

# UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE

PACIFIC NORTHWEST REGION

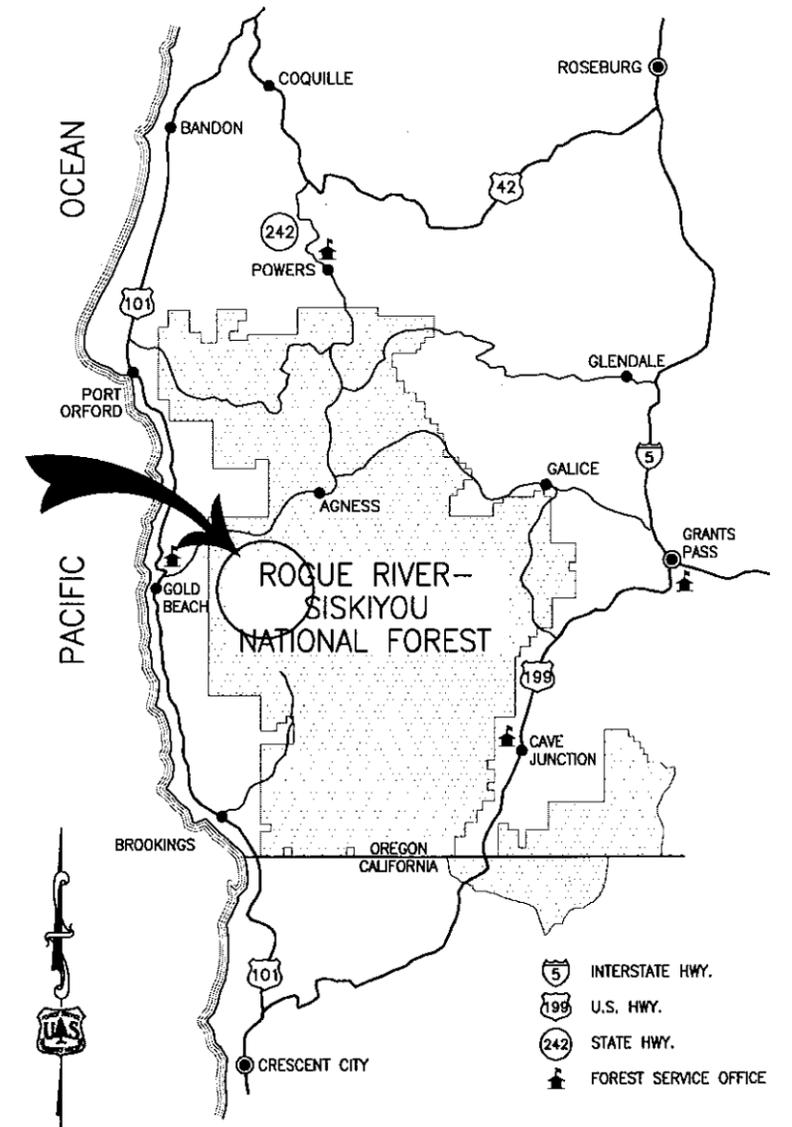
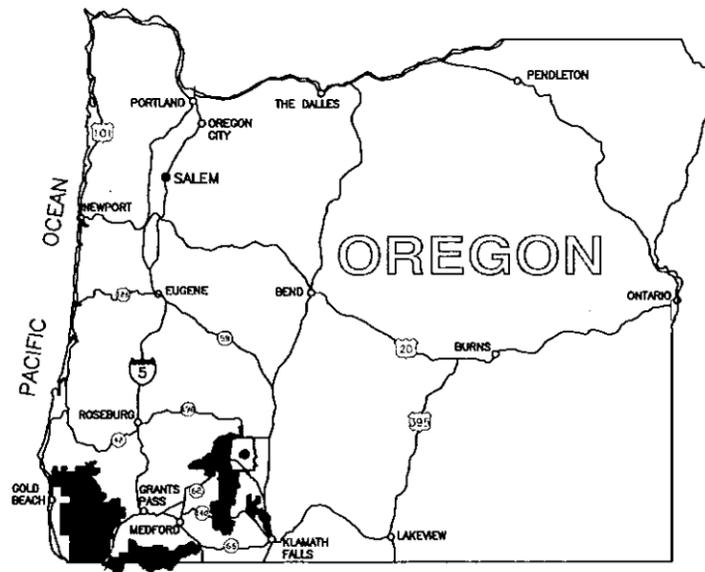
## ROGUE RIVER-SISKIYOU NATIONAL FOREST GOLD BEACH RANGER DISTRICT

PLANS FOR PROPOSED

### EQUINE TIMBER SALE



DESIGNED BY: <i>Lola Coombe</i>	7/13/12
PROJECT DESIGNER	Date
REVIEWED BY: <i>Pal Podesta</i>	7/13/2012
REVIEWER	Date
RECOMMENDED BY: <i>Dan Smith</i>	7/19/2012
ASSISTANT FOREST ENGINEER	Date
APPROVED BY: <i>[Signature]</i>	7/20/12
DISTRICT RANGER	Date
APPROVED BY: <i>Juan M. Kocis</i>	7/24/12
REL M STAFF OFFICER	Date



PROJECT LOCATION MAP  
Not to Scale



U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
**R6**  
PACIFIC NORTHWEST REGION

Forest  
**ROGUE RIVER-SISKIYOU  
NATIONAL FOREST**  
GOLD BEACH

Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**COVER SHEET**  
EQUINE TIMBER SALE

Project No:  
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INDEX TO SHEETS  
EQUINE TIMBER SALE

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EQUINE TIMBER SALE		ESTIMATED QUANTITIES																																						
<p align="center"><b>FP-03 Pay Items</b></p>		Item Number:	15101	15701	20102	20207	20301	20304	20403	20416	20419	20420	20701	23050	25104a	25104b	25205	25313	30326a	30326b	30326c	32111a	32111b	40401	43001	60201a	60201b	60201c	60201d	60501a	60501b	60601	60603	60708	60710	62530	65102			
		Unit of Measure:	LSQ	LSQ	LSQ	EA	EA	LSQ	CY	CY	FT	EA	SY	Mile	CY	CY	CY	SY	Mile	Mile	Mile	CY	CY	Ton	Ton	FT	FT	FT	FT	FT	FT	EA	EA	EA	EA	LSQ	LSQ			
		Contract Quantity																																						
		Road Number																																						
3318000	All	All	All	0	6	All	0	0	0	0	0	1	128	15.94	40	0	0	0	0	10.30	5.64	0.14	280	0	0.0	184.1	0	34	160	0	0	0	0	0	0	0	0	0	0	0
3318020	All	All	All	0	2	0	0	0	0	0	0	0	30	0.00	8	0	0	0	0.10	0.00	0.00	10	0	0.0	0.0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	
3318050	All	All	All	1	4	0	0	0	0	0	0	0	30	1.16	8	0	0	0	1.16	0.00	0.00	40	0	0.0	0.0	16	100	0	0	0	0	0	0	0	0	0	0	0	0	
3318055	All	All	All	0	1	0	0	0	0	0	0	0	15	0.16	4	0	0	0	0.16	0.00	0.00	5	0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3318072	All	All	All	0	2	0	0	0	0	0	0	2	76	0.58	32	0	0	0	0.58	0.00	0.00	140	0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3318240	All	All	All	0	3	0	0	0	0	0	0	0	45	1.09	12	0	0	0	1.09	0.00	0.00	10	0	0.0	0.0	0	30	74	10	0	0	0	0	0	0	0	0	0	0	
3318300a	All	All	All	0	1	0	0	0	0	0	0	0	26	0.00	7	0	0	0	0.32	0.00	0.00	3	0	0.0	0.0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	
3318300b	All	All	All	0	2	0	0	0	0	0	0	0	30	0.71	8	0	0	0	1.17	0.00	0.00	9	0	0.0	0.0	0	40	46	0	0	0	0	0	0	0	0	0	0	0	
3680000	All	All	All	0	1	All	182	476	0	0	0	0	145	15.38	0	5	70	48	15.21	0.00	0.00	4049	13673	159.6	184.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FOR ALL ROAD		All	All	All	1	22	All	182	476	30	3	525	35.02	119	5	70	48	30.09	5.64	0.14	4546	13673	159.6	184.1	16	308	320	10	40	65	1	3	8	4	All	All				
 <p align="center">U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE R6 PACIFIC NORTHWEST REGION</p>		<p align="center">ROGUE RIVER-SISKIYOU NATIONAL FOREST GOLD BEACH DISTRICT</p>										<p align="center">ESTIMATED QUANTITIES</p>										<p align="center">Sheet No. 4</p>		<p align="center">Total Sheets 34</p>																

PAY ITEM NUMBER	PAY ITEM DESCRIPTION	PAY UNIT	NOTES
15101	MOBILIZATION	LUMP SUM	TRAFFIC CONTROL IS INCIDENTAL
15713	SOIL EROSION AND POLLUTION CONTROL	LUMP SUM	SILT FENCE FOR CULVERTS AS NEEDED AND GABION RETAINING WALL
20102	CLEARING AND GRUBBING, DISPOSAL OF TOPS AND LIMBS (G), LOGS (I), STUMPS (F)	LUMP SUM	G-CHIPPING/GRINDING, I-DECK, F-SCATTER, CLEARED TOPS AND LIMBS MAY BE PLACED ON FINISHED CULVERT SLOPES AS EROSION CONTROL
20207	REMOVAL OF INDIVIDUAL TREES, DISPOSAL OF TOPS AND LIMBS (G), LOGS (I), STUMPS (F)	EACH	G-CHIPPING/GRINDING, I-DECK, F-SCATTER, MISCELLANEOUS TREES MAY BE SCATTERED
20301	REMOVAL OF CULVERT, DISPOSAL METHOD (A)	EACH	LEGALLY DISPOSE OFF GOVERNMENT LAND
20304	REMOVAL OF ASPHALT CONCRETE, DISPOSAL METHOD (A)	LUMP SUM	LEGALLY DISPOSE OFF GOVERNMENT LAND
20403	SUBEXCAVATION	* CUBIC YARD	FSR 3680, BRIDGE APPROACHES
20416	WASTE, ROADWAY EXCAVATION	* CUBIC YARD	FSR 3680, BRIDGE APPROACHES, ROCK BUTTRESS, GABION RETAINING WALL, HAUL TO DISPOSAL SITE FSR 36980 MP 6.21
20419	DRAINAGE EXCAVATION, TYPE DITCH	FOOT	
20420	DRAINAGE EXCAVATION, TYPE DRAIN DIP	EACH	
20701	EARTHWORK GEOTEXTILE TYPE IV-C	SQUARE YARD	
23050	BRUSHING	MILE	CHIP DEBRIS
25104A	KEYED RIPRAP, CLASS 3 (GOVERNMENT SOURCE)	* CUBIC YARD	WILDHORSE QUARRY, FSR 3318, MP 14.45, EXCAVATION IS INCIDENTAL
25104B	KEYED RIPRAP, CLASS 4 (COMMERCIAL SOURCE)	* CUBIC YARD	WILDHORSE QUARRY, FSR 3318, MP 14.45, EXCAVATION IS INCIDENTAL
25205	ROCK BUTTRESS, MECHANICALLY PLACED	* CUBIC YARD	EXCAVATION IS INCIDENTAL TO 60501B, 8" UNDERDRAIN SYSTEM
25313	GABIONS, WELDED WIRE BASKETS	SQUARE YARD	EXCAVATION, BACKFILL, ROCK AND SOIL ANCHORS ARE INCIDENTAL
30326A	ROAD RECONDITIONING, ROAD AND DITCH	MILE	LOADING, HAULING AND PLACING WASTE AND VEGETATION AND WATER FOR COMPACTION ARE INCIDENTAL. COMPACTION METHOD B, SUBSECTION 321.05
30326B	ROAD RECONDITIONING, DITCH ONLY	MILE	LOADING, HAULING AND PLACING WASTE AND VEGETATION AND WATER FOR COMPACTION ARE INCIDENTAL

\* CONTRACT QUANTITIES



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GOLD BEACH

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Sheet Title:

PAY ITEM GENERAL NOTES  
1 OF 2  
EQUINE TIMBER SALE

Project No:

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PAY ITEM NUMBER	PAY ITEM DESCRIPTION	PAY UNIT	NOTES
30326C	ROAD RECONDITIONING, PULVERIZING	MILE	REUSE MATERIAL AS BASE. SHAPING, COMPACTION AND DISPOSAL OF EXCESS/OVERSIZE MATERIAL ARE INCIDENTAL. COMPACTION METHOD B
32111A	AGGREGATE SURFACE COURSE, GRADING (S), COMPACTION METHOD (B) (GOVERNMENT SOURCE, STOCKPILE)	* CUBIC YARD	PLACE STOCKPILED MATERIAL PRIOR TO CRUSHING, QUANTITY IS COMPACTED IN PLACE, PREHISTORIC BUTTE QUARRY, FSR 3313150, MP 1.45
32111B	AGGREGATE SURFACE COURSE, GRADING (S), COMPACTION METHOD (B) (GOVERNMENT SOURCE, CRUSHED)	* CUBIC YARD	QUANTITY IS COMPACTED IN PLACE, PREHISTORIC BUTTE QUARRY, FSR 3313150, MP 1.45
40401	MINOR HOT ASPHALT CONCRETE	TON	TACK COAT IS INCIDENTAL
43001	HOT ASPHALT CONCRETE MIXTURE, SKIN PATCH, FULL DEPTH PATCH	TON	TACK COAT IS INCIDENTAL
60201A	18-INCH ALUMINIZED CORRUGATED STEEL PIPE, 16 GAGE, COMPACTION METHOD B	FOOT	EXCAVATION, BACKFILL, BEDDING, BANDS AND HARDWARE ARE INCIDENTAL, LENGTHS SHOWN ARE APPROXIMATE, STAKE AND MEASURE FOR APPROVAL PRIOR TO ORDERING
60201B	24-INCH ALUMINIZED CORRUGATED STEEL PIPE, 16 GAGE, COMPACTION METHOD B, 0'-4' DEEP	FOOT	EXCAVATION, BACKFILL, BEDDING, BANDS AND HARDWARE ARE INCIDENTAL, LENGTHS SHOWN ARE APPROXIMATE, STAKE AND MEASURE FOR APPROVAL PRIOR TO ORDERING
60201C	24-INCH ALUMINIZED CORRUGATED STEEL PIPE, 16 GAGE, COMPACTION METHOD B, 4'-10' DEEP	FOOT	EXCAVATION, BACKFILL, BEDDING, BANDS AND HARDWARE ARE INCIDENTAL, LENGTHS SHOWN ARE APPROXIMATE, STAKE AND MEASURE FOR APPROVAL PRIOR TO ORDERING
60201D	24-INCH ALUMINIZED CORRUGATED STEEL PIPE, 16 GAGE, OUTLET PIPE	FOOT	
60501A	UNDERDRAIN SYSTEM, 4" PERFORATED PIPE	FOOT	EXCAVATION AND DRAIN ROCK ARE INCIDENTAL
60501B	UNDERDRAIN SYSTEM, 8" PERFORATED PIPE	FOOT	EXCAVATION FOR UNDERDRAIN AND BUTTRESS, GEOTEXTILE TYPE IV-C AND GRANULAR ROCK ARE INCIDENTAL
60601	SPILLWAY ASSEMBLY, 24-INCH	EACH	HARDWARE IS INCIDENTAL
60603	PIPE ANCHOR ASSEMBLY, 24-INCH	EACH	HARDWARE AND CABLE ARE INCIDENTAL
60708	CLEANING CULVERTS IN PLACE	EACH	CLEAN INLET AND OUTLET, MAY NEED TO JACK OPEN OR CUT INLET OR OUTLET
60710	RECONDITIONING DRAINAGE STRUCTURES	EACH	CLEAN ENTIRE LENGTH, RECONNECT SPILLWAY, OUTLET PIPE, AND PIPE ANCHOR ASSEMBLY
62530	SEEDING AND MULCHING, DRY METHOD	LUMP SUM	GOVERNMENT PROVIDED SEED
65102	PIT AND QUARRY DEVELOPMENT	LUMP SUM	CLEARING AND GRUBBING, REMOVAL AND PLACING OF OVERBURDEN, SHAPING TO DRAIN ARE INCIDENTAL

\* CONTRACT QUANTITIES



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Sheet Title:

PAY ITEM GENERAL NOTES  
2 OF 2  
EQUINE TIMBER SALE

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DRAINAGE LISTING

ROAD #	MILEPOST	CMP		GAGE	OUTLET PIPE		CMP		GAGE	OUTLET PIPE		TYPE	GRADE	ANCHOR ASSEMBLY		HINGED	ELBOW	OUTLET PIPE CONNECT	** DEPTH OF EXCAVATION	OUTLET PROTECTION			REMARKS	
		DIAMETER IN.	LENGTH FT.		DIAMETER IN.	* LENGTH FT.	DIAMETER IN.	LENGTH FT.		EA.	FT			RY	RY					RY	RY			
3318000	4.62	24	40	16								2	MATCH						4-10		4			REMOVE AND REATTACH EXISTING 20 FT. OF OUTLET PIPE, CONNECTOR AND ANCHOR ASSEMBLIES.
	5.53	24	40	16								3	MATCH						4-10		4			
	5.57	24	40	16								3	MATCH						4-10		4			
	5.70	24	40	16								3	MATCH						4-10		4			
	11.29	24	34	16								3	MATCH						0-4		4			
3318020	0.07	24	30	16								3	MATCH						0-4		4			
	0.10	24	34	16								3	MATCH						0-4		4			
3318050	0.08	24	50	16								3	MATCH						0-4		4			
	0.42	24	50	16								3	MATCH						0-4		4			
	0.53	18	6	16								3	MATCH						0-4					REMOVE AND REPLACE INLET SECTION OF THE EXISTING PIPE
	0.95	18	10	16								3	MATCH						0-4					REMOVE AND REPLACE INLET SECTION OF THE EXISTING PIPE
3318055																								
	0.04	24	40	16								3	MATCH						4-10		4			

METAL PIPE CORRUGATIONS SHALL BE 2 2/3" X 1/2" UNLESS OTHERWISE APPROVED.  
ALUMINIZED STEEL SHALL BE USED.

\* OUTLET PIPE LENGTH SHOWN ON THIS LISTING INCLUDES THE 20' SPILLWAY ASSEMBLY. FOR EXAMPLE: A 30 FOOT OUTLET PIPE CONSISTS OF A 20 FOOT SPILLWAY ASSEMBLY PLUS 10 FEET OF PIPE.  
\*\* RANGE OF DEPTH OF CULVERT AT ROAD CENTERLINE GIVEN IN FEET. FOR EXAMPLE, 0-4 MEANS CULVERT IS BETWEEN 0 AND 4 FEET BELOW THE ROAD SURFACE AT ROAD CENTERLINE.



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Sheet Title:  
**DRAINAGE LISTING, 1 OF 2**  
EQUINE TIMBER SALE

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Sheet **7** OF **34**



Mile Post		Item Number: Unit of Measure: Contract Quantity	Description of Work		Begin		End		Description of Work		Begin		End		
			LSQ	LSQ	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
		15101	LSQ	Mobilization											
		15713	LSQ	Soil erosion and pollution control											
		20102	LSQ	Clearing and grubbing, disposal of tops and limbs (g), logs (i), stumps (f)											
		20207	EA	Removal of individual trees, disposal of tops and limbs (g), logs (i), stumps (f)											
		20301	EA	Removal of culvert, disposal method (A)											
		20304	LSQ	Removal of asphalt concrete, disposal method (A)											
		20403	CY	Subexcavation											
		20416	CY	Waste, roadway excavation											
		20419	FT	Drainage excavation, type ditch											
		20420	EA	Drainage excavation, type drain dip											
		20701	SY	Earthwork geotextile type IV-C											
		23050	Mile	Brushing				9.46							
		25104a	CY	Keyed riprap, class 3 (government source)											
		25104b	CY	Keyed riprap, class 4 (commercial source)											
		25205	CY	Rock buttress, mechanically placed											
		25313	SY	Gabions, welded wire baskets											
		30326a	Mile	Road reconditioning, road and ditch											
		30326b	Mile	Road reconditioning, ditch only											
		30326c	Mile	Road reconditioning, pulverizing											
		32111a	CY	Aggregate surface course, Grading (S), compaction method (B) (stockpiled, government source)											
		32111b	CY	Aggregate surface course, Grading (S), compaction method (B) (crushed, government source)											
		40401	Ton	Minor hot asphalt concrete											
		43001	Ton	Hot asphalt concrete mixture, skin patch, full depth patch											
		60201a	FT	18-inch aluminized corrugated steel pipe, 16 gage, compaction method B											
		60201b	FT	24-inch aluminized corrugated steel pipe, 16 gage, compaction method B, 0-4' deep											
		60201c	FT	24-inch aluminized corrugated steel pipe, 16 gage, compaction method B, 4'-10' deep											
		60201d	FT	24-inch aluminized corrugated steel pipe, 16 gage, outlet pipe											
		60501a	FT	Underdrain system, 4" perforated pipe											
		60501b	FT	Underdrain system, 8" perforated pipe											
		60601	EA	Spillway assembly, 24-inch											
		60603	EA	Pipe anchor assembly, 24-inch											
		60708	EA	Cleaning culverts in place											
		60710	EA	Reconditioning drainage structures											
		62530	LSQ	Seeding and mulching, dry method											
		65102	LSQ	Pit and Quarry Development											
0.00		Begin Work: FSR 3318000 Intersection with FSR 3300000						1							
0.00	9.46	Brushing													
0.00	1.78	Recondition ditch, asphalt section													
0.08		Pothole, patch													
0.10	0.13	Skin patch area													
0.30		Pothole, patch													
0.33	0.38	Skin patch area													
0.47		Existing 18" culvert w/riser Clean length of culvert													
0.58	0.59	Skin patch area													
0.63		Existing 18" culvert Clean inlet													
0.65	0.68	Skin patch area													
1.43		Existing 18" culvert Clean length of culvert													
1.51		Intersection with FSR 3318020 Rt.													
1.67	1.72	Skin patch area													
1.78	1.93	Recondition road and ditch, aggregate section													
1.91		Construct drain dip													
1.93	2.28	Recondition ditch, asphalt section													
2.28	2.39	Recondition road and ditch, aggregate section													
2.32		Intersection with FSR 3318050 Rt. to Intersection with FSR 3318055													
2.39	5.9	Recondition ditch, asphalt section													
2.48	2.49	Skin patch area													
2.57		Pothole patch, 3 total													
2.71		Pothole patch, 3 total													
2.71	2.72	Skin patch area													
3.36		Intersection with FSR 3318070 Rt. to Intersection with FSR 3318072													
3.78		Pothole, patch, 2 total													
3.81		Pothole, patch													
3.81	3.82	Skin patch area													
3.84		Pothole, patch													
3.89		Pothole, patch, 3 total													
4.38		Skin patch area													
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE R6 PACIFIC NORTHWEST REGION		ROGUE RIVER-SISKIYOU NATIONAL FOREST GOLD BEACH DISTRICT		FSR 3318000 WORK LIST & ESTIMATED QUANTITIES, 1 of 2		EQUINE TIMBER SALE		Sheet No. 9		Total Sheets 34					













FSR # 3318300a		WORK LIST AND ESTIMATED QUANTITIES																																						
Mile Post	End	Description of Work	FP-03 Pay Items																																					
			15101	15713	20102	20207	20301	20304	20403	20416	20419	20420	20701	23050	25104a	25104b	25205	25313	30326a	30326b	30326c	32111a	32111b	40401	43001	60201a	60201b	60201c	60201d	60501a	60501b	60601	60603	60708	60710	62530	65102			
Begin	End	Description of Work	LSQ	LSQ	LSQ	EA	EA	LSQ	CY	CY	FT	EA	SY	Mile	CY	CY	CY	SY	Mile	Mile	Mile	CY	CY	Ton	Ton	FT	FT	FT	FT	FT	FT	EA	EA	EA	EA	LSQ	LSQ			
0.00	0.32	Begin Work: FSR 3318300 Intersection with FSR 3318000, MP 15.16	1																																					
0.00	0.32	Clear and grub vegetation			1																																			
0.00	0.32	Recondition road and ditch																	0.32																					
0.27		Existing 18" CMP. Install type A culvert outlet protection																																						
0.32		Existing 18" CMP Replace with 24" x 40' CMP		1																																				
	0.32	End work.																																						
TOTAL FOR ROAD			All	All	All	0	1	0	0	0	0	0	26	0.00	7	0	0	0	0.32	0.00	0.00	0.00	3	0	0.0	0.0	0	40	0	0	0	0	0	0	0	0	0	All	0	
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE R6 PACIFIC NORTHWEST REGION			ROGUE RIVER-SISKIYOU NATIONAL FOREST GOLD BEACH DISTRICT														FSR 3318300a WORK LIST & ESTIMATED QUANTITIES EQUINE TIMBER SALE														Sheet No.	Total Sheets								
																															16	34								

**FSR # 3318300b**

**WORK LIST AND ESTIMATED QUANTITIES**

FP-03 Pay Items		Mile Post		Item Number:		Unit of Measure:		Contract Quantity		Description of Work																											
Begin	End	LSQ	LSQ	EA	EA	EA	EA	EA	EA	EA	EA																										
3.30	3.76	15101	15773	20102	20207	20301	20304	20403	20416	20419	20420	20701	23050	25104a	25104b	25205	25313	30326a	30326b	30326c	32111a	32111b	40401	43001	60201a	60201b	60201c	60201d	60501a	60501b	60601	60603	60708	60710	62530	65102	
		LSQ	LSQ	LSQ	EA	EA	LSQ	CY	CY	FT	EA	SY	Mile	CY	CY	CY	SY	Mile	Mile	Mile	CY	CY	Ton	Ton	FT	FT	FT	FT	FT	FT	EA	EA	EA	EA	EA	LSQ	LSQ
3.30	3.76	Begin Work: FSR 3318300 @ 0.46 miles south of intersection with FSR 3318304																																			
3.30	3.76	Clear and grub vegetation																																			
3.76	4.47	Brushing																																			
3.30	4.47	Recondition road and ditch																																			
3.46		Existing 18" CMP Replace with 24" x 46' CMP																																			
3.76		Intersection w/ FSR 3318304																																			
3.98		Existing 24" CMP Replace with 24" x 40' CMP																																			
4.22		Existing 24" CMP Construct 30' lead-off ditch																																			
	4.47	End work.																																			
TOTAL FOR ROAD		All	All	All	0	2	0	0	0	30	0	30	0.71	8	0	0	0	1.17	0.00	0.00	9	0	0.0	0.0	0	40	46	0	0	0	0	0	0	0	0	All	0
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE R6 PACIFIC NORTHWEST REGION		ROGUE RIVER-SISKIYOU NATIONAL FOREST GOLD BEACH DISTRICT										FSR 3318300b WORK LIST & ESTIMATED QUANTITIES EQUINE TIMBER SALE										Sheet No.	Total Sheets														
		Design: Lola Coombe										Drawn: Lola Coombe										17	34														
		Checked: Paul Podestla										Date: 6/22/2012																									

Mile Post		Item Number:	Unit of Measure:	Contract Quantity	Description of Work		Begin		End		TOTAL FOR ROAD		U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE R6 PACIFIC NORTHWEST REGION		ROGUE RIVER-SISKIYOU NATIONAL FOREST GOLD BEACH DISTRICT		FSR 3680000 WORK LIST & ESTIMATED QUANTITIES		EQUINE TIMBER SALE		Sheet No.	Total Sheets												
Begin	End																																	
		15101	LSQ			Mobilization																												
		15713	LSQ			Soil erosion and pollution control																												
		20102	LSQ			Clearing and grubbing, disposal of tops and limbs (g), logs (i), stumps (f)																												
		20207	EA			Removal of individual trees, disposal of tops and limbs (g), logs (i), stumps (f)																												
		20301	EA			Removal of culvert, disposal method (A)																												
		20304	LSQ			Removal of asphalt concrete, disposal method (A)																												
		20403	CY			Subexcavation																												
		20416	CY			Waste, roadway excavation																												
		20419	FT			Drainage excavation, type ditch																												
		20420	EA			Drainage excavation, type drain dip																												
		20701	SY			Earthwork geotextile type IV-C																												
		23050	Mile			Brushing																												
		28104a	CY			Keyed riprap, class 3 (government source)																												
		28104b	CY			Keyed riprap, class 4 (commercial source)																												
		28205	CY			Rock buttress, mechanically placed																												
		25313	SY			Gabions, welded wire baskets																												
		30326a	Mile			Road reconditioning, road and ditch																												
		30326b	Mile			Road reconditioning, ditch only																												
		30326c	Mile			Road reconditioning, pulverizing																												
		32111a	CY			Aggregate surface course, Grading (S), compaction method (B) (stockpiled, government source)																												
		32111b	CY			Aggregate surface course, Grading (S), compaction method (B) (crushed, government source)																												
		40401	Ton			Minor hot asphalt concrete																												
		43001	Ton			Hot asphalt concrete mixture, skin patch, full depth patch																												
		60201a	FT			18-inch aluminized corrugated steel pipe, 16 gage, compaction method B																												
		60201b	FT			24-inch aluminized corrugated steel pipe, 16 gage, compaction method B, 0-4' deep																												
		60201c	FT			24-inch aluminized corrugated steel pipe, 16 gage, compaction method B, 4'-10' deep																												
		60201d	FT			24-inch aluminized corrugated steel pipe, 16 gage, outlet pipe																												
		60501a	FT			Underdrain system, 4" perforated pipe																												
		60501b	FT			Underdrain system, 8" perforated pipe																												
		60601	EA			Spillway assembly, 24-inch																												
		60603	EA			Pipe anchor assembly, 24-inch																												
		60708	EA			Cleaning culverts in place																												
		60710	EA			Reconditioning drainage structures																												
		62530	LSQ			Seeding and mulching, dry method																												
		65102	LSQ			Pit and Quarry Development																												
0.00		Begin Work: FSR 3680000 End of county Rd. 635		1																														
0.00	15.38	Brushing																																
0.00	15.38	Recondition road and ditch, except bridges, approaches and as noted below																																
0.00	15.38	Place crushed aggregate, 4" depth, see Road Reconditioning & Aggregate Placement																																
11.62	14.95	Place crushed aggregate from existing stockpile, 4" depth, see 'Road Reconditioning & Aggregate Placement'																																
0.15	0.13	No ditch reconditioning prior to end of bridge, see FSSS 107																																
0.15	0.17	Asphalt pave Hunter Creek #3 west end bridge approach for 100 ft., see 'Asphalt Typical's'																																
0.20	0.22	Asphalt pave Hunter Creek #3 east end bridge approach for 100 ft., see 'Asphalt Typical's'																																
0.20	0.22	No ditch reconditioning prior to end of bridge, see FSSS 107																																
0.35	0.37	No ditch reconditioning prior to culvert catch basin, see FSSS 107																																
0.37	0.39	No ditch reconditioning prior to culvert catch basin, see FSSS 107																																
0.75	0.77	No ditch reconditioning prior to end of bridge, see FSSS 107																																
0.77	0.75	Cut & remove 10' of existing asphalt pavement at Hunter Creek #4 west end bridge approach, asphalt pave additional 50' of approach, see 'Asphalt Typical's'																																
0.80		At bridge end, install gabion retaining wall																																
0.80	0.82	Asphalt pave Hunter Creek #4 east end bridge approach for 100 ft., see 'Asphalt Typical's'																																
0.80	0.82	No ditch reconditioning prior to end of bridge, see FSSS 107																																
2.09	2.11	Rock buttress with underdrain system																																
	14.95	End crushed aggregate surfacing. Intersection with FSR 3318000 Lt.																																
	15.38	End work.																																
TOTAL FOR ROAD		All	All	All	0	1	All	182	476	0	0	145	15.38	0	5	70	48	15.21	0.00	0.00	4049	13673	159.6	0.0	0	0	0	0	40	65	0	0	0	All
		Design: Lola Coombe		Drawn: Lola Coombe		Checked: Paul Podesta		Date: 6/22/2012		FSR 3680000 WORK LIST & ESTIMATED QUANTITIES		EQUINE TIMBER SALE		Sheet No. 18		Total Sheets 34																		



U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
R6  
PACIFIC NORTHWEST REGION

ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH DISTRICT

FSR 3680000 WORK LIST  
& ESTIMATED QUANTITIES

EQUINE TIMBER SALE

Sheet No.

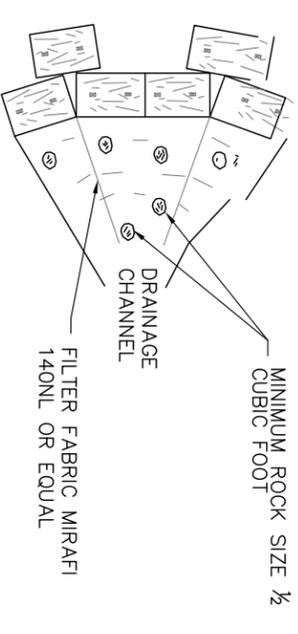
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Total Sheets

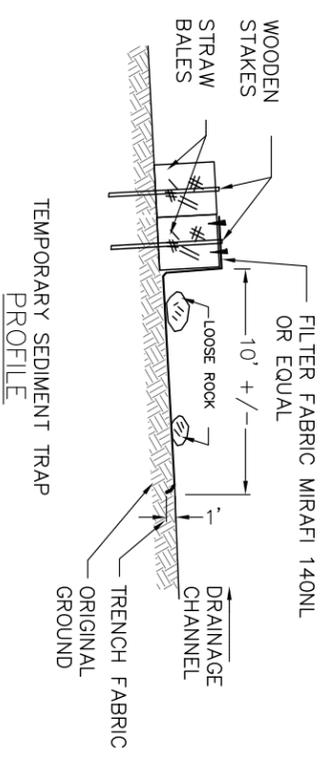
34

EROSION AND SEDIMENT CONTROL:

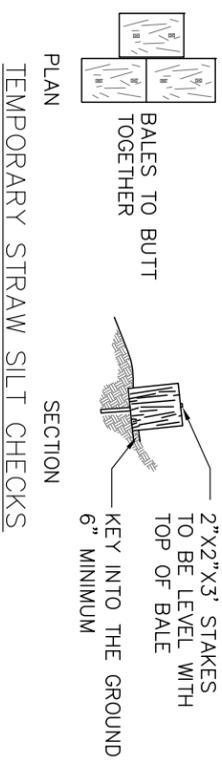
1. PRIOR TO THE START OF CONSTRUCTION, SUBMIT A WRITTEN PLAN THAT PROVIDES PERMANENT AND TEMPORARY EROSION CONTROL MEASURES TO MINIMIZE EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION.
2. PURCHASER SHALL PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED TO CONTROL SOIL EROSION DURING ROAD RECONSTRUCTION.
3. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO BEGINNING EARTH DISTURBING ACTIVITIES IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLAN. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY CONTRACTING OFFICER.
4. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED.
5. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED.
6. SEDIMENT SHALL BE REMOVED FROM BEHIND TEMPORARY SILT FENCING WHEN THE DEPTH OF SEDIMENT REACHES 6 INCHES.
7. ALL DISTURBED AREAS WHERE EARTH IS EXPOSED SHALL BE CLEANED, GRADED SMOOTH, SHAPED TO DRAIN, SEEDED AND MULCHED. SEED WILL BE GOVERNMENT FURNISHED. MULCH SHALL BE CERTIFIED WEED FREE.
8. ALL TEMPORARY SEDIMENT CONTROL MEASURES AND PRACTICES SHALL BE REMOVED WITHIN TWO (2) MONTHS AFTER THE FOREST SERVICE HAS ACCEPTED THE PROJECT.



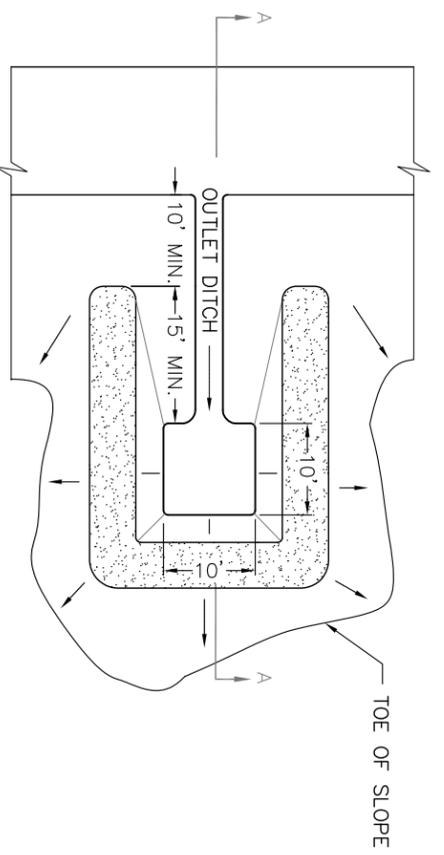
TEMPORARY STRAW SEDIMENT TRAP  
PLAN VIEW



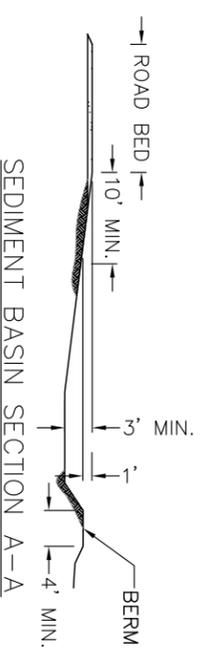
TEMPORARY SEDIMENT TRAP  
PROFILE



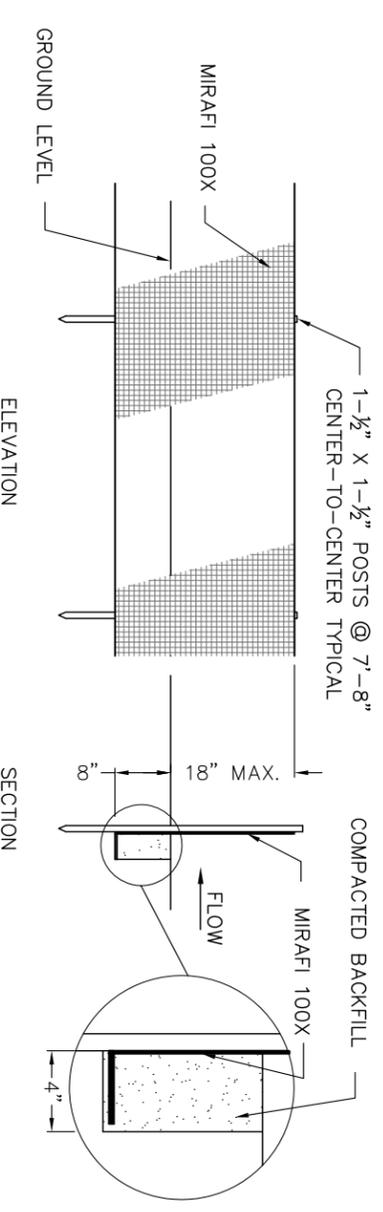
TEMPORARY STRAW SILT CHECKS



SEDIMENT BASIN PLAN VIEW



SEDIMENT BASIN SECTION A-A



SILT FENCE DETAILS

DRAWINGS  
NOT TO SCALE



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FOREST SERVICE  
R6  
PACIFIC NORTHWEST REGION

Forest  
ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

Design: Lida Coornbe  
Drawn: Lida Coornbe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
SEDIMENT CONTROL  
EQUINE TIMBER SALE

Project No:  
Sheet 19 OF 34



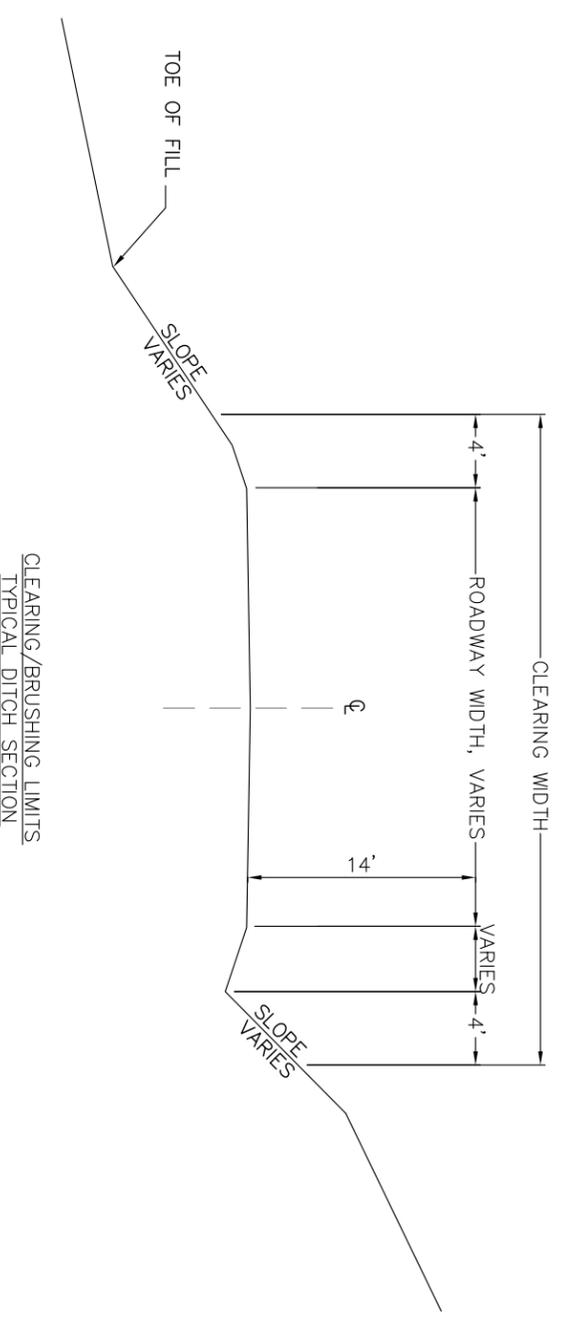
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 PACIFIC NORTHWEST REGION

Forest  
**ROGUE RIVER-SISKIYOU  
 NATIONAL FOREST**  
 GOLD BEACH

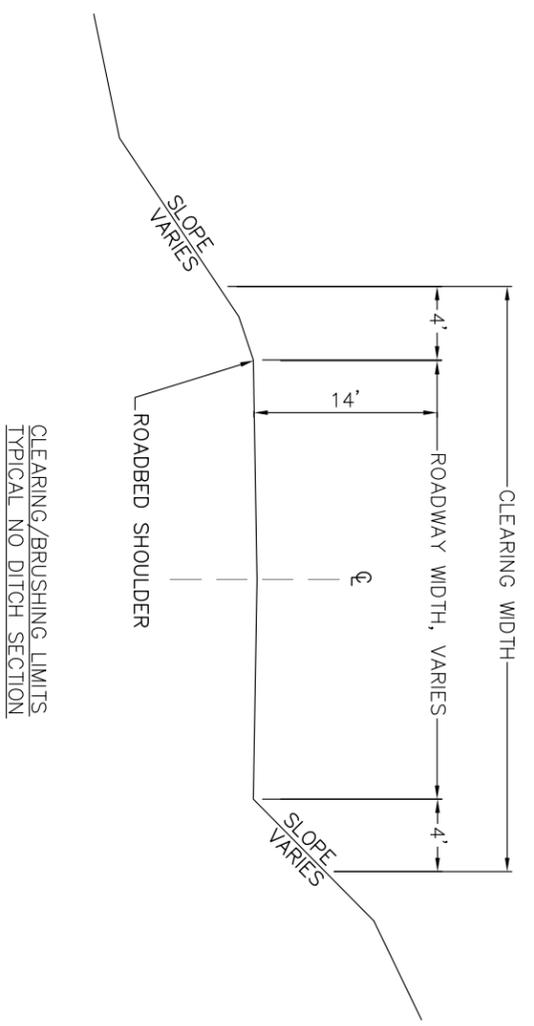
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 Drawn: Lola Coombe  
 Checked: P. Podesta  
 Date: 6-22-2012

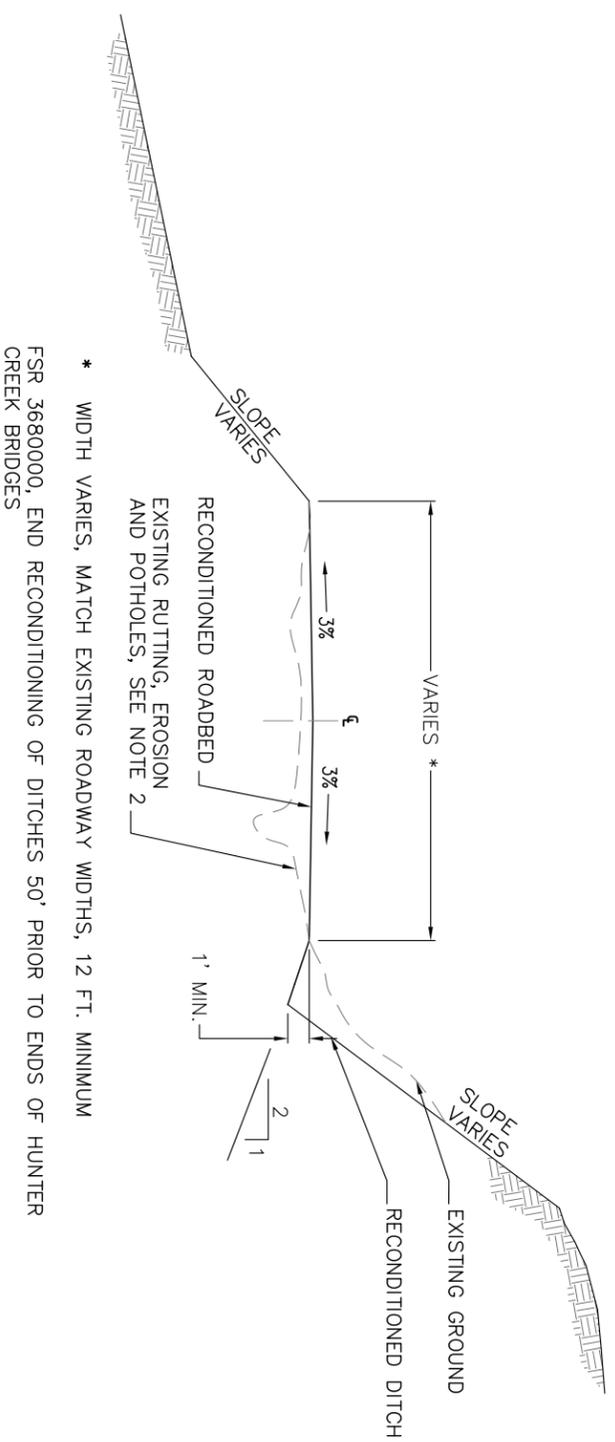
Sheet Title:  
**CLEARING/BRUSHING LIMITS**  
 EQUINE TIMBER SALE

Project No:  
 Sheet **20** OF **34**



WIDTH VARIES, MATCH EXISTING ROADWAY WIDTHS  
 18' MINIMUM ON FSR 3318000 & 3680000  
 ALL OTHER ROADS, 12' MINIMUM, UNLESS  
 OTHERWISE APPROVED BY CO.



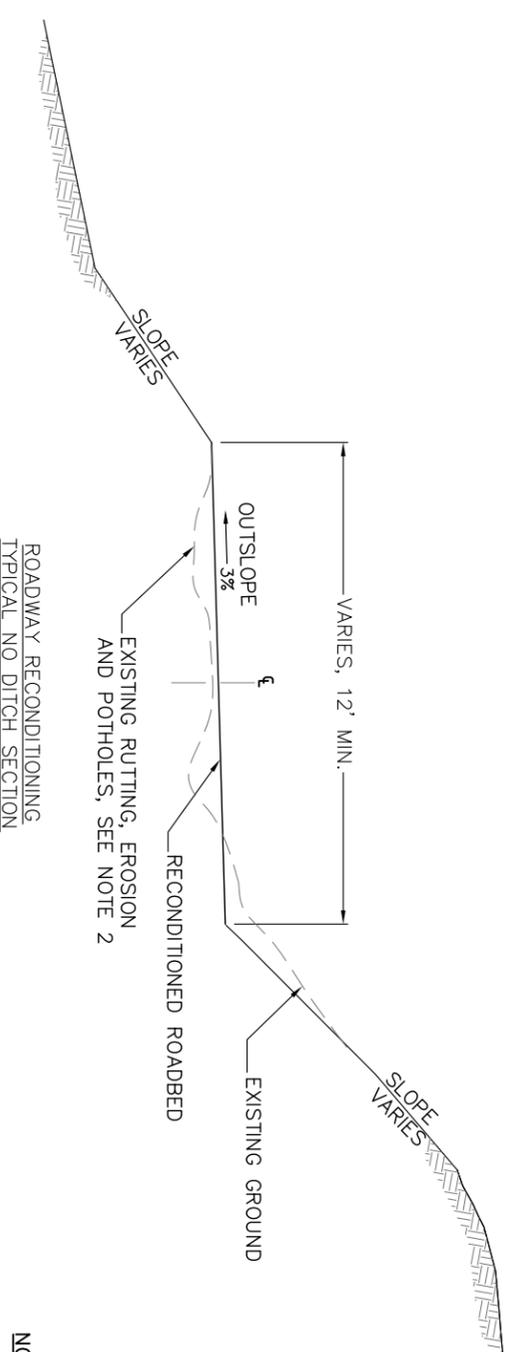


\* WIDTH VARIES, MATCH EXISTING ROADWAY WIDTHS, 12 FT. MINIMUM  
FSR 3680000, END RECONSTRUCTION OF DITCHES 50' PRIOR TO ENDS OF HUNTER CREEK BRIDGES

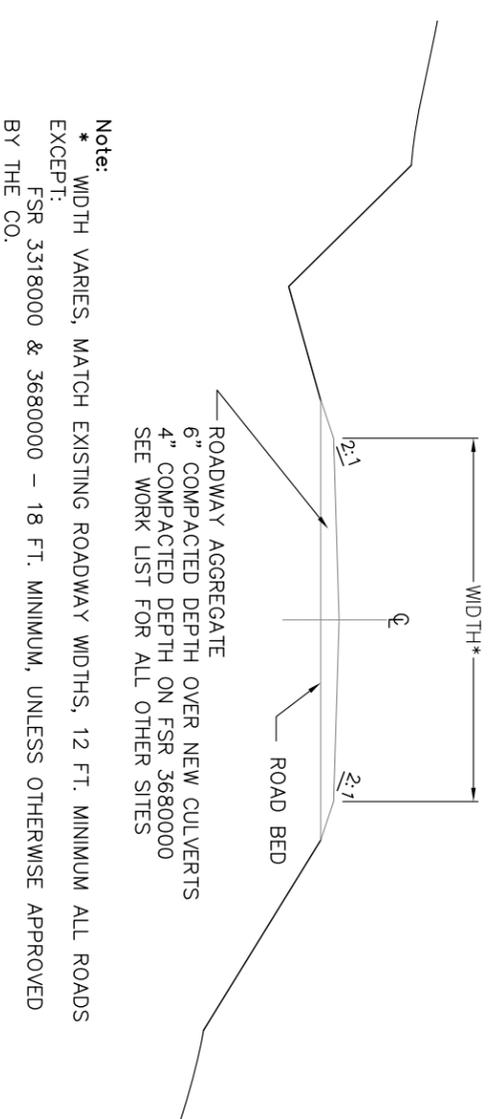
ROADWAY RECONSTRUCTION  
TYPICAL DITCH SECTION

**NOTES:**

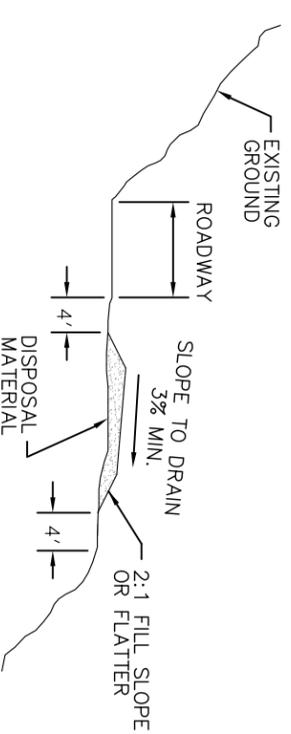
1. RECONSTRUCTION ROADS AS SHOWN AND IN ACCORDANCE WITH FP-03 SECTION 303. REQUIRED RECONSTRUCTION INCLUDES WIDENING FOR CURVES AND TURNOUTS.
2. WHERE RUTTING, EROSION AND POTHOLES EXIST, SCARIFY TO DEPTH OF RUT/EROSION/POTHOLE, BLADE, SHAPE AND COMPACT EXISTING AGGREGATE SURFACE MATERIAL.
3. PLACE AGGREGATE SURFACE OR ROADWAY EXCAVATION MATERIAL AS SHOWN ON WORK LISTS.
4. REMOVE AND DISPOSE OF SLIDE, DITCH, AND CATCH BASIN MATERIAL.



DRAWINGS  
NOT TO SCALE



AGGREGATE PLACEMENT TYPICAL



ROAD #	DISPOSAL SITES	MILEPOSTS
3318000		2.35, 5.22, 5.50, 6.20
3318020		FSR 3318000 MP 2.35
3318050		0.11, 1.06
3318055		FSR 3318050 MP 1.06
3318072		FSR 3318073 MP 0.11, FSR 3318070 MP 0.52
3318240		0.74
3680000		6.21, 7.22, 8.23, 9.34, 11.04, 11.90, 15.04



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FOREST SERVICE  
**R6**  
PACIFIC NORTHWEST REGION

Forest  
**ROGUE RIVER-SISKIYOU  
NATIONAL FOREST**  
GOLD BEACH

Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**ROAD RECONSTRUCTION  
& AGGREGATE PLACEMENT**  
EQUINE TIMBER SALE

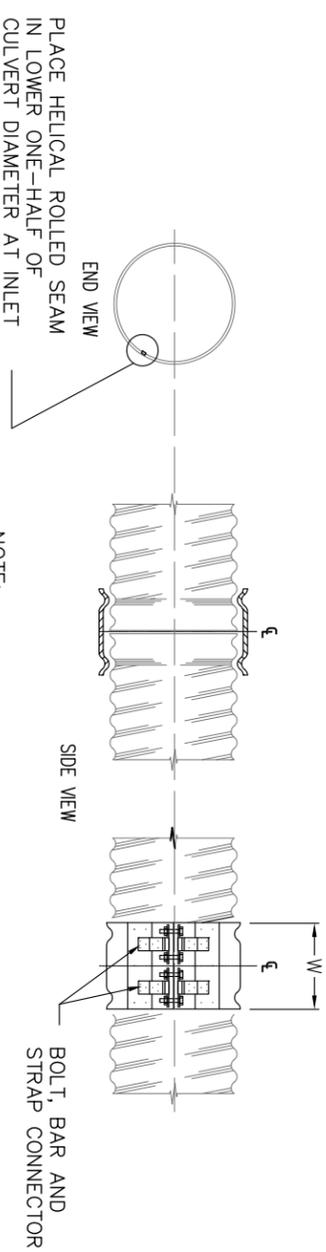
Project No:  
Sheet **21** OF **34**

COUPLING BANDS FOR METAL PIPE CULVERT				
CORRUGATION SIZE	PIPE DIAMETER	PIPE-ARCH SPAN X RISE	MINIMUM BAND WIDTH - W	
			ANNULAR CORRUGATED BANDS	HELICALLY CORRUGATED BANDS
INCHES				
1-1/2 by 1/4	under drain	-	12	12
	12 to 36	17x13 to 42x29	12	12
	42 to 72	49x33 to 83x57	12	12
2-2/3 by 1/2	78 to 84	-	12	12
	36 to 72	42x29 to 81x59	12	14
3 by 1	78 to 144	87x63 to 142x91	12	14
	48 to 72	57x38 to 81x59	20	22
5 by 1	78 to 144	87x63 to 142x91	20	22

**NOTES:**

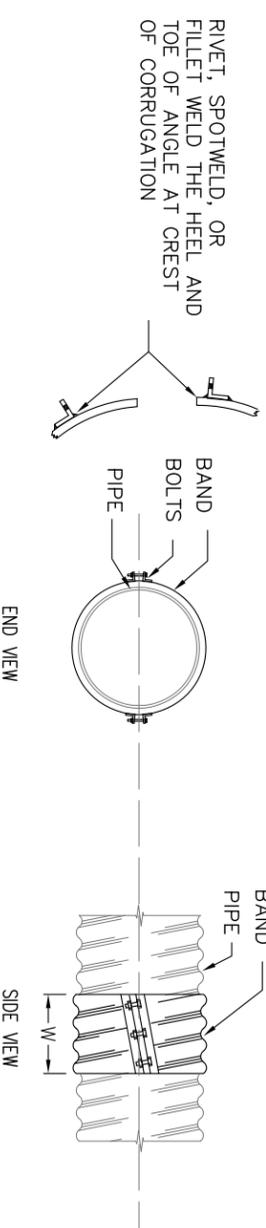
- FABRICATE ANNULAR, HELICAL AND SEMI-CORRUGATED TYPE COUPLING BANDS FROM THE SAME METAL AS THE CONNECTING PIPE. PROVIDE COUPLING BANDS NOT MORE THAN 2 NOMINAL SHEET THICKNESS THINNER THAN THE THICKNESS OF THE PIPE TO BE CONNECTED, AND NO THINNER THAN 0.052 INCH (18 GAGE) FOR STEEL OR 0.048 INCH (18 GAGE) FOR ALUMINUM. FASTEN COUPLING BANDS WITH THE FOLLOWING SIZE OF BOLT:
  - 3/8-INCH FOR PIPE DIAMETER - 18" (21"x15" PIPE ARCH) OR LESS
  - 1/2-INCH FOR PIPE DIAMETER - 21" (24"x18" PIPE ARCH) OR MORE
- FOR HELICALLY CORRUGATED PIPE WITH REROLLED ENDS, THE NOMINAL CORRUGATION SIZE REFERS TO THE DIMENSION OF THE END CORRUGATION IN THE PIPE.
- USE ANNULAR CORRUGATED BANDS WITH PIPES HAVING ANNULAR CORRUGATIONS OR WITH HELICAL PIPE HAVING REROLLED ENDS TO FORM ANNULAR CORRUGATIONS.
- USE HELICAL CORRUGATED BAND WITH PIPES HAVING HELICALLY CORRUGATED ENDS. HELICAL CULVERT INSTALLATIONS SHALL HAVE THE ROLLED SEAM AT THE INLET PLACED IN THE LOWER ONE-HALF OF THE PIPE DIAMETER.
- SMOOTH SLEEVE-TYPE COUPLERS AND FLAT BANDS MAY BE USED FOR PIPE DIAMETERS OF 12 INCHES OR LESS. USE A MATCHING METAL HAVING A NOMINAL THICKNESS OF NOT LESS THAN 0.040 INCH (20 GAGE) FOR STEEL, OR 0.036 INCH (20 GAGE) FOR ALUMINUM, OR A PLASTIC WITH AN EQUIVALENT STRENGTH TO METAL.

GAUGE NUMBER	EQUIVALENT CULVERT THICKNESS	
	THICKNESS - INCHES	STEEL
16	0.064	0.060
14	0.079	0.075
12	0.109	0.105
10	0.138	0.135
6	0.168	0.165



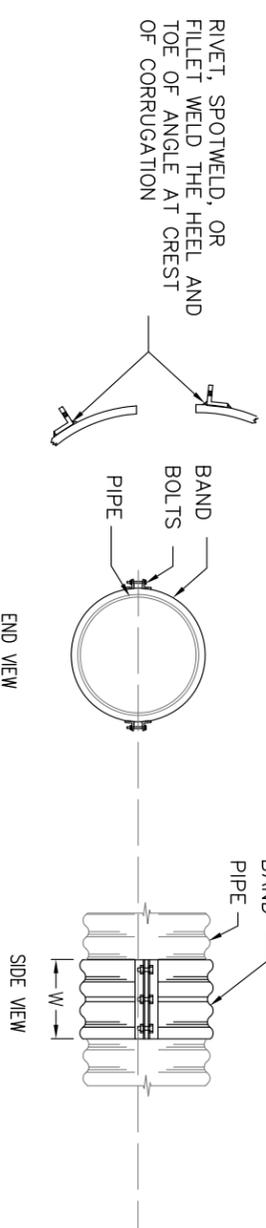
NOTE:  
CONTINUOUS CORRUGATION AROUND THE BAND SHALL MESH WITH SECOND ANNULAR CORRUGATION FROM END OF PIPE END.

**SEMI-CORRUGATED BAND**



NOTE:  
A BAND WITH 2 ANGLE CONNECTIONS IS OPTIONAL UP TO 42" DIA., REQUIRED FOR DIA. GREATER THAN 42".

**HELICAL BAND**



NOTE:  
A BAND WITH 2 ANGLE CONNECTIONS IS OPTIONAL UP TO 42" DIA., REQUIRED FOR DIA. GREATER THAN 42".

**ANNULAR BAND**

DRAWINGS  
NOT TO SCALE



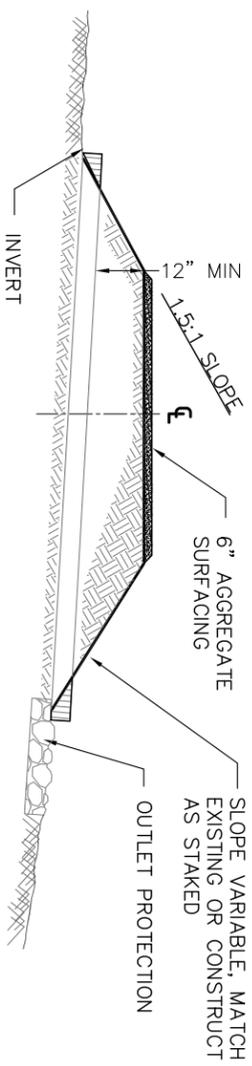
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FOREST SERVICE  
**R6**  
PACIFIC NORTHWEST REGION

Forest  
**ROGUE RIVER-SISKIYOU  
NATIONAL FOREST**  
GOLD BEACH

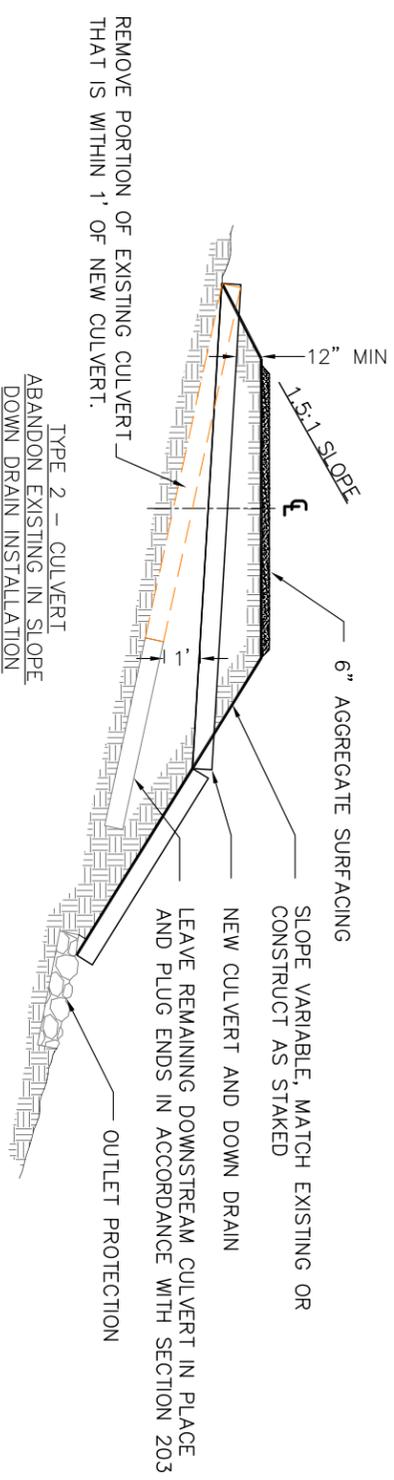
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Date: 6-22-2012

Sheet Title:  
**COUPLING BANDS FOR  
METAL PIPE CULVERTS**  
EQUINE TIMBER SALE

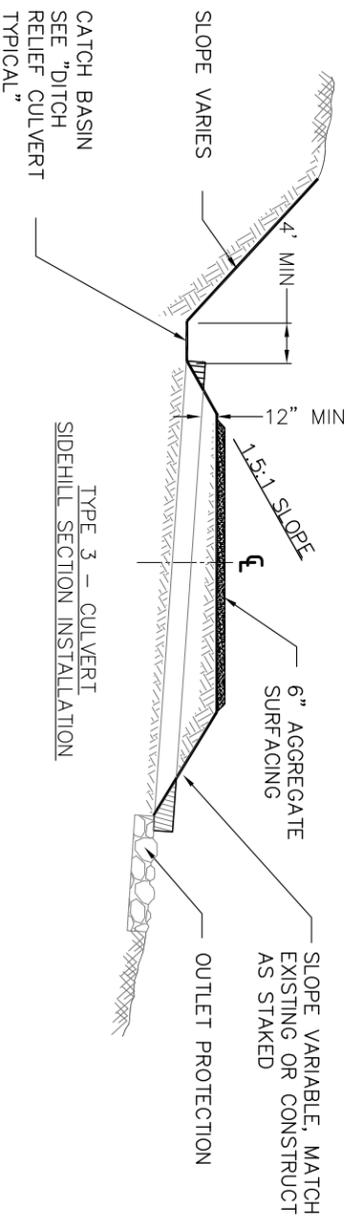
Project No:  
Sheet **22** OF **34**



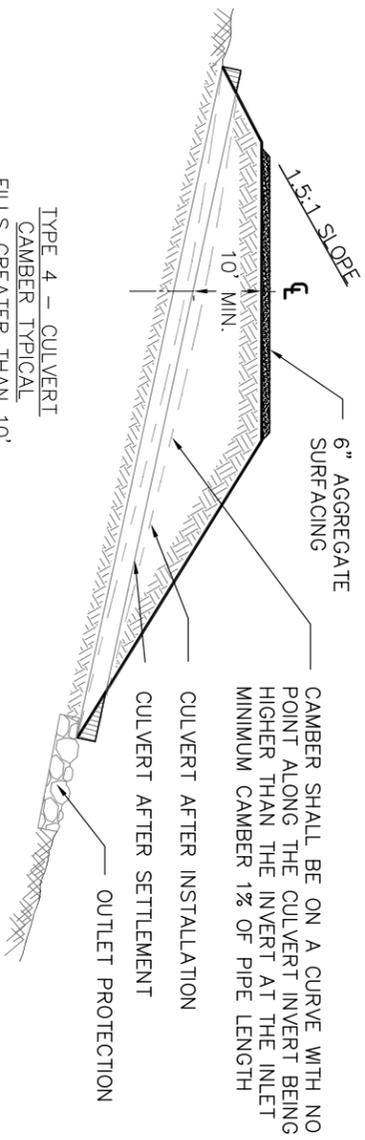
TYPE 1 - CULVERT  
FILL SECTION INSTALLATION



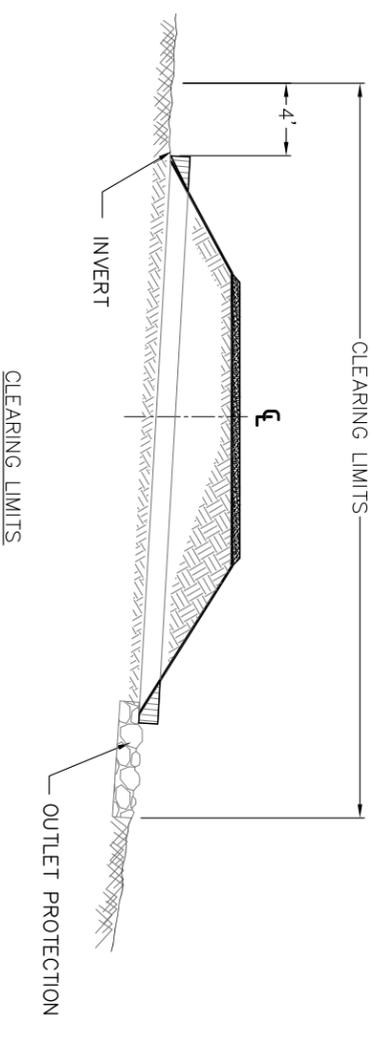
TYPE 2 - CULVERT  
ABANDON EXISTING IN SLOPE  
DOWN DRAIN INSTALLATION



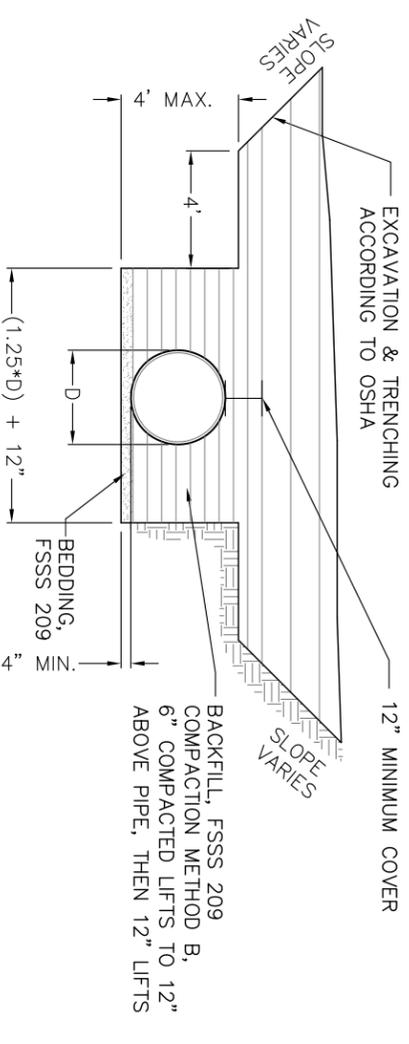
TYPE 3 - CULVERT  
SIDEHILL SECTION INSTALLATION



TYPE 4 - CULVERT  
CAMBER TYPICAL  
FILLS GREATER THAN 10'



CLEARING LIMITS



TYPICAL CMP ROUND CULVERT SECTION

- NOTES:**
1. CLEAR AND GRUB IN ACCORDANCE WITH SECTION 201. SEE PAY ITEM 201 FOR DISPOSAL METHODS.
  2. INSTALL NEW CULVERT ACCORDING TO SECTION 602. EXCAVATION, BEDDING, AND BACKFILL ARE INCIDENTAL TO ITEM 602 AND IN ACCORDANCE WITH SECTION 209. USE COMPACTION METHOD B FOR BACKFILL.
  3. MATCH EXISTING ROAD WIDTH AND GRADE. IMPORT SELECT BORROW AS NEEDED.
  4. PLACE CRUSHED AGGREGATE AT 6" DEPTH OVER CULVERT INSTALLATION FOR ROAD SURFACING. SALVAGE EXISTING ROAD AGGREGATE AND UTILIZE AS BASE ROCK.
  5. PROVIDE FOR A 25' TRANSITION GRADE INTO INLET OF CULVERT. SEE 'CULVERT CATCH BASIN & OUTLET DITCH'.
  6. ALL EXCAVATION AND TRENCHING OPERATIONS SHALL CONFORM TO OSHA REQUIREMENTS.
  7. DO NOT OPERATE ANY HEAVY EQUIPMENT OVER ANY CULVERT UNTIL IT HAS BEEN PROPERLY BACK FILLED WITH A MINIMUM OF 1-FOOT COVER.
  8. CULVERTS SHALL BE INSTALLED AS STAKED, WITH A MINIMUM OF 8% SLOPE WHERE POSSIBLE.
  9. THE MINIMUM LENGTH OF A SINGLE PIPE SECTION FOR ANY INSTALLATION SHALL NOT BE LESS THAN 10 L.F.
  10. FIELD CUTTING OF CULVERT IS NOT PERMITTED UNLESS APPROVED BY THE CONTRACTING OFFICER.
  11. REMOVE AND DISPOSE OF EXISTING CULVERT ACCORDING TO SECTION 203.

DRAWINGS  
NOT TO SCALE



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Forest

ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

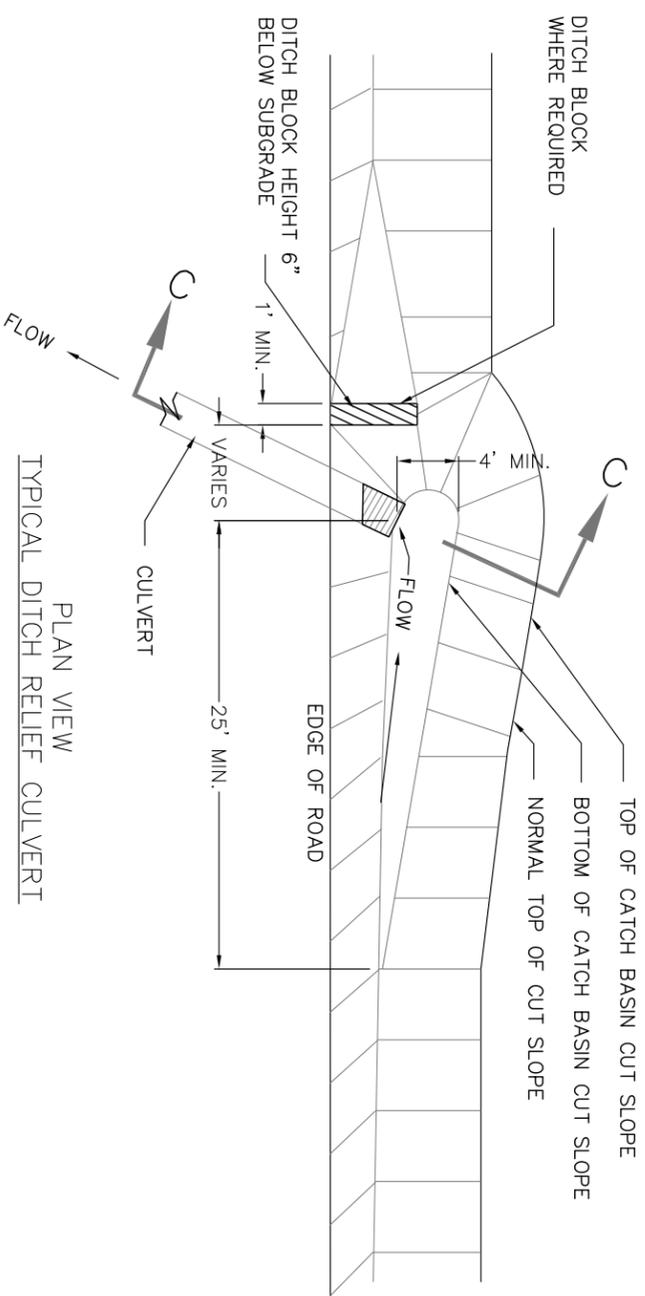
Design: Lida Coornbe  
Drawn: Lida Coornbe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**CULVERT INSTALLATION & BEDDING**

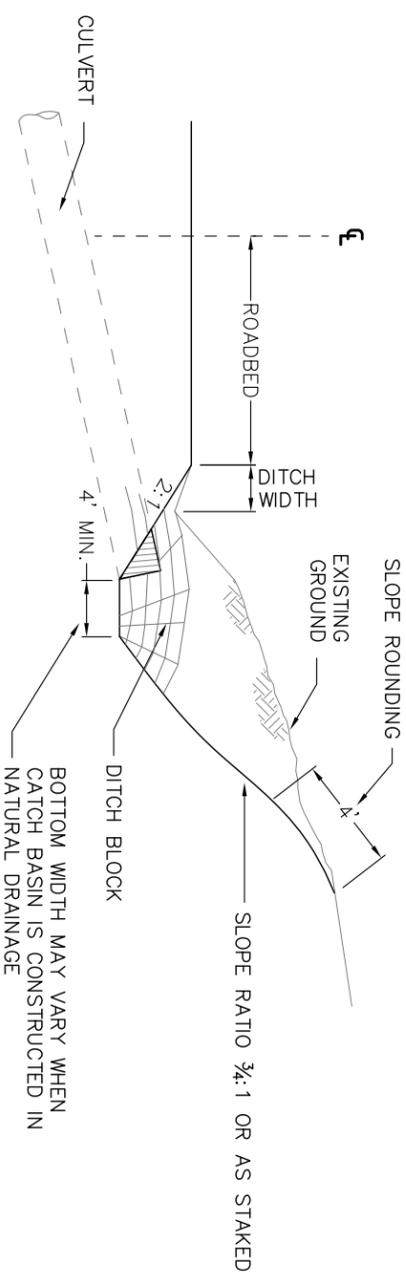
EQUINE TIMBER SALE

Project No:

Sheet  
23 OF 34

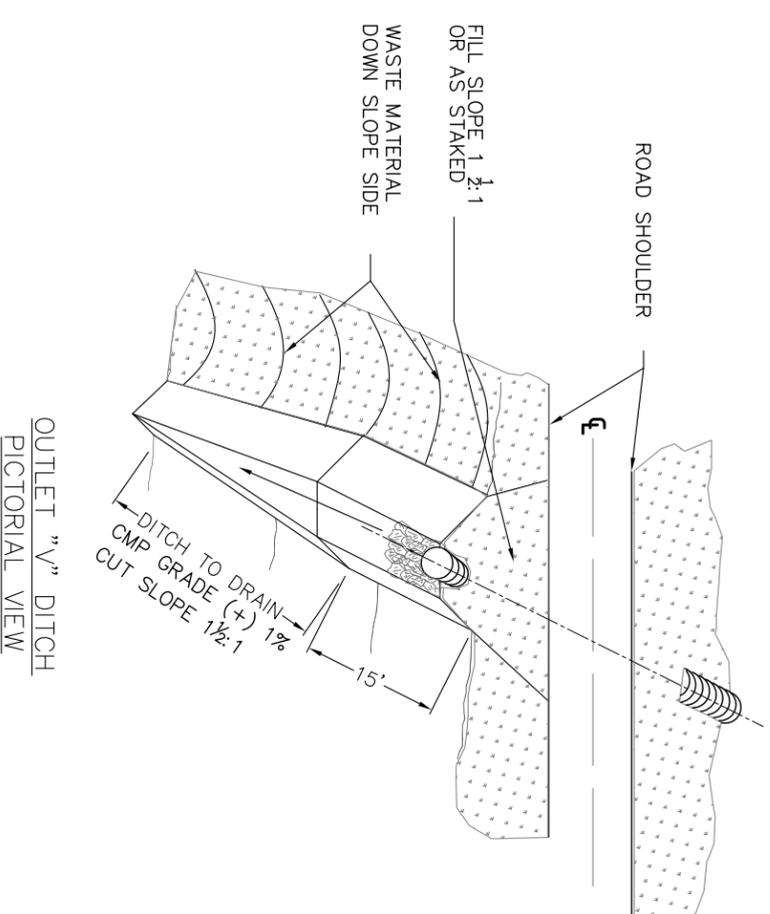


PLAN VIEW  
TYPICAL DITCH RELIEF CULVERT



SECTION C-C  
DITCH RELIEF CULVERT

**NOTE:**  
MATERIAL REMOVED IN THE MAINTENANCE, RECONDITIONING, & CLEANING OF CATCH BASINS & CULVERTS SHALL **NOT** BE DEPOSITED ON / OR ABOVE CUT SLOPES. MATERIAL MAY BE DEPOSITED ON FILL SLOPE TO A DEPTH OF **NOT** MORE THAN 4 INCHES WHEN APPROVED BY THE CONTRACTING OFFICER. OTHERWISE ALL MATERIAL SHALL BE REMOVED FROM NATIONAL FOREST LANDS IN A LEGAL MANNER OR DISPOSAL AREA AS APPROVED BY THE CONTRACTING OFFICER.



OUTLET "V" DITCH  
PICTORIAL VIEW

DRAWINGS  
NOT TO SCALE



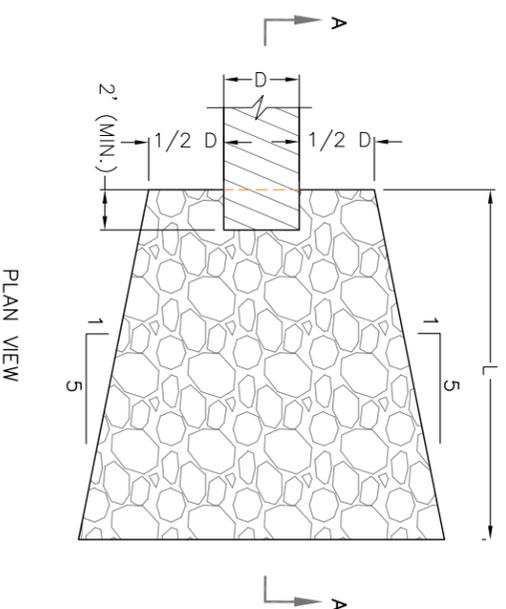
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FOREST SERVICE  
**R6**  
PACIFIC NORTHWEST REGION

Forest  
**ROGUE RIVER-SISKIYOU  
NATIONAL FOREST**  
GOLD BEACH

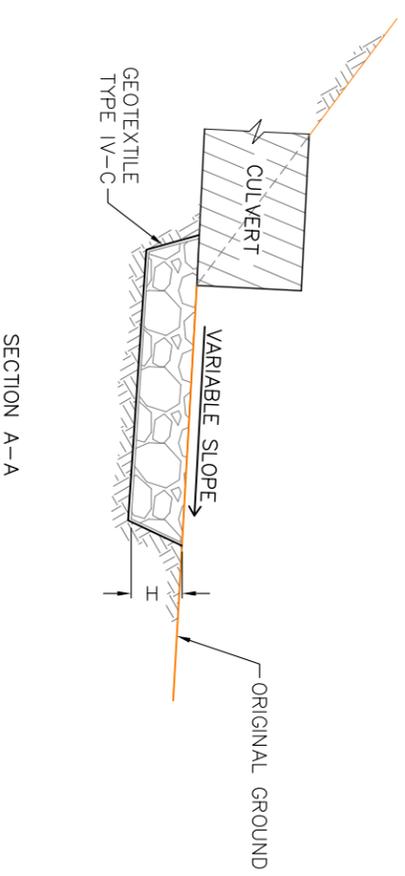
Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**CULVERT CATCH BASIN  
& OUTLET DITCH**  
EQUINE TIMBER SALE

Project No:  
Sheet **24** OF **34**



PLAN VIEW



SECTION A-A

TYPE A CULVERT OUTLET PROTECTION

TYPE A CULVERT OUTLET PROTECTION DIMENSIONS AND ESTIMATED QUANTITIES					
CULVERT SIZE D (inches)	RIPRAP CLASS	LENGTH OF APRON L (feet)	DEPTH OF APRON H (feet)	ESTIMATED RIPRAP QUANTITY (CY)	ESTIMATED GEOTEXTILE QUANTITY (SY)
18	2	10	1.5	3	11
24	3	12	1.5	4	15
30	3	14	2	8	22
36	3	16	2	11	28
42	4	18	2.5	18	37
48	4	20	2.5	22	44

NOTES:

1. FURNISH GEOTEXTILE CONFORMING TO FP-03 SUBSECTION 714.01(d).
2. EXCAVATION FOR PLACEMENT OF RIPRAP WILL NOT BE MEASURED FOR PAYMENT.
3. RIPRAP SHALL BE PLACED BEFORE OR DURING CULVERT INSTALLATION.

DRAWINGS  
NOT TO SCALE



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ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

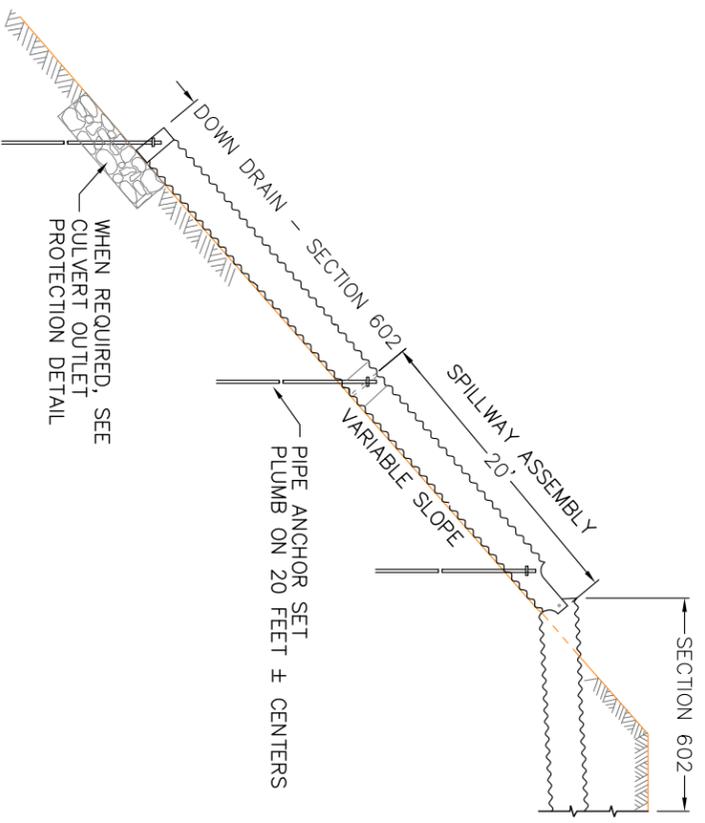
Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:

CULVERT INLET & OUTLET  
SLOPE PROTECTION  
EQUINE TIMBER SALE

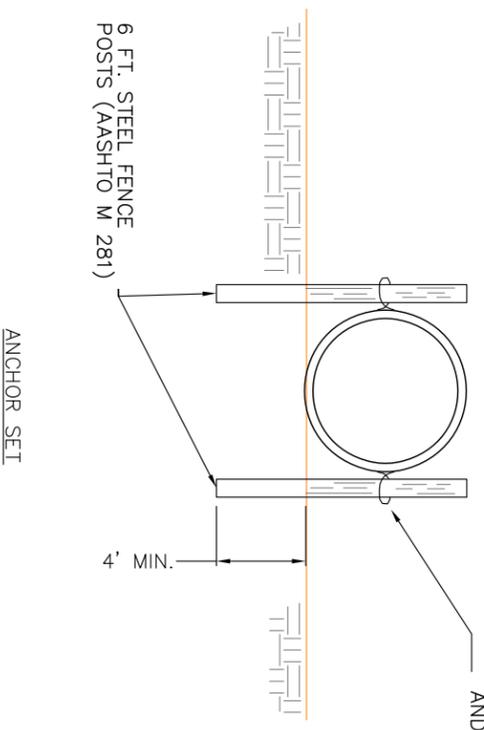
Project No:

Sheet  
25 OF 34

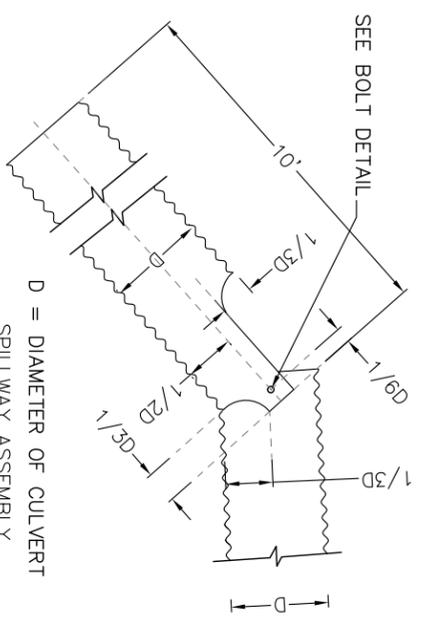


ELEVATION

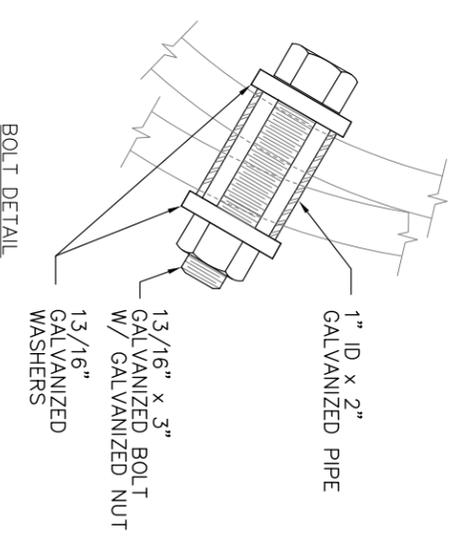
3 STRANDS OF NO. 9 WIRE TWISTED TOGETHER, WRAPPED AROUND PIPE, AND SECURED TO POSTS.



- NOTES:
1. FABRICATE SPILLWAY ASSEMBLY FROM ANNUAL CORRUGATED PIPE, OR FROM HELICALLY CORRUGATED PIPE WITH FACTORY ANNUAL OR REFORMED ENDS.
  2. ANCHOR SETS SHALL CONSIST OF 2-SIX FOOT METAL FENCE POSTS (AASHTO M 281) AND NO. 9 GALVANIZED WIRE. 3 STRANDS OF WIRE SHALL BE TWISTED TOGETHER AND WRAPPED AROUND THE ENTIRE CIRCUMFERENCE OF THE PIPE.
  3. MAKE ALL BANDED CONNECTIONS WATER TIGHT BY PLACING 1/4" BEAD OF APPROVED CAULKING UNDER EACH HALF OF THE BAND BEFORE TIGHTENING.
  4. WHEN REQUIRED, PLACE RIPRAP CONFORMING TO SECTION 251 FOR PROTECTIVE APRON.
  5. GALVANIZE ALL ITEMS OF ANCHOR ASSEMBLY AFTER FABRICATION.
  6. ALTERNATE DESIGNS MAY BE USED IF APPROVED BY THE CONTRACTING OFFICER.



D = DIAMETER OF CULVERT  
SPILLWAY ASSEMBLY



BOLT DETAIL

DRAWINGS  
NOT TO SCALE



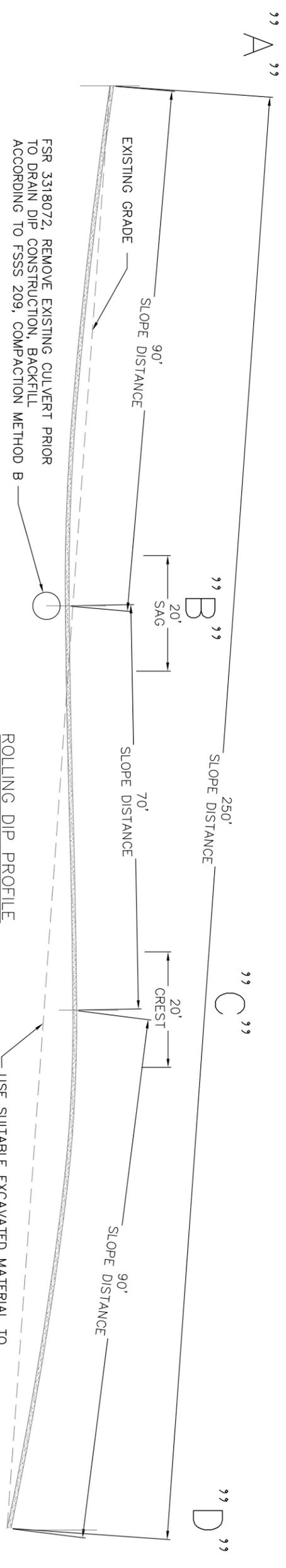
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ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

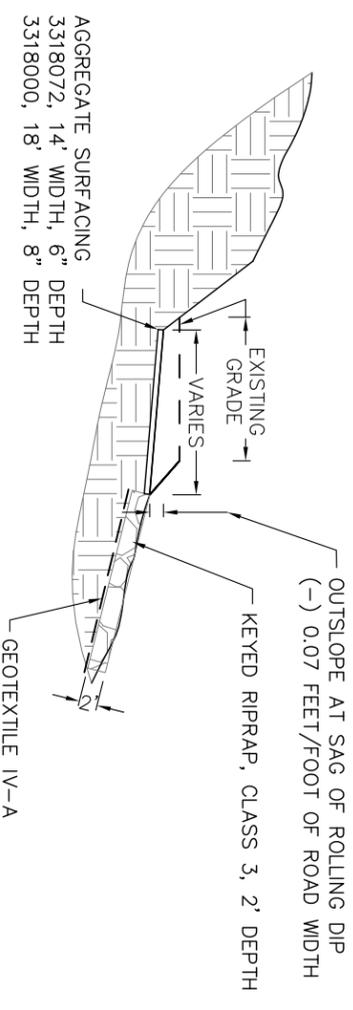
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Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
CULVERT DOWN DRAIN  
WITH ANCHOR ASSEMBLY  
EQUINE TIMBER SALE

Project No:  
Sheet 26 OF 34



REFERENCE POINT	POINT	DISTANCE BETWEEN	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	ELEVATION DROP ACROSS THE SAG POINT
A = HIGH POINT	A-B	90'	-3'	-4'	-5'	-6'	-8'	-9'	-10'	-11'	-13'	-14'	(-)0.07 FEET / FOOT OF ROAD WIDTH
B = SAG			% SLOPE AHEAD -3%	% SLOPE AHEAD -4%	% SLOPE AHEAD -6%	% SLOPE AHEAD -7%	% SLOPE AHEAD -9%	% SLOPE AHEAD -10%	% SLOPE AHEAD -11%	% SLOPE AHEAD -13%	% SLOPE AHEAD -14%	% SLOPE AHEAD -16%	14' ROAD WIDTH = 1.1 FEET
C = CREST	B-C	70'	+3'	+3'	+3'	+3'	+3'	+3'	+3'	+3'	+3'	+3'	16' ROAD WIDTH = 1.2 FEET
D = LOW POINT			% SLOPE AHEAD +4%	% SLOPE AHEAD +4%	% SLOPE AHEAD +4%	% SLOPE AHEAD +4%	% SLOPE AHEAD +4%	18' ROAD WIDTH = 1.3 FEET					
	C-D	90'	-3'	-4'	-5'	-6'	-8'	-9'	-10'	-11'	-13'	-14'	20' ROAD WIDTH = 1.4 FEET
			% SLOPE AHEAD -3%	% SLOPE AHEAD -4%	% SLOPE AHEAD -6%	% SLOPE AHEAD -7%	% SLOPE AHEAD -9%	% SLOPE AHEAD -10%	% SLOPE AHEAD -11%	% SLOPE AHEAD -13%	% SLOPE AHEAD -14%	% SLOPE AHEAD -16%	22' ROAD WIDTH = 1.5 FEET
	A-D	250'	2.5'	5'	7.5'	10'	12.5'	15'	17.5'	20'	22.5'	25'	24' ROAD WIDTH = 1.7 FEET
													26' ROAD WIDTH = 1.8 FEET



ROAD NO.	MILEPOST	GRADE	WIDTH
3318000	0.19	6%	14'
3318072	0.50	8%	14'
3318072	1.91	7%	18'

DRAWINGS  
NOT TO SCALE

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FOREST SERVICE

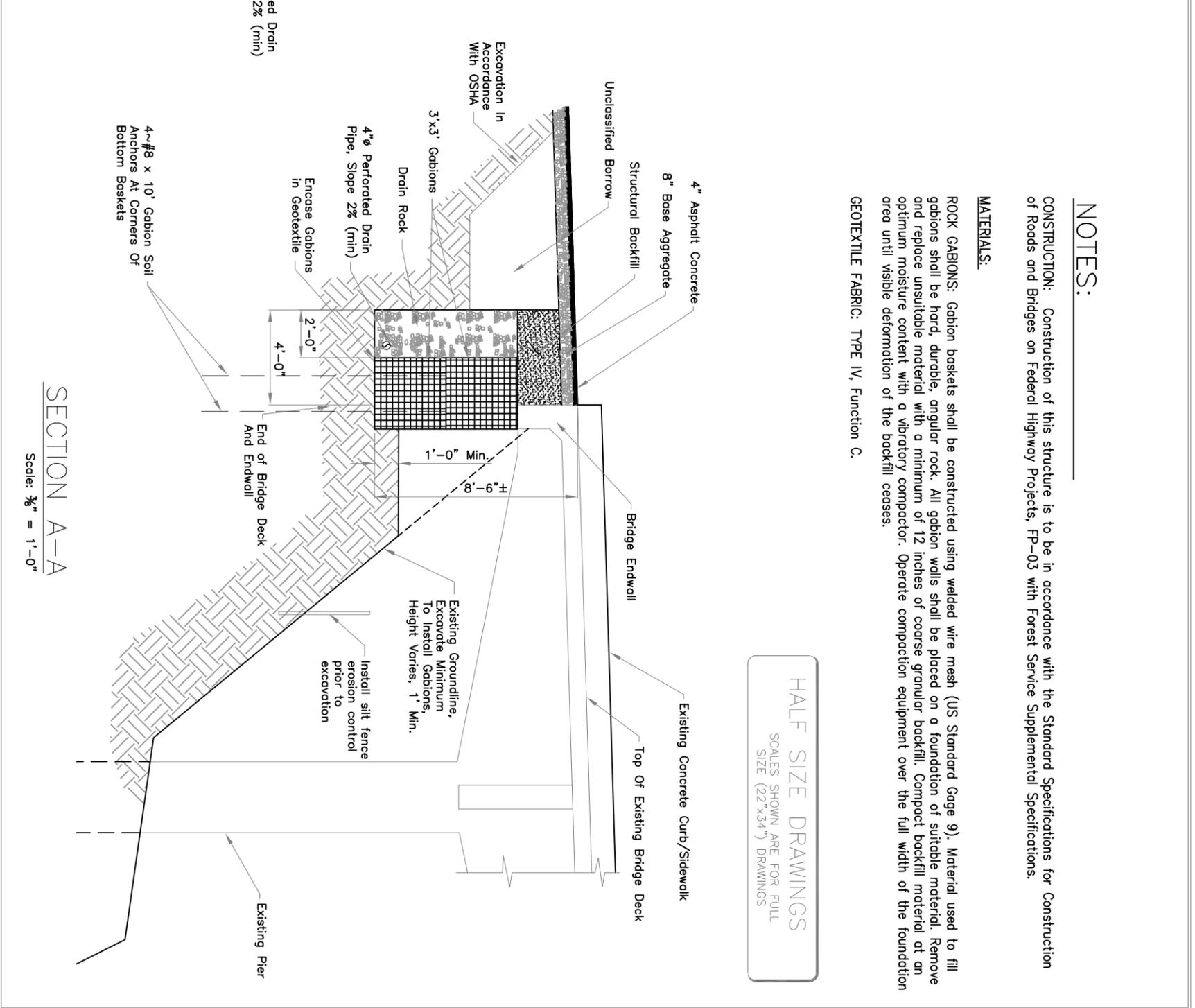
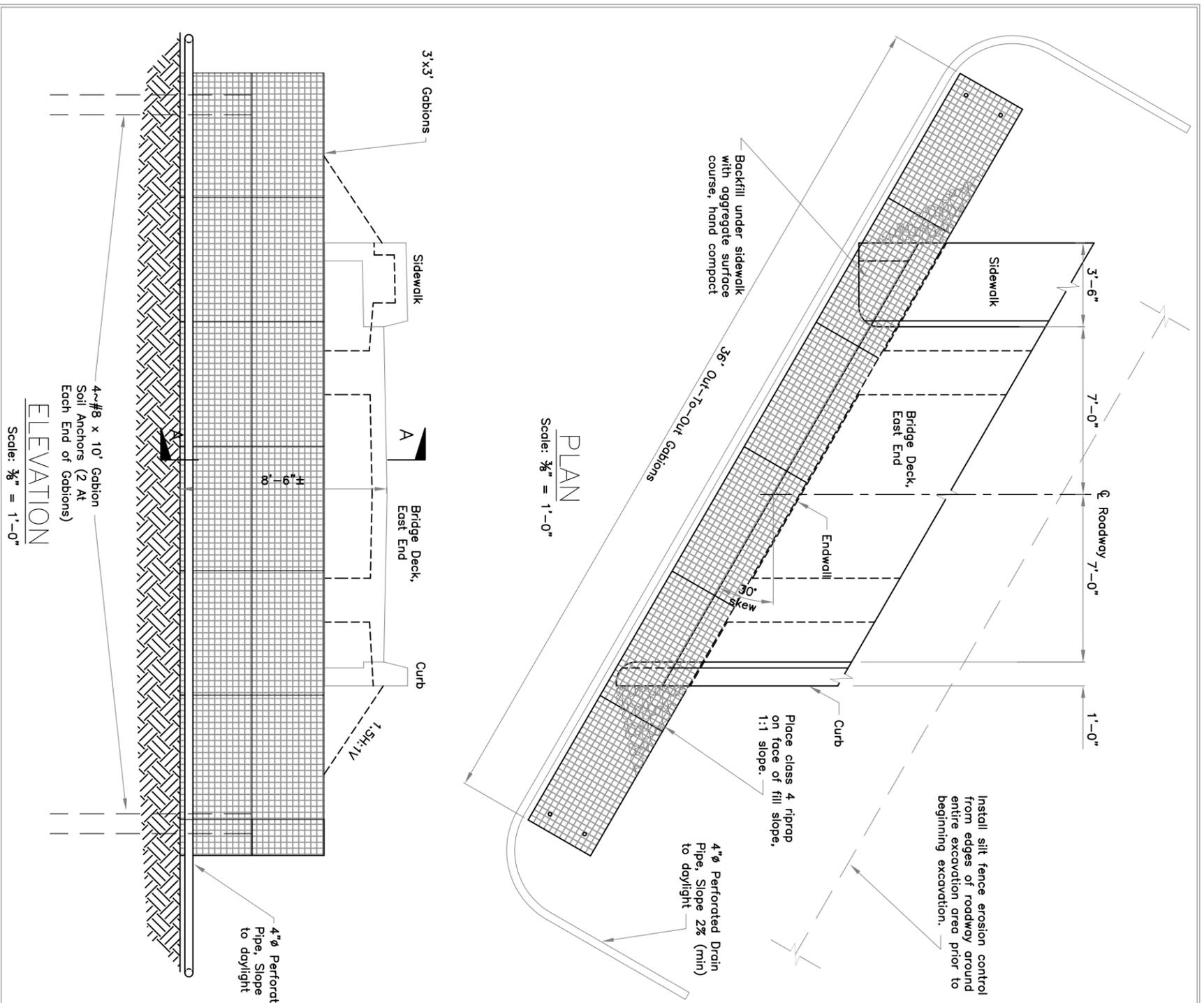


ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**DRAIN DIP**  
EQUINE TIMBER SALE

Project No:  
Sheet 27 OF 34



**NOTES:**

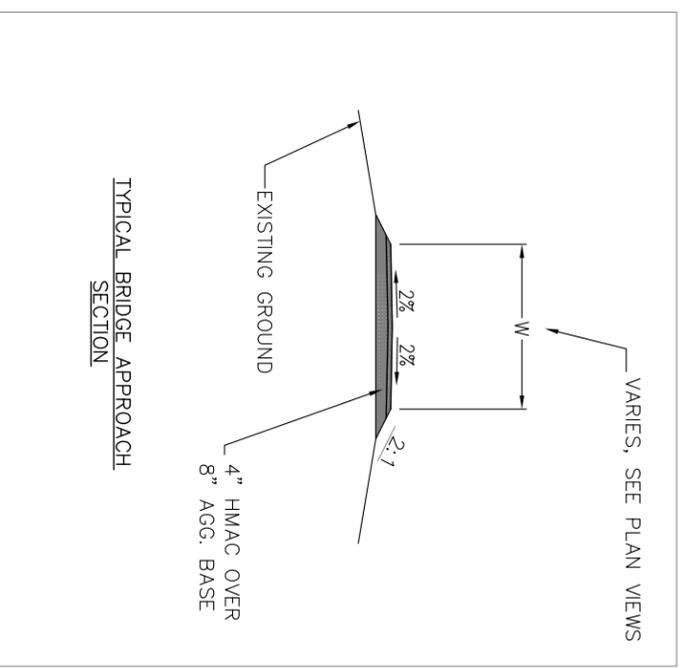
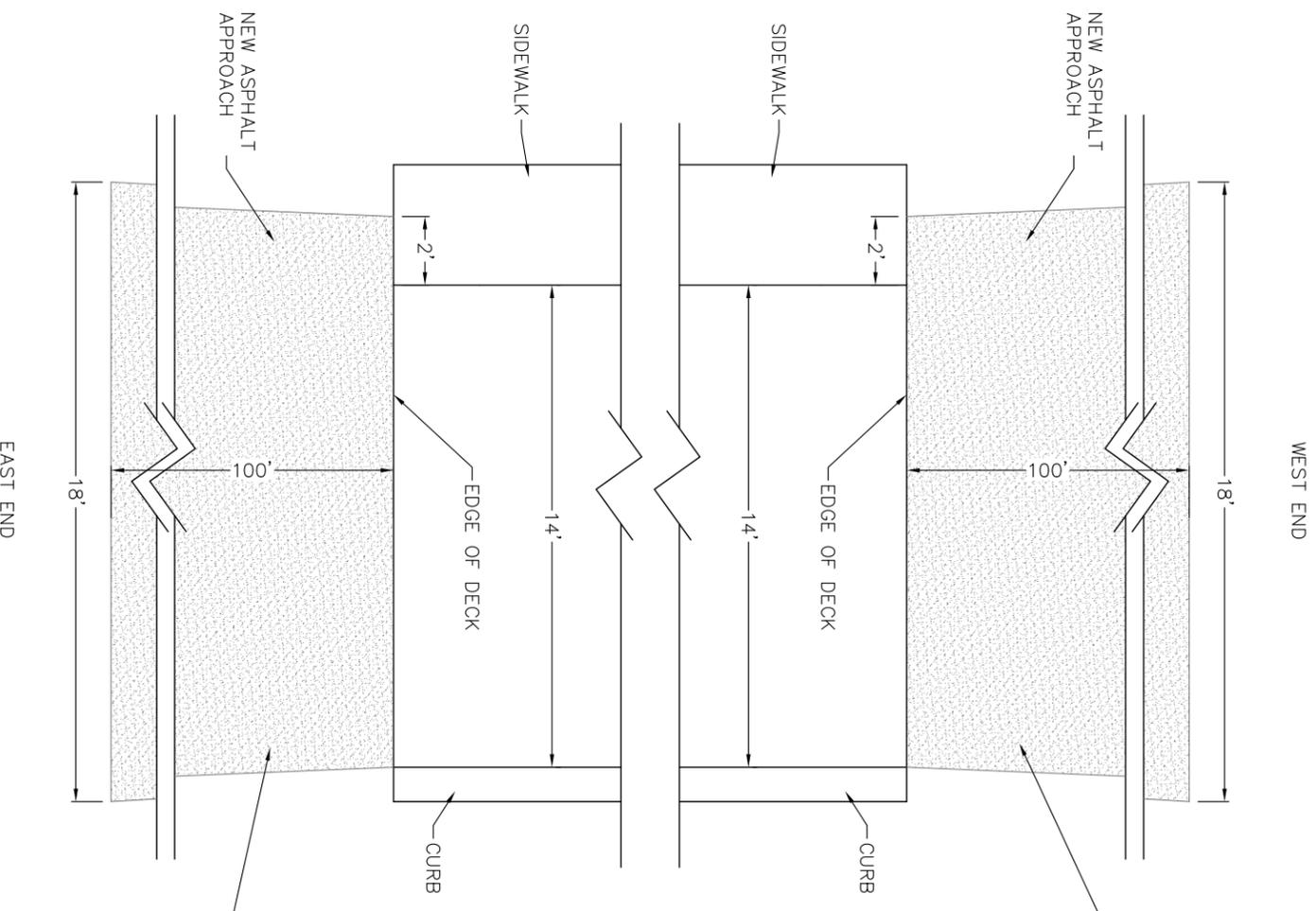
**CONSTRUCTION:** Construction of this structure is to be in accordance with the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-03 with Forest Service Supplemental Specifications.

**MATERIALS:**

**ROCK GABIONS:** Gabion baskets shall be constructed using welded wire mesh (US Standard Gage 9). Material used to fill gabions shall be hard, durable, angular rock. All gabion walls shall be placed on a foundation of suitable material. Remove and replace unsuitable material with a minimum of 12 inches of coarse granular backfill. Compact backfill material at an optimum moisture content with a vibratory compactor. Operate compaction equipment over the full width of the foundation area until visible deformation of the backfill ceases.

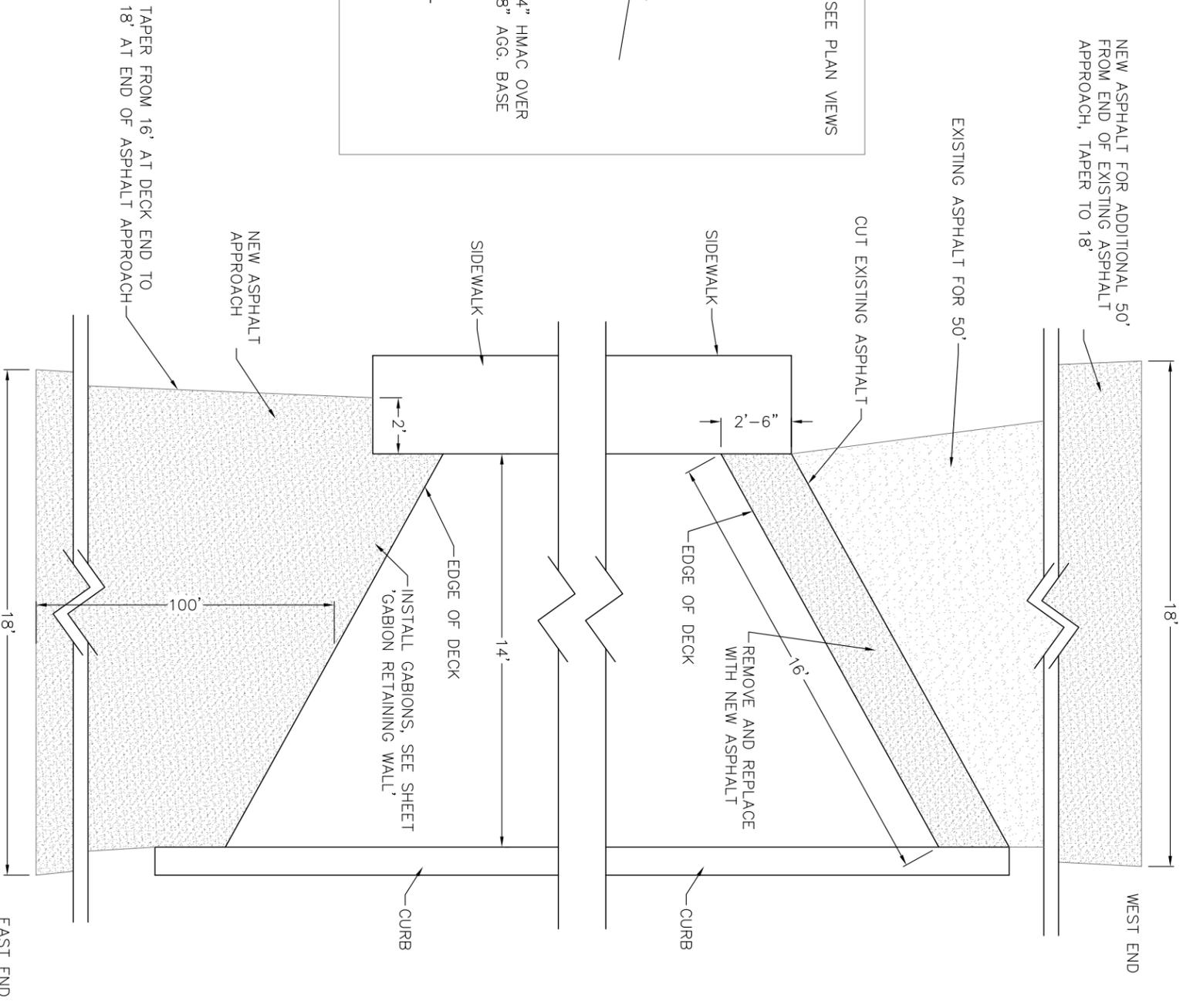
**GEOTEXTILE FABRIC:** TYPE IV, Function C.

**HALF SIZE DRAWINGS**  
SCALES SHOWN ARE FOR FULL SIZE (22 x 34") DRAWINGS



HUNTER CREEK #3  
MP 0.17 & 0.2

PLAN VIEW



HUNTER CREEK #4  
MP 0.77 & 0.8



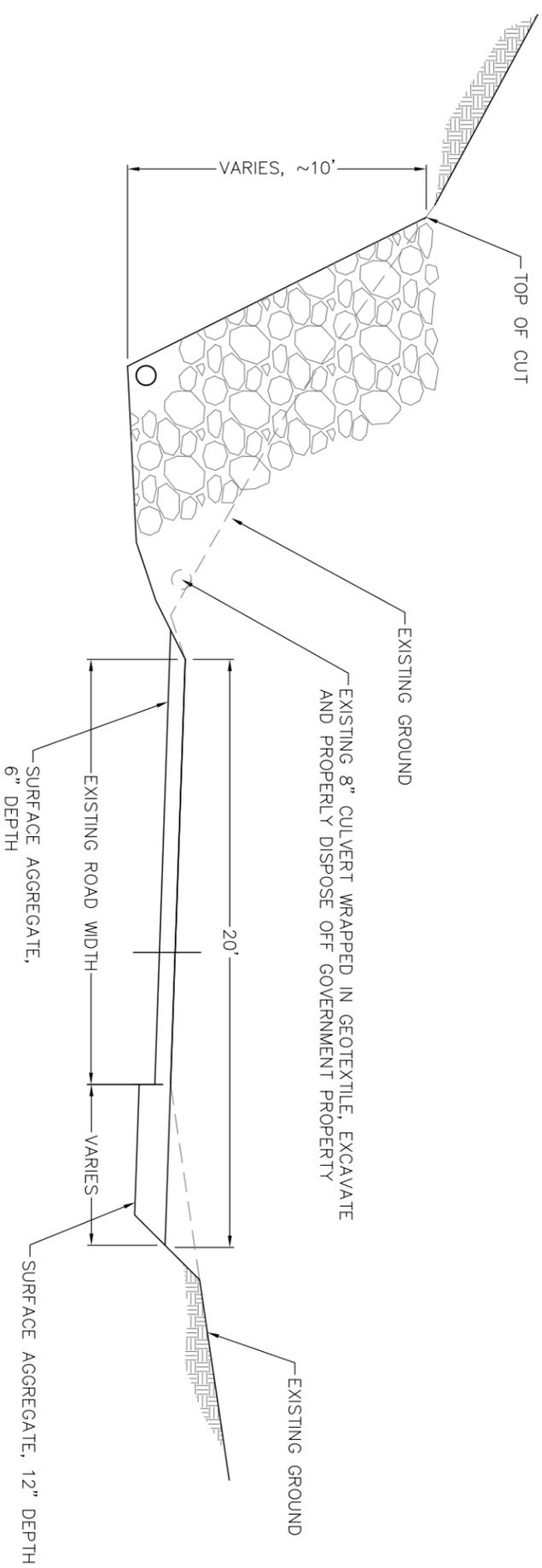
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PACIFIC NORTHWEST REGION

Forest  
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Design: Lida Coombe  
Drawn: Lida Coombe  
Checked: P. Podesta  
Date: 6-22-2012

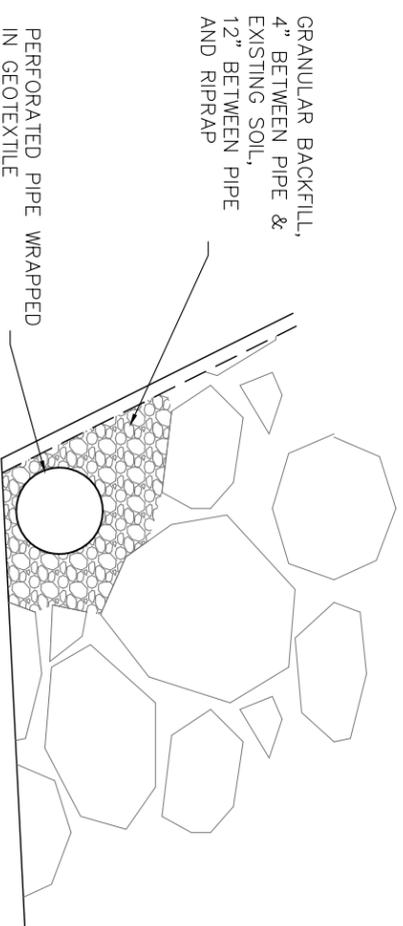
Sheet Title:  
ASPHALT TYPICALS  
EQUINE TIMBER SALE

Project No:  
Sheet 29 OF 34



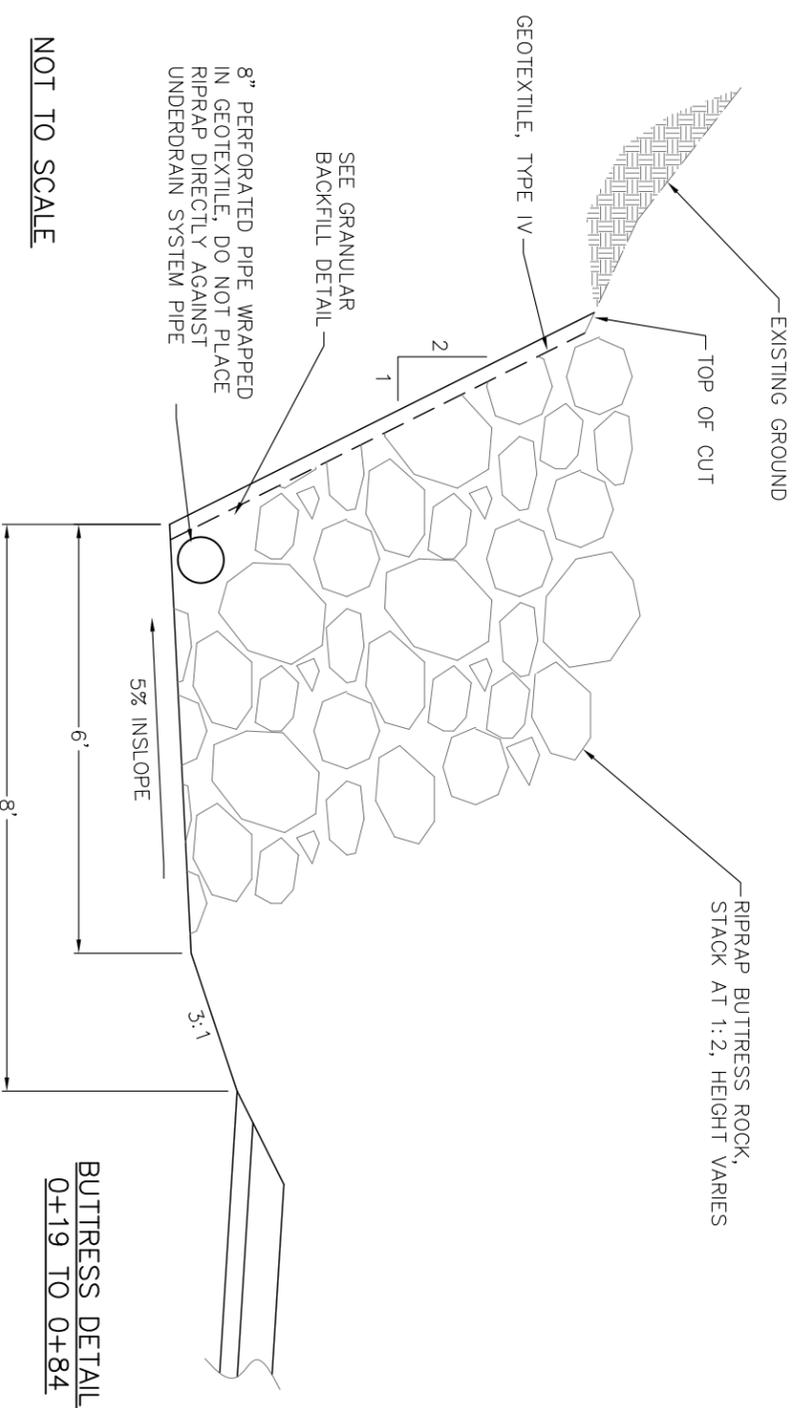
TYPICAL SECTION  
FSR 3680, MP 2.09, 0+00 TO 0+87

- NOTES:
1. ELEVATION OF PERFORATED PIPE VARIES, MINIMUM 2% GRADE FROM BEGINNING OF BUTTRESS AT 0+19 TO INTERCEPTION OF EXISTING DITCH AT 0+84.
  2. DISPOSAL AREA IS AT 0+00 LEFT, IN AREA FLAGGED BY THE ENGINEER. CLEARING AND SHAPING DISPOSAL AREA TO DRAIN ARE INCIDENTAL TO 20416.
  3. CONSTRUCT BUTTRESS WALL IN 20' INCREMENTS. KEY ROCK INTO ADJACENT ROCKS BY USING THE NATURAL IRREGULAR SHAPES OF THE ROCKS.
  4. RIPRAP SHALL BE FROM A COMMERCIAL SOURCE AND BE STOCKPILED ON SITE BEFORE BEGINNING EXCAVATION. NO EXCAVATED SLOPES SHALL BE LEFT OPEN OVERNIGHT. EXCAVATION AND RIPRAP ARE INCIDENTAL TO 25205.
  5. PLACE PIT RUN AGGREGATE ON ALL NEW SUBGRADE AREAS.



GRANULAR BACKFILL GRADATION	
NOMINAL SIZE, SQUARE OPENINGS (1.5 INCH TO 3/8 INCH)	
2 INCH	100
1.5 INCH	90 TO 100
1 INCH	20 TO 55
3/4 INCH	0 TO 15
3/8 INCH	0 TO 5

GRANULAR BACKFILL DETAIL



BUTTRESS DETAIL  
0+19 TO 0+84

NOT TO SCALE



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GOLD BEACH

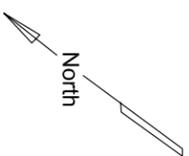
Design: Lola Coombe  
Drawn: Lola Coombe  
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Date: 6-22-2012

Sheet Title:  
FSR 3680000 MP 2.09  
ROCK BUTTRESS  
EQUINE TIMBER SALE

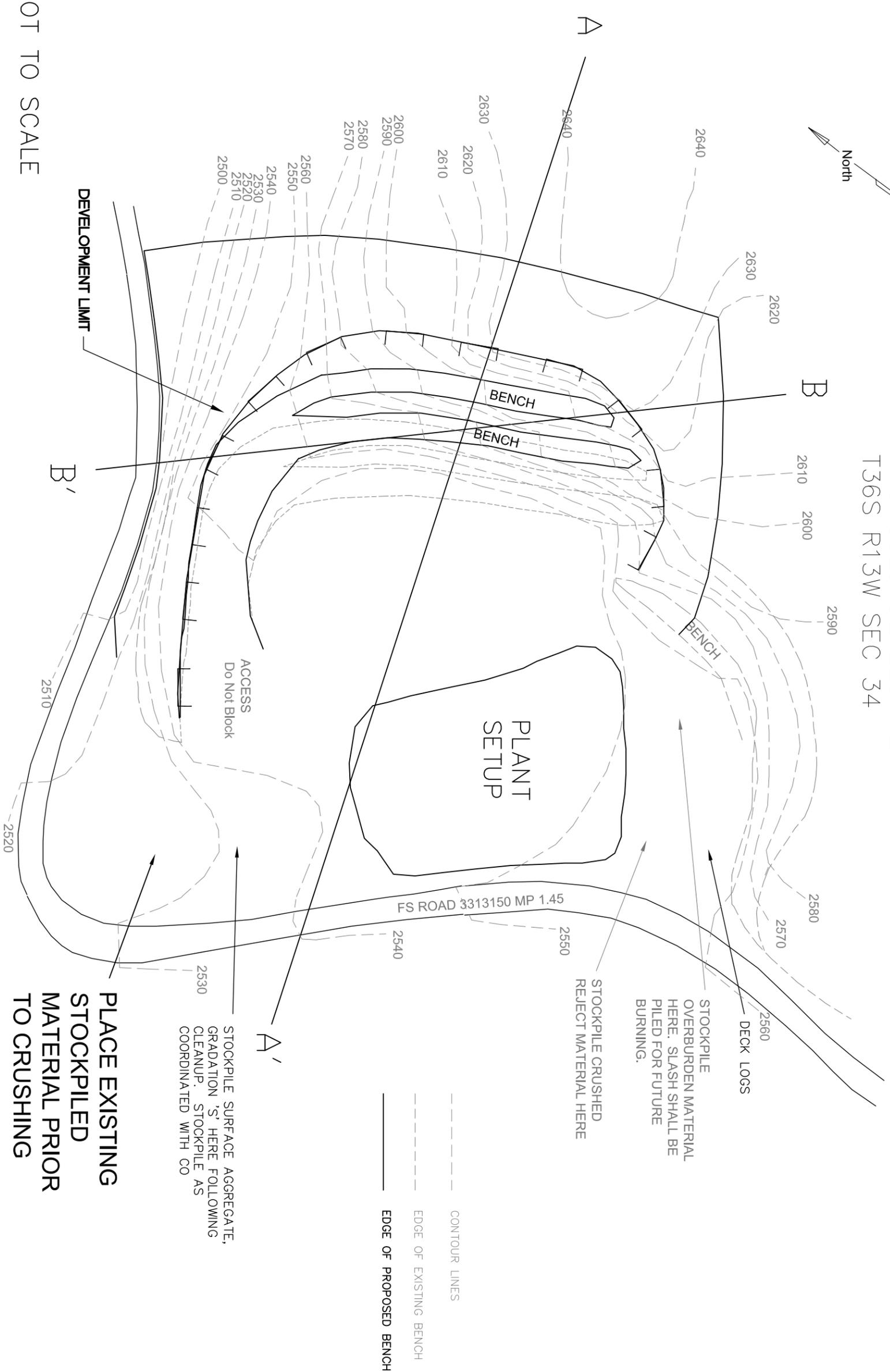
Project No:  
Sheet 30 OF 34

# PREHISTORIC BUTTE ROCK QUARRY

PROPOSED DEVELOPMENT  
T36S R13W SEC 34



NOT TO SCALE



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Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**PROPOSED DEVELOPMENT PLAN VIEW**  
**PREHISTORIC BUTTE**  
EQUINE TIMBER SALE

Project No:  
Sheet **31** OF **34**

**DEVELOPMENT NOTES**

DEVELOPMENT OF THE QUARRY MAY REQUIRE RIPPING, SORTING, DRILLING, AND BLASTING TO PRODUCE CRUSHED ROCK AGGREGATE STOCKPILES OF SPECIFIED GRADATION. THE PLAN VIEWS DISPLAY AREAS PROPOSED FOR SET UP OF THE CRUSHING PLANT AND STOCKPILES, UNLESS OTHERWISE APPROVED BY THE CO. EXISTING STOCKPILE MATERIAL SHALL BE USED PRIOR TO BEGINNING CRUSHING OPERATIONS. QUARRY DEVELOPMENT SHALL NOT EXTEND BEYOND EXISTING FLAGGING.

1. SUBMIT QUARRY DEVELOPMENT PLAN. DO NOT PERFORM WORK UNTIL PLAN HAS BEEN APPROVED BY THE CO.
2. NOTIFY THE CO AT LEAST 15 DAYS BEFORE MOVING CONSTRUCTION EQUIPMENT ONTO THE FOREST, AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF ANY OPERATIONS AT THIS SITE, AND AT LEAST 24 HOURS PRIOR TO AGGREGATE PRODUCTION.
3. THIS ENTRY SHALL BE LIMITED TO THE AREA AND DESIGN PARAMETERS SHOWN ON THE PLAN VIEWS AND CROSS SECTION PROFILES UNLESS OTHERWISE APPROVED BY THE CO.
4. FOLLOW BENCH SEQUENCE INDICATED BY NUMBERS IN PARENTHESIS. BENCHING SHALL MEET THE FOLLOWING CRITERIA:  
 MAX. FACE HEIGHT: 25'  
 MAX. FACE SLOPE: 1 V: 1 H  
 BENCH WIDTH: 20'

5. ALLOW FOR AND INCLUDE ADEQUATE DRAINAGE THROUGHOUT QUARRY AREA. EROSION CONTROL MEASURES MAY INCLUDE GRADING, GROUND RE-CONTOURING, CONSTRUCTION OF DITCHES OR SEDIMENT TRAPS.

6. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DIESEL AND FUEL LEAKAGE.

7. ALL OPERATION DEBRIS (METAL, RUBBER, PLASTIC, GLASS, PAPER) SHALL BE CLEANED UP AND REMOVED FROM THE SITE.

8. OVERBURDEN SHALL BE REMOVED FROM THE DEVELOPMENT AREA AND PLACED IN THE PROPOSED AREAS SHOWN ON THE PLAN VIEWS PRIOR TO AGGREGATE PRODUCTION.

9. CLEARING AND GRUBBING AND DISPOSAL OF MATERIAL IN THE QUARRY AND CRUSHED AGGREGATE STOCKPILE AREAS SHALL BE IN ACCORDANCE WITH FP-03 & FSSS SECTIONS 201 & 203. TOPS, LIMBS, AND STUMPS SHALL BE PILED (FSSS 203 (K)) AND LOGS THAT ARE NOT MERCHANTABLE SHALL BE DECKED FOR FIREWOOD (FSSS 203 (I)) IN DESIGNATED AREAS SHOWN ON PLAN VIEWS.

10. OPERATIONS RELATING TO DEVELOPMENT OF THE QUARRY SHALL CONFORM TO MSHA AND OSHA. CONTRACTOR SHALL TAKE MEASURES FOR THE PROTECTION OF THREATENED AND ENDANGERED (T&E) WILDLIFE SPECIES OR TO PREVENT THE SPREAD OF INVASIVE WEEDS SPECIES, IF PRESENT.

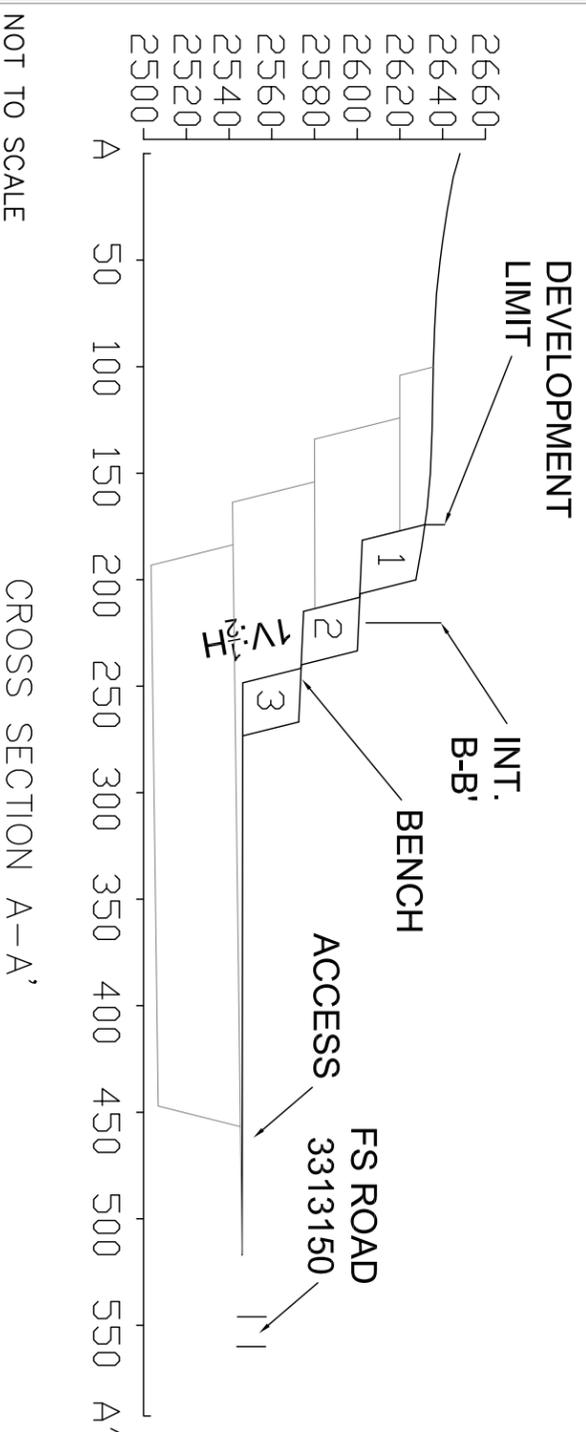
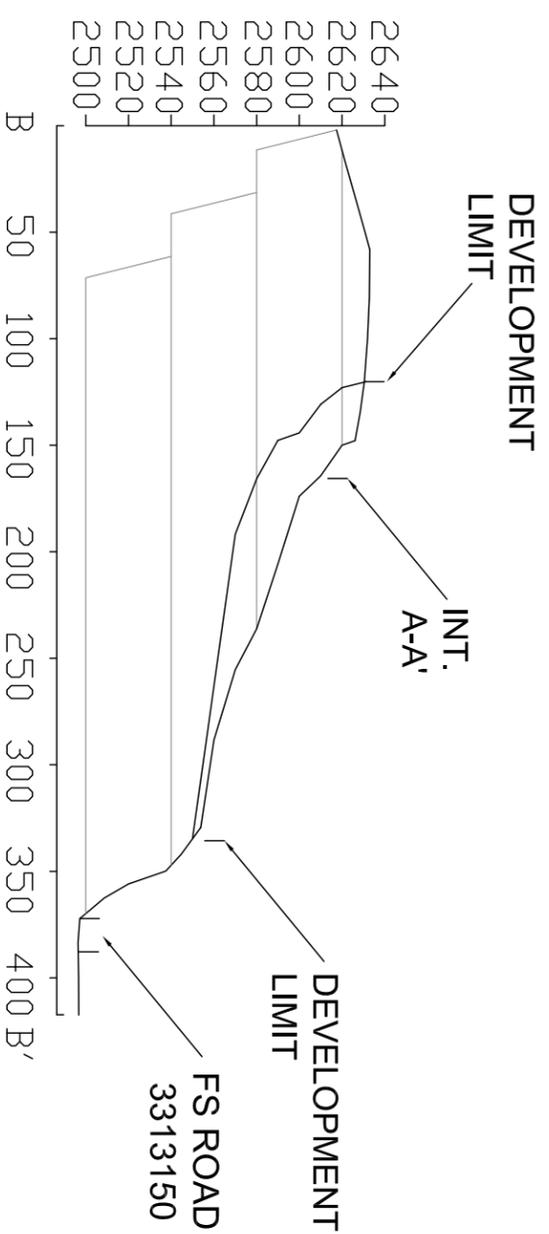
11. MARBLED MURRELET & SPOTTED OWL RESTRICTIONS ARE IN EFFECT. DISTURBANCE IS PROHIBITED FROM APRIL 1 TO SEPTEMBER 15. BLASTING OF MORE THAN 2 POUNDS OF EXPLOSIVES IS PROHIBITED FROM MARCH 1 TO SEPTEMBER 15.

12. PRIOR TO FINAL EQUIPMENT MOBILIZATION FROM THE QUARRY, THE CONTRACTOR SHALL CONTACT THE CO AND SET UP AN ON-SITE MEETING TO DISCUSS ANY FINAL CONDITIONS THAT NEED TO BE ADDRESSED.

13. MAINTAIN EQUIPMENT ACCESS TO QUARRY FLOOR, BENCHES AND TOP OF FACE FOR FUTURE USE.

14. REPAIR ANY DAMAGE TO THE ROAD CAUSED BY THE OPERATION.

15. WARNING SIGNS WILL BE REQUIRED WHERE EQUIPMENT IS IN ROAD #3313150, OR LOOSE ROCK ENDANGERS THE TRAVELED WAY. FSR 3313150 SHALL REMAIN OPEN TO PUBLIC TRAFFIC.



NOT TO SCALE

Project No:

Sheet

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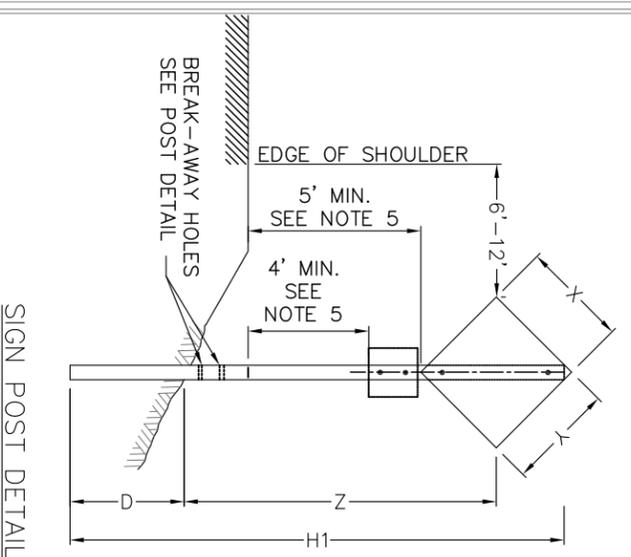
Sheet Title:  
**CROSS SECTION AND NOTES**  
**PREHISTORIC BUTTE**  
 EQUINE TIMBER SALE

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 Drawn: Lola Coombe  
 Checked: P. Podesta  
 Date: 6-22-2012

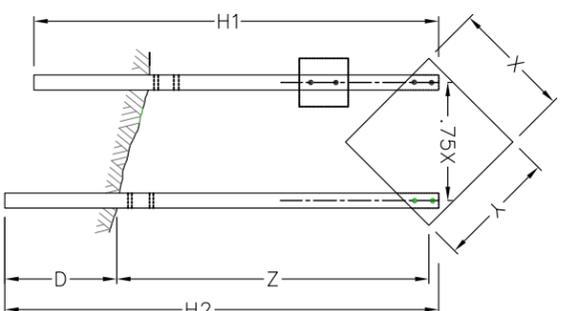
Forest  
**ROGUE RIVER-SISKIYOU**  
**NATIONAL FOREST**  
 GOLD BEACH

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 FOREST SERVICE  
**R6**  
 PACIFIC NORTHWEST REGION

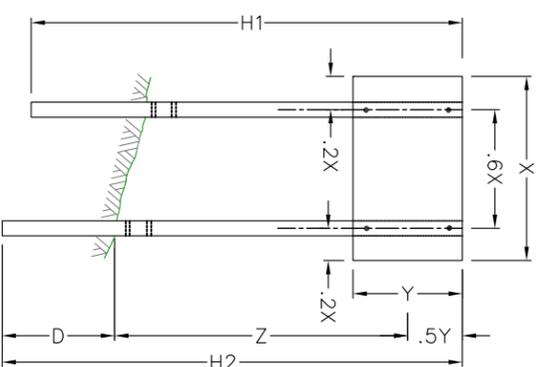




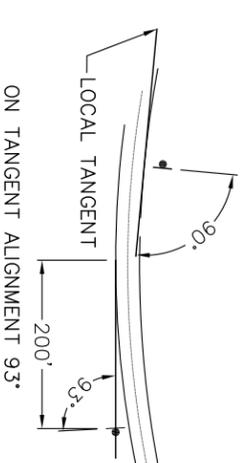
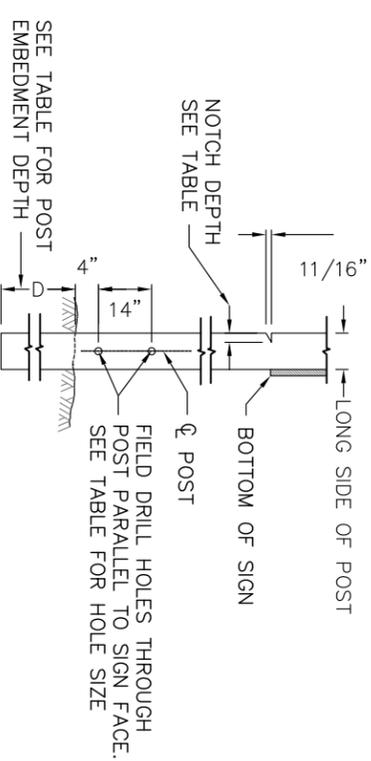
SIGN POST DETAIL



TWO POST SIGN



POST DETAIL



SIGN INSTALLATION ANGLE

DRAWINGS  
NOT TO SCALE

WOOD POST SELECTION TABLE

SIGN SHAPE	X x Y	NUMBER OF POSTS	POST SIZE	D	HOLE SIZE	NOTCH DEPTH	Z IS 10' OR LESS		Z IS GREATER THAN 10'		
							NUMBER OF POSTS	POST SIZE	D	HOLE SIZE	NOTCH DEPTH
	30" X 30"	1	4" X 4"	36"	0	0	1	4" X 6"	48"	1 1/2"	0
	30" X 30"	1	4" X 4"	36"	0	0	or 2	4" X 4"	36"	0	0
	36" X 36"	1	4" X 6"	48"	1 1/2"	0	or 2	4" X 6"	48"	1 1/2"	0
	36" X 36"	or 2	4" X 4"	36"	0	0	1	4" X 4"	36"	0	0
	48" X 48"	1	4" X 6"	48"	1 1/2"	0	1	6" X 8"	48"	3"	0
	48" X 48"	1	4" X 6"	48"	1 1/2"	0	or 2	4" X 6"	48"	1 1/2"	1 3/4"
	60" X 30"	2	4" X 4"	36"	0	0	2	4" X 6"	48"	1 1/2"	1 3/4"
	78" X 42"	2	4" X 6"	48"	1 1/2"	1 3/4"	2	4" X 6"	48"	1 1/2"	1 3/4"
	96" X 48"	2	4" X 6"	48"	1 1/2"	1 3/4"	2	6" X 8"	48"	3"	2 1/4"

GROUND LINE TO CENTER OF SIGN HEIGHT (Z)

NOTE:

1. ATTACH SIGN PANELS WITH A MINIMUM OF 2 - 1/4" DIA. BOLTS PER POST.
2. MOUNT SIGNS SMALLER THAN LISTED ON A SINGLE 4" X 4" POST. FOR SIGNS NOT SHOWN, USE NEXT LARGEST SIZE.
3. H1 AND H2 = OVERALL POST LENGTH. SELECT POST LENGTHS TO FIT FIELD CONDITIONS.
4. D = POST EMBEDMENT DEPTH FOR AVERAGE SOIL CONDITIONS.
5. WHEN PEDESTRIANS ARE PRESENT, OR IN AREAS WHERE THE VIEW IS OBSTRUCTED, USE 7' MINIMUM MOUNTING HEIGHT.
6. USE TYPE III OR HIGHER TYPE SHEETING ON ALL SIGNS AND CHANNELIZING DEVICES. WARNING LIGHTS ARE NOT NORMALLY NEEDED ON DEVICES WITH TYPE III OR HIGHER TYPE SHEETING, BUT MAY BE BENEFICIAL TO ATTRACT THE DRIVERS ATTENTION IN FOG OR OTHER SPECIAL CONDITIONS. WHEN USED, APPLY THE APPROPRIATE TYPE OR WARNING LIGHT (TYPE A, B, C, OR D) PER THE MUTCD CHAPTER 6F.
7. ENSURE ALL SIGN SUPPORTS EXPOSED TO IMPACT BY TRAFFIC MEET THE REQUIREMENTS OF NCHRP-350 FOR CRASH WORTHINESS.
8. DO NOT STORE TRAFFIC CONTROL DEVICES ALONG THE ROADWAY WHEN NOT IN USE. COVER POST-MOUNTED SIGNS WHEN NOT APPLICABLE.
9. STATE STANDARDS MAY BE USED AS AN ALTERNATIVE IF APPROVED BY THE CONTRACTING OFFICER.



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Forest

ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

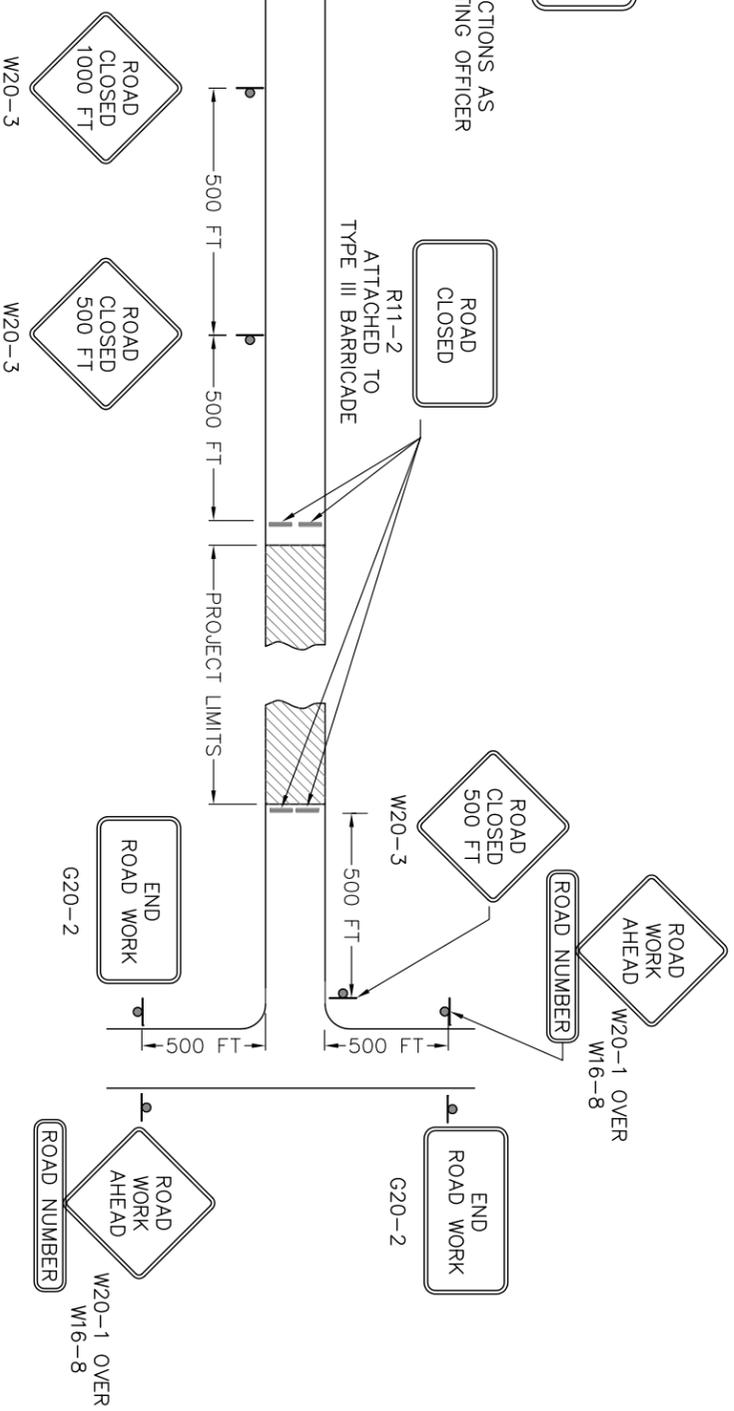
Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
**TEMPORARY TRAFFIC CONTROL -  
POST DETAIL**  
EQUINE TIMBER SALE

Project No:  
Sheet **33** OF **34**

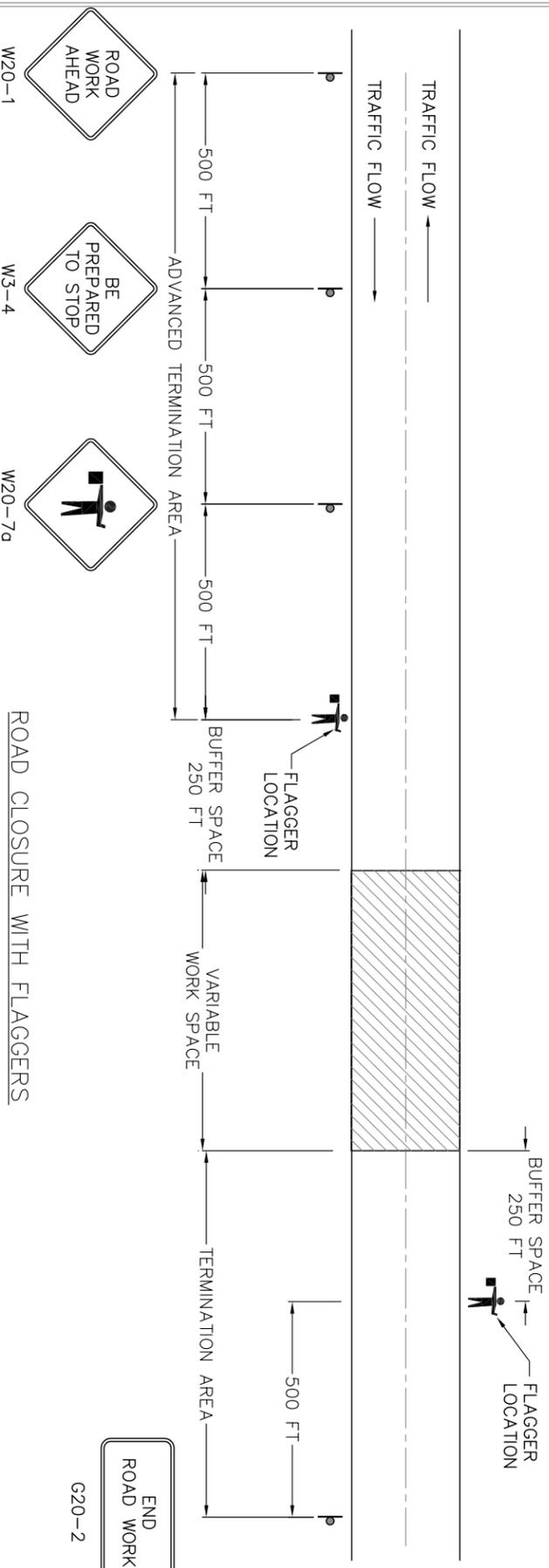
ROAD CLOSED  
XX MILES AHEAD

R11-3  
INSTALL AT ROAD INTERSECTIONS AS  
DIRECTED BY THE CONTRACTING OFFICER



ROAD CLOSURE WITHOUT FLAGGERS

- NOTE
1. ERECT ALL ADVANCE WARNING SIGNS BEFORE STARTING CONSTRUCTION WORK.
  2. NOT ALL DETAILS SHOWN ON THE TEMPORARY TRAFFIC CONTROL SHEETS MAY BE APPLICABLE TO THIS PROJECT. THE CONTRACTOR MAY ADD OR DELETE INFORMATION AND DETAILS IN THIS TRAFFIC CONTROL PLAN AS NECESSARY TO ACCOMMODATE ACTUAL OPERATIONS WITH WRITTEN APPROVAL FROM THE CONTRACTING OFFICER.
  3. WHERE ADVANCE WARNING SIGNS, PLACED AS SHOWN, INTERFERE WITH PERMANENT SIGNS, LOCATE THE WARNING SIGNS AS DETERMINED BY THE CO FOR BEST RESULTS. VARY MESSAGES AS REQUIRED.
  4. ADDITIONAL OR DIFFERENT MESSAGE SIGNS MAY BE REQUIRED TO FIT THE ACTUAL CONSTRUCTION CONDITIONS.
  5. IF W20-1 IS ON A ROADWAY OTHER THAN THAT ON WHICH THE ACTUAL CONSTRUCTION WORK OCCURS, INCLUDE A SUPPLEMENTARY PLAQUE INDICATING THE NAME OF THE ROAD THE WORK IS ON.
  6. IF SIGNS WILL BE IN PLACE MORE THAN 72 CONSECUTIVE HOURS, USE GROUND-MOUNTED POSTS.



ROAD CLOSURE WITH FLAGGERS

- NOTE
1. SIGNS ARE SHOWN FOR ONE DIRECTION OF TRAVEL ONLY. PLACE DEVICES SIMILAR TO THOSE DEPICTED FOR THE OPPOSITE DIRECTION OF TRAVEL.
  2. FINAL LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE CHANGED TO FIT FIELD CONDITIONS AS APPROVED BY THE CO.
  3. FOR PILOT CAR OPERATION, MOUNT THE "PILOT CAR FOLLOW ME" (G20-4) SIGN AT A CONSPICUOUS LOCATION ON THE REAR OF VEHICLE. PROMINENTLY DISPLAY THE NAME OF THE CONTRACTOR ON THE PILOT CAR.
  4. FOR NIGHT TIME FLAGGING OPERATION, PROVIDE FLOODLIGHTING AT FLAGGER STATIONS PER OSHA REGULATIONS.
  5. DO NOT ALLOW EQUIPMENT, MATERIALS, OR VEHICLES TO BE PARKED OR STORED IN THE BUFFER SPACE.

DRAWINGS  
NOT TO SCALE



U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
R6  
PACIFIC NORTHWEST REGION

Forest  
ROGUE RIVER-SISKIYOU  
NATIONAL FOREST  
GOLD BEACH

Design: Lola Coombe  
Drawn: Lola Coombe  
Checked: P. Podesta  
Date: 6-22-2012

Sheet Title:  
TEMPORARY TRAFFIC CONTROL -  
SINGLE LANE CLOSURE LAYOUT  
EQUINE TIMBER SALE

Project No:  
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