


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: _____

(5) State Brand Information (Complete)

(1) Contract Number: WO-341-2020-W00777-01

(2) Sale Name: Lost Steere

(3) Contract Expiration Date: 03/31/2022

(4) Purchaser Name: _____

(6) State Representatives:

<u>Name</u>	<u>Circle One</u>	<u>Phone No.</u>	<u>Cell No.</u>	<u>Alt Phone</u>
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			

(7) Purchaser Representatives:

<u>Name</u>	<u>Circle One</u>	<u>Phone No.</u>	<u>Cell No.</u>	<u>Alt Phone</u>
	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:

<u>Project No.</u>	<u>Subcontractor Name.</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Cell No.</u>	<u>Alt Phone</u>

Subcontractor Name.
Start Date
Cell No.
Alt Phone

(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

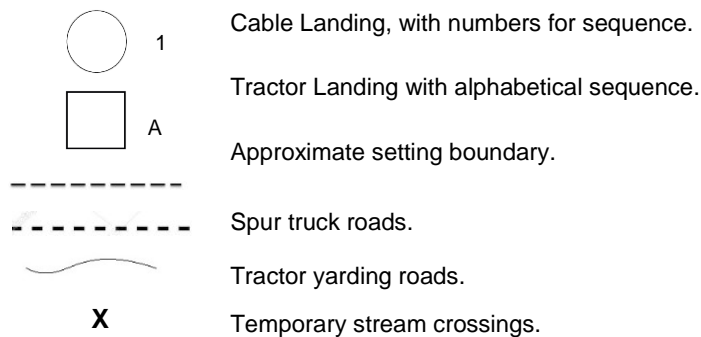
INSTRUCTION SHEET FOR OPERATIONS PLAN

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.




Oregon Department of Forestry

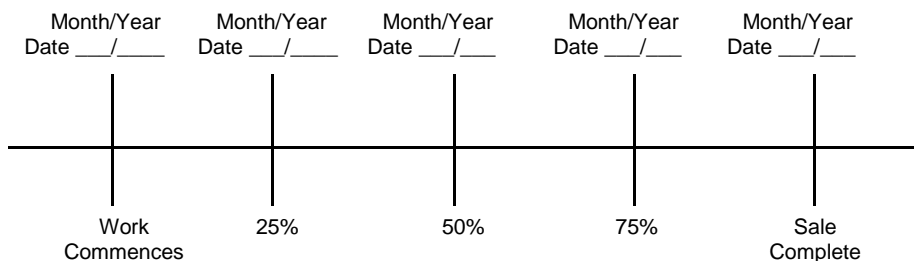
2600 State St Salem OR 97310

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: _____

 SUBMITTED BY:
PURCHASER

 STATE OF OREGON - DEPARTMENT OF
FORESTRY

Title _____

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'.

(7) Weight Scale Sample ☐ YES ☒ NO

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

(9) SALE NAME: Lost Steere
COUNTY: Lincoln, Polk

(10) STATE CONTRACT NUMBER:
WO-341-2020-W00777-01

(11) STATE BRAND REGISTRATION NUMBER:

(12) STATE BRAND INFORMATION:



(13) PAINT REQUIRED: YES ☒
COLOR: Orange

(14) SPECIAL REQUESTS (Check applicable)	
PEELABLE CULL (all species).....	<input checked="" type="checkbox"/>
NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE	<input checked="" type="checkbox"/>
ADD-BACK VOLUME - Deductions due to delay...	<input checked="" type="checkbox"/>
OTHER :	

(15) REMARKS

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

(16)

Purchaser or Authorized Representative Date

State Forester Representative Date

State Forester Representative PRINT NAME



Oregon Department of Forestry
EXHIBIT C - SAWMILL GRADE
INSTRUCTIONS FOR FORM 343-307a (rev. 11/11)
West Oregon - NWOA

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.

(2)

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

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

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

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

Pacific Log Scaling & Grading Bureau, Inc.
P.O.Box 23939, Portland, OR 97281
Phone: (503) 684-5599 Fax: (503) 639-4880
Email: PacLogScale@sol.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 specifics 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: http://www.odf.state.or.us/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 conversion factors, per load volumes, 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.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive \\WPODFFILL01\\Transfer\\ScalingInstructions or e-mailed directly to scaling@odf.state.or.us. Scaling Instructions for each brand should be scanned separately, for each approved TPSO.

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(s), Purchaser, Specific distribution instructions are outlined on the last page of this report: Instructions for Form



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 _____

(9) **SALE NAME:** Lost Steere
COUNTY: Lincoln, Polk
STATE CONTRACT NUMBER:
WO-341-2020-W00777-01

(2) _____
(Approved Pulp Processing Facility)

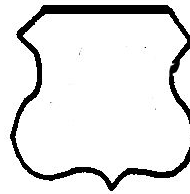
(11) **STATE BRAND REGISTRATION NUMBER:** _____

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

(12) **STATE BRAND INFORMATION:** _____

(4) **PURCHASER:** _____

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



Mailing Address: _____

(13) **REMARKS:**

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.

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

(7) **PULP FACILITY PROCESSING INSTRUCTIONS:**

(14) **SIGNATURES:**

- 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.

Purchaser or Authorized Representative _____ Date _____

(8) **TPSO PROCESSING INSTRUCTIONS**

State Forester Representative _____ Date _____

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

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.

Distribution: ORIGINAL: Salem/ COPIES: TPSO, Approved Pulp Processing Location, Purchaser, District, Mgmt. Unit



Oregon Department of Forestry
EXHIBIT C - PULP SORT
Instructions for Form 343-307b

West Oregon, NWOA

- (1) **Must Complete.** Check appropriate box. REVISION NUMBER requires comments in the Remarks Section(13). CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) **Must Complete.** Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp
- (3) **Must Complete.** State Forestry District and District Phone Number.
- (4) **Must Complete.** Purchaser's business name as it appears on the Contract.
- (5) **Must Complete.** 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@southernoregonlogscaling.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 Scalars Inc.
6137 NE 63rd St, Vancouver, WA, 98661
Phone: (360) 553-7212 ext. 4 Fax: (360) 553-7213
Email: info@nwlogscalars.com

Pacific Log Scaling & Grading Bureau, Inc.
P.O.Box 23939, Portland, OR 97281
Phone: (503) 684-5599 Fax: (503) 639-4880
Email: PacLogScale@sol.com

Must Complete. Big end log not to exceed _____ inches. 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.

- (7) **Must Complete.** Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (8) **Must Complete.** Enter sale Contract number.
- (9) **Must Complete.** Enter Oregon's State Brand Registry Number **(REQUIRED)**.
- (10) **Must Complete.** 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).
- (11) Use this section to list any special instructions or the reason for any revisions in section item(1).
- (12) **Must Complete.** Purchaser required to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive \\WPODFILL01\Transfer\ScalingInstructions or e-mailed directly to scaling@odf.state.or.us. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

Distribution(See specific instructions on pg.2): ORIGINAL: Salem/ COPIES: TPSO, Approved Pulp Processing Location, Purchaser, District, Mgmt. Unit

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	N/A	A to B	0+00 to 25+00	Outslope
16 feet	12 feet	1 to 2	0+00 to 97+70	Ditch
14 feet	12 feet	2 to 3	0+00 to 36+40	Ditch
14 feet	12 feet	4 to 5	0+00 to 7+00	Outslope
14 feet	12 feet	2 to A	0+00 to 17+20	Outslope

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.

Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cut slope and 5 feet out from the toe of the fill slope, or as directed by STATE. The "Road Brushing Specifications" in Exhibit E shall apply. 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 cut slopes 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 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. Scatter in stable locations through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required. In areas where end-haul is required, clearing and grubbing debris shall be fully contained and hauled to a designated waste area. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.

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.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

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 as marked in the field.

SLOPES

Solid Rock

Fractured Rock

Soil - side slopes 50% and over

Soil - side slopes less than 50%

Back Slopes

Vertical to $\frac{1}{4}$:1

$\frac{1}{2}$:1

$\frac{3}{4}$:1

1 :1

Fill Slopes

1½:1

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 outsloped or 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 Exhibit D, and blocked from vehicular traffic prior to October 1, annually and as directed by STATE.

EXHIBIT D
FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- (1) Timber Removal. Remove 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) 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 outsloped at 3 to 4 percent.
 - (c) Process and compact any 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.

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS: (Project No.1)

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
A to B	0+00 to 25+00	Construct new outsloped road from Point A to Point B. Construct Landings at stations 9+60, 21+70, and at Point B. Shape and compact road subgrade and Landings with grader and vibratory roller. Begin to apply 20 CY of 3"-0" rock at road junction.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) Timber Removal. Remove all trees within posted right-of-way boundary or marked by STATE with an orange "C" as specified in Section 2210, "Designated Timber."
- (2) Sod Removal. Scrape off sod and grass from road surfacing where needed. Do not leave berms along road edges and ditch lines.
- (3) Sidecast Pullback and Bank Slough Removal. Dig out all bank slough and sidecast material. Bank slough and sidecast material shall be hauled to a nearby waste area and uniformly sloped and compacted for drainage, as directed by STATE.
- (4) 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. All waste materials shall be hauled to nearby waste areas and shall be uniformly sloped and compacted for drainage. Fill reconstruction backfill shall consist of select materials and may be obtained from borrow pits, as directed by STATE. Backfill materials shall be hauled in where necessary and thoroughly compacted in accordance with this Exhibit. Crushed rock shall be used for backfilling excavation trenches less than 3 feet deep. STATE may require the use of crushed rock for culvert bedding. Removed culverts shall be hauled to an approved refuse site off of STATE land.
- (5) Fill Armor and Energy Dissipater Construction. Where rock is specified for fill armor, rock shall be machine placed and tamped at a 1½:1 slope, beginning at the toe of the fill. Where rock is used for an energy dissipater, rock shall be placed below the culvert outlet and embedded for a minimum of 3 feet, in accordance with Exhibit D.
- (6) Drainage Ditches. Restore or construct ditch lines, 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 and uniformly sloped and compacted for drainage, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels.
- (7) Waste areas shall be uniformly sloped and compacted for drainage.
- (8) Subgrade Preparation and Application of Surfacing Rock.
 - (a) Complete tree and stump removal within posted right-of-ways, sod removal, drainage ditches, ditchouts, and other specified work prior to the application of new surfacing rock.
 - (b) Cut out all potholes and/or 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 of 4 to 6 percent or outslope of 3 to 4 percent, and compact in accordance with the "Compaction and Processing Requirements" in this Exhibit.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS: (Project No.2)

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
1 to 2	0+00 to 97+70	Remove sod and debris with grader from the new bridge to Point 2. Clean out culvert inlets and outlets (5) and re-establish ditch lines where needed. Scatter waste material in stable locations away from streams. Clear sod and debris from (6) turnouts (2 located on Lost Steere Road), and at Stations 68+60, 73+60, 89+60, and 92+80. Apply 10 CY of 3"-0" rock to each turnout (60 CY of 3"-0" total). Apply 330 CY of 1½"-0" spot rock from Point 1 to Point 2 (1.7 miles). Reopen Landings at Stations 71+90 and 79+10. Create Yarder pad above Landing within R/W tags at Station 71+90 using excavator. Haul waste material (~30 CY) to waste area (W), and compact waste material. Apply 20 CY of jaw-run rock to each Landing (40 CY total). Process and compact road and Landings with grader and vibratory roller from Point 1 to Point 2.
	76+70	Repair smashed culvert inlet.
	90+40 to 92+80	Remove trees within posted right-of-way tags. Pullback sidecast material from Station 90+70 to Station 91+30, and realign road from Station 90+50 to Station 92+00. Remove bank slough and slide material on roadway and move centerline of road 4 feet into cutbank. Establish a 24 foot subgrade with curve widening. Excavate cutslope back to a ¾:1 backslope. Haul waste material (~140 CY) to waste area (W) and compact material, shown on Exhibit A.
	91+60	Remove existing culvert and dispose of from STATE property. Reconstruct fill. Install an 18"x 40' CPP culvert. Utilize 20 cubic yards of 1½" -0" crushed rock for bedding and backfill. Armor fill with 30 cubic yards of pit-run rock. Construct an energy dissipater utilizing 7 cubic yards of 24"-6" rip-rap rock, according to the specifications in this Exhibit. Apply 60 CY of 3"-0" for surface rock replacement between Stations 90+50 and 92+00.
2 to 3	0+00 to 36+40	Remove sod with grader and excavator. Reopen roadside Landings at Stations 11+40 and 19+40. Apply 20 CY of jaw-run rock to each Landing (40 CY of jaw run rock). Apply 100 CY of 3"-0" spot rock from Point 2 to Point 3. Process and compact road and Landings with grader and vibratory roller from Point 2 to Point 3.
4 to 5	0+00 to 7+00	Re-open unsurfaced road with dozer. Shape and compact outsloped subgrade. Reopen Landings at Stations 0+60, 3+60, and Point 5. Apply a 6 inch lift of jaw-run rock (230 CY) from Point 4 to Point 5. Rock each Landing with 30 CY of jaw run rock (90CY). Apply 20 CY of 3"-0" rock at the junction at Point 4. Process and compact surfaced road and Landings with grader and vibratory roller from Point 4 to Point 5.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS: (Project No.2)

2 to A	0+00 to 17+20	<p>Create Waste Area near Point A.</p> <p>Remove sod and debris with grader and excavator.</p> <p>Remove bank slough (Sta. 5+40) with grader and excavator. Haul bank slough (~30 CY) to waste area near Point A and compact waste material.</p> <p>Remove and dispose of existing culvert from STATE property at Station 2+60. Install an 18"x 30' CPP culvert. Utilize 20 cubic yards of 1½" -0" crushed rock for bedding and backfill. Armor fill with 30 cubic yards of pit-run rock. Construct an energy dissipater utilizing 7 cubic yards of 24"-6" rip rap, according to the specifications in this Exhibit. Apply 30 CY of 3"-0" for surface rock replacement over new fill.</p> <p>Apply 80 CY of 3"-0" spot rock from Point 2 to Point A. Rock turnout at Station 10+20 with 10 CY of 3"-0" rock. Process and compact surfaced road with grader and vibratory roller from Point 2 to Point A.</p>
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EXHIBIT D

ROAD SURFACING

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	A to B		0+00 to 0+50			
				Volume (CY) per		Number of			
Junction Rock	3-0"	0+00 to 0+50		40	Station	0.5	Stations	20	27
Total Rock for Road Segment		A to B						20	27

ROAD SEGMENT				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		0+00 to 97+70			
				Volume (CY) per		Number of			
Spot rock	1 ½"-0"	0+00 to 97+70		200	Mile	1.7	Miles	330	446
Landing Rock	Jaw-Run	71+90, 79+10		20	Landing	2	Landings	40	54
Turnouts (6)	3"-0"	As marked		10	Turnout	6	Turnouts	60	81
Culvert bedding	1 ½"-0"	91+60						20	27
Fill Armor	Pit-Run	91+60						30	41
Surface rock replacement	3"-0"	90+50 to 92+00	8					60	81
Energy dissipater	Rip-Rap	91+60						7	9
Total Rock for Road Segment		1 to 2						547	738

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	2 to 3		0+00 to 36+40			
				Volume (CY) per		Number of			
Spot rock	3-0"	0+00 to 36+40		140	Mile	0.7	Miles	100	135
Landing rock	Jaw-Run	11+40, 19+40		20	Landing	2	Landings	40	54
Total Rock for Road Segment		2 to 3						140	189

EXHIBIT D
ROAD SURFACING

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	4 to 5		0+00 7+00			
				Volume (CY) per		Number of			
Base Rock	Jaw-Run	0+00 to 7+00	6"	33	Station	7	Stations	230	311
Junction rock	3-0"	Pt. 4		20	Junction	1	Junctions	20	27
Landing rock	Jaw-Run	0+60, 3+60, Pt. 5		30	Landing	3	Landings	90	122
Total Rock for Road Segment		4 to 5						340	459

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	2 to A		0+00 to 17+20			
				Volume (CY) per		Number of			
Spot rock	3-0"	0+00 to 17+20		240	Mile	.33	Miles	80	108
Turnouts (1)	3-0"	10+20		10	Turnout	1	Turnouts	10	14
Culvert bedding	1 ½"-0"	2+60						20	27
Fill Armor	Pit Run	2+60						30	41
Surface rock replacement	3-0"	2+60	10					30	41
Energy dissipater	Rip-Rap	2+60						7	9
Total Rock for Road Segment		2 to A						177	239

EXHIBIT D
ROAD SURFACING

ROCK CONVERSION FACTORS

Size	3/4-0"	1 1/2-0"	3-0"	4-0"	Jaw-run	pit run
Tons/CY	1.35	1.35	1.35	1.35	1.35	1.35

(Conversion factors from Rickard Rock Quarry)

	TOTAL ROCK VOLUMES for Project No. 2						
Rock Size	3/4 - 0"	1 1/2-0"	3-0"	4-0"	Jaw-run	pit run	other
Rock Totals CY	-	370	380	-	400	60	14
Rock Totals TONS	-	500	513	-	540	81	19

	Maintenance Rock Volumes in CY						
Rock Size	3/4 - 0"	1 1/2-0"	3-0"	4-0"	Jaw-run	pit run	other
Rock Totals CY	-	150	50	-	-	-	-
Rock Totals TONS	-	203	68	-	-	-	-

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 at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
Points A to B and 4 to 5	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	COMPACTION EQUIPMENT OPTIONS
Points A to B, 1 to 2, and 2 to A	1 and 2

EXHIBIT D

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 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 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 processed and compacted during the same 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.

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

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.

EXHIBIT D

DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

<u>For 1½"-0"</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	60-90%
	Passing	¼" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
<u>For 3"-0"</u>	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	¾" sieve	40-60%
	Passing	¼" sieve	20-40%
	Passing	No. 10 sieve	5-20%
<u>For Jaw-Run</u>	Passing	6" sieve	100%
	Passing	3" sieve	45-65%
<u>For 6"-0" Pit-Run</u>	Passing	10" sieve	100%
	Passing	6" sieve	60-85%
	Passing	3" sieve	30-50%
	Passing	¼" sieve	0-20%

For 24"-12" Rip Rap Rock

Control of gradation shall be by visual inspection by STATE.

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 corrugated double-walled polyethylene.

Polyethylene culverts shall be double-walled and meet the requirements of AASHTO M-294-06, Type S, **or** ASTM F2648 Culvert.

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

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 specified in special instructions.

The STATE Representative shall determine final culvert locations and stake the locations in the field prior to installation.

Cross drain culverts on road grades in excess of 3 percent shall be skewed at least 30 degrees from perpendicular to the road centerline, except that cross drain culverts at the low point of dips in roads shall not be skewed. Cross drains shall be skewed to fit the required culvert length to the road prism.

Cross drain culverts shall be installed at a slope steeper than the incoming ditch grade, but not less than 3 percent or greater than 10 percent.

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 culvert. The culvert trench shall be excavated 3 culvert diameters wide to permit compaction and working on each side of the culvert. Tamping shall be done in 6-inch lifts, 1 culvert diameter each side of the culvert. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

A bedding of 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 culvert for all culverts.

Backfill shall consist of, crushed rock, rock crusher reject, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the culvert.

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

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 culverts 18" to 36" and 18" for culverts 42" to 96" [add 6" for roads which will not be rocked]. Minimum vertical cover for other 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 an energy dissipater, or other approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Compaction by tamping utilizing a Vibratory Hand-Operated or Backhoe-Mounted Tamper is required for all culverts.

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

CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	GAUGE	ROAD SEGMENT POINT TO POINT	STATION
1	18	40	CPP		1 to 2	91+60
2	18	30	CPP		2 to A	2+60

CPP = Polyethylene

EXHIBIT D

TYPICAL CROSS SECTION VIEW OF SIDECAST PULLBACK AND ROAD REALIGNMENT

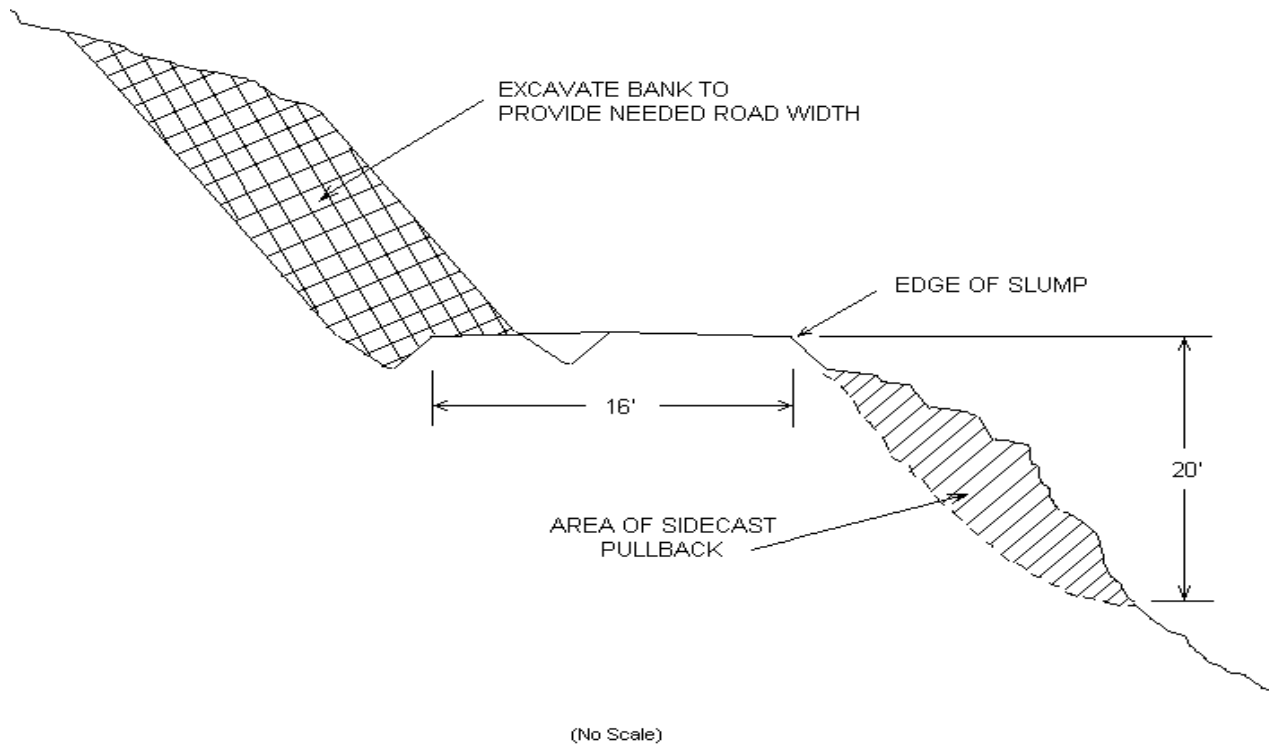
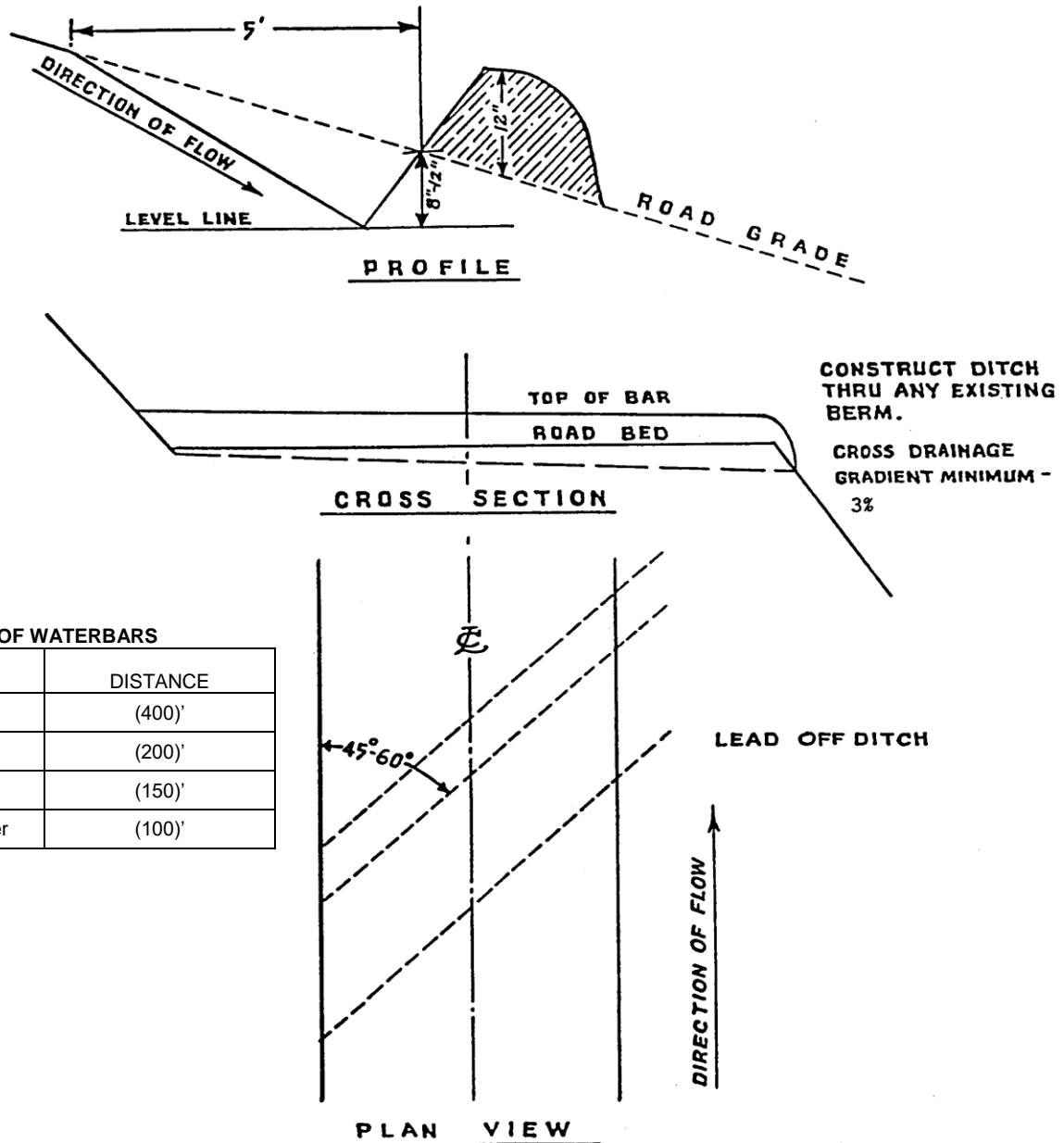


EXHIBIT D

WATERBAR SPECIFICATIONS



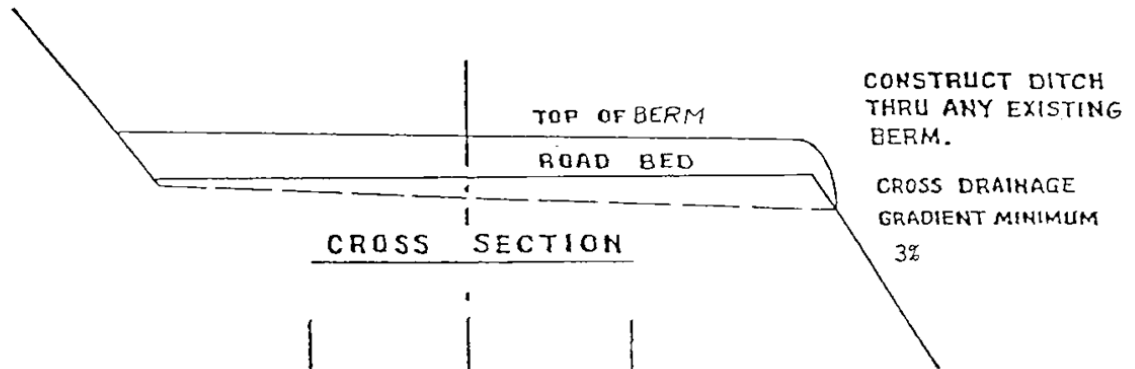
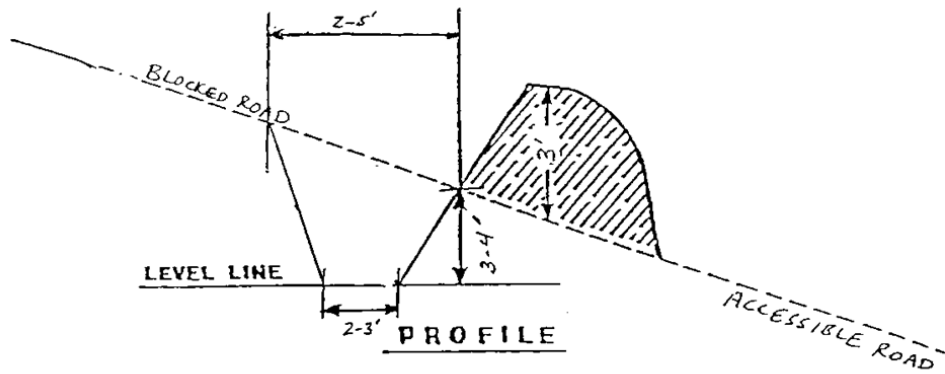
SPACING OF WATERBARS

ROAD GRADE	DISTANCE
≤ 5%	(400)'
6-10%	(200)'
11-15%	(150)'
16-20% or greater	(100)'

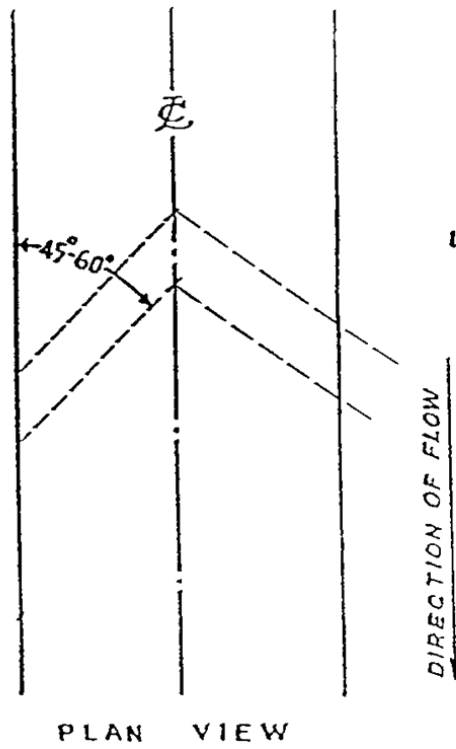
WATERBAR SPECIFICATIONS
FOR CROSS DITCHING #298

EXHIBIT D

TANK TRAP SPECIFICATIONS

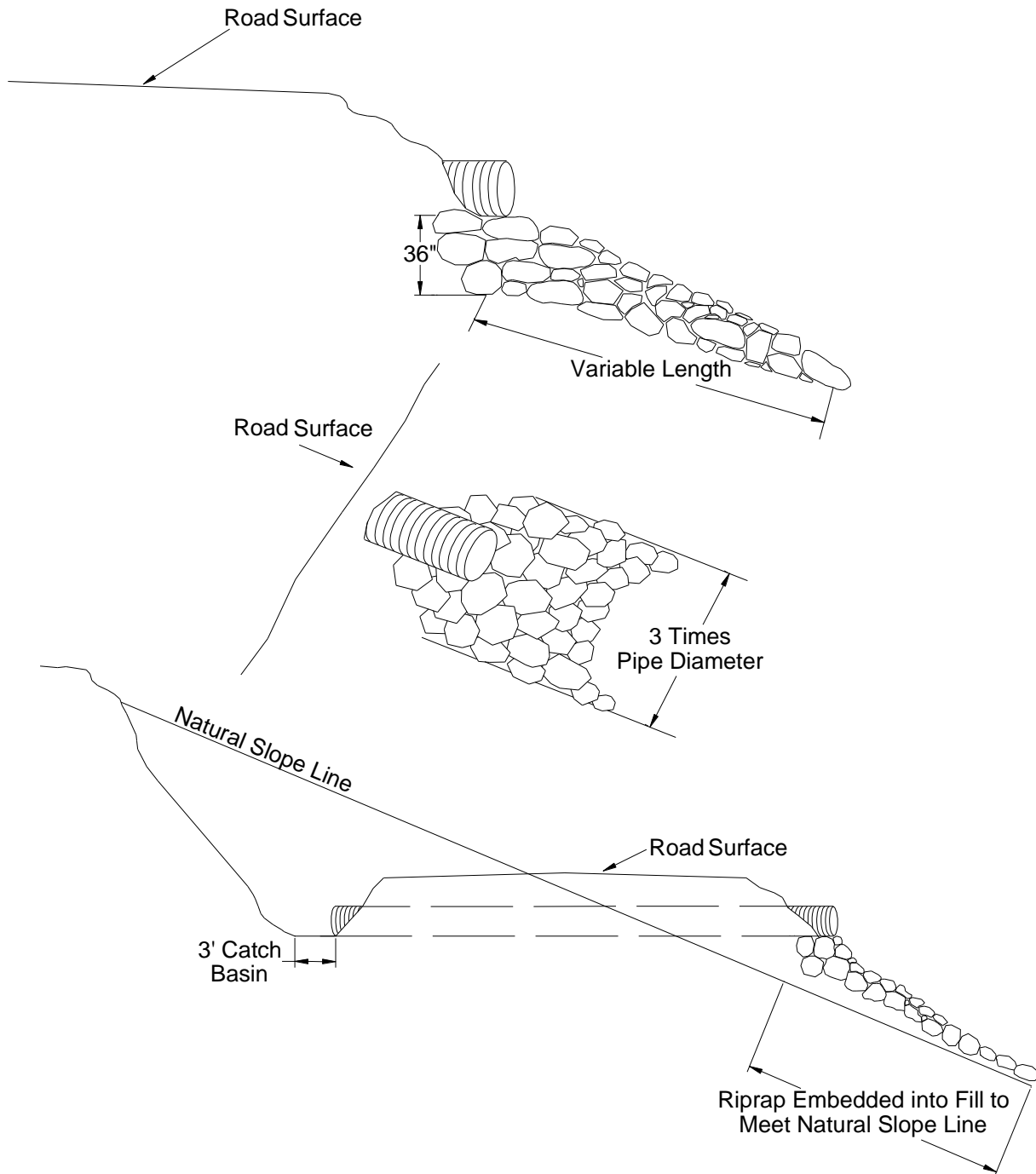


Tank trap shall be installed in a "V" shape. It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.



TANK TRAP
SPECIFICATIONS

EXHIBIT D
TYPICAL EMBEDDED ENERGY DISSIPATER



Dissipater shall be installed prior to the installation of the culvert, unless approved by STATE.

Forest Practices Alternative Riparian Vegetation Treatment Plan
Lost Steere Timber Sale, Area 2, West Oregon District AOP 2019

Background

This plan is for Area 2 of the Lost Steere timber sale from the West Oregon District AOP 2019. A portion of the eastern sale boundary is posted along a small unnamed perennial type stream approximately 0.3 miles upstream of the confluence with Little Steer Creek. According to the most recent information obtained from the Oregon Department of Wildlife, Coho or steelhead, which occur in Little Steer Creek, are not present in this small tributary. However, Little Steer Creek at the junction is classified as a medium, Type F stream and is within the Siletz – Yaquina watershed (HUC 8: 17100204).

The main goal of the FMP is to manage for mature forest conditions in Riparian Management Areas (RMA's). Mature forest conditions will provide shade and large wood inputs for the streams. In the event the community is dominated by hardwoods, then the most desired pathway will depend on the site conditions. On productive sites, the hardwoods will eventually be replaced by mixed conifers. On less productive sites, such as in poorly drained areas, alder may persist indefinitely or be replaced with a shrub-dominated community.

This alternative management treatment is planned because the streamside currently is dominated by scattered hardwoods and large brush components, primarily salmonberry and vine maple. The streamside will not achieve mature conifer forest conditions within a "timely manner". The long-term supply of woody debris to the stream is negligible due to the lack of conifers. The intent of this plan is to actively manage this RMA to obtain a mixed conifer forest more expediently than projected for the current RMA. The conversion areas in the RMA currently consist of natural 56-58 year old hardwoods, primarily red alder and bigleaf maple, with larger pockets of shrubbery. The presence of old-growth conifer stumps within the inner RMA strongly indicate that this site would support conifer. Without intervention, the current hardwood stand would eventually reach its natural age limit of 70-80 years old, would start to decay and likely leave larger brush pockets throughout the inner RMA. It would take decades for the site to naturally establish dominate conifers.

Alternative Vegetation Treatment Plan

The conditions in the Lost Steere RMA are well-suited for an alternative management approach. The proposed prescription is more likely to enhance the riparian community to achieve the aquatic and riparian habitat FMP objectives for the following reasons.

1. Management will achieve mature forest conditions sooner than if the stand was not managed.
2. Large wood recruitment potential for the stream will improve drastically.
3. The long-term beneficial effects to the temperature and quality of water are greater than the short-term detriments.

This alternate management prescription for the Lost Steere RMA will divide the 1,100 foot RMA segment into conversion and retention blocks. With retention blocks maintaining FMP vegetation retention prescription stream buffers. Conversion blocks shall be given the same prescription as

the overall Sale Area. In this plan, conversion blocks established in the prescription area are 200 feet and 350 feet, respectively. Over 200 feet separates the conversion blocks along the RMA. In the conversion blocks, Timber Sale Boundary flagging and tags have been posted at 20-30 feet horizontal distance from high water level.

This plan meets the requirements to comply with the Forest Practices Act Alternative Vegetation Retention Prescription 2 (Hardwood Dominated Sites) (629-640-0300-4, FPA, January 2010). This prescription calls for alternating conversion blocks (length ≤ 500 ft long) with retention blocks (length ≥ 200 ft) within the Riparian Management Area (RMA). All trees ≤ 10 ft and all trees leaning toward the stream ≤ 20 ft from the high water level will be retained in the conversion blocks. All conifers and hardwoods will be retained within the retention blocks to ODF FMP specifications.

After converting the blocks, the site will be treated with a ground-based herbicide site preparation treatment to reduce vegetative competition. The FPA allows ground-based herbicide application to within 10 feet of a Type F stream, so active site preparation will aid in successful reforestation of the conversion blocks. Treatment applications will end at the Timber Sale Boundary tags and flagging, which are 20-30 feet horizontal distance from high water level. The conversion blocks will then be planted to 400 trees per acre of mixed conifer species.

Multi-disciplinary Approach

This project has utilized a multi-disciplinary approach with input from the aquatic and riparian specialist, the reforestation specialist, and the forester.

Monitoring


Sedimentation into the stream will be minimal due to cable harvesting systems being used in this section of the unit. The understory vegetation in the conversion blocks should largely remain intact during operations to control sediments from activities. The area will be planted with conifer, and monitored closely to ensure successful establishment. Seedling survival and health shall be monitored using the 1-2-6 year stocking survey method and restocked as necessary. Manual release, and herbicide release of competing vegetation using the Mill Creek inmate crew will also be utilized throughout the first 9 years to promote conifer survivability. Operations and effects from the prescription shall be monitored by operations forester and reforestation forester to achieve the plans optimal outcome.

Approval

The final alternative vegetation treatment plan will be approved, signed and dated by the District Forester, attached to the sale in WALT, and placed in the sale folder.



District Forester



Date

FPA Written Plan for Timber Harvest

Lost Steere Timber Sale

Portions of Section 10, T10S, R08W, W.M., Lincoln & Polk Counties, Oregon.

Protected Resources: Two small unnamed Type F streams, which are tributaries to Little Steere Creek.

Situation: Approximately 1,500 feet of a small, Type F stream flows through Area 1. Approximately 1,000 feet of a small, Type F stream flows along the Eastern boundary of Area 2. (Harvest operations will not occur within 100 feet of the stream in Area 1, but will occur within 100 feet of the stream in Area 2 (See Alternate Riparian Vegetation Treatment Plan). Skylines may pass over both of these streams and/or yarding operations may occur through the stream buffers.

Resource Protection Measures:

1. An average 100 foot horizontal distance no-harvest stream buffer has been established along all portions of the Type F stream in Area 1.
2. Trees adjacent to the stream buffer shall be felled so that they do not enter into the buffer.
3. Skyline cables will not be lowered into streamside vegetation during the yarding cycle.
4. Skyline corridors passing over the stream will be spaced a minimum of 100 feet apart.
5. Full suspension is required when yarding over the stream buffers.
6. Where the logging system requires the skyline to pass over the stream, cables will be pulled out of the streamside vegetation prior to rigging the next yarding road.

I, the undersigned, submit this written plan in compliance with the requirements of the Forest Practices Act, regarding operations conducted within 100 feet of Type F streams.

PURCHASER REPRESENTATIVE

DATE

STATE REPRESENTATIVE

DATE