EXHIBIT "B"

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	12 feet	A to A1	0+00 to 65+00	Ditch
14 feet	12 feet	B to B1	0+00 to 47+60	Ditch
14 feet	12 feet	B1 to B2	0+00 to 50+00	No Ditch
14 feet	12 feet	B1 to C	0+00 to 23+90	No Ditch
14 feet	12 feet	B3 to B4	0+00 to 2+70	No Ditch
14 feet	12 feet	B5 to B6	0+00 to 2+20	No Ditch
14 feet	12 feet	B7 to B8	0+00 to 5+70	No Ditch
14 feet	12 feet	B9 to B10	0+00 to 11+90	No Ditch
14 feet	12 feet	B11 to B12	0+00 to 20+30	No Ditch
14 feet	12 feet	B11 to B13	0+00 to 10+10	No Ditch
14 feet	12 feet	B14 to B15	0+00 to 2+40	No Ditch
14 feet	12 feet	B14 to B16	0+00 to 2+40	No Ditch
14 feet	--	C to C1	0+00 to 28+70	No Ditch
14 feet	--	C to D	0+00 to 27+70	No Ditch
14 feet	--	C2 to C3	0+00 to 10+30	No Ditch
14 feet	--	C4 to C5	0+00 to 14+70	No Ditch
14 feet	--	D to D1	0+00 to 18+70	No Ditch
12 feet	--	D1to D8	18+70 to 32+90	No Ditch
As needed	--	D1to D8	32+90 to 53+10	No Ditch
14 feet	--	D2 to D3	0+00 to 7+40	No Ditch
14 feet	--	D4 to D5	0+00 to 11+50	No Ditch
12 feet	--	D6 to D7	0+00 to 3+00	No Ditch
16 feet	12 feet	E to E1	0+00 to 121+00	Ditch
16 feet	12 feet	E to E2	0+00 to 36+50	Ditch
14 feet	12 feet	E3 to E4	0+00 to 6+20	No Ditch
14 feet	12 feet	E5 to E6	0+00 to 1+70	No Ditch
14 feet	12 feet	E7 to E8	0+00 to 3+10	No Ditch
14 feet	12 feet	E9 to E10	0+00 to 9+20	No Ditch

EXHIBIT "B"

FOREST ROAD SPECIFICATIONS

CLEARING. This work shall consist of clearing, removing, and disposing of all trees, snags, down timber, brush, surface objects, and protruding obstructions within the clearing limits.

All clearing limits shall be marked by STATE with R/W tags and fluorescent pink flagging. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

All danger trees, leaners, and snags outside the clearing limits which could fall and hit the road shall be felled.

GRUBBING. This work shall consist of the removal or digging out of stumps and protruding objects.

All stumps shall be completely removed within the limits of required grubbing. Stumps overhanging cutslopes shall be removed. Grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Grubbing debris shall not be left lodged against standing trees. Grubbing classifications are as follows:

New construction - From the top of the cutslope to the toe of the fill.

Improvements and reconstructions - 4 feet back from the shoulder of the subgrade or ditch, whichever is widest, or as marked in the field.

CLEARING AND GRUBBING DISPOSAL. Scatter through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required.

EXHIBIT "B"

FOREST ROAD SPECIFICATIONS

EXCAVATION. Excavation and grading shall not be done when weather and/or ground conditions are such that damage will result to existing subgrade or cause excessive erosion.

Excavation shall conform to STATE-engineered lines, grades, dimensions, and plans when provided.

All suitable excavated material shall be used where possible for the formation of fills, shoulders, and drainage structure backfills. Embankment materials shall be free of woody debris, brush, muck, sod, frozen material, and other deleterious materials. All fills and drainage structure backfills shall be machine compacted according to the specifications in Exhibit C.

Unless road design plans show otherwise, all roads shall be on a balanced cross section, except when the slope is over 50 percent, the road shall be on full bench for the width specified.

Excess excavation shall not be sidecast where material will enter a stream course or where material will accumulate in areas deemed a high-risk site by STATE.

ROAD WIDTH LIMITATIONS. PURCHASER shall obtain advance written approval from STATE to construct the road to a greater width than specified. Extra subgrade width shall be required for:

Fill Widening. Add to each fill shoulder 1 foot for fills 3 feet to 6 feet high; 2 feet for fills over 6 feet high.

Curve Widening. Widen the inside shoulder of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

Ditch. Construct "V" ditch 3 feet wide and to a depth of 1 foot below subgrade. Subgrade shall be crowned at 4 to 6 percent.

Outslope. Road subgrade shall be outsloped at 1 to 3 percent.

TURNOUTS. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 25 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: As marked in the field.

GRADING	Back Slopes	Fill Slopes
Rock	Vertical to 1/4:1	Not steeper
Common - side slopes 50% and over	1/2:1	than 1½:1
Common - side slopes less than 50%	3/4:1	
Common - turnpike (level) section	2:1	

Top of cutslope shall be rounded.

LANDINGS. Landings shall be constructed to the dimensions posted in the field. Surface is to be crowned for drainage, with general grade no more than 3 percent.

TURNAROUNDS. Increase subgrade width an additional 20 feet for a length of 20 feet at locations marked in the field.

EXHIBIT "B"

END-HAULING REQUIREMENTS

POINT TO POINT	STATION TO STATION
D1 to D8	32+90

End-Haul Areas General Requirements

Material shall not be intentionally side cast.

Clearing and grubbing debris shall be end-hauled.

When blasting is required, it shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain as much material as possible within the road prism.

Containment

Full containment: The amount of material lost over the outside edge of the road shall not exceed 6 inches in depth measured perpendicular to the natural ground slope. Pioneer excavation shall be removed by digging, loading, and hauling rather than by pushing or scraping methods.

Trees and stumps may have up to 12 inches of material directly above them. Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

As shown on Exhibit A and as marked in the field.

Waste Area Treatment

(1) Deposit at waste area, spread evenly, compact, and provide adequate drainage.

(2) Pile woody debris separate from other waste material.

EXHIBIT "C"

ROAD SURFACING

POINT TO POINT	STATION TO STATION	TYPE OF ROCK	ROCK SIZE	COMPACTED DEPTH	VOLUME PER STA.	APPROX. TOTAL VOL.
B1 to B2	0+00 to 29+00	Crushed	2½ - 0"	10"	56 CY	1624 CY
B1 to B2	29+00 to 49+50	Crushed	2½ - 0"	8"	44 CY	902 CY
B3 to B4	0+00 to 2+20	Crushed	2½ - 0"	4"	22 CY	54 CY
B5 to B6	0+00 to 1+70	Crushed	2½ - 0"	4"	22 CY	36 CY
B7 to B8	0+00 to 5+20	Crushed	2½ - 0"	4"	22 CY	126 CY
B9 to B10	0+00 to 11+40	Crushed	2½ - 0"	8"	44 CY	502 CY
B11 to B12	0+00 to 19+80	Crushed	2½ - 0"	8"	44 CY	871 CY
B11 to B13	0+00 to 9+60	Crushed	2½ - 0"	8"	44 CY	423 CY
B14 to B15	0+00 to 1+90	Crushed	2½ - 0"	8"	44 CY	90 CY
B14 to B16	0+00 to 1+90	Crushed	2½ - 0"	8"	44 CY	90 CY
B1 to C	0+00 to 23+90	Crushed	2½ - 0"	4"	22 CY	526 CY
		TURNOUTS:			**NO. OF TURNOUTS**	
B1 to B2	0+00 to 49+50	Turnout Rock	2½ - 0"	--	6	168 CY
B1 to C	0+00 to 23+90	Turnout Rock	2½ - 0"	--	2	22 CY
B9 to B10	0+00 to 11+40	Turnout Rock	2½ - 0"	--	1	22 CY
B11 to B12	0+00 to 20+30	Turnout Rock	2½ - 0"	--	2	44 CY
B11 to B13	0+00 to 10+10	Turnout Rock	2½ - 0"	--	2	44 CY
	POINT	**LANDINGS:**		**VOL. PER LANDING**	**NO. OF LDG.**	
B1 to B2	B2	Crushed	Jaw-Run	36 CY	1	36 CY
B3 to B4	B4	Crushed	Jaw-Run	36 CY	1	36 CY
B5 to B6	B6	Crushed	Jaw-Run	36 CY	1	36 CY
B7 to B8	B8	Crushed	Jaw-Run	36 CY	1	36 CY
B9 to B10	B10	Crushed	Jaw-Run	36 CY	1	36 CY
B11 to B12	B12	Crushed	Jaw-Run	36 CY	1	36 CY
B11 to B13	B13	Crushed	Jaw-Run	36 CY	1	36 CY
B14 to B15	B15	Crushed	Jaw-Run	36 CY	1	36 CY
B14 to B16	B16	Crushed	Jaw-Run	36 CY	1	36 CY

EXHIBIT "C"

ROAD SURFACING

POINT TO POINT	STATION TO STATION	TYPE OF ROCK MISCELLANEOUS:	ROCK SIZE	COMPACTED DEPTH	VOLUME PER STA.	APPROX. TOTAL VOL.
B to B1	0+00 to 47+60	Spot Rock	1½ - 0"	--	--	90 CY
B1 to B2	0+00 to 50+00	Curve Widening	2½ - 0"	--	--	172 CY
B1 to C	0+00 to 11+40	Curve Widening	2½ - 0"	--	--	64 CY
B9 to B10	0+00 to 11+90	Curve Widening	2½ - 0"	--	--	70 CY
B11 to B12	0+00 to 20+30	Curve Widening	2½ - 0"	--	--	93 CY
B11 to B13	As Posted	Turnaround Rock	Jaw-Run	--	--	18 CY
B11 to B13	0+00 to 10+10	Curve Widening	2½ - 0"	--	--	55 CY
	LOCATION	**POST-HARVEST:**		**VOL. PER LANDING**	**NO. OF LANDINGS**	
B1 to C	--	Landing Patch Rock	2½ - 0"	9 CY	6	54 CY
B1 to C	Point C	Turnaround Rock	2½ - 0"	18 CY	--	18 CY
B1 to B2	--	Landing Patch Rock	2½ - 0"	9 CY	11	99 CY
B1 to B2	Point B2	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
B3 to B4	Point B4	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
B5 to B6	Point B6	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
B7 to B8	Point B8	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
B9 to B10	--	Landing Patch Rock	2½ - 0"	9 CY	3	27 CY
B9 to B10	Point B10	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
B11 to B12	--	Landing Patch Rock	2½ - 0"	9 CY	3	27 CY
B11 to B12	Point B12	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
B11 to B13	--	Landing Patch Rock	2½ - 0"	9 CY	2	18 CY
B11 to B13	Point B13	Turnaround Rock	2½ - 0"	27 CY	--	27 CY
--	Haul Route	Maintenance Rock	1½ - 0"	--	--	126 CY

Additional rock for curve widening is required and has been included in the volume estimates.

Roads shall be uniformly graded and approved by STATE prior to rocking. For typical cross section, see Forestry Department Drawing Nos. 351-C and 351-D at the Forestry Department District Office.

Fifty (50) feet has been subtracted from the total length of rock roads for the landing rock.

Rock volumes rounded to nearest 9 or 18 CY load.

EXHIBIT "C"

CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be fragments of rock or other hard, durable particles crushed to the required size and a filler of finely crushed stone, sand, or other finely divided mineral matter. The material shall be free from vegetation and lumps of clay.

Quality and Grading Requirements. The stone base materials shall be crushed rock, including sand. River gravel shall not be used.

The material from which base material is produced or manufactured shall conform to the general requirements of Section 2630 of the "Standard Specifications for Highway Construction" prepared by the Highway Division, Oregon Department of Transportation, and shall meet the following test requirements:

Hardness - Test Method AASHTO T 96 35% Maximum

Durability - Test Method ODOT TM 208
Passing No. 20 Sieve: 30% Maximum
Sediment Height: 3" Maximum

For 1½"-0"	Passing	2" sieve	100%
	Passing	1½" sieve	95-100%
	Passing	3/4" sieve	55-75%
	Passing	1/4" sieve	35-50%

Of the fraction passing 1/4" sieve, 40% to 60% shall pass the No. 10 sieve.

For 2½"-0"	Passing	3" sieve	100%
	Passing	2½" sieve	95-100%
	Passing	1¼" sieve	55-75%
	Passing	1/4" sieve	30-45%

Of the fraction passing 1/4" sieve, 40% to 60% shall pass the No. 10 sieve.

For Jaw-Run	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

Control of gradation shall be by visual inspection by STATE.

The referenced sieve shall have square openings as set forth in AASHTO M 92, Woven Cloth Series. The determinations of size and gradings shall be as set forth in AASHTO T 27.

EXHIBIT "C"

ROCK ACCOUNTABILITY

The rock shall meet the quality and size specifications in Exhibit C. A sample of the rock shall be supplied to STATE for testing and approval prior to rocking. PURCHASER shall obtain subgrade approval from STATE prior to rocking. Rocking shall be limited to periods when weather conditions are acceptable to STATE and when sediments will not enter streams.

Rock accountability shall be determined by the following methods, as directed by STATE. STATE shall be given 24 hours' notice prior to rocking.

Depth Measurement. Rock shall be spread and compacted according to the depths specified in Exhibit C. Truck measure volumes are given, but shall not limit the amount of rock spread.

Depth shall be determined in the most compacted area of the surface cross section. If additional rock is required because of insufficient depth, it shall be added by truck measure to those areas that were slighted. The conversion from compacted yardage to truck yardage is 1.3 multiplied by the compacted yardage equals truck yardage.

The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in Exhibit C. The average depth for each road segment shall be the specified depth or greater.

Load Records. Notify STATE before spreading the rock and maintain a record of all rock delivered for spreading. Make the record available for STATE inspection. A report listing the amount of rock delivered the prior month must be submitted no later than the 15th of each month.

Curve Surfacing. Extra surface width shall be required for the inside of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width to be surfaced at the depths shown in Exhibit C.

EXHIBIT "C"

COMPACTION AND PROCESSING REQUIREMENTS

Subgrade. Subgrade surfaces of the road segments listed below shall be graded and compacted prior to rocking. Compaction shall be accomplished by traveling all surfaces from shoulder to shoulder until visible deformation ceases, or in the case of a sheepsfoot roller, the roller "walks out." At least 3 passes shall be made over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE:

Subgrade shall be crowned at 4 to 6 percent unless otherwise specified.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
B1 to B2 (29+00 to Pt. B2), B9 to B10, B11 to B12, B11 to B13, B14 to B15, B14 to B16, C2 to C3, C4 to C5, D to D1, D2 to D3, and D4 to D5	1

Fills. Embankments and fills shall be placed in (approximately) horizontal layers not more than 8 inches in depth. Each layer shall be separately, and thoroughly, compacted. Compaction equipment shall be operated over the entire width of each layer until visible deformation of the layers ceases or, in the case of a sheepsfoot roller, the roller "walks out." At least of 3 passes shall be made over the entire width and length of each layer. A pass is defined as traveling a fill layer in one direction and then back over that same layer again.

Placing individual rocks or boulders with more depth than the allowed layer thickness shall be permitted, provided the embankment will accommodate them. Such rocks and boulders shall be at least 6 inches below the subgrade. They shall be carefully distributed and the voids filled with finer material, forming a dense and compacted mass. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
D to D1	1, 2
D6 to D7	4

EXHIBIT "C"

COMPACTION AND PROCESSING REQUIREMENTS

Crushed Rock. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of crushed rock shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 6 inches in depth. When more than 1 layer is required, each shall be shaped and compacted before the succeeding layer is placed. Any irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Each layer shall be compacted with a minimum of 3 passes over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

Rock shall be compacted and processed during the same project period it is spread, unless otherwise approved in writing by STATE.

Rock shall be crowned at 4 to 6 percent unless otherwise specified.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
B1 to B2, B1 to C, B3 to B4, B5 to B6, B7 to B8, B9 to B10, B11 to B12, B11 to B13, B14 to B15, and B14 to B16	1 and 3
Spot, Patch, and Maintenance Rock	3

COMPACTION EQUIPMENT OPTIONS

(1) Vibratory Rollers. The drum shall have a smooth surface, a diameter not less than 48 inches, a width not less than 58 inches, and a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 VPM, corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 VPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled and operated at speeds ranging from 0.9 miles to 1.8 miles per hour, as directed by STATE.

(2) Vibratory Hand-Operated or Backhoe-Mounted Tamper. Vibratory hand-held or hydraulic tampers shall be used for compaction of backfill materials around culverts (and/or bridge approach embankment materials around abutments). The tamper shoe dimensions shall be a minimum of 10” X 13” and capable of a centrifugal force of 2,250 pounds.

(3) Rock Trucks. Rock spreading shall begin at the nearest point to the rock source and progress toward the end of the project. Rock trucks shall be routed over the entire cross section of rock layers.

(4) Crawler Tractors. D-7 Caterpillar or equivalent or larger.

EXHIBIT "D"

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the contract. Culverts shall be constructed of aluminized steel, or polyethylene and shall conform to the material and fabricating requirements of Sections 2410 and 2420 of the "Standard Specifications for Highway Construction" prepared by the Highway Division of the Oregon State Department of Transportation. Corrugation types and shapes other than those meeting the above minimum Highway requirements, shall be approved in writing by STATE.

Culverts shall be located according to the alignment and grade as shown on the Plan and Profile, and/or as staked in the field, or as stipulated in special instructions.

Culvert grade shall slope away from ditch grade at least the same grade as the ditch.

Culverts less than 36 inches in diameter shall be installed with the lock seam on the inlet end placed within 45 degrees of the bottom of the trench.

The foundation and trench walls for all culverts shall be free from logs, stumps, limbs, stones, and other objects which would dent or damage the pipe. The culvert trench shall be excavated 1½ times the pipe diameter with at least 2 feet on each side of the pipe to permit compaction and working on each side of pipe. Tamping shall be done in 6-inch lifts each side of the pipe to 95 percent density or over. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

A bedding of granulated material or crushed rock as specified shall be placed to provide a wide band of support and to transmit the load from above evenly over the entire length of the pipe.

Backfill shall consist of granulated material, crushed rock, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the pipe.

Transporting of the pipe shall be done carefully. Dragging or allowing free fall from trucks or into trenches shall not be permitted.

Joining shall be done with bands of like material and corrugations. Manufacturers' instructions shall be followed for prefabricated pipe assembly.

Polyethylene joints shall be made with split couplings, corrugated to engage the pipe corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the pipe joint.

A manufacturer's certification that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the Project Engineer upon request.

EXHIBIT "D"

CULVERT SPECIFICATIONS

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for galvanized or aluminized steel culverts 18” to 36”, 18” for galvanized or aluminized steel culverts 42” to 96”, and 12" for polyethylene culverts (add 6" for roads which will not be rocked). Minimum vertical cover for other steel designs shall be as specified by STATE.

Lengths of individual culvert sections shall be not less than 10 feet, unless otherwise provided for in special instructions.

The ends of each culvert shall be free of logs and debris which would restrict the free flow of water. The intake end of relief culverts shall be provided with a sediment catching basin 3 feet in diameter at the bottom. The outlet end of any culvert which would allow water to erode embankment soil shall be provided with a half round or other approved slope protection device. Construct the lead-off ditch away from the culvert outlet where the slope gradient restricts the free flow of water.

Following are the minimum standard gauges for pipe and coupling bands. Some culverts may require different gauges and may be found in the culvert listing.

	Steel Pipe Gauge		Band Widths (")			Hugger Band Widths (")	
Dia.	Galvanized or Aluminized	Band Gauges	Annular	Helical	Dimpled	Annular	Helical
12-15	16	16	7	12	12	13 1/8	10 1/2
18-24	16	16	12	12	12	13 1/8	10 1/2
30-36	16	16	12	12	*12	13 1/8	10 1/2
42	14	16	12	12	NA	13 1/8	10 1/2
48	14	16	24	24	NA	13 1/8	10 1/2
54	14	16	24	24	NA	13 1/8	10 1/2
60	12	16	24	24	NA	13 1/8	10 1/2
66-72	12	16	24	24	NA	13 1/8	10 1/2
78	12	16	24	24	NA	13 1/8	10 1/2
84	12	16	24	24	NA	14 3/4	10 1/2
90-120	12	16	26	26	NA	NA	NA

Polyethylene culverts shall be double walled and meet the requirements of AASHTO M-294-901, Type S.

EXHIBIT "D"

CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	CULVERT GAUGE	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	18	--	60	*CPP	D to D1	2+85
2	18	--	40	*CPP	D6 to D7	0+30

*All culverts shall be constructed of corrugated, double-walled polyethylene.

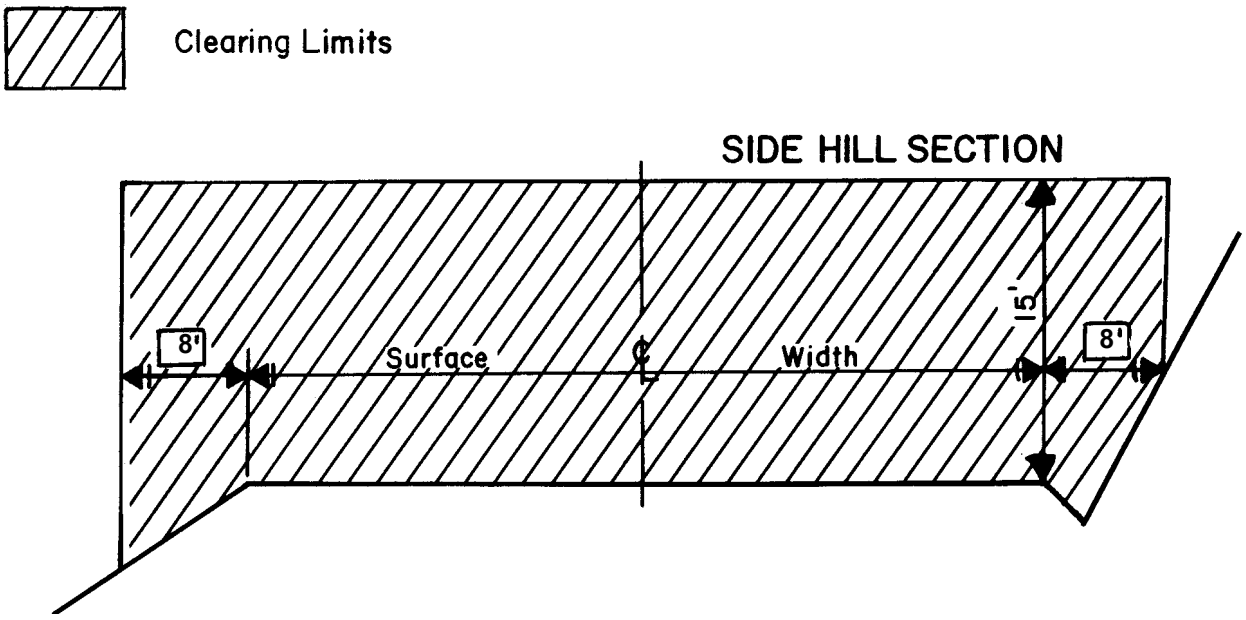
Tamping is required.

All metal culverts scheduled for removal shall become property of PURCHASER and be removed from STATE land.

State Timber Sale Contract
No. 341-05-05
Barkshot Thin

EXHIBIT "E"

ROAD BRUSHING SPECIFICATIONS



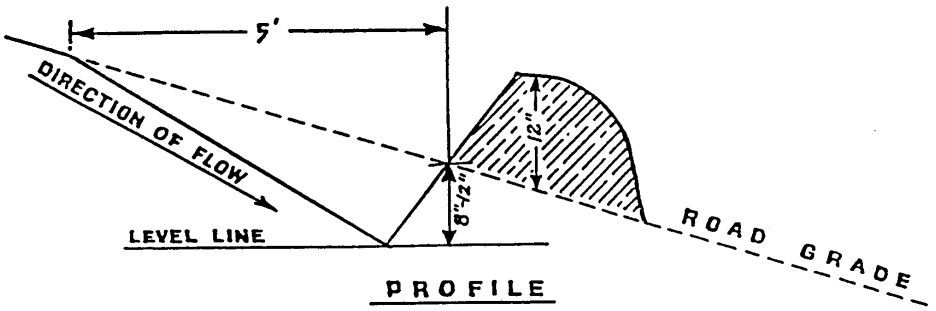
REQUIREMENTS

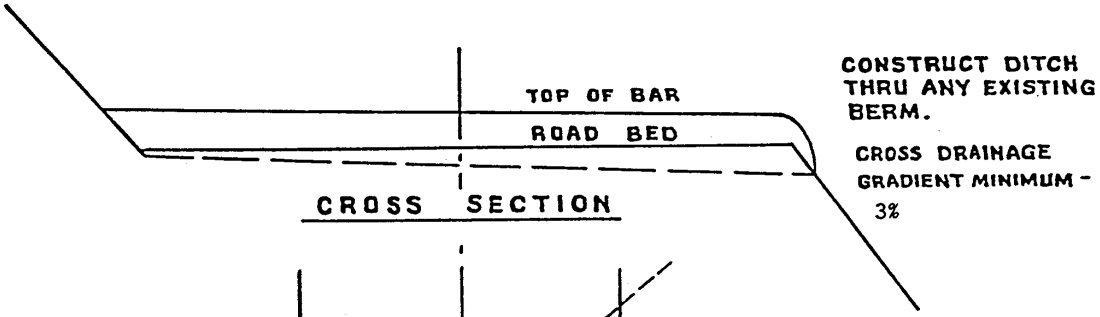
Brush and trees shall be cut to a maximum height of 6 inches above the ground surface or obstructions such as rocks or existing stumps.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, and water courses within 72 hours and may be scattered downslope from the road or placed in other stable locations, unless otherwise approved in writing by STATE.

EXHIBIT "F"

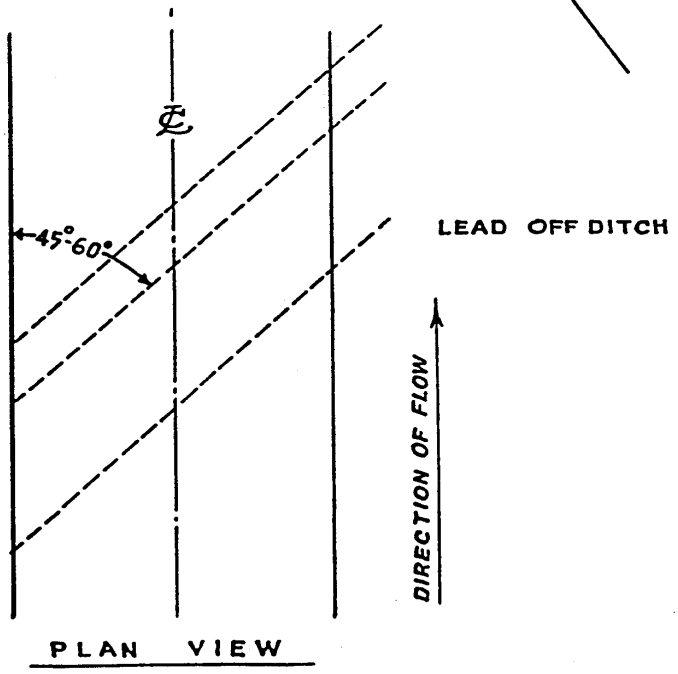
WATERBAR SPECIFICATIONS





SPACING OF WATERBARS

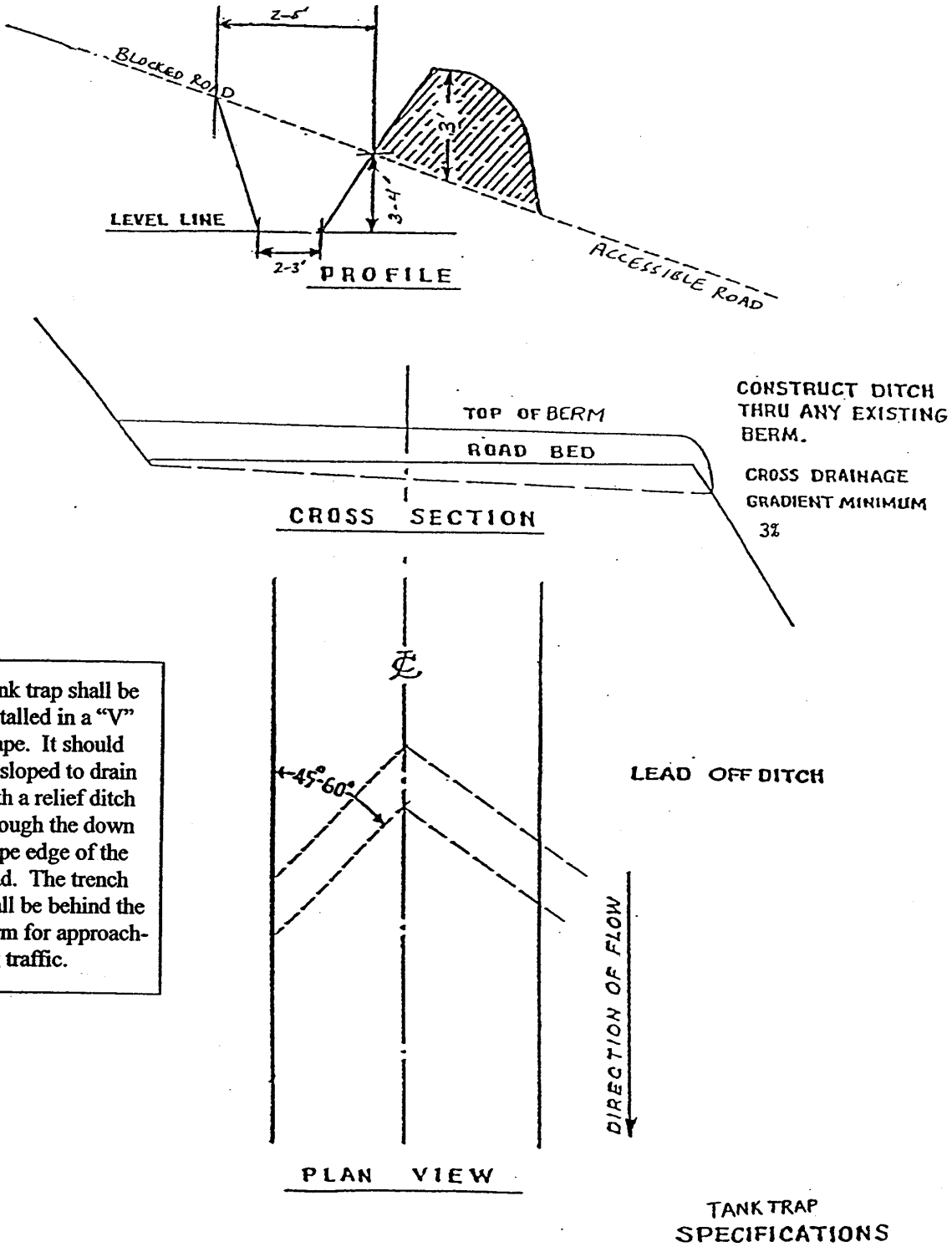
ROAD GRADE	DISTANCE
≤ 5%	600'
6-10%	300'
11-15%	150'
16-20% or greater	100'



WATERBAR SPECIFICATIONS
FOR CROSS DITCHING #298

EXHIBIT "F"

TANK TRAP SPECIFICATIONS



Tank trap shall be installed in a "V" shape. It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.

EXHIBIT "G"
OREGON DEPARTMENT OF FORESTRY

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1) ORIGINAL REGISTRATION ☐ Date _____
REVISION NUMBER _____ ☐ Date _____
CANCELLATION ☐ Date _____

(2) TO: _____
(Third Party Scaling Organization)

(3) FROM: West Oregon-01 Phone (541) 929-3266
(State Forestry District)
Address 24533 Alsea Hwy., Philomath, OR 97370

(4) PURCHASER: _____
Address _____

(5) **MINIMUM SCALING SPECIFICATIONS**			**CLASS**		
SPECIES	SCALING DIAMETER INCHES	*NET SCALE VOLUME	PER MBF	** SUM	SUB
Conifers	--	10	X		
Hardwoods	--	10	X		

* Apply minimum volume test to whole logs over 40' Westside; 20' Eastside.
** Sum (if indicated): see instructions and explain in Item (20).

(6) WESTSIDE SCALE: YES ☒ NO ☐
Actual taper all logs over 40' scaling length

(7) EASTSIDE SCALE: YES ☐ NO ☒
*Actual taper butt logs over 40' scaling length

(8) PENCIL BUCK: YES ☐ NO ☒
back to Minimum Scaling Diameter _____

(9) ADD-BACK VOLUME -- YES ☒ NO ☐
Deductions due to delay

(10) **APPROVED SCALING LOCATIONS**	**Species**	**Yard**	**Truck**

(11) NOTICE OF CANCELLATION OF BRAND:
Effective Date: _____

_____
State Forester's Representative

(12) SALE NAME Barkshot Thin
COUNTY Lincoln

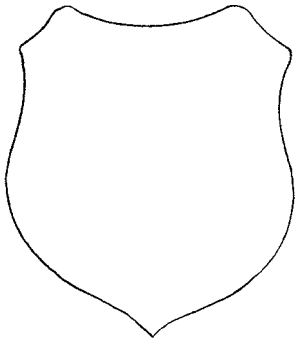
(13) STATE CONTRACT NUMBER 341-05-05

(14) SCALE: westside ☒ eastside ☐ cubic foot ☐

(15) STATE BRAND REGISTRATION NUMBER _____

(16) BUREAU BRAND CODE NUMBER _____

(17) STATE BRAND INFORMATION:
(COMPLETE)



(18) PAINT REQUIRED: YES ☒
COLOR Orange

(19) SPECIAL SCALES
PEELABLE CULL (all species)
UTILITY/PULP (all species)
NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE
OTHER: _____
OTHER: _____

(20) REMARKS: _____

Operator's Name (Optional inclusion by District): _____

(21) SIGNATURES:

_____
Purchaser or Authorized Representative Date

_____
State Forester Representative Date

Distribution: ORIGINAL: Salem / COPIES: TPSO (4), Purchaser, Operator, District, Mgmt. Unit

EXHIBIT “G”

INSTRUCTIONS FOR FORM 343-307 (rev. 5/01)

(1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (21). Complete date.

(2) Designate Third Party Scaling Organization (TPSO). Send 4 copies to TPSO, 1 to purchaser, 1 to Salem, and keep such copies as to district needs.

(3) State District office, address and phone.

(4) Enter Purchaser's business name and address as it appears on the contract.

(5) Minimum Scaling Specifications. Review Section 45, "Log Removal," of the contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (13) thru (17)), and is required to show existence on the sale. **PerM** (per mbf). **SUM** (lump sum material). **SUB** (submerchantable material. SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (PerM) entries. PerM, SUM, and SUB must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. PerM and SUB require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, PERM and/or SUB species will always be scaled.

(6) Westside -- actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Westside).

(7) Eastside -- actual taper/taper table segment scale. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Eastside). Items with * follow U.S. Forest Service Eastside rules.

(8) Pencil Buck. Check NO if a westside sale, optional for eastside sales.

(9) Add-Back Volume. Add-Back is normally checked YES. Scaler records deductions (sap rot, weather checks, etc.) caused by an abnormal delay in removal. Enter separately on scale ticket. TPSO provides State with summaries that include this as a net volume by species. Salvage sales and certain other circumstances may require that "NO" be checked.

(10) Show scaling locations only applicable to TPSO. Not necessary to list markets. If all species are scaled at same location, enter "ALL."

(11) When logging is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box at top of form, and send to TPSO.

(12) Enter sale name and county.

(13) Enter sale contract number.

(14) Check Westside or Eastside log scale. Cubic foot refers to Northwest Log Rules Cubic Foot Scale.

(15) Oregon Forest Products Brand Registry Number (optional).

(16) DO NOT USE -- TPSO will fill in when applicable.

(17) Show one brand only. Complete drawing. If more than one brand is assigned to the sale, (1) make separate form for each brand, and (2) on each form, explain and show other brand(s) under REMARKS, Item 19.

(18) Check YES and designate orange.

(19) Special Scales. These are the Special Scales that will be applied. If "Other" is indicated, please describe. Give comments in Item (19).

(20) Use this space to designate weight conversion factors, or any other explanations to clarify scaling requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.

(21) Require purchaser to sign and date completed form.