



Oregon Department of Forestry

2600 State St Salem OR 97310

PART III: EXHIBITS

EXHIBIT B

TIMBER SALE OPERATIONS PLAN

(See page 2 for instructions)

Date Received by State: _____

(5) State Brand Information (Complete)

(1) Contract Number: WL-341-2020-W00577-01

(2) Sale Name: Milk Creek

(3) Contract Expiration Date: 05/31/2022

(4) Purchaser Name: _____

(6) State Representatives:

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

(7) Purchaser Representatives:

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

(8) Name of Subcontractors and Start Dates:

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

	<u>Subcontractor Name.</u>	<u>Start Date</u>	<u>Cell No.</u>	<u>Alt Phone</u>
FELLING				
YARDING				

(9) Comments:

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



Oregon Department of Forestry

2600 State St Salem OR 97310

PART III: EXHIBITS

EXHIBIT B

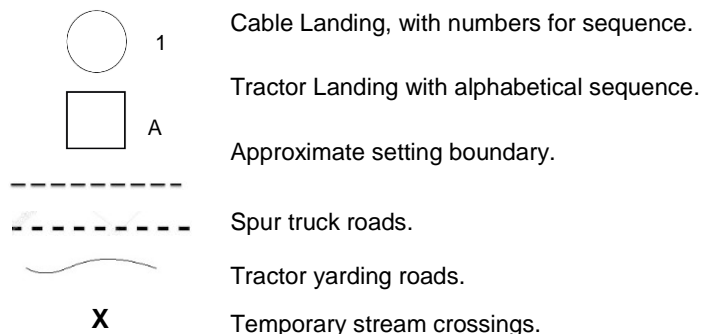
INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN STATE

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

Explanation of Item No.(from Page 1)

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not Known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.
- (9) Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.
- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:
 1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
 2. Locations of spur roads planned for construction, other than required by the timber sale contract. Provide spur road specifications
 3. Locations of proposed tractor yarding roads. Show if and how marked on the ground.
 4. Locations of temporary stream crossings.
 5. List the sequence of performing project work.
 6. Location of rock sources - attach pit development plans.





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

Completion Timeline

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

Projects

Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____

Work Commences	25%	50%	75%	Projects Complete

Harvest & Other Requirements

Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____

Work Commences	25%	50%	75%	Sale 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 PURCHASER's operation under the plan is lawful under the federal ESA. As provided in the timber sale contract, PURCHASER's must comply with all applicable state, federal, and local laws.

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

APPROVED; Date: _____

SUBMITTED BY:
PURCHASER

STATE OF OREGON - DEPARTMENT OF
FORESTRY

Title _____

Title _____



Oregon Department of Forestry
EXHIBIT C - SAWMILL GRADE (WESTSIDE SCALE)
SCALING INSTRUCTIONS - LOCATION APPROVAL - BRAND INFORMATION
Western Lane - SOA

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

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

(3) FROM: Western Lane Phone (541) 935-2283
(State Forestry District)
Address: 87950 TERRITORIAL HWY
VENETA, OR 97487-0157

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

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

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

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

(7) Weight Scale Sample ☐ YES ☒ NO

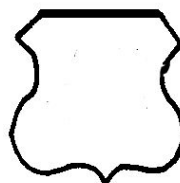
(8) APPROVED SCALING LOCATIONS (as shown on the ODF Approved Locations web-site)	Species	Yard	Truck	Weight

(9) SALE NAME: Milk Creek
COUNTY: Lane

(10) STATE CONTRACT NUMBER:
WL-341-2020-W00577-01

(11) STATE BRAND REGISTRATION NUMBER:

(12) STATE BRAND INFORMATION:



(13) PAINT REQUIRED: YES ☒
COLOR: Orange

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

(15) REMARKS

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

(16) SIGNATURES:

Purchaser or Authorized Representative Date

State Forester Representative Date

State Forester Representative PRINT NAME



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

- (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@southernoregonlogscaling.com

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

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

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

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

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

General Distribution: TPSO, Approved Scaling Locations(s), Purchaser, Specific distribution instructions are outlined on the last page of this report: Instructions for Form



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

Western Lane, SOA

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

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

(3) FROM: Western Lane Phone (541) 935-2283
(State Forestry District)
Address: 87950 TERRITORIAL HWY
VENETA, OR 97487-0157

(4) PURCHASER: _____

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

Mailing Address: _____

Phone Number: _____

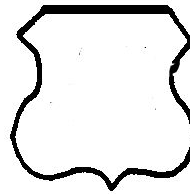
(9) SALE NAME: Milk Creek

COUNTY: Lane

(10) STATE CONTRACT NUMBER:
WL-341-2020-W00577-01

(11) STATE BRAND REGISTRATION NUMBER: _____

(12) STATE BRAND INFORMATION:



(13) REMARKS:

(6) STATE Definition of Approved Pulp Sort:
• Top portion of the tree (tops).
• All logs with a diameter (Big End) greater than 8 inches marked with blue paint.

Operator's Name (Optional inclusion by District):

(14) SIGNATURES:

(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.

Purchaser or Authorized Representative _____ Date _____

State Forester Representative _____ Date _____

State Forester Representative PRINT NAME _____

(8) TPSO PROCESSING INSTRUCTIONS

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

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

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



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

Western Lane, SOA

- (1) **Must Complete.** Check appropriate box. REVISION NUMBER requires comments in the Remarks Section (13). CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) **Must Complete.** Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp
- (3) **Must Complete.** State Forestry District and District Phone Number.
- (4) **Must Complete.** Purchaser's business name as it appears on the Contract.
- (5) **Must Complete.** Third Party Scaling Organization that will be processing the weight tickets, mailing address, and phone number.

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

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

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

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

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

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

- (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.
- (7) **Must Complete.** Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (8) **Must Complete.** Enter sale Contract number.
- (9) **Must Complete.** Enter Oregon's State Brand Registry Number **(REQUIRED)**.
- (10) **Must Complete.** Show brand assigned to timber sale. One brand only, if more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item(13).
- (11) Use this section to list any special instructions or the reason for any revisions in section item (1).
- (12) **Must Complete.** Purchaser required to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

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

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

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT D
FOREST ROAD SPECIFICATIONS

ROAD	SUBGRADE WIDTH	SURFACED WIDTH	STATION TO STATION	DRAINAGE
Wimble Pass Road	16'	12'	0+00 to 50+94	Ditched
Spur 1	16'	12'	0+00 to 51+75	Ditched
Spur 1a	14'	12'	0+00 to 12+34	Ditched/Outsloped
Spur 1b	14'	12'	0+00 to 20+51	Ditched/Outsloped
Spur 2	16'	12'	0+00 to 33+84	Ditched
Spur 2a	14'	12'	0+00 to 3+10	Outsloped
Spur 2b	14'	12'	0+00 to 1+20	Outsloped

CLEARING. This work shall consist of clearing, removing, and disposing of all trees, Snags, Down Timber, brush, surface objects, and protruding obstructions within the clearing limits.

Where clearing limits have not been marked, the clearing limits shall extend 10 feet back of the top of the cut slope and 10 feet out from the toe of the fill slope, or as directed by STATE. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

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

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

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

Milk Creek



State Timber Sale Contract

Page 2 of 12

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT D
FOREST ROAD SPECIFICATIONS

GRUBBING CLASSIFICATION.

New construction - from the top of the cut slope to the toe of the fill.

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

CLEARING AND GRUBBING DISPOSAL. 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.

Milk Creek

WL-341-2020-W00577-01

- 2 -

Version April 2019



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, outsloped, or insloped at 4 to 6 percent as shown on the "Forest Road Specifications" table in this Exhibit or as specified by STATE.

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 25 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

Back Slopes

Fill Slopes

Solid Rock

Vertical to ¼ :1

Fractured Rock

½:1

Milk Creek



State Timber Sale Contract

Page 4 of 12

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT D

FOREST ROAD SPECIFICATIONS

Soil - side slopes 50% and over	$\frac{3}{4} : 1$	$1\frac{1}{2} : 1$
Soil - side slopes less than 50%	$1 : 1$	$1\frac{1}{2} : 1$

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

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

SEASONAL WINTERIZATION. All unsurfaced roads or unfinished subgrades shall be waterbarred as directed by the STATE, and blocked from vehicular traffic prior to October 31, annually and as directed by STATE.

Milk Creek

WL-341-2020-W00577-01



EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- 1 Roadside Brushing. Conduct roadside brushing as specified in Exhibit H.
- 2 Excavated Materials. Excavated materials shall be utilized for road and fill 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. Waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted.
- 3 Bank Slough Removal. Dig out all bank slough. Bank slough material 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.
- 4 Culvert Installation. Cross drain culverts shall be installed as directed by STATE and in accordance to exhibit G. The location of the culverts shall be marked by STATE. A STATE representative will mark the location after the completion of the subgrade. Rocking shall not occur until all culverts have been installed unless otherwise approved in writing by STATE. Each culvert shall be backfilled with crushed rock, or approved fill, and additional surfacing rock shall be placed over the culvert to account for shrinkage and compaction during hauling.
- 5 Drainage Ditches. Restore or construct ditch lines, including ditchouts, as directed by STATE. Clean out any plugged culvert inlets and outlets. 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.
- 6 Energy Dissipator Construction. Where rock is used for an energy dissipator, rock shall be placed below the culvert outlet and embedded for a minimum of 3 feet, in accordance with Exhibit G.
- 7 Subgrade Preparation and Application of Surfacing Rock.
 - (a) Cut out all potholes and/or washboard sections from the existing surfacing.
 - (b) Grade and shape and establish drainage.
 - (c) Apply required patching and leveling rock, as directed by STATE.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Wimble Pass Rd as shown on Exhibit A:

- Point A Reestablish drainage between culvert and gate, remove bank slough, unplug cross drain.
- 0+00 to 50+94 Grade and shape running surface and establish drainage. Wimble Pass Rd is crowned and the operator shall maintain or reestablish drainage for the entire road. Clearing ditches of debris, cleaning out catch basins and unplugging or cleaning culverts along the road.

Rocking Instructions:

- Gate to Intersection with Spur 2
From the Gate to the intersection of Wimble Pass Rd and Spur 2, approximately 150', provide a compacted depth of 3" of 1½"-0" rock.

Spur 1 as shown on Exhibit A:

- 0+00 to 51+75 Conduct roadside brushing according to Exhibit H.
- 0+00 to 51+75 Conduct standard maintenance. Reestablish drainage, remove bank slough, unplug cross drains.
- Merchantable trees have fallen across the existing road. These trees shall be processed and set aside for removal.
- Prepare the running surface for a lift of rock.
- Grade and shape running surface and establish drainage. Spur 1 has sections of crowned or insloped drainage. The operator shall maintain or reestablish drainage for each section prior to the application of surfacing rock. The subgrade shall be crowned at 3 to 6 percent.
- Operator shall utilize ditchouts where feasible.
- Remove any berms on the inside and outside edge of the road that impedes drainage. The operator shall be careful to minimize the disturbance to the grasses and herbs growing in the ditchline and outside edge of the road.
- Re-establish ditchlines where specified by STATE.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

- | | |
|----------------------------|---|
| 4+84 | Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D. |
| 10+96 | Install an 18"x30' cross drain as marked in the field and in accordance to Exhibit G. |
| 14+18 | Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D. |
| 17+34 | Intersection with Spur 1a. |
| Between 17+34
and 36+84 | Construct 2 landings and 1 truck turnaround as approved by STATE and in accordance to Exhibit D. |
| 23+35 | Replace culvert with an 18"x40' ACSP pipe in accordance to Exhibit G. |
| 29+39 | Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D. |
| 34+53 | Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D. |
| 36+84 | Intersection with Spur 2a. |
| 39+89 | Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D. |
| 42+92 | Begin placement woven geotextile for subgrade separation per Exhibit I. Continue laying fabric approx. 140'. |
| 44+32 | End geotextile placement and clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D. |
| 48+31 | Construct truck turnaround on the right side in accordance to Exhibit D. |
| 51+28 | Install an 18"x40' cross drain as marked in the field and in accordance to Exhibit G. Cross drain will be placed in order to reroute water from running onto the landing. Culvert shall be placed in a location that will redirect the water and will not be damaged during logging activities. Culvert may be placed in a different location with approval from STATE. |
| 51+75 | Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'. |

Rocking Instructions:

- 0+00 to 51+75 From the intersection of Wimble Pass Rd and Spur 1 to the 51+75 landing, provide a compacted depth of 3" of 3 "-0" rock.



State Timber Sale Contract

Page 8 of 12

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Between 17+34 and 36+84:

Apply the allocated landing rock in two locations and turnaround rock in one location Purchaser choice as approved by STATE.

48+31: Apply the allocated turnaround rock.

51+75 Apply the allocated landing rock.

Spur 1a as shown on Exhibit A

0+00 to 12+34 Conduct roadside brushing according to Exhibit H.

0+00 to 12+34 Clear and grub. Clearing debris shall be piled on stable locations. Clearing debris shall be piled in a manner to facilitate burning. The piles shall be conical in nature.

Stumps may be piled in openings and gaps in stable locations.

0+00 Clean out cross drain inlet and outlet.

0+00 to 1+86 Grade, shape, compact subgrade, and establish drainage for outsloped road reconstruction.

1+86 to 3+14 Stop outsloped road and begin crowned road reconstruction. Grade, shape, compact subgrade, and establish drainage for crowned road. Road shall be crowned 3 to 6 percent.

2+09 Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D.

3+14 to 12+34 Stop crowned road and begin outsloped road reconstruction. Grade, shape, compact subgrade, and establish drainage for outsloped road.

5+52 Construct truck turnaround on the left side in accordance to Exhibit D. Drift approximately 100 cubic yards of material to a stable location as approved by STATE.

9+63 Construct a landing. Landing shall be 60' by 60'.

12+34 The subgrade shall be standard balance cut fill construction in preparation for a landing.

Clear and grub. Clearing debris shall be piled on stable locations. Clearing debris shall be piled in a manner to facilitate burning. The piles shall be conical in nature. Merchantable logs shall be processed and set aside for removal.

Milk Creek



EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Stumps may be piled in openings and gaps in stable locations.

Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'.

Rocking Instructions:

0+00 to 12+34 From the intersection of Spur 1 and Spur 1a to the landing at 12+34, apply a compacted depth of 8" of 3"-0" base rock. The running surface of crowned road sections shall be crowned at 3 to 6 percent.

5+52 Apply the allocated turnaround rock.

9+63 & 12+34 Apply the allocated landing rock.

Spur 1b as shown on Exhibit A

0+00 to 20+51 Conduct roadside brushing according to Exhibit H.

0+00 to 20+51 Clear and grub. Clearing debris shall be piled on stable locations. Clearing debris shall be piled in a manner to facilitate burning. The piles shall be conical in nature.

0+00 At intersection of Spur 1 and Spur 1b, establish 3-way intersection.

The subgrade shall be standard balance cut fill construction.

Remove hump in 3-way intersection and level out. Material can be drifted onto Spur 1b.

Stumps may be piled in openings and gaps in stable locations.

0+00 Begin crowned road reconstruction. Grade, shape, compact subgrade, and establish drainage for crowned road. Road shall be crowned 3 to 6 percent. Ditches should be 3'x1'.

0+43 Remove tank trap. Material can be drifted onto Spur 1b.

1+70 to 3+68 Begin inside ditch on both sides of road. Ditch should be 3'x1'.

3+68 Construct ditch outs on both sides of the road.

5+13 Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

End crowned road reconstruct and begin outsloped road reconstruct. Grade, shape, compact subgrade, and establish drainage for outsloped road.

- 8+14 Construct truck turnaround on left side in accordance to Exhibit D.
- 10+24 Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'.
- 16+51 Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'.
- 19+79 Construct a truck turnaround.
- 20+51 Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'.

Rocking Instructions:

- 0+00 to 20+51 From the intersection of Spur 1 and Spur 1b to the final landing at 20+51, apply a compacted depth of 8" of 3"-0" base rock. The running surface of crowned road sections shall be crowned at 3 to 6 percent.
- 8+14 Apply the allocated truck turnaround rock.
- 5+13, 12+64,
16+51 & 20+51 Apply the allocated landing rock.

Spur 2 as shown on Exhibit A

- 0+00 to 33+84 Conduct roadside brushing according to Exhibit H.
- 0+00 to 2+50 Prepare the running surface for a lift of rock.
- 0+00 to 33+84 Conduct standard maintenance. Reestablish drainage, remove bank slough, unplug cross drains.

Merchantable trees have fallen across the existing road. These trees shall be processed and set aside for removal.

Grade and shape running surface and establish drainage. Spur 1 has sections of crowned or insloped drainage. The operator shall maintain or reestablish drainage for each section prior to the application of surfacing rock. The subgrade shall be crowned at 3 to 6 percent.

Operator shall utilize ditchouts where feasible.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Remove any berms on the inside and outside edge of the road that impedes drainage. The operator shall be careful to minimize the disturbance to the grasses and herbs growing in the ditchline and outside edge of the road.

Re-establish ditchlines where specified by STATE.

0+03 Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D.

6+40 Construct a truck turnout on right side. The turnout shall be a minimum 25 feet in length and the subgrade shall be 30 feet wide at the curve. Width may be obtained from cutting into the bank and filling on the ridge, creating a mostly balanced cut and fill road prism.

22+24 Clean out cross drain culvert inlet and outlet as marked in the field and in accordance to Exhibit D.

24+50 Construct a truck turnaround on the left side in accordance to Exhibit D.

Approx. 25+70 Intersection of Spur 2 and Spur 2a.

Approx. 33+70 Intersection of Spur 2 and Spur 2b.

36+62 End crowned road reconstruct and begin outsloped road reconstruct.

37+62 Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70'. Option to end road.

37+84 End road reconstruction.

Rocking Instructions:

0+00 to 2+50 From the intersection of Wimble Pass Rd and Spur 2 to the 2+50, provide a compacted depth of 3" of $\frac{3}{4}$ "-0" rock.

6+40 Apply the allocated truck turnout rock.

24+50 Apply the allocated truck turnaround rock.

37+62 Apply the allocated landing rock.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Spur 2a as shown on Exhibit A

0+00 to 3+10 The subgrade shall be standard balance cut fill construction.

The subgrade shall be outsloped.

Operator shall utilize ditchouts where feasible.

Clear and grub. Clearing debris shall be piled on stable locations. Clearing debris shall be piled in a manner to facilitate burning. The piles shall be conical in nature.

Stumps may be piled in openings and gaps in stable locations.

Merchantable logs shall be processed and set aside for removal.

3+10 Construct a landing. Landing shall be a minimum of 50' by 50' and no greater than 70' by 70' and sloped for drainage.

Rocking Instructions:

0+00 to 3+10 From the intersection of Spur 2 and Spur 2a to the landing at 3+10, apply a compacted depth of 8" of 3"-0" base rock. The running surface of the road shall be crowned at 3 to 6 percent.

3+10 Apply the allocated landing rock.

Spur 2b as shown on Exhibit A

0+00 to 0+70 Clear and grub. Clearing debris shall be piled on stable locations. Clearing debris shall be piled in a manner to facilitate burning. The piles shall be conical in nature.

Stumps may be piled in openings and gaps in stable locations.

Merchantable logs shall be processed and set aside for removal.

0+70 Construct a landing. Landing shall be 70' by 70' and sloped for drainage.

Rocking Instructions:

0+70 Apply the allocated landing rock.



"Stewardship in Forestry"

State Timber Sale Contract

Page 1 of 4

No. 341-18-64

Milk Creek

EXHIBIT E

ROAD	ROCK TYPE	ROCK SIZE	COMPACTED DEPTH	POINT TO POINT	STATION TO STATION	TOTAL LOOSE TRUCK VOLUME
Spur 1	Lift	3"-0"	3"		0+00 to 51+75	850
Spur 1a	Base	3"-0"	8"		0+00 to 12+34	540
Spur 1b	Base	3"-0"	8"		0+00 to 20+51	900
Spur 2	Cap	¾"-0"	3"		0+00 to 2+50	40
Spur 2a	Base	3"-0"	8"		0+00 to 3+10	140
Wimble Pass Road	Lift	1 ½"-0"	3"	Gate to intersection w/Spur 2		30
TURNOUTS:				NO. OF T.O.	LOCATION	
Spur 2	Base	3"-0"	6"	1	6+40	20
TURNAROUNDS:				NO. OF T.A.	LOCATIONS	
Spur 1	Base	3"-0"	6"	2	48+31 and Approved by STATE	40
Spur 1a	Base	3"-0"	6"	1	5+52	20
Spur 1b	Base	3"-0"	6"	1	8+14	30
Spur 2	Base	3"-0"	6"	1	24+50	20
LANDINGS AND JUNCTIONS:				NO. OF LDGS.	LOCATIONS	
Spur 1	Base	Jaw Run	6"	3	51+75 and Approved by STATE	120
Spur 1a	Base	Jaw Run	6"	2	9+63 and 12+34	80
Spur 1b	Base	Jaw Run	6"	4	5+13, 12+64, 16+51, 20+51	160
Spur 2	Base	Jaw Run	6"	1	37+62	40

Milk Creek



"Stewardship in Forestry"

State Timber Sale Contract

Page 2 of 4

No. 341-18-64

Milk Creek

EXHIBIT E

LANDINGS AND JUNCTIONS:	Rock Type	Rock Size	COMPACTED DEPTH	NO. OF LDGS.	LOCATIONS	TOTAL LOOSE TRUCK VOLUME
Spur 2a	Base	Jaw Run	6"	1	3+10	40
Spur 2b	Base	Jaw Run	6"	1	1+20	50

ROCK TOTALS	Jaw Run	3"-0"	1 1/2" -0"	3/4" -0"
LOOSE TRUCK Cu. Yds.	490	2560	30	40

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

Depth measurement shall be used to determine contract compliance.

Milk Creek

WL-341-2020-W00577-01



State Timber Sale Contract

Page 3 of 4

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT E

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 weekly. However, depth measurement shall be used to determine contract compliance.

Milk Creek



EXHIBIT E

DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

<u>For 3/4"-0"</u>	Passing	1" sieve	100%
	Passing	3/4" sieve	90-100%
	Passing	3/8" sieve	55-75%
	Passing	1/4" sieve	40-60%
	Passing	No. 10 sieve	20-40%
	Passing	No. 40 sieve	8-16%

<u>For 1½"-0"</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	3/4" sieve	60-90%
	Passing	1/4" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%

<u>For 3"-0"</u>	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	3/4" sieve	40-60%
	Passing	1/4" sieve	20-40%
	Passing	No. 10 sieve	5-20%

JAW-RUN, PIT-RUN, and RIPRAP ROCK SPECIFICATIONS

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

Control of gradation shall be by visual inspection by STATE.



EXHIBIT F

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.

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.

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments requiring crushed rock.	(1) Vibratory Roller



EXHIBIT F

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.



"Stewardship in Forestry"

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT G

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract.

Culverts shall be constructed of corrugated aluminized (Type 2) steel.

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

Aluminized (Type 2) steel culverts shall meet the requirements of AASHTO M-36-03¹.

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

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

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

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

The foundation and trench walls for all culverts shall be free from logs, stumps, limbs, stones, and other objects which would dent or damage the culvert. The culvert trench shall be excavated 3 culvert diameters wide to permit compaction and working on each side of the culvert. Tamping shall be done in 6-inch lifts, 1 culvert diameter each side of the culvert. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

Backfill shall consist of, crushed rock, or approved job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the culvert. Additional surfacing rock shall be placed over the culvert to account for shrinkage and compaction during hauling.

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

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". Minimum vertical cover for other designs shall be as specified by STATE.

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

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



"Stewardship in Forestry"

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT G

CULVERT SPECIFICATIONS

The intake end of relief culverts shall be provided with a sediment catching basin 3 feet in diameter at the bottom. The outlet end of any culvert which would allow water to erode embankment soil shall be provided with an energy dissipator, or other approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Milk Creek

WL-341-2020-W00577-01



EXHIBIT G

CULVERT SPECIFICATIONS

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.

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

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

<u>Steel Culvert</u>		<u>Thickness</u>		<u>Band Widths (")</u>		
<u>Dia.</u>	<u>Gauge</u>	<u>Uncoated</u>	<u>Coated</u>	<u>Band Gauges</u>	<u>Annular</u>	<u>Helical</u>
18-24	16	(0.0598")	(0.064")	16	12	12

CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	GAUGE	STATION
1	18	40	ACSP	16	As marked by STATE
2	18	30	ACSP	16	As marked by STATE
3	18	40	ACSP	16	As marked by STATE

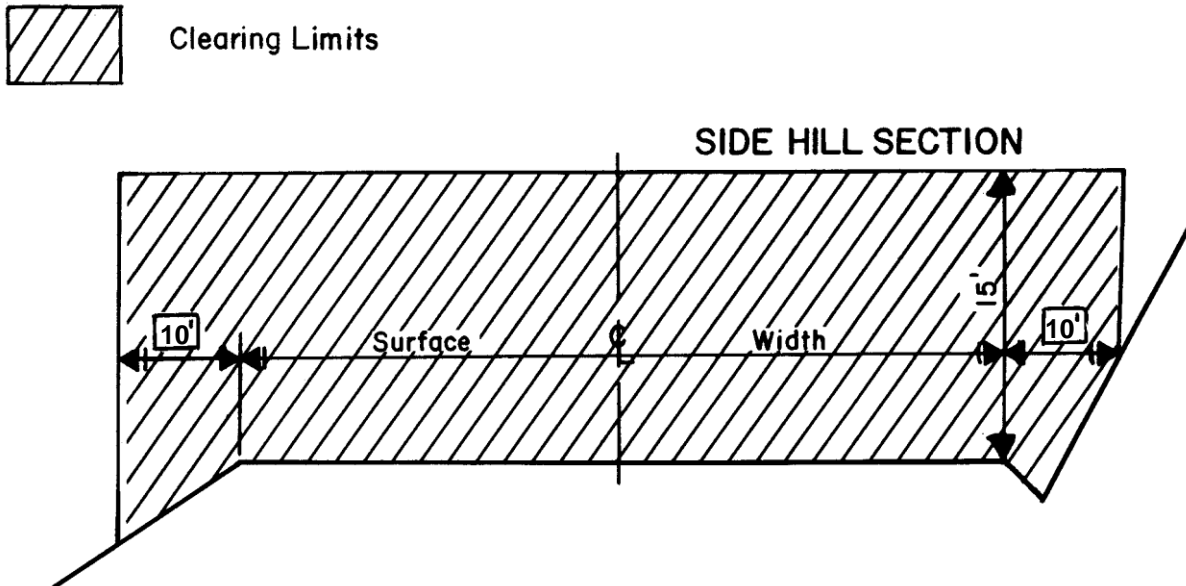
ACSP = Aluminized, CPP = Polyethylene, GCSP = Galvanized

Culvert Length shown are not the exact lengths. The length may be less or greater based on site conditions. Operator shall install the appropriate length of culvert to meet the requirements in this Exhibit as stated above and as directed by STATE.



EXHIBIT H

ROAD BRUSHING SPECIFICATIONS



Brush between Project Points A to E as shown on Exhibit A in accordance to the requirements bellow.

REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface, and the minimum width of clearing on the cut slope side 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.

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, cut slope, 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.

Milk Creek



State Timber Sale Contract

Page 2 of 2

No. WL-341-2020-W00577-01

Milk Creek

EXHIBIT H

ROAD BRUSHING SPECIFICATIONS

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

Existing debris on the roadway, cut slope, ditch line, 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 DAMAGES. Culverts damaged, or any portion of a marker damaged from PURCHASER activities shall be assessed a damage fee.

Milk Creek



EXHIBIT I

GEOTEXTILE SPECIFICATIONS

GEOTEXTILE SPECIFICATIONS –

Subgrade Geotextiles (separation) - Geotextile fabric for forest road surfacing purposes shall be woven and shall meet or exceed the following requirements, unless otherwise approved in writing by STATE:

Geotextile Property	ASTM test method	Unit	Woven property	Nonwoven property
Grab Tensile strength (minimum) Machine and Cross Machine Directions	D4623	Lb.	180	113
Grab Failure Strain Machine and Cross Machine Directions	D4623	%	<50	≥50
Tear Strength (minimum)	D4533	Lb.	68	41
Puncture Strength (minimum)	D6241	Lb.	371	223
Apparent Opening Size (US Standard Sieve)	D4751	-	30	30
Permittivity (minimum)	D4491	sec ⁻¹	0.05	0.05
Ultra Violet Stability Retained Strength (minimum)	D4355 @500 hrs	%	50	50

Roll width shall be 16 feet

Drainage Geotextile- Geotextile fabric for forest road drainage purposes shall be woven and shall meet the following requirements, unless otherwise approved in writing by STATE:



TYPE 1 Drainage Geotextiles

Geotextile Property	ASTM test method	Unit	Woven property	Nonwoven property
Grab Tensile strength (minimum) Machine and Cross Machine Directions	D4623	Lb.	180	115
Grab Failure Strain Machine and Cross Machine Directions	D4623	%	<50	≥50
Tear Strength (minimum)	D4533	Lb.	67	40
Puncture Strength (minimum)	D6241	Lb.	370	220
Apparent Opening Size (US Standard Sieve)	D4751	-	40	40
Permittivity (minimum)	D4491	sec ⁻¹	0.05	0.05
Ultra Violet Stability Retained Strength (minimum)	D4355 @500 hrs	%	50	50

Roll Width shall be 16 feet

TYPE 2 Drainage Geotextiles

Geotextile Property	ASTM test method	Unit	Woven property	Nonwoven property
Grab Tensile strength (minimum) Machine and Cross Machine Directions	D4623	Lb.	250	160
Grab Failure Strain Machine and Cross Machine Directions	D4623	%	<50	≥50
Tear Strength (minimum)	D4533	Lb.	90	56
Puncture Strength (minimum)	D6241	Lb.	495	310
Apparent Opening Size (US Standard Sieve)	D4751	-	40	40
Permittivity (minimum)	D4491	sec ⁻¹	0.05	0.05
Ultra Violet Stability Retained Strength (minimum)	D4355 @500 hrs	%	50	50

Roll width shall be 16 feet



INSTALLATION REQUIREMENTS – subgrade (separation) geotextile shall be installed according to the following requirements:

1. Subgrade surface shall be leveled and smoothed to remove humps and depressions which exceed 6 inches in height and depth. Small pieces of woody debris shall be removed. Light vegetation (grass, weeds, leaves, and fine woody debris) may be left in place.
2. Fabric shall be installed directly on the prepared surface. Longitudinal and traverse joints shall be overlapped at least 3 feet.
3. Surfacing course material shall be placed to the designated thickness in one lift and spread in the direction of fabric overlap. Hauling and spreading equipment shall not be operated on the fabric until the total thickness of surfacing course material is placed.
4. Torn, punctured, or separated sections of the fabric shall be repaired by installing a fabric patch over the break prior to placing the surfacing course material. The patch shall be at least 4 feet larger in horizontal dimensions than the break to be repaired.
5. Fabric failures resulting after rock placement and as evidenced by subgrade pumping or roadbed distortion shall be corrected. Correction measures shall consist of: (1) removing at least three-quarters the depth of surfacing course material in the affected area, (2) placing a fabric patch over the affected area with a minimum 4-foot overlap around the circumference of the area, and (3) replacing enough rock to cover the patch and blend in with the rest of the road.
6. Should STATE determine that installation of woven fabric on roads or portions of roads is not necessary, PURCHASER shall deliver an equivalent amount of woven road fabric to STATE.
7. Geotextile placement locations:

Road	Location
Spur 1	42+92 to 44+32

PART IV: OTHER INFORMATION

**OREGON DEPARTMENT OF FORESTRY
Western Lane District**

Written Plan

**Milk Creek Timber Sale
341-2020-W00577-01**

Portions of Section 21, T19S, R01E, W.M., Lane County

Protected Waters: Small Type F (Winberry Creek Tributaries)

Activity: Cable yarding within 100 feet of a small Type F stream for approximately 1,000 feet (Tributaries of Winberry Creek).

Protection Measures:

Cable Yarding:

- No cutting will take place within approximately 100 feet of the stream (either side) except for any cable corridors that may be needed or for safety purposes.
- Any tree requiring to be felled for either corridors or safety reasons that is within the stream RMA (beyond the Timber Sale Boundary signs) will be felled away from the stream if safe to do so and left where they fall.
- Corridors through the RMA, if necessary, will be at least 100 feet apart (within the RMA).
- All lines will be re-spoiled and then restrung for each new corridor.

Prepared By: Kevin Gehrig
Natural Resource Specialist

Date: July 30, 2019