

July 9, 2014

SPECIAL NOTICE TO ALL PROSPECTIVE TIMBR SALE PURCHASERS

The Ocean View CT timber sale ORC00-TS-2014.0034, which is scheduled for sale on July 25, 2014, has been changed to reflect updates to Occupied Marbled Murrelet Habitat, generated by ongoing surveys. In addition to Unit 4, Unit 1 will have Seasonal Restriction (MM) as well. Please refer to attached Exhibit A Map and Contract language listed below to see changes.

Changed Contract Language:

SPECIAL PROVISION: *This list is not comprehensive. Please review the entire contract.*

- 5. A Seasonal Restriction (MM) affects a portion of Unit 1 and Unit 4. Harvest activities are prohibited April 1 through August 5, and a daily timing restriction restricts harvest activities to the period two hours after sunrise to two hours before sunset August 6 through September 15.*

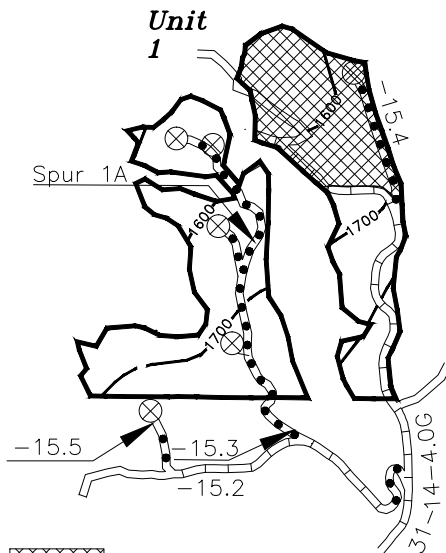
TIMBER SALE CONTRACT MAP
 USDI-BLM COOS BAY DISTRICT
 T.31S., R.14W., Secs. 14,15,22&23, Will. Mer.

ORC00-TS-2014.34
 EXHIBIT A
 Page 1 of 2
 OCEAN VIEW CT

Total Reserve Area 340 ac.
 Total Contract Area 535 ac.

Unit 1.....	35 ac.
Unit 2.....	5 ac.
Unit 3.....	10 ac.
Unit 4.....	23 ac.
Unit 5.....	67 ac.
Unit 6.....	34 ac.
Unit 7.....	16 ac.
R/W	5 ac.
Total	195 ac.

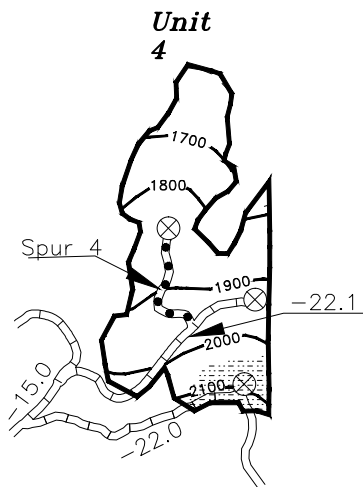




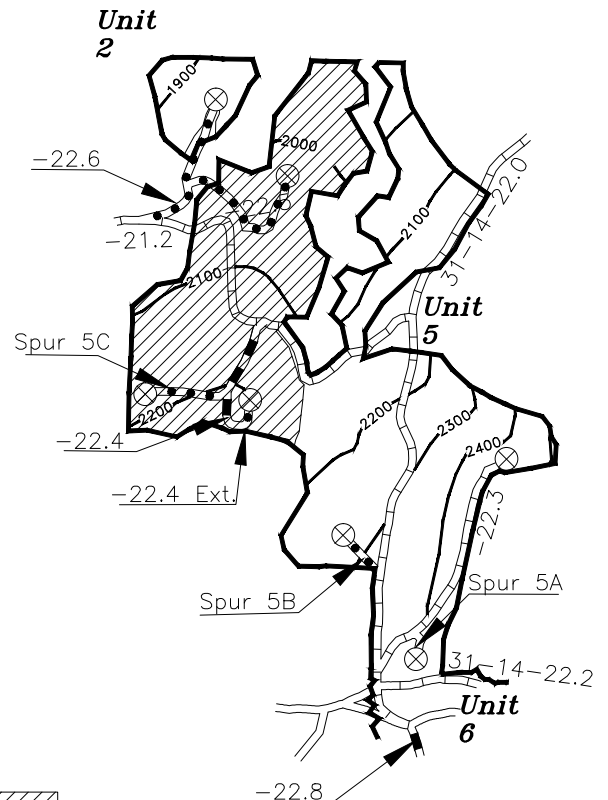
Snag & Down Wood
 Unit 1..... 10ac.
 Unit 5..... 29ac.



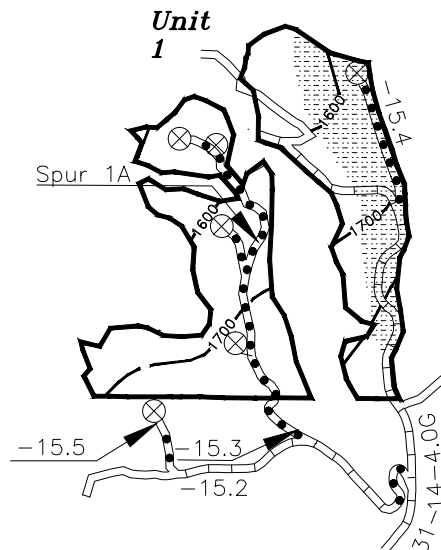
1.5 Snags per Acre



Seasonal Restricted Area (MM)



1.0 Down Wood per Acre



ORC00-TS-2014.34
EXHIBIT A-1
Page 1 of 1
OCEAN VIEW CT



Road Number Break

SCALE 1" = 1 Mile

LOCKED GATE

COOS BAY DISTRICT OFFICE
MYRTLEWOOD RESOURCE AREA

SALE DATE: July 25, 2014
SALE TIME: 10:00 a.m.

SALE NO.: ORC00-TS-2014.0034, OCEAN VIEW CT

SET-ASIDE SALE

CURRY COUNTY: OREGON: O&C, PD: ORAL AUCTION: Bid deposit required: \$26,000.00

All timber designated for cutting on: T. 31 S., R. 14 W., Sec. 14, Lots 5, 6; Sec. 15, Lots 5, 6, 7, 8, 9; Sec. 22, NE¼, NE¼ SE¼; Sec. 23, SW¼ NW¼, NW¼ SW¼; Will. Mer.

Approx. No. Merch. Trees	Est. Vol. MBF 32' Log	Species	Est. Vol. MBF 16' Log	Appraised Price Per MBF	Estimated Vol. Times Appraised Price
16,931	2,283	western hemlock	2,606	\$43.80	\$114,142.80
19,672	1,491	Douglas-fir	1,779	\$74.80	\$133,069.20
3,889	189	red alder	243	\$37.30	\$9,063.90
323	58	grand fir	72	\$40.30	\$2,901.60
276	7	Port-Orford-cedar	9	\$41.50	\$373.50
41,091	4,028	Total	4,709		\$259,551.00

THIS TIMBER SALE HAS BEEN CRUISED, APPRAISED, AND ADVERTISED BASED UPON SCRIBNER BOARD FOOT MEASURE (16 FOOT LOG). THE MINIMUM BID FIGURES SHOWN BY SPECIES ARE DOLLARS PER THOUSAND BOARD FEET (MBF). THE MINIMUM BID INCREMENT WILL BE \$0.50 PER MBF. SCRIBNER BOARD FOOT VOLUMES (32 FOOT LOG) BY SPECIES ARE DISPLAYED FOR INFORMATIONAL PURPOSES.

LOG EXPORT AND SUBSTITUTION: All timber sales, including timber from Federal rights-of-ways, shall be subject to the restrictions relating to the export and substitution of unprocessed timber from the United States in accordance with P.L. 94-165 and 43 CFR 5400 and 5424 as amended.

LOG EXPORT AND SUBSTITUTION RESTRICTIONS: Excepting Port-Orford-cedar, all timber offered for sale hereunder is restricted from export from the United States in the form of unprocessed timber and is prohibited from being used as a substitute for exported private timber.

CRUISE INFORMATION: With respect to merchantable trees of all species in all cruise strata: the average DBHOB is 11.2 inches; the average gross merchantable log contains 36 bd. ft.; the total gross volume is approximately 5,094 thousand bd. ft.; and 92 % recovery is expected. The average DBHOB for western hemlock is 11.6 inches; and the average gross merchantable log contains 42 bd. ft. None of the total sale volume is salvage material. The following cruise method was used for volume determination:

VARIABLE PLOT: Timber volumes in Units 1-7 were based on a variable plot cruise. Using a 20 basal area

COOS BAY SALE NO. ORC00-TS-2014.0034
OCEAN VIEW CT

factor (BAF), 301 plots were measured and 318 trees were randomly selected to be sampled. The sample trees have been cruised and their volumes computed using form class tables for estimating board foot volumes of trees in 16-foot logs. The volumes are then expanded to a total sale volume.

3P: The Douglas-fir, western hemlock and red alder within the road right-of-way has been cruised using the 3P system to select 77 sample trees. The sample trees have been cruised and their volumes computed using form class tables for estimating board foot volumes of trees in 16-foot logs. The volumes are then expanded to a total sale volume.

100% CRUISE: The grand fir and Port-Orford-cedar within the road right-of-way were cruised using form class tables for estimating board foot volume of trees in 16-foot logs.

CUTTING AREA: Seven units totaling approximately 190 acres must be partial cut. Five acres of right-of-way must be cut.

ACCESS: Access to the sale area is provided via: Oregon State highways, county roads, privately controlled roads and Government controlled roads.

DIRECTIONS TO SALE AREA: From Port Orford, Oregon, travel north on Highway 101 for approximately four miles. Turn east onto Sixes River County Road and travel 8.4 miles. Turn left onto Plum Trees road (Moore Mill Road No. 32-14-4.0 – a key is required for access). Travel approximately 6 miles to the sale area. Refer to Exhibits A and A-1 for unit locations.

ROAD USE & MAINTENANCE: Refer to Exhibit E Summary attached. Operator maintenance required on 6.1 miles of road.

Road Use Fees Payable to Plum Creek Timberlands, L.P.:	\$14,127.00
Rockwear Fees Payable to Plum Creek Timberlands, L.P.:	\$0.00
Road Use Fees Payable to Moore Mill & Lumber Company:	\$12,055.04
Maintenance & Rockwear Fees Payable to Moore Mill & Lumber Company:	\$44,847.01
Right-of-Way and Yarding Wedge Timber Purchase Price Payable to Moore Mill & Lumber Company:	\$14,538.30
Rockwear Fees Payable to BLM:	\$1,487.10

ROAD CONSTRUCTION:

Road Construction estimates include the following:

New Construction:

108.25 stations

Road Renovation:

228.00 stations

Aggregate:

Pipe Rock, 1" minus hardrock: 41 C.Y. (Compacted Measure)
Top Rock, 1 ½" minus hardrock: 15 C.Y. (Compacted Measure)
Riprap: 10 tons

Drainage:

18" CPE Double Wall: 175'
24" CPE Double Wall: 286'
Culvert Markers: 11

Soil Stabilization:

Dry Seed, fertilizer, & mulch: 11.2 acres (Pre Haul)
Dry Seed, fertilizer, & mulch: 14.1 acres (Post Haul)

Roadside Brushing:

228.00 stations

Road Decommissioning:

Earthen Berm Barriers: 11
Boulder Barriers: 4
Culvert Removal: 4
Full Decommissioning: 5.39 stations
Normal Decommissioning: 184.86 stations

DURATION OF CONTRACT: Will be 36 months for cutting and removal of timber. The contract will contain special stipulations regarding logging, road construction, road use and maintenance, fire prevention, hazard reduction and logging residue reduction, log export and substitution, optional scale check of lump sum sales, equal opportunity in employment, cultural resource protection, and sensitive, threatened, or endangered plants or animals.

SPECIAL PROVISIONS: This list is not comprehensive. Please review the entire contract.

1. A key is required for access on Plum Trees road (Moore Mill Road No. 32-14-4.0). Keys are available at the Moore Mill & Lumber Company office at 440 1st Street SE, Bandon, OR 97411, (541) 347-4338.
2. License agreements with Moore Mill & Lumber Company and Plum Creek Timberlands L.P. are required. Merchantable timber on Moore Mill & Lumber Company lands within the painted right-of-ways for the Moore Mill Road No. 31-14-15.2, BLM Road Nos. 31-14-15.2, & -15.3, and yarding wedge associated with timber sale Unit 1 shall be purchased upon execution of the license agreement. The purchase price for the timber is \$14,538.30.
3. All equipment must be washed prior to entry into the contract area to control the spread of noxious weeds.
4. All roads are summer haul only (June 1 through October 15).
5. A Seasonal Restriction (MM) affects a portion of Unit 4. Harvest activities are prohibited April 1 through August 5, and a daily timing restriction restricts harvest activities to the period two hours after sunrise to two hours before sunset August 6 through September 15.
6. No trees shall be felled into the Reserve Areas as shown on the Exhibit A. Line pulling, jacking, or other mechanical devices shall be used as necessary.
7. Damage shall affect less than 5% of reserve trees.
8. Lift trees and intermediate support trees may be necessary.
9. One-end suspension required.
10. Full suspension required over any stream channels. Trees cut within the Reserve Area adjacent to stream channels for yarding corridors shall be felled toward the channel and left on site.
11. Log lengths shall not exceed 41 feet.
12. Shape and restore all landings to a natural contour to prevent erosion.
13. Seed and fertilize all landings, road cuts and fills, and waste areas.
14. Soil stabilization, water bar construction, road decommissioning, and road barrier construction shall be conducted after the completion of harvest activities but no later than October 15th.
15. Installation and removal of stream culverts is restricted to the in-stream work period of July 15 through September 30.
16. BLM will assume supervisory responsibility for disposal of logging slash.
17. Machine and/or hand piling of logging slash are required at all landing areas.
18. After yarding is complete the purchaser shall top 15 conifer trees in Unit 1 and fall 29 conifer trees in Unit 2.
19. This contract contains provisions (Sec. 42.b(10) and Sec. 42.b(11)) for the sale and removal of additional timber necessary to facilitate safe and efficient Purchaser operations. These provisions include:
 - a. The designation and sale of additional timber, such as corridor and guyline trees, at contract price, as necessary to facilitate safe and efficient logging. Such trees may be felled and removed when they are painted by the Authorized Officer;
 - b. Sale of additional timber volume at current fair market value where the species and/or size of trees are not representative of the forest stand(s) being thinned;
 - c. Government reservation of trees previously marked for cutting replacement when the Authorized Officer determines that it is necessary in order to maintain stand densities consistent with objectives set forth in management prescriptions;
 - d. The use of unilateral modifications executed by BLM for such additional and replacement timber;

COOS BAY SALE NO. ORC00-TS-2014.0034
OCEAN VIEW CT

- e. Revocation of the Purchaser's right to cut additional timber if the Authorized Officer determines that trees have been cut and removed that were not previously marked and approved for cutting and removal by the Authorized Officer; and,
- f. It is estimated that approximately ten percent of the sale volume (estimated at 471 MBF) of such additional timber may be removed under the contract, but is not included in the advertised sale volume nor was it included in the timber sale appraisal. This estimate is a net figure reduced by the estimate of the volume of trees previously marked for cutting, which the Authorized Officer may elect to reserve.

Seasonal Restriction Matrix ORC00-TS-2014.0034 OCEAN VIEW CT Timber Sale Prospectus

***Restricted periods are Shaded; Conditional periods are hatched; See Exhibit A for portions of units affected.**

Sale Area	Activity	Jan		Feb		Mar		Apr		May		June		July		Aug		Sept		Oct		Nov		Dec	
		1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15
General All Units	Falling and bucking ²																								
	Cable yarding ²																								
	Road Construction, Renovation, or Improvement Work ¹																								
	Stream Culvert Installation or Removal ³																								
	Hauling ¹																								
Unit 4	Seasonally Restricted (MM) area ⁴																								

¹ Wet season restrictions may be shortened or extended depending on weather conditions.

² Bark slip seasonal restrictions may be conditionally waived upon written request and Authorized Officer approval. Strict compliance with damage provision required for continued operations.

³ The in-stream work period is July 15 through September 15.

⁴ Harvest activities are prohibited April 1 through August 5, and a daily timing restriction restricts harvest activities to the period two hours after sunrise to two hours before sunset August 6 through September 15.

SCHEDULE I

Sec. 41. **TIMBER RESERVED FROM CUTTING.** The following timber on the Contract Area, shown on Exhibit A, which is attached hereto and made a part hereof, is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of the Government:

- a. All timber on the Reserve Area, shown on Exhibit A, and all blazed, orange painted and/or posted trees which are on or mark the boundaries of the Reserve Area.
- b. All timber marked, by the Government, with orange paint above and below stump height within the Partial Cut Units, shown on the Exhibit A.
- c. All existing standing dead trees, except those snags that must be felled to permit safe working operation provided that all snags felled must be retained on site;
- d. All existing downed wood in decay classes 3-5 and all existing downed wood 20 inches or larger in diameter measured on the large end regardless of decay class;
- e. All Bearing Trees with metal tags that mark property corners.

Sec. 42 **SPECIAL PROVISIONS.** Purchaser shall comply with the special provisions which are attached hereto and made a part hereof unless otherwise authorized, in writing, by the Authorized Officer:

a. **Periodic Payment and First Installment Adjustment**

(1) Notwithstanding the provisions of Sec. 3(b), the amount of the first installment may be reduced by the Government when the Contracting Officer requests the Purchaser to interrupt or delay operations for a period expected to last more than 30 days during the operating season. Such interruption or delay must be beyond the Purchaser's control. Operating Season shall be defined, for this purpose, as the time of year in which operations of the type required are normally conducted and not specifically restricted under the contract. The first installment may be reduced to 5% of the installment amount listed in Sec. 3(b), during the delay period. The Purchaser must request such a reduction in writing. When the Contracting Officer notifies the Purchaser that operations may proceed, the purchaser shall have 15 days after such notification to return the first installment to the full value specified in Sec. 3(b). Failure to return the first installment to the full value within the allotted time will be considered a material breach of contract. No timber shall be cut or removed from the contract area until the first installment is restored to the full amount.

(2) Notwithstanding the provisions of Sec. 3(b), adjustments in the due dates for periodic payments may be made by the Government if the Contracting Officer interrupts or delays contract operations for a period expected to last at least 30 days, and the interruption or delay is beyond the Purchasers control. Any adjustment made shall provide the Purchaser with an equal amount of operating time as would have been available without the delay. The Purchaser shall request such adjustment in writing before the due date for a periodic payment contained in Sec. 3(b).

b. Logging

(1) Prior to commencement of operations, the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract which shall include measures needed to assure protection of the environment and watershed. A pre-work conference between the Purchaser's authorized representative and the Authorized Officer's representative must be held at a location designated by the Authorized Officer before the logging plan will be approved.

(2) Before beginning operations on the contract area for the first time, or after a shutdown of ten or more days, the Purchaser shall notify the Authorized Officer in writing of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer in writing if they intend to cease operations for any period of ten or more days.

(3) In the Seasonal Restricted Area (MM), as shown on Exhibit A, falling, yarding, and new road construction operations are prohibited in the period between April 1 and August 5. In addition a daily timing restriction confines activities to the period from two hours after sunrise to two hours before sunset between August 6 and September 15 both days inclusive.

(4) Due to bark slippage, falling or yarding may be restricted by the Authorized Officer within the contract area between March 1 and June 30 of each calendar year, both days inclusive.

(5) No trees may be felled into the Reserve Area designated on the Exhibit A. Line pulling, jacking, or other mechanical devices shall be used as necessary to prevent trees from falling into these areas.

(6) Damage to residual trees shall affect less than 5% of reserve trees. Bark removed to cambium three inches wide or wider, top broken at three inches diameter or greater, root sprung trees, or any root collar damage shall constitute damage. Damage levels will be upon government sample of an affected area. Failure to resolve excess damage to reserve trees may result in suspension of operations and recovery of the value of the damaged timber in accordance with Sec. 13.

(7) Trees shall be felled, limbed, topped into lengths not to exceed 41 feet prior to yarding.

(8) In the Partial Cut Units, yarding (except for road rights-of-way) shall be done with a skyline cable system according to the following:

(a) The skyline cable system shall be capable of being rigged in a multi-span configuration utilizing a carriage capable of yarding 75 feet laterally from the skyline. Skyline roads shall not be spaced closer than 150 feet apart, unless approved by the Authorized Officer.

(b) One-end log suspension is required during yarding operations. Intermediate supports and/or lift trees may be required to obtain the required suspension. Full suspension is required when yarding over Stream Channels shown on the Exhibit A.

(c) If the placement of a yarding corridor requires the cutting of a tree within the Reserve Area adjacent to a Stream Channel, the tree shall remain on-site and felled toward the direction of the channel in a manner to protect the stream bank from disturbance during yarding. Yarding corridors shall cross

stream channels perpendicular where possible to minimize cutting of trees within the Reserve Area. Yarding corridor location within the Reserve Area shall be approved by the Authorized Officer prior to cutting.

(d) Where road locations allow, yarding will be done so that corridors run parallel to each other rather than radiate from a central landing.

(9) Sec. 42.b.(10) shall be the primary method for the identification, cutting, and removal of additional timber required for skyline corridors, yarding trails, and guy-line trees. Sec. 42.b.(11) may be used at the discretion of the Authorized Officer. The purchaser shall be notified in writing when Sec. 42.b.(11) is authorized for use.

Before cutting and removing any trees necessary to facilitate logging in the Partial Cut Units the Purchaser shall identify the location of the cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the Logging Plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal. In addition, before proceeding the following conditions must be met:

(a) All cable yarding roads upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the removal of timber sold under this contract and shall be limited to the minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Authorized Officer, the width of each cable yarding road shall be limited to 12 feet.

(b) The Purchaser may immediately cut and remove additional timber to clear cable yarding roads; and provide tailhold, tieback, guyline, lift, and intermediate support trees; and clear danger trees when the trees have been marked with blue paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures. No timber may be cut or removed under terms of this provision unless sufficient installment payments have been made in accordance with Sec. 3.(b) of the contract or sufficient bonding has been provided in accordance with Sec. 3.(d) of the contract.

(c) The Purchaser agrees that sale of this additional timber shall be accomplished by a unilateral modification of the contract executed by the Contracting Officer and that such timber shall be sold at the unit prices shown in Exhibit B of this contract unless: the value of the timber must be reappraised subject to the terms for contract extension set forth in Sec. 9 of the contract; or, the Authorized Officer determines that any tree that exceeds 24 inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Sec. 8 of the contract.

(d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Sec. 10 of the contract constitutes a violation of the contract and under

Sec. 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.

(e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with Sec. 8 or 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and

(f) The Government may reserve trees previously designated for cutting and removal by applying orange paint as replacements for additional trees cut and removed for skid roads and/or cable yarding roads when the Authorized Officer determines such reservation is necessary to maintain stand densities consistent with objectives set forth in the management prescription. This may include the replacement of trees damaged by storm events, or insects or disease. The volume of this timber to be reserved will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and the value shall be based on the unit prices shown in Exhibit B of the contract. The Purchaser agrees that the Total Purchase shall be reduced accordingly through a unilateral modification to the contract executed by the Contracting Officer.

(10) In accordance with the requirements of Sec. 8 of the contract it has been determined that it is in the best interest of the Government and within the provisions of 43 CFR 5402.0-6 to sell additional timber located in the contract area which, is obstructing needed cable yarding roads, hazardous to workers, needed for guyline, tailhold, and/or tieback trees to meet all applicable State safety laws, codes or regulations. This timber must be cut or removed so that the Purchaser can continue active falling and yarding operations. The Purchaser is, therefore, authorized to cut and remove such additional timber in accordance with the provisions of Sec. 8 of the contract: provided, however, that:

(a) Seed trees, bearing trees, trees larger than 24 inches in diameter at breast height, and trees located within the Reserve Areas are not included in this authorization;

(b) the Purchaser shall identify each tree sold and cut in accordance with this provision by marking the surface of the stump immediately after cutting with a large "X", cut with a chain saw, and by painting the stump with florescent red paint so that the stump can be visually located from a distance of not less than 100 feet;

(c) concurrently with falling, paint the end of the butt log of each tree with florescent red paint. When butt logs are yarded, deck separately for inspection by Authorized Officer;

(d) the Purchaser conforms to all requirements of Sec. 8 of this contract; provided that (1) the unit prices for additional timber within unit boundaries shall be the unit prices shown in Exhibit B of this contract, or the reappraised unit prices arrived at in accordance with Sec. 9 of this contract, and (2) timber outside of unit boundaries shall be sold at fair market value;

(e) no timber may be cut or removed under the terms of this provision if all contract payments required

by Sec. 3.(c) or Sec. 3.(d) have been made; and,

(f) permission to cut and remove additional timber contained in this provision may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser:

1. failed to properly mark any stump with the "X" cut and red paint.
2. failed to properly mark any butt log with red paint.
3. cut any tree that was reserved for tree improvement and/or wildlife habitat.
4. cut any tree in or adjacent to cable yarding corridors that was not necessary to facilitate cable yarding.
5. cut any reserve tree in or adjacent to tractor skid roads that was not necessary to facilitate ground based yarding.
6. failed to properly segregate any pulled over tree that was yarded to the landing.
7. cut any reserve tree that was not severely (as defined during the prework conference and documented in the approved logging plan) damaged from felling and yarding operations.
8. cut more than the minimum number of trees necessary to properly serve as guyline anchor stumps.
9. cut or topped more than the minimum number of trees necessary to properly serve as tailhold trees.
10. cut more than the minimum number of trees necessary to properly serve as tie-backs for topped tailhold trees.

Failure to perform any of the conditions listed above may be considered a trespass.

If the permission to cut and remove additional timber provision is withdrawn, the Authorized Officer shall deliver to the Purchaser a written notice that additional sale of timber under this special provision is no longer approved.

If the permission to cut and remove additional timber provision is withdrawn, the Purchaser shall inform the Authorized Officer at least two working days prior to the need for cutting and yarding any guyline tree, tailhold tree, tie-back tree, danger tree, corridor tree, pulled over tree, and severely damaged tree. All sales of additional timber shall comply with Sec. 8 of the contract. The Contracting Officer may order the Purchaser, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the Government to safely measure and mark additional timber.

All cable-yarding roads upon which timber may be cut and removed in accordance with this special provision must be needed for the removal of timber sold under this contract and shall be limited to the narrowest width necessary for the yarding of logs with minimum damage to reserved trees.

The Purchaser shall be liable for damages in accordance with Sec. 13 of the contract for any reserved timber cut or removed in violation of the terms of this special provision.

(11) Prior to attaching any logging equipment to any tree within the Reserve Area, or any reserve tree larger than 24 inches in diameter at breast height, the Purchaser shall obtain written approval from the Authorized Officer, and shall take precautions to protect the trees from damage, as directed in writing by the Authorized Officer.

(12) After completion of yarding activities, the Purchaser shall top 15 conifer trees in Unit 1 and fell 29 conifer trees in Unit 2, as shown on the Exhibit A and as directed by the Authorized Officer.

The Purchaser shall top the trees above the third live whorl at a minimum height of 40 feet or at 60 feet if no live limbs occur below 60 feet. Trees selected for treatment shall be from the co-dominant tree class as directed by the Authorized Officer. Topped trees shall have a number painted at breast height with fluorescent paint such that they are visible from at least 150 feet, felled trees shall have the butt ends painted. Existing snags or windfalls and reserve trees meeting the desired characteristics including recent broken tops or logging damage may be counted towards the requirements as directed by the Authorized Officer. Number and location of existing or treated trees shall be depicted on a map such that they may be easily verified.

(13) To control the spread of noxious weeds and Port-Orford-cedar root disease, the purchaser shall conduct all operations involving the transportation and use of equipment and vehicles in strict accordance with the requirements shown on Exhibit F, which is attached hereto and made a part hereof. All road building and logging equipment shall be washed prior to moving in the Contract Area to minimize the spread of noxious weeds.

c. Road Construction

(1) The Purchaser shall construct, improve, and renovate roads in strict accordance with the road plans and specifications, shown on Exhibit C, which is attached hereto and made a part hereof.

(2) Any required construction, improvement, or renovation of structures and roads shall be completed and accepted prior to the removal of any timber, except right-of-way timber, over that road.

(3) In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall complete erosion control and soil stabilization measures on all cuts, fills, waste areas, and scarified areas, as designated by the Authorized Officer, along all sections of roadway disturbed during the year prior to October 15 of each year. The Authorized Officer may set time limits for the beginning and completion of erosion control and soil stabilization measures and modify seasonal dates to conform to existing weather conditions and changes in the construction schedule. Such work shall be accomplished in accordance with Erosion Control and Soil Stabilization, 1700 and 1800 Series, contained in Exhibit C..

(4) The Purchaser, prior to construction of landings, shall stake all landing locations in accordance with the requirements set forth in Exhibit C. Concurrently with, or at the termination of logging operations, the Purchaser shall pull back and shape onto the landings all overhanging materials to prevent erosion in accordance with the requirements set forth in Exhibit C.

d. Road Use and Maintenance

(1) The Purchaser shall be required to secure written approval to use or haul equipment over Government owned or controlled structures when that equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit.

(2) Tracked type equipment shall not be allowed to cross over concrete bridge decks, other concrete

surfaced structures or asphalt surfaced roads without the proper protection of that surface. Prior approval shall be obtained from the Authorized Officer when crossing with protective devices. Details of such equipment shall be furnished to the Authorized Officer for evaluation of load characteristics, at least 15 days prior to proposed move in. Details shall include:

- (a) Axle weights when fully loaded;
- (b) Axle spacing;
- (c) Transverse wheel spacing;
- (d) Tire size;
- (e) Outside width of vehicle;
- (f) Operating speed;
- (g) Frequency of use; and,
- (h) Special features (e.g. running tracks, overhang loads, etc.).

The Purchaser shall be responsible for repair of any damage to structures caused by the use of overweight or over-dimension vehicles: (1) without written approval, (2) in violation of the conditions of a written approval or (3) in a negligent manner. The amount of actual damage shall be determined by the Authorized Officer following a technical inspection and evaluation.

(3) The Purchaser is authorized to use the roads shown on Exhibit E, attached hereto and made a part hereof, for the removal of Government timber sold under the terms of this contract and for haul of mineral material required under the terms of this contract; provided, that the Purchaser shall pay the road maintenance fees and rockwear fees totaling \$46,334.11 as shown on Exhibit E. Unless the total maintenance and rockwear fees due BLM are paid prior to commencement of operations on the contract area, payments shall be made in installments payable in the same manner as and together with payments required by Sec. 3 of this contract.

(4) The Purchaser shall perform maintenance and repair of such roads shown on Exhibit D in accordance with the maintenance specifications listed in Exhibit D, attached hereto and made a part hereof.

(5) At all times during the period of his operations on the contract area, and upon completion of said operations, the Purchaser shall be liable for maintenance and repair of such roads shown on Exhibit D resulting from wear or damage in accordance with the maintenance specifications as shown on Exhibit D.

(6) With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users of any BLM controlled road included in Sec. 42.c.(1) and Sec. 42.d.(3) of this contract; provided, that such cooperative arrangement shall not relieve the Purchaser of his liability for the maintenance and repair of such roads resulting from wear or damage, in accordance with this contract. The Purchaser shall furnish the Authorized Officer a copy of any cooperative maintenance agreements entered into with other users on these roads.

(7) The Authorized Officer may at any time, by written notice, terminate the Purchaser's operator road maintenance obligations and require instead payment of current Bureau of Land Management road maintenance fees for the particular surface type of the road(s) involved. These fees will be applied to the remaining contract volume on the sale area, as determined by the Authorized Officer, to be transported over the roads listed in Sec.

42.c.(1) and 42.d.(3). If the total road maintenance fee does not exceed \$500.00, the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance fee exceeds \$500.00, the Authorized Officer shall establish an installment schedule of payments of the maintenance obligation.

(8) In the use of required company roads shown on the Exhibit E, the Purchaser shall comply with the conditions of the Right-of-Way and Road Use Agreements between the United States and Plum Creek Timberlands, L.P. RWA-C-354 and Moore Mill & Lumber Company RWA-C-364. The Agreements are available for inspection at the Bureau of Land Management, North Bend, Oregon.

Prior to commencement of operations, the Purchaser shall furnish to the Authorized Officer a copy of the executed License Agreements issued under the terms of the Right-of-Way Agreements.

Default by the Purchaser of said Right-of-Way and Road Use Agreements, of any License Agreements executed pursuant thereto, for failure to pay appropriate road use fees or road maintenance fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision. Road maintenance fees may change during the course of the contract as determined by the Licensor. It is the responsibility of the Purchaser to pay fees current at time of haul. The fees used for the appraisal include:

Road Use Fees Payable to Plum Creek Timberlands, L.P.:	\$14,127.00
Rockwear Fees Payable to Plum Creek Timberlands, L.P.:	\$0.00
Road Use Fees Payable to Moore Mill & Lumber Company:	\$12,055.04
Maintenance & Rockwear Fees Payable to Moore Mill & Lumber Company:	\$44,847.01
Right-of-Way and Yarding Wedge Timber Purchase Price Payable to Moore Mill & Lumber Company:	\$14,538.30
Rockwear Fees Payable to BLM:	\$1,487.10

If a Licensor is the purchaser, allowances have been made for amortization of capital investment of the roads covered by the Licensor's Agreement in accordance with 43 CFR 2812.6, 2(a)(5); it is understood that the purchase price stated in Section 2 of this contract is the net price and that no deduction will be made from the contract price because of such allowance.

(9) Merchantable timber on Moore Mill & Lumber Company lands within the painted right-of-ways for the Moore Mill Road No. 31-14-15.2, BLM Road Nos. 31-14-15.2, & -15.3, and yarding wedge associated with Unit 1 shall be purchased from Moore Mill upon execution of the license agreement. The purchase price for the timber is \$14,538.30.

(10) Hauling on all roads shall be permitted between June 1 and October 15 unless dry conditions extend the hauling season, as directed by the Authorized Officer.

e. Fire Prevention, Hazard Reduction and Logging Residue Reduction

(1) BLM will assume supervisory responsibility for disposal of logging slash. The assumption by the

Government of all obligations for the disposal or reduction of fire hazard under State law does not relieve the Purchaser of the obligations to perform the fire prevention, hazard reduction and logging residue reduction measures required by this contract.

(2) Fire Prevention and Hazard Reduction. Primarily for purposes of fire prevention and fire hazard reduction, the Purchaser shall comply with the following provisions:

(a) Prior to the operation of power driven equipment in construction or logging operations under this contract during the closed fire season or periods of fire danger, the Purchaser shall prepare a fire prevention and control plan to the satisfaction of the Authorized Officer.

(b) Slash shall be disposed of in accordance with the written instructions of the Authorized Officer.

(3) Logging Residue Reduction, Roadside Hazard Reduction and Biomass Removal. Primarily for purposes of fire prevention the Purchaser shall comply with the following provisions:

(a) Notwithstanding the provisions of Sec. 15 of this contract, the Government shall be responsible for disposing of slash created by the Purchaser's operations at all landing sites in the sale area.

(b) All logging debris accumulated on the landing or along roads shall be piled. As much as possible, piling on landings shall be reduced to the least amount of piles necessary and shall be free of soil and rock. Alternatively, accumulations of logging debris can be scattered throughout the unit by logging equipment at the direction of the Authorized Officer.

(c) Unless directed by the Authorized Officer, no landing or roadside piles shall be within 15 feet of any reserve tree.

Specifications for Landing Pile Covering

(a) The Purchaser shall place polyethylene plastic, maximum 4 MIL thick and black in color over the pile to provide a barrier from winter rains. Unless otherwise directed, the size of plastic shall not exceed 100 square feet (10 X 10).

(b) Larger piles may receive additional polyethylene plastic sheeting in excess of the 100 square feet to adequately cover the pile. Piles within this size limit will be identified by the Authorized Officer before the landing pile covering begins.

(c) In the piled area being covered, material that extends beyond the general contour of the pile shall be cut off and placed on the pile to prevent tearing of the plastic during seasonal winds.

(d) Plastic covering shall be placed on top of the pile to ensure the center of the piles remains dry and shall be weighted down with logging debris and shall be tied down with twine on all four corners.

(e) All piles shall be covered by September 30 of the same year of piling.

(f) Biomass Utilization Option:

1. If the Purchaser elects to remove biomass generated from harvest activities within the Partial Cut Unit, the Purchaser shall notify the Authorized Officer in order to arrange for on-site inspections of the removal operations and shall provide information on the total tonnage of biomass material removed from the sale area.
2. Upon completion of the biomass removal, the Purchaser shall notify the Authorized Officer to arrange for a final inspection of the landing site.

Specifications Applicable to Landing Pile Burning

- (a) The Purchaser shall begin landing pile burning within 14 hours of notification by the Authorized Officer.
- (b) The Purchaser shall remove and dispose of all plastic exceeding the 100 square foot limit in accordance with Federal, State and municipal laws. Removed polyethylene sheeting shall be not be disposed of in burn piles.
- (c) Manpower and Equipment Requirements for burning of piles are:
 1. One (1) English-speaking foreman for crew supervision
 2. Three (3) person burn crew
 3. Three (3) drip torches and a sufficient amount of fuel to complete all landing pile burning.
- (d) A minimum of 80 % consumption of each pile is required.
- (e) No mop-up is required of the Purchaser.

All listed personnel shall be physically fit, experienced and fully capable of functioning as required. All personnel shall arrive at the project area with the following personal safety equipment: Long sleeve natural fabric shirt (or nomex), full length natural fabric trousers (or nomex), minimum eight-inch top leather boots, hardhat, and leather gloves. All listed equipment shall be in good usable condition.

In case of injury to personnel or damage to equipment furnished as required by this subsection, liability shall be borne by the Purchaser, unless such injury or damage is caused by Government negligence.

Time is of the essence in complying with this provision. In the event the Purchaser fails to provide the men and equipment required herein, the Purchaser shall be responsible for all additional costs incurred by the Government in disposing of slash including but not limited to the wages and other costs of providing federal employees and others as substitute labor force, the cost of providing substitute equipment and appropriate additional overhead expenses.

f. Log Export and Substitution

- (1) All timber sold to the Purchaser under the terms of this contract is restricted from export from the United

States in the form of unprocessed timber, and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as (1) any logs except those of utility grade or below, such as sawlogs, peeler logs, and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 Common or better. Thus, timber manufactured into the following will be considered processed: (1) lumber and construction timbers, regardless of size, manufactured to standards and specifications suitable for end-product uses; (2) chips, pulp and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacturing of eight and three-quarters (8-3/4) inches in thickness or less; (6) shakes and shingles.

(2) Substitution will be determined under the definition found in 43 CFR 5400.0-5(n).

(3) The Purchaser is required to maintain and upon request to furnish the following information:

- (a) date of last export sale;
- (b) volume of timber contained in last export sale;
- (c) volume of timber exported in the past 12 months from the date of last export sale;
- (d) volume of Federal timber purchased in the past 12 months from the date of last export sale;
- (e) volume of timber exported in succeeding 12 months from date of last export sale; and,
- (f) volume of Federal timber purchased in succeeding 12 months from date of last export sale.

(4) In the event the Purchaser elects to sell any or all of the timber sold under this contract in the form of unprocessed timber, the Purchaser shall require each party buying, exchanging, or receiving such timber to execute a "Certificate as to Nonsubstitution and the Domestic Processing of Timber" (Form 5460-16). The original of such certification shall be filed with the Authorized Officer. Additionally, when the other party is an affiliate of the Purchaser, the Purchaser will be required to update information under item (2) of Form 5450-17 (Export Determination) and file the form with the Authorized Officer.

(5) In the event an affiliate of the Purchaser has exported private timber within 12 months prior to purchasing or otherwise acquiring Federal timber sold under this contract, the Purchaser shall, upon request, obtain from the affiliate information in a form specified by the Authorized Officer and furnish the information

(6) Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer a "Log Scale and Disposition of Timber Removed Report" (Form 5460-15) which shall be executed by the Purchaser. In addition, the Purchaser is required under the terms of this contract to retain for a three-year period from the date of termination of the contract the records of all sales or transfer of logs involving timber from the sale for inspection and use of the Bureau of Land Management.

(7) Unless otherwise authorized in writing by the Contracting Officer, the Purchaser shall brand clearly and legibly one end of all logs with a scaling diameter (small end inside bark) of over 10 inches, prior to the removal of timber from the contract area. All loads of 11 logs or more will have a minimum of 10 logs clearly and legibly branded on one end regardless of the diameter of the logs. All logs will be branded on loads of 10

logs or less. One end of all branded logs to be processed domestically will be marked with a three square inch spot of highway yellow paint. The Purchaser will stop trucks for accountability monitoring at mutually agreed upon locations when notified by the Authorized Officer.

If multiple trailers (mule trains) are used, each bunked load shall be considered an individual load, and these guidelines will apply to each bunked load. If a flatbed stake trailer is used, each bundle will be treated as a separate load. At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. Any increased costs for log branding and painting shall be the responsibility of the Purchaser.

(8) In the event of the Purchaser's noncompliance with this subsection of the contract, the Authorized Officer may take appropriate action as set forth in Sec. 10 of this contract. In addition, the Purchaser may be declared ineligible to receive future awards of Government timber for a period of one year.

g. Optional Scale Check of Lump Sum Sales

(1) The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed.

(2) In the event that BLM elects to administratively check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows. If the entire sale is check scaled by yard scale, the purchase price of this contract shall be reduced by \$3,531.75. In the event only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of \$3,531.75 which is equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or loss incurred as a result of such scaling. Scaling shall be conducted in accordance with the Eastside Scribner Scaling Rules by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to the Purchaser upon request.

h. Equal Opportunity in Employment

(1) Certification of Nonsegregated Facilities, Form 1140-3, is attached hereto and made a part hereof.

i. Cultural Resource Protection

(1) If in connection with operations under this contract, the Purchaser, his contractors, sub-contractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural value on the contract area such as historical or prehistorical ruins, fossils, or artifacts, the Purchaser shall immediately suspend all operations in the vicinity of the cultural value and notify the Authorized Officer of the findings.

Operations may resume at the discovery site upon receipt of written instructions and authorization by the Authorized Officer.

(2) Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the Authorized Officer, by telephone, with written confirmation, immediately upon discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.

j. Sensitive, Threatened, or Endangered Plants or Animals

The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Contracting Officer that:

- (a) threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, may be affected by the operation, and a determination is made that consultation or reinitiation of consultation is required concerning the species prior to continuing operation, or;
- (b) when, in order to comply with the Endangered Species Act or to protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Coos Bay District Record of Decision (ROD) and Resource Management Plan (RMP), the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (c) federal proposed, federal candidate, Bureau sensitive or State listed species protected under BLM Manual 6840 - Special Status Species Management - have been identified, and a determination is made that continued operations would affect the species or its habitat, or;
- (d) other active raptor nests have been discovered, and a determination is made that continued operations under this contract would adversely affect the present use of the discovered nesting area by the raptor, or;
- (e) when, in order to comply with a court order which enjoins operations on the sale or otherwise requires the Bureau of Land Management to suspend operations, or;
- (f) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (g) species have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, and the Contracting Officer determines that continued operations would affect the species or its habitat, or;
- (h) when, in order to protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and
- (i) RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

Those operations necessary for a safe removal of personnel and equipment from the contract area and those directed by the Contracting Officer which are required in order to leave the contract area in an acceptable condition will be permitted. Discontinued operations may be resumed upon receipt of written instructions and authorization by the Contracting Officer.

During any period of suspension, the Purchaser may withdraw performance and payment bond coverage aside from that deemed necessary by the Authorized Officer to secure cut and/or removed timber for which the Bureau of Land Management has not received payment, and/or unfulfilled contract requirements associated with harvest operations that have already occurred and associated post-harvest requirements.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five (5) percent of the First Installment amount listed in Sec. 3.b. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, *et seq.*). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall restore the First Installment to the full amount shown in Sec. 3.b. of the contract within 15 days after the bill for collection is issued, subject to Sec. 3.h. of the contract. The Purchaser shall not resume contract operations until the First Installment amount is fully restored.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the unamortized Out-of-Pocket Expenses for road or other construction required pursuant to Exhibit C of the contract shall be refunded or transferred to another BLM contract at the request of the Purchaser. Upon written notice from the Contracting Officer lifting the suspension, the Purchaser shall reimburse the Government the amounts refunded or transferred. The Purchaser may choose to pay this reimbursement at once or in installments payable at the same time as payments are due for the timber under the contract and in amounts approximately equal to the expenses associated with the timber for which payment is due.

In the event that operating time is lost as a result of the incorporation of additional contract requirements, or delays due to Endangered Species Act consultation with the U.S. Fish and Wildlife Service or U.S. National Marine Fisheries Service, or court-ordered injunctions, the Purchaser agrees that an extension of time, without reappraisal, will constitute a full and complete remedy for any claim that delays due to the suspension hindered performance of the contract or resulted in damages of any kind to the Purchaser.

The Contracting Officer may determine that it is necessary to terminate the cutting and removal rights under the contract in order to comply with the Endangered Species Act, protect occupied marbled murrelet sites in accordance with the ROD and RMP, protect species that have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or comply with a court order. Following the issuance of a written notice that cutting and removal rights will be terminated, the Purchaser will be permitted to remove timber cut under the contract, if allowed by the Endangered Species Act, marbled murrelet occupied site protection in accordance with the ROD and RMP, survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or court order requirements necessitating the modification or termination.

In the event cutting and removal rights are terminated under this subsection the Purchaser agrees that the liability of the United States shall be limited to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area. This calculation of liability shall utilize actual Purchaser costs and Government estimates of timber volumes. At the Authorized Officer's request, the Purchaser agrees to provide documentation of the actual costs incurred in the performance of the contract. In addition, the Purchaser shall be released from the obligation to pay the contract price for any timber which is not authorized to be removed from the contract area.

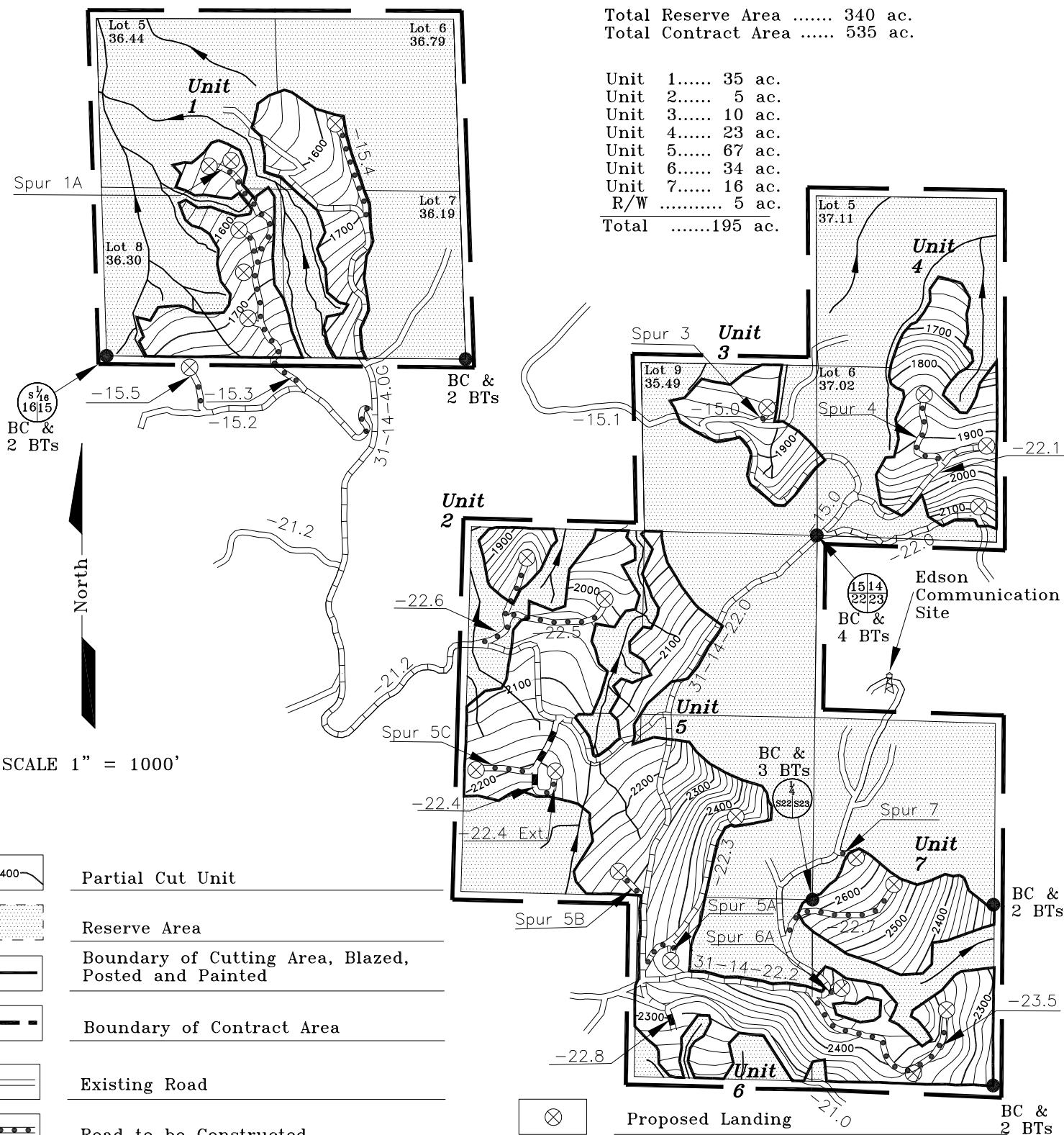
The Purchaser specifically and expressly waives any right to claim damages, other than those described in the preceding paragraphs, based on an alleged breach of any duty to the Purchaser, whether express or implied, in regard to the manner in which the Government defended the litigation which resulted in the court order affecting the operation of the contract. This waiver also extends to any claims based on effects on the operation of the contract that arise from litigation against another agency. Furthermore, the Purchaser specifically acknowledges and agrees that a court ruling that the Government violated the Administrative Procedures Act cannot be interpreted, in itself, to mean that the Government had not acted reasonably in regard to its duties to the Purchaser under this contract.

TIMBER SALE CONTRACT MAP
 USDI-BLM COOS BAY DISTRICT
 T.31S., R.14W., Secs14,15,22&23., Will Mer.

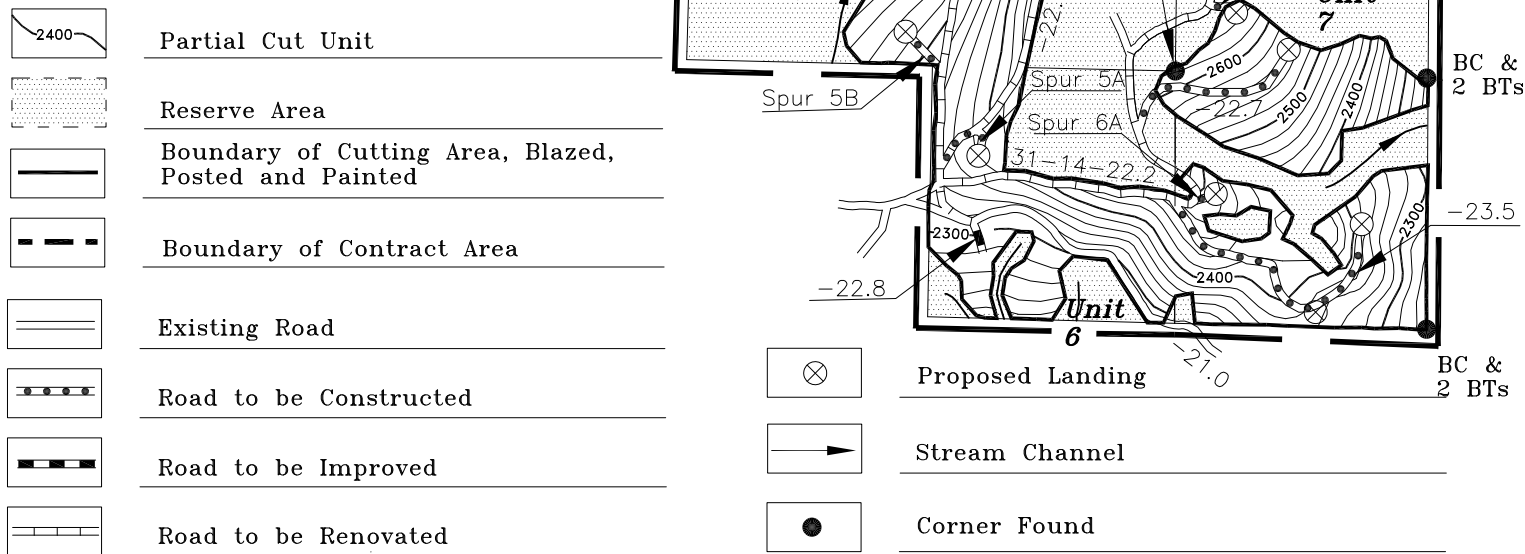
ORC00-TS-2014.34
 EXHIBIT A
 Page 1 of 2
 OCEAN VIEW CT

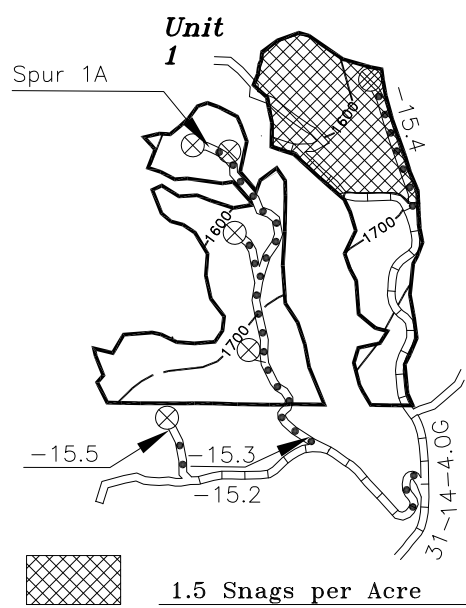
Total Reserve Area 340 ac.
 Total Contract Area 535 ac.

Unit 1.....	35 ac.
Unit 2.....	5 ac.
Unit 3.....	10 ac.
Unit 4.....	23 ac.
Unit 5.....	67 ac.
Unit 6.....	34 ac.
Unit 7.....	16 ac.
R/W	5 ac.
Total	195 ac.

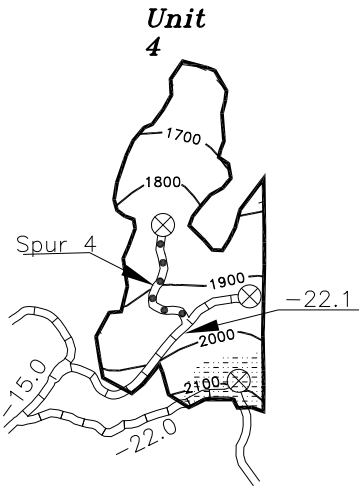
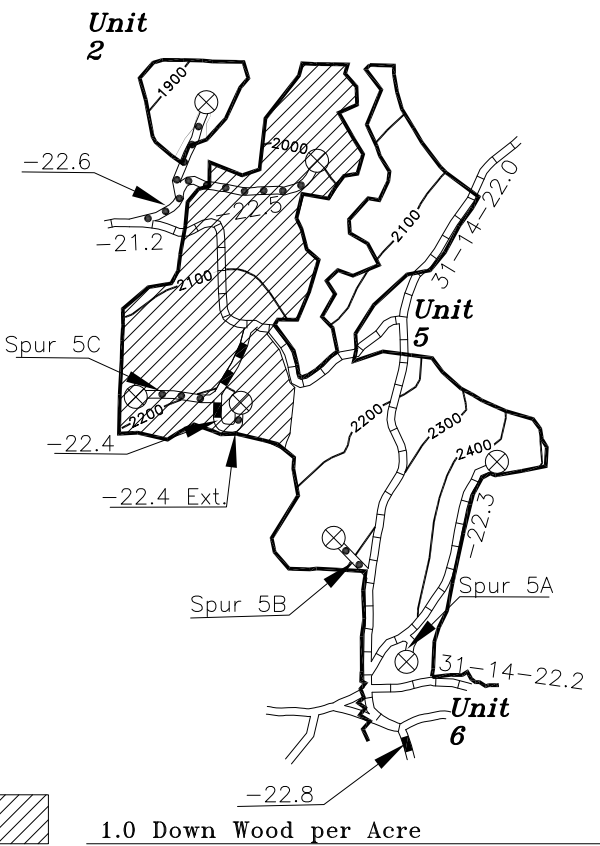


SCALE 1" = 1000'





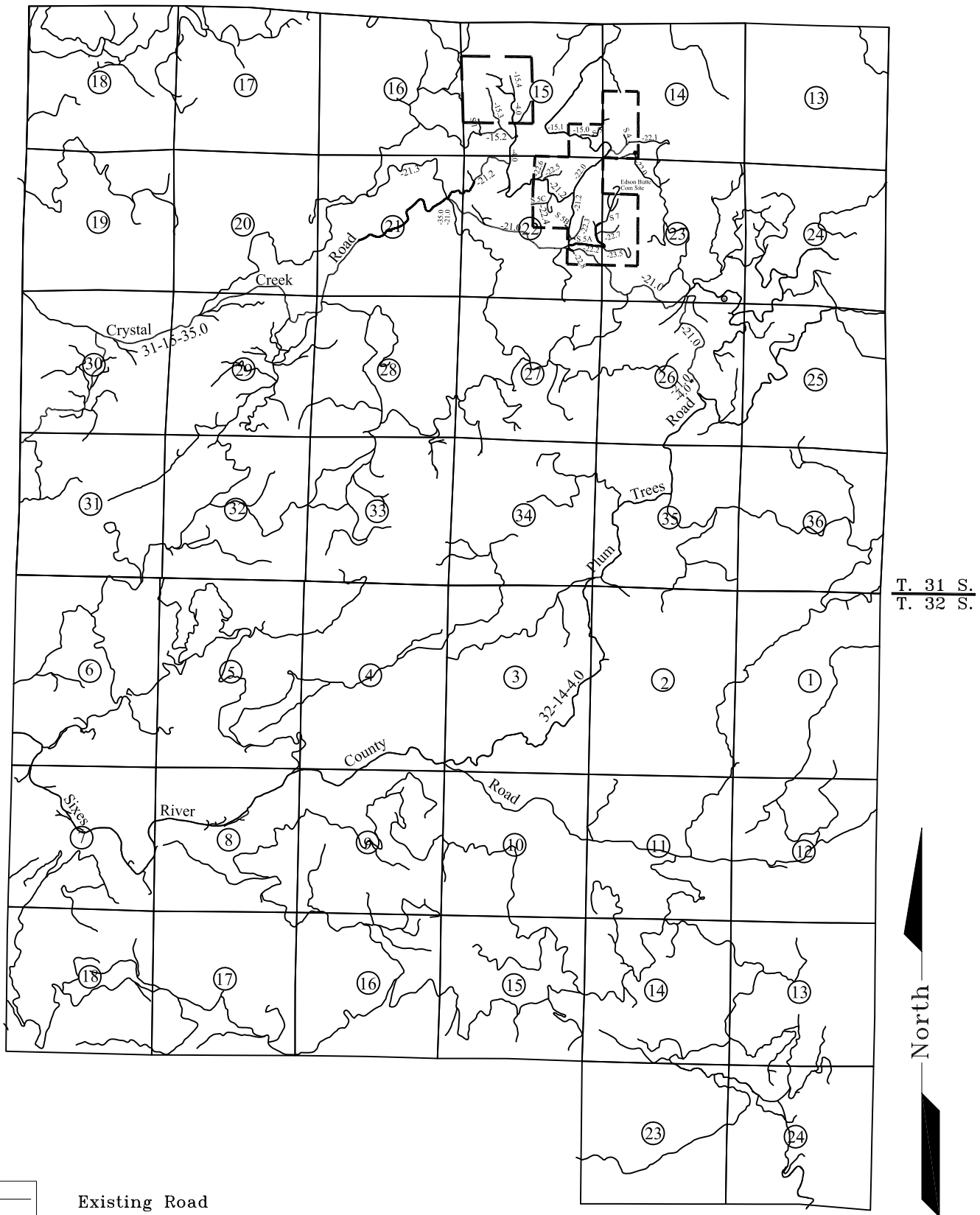
Snag & Down Wood
Unit 1..... 10ac.
Unit 5..... 29ac.



Seasonal Restricted Area (MM)

TIMBER SALE CONTRACT MAP
 USDI-BLM COOS BAY DISTRICT
 T.31S., R.14W., Secs14,15,22&23.,Will Mer.

ORC00-TS-2014.34
 EXHIBIT A-1
 Page 1 of 1
 OCEAN VIEW CT



Existing Road

Road Number Break

SCALE 1" = 1 Mile

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Exhibit B

The following estimates and calculations of timber sold are made solely as an administrative aid for determining: (1) Adjustments made or credits given in accordance with Sections 6, 9, or 11; (2) When payments are due; and (3) Value of timber subject to any special bonding provisions. The value of timber will be determined by multiplying the value per acre as shown below, times the amount of acreage as determined by the authorized officer, which has been cut or removed or designated for taking.

Except provided in Section 2, Purchaser shall be liable for the total purchase price even though the quantity of timber actually cut or removed or designated for taking is less than the estimated volume or quantity shown. Cutting areas are shown on the Exhibit A.

Sale Totals (16' MBF)

Species	Net Volume	Bid Price	Sale SubTotal
Western Hemlock	2,606		
Douglas-fir	1,779		
Red Alder	243		
Grand Fir	72		
Port-Orford-cedar	9		
Sale Totals	4,709		

Unit Details (16' MB)

Unit 1 35 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	295		
Grand Fir	11		
Port-Orford-cedar	2		
Red Alder	39		
Western Hemlock	456		
Unit Totals	803		

Unit 2 5 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	42		
Grand Fir	1		
Red Alder	5		
Western Hemlock	65		
Unit Totals	113		

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Unit 3 10 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	84		
Grand Fir	3		
Red Alder	11		
Western Hemlock	130		
Unit Totals	228		

Unit 4 23 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	194		
Grand Fir	7		
Port-Orford-cedar	1		
Red Alder	26		
Western Hemlock	300		
Unit Totals	528		

Unit 5 67 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	565		
Grand Fir	20		
Port-Orford-cedar	3		
Red Alder	75		
Western Hemlock	873		
Unit Totals	1,536		

Unit 6 34 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	287		
Grand Fir	10		
Port-Orford-cedar	2		
Red Alder	38		
Western Hemlock	443		
Unit Totals	780		

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Unit 7 16 Acres Value per Acre : \$0.00

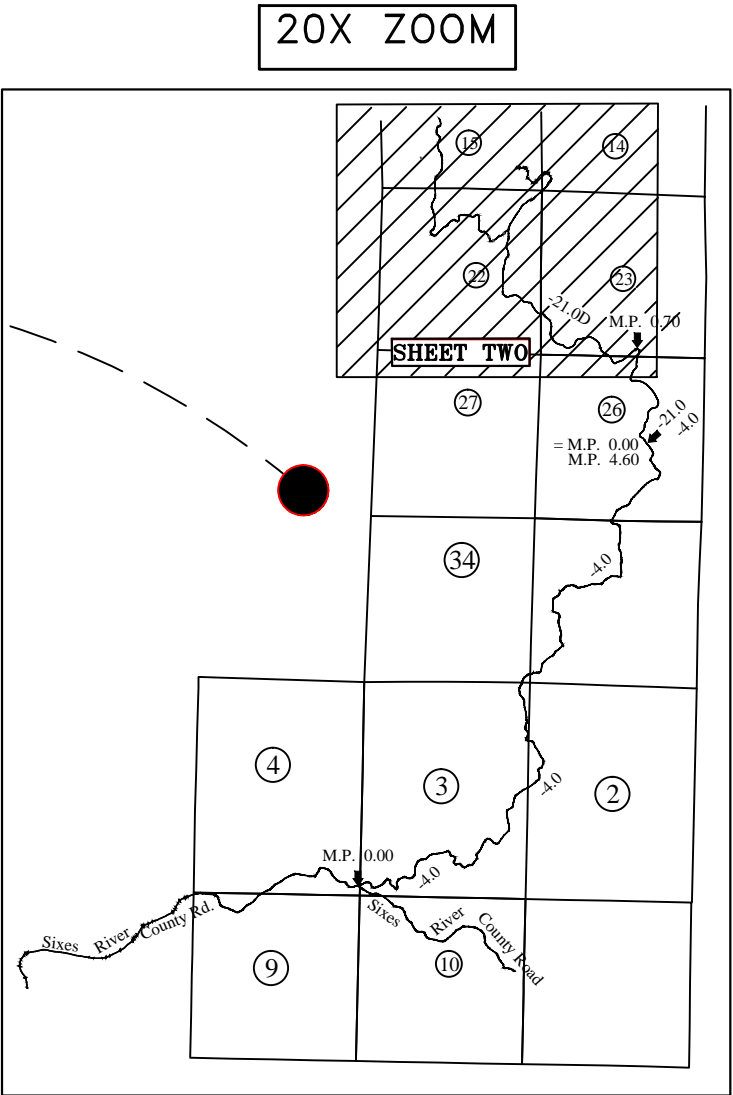
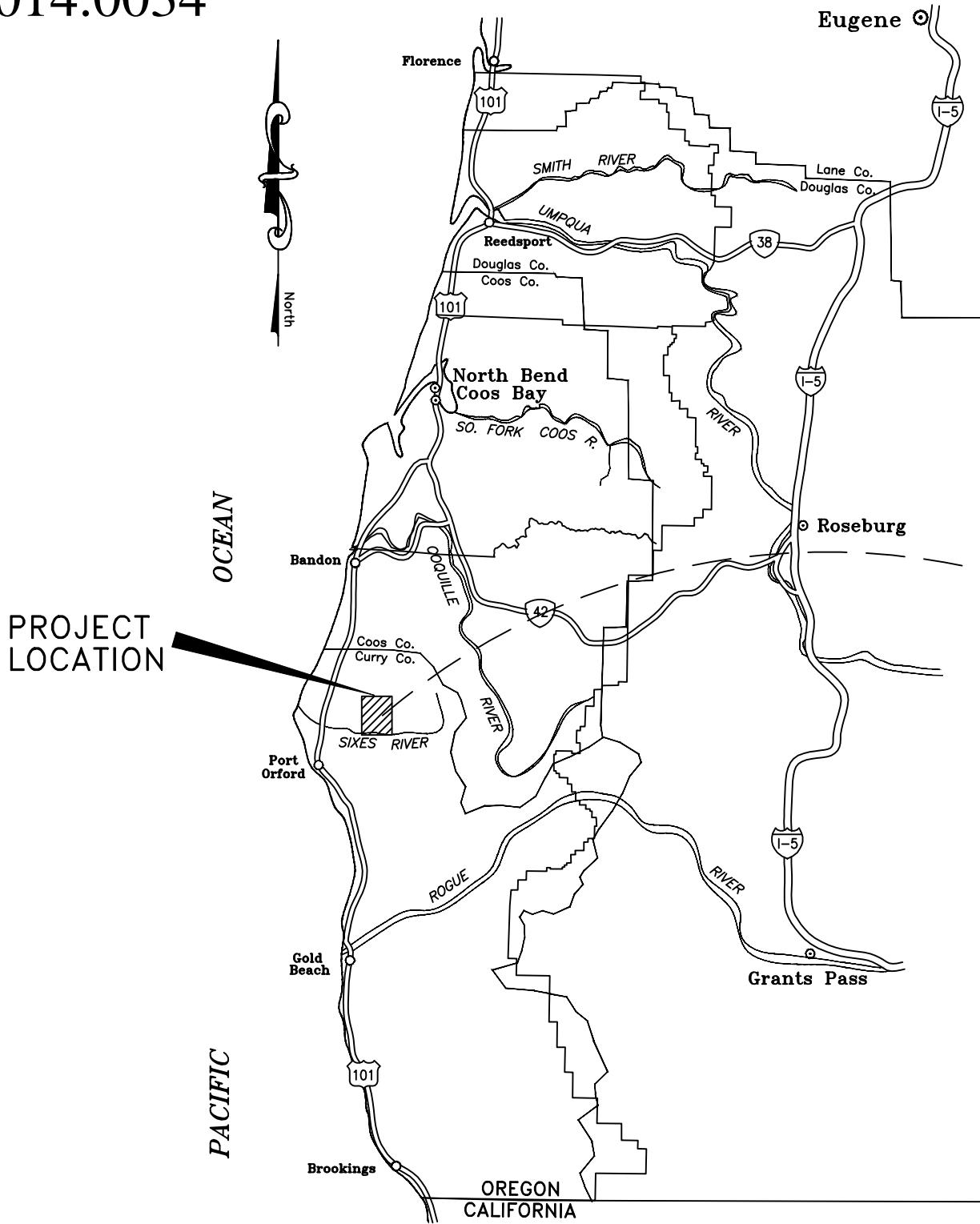
Species	Net Volume	Bid Price	Species Value
Douglas-fir	135		
Grand Fir	5		
Port-Orford-cedar	1		
Red Alder	18		
Western Hemlock	208		
Unit Totals	367		

Unit RW 5 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	177		
Grand Fir	15		
Red Alder	31		
Western Hemlock	131		
Unit Totals	354		

EXHIBIT C
OCEANVIEW CT
2014.0034

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OFFICE
MYRTLEWOOD FIELD OFFICE



SHEET	CONTENTS
1	TITLE SHEET
2	WORK LOCATION MAP
3-6	ESTIMATE OF QUANTITIES
7	CULVERT INSTALLATION DETAILS
8-9	TYPICAL CROSS SECTION DETAILS
10	ROADSIDE BRUSHING DETAILS
11	LANDING DETAILS
12-40	SPECIAL DETAILS
41-57	ROAD CONSTRUCTION SPECIFICATIONS

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

TITLE SHEET

DESIGNED K. SANDERS

REVIEWED D. HIGGS

APPROVED K. HOFFINE

DRAWN KGS

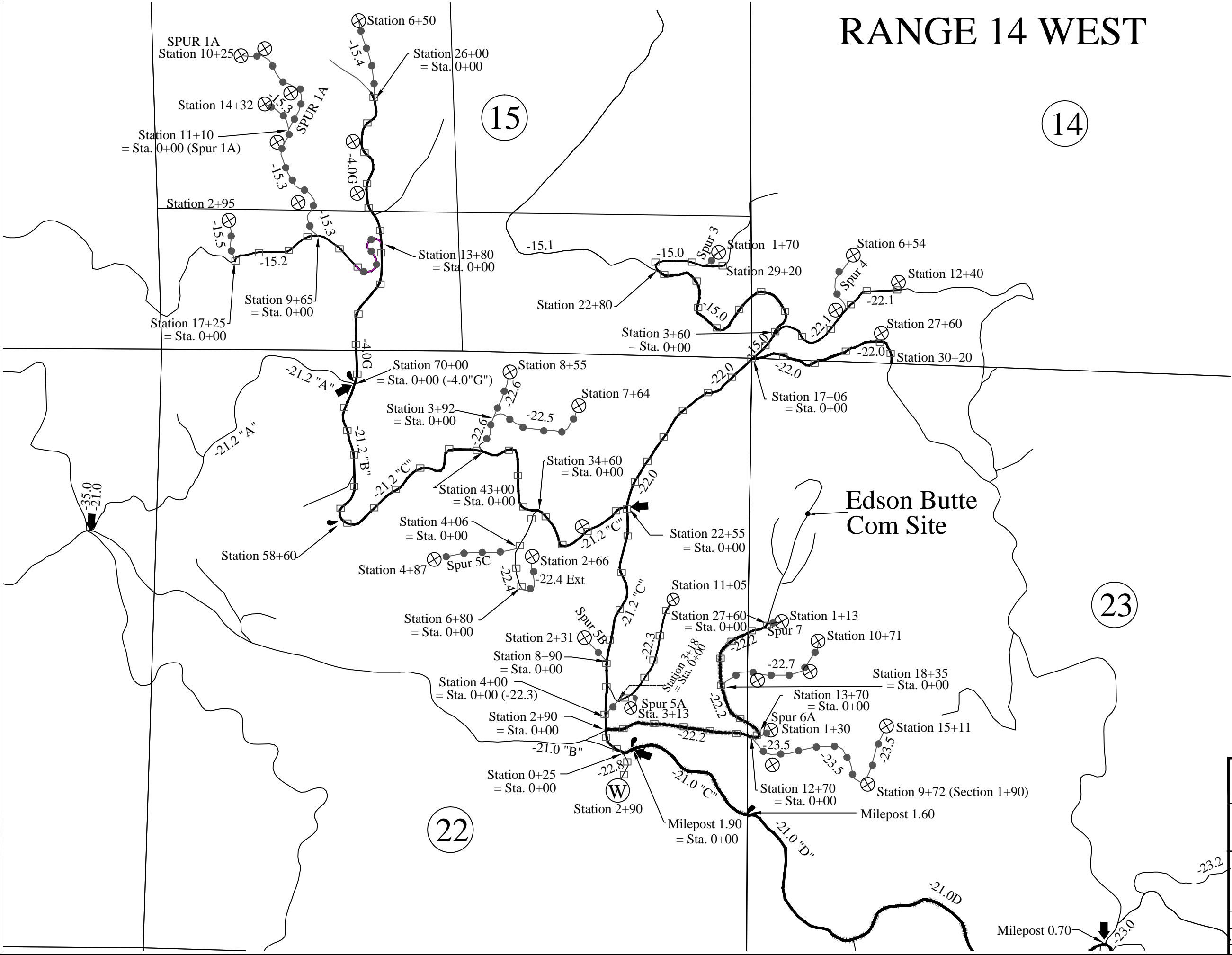
DATE 3/14

SCALE AS SHOWN

SHEET 1 OF 57

DRAWING NO.

RANGE 14 WEST



Legend

- Road Renovation
- New Construction
- Water Source
- Segment Break
- Landing
- Road junction

U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON	
OCEANVIEW CT 2014.00 Location Map 1	
DESIGNED K. SANDERS	
REVIEWED D. HIGGS	
APPROVED K. HOFFINE	
DRAWN RCS	SCALE None
DATE 3/2014	SHEET 2 OF 57
DRAWING NO.	

ROAD NUMBER	NEW CONSTRUCTION	RENOVATION	IMPROVEMENT	CLEARING	SLASH TREATMENT	GRUBBING	ROADSIDE BRUSHING	EARTHWORK						CPE (DW)		ALUMINIZED				DOWNSPOUTS		MARKERS	
								COMMON (Embankment)	RIPPABLE ROCK	ROCK CUT	FILL (Embankment)	SHORT HAUL 200-5000' (Swelled)	LONG HAUL 5000'+	18"	24"	18"	24"	36"	48"	FULL ROUND			
																				18" CPE (SW)	24" CPE (SW)		
SPEC. NO.		500	500	200	200	200	2100	300	300	300	300	300	300	400	400	400	400	400	400	400	400	400	
UNITS	STA.	STA.	STA.	STA.	ACRES	ACRES	STA.	C.Y.	C.Y.	C.Y.	YDS.	STA.YD.	YD.MI.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	
31-14-4.0G		26.00					26.00	Cat Time = 4 hrs.							35	70							3
31-14-15.0		29.20					29.20	Cat Time = 10 hrs.															
31-14-15.2	5.40	11.85					11.85	Cat Time = 27 hrs.							40	126							4
31-14-15.3	14.32							Cat Time = 76 hrs.								40							1
31-14-15.4	6.50							Cat Time = 23 hrs.															
31-14-15.5	2.95							Cat Time = 10 hrs.															
31-14-21.2B,C		70.00					70.00	Cat Time = 3 hrs.															
31-14-22.0		30.20					30.20	Cat Time = 3 hrs.															
31-14-22.1		12.40					12.40	Cat Time = 13 hrs.															
31-14-22.2		27.60					27.60	Cat Time = 5 hrs.															
31-14-22.3	3.18	11.05					11.05	Cat Time = 17 hrs.															
31-14-22.4		6.80					6.80	Cat Time = 11 hrs.							20								
31-14-22.4 Ext	2.66							Cat Time = 12 hrs.															
31-14-22.5	7.64							Cat Time = 27 hrs.							40	50							2
31-14-22.6	8.55							Cat Time = 25 hrs.							40								1
31-14-22.7	10.71							Cat Time = 72 hrs.															
31-14-22.8 (Waterhole)		2.90					2.90	Cat Time = 2 hrs.															
31-14-23.5	15.11							Cat time = 46 hrs.															
PAGE TOTALS	77.02	228.00					228.00	Cat Time = 386 hrs.							175	286							11

ESTIMATE OF QUANTITIES *

CPE (DW) - DOUBLE WALL CORRUGATED POLYETHYLENE PIPE
CPE (SW) - SINGLE WALL CORRUGATED POLYETHYLENE PIPE
CMP - CORRUGATED METAL PIPE

*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.



U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON	
ESTIMATE OF QUANTITIES	
DESIGNED <u>K. SANDERS</u>	
REVIEWED <u>D. HIGGS</u>	
APPROVED <u>K. HOFFINE</u>	
DRAWN <u>KGS</u>	SCALE <u>NONE</u>
DATE <u>03/14</u>	SHEET <u>3 OF 57</u>

ESTIMATE OF QUANTITIES*

ROAD NUMBER	SURFACING							BOULDERS	RIPRAP	SEEDING	
	MAINT. ROCK **	LANDING	BASE ROCK	PIPE ROCK	TOP ROCK	SPOT ROCK **	Aarmor Plate			DRY Pre Haul	
SPEC. NO.	1200	1200	1200	1200	1200	1200			Class 4	1800	
UNITS	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	TON	TON	TON	ACRES	
31-14-4.0G	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	15 <div><div>D</div></div>	15 <div><div>C</div></div>	<div><div></div></div>			10	0.7	
31-14-15.0	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.0	
31-14-15.2	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	21 <div><div>D</div></div>	<div><div></div></div>	<div><div></div></div>				0.7	
31-14-15.3	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	5 <div><div>D</div></div>	<div><div></div></div>	<div><div></div></div>				1.4	
31-14-15.4	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.5	
31-14-15.5	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.1	
31-14-21.2B,C	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.2	
31-14-22.0	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.2	
31-14-22.1	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.7	
31-14-22.2	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.1	
31-14-22.3	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.4	
31-14-22.4	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.1	
31-14-22.4 Ext	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.2	
31-14-22.5	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.5	
31-14-22.6	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.5	
31-14-22.7	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.5	
31-14-22.8 (Waterhole)	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				0.2	
31-14-23.5	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>				1.3	
	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>					
	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>					
	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>					
	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>					
	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>					
	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	41	15	<div><div></div></div>			10	8.3	

ITEM	SIZE	GRADE
1000	3"	A
	2"	B
	3"	C
	2"	D
	3"	F
1100	6"	A
SANDSTONE	4"	B
1200	1 1/2 "	C
	1"	D
	3/4 "	E

GRADE INDICATED IN CIRCLE

ALL ROCK QUANTIES SHOWN ARE IN PLACE UNLESS OTHERWISE NOTED.

* FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.

** QUANTITIES SHOWN ARE TRUCK MEASURE.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

ESTIMATE OF QUANTITIES

DESIGNED K. SANDERS
REVIEWED D. HIGGS
APPROVED K. HOFFINE

DRAWN KGS

DATE 03/14

DRAWING NO.

SCALE None

SHEET 5 OF 57

ESTIMATE OF QUANTITIES*

ROAD NUMBER	SURFACING							BOULDERS	RIPRAP	SEEDING	
	MAINT. ROCK **	LANDING	BASE ROCK	PIPE ROCK	TOP ROCK	SPOT ROCK **	AC PAVING			DRY Pre Haul	
SPEC. NO.	1200	1200	1200	1200	1200	1200			Class 4	1800	
UNITS	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	TON	TON	Ton	ACRES	
Spur 1A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.5	
Spur 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.3	
Spur 4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.5	
Spur 5A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.3	
Spur 5B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.3	
Spur 5C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.4	
Spur 6A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.3	
Spur 7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				0.3	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
										2.9	

ITEM	SIZE	GRADE
1000	3"	A
	2"	B
	3"	C
	2"	D
	3"	F
1100	6"	A
SANDSTONE	4"	B
1200	1 1/2 "	C
	1"	D
	3/4 "	E

GRADE INDICATED IN CIRCLE ☐

ALL ROCK QUANTITIES SHOWN ARE IN PLACE UNLESS OTHERWISE NOTED.

* FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.

** QUANTITIES SHOWN ARE TRUCK MEASURE.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

ESTIMATE OF QUANTITIES

DESIGNED K. SANDERS
REVIEWED D. HIGGS
APPROVED K. HOFFINE

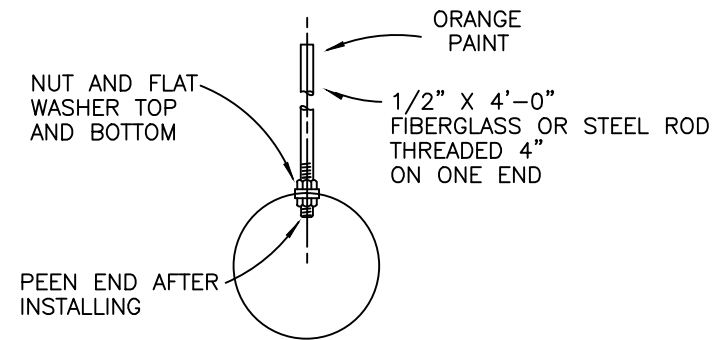
DRAWN KGS

DATE 03/14

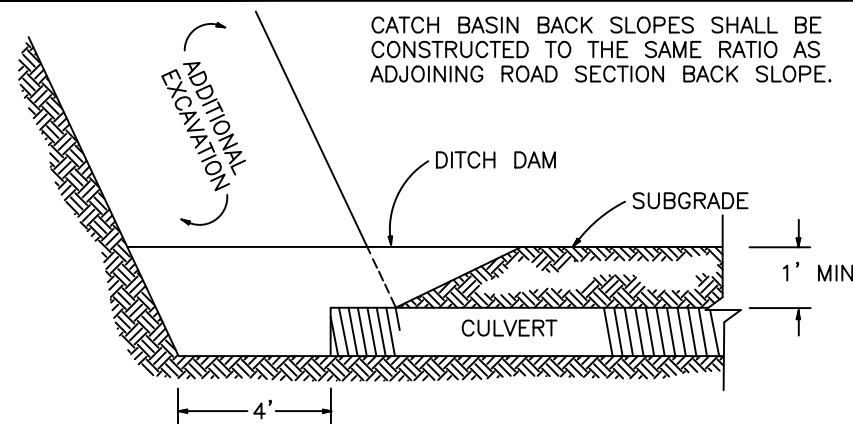
SCALE None

SHEET 6 OF 57

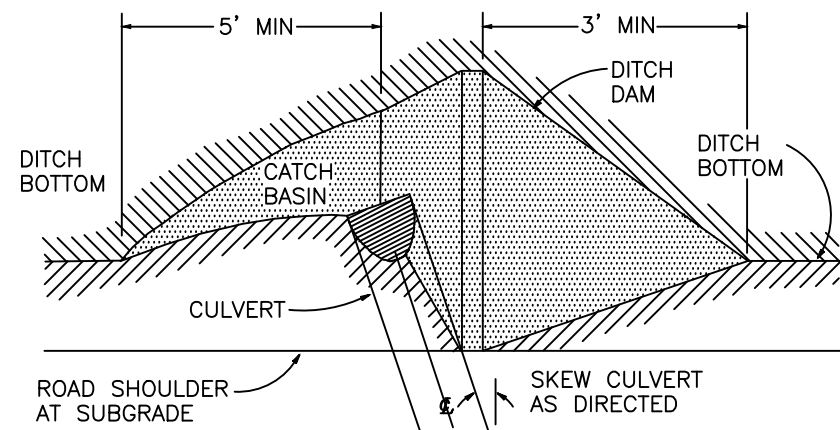
DRAWING NO.



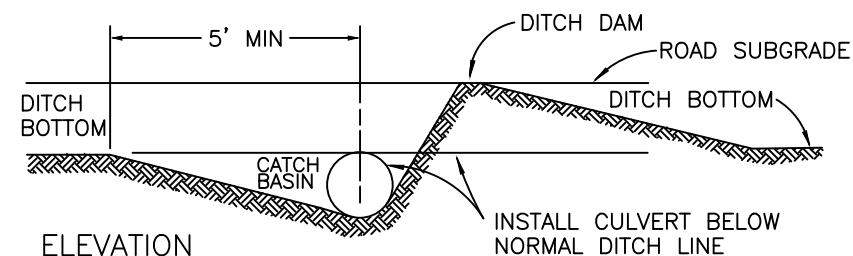
CULVERT MARKERS



CROSS SECTION AT CATCH BASIN



PLAN VIEW

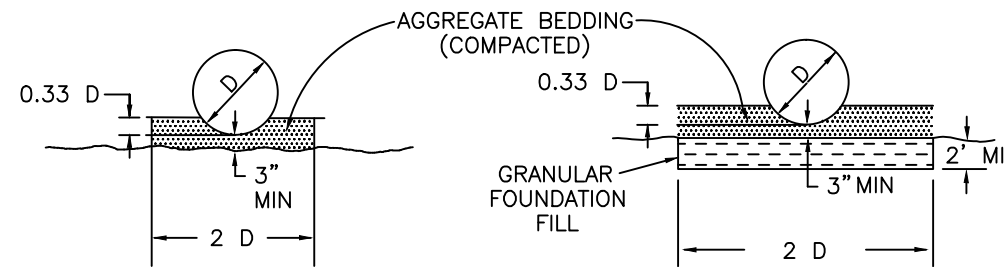


ELEVATION

CATCH BASIN

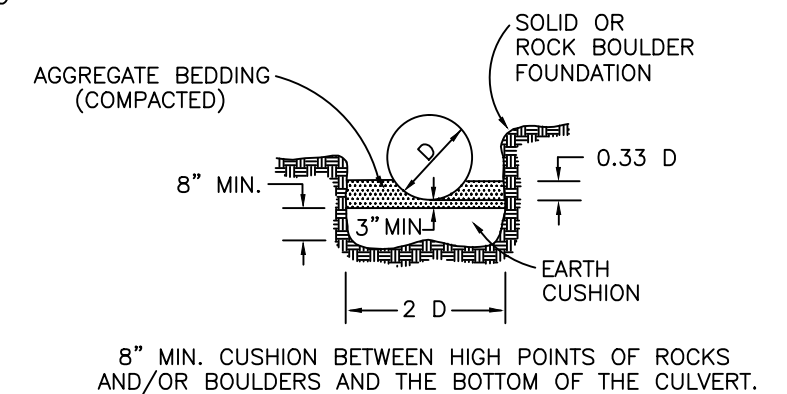
BEDDING OF CULVERTS

BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT.



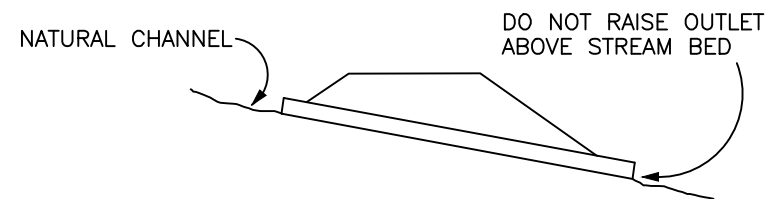
BEDDING OF CULVERTS ON STABLE, NATURAL GROUND FOUNDATION, OR COMPACTED EMBANKMENT

BEDDING OF CULVERTS ON SOFT, SPONGY, OR UNSTABLE SOIL FOUNDATION

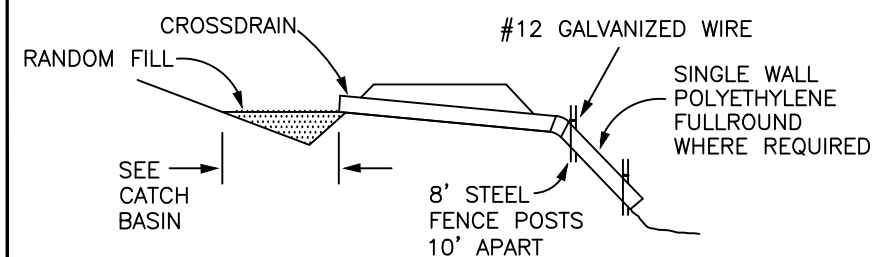


8" MIN. CUSHION BETWEEN HIGH POINTS OF ROCKS AND/OR BOULDERS AND THE BOTTOM OF THE CULVERT.

BEDDING OF CULVERT IN SOLID ROCK OR BOULDER FOUNDATION



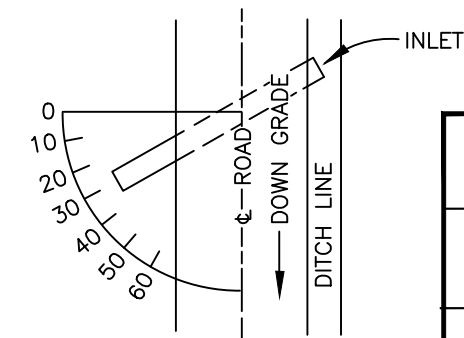
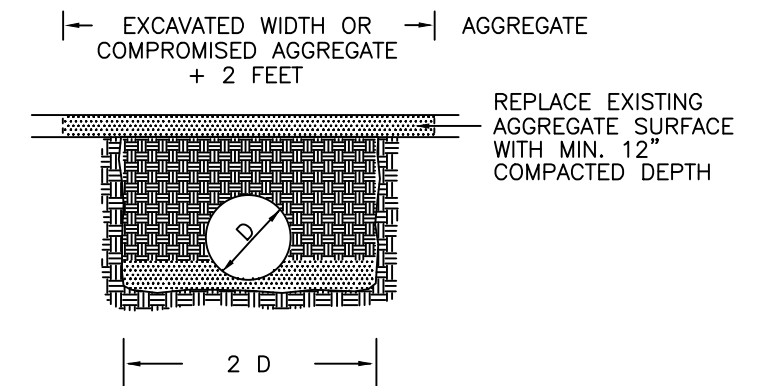
TYPE 1



TYPE 2

CULVERT INSTALLATION TYPES

AGGREGATE SURFACE REPLACEMENT OVER CULVERTS ON EXISTING SURFACED ROADS



SKREW DIAGRAM

ALWAYS THINK *SAFETY*

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

CULVERT INSTALLATION DETAILS

DESIGNED K. SANDERS

REVIEWED D. HIGGS

APPROVED K. HOFFINE

DRAWN BB SCALE NONE

DATE 6/2008 SHEET 7 OF 57

ROAD NUMBER	FROM STATION or MILE POST	TO STATION or MILE POST	LENGTH MILE or STATION	TYPICAL SECTION TYPE	ROAD WIDTH ¹		CLEARING WIDTH		SURFACING											REMARKS	
					Subgrade	Ditch	BEYOND TOP CUT	EXISTING TOE FILL	BASE COURSE					SURFACE COURSE							
									ROADS ⁵		Minimum Width	Comp. Depth	Type ²	Grading		Minimum Width	Comp. Depth	Type ²	Grading		
									L	R											
31-14-4.0G	0+00	26+00	26+00	3	16	2			10	10											
31-14-15.0	0+00	29+20	29.20	3	16	2			10	10											
31-14-15.2	0+00	5+40	5.40	1/2	14	3	10	5													
31-14-15.2	5+40	17+25	11.85	1/2	14	3			10	10											
31-14-15.3	0+00	14+32	14.32	1/2	14	0	10	5													3% Outslope
31-14-15.4	0+00	6+50	6.50	1/2	14	2	10	5													
31-14-15.5	0+00	2+95	2.95	1/2	14	2	10	5													
31-14-21.2B,C	0+00	70+00	70.00	3	16	2			10	10											
31-14-22.0	0+00	30+20	30.20	3	16	2			10	10											
31-14-22.1	0+00	12+40	12.40	3	14	2			10	10											
31-14-22.2	0+00	27+60	27.60	3	16	0			10	10											3% Outslope
31-14-22.3	0+00	14+23	14.23	2/3	14	2			10	10											
31-14-22.4	0+00	6+80	6.80	1/2	16	2			10	10											
31-14-22.4 Ext	0+00	2+66	2.66	1/2	16	2	10	5													3% Outslope
31-14-22.5	0+00	7+64	7.64	1/2	14	0	10	5													
31-14-22.6	0+00	8+55	8.55	1/2	14	3	10	5													3% Outslope
31-14-22.7	0+00	10+71	10.71	1/2	14	0	10	5													
31-14-22.8 (Waterhole)	0+00	2+90	2.90	1/2	16	0			10	10											3% Outslope
31-14-23.5	0+00	15+11	15.11	1/2	14	2	10	5													

NOTES

1. EXTRA SUBGRADE WIDTHS
ADD TO EACH FILL SHOULDER 1 FT. FOR FILLS OF 1-6 FT.
AND 2 FT. FOR FILLS OVER 6 FT. WIDEN THE INSIDE
SHOULDER OF ALL CURVES AS FOLLOWS:

DEGREE OF CURVE	CURVE RADIUS	ADDITIONAL WIDTH
0 - 40°	> 143'	0
41 - 64°	142' - 90'	2
65 - 79°	89' - 73'	3
80 - 89°	72' - 64'	4
90 - 96°	63' - 60'	5

OR AS SHOWN ON PLANS.
4. SURFACING
A. TURNOUTS, CURVE WIDENING AND ROAD APPROACH
APRONS SHALL BE SURFACED.

5. CLEARING WIDTH
SEE SUBSECTION 200 OR 2100.

MATERIALS	CUT SLOPES	FILL SLOPES
COMMON	1/2:1	1 1/2:1
SOFT ROCK & SHALE	1/2:1	1 1/2:1
SOLID ROCK	1/4:1	

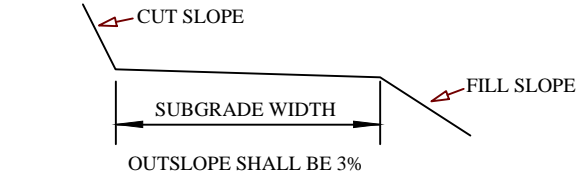
- FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEEDING 60%.
2. SURFACING TYPE
A. PIT RUN ROCK MATERIAL.
B. GRID ROLLED ROCK MATERIAL.
C. SCREENED ROCK MATERIAL.
D. CRUSHED ROCK MATERIAL.
3. TURNOUTS
A. WIDTH 10 FT. IN ADDITION TO SUBGRADE WIDTH, OR AS SHOWN ON THE PLANS.
B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS OR NARRATIVE.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

TYPICAL CROSS SECTION DETAIL

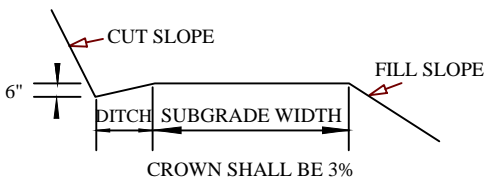
DESIGNED _____ K. SANDERS
REVIEWED _____ D. HIGGS
APPROVED _____ K. HOFFINE

DRAWN	KGS	SCALE	NONE
DATE	3/14	SHEET	8 OF 57



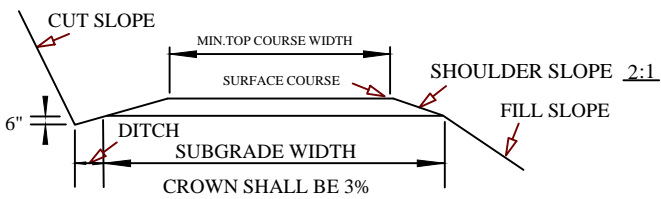
TYPICAL OUTSLOPE SECTION

TYPE 1



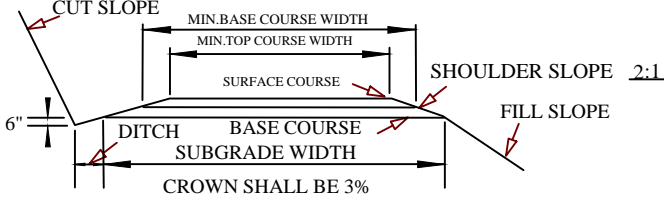
TYPICAL GRADING SECTION

TYPE 2



TYPICAL SURFACING SECTION

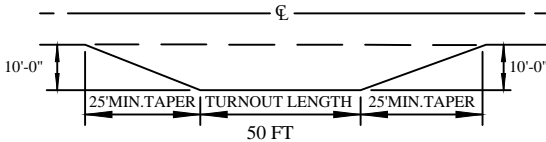
TYPE 3



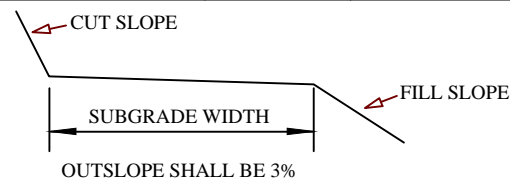
TYPICAL SURFACING SECTION

TYPE 4

DITCHES - 4:1 SLOPE FROM SUBGRADE
DEPTH MAY BE EXCEEDED TO
OBTAIN REQUIRED DRAINAGE.

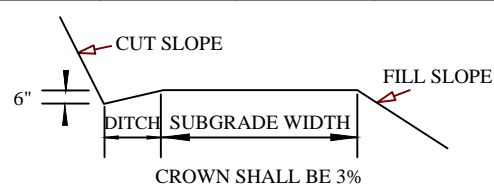


PLAN
TYPICAL TURNOUT

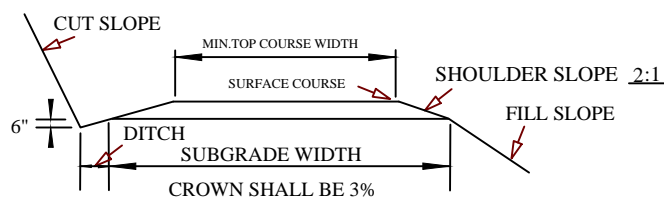
[illegible]

TYPICAL OUTSLOPE SECTION

TYPE 1

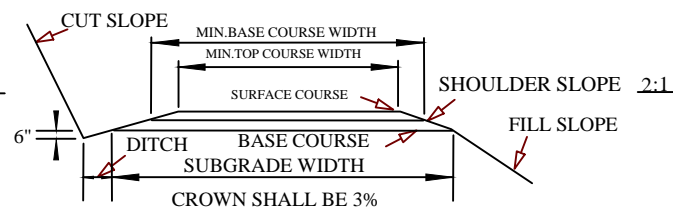


TYPICAL GRADING SECTION
TYPE 2



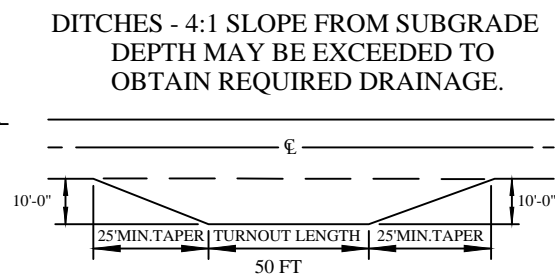
TYPICAL SURFACING SECTION

TYPE 3



TYPICAL SURFACING SECTION

TYPE 4



PLAN TYPICAL TURNOUT

NOTES

1. EXTRA SUBGRADE WIDTHS
ADD TO EACH FILL SHOULDER 1 FT. FOR FILLS OF 1-6 FT.
AND 2 FT. FOR FILLS OVER 6 FT. WIDEN THE INSIDE
SHOULDER OF ALL CURVES AS FOLLOWS:

DEGREE OF CURVE	CURVE RADIUS	ADDITIONAL WIDTH
0 - 40°	> 143'	0
41 - 64°	142' - 90'	2
65 - 79°	89' - 73'	3
80 - 89°	72' - 64'	4
90 - 96°	63' - 60'	5

OR AS SHOWN ON PLANS.

<u>MATERIALS</u>	<u>CUT SLOPES</u>	<u>FILL SLOPES</u>
COMMON	1/2:1	1 1/2:1
SOFT ROCK & SHALE	1/2:1	1 1/2:1
SOLID ROCK	1/4:1	

FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEEDING 60%.

2. SURFACING TYPE

- A. PIT RUN ROCK MATERIAL.
B. GRID ROLLED ROCK MATERIAL.
C. SCREENED ROCK MATERIAL.
D. CRUSHED ROCK MATERIAL.

3. TURNOUTS

- A. WIDTH 10 FT. IN ADDITION TO SUBGRADE WIDTH, OR AS SHOWN ON THE PLANS.
- B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS OR NARRATIVE.

- #### 4. SURFACING

- A. TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH

SEE SUBSECTION 200 OR 2100.

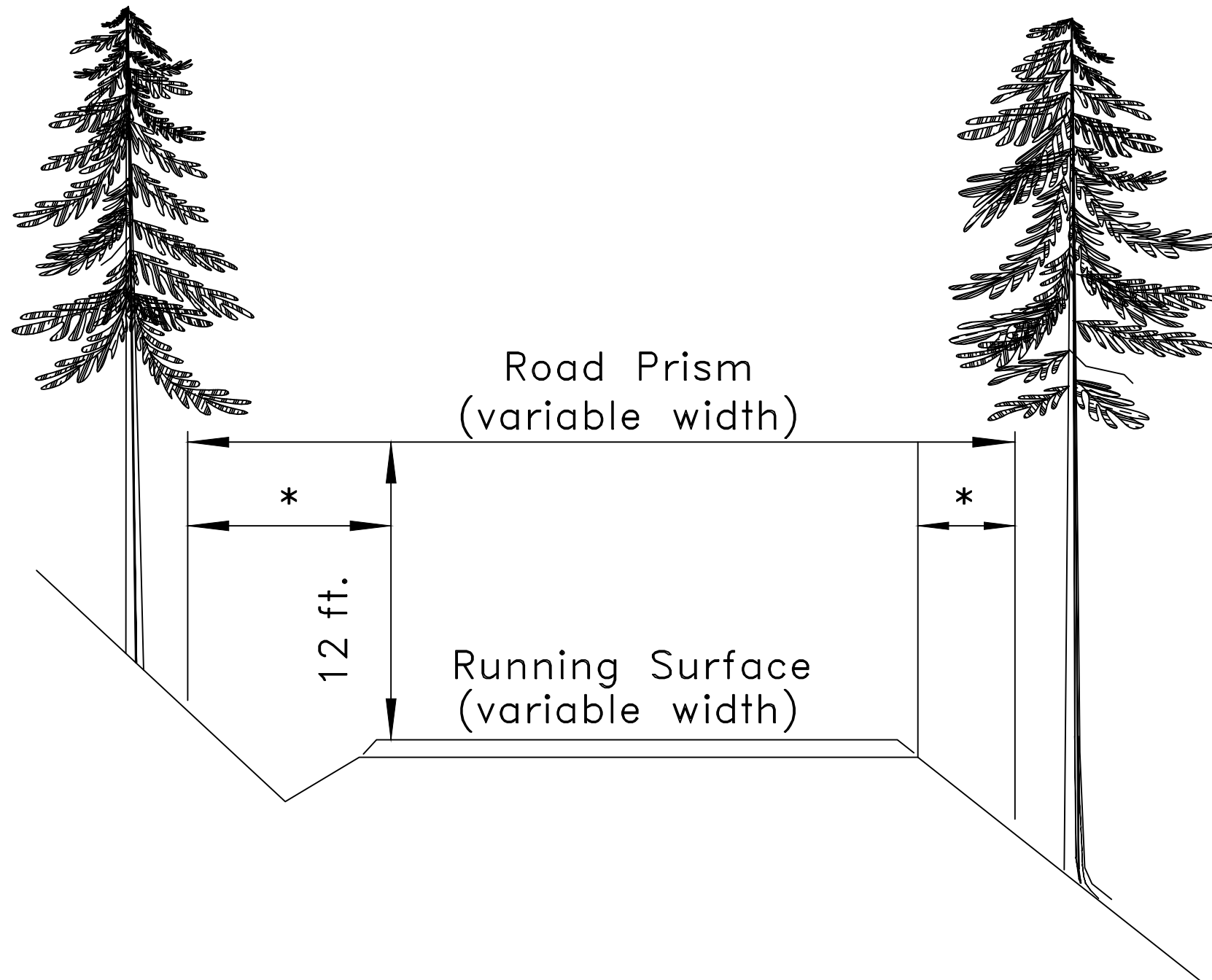
U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

TYPICAL CROSS SECTION DETAIL

DESIGNED K. SANDERSREVIEWED D. HIGGS

APPROVED _____ K. HOFFINE

DRAWN	KGS	SCALE	NONE
DATE	3/14	SHEET	9 OF 57



* Road specific variable distance (see Typical Cross Section Detail).

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

ROADSIDE BRUSHING DETAIL

DESIGNED K. SANDERS
REVIEWED D. HIGGS
APPROVED K. HOFFINE

DRAWN <u>JB/BB</u>	SCALE <u>NONE</u>
DATE <u>6/2008</u>	SHEET <u>10 OF 57</u>

PRE-LOGGING

STAKING APPROVAL: Purchaser shall stake landing locations/limits, and request approval, a minimum of five (5) days in advance of construction, unless otherwise agreed. Landings shall be located in conjunction with the logger. Locations/limits shall be approved by the Authorized Officer prior to construction.

DISTURBANCE LIMITS: The landing perimeter at final grade elevation ("daylight"), top of back slope, and toe of fill, shall be delineated by a series of intervisible stakes or ribbons. The entire construction area shall be located within the approved stakes/ribbons.

END HAUL: Disposal area limits shall be staked by Purchaser, and approved by the Authorized Officer, prior to end-haul activity.

SLOPES: The 300 Series of Road Specifications applies for the construction of landings.

- (a) The fill slope ratio shall not be steeper than 1 1/2:1.
- (b) The cut slope ratio shall be 1/2:1 for common and 1/4:1 for rock.

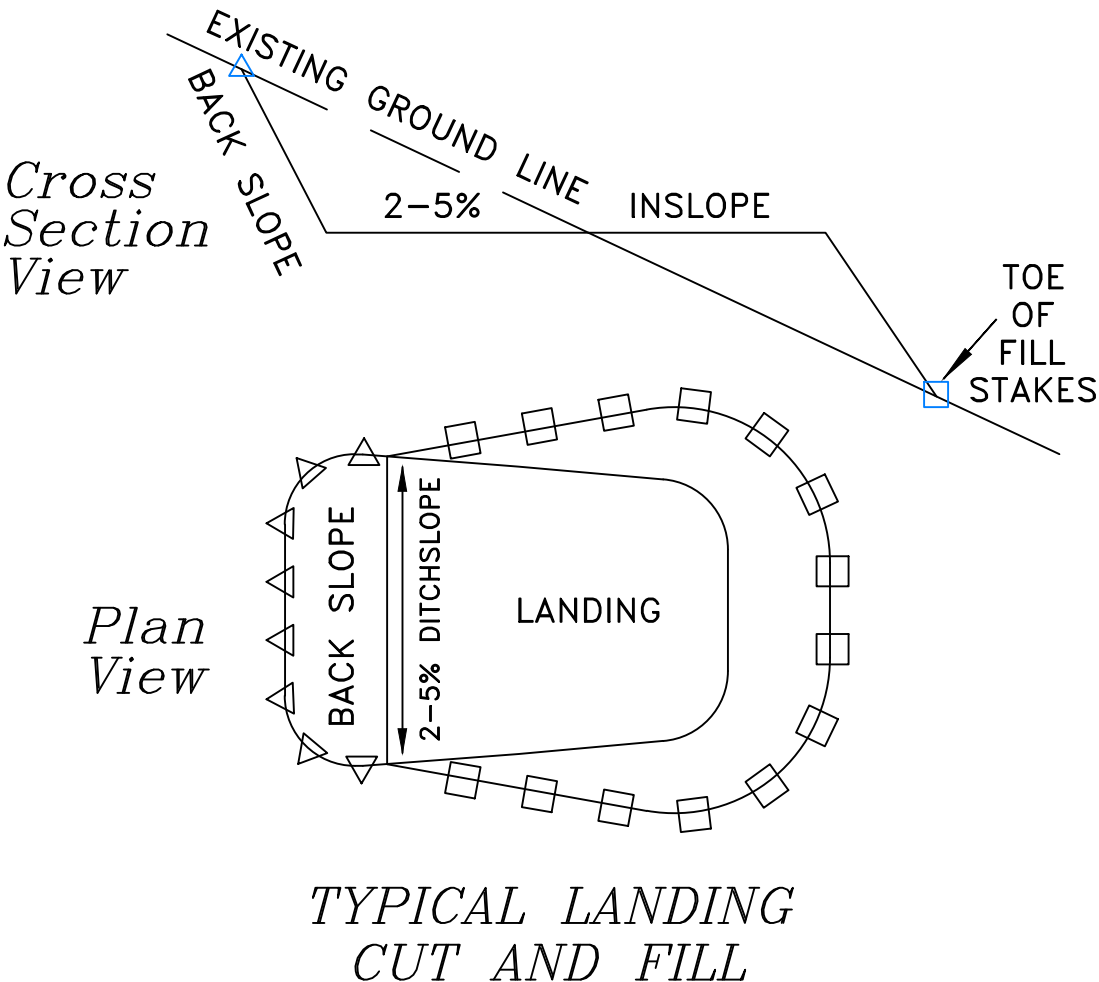
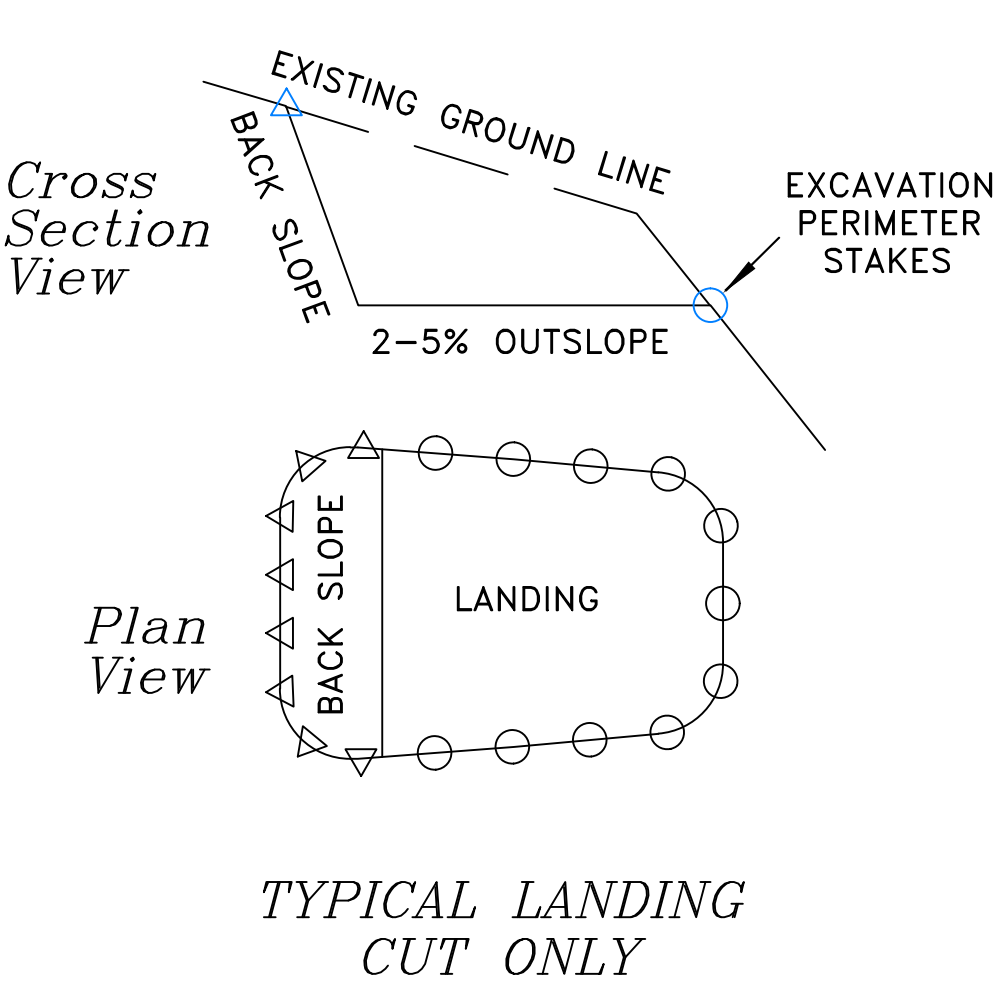
GRADE: Landings shall be constructed with a 2-5% slope for drainage. Ditches and ditchouts shall have a minimum 2% grade.

POST-LOGGING

END HAUL: Purchaser shall remove and dispose of debris from the perimeter of landings. Debris is considered unclassified excavation and shall include any woody material such as log ends, cull chunks, stumps, bark, limbs, etc., and any common soil that is mixed in, perched, or overhanging. All excavated material, shall be disposed of/end hauled to, areas specified by the Authorized Officer.

DRAINAGE: All natural water courses, ditches, and ditchouts, shall be opened to prevent erosion. Landings shall be graded, crowned, and shaped to facilitate drainage.

DECOMMISSIONING: Landings shall be treated in accordance with the Exhibit D, which may include pullback, subsoiling, water barring, blocking, and soil stabilization.



U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON	
LANDING DETAILS	
DESIGNED	K. SANDERS
REVIEWED	D. HIGGS
APPROVED	K. HOFFINE
DRAWN JB/BB	SCALE NONE
DATE 6/2008	SHEET 11 OF 57

SPECIAL DETAILS

Clearing Limits

Maximum clearing widths for new construction are 10' from top of cuts and 5' from the toe of fills. Clearing debris must be removed from areas of excavation and embankment.

The limits of disturbance for all landings shall be designated by the Purchaser with stakes or flags and approved by the Authorized Officer, prior to clearing or construction (see Landing Details Sheet). Landings shall not be constructed until the Purchaser has verified landing size, shape, and location with the logger. The entire landing rock quantities listed shall be placed, either on designated landings or on haul routes, at the direction of the Authorized Officer.

Excavated Material/Compaction

Excavated material shall not be side-cast or perched. All material perched or lost over the side will be retrieved and disposed of at the Purchaser's expense and at the direction of the Authorized Officer. All fill slopes shall be compacted equal to two passes with tracked equipment, either by walking with cat/excavator tracks or by pressing with excavator bucket, to prevent surface erosion and raveling.

Drainage Ditches

Existing drainage ditches that are functioning and have a protective layer of nonwoody vegetation shall not be disturbed.

Class 4 Riprap

Class 4 riprap shall be in accordance with the FP-03, Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects.

Minimum Quantities

At a minimum, all estimated aggregate quantities shall be applied, either at the specified sites, or at adjacent locations designated by the Authorized Officer.

Purchaser Responsibility

The Purchaser shall avoid damaging any gravel or bituminous surfaced roads, and will be responsible for the repair of any road damaged as a result of his activity. Gravel or bituminous roads shall be left in the same condition that they were prior to logging operations. Care shall be taken during road/landing work operations to avoid damaging adjacent reproduction. Any damaged trees shall be brought to the attention of the project inspector.

Spill Containment

Spill containment kit is required on-site during work. Kit contents shall include absorbent booms (two bales, four 8" x 10" booms/bale), absorbent pads (two bales, one hundred 17" x 19" x 1/4" pads/bale), heavy duty garbage bags, gloves (PVC and latex), and goggles.

Equipment Washing

The Purchaser is responsible for vehicle/equipment entrance cleaning in accordance with the Exhibit F.

Road Decommissioning

Road decommissioning shall be performed as specified in the Exhibit D Special Details.

Over-wintering

All natural-surfaced new construction shall not over-winter without being either decommissioned, as specified in the Exhibit D, or winterized, in accordance with the 1700 Erosion Control specifications, prior to the first rains of the wet season, but no later than October 15th in the year of construction.

Seasonal Restrictions

All road construction, renovation, and decommissioning work shall be done during the dry construction season, avoiding precipitation periods, between June 1st and October 15th.

Seasonal In stream restrictions apply to road: 31-14-15.2 Station(s) 3+80, 9+05, 13+05

- (1) Seasonal Restriction: No activity April 1st – August 5th applied to BLM road **31-14-22.0 (sta. 25+00 to sta. 28+50)** in Unit 4
- (2) Daily Timing Restriction: August 6th – September 15th. No work will be scheduled to occur earlier than 2 hours after sunrise and no later than 2 hours before sunset. **31-14-22.0 (sta. 25+00 to sta. 28+50)** in Unit 4
- (3) Construction activity restrictions: In stream activity may not proceed prior to July 15 or extend beyond September 15.

Culverts

All removed culverts will be disposed of off of U.S. Governments lands in a lawful manner.

Native Seed

The Government will furnish native seed mix, when available and upon request, to be used by the Purchaser. The quantity of government-furnished seed mix will not exceed 10% of the total required, and will be applied at government selected sites.

SIXES RIVER COUNTY ROAD

<u>Mile Post</u>	<u>Remarks</u>
0.00	Junction with Highway 101.
8.50	Junction, 32-14-4.0 (Plum Trees Road) left.

Road No. 32-14-4.0A, B (Plum Trees Road) Fee Maintained
Mile Post 0+00 to Mile Post 4.6 (rock, Summer haul)

<u>Mile Post</u>	<u>Remarks</u>
0.00	Junction with Sixes River road at M.P. 8.50
4.60	Continue on 31-14-21.0

Renovation of 31-14-4.0 "G"

Station 0+00 to Station 26+00 (rock – Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with Road No.31-14-21.2 (Summer Haul Only) Begin brushing, slough and slide removal, culvert installation, compaction, and grading and shaping in accordance with Sections 400, 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10. Remove water dips in road surface.
8+90	Remove old metal culvert- left. Dispose of lawfully, off of U.S. Government land.
11+80	Install 24" x 40' CPP "S" poly culvert.
13+50	Remove 18" dia. poly culvert.
13+68	Point of Beginning of NC 31-14-15.2 Road Left. Junction of road (Right).
13+80	Junction with Road No. 31-14-15.2 , station 0+00 (Left). Reestablish the ditch line.
15+30	Remove 18" x 35' CMP. Install 24" x 30' CPP "S" Poly culvert with 5 cubic yards Class IV Rip Rap at outlet.
17+60	Remove 18" x 35 CMP. Install 18" x 35' CPP "S" Poly culvert with 5 cubic yards Class IV Rip Rap at outlet.
19+90	Construct roadside landing (Left).
23+80	Construct roadside landing (Left).
26+00	Construct Road No. 31-14-15.4 (Right). End Renovation.

Renovation of 31-14-15.0

Station 0+00 to Station 29+20 (rock – Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with Road No. 31-14-22.0 (Summer Haul Only). Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
3+60	Junction with Road No. 31-14-22.1 (Right).
22+80	Junction with Road No. 31-14-15.1 (Left).
26+40	Junction with Spur 3 (Left).
28+95	Repair road cracking.
29+20	End Renovation.

31-14-15.2

Control Point

Station 0+00 to Station 5+40 (Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 5+40 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be fifty five (55) feet.

GRADES

Grade shall not exceed 18%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this spur.

DRAINAGE FEATURES

Install 24" x 50' CPP "S" Poly Culvert at Sta. 3+80.

*In-stream restrictions: Construction 15 July to 15 Sept.

Install 18" x 40' CPP "S" Poly Culvert at Sta. 4+58.

LANDING

None

SURFACING

Natural Surface

CONSTRUCTION NOTES

Construct Truck Turn Out in center of the 55' radius curve from 0+00 to 1+80.

Outslope 5% from the center

Renovation of 31-14-15.2

Station 5+40 to Station 17+25 (Natural – Summer Haul)

Station

Remarks

- 5+40 Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
- 9+05 Stream Crossing. Install 24" X 40' CPP "S" Double wall - Poly Culvert.
*In-stream restrictions: Construction 15 July to 15 Sept.
- 9+65 Junction. Construct Road No. 31-14-15.3 (Right).
- 10+95 Repair slump in roadway.
- 12+05 Repair slump in roadway.
- 13+05 Install 24" X 36' CPP "S" Double wall - Poly Culvert. .
*In-stream restrictions: Construction 1 July to 15 Sept.
- 15+95 Re-construct road.
- 17+25 Junction. Construct road No. 31-14-15.5 (Right).
End renovation.

31-14-15.3

Control Point

Station 0+00 to Station 14+32 (Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 14+32 in accordance with the specifications which follow:

Note: Leave private and enter BLM at approximately Station 2+66..

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 18%.

Cut appr. 8 feet at Sta. 0+85 (Sec 30) for thru-cut, drift forward to Sta. 10+53 (Sec 230).

Cut appr. 5 feet at Sta. 4+72 (Sec 130) for thru-cut, drift forward to Sta. 10+53 (Sec 230).

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this spur and end haul for cut/fill.

DRAINAGE FEATURES

Install 24" x 40' CPP "S" Poly Culvert at Sta. 10+53 (Sec 230).

LANDING

Construct roadside landing with approach at Sta. 2+30 (Sec 70).

Construct roadside landing at Sta. 8+80 (Sec 190).

Construct roadside landing at Sta. 11+10 (Sec 250).

Construct roadside landing at Sta. 12+93 (Sec 290).

Construct landing at Sta. 14+32 (Sec 320).

Grade of landing shall not exceed 5%.

SURFACING

Natural Surface

31-14-15.4

Control Point

Station 0+00 to Station 6+50 (Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 6+50 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 17%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this spur.

DRAINAGE FEATURES

No Drainage Features

LANDING

Construct landing at Sta. 6+50 (Sec 130).

Grade of landing shall not exceed 5%.

SURFACING

Natural Surface

32-14-15.5

Control Point

Station 0+00 to Station 2+95 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 2+95 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Out-slope road where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 18 %.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 2+95 (Sec 90).

Maximum landing grade is 5%.

SURFACING

Natural Surface

CONSTRUCTION NOTES

Construct Truck Turn Around at Station 1+30 (Between section 50 and section 60)

31-14-21.0 Segments “C” and “D”

Mile Post 0.0 to Mile Post 1.9 (rock – Summer haul)

<u>Mile Post</u>	<u>Remarks</u>
0.00	Continue Plum Creek Road from 32-14-4.0
0.70	Junction with Road No. 31-14-23.0 (right).
1.60	SEGMENT BREAK “C” & “D”
1.90	Junction with Road No. 31-14-21.2 (right) and 31-14-21.0 Segment “B” (left).

Renovation of 31-14-21.2 Segments “C” and “B”

Station 0+00 to Station 70+00 (rock – Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with Plum Trees Road. MP1.90 (31-14-21.0 Seg “C”) Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
0+25	Junction with Road No. 31-14-22.8 (left). <u>WATERHOLE / PUMP CHANCE</u>
2+90	Junction with Road No. 31-14-22.2 (Edson Butte Road) right.
4+00	Junction with new approach to Road No. 31-14-22.3 (right).
8+90	Junction with Spur 5B (left).
22+55	Junction with Road No. 31-14-22.0.
26+25	Construct roadside landing.
34+60	Junction with Road No. 31-14-22.4 (Left).
40+25	Construct 50’ TURN OUT RIGHT. .
43+00	Junction with Road No. 31-14-22.6 (right).
45+80	Construct truck turn-around .
58+60	SEGMENT BREAK “B” & “C”
70+00	Junction with Road No. 31-14-4.0. End renovation.

Renovation of 31-14-22.0

Station 0+00 to Station 30+20 (rock – Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with Road No. 31-14-21.2C. (Summer Haul) Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
17+06	Junction with Road No. 31-14-15.0 (left).
27+60	Construct Roadside Landing (left)
30+20	End Renovation.

Renovation of 31-14-22.1

Station 0+00 to Station 12+40 (Natural - Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with Road No. 31-14-15.0. (Summer Haul) Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
9+90	Construct roadside landing Left.
10+50	Junction with Spur 4 (left).
12+40	Construct landing. End renovation.

Renovation of 31-14-22.2 (Edson Butte Road)
Station 0+00 to Station 27+60 (Natural - Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with Road No. 31-14-21.2 (Summer Haul only) Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
12+70	Junction with Road No. 31-14-23.5 (right).
13+70	Junction with Spur 6B (right).
18+35	Junction with Road No. 31-14-22.7 (right).
27+60	Junction with Spur 7 (Right). End renovation.

31-14-22.3 (Approach)

Control Point

Station 0+00 to Station 3+18 (Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 3+18 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 17%.

Cut approximately 3' at 3+18 (Sec 90) drift back.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this spur.

DRAINAGE FEATURES

No drainage features.

LANDING

No landing construction.

SURFACING

Natural Surface

Renovation of 31-14-22.3

Station 0+00 to Station 11+05 (Natural - Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	End construction of the new approach and begin renovation of existing road (Sec 90) Sta. 3+18. Cut subgrade to match approach grade, approximately 3' Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
1+45	Junction with Spur 5A (right).
2+00	Reestablish 50' TURN OUT RIGHT.
8+10	Remove rootwad.
9+60	Remove slough.
11+05	Construct landing. End renovation.

Renovation of 31-14-22.4

Station 0+00 to Station 6+80 (Natural – Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with 31-14-21.2. Reconstruct approach to allow haul to go east. Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
0+16	Install temporary culvert 18" x 20' CPP "S" in the ditch.
0+65	End reconstruction of approach.
2+16	Repair road slump.
3+20	Realign road approximately 6' into the cutbank.
4+06	End realignment. Junction with Spur 5C (right).
6+80	End renovation.

31-14-22.4 Ext.

Control Point

Station 0+00 to Station 2+66 (Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 2+66 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 16%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with the Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 2+66 (Sec 90).

SURFACING

Natural Surface

31-14-22.5

Control Point

Station 0+00 to Station 7+64 (Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 7+64 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 18%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

Construct Ditch line 3' / 1' right (stations 1+50 to Section 140)

Section 90 stake Install : 18"dia.x 40' CPP "S" Poly culvert (Temporary)

Section 120 stake Install : 24"dia. x 50' CPP "S" Poly culvert (Temporary)

LANDING

Construct landing at Sta. 7+64 (Sec 190).

SURFACING

Natural Surface

CONSTRUCTION NOTES

Realigned construction of station 0+00 to 3+45.

(Begin at station 3+92 BLM road 31-14-22.6) New construction

Station 3+45 intersects Sections 80 and 90 in the middle of the line.

31-14-22.6

Control Point

Station 0+00 to Station 8+55 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 8+55 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Out-slope where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 16%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

Sta. 1+75 Install 18"x40' CPP "S" culvert (Temporary)

LANDING

Construct landing at Sta. 8+55 (Sec 100).

SURFACING

Natural Surface

CONSTRUCTION NOTES

Construct 31-14-22.5 road right at station P3+92.

31-14-22.7

Control Point

Station 0+00 to Station 10+71 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 10+71 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Out-slope road where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 18%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct roadside landing at Sta. 2+51 (Sec 70).

Construct landing at Sta. 10+71 (Sec 220).

SURFACING

Natural Surface

CONSTRUCTION NOTES

Full bench construction from Section 90 to Section 120 (1+80 Stations)

Renovation of 31-14-22.8 WATER PUMPCHANCE
Station 0+00 to Station 2+90 (Natural, Summer Haul)

<u>Station</u>	<u>Remarks</u>
0+00	Junction with 31-14-21.2 (Plum Trees Road). Begin brushing, slough and slide removal, compaction, and grading and shaping in accordance with Sections 500, and 2100 of the Road Specifications, Typical Cross Section Sheet No. 8, and Roadside Brushing Detail Sheet No. 10.
1+60	Existing truck turn-around.
2+90	End renovation just before the pond. Do not disturb vegetation around the pond

31-14-23.5

Control Point

Station 0+00 to Station 15+11 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 15+11 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

Outslope road where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 15%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct roadside landing at Sta. 2+51 (Sec 70).

Construct landing at Sta. 9+72 (Sec 190).

Construct landing at Sta. 15+11 (2nd Sec 90).

Maximum landing grade is 5%.

SURFACING

Natural Surface

SPUR 1A

Control Point

Station 0+00 to Station 10+25 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 10+25 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Outslope road where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 12%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing 23' offset North at station 8+50.

Construct landing at Sta. 10+25.

Maximum landing grade is 5%.

SURFACING

Natural Surface

CONSTRUCTION NOTES

Construct truck turn off (right) Station 4+75.

Cut from the ridgeline at station 8+50 and drift forward 10+25.

Spur 3

Control Point

Station 0+00 to Station 1+70 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 1+70 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 8%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 1+70 (Sec 70).

Maximum landing grade is 5%.

SURFACING

Natural Surface

Spur 4

Control Point

Station 0+00 to Station 6+54 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 6+54 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Outslope where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 17%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 Section of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 6+54 (Sec 160).
Maximum landing grade is 5%.

SURFACING

Natural Surface

Spur 5A

Control Point

Station 0+00 to Station 3+13 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 3+13 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. .

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 6%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

Outslope where possible.

LANDING

Construct landing at Sta. 3+13 (Sec 70).

Maximum landing grade is 5%.

SURFACING

Natural Surface

Spur 5B

Control Point

Station 0+00 to Station 2+31 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 2+31 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Outslope where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 18%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 2+31 (Sec 60).

Maximum landing grade is 5%.

SURFACING

Natural Surface

Spur 5C

Control Point

Station 0+00 to Station 4+87 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 4+87 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Outslope where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 15%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 4+87 (Sec 110).

Maximum landing grade is 5%.

SURFACING

Natural Surface

Spur 6A

Control Point

Station 0+00 to Station 1+30 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 1+30 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Outslope where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 8%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 1+30 (Sec 30).

Maximum landing grade is 5%.

SURFACING

Natural Surface

Spur 7

Control Point

Station 0+00 to Station 1+13 (Natural - Summer Haul)

GENERAL

Purchaser shall construct this road from 0+00 to 1+13 in accordance with the specifications which follow:

CLEARING

Maximum clearing limits shall be 10' beyond the top of cuts, and 5' below bottom of fills.

SHAPING

The roadway shall be constructed and shaped to conform to the standards shown on the Typical Cross Section Detail. Outslope where possible.

ALIGNMENT

The roadway shall be constructed in close proximity to the stakes on the ground and within the posted right-of-way boundaries. Minimum curve radius shall be sixty (60) feet.

GRADES

Grade shall not exceed 8%.

SUBGRADE

The subgrade shall be excavated and compacted in accordance with Sections 200 and 300 of the Road Specifications.

EXCAVATION/EMBANKMENT

Excavation and embankment are required in the construction of this road.

DRAINAGE FEATURES

No drainage features.

LANDING

Construct landing at Sta. 1+13 (Sec 30).

Maximum landing grade is 5%.

SURFACING

Natural Surface

ROAD CONSTRUCTION SPECIFICATIONS

Section

100	GENERAL
200	CLEARING AND GRUBBING
300	EXCAVATION AND EMBANKMENT
400	PIPE CULVERTS
500	RENOVATION AND IMPROVEMENT OF EXISTING ROADS
600	WATERING
1200	AGGREGATE SURFACE COURSE (CRUSHED ROCK)
1400	RIPRAP SLOPE PROTECTION
1700	EROSION CONTROL
1800	SOIL STABILIZATION
2100	ROADSIDE BRUSHING

GENERAL - 100

101 - Prewrite Conference(s):

A prework conference will be held prior to the start of operations. The Purchaser shall request the conference at least 48 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or his representative(s), subcontractor(s) and/or his or their representative(s) and the Authorized Officer and/or his representative(s).

The purpose will be to review the required work, exhibits and specifications, and to establish a work schedule and a list of the Purchaser's representatives and subcontractor(s).

102 - Definitions:

AASHTO - American Association of State Highway and Transportation Officials. Current editions of tests and specifications.

ASTM - American Society for Testing and Materials.

Base Course - Surfacing structure consisting of crushed gravel or stone, crushed sandstone, pitrun rock, bank or river-run gravels, etc., to provide support and, in the event no surface course is placed, the running surface for traffic load.

BLM - Bureau of Land Management

Borrow - Excavated material required for embankments and other portions of the work.

Culvert - A pipe, pipe-arch, arch, or box structure constructed of metal, concrete, plastic or wood which provides an opening under the roadway primarily for the conveyance of liquids, pedestrians or livestock.

Curve Widening - Widening required on inside of curves to accommodate long log and equipment hauling trucks.

Embankment - A structure of soil, aggregate, or rock material placed on a prepared ground surface and constructed to subgrade.

End Haul - Excavated material moved, other than by dozer, to an embankment or waste area to prevent sidecasting material outside of the road prism.

Excess Excavation - Material from the roadway in excess of that needed for construction of the designed roadway (waste).

Grading - Leveling to grade, shaping and smoothing of a road subgrade; the shaping of roadside ditches as to grade and contour. In some instances includes smoothing of the cut bank.

Overhaul - Distance excavated material is transported in excess of the distance included in the cost for excavation.

Pioneer Road - Temporary construction access built along the route of the project.

Piping - The process by which soil particles are washed in or through pore spaces in drains and filters or poorly compacted fill/backfill material.

Plans - The approved drawings, or exact reproductions thereof which show the locations, character, dimensions, and details of the work to be done.

Purchaser - The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through their, or its agents, employees, or contractors.

Reasonably Close Conformity - Compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified.

Roadbed - The graded portion of the road within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Road Centerline - Longitudinal center of roadbed.

Road Improvement - Work done to an existing road which improves it over its original design standard.

Road Renovation - Work done to an existing road which restores it to its original design.

Roadway - The portion of a road within limits of construction. Usually from the toe of the fill slope to a point where the cut slope intersects natural ground line. Synonym - road prism.

Scarification - The process of loosening or breaking up of the surface layer of soil or road, usually to a specified depth.

Shoulder - The portion of the roadbed contiguous with the traveled way designed for accommodation of stopped vehicles, safety, and lateral support of base and surface courses.

Spalls - Flakes or chips of stone.

Specifications - A general term applied to all directions, provisions, and requirements pertaining to performance of the work.

Specific Gravity - The ratio of the density of a material, to the density of water obtained by weighing known volumes of both items in air. A specific gravity less than one implies that the material will float.

Structures - Bridges, culverts, catch basins, retaining walls, underdrains, flumes, splash pads, downspouts, and other project features which may be involved in the work and not otherwise classified in these specifications.

Subbase - Reinforcement of the subgrade with large particles of pitrun or crushed stone. Usually confined to roads having wet subgrades or subgrades with weak support characteristics.

Surface Course - Top layer of a road structure consisting of finely crushed gravels or asphalt designed to provide a smooth running surface for traffic load.

Subgrade - The top surface of a roadbed upon which the traveled way and shoulders are constructed.

Tackifier - A compound which penetrates into the earth and assists in creating a crust through the cohesive bonding of the surface materials to a depth sufficient to stabilize the soil surface and/or a compound used to mat together mulching material.

Timber - Standing trees, downed trees, or logs, or portions thereof, which are capable of being measured in board feet.

Traveled Way - The portion of the roadbed used for the movement of vehicles, exclusive of shoulders.

Typical Cross Sections - Cross-sectional plane of a typical roadway; showing natural ground line and designed roadway in relation to cut and fill, through cut, and through fill.

Turnout - Extra widening of the roadbed at appropriate intervals on single-lane roads for passing purposes.

102a - Tests Used in These Specifications:

<u>AASHTO T 11</u>	Quantity of rock finer than No. 200 sieve.
<u>AASHTO T 27</u>	Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.
<u>AASHTO T 89</u>	Liquid limit of material passing the No. 40 sieve. Water content at which the soil passes from a plastic to a liquid state.
<u>AASHTO T 90</u>	Plastic limits and plasticity index of soil. a. Plastic limit - lowest water content at which the soil remains plastic. b. Plasticity index - range of water content, within which the material is in a plastic state. Numerical difference between the liquid and plastic limits of the soil.
<u>AASHTO T 99</u>	Relationship between soil moisture and maximum density of soil. Method A - 4" mold, soil passing a No. 4 Sieve. 25 blows/layer & 3 layers. Method D - 6" mold, soil passing a 19.00 mm (3/4 inches) sieve. 56 blows/layer & 5 layers.
<u>AASHTO T 96</u>	Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.
<u>AASHTO T 210</u>	Durability of aggregates based on resistance to produce fines.
<u>DES. E-12</u>	Determination of relative density of cohesionless soils.
<u>DMSO (dimethyl sulfide)</u>	Determines volume of expanding clays in aggregates, usually associated with marine basalts.

- 103 - Compaction equipment shall meet the following requirements:
- 103f - Vibratory roller. The drum diameter shall be not less than 48 inches, the drum width not less than 58 inches, and have a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 vibrations per minute (VPM), corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 RPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled or drawn by a vehicle of sufficient horsepower to enable the unit to travel through a loose layer of material at a speed ranging from 0.9 mile to 1.8 miles per hour, as directed by the Authorized Officer.
- The towing vehicle and roller or self-propelled unit meeting the above requirements shall be considered a vibratory roller unit.
- 103i - Other. Compaction equipment approved by the Authorized Officer.

CLEARING AND GRUBBING - 200

- 201 - This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions within the clearing limits in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections as shown on the plans and as staked on the ground.
- 202 - Where clearing limits have not been staked, established by these specifications, or shown on the plans, the limits shall extend 10 feet beyond the top of the cut slope, and 5 feet out from the toe of the fill slope.
- 202a - Where clearing limits for structures have not been staked or shown on the plans, the limits shall extend 2 feet out from the outside edge of the structure.
- 203 - Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsections 202 and 202a as shown on the plans and as staked on the ground.
- 203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.
- 204 - Grubbing shall consist of the removal and disposal of stumps, roots, and other wood material embedded in the ground and protruding obstacles remaining as a result of the clearing operation in accordance with Subsections 204a and 204c between the top of the cut slope and the toe of the fill slope.
- 204a - Stumps, including those overhanging cut banks, shall be removed within the required excavation limits.
- 204c - On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.

COOS BAY SALE NO. 2014.0034
OCEANVIEW CT
EXHIBIT C
Sheet 46 of 57 sheets

210 - Disposal of clearing and grubbing debris, stumps and cull logs, shall be by scattering over government owned lands outside of established clearing limits in a manner acceptable to the Authorized Officer. The areas for such scattering shall have the prior approval of the Authorized Officer.

213 - No clearing or grubbing debris shall be left lodged against standing trees.

EXCAVATION AND EMBANKMENT - 300

301 - This work shall consist of excavating, overhaul, placement of embankments, backfilling, borrowing, leveling, ditching, grading, insloping, outsloping, crowning and scarification of the subgrade, compaction, disposal of excess and unsuitable materials, and other earth-moving work in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.

302 - Excavation shall also consist of the excavation of road and landing cut sections, borrow sites, backfilling, leveling, ditching, grading, compaction, and other earth moving work necessary for the construction of the roadway in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and as marked on the ground with stakes.

303 - Suitable material removed from the excavation shall be used in the formation of embankment subgrade, shoulders, slopes, bedding, backfill for structures, and for other purposes as shown on the plans.

305 - Embankment construction shall consist of the placement of excavated and borrowed materials, backfilling, leveling, grading, compaction, and other earth-moving work necessary for the construction of the roadway and landings in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and as marked on the ground with stakes.

305a - Material used in the construction of embankment sections shall be free of stumps, cull logs, brush, muck, sod, roots, frozen material, and other deleterious materials and shall be placed and compacted as specified.

305b - Embankment materials shall be placed in successive, horizontal, parallel layers on areas cleared of stumps, cull logs, brush, sod, and other vegetative and deleterious materials, except as provided under Subsection 204. Roadway embankments of earth material shall be placed in horizontal layers not exceeding 12 inches in depth.

306 - Layers of final subgrade material as specified under Subsections 305a and 305b shall be moistened or dried to an uniform optimum moisture content suitable for maximum density and compacted to full width with compacting equipment conforming to requirements of Subsection 103.

306a - Minimum compaction for each layer of material placed shall be 1 hour of continuous compacting for each 150 cubic yards in place.

306e - The final subgrade shall be compacted to full width with compacting equipment conforming to the requirements of Subsection 103. Minimum compaction shall be 1 hour of continuous compacting for each 4 stations of road or a fraction of as measured along the center line of the constructed road.

311 - In solid rock cuts where pockets that will not drain are formed by blasting below the subgrade elevation, drainage shall be provided by ditching to the edge of the subgrade and backfilling to grade and compacting both the pockets and the ditch with rock fragments, gravel, or other suitable porous material.

COOS BAY SALE NO. 2014.0034
OCEANVIEW CT
EXHIBIT C
Sheet 47 of 57 sheets

- 312 - When material, except solid rock, encountered in cuts at subgrade, is suitable for use in forming the finished roadbed, the top 6-inch layer of the subgrade shall be thoroughly scarified for the full width of the roadbed. Roots, sod, and other deleterious material or stones that will not pass a 6-inch square opening shall be removed. The scarified material shall be processed to the optimum moisture content suitable for maximum density and compacted in accordance with Subsection 306.
- 313 - In cut areas where solid rock is encountered at or near subgrade, the rock shall be excavated to a minimum depth of 6 inches below subgrade elevation and the excavated area backfilled with suitable material. The backfill material shall be processed to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306.
- 314 - When heavy clays, muck, clay shale, or other deleterious material for forming the roadbed is encountered in cuts at subgrade, it shall be excavated to a minimum depth of 2 feet below the subgrade elevation and the excavated area backfilled with a selected borrow material approved by the Authorized Officer. The backfill material shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density in accordance with the requirements of Subsection 306. Unsuitable material shall be disposed of as directed by the Authorized Officer.
- 320 - Ditches shall conform to the slope, grade, dimensions, and shape of the required cross section shown on the plans. Roots, stumps, rocks, and other projections shall be removed to form smooth, even slopes.
- 321 - Excess excavated, unsuitable, or slide materials shall not be disposed of on areas where the material will encroach on riparian reserve area.
- 321c - End-dumping will be permitted for the placement of excess materials in conformance with Subsection 321, in designated disposal areas, or within approved areas. Watering, rolling, and placement in layers is not required. Materials placed shall be sloped and shaped to facilitate drainage, as approved by the Authorized Officer.
- 324 - Excavated material shall not be placed so as to cover boles of standing trees to a depth in excess of ½ foot on the uphill side.
- 328 - The Purchaser shall adopt methods and procedures in using explosives which will prevent damage to adjacent landscape features and which will minimize scattering rocks and other debris outside the road/landing prism.

PIPE CULVERTS - 400

- 401 - This work shall consist of furnishing and installing pipe culverts, downspouts, energy dissipaters, and other erosion control devices in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Individual lengths and locations are approximate; final lengths and locations will be determined by the Authorized Officer. Additional pipe and erosion control devices may be required at the option of the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost of furnishing and installing such items. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule.

- 403 - Grade culverts shall have a gradient of from 5 percent to 10 percent greater than the adjacent road grade and shall be skewed down grade 30 degrees as measured from the perpendicular to the centerline unless otherwise specified on the plans.
- 408 - Coupling bands of the type required under these specifications shall be installed so as to provide the circumferential and longitudinal strength necessary to preserve the pipe alignment, prevent separation of the pipe sections, and the escape of water from the conduit, and infiltration of fill material.
- 410 - Pipe material shall be unloaded and handled with reasonable care. If the Authorized Officer determines any structure is damaged to the extent that it is unsuitable for use in the road construction, it shall be replaced at the Purchaser's expense. All breaks in culvert coating integrity shall either be repaired in accordance with manufacturer specifications, or the culvert section shall be replaced, as determined by the Authorized Officer.
- 411 - Trenches necessary for the installation of pipe culverts shall conform to the lines, grades, dimensions, and Typical Cross Section and the Culvert Installation Detail Sheets.
- 412 - Where ledge rock, boulders, soft, or spongy soils are encountered, they shall be excavated a minimum of 24 inches below the invert grade for a width of at least one pipe diameter on each side of the pipe, and shall be backfilled with granular foundation fill and approved aggregate bedding.
- 414 - The invert grade of the bedding shall be cambered in accordance with the requirements and details shown on the plans and as directed by the Authorized Officer.
- 416 - Side-fill material to be placed above the approved aggregate bedding, along the sides of the pipe barrel, and to a minimum elevation 1 foot above the top of the pipe, shall consist fine, readily compactible soil or granular fill material, free of excess moisture, muck, frozen material, roots, sod, or other deleterious or caustic material, and devoid of rocks or stones of sizes which may impinge upon, and damage the pipe, or otherwise interfere with proper compaction.
- 417 - Approved aggregate bedding shall be placed so that a minimum compacted depth of 3" lies beneath the pipe invert, with the remaining depth equaling 1/3 of the diameter compacted under the pipe haunches. Side-fill material conforming to the requirements of Subsection 416 shall be brought up evenly and simultaneously on both sides of the pipe to an elevation of 1 foot above the pipe, in layers not exceeding 6 inches in depth, and a minimum of 1/2 pipe diameter in width on each side of the full length of the pipe barrel. Each layer shall be moistened or dried to a uniform moisture content suitable for maximum compaction, and immediately compacted by approved hand or pneumatic tampers, until a uniform density of 85 percent of the maximum density is attained, as determined by AASHTO T 99, Method C.
- 425 - Where pervious materials are used for backfill and bedding, collars consisting of selected impervious material shall be placed at the inlet end, and span a distance of 6 feet along the culvert barrel from the catch basin, and as directed by the Authorized Officer.
- 426 - Culvert markers, consisting of 1/2-inch round fiberglass rods, 4 feet in length, bolted to culvert inlets, and painted orange, shall be furnished, fabricated, and installed by the Purchaser as shown on the plans and as directed by the Authorized Officer.

RENOVATION AND IMPROVEMENT OF EXISTING ROADS - 500

- 501 - This work shall consist of reconditioning and preparing the roadbed and shoulders, cleaning and shaping drainage ditches, trimming vegetation from cut and embankment slopes, and cleaning, repairing, and replacing drainage structures of existing roads in accordance with these specifications and as marked on the ground with stakes or tags.
- 502 - Where specified, the existing road surfaces shall be scarified to its full width and to a sufficient depth to eliminate surface irregularities, and bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.
- 504 - All existing dirt road surfaces which will support equipment operating in connection with this timber sale shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsection 103.
- 504a - Minimum compaction required shall be 1 hour of continuous rolling for each 4 stations of road, or fraction thereof, as measured along the centerline per layer of material.
- 506 - Culverts shall be cleaned on any road to be renovated or improved, as listed in the Special Details. The inlet end of existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.
- 507 - The finished grading shall be approved by the Authorized Officer. The Purchaser shall give the Authorized Officer 3 days notice prior to final inspection of the grading operations.

WATERING - 600

- 601 - This work shall consist of furnishing and applying water required for the compaction of embankments, roadbeds, backfills, base courses, surface courses, finishing and reconditioning of existing roadbeds, laying dust, or for other uses in accordance with these specifications.
- 602 - Water, when needed for compaction or laying dust, shall be applied at the locations in the amounts and during the hours as directed by the Authorized Officer. Amounts of water to be provided will be the minimum needed to properly execute the compaction requirements in conformance with these specifications, and for laying dust during work periods where the road crosses private property.
- 603 - Water trucks used in this work shall be equipped with a distributing device of ample capacity and of such design as to ensure uniform application of water on the road bed.

AGGREGATE SURFACE COURSE – 1200
CRUSHED ROCK MATERIAL

- 1201 - This work shall consist of furnishing, hauling, and placing crushed rock material as culvert bedding, as surfacing over replaced culverts, and as maintenance rock. Aggregate application shall be in accordance with these specifications, and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected and shall be removed from the road.
- 1202a - Crushed rock materials used in this work may be obtained from commercial sources selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the specifications in this section.
- 1203 - When crushed rock material is produced from gravel, not less than 75 percent by weight of the particles retained on the No. 4 sieve will have 3 manufactured fractured faces. If necessary to meet the above requirements or to eliminate an excess of filler, the gravel shall be screened before crushing.
- 1204 - Crushed rock material shall consist of hard durable rock fragments conforming to the following gradation requirements:

TABLE 1204

AGGREGATE SURFACE COURSE
CRUSHED ROCK MATERIAL

Percentage by weight passing square mesh sieves
AASHTO T 11 & T 27

GRADATION

Sieve Designation	C
1-1/2-inch	100
1-inch	-
3/4-inch	50-90
1/2-inch	-
No. 4	25-50
No. 8	-
No. 30	-
No. 40	5-25
No. 200	2-15

CRUSHED ROCK MATERIAL

1 " minus

Percentage by weight passing square mesh sieves
 AASHTO T 11 & T 27
 GRADATION

Sieve Designation	C
1-inch	100
3/4-inch	90-100
3/8 -inch	55-75
¼ inch	40-60
No. 40	5-25
No. 200	2-15

- 1205 - Crushed rock material retained on the No. 4 sieve shall have a percentage of loss of not more than 35 at 500 revolutions, as determined by AASHTO T 96.
- 1206 - Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T 210.
- 1207 - That portion of crushed rock material passing the No. 40 sieve, including blending filler, shall have liquid limits of not more than 35 and a plasticity index of not less than 4 and not more than 12 as determined by AASHTO T 89 and AASHTO T 90.
- 1207a - That portion of crushed rock material passing No. 4 sieve, including blending filler, shall have a sand equivalent of not less than 35, as determined by AASHTO T 176, except where that portion exhibits a sand equivalence of less than 35, the aggregate will be accepted if it complies with the additional requirement as follows:

Sand Equivalent AASHTO T 176 Maximum	Liquid Limit AASHTO T 89 Maximum	Plasticity Index AASHTO T 90 Maximum	Percentage Passing No. 200 Sieve AASHTO T 27 Maximum
34	25	9	9
33	25	8	8
32	25	7	7
31	25	6	6
30	25	5	5
29 or less	25	4	4

- 1208 - If additional binder or filler material is necessary to meet the grading or plasticity requirements or for satisfactory bonding of the material, it shall be uniformly blended with the crushed rock material at the crushing and screening plant prior to placing on the road, unless otherwise agreed. The material for such purposes shall be manufactured fines obtained from sources approved by the Authorized Officer and shall be free from stones, vegetative matter, and other deleterious materials.
- 1208a - Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.
- 1209 - Shaping and compacting of roadbed shall be completed and approved in writing, prior to placing crushed rock material, in accordance to the requirements of Subsections 500 for placing on the roadbeds. Notification for roadbed inspection, prior to rocking, shall be 3 days prior to that inspection and shall be 6 days prior to start of rocking operations.
- 1210 - Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed and compacted before the succeeding layer is placed. Irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and then adding or removing crushed rock material until the surface is smooth and uniform.
- 1212 - Each layer of crushed rock material shall be placed, processed, shaped, moistened, or dried to a uniform moisture content suitable for maximum compaction, and compacted to full width by compaction equipment conforming to the requirements of Subsection 103. Minimum compaction shall be 1 hour of continuous compacting for each 150 cubic yards or fraction thereof, of crushed rock material placed per layer.

RIP RAP SLOPE PROTECTION – 1400

- 1401 - This work shall consist of furnishing, hauling, and placing stone materials for slope protection structures in the construction of energy dissipaters at specified culvert outlets. Material not conforming to these specifications will be rejected, and shall be removed from the slope protection structure as directed by the Authorized Officer.
- 1402 - Riprap shall be hard, durable, angular in shape, and resistant to weathering and water action. Thickness of a single stone should be more than one-third its length. Do not use rounded rock or boulders. Stone shall be free from overburden, spoil, shale, and organic material and conforming to the following:
- | | |
|---|-----------|
| A. Apparent Specific Gravity (AASHTO T85) | 2.50 Min. |
| B. Absorption (AASHTO T85) | 4.2% Max. |
| C. Coarse Durability Index (AASHTO T210) | 20 Min. |

- 1403 - Loose riprap shall meet the following gradation:

Equivalent Cubic <u>Dimensions</u>	Total Size Smaller <u>Than Given</u>
18-20 inches	100
14-18 inches	80
6-14 inches	50
0-6 inches	10

- 1404 - The placement of slope protection riprap by the end dumping method is not permitted.
- 1405 - Riprap shall be placed to produce a well keyed mass of rock with the least practical amount of void spaces. The foundation course is the course placed in contact with the ground surface, and shall be placed on a stable key bench. Bearing shall not be on smaller rocks that may be used for filling voids.
- 1405a - Riprap shall be placed directly under the culvert outlet and extend to the point where a 45-degree angle from the outlet invert intersects the key bench. Riprap shall extend a minimum distance equal to the culvert diameter on all sides.
- 1406 - Determination of the acceptability of the slope protection structure will be by visual inspection and / or physical measurements by the Authorized Officer.
- 1406a - The embankment shall be placed in successive horizontal layers of sufficient depth to contain the maximum size rock present in the material. Spalls and finer fragments of stone other than specified in Subsection 1405 shall be used to chock the larger stones solidly in position, and to fill voids between the major stones as laid in the embankment. The exposed face of the embankment shall be reasonably smooth and uniform and material shall be prevented from escaping beyond the toe of the structure.
- 1407 - Determination of gradation acceptability of the slope protection material will be made through visual inspection and physical measurements by the Authorized Officer.
- 1408a - Foundation trenches and other required excavation shall be approved prior to placing the slope protection material.

EROSION CONTROL - 1700

- 1701 - This work shall consist of measures to control soil erosion or water pollution during the construction operation through the use of berms, dikes dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 1705 - The surface area of erodible earth material exposed at any one time by clearing and grubbing shall not exceed 25,000 square feet after October 1 without prior approval by the Authorized Officer.
- 1706a - The Purchaser shall perform, during the same construction season, erosion control measures specified in this Exhibit C, on all exposed excavation, borrow, and embankment areas.
- 1707 - Completed and partially completed portions of unsurfaced roads/landings to be carried over the winter and early spring periods shall be stabilized in accordance with Section 1812.

- 1708 - Newly constructed unsurfaced roads/landings to be carried over the winter period, shall be blocked to vehicular traffic.
- 1708a - Road segments/landings not completed during dry weather periods shall be winterized, by providing a well-drained roadway by water barring, maintaining drainage, and performing additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Portions of roads/landings not having surface rock in place will be blocked or barricaded to prevent vehicular traffic.

SOIL STABILIZATION - 1800

- 1801 - This work consists of seed, fertilizer, and mulch application on designated cut, fill, borrow, disposal, and all other contract-disturbed areas in accordance with these specifications and as shown on the plans. This work is not required for road acceptance under Section 18 of this contract.
- 1802a - Soil stabilization work consisting of seeding, fertilizing, and mulching shall be performed on new road and landing construction, culvert replacement sites, and areas where vegetative cover has been disturbed, in accordance with these specifications and as shown on the plans.
- 1803 - Soil stabilization work as specified under Subsection 1802a shall be performed during the following seasonal periods:

From:	March 15	to:	April 30
From:	September 1	to:	October 15

The Authorized Officer may modify the above seasonal dates to conform to existing weather conditions and changes in the construction schedule.

- 1806 - The Purchaser shall apply the seed mixtures specified Gov't furnished native seed corresponding seeding projects as shown on Sheet No. 6 & 7.
- 1806a - Additional soil stabilization work consisting of seeding, fertilizing and mulching may be required at the option of the Authorized Officer. Providing the additional stabilization is not due to Purchaser negligence as specified in Section 12 of the contract, a reduction in the total purchased price shall be made to offset the cost of furnishing and applying such additional stabilization material. Cost shall be based upon the unit price set forth in the current BLM Timber Appraisal Production Cost Schedule.
- 1808 - Fertilizer shall be a standard, water soluble, commercial grade of fertilizer conforming to all State and Federal regulations and to the standards of the Association of Official Agricultural Chemists. Fertilizer furnished shall provide the minimum percentage of available nutrients as specified below:

Available nitrogen	16%
Available phosphoric acid	20%
Potassium	0%

The Authorized Officer will take samples as necessary for the determination of compliance with the above requirements. Fertilizer shall be furnished in new, sealed, and properly labeled containers with name, weight, and guaranteed analysis of contents clearly marked. Material failing to meet these requirements, or that which has become wet or otherwise damaged in transit or storage, will be subject to rejection by the Authorized Officer.

- 1809 - Mulch materials conforming to the requirements of Subsections 1809d, 1809e, 1809f, and 1809g shall be furnished by the Purchaser in the amounts specified under Subsection 1812.
- 1809d - Straw mulch shall be from oats, wheat, rye, or other approved grain crops which are free from noxious weeds, mold, or other objectionable materials
- 1809e - Grass straw mulch shall be from perennial grass or, if specified, an annual rye grass, from which the seed has been removed. The straw shall be free from noxious weed seed, mold, or other objectionable materials.
- 1809f - Peat mulch shall be furnished in bales not less than 7-1/2 cubic feet per bale compressed and 12 to 14 bushels loose. Peat moss shall be a granulated sphagnum peat moss free from woody substances consisting of at least 75 percent of partially decomposed stems and leaves of sphagnum and essentially brown in color. The texture may vary from porous fibrous to spongy fibrous and shall be free of sticks, stones, and mineral matter. Peat moss shall be in air-dry condition, shall show an acid reaction of 3.5 pH to 5.5 pH, and shall otherwise conform to State and Federal regulations.
- 1809g - Peat humus mulch shall be a natural peat or peat humus from fresh water saturated areas, consisting of sedge, sphagnum, or reed peat and be of such physical condition that it will pass through a 1/2-inch mesh screen. The humus shall be free from sticks, stones, roots, and other objectionable materials. Samples taken at the source of supply shall have the following analysis: Acidity range 4.0 to 7.5 pH; minimum water absorbing ability 200 percent by weight on oven-dry basis. Minimum organic content shall be 60 percent when dried at 105° C. Freshly excavated peat, if saturated with water, shall be stored for a sufficient length of time to condition it for workability.
- 1810 - Mulch material shall be delivered to the work area in a dry state. Wet material will not be accepted. Material to be used in the mulching operation may be stockpiled along the road designated for treatment provided that it is maintained in a dry state, and has the approval of the Authorized Officer.
- 1811 - Bulk mulching material required under these specifications shall be delivered to the work area bound either by twine, string, or hemp rope. Wire binding and plastic twine will not be permitted.
- 1812 - The Purchaser shall furnish and apply to approximately 11.2 ACRES designated for treatment as shown on the plans and as specified under Subsection 1806, a mixture of water, grass seed, fertilizer and mulch material, or a mixture of grass seed and fertilizer material at the following rate of application:
- A. Dry Application: _____
- | | |
|---------------------------|------------------|
| BLM Grass Seed Mix | 40 lbs. /acre |
| Commercial Grass Seed Mix | 60 lbs. /acre |
| Fertilizer | 200 lbs. /acre |
| Mulch/Straw | 3,000 lbs. /acre |
- The above proportion and application rate are subject to adjustment by the Authorized Officer during the application operation.
- 1815 - The Purchaser may reduce the application rate on partially covered slopes and no application on areas already well stocked with grass or on rock surfaces.

COOS BAY SALE NO. 2014.0034
OCEANVIEW CT
EXHIBIT C
Sheet 56 of 57 sheets

- 1816 - The seed, fertilizer, and mulch materials shall be placed by the dry method in accordance with the requirements set forth in Subsection 1816b.
- 1816b - Dry Method - Blowers, mechanical seeders, seed drills, landscape seeders, cultipaker seeders, fertilizer spreaders, or other approved mechanical seeding equipment may be used when seed and fertilizer are to be applied in dry form.
- 1819 - The maximum distance to be seeded, fertilized and mulched from the road centerline shall be 100 feet for the cut slopes and 150 feet for the fill slopes.
- 1820 - The Purchaser shall notify the Authorized Officer at least 3 days in advance of date he intends to commence the specified soil stabilization work.
- 1822 - Mulch that collects at the end of culverts or accumulates to excessive depths on the slopes shall be evenly spread by hand methods, as directed by the Authorized Officer.
- 1823 - No materials shall be applied when wind velocities would prevent a uniform application of the mix or slurry or when winds would drift the mix or slurry spray outside of the designated treatment area.
- 1826 - Twine, rope, sacks, and other debris resulting from the soil-stabilization operation shall be picked up and disposed of to the satisfaction of the Authorized Officer.

ROADSIDE BRUSHING - 2100

- 2101 - This work shall consist of cutting and removal of vegetation from the road prism in accordance with these specifications. This work shall conform to the dimensions shown on the Typical Cross Section and Roadside Brushing Detail sheets, at designated locations.
- 2102 - Roadside brushing may be performed mechanically with self-powered, self-propelled equipment or manually with hand tools, including chainsaws.
- 2103 - Vegetation cut manually and/or mechanically less than 6 inches in diameter when measured 6 inches above the ground shall be cut to a maximum height of 2 inches above the ground surface or above obstructions such as rocks or stumps on cut and fill sloped and all limbs will be severed from the trunk.
- 2104 - Trees in excess of 6 inches in diameter when measured 6 inches above the ground line shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 14 feet above the running surface of the roadway, on cut and fill slopes, within the road prism-variable distance. Limbs shall be cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than 6 inches in diameter for sight distance or safety may be directed by the Authorized Officer.
- 2105 - Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the running surface shall be cut, to within 1 inch of the trunk to produce a smooth vertical face.
- 2106 - Vegetative growth capable of growing 1 foot in height or higher shall be cut within the road prism-variable distance or as directed by the Authorized Officer.
- 2107 - Inside curves shall be brushed out for a sight distance of 100 feet chord distance. Overhanging limbs and vegetation in excess of 1 foot in height, shall be cut within these areas.
- 2108 - Self propelled equipment shall not be permitted on cut and fill slopes or in ditches.
- 2109 - Debris resulting from roadside brushing shall be scattered downslope from the roadway. Debris shall not be accumulated in concentrations. Debris in excess of 1 foot in length and 2 inches in diameter shall not be allowed to remain on cut slopes, ditches, roadways or water courses, or as directed by the Authorized Officer.
- 2113 - Roadside brushing shall be accomplished as specified on the Typical Cross Section Detail Sheets.
- 2117 - Traffic warning signs shall be required at each end of the work area. Signs shall meet the requirements of the Manual on Uniform Traffic Devices.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Summary of All Roads and Projects

Updated: 5/1/2013

T.S. Contract Name: OCEANVIEW CT 14-34 Tract No: Sale Date:

Prepared by: K. Sanders Ph: 751-4275 Print Date: 4/11/2014 3:11:17 PM

Construction: 108.25 sta

Improve: 0.00 sta Renov: 228.00 sta Decom: 0.00 sta Temp: 0.00 sta

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing: 0.0 sta Grubbing: 0.0 acres	
Slash Treatment: 0.0 acres	
300 Excavation:	\$61,190.17
Haul: 0 sta-yds	
400 Drainage:	\$13,623.28
Culvert: 0 lf wt = 0 lbs	
DownSpout: 0 lf	
PolyPipe: 441 lf	
500 Renovation:	\$15,856.81
Blading 4.30 mi	
Surfacing:	\$2,337.25
Quarry Name: Sullivan Quarry 1.0 41 cy	
Quarry Name: Sullivan Quarry 1.5 15 cy	
Quarry Name: Sullivan quarry RR 10 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$355.32
Gradation Class 4: 10 cy	
1800 Soil Stabilization: 11.2 acres	\$5,353.86
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 7.6 acres	\$4,653.84
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$5,996.00 Surf. \$0.00.....	\$5,996.00
Quarry Development:	\$0.00
Total: = \$109,366.54	

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-15.0 Road Name:

Road Renovation: 0.55 mi 16 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$2,130.15
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$1,415.86
Blading 0.55 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.3 acres	\$745.95
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$248.95 Surf. \$0.00.....	\$248.95
Quarry Development:	\$0.00

Total: \$4,540.91

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-15.0 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium: \$30.57/sta x 0.00 sta = \$0.00

Grubbing - Medium: \$822.91/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 29.2 sta = \$551.30

Blading: \$11.43/station x 29.20 stations = \$333.76

Road Construction

Tractor: D6 with winch 10 hr x \$124.51/hr = \$1,245.10

Subtotal: \$2,130.15

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.55 mi = \$285.85

Scarification: \$866.20/mi x 0.20 mi = \$173.24

Pull Ditches: \$140.38/mi x 0.55 mi = \$77.21

Compaction: \$1329.15/mi x 0.55 mi = \$731.03

Clean Culverts: \$270.05/mi x 0.55 mi = \$148.53

Subtotal: \$1,415.86

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: \$556.68/acre x 1.34 acres = \$745.95

Subtotal: \$745.95

Subtotal: \$0.00

Mobilization:

Construction - 4.15% of total Costs = \$248.95

Road Number: 31-14-15.0 Continued

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$248.95

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$4,540.91

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-15.2 NC Road Name:

Road Construction: 0.10 mi 14 ft Subgrade 3 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$3,525.44
400 Drainage:	\$2,130.90
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 70 lf	
500 Renovation:	\$0.00
Surfacing:	\$366.33
Quarry Name: Sullivan Quarry 1.0 11 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.2 acres	\$95.60
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$354.89 Surf. \$0.00.....	\$354.89
Quarry Development:	\$0.00

Total: \$6,473.17

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-15.2 NC Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Pile and Burn: \$1149.48/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Excavation - Common: \$1.72/cy x 0 cy = \$0.00

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 5.4 sta = \$101.95

Compaction - Common: \$0.76/cy x 0 cy = \$0.00

End Hauling - 100 to 500 ft: \$0.14/sta-yd x 0 sta-yd = \$0.00

Blading: \$11.43/station x 5.40 stations = \$61.72

Road construction and TTO

Tractor: D6 with winch 27 hr x \$124.51/hr = \$3,361.77

Subtotal: \$3,525.44

Section 400 Drainage:

Poly Pipe 30" dia. * sta. 3+80 24 inch 50 ea x \$32.93/ea = \$1,646.50

Poly Pipe sta 4+58 18 inch 20 ea x \$24.22/ea = \$484.40

Subtotal: \$2,130.90

Section 500 Renovation:

Subtotal: \$0.00

1".0 minus Quarry Name: Sullivan Quarry 1.0

Comment: culvert bedding 3+80, 4+58

Length	TopW	BotW	Depth	CWid	#TOs	Width	F.W.L	Taper	Other
									11cy

Rock Volume = 11cy

Royalty: \$10.25/cy x 11cy = \$112.75

Processing: \$1.40/cy x 11cy = \$15.40

Compaction: \$0.79/cy x 11cy = \$8.69

Basic Rock Haul cost: \$0.93/cy x 11cy = \$10.23

Rock Haul -15% grades: \$1.39/cy-mi x 11cy x 6.00 mi= \$91.74

Rock Haul St& Co Roads: \$0.62/cy-mi x 11cy x 17.40 mi= \$118.67

Basic Water Haul cost: \$0.61/cy x 11cy = \$6.71

Water Haul -15% grades: \$0.13/cy-mi x 11cy x 1.50 mi= \$2.15

Subtotal: \$366.33

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.20 acres = \$95.60

Includes Small Quantity Factor of 1.30

Subtotal: \$95.60

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 2500 Gabions:	Subtotal:	\$0.00
Section 8000 Miscellaneous:	Subtotal:	\$0.00
Mobilization:		
Construction - 5.92% of total Costs = \$354.89		
Surfacing - 16.67% by rock volume = \$0.00		
	Subtotal:	\$354.89
Quarry Development:		
Based on 16.67% of total rock volume		
	Subtotal:	\$0.00
	Total:	\$6,473.17

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-15.2 R Road Name:

Road Renovation: 0.22 mi 14 ft Subgrade 3 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$2,923.88
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 76 lf	
500 Renovation:	\$628.20
Blading 0.22 mi	
Surfacing:	\$333.03
Quarry Name: Sullivan Quarry 1.0 10 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.5 acres	\$556.68
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$271.51 Surf. \$0.00.....	\$271.51
Quarry Development:	\$0.00
Total:	\$4,952.31

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-15.2 R Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Poly Pipe sta 13+05 24 inch 36 ea x \$32.93/ea = \$1,185.48

Poly Pipe sta 9+05 24 inch 40 ea x \$32.93/ea = \$1,317.20

Bedding Rock

1-1/2" Crushed Hard Rock 10 CY x \$42.12/CY = \$421.20

Subtotal: \$2,923.88

Section 500 Renovation:

Blading: \$519.72/mi x 0.22 mi = \$114.34

Scarification: \$866.20/mi x 0.22 mi = \$190.56

Pull Ditches: \$140.38/mi x 0.22 mi = \$30.88

Compaction: \$1329.15/mi x 0.22 mi = \$292.41

Clean Culverts: \$270.05/mi x 0.00 mi = \$0.00

Subtotal: \$628.20

1".0 minus Quarry Name: Sullivan Quarry 1.0

Comment: bedding 5cuyd ea 9+05, 13+05

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									10cy

Rock Volume = 10cy

Royalty: \$10.25/cy x 10cy = \$102.50

Processing: \$1.40/cy x 10cy = \$14.00

Compaction: \$0.79/cy x 10cy = \$7.90

Basic Rock Haul cost: \$0.93/cy x 10cy = \$9.30

Rock Haul -15% grades: \$1.39/cy-mi x 10cy x 6.00 mi= \$83.40

Rock Haul St& Co Roads: \$0.62/cy-mi x 10cy x 17.40 mi= \$107.88

Basic Water Haul cost: \$0.61/cy x 10cy = \$6.10

Water Haul -15% grades: \$0.13/cy-mi x 10cy x 1.50 mi= \$1.95

Subtotal: \$333.03

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.50 acres = \$239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: \$556.68/acre x 0.00 acres = \$0.00

RoadSide Brushing Heavy: \$1113.36/acre x 0.50 acres = \$556.68

Subtotal: \$556.68

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 4.53% of total Costs = \$271.51

Surfacing - 15.15% by rock volume = \$0.00

Subtotal: \$271.51

Quarry Development:

Based on 15.15% of total rock volume

Subtotal: \$0.00

Total: \$4,952.31

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-15.3 Road Name:

Road Construction: 0.27 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$9,896.80
400 Drainage:	\$1,317.20
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 40 lf	
500 Renovation:	\$0.00
Surfacing:	\$180.42
Quarry Name: Sullivan Quarry 1.0 5 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.4 acres	\$669.23
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$699.75 Surf. \$0.00.....	\$699.75
Quarry Development:	\$0.00

Total: \$12,763.40

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-15.3 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Medium: \$822.91/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 14.3 sta = \$270.36

Blading: \$11.43/station x 14.32 stations = \$163.68

Excavation & Embankment

Tractor: D6 with winch 67 hr x \$124.51/hr = \$8,342.17

Landing Construction

Tractor: D6 with winch 9 hr x \$124.51/hr = \$1,120.59

Subtotal: \$9,896.80

Section 400 Drainage:

Poly Pipe sta. 10+53 24 inch 40 ea x \$32.93/ea = \$1,317.20

Subtotal: \$1,317.20

Section 500 Renovation:

Subtotal: \$0.00

1".0 minus Quarry Name: Sullivan Quarry 1.0

Comment: bedding 10+53

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									5cy

Rock Volume = 5cy

Royalty: \$10.25/cy x 5cy = \$51.25

Processing: \$1.40/cy x 5cy = \$7.00

Compaction: \$0.79/cy x 5cy = \$3.95

Basic Rock Haul cost: \$0.93/cy x 5cy = \$4.65

Rock Haul -15% grades: \$1.39/cy-mi x 5cy x 8.00 mi= \$55.60

Rock Haul St& Co Roads: \$0.62/cy-mi x 5cy x 17.40 mi= \$53.94

Basic Water Haul cost: \$0.61/cy x 5cy = \$3.05

Water Haul -15% grades: \$0.13/cy-mi x 5cy x 1.50 mi= \$0.98

Subtotal: \$180.42

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 1.40 acres = \$669.23

Includes Small Quantity Factor of 1.30

Subtotal: \$669.23

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Road Number: 31-14-15.3 Continued

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 11.67% of total Costs = \$699.75

Surfacing - 7.58% by rock volume = \$0.00

Subtotal: \$699.75

Quarry Development:

Based on 7.58% of total rock volume

Subtotal: \$0.00

Total: \$12,763.40

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-15.4 Road Name:

Road Construction: 0.12 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$3,060.75
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$191.40 Surf. \$0.00.....	\$191.40
Quarry Development:	\$0.00

Total: \$3,491.16

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-15.4 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 6.5 sta = \$122.72

Blading: \$11.43/station x 6.50 stations = \$74.30

Excavation & Embankment

Tractor: D6 with winch 23 hr x \$124.51/hr = \$2,863.73

Subtotal: \$3,060.75

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.50 acres = \$239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Subtotal: \$0.00

Mobilization:

Construction - 3.19% of total Costs = \$191.40

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$191.40

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$3,491.16

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-15.5 Road Name:

Road Construction: 0.06 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,334.51
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres	\$47.80
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$80.18 Surf. \$0.00.....	\$80.18
Quarry Development:	\$0.00

Total: \$1,462.50

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-15.5 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 3.0 sta = \$55.70

Blading: \$11.43/station x 2.95 stations = \$33.72

Road construction

Tractor: D6 with winch 10 hr x \$124.51/hr = \$1,245.10

Subtotal: \$1,334.51

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.10 acres = \$47.80

Includes Small Quantity Factor of 1.30

Subtotal: \$47.80

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Mobilization:

Construction - 1.34% of total Costs = \$80.18

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$80.18

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,462.50

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-21.2 B/C Road Name:

Road Renovation: 1.33 mi 16 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$373.53
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$3,004.87
Blading 1.33 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.2 acres	\$95.60
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$201.51 Surf. \$0.00.....	\$201.51
Quarry Development:	\$0.00

Total: \$3,675.51

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-21.2 B/C Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Landing Construction

Tractor: D6 with winch 3 hr x \$124.51/hr = \$373.53

Subtotal: \$373.53

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 1.33 mi = \$691.23

Pull Ditches: \$140.38/mi x 1.33 mi = \$186.71

Compaction: \$1329.15/mi x 1.33 mi = \$1,767.77

Clean Culverts: \$270.05/mi x 1.33 mi = \$359.17

Subtotal: \$3,004.87

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.20 acres = \$95.60

Includes Small Quantity Factor of 1.30

Subtotal: \$95.60

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 3.36% of total Costs = \$201.51

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$201.51

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$3,675.51

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.0 Road Name:

Road Renovation: 0.57 mi 16 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$373.53
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$1,461.04
Blading 0.57 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.2 acres	\$95.60
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.4 acres	\$779.35
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$157.17 Surf. \$0.00.....	\$157.17
Quarry Development:	\$0.00

Total: \$2,866.69

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.0 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Landing Construction

Tractor: D6 with winch 3 hr x \$124.51/hr = \$373.53

Subtotal: \$373.53

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.57 mi = \$296.24

Scarification: \$866.20/mi x 0.20 mi = \$173.24

Pull Ditches: \$140.38/mi x 0.57 mi = \$80.02

Compaction: \$1329.15/mi x 0.57 mi = \$757.62

Clean Culverts: \$270.05/mi x 0.57 mi = \$153.93

Subtotal: \$1,461.04

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.20 acres = \$95.60

Includes Small Quantity Factor of 1.30

Subtotal: \$95.60

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: \$556.68/acre x 1.40 acres = \$779.35

Subtotal: \$779.35

Section 2300 Engineering:

One Side Normal: \$24.94/sta x 0.00 sta = \$0.00

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 2.62% of total Costs = \$157.17

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$157.17

Total: \$2,866.69

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.1 Road Name:

Road Renovation: 0.23 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,618.63
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$3,806.15
Blading 0.23 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.7 acres	\$334.62
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.7 acres	\$389.68
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$356.68 Surf. \$0.00.....	\$356.68
Quarry Development:	\$0.00

Total: \$6,505.75

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.1 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Light: $\$15.28/\text{sta} \times 0.00 \text{ sta} = \0.00

Grubbing - Light: $\$395.63/\text{acre} \times 0.00 \text{ acres} = \0.00

Scatter: $\$724.08/\text{acre} \times 0.00 \text{ acres} = \0.00

Subtotal: \$0.00

Section 300 Excavation:

Landing Construction

Tractor: D6 with winch 13 hr x $\$124.51/\text{hr} = \$1,618.63$

Subtotal: \$1,618.63

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: $\$519.72/\text{mi} \times 0.23 \text{ mi} = \119.54

Pull Ditches: $\$140.38/\text{mi} \times 0.23 \text{ mi} = \32.29

Compaction: $\$1329.15/\text{mi} \times 0.23 \text{ mi} = \305.70

Clean Culverts: $\$270.05/\text{mi} \times 12.40 \text{ mi} = \$3,348.62$

Subtotal: \$3,806.15

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: $\$478.02/\text{acre} \times 0.70 \text{ acres} = \334.62

Includes Small Quantity Factor of 1.30

Subtotal: \$334.62

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: $\$556.68/\text{acre} \times 0.70 \text{ acres} = \389.68

Subtotal: \$389.68

Mobilization:

Construction - 5.95% of total Costs = \$356.68

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$356.68

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$6,505.75

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.2 Road Name: Edson Butte Road

Road Renovation: 0.52 mi 16 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$1,656.96
Blading 0.52 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres	\$47.80
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.3 acres	\$723.68
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$140.86 Surf. \$0.00.....	\$140.86
Quarry Development:	\$0.00

Total: \$2,569.31

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.2 Road Name: Edson Butte Road

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: $\$519.72/\text{mi} \times 0.52 \text{ mi} = \270.25

Pull Ditches: $\$140.38/\text{mi} \times 0.52 \text{ mi} = \73.00

Compaction: $\$1329.15/\text{mi} \times 0.52 \text{ mi} = \691.16

Clean Culverts: $\$270.05/\text{mi} \times 0.00 \text{ mi} = \0.00

Remove water dips

Tractor: D6 with winch 5 hr $\times \$124.51/\text{hr} = \622.55

Subtotal: \$1,656.96

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Comment: disturbance from waterdips

Dry Method with Mulch: $\$478.02/\text{acre} \times 0.10 \text{ acres} = \47.80

Includes Small Quantity Factor of 1.30

Subtotal: \$47.80

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: $\$556.68/\text{acre} \times 1.30 \text{ acres} = \723.68

Subtotal: \$723.68

Subtotal: \$0.00

Mobilization:

Construction - 2.35% of total Costs = \$140.86

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$140.86

Subtotal: \$0.00

Total: \$2,569.31

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.3 Road Name:

Road Renovation: 0.21 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$747.06
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$474.45
Blading 0.21 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres	\$143.41
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.5 acres	\$278.34
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$95.32 Surf. \$0.00.....	\$95.32
Quarry Development:	\$0.00

Total: \$1,738.58

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.3 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Landing Construction

Tractor: D6 with winch 6 hr x \$124.51/hr = \$747.06

Subtotal: \$747.06

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.21 mi = \$109.14

Pull Ditches: \$140.38/mi x 0.21 mi = \$29.48

Compaction: \$1329.15/mi x 0.21 mi = \$279.12

Clean Culverts: \$270.05/mi x 0.21 mi = \$56.71

Subtotal: \$474.45

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.30 acres = \$143.41

Includes Small Quantity Factor of 1.30

Subtotal: \$143.41

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: \$556.68/acre x 0.50 acres = \$278.34

Subtotal: \$278.34

Subtotal: \$0.00

Mobilization:

Construction - 1.59% of total Costs = \$95.32

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$95.32

Subtotal: \$0.00

Total: \$1,738.58

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.3 Appr Road Name:

Road Construction: 0.06 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,464.48
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres	\$47.80
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$87.72 Surf. \$0.00.....	\$87.72
Quarry Development:	\$0.00

Total: \$1,600.00

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.3 Appr Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 3.1 sta = \$59.09

Blading: \$11.43/station x 3.13 stations = \$35.78

Excavation & Embankment

Tractor: D6 with winch 11 hr x \$124.51/hr = \$1,369.61

Subtotal: \$1,464.48

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.10 acres = \$47.80

Includes Small Quantity Factor of 1.30

Subtotal: \$47.80

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 1.46% of total Costs = \$87.72

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$87.72

Quarry Development:

Road Number: 31-14-22.3 Appr Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,600.00

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.4 Road Name:

Road Renovation: 0.13 mi 16 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$484.40
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 20 lf	
500 Renovation:	\$1,663.32
Blading 0.13 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres	\$47.80
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.3 acres	\$334.01
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$146.73 Surf. \$0.00.....	\$146.73
Quarry Development:	\$0.00

Total: \$2,676.25

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.4 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Poly Pipe Temporary Sta. 0+1618 inch 20 ea x \$24.22/ea = \$484.40

Subtotal: \$484.40

Section 500 Renovation:

Blading: \$519.72/mi x 0.13 mi = \$67.56

Pull Ditches: \$140.38/mi x 0.13 mi = \$18.25

Compaction: \$1329.15/mi x 0.13 mi = \$172.79

Clean Culverts: \$270.05/mi x 0.13 mi = \$35.11

Excavation

Tractor: D6 with winch 11 hr x \$124.51/hr = \$1,369.61

Subtotal: \$1,663.32

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Comment: Temp 18" culvert install at 0+16

Dry Method with Mulch: \$478.02/acre x 0.10 acres = \$47.80

Includes Small Quantity Factor of 1.30

Subtotal: \$47.80

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Heavy: \$1113.36/acre x 0.30 acres = \$334.01

Subtotal: \$334.01

Mobilization:

Construction - 2.45% of total Costs = \$146.73

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$146.73

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$2,676.25

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.4 Ext. Road Name:

Road Construction: 0.05 mi 16 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,574.74
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.2 acres	\$95.60
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$96.89 Surf. \$0.00.....	\$96.89
Quarry Development:	\$0.00

Total: \$1,767.24

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.4 Ext. Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 2.7 sta = \$50.22

Blading: \$11.43/station x 2.66 stations = \$30.40

Excavation & Embankment

Tractor: D6 with winch 12 hr x \$124.51/hr = \$1,494.12

Subtotal: \$1,574.74

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.20 acres = \$95.60

Includes Small Quantity Factor of 1.30

Subtotal: \$95.60

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 1.62% of total Costs = \$96.89

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$96.89

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,767.24

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.5 Road Name:

Road Construction: 0.14 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$3,593.34
400 Drainage:	\$2,625.30
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 90 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$374.58 Surf. \$0.00.....	\$374.58
Quarry Development:	\$0.00
Total:	\$6,832.23

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.5 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 7.6 sta = \$144.24

Blading: \$11.43/station x 7.64 stations = \$87.33

Excavation & Embankment

Tractor: D6 with winch 27 hr x \$124.51/hr = \$3,361.77

Subtotal: \$3,593.34

Section 400 Drainage:

Poly Pipe Section 120 Temporary 24 inch 50 ea x \$32.93/ea = \$1,646.50

Poly Pipe Section 90 Temporary 18 inch 40 ea x \$24.22/ea = \$968.80

MISC PIPE COSTS

4' Fiberglass inlet markers 2 ea x \$5.00/ea = \$10.00

Subtotal: \$2,625.30

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.50 acres = \$239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Mobilization:

Construction - 6.25% of total Costs = \$374.58

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$374.58

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$6,832.23

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.6 Road Name:

Road Construction: 0.16 mi 14 ft Subgrade 3 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$3,371.90
400 Drainage:	\$973.80
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 40 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$265.94 Surf. \$0.00.....	\$265.94
Quarry Development:	\$0.00

Total: \$4,850.65

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.6 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

File and Burn: \$1149.48/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 8.6 sta = \$161.42

Blading: \$11.43/station x 8.55 stations = \$97.73

Excavation & Embankment

Tractor: D6 with winch 25 hr x \$124.51/hr = \$3,112.75

Subtotal: \$3,371.90

Section 400 Drainage:

Poly Pipe Station 1+75 18 inch 40 ea x \$24.22/ea = \$968.80

MISC PIPE COSTS

4' Fiberglass inlet marker 1 ea x \$5.00/ea = \$5.00

Subtotal: \$973.80

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.50 acres = \$239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 4.44% of total Costs = \$265.94

Subtotal: \$265.94

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$4,850.65

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.7 Road Name:

Road Construction: 0.20 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$6,176.59
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$372.14 Surf. \$0.00.....	\$372.14
Quarry Development:	\$0.00

Total: \$6,787.74

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.7 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Excavation - Common: \$1.72/cy x 0 cy = \$0.00

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 10.7 sta = \$202.20

Compaction - Common: \$0.76/cy x 0 cy = \$0.00

End Hauling - 100 to 500 ft: \$0.14/sta-yd x 0 sta-yd = \$0.00

Blading: \$11.43/station x 10.71 stations = \$122.42

Excavation & Embankment

Tractor: D6 with winch 47 hr x \$124.51/hr = \$5,851.97

Subtotal: \$6,176.59

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.50 acres = \$239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 6.21% of total Costs = \$372.14

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$372.14

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$6,787.74

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-22.8 Road Name: Waterhole Road

Road Renovation: 0.05 mi 16 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$391.79
Blading 0.05 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.2 acres	\$95.60
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.1 acres	\$66.80
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$32.15 Surf. \$0.00.....	\$32.15
Quarry Development:	\$0.00

Total: \$586.34

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-22.8 Road Name: Waterhole Road

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: $\$519.72/\text{mi} \times 0.05 \text{ mi} = \25.99

Scarification: $\$866.20/\text{mi} \times 0.05 \text{ mi} = \43.31

Pull Ditches: $\$140.38/\text{mi} \times 0.05 \text{ mi} = \7.02

Compaction: $\$1329.15/\text{mi} \times 0.05 \text{ mi} = \66.46

Truckturnaround 1+60, pad 2+90

Tractor: D6 with winch 2 hr $\times \$124.51/\text{hr} = \249.02

Subtotal: \$391.79

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: $\$478.02/\text{acre} \times 0.20 \text{ acres} = \95.60

Includes Small Quantity Factor of 1.30

Subtotal: \$95.60

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Medium: $\$556.68/\text{acre} \times 0.12 \text{ acres} = \66.80

Subtotal: \$66.80

Mobilization:

Construction - 0.54% of total Costs = \$32.15

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$32.15

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$586.34

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-23.5 Road Name:

Road Construction: 0.29 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$6,185.44
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.3 acres	\$621.43
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$394.83 Surf. \$0.00.....	\$394.83
Quarry Development:	\$0.00

Total: \$7,201.71

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-23.5 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 15.1 sta = \$285.28

Blading: \$11.43/station x 15.11 stations = \$172.71

Excavation & Embankment

Tractor: D6 with winch 46 hr x \$124.51/hr = \$5,727.46

Subtotal: \$6,185.44

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 1.30 acres = \$621.43

Includes Small Quantity Factor of 1.30

Subtotal: \$621.43

Section 1900 Cattleguards:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 6.58% of total Costs = \$394.83

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$394.83

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$7,201.71

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: 31-14-4.0G Road Name:

Road Renovation: 0.49 mi 16 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$498.04
400 Drainage:	\$3,167.80
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 105 lf	
500 Renovation:	\$1,354.18
Blading 0.49 mi	
Surfacing:	\$1,457.47
Quarry Name: Sullivan Quarry 1.0 15 cy	
Quarry Name: Sullivan Quarry 1.5 15 cy	
Quarry Name: Sullivan quarry RR 10 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$355.32
Gradation Class 4: 10 cy	
1800 Soil Stabilization: 0.7 acres	\$334.62
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.4 acres	\$779.35
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$460.95 Surf. \$0.00.....	\$460.95
Quarry Development:	\$0.00
Total:	\$8,407.73

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 31-14-4.0G Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Roadside Landing Construction

Tractor: D6 with winch 4 hr x \$124.51/hr = \$498.04

Subtotal: \$498.04

Section 400 Drainage:

Poly Pipe Station 11+80 24 inch 40 ea x \$32.93/ea = \$1,317.20

Poly Pipe Station 15+30 24 inch 30 ea x \$32.93/ea = \$987.90

Poly Pipe Station 17+60 18 inch 35 ea x \$24.22/ea = \$847.70

MISC PIPE COSTS

4' FIBERGLASS INLET MARKERS 3 EA x \$5.00/EA = \$15.00

Subtotal: \$3,167.80

Section 500 Renovation:

Blading: \$519.72/mi x 0.49 mi = \$254.66

Scarification: \$866.20/mi x 0.20 mi = \$173.24

Pull Ditches: \$140.38/mi x 0.49 mi = \$68.79

Compaction: \$1329.15/mi x 0.49 mi = \$651.28

Clean Culverts: \$270.05/mi x 0.49 mi = \$132.32

Renovation

Backhoe 24 inch 1 hr x \$73.88/hr = \$73.88

Subtotal: \$1,354.18

1".0 minus Quarry Name: Sullivan Quarry 1.0

Comment: Culvert Bedding 11+80,15+30,17+60

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									15cy

Rock Volume = 15cy

Royalty: \$10.25/cy x 15cy = \$153.75

Processing: \$1.40/cy x 15cy = \$21.00

Compaction: \$0.79/cy x 15cy = \$11.85

Basic Rock Haul cost: \$0.93/cy x 15cy = \$13.95

Rock Haul -15% grades: \$1.39/cy-mi x 15cy x 8.00 mi= \$166.80

Rock Haul St& Co Roads: \$0.62/cy-mi x 15cy x 17.40 mi= \$161.82

Basic Water Haul cost: \$0.61/cy x 15cy = \$9.15

Water Haul -15% grades: \$0.13/cy-mi x 15cy x 1.50 mi= \$2.93

1.5" crushed Quarry Name: Sullivan Quarry 1.5

Comment: Surfacing sta 11+80,15+30,17+60

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									15cy

Rock Volume = 15cy

Royalty: \$10.25/cy x 15cy = \$153.75

Processing: \$1.40/cy x 15cy = \$21.00

Compaction: \$0.79/cy x 15cy = \$11.85

Basic Rock Haul cost: \$0.93/cy x 15cy = \$13.95

Rock Haul -15% grades: \$1.39/cy-mi x 15cy x 8.00 mi= \$166.80

Rock Haul St& Co Roads: \$0.62/cy-mi x 15cy x 17.40 mi= \$161.82

Basic Water Haul cost: \$0.61/cy x 15cy = \$9.15

Water Haul -15% grades: \$0.13/cy-mi x 15cy x 1.50 mi= \$2.93

CL4 Rip rap Quarry Name: Sullivan quarry RR

Comment: Energy dissp sta. 15+30,17+60

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									10cy

Rock Volume = 10cy

Royalty: \$12.00/cy x 10cy = \$120.00	
Processing: \$1.40/cy x 10cy = \$14.00	
Basic Rock Haul cost: \$0.93/cy x 10cy = \$9.30	
Rock Haul -15% grades: \$1.39/cy-mi x 10cy x 8.00 mi= \$111.20	
Rock Haul St& Co Roads: \$0.62/cy-mi x 10cy x 17.40 mi= \$107.88	
Basic Water Haul cost: \$0.61/cy x 10cy = \$6.10	
Water Haul -15% grades: \$0.13/cy-mi x 10cy x 5.00 mi= \$6.50	
	Subtotal: \$1,457.47
Section 1300 Geotextiles:	
	Subtotal: \$0.00
Section 1400 Slope Protection:	
Comment: Outlet energy dissipation Station 15+30, 17+60	
Rock Source: Sullivan quarry RR	
Furnish Class 4 type rock	
Basic Rock Haul cost: \$1.30/cy x 10cy = \$13.00	
Rock Haul +15% grades: \$2.59/cy-mi x 10cy x 8.00 mi= \$207.20	
Rock Haul St& Co Roads: \$0.58/cy-mi x 10cy x 17.40 mi= \$100.92	
Placement on Fill slopes: 10cy x \$3.42/cy = \$34.20	
	Subtotal: \$355.32
Section 1800 Soil Stabilization:	
Dry Method with Mulch: \$478.02/acre x 0.70 acres = \$334.62	
Includes Small Quantity Factor of 1.30	
	Subtotal: \$334.62
Section 1900 Cattleguards:	
	Subtotal: \$0.00
Section 2100 Roadside Brushing:	
RoadSide Brushing Medium: \$556.68/acre x 1.40 acres = \$779.35	
	Subtotal: \$779.35
Section 2300 Engineering:	
	Subtotal: \$0.00
Section 2400 Minor Concrete:	
	Subtotal: \$0.00
Section 2500 Gabions:	
	Subtotal: \$0.00
Section 8000 Miscellaneous:	
	Subtotal: \$0.00
Mobilization:	
Construction - 7.69% of total Costs = \$460.95	
Surfacing - 60.61% by rock volume = \$0.00	
	Subtotal: \$460.95
Quarry Development:	
Based on 60.61% of total rock volume	
	Subtotal: \$0.00
	Total: \$8,407.73

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 1A Road Name:

Road Construction: 0.19 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$4,668.53
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$284.66 Surf. \$0.00.....	\$284.66
Quarry Development:	\$0.00

Total: \$5,192.20

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 1A Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium: $\$30.57/\text{sta} \times 0.00 \text{ sta} = \0.00

Grubbing - Medium: $\$822.91/\text{acre} \times 0.00 \text{ acres} = \0.00

Scatter: $\$724.08/\text{acre} \times 0.00 \text{ acres} = \0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr $\$18.88/\text{sta.} \times 10.3 \text{ sta} = \193.52

Blading: $\$11.43/\text{station} \times 10.25 \text{ stations} = \117.16

Excavation & Embankment

Tractor: D6 with winch 35 hr $\times \$124.51/\text{hr} = \$4,357.85$

Subtotal: \$4,668.53

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: $\$478.02/\text{acre} \times 0.50 \text{ acres} = \239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 4.75% of total Costs = \$284.66

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$284.66

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$5,192.20

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 3 Road Name:

Road Construction: 0.03 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$923.10
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres	\$143.41
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$61.86 Surf. \$0.00.....	\$61.86
Quarry Development:	\$0.00

Total: \$1,128.37

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 3 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 1.7 sta = \$32.10

Blading: \$11.43/station x 1.70 stations = \$19.43

Construct road

Tractor: D6 with winch 7 hr x \$124.51/hr = \$871.57

Subtotal: \$923.10

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.30 acres = \$143.41

Includes Small Quantity Factor of 1.30

Subtotal: \$143.41

Section 1900 Cattleguards:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 1.03% of total Costs = \$61.86

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$61.86

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,128.37

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 4 Road Name:

Road Construction: 0.12 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$2,812.94
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.5 acres	\$239.01
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$177.03 Surf. \$0.00.....	\$177.03
Quarry Development:	\$0.00

Total: \$3,228.98

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 4 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 6.5 sta = \$123.48

Blading: \$11.43/station x 6.54 stations = \$74.75

Excavation & Embankment

Tractor: D6 with winch 21 hr x \$124.51/hr = \$2,614.71

Subtotal: \$2,812.94

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.50 acres = \$239.01

Includes Small Quantity Factor of 1.30

Subtotal: \$239.01

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Mobilization:

Construction - 2.95% of total Costs = \$177.03

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$177.03

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$3,228.98

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 5A Road Name:

Road Construction: 0.06 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,090.95
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres	\$143.41
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$71.60 Surf. \$0.00.....	\$71.60
Quarry Development:	\$0.00

Total: \$1,305.96

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 5A Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium: $\$30.57/\text{sta} \times 0.00 \text{ sta} = \0.00

Grubbing - Medium: $\$822.91/\text{acre} \times 0.00 \text{ acres} = \0.00

Scatter: $\$724.08/\text{acre} \times 0.00 \text{ acres} = \0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr $\$18.88/\text{sta.} \times 3.1 \text{ sta} = \59.09

Blading: $\$11.43/\text{station} \times 3.13 \text{ stations} = \35.78

Excavation & Embankment

Tractor: D6 with winch 8 hr $\times \$124.51/\text{hr} = \996.08

Subtotal: \$1,090.95

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: $\$478.02/\text{acre} \times 0.30 \text{ acres} = \143.41

Includes Small Quantity Factor of 1.30

Subtotal: \$143.41

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Mobilization:

Construction - 1.19% of total Costs = \$71.60

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$71.60

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,305.96

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 5B Road Name:

Road Construction: 0.04 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$2,311.20
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres	\$143.41
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$142.38 Surf. \$0.00.....	\$142.38
Quarry Development:	\$0.00

Total: \$2,596.98

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 5B Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium: $\$30.57/\text{sta} \times 0.00 \text{ sta} = \0.00

Grubbing - Medium: $\$822.91/\text{acre} \times 0.00 \text{ acres} = \0.00

Scatter: $\$724.08/\text{acre} \times 0.00 \text{ acres} = \0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr $\$18.88/\text{sta.} \times 2.3 \text{ sta} = \43.61

Blading: $\$11.43/\text{station} \times 2.31 \text{ stations} = \26.40

Excavation & Embankment

Tractor: D6 with winch 18 hr $\times \$124.51/\text{hr} = \$2,241.18$

Subtotal: \$2,311.20

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: $\$478.02/\text{acre} \times 0.30 \text{ acres} = \143.41

Includes Small Quantity Factor of 1.30

Subtotal: \$143.41

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.37% of total Costs = \$142.38

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$142.38

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$2,596.98

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 5C Road Name:

Road Construction: 0.09 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,890.75
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.4 acres	\$191.21
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$120.76 Surf. \$0.00.....	\$120.76
Quarry Development:	\$0.00

Total: \$2,202.72

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 5C Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium: \$30.57/sta x 0.00 sta = \$0.00

Grubbing - Medium: \$822.91/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 4.9 sta = \$91.95

Blading: \$11.43/station x 4.87 stations = \$55.66

Excavation & Embankment

Tractor: D6 with winch 14 hr x \$124.51/hr = \$1,743.14

Subtotal: \$1,890.75

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.40 acres = \$191.21

Includes Small Quantity Factor of 1.30

Subtotal: \$191.21

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.01% of total Costs = \$120.76

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$120.76

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$2,202.72

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 6A Road Name:

Road Construction: 0.02 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$786.46
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres	\$143.41
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$53.94 Surf. \$0.00.....	\$53.94
Quarry Development:	\$0.00

Total: \$983.81

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 6A Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 1.3 sta = \$24.54

Blading: \$11.43/station x 1.30 stations = \$14.86

Excavation & Embankment

Tractor: D6 with winch 6 hr x \$124.51/hr = \$747.06

Subtotal: \$786.46

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.30 acres = \$143.41

Includes Small Quantity Factor of 1.30

Subtotal: \$143.41

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 0.90% of total Costs = \$53.94

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$53.94

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$983.81

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number: Spur 7 Road Name:

Road Construction: 0.02 mi 14 ft Subgrade 2 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$781.31
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres	\$143.41
Includes Small Quantity Factor of 1.30	
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$53.64 Surf. \$0.00.....	\$53.64
Quarry Development:	\$0.00
Total:	\$978.36

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: Spur 7 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Heavy: \$45.05/sta x 0.00 sta = \$0.00

Grubbing - Heavy: \$1598.35/acre x 0.00 acres = \$0.00

Scatter: \$724.08/acre x 0.00 acres = \$0.00

Subtotal: \$0.00

Section 300 Excavation:

Subgrade Compaction: 4 Sta/hr \$18.88/sta. x 1.1 sta = \$21.33

Blading: \$11.43/station x 1.13 stations = \$12.92

Excavation & Bedding

Tractor: D6 with winch 6 hr x \$124.51/hr = \$747.06

Subtotal: \$781.31

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Dry Method with Mulch: \$478.02/acre x 0.30 acres = \$143.41

Includes Small Quantity Factor of 1.30

Subtotal: \$143.41

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Subtotal: \$0.00

Mobilization:

Construction - 0.89% of total Costs = \$53.64

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$53.64

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$978.36

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Mobilization Costs - Construction and Surfacing

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Average Mobilization distance = 50 miles Factor = 1.00

Mobilization: Construction

Comment: Lump Sum = Equipment Washing x1

Hydro-Mulcher:	1 ea x (1.00 x \$132.00/ea + 0 mi x \$3.51/mi)=	\$132.00
Fire Equipment:	1 ea x (1.00 x \$132.00/ea + 0 mi x \$3.51/mi)=	\$132.00
Graders-all:	1 ea x (1.00 x \$356.00/ea + 0 mi x \$13.91/mi)=	\$356.00
Brush Cutter:	1 ea x (1.00 x \$356.00/ea) =	\$356.00
Loaders < 3cy:	1 ea x (1.00 x \$356.00/ea + 0 mi x \$7.58/mi)=	\$356.00
Rollers & Comp:	1 ea x (1.00 x \$356.00/ea + 0 mi x \$15.10/mi)=	\$356.00
Excavators:	1 ea x (1.00 x \$688.00/ea + 0 mi x \$22.59/mi)=	\$688.00
RTBackhoes 24/30:	1 ea x (1.00 x \$356.00/ea + 0 mi x \$4.93/mi)=	\$356.00
Tractors <= D7:	1 ea x (1.00 x \$522.00/ea + 0 mi x \$29.75/mi)=	\$522.00
Dump Truck<=10cy:	1 ea x (1.00 x \$185.00/ea + 0 mi x \$3.70/mi)=	\$185.00
Water Truck:	1 ea x (1.00 x \$217.00/ea + 0 mi x \$4.33/mi)=	\$217.00
Lump Sum:		\$2,340.00

Subtotal: \$5,996.00

Mobilization: Surfacing

Comment: Lum Sum = Equipment Washing

Summary of Construction Quantities

T.S. Contract Name: OCEANVIEW CT 14-34 Sale Date:

Road Number	Const	Improv	Renov	Decomm	Temp
31-14-15.0			29.20		
31-14-15.2 NC	5.40				
31-14-15.2 R			11.85		
31-14-15.3	14.32				
31-14-15.4	6.50				
31-14-15.5	2.95				
31-14-21.2 B/C			70.00		
31-14-22.0			30.20		
31-14-22.1			12.40		
31-14-22.2			27.60		
31-14-22.3			11.05		
31-14-22.3 Appr					
	3.18				
31-14-22.4			6.80		
31-14-22.4 Ext.					
	2.66				
31-14-22.5	7.64				
31-14-22.6	8.55				
31-14-22.7	10.71				
31-14-22.8			2.90		
31-14-23.5	15.11				
31-14-4.0G			26.00		
Spur 1A	10.25				
Spur 3	1.70				
Spur 4	6.54				
Spur 5A	3.13				
Spur 5B	2.31				
Spur 5C	4.87				
Spur 6A	1.30				
Spur 7	1.13				

Total Sta:	108.25		228.00		
------------	--------	--	--------	--	--

200 Clearing and Grubbing

	Clearing stations	Grubbing acres	Slash acres
Totals:	0.00	0.0	0.0

300 Excavation

	Excav C.Y.s	Haul sta-yds
Totals:	0	0
Construct road Spur 3		
Tractor: D6 with winch		7 hr
Excavation & Bedding Spur 7		
Tractor: D6 with winch		6 hr
Excavation & Embankment Spur 4		
Tractor: D6 with winch		21 hr
Excavation & Embankment 31-14-15.3		
Tractor: D6 with winch		67 hr
Excavation & Embankment 31-14-22.3 Appr		
Tractor: D6 with winch		11 hr
Excavation & Embankment 31-14-22.4 Ext.		
Tractor: D6 with winch		12 hr
Excavation & Embankment 31-14-22.5		
Tractor: D6 with winch		27 hr
Excavation & Embankment 31-14-22.6		
Tractor: D6 with winch		25 hr
Excavation & Embankment Spur 1A		
Tractor: D6 with winch		35 hr
Excavation & Embankment 31-14-23.5		
Tractor: D6 with winch		46 hr
Excavation & Embankment Spur 5A		
Tractor: D6 with winch		8 hr
Excavation & Embankment Spur 5B		
Tractor: D6 with winch		18 hr
Excavation & Embankment Spur 6A		
Tractor: D6 with winch		6 hr
Excavation & Embankment 31-14-15.4		
Tractor: D6 with winch		23 hr
Excavation & Embankment 31-14-22.7		
Tractor: D6 with winch		47 hr
Excavation & Embankment Spur 5C		
Tractor: D6 with winch		14 hr
Landing Construction 31-14-22.3		
Tractor: D6 with winch		6 hr
Landing Construction 31-14-22.1		
Tractor: D6 with winch		13 hr
Landing Construction 31-14-22.0		
Tractor: D6 with winch		3 hr
Landing Construction 31-14-21.2 B/C		
Tractor: D6 with winch		3 hr
Landing Construction 31-14-15.3		
Tractor: D6 with winch		9 hr
Road construction 31-14-15.5		
Tractor: D6 with winch		10 hr
Road Construction 31-14-15.0		
Tractor: D6 with winch		10 hr
Road construction and TFO 31-14-15.2 NC		
Tractor: D6 with winch		27 hr
Roadside Landing Construction 31-14-4.0G		
Tractor: D6 with winch		4 hr

Continuation of Construction Quantities

400 Drainage

31-14-15.2 NC	30" dia. * sta. 3+80	Poly Pipe	24 inch	50 lf	
31-14-15.2 NC	sta 4+58	Poly Pipe	18 inch	20 lf	
31-14-15.2 R	sta 13+05	Poly Pipe	24 inch	36 lf	
31-14-15.2 R	sta 9+05	Poly Pipe	24 inch	40 lf	
31-14-15.3	sta. 10+53	Poly Pipe	24 inch	40 lf	
31-14-22.4	Temporary Sta. 0+16	Poly Pipe	18 inch	20 lf	
31-14-22.5	Section 120 Temporary	Poly Pipe	24 inch	50 lf	
31-14-22.5	Section 90 Temporary	Poly Pipe	18 inch	40 lf	
31-14-22.6	Station 1+75	Poly Pipe	18 inch	40 lf	
31-14-4.0G	Station 11+80	Poly Pipe	24 inch	40 lf	
31-14-4.0G	Station 15+30	Poly Pipe	24 inch	30 lf	
31-14-4.0G	Station 17+60	Poly Pipe	18 inch	35 lf	
Bedding Rock	31-14-15.2 R				
	1-1/2" Crushed Hard Rock				10 CY
MISC PIPE COSTS	31-14-22.6				
	4' Fiberglass inlet marker				1 ea
MISC PIPE COSTS	31-14-22.5				
	4' Fiberglass inlet markers				2 ea
MISC PIPE COSTS	31-14-4.0G				
	4' FIBERGLASS INLET MARKERS				3 EA

500 Renovation

	Miles	Slide cy
31-14-15.0	0.55	0
31-14-15.2 R	0.22	0
31-14-21.2 B/C	1.33	0
31-14-22.0	0.57	0
31-14-22.1	0.23	0
31-14-22.2	0.52	0
31-14-22.3	0.21	0
31-14-22.4	0.13	0
31-14-22.8	0.05	0
31-14-4.0G	0.49	0

Totals:	4.30	0
---------	------	---

Excavation	31-14-22.4	
Tractor: D6 with winch		11 hr
Remove water dips	31-14-22.2	
Tractor: D6 with winch		5 hr
Renovation	31-14-4.0G	
Backhoe 24 inch		1 hr
Truckturnaround 1+60, pad 2+90	31-14-22.8	
Tractor: D6 with winch		2 hr

Surfacing (Cubic Yards)

Quarry Name: Sullivan Quarry 1.0

1".0 minus	Roadway	Turnouts	Other	
31-14-15.2 R	0	0	10	10
31-14-15.2 NC	0	0	11	11
31-14-4.0G	0	0	15	15
31-14-15.3	0	0	5	5
Totals:	0	0	41	41

Quarry Name: Sullivan Quarry 1.5

1.5" crushed	Roadway	Turnouts	Other	
31-14-4.0G	0	0	15	15
Totals:	0	0	15	15

Quarry Name: Sullivan quarry RR

CL4 Rip rap	Roadway	Turnouts	Other	
31-14-4.0G	0	0	10	10
Totals:	0	0	10	10

Continuation of Construction Quantities

1300 Geotextiles

Totals: No Quantities

1400 Slope Protection

Slope Protection Class 4
31-14-4.0G

C.Y.s
10

Totals: 10

1800 Soil stabilization - acres

Dry W/O
Mulch

Dry/with
Mulch

Hydro
Mulch

31-14-15.2 NC

0.0

0.2

31-14-15.2 R

0.0

0.5

31-14-15.3

0.0

1.4

31-14-15.4

0.0

0.5

31-14-15.5

0.0

0.1

31-14-21.2 B/C

0.0

0.2

31-14-22.0

0.0

0.2

31-14-22.1

0.0

0.7

31-14-22.2

0.0

0.1

31-14-22.3

0.0

0.3

31-14-22.3 Appr

0.0

0.1

31-14-22.4

0.0

0.1

31-14-22.4 Ext.

0.0

0.2

31-14-22.5

0.0

0.5

31-14-22.6

0.0

0.5

31-14-22.7

0.0

0.5

31-14-22.8

0.0

0.2

31-14-23.5

0.0

1.3

31-14-4.0G

0.0

0.7

Spur 1A

0.0

0.5

Spur 3

0.0

0.3

Spur 4

0.0

0.5

Spur 5A

0.0

0.3

Spur 5B

0.0

0.3

Spur 5C

0.0

0.4

Spur 6A

0.0

0.3

Spur 7

0.0

0.3

Totals: 0.0 11.2 0.0

Small Quantity Factor of 1.30 used

1900 Cattleguards

Totals: No Quantities

2100 RoadSide Brushing

acres

31-14-15.0

1.3

31-14-15.2 R

0.5

31-14-22.0

1.4

31-14-22.1

0.7

31-14-22.2

1.3

31-14-22.3

0.5

31-14-22.4

0.3

31-14-22.8

0.1

31-14-4.0G

1.4

Totals: 7.6

Continuation of Construction Quantities

2300 Engineering

stations

Totals: 0.00

2400 Minor Concrete

Totals: No Quantities

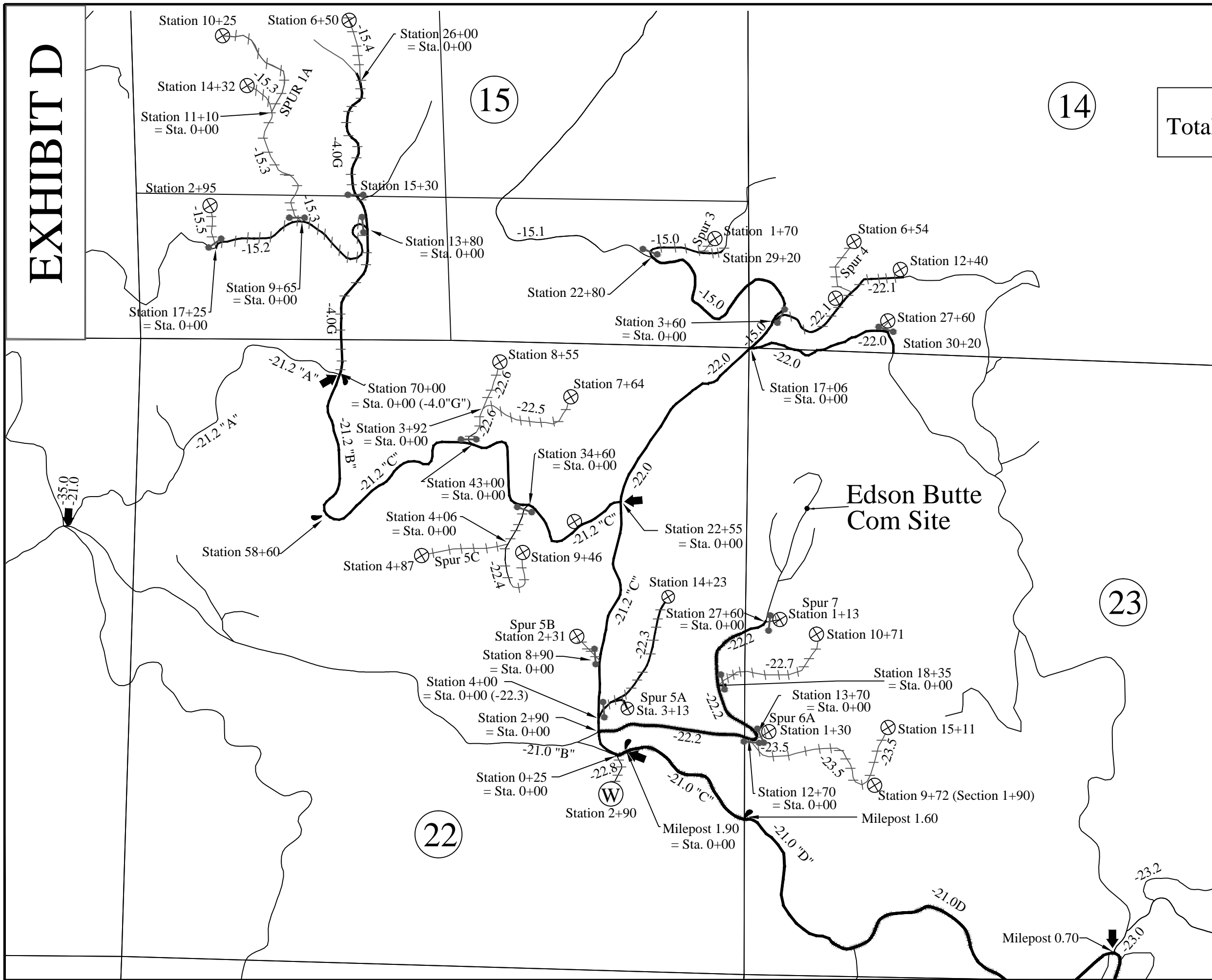
2500 Gabions

Totals: No Quantities

8000 Miscellaneous

Totals: No Quantities

EXHIBIT D



Total Maintenance Rock = 0 CY

Legend

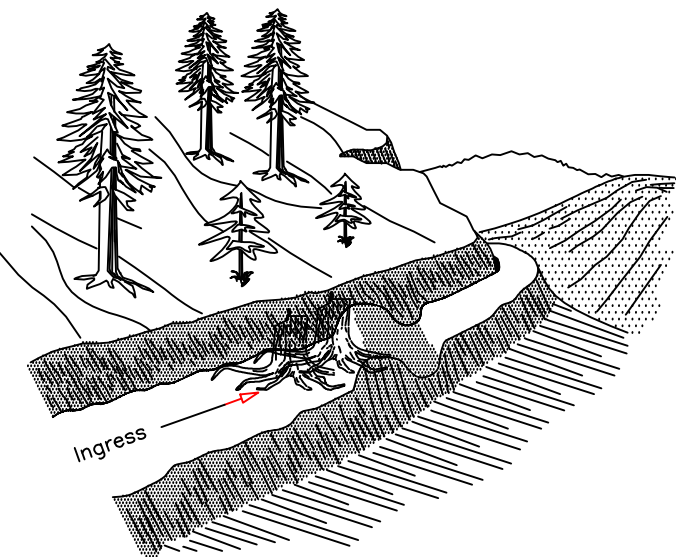
Road No.s 32-14-4.0 and 31-14-21.0C,D are fee maintenance (Moore Mill).

All other roads are operator maintenance

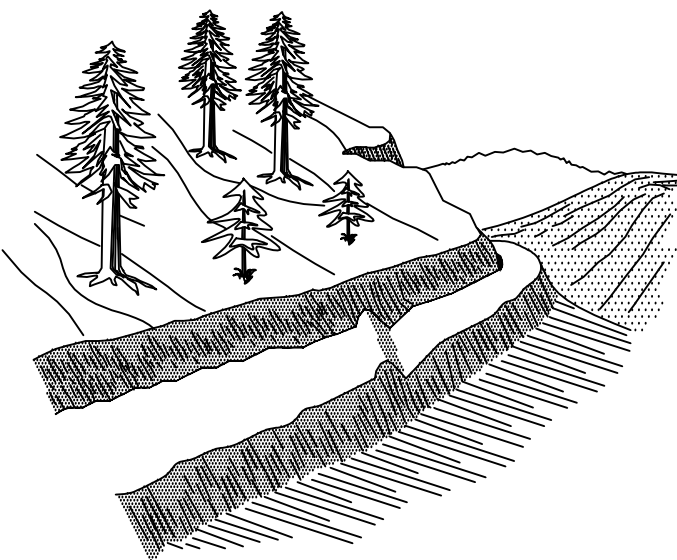
- Road Decommission
- Water Source
- Segment Break
- Landing
- Barrier

U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON	
OCEANVIEW CT Location Map 1	
DESIGNED K. SANDERS	
REVIEWED D. HIGGS	
APPROVED K. SANDERS	
DRAWN KGS	SCALE None
DATE 3/14	SHEET 1 OF 11
DRAWING NO.	

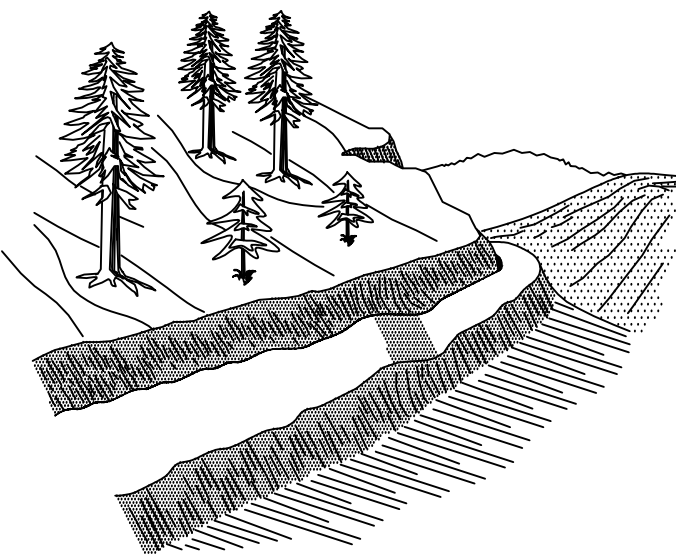
EXHIBIT D



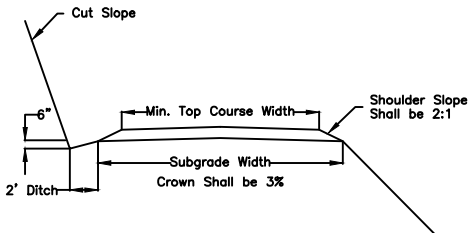
EARTH BERM BARRIER



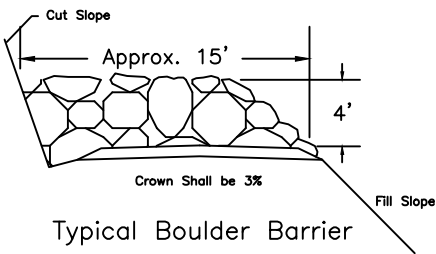
WATER BAR



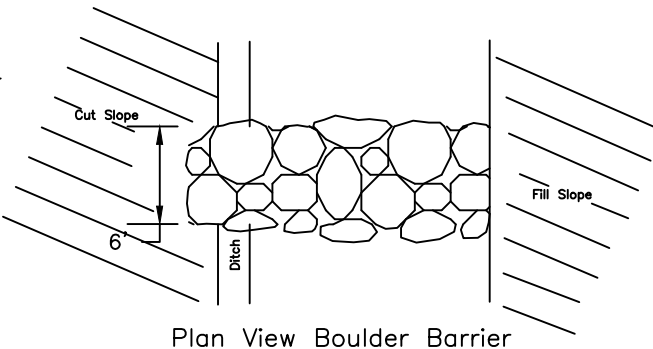
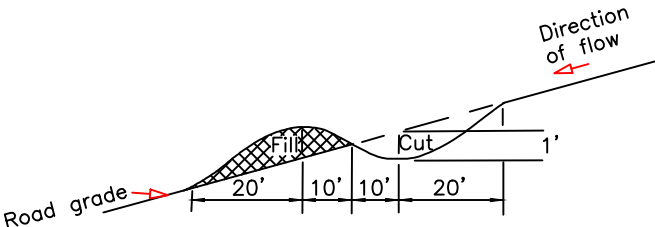
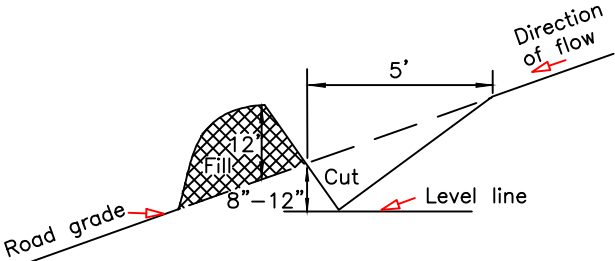
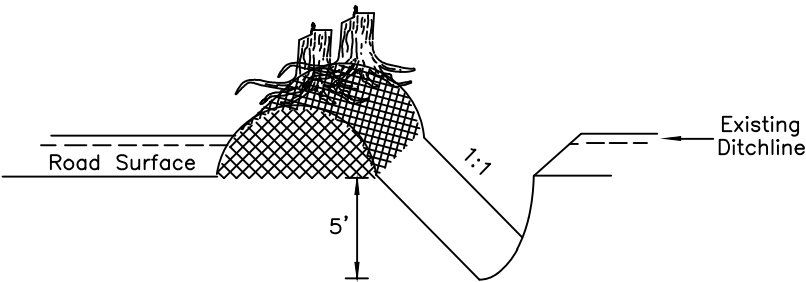
WATER DIP



Typical Surfacing Section



Typical Boulder Barrier

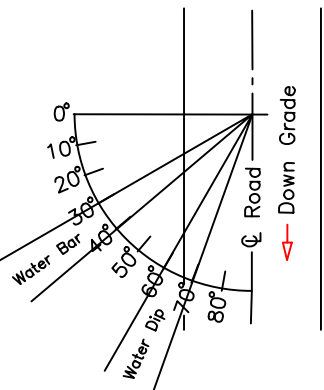


Plan View Boulder Barrier

NOTES

1. All barriers, water bars, and water dips, shall be constructed as shown above, prior to October 15th.
2. Exact structure locations will be agreed upon with the Authorized Officer prior to construction.
3. All water bars and water dips shall be cut into the roadbed from the ditchline, using ditchline as starting elevation for structure invert.
4. Ditchlines shall be blocked with excavated material (ditch dam) downgrade from all water bars and water dips, to deflect water flow into road-crossing trench.
5. The invert grade of water bars and water dips shall be outsloped a minimum of 5%, or 2% more than road grade, whichever is greater.
6. All water bars shall be skewed 30°-40° downhill (from perpendicular). All water dips shall be skewed 60°-70° downhill (from perpendicular). See skew diagram.
7. All water bar and water dip berms (fills) shall be compacted to 85% of maximum density. Water dips shall be built for vehicle passage without degradation.
8. Additional rip rap barrier width is required on flat areas (adjacent to road surface) to achieve road blockage. Barrier height shall be a minimum of 4'.
9. Minimum of 20 cubic yards of boulders shall be used per boulder barrier.
10. Boulders shall be hard rock (Durability of 35 as determined by AASHTO T210), open graded from to 28" to 36" equivalent diameter.

SKIEW DIAGRAM



WATER DIP/BAR SPACING

ROAD GRADE	Road Surface	
	Maximum Spacing (in feet)	
%	Natural	Rocked
3-5	200	300
6-10	150	200
11-15	100	150
16-20	75	100
21-35	50	50

* ON GRADES IN EXCESS OF 14% CONSTRUCT WATER BARS.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COOS BAY DISTRICT OREGON

BARRIER AND EROSION
CONTROL DETAIL

DESIGNED _____ K. SANDERS
REVIEWED _____ D. HIGGS
APPROVED _____ K. HOFFINE

DRAWN JB/RCS SCALE NONE
DATE 11/24/2011 SHEET 2 OF 11

THIS SHEET PROVIDED FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.

ROAD NUMBER	SURFACING								DRY SEED, FERTILIZER, & MULCH	
	BASE ROCK	MAINT ROCK **	REPAIR ROCK **	MAINT ROCK **			RIP RAP BARRIER ROCK **		DRY	HUYDRO MULCH
SPEC. NO.	1000	1000	1200	1200	1200	1200	CLASS IV		1800	1800
UNITS	*(C.Y.)	*(C.Y.)	*(C.Y.)	*(C.Y.)	*(C.Y.)	*(C.Y.)	*(C.Y.)	*(C.Y.)	ACRES	ACRES
31-14-4.0G	(A)	(A)	(C)	(C)	(D)	(C)	20 (B)		0.2	
31-14-15.0	(A)	(A)	(C)	(C)	(D)	(C)	(B)		2.1	
31-14-15.2	(A)	(A)	(C)	(C)	(D)	(C)	20 (B)		1.2	
31-14-15.3	(A)	(A)	(C)	(C)	(D)	(C)	10 (B)		1.0	
31-14-15.4	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.5	
31-14-15.5	(A)	(A)	(C)	(C)	(D)	(C)	10 (B)		0.2	
31-14-22.0	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.6	
31-14-22.1	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.9	
31-14-22.3	(A)	(A)	(C)	(C)	(D)	(C)	(B)		1.0	
31-14-22.4	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.8	
31-14-22.5	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.7	
31-14-22.6	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.7	
31-14-22.7	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.8	
31-14-22.8	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.1	
31-14-23.5	(A)	(A)	(C)	(C)	(D)	(C)	(B)		1.1	
SPUR 1A	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.7	
SPUR 3	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.1	
SPUR 4	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.5	
SPUR 5A	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.2	
SPUR 5B	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.2	
SPUR 5C	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.3	
SPUR 6A	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.1	
SPUR 7	(A)	(A)	(C)	(C)	(D)	(C)	(B)		0.1	
	(A)	(A)	(C)	(C)	(D)	(C)	(B)			
	(A)	(A)	(C)	(C)	(D)	(C)	(B)			
	(A)	(A)	(C)	(C)	(D)	(C)	(B)			
	(A)	(A)	(C)	(C)	(D)	(C)	(B)			
	(A)	(A)	(C)	(C)	(D)	(C)	(B)			
PAGE TOTALS	(A)	(A)	(E)	(C)	(D)	(C)	60 (B)		14.1	

ITEM	SIZE	GRADE
1000	3"	A
	2"	B
	1 1/2"	C
	6"	D
700	4"	A
	6"	B
1100	4"	B
1200	1 1/2 "	C
	1"	D
	3/4 "	E
RIPRAP	CLASS IV	B

GRADE INDICATED IN CIRCLE ○

* FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.
** PITRUN ROCK, SPOT ROCK, AND RIP RAP ARE TRUCK MEASUREMENT QUANTITIES.
QUANTITIES SHOWN IN BASE AND SURFACE ROCK ARE IN COMPACTED CUBIC YARDS.

TTA = TRUCK TURNAROUND



U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON	
EXHIBIT D ESTIMATE OF QUANTITIES	
DESIGNED	K. SANDERS
REVIEWED	D. HIGGS
APPROVED	K. HOFFINE
DRAWN KGS	SCALE NONE
DATE 03/2014	SHEET 3 OF 11

SPECIAL DETAILS

Timing Restraints

Exhibit D work shall coincide with the Timing Restraints specified in the Special Details of the Exhibit C. In addition, specified roads, spurs, and landings shall be decommissioned after hauling is complete, and prior to the first rains of the wet season, but no later than October 15. Coordination with the BLM Area Fuels Management Specialist and the Silviculturalist, for the purposes of facilitating access to areas that require burning and/or planting, is the responsibility of the Purchaser.

Equipment Washing & Spill Containment

Equipment usage to accomplish the work specified in this Exhibit D shall be in accordance with the Equipment Washing and Spill Containment kit specifications located in the Special Details of the Exhibit C.

Soil Stabilization

All disturbed or exposed soil, within the spur/landing right-of-way, or connected with the road construction, renovation, or decommissioning of this sale, shall have seed, fertilizer, and mulch applied in accordance with the 1800 series of the Exhibit C.

Surface Infiltration Enhancement(SIE)/Recolonization(R)

SIE - The Purchaser shall break up the surfaces of spurs and landings that are designated for treatment to an 18-inch depth, using excavator attachments, log loader tongs, or other approved equipment. The areas to be treated include the entire width of spur and landing surfaces, plus related compacted areas such as turnouts, truck turnarounds, forwarding trails, and log decking areas.

The equipment shall be capable of penetrating to an 18-inch depth, and shall sufficiently loosen the compacted soil so that no more than 50% of the soil particle clusters are greater than 2 inches in size. Treatment shall occur after the completion of harvest activities and during the dry season, when the soil moisture is less than 25%.

R - All spurs to be treated shall be covered with a layer of slash and organic matter following the SIE operation. The intent of the above requirement is to pull back that which is reachable, by an average sized excavator, while staying on the existing roadbed.

Waterbars & Waterdips

Waterbars and waterdips shall be constructed in accordance with the Barrier and Erosion Control Detail, sheet 2.

Pulling Culverts

Pulled culverts shall be removed and disposed of in a lawful manner off of U.S. Government property. The channel shall match the existing channel upstream and downstream of the crossing. The side slopes shall be at a 1½ :1 slope.

Road Barriers

Earth Berm Barriers and Boulder Barriers shall be constructed at specified locations, and in accordance with the Barrier and Erosion Control Details, and shall facilitate drainage. Additional barrier lengths are required when adjacent flat areas exist at barrier locations, to achieve effective road blockage. Single components of the boulder barrier shall be of sufficient size to prevent pickup-assisted movement. Boulders shall have a minimum durability of 35, as determined by AASHTO T210. Load tickets are required. Seed, fertilizer, and mulch shall be applied to all exposed soil after construction.

Road Decommissioning Narratives

The following roads and landings shall be decommissioned in strict accordance with this Exhibit D, and the narratives below. Spurs and landings shall be decommissioned after hauling is complete, and before the first rains of the wet season, but no later than October 15.

31-14-4.0G

Access to this road shall be blocked with a **boulder barrier** at station 15+30 (property line). Waterbars shall be constructed from station 0+00 to the end of the road, station 26+00. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas along the entire road.

31-14-15.0

Access to this road shall be blocked with an **earthen barrier** at the junction with Road No. 31-14-15.1, station 23+50. Waterbars shall be constructed from the barrier location to the end of Unit 3, station 29+20. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas including the dirt road surface.

31-14-15.2

Access to this road shall be blocked with a **boulder barrier** at the junction with 31-14-4.0G. Waterbars shall be constructed from the barrier to the end of the renovated road, station 17+25. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface.

31-14-15.3

Access to this road shall be blocked with **10 cubic yard boulder barrier**, close to the junction with Road No. 31-14-15.2. Waterbars shall be constructed, from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing areas.

31-14-15.4

Waterbars shall be constructed along the entire length of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing area.

31-14-15.5

Access to this road shall be blocked with a **10 cubic yard boulder barrier**, close to the junction with Road No. 31-14-15.2. Waterbars shall be constructed, from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing areas.

31-14-22.0

Access to the landing with approach at station 27+60 shall be blocked with a **earthen barrier**, close to the junction with Road No. 31-14-22.0. Waterbars shall be constructed, from the barrier to the end of the landing. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface.

31-14-22.1

Access to this road shall be blocked with a **earthen barrier**, close to the junction with Road No. 31-14-15.0. Waterbars shall be constructed, from the barrier to the end of the road renovation, station 12+40. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface.

31-14-22.3

Access to this road shall be blocked with a **earthen barrier**, close to the junction with Road No. 31-14-21.2. Waterbars shall be constructed, from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

31-14-22.4

Sta. 0+16 - 18"x 20' Poly culvert, remove and dispose of in a lawful manner off of U.S. Government property. Access to this road shall be blocked with a **earthen barrier**, close to the junction with Road No. 31-14-21.2. Waterbars shall be constructed, from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

31-14-22.5

Sta. 3+60 - 18"x 40' Poly culvert, remove and dispose of in a lawful manner off of U.S. Government property. Sta. 4+46 - 24"x 50' Poly culvert, remove and dispose of in a lawful manner off of U.S. Government property. Waterbars shall be constructed along the entire length of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

31-14-22.6

Sta. 1+75 - 18"x 40' CPP Poly culvert, remove and dispose of in a lawful manner off of U.S. Government property. Access to this road shall be blocked with an **earthen barrier**, close to the junction with Road No. 31-14-21.2. Waterbars shall be constructed, from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

31-14-22.7

Access to this road shall be blocked with a **earthen barrier**, close to the junction with Road No. 31-14-22.2. Waterbars shall be constructed, from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landings.

31-14-23.5

Access to this road shall be blocked with a **earthen barrier**, close to the junction with Road No. 31-14-22.2.

Waterbars shall be constructed, from the barrier to the second roadside landing, station 9+72. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landings.

Surface infiltration enhancement/recolonization treatment shall be performed from station 9+72 to station 15+11 at the end of the landing. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including road surface.

Spur 1A

Waterbars shall be constructed from the intersection with Road No. 31-14-15.3 to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

Spur 3

Waterbars shall be constructed from the intersection with Road No. 31-14-15.0 to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and landing.

Spur 4

Waterbars shall be constructed from the intersection with Road No. 31-14-22.1 to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and landing.

Spur 5A

Waterbars shall be constructed from the intersection with Road No. 31-14-22.3 to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and landing.

Spur 5B

Access to this road shall be blocked with a **earthen barrier** close to the intersection with Road No. 31-14-21.2.

Waterbars shall be constructed from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

Spur 5C

Waterbars shall be constructed from the intersection with Road No. 31-14-22.4 to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and landing.

Spur 6A

Access to this road shall be blocked with a **earthen barrier** close to the intersection with Road No. 31-14-22.2.

Waterbars shall be constructed from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

Spur 7

Access to this road shall be blocked with a **earthen barrier** close to the intersection with Road No. 31-14-22.2.

Waterbars shall be constructed from the barrier to the end of the road. Seed, fertilizer, and mulch shall be applied to all disturbed/bare areas, including the dirt road surface and the landing.

ROAD MAINTENANCE SPECIFICATIONS

General road maintenance specifications are designated numerically according to the type of road work to be performed, as follows:

<u>Section</u>	
3000	GENERAL
3100	OPERATIONAL MAINTENANCE
3200	SEASONAL MAINTENANCE
3300	FINAL MAINTENANCE
3400	OTHER MAINTENANCE

GENERAL - 3000

- 3001 - The Purchaser shall be required to maintain all roads as shown on the Exhibit D maps of this contract in accordance with Sections 3000, 3100, 3200, 3300, and 3400 of this exhibit.
- 3002 - The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards. Any roads required to be constructed, improved, or renovated under terms of this contract shall be maintained to the standards required in Exhibit C of this contract.
- 3003 - The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 3004 - The Purchaser shall be responsible for providing timely maintenance and cleanup on any roads with logging units substantially completed prior to moving operations to other roads. Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

OPERATIONAL MAINTENANCE - 3100

- 3101 - The Purchaser shall blade and shape the road surface and shoulders with a motor patrol grader. Banks shall not be undercut. Back blading with tractors or similar equipment will be allowed only around landings and other areas when approved by the Authorized Officer.
- 3102 - The Purchaser shall furnish and place 0 yds³ (truck measure) of aggregate, conforming to the requirements in Section 1200 of Exhibit C of this contract at locations and in the amounts designated by the Authorized Officer.
- 3103 - The Purchaser shall maintain established berms and place additional berms using adjacent material where needed to protect fills as directed by the Authorized Officer.
- 3104 - The Purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor patrol grader, rubber-tired front-end bucket loader, rubber-tired backhoe or comparable equipment, and by the use of hand tools.
- 3104a - Removal of bank slough and slide material includes placement of material at the nearest suitable turnout or disposal site where material cannot erode into streams, lakes, or reservoirs or cause undue damage to road fill slopes which have been planted or mulched to control soil erosion.
- 3104b - The Purchaser shall be responsible for removal of all slides or slough, up to fifteen (15) station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the Purchaser.

Prior to removal of any slough or slide material exceeding fifteen (15) station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, method of disposal, and the disposal site. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of work, based on current BLM Timber Appraisal Production Cost Schedules.

Adjustments in purchase price for completed work shall be made as necessary, and no less than once per year when actual work is ongoing.

- 3105 - The Purchaser shall be responsible for maintaining normal flow in drainage structures. This includes cleaning out drainage ditches, catch basins, clearing pipe inverts of sediment and other debris lodged in the barrel of the pipe and maintaining water dips and water bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.
- 3106 - The Purchaser shall be responsible for repair and replacement of all materials eroded from road shoulders and fill slopes, up to fifteen (15) station yards in quantity, at any one site. The work includes unlimited multiple sites on all roads required to be maintained by the Purchaser. Prior to repair and replacement of eroded material exceeding fifteen (15) station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, borrow source, and method of repair. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based upon current BLM Timber Sale Appraisal Production Cost Schedules. Adjustments in purchase price for completed work shall be made as necessary, and no less than once per year when actual work is ongoing.

- 3107 - The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe passage of traffic along the traveled way, when directed by the Authorized Officer.
- The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of any activities or winter damage during the contract period. Disposal of such vegetative material shall be by scattering below the road.
- 3108 - The Purchaser shall avoid fouling gravel or bituminous surfaces through covering with earth and debris from side ditches, slides, or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway. Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required by such skidding activity is not considered maintenance and shall be performed at the Purchaser's expense.
- 3108a - The Purchaser shall perform logging operations on gravel and/or bituminous roadways only where the locations have been marked on the ground or approved by the Authorized Officer. Repair of the road shall be as specified in Subsection 3401.

SEASONAL MAINTENANCE - 3200

- 3201 - The Purchaser shall perform preventive maintenance at the end of Purchaser's hauling each season, and during non-hauling periods which occur between other operations on the contract area. This includes cross ditching, road blockage, removing ruts or other surface irregularities, and all other requirements specified in Section 3100.
- 3202 - The Purchaser shall perform and complete maintenance, specified in Sections 3000, 3100, and 3200, on all roads maintained by him, prior to October 15 of each year, except as specified in Subsection 3203, after initial commencement of construction or logging operations. Thereafter, all roads shall have continuous preventive maintenance and road cleanup until suspension of seasonal

operations. This includes all roads designated as Operator Maintenance on Sheet 1 of the Exhibit D, both used and not used during the preceding operating seasons.

- 3203 - The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any roads located in an area separate from the area where logging activities will resume.
- 3204 - The Purchaser shall be responsible for performing post storm inspections and maintenance during the winter season to minimize erosion and potential road or watershed damage.

FINAL MAINTENANCE - 3300

- 3301 - The Purchaser shall complete final maintenance and/or damage repairs on all roads used under terms of their contract within 30 calendar days following the expiration of Purchaser's right to cut and remove timber (Sec. 4), and in accordance with Sec. 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002, and shall be executed in accordance with Subsection 3302 of this section.

The Authorized Officer may grant acceptance of Purchaser's maintenance responsibility in part where certain individual roads or road segments are no longer of any use to the Purchaser's remaining removal operations, providing that all contract requirements as specified under Section 16(b), and Sections 3000, 3100, 3200, and 3300 of the maintenance specifications have been completed, and a relinquishment of cutting and removal rights on cutting units tributary to these roads is signed by the Purchaser. Request for partial acceptance must be submitted in writing by the Purchaser.

- 3302 - The Purchaser shall perform final road maintenance only when weather or soil moisture conditions are suitable for normal maintenance equipment operations as determined by the Authorized Officer.

If final maintenance is delayed after the date required in Subsection 3301 of this contract, due to adverse soil moisture or unsuitable equipment operating conditions, the Purchaser will be notified by the Authorized Officer when soil moisture and equipment operating conditions are suitable. The Purchaser shall then be required to complete final maintenance within 10 days.

OTHER MAINTENANCE - 3400

- 3401 - The Purchaser shall repair any damage to road surfaces that was specified under Subsections 3108 and 3108a. This repair includes restoring the roadway to the designed standard, including the replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in Subsection 3104.
- 3402 - The Purchaser shall be permitted to remove ice and snow from roads authorized for use under this contract only when prior written approval has been secured from the Authorized Officer. The Purchaser shall submit a written request for permission to remove ice and snow in advance of the date operations are to begin.

Upon receiving written authorization for ice and snow removal, the Purchaser will perform the work according to the conditions and equipment requirements set forth in the Authorization.

			EXHIBIT D			
		ROAD MAINTENANCE APPRAISAL				
Date:	3/18/2014			SALE NAME	OCEANVIEW CT 2014-0034	
		ROAD NUMBERS		MILES		
		31-14-4.0 G		0.5		
		31-14-15.0		0.6		
		31-14-15.2		0.3		
		31-14-15.3		0.3		
		31-14-15.4		0.1		
		31-14-15.5		0.1		
		31-14-21.2		1.3		
		31-14-22.0		0.6		
		31-14-22.1		0.2		
		31-14-22.3		0.3		
		31-14-22.4		0.2		
		31-14-22.5		0.1		
		31-14-22.6		0.2		
		31-14-22.7		0.2		
		31-14-22.8		0.1		
		31-14-23.5		0.3		
		SPUR 1A		0.2		
		SPUR 3		0.1		
		SPUR 4		0.1		
		SPUR 5A		0.1		
		SPUR 5B		0.1		
		SPUR 5C		0.1		
		SPUR 6A		0.1		
		SPUR 7		0.1		
			TOTAL MILES =	6.3		

			-APPRAISAL WORKSHEET-			
			-SUMMARY-			
1.		MOVE IN				\$4,947.00
2.		CULVERTS, SLOUGH, SLUMPS, & MISC				\$2,583.00
3.		GRADING FOR TIMBER HAUL				\$5,040.00
4.		GRADING FOR AGGREGATE HAUL				\$0.00
5.		MAINTENANCE ROCK				\$0.00
6.		NOXIOUS WEED EQUIPMENT WASHING				\$4,550.00
7.		DECOMMISSIONING				\$13,064.00
				MAINTENANCE TOTAL:		\$30,184.00
1.		MOVE-IN:				
		EQUIPMENT		MOVE-INS	COST / MOVE	= TOTAL
		GRADER		2.0	\$356.00	\$712.00
		EXCAVATOR/LOG LOADER		2.0	\$680.00	\$1,360.00
		TRACTOR/D7 w/rippers + LOWBOY HAUL		1.0	\$518.00	\$518.00
		ROLLER & COMPACTOR		2.0	\$356.00	\$712.00
		BACKHOE		2.0	\$356.00	\$712.00
		DUMP TRUCK		2.0	\$185.00	\$370.00
		MULCHING EQUIPMENT		1.0	\$131.00	\$131.00
		Water Truck		2.0	\$216.00	\$432.00
					TOTAL =	\$4,947.00
2.		CULVERT MAINT., SLOUGH REMOVAL, SLUMP REPAIRS, ETC.				
		MAINT. OBLIGATION		AVE. COST		= TOTAL
		6.3 MILES @		410.0 / MILE =		\$2,583.00
3.		GRADING FOR TIMBER HAUL				
		UNIT #	GRADINGS	X MILES	ACC. MILES	
		ALL UNITS	2.0	6.3	12.6	
				TOTAL MILES	12.6	
		12.6 MILES @		400.0 / MILE =		\$5,040.00
4.		GRADING FOR AGGREGATE HAUL:				
			MILES @	520.0 / MILE =		\$0.00

Road Maintenance Appraisal

3 of 5

5.		MAINTENANCE ROCK:				
ROYALTY	\$0.00	SIZE:	1 1/2" (-)	SOURCE:	0	
BASE COSTS		0	CU. YDS. @	14.9	=	\$0.00
SLOW HAUL		0	CU. YDS. @	2.8	0.0	-
MED. HAUL		0	CU. YDS. @	1.4	1.5	-
FAST HAUL		0	CU. YDS. @	0.6	14.0	-
WATER		0	CU. YDS. @	0.6	1.5	-
MED. HAUL		0	CU. YDS. @	0.1	0.0	-
						\$0.00
ROYALTY	\$0.00	SIZE:	3-0" (-)	SOURCE:	0	
BASE COSTS		0	CU. YDS. @	14.9	=	\$0.00
SLOW HAUL		0	CU. YDS. @	2.8	0.0	-
MED. HAUL		0	CU. YDS. @	1.4	1.5	-
FAST HAUL		0	CU. YDS. @	0.6	14.0	-
WATER		0	CU. YDS. @	0.6	1.5	-
MED. HAUL		0	CU. YDS. @	0.1	0.0	-
						-
ROYALTY	\$0.00	SIZE:	3/4" (-)	SOURCE:	0	
BASE COSTS		0	CU. YDS. @	0.9	=	\$0.00
SLOW HAUL		0	CU. YDS. @	2.8	0.0	-
MED. HAUL		0	CU. YDS. @	1.4	6.0	-
FAST HAUL		0	CU. YDS. @	0.6	30.0	-
WATER		0	CU. YDS. @	0.6	5.0	-
MED. HAUL		0	CU. YDS. @	0.1	1.0	-
						-
					TOTAL =	\$0.00
6.		NOXIOUS WEED EQUIPMENT WASHING				\$4,550.00
		(Entrance Only)			\$ 2275 x 2	

7.		DECOMMISSIONING:		UNITS:		
		31-14-4.0G				
		Boulder Barrier		1.0	\$613.00	
		Soil stabilization		0.2	\$72.40	
		Waterbar Construction		8.0	\$184.00	\$869.40
		31-14-15.0				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		14.0	\$322.00	
		Soil stabilization		2.1	\$760.20	\$1,282.20
		31-14-15.2				
		Boulder Barrier		1.0	\$613.00	
		Waterbar Construction		7.0	\$161.00	
		Soil stabilization		1.2	\$434.40	\$1,208.40
		31-14-15.3				
		Boulder Barrier		0.5	\$306.50	
		Waterbar Construction		8.0	\$184.00	
		Soil stabilization		1.0	\$362.00	\$852.50
		31-14-15.4				
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		3.0	\$69.00	
		Soil stabilization		0.5	\$181.00	\$250.00
		31-14-15.5				
		Boulder Barrier		0.5	\$306.50	
		Waterbar Construction		2.0	\$46.00	
		Soil stabilization		0.2	\$72.40	\$424.90
		31-14-22.0				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		15.0	\$345.00	
		Soil stabilization		0.6	\$217.20	\$762.20
		31-14-22.1				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		6.0	\$138.00	
		Soil stabilization		0.9	\$325.80	\$663.80
		31-14-22.3				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		7.0	\$161.00	
		Soil stabilization		1.0	\$362.00	\$723.00
		31-14-22.4				
		Remove culvert		1.0	\$250.00	
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		4.0	\$92.00	
		Soil stabilization		0.8	\$289.60	\$831.60
		31-14-22.5				
		Remove culvert		2.0	\$500.00	
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		4.0	\$92.00	
		Soil stabilization		0.7	\$253.40	\$845.40

		31-14-22.6				
		Remove culvert		1.0	\$250.00	
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		4.0	\$92.00	
		Soil stabilization		0.7	\$253.40	\$795.40
		31-14-22.7				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		6.0	\$138.00	
		Soil stabilization		0.8	\$289.60	\$627.60
		31-14-23.5				
		Earthen Barrier		1.0	\$200.00	
		SIER		1.0	\$450.00	
		Waterbar Construction		5.0	\$115.00	
		Soil stabilization		1.1	\$398.20	\$1,163.20
		SPUR 1A				
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		6.0	\$138.00	
		Soil stabilization		0.7	\$253.40	\$391.40
		SPUR 3				
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		1.0	\$23.00	
		Soil stabilization		0.1	\$36.20	\$59.20
		SPUR 4				
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		3.0	\$69.00	
		Soil stabilization		0.5	\$181.00	\$250.00
		SPUR 5A				
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		1.0	\$23.00	
		Soil stabilization		0.2	\$72.40	\$95.40
		SPUR 5B				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		1.0	\$23.00	
		Soil stabilization		0.2	\$72.40	\$295.40
		SPUR 5C				
		Boulder Barrier		0.0	\$0.00	
		Waterbar Construction		2.0	\$46.00	
		Soil stabilization		0.3	\$108.60	\$154.60
		SPUR 6A				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		1.0	\$23.00	
		Soil stabilization		0.1	\$36.20	\$259.20
		SPUR 7				
		Earthen Barrier		1.0	\$200.00	
		Waterbar Construction		1.0	\$23.00	
		Soil stabilization		0.1	\$36.20	\$259.20

Subtotal

\$13,064.00

SALE NAME: Ocean View CT

EXHIBIT E
ROAD USE AND MAINTENANCE FEES

SALE NO.: ORC00-TS-2014.0034

SALE VOLUME: 4709 NET MBF

A. ROAD USE FEES - Payable to Private Company:

COMPANY NAME	AGREEMENT NUMBER	ROAD NUMBER	NET MBF	USE FEE per MBF	TOTAL FEES
Moore Mill	C-364	31-14-15.2	542	\$0.00	\$0.00
Moore Mill	C-364	31-14-21.2B	944	\$0.00	\$0.00
Moore Mill	C-364	31-14-21.0C	4709	\$0.00	\$0.00
Moore Mill	C-364	31-14-21.0D	4709	\$0.00	\$0.00
Plum Creek	C-354	32-14-4.0B	4709	\$3.00	\$14,127.00
Moore Mill	C-364	32-14-4.0A	4709	\$2.56	\$12,055.04
					\$0.00
					\$0.00
TOTAL USE FEE:					\$26,182.04

B. MAINTENANCE FEES:

1. Maintenance and Rockwear Fees Payable to the U.S. (BLM Maintained Roads):

a. Timber Haul:

Surface Type	ROAD NUMBER	NET MBF	ROAD MILES	ROCKWEAR /MBF/Mile	Subtotal	MAINT. /MBF/Mile	Subtotal	TOTAL FEES
					\$0.00		\$0.00	\$0.00
					\$0.00		\$0.00	\$0.00
					\$0.00		\$0.00	\$0.00
0					\$0.00		\$0.00	\$0.00

2. ROCKWEAR Fees Payable to the U.S. (OPERATOR Maintained Roads):

a. Timber Haul:

Surface Type	ROAD NUMBER	NET MBF	ROAD MILES	ROCKWEAR /MBF/Mile	TOTAL FEES
natural	Spur 1A	23	0.06	\$0.00	\$0.00
natural	Spur 1A	69	0.05	\$0.00	\$0.00
natural	Spur 1A	92	0.08	\$0.00	\$0.00
natural	31-14-15.3	46	0.06	\$0.00	\$0.00
natural	31-14-15.3	290	0.05	\$0.00	\$0.00
natural	31-14-15.3	359	0.09	\$0.00	\$0.00
natural	31-14-15.3	382	0.02	\$0.00	\$0.00
natural	31-14-15.3	451	0.05	\$0.00	\$0.00
natural	31-14-15.5	91	0.06	\$0.00	\$0.00
natural	31-14-15.4	160	0.07	\$0.00	\$0.00
natural	31-14-15.4	264	0.05	\$0.00	\$0.00
rock	31-14-4.0G	310	0.07	\$0.49	\$10.63
rock	31-14-4.0G	356	0.07	\$0.49	\$12.21
rock	31-14-4.0G	402	0.09	\$0.49	\$17.73
rock	31-14-4.0G	944	0.26	\$0.49	\$120.27
rock	31-14-21.2C	944	0.30	\$0.49	\$138.77
natural	31-14-22.6	166	0.09	\$0.00	\$0.00
natural	31-14-22.5	138	0.14	\$0.00	\$0.00
natural	31-14-22.6	304	0.07	\$0.00	\$0.00
rock	31-14-21.2C	1248	0.06	\$0.49	\$36.69
rock	31-14-21.2C	1340	0.05	\$0.49	\$32.83
rock	31-14-21.2C	1478	0.05	\$0.49	\$36.21
natural	Spur 5C	92	0.05	\$0.00	\$0.00
natural	Spur 5C	184	0.04	\$0.00	\$0.00
natural	31-14-22.4ext	92	0.05	\$0.00	\$0.00
natural	31-14-22.4	92	0.05	\$0.00	\$0.00
natural	31-14-22.4	276	0.08	\$0.00	\$0.00
rock	31-14-21.2C	1754	0.15	\$0.49	\$128.92
rock	31-14-21.2C	1800	0.08	\$0.49	\$70.56
natural	Spur 3	68	0.03	\$0.00	\$0.00

SALE NO.: ORC00-TS-2014.0034

3. ROAD MAINTENANCE AND/OR ROCKWEAR FEES - Payable to Private Company:

4. OPERATOR MAINTENANCE WILL BE REQUIRED ON APPROX. 6.3 MILES OF ROAD. (SEE EXHIBIT D)

	TOTAL	\$/MBF
MAINTENANCE OBLIGATION PAYABLE TO BLM:	\$1,487.10	\$0.32

Exhibit F
Sheet 1 of 1

SPECIAL PROVISIONS TO CONTROL THE SPREAD OF NOXIOUS WEEDS

Vehicle and Equipment Cleaning

1. Cleaning shall consist of the removal of soil and debris by washing with a high pressure hose or steam cleaning. Cleaning and inspection sites will be agreed to by Purchaser and BLM. All petroleum product residues shall be contained at wash sites and dealt with in accordance to DEQ standards. Contractor shall provide an approved plan for the cleaning station that demonstrates that the station meets all DEQ and water quality regulations. All necessary permits shall be obtained by the contractor.

2. All equipment parts shall be cleaned as designated by the Authorized Officer, including removal of tractor belly plates, in accordance with Sec. A.1 above.

All construction, logging and slash disposal equipment shall be cleaned prior to entering the contract area. The Authorized Officer will determine if log trucks and vehicles used for transportation of personnel shall be cleaned, based upon the location of use immediately prior to current timber sale. If the vehicles have been in a weed-infested area, they shall be washed before entering Contract Area, as shown on Exhibit A.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

☒ **TIMBER or
TIMBER AND OTHER WOOD PRODUCTS**

DEPOSIT AND BID FOR

☐ **VEGETATIVE RESOURCES
(Other Than Timber)**

Name of Bidder
Tract Number ORC00-TS-2014.0034
Sale Name OCEAN VIEW CT
Sale Notice <i>(dated)</i> JUNE 26, 2014
BLM District COOS BAY

<input type="checkbox"/> Sealed Bid for Sealed Bid Sale	<input checked="" type="checkbox"/> Written Bid for Oral Auction Sale
Time for opening sealed bids <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Sale commences 10:00 <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
On <i>(date)</i> Place	On <i>(date)</i> 07/25/2014 Place DISTRICT OFFICE

In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated timber/vegetative resource on the tract specified above.

Required bid deposit is _____ and is enclosed in the form of:
☐ cash ☐ money order ☐ cashier's check ☐ certified check ☐ bank draft
☐ bid bond of corporate surety on approved list of the United States Treasury ☐ guaranteed remittance approved by the authorized officer.

IT IS AGREED That the bid deposit shall be retained by the United States as liquidated damages if the bid is accepted and the undersigned fails to execute and return the contract, together with any required performance bond and any required payment within 30 days after the contract is received by the successful bidder. It is understood that no bid for less than the appraised price on a unit basis per species will be considered. If the bid is rejected the deposit will be returned.

BID SCHEDULE – LUMP SUM SALE

NOTE: Bidders should carefully check computations in completing the Bid Schedule

BID SUBMITTED					ORAL BID MADE	
PRODUCT SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
WESTERN HEMLOCK	MBF	2,606	X	=	X	=
DOUGLAS-FIR	MBF	1,779	X	=	X	=
RED ALDER	MBF	243	X	=	X	=
GRAND FIR	MBF	72	X	=	X	=
PORT-ORFORD-CEDAR	MBF	9	X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

☒ **TIMBER or
TIMBER AND OTHER WOOD PRODUCTS**

DEPOSIT AND BID FOR

☐ **VEGETATIVE RESOURCES
(Other Than Timber)**

Name of Bidder
Tract Number ORC00-TS-2014.0034
Sale Name OCEAN VIEW CT
Sale Notice <i>(dated)</i> JUNE 26, 2014
BLM District COOS BAY

<input type="checkbox"/> Sealed Bid for Sealed Bid Sale	<input checked="" type="checkbox"/> Written Bid for Oral Auction Sale
Time for opening sealed bids <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Sale commences 10:00 <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
On <i>(date)</i> Place	On <i>(date)</i> 07/25/2014 Place DISTRICT OFFICE

In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated timber/vegetative resource on the tract specified above.

Required bid deposit is _____ and is enclosed in the form of:
☐ cash ☐ money order ☐ cashier's check ☐ certified check ☐ bank draft
☐ bid bond of corporate surety on approved list of the United States Treasury ☐ guaranteed remittance approved by the authorized officer.

IT IS AGREED That the bid deposit shall be retained by the United States as liquidated damages if the bid is accepted and the undersigned fails to execute and return the contract, together with any required performance bond and any required payment within 30 days after the contract is received by the successful bidder. It is understood that no bid for less than the appraised price on a unit basis per species will be considered. If the bid is rejected the deposit will be returned.

BID SCHEDULE – LUMP SUM SALE

NOTE: Bidders should carefully check computations in completing the Bid Schedule

BID SUBMITTED					ORAL BID MADE	
PRODUCT SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
WESTERN HEMLOCK	MBF	2,606	X	=	X	=
DOUGLAS-FIR	MBF	1,779	X	=	X	=
RED ALDER	MBF	243	X	=	X	=
GRAND FIR	MBF	72	X	=	X	=
PORT-ORFORD-CEDAR	MBF	9	X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

If sale contract is executed, undersigned is liable for total purchase price even though the quantity cut, removed, or designated for taking is more or less than the total estimated volume or quantity shown above. Undersigned certifies bid was arrived at by bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. In submitting or confirming this bid, undersigned agrees to the foregoing provisions, applicable regulations, and certifies that he is authorized to act as, or on behalf of, the bidder.

Bid submitted on *(date)*

(Check appropriate box, sign in ink, and complete the following)

<input type="checkbox"/> Signature, if firm is individually owned	Name of firm <i>(type or print)</i>
<input type="checkbox"/> Signatures, if firm is a partnership or L.L.C.	Business address, include zip code <i>(type or print)</i>
<input type="checkbox"/> Corporation organized under the state laws of	<i>(To be completed following oral bidding)</i>
Signature of Authorized Corporate Signing Officer	I HEREBY confirm the above oral bid By <i>(signature)</i>
Title	Date
Submit bid, in <i>duplicate</i> , to qualify for either an oral auction or sealed bid sale together with the required bid deposit made payable to the Department of the Interior – BLM. Oral Auction – Submit to Sales Supervisor prior to closing of qualifying period for tract.	Sealed Bid – Send to District Manager, who issued the sale notice, in a sealed envelope marked on the outside: (1) “Bid for Timber” or (1a) “Vegetative Resources Other Than Timber” (2) Time bids are to be opened (3) Legal description

NOTICES

The Privacy Act and 43 CFR 2.48(d) require that you be furnished with the following information in connection with the information required by this form.

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

PRINCIPAL PURPOSE: To qualify an oral auction bidder, and then if successful, to bind bidder to certain contract conditions.

ROUTINE USES: To determine that an individual is qualified to participate in oral auction bidding, and, as surety that bidder will fulfill contract requirements.

EFFECT OF NOT PROVIDING INFORMATION: Filing this deposit and bid information is necessary only when an individual wishes to participate in a sealed or auction bid sale for timber or vegetative resources.

(Continued on page 3)

(Form 5440-9, page 2)

INSTRUCTIONS TO BIDDERS

1. **AUTHORITY** – Timber located on the revested Oregon and California Railroad Grant Lands and on the reconveyed Coos Bay Wagon Road Grant Lands is administered and sold pursuant to authority of the Act of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181a); timber located on other lands and other vegetative resources on all public lands of the United States under jurisdiction of the Bureau of Land Management are administered and sold pursuant to authority of the Act of July 31, 1947 (61 Stat. 681), as amended, by the Act of July 23, 1955 (69 Stat. 367; 30 U.S.C. 601 et. seq.). Regulations of the Secretary of the Interior governing sale of timber are codified in 43 CFR Group 5400.

2. **QUALIFICATIONS OF BIDDERS** – A bidder for sale of timber/vegetative resources must be either (a) a citizen of the United States, (b) a partnership composed wholly of such citizens, (c) an unincorporated association composed wholly of such citizens, or (d) a corporation authorized to transact business in the State in which the timber/vegetative resource is located.

3. **INSPECTION OF TIMBER/VEGETATIVE RESOURCES** – Bidder is invited, urged, and cautioned to inspect the timber/vegetative resource prior to submitting a bid. By executing the timber/vegetative resource sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the timber/vegetative resource and his opinion of its value.

4. **DISCLAIMER OF WARRANTY** – Government expressly disclaims any warranty of the fitness of the designated timber/vegetative resource for any purpose of the bidder; all timber/vegetative resources are to be sold “As Is” without any warranty of merchantability by Government. Any warranty as to the quantity or quality of timber/vegetative resource to be sold is expressly disclaimed by Government.

5. **BIDS** – Sealed or written bids for not less than the advertised appraised price, per timber/vegetative resource must be submitted in duplicate to the District Manager who issued *Timber/Vegetative Resource Sale Notice*.

(a) **Sealed Bid Sales** – Bids will be received until time for opening which is set out in the Notice. Enclose both copies of bid with required bid deposit in a sealed envelope marked on the outside *Bid for Timber/Vegetative Resources*, time bid is to be opened, tract number, and legal description of land on which timber/vegetative resource is located. In event of a tie, the high bidder shall be determined by lot from among those who submitted the tie bids.

(b) **Auction Sales** – Submission of the required bid deposit and a written bid is required to qualify for oral bidding. Oral bidding shall begin from the highest written bid. No oral bid will be considered which is not higher than the preceding bid. In the event there is a tie in high written bids, and no oral bidding occurs, the bidder who was the first to submit his bid deposit and written bid shall be declared the high bidder. If the officer conducting the sale cannot determine who made the first submission of high tie written bids, the high bidder shall be determined by lot. High bidder must confirm his bid, in writing, immediately upon being declared high bidder.

(c) Except as otherwise provided in 43 CFR 5442.2, bids will not be considered in resale of timber/vegetative resource remaining from an uncompleted contract from any person or affiliate of such person who failed to complete the original contract because of (1) cancellation for the purchaser's breach or (2) through failure to complete payment by expiration date.

(d) When it is in the interest of the Government to do so, it may reject any and all bids and may waive minor deficiencies in bids or in sale advertisement.

6. **BID FORMS** – All sealed, written bids, and confirmation of oral bids shall be submitted on forms provided by Government.

(a) **Lump Sum Sales** – Bids shall specify (1) Bureau of Land Management estimated volume, (2) price per unit, and (3) total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, high bidder shall be liable for total purchase price, including any adjustment which may be made as a result of reappraisal if an extension of time is granted, even though quantity of timber/vegetative resource actually cut, removed, or designated for taking is more or less than the estimated volume or quantity listed.

(b) **Timber Scale Sales** – Bids must state price per thousand board feet that will be paid for each species. High bidder will be determined by multiplying bid price per thousand board feet per species by Bureau of Land Management

estimate of volume of each species. Purchaser shall be liable for purchase price of all merchantable timber sold under contract even though all such timber is not actually cut and removed prior to expiration of time for cutting and removal as specified in contract.*

7. **BID DEPOSIT** – All bidders must make a deposit of not less than the amount specified in the *Timber/Vegetative Resource Notice*. Deposit may be in the form of cash, money orders, bank drafts, cashiers or certified checks made payable to the Department of the Interior – BLM, bid bonds of a corporate surety shown on the approved list of the United States Treasury Department*, or any approved guaranteed remittance approved by the Contracting Officer. Upon conclusion of bidding, the bid deposit of all bidders, except high bidder, will be returned. The cash deposit of the successful bidder may be applied toward the required sale deposit and/or the purchase price. Cash not applied to the sale deposit or the purchase price, or a corporate surety bid bond, will be returned at the time the contract is signed by the Government.

8. **AWARD OF CONTRACT** – Government may require high bidder to furnish such information as is necessary to determine the ability of bidder to perform the obligation of contract. Contract will be awarded to high bidder, unless he is not qualified or responsible or unless all bids are rejected. If high bidder is not qualified or responsible or fails to sign and return the contract together with required performance bond and any required payment, contract may be offered and awarded to the highest bidders qualified, responsible, and willing to accept the contract.

9. **TIMBER/VEGETATIVE RESOURCE SALE CONTRACT** – To be executed by purchaser, has been prepared by Government, and may be examined in the District Manager's office.

10. **PERFORMANCE BOND** –

(a) A performance bond in an amount of not less than 20 percent of total purchase price is required, but the amount of the bond shall not be in excess of \$500,000, except when the purchaser opts to increase the minimum bond to permit cutting prior to payment as provided in 43 CFR 5451.2, or in the event the purchaser is a holder of an unresolved default the bond may be increased as provided in 43 CFR 5450.1(b). Performance bond may be (1) bond of a corporate surety shown on approval list issued by the United States Treasury Department and executed on an approved standard form, (2) personal surety bond executed on an approved standard form if Government determines principals and bondsman are capable of carrying out the terms of the contract, (3) cash bonds, (4) negotiable securities of the United States, or (5) any guaranteed remittance approved by the Contracting Officer.

(b) If purchaser elects to cut timber without skidding or yarding it to a loading point or removing it prior to the payment of the second or subsequent installments, Government shall require an increase in amount of performance bond initially required by an amount equal to the value of timber to be cut. Such increase must be on a bond rider form supplied by Government and be approved, in writing, by Government prior to cutting timber covered by the bond increase. This increased amount of bond shall be used to assure payment for timber cut in advance of payment.*

11. **PAYMENT BOND** – If purchaser elects to (a) cut and remove timber, or (b) remove timber already cut which has been secured by an increased performance bond as provided in paragraph 10(b) above, before payment of the second or subsequent installments, Government shall require a payment bond on a form supplied by Government. Purchaser shall obtain written approval from Government of payment bond prior to cutting and/or removal of timber covered by the bond. Payment bond shall be used to assure payment for timber cut and/or removed in advance of payment.*

12. **PAYMENT OF PURCHASE PRICE** – For sales of \$500 or more, Government may allow payment by installments. Except as discussed in paragraphs 10 and 11 above, no part of any timber/vegetative resource sold may be severed, cut, or removed unless advance payment has been made as provided in contract.

13. **LIQUIDATED DAMAGES** – Within thirty (30) days from receipt of *Timber/Vegetative Resources Sale Contract*, the successful bidder shall sign contract and return it to Government, together with required bond and any required payment. If successful bidder fails to comply within the stipulated time, his bid deposit shall be retained by Government as liquidated damages.

14. **NINETY-DAY SALES** – If no bid is received within time specified in the advertisement of sale and if Government determines that there has been no significant rise in the market value of timber/vegetative resource, it may, in its discretion, keep the sale open, not to exceed ninety (90) days.

15. **UNAUTHORIZED USE OF GOVERNMENT PROPERTY** – A sale may be refused to high bidder who has been notified that he has failed to make satisfactory arrangements for payment of damages resulting from unauthorized use of, or injury to, property of the United States.

16. **EQUAL OPPORTUNITY CLAUSE** – This contract is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the nondiscrimination clauses. Copies of this order may be obtained from the District Manager. 43 CFR 60-1.7(b) requires that the Equal Opportunity Compliance Report Certification will be completed by prospective contractors. Certification may be obtained from District Manager.

17. **LOG EXPORT** – All timber offered for sale except as noted in the *Timber Sale Notice* is restricted from export from the United States in the form of unprocessed timber and cannot be used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs, and pulp logs; (2)

cants or squares to be subsequently remanufactured exceeding eight and three quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end product use; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimensions or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 common or better. Timber manufactured into the following will be considered processed: (1) lumber and construction timbers, regardless of size, manufactured to standards and specifications suitable for end product uses; (2) chips, pulp and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacture of eight and three quarters (8-3/4) inches in thickness or less; or (6) shakes and shingles. In event purchaser wishes to sell any or all of timber restricted from export in the form of unprocessed timber, the buyer, exchanges, or recipient shall be required to comply with contractual provisions relating to “*unprocessed timber*”. Special reporting, branding and painting of logs may be included in contract provisions.*

18. **DETAILED INFORMATION** – Detailed information concerning contract provisions, bid, performance bond forms, tract location maps, and access conditions may be obtained from the District Manager. All persons interested in bidding on the products listed are encouraged to familiarize themselves with all such detailed information.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Timber - Sale - Summary

Legal Description

Forest Type	Township	Range	Section	Subdivision
PD	31 S	14 W	14	Lots 5 & 6
O&C	31 S	14 W	15	Lots 5, 6, 7, 8, 9
O&C	31 S	14 W	22	NE1/4, NE1/4SE1/4
O&C	31 S	14 W	23	SW1/4NW1/4, NW1/4SW1/4

Cutting Volume (16' MBF)

Unit	WH	DF	RA	GF	POC				Total	Regen	Partial	ROW
1	456	295	39	11	2				803	0	35	0
2	65	42	5	1					113	0	5	0
3	130	84	11	3					228	0	10	0
4	300	194	26	7	1				528	0	23	0
5	873	565	75	20	3				1,536	0	67	0
6	443	287	38	10	2				780	0	34	0
7	208	135	18	5	1				367	0	16	0
RW	131	177	31	15					354	0	0	5

Totals	2,606	1,779	243	72	9				4,709	0	190	5
--------	-------	-------	-----	----	---	--	--	--	-------	---	-----	---

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Logging Costs per 16' MBF

Stump to Truck	\$	231.73
Transportation	\$	76.53
Road Construction	\$	23.23
Road Amortization	\$	5.56
Road Maintenance	\$	16.25

Other Allowances :

Habitat Creation	\$ 0.22
Landing pullback	\$ 1.32
Misc	\$ 3.09
Slash Disposal	\$ 1.05
Vehicle Washing	\$ 0.82
Total Other Allowances :	\$ 6.49

Total Logging Costs per 16' MBF

\$ 359.79

Utilization Centers

Center #1 : North Bend, OR	75 Miles
Center #1 : Coos Bay, OR	60 Miles
Weighted distance to Utilization Centers	74

Length of Contract

Cutting and Removal Time	36 Months
Personal Property Removal Time	1 Months

Profit & Risk

Total Profit & Risk		14 %
Basic Profit & Risk	11 % + Additional Risk	3 %
Back Off		0 %

Tract Features

Avg Log	Western Hemlock : 42 bf	All : 36 bf
Recovery	Western Hemlock : 92 %	All : 92 %
Salvage	Western Hemlock : 0 %	All : 0 %
Avg Volume (16' MBF per Acre)		24
Avg Yarding Slope		30 %
Avg Yarding Distance (feet)		224
Avg Age		60
Volume Cable		93 %
Volume Ground		7 %
Volume Aerial		0 %
Road Construction Stations		77.02
Road Improvement Stations		0.00
Road Renovation Stations		228.00
Road Decommission Stations		167.40

Cruise

Cruised By	Wooley, Davis, Morgan
Date	12/02/2013
Type of Cruise	VP,3P,BLM100
County, State	Curry, OR

Net Volume

Green (16' MBF)	4,709
Salvage (16' MBF)	0
Western Hemlock Peeler	0
Export Volume	9
Scaling Allowance (\$0.75 per 16' MBF)	\$3,531.75

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Stumpage Summary

Stumpage Computation (16' MBF)

Species	Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Cost	(+) Marginal Log Value	(-) Back Off	Appraised Price	Appraised Value
WH	16,931	2,606	\$ 438.05	\$ 61.33	\$ 359.79			\$ 43.80	\$ 114,142.80
DF	19,672	1,779	\$ 505.37	\$ 70.75	\$ 359.79			\$ 74.80	\$ 133,069.20
RA	3,889	243	\$ 373.28	\$ 52.26	\$ 359.79			\$ 37.30	\$ 9,063.90
GF	323	72	\$ 402.80	\$ 56.39	\$ 359.79			\$ 40.30	\$ 2,901.60
POC	276	9	\$ 415.19	\$ 58.13	\$ 359.79			\$ 41.50	\$ 373.50
Totals	41,091	4,709							\$ 259,551.00

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
Grand Fir				35.0	54.0	11.0
Port-Orford-cedar				16.0	30.0	54.0
Douglas-fir				12.0	66.0	22.0
Western Hemlock				28.0	60.0	12.0
Red Alder		10.0	27.0	63.0		

Marginal Log Volume

Species	Grade #7	Grade #8
Grand Fir		
Port-Orford-cedar		
Douglas-fir		
Western Hemlock		
Red Alder		

Appraised By : Sill, Tom	Date : 04/22/2014
Area Approval By : Wooley, Michael	Date : 04/28/2014
District Approval By : Morgan, Estella	Date : 06/17/2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Coos Bay
Ocean View CT
ORC00-TS-2014.0034

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Western Hemlock	16,931	2,606	2,283	
Douglas-fir	19,672	1,779	1,491	
Red Alder	3,889	243	189	
Grand Fir	323	72	58	
Port-Orford-cedar	276	9	7	
Total	41,091	4,709	4,028	

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
5,094	41,091	123	11.2	5,047	138,353	36

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
138,353	1,241	139,594	3.4	4,709	5,094	92 %

Western Hemlock

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
2,829	16,931	167	11.6	2,800	66,588	42

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
66,588	738	67,326	4.0	2,606	2,829	92 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
1		35		35
2		5		5
3		10		10
4		23		23
5		67		67
6		34		34
7		16		16
RW			5	5
Totals :		190	5	195