Oregon Department of Forestry
2600 State St Salem OR 97310
PART III: EXHIBITS

EXHIBIT B
TIMBER SALE OPERATIONS PLAN

(See page 2 for instructions)

Date Received by State: _____

(1) Contract Number: WO-341-2023-W00905-01

(2) Sale Name: Roger Miller Combo

(3) Contract Expiration Date: 12/31/2024

(4) Purchaser Name: _____

(5) State Brand Information (Complete)

(6) State Representatives:

Name	Circle One	Phone No.	Cell No.	Alt Phone
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			

(7) Purchaser Representatives:

Name	Circle One	Phone No.	Cell No.	Alt Phone
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			

(8) Name of Subcontractors and Start Dates:

Project No.	Subcontractor Name.	Start Date	Completion Date	Cell No.	Alt Phone

	Subcontractor Name.	Start Date	Cell No.	Alt Phone
FELLING				
YARDING				

(9) Comments:

_____

_____

_____

(10) Operations Map: Attach a copy of timber sale Exhibit A or other suitable map which plainly shows the items listed on the instruction sheet.

Oregon Department of Forestry
2600 State St Salem OR 97310
PART III: EXHIBITS

EXHIBIT B
INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN STATE

Operations shall be limited to the work shown in the plan until a revised plan or supplemental plan is submitted covering additional work. Compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. If STATE has prepared a required Forest Practices Act (FPA) "Written Plan" for operations, PURCHASER shall comply with all provisions of the Written Plan.

Explanation of Item No.(from Page 1)

(5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.

(6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.

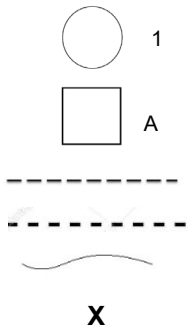
(7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.

(8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not Known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.

(9) Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.

(10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:

1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
2. Locations of spur roads planned for construction, other than required by the timber sale contract. Provide spur road specifications
3. Locations of proposed tractor yarding roads. Show if and how marked on the ground.
4. Locations of temporary stream crossings.
5. List the sequence of performing project work.
6. Location of rock sources - attach pit development plans.



Cable Landing, with numbers for sequence.

Tractor Landing with alphabetical sequence.

Approximate setting boundary.

Spur truck roads.

Tractor yarding roads.

Temporary stream crossings.

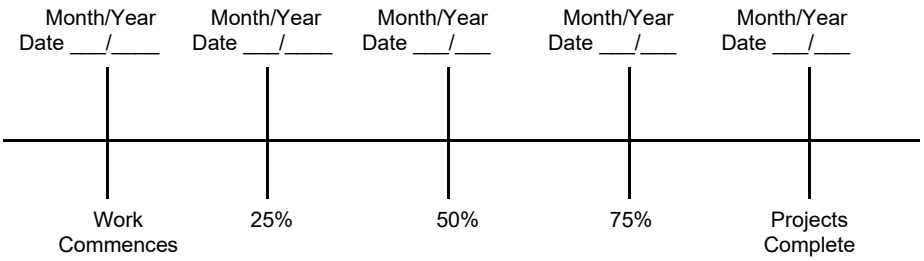
Oregon Department of Forestry
2600 State St Salem OR 97310
PART III: EXHIBITS

EXHIBIT B
OPERATIONS PLAN

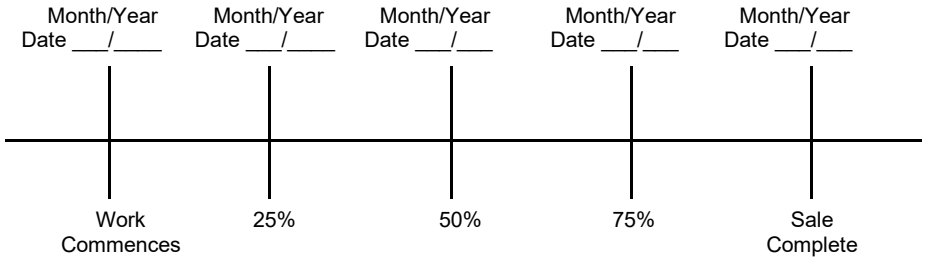
Completion Timeline

Indicate on the appropriate timeline below, the dates by which you plan to complete the work as required under this contract. The purpose of this section is to develop a plan that will ensure you complete the work as required, and meet the interim completion date(s) and contract expiration date. This plan is incorporated and made a part of the contract. When, in the opinion of STATE, operations are not commencing in a manner that meets the intent of this plan, you may be placed in violation of contract and your operations suspended until an amended plan is submitted and approved by STATE.

Projects



Harvest & Other Requirements



The Federal Endangered Species Act (ESA) prohibits a person from taking any federally listed threatened or endangered species. Taking under the federal ESA may include alteration of habitat. STATE's approval of this plan does not certify that PURCHASER's operation under the plan is lawful under the federal ESA. As provided in the timber sale contract, PURCHASER's must comply with all applicable state, federal, and local laws.

PURCHASER's compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act.

APPROVED; Date: _____

STATE OF OREGON - DEPARTMENT OF FORESTRY

_____

Title _____

SUBMITTED BY:
PURCHASER

_____

Title _____

Oregon Department of Forestry

EXHIBIT C - SAWMILL GRADE (WESTSIDE SCALE)
SCALING INSTRUCTIONS - LOCATION APPROVAL - BRAND INFORMATION
West Oregon - NWOA

(1) ORIGINAL REGISTRATION ☐ Date _____
REVISION NUMBER 000 ☐ Date _____
CANCELLATION ☐ Date _____

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

(3) FROM: West Oregon Phone (541) 929-3266
(State Forestry District)
Address: 24533 ALSEA HWY
PHILOMATH,OR 97370

(4) PURCHASER: _____
Mailing Address: _____

Phone Number: _____

(5) **MINIMUM SCALING SPECIFICATIONS**	
SPECIES	MINIMUM NET VOLUME
Conifers	10
Hardwoods	10

*Apply minimum volume test to whole logs over 40' Westside

(6) WESTSIDE SCALE:
Use Region 6 actual taper rule. Logs over 40'.

	YES	NO
(7) Weight Scale Sample	☐	☑

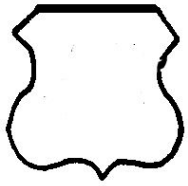
(8) **APPROVED SCALING LOCATIONS** (as shown on the ODF Approved Locations web-site)	**Species**	**Yard**	**Truck**	**Weight**

(9) **SALE NAME:** Roger Miller Combo
COUNTY: Lincoln

(10) **STATE CONTRACT NUMBER:**
WO-341-2023-W00905-01

(11) STATE BRAND REGISTRATION NUMBER:

(12) **STATE BRAND INFORMATION:**



(13) PAINT REQUIRED: YES ☑
COLOR: Orange

(14) **SPECIAL REQUESTS** (Check applicable)

PEELABLE CULL (all species).....	☑
NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE.....	☑
ADD-BACK VOLUME - Deductions due to delay...	☑

OTHER :

(15) **REMARKS:** "Mule Train" loads require a load ticket for each set of bunks.

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

(16) SIGNATURES:

_____
Purchaser or Authorized Representative Date

_____
State Forester Representative Date

_____
State Forester Representative PRINT NAME

Notify the District within one hour when branding or painting is inadequate for quick identification, the receipts are missing, not correctly or completely filled out, and/or when logs presented for scaling are impossible to scale accurately.
General Distribution: TPSO, Approved Scaling Locations and Purchaser.

Oregon Department of Forestry
EXHIBIT C - SAWMILL GRADE
INSTRUCTIONS FOR EXHIBIT C
West Oregon - NWOA

(1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers.

(2) Designate Third Party Scaling Organization (TPSO).

Columbia River Log Scaling & Grading Bureau
P.O.Box 7002, Eugene, OR 97401
Phone: (541) 342-6007 Fax: (541) 342-2631
Email: services@crls.com

Pacific Rim Log Scaling Bureau, Inc.
8288 28th Court North East, Lacey, WA 98516
Phone: (360) 528-8710 Fax: (360) 528-8718
Email: office@prlsb.com

Mountain Western Log Scaling & Grading Bureau
P.O.Box 580, Roseburg, OR 97470
Phone: (541) 673-5571 Fax: (541) 672-6381
Email: info@mwlsgb.com

Yamhill Log Scaling & Grading Bureau
P.O.Box 709, Forest Grove, OR 97116
Phone: (503) 359-4474 Fax: (503) 359-4476
Email: yamhilllog@frontier.com

Northwest Log Scalers Inc.
6137 NE 63rd St, Vancouver, WA, 98661
Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213
Email: info@nwlogscalers.com

(3) State District office, address and phone.

(4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.

(5) Minimum Scaling Specifications.

(6) Westside - Region 6 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) Weight Scale Sample - Check box if sale is to be a Weight Scale Sample. All specifies for handling, scaling and processing will be attached or explained in the Remarks section item (15).

(8) Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: https://apps.odf.oregon.gov/Divisions/management/asset_management/scalinglocation.asp Locations with scaling and processing directions specific to their location should be on a separate form. Species should be identified if not capable of receiving "all" species. Check appropriate box for either: yard, truck scale, or weight. Refer to the web site listed above for the locations approval status.

(9) Enter sale name and county.

(10) Enter sale Contract number.

(11) Enter Oregon's State Brand Registry Number (**REQUIRED**).

(12) Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section item (15).

(13) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.

(14) Special Requests. These are requests that will be applied to ODF timber sales. All boxes applicable to the timber sales designated in the Exhibit C form must be "marked". If "Other" is indicated, it must contain a description and any necessary comments.

(15) Use this space to designate any weight scale sample instructions or any other explanations to clarify scaling, processing and/or mailing requirements. If additional scaling locations are approved, revise original or current form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.

(16) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form. Signatures not required on revisions.

Oregon Department of Forestry
EXHIBIT C - PULP SORT
PROCESSING INSTRUCTIONS - LOCATION APPROVAL
BRAND INFORMATION

West Oregon, NWOA

(1) ORIGINAL REGISTRATION ☐ Date _____

REVISION NUMBER 000 ☐ Date _____

CANCELLATION ☐ Date _____

(2) TO: _____

(Approved Pulp Processing Facility)

(3) FROM: West Oregon Phone (541) 929-3266
(State Forestry District)

Address: 24533 ALSEA HWY

PHILOMATH,OR 97370

(4) PURCHASER: _____

(5) Scaling Bureau **(TPSO)** Processing Weight receipts:

Mailing Address: _____

, _____

Phone Number: _____

(6) **STATE Definition of Approved Pulp Sort:**

- Top portion of the tree (tops).
- All logs with a diameter (Big End) greater than 8 inches marked with blue paint.

(7) PULP FACILITY PROCESSING INSTRUCTIONS:

- Pulp loads shall be weighed in lieu of scaling.
- One Ton = 2000 lbs (Short Ton).
- Pulp loads shall have a yellow Log Load Receipt attached.
- Gross weight and truck tare weight for each load shall be machine printed on the weight receipt.
- Weigher shall sign the weight receipt.
- Weigher shall record the Log Load Receipt number on the weight receipt.
- Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the TPSO processing the Weight receipt.

(8) TPSO PROCESSING INSTRUCTIONS

- Submit data files daily (or each day of activity).
- Mail or deliver scale tickets weekly to ODF Headquarters in Salem.

(9) **SALE NAME:** Roger Miller Combo

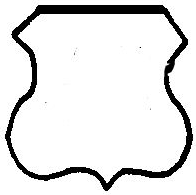
COUNTY: Lincoln

(10) **STATE CONTRACT NUMBER:**

WO-341-2023-W00905-01

(11) STATE BRAND REGISTRATION NUMBER: _____

(12) STATE BRAND INFORMATION:



(13) **REMARKS:** "Mule Train" loads require a load ticket for each set of bunks.

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

(14) SIGNATURES:

_____
Purchaser or Authorized Representative Date

_____
State Forester Representative Date

_____
State Forester Representative PRINT NAME

Notify the District within one hour when branding is inadequate for quick identification, the logs are marked with orange paint, the receipts are missing, not correctly or completely filled out, and/or logs do not meet the specifications of the STATE definition of Approved Pulp Sort.

General Distribution: TPSO, Approved Scaling Locations and Purchaser.

Oregon Department of Forestry
EXHIBIT C - PULP SORT
INSTRUCTIONS FOR EXHIBIT C

West Oregon, NWOA

(1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers.

(2) Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location
https://apps.odf.oregon.gov/Divisions/management/asset_management/scalinglocation.asp

(3) State District office, address and phone.

(4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.

(5) Third Party Scaling Organization that will be processing the weight tickets, mailing address, and phone number.

Columbia River Log Scaling & Grading Bureau
P.O.Box 7002, Eugene, OR 97401
Phone: (541) 342-6007 Fax: (541) 342-2631
Email: services@crls.com

Pacific Rim Log Scaling Bureau, Inc.
8288 28th Court North East, Lacey, WA 98516
Phone: (360) 528-8710 Fax: (360) 528-8718
Email: office@prlsb.com

Mountain Western Log Scaling & Grading Bureau
P.O.Box 580, Roseburg, OR 97470
Phone: (541) 673-5571 Fax: (541) 672-6381
Email: info@mwlsgb.com

Yamhill Log Scaling & Grading Bureau
P.O.Box 709, Forest Grove, OR 97116
Phone: (503) 359-4474 Fax: (503) 359-4476
Email: yamhilllog@frontier.com

Northwest Log Scalers Inc.
6137 NE 63rd St, Vancouver, WA, 98661
Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213
Email: info@nwlogscalers.com

(6) Big end of log is not to exceed 2 inches greater than the minimum removal specifications in the contract. Example: Minimum removal specifications 6 inches and 20 board feet, then the Big end of log not to exceed 8 inches. When conifer and hardwood removal specifications are different, use the smaller removal diameter to determine this specification.

(9) Enter sale name and county.

(10) Enter sale Contract number.

(11) Enter Oregon's State Brand Registry Number **(REQUIRED).**

(12) Show brand assigned to timber sale. One brand only, if more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (13).

(13) Use this section to list any special instructions or the reason for any revisions in section item (1).

(14) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form. Signatures not required on revisions.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	12 feet	A to B	0+00 to 3+00	Outsloped
14 feet	12 feet	C to D	0+00 to 15+00	Outsloped
14 feet	12 feet	E to F	0+00 to 3+80	Outsloped
14 feet	12 feet	15 to G	0+00 to 23+90	Outsloped
14 feet	12 feet	H to I	0+00 to 1+70	Outsloped
14 feet	12 feet	1 to 2	0+00 to 22+20	Crowned
14 feet	12 feet	3 to 4	0+00 to 68+60	Outsloped
14 feet	12 feet	4 to A	0+00 to 10+10	Outsloped
14 feet	12 feet	5 to 6	0+00 to 2+00	Crowned
14 feet	12 feet	7 to 8	0+00 to 2+10	Outsloped
14 feet	12 feet	9 to 10	0+00 to 195+70	Crowned
14 feet	12 feet	10 to 11	0+00 to 51+30	Crowned
14 feet	12 feet	12 to 13	0+00 to 18+10	Outsloped
14 feet	12 feet	14 to 15	0+00 to 44+60	Crowned
14 feet	12 feet	16 to 17	0+00 to 8+60	Crowned
14 feet	12 feet	17 to 18	0+00 to 9+00	Outsloped

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

CLEARING CLASSIFICATION.

New Construction - Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE.

Improvement – The "Road Brushing Specifications" in Exhibit E shall apply. Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE.

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 cut slopes shall be removed.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GRUBBING CLASSIFICATION.

New construction - from the top of the cut slope 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. Clearing and grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.

Clearing, grubbing, and associated disposal shall be completed prior to subgrade approval.

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-specified lines, grades, dimensions, and plans when provided.

Unless road 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.

Suitable excavated material shall be used 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.

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Sidecast shall not be placed where it will enter a stream course. Leaving sidecast below the road is only permissible if specifically allowed in "Full Bench and End Haul Requirements" in this Exhibit.

All fills shall be machine compacted according to the "Compaction and Processing Requirements" in this Exhibit.

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 specified in the plans or as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

Subgrade. Subgrade shall be crowned at 4 to 6 percent or outsloped at 3 to 4 percent as shown on the "Forest Road Specifications" table in this Exhibit.

Ditch. Construct V shaped ditch 3 feet wide and to a depth of 1 foot below subgrade.

Ditchouts. Construct ditchouts to drain away from subgrade at locations marked in the field or as directed by STATE.

TURNOUTS. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 50 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: Intervisible but not greater than 750 feet apart and as marked in the field.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SLOPES	Cut Slopes	Fill Slopes
Solid Rock	Vertical to ¼ :1	
Fractured Rock	½ :1	
Soil - side slopes 50% and over	¾ :1	1½:1
Soil - side slopes less than 50%	1 :1	1½:1

Top of cut slope shall be rounded.

LANDINGS. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 70 feet wide unless otherwise approved by STATE. Surface is to be crowned for drainage with general grade no more than 3 percent. Surface as shown in the "Road Surfacing" table in this Exhibit.

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

SEASONAL WINTERIZATION. All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance with the specifications in these Exhibits, and blocked from vehicular traffic prior to October 1, annually and as directed by STATE.

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

(1) Timber Removal. Removal all trees within posted Right-of-Way boundary as specified in Section 2210, "Designated Timber."

(2) Excavated Materials. Excavated materials shall be utilized for road construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with this Exhibit.

(3) Drainage Ditches. Construct ditchlines, including ditchouts, as directed by STATE. Cut slopes of ditchlines and ditchouts shall not exceed a 1:1 slope. Construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE.

(4) Equipment. All excavation and riprap placement shall be performed using a minimum 1½ cubic-yard, track-mounted excavator.

(5) Subgrade Preparation and Application of Surfacing Rock.

(a) Complete culvert installations, drainage ditches, ditchouts, fill construction, and other specified work prior to the application of surfacing rock.

(b) Subgrade shall be crowned at 4 to 6 percent or outsloped at 3 to 4 percent.

(c) Upon completion of above required work, apply, process, and compact surfacing rock in accordance with specifications in the "Compaction and Processing Requirements" in this Exhibit. Final road surface shall be crowned at 4 to 6 percent or outsloped at 3 to 4 percent.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS (Project No. 1)

A to B	0+00 to 3+00	Construct a 14' wide outsloped unsurfaced road with dozer. Construct Landing at Pt. B. Shape subgrade with road grader. Compact subgrade and Landing with vibratory roller.
C to D	0+00 to 15+00	Construct a 14' wide outsloped road with dozer. Construct two Landings (Station 3+80 and Point D). Shape subgrade with road grader. Compact subgrade and Landings with vibratory roller. Apply 170 cubic yards of jaw-run rock (8" base rock) from Station 0+00 to 3+80. Rock Landing at Station 3+80 with 40 CY jaw-run rock. Construct a turnaround at station 3+00 and rock with 20 CY of jaw-run rock. Widen junction at station 0+00 with 10 CY of jaw-run rock capped with 10 cubic yards of 1½"-0". Spread and compact junction rock with dozer or grader.
E to F	0+00 to 3+80	Construct a 14' wide outsloped unsurfaced road with dozer from Point E to Point F. Do not sidecast material on side slopes over 45 percent. Construct two Landings (Station 1+00 and at Point B). Shape subgrade with road grader. Apply 10 CY of 3"-0" rock for junction rock at Point E. Compact the road subgrade and Landings with vibratory roller.
15 to G	0+00 to 23+90	Construct a 14' wide outsloped unsurfaced road from Point 15 to Station 9+10 with dozer. Construct turnaround at Sta. 1+20. Reopen road from Station 9+10 to 23+90 with dozer. Construct a Landing at station 4+80 with excavator. Shape subgrade with road grader. Compact road and Landing with vibratory roller. Apply 10 cubic yards of 3"-0" rock for junction rock at Point 15.
H to I	0+00 to 1+70	Construct a 14' wide outsloped unsurfaced road with dozer. Construct a Landing at Point I with excavator. Shape subgrade with road grader. Compact road and Landing with vibratory roller.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

(1) Timber Removal. Remove all trees within posted Right-of-Way Boundary as specified in Section 2210, Designated Timber.

(2) Bank Slough Removal. Excavate all bank slough. Bank slough material shall not be pulled across existing surfacing rock. Excavated material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A.

(3) Culvert Replacement, Culvert Installation, Fill Reconstruction, and Fill Removal. Existing culvert geometry shall be modified to provide for optimum drainage and culvert performance. Modifications may include, skewing the culvert and/or installing the culvert at gradients equal to or exceeding the drainage (or ditch) gradient. Where fill reconstruction or culvert replacement is specified, fills shall be excavated to natural stream course levels. All woody debris encountered during fill excavation shall be removed. Fill reconstruction backfill shall consist of select materials and may be obtained from borrow pits, as directed by STATE. Unsuitable backfill material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A. STATE may require the use of crushed rock for culvert bedding and backfill according to the "Specific Road Construction Instructions." Backfill materials shall be thoroughly compacted in accordance with this Exhibit.

(4) Drainage Ditches. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. Re-establish or construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas. Install a culvert marker at each newly installed culvert.

(5) Sod Removal. Scrape off sod and grass from road surfacing where needed. Sod material shall be scattered in stable locations through openings in the timber outside of the cleared right-of-way.

(6) Equipment. All excavation and riprap placement shall be performed using a minimum 1½ cubic yard, track-mounted excavator.

(7) Waste areas. shall be uniformly sloped and compacted for drainage.

(8) Subgrade Preparation and Application of Surfacing Rock.

(a) Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, and other specified work prior to the application of new surfacing rock.

(b) Cut out all potholes and washboard sections from the existing surfacing.

(c) Apply required patching and leveling rock, as directed by STATE.

(d) Process (grade and mix) the existing surface and added base rock. Provide for a crown at 4 to 6 percent or outslope of 3 to 4 percent, and compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.

(9) Road Brushing. Conduct roadside brushing as specified in Exhibit E.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS (Project No. 2)

Segment	Station	Work Description
1 to 2	0+00 to 22+20	Shape surface with road grader and compact surface with vibratory roller. At Point 2 place 30 CY of rip-rap rock along edge of Mt. Baber Staging Area as directed by STATE.
3 to 4	0+00 to 68+60	Brush road as specified in Exhibit E. Remove sod and brushing debris from road with road grader. Excavate bank slough (approximately 40 cubic yards) with excavator from Station 6+30 to 10+60. End haul bank slough to waste area. Widen road into bank with excavator Station 30+60. Apply 150 CY of 1 ½"-0" rock for spot rock as directed by STATE. Apply 20 CY of 1 ½"-0" rock for spot rock at Station 30+60. Apply 10 CY of 3"-0" rock for turnout rock at Station 23+30, and 10 CY of 1 ½"-0" rock for Junction rock at Point 3. Shape surface with grader and compact surface with vibratory roller.
4 to A	0+00 to 10+10	Cut and remove timber within Right-of-Way boundary. Reopen road with dozer. Shape subgrade with road grader and compact with vibratory roller. Apply 10 CY of 3"-0" rock for Junction rock at Point 4.
5 to 6	0+00 to 2+00	Remove sod with road grader. Construct Landing and truck turnaround with excavator at Pt. 5. Widen approach to truck turnaround with excavator and place material in stable location. Construct Landing with excavator at Pt. 6. Apply 10 CY of 1 ½"-0" rock for junction rock at Pt. 5. Apply 20 CY of 3"-0" rock for spot rock and 60 CY of jaw-run rock for Landing rock for Pt. 5 and Pt. 6. Shape surface with grader and compact surface and Landings with vibratory roller.
7 to 8	0+00 to 2+10	Remove sod with road grader. Construct Landing with excavator at Pt. 8. Apply 20 CY of 3"-0" rock for spot rock and 40 CY of jaw-run rock for Landing rock. Shape surface with grader and compact surface and Landing with vibratory roller.
9 to 10	0+00 To 195+70	Brush road as specified in Exhibit E. Apply 50 CY of 1 ½"-0" rock for spot rock as directed by STATE. Shape surface with road grader and compact surface with vibratory roller (20 Stations as directed by STATE).

10 to 11	0+00 to 46+30	Brush road as specified in Exhibit E (Station 0+00 to 46+30). Remove sod and brushing debris with road grader. Excavate bank slough from Sta. 12+30 to 15+30 (approximately 40 CY). End haul to waste area. Apply 10 CY of 1 ½"-0" rock for junction rock at Pt. 10. Apply 20 CY of 1 ½"-0" rock for spot rock at Sta. 12+30 to 15+30 and 30 CY of 1 ½"-0 for spot rock as directed by STATE. Shape surface with road grader and compact with vibratory roller (20 stations as directed by STATE).
	46+30 to 51+30	Reopen road with dozer. Reopen Landing with excavator Pt. 11. Shape subgrade with road grader and compact subgrade and Landing with vibratory roller. Apply 10 CY of jaw-run rock for Junction rock at Sta. 46+30.
12 to 13	0+00 to 18+10	Reopen road and Landing with dozer/excavator. Shape subgrade with road grader and compact subgrade with vibratory roller. Apply 6" lift (600 CY) of jaw-run rock for base rock. Apply 2" lift (200 CY) of 3"-0" rock for surface rock. Apply 20 CY of jaw-run rock for Landing rock at Pt. 12.
	18+10	Apply 40 CY of jaw-run rock for Landing rock (Pt. 13). Shape surface with grader and compact surface and Landing with vibratory roller.
14 to 15	0+00 to 44+60	Brush road as specified in Exhibit E. Remove sod and brushing debris with road grader. Apply 30 CY of 1 ½"-0" rock for spot rock (as directed by STATE). Shape surface with grader and compact surface with vibratory roller (22 Stations as directed by STATE).
16 to 17	0+00 to 8+60	Apply 20 CY of 1 ½"-0" rock for spot rock as directed by STATE.
17 to 18	0+00 to 9+00	Reopen road with dozer. Reopen Landing with dozer at Pt.18. Construct turnaround at Sta. 6+80. Apply 10 CY of 3"-0" rock for Junction rock at Point 17.

EXHIBIT D
ROAD SURFACING

ROAD SEGMENT	C to D			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	C to D Volume (CY) per		0+00 to15+00 Number of			
Base Rock	jaw-run	0+00 to 3+80	8"	45	Station	3.8	Stations	170	230
Landing Rock	jaw-run	Sta. 3+80		40	Landing	1	Landings	40	54
Junction Rock	jaw-run	Pt. C		10	Junction	1	Junctions	10	14
Junction Rock	1 1/2"-0"	Pt. C		10	Junction	1	Junctions	10	14
Turnaround Rock	jaw-run	Sta. 3+00		20	Turnaround	1	Turnarounds	20	27
Total Rock for Road Segment		C to D						250	339

ROAD SEGMENT	E to F			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	E to F Volume (CY) per		0+00 to 3+80 Number of			
Junction Rock	3"-0"	Pt. E		10	Junction	1	Junctions	10	14
Total Rock for Road Segment		E to F						10	14

ROAD SEGMENT	15 to G			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	15 to G Volume (CY) per		0+00 to 23+90 Number of			
Junction Rock	3"-0"	Pt. 15		10	Junction	1	Junctions	10	14
Total Rock for Road Segment		15 to G						10	14

ROAD SEGMENT	1 to 2			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	1 to 2 Volume (CY) per		0+00 to 22+20 Number of			
Staging Area Barrier	rip-rap	Pt. 2		10	Load	3	Loads	30	41
Total Rock for Road Segment		1 to 2						30	41

ROAD SEGMENT	3 to 4			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	3 to 4 Volume (CY) per		0+00 to 68+60 Number of			
Junction Rock	1 1/2"-0"	Pt. 3		10	Junction	1	Junctions	10	14
Turnout Rock	3"-0"	23+30		10	Turnout	1	Turnouts	10	14
Spot Rock	1 1/2"-0"	0+00 to 68+60		10	Load	15	Loads	170	230
Total Rock for Road Segment		3 to 4						190	258

ROAD SEGMENT	4 to A			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	4 to A Volume (CY) per		0+00 to 10+10 Number of			
Junction Rock	3"-0"	Pt. 4		10	Junction	1	Junctions	10	14
Total Rock for Road Segment		4 to A						10	14

EXHIBIT D
ROAD SURFACING

ROAD SEGMENT	5 to 6			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	5 to 6		0+00 to 2+00			
				Volume (CY) per		Number of			
Landing Rock	jaw-run	Pt. 5 and Pt.6		30	Landing	2	Landings	60	81
Spot Rock	3"-0"			10	Load	2	Loads	20	27
Junction Rock	1 1/2"-0"	Pt. 5		10	Load	1	Loads	10	14
Total Rock for Road Segment		5 to 6						90	122

ROAD SEGMENT	7 to 8			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	7 to 8		0+00 to 2+10			
				Volume (CY) per		Number of			
Landing Rock	jaw-run	Pt. 8		40	Landing	1	Landings	40	54
Spot Rock	3"-0"			10	Load	2	Loads	20	27
Total Rock for Road Segment		7 to 8						60	81

ROAD SEGMENT	9 to 10			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	9 to 10		0+00 to 195+70			
				Volume (CY) per		Number of			
Spot Rock	1 1/2"-0"			10	Load	5	Loads	50	68
Total Rock for Road Segment		9 to 10						50	68

ROAD SEGMENT	10 to 11			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	10 to 11		0+00 to 51+30			
				Volume (CY) per		Number of			
Junction Rock	1 1/2"-0"	Pt. 10		10	Junction	1	Junctions	10	14
Junction Rock	jaw-run	Sta. 46+30		10	Junction	1	Junctions	10	14
Spot Rock	1 1/2"-0"	Sta. 0+00 to 46+30		10	Load	5	Loads	50	68
Total Rock for Road Segment		10 to 11						70	96

ROAD SEGMENT	12 to 13			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	12 to 13		0+00 to 18+10			
				Volume (CY) per		Number of			
Base Rock	jaw-run	0+00 to 18+10	6"	33	Station	18.1	Stations	600	810
Surface Rock	3"-0"	0+00 to 18+11	2"	11	Station	18.1	Stations	200	270
Landing Rock	jaw-run	Pt. 13		40	Landing	1	Landings	40	54
Landing Rock	jaw-run	Pt. 12		20	Landing	1	Landings	20	27
Total Rock for Road Segment		12 to 13						860	1161

EXHIBIT D
ROAD SURFACING

ROAD SEGMENT	14 to 15			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	14 to 15		0+00 to 44+60			
				Volume (CY) per		Number of			
Spot Rock	1 1/2"-0"			10	Load	3	Loads	30	41
Total Rock for Road Segment		14 to 15						30	41

ROAD SEGMENT	16 to 17			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	16 to 17		0+00 to 8+60			
				Volume (CY) per		Number of			
Spot Rock	1 1/2"-0"			10	Load	2	Loads	20	27
Total Rock for Road Segment		16 to 17						20	27

ROAD SEGMENT	17 to 18			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	17 to 18		0+00 to 9+00			
				Volume (CY) per		Number of			
Junction Rock	3"-0"	Pt. 17		10	Junction	1	Junctions	10	14
Total Rock for Road Segment		17 to 18						10	14

ROCK CONVERSION FACTORS

Size	1 1/2"-0"	3"-0"	Jaw-Run	Pit-Run
Tons/CY	1.35	1.35	1.35	1.35

(Conversion factors from Hardrock Quarry)

	Maintenance Rock Volumes in CY			
Rock Size	1 1/2"-0"	3"-0"	Jaw-Run	Pit-Run
Rock Totals	200	-	-	-

	Total Rock Volumes For Projects			
Rock Size	1 1/2"-0"	3"-0"	Jaw-Run	Rip-Rap
Rock Totals CY	360	290	1010	30
Rock Totals TONS	486	392	1364	41

Roads shall be uniformly graded, shaped and approved by STATE prior to rocking.

EXHIBIT D

ROCK ACCOUNTABILITY

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 sediment will not enter streams. Additional surfacing needed because of construction season or construction practice is not included in the preceding ROAD SURFACING table, and shall be furnished at PURCHASER expense.

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 D. 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. The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in the "Road Surfacing" table in Exhibit D. The average depth for each road segment shall be the specified depth or greater. If additional rock is required because of insufficient depth, the locations and volumes to be added shall be determined by STATE.

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.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

Moisture Content: Compaction must take place when moisture content of the materials being compacted is favorable for effective compaction as determined by STATE.

Compaction Pass: A pass is defined as traveling a road section forward and then backward over that same section.

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 the surface is smooth and hard and visible deformation ceases. At least 3 passes shall be made over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

Subgrade shall be crowned at 4 to 6 percent or outsloped or insloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	SUBGRADE COMPACTION OPTIONS
All road segments.	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. At least 3 passes shall be made over the entire width and length of each layer.

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	FILLS COMPACTION OPTIONS
All road segments.	1 and 2

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 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, compacted, and approved by STATE 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 until the surface is smooth and hard and visible deformation ceases. 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 or outsloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

ROAD SEGMENT	CRUSHED COMPACTION OPTIONS
All road segments requiring crushed rock.	1

Jaw-Run Rock. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of jaw-run rock shall be moistened or dried to uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 8 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. Compaction shall be accomplished by using one or more of the approved equipment options listed below:)

Rock shall be crowned at 4 to 6 percent or outsloped or insloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	JAW-RUN COMPACTION OPTIONS
All road segments requiring Jaw-Run	1 and 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) Dozer. A dozer/track-type tractor weighing a minimum of 45,000 pounds as directed by STATE shall be operated over the Jaw-run rock so that the entire surface comes in contact with the tracks.

EXHIBIT D

DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

For 1½"-0"	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	3/4" sieve	60-90%
	Passing	1/4" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
For 3"-0"	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	3/4" sieve	40-60%
	Passing	1/4" sieve	20-40%
	Passing	No. 10 sieve	5-20%
For Jaw-Run	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

For 24"-6" Riprap A minimum of 50 percent of the material shall measure a minimum of 24 inches, measured in one dimension. Material shall be clean, well graded, and free of 2"-0" fines.

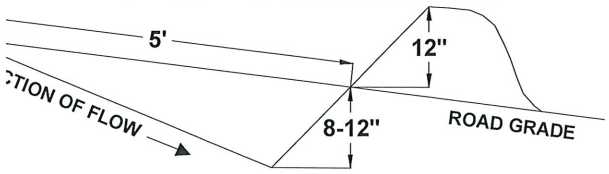
Control of gradation shall be by visual inspection by STATE.

EXHIBIT D

WATERBAR SPECIFICATIONS

PROFILE

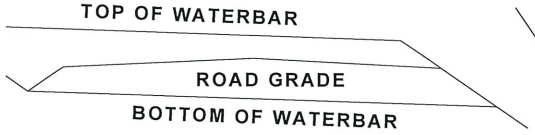
DITCHED AND OUTSLOPED



SPACING OF WATERBARS	
ROAD GRADE	DISTANCE
< 6 %	400'
6 - 10 %	200'
11 - 15 %	150'
> 15 %	100'

CROSS SECTION

DITCHED



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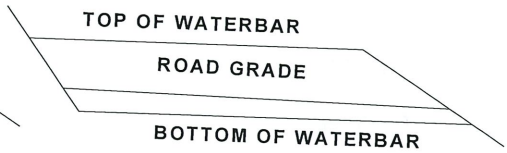
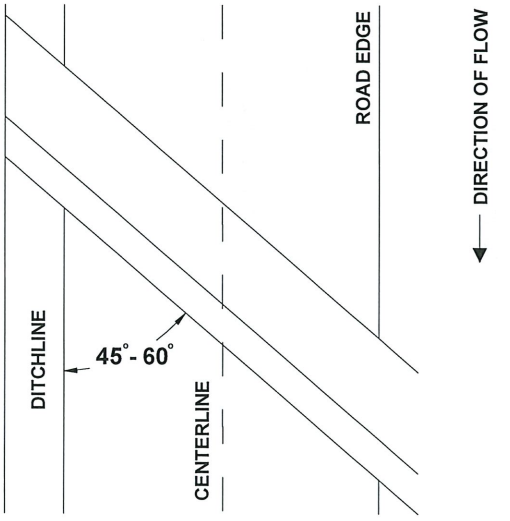


CONSTRUCT DITCHOUT THRU ANY EXISTING BERM.
CROSS DRAINAGE GRADIENT MINIMUM 3%.

PLAN VIEW

DITCHED



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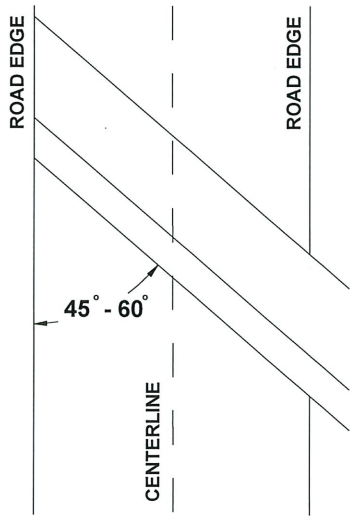
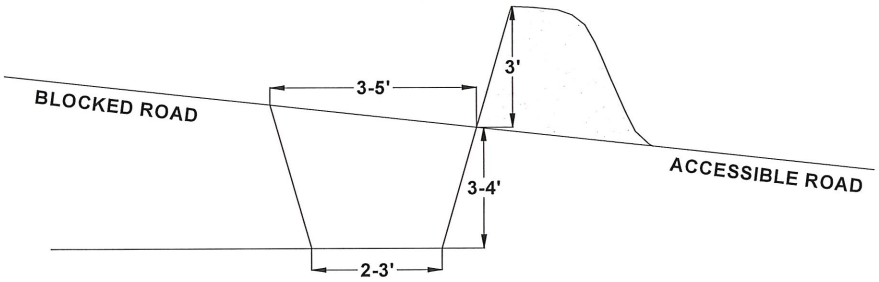


EXHIBIT D

TANK TRAP SPECIFICATIONS

PROFILE
DITCHED AND OUTSLOPED



CROSS SECTION

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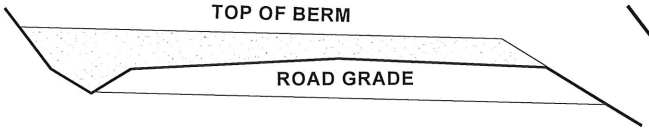
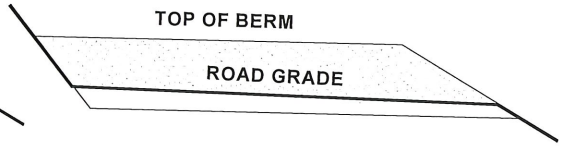


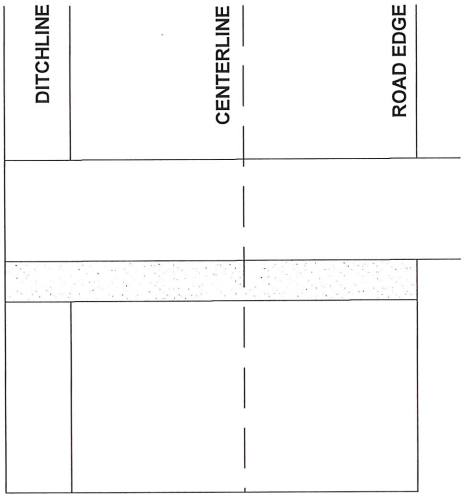
OUTSLOPED

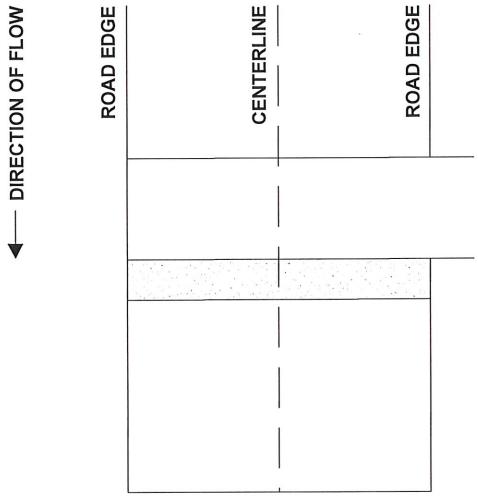


CONSTRUCT DITCHOUT THRU ANY EXISTING BERM.
CROSS DRAINAGE GRADIENT MINIMUM 3%

PLAN VIEW

DITCHED





OUTSLOPED

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 E

ROAD BRUSHING SPECIFICATIONS

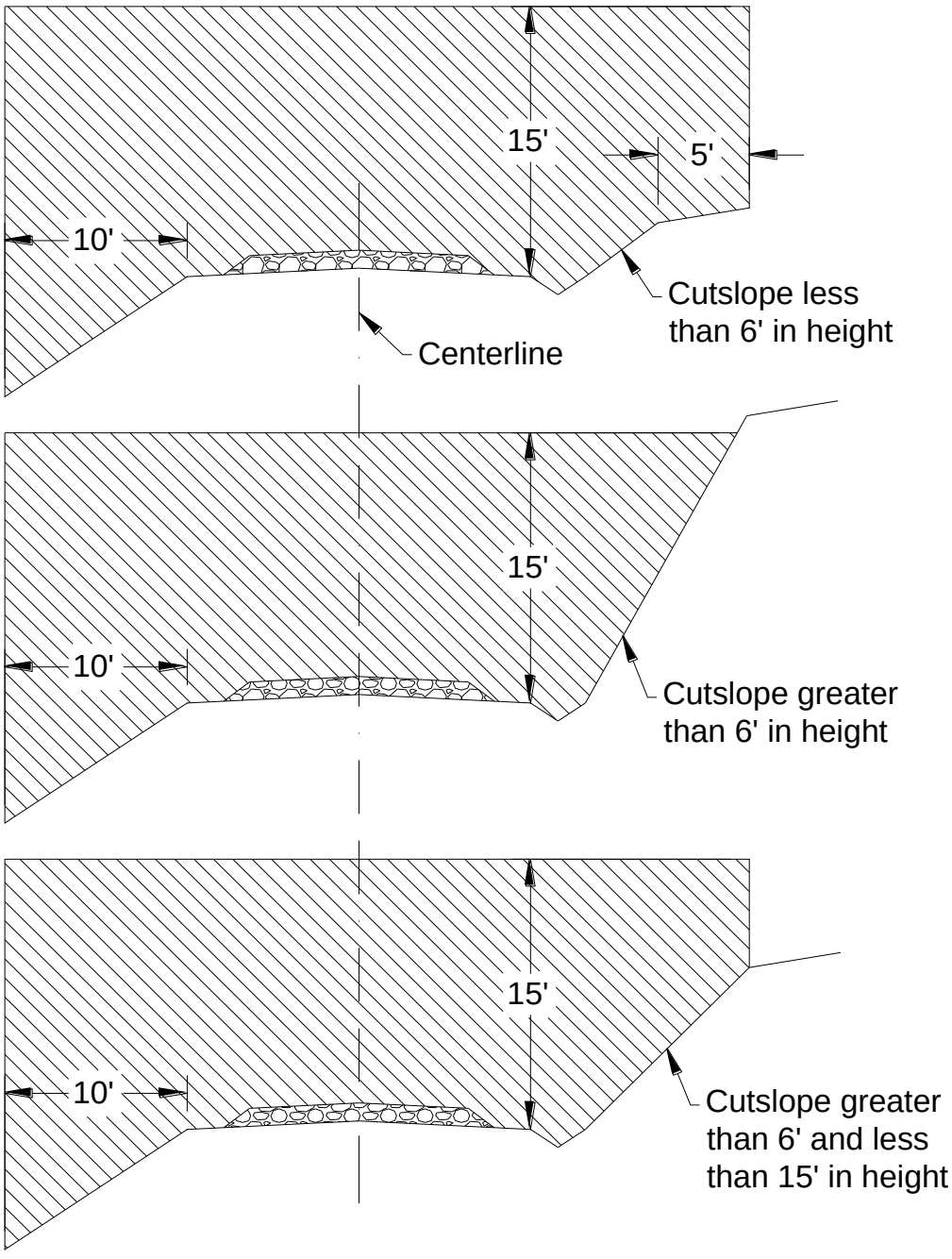


EXHIBIT E

ROAD BRUSHING SPECIFICATIONS

GENERAL ROAD BRUSHING INSTRUCTIONS:
Conduct roadside brushing as specified in this Exhibit, on road segments as listed in Section 2610 of the Timber Sale Contract.

CUTTING REQUIREMENTS:
The minimum height of brushing shall be for all situations 15 feet from the road surface, and the minimum width of brushing on the down slope side of the road shall be 10 feet horizontal distance. The minimum width of brushing on the cutslope side of the road shall be dictated by the height of the cutslope as indicated in the three drawings above. In situations where site distance is an issue brushing heights on the cutslope may vary from the above drawings, as directed by STATE. All turnouts and turnarounds encountered shall be brushed.

CLEAN-UP and DEBRIS REMOVAL:
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. All vegetation on the road surface shall be cut flush to the road surface. Stumps greater than three inches on the road shoulder and ditchline, shall be cut flush to the surface.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, water courses, culvert inlets/outlets, and sediment catch basins. Debris shall be mulched or scattered downslope from the road or placed in other stable locations. Large debris, 6 inches or larger in diameter, shall be mulched or cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

Trees larger than 6 inches in diameter at stump height, located within brushing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility.

Existing debris on the roadway, cutslope, ditchline, or catch basin shall be removed and treated. Debris shall be mulched or scattered downslope from the road or placed in other stable locations. Large non-merchantable debris, 6 inches or larger in diameter, shall be mulched or cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

Merchantable blown down trees encountered shall be bucked in lengths as directed by STATE, and placed in locations acceptable to STATE, or pushed out of the road prism.

When spur roads to be brushed end with a landing, the landing is to be brushed as directed by STATE.

CULVERT AND ROAD MARKER DAMAGES: Culvert and road markers damaged, or any portion of a marker damaged from PURCHASER activities shall be replaced.

FPA WRITTEN PLAN for Timber Harvest within a Type F stream RMA
Roger Miller Combo Timber Sale

Location: Portions of Section 13, T11S, R09W, W.M., Lincoln County, Oregon

Landowner: Oregon Department of Forestry
24533 Alsea Hwy
Philomath OR, 97370
(541) 929-3226

Protected Resources: Unnamed tributary of Little Elk Creek, small Type F stream.

Situation: Unit 4 of the Timber Sale Area extend down to the Type F RMA's. Thinning harvest operations will occur within 100 feet of the streams and yarding will occur over stream buffers. This is a commercial thinning sale, an average of 130 square feet of basal area will be left in the harvest areas after logging is completed.

Resource Protection Measures:
Along all of the above mentioned stream, as well as any other streams, the following practices are required under the timber sale contract, to protect the streams and stream buffers:

- No trees will be felled within stream buffers (RMA's), except as necessary in cable corridors.
- Trees that fall or slide into Type F buffers shall not be removed without prior approval from STATE.
- Trees adjacent to the stream buffers will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
- When cable logging is conducted nearby the RMA's, logging lines may cross, but will not be lowered into the RMA's during yarding, except during rigging. During rigging, the lines must be pulled out of the RMA's when changing corridors.
- Logs shall be fully suspended when yarding through all stream buffers.
- Cable corridors must be at least 100 feet apart where they cross the buffers.
- Ground equipment may not operate within 50 feet of any perennial stream.

I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act regarding the harvest of timber within a Type F RMA's. I agree to the protection measures listed on this plan:

_____ Date: _____
Purchaser/Operator Contract Representative

_____ Date: _____
State Representative

FPA WRITTEN PLAN for Tailholding within 300 feet of a Sensitive Wildlife Site

Roger Miller Combo Timber Sale

Location: Portions of Sections 13 & 24, T11S, R09W, W.M., Lincoln County, Oregon

Landowner: Oregon Department of Forestry
24533 Alsea Hwy
Philomath OR, 97370
(541) 929-3226

Protected Resources: The Salmon Creek Marbled Murrelet Management Area (MMMA).

Situation: Unit 3 borders the Non-habitat Buffer of the Salmon Creek MMMA on the western border of the unit. The use of Tailholds within occupied habitat may be allowed with STATE approval.

Resource Protection Practices:

1) The following shall not be allowed within seasonally restricted buffers from April 1 through August 5 and from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.

   a) Felling operations.
   b) Use of mechanized equipment, including chainsaws.

2) Use of Tailholds in the MMMA shown on Exhibit A will have the following restrictions:

   a) Consultation with STATE and approval of each Tailhold and cable line placement is required before Tailholding is allowed in these areas. A lead time of two weeks is required to schedule a field consultation between STATE, PURCHASER, the Operator, and the person responsible for Tailhold selection and cable rigging. Consultation will include identification of nesting platforms and cover trees.

   b) The following trees within the MMMA will not be selected for Tailhold anchors:
      i) Trees with potential nest platforms or immediately surrounding trees that provide cover to the potential nest platforms, as determined by STATE.
      ii) If feasible, the largest trees in the areas where the number of large trees is limited.
      iii) If feasible, minor conifer species not commonly found in the stand.

   c) Cables located within the MMMA will be located so that raising, lowering or use of the line will not damage trees considered to have suitable nesting platforms or associated cover trees.

   d) Lines that may damage, in the opinion of the ODF Area Biologist or authorized representative, potential or existing nesting platforms or associated cover trees must be removed and relocated.

   e) Any plans to Guyline or Tailhold in the MMMA must be addressed in the Operations Plan and at the Pre-Operations meeting.

I, the undersigned, submit this written plan in compliance with the requirements of the Forest Practices Act, regarding operations conducted within 300 feet of a sensitive wildlife site.

_____ Date:_____
Purchaser/Operator Contract Representative

_____ Date: _____
State Representative

FPA WRITTEN PLAN for Yarding Corridors through Type F RMA's

Roger Miller Combo Timber Sale

Location: Portions of Section 13, T11S, R09W, W.M., Lincoln County, Oregon

Landowner: Oregon Department of Forestry
24533 Alsea Hwy
Philomath OR, 97370
(541) 929-3266

Protected Resources: Two tributaries of Little Elk Creek, small Type F streams.

Situation: Units 1 and 4 of the Timber Sale Area extend down to the Type F RMA's. To achieve one-end suspension, cable corridors may need to tailhold on the other side of the Type F stream, however no logs will be yarded through the RMA's.

Resource Protection Practices:
Along all of the above mentioned streams, as well as any other streams, the following practices are required under the timber sale contract, to protect the streams and streamside areas:

- No trees will be felled within stream buffers (RMA's), except as necessary in cable corridors. Felled trees may not be removed from stream buffer.
- Trees that fall or slide into Type F RMA's shall not be removed without prior approval from STATE.
- Trees adjacent to the stream buffers (RMA's) will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
- When cable logging is conducted nearby the RMA's, logging lines may cross, but will not be lowered into the RMA's during yarding, except during rigging. During rigging the lines must be pulled out of the RMA's when changing corridors.
- Cable corridors must be at least 100 feet apart where they cross the RMA's.

I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act regarding the use of cable corridors across Type F RMA's. I agree to the protection measures listed on this plan:

_____ Date: _____
Purchaser/Operator Contract Representative

_____ Date: _____
State Representative