

PART III: EXHIBITS

State Timber Sale Contract
No. 341-10-08
California Elk

EXHIBIT B

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

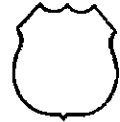
OREGON DEPARTMENT OF FORESTRY

TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)

Date Received by STATE: _____

(5) State Brand Information (complete):



(1) Contract No.: 341-10-08

(2) Sale Name: California Elk

(3) Contract Expiration Date: October 31, 2012

Project Completion Dates: Project Nos. 1 and 2: October 31, 2011

(4) Purchaser: _____

Project Nos. 3 and 4: October 31, 2010

(6) Purchaser Representatives:

Projects and Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects and Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Cell/Other

Phone: _____

Home: _____

(7) State Representatives:

Projects and Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Cell/Other

Phone: _____

Home: _____

(8) Name of Subcontractors & Starting Dates:

Projects: No(s) - _____ Date: _____ Phone: _____

No(s) - _____ Date: _____ Phone: _____

No(s) - _____ Date: _____ Phone: _____

No(s) - _____ Date: _____ Phone: _____

Logging: Felling _____ Date: _____ Phone: _____

Yarding: _____ Date: _____ Phone: _____

(9) Comments: _____

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

EXHIBIT B

INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN TO STATE

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

Explanation of Item No. (from Page 1)

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.

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

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

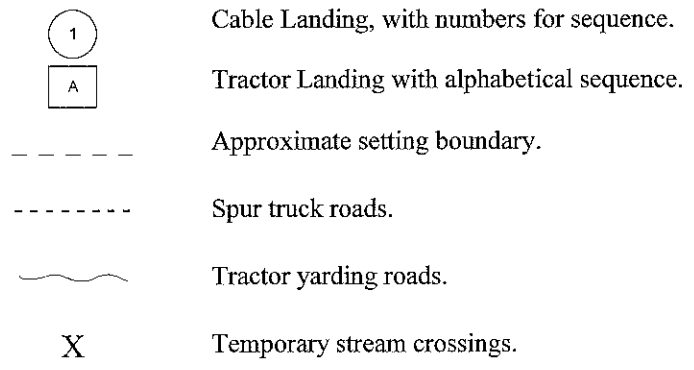
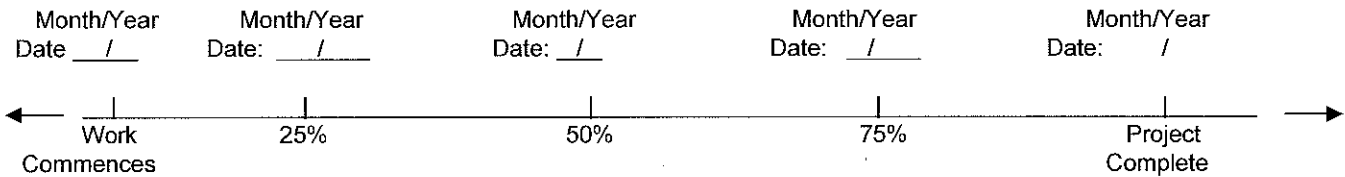


EXHIBIT B
 OPERATIONS PLAN

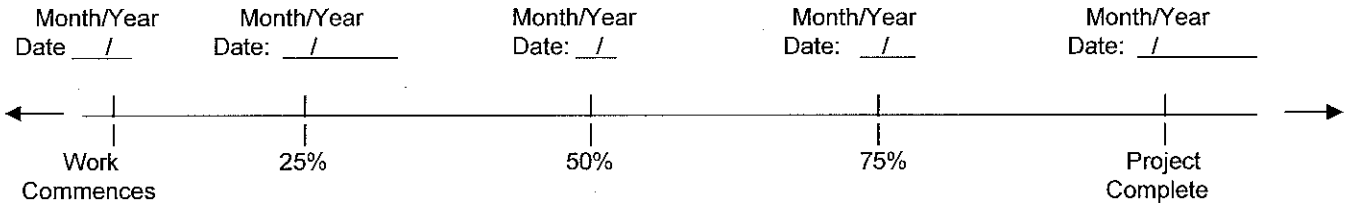
Completion Timeline

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.

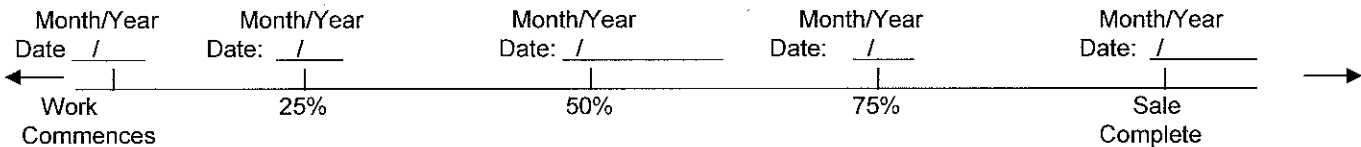
Project Nos. 1 and 2



Project Nos. 3 and 4



Harvest & Other Requirements



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

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

APPROVED: Date: _____

SUBMITTED BY:
PURCHASER

STATE OF OREGON - DEPARTMENT OF FORESTRY

Title

Title

Original: Salem
 cc: Purchaser, District File, Sunset Unit (2), Engineering Unit, Reforestation Unit

EXHIBIT C

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

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

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

(3) FROM: Astoria (04) Phone: 503-325-5451
 (State Forestry District)
 Address 92219 Hwy. 202
Astoria, OR 97103

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

| (5) MINIMUM SCALING SPECIFICATIONS | | | CLASS | | |
|------------------------------------|-------------------------|-------------------|---------|--------|-----|
| SPECIES | SCALING DIAMETER INCHES | *NET SCALE VOLUME | PER MBF | ** SUM | SUB |
| Conifer | -- | 10 | X | | |
| Hardwoods | -- | 10 | X | | |

* Apply minimum volume test to whole logs over 40' Westside; 20' Eastside.
 ** Sum (if indicated); see instructions and explain in item (19).

(6) WESTSIDE SCALE: YES NO
 Use Region 6 actual taper rule. Logs over 40'.
 (7) EASTSIDE SCALE: YES NO
 Use Region 6 actual taper rule. Logs over 40'.
 (8) Weight Scale Sample YES NO
 (6) - (8), pink log load receipts
 (9) Weight Sale YES NO
 (10) Per Load YES NO
 (9) and (10), yellow log load receipts

| (11) APPROVED SCALING LOCATIONS | Species | Yard | Truck | Weight |
|---------------------------------|---------|------|-------|--------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

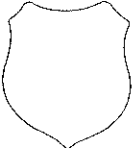
(12) NOTICE OF CANCELLATION OF BRAND:
 Effective Date: _____

 State Forester's Representative

(13) SALE NAME California Elk
 COUNTY Clatsop

(14) STATE CONTRACT NUMBER 341-10-08

(15) STATE BRAND REGISTRATION NUMBER _____

(16) STATE BRAND INFORMATION:
 (COMPLETE) 

(17) PAINT REQUIRED: YES
 COLOR Orange

| (18) SPECIAL REQUESTS |
|--|
| PEELABLE CULL (all species) NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE ADD-BACK VOLUME - Deductions due to delay |
| OTHER: _____ |

(19) REMARKS All Hardwood logs less than 30 board feet shall be scaled as "Utility". Hardwood logs greater than or equal to 30 net board feet shall be scaled as a sawlog

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

(20) SIGNATURES:
 _____ Date
 Purchaser or Authorized Representative
 _____ Date
 State Forester Representative

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.

EXHIBIT C

INSTRUCTIONS FOR FORM 343-307 (rev. 10/08)

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (12). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO).
- (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. Review Section 2040 or 2045, "Log Removal," of the Contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (16) thru (18)), and is required to show existence on the sale. **SUM** (lump sum material). **SUB** (submerchantable material). SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (Per MBF) entries. Per MBF, SUM, and SUB must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. Per MBF and SUB require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, Per MBF and/or subspecies will always be scaled.
- (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) Eastside – Region 6 actual taper/taper table segment scale. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Northwest Log Rules Eastside). Items with * follow U.S. Forest Service Eastside rules.
- (8) 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 (19).
- (9) Weight Sale – Check box if sale is to be sold as a weight sale. Processing procedures from approved locations to TPSO's will be explained in the Remarks section of Item (19).
- (10) Per Load – Check box if volumes on sale are per load. Specific instructions for handling and processing will be fully explained in the Remarks section of Item (19).
- (11) 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.
- (12) When logging and hauling is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box in Item (1), and send to TPSO.
- (13) Enter sale name and county
- (14) .Enter sale Contract number.
- (15) Enter Oregon's State Brand Registry Number (required).
- (16) Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (19).
- (17) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (18) Special Requests. These are requests that will be applied to ODF timber sales. If "Other" is indicated, it must contain a description and any necessary comments.
- (19) Use this space to designate any weight conversion factors, per load volumes, weight scale sample instructions or any other explanations to clarify scaling or processing requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (20) Require purchaser to sign and date completed form.

EXHIBIT D
 FOREST ROAD SPECIFICATIONS

| SUBGRADE WIDTH | SURFACED WIDTH | POINT TO POINT | STATION TO STATION | DRAINAGE |
|----------------|----------------|----------------|--------------------|-----------|
| 14 feet | N/A | 1A to 1B | 0+00 to 10+45 | Outsloped |
| 14 feet | N/A | 1C to 1D | 0+00 to 2+00 | Outsloped |
| 14 feet | N/A | 1E to 1F | 0+00 to 16+15 | Outsloped |
| 14 feet | N/A | 2A to 2B | 0+00 to 2+80 | Outsloped |
| 16 feet | 12 feet | I1 to I2 | 0+00 to 87+60 | Ditched |
| 16 feet | 12 feet | I3 to I4 | 0+00 to 256+80 | Ditched |
| 16 feet | 12 feet | I5 to I6 | 0+00 to 12+30 | Ditched |

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

Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

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

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

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

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

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

CLEARING AND GRUBBING DISPOSAL. Scatter in stable locations through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required. In areas where end-haul is required, clearing and grubbing debris shall be fully contained and hauled to a designated waste area. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

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

Excavation shall conform to STATE-specified lines, grades, dimensions, and plans when provided. Plans are provided between stations 75+31 to 77+06 of Road Segment I3 to I4.

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.

Sidcast 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. Sidcast shall not be placed where it will enter a stream course. Leaving sidcast below the road is only permissible if specifically allowed in "Full Bench and End Haul Requirements" in this Exhibit.

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

ROAD WIDTH LIMITATIONS. PURCHASER shall obtain advance written approval from STATE to construct the road to a greater width than specified. Extra subgrade width shall be required for:

Fill Widening. Add to each fill shoulder 1 foot for fills 3 feet to 6 feet high; 2 feet for fills over 6 feet high.

Curve Widening. Widen the inside shoulder of all curves as specified in the plans or as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

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

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

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

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

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

SLOPES

Solid Rock

Fractured Rock

Soil - side slopes 50% and over

Soil - side slopes less than 50%

Top of cutslope shall be rounded.

Back Slopes

Vertical to ¼ :1

½ :1

¾ :1

1 :1

Fill Slopes

1½ :1

1½ :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 crowned for drainage with general grade no more than 3 percent. Surface as shown in the "Road Surfacing" table in this Exhibit.

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

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

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- (1) Timber Removal. Remove all trees within posted right-of-way boundary as specified in Section 2210, "Designated Timber".
- (2) Excavated Materials. Excavated materials shall be utilized for road construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with this Exhibit. Excess excavated material not used for embankment shall be end hauled or pushed to waste areas as shown on Exhibit A and marked in the field.
- (3) Fill Armor and Energy Dissipator Construction. Where rock is specified for fill armor, rock shall be machine placed and tamped at a 1½:1 slope, beginning at the toe of the fill. Where rock is used for an energy dissipator, rock shall be placed below the culvert outlet and embedded for a minimum of 3 feet, in accordance with Exhibit G.
- (4) Equipment. All excavation and riprap placement shall be performed using a minimum 1½ cubic-yard, track-mounted excavator.
- (5) Subgrade Preparation and Application of Surfacing Rock.
 - (a) Complete culvert installations, drainage ditches, ditchouts, fill construction, and other specified work prior to the application of surfacing rock.
 - (b) Subgrade shall be crowned at 4 to 6 percent or sloped 4 to 6 percent for outsloped roads.

EXHIBIT D
FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) Timber Removal. Remove all trees within posted Right-of-Way Boundary as specified in Section 2210, Designated Timber.
- (2) Roadside Brushing. Conduct roadside brushing as specified in Exhibit K.
- (3) 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 in accordance with this Exhibit.
- (4) Culvert Replacement, Culvert Installation, Fill Reconstruction, and Fill Removal. Existing culvert geometry shall be modified to provide for optimum drainage and culvert performance. Modifications may include, skewing the culvert and/or installing the culvert at gradients equal to or exceeding the drainage (or ditch) gradient. Where fill reconstruction or culvert replacement is specified, fills shall be excavated to natural stream course levels. All woody debris encountered during fill excavation shall be removed. All waste materials shall be hauled to nearby waste areas and shall be uniformly sloped and compacted for drainage. Waste materials shall be seeded and mulched in accordance with specifications in Exhibit J. Fill reconstruction backfill shall consist of select materials and may be obtained from borrow pits, as directed by STATE. Backfill materials shall be hauled in where necessary and thoroughly compacted in accordance with this Exhibit. Crushed rock shall be used for backfilling excavation trenches less than 3 feet deep. STATE may require the use of crushed rock for culvert bedding. Removed culverts shall be hauled to an approved refuse site off of STATE land.
- (5) Drainage Ditches. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. Re-establish or construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels. Install a culvert marker at each newly installed culvert and at each existing culvert that is missing a marker that could be reached by a grader blade.
- (6) Fill Armor and Energy Dissipator Construction. Where rock is specified for fill armor, rock shall be machine placed and tamped at a 1½:1 slope, beginning at the toe of the fill. Where rock is used for an energy dissipator, rock shall be placed below the culvert outlet and embedded for a minimum of 3 feet, in accordance with Exhibit G.
- (7) Equipment. All excavation and riprap placement shall be performed using a minimum 1½ cubic yard, track-mounted excavator.
- (8) Subgrade Preparation and Application of Surfacing Rock.
 - (a) Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, and other specified work prior to the application of new surfacing rock.
 - (b) Cut out all potholes and/or washboard sections from the existing surfacing.
 - (c) Apply required patching and leveling rock, as directed by STATE.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

(8) Subgrade Preparation and Application of Surfacing Rock. (Cont.)

- (d) Process (grade and mix) the existing surface and added base rock, leveling rock, and/or reinforcement rock. Provide for a crown 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.

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

| <u>Segment</u> | <u>Station</u> | <u>Work Description:</u> |
|----------------|----------------|--|
| I1 to I2 | 0+00 to 87+60 | Apply patch/leveling rock as directed by STATE. |
| | 6+50 | Begin rock application. Utilize 38 cubic yards of 1½"-0" crushed rock over stream crossing. |
| | 8+50 | End rock application. |
| | 25+30 | Begin rock application. Utilize 38 cubic yards of 1½"-0" crushed rock over stream crossing. |
| | 27+30 | End rock application. |
| | 32+80 | Install 18" x 30' CPP. Utilize 22 cubic yards of 1½"-0" crushed rock for bedding rock. |
| | 41+20 | Begin rock application. Utilize 57 cubic yards of 1½"-0" crushed rock over stream crossing. |
| | 44+20 | End rock application. |
| | 66+00 | Begin subgrade reconstruction. Utilize 33 cubic yards of 6"-0" pit run rock to reinforce subgrade. |
| | 67+00 | End reconstruction of subgrade. |
| | 76+65 | Begin subgrade reconstruction. Utilize 33 cubic yards of 6"-0" pit-run rock to reinforce subgrade. |
| | 77+50 | End subgrade reconstruction. |
| | 83+75 | Install 18" x 30' CPP. Utilize 22 cubic yards of 1½"-0" rock for culvert bedding. |
| I3 to I4 | 74+84 | Begin fill widening. Begin application of 4"-0" base rock and 1½"-0" surface rock. |
| | 75+31 | Begin 80-foot radius curve and 5 feet of curve widening. |

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

| <u>Segment</u> | <u>Station</u> | <u>Work Description:</u> |
|------------------|----------------|---|
| I3 to I4 (cont.) | 75+89 | Remove old culvert and fill. Install 96" x 88' 10 gauge aluminized steel culvert per Exhibit H instructions. Utilize 60 cubic yards 1½" -0" crushed rock for culvert bedding, 240 cubic yards of 1½"-0" crushed rock for back fill, 122 cubic yards of 24"-6" rock for riprap, 30 cubic yards of 36"-12" riprap for culvert retention rock and 1,450 cubic yards of 6"-0" pit run material for backfill material. |
| | 76+36 | Remove old culvert and fill. Install 96" x 87' 10 gauge aluminized steel culvert per Exhibit H instructions. Utilize 61 cubic yards of 1½"-0" crushed rock for culvert bedding, 253 cubic yards of 1½"-0" crushed rock for back fill, 122 cubic yards of 24"-6" rock for riprap, 30 cubic yards of 36"-12" riprap for culvert retention rock and 1,500 cubic yards of 6"-0" pit run material for backfill material. |
| | 76+51 | End fill widening. |
| | 77+06 | End application of 4"-0" crushed base rock and 1½"-0" crushed surface rock. End curve widening. |
| | 82+35 | Install Dissipator rock to outlet on existing culvert. Utilize 11 cubic yards of 24"-6" riprap. |
| | 86+70 | Replace existing culvert with 18" X 35' CPP. Utilize 22 cubic yards of 1½"-0" crushed rock for bedding rock. |
| | 121+15 | Install Dissipator rock to outlet on existing culvert. Utilize 11 cubic yards of 24"-6" riprap. |
| | 126+55 | Utilize 22 cubic yards of 1 ½"-0" rock to level road grade. |
| | 177+85 | Install Dissipator rock to outlet on existing culvert. Utilize 11 cubic yards of 24"-6" riprap. |
| | 208+10 | Replace existing culvert with 18" X 30' CPP. Utilize 22 cubic yards of 1½"-0" crushed rock for bedding rock. |

EXHIBIT D
 FULL BENCH AND END-HAUL REQUIREMENTS

| POINT TO POINT | STA. TO STA. | CONTAINMENT - SIDECAST | WASTE AREA LOCATION | WASTE AREA TREATMENT |
|----------------------------------|----------------|---------------------------|------------------------|-------------------------|
| I3 to I4 | 75+31 to 77+06 | 1 & 2 | Waste Area 1 | 1, 2, 3, and 4 |
| California Barrel Borrow Site | N/A | 1 & 2 | Waste Area 1 | 1, 2, 3, and 4 |

Fill Removal and Borrow Site End-Haul Areas General Requirements

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. Material shall not be sidecast unless specified above.

Clearing and grubbing debris shall be end-hauled.

When controlled blasting is required, it shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain material within the road prism.

Containment/Sidecast

- (1) Full: No excavated material remains below the road
- (2) Normal/Incidental: The amount of excavated material lost over the outside edge of the road shall not exceed 1 foot in depth.

Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

- (1) As shown on Exhibit A and as marked in the field.
- (2) Setback from slope break shall be a minimum of 20 feet horizontal measurement.

Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact, and provide adequate drainage.
- (2) Pile woody debris separate from other waste material.
- (3) Mulch and seed all waste areas in accordance with Exhibit J.

EXHIBIT D
 ROAD SURFACING

| ROAD SEGMENT 1A to 1B | | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|--------------------|-----------|------------------------|-----------------|----|---------------|-----|-------------------|
| Application | Rock Size and Type | Location | Depth of Rock (inches) | 1A to 1B | | 0+00 to 10+45 | | |
| | | | | Volume (CY) per | | Number of | | |
| Road Approach | 4"-0" | 0+00-0+50 | | station | 38 | stations | 0.5 | 19 |
| Junctions | 4"-0" | 0+00 | N/A | junction | 11 | junctions | 1 | 11 |
| Subgrade reinforcement | 6"-0" pit run | As Needed | N/A | N/A | | N/A | | 55 |
| Total Rock for Road Segment: | | | | 1C to 1D | | | | 85 |

| ROAD SEGMENT 1C to 1D | | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|--------------------|-----------|------------------------|-----------------|--|--------------|--|-------------------|
| Application | Rock Size and Type | Location | Depth of Rock (inches) | 1C to 1D | | 0+00 to 2+00 | | |
| | | | | Volume (CY) per | | Number of | | |
| Subgrade reinforcement | 6"-0" pit run | As Needed | N/A | N/A | | N/A | | 11 |
| Total Rock for Road Segment: | | | | 1C to 1D | | | | 11 |

| ROAD SEGMENT 1E to 1F | | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|--------------------|-----------|------------------------|-----------------|--|---------------|--|-------------------|
| Application | Rock Size and Type | Location | Depth of Rock (inches) | 1E to 1F | | 0+00 to 16+15 | | |
| | | | | Volume (CY) per | | Number of | | |
| Subgrade reinforcement | 6"-0" pit run | As Needed | N/A | N/A | | N/A | | 88 |
| Total Rock for Road Segment: | | | | 1E to 1F | | | | 88 |

| ROAD SEGMENT 2A to 2B | | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|--------------------|-----------|------------------------|-----------------|--|--------------|--|-------------------|
| Application | Rock Size and Type | Location | Depth of Rock (inches) | 2A to 2B | | 0+00 to 2+80 | | |
| | | | | Volume (CY) per | | Number of | | |
| Subgrade reinforcement | 6"-0" pit run | As Needed | N/A | N/A | | N/A | | 11 |
| Total Rock for Road Segment: | | | | 2A to 2B | | | | 11 |

| ROAD SEGMENT I1 to I2 | | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|--------------------|--|------------------------|-----------------|----|---------------|----|-------------------|
| Application | Rock Size and Type | Location | Depth of Rock (inches) | I1 to I2 | | 0+00 to 87+60 | | |
| | | | | Volume (CY) per | | Number of | | |
| Leveling Rock | 4"-0" | 0+00 to 87+60 | N/A | patch | 11 | patches | 34 | 374 |
| Stream Crossings | 1½"-0" | 6+50 to 8+50 25+30 to 27+30 41+20 to 44+20 | 3 | station | 19 | stations | 7 | 133 |
| Culvert Bedding/Backfill | 1½"-0" | 32+80, 83+75 | N/A | culvert | 22 | culverts | 2 | 44 |
| Subgrade Reinforcement | 6" 0" | 66+00 to 67+00 76+50 to 77+50 | N/A | N/A | | N/A | | 66 |
| Total Rock for Road Segment: | | | | I1 to I2 | | | | 617 |

EXHIBIT D
 ROAD SURFACING

| ROAD SEGMENT | I3 to I4 | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|-------------|--|----------|------------------------|--------------------------|--------------------------|------|-------------------|
| | Application | Rock Size and Type | Location | Depth of Rock (inches) | I3 to I4 Volume (CY) per | 0+00 to 256+80 Number of | | |
| Culvert Bed. & Back fill | 1½"-0" | 75+89, 76+36 | N/A | culvert | 307 | culverts | 2 | 614 |
| Backfill Material | 6"-0 | 75+31 to 77+06 | N/A | fill | 2,050 | fills | 1 | 2050 |
| Armor riprap | 24"-6" | 75+31 to 77+06 | N/A | fill | 244 | fills | 1 | 244 |
| Retention Rock (culvert) | 36"-12" | 75+89,76+36 | N/A | culvert | 30 | culverts | 2 | 60 |
| Base Rock | 4"-0" | 75+31 to 77+06 | 10 | station | 63 | stations | 1.75 | 110 |
| Fill Widening | 4"-0" | 74+84 to 76+51 | 9 | fill | 43 | fills | 1 | 43 |
| Curve Widening | 4"-0" | 75+31 to 77+06 | 9 | curve | 30 | curves | 1 | 30 |
| Curve Widening | ¾"-0" | 75+31 to 77+06 | 4 | curve | 20 | curves | 1 | 20 |
| Surface Rock | ¾"-0" | 75+31 to 77+06 | 4 | station | 25 | stations | 1.75 | 44 |
| Fill Widening | ¾"-0" | 74+84 to 76+51 | 4 | fill | 14 | fills | 1 | 14 |
| Curve Widening | ¾"-0" | 0+00 to 233+00 | 1 | station | N/A | stations | N/A | 150 |
| Surface Rock | ¾"-0" | 0+00 to 233+00 | 1 | station | 6 | stations | 233 | 1,388 |
| Leveling Rock | ¾"-0" | 126+55 | N/A | N/A | 22 | N/A | 1 | 22 |
| Turnouts | ¾"-0" | | N/A | turnout | 11 | turnouts | 32 | 352 |
| Junctions | ¾"-0" | 0+00, 117+80 184+45 | N/A | junction | 22 | junctions | 3 | 66 |
| Junctions | ¾"-0" | | N/A | junction | 11 | junctions | 10 | 110 |
| Surface Rock | 1½"-0" | 233+00 to 256.8 | 1 | station | 6 | stations | 23.8 | 143 |
| Culvert Bedding | 1½"-0" | 86+70, 208+10 | N/A | culvert | 22 | culverts | 2 | 44 |
| Turnouts | 1½"-0" | 245+50, 251+50 | N/A | turnout | 11 | turnouts | 2 | 22 |
| Turnarounds | 1½"-0" | | N/A | turnaround | 11 | turnarounds | 2 | 22 |
| Landing approaches | 4"-0" | 242+50,246+7 5,250+75,253+ 50 | N/A | landing | 40 | landings | 2 | 80 |
| Landings | 6"-0 | 242+50, 246+55 250+75, 253+50 | N/A | landing | 80 | landings | 4 | 320 |
| Dissipator Rock | 24"-6" | 82+35, 121+15, 177+85, | N/A | culvert | 11 | culverts | 3 | 33 |
| Total Rock for Road Segment: | | | I3 to I4 | | | | | 5,981 |

EXHIBIT D
 ROAD SURFACING

| ROAD SEGMENT 15 to 16 | | | | POINT TO POINT | | Sta. to Sta. | | TOTAL VOLUME (CY) |
|------------------------------|--------------------|---------------|------------------------|-----------------|----|---------------|------|-------------------|
| Application | Rock Size and Type | Location | Depth of Rock (inches) | 15 to 16 | | 0+00 to 12+30 | | |
| | | | | Volume (CY) per | | Number of | | |
| Surface Rock | 1½"-0" | 0+00 to 12+30 | 1 | station | 6 | stations | 12.3 | 74 |
| Landing approaches | 4"-0" | 1+20, 7+00 | N/A | landing | 40 | landings | 1 | 40 |
| Landings | 6"-0" | 1+20, 7+00 | N/A | landing | 80 | landings | 2 | 160 |
| Total Rock for Road Segment: | | | 15 to 16 | | | | | 274 |

| ROCK TOTALS (CY) | 36"-12" | 24"-6" | 6"-0" | 4"-0" | 1½"-0" | ¾"-0" |
|------------------|---------|--------|-------|-------|--------|-------|
| 7,067 | 60 | 277 | 2,761 | 707 | 1,096 | 2,166 |

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.

Rock Checking. All rock spreading shall be done only when a STATE representative is present. STATE shall issue a receipt for each load delivered, and rock shall be measured without allowance for shrinkage or shakedown during hauling. Total truck measure volume for each road segment shall be as shown on Exhibit D. Deliver at least 600 cubic yards per 8-hour shift, unless otherwise approved by STATE. A penalty of \$10 for each 10 cubic yards which are not delivered during a single shift shall be billed, and payment shall be required prior to final acceptance of the project by STATE.

Depth Measurement. Rock shall be spread and compacted according to the depths specified in Exhibit D. Truck measure volumes are given, but shall not limit the amount of rock spread.

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

Load Records. Notify STATE before spreading the rock and maintain a record of all rock delivered for spreading. Make the record available for STATE inspection. A report listing the amount of rock delivered the prior month must be submitted no later than the 15th of each month.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

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

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

Subgrade. Subgrade surfaces of the road segments listed below shall be graded and compacted prior to rocking. Compaction shall be accomplished by traveling all surfaces from shoulder to shoulder until the surface is smooth and hard and visible deformation ceases. At least 3 passes shall be made over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

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

| ROAD SEGMENT | COMPACTION EQUIPMENT OPTIONS |
|---|------------------------------|
| All road segments that require rock surfacing | 1 |

Fills. Embankments and fills shall be placed in (approximately) horizontal layers not more than 8 inches in depth. Each layer shall be separately, and thoroughly, compacted. Compaction equipment shall be operated over the entire width of each layer until visible deformation of the layers ceases. At least 3 passes shall be made over the entire width and length of each layer.

Placing individual rocks or boulders with more depth than the allowed layer thickness shall be permitted, provided the embankment will accommodate them. Such rocks and boulders shall be at least 6 inches below the subgrade. They shall be carefully distributed and the voids filled with finer material, forming a dense and compacted mass. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

| ROAD SEGMENT | COMPACTION EQUIPMENT OPTIONS |
|--------------------|------------------------------|
| All road segments. | 1, 2, or 3; and 4 |

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 at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

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

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

Pit-Run Rock. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of pit-run rock shall be moistened or dried to uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 8 inches in depth. When more than 1 layer is required, each shall be shaped and compacted before the succeeding layer is placed. Any irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Each layer shall be compacted with a minimum of 3 passes over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

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

| ROAD SEGMENT | COMPACTION EQUIPMENT OPTIONS |
|-------------------------------------|------------------------------|
| All Segments requiring pit-run rock | 6 |

COMPACTION EQUIPMENT OPTIONS

- (1) Vibratory Rollers. The drum shall have a smooth surface, a diameter not less than 48 inches, a width not less than 58 inches, and a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 VPM, corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 VPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled and operated at speeds ranging from 0.9 miles to 1.8 miles per hour, as directed by STATE.
- (2) Rubber-Tired Skidders. A rubber-tired skidder weighing a minimum of 20,000 pounds shall be operated over the fill layers so that the entire layered surface comes in contact with the tires. Skidders with oversized tires (high flotation) are not acceptable for compaction.
- (3) Tampingfoot Compactors. Tampingfoot compactors shall exert a minimum pressure of 250 pounds per square inch on the ground area in contact with the tamping feet. The compactor shall cover a minimum width of 60 inches per pass and weigh a minimum of 16,000 pounds.
- (4) Vibratory Hand-Operated or Backhoe-Mounted Tamper. Vibratory hand-held or hydraulic tampers shall be used for compaction of backfill materials around culverts (and/or bridge approach embankment materials around abutments). The tamper shoe dimensions shall be a minimum of 10" X 13" and capable of a centrifugal force of 2,250 pounds.
- (5) D6 or larger cat. A D-6 cat or larger shall be operated over the entire layered road surface to break and compact the rock. All rock shall come in contact with the cat.

EXHIBIT E
CULVERT SPECIFICATIONS

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

Culverts shall be constructed of corrugated double-walled polyethylene, and corrugated aluminized (Type 2) steel.

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

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

Polyethylene culverts shall not be used where required culvert diameter is over 24 inches.

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

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

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

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

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

A bedding of crushed rock as specified shall be placed to provide a wide band of support and to transmit the load from above evenly over the entire length of the culvert for all culverts placed in road improvement road segments.)

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

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" and 18" for culverts 42" to 96", add 6" for roads which will not be rocked. Minimum vertical cover for other designs shall be as specified by STATE.

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

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

EXHIBIT E

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, 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.)

Culvert Nos. 4 and 5 shall have 1½ :1 step beveled ends.

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

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

The intake ends of culverts in fills less than 3 feet to the top of the culvert shall be marked by driving white fiberglass posts within 6 inches of the downgrade side. Posts shall be a minimum of 6 feet long and 2½ inches wide, 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.

| Dia. | Steel Culvert | | Thickness | | Band Gauges | Band Widths ("") | |
|--------|---------------|--|-----------|----------|-------------|------------------|---------|
| | Gauge | | Uncoated | Coated | | Annular | Helical |
| 18-24 | 16 | | (0.0598") | (0.064") | 16 | 12 | 12 |
| 90-120 | 10 | | (0.1336") | (0.138") | 16 | 26 | 26 |

Culverts larger than 60" in diameter shall have 3" x 1" corrugations.

CULVERT LIST

| CULVERT NO. | DIAMETER (Inches) | LENGTH (Feet) | MATERIAL TYPE | GAUGE | ROAD SEGMENT POINT TO POINT | STATION |
|-------------|-------------------|---------------|---------------|-------|-----------------------------|---------|
| 1 | 18 | 35 | CPP | | 1E to 1F | 3+16 |
| 2 | 18 | 35 | CPP | | 11 to 12 | 32+80 |
| 3 | 18 | 35 | CPP | | 11 to 12 | 83+75 |
| 4 | 96 | 88 | ACSP | 10 | 13 to 14 | 75+89 |
| 5 | 96 | 87 | ACSP | 10 | 13 to 14 | 76+36 |
| 6 | 18 | 35 | CPP | | 13 to 14 | 88+70 |
| 7 | 18 | 35 | CPP | | 13 to 14 | 208+10 |

ACSP = Aluminized Steel, CPP = Polyethylene

EXHIBIT F

ROCK QUARRY DEVELOPMENT AND USE

- (1) PURCHASER shall prepare a written development plan for the Elk Mountain Quarry, Simmons Ridge Quarry, and California Barrel Borrow area. The plan shall be submitted to STATE for approval prior to conducting any operation in quarry/borrow area. The plan shall include, but not be limited to:
 - (a) Location of benches and roads to benches.
 - (b) Disposal site for woody debris, overburden and reject material.
 - (c) Time lines for rock quarry use.
 - (d) Erosion Control measures.
- (2) PURCHASER shall schedule and coordinate quarry and stockpile usage with other existing or planned activity requiring quarry or stockpile usage. PURCHASER shall notify STATE 5 days prior to the start of quarry development activities.
- (3) The quarry and borrow sites shall be left in a condition free from overburden and debris. Access roads to the quarry, and the quarry floor, shall be cleared at the termination of use. Overburden shall be removed for a distance of 20 feet beyond the developed rock source.
- (4) All overburden and reject material shall be hauled to the designated waste area as directed by STATE.
- (5) PURCHASER shall conduct the operations relative to the disposal of waste material in such manner that sediment, rock, or debris shall not be washed, conveyed, or otherwise deposited in any stream.
- (6) At the Elk Mountain Quarry and California Barrel Borrow Site, remove all woody debris, including stumps and Slash. Removed material shall be hauled to the designated disposal areas, and piled as directed by STATE.
- (7) Controlled blasting techniques shall be utilized for any blasting operations, and shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain as much material as possible within the quarry development area. PURCHASER shall maintain a comprehensive blasting log that contains all pertinent data for all blasting operations. The blasting log shall be submitted to the STATE after the completion of all blasting activity. The blasting log is intended for STATE record keeping purposes only.
- (8) Benches shall be maintained/constructed at intervals of 40 feet or less in height and shall be a minimum of 20 feet in width. Any gravel or talus slopes shall be left with a working face at an angle of 60 percent or less. There shall be a minimum of one bench with an access road to it. Said bench shall be easily accessible with tractors.
- (9) Quarry and Borrow source faces shall be developed in a uniform manner. All quarry and borrow site backslopes shall be left in a stable condition.
- (10) Oversized material that is produced or encountered during development shall be broken down and utilized for riprap or pit-run as directed by STATE.
- (11) The quarry and borrow site floors shall be developed to provide for drainage away from the quarry. All quarry, borrow site, and stockpile site drainage ditches shall be maintained. Quarry and borrow site access roads shall be cleared and blocked upon completion of quarry and borrow site use as directed by STATE.

EXHIBIT F

ROCK QUARRY DEVELOPMENT AND USE

- (12) The quarry and borrow site floors shall be developed to provide for drainage away from the quarry. All quarry and stockpile borrow site drainage ditches shall be maintained. Quarry access roads shall be cleared and blocked upon completion of quarry use as directed by STATE.
- (13) Proper winterization and storm-water control measures such as waterbarring, drainage, utilization of filter bales, mulching and/or blocking access shall be constructed and maintained to protect the watershed and Project Work, as directed by STATE.
- (14) Apply seed and mulch to the waste area, as specified in Exhibit J.

PIT-RUN and RIPRAP ROCK SPECIFICATIONS

| | | | |
|--------------------------|---------|------------|--------|
| <u>For 6"-0" Pit-Run</u> | Passing | 10" sieve | 100% |
| | Passing | 6" sieve | 60-85% |
| | Passing | 3" sieve | 30-50% |
| | Passing | 1/4" sieve | 0-20% |

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

For 36"-12" Riprap A minimum of 50 percent of the material shall measure a minimum of 36 inches, measured in one dimension. Material shall be clean, well graded, and free of 2"-0" fines.

Control of gradation shall be by visual inspection by STATE.

EXHIBIT G

TYPICAL EMBEDDED ENERGY DISSIPATOR

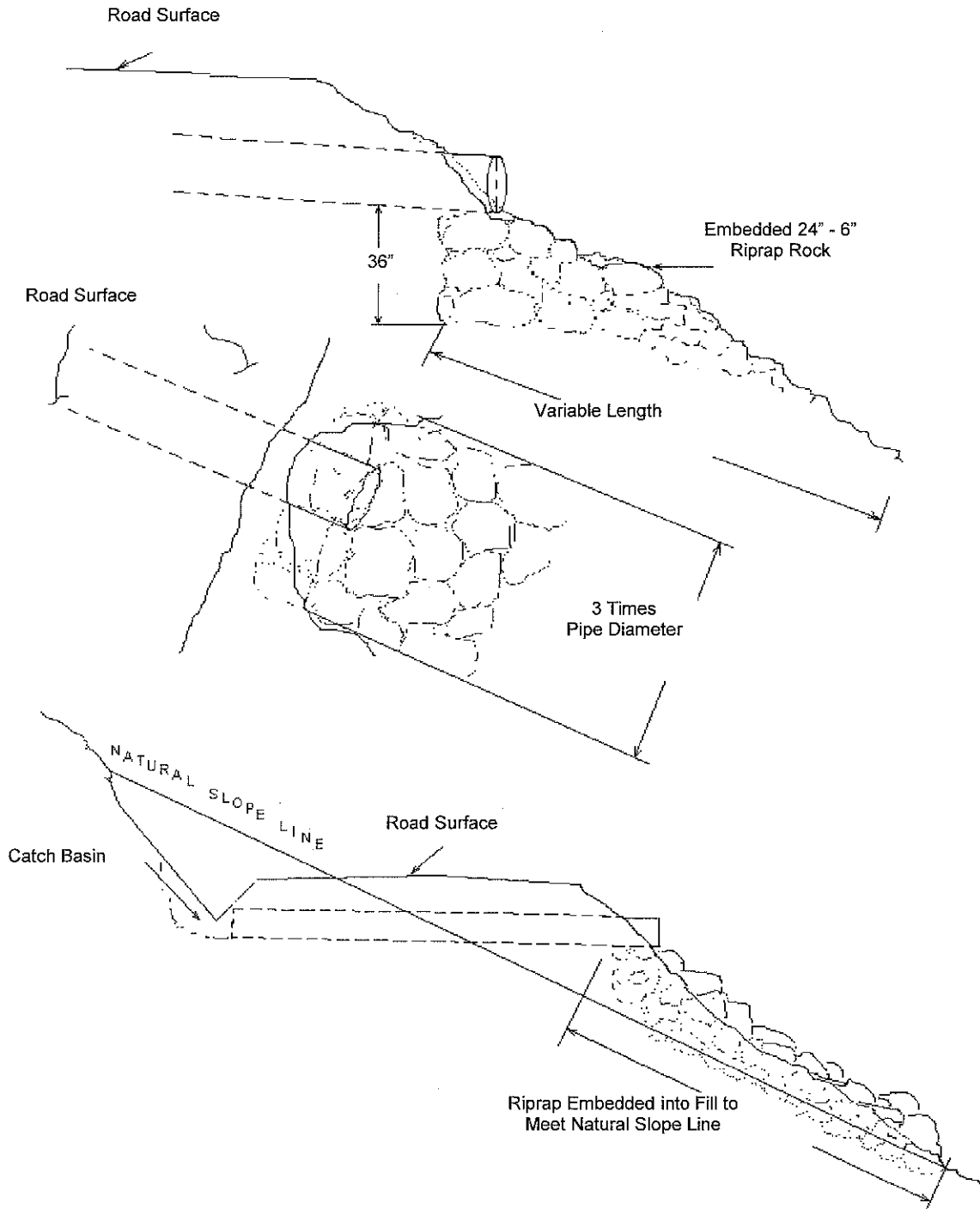


EXHIBIT H

TYPE F STREAM CROSSING STRUCTURE SPECIFICATIONS

PURCHASER shall install two Type F structures. Both culverts shall be 10 gauge Aluminized steel.

GENERAL TYPE F CONSTRUCTION SPECIFICATIONS

- (a) Work shall be conducted only during periods of low water flows and between July 1 and September 15, annually. STATE shall be notified a minimum of 48 hours prior to beginning the work. STATE has prepared a FPA "Written Plan" for this work.
- (b) Remove the existing embankment and culvert to accommodate the work area for stream crossing construction. Existing embankment(s) shall be excavated to the natural stream course level. All woody debris encountered during excavation shall be removed.
- (c) Salvage onsite existing riprap material for reuse as riprap for the new structures.
- (d) Excavated debris and materials unsuitable for embankment construction shall be end hauled to the designated waste area, as directed by STATE. The existing, removed culverts, shall be hauled to an approved refuse site off of STATE land.
- (e) Waste materials shall be sloped for drainage and stability, as directed by STATE. Prior to hauling waste materials, the waste area shall be cleared of large woody debris. The debris shall be piled adjacent to the waste area. All exposed excavation areas and waste materials shall be mulched with straw. Applied mulch shall be a minimum of 2 inches deep and provide a uniform cover. Large woody debris shall be redistributed over the waste area after all waste materials have been hauled.
- (f) Oil spill response materials shall be on site before the work begins.
- (g) A minimum 2 cubic-yard, track-mounted excavator shall be used for all excavation, stream channel development, and riprap placement.
- (h) Grass seed and straw mulch shall be applied to all exposed areas, bare soils and waste materials as directed by STATE in accordance with Exhibit J.
- (i) De-watering of the work site shall be accomplished according to PURCHASER's STATE approved plan and prior to the removal of any additional fill material for the development of the culvert bed, and stream channel. The work site shall be de-watered by the use of cofferdams, pumps, temporary diversion ditches and/or drainage structures.
- (j) Remove existing fill, culvert, and any logs or woody debris.
- (k) Type "F" stream fill reconstruction must allow free passage of fish as provided in the Oregon Forest Practice Rules. Modifications of the existing culvert geometry shall be required to allow free passage of fish.
- (l) Use of an on site hydraulic rock hammer may be required for the breaking of rock strata encountered during the development of the culvert bed.
- (m) Remove additional fill and logs or woody debris for the development of the new culvert bed. The new culvert beds will **NOT** be the same location as the existing culvert beds. The new culvert bed inlet and outlet coordinates are designated on Exhibit H.

EXHIBIT H

SPECIFIC CULVERT INSTALLATION SPECIFICATIONS

Road Segment I3 to I4 (Sta. 75+89)

- (a) Develop the stream channel for a distance of 20 feet upstream of the inlet of the culvert and 15 feet downstream of the outlet, as directed by STATE. The stream channel width will be 8 feet and stream channel banks shall be sloped at 1½:1. Utilize 30 cubic yards of 24"-6" riprap to arm the developed stream channel as directed by STATE.
- (b) Utilize 30 cubic yards of 36"-12" riprap rock (streambed retention material) placed and embedded at the outlet of the new culvert to establish the stream channel elevation and allow stream sediment materials to settle in the barrel of the pipe.
- (c) Utilize recovered stream cobble on both the inlet and outlet to assist in the formation of a new stream bed. At the culvert inlet taper cobble into the barrel of the culvert as directed by STATE. At the outlet inter-mingle the cobble with the 36"-12" riprap as directed by STATE.
- (d) Fill reconstruction backfill shall consist of suitable onsite excavated material and 6"-0" borrowed pit-run as directed by STATE. Backfill shall be compacted as specified in Exhibit D. Riprap rock shall be placed and tamped at a 1½:1 slope for a minimum thickness of 2 feet beginning at the toes.
- (e) Utilize 61 cubic yards 1½"-0" crushed rock for culvert bedding material, and 247 cubic yards of 1½"-0" crushed rock for backfill around culvert haunches and to cover the top of the culvert. Bedding and top cover shall be a minimum of 12" compacted depth.
- (f) Utilize 275 cubic yards of 24"-6" riprap rock for fill and stream bank armor material placed and tamped at a 1½:1 slope for a minimum thickness of 2 feet beginning at the toes.
- (g) Finished fill subgrade width is 25 feet. Finished fill surface width is 21 feet. 5 feet of the finished subgrade and surface width is inside curve widening.

Road Segment I3 to I4 (Sta. 76+36)

- (a) Develop the stream channel for a distance of 25 feet upstream of the inlet of the culvert and 15 feet downstream of the outlet, as directed by STATE. The stream channel width will be 8 feet and stream channel banks shall be sloped at 1½:1. Utilize 60 cubic yards of 24"-6" riprap to arm the developed stream channel as directed by STATE.
- (b) Utilize 30 cubic yards of 36"-12" riprap rock (streambed retention material) placed and embedded at the outlet of the new culvert to establish the stream channel elevation and allow stream sediment materials to settle in the barrel of the pipe.
- (c) Utilize recovered stream cobble on both the inlet and outlet to assist in the formation of a new stream bed. At the culvert inlet taper cobble into the barrel of the culvert as directed by STATE. At the outlet inter-mingle the cobble with the 36"-12" riprap as directed by STATE.
- (d) Fill reconstruction backfill shall consist of suitable onsite excavated material and 6"-0" borrowed pit-run as directed by STATE. Backfill shall be compacted as specified in Exhibit D. Riprap rock shall be placed and tamped at a 1½:1 slope for a minimum thickness of 2 feet beginning at the toes.

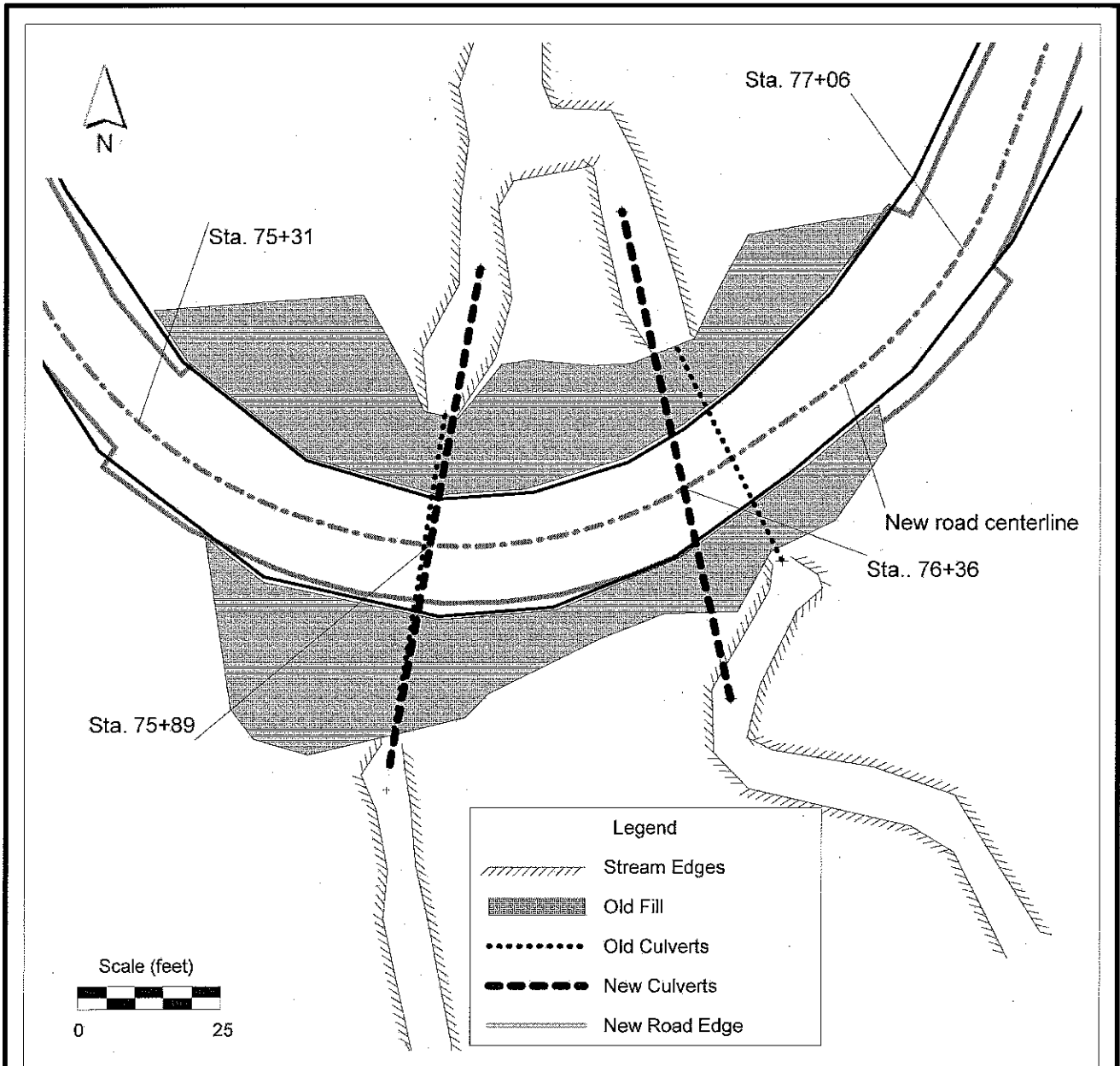
EXHIBIT H

SPECIFIC CULVERT INSTALLATION SPECIFICATIONS

Road Segment I3 to I4 (Sta. 76+36 Cont.)

- (e) Utilize 60 cubic yards 1½"-0" crushed rock for culvert bedding material, and 246 cubic yards of 1½"-0" crushed rock for backfill around culvert haunches and to cover the top of the culvert. Bedding and top cover shall be a minimum of 12" compacted depth.
- (f) Finished fill subgrade width is 25 feet. Finished fill surface width is 21 feet. 5 feet of the finished subgrade and surface width is inside curve widening.

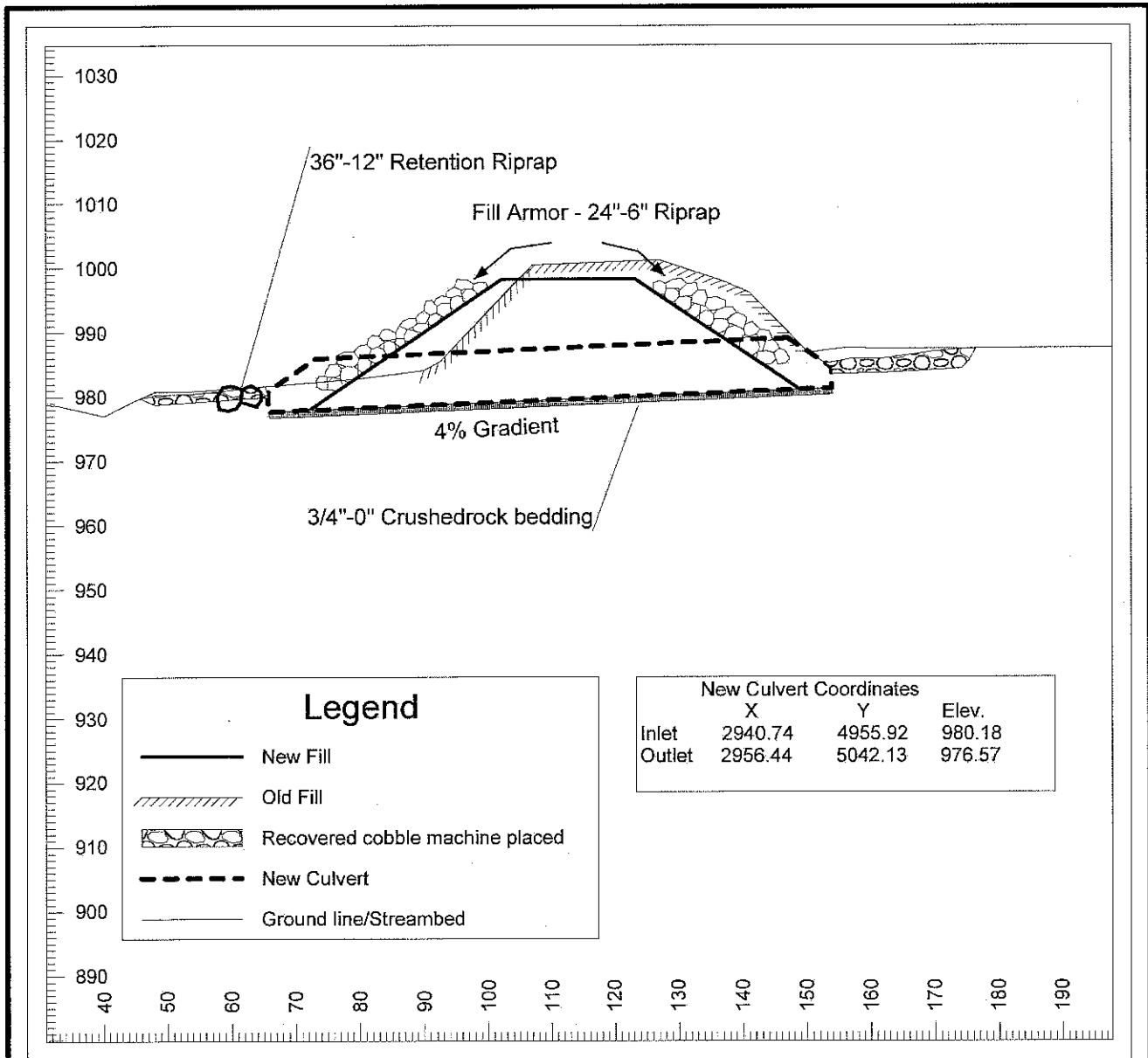
EXHIBIT H
SITE PLAN



Oregon Department of Forestry
Astoria District
Engineering Unit

Project No. 3
Road Segment I3 to I4
Double Culverts
NW1/4, SE1/4, Section 36, T7N, R8W, W. M.
Clatsop County, Oregon

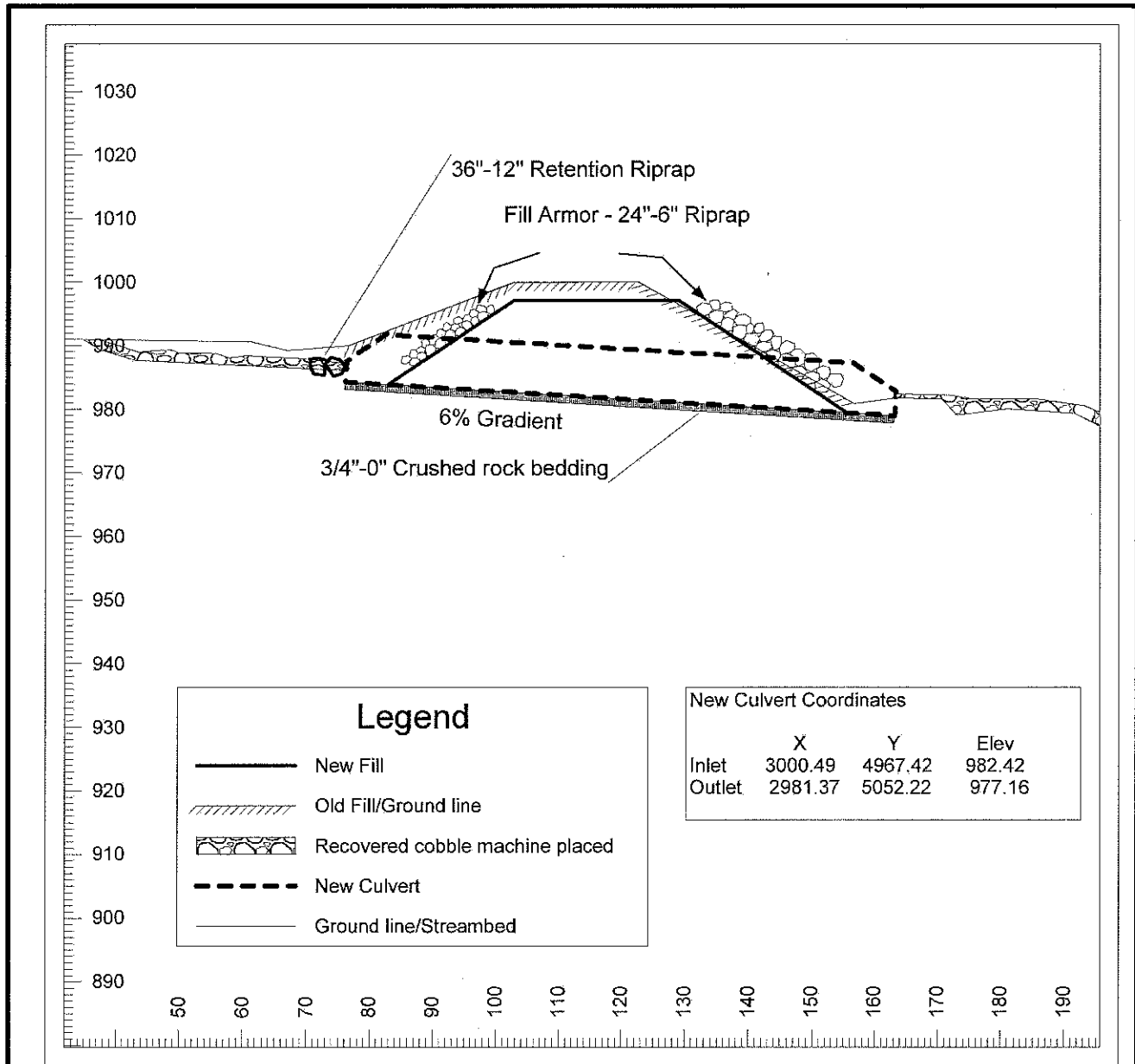
EXHIBIT H
 PROFILE VIEW



Oregon Department of Forestry
 Astoria District
 Engineering Unit

Project No. 3
 Road Segment I3 to I4
 Station 75+89
 NW1/4, SE1/4, Section 36, T7N, R8W, W. M.
 Clatsop County, Oregon

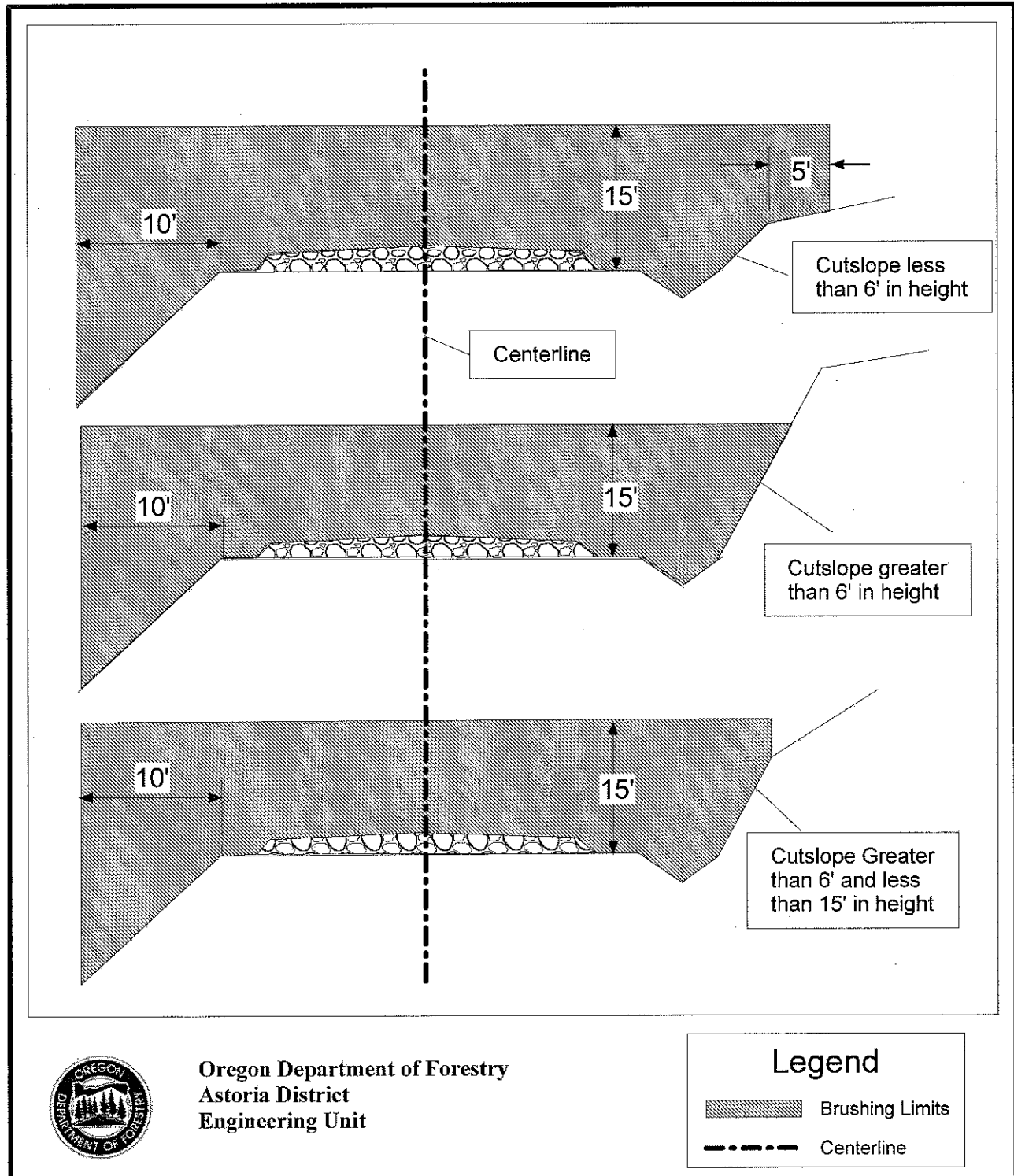
EXHIBIT H
 PROFILE VIEW



Oregon Department of Forestry
 Astoria District
 Engineering Unit

Project No. 3
 Road Segment I3 to I4
 Station 76+36
 NW1/4, SE1/4, Section 36, T7N, R8W, W. M.
 Clatsop County, Oregon

EXHIBIT K
ROAD BRUSHING SPECIFICATIONS



Oregon Department of Forestry
Astoria District
Engineering Unit

Legend

- Brushing Limits
- Centerline

EXHIBIT K

ROAD BRUSHING SPECIFICATIONS

REQUIREMENTS

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

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

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

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

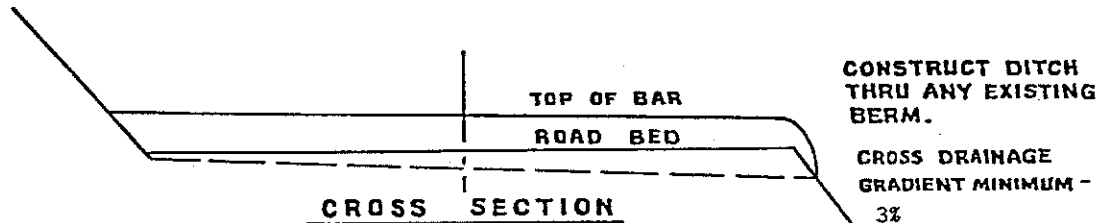
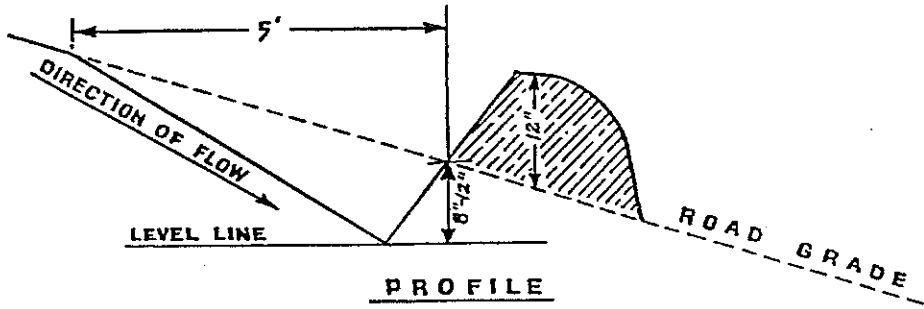
Existing debris on the roadway, cutslope, ditchline, or catch basin shall be removed and treated. Debris shall be mulched or scattered downslope from the road or placed in other stable locations. Large non-merchantable debris, 6 inches or larger in diameter, shall be mulched or cut into lengths 6 feet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

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

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

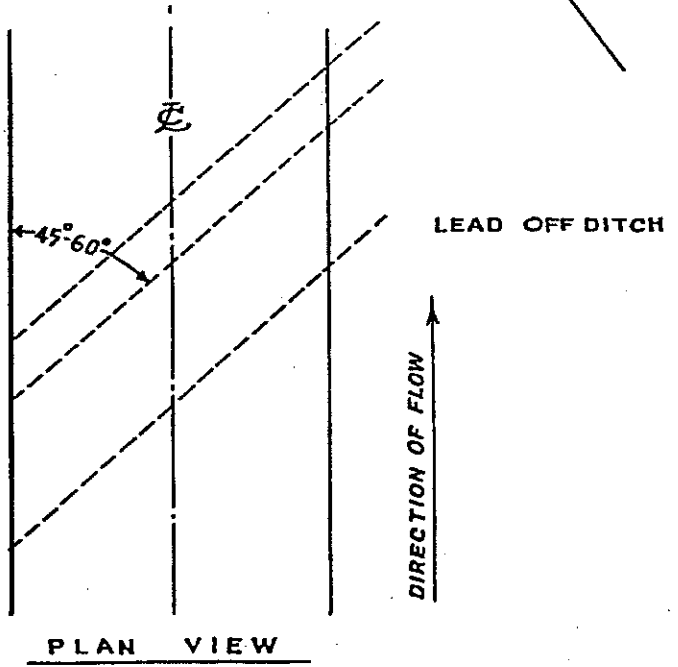
CULVERT AND ROAD MARKER DAMAGES. Culvert and road markers damaged, or any portion of a marker damaged from PURCHASER activities shall be replaced as specified in Exhibit E.

EXHIBIT I
 WATERBAR SPECIFICATIONS



SPACING OF WATERBARS

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



**WATERBAR SPECIFICATIONS
 FOR CROSS DITCHING #298**

EXHIBIT J

SEEDING AND MULCHING

This work shall consist of preparing seedbeds and furnishing and placing required seed, fertilizer, and straw mulch. Apply seed, fertilizer, and straw mulch to all waste areas, and bare soils resulting from Project No. 3.

Seeding Seasons. Seeding shall be performed only from March 1 through June 15 and August 15 through October 31. 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.

Application Methods for Seed and Fertilizer

Dry Method. 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 | 26% | 95% | >90% |
| Orchard Grass | 25% | 95% | >90% |
| New Zealand White Clover | 17% | 95% | >90% |
| Perennial Rye | 15% | 95% | >90% |
| Birdsfoot Trifol | 07% | 95% | >90% |
| Red Clover | 06% | 95% | >90% |
| Alsike Clover | 04% | 95% | >90% |

Fertilizer: 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 1½ to 2½ inches. This rate requires between 2 and 3 tons of dry mulch per acre.

APPLICATION LOCATIONS:

| Road Segment | Location | Road Segment | Location |
|--------------|----------------|--------------|----------|
| I3 to I4 | 75+31 to 77+06 | Waste Area 1 | N/A |

PART IV: OTHER INFORMATION

State Timber Sale Contract
No. 341-10-08
California Elk

Page 1 of 2

FOREST PRACTICES ACT "WRITTEN Plan" Type F Crossing and Fill Greater Than 15 Feet California Elk Timber Sale

Landowner: Oregon Department of Forestry
92219 Hwy 202
Astoria, OR 97103
(503) 325-5451

Protected Resources:

Road Segment I3 to I4, (Sta. 75+89 and Sta. 76+36): Two tributaries of the South Fork of the North Fork Klaskanine River, both small Type F fisheries resource, located in the NW1/4, NE 1/4, Section 36, T7N, R8W, W.M., Clatsop County, Oregon.

A written plan is required for any activity within 100 feet of any Type F stream and for fills greater than 15 feet in height.

Situation:

Road Segment I3 to I4 (Sta. 75+89 and Sta. 76+36): Both structures are failing and are undersized. Both structures are a blockage to fish passage upstream.

Drainage Area and Structure Design (Road Segment I3 to I4) (Sta. 75+89 and 76+36): The stream crossing structures will be replaced with 88' and 87' respectively of a 96", 10 gage aluminized steel round culvert pipe, embedded 38.4", with both ends step beveled. The stream crossing will utilize a streambed simulation strategy and preserve a natural stream channel, a maximum of 8 feet wide. The stream crossing will meet or exceed the requirements of the FPA for type F stream crossings. It will take sufficient time and flow conditions for the predicted stream bed to develop inside and above the stream crossing. The new fill height at sta. 75+89 will be 18.5 feet at road centerline and at sta. 76+36 will be 15.2 feet.

Sta. 75+89

| | |
|---------------------------------------|-------------------------------|
| New Stream Gradient: | 4% |
| Size of Watershed: | 150 acres |
| Average Stream Width: | 7.83 feet |
| Stream Bed Material: | Cobble, Sand, Gravel, Bedrock |
| 50 -Year Peak Flow/Mi. ² : | 300 cfs |
| 50-Year Peak Flow: | 70 cfs |
| Flow Capacity of New Structure: | 367 cfs |

Sta. 76+36

| | |
|---------------------------------------|-------------------------------|
| New Stream Gradient: | 6% |
| Size of Watershed: | 175 acres |
| Average Stream Width: | 7.35 feet |
| Stream Bed Material | Cobble, Sand, Gravel, Bedrock |
| 50 -Year Peak Flow/Mi. ² : | 300 cfs |
| 50-Year Peak Flow: | 82 cfs |
| Flow Capacity of New Structure: | 367 cfs |

**FOREST PRACTICES ACT "WRITTEN Plan"
Type F Crossing and Fill Greater Than 15 Feet**

California Elk Timber Sale

Resource Protection Measures:

- Machine activity in stream channels will be minimized. All existing fill excavation, and rip rap rock placement will be performed using a minimum 2 cubic-yard track-mounted excavator.
- In-stream work, including, excavation, culvert installations, and riprap rock placement will be conducted from July 1 to September 15.
- A dewatering plan will be developed and followed from the start of excavation until the structures are in place and water flowing.
- An erosion-control plan will be developed and followed to prevent sediment from entering the stream during construction work.
- Waste clearing debris and excavation material will be hauled to the designated waste area.
- Riprap rock will be used to protect the structure, road approaches/embankments, and stream banks from erosion.
- Oil spill response materials shall be on site before the work begins.

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 streams. I agree to the protection measures listed on this plan.

Submitted

Purchaser/Operator

Date

Attachments: Exhibit A and H.

Original: Salem

Copies: Operator, Purchaser, District File, Engineering Unit, Sunset Unit

State Timber Sale Contract
No. 341-10-08
California Elk

FPA "Written Plan" for Operating within 100 Feet of Type F Streams California Elk Timber Sale

Portions of Section 26, T7N, R8W, W.M., Clatsop County, Oregon

Landowner: Oregon Department of Forestry
92219 Highway 202
Astoria, Oregon 97103
Phone: (503) 325-5451

Protected Resources:

1. Unnamed Tributary of the Middle Fork of the NF of the Klaskanine River
2. Middle Fork of the North Fork of the Klaskanine River
3. Boyington Creek
4. South Fork of the North Fork of the Klaskanine River

Specific Site Characteristics:

1. Unnamed Tributary of the Middle Fork of the NF of the Klaskanine River (Small, Type F) – This stream (approximately 0.5 to 1 feet wide) marks the area boundary between Areas 1 and 2 for approximately 350 feet. The stream channel has moderate slopes with alder and conifer above the flood plain.
2. Middle Fork of the North Fork of the Klaskanine River (Medium, Type F) - This stream (approximately 15 to 25 feet wide) flows along the north side of timber sale boundary along Areas 1 and 2 for approximately 1,800 feet and is approximately 100 feet away, outside of the Timber Sale Area.
3. Boyington Creek (Small changing to Medium Type F) – This stream (approximately 1 to 5 feet wide) is located on the east boundary of Area 3 for approximately 2,200 feet and is approximately 100 feet away, outside of the Timber Sale Area.
4. South Fork of the North Fork of the Klaskanine River (Large Type F) is not adjacent to the Timber Sale Area but cable lines may pass over this stream.

Tree and Vegetation Retention:

Vegetation within the buffers consists of a combination of conifers, hardwoods, and shrubs.

All posted Type F buffers along or within cut units are approximately 100 feet. During cable yarding operations, it is anticipated that cable skylines will cross all the above listed streams. It is not anticipated that any logs will pass over the Type F streams or buffers.

Resource Protection Practices:

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

1. No trees will be felled within posted stream buffers (RMA's) except were needed for corridors.
1. Trees that fall or slide into Type F RMA's shall not be removed without prior approval from STATE.
2. Trees adjacent to the posted stream buffers (RMA's) will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
3. When cable logging is conducted nearby the RMA's, logging lines may cross, but will not be lowered into the RMA's during yarding, except during rigging. During rigging, the lines must be pulled out of the RMA's when changing corridors.
4. Logs shall be fully suspended when yarding across all stream buffers (RMA's).
5. Cable corridors must be at least 100 feet apart where they cross the RMA's.

I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practice Act regarding the operations conducted within 100 feet of streams. I agree to the protection measures listed in this plan.

Submitted by: _____
Operator/PURCHASER

Date: _____

Attachments: Logging Plan Map

Distribution: Original: Salem / Copies: Operator, Purchaser, District File, Engineering Unit, Sunset Unit

State Timber Sale Contract
No. 341-10-08
California Elk

OREGON DEPARTMENT of FISH and WILDLIFE

FISH SCREENING PROGRAM

SMALL PUMP SCREEN SELF CERTIFICATION

The Oregon Water Resources Department in coordination and cooperation with the Oregon Department of Fish and Wildlife includes screen requirements on pumps to protect fish as a condition of many surface water and/or reservoir water right permits. This is done in accordance with ORS 537.153.

The Oregon Department of Fish and Wildlife does not usually inspect small pump screens at pumped diversions less than 225 GPM (Gallons per Minute), but furnishes the following fish screening criteria information to the water right permit tee:

Screen material open area must be at least 27% of the total wetted screen area.

Perforated plate: Openings shall not exceed 3/32 or 0.0938 inches (2.38 mm).

Mesh/Woven wire screen: Square openings shall not exceed 3/32 or 0.0938 inches (2.38mm) in the narrow direction, e.g., 3/32 inch x 3/32 inch open mesh.

Profile bar screen/Wedge wire: Openings shall not exceed 0.0689 inches (1.75 mm) in the narrow direction.

Screen area must be large enough to cause fish impact. Wetted screen area depends on the water flow rate and the water approach velocity. **Approach velocity** is the water velocity perpendicular to and approximately three inches in front of any part of the screen face.

An Active pump screen is a self cleaning screen that has a proven cleaning system. The **screen approach velocity for active pump screens** shall not exceed 0.4 fps (feet per second) or 0.12 mps (meters per second). The wetted screen area in square feet is calculated by dividing the maximum water flow rate in cubic feet per second (1 cfs = 449 gpm) by 0.4 fps.

A Passive pump screen is a screen that has no cleaning system other than periodic manual cleaning. **Screen approach velocity for passive pump screens** shall not exceed 0.2 fps or 0.06 mps. The wetted screen area in square feet is calculated by dividing the maximum water flow rate by 0.2 fps.

For further information on fish screening please contact:

Bernie Kepshire, Oregon Department of Fish and Wildlife,
7118 NE Vandenberg Avenue, Corvallis, OR 97330-9446 (541) 757-4186 x 255

As evidence of having met fish screen installation requirements, please sign the certification and send to: Oregon Water Resources Department, Water Rights Section, 725 Summer St. NE, Suite A, Salem, OR 97301-1271

Certification: I certify that my small pumped diversion of less than 225 gpm meets fish screening criteria, and that I will maintain it to comply with regulatory criteria. I also understand that should fish screening standards change, I may be required to modify my installation to meet applicable standards.

Applicant Signature: _____

Date: ___/___/___ WRD File #

Printed Name and Address: _____

Phone: (____) _____

Fax: (____) _____

bm
3/11/99
PUMPCERT.doc

NB: ODFW logo is 129% of logo on HQ mail label

NOTICE OF TRANSFER OF STATE TIMBER

Instructions

629--Form-301-010

Complete Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and obtain signatures.

SECTION 1

On _____, state timber sale purchaser (Transferor):
_____, sold, exchanged or otherwise transferred to
_____, (Transferee) state timber originating from State
Timber Sale Contract No: _____.

Transferee hereby certifies that they:

- (a) Will not export the unprocessed state timber which is the subject of this transaction;
- (b) Will not sell, transfer, exchange or otherwise convey the unprocessed timber which is the subject of this transaction to any other person without first obtaining a like certification from that person.
- (c) Are not prohibited by OAR's 629-31-005 through 045 from purchasing state timber or logs directly from the State Forester, or this is a sale of Western Red Cedar for domestic processing.

SECTION 2

- Have not exported unprocessed timber originating from private lands in Oregon in the last 24 months.
- This is a sale of hardwood logs for domestic processing.
- This is a sale of Western Red Cedar for domestic processing.
- This is a sale of pulp logs or cull logs processed at domestic pulp mills, domestic chip plants or other domestic operations for the purpose of conversion of the logs into chips.

SECTION 3

The parties understand that falsely entering into this certification, or failure to comply with the terms of this certification is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, Division 31, and is subject to any and all penalties contained therein.

Transferor:

Transferee:

Signed _____

Signed _____

Title _____

Title _____

Dated _____

Dated _____

[Note: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-005]

Mail To: State Forester
2600 State Street
Salem, OR 97310