

UNITED STATES DEPARTMENT OF AGRICULTURE



FOREST SERVICE--REGION SIX  
WILLAMETTE NATIONAL FOREST  
MIDDLE FORK RANGER DISTRICT



Project located in Lane County, OR

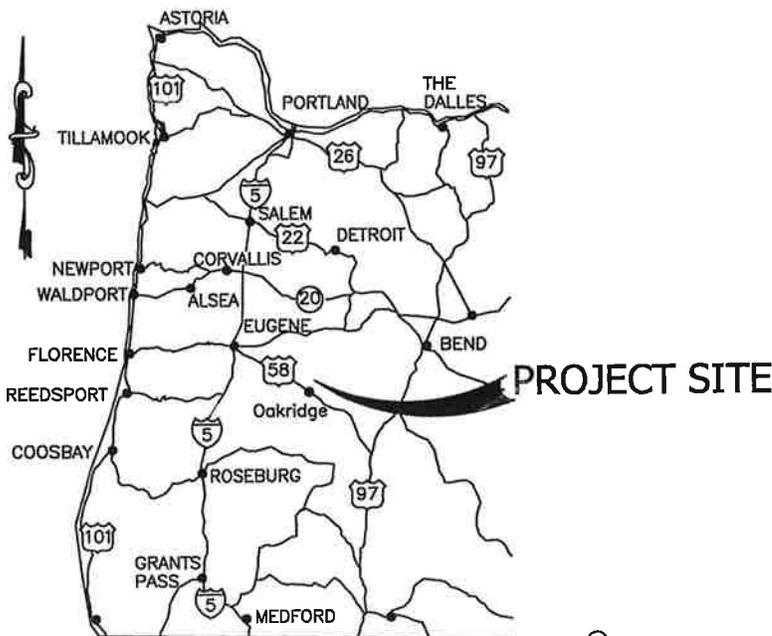
PLANS FOR PROPOSED  
**PRAIRIE THIN TIMBER SALE**

ROADS

ROAD NO.	NAME	LENGTH	TYPE OF WORK
1920	No Name	0.61 MILES	RECONSTRUCTION

INDEX TO SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	VICINITY MAP
3	ROAD 1920 ESTIMATE OF QUANTITIES
4	GENERAL NOTES
5	DRAINAGE LISTING
6-7	DRAINAGE CONSTRUCTION DETAILS
8	BRUSHING TYPICAL
9	RECONSTRUCTION TYPICALS
10-11	ROAD 1920 RECONSTRUCTION SUMMARY



**WESTERN OREGON  
PROJECT LOCATION MAP**

- STATE HIGHWAY
- FEDERAL HIGHWAY
- INTERSTATE HIGHWAY



DESIGNED BY:	DATE
<i>Mike Larman</i>	6/13/13
REVIEWED BY:	DATE
<i>Kent C Dahill</i>	6/14/13
REVIEWED BY:	DATE
<i>John Law</i>	6/14/13
(DEVELOPMENT ENGINEER)	
RECOMMENDED BY:	DATE
<i>Scott Zene</i>	6/25/13
(DISTRICT ENGINEER)	
APPROVED BY:	DATE
<i>Diana F Bidy</i>	6/27/13
(DISTRICT RANGER)	
APPROVED BY:	DATE
<i>Charlie [Signature]</i>	6/14/13
(FOREST ENGINEER)	



ITEM NUMBER	DESCRIPTION	UNIT	QUANTITIES	REMARKS
15101	Mobilization	Lump Sum	All	Includes fire protection, equipment cleaning, and temporary traffic control.
15755	Dewatering structure	Each	2	Dewatering for culvert installations.
20253	Removal of individual trees, miscellaneous: disposal of tops & limbs f & logs f	Each	5	
20358	Removal of corrugated metal pipe, disposal method A	Each	5	Does not include excavation.
20419	Drainage excavation, type culvert outlet ditch	Foot	15	
20462	Unclassified borrow, compaction method B	Cubic Yard*	50	Includes removal and replacement of any shortage or unsuitable material encountered during work on all roads. If not used pay item shall be deleted. Government furnished material located on Road 1919, MP 0.02, Left side. Generating and sorting required.
25104	Keyed riprap, class 4	Cubic Yard*	4	Government furnished material located at Whiterock Quarry, Road 1900-703. Generating and sorting required.
23051	Roadside brushing, disposal method 1	Mile	0.61	
30359	Roadway reconditioning, compaction method E	Mile	0.61	Haul material pulled from ditch reconditioning, slough and slide removal, and logs in ditch to disposal area located on Road 1925, MP 0.82, left and right side.
32203	Aggregate base, grading D, compaction method B	Cubic Yard*	470	Commercial Source.
60276	24-inch aluminized steel, type 2, corrugated steel pipe, .079-inch thickness, method B	Foot	188	Includes bands and necessary hardware. Includes excavation.
62509	Mulching, dry method	Lump Sum	All	Includes work on all disturbed areas. Government furnished.

\* Denotes contract quantity



## PRAIRIE THIN TIMBER SALE

### ROAD 1920 ESTIMATE OF QUANTITIES

SHEET NUMBER TOTAL SHEETS

3

11

PACIFIC NORTHWEST REGION

General Notes:

1. Salvage existing aggregate during culvert installation and use as bedding and initial backfill material.
2. Designated disposal site(s) are identified on the plans. The Contracting Officer will flag the disposal areas prior to placement of material. For all excess or unsuitable materials, layer place, smooth uniformly, and shape to drain. Disposal area development and shaping is indirect to items 20419 and 20462.
3. All culvert installations/replacements with flowing water are considered stream channels. Replace culverts when stream channels are dry or during instream work period. Dewatering will be deleted if there is no water in the stream when work is done. The instream work period is July 1 to August 31. Additional timing / date restrictions, if applicable are included in C6.24 and C6.315 of the timber sale provisions and specification FSSS 156.05.
4. All new culvert installations require partial inlet bevel cut (indirect cost to corresponding culvert installation).
5. Rebuild fills over pipes with a minimum of 1.5'V : 1'H fill slope and 1' shoulders.
6. Do not undercut existing backslopes when cleaning and/or reconstructing roadway ditch.
7. Maintain all construction staking on the project, until final inspection and acceptance.
8. Spread government furnished straw over disturbed soil at all culvert installations, disposal areas and other disturbed soil work areas, excluding ditches. Cover areas completely. Straw is stored at the Flat Creek Work Center, located on Forest Service Road 24, 2 miles east of the town of Oakridge. Contact the Contracting Officer to arrange pick up.
9. Dispose of inlet and outlet beveled cut culvert pieces by removing from government land according to FSSS 203.05, method a.
10. Recondition turnouts and curve widening with the basic roadbed, to dimensions existing of the ground.
11. Clearing and grubbing of trees during culvert installations is considered indirect to corresponding culvert installations. Logs meeting utilization standards (see section 201.04) are to be limbed, separated, and decked adjacent to the work area as designated by the Contracting Officer. Dispose of slash according to subsection FSSS 203.05, disposal method (f).
12. Construction tolerance class D, for all roads.



**PRAIRIE THIN TIMBER SALE**

**GENERAL NOTES**

SHEET NUMBER TOTAL SHEETS

4

11

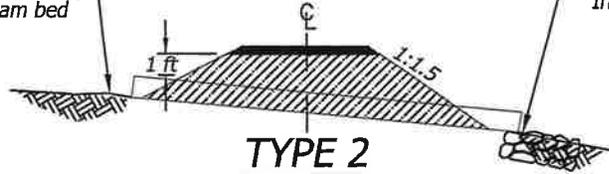
PACIFIC NORTHWEST REGION



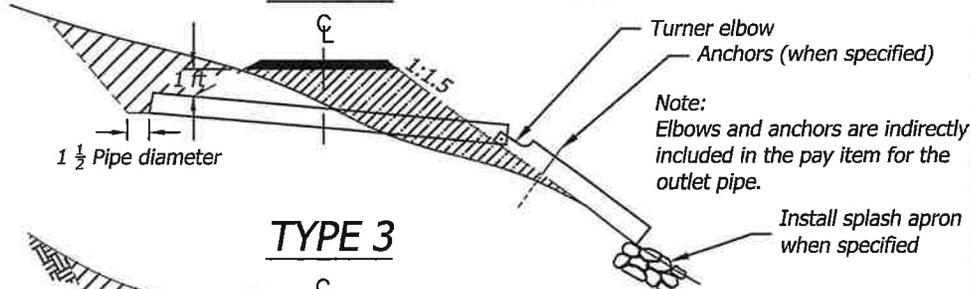
## CULVERT TYPES

### TYPE 1

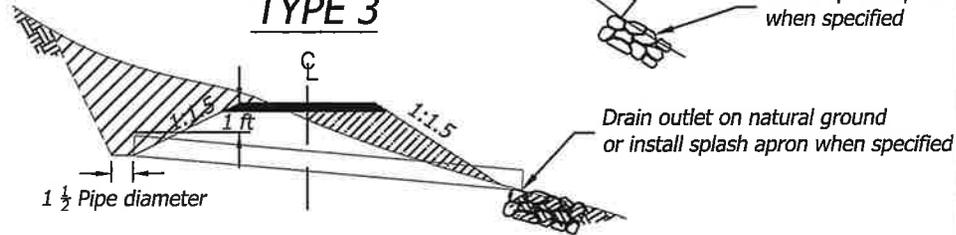
Original ground or stream bed



### TYPE 2



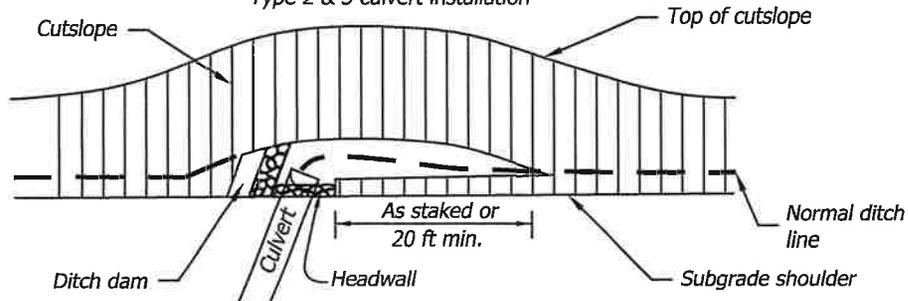
### TYPE 3



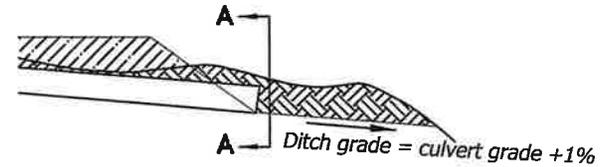
Some installations of culverts may require additional excavation below grade line.

## CATCH BASIN DETAIL

PLAN VIEW  
Type 2 & 3 culvert installation

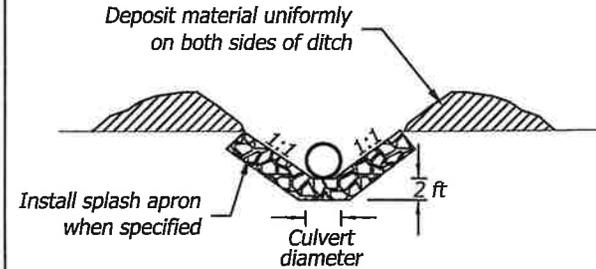


## OUTLET DITCH

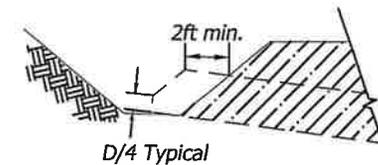


Note: Seed ditch and berm when specified

## OUTLET DITCH SECTION A-A

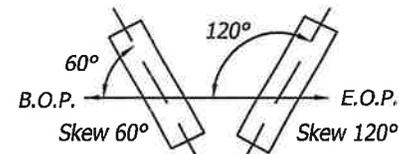


## PARTIAL BEVELED INLET DETAIL



Note: Bevel cut to match existing fill slopes as specified

## SKREW DIAGRAM



Drawings not to scale

PRAIRIE THIN TIMBER SALE

DRAINAGE CONSTRUCTION DETAILS

U.S.D.A. FOREST SERVICE

PACIFIC NORTHWEST REGION

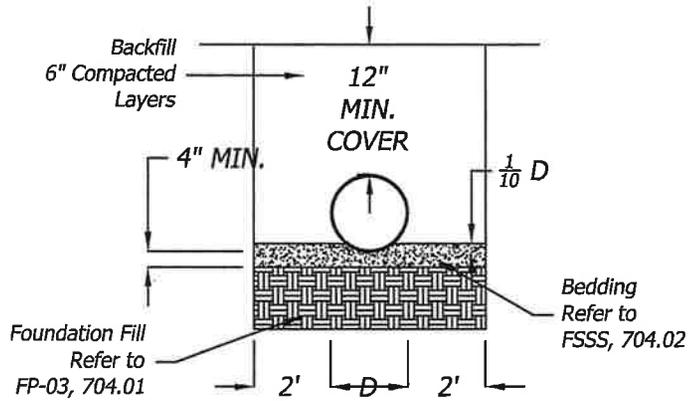


SHEET NUMBER TOTAL SHEETS

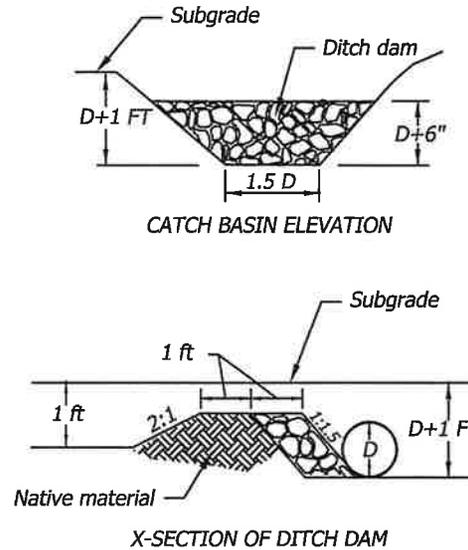
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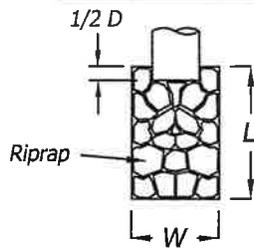
### CULVERT BEDDING & BACKFILL TYP.



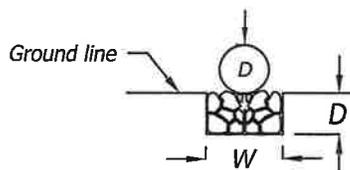
### RIPRAP DITCH DAM



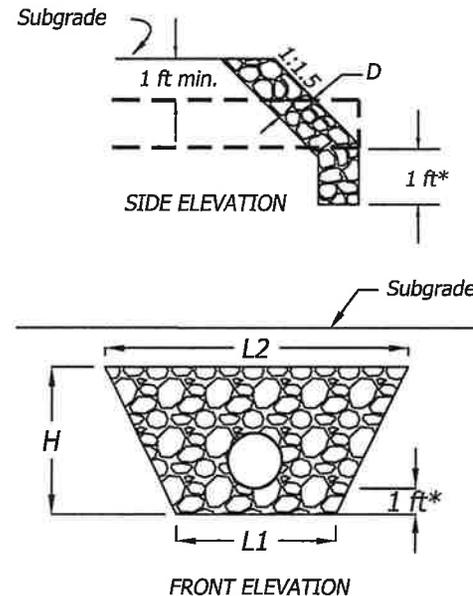
### SPLASH APRON PLAN VIEW



### SPLASH APRON ELEV. VIEW



### RIPRAP HEADWALL



\* For culverts over 24" in diameter otherwise 0 ft.

PRAIRIE THIN TIMBER SALE

DRAINAGE CONSTRUCTION DETAILS

PACIFIC NORTHWEST REGION

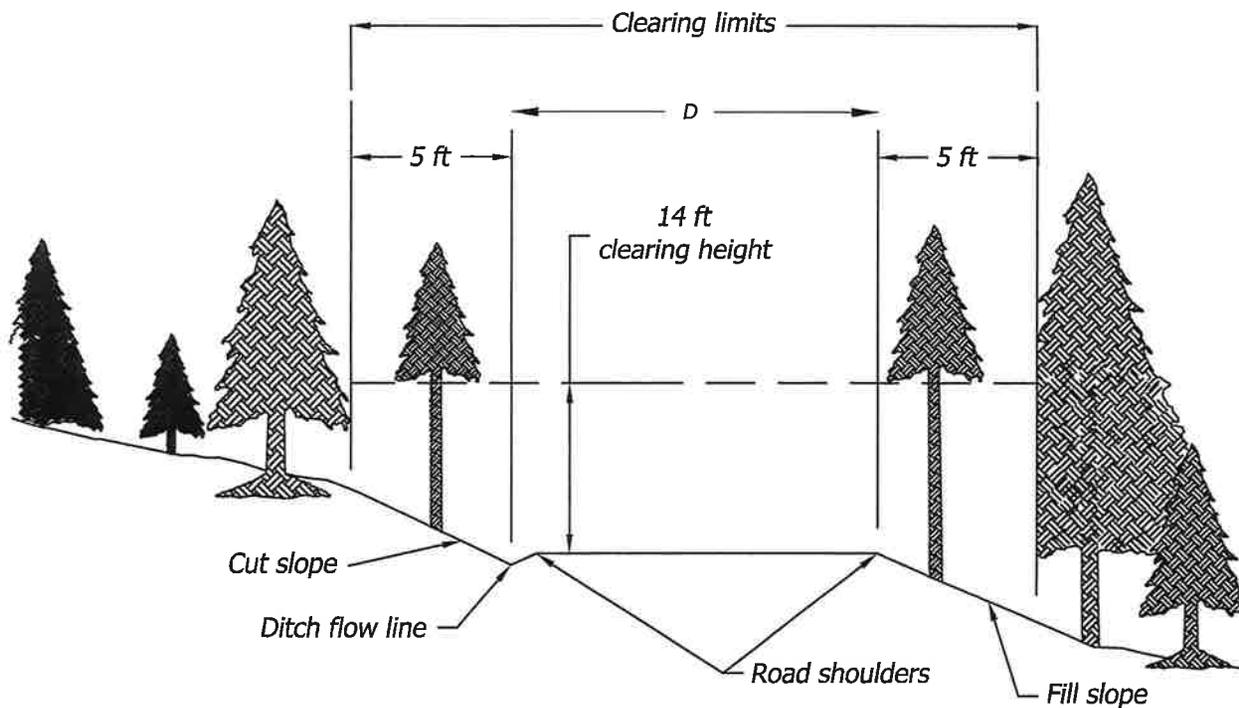
U.S.D.A FOREST SERVICE



SHEET NUMBER TOTAL SHEETS

7

11



NOTES:

1. Remove trees up to 8 inches in diameter (measured at 4.5 ft above the ground on the downhill side) and all vegetation within the clearing limits.
2. Cut all vegetation between the road shoulders or the bottom of the ditch to a maximum height of 6 inches above the ground surfaces.
3. Grub stumps within "D" above and scatter outside the clearing limits.
4. Drawings not to scale.

PRAIRIE THIN TIMBER SALE

BRUSHING TYPICAL

U.S.D.A. FOREST SERVICE

PACIFIC NORTHWEST REGION

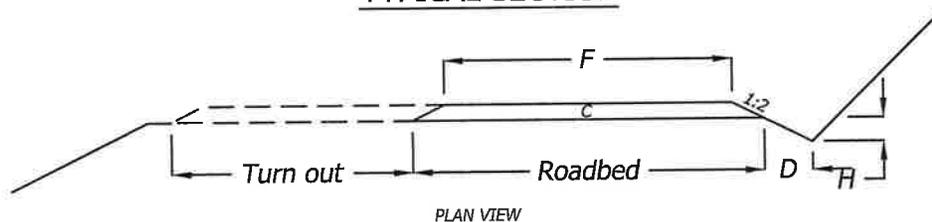


SHEET NUMBER	TOTAL SHEETS
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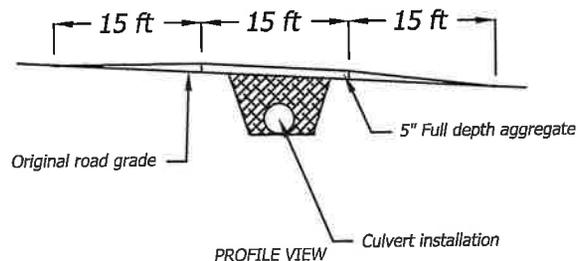
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11

TYPICAL SECTION



CULVERT SURFACE ROCK REPLACEMENT FOR AGGREGATE ROADS ONLY



Note: Top width dimension is 12 ft unless noted otherwise

ROAD NUMBER	BEGINNING MILE POST	ENDING MILE POST	CONSTRUCTION TOLERANCE	OUTSLOPED INSLOPED CROWNED	ROADBED WIDTH (FT)	DITCH DIMENSIONIS (FT)		PAVEMENT STRUCTURE			
								TRAVELED WAY WIDTH (FT)	COMPACTED DEPTH (IN)	SLOPE RATIO	
										AGG	V:H
1920	0.00	0.61	D	2 C	14*	2	1	12*	5	1V:2H	

\* Widths are minimum. Reconstruct roadbed to match existing conditions.

Drawings not to scale.

PRAIRIE THIN TIMBER SALE  
RECONSTRUCTION TYPICALS

PACIFIC NORTHWEST REGION

U.S.D.A. FOREST SERVICE



SHEET NUMBER TOTAL SHEETS

9

11

MILE POST	ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION OF WORK
0.00				Junction with road 19 at MP 9.35, left side.
				Beginning of project.
	23051	0.61	Mile	Begin roadside brushing.
	30359	0.61	Mile	Begin reconditioning of roadway. Recondition ditch for full length of project and grub as necessary. Haul material from ditch reconditioning, slough and slide removal to disposal area. Scatter all logs and woody debris from top of cutbank to the opposite road shoulder outside clearing limits. Scarify minimum 1" below the depth of all potholes, washboards or surface irregularities.
	32203	430	Cubic Yard*	Place 3-inch depth of crushed aggregate full width. Blend to adjacent surfaces and widths to provide for smooth transition.
0.08	20358	1	Each	Remove existing 24-inch CMP.
	15755	1	Each	Install dewatering system.
	60276	40	Foot	Install 24-inch CMP at same skew.
				Lower culvert outlet 2 ft (to ground line).
	25104	2	Cubic Yard*	Construct splash apron (7' L x 4' W x 2'D).
	32203	8	Cubic Yard*	Place 5-inch depth of crushed aggregate over culvert installation. Blend to adjacent surfaces and widths to provide for smooth transition.
0.33	20358	1	Each	Remove existing 24-inch CMP.
	15755	1	Each	Install dewatering system.
	60276	26	Foot	Install 24-inch CMP at same skew and grade.
	25104	2	Cubic Yard*	Construct splash apron (7' L x 4' W x 2'D).
	32203	8	Cubic Yard*	Place 5-inch depth of crushed aggregate over culvert installation. Blend to adjacent surfaces and widths to provide for smooth transition.
0.35	20358	1	Each	Remove existing 18-inch CMP with attached pipe in ditch line.
	60276	28	Foot	Install 24-inch CMP at same skew and grade.
	32203	8	Cubic Yard*	Place 5-inch depth of crushed aggregate over culvert installation. Blend to adjacent surfaces and widths to provide for smooth transition.



**PRAIRIE THIN TIMBER SALE**

**ROAD 1920 RECONSTRUCTION SUMMARY**

SHEET NUMBER TOTAL SHEETS

10 11

MILE POST	ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION OF WORK
0.44	20358	1	Each	Remove existing 18-inch CMP.
	60276	34	Foot	Install 24-inch CMP at same skew and grade.
	20419	15	Foot	Construct culvert outlet ditch.
	32203	8	Cubic Yard*	Place 5-inch depth of crushed aggregate over culvert installation. Blend to adjacent surfaces and widths to provide for smooth transition.
0.48	20358	1	Each	Remove existing 24-inch CMP.
	60276	60	Foot	Install 24-inch CMP at same skew and grade.
	32203	8	Cubic Yard*	Place 5-inch depth of crushed aggregate over culvert installation. Blend to adjacent surfaces and widths to provide for smooth transition.
0.49	20253	1	Each	Remove danger tree, right side.
0.54	20253	2	Each	Remove danger trees, right side.
0.61				Creek Crossing, Hammer Creek.
	20253	2	Each	An additional 2 danger trees shall be identified and marked by the CO.
				End reconditioning of roadway.
				End roadside brushing.
				End placement of 3-inch depth of crushed aggregate, full width.
				End of Project.



PRAIRIE THIN TIMBER SALE

ROAD 1920 RECONSTRUCTION SUMMARY

SHEET NUMBER TOTAL SHEETS

11 11

PACIFIC NORTHWEST REGION

Prairie Thin Timber Sale

SCHEDULE OF ITEMS					
ROAD NUMBER			1920		
CONSTRUCTION					
RECONSTRUCTION			X		
PROJECT LENGTH (MILES)			0.61		
ITEM NO.	DESCRIPTION	PAY UNIT	QTY	UNIT COST	TOTAL
15101	Mobilization	Lump Sum	All	\$3,347.48	\$3,347.48
15755	Dewatering structure	Each	2	\$159.60	\$319.20
20253	Removal of individual trees, miscellaneous: disposal of limbs f, logs f, & stumps f	Each	5	\$36.24	\$181.20
20358	Removal of corrugated metal pipe, disposal method A	Each	5	\$112.82	\$564.10
20419	Drainage excavation, type culvert outlet ditch	Foot	15	\$2.61	\$39.15
20462	Unclassified borrow, compaction method B	Cubic Yard*	50	\$14.37	\$718.50
25104	Keyed riprap, class 4	Cubic Yard*	4	\$31.53	\$126.12
23051	Roadside brushing, disposal method 1	Mile	0.61	\$1,000.00	\$610.00
30359	Roadway reconditioning, compaction method E	Mile	0.61	\$4,520.52	\$2,757.52
32203	Aggregate surfacing, grading D, compaction method B	Cubic Yard*	470	\$38.57	\$18,127.90
60276	24-inch aluminized steel, type 2, corrugated steel pipe, .079-inch thickness, method B	Foot	188	\$52.16	\$9,806.08
62509	Mulching, dry method	Lump Sum	All	\$224.99	\$224.99
* Designated Contract Quantities				Total	\$36,822.24
Payment will be made on actual work performed as described in FP-03 109.01 unless otherwise noted.					

**Standard specification and supplemental list for  
Prairie Thin Timber Sale**

All specifications not included in the specification listing, but included by reference, are applicable. "X" denotes applicable standard and/or supplemental specification. The supplementals shown on the specification list are physically attached.

<b>Standard Specifications</b>			
<b>Standard Specifications</b>	<b>Date</b>	<b>Title</b>	<b>Road 1920</b>
101-109	2003		X
151	2003	Mobilization	X
157	2003	Soil Erosion Control	X
201	2003	Clearing and Grubbing	X
202	2003	Additional Clearing and Grubbing	X
203	2003	Removal of Structures and Obstructions	X
204	2003	Excavation and Embankment	X
251	2003	Riprap	X
303	2003	Road Reconditioning	X
602	2003	Culverts and Drains	X
625	2003	Turf Establishment	X
635	2003	Temporary Traffic Control	X
<b>Supplemental Specifications</b>			
<b>Supplemental Specifications</b>	<b>Date</b>	<b>Title</b>	
Preface	03/15/04	Preface	X
101.01	01/22/09	Meaning of Terms	X
101.01	01/22/09	Meaning of Terms	X
101.03	06/16/06	Abbreviations	X
101.04	03/29/07	Definitions	X
101.04	11/06/07	Definitions	X
102.00	02/16/05	Bid, Award, and Execution of Contract	X
103.00	02/16/05	Deletions	X
104.00	06/16/06	Deletions	X
104.03	01/22/09	Specifications and Drawings	X
104.06	02/17/05	Use of Roads by Contractor	X
105.02	03/08/07	Contractor provided source	X
105.02	02/17/05	Government provided source	X
105.05	05/12/04	Use of Material Found in the Work	X
106.01	07/31/07	Conformity with Contract Requirements	X
106.07	05/11/04	Delete	X
107.02	02/17/05	Protection and Restoration of Property and Landscape	X
107.05	05/11/04	Responsibility for Damage Claims	X
107.06	06/16/06	Contractor's Responsibility for Work.	X
107.08	03/29/05	Sanitation, Health, and Safety	X
107.09	06/16/06	Legal Relationship of the Parties	X
108.00	02/16/05	Delete	X
109.00	02/17/05	Deletions	X
109.02	06/16/06	Measurement Terms and Definitions	X
156.00	04/28/08	Complete Specification	X
157.02	08/23/04	Materials	X
157.03	02/24/05	General	X
170.00	03/26/07	Complete Specification	X
201.00	08/05/09	Deletions	X
201.01	02/18/05	Description	X
201.04	02/22/05	Clearing	X
201.04	02/18/05	Clearing	X
201.04	03/03/05	Clearing	X
201.06	11/09/05	Disposal	X
203.01	02/25/05	Description	X
203.04	02/18/05	Removing Material	X
203.05	02/18/05	Disposing of Material	X
203.05	03/26/07	Disposing of Material	X
204.00	02/11/08	Complete Specification	X

**Standard specification and supplemental list for  
Prairie Thin Timber Sale**

**All specifications not included in the specification listing, but included by reference, are applicable. "X" denotes applicable standard and/or supplemental specification. The supplementals shown on the specification list are physically attached.**

<b>Supplemental Specifications</b>			
<b>Supplemental Specifications</b>	<b>Date</b>	<b>Title</b>	<b>Road 1920</b>
209.07	07/12/07	Dewatering	X
209.10	05/01/07	Backfill	X
209.11	05/01/07	Compacting	X
230.01	03/31/10	Roadside Brushing	X
251.03	08/05/09	General	X
251.08	08/05/09	Measurement	X
303.01	03/02/05	Work	X
303.06	04/04/07	Aggregate Surface Reconditioning	X
303.10	03/29/05	Measurement	X
303.10	03/26/07	Measurement	X
322.00	10/14/11	Minor Aggregate Courses (Complete Spec)	X
602.03	09/06/05	General	X
602.03	10/02/08	General	X
602.03	03/17/10	General	X
625.08	01/29/09	Turf Establishment	X
635.03	05/13/04	General	X
703.05	08/14/09	Subbase, base, surface course, and screened Aggregate	X
703.10	04/11/11	Flakiness Index and Adherent Coatings	X
704.02	03/02/05	Bedding Material	X