

PART III: EXHIBITS

State Timber Sale Contract
No. 341-17-44
Hot Plunkett

EXHIBIT B

Page 1 of 3
629-Form 341-203
Revised 06/97

OREGON DEPARTMENT OF FORESTRY

TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)

Date Received by STATE: _____

(5) State Brand Information (complete):



(1) Contract No.: 341-17-44

(2) Sale Name: Hot Plunkett

(3) Contract Expiration Date: December 31, 2018

Project Completion Dates: _____

(4) Purchaser: _____

(6) Purchaser Representatives:

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

(7) State Representatives:

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

(8) Name of Subcontractors & Starting Dates:

Projects: No(s) _____ - _____

Date: _____

Phone: _____

No(s) _____ - _____

Date: _____

Phone: _____

No(s) _____ - _____

Date: _____

Phone: _____

No(s) _____ - _____

Date: _____

Phone: _____

Logging: Felling _____

Date: _____

Phone: _____

Yarding: _____

Date: _____

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.

EXHIBIT B

INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN TO 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.

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.

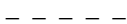
- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:
 1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
 2. Locations of spur roads planned for construction, other than those required by the timber sale contract. Provide spur road specifications.
 3. Location of proposed tractor yarding roads. Show if and how marked on the ground.
 4. Location of temporary stream crossings.
 5. List the sequence of performing project work.
 6. Location of rock sources - attach pit development plans.



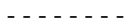
Cable Landing, with numbers for sequence.



Tractor Landing with alphabetical sequence.



Approximate setting boundary.



Spur truck roads.



Tractor yarding roads.



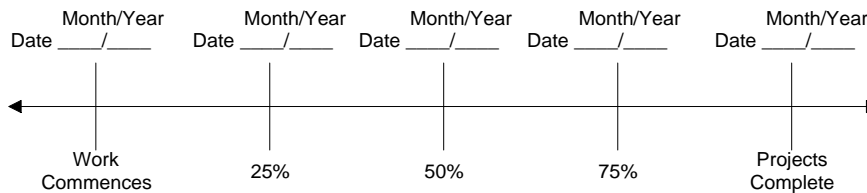
Temporary stream crossings.

EXHIBIT B
OPERATIONS PLAN

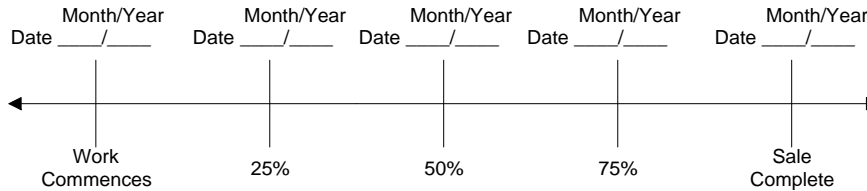
Completion Timeline

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, PURCHASERS 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 _____

Original: Salem
cc: District File
Purchaser
(Purchaser Representative) _____

EXHIBIT C – SAWMILL GRADE (WESTSIDE SCALE)

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

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

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

(3) FROM: West Oregon (01) Phone (541) 929-3266
(State Forestry District)
Address 24533 Alsea Highway, Philomath, OR, 97370-9112

(4) PURCHASER: _____
Mailing Address: _____
Phone Number: _____

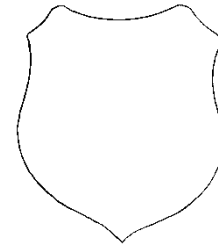
(9) SALE NAME: Hot Plunkett

COUNTY: Lincoln

(10) STATE CONTRACT NUMBER: 341-17-44

(11) STATE BRAND REGISTRATION NUMBER: _____

(12) STATE BRAND INFORMATION (COMPLETE):



(13) PAINT REQUIRED: YES ☒
COLOR: Orange

(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: YES ☒ NO ☐
Use Region 6 actual taper rule. Logs over 40'.

(7) Weight Scale Sample ☐ ☒

(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) SIGNATURES:

Purchaser or Authorized Representative Date

State Forester Representative Date

State Forester Representative PRINT NAME

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

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.

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

EXHIBIT C – SAWMILL GRADE
INSTRUCTIONS FOR FORM 343-307a (rev. 11/11)

- (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) 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@mwlsqb.com

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

Northwest Log Scalpers, Inc.
5526 NE 122nd Ave, Portland, OR 97230
Phone: (503) 254-0600 Fax: (503) 408-0919
Email: info@nwlogscalpers.com

Pacific Log Scaling & Grading Bureau, Inc.
P.O. Box 23939, Portland, OR 97281
Phone: (503) 684-5599 Fax: (503) 639-4880
Email: PacLogScale@aol.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 <\\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 Scaling Location, Purchaser, District, Mgmt. Unit

EXHIBIT C – PULP SORT

PROCESSING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

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

(2) TO: _____
(Approved Pulp Processing Facility)

(3) FROM: West Oregon (01) Phone (541) 929-3266
(State Forestry District)

(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**

- Mail to ODF weekly.
- Convert to mbf using 10 tons per mbf.

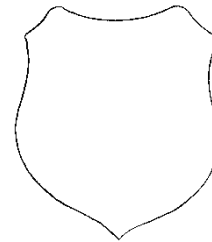
(9) SALE NAME: Hot Plunkett

COUNTY: Lincoln

(10) STATE CONTRACT NUMBER: 341-17-44

(11) STATE BRAND REGISTRATION NUMBER _____

(12) STATE BRAND INFORMATION: (COMPLETE BELOW)



(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.

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

EXHIBIT C – PULP SORT
INSTRUCTIONS FOR FORM 343-307b (rev. 11/11)

- (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@mwlsbg.com

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

Northwest Log Scalers, Inc.
5526 NE 122nd Ave, Portland, OR 97230
Phone: (503) 254-0600 Fax: (503) 408-0919
Email: info@nwlogscalers.com

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

- (6) **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.
- (9) **Must Complete.** Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (10) **Must Complete.** Enter sale Contract number.
- (11) **Must Complete.** Enter Oregon's State Brand Registry Number **(REQUIRED)**.
- (12) **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).
- (13) Use this section to list any special instructions or the reason for any revisions in section item (1).
- (14) **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 \\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.

EXHIBIT D
FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	N/A	1A to 1B	0+00 to 1+90	Outslope
14 feet	N/A	1C to 1D	0+00 to 3+70	Outslope
14 feet	12 feet	1E to 1F	0+00 to 2+00	Outslope
14 feet	12 feet	1G to 1H	0+00 to 2+00	Outslope
14 feet	12 feet	2A to 2B	0+00 to 5+00	Outslope
14 feet	N/A	2C to 2D	0+00 to 5+50	Outslope
16 feet	14 feet	I1 to I2	0+00 to 35+60	Ditch
16 feet	14 feet	I2 to I3	0+00 to 58+00	Ditch
16 feet	14 feet	I2 to I17	35+60 to 161+10	Ditch
14 feet	12 feet	I3 to I4	0+00 to 12+50	Ditch
14 feet	12 feet	I3 to I4	12+50 to 19+00	Outslope
16 feet	14 feet	I5 to I6	0+00 to 55+50	Ditch
16 feet	14 feet	I7 to I8	0+00 to 77+90	Ditch
14 feet	N/A	I9 to 2C	0+00 to 16+50	Outslope
14 feet	N/A	I11 to I12	0+00 to 36+80	Outslope
14 feet	N/A	I13 to I14	0+00 to 2+70	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 cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE. The "Road Brushing Specifications" in Exhibit D 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 cutslopes shall be removed. Grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Grubbing debris shall not be left lodged against standing trees.

FOREST ROAD SPECIFICATIONS

GRUBBING CLASSIFICATION.

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

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

CLEARING AND GRUBBING DISPOSAL. Scatter 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.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

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

Excavation shall conform to STATE-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 or outsloped at 4 to 6 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.

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

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

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

Top of cutslope 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 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 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)

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
1A to 1B	0+00- 1+90	Construct new unsurfaced road. Outslope at 3% to 4%. Construct landing at Point 1B. Compact subgrade with vibratory roller.
1C to 1D	0+00- 3+70	Construct new unsurfaced road. Outslope at 3% to 4%. Construct landing at Point 1D. Compact subgrade with vibratory roller.
1E to 1F	0+00- 2+00	Construct new surfaced road. Outslope at 3% to 4%. Construct landing at Point 1F. Compact subgrade with vibratory roller. Apply an 8 inch lift of jaw-run rock (88 CY) from Point 1E to Point 1F, and 20 cubic yards of jaw-run rock at the junction (0+00). Compact rock surface with vibratory roller. Apply landing rock (40cy).
1G to 1H	0+00- 2+00	Construct new surfaced road. Outslope at 3% to 4%. Construct landing at Point 1H. Compact subgrade with vibratory roller. Apply an 8 inch lift of jaw-run rock (88 CY) from Point 1G to Point 1H, and 20 cubic yards of jaw-run rock at the junction (0+00). Compact rock surface with vibratory roller. Apply landing rock (40cy).
2A to 2B	0+00- 5+00	Construct new surfaced road. Outslope at 3% to 4%. Construct landings at station 2+30 and Point 2B. Compact subgrade with vibratory roller. Apply an 8 inch lift of jaw-run rock (220 CY) from Point 2A to Point 2B. Compact rock surface with vibratory roller. Apply landing rock at landings (30 CY jaw-run at Sta. 2+30 and 50CY at Point 2B).
2C to 2D	0+00- 5+50	Construct new unsurfaced road. Outslope at 3% to 4%. Construct landing at Point 2D. Compact subgrade 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) Roadside Brushing. Conduct roadside brushing as specified in Exhibit E.
- (3) Roadside Spraying. Conduct roadside Spraying as specified in Exhibit F.
- (4) 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. Install a culvert marker at each newly installed culvert and at each existing culvert that is missing a marker that could be reached by a grader blade.
- (5) Subgrade Preparation and Application of Surfacing Rock.
 - (a) Complete roadside brushing, 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, and compact in accordance to 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>
I2 to I3	0+00-58+00	<p>Re-establish ditches with grader and a backhoe where needed. Scatter ditch waste material in stable locations away from streams.</p> <p>Apply 160 CY of 1½"-0" spot rock from Point I2 to Point I3, and rock 8 turnouts (80 CY of 1½"-0"), and 2 landings, stations 39+00 and 45+80 (40 CY of jaw-run each).</p> <p>Shape surface with road grader. Crown road @ 4% to 6%.</p> <p>Process and compact surface rock with grader and vibratory roller.</p>
I3 to I4	0+00-19+00	<p>Re-establish ditches with grader and a backhoe where needed. Clean out culvert inlets and outlets (2). Scatter ditch waste material in stable locations away from streams.</p> <p>Apply 80 CY of 3"-0" subgrade leveling rock where needed.</p> <p>Rock all turnouts with 10 CY of 1½"-0" each. 2 turnouts.</p> <p>Shape surface with road grader and compact with vibratory roller. Crown road @ 4% to 6%.</p> <p>Apply a 3" lift (360 CY) of 1½"-0" crushed rock from Point I3 to Point I4. Process and compact surface rock with vibratory roller.</p>
I7 to I8	0+00-28+60	<p>Clear landing at station 28+60 of brush and debris with grader.</p> <p>Compact subgrade with rock truck and apply landing rock (30 CY jaw-run).</p>
I9 to 2C	0+00-16+50	<p>Re-open outsloped unsurfaced road with dozer. Outslope @ 3% to 4%.</p> <p>Re-open Landing at Point 2C with dozer.</p> <p>Rock the first 50 feet of road with 30 CY of jaw-run rock.</p> <p>Grade and compact junction rock.</p>
I11 to I12	0+00-36+80	<p>Re-open outsloped unsurfaced road with dozer (or grader). Outslope @ 3% to 4%.</p> <p>Re-open Landing at Point I12 with dozer.</p> <p>Rock the first 50 feet of road with 20 CY of jaw-run rock.</p> <p>Grade and compact junction rock.</p>
I13 to I14	0+00-2+70	<p>Re-open outsloped unsurfaced road with dozer (or grader). Outslope @ 3% to 4%.</p>

EXHIBIT D
FOREST ROAD SPECIFICATIONS

SPECIFIC STOCKPILE CREATION INSTRUCTIONS

Project No. 5 – Rock Stockpile

Level stockpile site.

Stockpile 1,000 cubic yards of 1½-0" crushed rock at the Wolf Cabin Road stockpile site shown on Exhibit A.

Shape crowned surface with road grader and compact crowned surface with vibratory roller from Point I1 to I17.
Apply wear replacement rock (80 CY of 1½-0" crushed rock) in conjunction with grading.

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)	1E to 1F		0+00 to 2+00			
				Volume (CY) per		Number of			
Base rock	jaw run	0+00 to 2+00	8	44	station	2	stations	88	119
Junction rock	jaw run	0+00	8	20	junction	1	junction	20	27
Landing rock	jaw run	Pt. 1 F	NA	40	landing	1	landing	40	54
Total Rock for Road Segment:								148	146

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	1G to 1H		0+00 to 2+00			
				Volume (CY) per		Number of			
Base rock	jaw run	0+00 to 2+00	8	44	station	2	stations	88	119
Junction rock	jaw run	0+00	8	20	junction	1	junction	20	27
Landing rock	jaw run	Pt. 1 H	NA	40	landing	1	landing	40	54
Total Rock for Road Segment:								148	

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	2A to 2B		0+00 to 5+00			
				Volume (CY) per		Number of			
Base rock	jaw run	0+00 to 5+00	8	44	station	5	stations	220	297
Landing rock	jaw run	2+30	NA	30	landing	1	landing	30	41
Landing rock	jaw run	Pt. 2B	NA	50	landing	1	landing	50	68
Total Rock for Road Segment:								300	

ROAD SEGMENT		(Burnt Woods Forest Rd.)		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	I2 to I3		0+00 to 58+00			
				Volume (CY) per		Number of			
Spot rock	1 1/2-0"	0+00 to 58+00	NA	10	load	16	loads	160	216
Turnouts	1 1/2-0"		NA	10	turnout	8	turnouts	80	108
Landing rock	Jaw run	39+00, 45+80	NA	40	landing	2	landings	80	108
Total Rock for Road Segment:								320	

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)	I3 to I4		0+00 to 19+00			
				Volume (CY) per		Number of			
Leveling rock	3-0"	0+00 to 19+00	NA	10	load	8	loads	80	108
Surfacing rock	1 1/2-0"	0+00 to 19+00	3	19	station	19	stations	360	486
Turnouts	1 1/2-0"		NA	10	turnout	2	turnouts	20	27
Total Rock for Road Segment:								460	

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	I7 to I8		0+00 to 77+90			
				Volume (CY) per		Number of			
Landing rock	Jaw run	28+60	NA	30	landing	1	landing	30	41
Total Rock for Road Segment:								30	

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	I9 to 2C		0+00 to 0+50			
				Volume (CY) per		Number of			
Junction rock	Jaw run	0+00 to 0+50	8	30	junction	1	junction	30	41
Total Rock for Road Segment:								30	

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	I11 to I12		0+00 to 0+50			
				Volume (CY) per		Number of			
Junction rock	Jaw run	0+00 to 0+50	8	20	junction	1	junction	20	27
Total Rock for Road Segment:								20	

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

EXHIBIT D
ROAD SURFACING

ROCK CONVERSION FACTORS

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

(Conversion factors from Richard Quarry)

TOTAL ROAD SURFACING ROCK VOLUMES

Rock Size	1 1/2-0"	3-0"	jaw-run
CY	620	80	756
Tons	838	108	1021

Note: Rock table does not include 1,000 CY stockpile for Project No. 5.

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 must be submitted weekly.

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
1A to 1B, 1C to 1D, 1E to 1F, 1G to 1H, 2A to 2B, 2C to 2D	1
I7 to I8 (Sta. 28+60)	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 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 compacted and processed during the same project period it is spread, unless otherwise approved in writing by STATE.

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
I2 to I3, I3 to I4, I7 to I8, I9 to 2C (0+00 to 0+50), I11 to I12 (0+00 to 0+50), 1E to 1F, 1G to 1H, 2A to 2B	1

EXHIBIT D

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) Loaded Dump Trucks. Dump trucks shall be routed over the entire cross section of the road surface. Loaded trucks shall cover all of the subgrade with a minimum of three passes.

EXHIBIT D

CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be fragments of rock crushed to the required size. The material shall be free from vegetation and lumps of clay.

Rock strength: for rock not produced from STATE quarries, the material from which base material is produced or manufactured shall meet the following test requirement for Aggregate Hardness - Test Method AASHTO T 96 Maximum.

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%

JAW-RUN ROCK SPECIFICATIONS

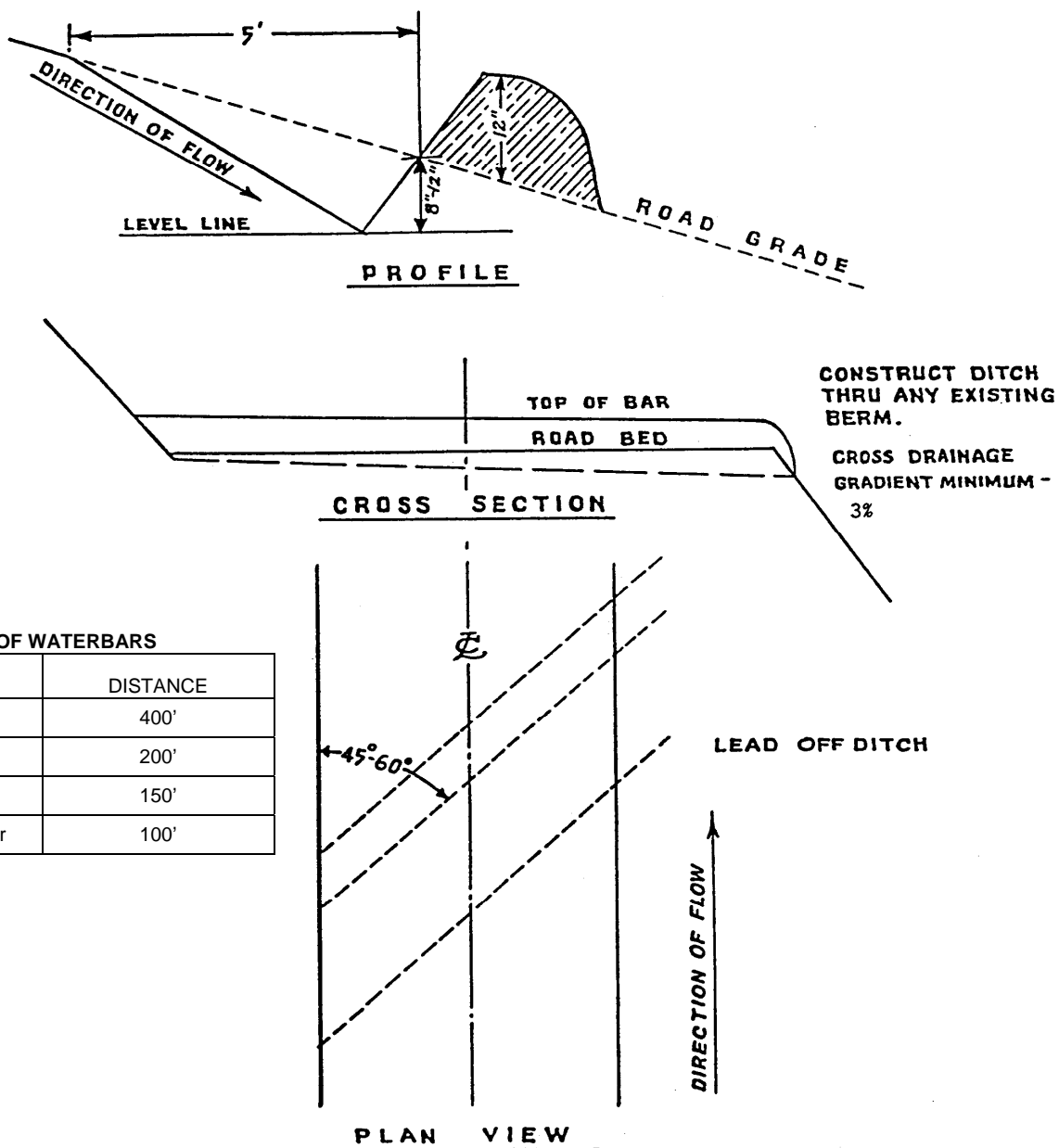
<u>For Jaw-Run</u>	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

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



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

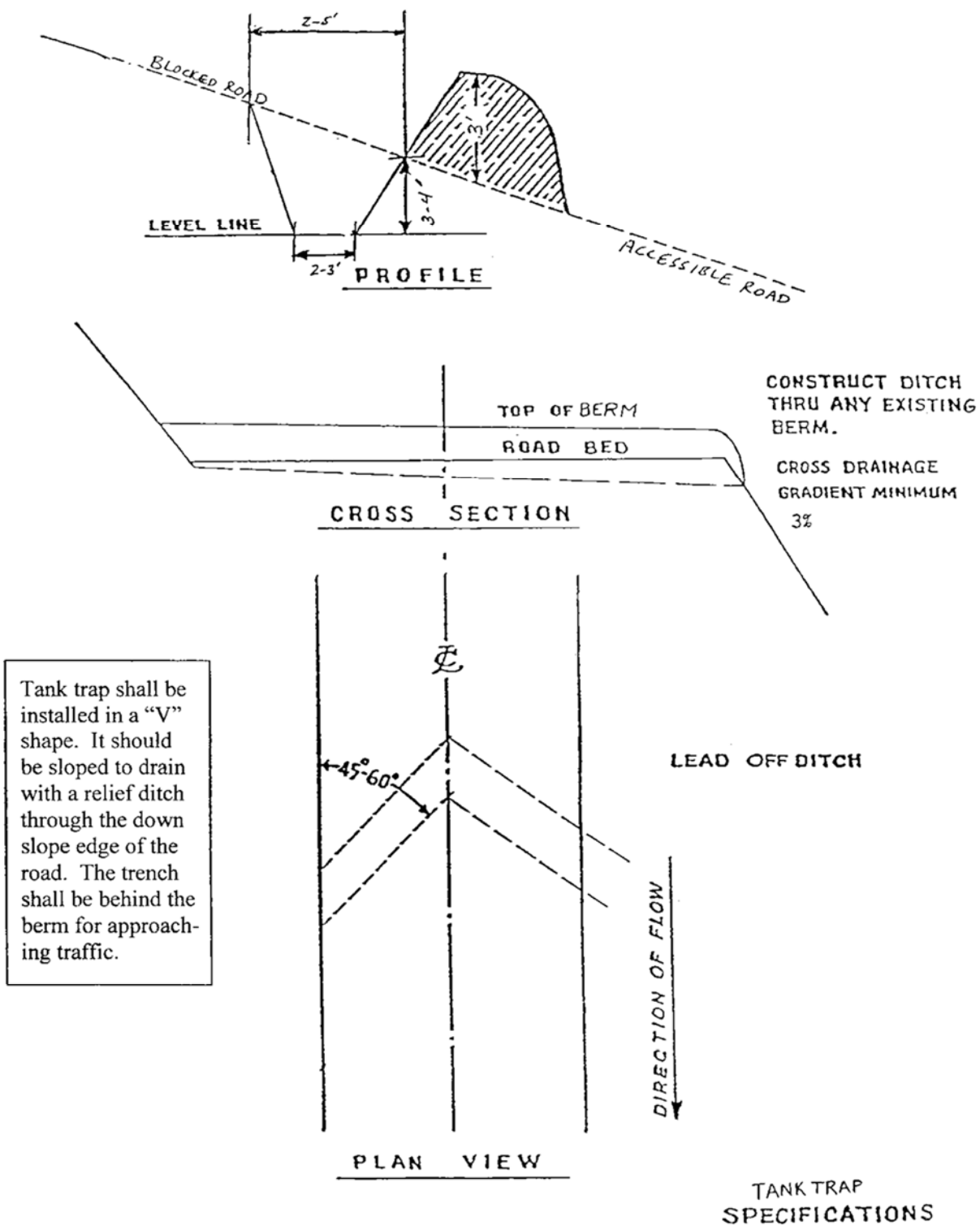
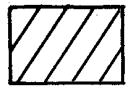
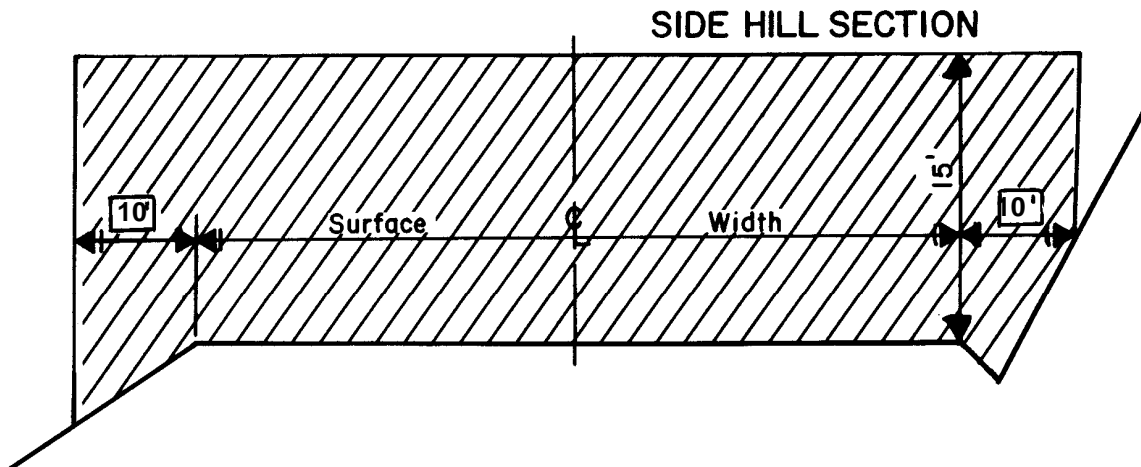


EXHIBIT E

ROAD BRUSHING SPECIFICATIONS



Clearing Limits



REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface, and the minimum width of clearing on the cutslope side(s) of the road shall be 10 feet horizontal distance from the shoulder of the road and 10 feet horizontal on the down slope side from the road shoulder. 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 drawing above. In situations where site distance is an issue brushing heights on the cutslope may vary from the drawing, as directed by STATE. For cutslopes less than 6 feet in height, brushing shall extend 5 feet beyond the top of cutslope. For cutslopes greater than 6 feet in height, brushing shall extend 15 feet horizontal distance from the road shoulder.

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

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, water courses, culvert inlets and outlets and sediment catching 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.

EXHIBIT E

ROAD BRUSHING SPECIFICATIONS

Trees larger than 6 inches in diameter at stump height, located within clearing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility. Planted or established conifers, located within brushing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility unless otherwise directed by STATE.

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 assessed a damage fee of \$25 per marker.

EXHIBIT E

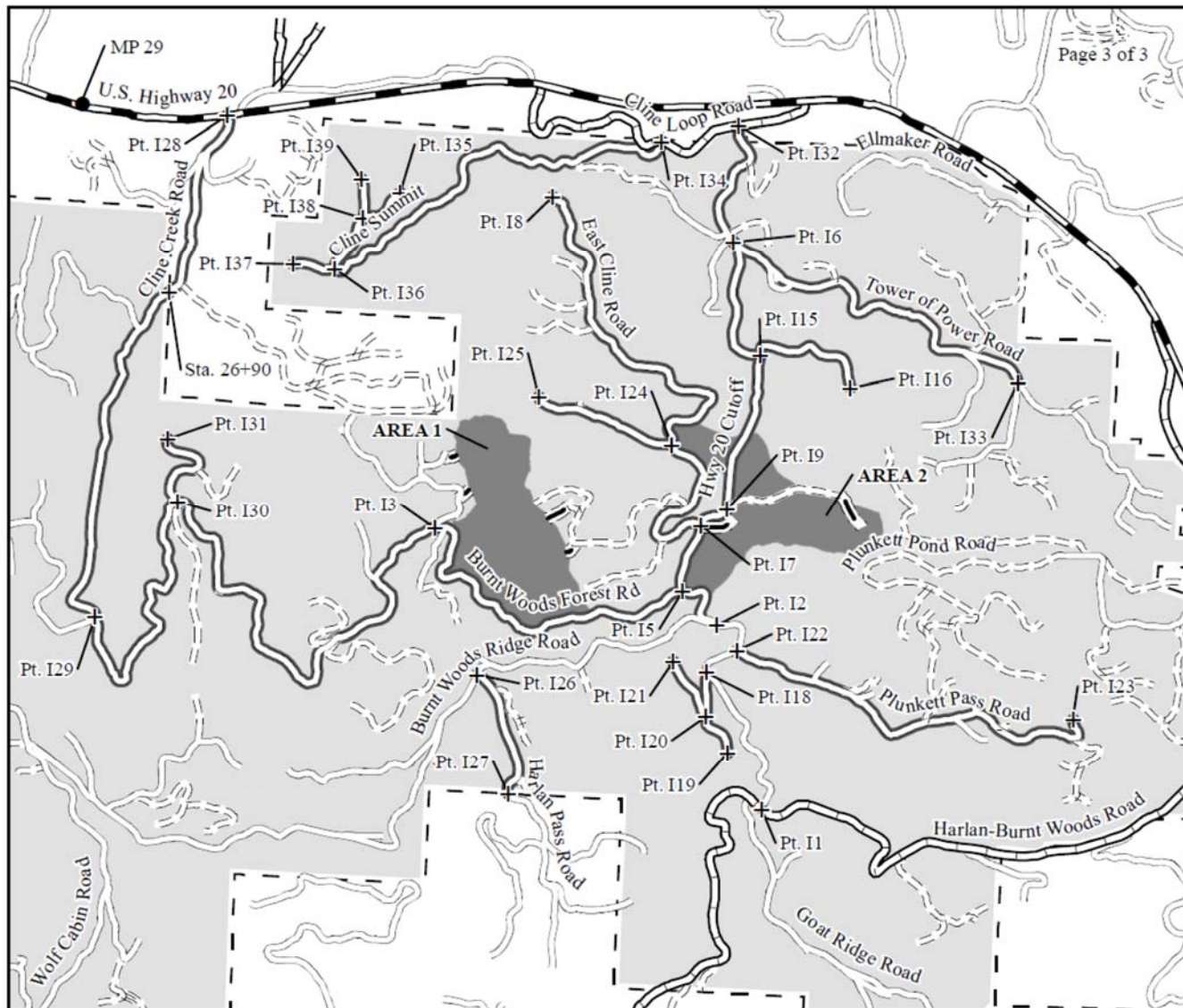


EXHIBIT "E"
ROADSIDE BRUSHING MAP

OF TIMBER SALE CONTRACT NO. 341-17-44
HOT PLUNKETT
LINCOLN COUNTY, OREGON

Legend

- Timber Sale Area
- State Forest Property Boundary
- Roads**
- Highway
- County Road
- Surfaced Road
- Unsurfaced Road
- New Construction
- Project Point
- Roadside Brushing

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Created By: Blake McKinley
bmckinley@odf.state.or.us
Date: 09/26/2016

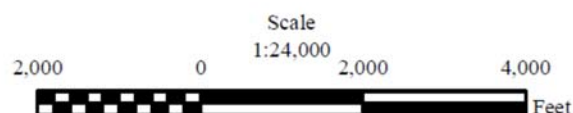


EXHIBIT F

ROADSIDE SPRAYING SPECIFICATIONS

REQUIREMENTS

PURCHASER shall conduct a roadside spray application on the roads shown in this Exhibit F, for an estimated 13.25 miles (39 acres) to be treated. As directed by STATE, PURCHASER shall apply the prescribed herbicide mix to all foliage/vegetation on the road surface and within twelve (12) horizontal feet from the road edge, vehicle turnouts, and landings. The application shall be made to wet all the foliage, but not to the point of significant runoff. Target vegetation includes woody species such as red alder, salmonberry, thimbleberry, scotch broom and blackberry, as well as sword fern and Braken fern.

PURCHASER shall provide one (1) Application Truck with a licensed applicator/driver; required herbicides and carrier; and all facilitating equipment for roadside spray application on forest roads. Additional equipment and support personnel may be utilized with written approval from STATE.

WORK PERIOD. During the last year of this Timber Sale Contract, spraying is to be conducted between July 15, 2018 and September 30, 2018, during dry weather periods, unless otherwise approved by STATE.

SPRAY EQUIPMENT. PURCHASER shall furnish one application truck with a metered injection sprayer. The sprayer must have at minimum two injection units and a water supply tank that has a minimum 50 gallon capacity. The application truck shall have at least one spray gun or wand connected to a minimum of 50 feet of hose. All vehicles shall have the power to negotiate roads in the contract area with a full load. PURCHASER shall furnish all equipment necessary to prepare the specified chemical mixtures. Quantities shall be measured as accurately as possible using calibrated dip sticks or other approved means of measuring liquids. The application truck shall be equipped with an agitation system capable of keeping the herbicide evenly distributed in the tank. Each application truck shall be equipped with a pump capable of rapid filling and mixing. Any deviation from the above specifications must be approved by STATE in writing.

- a. The spraying equipment shall be capable of disseminating the liquid herbicide mixture at a measured rate.
- b. Handgun, wand type, or any other spray systems shall be designed to receive spray nozzles with changeable orifices and shall operate under controllable pressure to the spray nozzle. The system must be leak proof with the nozzles equipped with diaphragm check valves or equivalent to assure positive shutoff.
- c. Nozzles shall be maintained free of plugs to assure a uniform application of sprayed mixture. Replacement nozzles and diaphragms shall be kept with each application truck for use whenever a nozzle is determined to be leaking.
- d. The spraying equipment shall be capable of operating at an even nozzle pressure. The lowest nozzle pressure recommended by the nozzle manufacturer shall be used to reduce the potential of off-target drift.
- e. Equipment shall be maintained to operate efficiently and to prevent leakage of chemicals, carriers, or spray mixture.

EXHIBIT F

ROADSIDE SPRAYING SPECIFICATIONS

- f. PURCHASER shall furnish portable pumps with necessary suction hose and feed hoses to supply the application truck with water from streams. This unit will be used for water only. An air gap separation or suitable back-flow preventer shall be provided where mixing water is obtained by direct connection to a domestic water supply or where water is taken from streams or ponds. Portable pumps shall be equipped with a fish screen that complies with the Oregon Department of Fish and Wildlife Small Pump Screen Self-Certification Form.

OPERATOR. Operator shall have a valid Oregon Commercial Applicator's License with the forest and Right-of-Way Category endorsements.

PROTECTION MEASURES

Buffer Zones. A buffer strip ten (10) feet wide shall be left unsprayed along each side of all live streams and open water or in other areas as directed by STATE. A buffer strip sixty (60) feet wide shall be left unsprayed along ESA listed streams as directed by STATE.

Weather Conditions. The spray material shall be applied under weather conditions which will protect non-target forest resources and comply with the product label requirements and the Forest Practices Act. Permission to commence or suspend operations with respect to this item will rest with STATE representative and that decision will be final.

Loss of Chemicals. In the event of loss of chemicals or mixtures from leakage, spills, or dumps, PURCHASER's applicator shall carry out procedures to contain and neutralize such losses and shall immediately notify STATE of any such incident. PURCHASER shall be responsible for all costs of containment, neutralization and other measures as may be required. PURCHASER's applicator shall have available a shovel, bucket and absorbent to clean up minor spills, should they occur.

NOTIFICATION. PURCHASER's applicator shall notify STATE 24 hours prior to commencement of operations and shall again notify STATE upon completion of operations.

INSPECTION. Satisfactory work shall be determined from visual reconnaissance by STATE, once die-off has begun. If greater than 10 untreated plants per mile of road side are identified then the work is deemed unsatisfactory. PURCHASER shall be required, without cost to STATE, to re-treat areas that are not treated according to specifications in this exhibit.

WEATHER RECORDS. PURCHASER is required to maintain hourly weather records when spraying. PURCHASER's applicator must have equipment available to accurately determine wind speed, direction, temperature and relative humidity. Documentation of hourly weather condition will be on a form provided by STATE. Weather records shall be readily available for inspection by STATE's representative.

EXHIBIT F

ROADSIDE SPRAYING SPECIFICATIONS

TRACKING RECORDS.

- a. PURCHASER is required to record start and stop points/coordinates using the aid of a GPS (Global Positioning System) on the areas of herbicide application. The points/coordinates shall be recorded in longitude and latitude expressed in decimal degrees and decimal places shall be carried out to achieve at least 35 feet accuracy. NAD 83 shall be the datum used for the coordinates. The data shall be submitted in the form of a layer compatible to ArcGIS10 or other format as specified by STATE.
- b. PURCHASER is required to record on an ODF map, areas of herbicide application.

HERBICIDES.

- a. PURCHASER shall furnish the herbicides listed in the Spray Mixture Table. All herbicides shall be registered and applicable for forest and Right-of-Way uses.
- b. Water shall be the basic carrier and may be obtained at the district headquarters.
- c. All herbicides and carriers shall be transported to mixing or project sites by PURCHASER.
- d. PURCHASER shall be responsible for chemical storage, decontamination treatment, and transportation of empty herbicide containers to an authorized disposal site.
- e. Spray Mixtures are listed in the Spray Mixture Table below.

SPRAY MIXTURE TABLE

Area	Herbicide	Herbicide Application Rate/Acre	Mix Application Rate/Acre (with carrier)
Roads and Roadsides shown on attached map; approximately 13.25 miles or 39 acres*	Element 4/ Garlon 4 (or equivalent)	48-64 oz./acre	20-35 gallons/acre
	2,4-D LV6 (or equivalent)	48-64 oz./acre	
	Non-ionic surfactant	10-12 oz./acre	

(*1 mile = 5,280 feet x 13.25 miles x 24 feet = 1,679,040 sq. ft. / 43,560 sq. ft./1 acre = 39 acres)

EXHIBIT F

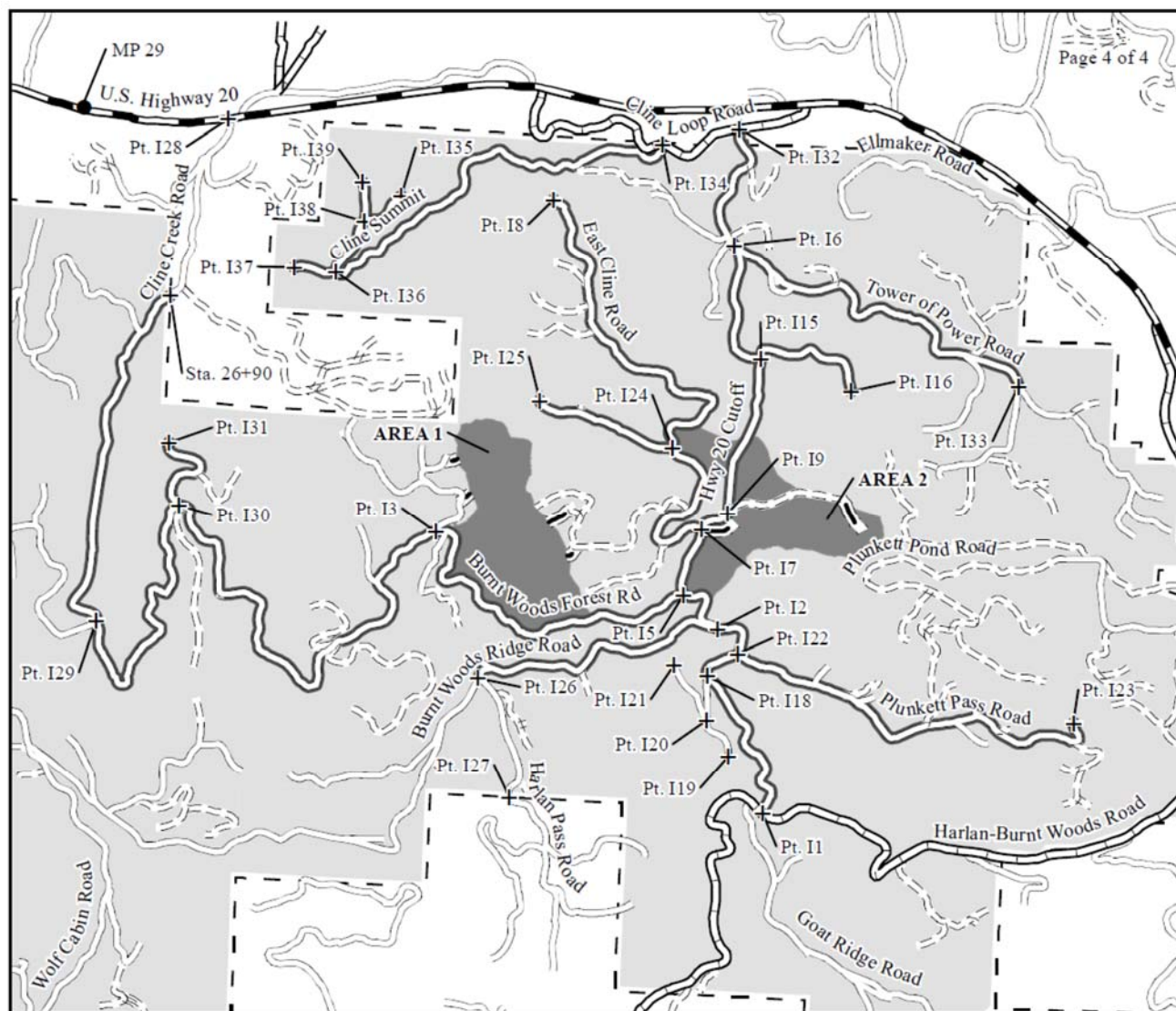


EXHIBIT "F"
ROADSIDE SPRAYING MAP

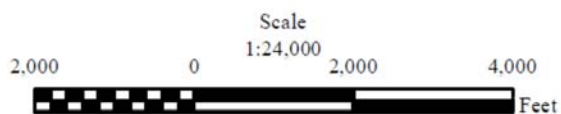
OF TIMBER SALE CONTRACT NO. 341-17-44
HOT PLUNKETT
LINCOLN COUNTY, OREGON

Legend

- Timber Sale Area
- State Forest Property Boundary
- Roads**
- Highway
- County Road
- Surfaced Road
- Unsurfaced Road
- New Construction
- Project Point
- Herbicide Application

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Created By: Blake McKinley
bmckinley@odf.state.or.us
Date: 09/26/2016



PART IV: OTHER INFORMATION

State Timber Sale Contract
No. 341-17-44
Hot Plunkett

FPA Written Plan for Timber Harvest

Hot Plunkett Timber Sale

Portions of Section 21, 22, 27, and 28, T11S, R08W, W.M., Lincoln County, Oregon.

Protected Resources: A small Type F tributary with associated significant wetland to the Tum Tum River, and a small Type F tributary to Cline Creek.

Situation: Approximately 600 feet of a small, Type F stream is within the timber sale boundary in Area 1 and approximately 500 feet of a small Type F stream adjacent to the North boundary of Area 1. Approximately 3,500 feet of a small, Type F stream with associated significant wetland along the South and East boundaries of Area 2.

(Harvest operations will not occur within 100 feet of these streams, however, skylines may pass over 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 streams and associated significant wetland.
2. Trees adjacent to the stream and wetland buffers 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

FPA Written Plan for Roadside Spraying

Hot Plunkett Timber Sale

Portions of Section 21, 22, 27, and 28, T11S, R08W, W.M., Lincoln County, Oregon.

Protected Resources: Cline Creek, a Type F stream. See attached map (Exhibit F).

Situation: Roadside spray treatment of foliage will be performed on approximately 13.25 miles of forest road in the area listed above. The treatment shall be applied to all foliage/vegetation on the road surface and within twelve (12) horizontal feet from the road edge, vehicle turnouts, and landings. No Type D streams are present in the treatment area.

Resource Protection Measures:

Along the Type F streams in the area listed above, as well as all other perennial Type N streams and other open water not listed, the following practices are required under the timber sale contract:

1. The application will be made to wet foliage surfaces, but avoid significant runoff.
2. The application will be made during dry weather periods, and where weather conditions will minimize risk of drift.
3. Weather conditions will be monitored hourly.
4. No spraying will occur within ten (10) feet of any live streams or open water.
5. All chemical mixing will be performed on a road or landing at least 100 feet away from open water.
6. All equipment will be kept in a leak proof condition.
7. Equipment will be cleaned in a location that will protect all streams and other open water.
8. A separate portable pump with filler and suction hose will be used to withdraw water from streams and other open water. This pump will be used for water only. An air gap or suitable back-flow preventer will be used where mixing water is obtained from streams or other open water.
9. The application will be made by a licensed commercial applicator.

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.

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