeded.
4. Judgement should be exercised in the installation of delineators in cut section, particularly on roads constructed to older standards where ditches are narrow and where delineators tend to hamper maintenance operations.
5. On horizontal curves place delineators nearly opposite each other.
6. At guard rail locations the delineators are to be installed behind the rail and shall be located adjacent to guard rail posts as shown for Type 4 Delineators.
7. Install all delineators with reflectors facing adjacent oncoming traffic.
8. Offset delineators an additional 4' in areas of heavy snow removal operations.
9. Backside Delineators may be used in frequently snow plowed areas where use of snow poles is not justified. When Backside Delineators are specified, substitute "W-1" and "W-2" with "W-1B" and "W-2B" respectively, on Type 1 steel posts. Do not install Backside Delineators on one-way sections of roadway, freeways and ramps, or on radius sections.
10. Refer to TM 222 for bracket assembly details for Backside Reflector Pattern.

REFLECTOR PATTERN TABLE					
	Color Type	Color Of Reflector And Target Or Post	Number Of Reflectors	Color Of Reflector And Target Or Post On Backside	Number Of Reflectors On Backside
Standard Pattern	"W-1"	White	1	Not Applicable	Not Applicable
	"W-2"	White	2		
	"Y-1"	Yellow	1		
	"Y-2"	Yellow	2		
	"B-1"	Blue	1		
	"B-2"	Blue	2		
	"B-3"	Blue	3		
	"R-1"	Red	1		
Backside Pattern	"W-1B"	White	1	White	2
	"W-2B"	White	2	White	2

TANGENT	HORIZONTAL CURVES				
▲MAX. SPACING EACH SIDE OF ROADWAY IN FEET	▲ MAX. SPACING EACH SIDE OF ROADWAY IN FEET				
	DEGREE OF CURVE	ON CURVE	IN ADVANCE OF & BEYOND CURVE		
			FIRST SPACE	SECOND SPACE	THIRD SPACE
400	Lower Than 1	300	300	300	300
	1	230	300	300	300
	2	160	300	300	300
	3	130	260	300	300
	4	110	220	300	300
	5	100	200	300	300
	6	90	180	270	300
	7 - 8	80	160	240	300
	9 - 11	70	140	210	300
	12 - 16	60	120	180	300
	17 - 22	50	100	150	300
	23 - 34	40	80	120	240
	35 - 53	30	60	90	180
	54 & Higher	20	40	60	120

(Min. spacing 20 feet)

(▲Install "W-1" reflective pattern unless otherwise noted. See Standard Drawings TM575 thru TM577 for spacing, layout, and reflective pattern of delineators at interchange ramps, channelized intersections, lane reductions, emergency escape ramps and freeway crossovers.)

DELINEATOR SPACING TABLE FOR TYPES 1, 1U, 2, and 4

To be accompanied by Drg. No. TM571, TM575, TM576, and/or TM577 as specified.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TRAFFIC DELINEATORS

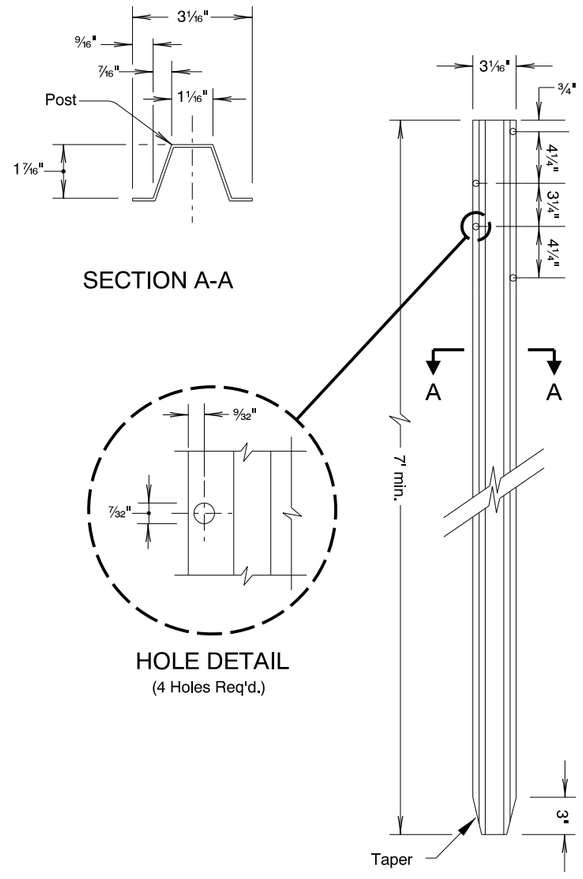
2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 06-JAN-2012 | **TM570**

Effective Date: December 1, 2025 - May 31, 2026

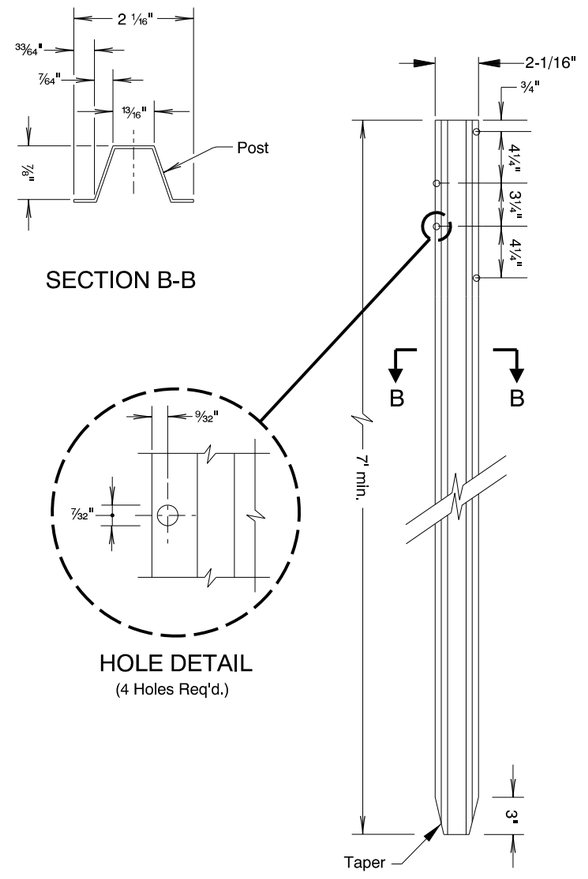
10-DEC-2009
TM571.dgn



Notes:

1. Galv. steel, nominal weight 2 lb. per ft.

TYPE - 1 STEEL POST DIMENSIONS



Notes:

1. Galv. steel, nominal weight 1.12 lb. per ft.

TYPE - 1 U STEEL POST DIMENSIONS

To be accompanied by Drg. No. TM570

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

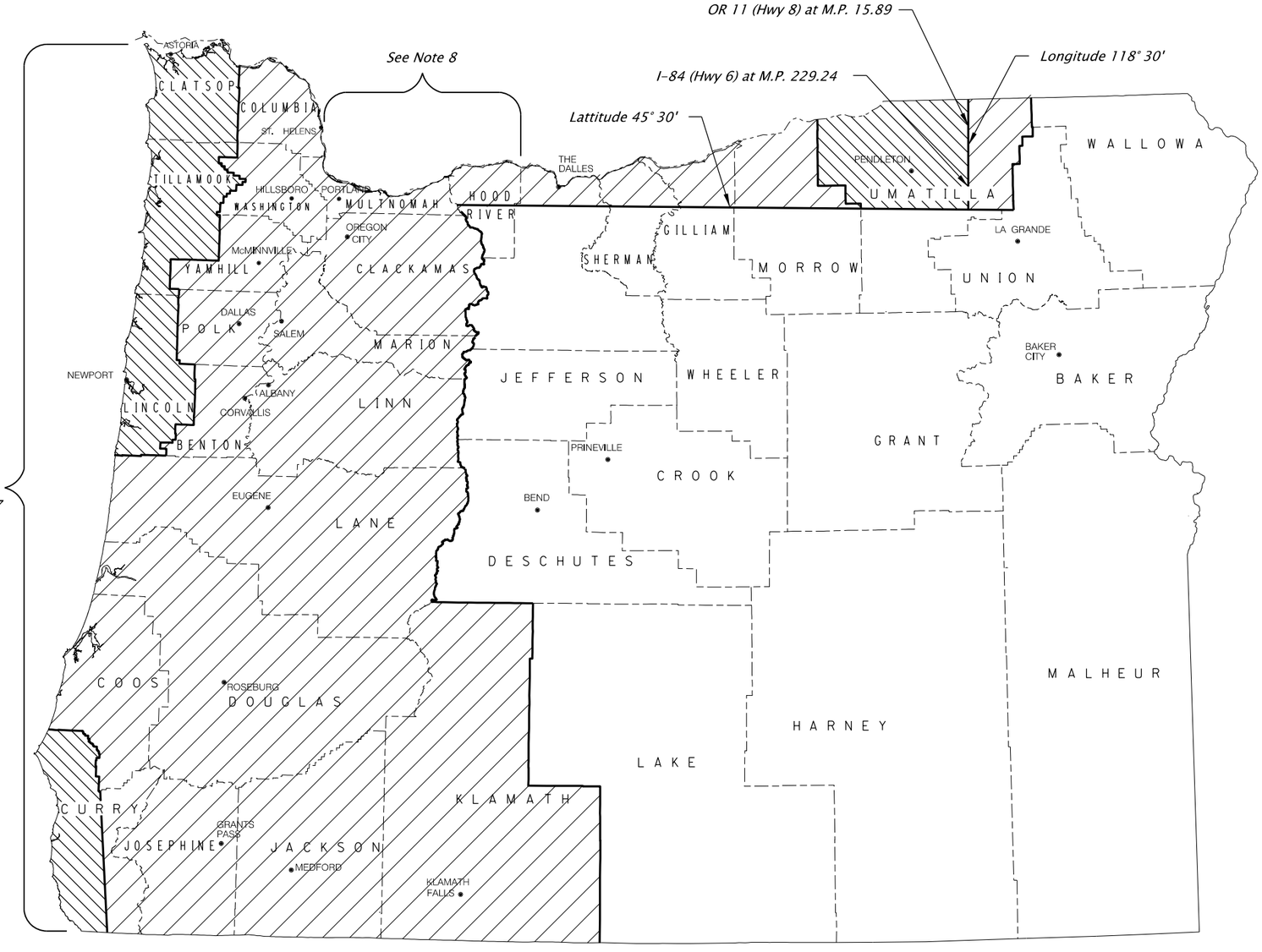
TRAFFIC DELINEATORS STEEL POST DETAILS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 10-DEC-2009 | **TM571**

Effective Date: December 1, 2025 - May 31, 2026



NOTES:

1. *The wind velocity map as shown is adapted from AASHTO 2001 4th Edition - "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals", Appendix C, Figure C-3 and Section 3, Figure 3-2. It uses the wind speed map shown in Figure 1609 of the 2007 Oregon Structural Code to account for locations in the State with special wind regions.*
2. *The wind velocities shown above are 3-Second Gust wind velocities.*
3. *The Exposure Catagory is C.*
4. *The mean recurrence interval is 50-Years.*
5. *Mountanious terrain, gorges, and ocean promontories are classified as special wind regions and shall be examined for unusual wind conditions.*
6. *The Interval Height (Kz) is 30 ft.*
7. *All areas with full exposure to ocean winds shall be designated 110 mph areas.*
8. *Areas in Multnomah and Hood River counties with full exposure to Columbia River Gorge winds shall be designated 110 mph areas.*
9. *Localities may have adopted wind speed higher that shown on this map. Those higher wind speed shall be used.*

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

3 SECOND GUST WIND SPEED MAP

2024

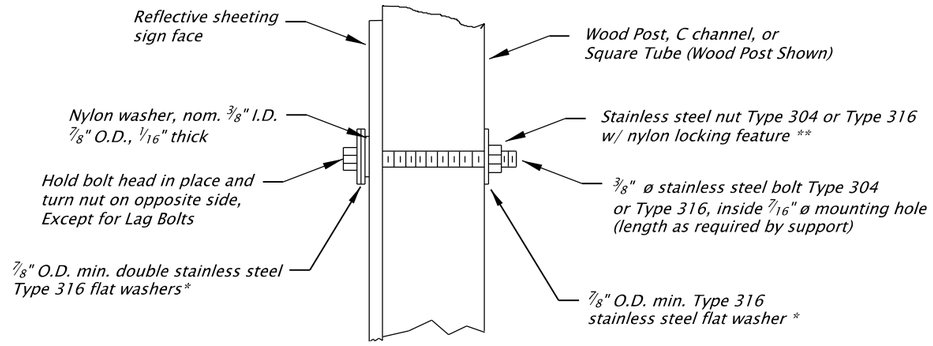
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 06-JAN-2012 | **TM671**

Effective Date: December 1, 2025 - May 31, 2026

10-JUL-2020

TM671.dgn

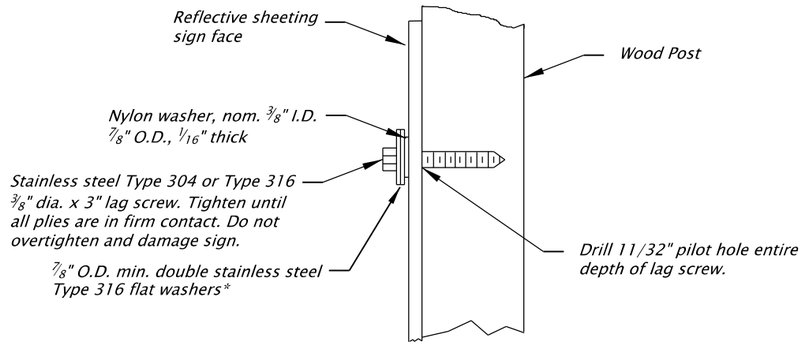


Note:
1)When signs are placed on opposing sides of post, 3/8" x 3" stainless steel Type 304 or Type 316 lag screws can be used instead of through bolt.
2) Use nylon and stainless steel washers when signs are placed on both sides of post.
3) Burr threads at junction with nut when locknuts are not used.
4) Post bolts to extend beyond the tightened nuts within the limits of 1/4" to 1".

** Stainless steel bonded sealing washer with neoprene layer is an acceptable substitue*

*** Acceptable substitute for nylon locking nuts:*
Stainless steel TRI-LOC® Top Lock Locknut

SIGN ATTACHMENT DETAIL



** Stainless steel bonded sealing washer with neoprene layer is an acceptable substitue*

Note: This optional detail is to be used only when specified on a project.

OPTIONAL WOOD POST LAG SCREW DETAIL

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SIGN ATTACHMENTS

2024

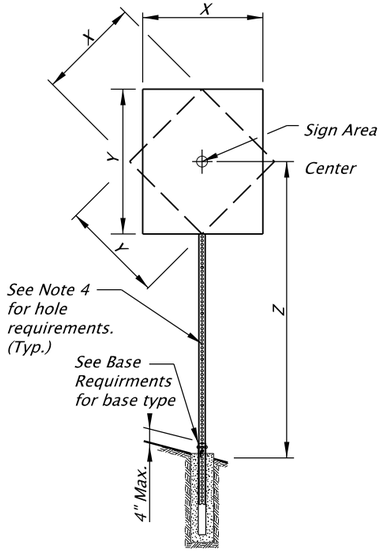
DATE	REVISION DESCRIPTION
07-2020	ADDED OPTIONAL LAG SCREW DETAIL
01-2025	ADDED STAINLESS STEEL TO ALL HARDWARE AND REMOVED ANCO PIN-LOC

CALC. BOOK NO. N/A | SDR DATE 10-JAN-2025 | **TM676**

Effective Date: December 1, 2025 - May 31, 2026

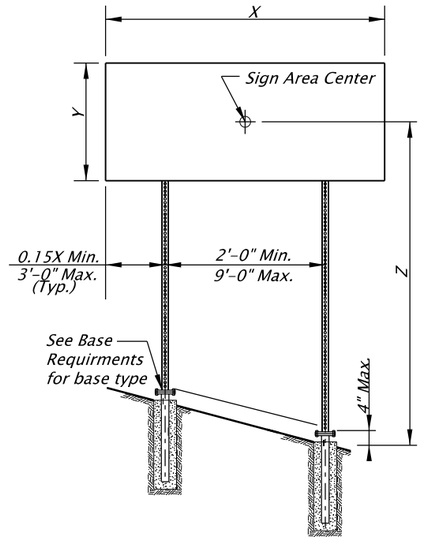
10-JUL-2020

TM681.dgn



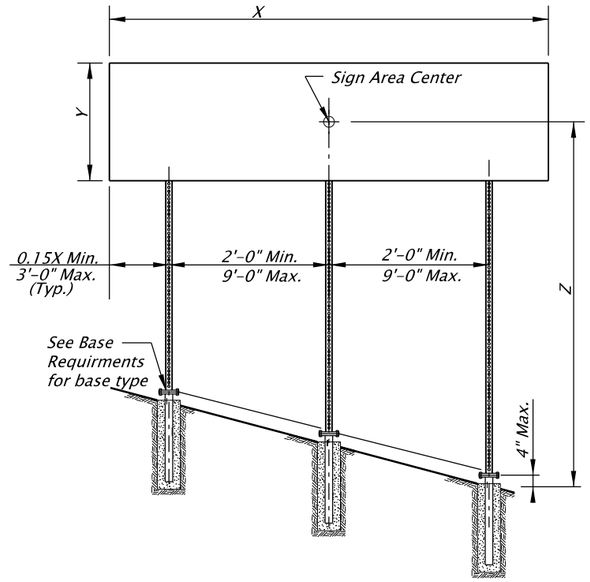
SINGLE POST ELEVATION

No scale



TWO POST ELEVATION

No scale



THREE POST ELEVATION

No scale

GENERAL NOTES:

1. Perforated Steel Square Supports are designed in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals 4th Edition, 2001, 2002, 2003, and 2006 interim revisions.
2. The design basic wind speed (3 second gust) shall be according to the wind map shown on TM671.
3. Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.
4. Use $^{7}/_{16}$" diameter holes at 1" spacing on each of the 4 sides.
5. Steel post shall have a minimum yield stress of 50 ksi.
6. Steel shall be galvanized according to ASTM A653 with coating designation G90.
7. General design parameters are Kz = 0.87, Cd (sign) = 1.20, and G = 1.14.
8. Permanent signing uses an Ir = 0.71 for a recurrence interval of 10 years.
9. Temporary signing uses an Ir = 0.45 for a recurrence interval of 1.5 years.
10. The sign width to sign height or sign height to sign width ratio shall not exceed 5.0.
11. For horizontal and vertical clearances of permanent signs refer to TM200 and of temporary signs refer to TM822.
12. Posts protected by barrier or guardrail do not require slip bases.

(X * Y * Z) in ft³ - Maximum									
3 Second Gust Wind Speed (TM671)									
	85 MPH			95 MPH			105 or 110 MPH		
	Number of Posts			Number of Posts			Number of Posts		
Square Tube Size	1	2	3	1	2	3	1	2	3
2"-12 ga.	79	158	237	63	126	189	57	114	171
$2^{1}/_{2}$"-12 ga.	136	272	408	109	218	327	98	196	294
$2^{1}/_{2}$"-10 ga.	165	330	495	132	264	396	119	238	357
$2^{1}/_{4}$" & $2^{1}/_{2}$"-12 ga.*	231	462	693	185	370	555	167	334	501

PERMANENT PERFORATED STEEL SQUARE TUBE TABLE

(X * Y * Z) in ft³ - Maximum									
3 Second Gust Wind Speed (TM671)									
	85 MPH			95 MPH			105 or 110 MPH		
	Number of Posts			Number of Posts			Number of Posts		
Square Tube Size	1	2	3	1	2	3	1	2	3
2"-12 ga.	125	250	375	100	200	300	90	180	270
$2^{1}/_{2}$"-12 ga.	215	430	645	172	344	516	155	310	465
$2^{1}/_{2}$"-10 ga.	261	522	783	209	418	627	189	378	567
$2^{1}/_{4}$" & $2^{1}/_{2}$"-12 ga.*	364	728	1092	292	584	876	263	526	789

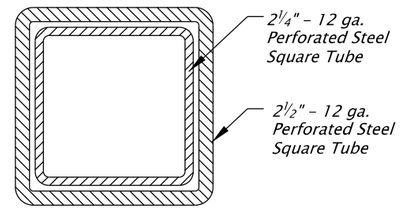
TEMPORARY PERFORATED STEEL SQUARE TUBE TABLE

* - See $2^{1}/_{4}$" & $2^{1}/_{2}$" - 12 ga. detail.

	Number of Posts		
Square Tube Size	1	2	3
2"-12 ga.	Anchor	Anchor	N/A
$2^{1}/_{2}$"-12 ga.	Anchor	Slip	Slip
$2^{1}/_{2}$"-10 ga.	Slip	Slip	Slip
$2^{1}/_{4}$" & $2^{1}/_{2}$"-12 ga.*	Slip	Slip	Slip

1. Anchor - See Drawing TM687 for PSST anchor foundation details.
2. Slip - See Drawing TM688 for PSST slip base foundation details.
3. N/A - Do not use this option.

BASE REQUIREMENTS



$2^{1}/_{4}$" - 12 ga. PSST to extend entire length inside of the $2^{1}/_{2}$" - 12 ga. PSST.

$2^{1}/_{4}$" & $2^{1}/_{2}$" - 12 GA. DETAIL

No scale

Accompanied by dwgs. TM200, TM671, TM687, TM688, TM689, TM822

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PERFORATED STEEL SQUARE TUBE (PSST) SIGN SUPPORT INSTALLATION

2024

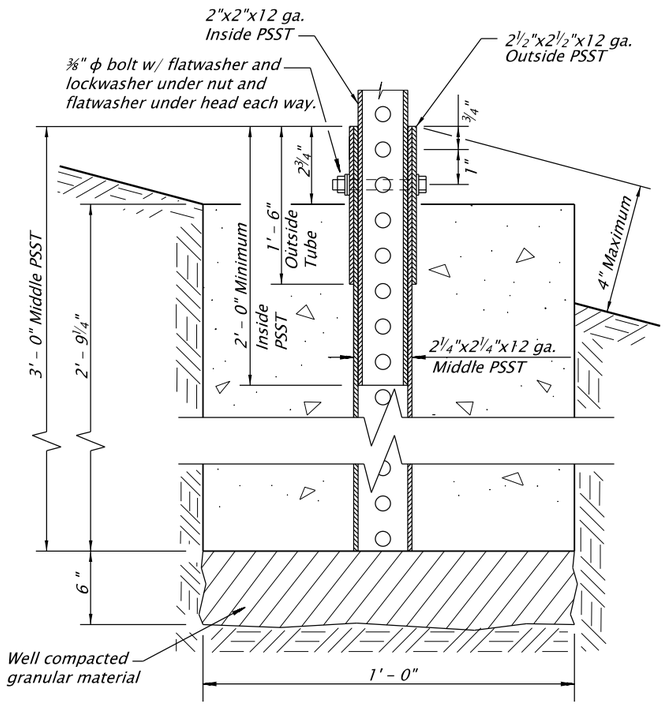
DATE	REVISION DESCRIPTION

CALC. BOOK NO. 5752 | SDR DATE 10-JUL-2017 | **TM681**

Effective Date: December 1, 2025 - May 31, 2026

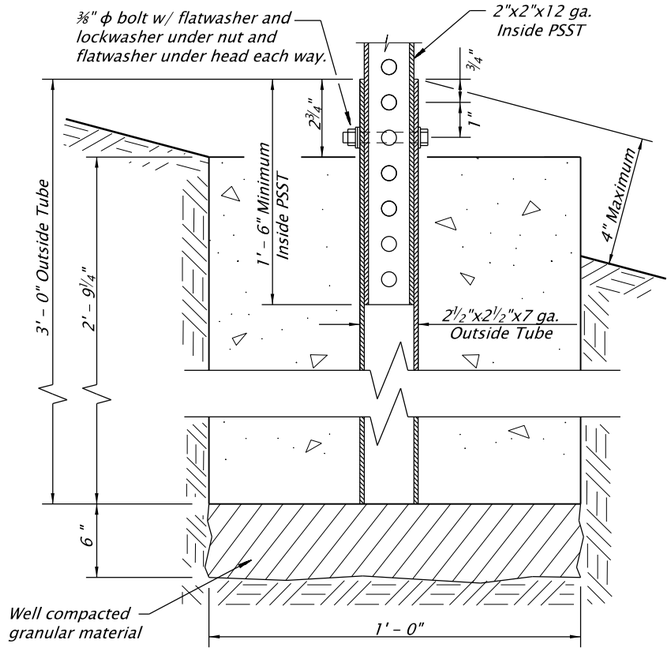
10-JUL-2020

TM687.dgn



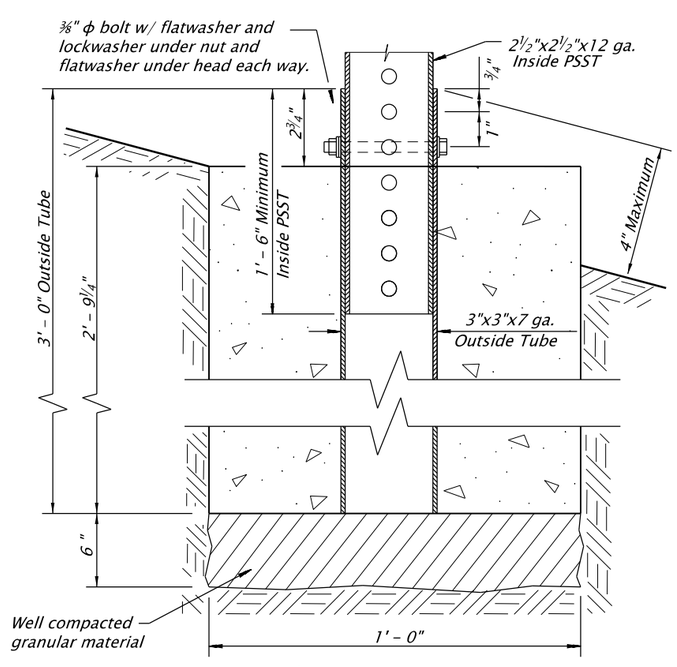
2" ANCHOR DETAIL

No scale



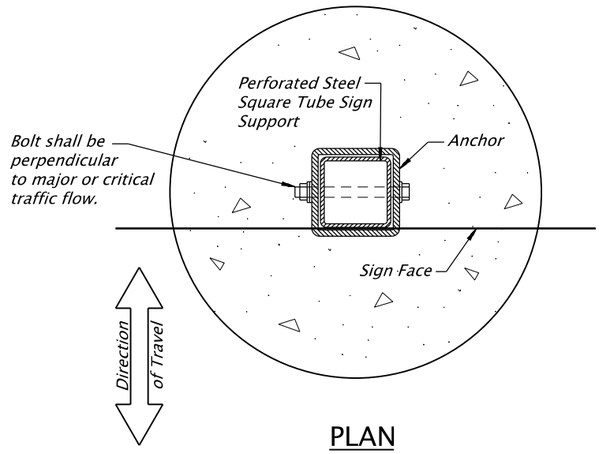
2" OPTIONAL ANCHOR DETAIL

No scale



2½" ANCHOR DETAIL

No scale



PLAN

No scale

General Notes:

1. Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.
2. Anchor steel shall be hot dipped galvanized or approved equal.
3. Footing concrete shall be Commercial Grade Concrete (fc = 3000 psi) per Specification 00440. The CGC mixture may be accepted at the site of placement according to 00440.14.
4. The estimated concrete volume is .09 cubic yards.

Accompanied by dwgs. TM681, TM688

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PERFORATED STEEL SQUARE TUBE (PSST) ANCHOR FOUNDATION

2024

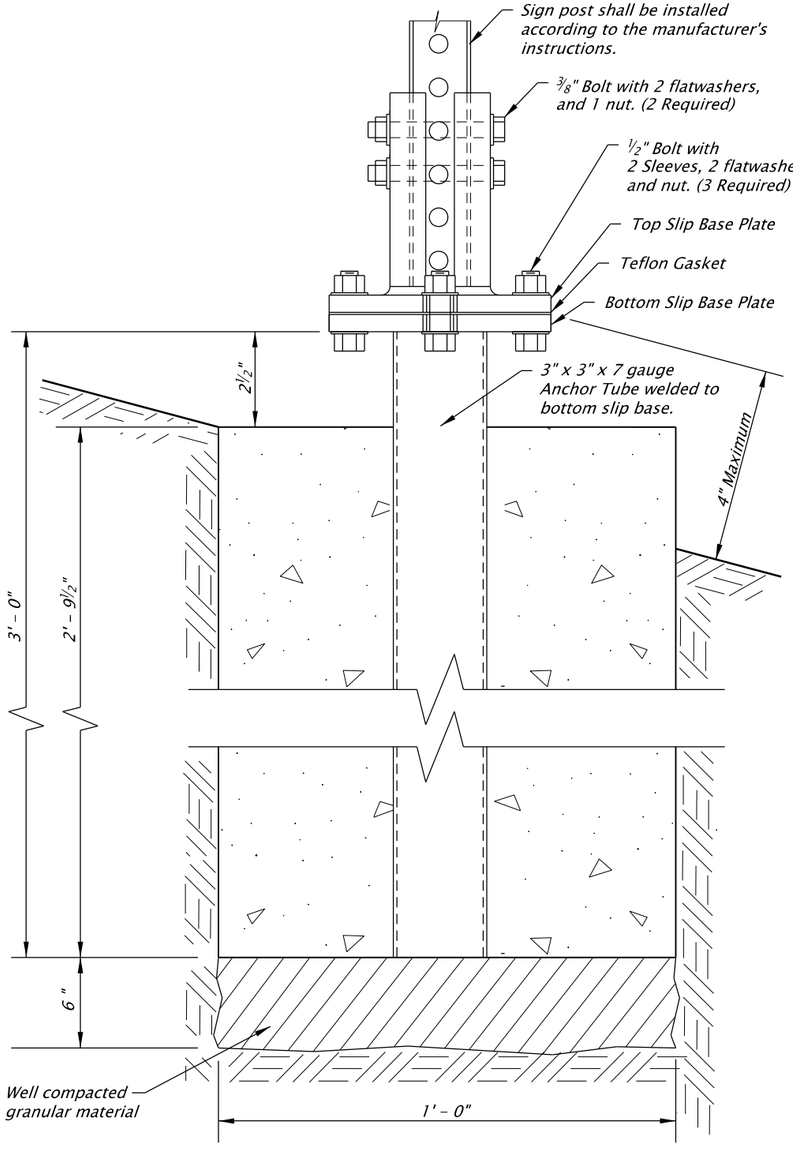
DATE	REVISION DESCRIPTION

CALC. BOOK NO. 5752 | SDR DATE 06-JAN-2012 | **TM687**

Effective Date: December 1, 2025 - May 31, 2026

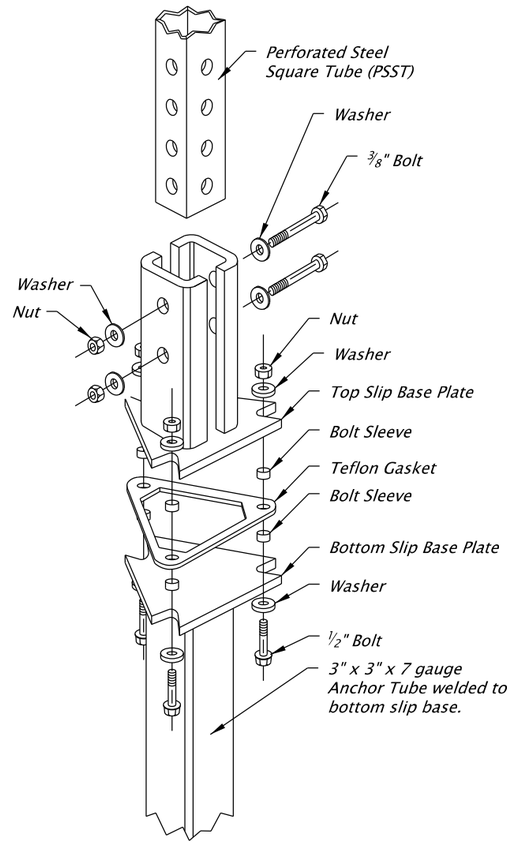
10-JUL-2020

TM688.dgn



SLIP BASE ELEVATION

No scale

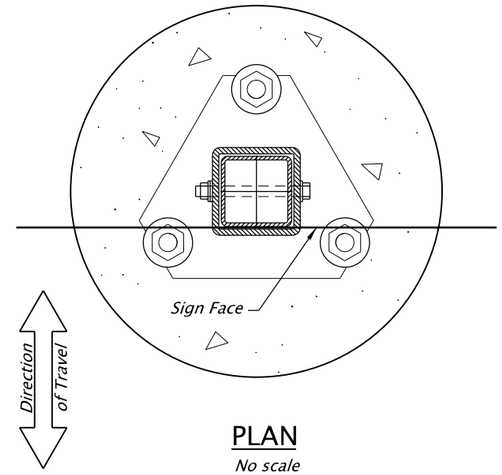


SLIP BASE EXPLODED VIEW

No scale

General Notes:

1. *Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.*
2. *Slip base steel shall be hot dipped galvanized or approved equal.*
3. *Footing concrete shall be Commercial Grade Concrete (fc = 3000 psi) per Specification 00440. The CGC mixture may be accepted at the site of placement according to 00440.14.*
4. *Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.*
5. *All slip bases shall be pre-assembled by the manufacturer and shall be installed according to the manufacturer's instructions.*
6. *Use slip bases listed on the ODOT Qualified products list or submit crash testing data, installation instructions, and unstamped working drawings according to 00150.35.*
7. *Slip base details shown are not for a specific manufacturer and are only shown to convey general pieces of a slip base system. Specific slip base material will be acccording to the manufacturer's documentation.*



PLAN

No scale

Accompanied by dwgs. TM681, TM687

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

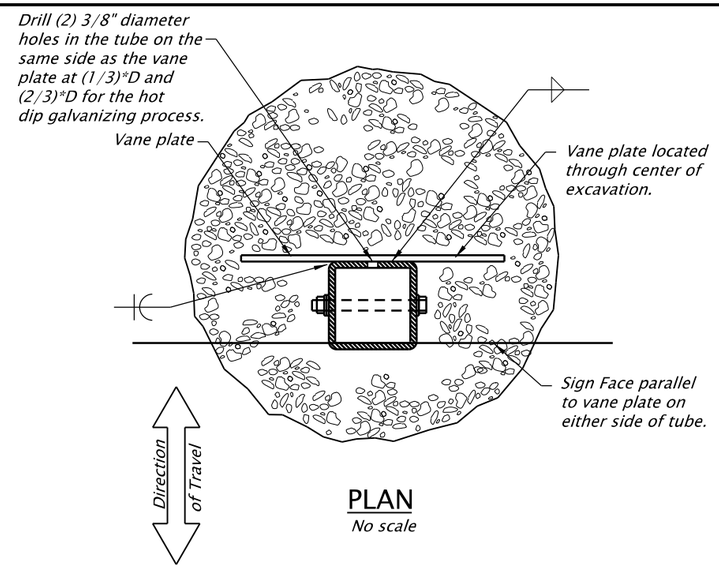
PERFORATED STEEL SQUARE TUBE (PSST) SLIP BASE FOUNDATION

2024

DATE	REVISION DESCRIPTION

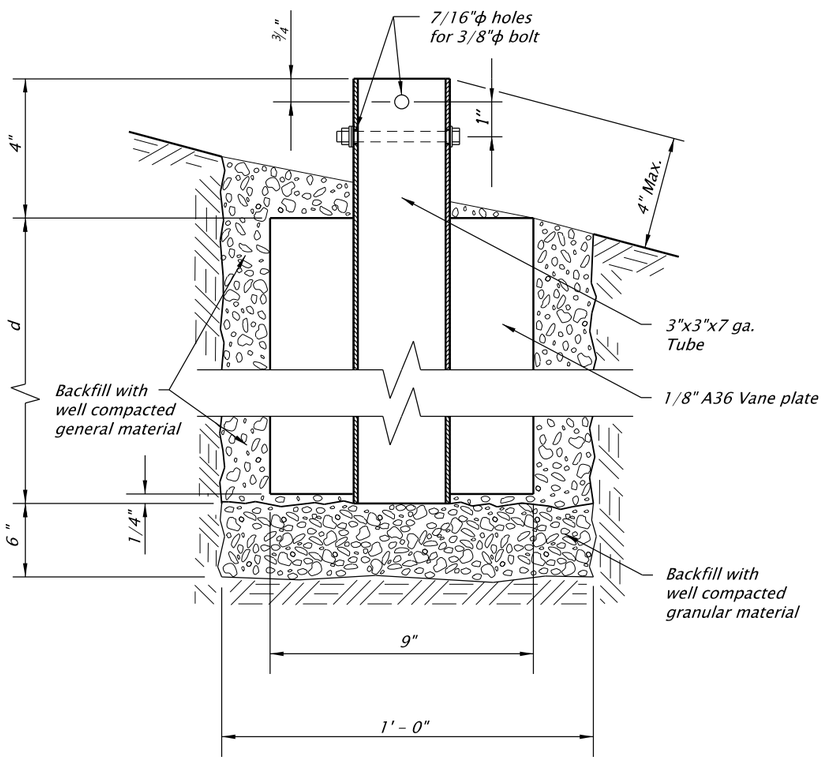
CALC. BOOK NO. 5752 | SDR DATE 06-JAN-2012 | **TM688**

Effective Date: December 1, 2025 - May 31, 2026



PLAN

No scale



VANE ANCHOR DETAIL

No scale

General Notes:

1. *Reference TM681, TM687, and TM688 for additional PSST details.*
2. *Reference TM822 for temporary sign placement.*
3. *PSST Vane anchor design in accordance with the 5th Edition 2009 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.*
4. *Use the 3 second gust wind speeds shown on TM671 for the site specific sign location. General design parameters are Kz = 0.87, Cd (sign) = 1.20, G = 1.14, and Ir = 0.45 for a recurrence interval of 1.5 years.*
5. *Use this design only for Temporary applications.*
6. *The PSST Vane anchor shall not remain permanently in place.*
7. *The temporary PSST vane anchor shall be hot-dip galvanized after fabrication.*

Post Embedment Installation:

1. *Excavate the hole to 6" deeper than the requried depth and backfill the bottom 6" with well compacted granular material meeting the requirements of 00330.14.*
2. *Align the vane anchor in the hole to a vertical position.*
3. *The space around the vane anchor shall be backfilled to finished ground surface.*
4. *Backfill with selected general backfill meeting the requirements of 00330.13.*
5. *Place backfill in layers not greater than 6 inches.*
6. *Solidly ram and tamp the layers into the excavation area around the post.*
7. *Dampen during placement if too dry to compact properly.*
8. *Replace and finish the surface around the vane anchor to match the surrounding surface.*

Square Tube Size	*d*
2"-12 ga. ⊛	*2'-6"*
2½"-12 ga.	*3'-0"*
2½"-10 ga.	*3'-0"*
2¼" & 2½"-12 ga.	*3'-6"*

⊛ *Requires a 2 1/2" x 2 1/2" x 7 ga. tube installed in the 3" x 3" x 7 ga. anchor.*

DEPTH REQUIREMENTS

Accompanied by dwgs. TM200, TM671, TM681, TM687, TM688, TM822

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TEMPORARY PSST VANE ANCHOR INSTALLATION

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. 6634 | SDR DATE 06-JAN-2017 | **TM689**

Effective Date: December 1, 2025 - May 31, 2026

TAPER TYPES & FORMULAS	
TAPER	FORMULA
Merging (Lane Closure)	"L"
Shifting	"L"/2 or ½"L"
Shoulder Closure	"L"/3 or ⅓"L"
Flagging (See Drg. TM850)	50' – 100'
Downstream (Termination)	Varies (See Drawings)

★ Use Pre-Construction Posted Speed to select the Speed from the Tables below:

TEMPORARY BARRIER FLARE RATE TABLE	
★SPEED (mph)	MINIMUM FLARE RATE
≤ 30	8:1
35	9:1
40	10:1
45	12:1
50	14:1
55	16:1
60	18:1
65	19:1
70	20:1

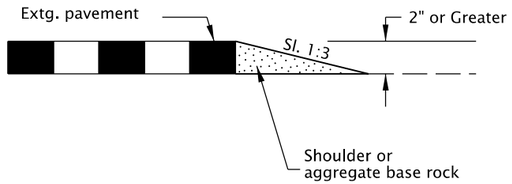
MINIMUM LENGTHS TABLE					
"L" VALUE FOR TAPERS (ft)					BUFFER "B" (ft)
★ SPEED (mph)	W = Lane or Shoulder Width being closed or shifted				
	W ≤ 10	W = 12	W = 14	W = 16	
25	105	125	145	165	75
30	150	180	210	240	100
35	205	245	285	325	125
40	265	320	375	430	150
45	450	540	630	720	180
50	500	600	700	800	210
55	550	660	770	880	250
60	600	720	840	960	285
65	650	780	910	1000	325
70	700	840	980	1000	365
FREEWAYS					
55	1000	1000	1000	1000	250
60	1000	1000	1000	1000	285
65	1000	1000	1000	1000	325
70	1000	1000	1000	1000	365

NOTES:
- For Lane closures where W < 10', use "L" value for W = 10'.
- For Shoulder closures where W < 10', use "L" value for W = 10' or calculate "L" using formula, for Speeds ≥ 45: L = WS, Speeds < 45: L = $S^2W/60$, S = Speed, W=Width

TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE				
★ SPEED (mph)	Sign Spacing (ft)			Max. Channelizing Device Spacing (ft)
	A	B	C	
20 – 30	100	100	100	20
35 – 40	350	350	350	20
45 – 55	500	500	500	40
60 – 70	700	700	700	40
Freeway	1000	1500	2640	40

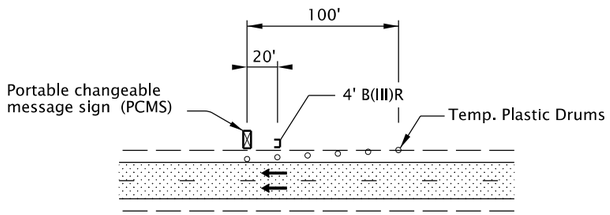
NOTES:
- Place traffic control devices on 10 ft. spacing for intersection and access radii.
- When necessary, sign spacing may be adjusted to fit site conditions. Limit spacing adjustments to 30% of the "A" dimension for all speeds.

NOTES:
- When paved shoulders adjacent to excavations are less than four feet wide protect longitudinal abrupt edge as shown.
- Use aggregate wedge when abrupt edge is 2 inches or greater.



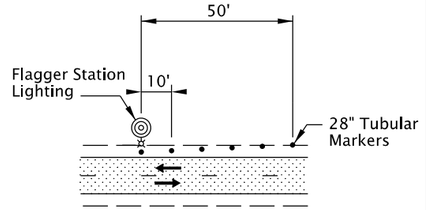
EXCAVATION ABRUPT EDGE

NOTES:
- Install PCMS beyond the outside shoulder, when possible.
- Use the appropriate type of barricade panels for PCMS location. Right shoulder, use Type B(III)R Left shoulder, use Type B(III)L
- Use six drums in shoulder taper on 20' spacing. The drums and barricade may be omitted when PCMS is placed behind a roadside barrier.
- Detail as shown is used for trailered and non-crashworthy components of:
  - Portable Traffic Signals
  - Smart Work Zone Systems



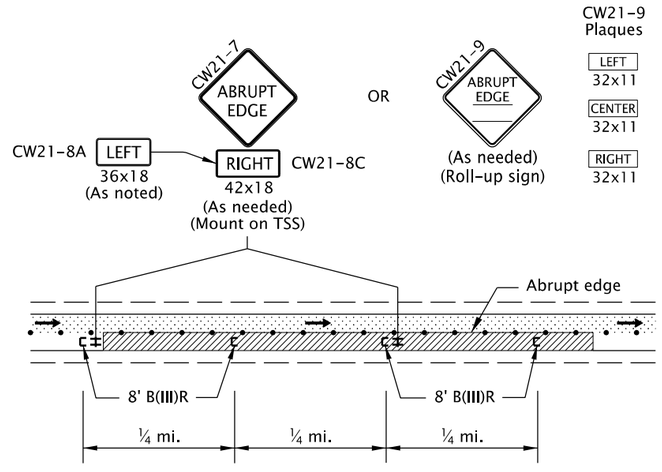
PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) INSTALLATION

NOTES:
- Install Flagger Station Lighting beyond the outside shoulder, where practical.
- Use six tubular markers in shoulder taper on 10' spacing.
- Place cart / generator / power supply off of the shoulder, as far as practical.



FLAGGER STATION LIGHTING DELINEATION

NOTES:
- Abrupt edges may be created by paving, operations, excavations or other roadway work. Use abrupt edge signing for longitudinal abrupt edges of 1 inch or greater.
- If the excavation is located on left side of traffic, replace the 8' B(III)R barricades with 8' B(III)L barricades and replace the "RIGHT" (CW21-8C) riders with "LEFT" (CW21-8A) riders.
- Continue signing and other traffic control devices throughout excavation area at spacings shown.
- If roll-up signs are used, attach the correct (CW21-9) plaques to the sign face using hook and loop fasteners. Place roll-up signs in advance of barricades.



TYPICAL ABRUPT EDGE DELINEATION

GENERAL NOTES FOR ALL TCP DRAWINGS:
- Signs and other Traffic Control Devices (TCD) shown are the minimum required.
- Place a barricade approx. 20' ahead of all sequential arrow boards.
- Arrows shown in roadway are directional arrows to indicate traffic movements.
- All signs are 48" x 48" unless otherwise shown. Use fluorescent orange sheeting for the background of all temporary warning signs.
- All diamond shaped warning signs mounted on barrier sign supports shall be 36" by 36". All other signs mounted on barrier sign supports shall not exceed 12 sq. ft. in total sign area.
- Low speed highways have a pre-construction posted speed of 40 mph or less. High speed highways have a pre-construction posted speed of 45 mph or higher.
- Do not locate sign supports in locations designated for bicycle or pedestrian traffic.
- Combine drawing details to complete temporary traffic control for each work activity.
- Coordinate and control pedestrian movements through a Temporary Accessible Route using Flaggers, Traffic Control Measures, or as directed.
- Provide a truck mounted attentuator (TMA) to protect the active work area on high speed divided highways or freeways when positive protection is not available, or as directed.
- To be accompanied by Dwg. Nos. TM820 & TM821.

○ ○ ○ Temp. Plastic Drums See TCD Spacing Table for max. spacing.

• • • 28" Tubular Markers See TCD Spacing Table for max. spacing.

UNDER TRAFFIC

UNDER CONSTRUCTION

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TABLES, ABRUPT EDGE AND PCMS DETAILS

2024

DATE	REVISION DESCRIPTION
07-2022	Added a note for TPARs
07-2024	Added a note for TMAs

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM800**

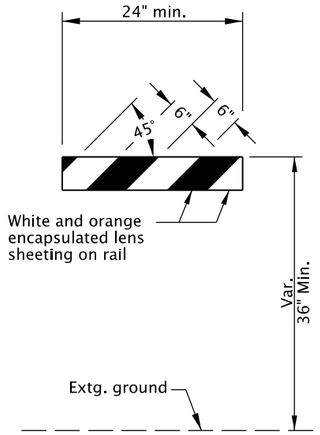
12-JUL-2024

TM800.dgn

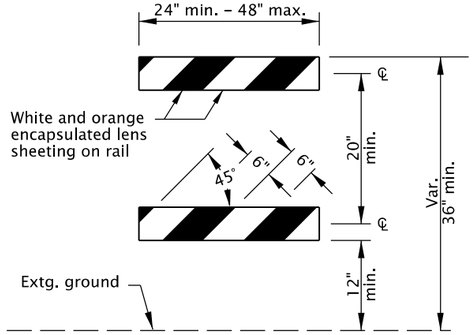
Effective Date: December 1, 2025 – May 31, 2026

01-JUL-2020

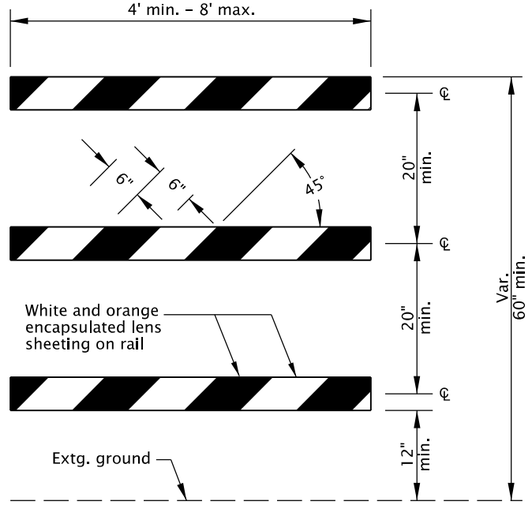
TM820.dgn



TYPE I



TYPE II



TYPE III

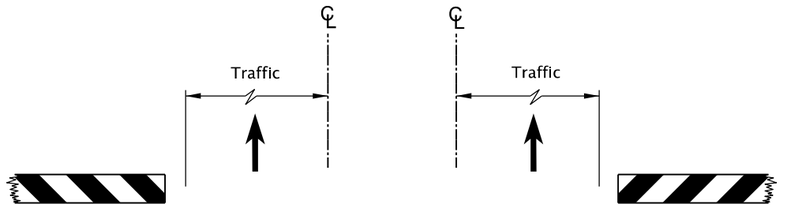
BARRICADE RAIL LAYOUT

GENERAL NOTES FOR ALL DETAILS:

- Sandbags (approximately 25 lb sack filled with sand) may be placed on lower frame to provide additional ballast.
- Ballast shall not extend above bottom rail or be suspended from barricade.
- For rails less than 36" long, 4" wide stripes shall be used.
- Rails must be 8" min. to 12" max. in height.
- Use barricades from ODOT Qualified Products List (QPL).
- Use 4' Type III barricades where horizontal space is limited.
- Do not block bike lanes or shoulders unless the facility is properly closed and signed.
- Do not place barricades in sidewalks unless sidewalk is closed and a temporary pedestrian accessible route (TPAR) is signed according to the TCP. See Dwg. No. TM844.

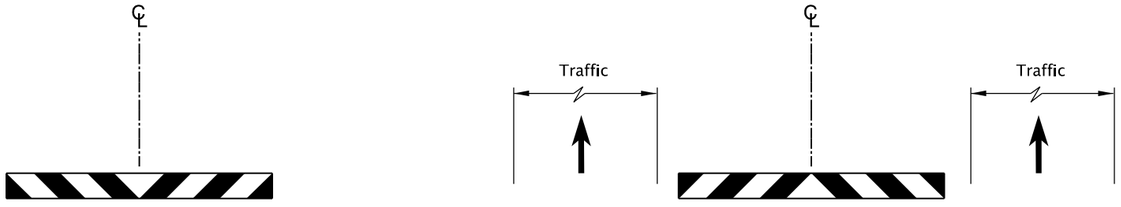
NOTES:

- Markings for barricade rails shall slope downward at an angle of 45° in the direction traffic is to pass.
- Where a barricade extends entirely across a roadway, it is desirable that the stripes slope downward in the direction toward which traffic must turn in detouring.
- Where both right and left turns are provided for, slope the chevron striping downward in both directions from the center of the barricade.
- For full roadway closures, the C or LR barricade may be used. Extend barricades completely across roadway unless access is required for local road users.



LT. SIDE - L
(For approaching traffic)

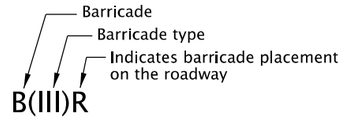
RT. SIDE - R
(For approaching traffic)



CLOSED - C
(For approaching traffic)

LT. / RT. - LR
(For approaching traffic)

DIAGRAM FOR BARRICADE PLACEMENT AND SLOPE MARKING



BARRICADE NOTATION

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

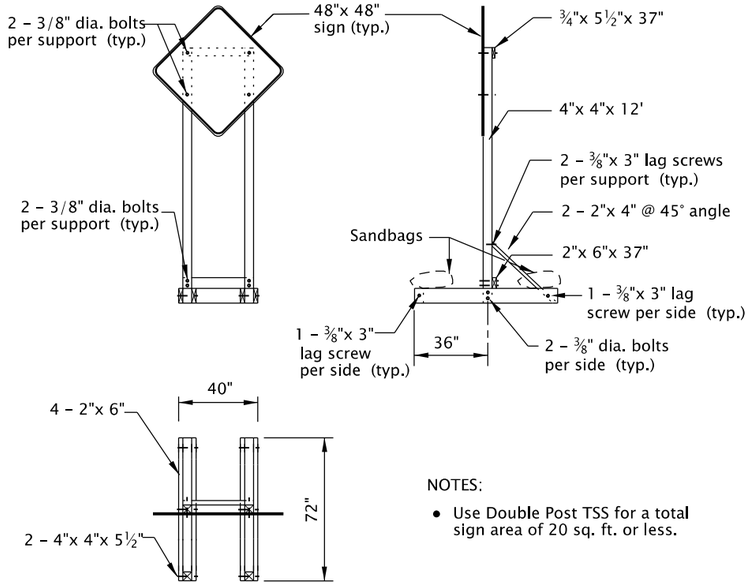
TEMPORARY BARRICADES

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 01-JUL-2020 | **TM820**

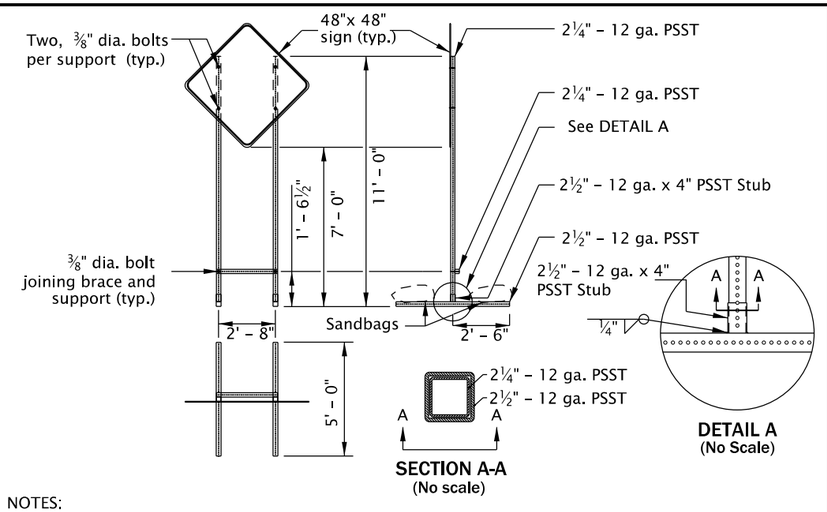
Effective Date: December 1, 2025 – May 31, 2026



NOTES:

- Use Double Post TSS for a total sign area of 20 sq. ft. or less.

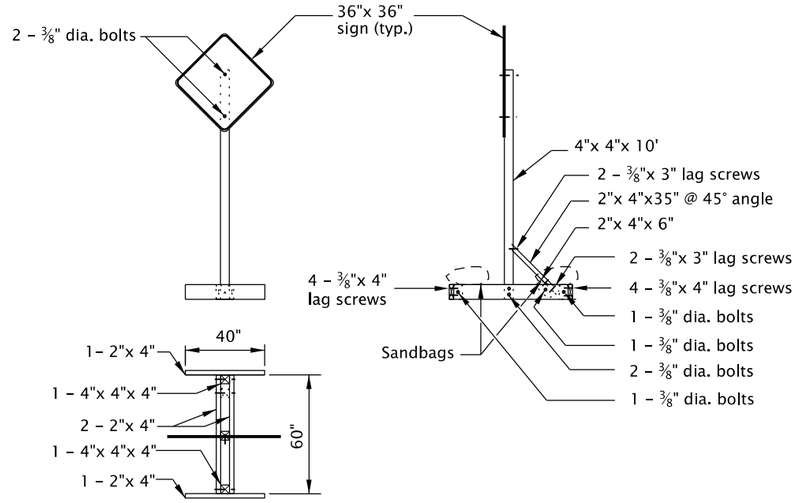
DOUBLE POST DETAIL



NOTES:

- Use PSST TSS's for a total sign area of 16 sq. ft. or less.
- All members shall have a minimum yield stress of 50 ksi.
- Galvanize steel according to ASTM A653 with coating designation G90. Remove Galvanizing from steel before welding. Repair Galvanizing according to ASTM A780.
- Use A325 Bolts or equivalent.
- 2¼" - 12 ga. PSST to extend entire length inside of the 2½" - 12 ga. x 4" PSST Stub.
- Do not use bolt to secure 2¼" PSST inside of the 2½" - 12 ga. x 4" PSST Stub.
- Weld steel according to American Welding Society (AWS) D.1.1.

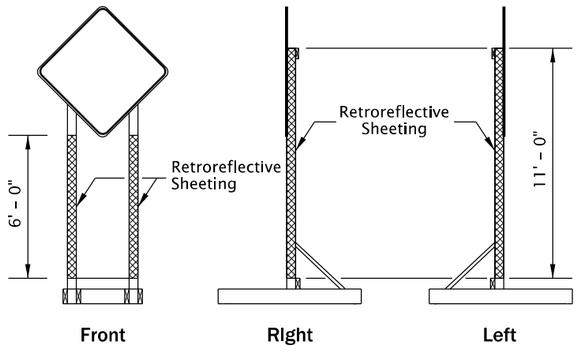
PERFORATED STEEL SQUARE TUBE (PSST) DETAIL



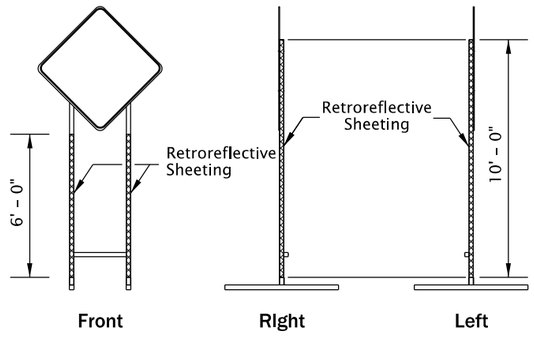
NOTES:

- Use Single Post TSS for a total sign area of 12 sq. ft. or less.
- Use Single Post TSS for mounting "Business Access" (CG20-11) signs. Do not mount signs on Type II or III Barricades.

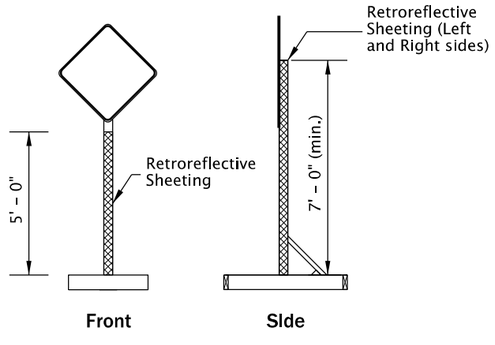
SINGLE POST DETAIL



Double Post



Perforated Steel Square Tube (PSST)



Single Post

TEMPORARY SIGN SUPPORT GENERAL NOTES:

- Do not tip over TSS at any time.
- Do not locate TSS's in locations that block pedestrian or bicycle traffic.
- For wooden TSS's, use either Douglas Fir or Hem Fir, which is surfaced four sides (S4S) and free of heart center (FOHC).
- See "Temporary Sign Placement" detail on TM822 for sign installation heights.
- Do not place or stack ballast more than 24" above the ground.
- When not in use, locate TSS as far from Public Traffic as practicable and turn away from traffic, or cover the sign. Do not cover reflective sheeting on the TSS posts.
- Place a minimum of 50 lbs of sandbags on each of the four TSS supports legs. (25 lb. max per bag) (min. 100 lbs per side of each TSS).
- See Dwg. No. TM204 for flag board mounting detail.

NOTES:

- Apply fluorescent orange, ANSI Type VIII or IX retroreflective sheeting to TSS posts, as shown, for all temporary signs, except "STOP" and "DO NOT ENTER". For "STOP" and "DO NOT ENTER" signs, used red ANSI Type III or IV retroreflective sheeting on the TSS posts.
- Apply sign post retroreflectivity to each TSS post facing front; and to the left and right sides of the TSS, as shown. Use 3" wide sheeting for wood post TSS's. Use 2" wide sheeting for PSST TSS's.
- Sheeting may be applied directly to post material; or applied to a rigid, lightweight substrate, then securely attached to the posts.

SIGN POST REFLECTIVE SHEETING PLACEMENT

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TEMPORARY SIGN SUPPORTS

2024

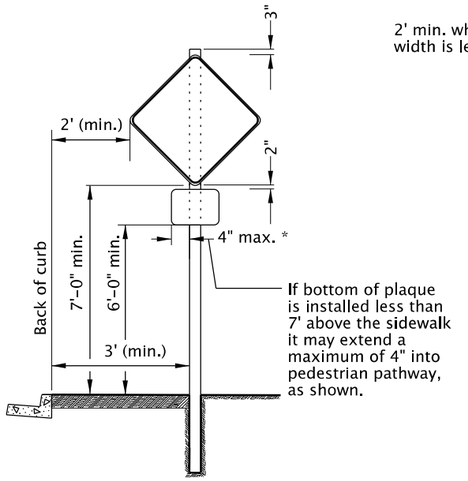
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2023 | TM821

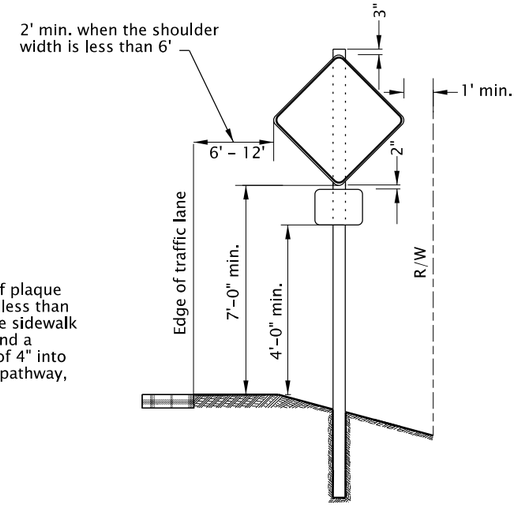
Effective Date: December 1, 2025 – May 31, 2026

NOTES:

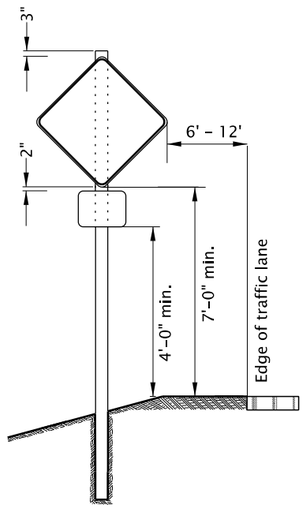
- Do not block bicycle lanes, sidewalks, or TPAR's with sign supports. Maintain minimum widths for these facilities according TCP Design Manual, MUTCD, ADA, or as directed.
- To be accompanied by Dwg. Nos. TM670, TM671, TM687, TM688 & TM689.



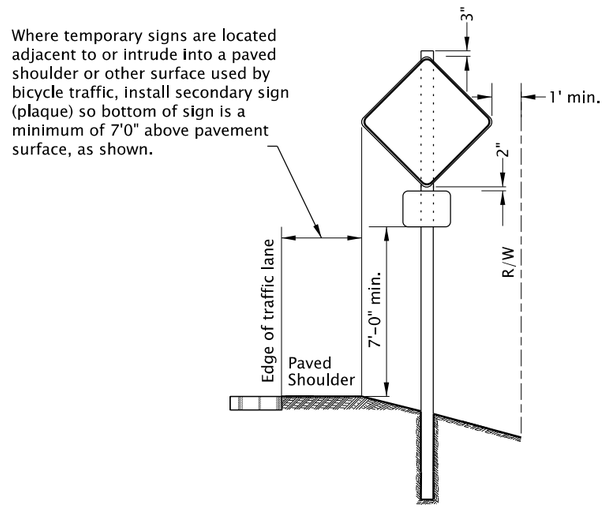
Urban Areas With Curb/Sidewalk



Rural Areas

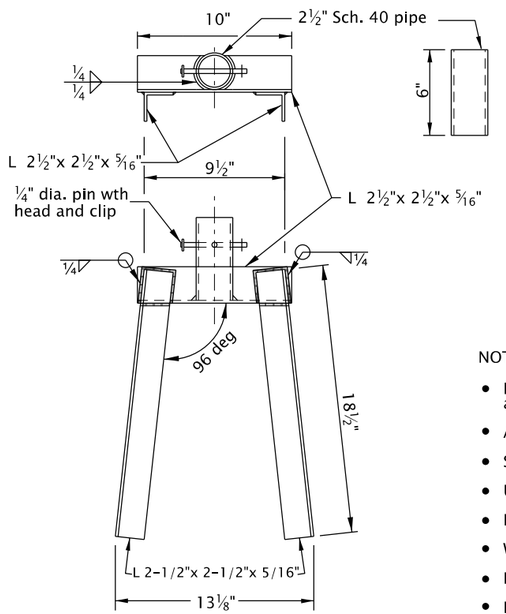


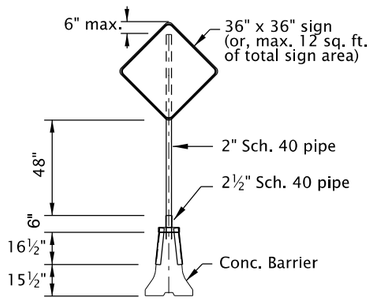
Divided Highway/Freeway Medians
No Curb/Sidewalk



Rural or Urban Areas - Curb or No Curb
Bicycles On Shoulder

TEMPORARY SIGN PLACEMENT





NOTES:

- Drill additional holes so sign can be rotated 90 degrees and pinned when not in use.
- All structural steel shall conform to ASTM A36.
- Support fits both 32" and 42" tall "F" barrier.
- Use for supporting a maximum 12 sq. ft. of total sign area.
- Place support at connection between two concrete barrier sections.
- Weld steel according to American Welding Society (AWS) D.1.1.
- Do not use clipped signs.
- Follow manufacturer recommendation when installing signs on barrier other than concrete.

CONCRETE BARRIER SIGN SUPPORT

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TEMPORARY SIGN SUPPORTS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 01-JUL-2020 | **TM822**

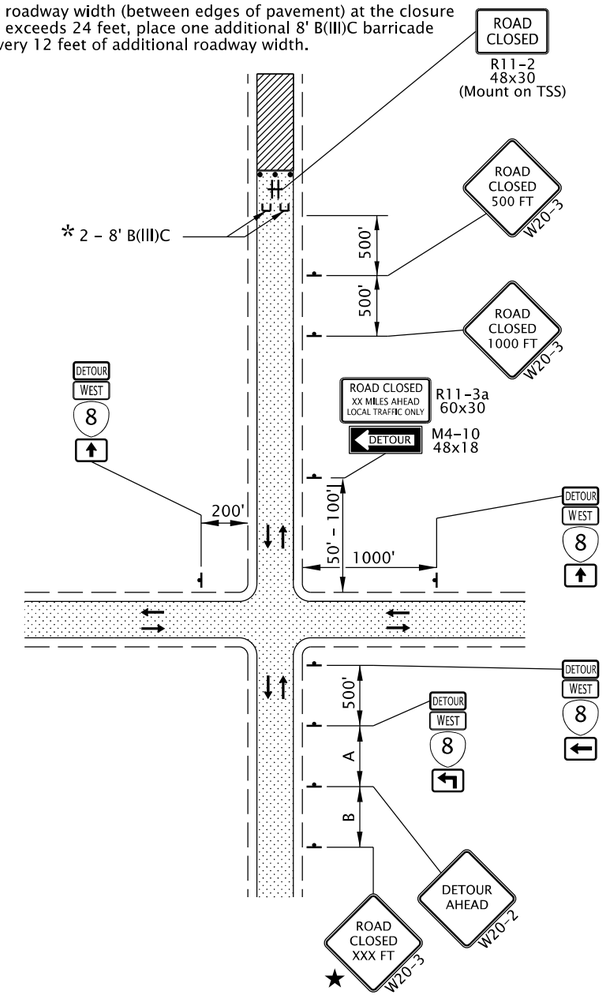
01-JUL-2020

TM822.dgn

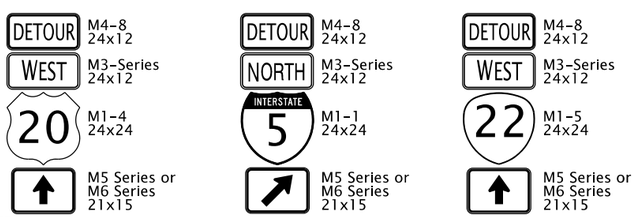
Effective Date: December 1, 2025 - May 31, 2026

NOTES:
If closure point is less than 1500 ft. from nearest intersection, use a "ROAD CLOSED TO THRU TRAFFIC" (R11-4)sign in place of the "ROAD CLOSED XX MILES AHEAD" sign.

* If the roadway width (between edges of pavement) at the closure point exceeds 24 feet, place one additional 8' B(III)C barricade for every 12 feet of additional roadway width.

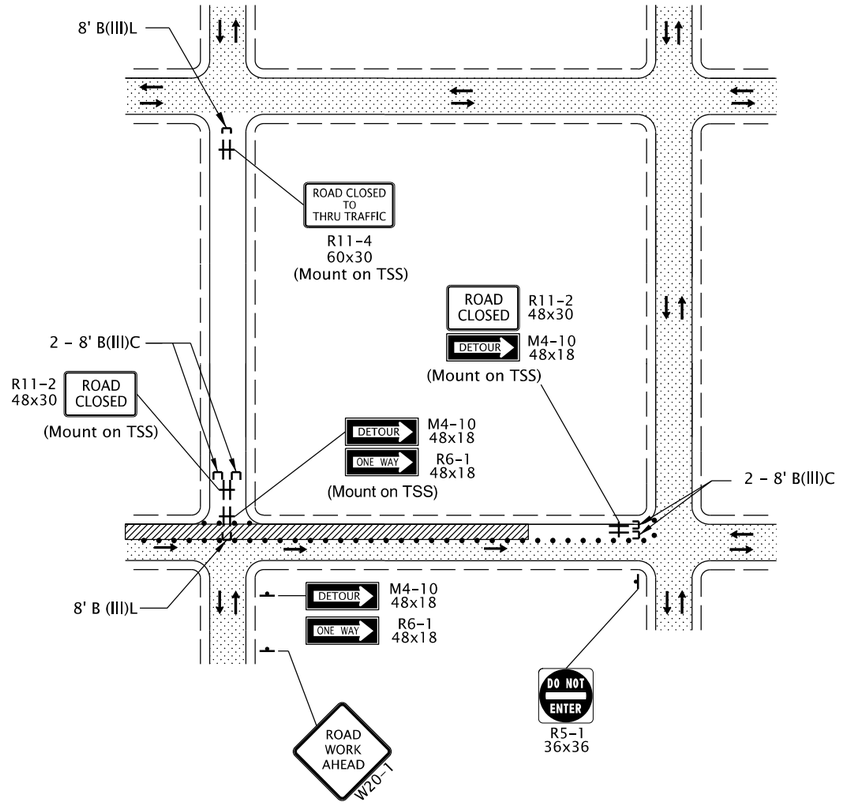


TYPICAL ROAD CLOSURE WITH DETOUR



NOTE:
- When detour routes overlap, each Route Shield will include a separate cardinal direction, detour, and directional arrow auxiliary sign assembly.

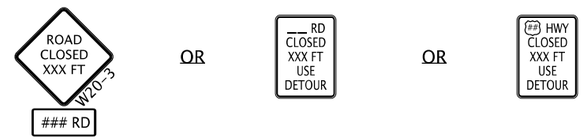
TYPICAL TRAILBLAZER ASSEMBLY



TYPICAL PARTIAL ROAD CLOSURE

GENERAL NOTES FOR ALL DETAILS:

★ A "Street Name" rider may be used to enhance Road Closure signing; or provide a project specific design; or, as shown in the traffic control plan.



##x18 Rider
Rider width to be determined by width of street name.

48 x 60 (nom.)
Project Specific Design

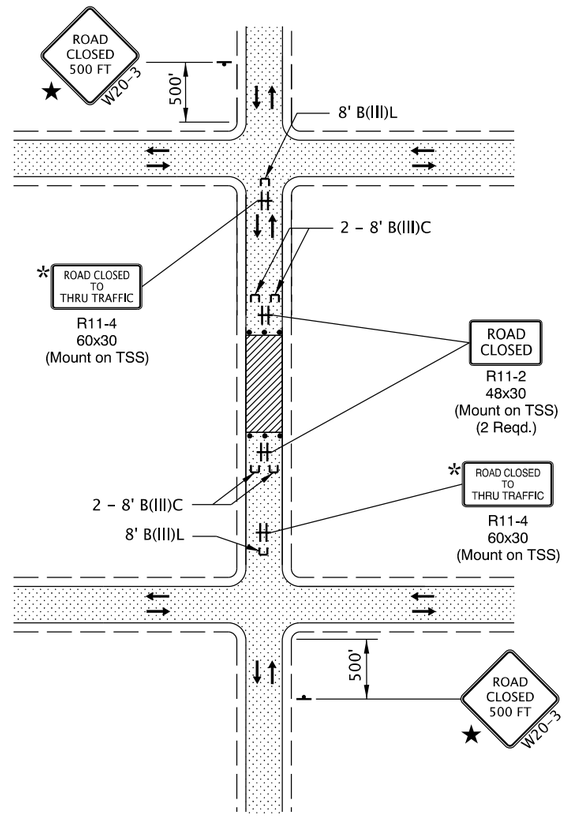
48 x 60 (nom.)
Project Specific Design

- Use a minimum of two Type III barricades for a road closure. For roads ≥ 36' wide between curbs or edge of pavement, use a minimum of three Type III barricades for the closure point.
- For full road closures, the C or LR barricade may be used.
- Place additional signing as directed.
- To determine sign spacing A, B, & C, use the "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. TM800.
- To be accompanied by Dwg. Nos.TM820 & TM821.

• • • • • 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.

UNDER TRAFFIC

UNDER CONSTRUCTION



NOTE:
* If accesses exist between intersection and point of closure, install "ROAD CLOSED TO THRU TRAFFIC" sign as shown.

TYPICAL ROAD CLOSURE

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CLOSURE DETAILS

2024

DATE	REVISION DESCRIPTION
MM-YYYY	REVISION
07-2025	Revised a miss spelling.

CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **TM840**

11-JUL-2025

TM840.dgn

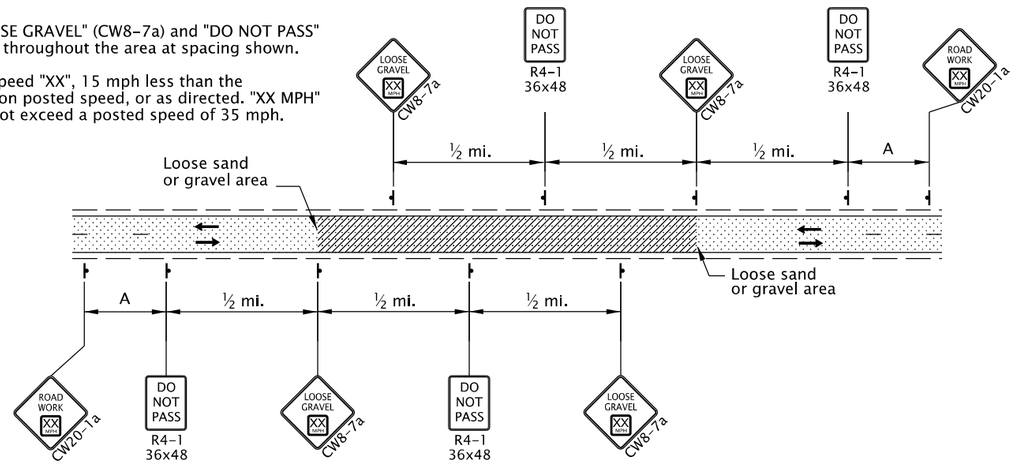
Effective Date: December 1, 2025 - May 31, 2026

11-JUL-2025

TM850.dgn

NOTE:

- Continue "LOOSE GRAVEL" (CW8-7a) and "DO NOT PASS" (R4-1) signing throughout the area at spacing shown.
- Use advisory speed "XX", 15 mph less than the pre-construction posted speed, or as directed. "XX MPH" placard shall not exceed a posted speed of 35 mph.

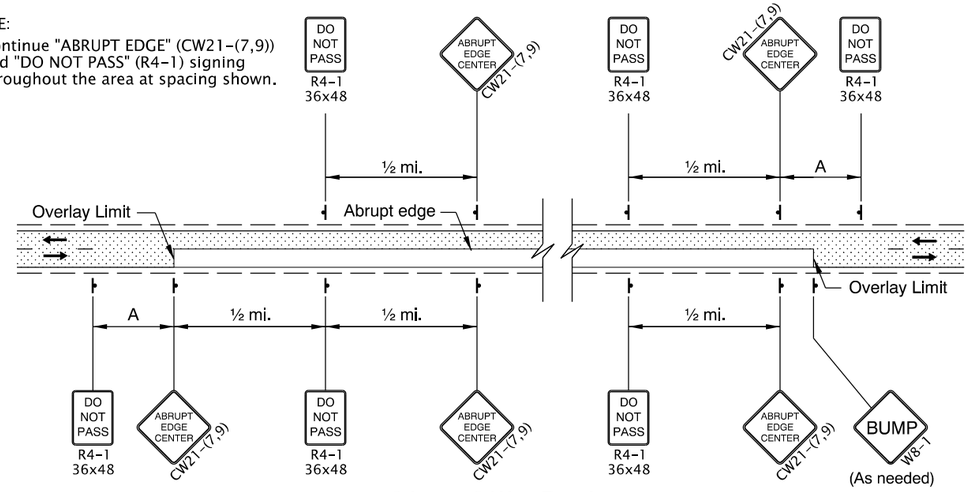


2-Lane, 2-Way Roadway

LOOSE GRAVEL IN ROADWAY SIGNING

NOTE:

- Continue "ABRUPT EDGE" (CW21-(7,9)) and "DO NOT PASS" (R4-1) signing throughout the area at spacing shown.

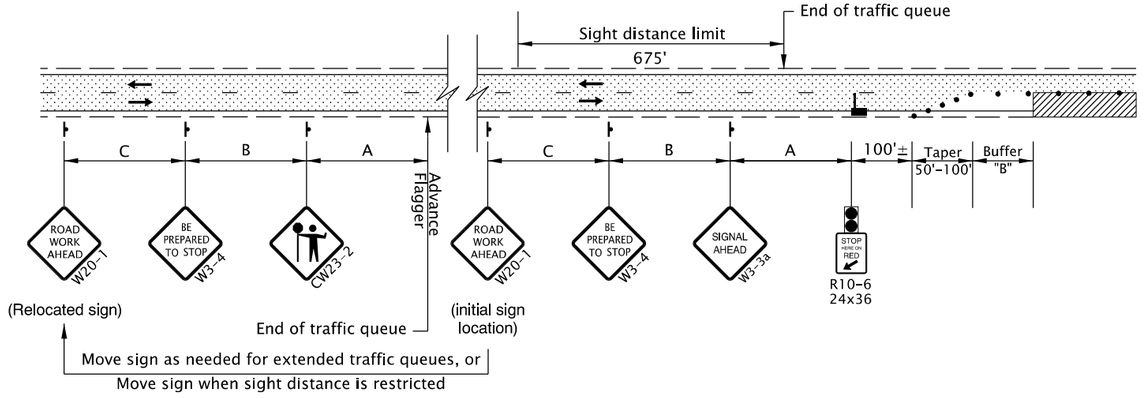


2-Lane, 2-Way Roadway

OVERLAY AREA SIGNING

NOTES:

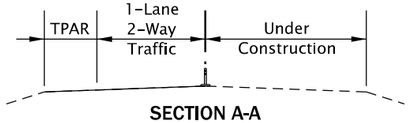
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
- Relocate initial "ROAD WORK AHEAD" (W20-1) sign in advance of additional "BE PREPARED TO STOP" (W3-4) and Flagger Ahead (CW23-2) signs, as shown.
- Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.



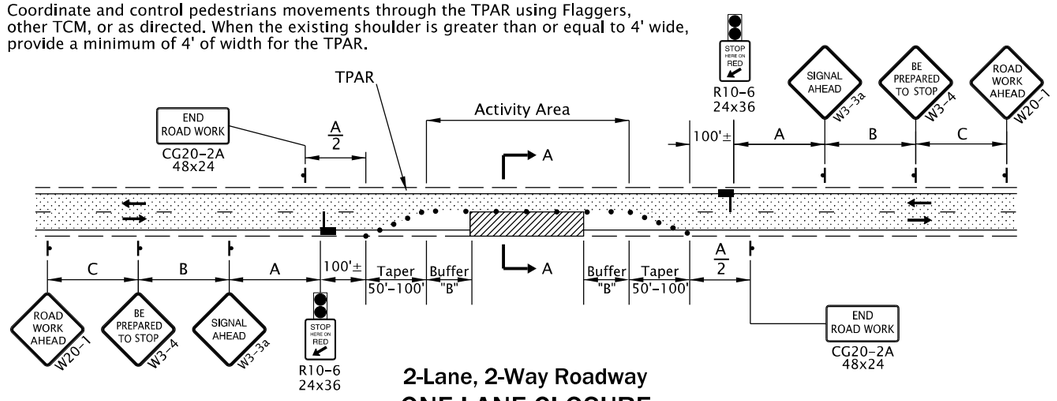
ADVANCE FLAGGER FOR EXTENDED TRAFFIC QUEUES

NOTE:

- When using pilot cars with flaggers to control traffic during paving operations, the Tubular Marker spacing along centerline may be increased to 200' within the Activity Area, as shown or as directed.
- Include "WAIT FOR FLAGGER" (CR4-23) signs mounted on Type II Barricade located approx. 50' before each Flagger Station.
- Coordinate and control pedestrians movements through the TPAR using Flaggers, other TCM, or as directed. When the existing shoulder is greater than or equal to 4' wide, provide a minimum of 4' of width for the TPAR.



SECTION A-A



2-Lane, 2-Way Roadway

ONE LANE CLOSURE

GENERAL NOTES FOR ALL DETAILS:

- The "SIGNAL AHEAD" (W3-3a) sign may be substituted with the Signal Ahead (W3-3) symbol sign.
- Cover existing passing zone signing, as directed.
- Install temporary striping as required.
- To determine Taper Length ("L") and Buffer Length ("B"), use the "MINIMUM LENGTHS TABLE" shown on Dwg. No. TM800.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. No. TM800.
- Install a "BICYCLES ON ROADWAY" (CW11-1) sign in advance of the closure when a bike lane is closed, or when the shoulder is closed and bikes are expected.
- At night, flagger stations shall be illuminated according to the FLAGGER STATION LIGHTING DELINEATION detail on Dwg No. TM800.
- To be accompanied by Dwg. Nos. TM820, TM821 & TM854.

Automated Flagging Assistance Device (AFAD)

• • • • • 28" Tubular Markers on 20' max. spacing for flagger tapers and stations

• • • 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.

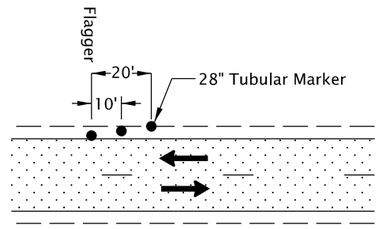
UNDER TRAFFIC

UNDER CONSTRUCTION

CONSTRUCTION UNDER TRAFFIC

NOTE:

- Use a minimum of 3 tubular markers in shoulder taper on 10' spacing for flagger station delineation.



FLAGGER STATION DELINEATION

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

2-LANE, 2-WAY ROADWAYS

2024

DATE	REVISION DESCRIPTION
01-2022	Added AFADs to drawing.
07-2025	Clarified location of "WAIT FOR FLAGGER" sign.

CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **TM850**

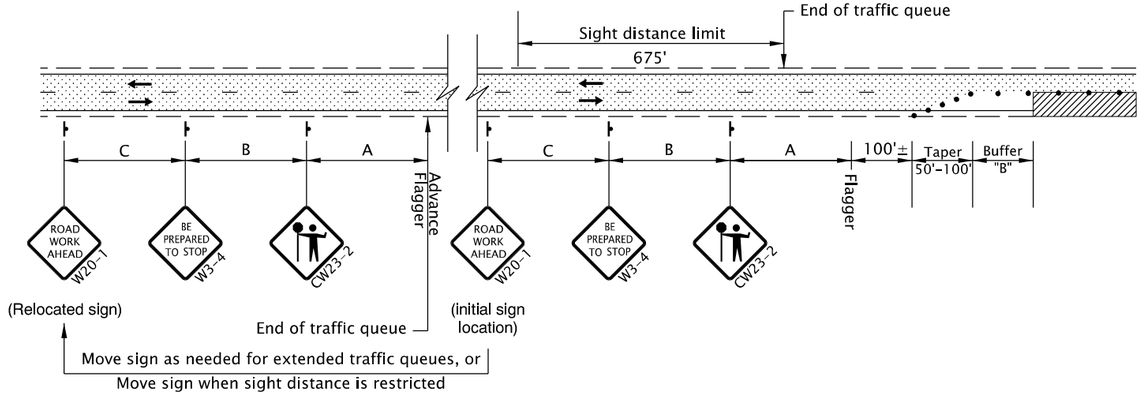
Effective Date: December 1, 2025 - May 31, 2026

11-JUL-2025

TM855.dgn

NOTES:

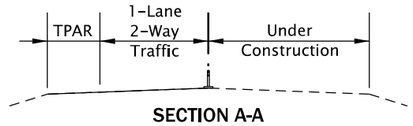
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
- Relocate initial "ROAD WORK AHEAD" (W20-1) sign in advance of additional "BE PREPARED TO STOP" (W3-4) and Flagger Ahead (CW23-2) signs, as shown.
- Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.



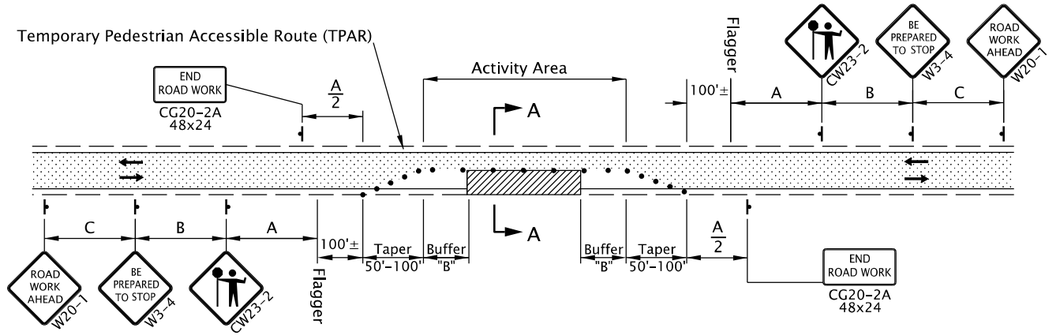
ADVANCE FLAGGER FOR EXTENDED TRAFFIC QUEUES

NOTE:

- When using pilot cars with flaggers to control traffic during paving operations, the Tubular Marker spacing along centerline may be increased to 200' within the Activity Area, as shown or as directed.
- Include "WAIT FOR FLAGGER" (CR4-23) signs mounted on Type II Barricade located approx. 50' before each Flagger Station.
- Coordinate and control pedestrians movements through the TPAR using Flaggers, other TCM, or as directed. When the existing shoulder is greater than or equal to 4' wide, provide a minimum of 4' of width for the TPAR.



SECTION A-A



2-Lane, 2-Way Roadway
ONE LANE CLOSURE

GENERAL NOTES FOR ALL DETAILS:

- This drawing is only intended to be used where an Automated Flagger Assistance Device (AFAD) cannot be utilized.
- The "FLAGGER" (CW23-2) symbol sign shall be used only in conjunction with the "BE PREPARED TO STOP" (W3-4) sign.
- Cover existing passing zone signing, as directed.
- Install temporary striping as required.
- To determine Taper Length ("L") and Buffer Length ("B"), use the "MINIMUM LENGTHS TABLE" shown on Dwg. No. TM800.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. No. TM800.
- Install a "BICYCLES ON ROADWAY" (CW11-1) sign in advance of the closure when a bike lane is closed, or when the shoulder is closed and bikes are expected.
- At night, flagger stations shall be illuminated according to the FLAGGER STATION LIGHTING DELINEATION detail on Dwg No. TM800.
- To be accompanied by Dwg. Nos. TM820 & TM821.

••••••••• 28" Tubular Markers on 10'max. spacing arround intersection radii.

• • • • • 28" Tubular Markers on 20' max. spacing for flagger tapers and stations

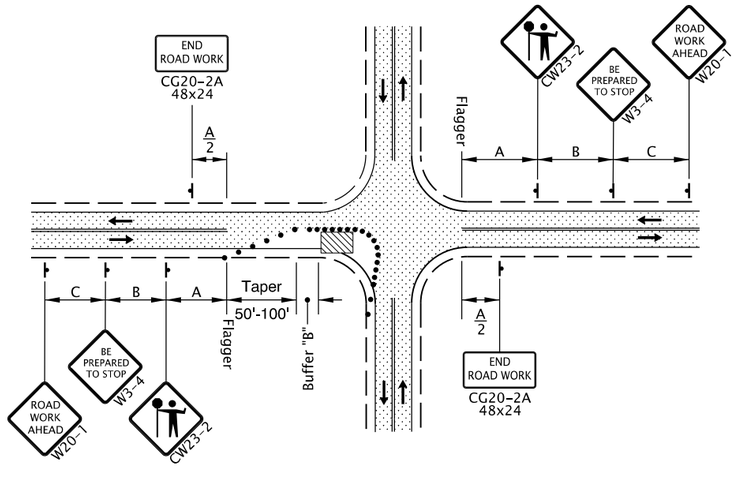
• • • 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.

UNDER TRAFFIC

UNDER CONSTRUCTION

NOTE:

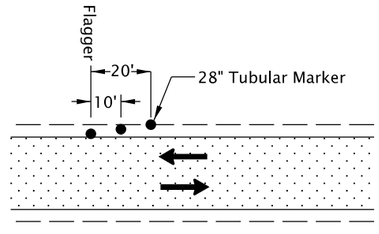
- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection



2-Lane, 2-Way Roadway
ONE LANE CLOSURE, INTERSECTION

NOTE:

- Use a minimum of 3 tubular markers in shoulder taper on 10' spacing for flagger station delineation.



FLAGGER STATION DELINEATION

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

2-LANE, 2-WAY ROADWAYS

2024

DATE	REVISION DESCRIPTION
MM-YYYY	REVISION
07-2025	Clarified location of "WAIT FOR FLAGGER" sign.

CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **TM855**

Effective Date: December 1, 2025 - May 31, 2026