

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) Sta | ate Brand Information(| Complete) |
|---------------------------------------|--------------------|-------------------|---------------|------------------------|-----------|
| (1) Contract Number: | FG-341-2024-V | V00952-01 | | | |
| (2) Sale Name: | Bible Creek | | | | |
| (3) Contract Expiration [| Date: 05/31/202 | 26 | | | |
| (4) Purchaser Name: | | | | | |
| (6) State Representative | es: | | | | |
| <u>Name</u> | | Circle One | Phone No. | Cell No. | Alt Phone |
| | Lo | ogging Projects A | All | | |
| | Lo | ogging Projects A | All | | |
| | Lo | ogging Projects A | AII | | |
| | Lo | ogging Projects A | | | |
| (7) Purchaser Represen <u>Name</u> | tatives: | Circle One | Phone No. | <u>Cell No.</u> | Alt Phone |
| | La | ogging Projects / | AII | | |
| | Lc | ogging Projects / | AII | | |
| | Lo | ogging Projects / | AII | | |
| | Lc | ogging Projects | AII | | |
| | Lc | ogging Projects | A II | | |
| | Lc | ogging Projects / | A II | | |
| | Lc | ogging Projects / | A II | | |
| (8) Name of Subcontracto | ors and Start Date | es: | | | |
| Project No. Subcont | ractor Name. | Start Date | Completion Da | ate <u>Cell No.</u> | Alt Phone |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Sub | contractor Name | <u>ə.</u> | Start Date | <u>Cell No.</u> | Alt Phone |
| FELLING | | |][| | |
| YARDING | | | | | |
| (9) Comments: | | [| I • | | |

⁽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 including without limitation PURCHASER'S independent obligation to avoid take of a T&E species and PURCHASER'S obligation to comply with terms and conditions of any incidental take Permit(s) that include required minimization and mitigation measures in any applicable Habitat Conservation Plan. If STATE has prepared a required Forest Practices Act (FPA) "Written Plan" for operations, PURCHASER shall comply with all provisions of the Written Plan.

Explanation of Item No.(from Page 1)

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not Known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.
- (9) Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.
- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:

1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.

2. Locations of spur roads planned for construction, other than required by the timber sale contract. Provide spur road specifications

- 3. Locations of proposed tractor yarding roads. Show if and how marked on the ground.
- 4. Locations of temporary stream crossings.
- 5. List the sequence of performing project work.
- 6. Location of rock sources attach pit development plans.

Cable Landing, with numbers for sequence.

Tractor Landing with alphabetical sequence.

Approximate setting boundary.



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Spur truck roads.

Tractor yarding roads.

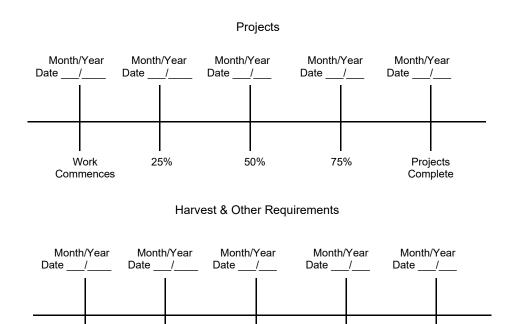
Temporary stream crossings.



Oregon Department of Forestry 2600 State St Salem OR 97310 PART III: EXHIBITS EXHIBIT B OPERATIONS PLAN

Completion Timeline

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



 Work
 25%
 50%
 75%
 Sale

 Commences
 Complete

 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

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 or that the plan is consistent with the terms and conditions of any applicable incidental take Permit(s) including any required minimization and mitigation measures proposed in the applicable Habitat Conservation Plan. As provided in the timber sale contract, PURCHASER's must comply with all applicable state, federal, and local laws, including without limitation any Permit(s) issued thereunder.

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 Forest Grove - NWOA

| (1) | ORIGINAL REGISTRATION | | □ Date | |
|-----|------------------------|-----|--------|--|
| | REVISION NUMBER | 000 | □ Date | |
| | CANCELLATION | | □ Date | |

(2) TO:

(Third Party Scaling Organization)

(3) FROM: Forest Grove Phone (503) 357-2191 (State Forestry District) 801 GALES CRK RD Address:

FOREST GROVE, OR 97116-1199

(4) PURCHASER:

Mailing Address:

Phone Number:

| (5) MINIMUI | 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'.

NO YES

 \checkmark

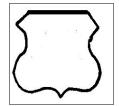
(7) Weight Scale Sample

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

(9) SALE NAME: Bible Creek

> COUNTY: Tillamook

- (10)STATE CONTRACT NUMBER: FG-341-2024-W00952-01
- STATE BRAND REGISTRATION NUMBER: (11)
- (12) **STATE BRAND INFORMATION:**



PAINT REQUIRED: YFS \square (13)COLOR: Orange

| (14) SPECIAL REQUESTS (Check applica | ble) |
|--|------|
| PEELABLE CULL (all species) | V |
| NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE | V |
| ADD-BACK VOLUME - Deductions due to delay | Ø |
| OTHER : | |

(15) REMARKS:

'Mule Trains"

- 1. Loads are required to have load tickets for each set of bunks.
- 2. If truck and pup are to be weighed, weigh and process separately for gross and tare weights.

Operator's Name (Optional inclusion by District):

(16)SIGNATURES:

> Purchaser or Authorized Representative Date

State Forester Representative

Date

State Forester Representative PRINT NAME

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

ODF/State Forests Timber Sale Exhibit C Form 629 342-307a Walt Sys Gen Report 2014 Page 2 of 2



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

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers.
- (2) Designate Third Party Scaling Organization (TPSO).

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

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

Northwest Log Scalers Inc. 6137 NE 63rd St, Vancouver, WA, 98661 Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213 Email: <u>info@nwlogscalers.com</u> Pacific Rim Log Scaling Bureau, Inc. 8288 28th Court North East, Lacey, WA 98516 Phone: (360) 528-8710 Fax: (360) 528-8718 Email: <u>office@prlsb.com</u>

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

- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.
- (5) Minimum Scaling Specifications.
- (6) Westside Region 6 actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs All Species State Forestry Department Scaling Practices (Westside).
- (7) Weight Scale Sample Check box if sale is to be a Weight Scale Sample. All specifies for handling, scaling and processing will be attached or explained in the Remarks section item (15).
- (8) Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: https://apps.odf.oregon.gov/Divisions/management/asset_management/scalinglocation.asp Locations with scaling and processing directions specific to their location should be on a separate form. Species should be identified if not capable of receiving "all" species. Check appropriate box for either: yard, truck scale, or weight. Refer to the web site listed above for the locations approval status.
- (9) Enter sale name and county.
- (10) Enter sale Contract number.
- (11) Enter Oregon's State Brand Registry Number (REQUIRED).
- (12) Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section item (15).
- (13) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (14) Special Requests. These are requests that will be applied to ODF timber sales. All boxes applicable to the timber sales designated in the Exhibit C form must be "marked". If "Other" is indicated, it must contain a description and any necessary comments.
- (15) Use this space to designate any weight scale sample instructions or any other explanations to clarify scaling, processing and/or mailing requirements. If additional scaling locations are approved, revise original or current form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (16) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form. Signatures not required on revisions.

FOREST ROAD SPECIFICATIONS

| SUBGRADE WIDTH | SURFACED WIDTH | POINT TO POINT | STATION TO STATION | DRAINAGE |
|--------------------|-------------------|-------------------|----------------------------------|-------------------|
| Match existing | Match existing | A to B | 0+00 to 62+50 | Ditch |
| Match existing | Match existing | C to D | 0+00 to 12+00 | Ditch |
| Match existing | Match existing | E to F | 0+00 to 66+00 | Ditch |
| Match existing | Match existing | G to H | 0+00 to 9+50 | Ditch |
| Match existing | Match existing | I to J | 0+00 to 18+60 | Ditch |
| Match existing | Match existing | K to L | 0+00 to 22+60 22+60 to 109+20 | Outslope Ditch |
| Match existing | Match existing | M to N | 0+00 to 13+00 | Ditch |
| 14 feet | | O to P | 0+00 to 5+50 | Outslope |
| 14 feet | | Q to R | 0+00 to 2+20 | Outslope |
| 14 feet | | S to T | 0+00 to 16+00 | Outslope |
| 14 feet | | U to V | 0+00 to 13+00 | Ditch |
| 14 feet | | W to X | 0+00 to 4+00 | Outslope |
| 14 feet | | H to Y | 0+00 to 9+00 | Outslope |
| 14 feet 16 feet | | Z to AA | 0+00 to 16+70 16+70 to 19+50 | Outslope Ditch |

<u>CLEARING</u>. This work shall consist of clearing, removing, and disposing of all trees, Snags, Down Timber, brush, surface objects, and protruding obstructions within the clearing limits. All danger trees, leaners, and Snags outside the clearing limits which could fall and hit the road shall be felled.

CLEARING CLASSIFICATION.

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

Improvement the - Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cutslope and 10 feet out from the toe of the fill slope, or as directed by STATE.

FOREST ROAD SPECIFICATIONS

<u>GRUBBING</u>. 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 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.

<u>CLEARING AND GRUBBING DISPOSAL</u>. Clearing and grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees. Clearing and grubbing debris may be scattered through openings in the timber outside of the cleared right-of-way, except for the following areas where debris shall be fully contained and hauled to a designated waste area:

- Where end-haul is required
- On side slopes exceeding 55 percent
- On unstable areas
- In any stream channel (Type F, N or D) or where material may enter the stream channel.

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

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.

<u>ROAD WIDTH LIMITATIONS</u>. 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.

<u>Curve Widening</u>. 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.

<u>Subgrade</u>. Subgrade shall be crowned, outsloped, or insloped 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.

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

<u>TURNOUTS</u>. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 25 feet, plus 25-foot approaches at each end. Location: Intervisible but not greater than 750 feet apart.

| SLOPES. Top of cutslope shall be rounded. | <u>Cutslopes</u> | Fill Slopes |
|---|--------------------|-------------|
| Solid Rock | Vertical to 1/4 :1 | |
| Fractured Rock | 1⁄4:1 | |
| Soil - side slopes 50% and over | 1⁄2:1 | 1½:1 |
| Soil - side slopes less than 50% | ³ ⁄4:1 | 1½:1 |

<u>LANDINGS</u>. Landings shall be constructed (as posted in the field,) no less than 50 feet wide and no more than 70 feet wide unless otherwise stated or 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, with 2 feet of subgrade extending out from base of the surfacing.

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

<u>SEASONAL WINTERIZATION</u>. All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance to the Waterbar and Tank Trap specifications in this contract, and blocked from vehicular traffic prior to October 31, annually and as directed by STATE.

<u>EROSION CONTROL</u>. Install bio bags, silt fence, or straw bales for erosion control in project areas and ditch lines where sedimentation or erosion is possible, as directed by STATE. Each Bio-bag shall be installed with a minimum of two wooden stakes.

FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- 1. <u>Excavated Materials</u>. Excavated materials shall be utilized for road construction and hauled in where required. 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.
- 2. <u>Drainage Ditches</u>. Construct ditchlines, including ditchouts, as directed by STATE. Cutslopes of ditchlines and ditchouts shall not exceed a 1:1 slope. Construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE.
- 3. <u>Culvert Installation</u>. Fill construction 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.
- 4. <u>Settling Ponds</u>. Construct settling ponds for erosion control in project areas and ditchlines where sedimentation or erosion is possible as directed by STATE. Excavated material shall be hauled to the designated waste areas designated on Exhibit A. Waste materials shall be sloped and compacted for drainage. Settling pond dimensions shall be a finished length of 3 feet, width of 3 feet, and 3 feet in depth 3 feet apart, or as directed by STATE.

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS:

| <u>Segment</u> | Station | Work Description |
|----------------|---------|--|
| O to P | 0+00 | Point O. Begin road construction; outslope road. |
| | 5+00 | Construct turnaround on right. |
| End | 5+50 | Point P. End road construction, construct landing. |

| Segment | Station | Work Description |
|---------|---------|--|
| Q to R | 0+00 | Point Q. Begin road construction; outslope road. |
| | 1+70 | Construct turnaround on left. |
| End | 2+20 | Point R. End road construction, construct landing. |

| Segment | Station | Work Description |
|---------|---------|--|
| S to T | 0+00 | Point S. Begin road construction; outslope road. Road follows old grade. |
| | 2+60 | Install Culvert No. 1 (18"X30') as cross drain. |
| | 3+75 | Live Stream. Install Culvert No. 2 (24"X40') as cross drain. |
| | 5+00 | Construct roadside landing on right. |
| | 15+50 | Construct turnaround on left. |
| End | 16+00 | Point T. End road construction, construct landing. |

| <u>Segment</u> | Station | Work Description |
|----------------|---------|--|
| U to V | 0+00 | Point U. Begin road construction; crown road, construct ditch. |
| | 12+50 | Construct turnaround on right. |
| End | 13+00 | Point V. End road construction, construct landing. |

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS:

| <u>Segment</u> | Station | Work Description |
|----------------|---------|--|
| W to X | 0+00 | Point W. Begin road construction; outslope road. |
| | 3+50 | Construct turnaround on left. |
| End | 4+00 | Point X. End road construction, construct landing. |

| Segment | Station | Work Description |
|---------|---------|--|
| H to Y | 0+00 | Point H. Begin road construction; outslope road. Road follows old grade. |
| | 3+70 | Construct roadside landing on right. |
| | 7+60 | Road leaves old grade. |
| | 8+50 | Construct turnaround on left. |
| End | 9+00 | Point Y. End road construction, construct landing. |

| <u>Segment</u> | Station | Work Description |
|----------------|---------|--|
| Z to AA | 0+00 | Point Z. Begin road construction; outslope road. Road follows old grade. |
| | 10+75 | Live stream. Replace with Culvert No. 3 (24"X40') as cross drain. |
| | 14+00 | Road leaves old grade. |
| | 15+00 | Begin drift to maintain grade of ≤ 10. |
| | 16+50 | Live stream. Install Culvert No. 4 (36"X50') as cross drain. End drift. Begin crowned road construction. |
| | 19+00 | Construct turnaround on left. |
| End | 19+50 | Point AA. End road construction, construct landing. |

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- 1. <u>Excavated Materials</u>. Excavated materials shall be utilized for road and fill construction and hauled in where required. 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.
- 2. <u>Bank Slough Removal</u>. Excavate all bank slough. Bank slough material shall not be pulled across existing surfacing rock. Excavated material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A.
- 3. <u>Drainage Ditches</u>. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. (Ditch debris including woody debris shall be loaded and hauled to designated waste areas and shall be accomplished with the use of an excavator and dump truck.) 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.
- 4. <u>Settling Ponds and Ditch Armoring</u>. Construct up to 3 settling ponds for erosion control in project areas and ditchlines where sedimentation or erosion is possible as directed by STATE. Excavated material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A. Waste materials shall be sloped and compacted for drainage. Settling pond dimensions shall be a finished length of 8 feet, width of 3 feet, and 3 feet in depth, or as directed by STATE. Backslopes shall be ³/₄:1. Ditch line armor and settling pond armor shall be 8 inches deep.
- 5. <u>Subgrade Preparation and Application of Surfacing Rock</u>.
 - (a) Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, settling ponds, and other specified work prior to the application of new surfacing rock.
 - (b) Cut out all potholes and/or washboard sections from the existing surface.
 - (c) Apply required patching and leveling rock, as directed by STATE.
 - (d) Process (grade and mix) the existing surface Provide for a crown, outslope, or inslope of 4 to 6 percent, and compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.
 - (e) Upon completion of above required work, apply, process, and compact surfacing rock in accordance to this Exhibit.

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS:

| <u>Segment</u> | <u>Station</u> | Work Description | | | | | | | |
|----------------|----------------|--|--|--|--|--|--|--|--|
| A to B | 0+00 | Point A. BLM property. Begin road improvement; crown road, clean or construct ditch. Ditch on left. | | | | | | | |
| | 0+85 | Live stream, existing culvert. | | | | | | | |
| | 2+00 | Junction with BLM OHV trail on right, maintain trail access. | | | | | | | |
| | 3+05 | Live stream, existing culvert. | | | | | | | |
| | 5+70 | Property line, BLM to ODF. | | | | | | | |
| | 13+10 | Begin ditch on right | | | | | | | |
| | 27+80 | Point O. Junction with O to P on left. | | | | | | | |
| | 28+90 | Junction on right. | | | | | | | |
| | 34+20 | Begin ditch on both sides. | | | | | | | |
| | 42+50 | Construct Roadside landing on left. | | | | | | | |
| | 42+70 | Point C. Junction with C to D on right. | | | | | | | |
| | 45+15 | Point Q. Junction with Q to R on right. | | | | | | | |
| | 48+30 | Point S. Junction with S to T on right. | | | | | | | |
| | 51+50 | Begin ditch on left. | | | | | | | |
| | 53+55 | Existing culvert, install marker. | | | | | | | |
| | 53+90 | Begin ditch on both sides. | | | | | | | |
| | 54+75 | Point U. Junction with U to V on left. | | | | | | | |
| | 56+10 | Point V1. Junction with V1 to V2 on right. Begin ditch on right. | | | | | | | |
| | 62+25 | Construct truck turnaround on left. | | | | | | | |
| End | 62+50 | Point B. End road improvement. | | | | | | | |

| <u>Segment</u> | <u>Station</u> | Work Description |
|----------------|----------------|--|
| C to D | 0+00 | Point A. Begin road improvement; crown road, clean or construct ditch. |
| | 1+25 | Junction with OHV trail on right, maintain trail access. Existing culvert, clean inlet and outlet. |
| | 5+30 | Point W. Junction with W to X on left. |
| | 7+25 | Junction on right. |
| End | 12+00 | Point D. End road improvement. |

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS:

| <u>Segment</u> | <u>Station</u> | Work Description |
|----------------|----------------|--|
| E to F | 0+00 | Point E. BLM property. Begin road improvement; crown road, clean or construct ditch on right. |
| | 1+80 | Junction with OHV trail on left, maintain trail access. |
| | 2+40 | Junction with OHV trail on right, maintain trail access. |
| | 12+35 | Begin ditch on both sides. |
| | 13+80 | Junction with OHV trail on right, maintain trail access. Existing culvert, clean inlet and outlet. |
| | 14+00 | Property line, BLM to ODF. |
| | 16+10 | Existing culvert, install marker. |
| | 22+15 | Existing culvert, clean inlet and outlet. |
| | 24+30 | Existing culvert, clean inlet and outlet, install marker. |
| | 25+90 | Junction on right. |
| | 28+50 | Begin ditch on left. |
| | 31+90 | Junction on right. Begin ditch on both sides. |
| | 34+60 | Begin ditch on right. |
| | 39+40 | Existing culvert, install marker. |
| | 54+30 | Point G. Junction with G to H on right. Begin ditch on left. |
| End | 66+00 | Point F. End road improvement. |

| <u>Segment</u> | <u>Station</u> | Work Description |
|----------------|----------------|--|
| G to H | 0+00 | Point G. Begin road improvement; crown road, clean or construct ditch. |
| | 9+00 | Junction with OHV trail on both sides, maintain trail access. |
| End | 9+50 | Point H. Junction with H to Y on left. End road improvement. |

| <u>Segment</u> | Station | Work Description |
|----------------|---------|--|
| l to J | 0+00 | Point I. Begin road improvement; crown road, clean or construct ditch. Improve turnaround. |
| | 8+40 | Point F. Junction with E to F on right. |
| | 10+55 | Improve 140 foot spur on right. |
| | 16+20 | Construct roadside landing on right. |
| End | 18+60 | Point J. End road improvement. Construct turnaround on right. |

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS:

| <u>Segment</u> | <u>Station</u> | Work Description | | | | | | | |
|----------------|----------------|--|--|--|--|--|--|--|--|
| K to L | 0+00 | int L. BLM property. Begin road improvement; outslope road. | | | | | | | |
| | 22+60 | Junction on left. | | | | | | | |
| | 26+90 | Property line, BLM to ODF. End outslope; crown road, clean or construct ditch on both sides. | | | | | | | |
| | 32+05 | Point M. Junction with M to N on left. Begin ditch on left. | | | | | | | |
| | 38+25 | Junction on right. | | | | | | | |
| | 53+65 | Install three settling ponds on left. | | | | | | | |
| | 53+75 | Live stream. Begin ditch on right. | | | | | | | |
| | 53+85 | Install three settling ponds on right. | | | | | | | |
| | 73+55 | Point Z. Junction with Z to AA on right. | | | | | | | |
| | 95+60 | Existing culvert, clean inlet and outlet, install marker. | | | | | | | |
| | 101+55 | Existing culvert, clean inlet and outlet, install marker. | | | | | | | |
| | 108+70 | Construct turnaround on right. | | | | | | | |
| End | 109+20 | Point L. End road improvement. | | | | | | | |

| <u>Segment</u> | Station | Work Description |
|----------------|---------|--|
| M to N | 0+00 | Point M. Begin road improvement; crown road, clean or construct ditch. |
| | 6+30 | Improve 300 foot spur on right. |
| End | 13+00 | Point N. End road improvement. Improve turnaround. |

ROCK TABLE

| ROAD SEGMENT: A to B | | | | Sta. to Sta. | | | | TOTAL |
|----------------------|-------------------|----------|------------------|--------------------|--------|--------------|--------|--------|
| | Rock Size | | Depth of | | 0+00 | to 62+50 | | VOLUME |
| Application | and Type | Location | Rock (inches) | Volume (CY) Per | | Number of | | (CY) |
| Spot Rock | 1 ½"-0 Crushed | A to B | Varies | Station | Varies | Stations | Varies | 299 |
| Turnaround | 1 ½"-0 Crushed | 62+25 | 3" | Turnaround | 6 | Turnarounds | 1 | 6 |
| Roadside Landing | 1 ½"-0 Crushed | 42+50 | 3" | Landing | 25 | Landings | 1 | 25 |
| Total Rock fo | r Road Segmen | t: | | | | | | 330 |

| ROAD SEGMENT: C to D | | | | Sta. to Sta. | | | | TOTAL | |
|------------------------------|-----------------------|----------|------------------------------|---------------|--------|-----------------|--------|-------|--|
| | Book Sizo | | Depth of Rock (inches) | | | TOTAL VOLUME | | | |
| Application | Rock Size and Type | Location | | Volume Per | (CY) | Numbe of | er | (CY) | |
| Spot Rock | 1 ½"-0 Crushed | C to D | Varies | Station | Varies | Stations | Varies | 40 | |
| Total Rock for Road Segment: | | | | | | | | 40 | |

| ROAD SEGMENT: E to F | | | | Sta. to Sta. | | | | τοται | |
|------------------------------|-----------------------|----------|------------------------------|---------------|--------|-------------|--------|-----------------|--|
| | Book Sizo | | Depth of Rock (inches) | 0+00 to 66+00 | | | | TOTAL VOLUME | |
| Application | Rock Size and Type | Location | | Volume Per | • • | Numbe of | er | (CY) | |
| Spot Rock | 1 ½"-0 Crushed | E to F | Varies | Station | Varies | Stations | Varies | 220 | |
| Total Rock for Road Segment: | | | | | | | | 220 | |

| ROAD SEGMENT: G to H | | | Sta. to Sta. | | | | TOTAL | |
|------------------------------|-----------------------|----------|------------------|---------------|--------|-------------|--------|-----------------|
| | Book Size | | Depth of | 0+00 to 9+50 | | | | TOTAL VOLUME |
| Application | Rock Size and Type | Location | Rock (inches) | Volume Per | • • | Numbe of | er | (CY) |
| Spot Rock | 1 ½"-0 Crushed | G to H | Varies | Station | Varies | Stations | Varies | 20 |
| Total Rock for Road Segment: | | | | | | | | 20 |

ROCK TABLE

| ROAD SEGN | ROAD SEGMENT: I to J | | | | Sta. to Sta. | | | |
|------------------------------|-----------------------|----------|------------------------------|---------------|--------------|-------------|--------|----------------|
| | Dook Size | | Depth of Rock (inches) | 0+00 to 18+60 | | | | TOTAL |
| Application | Rock Size and Type | Location | | Volume Per | (CY) | Numbe of | r | VOLUME (CY) |
| Spot Rock | 1 ½"-0 Crushed | I to J | Varies | Station | Varies | Stations | Varies | 98 |
| Turnaround | 1 ½"-0 Crushed | 18+60 | 3" | Turnaround | 6 | Turnarounds | 1 | 6 |
| Approach to Landing | 1 ½"-0 Crushed | 10+55 | 3" | Station | 15 | Stations | 1.4 | 21 |
| Landing | 1 ½"-0 Crushed | 10+55 | 3" | Landing | 45 | Landings | 1 | 45 |
| Roadside Landing | 1 ½"-0 Crushed | 16+20 | 3" | Landing | 25 | Landings | 1 | 25 |
| Total Rock for Road Segment: | | | | | | | | 195 |

| ROAD SEGN | Sta. to Sta. | | | | TOTAL | | | | |
|------------------------------|-------------------|----------|------------------|--------------------|---------|--------------|--------|--------|--|
| | Rock Size | | Depth of | | 0+00 to | o 109+20 | | VOLUME | |
| Application | and Type | Location | Rock (inches) | Volume (CY) Per | | Number of | | (CY) | |
| Spot Rock | 1 ½"-0 Crushed | K to L | Varies | Station | Varies | Stations | Varies | 294 | |
| Turnaround | 1 ½"-0 Crushed | 108+70 | 3" | Turnaround | 6 | Turnarounds | 1 | 6 | |
| Total Rock for Road Segment: | | | | | | | | 300 | |

| ROAD SEGN | IENT: M to N | | | Sta. to Sta. | | | | TOTAL |
|------------------------|-----------------------|----------|------------------|--------------------|--------|--------------|--------|----------------|
| | Deals Oine | | Depth of | 0+00 to 13+00 | | | | |
| Application | Rock Size and Type | Location | Rock (inches) | Volume (CY) Per | | Number of | | VOLUME (CY) |
| Spot Rock | 1 ½"-0 Crushed | I to J | Varies | Station | Varies | Stations | Varies | 34 |
| Turnaround | 1 ½"-0 Crushed | 13+00 | 3" | Turnaround | 6 | Turnarounds | 1 | 6 |
| Landing | 1 ½"-0 Crushed | 6+30 | 3" | Landing | 45 | Landings | 1 | 45 |
| Approach to Landing | 1 ½"-0 Crushed | 6+30 | 3" | Station | 15 | Stations | 3 | 45 |
| Total Rock fo | r Road Segme | nt: | | | | • | | 130 |

| TOTAL ROCK | 1 ½"-0 Crushed |
|------------|-------------------|
| | 1,235 CY |

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

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.

<u>Load Records</u>. 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.

<u>Depth Measurement</u>. 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.

COMPACTION AND PROCESSING REQUIREMENTS

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

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

<u>Subgrade</u>. 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, outsloped, or insloped at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

| ROAD SEGMENT | SUBGRADE COMPACTION OPTIONS |
|---|---|
| All road segments that require rock surfacing | Vibratory Roller |
| All road segments that require subgrade reinforcement rock | Vibratory Grid Roller or a combination of Vibratory Roller and Dozer |

<u>Fills</u>. 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 | FILL COMPACTION OPTIONS |
|-------------------|---|
| All road segments | Vibratory Roller, Vibratory Hand-Operated, Backhoe- Mounted Tamper, or Dozer |

COMPACTION AND PROCESSING REQUIREMENTS

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

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

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

| | ROAD SEGMENT | CRUSHED ROCK COMPACTION OPTIONS | | |
|---|--|---------------------------------|--|--|
| Ī | All road segments requiring crushed rock | Vibratory Roller | | |

COMPACTION EQUIPMENT OPTIONS

<u>Vibratory Rollers</u>. 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.

<u>Vibratory Hand-Operated or Backhoe-Mounted Tamper</u>. Vibratory hand-held or hydraulic tampers shall be used for compaction of backfill materials around culverts. The tamper shoe dimensions shall be a minimum of 10" X 13" and capable of a centrifugal force of 2,250 pounds.

<u>Vibratory Grid Compactors</u>. The roller shall have a grid surface and have an operating weight of 32,000 pounds or more. The rock shall be worked with a grader weighing at least 20,000 pounds during the grid rolling process. All rock shall come in contact with the vibratory grid compactor.

EXHIBIT E

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract. Uninstalled culverts shall become property of the STATE. PURCHASER will deliver surplus culverts to the district office as directed by STATE.

Culverts 36 inches in diameter and smaller shall be constructed of corrugated polyethylene. Culverts larger than 36 inches in diameter shall be constructed of corrugated aluminized Type 2 steel. Polyethylene culverts shall be double-walled and meet the requirements of AASHTO M-294-11, Type S, or ASTM F2648.

Joining shall be done with bands of like material and corrugations. Manufacturers' instructions shall be followed for prefabricated pipe assembly. Polyethylene joints shall be made with split couplings, corrugated to engage the culvert corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the culvert joint.

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

Culverts in live streams shall be installed with the inlet and outlet on grade with the stream bottom, unless otherwise specified in writing.

Cross Drain Culverts

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.

Disconnect Culverts

The culvert inlet shall be located as close to the channel that it is disconnecting, while the culvert outlet shall be located as far from the channel as possible; discharge culvert outflow on the forest floor, allowing for filtration before the water enters the disconnected channel.

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 on improvement segments and crushed rock on new construction segments.

EXHIBIT E

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 shortest culvert section length shall be placed at the inlet end.

The ends of each culvert shall be free of logs and debris which would restrict the free flow of water.

The intake end of cross drain and disconnect 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 dissipator, half round, or other approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Culverts 36 inches in diameter or larger shall have 1:1 step beveled inlets.

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

All culverts scheduled for replacement shall become property of the PURCHASER and be removed from STATE land in the same project period in which replacement occurred. 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.

The intake ends of culverts in fills less than 3 feet to the top of the culvert shall be marked by driving steel posts within 6 inches of the downgrade side. Posts shall be painted with a rust-resistant paint and be a minimum of 5 feet long, with the spade driven 2 feet into the ground. Install a culvert marker at each existing culvert that is missing a marker that could be reached by a grader blade.

Settling Ponds shall be installed within 72 hours of culvert installation, unless otherwise approved in writing by STATE. Steel posts used with half round installation shall be painted with rust preventative paint.

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

EXHIBIT E

CULVERT LIST

| CULVERT NO. | DIAMETER (Inches) | LENGTH (Feet) | ROAD SEGMENT POINT TO POINT | STATION |
|----------------|----------------------|------------------|--------------------------------|---------|
| 1 | 18 | 30 | S to T | 2+60 |
| 2 | 24 | 40 | S to T | 3+75 |
| 3 | 24 | 40 | Z to AA | 10+75 |
| 4 | 36 | 50 | Z to AA | 16+50 |

| TOTAL LENGTHS BY DIAMETER | | | | |
|---------------------------|---------|---------|--|--|
| 18 INCH | 24 INCH | 36 INCH | | |
| 30' | 80' | 50' | | |

EXHIBIT F

WATERBAR SPECIFICATIONS

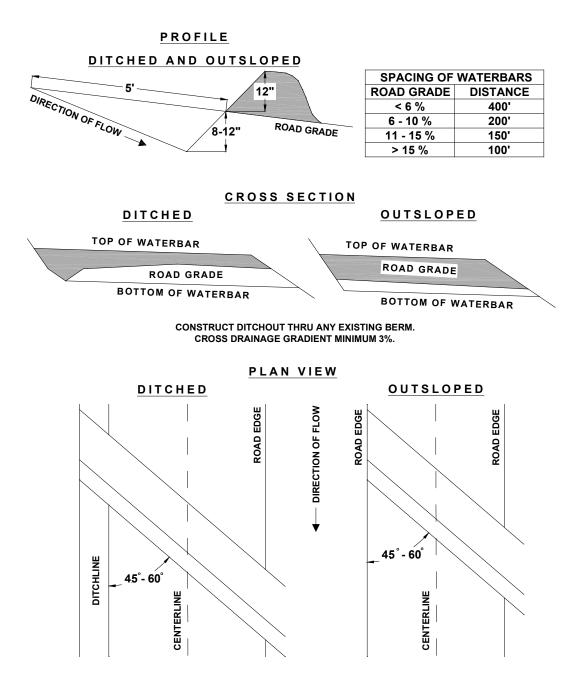
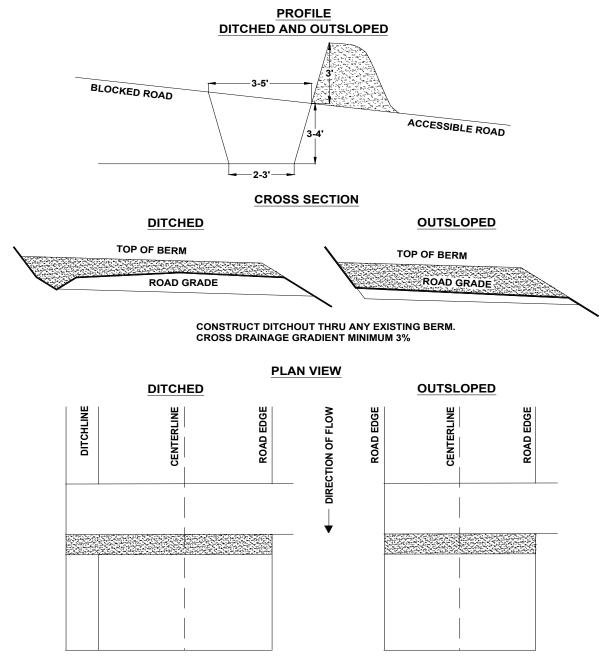


EXHIBIT F

TANK TRAP SPECIFICATIONS



It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.

EXHIBIT G

ROAD VACATING SPECIFICATIONS

GENERAL ROAD VACATING INSTRUCTIONS:

PURCHASER shall vacate road between the following points: V1 to V2, O to P, Q to R, S to T, U to V, W to X, H to Y and Z to AA.

Specific objectives for this project include:

- 1. <u>Block Roads.</u> Use excavated material from fill removals, boulders to block roads from vehicle access, as directed by STATE.
- 2. <u>Erosion Control.</u> Erosion control shall be completed in a progressive manner. Grass seed and straw mulch shall be applied for every 500 feet of road vacated, prior to continuing work.
- 3. <u>Equipment.</u> A minimum 1½ cubic yard, track mounted excavator shall be used for all excavation, culvert removal, streambed preparation, road blocking, and waterbarring, unless otherwise approved in writing by STATE.
- 4. <u>Dry Conditions.</u> All work shall be performed during dry conditions acceptable to STATE.
- 5. Support, including transport, other equipment, replacements, supplies, maintenance, and repairs, shall be furnished as required to complete the project and shall be furnished without cost to STATE, other than as agreed under the contract terms.
- <u>Fill Removal and Stream Channel Development</u>. Remove fills to the natural stream course level(s). Stream channel(s) shall be excavated/developed to specified widths. Developed stream banks shall be sloped at natural contours or no steeper than 2:1, as directed by STATE. Do not place excavated material within a riparian management area. If a riparian management area is not required, do not place excavated material within 75 ft. of stream channel.
- 7. <u>Culvert Removal</u>. Remove drainage structures and culverts. Removed culverts shall be hauled to an approved refuse site off of STATE land.

EXHIBIT G

ROAD VACATING SPECIFICATIONS

SPECIFIC ROAD VACATING INSTRUCTIONS:

| <u>Segment</u> | Station | Work Description |
|----------------|---------|---|
| V1 to V2 | 0+00 | Point V1. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. |
| End | 4+00 | Point V2. End road vacating. |

| <u>Segment</u> | <u>Station</u> | Work Description |
|----------------|----------------|--|
| O to P | 0+00 | Point O. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. |
| End | 5+50 | Point P. End road vacating. |

| Segment | Station | Nork Description | |
|---------|---------|--|--|
| Q to R | 0+00 | Point Q. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. | |
| End | 2+20 | Point R. End road vacating. | |

| <u>Segment</u> | Station | Work Description | |
|----------------|---|-----------------------------|--|
| S to T | 0+00 Point S. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. | | |
| | 2+60 Existing culvert. Construct waterbar on the up-slope side of the culvert and block ditchline from culvert inlet. | | |
| | 3+75 Live stream. Remove existing culvert and fill. | | |
| End | 16+00 | Point T. End road vacating. | |

| <u>Segment</u> | <u>Station</u> | Work Description | |
|----------------|----------------|--|--|
| U to V | 0+00 | Point U. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. | |
| End | 13+00 | Point V. End road vacating. | |

| Segment | Station | Vork Description | |
|---------|---------|---|--|
| W to X | 0+00 | 0+00 Point W. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. | |
| End | 4+00 | Point X. End road vacating. | |

EXHIBIT G

ROAD VACATING SPECIFICATIONS

SPECIFIC ROAD VACATING INSTRUCTIONS:

| <u>Segment</u> | Station | Work Description | |
|----------------|---------|---|--|
| H to Y | 0+00 | Point H. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. | |
| End | 9+00 | Point Y. End road vacating. | |

| <u>Segment</u> | <u>Station</u> | Work Description | |
|----------------|----------------|--|--|
| Z to AA | 0+00 | Point Z. Begin road blocking. Construct tank trap. Begin waterbar construction according to the specifications in Exhibit F. | |
| | 10+75 | Live stream. Remove existing culvert and fill. | |
| | 16+50 | Live stream. Remove existing culvert and fill. | |
| End | 19+50 | Point AA. End road vacating. | |

EXHIBIT H

SEEDING AND MULCHING

This work shall consist of preparing seedbeds and furnishing and placing required seed, fertilizer, and straw mulch. Straw mulch shall consist of straw that is free of noxious weeds. Apply seed and fertilizer to all waste areas, and bare soils resulting from Project Nos. 1, 2 and 3. Apply straw mulch to all bare soils within 100' of streams resulting from Project Nos. 1, 2 and 3 and to all waste areas.

<u>Seeding Seasons</u>. Seeding shall be performed only from <u>March 1</u> through <u>June 15</u> and <u>August 15</u> through <u>October 31</u>. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Areas of disturbed soil shall be seeded by the end of the project period in which work was started. PURCHASER shall notify STATE within 24 hours of seeding and fertilizer application.

APPLICATION METHODS FOR SEED AND FERTILIZER

<u>Dry Method</u>. Mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders, or other approved mechanical seeding equipment shall be used to apply the seed and fertilizer in the amounts and mixtures specified. Hand-operated seeding devices may be used when seed and fertilizer are applied in dry form.

APPLICATION RATES FOR SEED AND FERTILIZER

The seed mixture listed below shall be applied at 100 lbs. per acre. The seed mixture shall be comprised of the following:

| SPECIES | MIXTURE | PURE LIVE SEED | GERMINATION |
|---------------|---------|----------------|-------------|
| Annual Rye | 33% | 95% | >90% |
| Orchard Grass | 33% | 95% | >90% |
| Perennial Rye | 34% | 95% | >90% |

<u>Fertilizer</u>: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 200 pounds per acre. Fertilizer shall not be applied within 100 feet of streams.

Mulching Period. Straw mulch shall be applied within 24 hours of spreading grass seed and fertilizer.

APPLICATION RATES FOR MULCH

Place straw mulch to a reasonably uniform thickness of $1\frac{1}{2}$ to $2\frac{1}{2}$ inches. This rate requires between 2 and 3 tons of dry mulch per acre.

Application Locations:

| Road Segment | Location | |
|--------------|---------------|--|
| V1 to V2 | 0+00 to 4+00 | |
| O to P | 0+00 to 5+50 | |
| Q to R | 0+00 to 2+20 | |
| S to T | 0+00 to 16+00 | |
| U to V | 0+00 to 13+00 | |
| W to X | 0+00 to 4+00 | |
| H to Y | 0+00 to 9+00 | |
| Z to AA | 0+00 to 19+50 | |

State Timber Sale Contract No. FG-341-2024-W00952-01 Bible Creek

PART IV: OTHER INFORMATION FOREST PRACTICES ACT "WRITTEN PLAN" For Operations within 100 feet of Type-F Stream

Timber Sale Area is located in Portions of Section 16 of T4S, R7W, W.M., Tillamook County, Oregon.

Landowner: Oregon Department of Forestry 801 Gales Creek Rd Forest Grove, OR 97116 (503) 357-2191

Protected Resources:

Tributary off the Tributary off Bible Creek

Specific Site Characteristics:

Unnamed Tributary (Small, Type-F) flows interior from the eastern boundary of Unit 1 for approximately 400 feet.

Tree and Vegetation Retention:

Vegetation within the buffers consists of red alder, Douglas-fir, and western hemlock. The understory consists of vine maple, salmonberry, devil's club, sword fern, graminoids, and forbs.

Type-F Streams within the Timber Sale Area are buffered at a minimum of 120 feet horizontal distance.

Resource Protection Practices:

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

- Trees that fall or slide into Type-F RMAs shall not be removed without prior approval from STATE.
- Trees adjacent to the stream buffers (RMAs) will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
- When cable logging is conducted nearby the RMAs, logging lines may cross, but shall not be lowered into the RMAs during yarding, except during rigging. During rigging, the lines must be pulled out of the RMAs when changing corridors.
- Logs shall be fully suspended when yarding across all stream buffers (RMAs).
- Cable corridors must be at least 100 feet apart where they cross the RMAs.

I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act regarding the operations conducted within 100 feet of Type-F and Type-D streams. I agree to the protection measures listed on this plan:

Submitted:

Purchaser/Operator Contract Representative

Date:

Original: Salem CC: Operator, Purchaser, District file, Marketing Unit