

TIMBER NOTICE OF SALE

SALE NAME: *SIDEHILL SALMON*

AGREEMENT NO: 30-091789

AUCTION: April 26, 2016 starting at 10:00 a.m., **COUNTY:** Snohomish
South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 18 miles south of Duvall.

PRODUCTS SOLD AND SALE AREA: All timber, except leave trees marked with blue paint or bounded out by yellow leave tree area tags, and downed timber existing more than 5 years from the day of sale, bounded by the following: white timber sale boundary tags, pink flagging and timber type change in Unit #1. All timber bounded by orange right of way tags on part(s) of Sections 25 all in Township 27 North, Range 7 East, W.M., containing 44 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BV-SFIS-US09000572)

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	MBF by Grade								
				1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	18.9	7	1,438				1		1,011	343	77	6
Hemlock	12.9	7	158						56	62	39	
Red alder	13.9		77						11	9	50	7
Red cedar	17.6		76							67	9	
Maple	9.7		34						3		23	8
Cottonwood	31		16						10			6
Sale Total			1,799									

MINIMUM BID: \$376,000.00 **BID METHOD:** Sealed Bids

PERFORMANCE SECURITY: \$100,000.00 **SALE TYPE:** Lump Sum

EXPIRATION DATE: October 31, 2017 **ALLOCATION:** Export Restricted

BID DEPOSIT: \$37,600.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Cable equipment with lateral and downhill yarding capabilities. Tracked shovels may only be used for road and landing construction. Yarding may be restricted if rutting becomes excessive, per clause H-017.

Falling, yarding and timber haul will not be permitted from November 1st to April 30th, nor on weekends or state recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1st to April 30th, the Purchaser shall comply with a Winter Operating Plan to include further protection of water, soil, roads and other forest assets at the Purchaser's expense. Sedimentation preventative measures must be in place prior to commencing any winter operations.

ROADS: 28.71 stations of optional construction. 129.35 stations of pre-haul and post-haul maintenance. 12.29 stations of decommissioning, if constructed. Purchaser maintenance on all roads used. Rock for this proposal may be obtained from the state owned 7500

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Rock Pit or any commercial rock source. Rock source development may be obtained from the 6020 Road, see Road Plan clause 6-11.

Road construction and rock haul will not be permitted from November 1st to April 30th, nor on weekends or state recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1st to April 30th, the Purchaser shall comply with a Winter Operating Plan to include further protection of water, soil, roads and other forest assets at the Purchaser's expense. Sedimentation preventative measures must be in place prior to commencing any winter operations.

ACREAGE DETERMINATION

CRUISE METHOD: Unit acreage was determined by traversing boundaries by GPS. Right of way acreage was determined by multiplying length times width. Traverse GPS files are available upon request by emailing rachel.mason@dnr.wa.gov. See cruise narrative for cruise method.

FEES: \$31,932.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: During active operations, Purchaser shall install and maintain road signs per Road Plan clause 7-1.

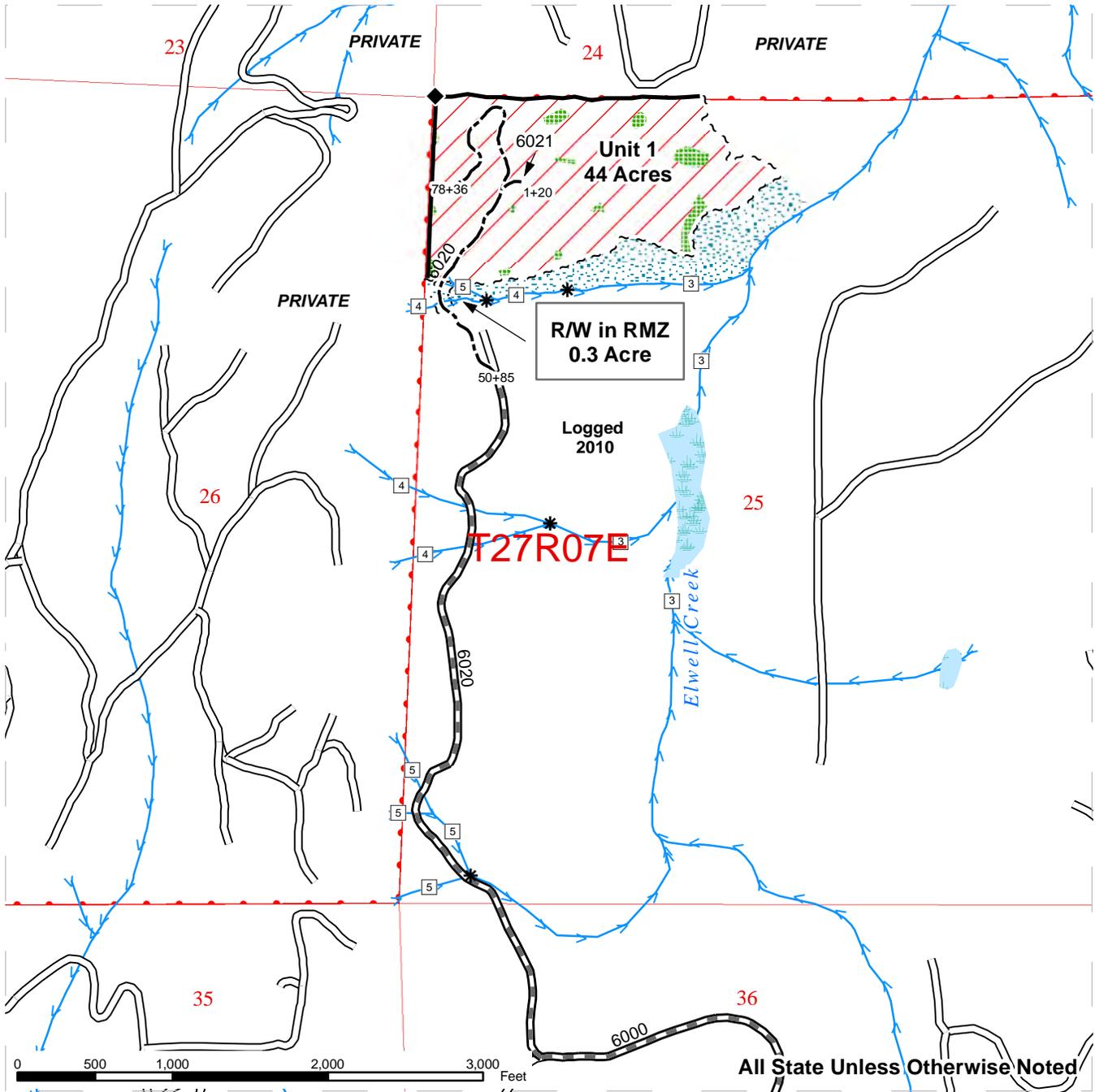
Purchaser shall cut vine maple and sever from the stump within the harvest unit.

See map for gate locations. Gate keys may be obtained by contacting the South Puget Sound Region Office at (360) 825-1631 or by contacting Zach Beebe at (253) 736-4830.

TIMBER SALE MAP

SALE NAME: Sidehill Salmon
AGREEMENT#: 30-091789
TOWNSHIP(S): T27NR07E, T27NR08E
TRUST(S): State Forest Transfer (01)

REGION: South Puget Sound
COUNTY(S): Snohomish
ELEVATION RGE: 290 - 930 ft

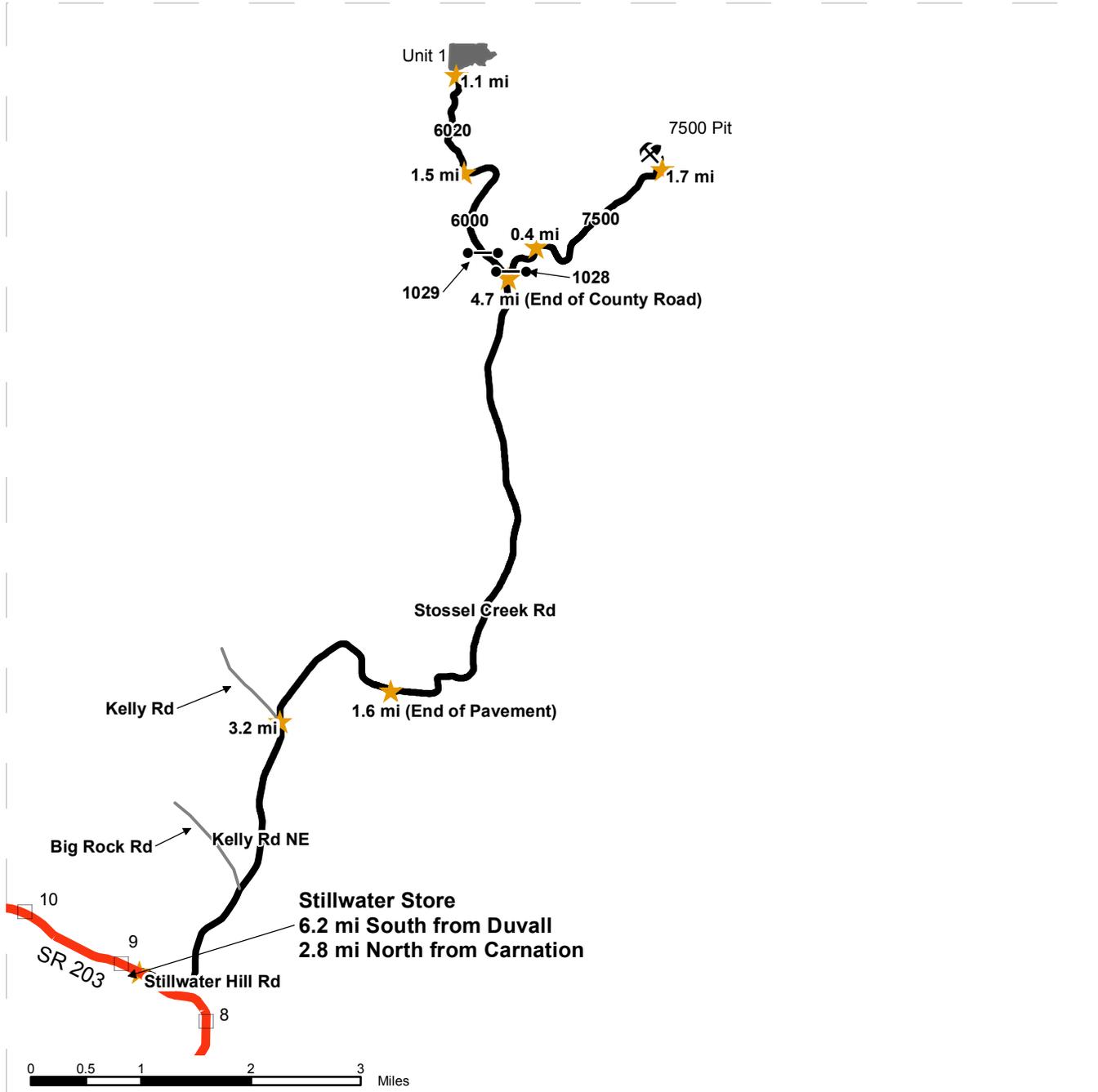


Timber Sale Area	Existing Roads	Streams
Riparian Mgt Zone	Required Pre-Haul Maintenance	Wetland
Leave Tree Areas Marked with Yellow "Leave Tree Area" Tags	Optional Construction	
White Timber Sale Boundary Tags	Survey Corner	
Timber Type Change marked with pink flagging	DNR Managed Lands	
Orange Right of Way Tags	Stream Type	
	Stream Type Break	

DRIVING MAP

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- Timber Sale Unit
- Highways
- Haul Route
- Existing roads
- Milepost Markers
- Gate (Master 383)
- Rock Pit
- Distance Indicator

DRIVING DIRECTIONS:

Unit 1 - Traveling North on State Route 203 from Carnation turn right onto Stillwater Hill Rd after 2.8 miles. Stillwater Hill Rd becomes Kelly Rd NE. Travel 3.2 miles turn right onto Stossel Creek County Rd. Travel 6.3 miles then turn left onto the 6000 Rd. Gate 1029B will be 300 feet further, gate lock type Master 383. Travel 1.5 miles then turn right onto the 6020 Rd. The end of the 6020 Rd is 1.1 miles further and the unit is north, past the RMZ.

7500 Rock Pit - From the junction of the 6000 / 7000 / Stossel Creek Rd, travel north on the 7000 Rd through gate # 1028, gate lock type Master 383. Continue on the 7000 road for 0.4 mile. Turn right onto the 7500 road. Continue for 1.7 miles, the 7500 Rock Pit will be on the right.

**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

**BILL OF SALE AND CONTRACT FOR
FOREST PRODUCTS**

Export Restricted Lump Sum AGREEMENT NO. 30-091789

SALE NAME: SIDEHILL SALMON

**THE STATE OF WASHINGTON DEPARTMENT OF NATURAL
RESOURCES, HEREINAFTER ACTING SOLELY, IN ITS PROPRIETARY
CAPACITY, STATE, AND PURCHASER, AGREE AS FOLLOWS:**

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

Bill of Sale and Contract for Forest Products: Contract between the Purchaser and the State, which sets forth the procedures and obligations of the Purchaser in exchange for the right to remove forest products from the sale area. The Bill of Sale and Contract for Forest Products may include a Road Plan for any road construction or reconstruction, where applicable.

Contract Administrator: Region Manager's designee responsible for assuring that the contractual obligations of the Purchaser are met.

Forest Product: Any material derived from the forest for commercial use.

Purchaser: The company or individual that has entered a Bill of Sale and Contract for Forest Products with the State for the right to harvest and remove forest products from the timber sale area.

Road Construction: Includes building new and maintaining existing forest roads and associated work that may be optional or required as described in the Road Plan.

State: The Washington State Department of Natural Resources, landowner and seller of Forest Products from the timber sale area. The State is represented by the Region Manager as designated on the contract signature page. Contractual obligations to the State are enforced by the Region Manager or the designated Contract Administrator.

Subcontractor: Individual or company employed by the Purchaser to perform a portion or all of the services required by The Bill of Sale and Contract for Forest Products. The Purchaser is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

G-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on April 26, 2016 and the sale was confirmed on _____. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All timber, except leave trees marked with blue paint or bounded out by yellow leave tree area tags, and downed timber existing more than 5 years from the day of sale, bounded by the following: white timber sale boundary tags, pink flagging and timber type change in Unit #1. All timber bounded by orange right of way tags, located on approximately 44 acres on part(s) of Section 25 in Township 27 North, Range 7 East W.M. in Snohomish County(s) as designated on the sale area and as shown on the attached timber sale map.

All forest products described above from the bole of the tree that meet or exceed 2 inches diameter inside bark on the small end are eligible for removal. Above ground components of a tree that remain as by-products after the manufacture of logs, including but not limited to tree tops, branches, limbs, needles, leaves, stumps, are not eligible for removal under the terms of this contract.

Forest products purchased under a contract that is designated as export restricted shall not be exported until processed. Forest products purchased under a contract that is designated as exportable may be exported prior to processing.

G-020 Inspection By Purchaser

Purchaser hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products being sold. Purchaser further warrants to the State that they enter this contract based solely upon their own judgment of the value of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products being sold. Purchaser also warrants to the State that they enter this contract without any reliance upon the volume estimates, acreage estimates, appraisals, pre-bid documentation, or any other representations by the State Department of Natural Resources.

G-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2017.

G-040 Contract Term Adjustment - No Payment

Purchaser may request an adjustment in the contract term. A claim must be submitted in writing and received by the State within 30 days after the start of interruption or delay. The claim must also indicate the actual or anticipated length of interruption or delay. The State may grant an adjustment without charge only if the cause for contract term adjustment is beyond Purchaser's control. The cause must be one of the following and the adjustment may be granted only if operations or planned operations under this contract are actually interrupted or delayed:

- a. Road and bridge failures which deny access.
- b. Access road closures imposed by road owner.
- c. Excessive suspensions as provided in clause G-220.
- d. Regulatory actions not arising from Purchaser's failure to comply with this contract which will prevent timber harvest for a period less than 6 months.

G-051 Contract Term Extension - Payment

Extensions of this contract term may be granted only if, in the judgment of the State, Purchaser is acting in good faith and is endeavoring to remove the forest products conveyed. The term of this contract may be extended for a reasonable time by the State if all of the following conditions are satisfied:

- a. A written request for extension of the contract term must be received prior to the expiration date of the contract.
- b. Completion of all required roads and compliance with all contract and regulatory requirements.
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the total contract price.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the total contract price.

The payments shall not include the initial deposit which shall be held according to the provisions of RCW 79.15.100.

- d. Payment of an amount based on 12 percent interest per annum on the unpaid portion of the total contract price.

All payments, except the initial deposit, will be deducted from the total contract price to determine the unpaid portion of the contract.

- e. Payment of \$665.00 per acre per annum for the acres on which an operating release has not been issued within the harvest area.
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

G-053 Surveys - Sensitive, Threatened, Endangered Species

Whenever the State determines that a survey for sensitive, threatened, or endangered species is prudent, or when Purchaser determines a survey is prudent and the State agrees, Purchaser shall perform such surveys at Purchaser's expense and to the standards required by the State. The survey information shall be supplied to the State.

G-060 Exclusion of Warranties

The PARTIES AGREE that the IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and ALL OTHER WARRANTIES EXPRESSED OR IMPLIED ARE EXCLUDED from this transaction and shall not apply to the goods sold. For example, THE FOLLOWING SPECIFIC MATTERS ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."
- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents are estimates only, provided solely for administrative and identification purposes.
- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any threatened or endangered species, or the presence of their habitat, within the sale area.

- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-062 Habitat Conservation Plan

The State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address state trust land management issues relating to compliance with the Federal Endangered Species Act. The activities to be carried out under this contract are located within the State's HCP area and are subject to the terms and conditions of the HCP, and the Services' Incidental Take Permit Nos. 812521 and 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the State's Regional Offices and the administrative headquarters in Olympia, Washington.

By signing this contract, Purchaser agrees to comply with the terms and conditions of the ITP, and the HCP, which shall become terms of this contract. The State agrees to authorize the lawful activities of the Purchaser carried out pursuant to this contract, PROVIDED the Purchaser remains in compliance with the terms and conditions of both the HCP and ITP. The requirements set forth in this contract are intended to comply with the terms and conditions of the HCP and ITP. Accordingly, non-compliance with the terms and conditions of the HCP and ITP will render the authorization provided in this paragraph void, be deemed a breach of the contract and may subject Purchaser to liability for violation of the Endangered Species Act.

Any modifications to the contract shall be proposed in writing by Purchaser, shall continue to meet the terms and conditions of the HCP and ITP, and shall require the prior written approval of the Region Manager before taking effect.

G-063 Incidental Take Permit Notification Requirements

- a. Purchaser shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITP) that are discovered within the area covered by the State's Habitat Conservation Plan (HCP), including, but not limited to: locations of occupied murrelet habitat; spotted owl nest sites; wolves; grizzly bears; nests, communal roosts, or feeding concentrations of bald eagles; peregrine falcon nests; Columbian white-tailed deer; Aleutian Canada geese; Oregon silverspot butterflies; and additional stream reaches found to contain bull trout. Purchaser is required to notify the Contract Administrator upon discovery of any fish species found in streams or bodies of water classified as non-fish bearing. In all circumstances, notification must occur within a 24 hour time period.

- b. Upon locating any live, dead, injured, or sick specimens of any permit species covered by the ITP, Purchaser shall immediately notify the Contract Administrator. Purchaser shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Purchaser may be required to take certain actions to help the Contract Administrator safeguard the well-being of any live, injured or sick specimens of any permit species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to Purchaser by the Contract Administrator during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.
- c. Purchaser shall refer to a specific ITP number, PRT-812521 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITP shall be clearly presented and explained to Purchaser by Contract Administrator during the Pre-Work Conference as per contract clause G-330. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Purchaser to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Purchaser may have about the ITP should be directed to the Contract Administrator.

G-064 Permits

Purchaser is responsible for obtaining any permits not already obtained by the State that relate to Purchaser's operation. Forest Practice Application / Hydraulic Project Approval permits obtained by the State shall be transferred to Purchaser. Purchaser is responsible for all permits, amendments and renewals.

G-065 Regulatory Disclaimer

The State disclaims any responsibility for, or liability relating to, regulatory actions by any government agency, including actions pursuant to the Forest Practices Act, Ch. 76.09 RCW that may affect the operability of the timber sale.

G-066 Governmental Regulatory Actions

a. Risk

Purchaser shall be responsible for any increased operational costs arising from any applicable foreign or domestic governmental regulation or order that does not cause contract performance to become commercially impracticable or that does not substantially frustrate the purpose of the contract. If impracticability or frustration results from Purchaser's failure to comply with this contract, Purchaser shall remain responsible for payment of the total contract price notwithstanding the impracticability or frustration.

b. Sale Area

When portions of the sale area become subject to a foreign or domestic governmental regulation or order that will likely prevent timber harvest for a period that will exceed the expiration date of this contract, and Purchaser has complied with this contract, the following shall apply:

- i. RCW 79.15.140 shall govern all adjustments to the contract area.

c. Adjustment of Price

The State shall adjust the total contract price by subtracting from the total contract price an amount determined in the following manner: The State shall cause the timber sale area subject to governmental regulation or order to be measured. The State shall calculate the percentage of the total sale area subject to the governmental regulation or order. The State shall reduce the total contract price by that calculated percentage. However, variations in species, value, costs, or other items pertaining to the affected sale area will be analyzed and included in the adjustment if deemed appropriate by the State. The State will further reduce the total contract price by the reasonable cost of unamortized roads Purchaser constructed but was unable to fully use for removing timber. A reduction in total contract price terminates all of the Purchaser's rights to purchase and remove the timber and all other interest in the affected sale area.

G-070 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to Purchaser will be limited to a return of the initial deposit, unapplied payments, and credit for unamortized improvements made by Purchaser. The State shall not be liable for any damages, whether direct, incidental or consequential.

G-080 Scope of State Advice

No advice by any agent, employee, or representative of the State regarding the method or manner of performing shall constitute a representation or warranty that said method, manner or result thereof will conform to the contract or be suitable for Purchaser's purposes under the contract. Purchaser's reliance on any State advice regarding the method or manner of performance shall not relieve Purchaser of any risk or obligation under the contract. Purchaser retains the final responsibility for its operations under this contract and State shall not be liable for any injuries resulting from Purchaser's reliance on any State advice regarding the method or manner of performance.

G-091 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary. The cumulative changes to the sale area during the term of the contract shall not exceed more than four percent of the original sale area. If the sale area is increased, the added forest products become a part of this contract. The State shall determine the volume added and shall

calculate the increase to the total contract price using the rates set forth in clause G-101, G-102, or G-103. If the sale area is reduced, the State shall determine the volume to be reduced. The State shall calculate the reduction to the total contract price using the rates set forth in clause G-101, G-102, or G-103.

G-101 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products become a part of this contract and the Scribner log scale volume, as defined by the Northwest Log Rules Advisory Group, shall be determined by the Contract Administrator. Added forest products shall be paid for at the following contract payment rates per Mbf Scribner log scale.

The pricing schedule has not been set for the sale.

G-111 Title and Risk of Loss

Title to the forest products under this contract passes to the Purchaser after they are removed from the sale area, if adequate advance payment or payment security has been provided to the State under this contract. Purchaser bears all risk of loss of, or damage to, and has an insurable interest in, the forest products described in this contract from the time the sale is confirmed under RCW 79.15.120. Breach of this contract shall have no effect on this provision.

G-116 Sustainable Forestry Initiative® (SFI) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative program Standard under certificate number: BV-SFIS-US09000572.

Purchaser shall have at least one person regularly on-site during active operations that have completed training according to the requirements outlined within the SFI® program Standard. Purchaser shall designate in writing the name(s) of the individual(s) who will be on-site and provide proof of their successful completion of an approved training program prior to active operations.

G-120 Responsibility for Work

All work, equipment, and materials necessary to perform this contract shall be the responsibility of Purchaser. Any damage to improvements, except as provided in clause G-121 or unless the State issues an operating release pursuant to clause G-280, shall be repaired promptly to the satisfaction of the State and at Purchaser's expense.

G-121 Exceptions

Exceptions to Purchaser's responsibility in clause G-120 shall be limited exclusively to the following. These exceptions shall not apply where road damage occurs due to Purchaser's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

Road is defined as the road bed, including but not limited to its component parts, such as subgrade, ditches, culverts, bridges, and cattle guards.

For the purposes of this clause, damage will be identified by the State and is defined as:

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction completed to the point that authorization to haul has been issued;
2. Caused by a single event from forces beyond the control of Purchaser, its employees, agents, or invitees, including independent contractors; and
3. Includes, but is not limited to natural disasters such as earthquakes, volcanic eruptions, landslides, and floods.

The repair work identified by the State shall be promptly completed by Purchaser at an agreed price. The State may elect to accomplish repairs by means of State-provided resources. The State will bear the cost to repair damages caused by a third party. In all other cases, the Purchaser shall bear responsibility for the costs as described below.

For each event, Purchaser shall be solely responsible for the initial \$5,000 in repairs. For repairs in excess of \$5,000, the parties shall share equally the portion of costs between \$5,000 and \$15,000. The State shall be solely responsible for the portion of the cost of repairs that exceed \$15,000.

Nothing contained in clauses G-120 and G-121 shall be construed as relieving Purchaser of responsibility for, or damage resulting from, Purchaser's operations or negligence, nor shall Purchaser be relieved from full responsibility for making good any defective work or materials. Authorization to haul does not warrant that Purchaser built roads are free from material defect and the State may require additional work, at Purchasers expense regardless of cost, to remedy deficiencies at any time.

G-140 Indemnity

To the fullest extent permitted by law, Purchaser shall indemnify, defend and hold harmless State, agencies of State and all officials, agents and employees of State, from and against all claims arising out of or resulting from the performance of the contract. "Claim" as used in this contract means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable for bodily injury, sickness, disease or death, or injury to or destruction of tangible property including loss of use resulting therefrom. Purchasers' obligations to indemnify, defend, and hold harmless includes any claim by Purchasers' agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Purchasers' or any subcontractors' performance or failure to perform the contract. Purchasers' obligation to indemnify, defend, and hold harmless State shall not be eliminated or reduced by any actual or alleged concurrent negligence of State or its agents, agencies, employees and officials. Purchaser waives its immunity under Title 51 RCW to the extent it is

required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

G-150 Insurance

Purchaser shall, at its cost and expense, buy and maintain insurance of the types and amounts listed below. Failure to buy and maintain the required insurance may result in a breach and/or termination of the contract at State's option. State may suspend Purchaser operations until required insurance has been secured.

All insurance and surety bonds should be issued by companies admitted to do business within the State of Washington and have a rating of A-, Class VII or better in the most recently published edition of Best's Reports. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC.

The State of Washington, Department of Natural Resources region office of sale origin shall be provided written notice before cancellation or non-renewal of any insurance referred to therein, in accord with the following specifications:

1. Insurers subject to Chapter 48.18 RCW (admitted and regulated by the Insurance Commissioner): The insurer shall give the State 45 days advance notice of cancellation or non-renewal. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.
2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

Before starting work, Purchaser shall furnish State of Washington, Department of Natural Resources with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified in the contract. Insurance coverage shall be obtained by the Purchaser prior to operations commencing and continually maintained in full force until all contract obligations have been satisfied or an operating release has been signed by the State.

Purchaser shall include all subcontractors as insured under all required insurance policies, or shall furnish separate certificates of insurance and endorsements for each subcontractor. Subcontractor(s) must comply fully with all insurance requirements stated herein. Failure of subcontractor(s) to comply with insurance requirements does not limit Purchaser's liability or responsibility.

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured on all general liability, excess, umbrella, and property insurance policies.

All insurance provided in compliance with this contract shall be primary as to any other insurance or self-insurance programs afforded to or maintained by State. Purchaser waives all rights against State for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

By requiring insurance herein, State does not represent that coverage and limits will be adequate to protect Purchaser and such coverage and limits shall not limit Purchaser's liability under the indemnities and reimbursements granted to State in this contract.

The limits of insurance, which may be increased as deemed necessary by State of Washington, Department of Natural Resources, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Purchaser shall maintain general liability (CGL) insurance, and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000.00 per each occurrence. If such CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL coverage shall include a Logging and Lumbering Endorsement (i.e. Logger's Broad-Form) to cover the events that include, but are not limited to, fire suppression expenses, accidental timber trespasses, and wildfire property damage with limits of not less than \$2,000,000.00 each occurrence.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability arising out of premises, operations, independent contractors, products completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another party assumed in a business contract), and contain separation of insured (cross liability) condition.

Employer's Liability "Stop Gap" Insurance. Purchaser shall buy employers liability insurance, and, if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000.00 each accident for bodily injury by accident or \$1,000,000.00 each employee for bodily injury by disease.

Workers' Compensation Coverage. Purchaser shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Purchaser and employees of any subcontractor or sub-subcontractor. Coverage shall include bodily injury (including death) by accident or disease, which exists out of or in connection with the performance of this contract. Except as prohibited by law, Purchaser waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers' compensation, employer's liability, commercial general liability, or commercial umbrella liability insurance.

If Purchaser, subcontractor or sub-subcontractor fails to comply with all State of Washington workers' compensation statutes and regulations and State incurs fines or is required by law to provide benefits to or obtain coverage for such employees, Purchaser shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

Business Auto Policy (BAP). Purchaser shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit not less than \$1,000,000.00 per accident. Such insurance shall cover liability arising out of "Any Auto". Business auto coverage shall be written on ISO form CA 00 01, or substitute liability form providing equivalent coverage. If necessary the policy shall be endorsed to provide contractual liability coverage and cover a "covered pollution cost or expense" as provided in the 1990 or later editions of CA 00 01. Purchaser waives all rights against State for the recovery of damages to the extent they are covered by business auto liability or commercial umbrella liability insurance.

G-160 Agents

The State's rights and duties will be exercised by the Region Manager at Enumclaw, Washington. The Region Manager will notify Purchaser in writing who is responsible for administering the contract. The Region Manager has sole authority to waive, modify, or amend the terms of this contract in the manner prescribed in clause G-180. No agent, employee, or representative of the State has any authority to bind the State to any affirmation, representation, or warranty concerning the forest products conveyed beyond the terms of this contract.

Purchaser is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Purchaser shall inform the State in writing who is authorized to receive instructions and notices from the State, and any limits to this person's authority.

G-170 Assignment and Delegation

No rights or interest in this contract shall be assigned by Purchaser without prior written permission of the State. Any attempted assignment shall be void and ineffective for all purposes unless made in conformity with this paragraph. Purchaser may perform any duty through a delegate, but Purchaser is not thereby relieved of any duty to perform or any liability. Any assignee or delegate shall be bound by the terms of the contract in the same manner as Purchaser.

G-180 Modifications

Waivers, modifications, or amendments of the terms of this contract must be in writing signed by Purchaser and the State.

G-190 Contract Complete

This contract is the final expression of the Parties' agreement. There are no understandings, agreements, or representations, expressed or implied, which are not specified in this contract.

G-200 Notice

Notices required to be given under the following clauses shall be in writing and shall be delivered to Purchaser's authorized agent or sent by certified mail to Purchaser's post office address:

G-210 Violation of Contract

G-220 State Suspends Operations

All other notices required to be given under this contract shall be in writing and delivered to the authorized agent or mailed to the Party's post office address. Purchaser agrees to notify the State of any change of address.

G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied (such as a violation of WAC 240-15-015) or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages.
- b. If the contract expires pursuant to clause G-030 or G-031 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.
- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.
- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning the date payment was due.

G-220 State Suspends Operation

The Contract Administrator may suspend any operation of Purchaser under this contract when the State is suffering, or there is a reasonable expectation the State will suffer environmental, monetary, or other damage if the operation is allowed to continue.

Purchaser shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes without prior approval and notice from the Contract Administrator.

Purchaser may request a modification of a suspension within 30 days of the start of suspension through the dispute resolution process in clause G-240. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State is suffering, or can reasonably be expected to suffer if the operation is allowed to continue, will prevent harvest for a period that will exceed 6 months, and Purchaser has complied with this contract, the provisions of clause G-066 shall govern just as if the harvest was prevented by an applicable foreign or domestic governmental regulation or order.

G-230 Unauthorized Activity

Any cutting, removal, or damage of forest products by Purchaser, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this contract or State law, is unauthorized. Such activity may subject Purchaser to liability for triple the value of said forest products under RCW 79.02.320 or RCW 79.02.300 and may result in prosecution under RCW 79.02.330 or other applicable statutes.

G-240 Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this contract and the parties agree that these procedures must be followed before a lawsuit can be initiated.

- a. In the event of a dispute, Purchaser must make a written request to the Region Manager for resolution prior to seeking other relief.
- b. The Region Manager will issue a written decision on Purchaser's request within ten business days.
- c. Within ten business days of receipt of the Region Manager's decision, Purchaser may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, a conference will be held by the Deputy Supervisor - Uplands within 30 calendar days of the receipt of Purchaser's request for review of the Region Manager's written decision. Purchaser and the Region Manager will have an opportunity to present their positions. The Deputy Supervisor - Uplands will issue a decision within a reasonable time of being presented with both Parties' positions.

G-250 Compliance with All Laws

Purchaser shall comply with all applicable statutes, regulations and laws, including, but not limited to; chapter 27.53 RCW, chapter 68.50 RCW, WAC 240-15 and WAC 296-54. Failure to comply may result in forfeiture of this contract.

G-260 Venue

This contract shall be governed by the laws of the State of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County Superior Court.

G-270 Equipment Left on State Land

All equipment owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other State land by the termination date of this contract. Equipment remaining unclaimed on State land 60 days after the expiration of the contract period is subject to disposition as provided by law. Purchaser shall pay to the State all costs of moving, storing, and disposing of such equipment. The State shall not be responsible for any damages to or loss of the equipment or damage caused by the moving, storing or disposal of the equipment.

G-280 Operating Release

An operating release is a written document, signed by the State and Purchaser, indicating that Purchaser has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Purchaser and State may agree to an operating release for this sale, or portion of this sale, prior to the contract expiration, when all contract requirements pertaining to the release area have been satisfactorily completed. Upon issuance of a release, Purchaser's right to cut and remove forest products on the released area will terminate.

G-310 Road Use Authorization

Purchaser is authorized to use the following State roads and roads for which the State has acquired easements and road use permits; on the 6000, 6020, 6021, 7000, 7500 and 7550 roads. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this contract and to examine the sale area before beginning any operations. A plan of operations shall be developed and agreed upon by the Contract Administrator and Purchaser before beginning any operations. To the extent that the plan of operations is inconsistent with the contract, the terms of the contract shall prevail. State's acceptance and approval of Purchaser's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Purchaser's purposes or complies with applicable laws.

G-340 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Purchaser shall, at the Purchaser's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in the process of road construction or logging shall be adequately referenced and/or

replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-360 Road Use Reservation

The State shall have the right to use, without charge, all existing roads and any road constructed or reconstructed on State lands by Purchaser under this contract. The State may extend such rights to others. If the State grants such rights to others, the State shall require performance or payment, as directed by the State, for their proportionate share of maintenance based on their use.

G-370 Blocking Roads

Purchaser shall not block the 6000 Road, unless authority is granted in writing by the Contract Administrator.

G-396 County Hauling Permit

The hauling of forest products, rock or equipment may require a county road hauling permit. Purchaser is responsible for obtaining a permit and any costs associated with extra maintenance or repair levied by a county. Purchaser must provide the Contract Administrator with a copy of the executed permit.

G-430 Open Fires

Purchaser shall not set, or allow to be set by Purchaser's employees, agents, invitees and independent contractors, any open fire at any time of the year without first obtaining permission, in writing, from the Contract Administrator.

G-450 Encumbrances

This contract and Purchaser's activities are subject to the following:

To be determined approximately one month prior to the day of sale.

Section P: Payments and Securities

P-011 Initial Deposit

Purchaser paid DATA MISSING initial deposit, which will be maintained pursuant to RCW 79.15.100(3). If the operating authority on this contract expires without Purchaser's payment of the full amount specified in Clause P-020, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$48,123.00. The total contract price consists of a \$0.00 contract bid price plus \$48,123.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

THE PURCHASE PRICE SHALL NOT BE AFFECTED BY ANY FACTORS, INCLUDING: the amount of forest products actually present within the contract area, the actual acreage covered by the contract area, the amount or volume of forest products actually cut or removed by purchaser, whether it becomes physically impossible or uneconomic to remove the forest products, and whether the subject forest products have been lost or damaged by fire or any other cause. The only situations Purchaser may not be liable for the full purchase price are governed by clause G-066, concerning governmental regulatory actions taken during the term of the contract.

P-045 Guarantee of Payment

Purchaser will pay for forest products prior to cutting or will guarantee payment by posting an approved payment security. The amount of cash or payment security shall be determined by the State and shall equal or exceed the value of the cutting proposed by Purchaser.

P-050 Billing Procedure

The State will compute and forward to Purchaser statements of charges provided for in the contract. Purchaser shall deliver payment to the State on or before the date shown on the billing statement.

P-080 Payment Account Refund

Advance payments made under P-045 or P-045.2 remaining on account above the value for the charges shall be returned to Purchaser within 30 days following the final report of charges. Refunds not made within the 30 day period will accrue interest at the interest rate, as established by WAC 332-100-030, computed on a daily basis until paid.

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date, security acceptable to the State in the amount of \$100,000.00. The Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A RCW, Article 5. Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform to the issuance and rating requirements in clause G-150. The State shall retain the performance security pursuant to RCW 79.15.100. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

The State may reduce the performance security after an operating release has been issued if the State determines that adequate security exists for any remaining obligations of Purchaser.

Section H: Harvesting Operations

H-001 Operations Outside the Sale Boundaries

No operations shall occur outside the sale boundaries, as described within the contract, unless approved in writing by the State.

H-013 Reserve Tree Damage Definition

Reserve trees are trees required and designated for retention within the sale boundary. Purchaser shall protect reserve trees from being cut, damaged, or removed during operations.

Reserve tree damage exists when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A reserve tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 144 square inches.
- b. A reserve tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A reserve tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a reserve tree has been cut or damaged, the Purchaser shall provide a replacement reserve tree of like condition, size, and species within the sale area, as approved by the Contract Administrator. Purchaser may be required to pay liquidated damages for Excessive Reserve Tree Damage as detailed in clause D-041.

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230 'Trespass and Unauthorized Activity' clause. Purchaser is required to leave all cut or damaged reserve trees on site.

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 12 inches as measured from the natural ground line. To reduce soil damage, the Contract Administrator may require water bars to be constructed, grass seed to be placed on exposed soils, or other mitigation measures. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.

H-035 Fall Trees Into Sale Area

Trees shall be felled into the sale area unless otherwise approved by the Contract Administrator.

H-051 Branding and Painting

Purchaser shall provide a State of Washington registered log brand, acceptable to the State, unless the State agrees to furnish the brand. All purchased timber shall be

branded in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All timber purchased under a contract designated as export restricted shall also be painted in a manner that meets the requirements of WAC 240-15-030(2)(a)(ii).

For pulp loads purchased under a contract designated as export restricted, Purchaser shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.

H-080 Snags Not to be Felled

Snags not required to be felled for safety reasons may be left standing. Snags felled for safety reasons shall not be removed and must remain where felled.

H-120 Harvesting Equipment

Forest products sold under this contract shall be yarded by cable equipment with lateral and downhill yarding capabilities, tracked shovels may only be used for road and landing construction unless authority to use other equipment is granted in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A) Any and all operations associated with this sale may be temporarily suspended when, in the opinion of the Contract Administrator, there is the potential for delivery to typed water.
- B) Equipment limitation zones are required within 30 feet of Type 5 streams, except during road construction.
- C) Log decks shall be kept within the timber sale boundary.
- D) Within Unit #1, Purchaser shall cut vine maple and sever from the stump.
- E) Falling, yarding and timber haul will not be permitted from November 1st to April 30th, nor on weekends or state recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator. If permission is granted to operate from November 1st to April 30th, the Purchaser shall comply with a Winter Operating Plan to include further protection of water, soil, roads and other forest assets at the Purchaser's expense. Sedimentation preventative measures must be in place prior to commencing any winter operations.

Permission to do otherwise must be granted in writing by the Contract Administrator.

H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A) Purchaser shall leave 2 down logs per acre. A log is defined as having a minimum diameter of 12 inches on the small end of the log and a minimum length of 20 feet or at least 100 board feet.

Permission to do otherwise must be granted in writing by the State.

H-190 Completion of Settings

Operations begun on any setting of the sale area shall be completed before any operation begins on subsequent settings unless authorized in writing by the Contract Administrator.

H-220 Protection of Residual or Adjacent Trees

Unless otherwise specified by this contract, the Contract Administrator shall identify damaged adjacent or leave trees that shall be paid for according to clause G-230.

H-230 Tops and Limbs Outside the Sale Boundary

Tops and limbs outside the sale boundary as a result of Purchaser's operation shall be removed concurrently with the yarding operation unless otherwise directed by the Contract Administrator.

Section C: Construction and Maintenance**C-040 Road Plan**

Road construction and associated work provisions of the Road Plan for this sale, dated 9/1/2015 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on all roads used. All work shall be completed to the specifications detailed in the Road Plan.

C-140 Water Bars

Purchaser shall, as directed by the Contract Administrator, construct water bars across haul roads, skid trails and fire trails as necessary to control soil erosion and water pollution.

Section S: Site Preparation and Protection**S-001 Emergency Response Plan**

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

The ERP must be presented for inspection at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations

S-010 Fire Hazardous Conditions

Purchaser acknowledges that operations under this Contract may increase the risk of fire. Purchaser shall conduct all operations under this agreement following the requirements of WAC 332-24-005 and WAC 332-24-405 and further agrees to use the highest degree of care to prevent uncontrolled fires from starting.

In the event of an uncontrolled fire, Purchaser agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity.

Purchaser's failure to effectively engage in fire-safe operations is considered a breach and may result in suspension of operations

S-030 Landing Debris Clean Up

Landing debris shall be disposed of in a manner approved in writing by the Contract Administrator.

S-035 Logging Debris Clean Up

Slash and debris created from harvest activities shall be treated in a manner approved in writing by the Contract Administrator.

S-050 Cessation of Operations for Low Humidity

During the "closed season", when the humidity is 30 percent or lower on the sale area, all operations must cease unless authority to continue is granted by the State in writing.

S-060 Pump Truck or Pump Trailer

Purchaser shall provide a fully functional pump truck or pump trailer equipped to meet the specifications of WAC 332-24-005 and WAC 332-24-405 during the "closed season" or as extended by the State and shall provide trained personnel to operate this equipment on the sale area during all operating periods.

S-100 Stream Cleanout

Slash or debris which enters any stream as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

S-110 Resource Protection

No equipment may operate within the Riparian Management Zones or leave tree areas unless authority is granted in writing by the Contract Administrator.

S-120 Stream Protection

No timber shall be felled into, across, or yarded through any stream, except Type 5 streams except within the 6020 Road right of way.

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

Purchaser is responsible for understanding and complying with all applicable local, state, and federal hazardous material/waste laws and regulations for operations conducted under this contract. Such regulations pertain to, but may not be limited to, hazardous material storage, handling and transport, personnel protection, release notification and emergency response, cleanup and waste disposal. Purchaser shall be responsible for restoring the site in the event of a spill.

b. Hazardous Materials Spill Prevention

All operations shall be conducted in a manner that avoids the release of hazardous materials, including petroleum products, into the environment (water, air or land).

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 4 to 6 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Purchaser must be able to effectively control a container leak and contain & recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

Releases of oil or hazardous materials to the environment must be reported according to the State Department of Ecology (ECY). It is the responsibility of the Purchaser to have all emergency contact information readily available and a means of remote communication for purposes of quick notification. In the event of a spill, the Purchaser is responsible for notifying the following:

Appropriate Department of Ecology regional office (contact information below).

DNR Contract Administrator

ECY - Northwest Region:

1-425-649-7000

(Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties)

ECY - Southwest Region:

1-360-407-6300

(Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties)

ECY - Central Region:

1-509-575-2490

(Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties)

ECY - Eastern Region:

1-509-329-3400

(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties)

S-131 Refuse Disposal

As required by RCW 70.93, All Purchaser generated refuse shall be removed from state lands for proper disposal prior to termination of this contract. No refuse shall be burned, buried or abandoned on state forest lands. All refuse shall be transported in a manner such that it is in compliance with RCW 70.93 and all loads or loose materials shall be covered/secured such that these waste materials are properly contained during transport.

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

The following clauses provide for payments by Purchaser to the State for breaches of the terms of this contract other than failure to perform. These payments are agreed to as liquidated damages and not as penalties. They are reasonable estimates of anticipated harm to the State, which will be caused by Purchaser's breach. These liquidated damages provisions are agreed to by the State and Purchaser with the understanding of the difficulty of proving loss and the inconvenience or infeasibility of obtaining an adequate remedy. These liquidated damages provisions provide greater certainty for the Purchaser by allowing the Purchaser to better assess its responsibilities under the contract.

Clause P-020 governs Purchaser's liability in the event Purchaser fails to perform any of the contract requirements other than the below liquidated damage clauses without written approval by the State. Purchaser's failure to pay for all or part of the forest products sold in this contract prior to expiration of the contract term results in substantial injury to the State. Therefore, Purchaser agrees to pay the State the full lump sum contract price in P-020 in the event of failure to perform.

D-041 Reserve Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in clause H-013, Reserve Tree Damage Definition, and when the Contract Administrator determines that a suitable replacement for a damaged reserve tree is not possible, the damaged trees

result in substantial injury to the State. The value of the damaged reserve trees at the time of the breach is not readily ascertainable. Therefore, the Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged reserve trees that are not replaced in the timber harvest area.

IN WITNESS WHEREOF, the Parties hereto have entered into this contract.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Art Tasker
South Puget Sound Region Manager

Date: _____

Date: _____

Address:

CORPORATE ACKNOWLEDGEMENT

STATE OF _____)

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally appeared _____

_____ to me known to be the _____ of the corporation

that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of the corporation, for the uses and purposes therein mentioned, and on oath stated that (he/she was) (they were) authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public in and for the State of

My appointment expires _____



WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region:

Timber Sale Name:

Application Number:

EXCISE TAX APPLICABLE ACTIVITIES

Construction: **linear feet**
Road to be constructed (optional and required) but not abandoned

Reconstruction: **linear feet**
Road to be reconstructed (optional and required) but not abandoned

Abandonment: **linear feet**
Abandonment of existing roads not reconstructed under the contract

Decommission: **linear feet**
Road to be made undriveable but not officially abandoned.

Pre-Haul Maintenance: **linear feet**
Existing road to receive maintenance work (specifically required by the contract) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Optional Construction: **linear feet**
Optional roads to be constructed and then abandoned

Temporary Optional Reconstruction: **linear feet**
Optional roads to be reconstructed and then abandoned

New Abandonment: **linear feet**
Abandonment of roads constructed or reconstructed under the contract

All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contract. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact of forest excise taxes. However, the information provided may not precisely calculate the actual amount of taxes due. The Department of Revenue is available for consultation by calling 1.800.548.8829.

(Revised 6/13)

PRE-CRUISE NARRATIVE

Sale Name: Sidehill Salmon	Region: South Puget Sound
Agreement #: 30-091789	District: Rainier Dist. // Snoqualmie Unit
Contact Forester: Zachary Beebe	Phone/ Location: (253)-736-4830 Ext: /
Alternate Contact: Paul Footen	Phone/ Location: (425)-736-1708 Ext: /

Type of Sale (lump sum, mbf scale, tonnage scale or contract harvest): Lump sum
 Required or Optional removal of utility as pulp: Optional
 Evaluated for RFRS Implementation?: Yes – No ecological improvement possible.
 Percentage cable (specify downhill vs uphill): 100% (85% uphill yarding / 15% downhill yarding)
 Percentage ground based: 0%

UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit #	Harvest R/W or RMZ WMZ	Legal Description Sec/Twp/Rng	Grant	Gross Proposal Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determination (List method and error of closure if applicable)
					RMZ/WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
1		Sec 25 / T 27 N/ R 07 E	01	45.7	0.0	2.09	0.0		43.61	GPS Garmin 64s
	R/W	Sec 25 / T 27 N/ R 07 E	01	0.29					0.29	Length x width
TOTAL ACRES				45.99	0.0	2.09	0.0		43.9	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Mark leave, take, etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	VRH, leave trees (individuals and groups) are marked with a band and dot of blue paint, and yellow "leave tree area" signs and pink flashers	N/A	322 leave trees in groups, 41 leave trees dispersed individually.

OTHER PRE-CRUISE INFORMATION:

Unit #	Estimated Volume	Access information (Gates, locks, etc.)	Photos, traverse maps required
1		Best access from the South through the 1029B gate), located off the Stossel Creek county road; located off of Kelly Rd; located off of Highway 203, north of Carnation.	(See attached)

REMARKS:

Within the RMZ there is merchantable timber within the Right-of-Way Tags. There is no merchantable timber within the ROW tags within the plantation.

Prepared By: Zachary Beebe Date: 08/12/2015	Title: Forester I	CC:
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Cruise Narrative

Sale Name: Sidehill Salmon	Region: South Puget Sound
App. #: 30-091789	District: Rainier
Lead Cruiser: Aaron Coleman	Completion Date: 10/1/2015
Other Cruisers: n/a	

Unit acreage specifications:

Unit #	Cruised acres	Cruised acres agree with sale acres? Yes/No	If acres do not agree explain why.
1	43.61	Yes	
2	0.29	Yes	
Total	43.90	Yes	

Unit cruise specifications:

Unit #	Sample type (VP, FP, ITS,100%)	Expansion factor (BAF, full/half)	Sighting height (4.5 ft, 16 ft.)	Grid size (Plot spacing or % of area)	Plot ratio (Cru./Tally)	Total number of plots
1	VP	54.44 – Majors 40.00 – Minors	4.5 ft	175' x 175'	1:1	62
2	VP	54.44 - ALL	4.5 ft	66' along centerline	Cruise All	5

Sale/Cruise Description:

Minor species cruise intensity:	Cruised on appropriate plots.
Minimum cruise spec:	40% Of Form- Factor at 16 feet D.O.B or 5 inch Top, and merchantable top.
Avg. ring count by sp:	DF = 7 WH = 7
Leave/take tree description:	Unit contains leave tree areas bounded with yellow "Leave Tree Area" tags and pink flashers as well as clumped and scattered trees marked with blue paint.
Sort Description:	<p>HA - Logs meeting the following criteria: Surface characteristics for a high quality A sort will have sound tight knots not to exceed 1 1/2" in diameter, numbering not more than an average of one per foot of log length. May include logs with not more than two larger knots. Knots and knot indicators 1/2" in diameter and smaller shall not be a determining factor. Logs will have a growth ring count of 6 or more rings per inch in the outer third top end of the log. (High Quality sort. Grades SM, 2S, 3S. Lengths 16ft-40ft, 2ft multiples min TDIB 8". Max butt 27")</p> <p>HB - Logs meeting the following criteria: Surface characteristics for an Intermediate B sort will have sound tight knots not to exceed 1 1/2" in diameter. May include logs with not more than two larger knots up to 2 1/2" in diameter. Logs will have a growth ring count of 6 or more rings per inch in the outer third to end of the log. (Intermediate sort. Grades 2S, 3S. Lengths 16ft-40ft, 2ft multiples min TDIB 8". Max butt 27").</p> <p>D - Domestic quality logs that do not meet high quality or intermediate definitions. (Domestic sort. Grades 2S, 3S, 4S and utility. Lengths 16ft-40ft, min TDIB 5".)</p> <p>O - Logs exceeding 27" on the large end. (Oversize sort. Grade 2S. Lengths 16ft-40ft, 2ft multiples butt diameter min dia. 27 in. +)</p>

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																		
T27N R07E S25 Ty00U1 T27N R07E S25 Ty00U2				43.61 .29		Project: SIDEHILL Acres 43.90											Page 1 Date 2/11/2016 Time 10:26:36AM					
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf		
									5-7	8-11	12-15	16+	12-20	21-30	31-35	36-99						
WH	CU	CU															1	7		0.00	14.7	
WH	HA	2S	6	4.2	244	233	10				100						40	13	230	1.45	1.0	
WH	HB	3S	7		249	249	11			100							40	9	120	0.76	2.1	
WH	D	2S	21	21.0	963	761	33				100						40	14	241	1.81	3.2	
WH	D	3S	32	7.9	1,253	1,153	51	13	87					2			39	9	110	0.81	10.5	
WH	D	4S	25		897	897	39	100						2	48	9	40	32	5	34	0.29	26.5
WH	OS	2S	9	10.5	343	307	13				100						40	21	680	3.82	.5	
WH Totals				9	8.8	3,948	3,601	158	29	35	28	9	1	13	2	84	26	7	62	0.65	58.3	
RA	CU	CU															4	7		0.00	7.0	
RA	D	UT	9		170	170	7	38	62				15	62	23		25	7	53	0.49	3.2	
RA	D	2S	15	6.0	277	260	11			100							40	13	224	1.52	1.2	
RA	D	3S	12	7.7	223	206	9		100				44	56			32	10	120	1.02	1.7	
RA	D	4S	21	7.1	407	378	17		100								40	8	95	0.73	4.0	
RA	D	4S	43	.9	748	741	33	100				10	4	11	74		33	6	44	0.41	17.0	
RA Totals				4	3.8	1,825	1,756	77	46	39	15		6	13	14	68	27	7	52	0.55	34.1	
RC	CU	CU															1	6		0.00	10.3	
RC	D	3S	40	5.5	747	705	31	1	52	38	9	5	10		85		33	11	154	1.45	4.6	
RC	D	4S	12	18.1	253	207	9	100					71		29		28	5	27	0.38	7.7	
RC	OS	3S	48	20.9	1,024	811	36				100				100		36	22	598	5.07	1.4	
RC Totals				4	14.9	2,024	1,723	76	13	21	15	51	2	12		86	18	8	72	1.31	23.9	
DF	CU	CU		100.0	109												5	7		0.00	46.4	
DF	HA	2S		4.3	47	45	2			100					100		40	14	269	1.54	.2	
DF	HA	3S	1		356	356	16		100						100		40	11	180	1.12	2.0	
DF	HB	2S	9	5.4	3,014	2,852	125			37	63				100		40	15	344	1.98	8.3	
DF	HB	3S	4	2.7	1,432	1,394	61		100						100		40	10	145	0.91	9.6	
DF	D	2S	40	5.8	13,773	12,972	569			49	51	0	2		98		39	15	308	1.75	42.2	
DF	D	3S	18	1.8	6,166	6,052	266	26	74				4	6	91		38	8	100	0.69	60.3	
DF	D	4S	6	1.3	1,782	1,760	77	100				13	26	14	47		30	5	34	0.30	51.7	
DF	D	UT			17	17	1	93	7			100					19	7	30	0.46	.6	
DF	OS	SM		6.6	33	31	1								100		40	21	693	3.50	.0	
DF	OS	2S	22	9.3	7,803	7,079	311				100				100		40	22	798	4.19	8.9	
DF Totals				79	5.7	34,532	32,557	1,429	10	19	23	48	1	3	2	94	30	9	142	1.09	230.0	
DF	D	CU	CU		100.0	96											21	11		0.00	1.2	
DF	D	D	2S	43	25.0	111	83	4		100					100		40	12	150	1.18	.6	
DF	D	D	UT	57		109	109	5		91	9				100		40	11	188	1.16	.6	
DF Totals				0	39.1	316	192	8		52	48				100		30	11	84	0.76	2.3	
CW	CU	CU															7	17		0.00	.6	
CW	D	2S	10		38	38	2				100				100		40	16	400	2.14	.1	
CW	D	UT	14		53	53	2		100					47	53		36	12	195	1.51	.3	
CW	OS	1S	51	10.2	208	187	8				100				100		40	22	793	4.05	.2	
CW	OS	UT	25		91	91	4				100				100		40	20	700	3.71	.1	
CW Totals				1	5.5	391	369	16		14	86				7	93	24	17	277	2.50	1.3	

Species, Sort Grade - Board Foot Volumes (Project)

T27N R07E S25 Ty00U1 43.61 T27N R07E S25 Ty00U2 .29	Project: SIDEHILL Acres 43.90	Page 2 Date 2/11/2016 Time 10:26:36AM
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Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre	
									Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf		
									5-7	8-11	12-15	16+	12-20	21-30	31-35	36-99						
BM	CU	CU														4	7		0.00	8.1		
BM	D	UT		24		192	192	8	99	1			25	24		52	27	5	29	0.32	6.5	
BM	D	2S		8	10.3	66	59	3			100				100	40	14	260	1.98	.2		
BM	D	3S			8.3	6	6	0		100				100		28	11	110	1.12	.1		
BM	D	4S		68	2.2	536	524	23	100					32	10	58	32	5	36	0.33	14.5	
BM Totals				2	2.4	801	782	34	91	1	8		6	28	7	59	23	6	27	0.34	29.5	
Totals					6.5	43,837	40,980	1,799	15	21	22	42		1	5	2	91	28	8	108	0.94	379.5

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT			SIDEHILL				DATE	2/11/2016	
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
27N	07E	25	SIDEHILLSALM	00U1	43.90	67	314	S	W		
27N	07E	25	SIDEHILLSALM	00U2							
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL		67	314	4.7							
CRUISE		41	176	4.3	7,169	2.5					
DBH COUNT REFOREST											
COUNT		25	121	4.8							
BLANKS		1									
100 %											
STAND SUMMARY											
		SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR		115	84.7	18.9	92	38.1	165.9	34,532	32,557	7,570	7,552
DOUG FIR-D		3	1.1	17.1	64	0.4	1.8	316	192	69	53
WR CEDAR		13	9.6	17.6	62	3.9	16.2	2,024	1,723	551	551
WHEMLOCK		14	31.6	12.9	67	8.0	28.9	3,948	3,601	1,001	1,001
BL MAPLE		15	21.3	9.7	38	3.5	11.0	801	782	229	229
R ALDER		13	14.6	13.9	72	4.1	15.4	1,825	1,756	512	512
COTWOOD		3	.4	31.0	90	0.3	1.9	391	369	81	81
TOTAL		176	163.3	16.5	76	59.4	241.1	43,837	40,980	10,014	9,978
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL	68.1	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		78.9	7.4	726	784	842					
DOUG FIR-D		49.4	34.2	151	230	309					
WR CEDAR		136.6	39.4	316	522	727					
WHEMLOCK		104.2	28.9	188	265	342					
BL MAPLE		108.0	28.9	45	63	82					
R ALDER		60.4	17.4	119	144	169					
COTWOOD		31.5	21.8	821	1,050	1,279					
TOTAL		99.9	7.6	562	608	654	399	203	100		
CL	68.1	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		71.3	6.7	161	172	184					
DOUG FIR-D		32.2	22.3	44	56	69					
WR CEDAR		122.3	35.3	104	160	216					
WHEMLOCK		91.3	25.3	53	71	88					
BL MAPLE		106.8	28.5	13	19	24					
R ALDER		55.6	16.0	35	41	48					
COTWOOD		23.2	16.1	190	227	263					
TOTAL		91.5	6.9	130	139	149	334	171	84		
CL	68.1	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		107.2	13.1	74	85	96					
DOUG FIR-D		560.5	68.4	0	1	2					
WR CEDAR		319.6	39.0	6	10	13					
WHEMLOCK		143.4	17.5	26	32	37					
BL MAPLE		589.0	71.9	6	21	37					
R ALDER		233.4	28.5	10	15	19					
COTWOOD		590.8	72.1	0	0	1					
TOTAL		90.6	11.1	145	163	181	328	167	82		
CL	68.1	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		

TWP	RGE	SC	TRACT	TYPE	ACRES			PLOTS	TREES	CuFt	BdFt
27N	07E	25	SIDEHILLSALM	00U1	43.90			67	314	S	W
27N	07E	25	SIDEHILLSALM	00U2							
			DOUG FIR	81.5	9.9	149	166	182			
			DOUG FIR-D	551.9	67.4	1	2	3			
			WR CEDAR	238.0	29.0	12	16	21			
			WHEMLOCK	128.7	15.7	24	29	33			
			BL MAPLE	506.9	61.9	4	11	18			
			R ALDER	231.5	28.3	11	15	20			
			COTWOOD	606.4	74.0	0	2	3			
			TOTAL	57.2	7.0	224	241	258	130	67	33
CL	68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
			DOUG FIR	83.5	10.2	29,237	32,557	35,877			
			DOUG FIR-D	548.1	66.9	64	192	321			
			WR CEDAR	226.0	27.6	1,248	1,723	2,199			
			WHEMLOCK	136.3	16.6	3,001	3,601	4,200			
			BL MAPLE	505.0	61.6	300	782	1,263			
			R ALDER	233.9	28.5	1,254	1,756	2,257			
			COTWOOD	614.0	74.9	93	369	646			
			TOTAL	63.5	7.8	37,802	40,980	44,158	161	82	40
CL	68.1	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
			DOUG FIR	83.2	10.2	6,785	7,552	8,318			
			DOUG FIR-D	552.0	67.4	17	53	89			
			WR CEDAR	227.8	27.8	398	551	704			
			WHEMLOCK	133.5	16.3	838	1,001	1,164			
			BL MAPLE	491.0	59.9	92	229	367			
			R ALDER	233.7	28.5	366	512	658			
			COTWOOD	605.1	73.9	21	81	140			
			TOTAL	61.1	7.5	9,234	9,978	10,722	149	76	37
CL	68.1	COEFF		V_BAR/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
			DOUG FIR			176	196	216			
			DOUG FIR-D	548.1	66.9	35	106	177			
			WR CEDAR	85.8	10.5	77	106	135			
			WHEMLOCK	35.2	4.3	104	125	146			
			BL MAPLE	485.7	59.3	27	71	115			
			R ALDER	151.0	18.4	82	114	147			
			COTWOOD	614.0	74.9	48	192	336			
			TOTAL	61.5	7.5	157	170	183	151	77	38

T27N R07E S25 T00U1 **T27N R07E S25 T00U1**
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdBft
 27N 07E 25 SIDEHILLSALM 00U1 43.61 62 155 S W

S Sp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
				Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf		
								5-7	8-11	12-15	16+	12-20	21-30	31-35	36-99						
DF	CU	CU		100.0	109												5	7		0.00	46.6
DF	HA	3S	1		359	359	16		100								40	11	180	1.12	2.0
DF	HB	2S	8	5.4	3,007	2,844	124			37	63						40	15	345	1.98	8.2
DF	HB	3S	5	2.7	1,404	1,366	60		100								40	10	145	0.91	9.4
DF	DM	2S	40	5.8	13,819	13,014	568			49	51	0	2		98		39	15	307	1.75	42.3
DF	DM	3S	18	1.8	6,188	6,074	265	26	74				4	6	91		38	8	100	0.69	60.5
DF	DM	4S	6	1.3	1,790	1,767	77	100				13	26	14	47		30	5	34	0.30	51.9
DF	DM	UT			16	16	1	100				100					19	7	30	0.46	.5
DF	OS	2S	22	9.3	7,797	7,073	308				100						40	22	798	4.19	8.9
DF	Totals		79	5.7	34,489	32,513	1,418	10	19	23	48	1	3	2	94		30	9	141	1.09	230.3
DF	D	CU	CU		100.0	89											21	11		0.00	1.1
DF	D	DM	2S	45	25.0	111	84	4			100						40	12	150	1.18	.6
DF	D	DM	UT	55		100	100	4		100							40	11	180	1.12	.6
DF	D	Totals		0	38.9	301	184	8		55	45				100		30	11	82	0.76	2.2
WH	CU	CU															1	7		0.00	14.8
WH	HA	2S	6	4.2	245	235	10			100							40	13	230	1.45	1.0
WH	HB	3S	7		250	250	11		100								40	9	120	0.76	2.1
WH	DM	2S	21	21.1	959	756	33			100							40	14	240	1.81	3.2
WH	DM	3S	32	7.9	1,257	1,157	50	13	87				2		98		39	9	110	0.81	10.5
WH	DM	4S	25		903	903	39	100				2	48	9	40		32	5	34	0.29	26.7
WH	OS	2S	9	10.5	345	309	13				100						40	21	680	3.82	.5
WH	Totals		9	8.8	3,959	3,610	157	29	35	27	9	1	13	2	84		26	7	62	0.65	58.6
RC	CU	CU															1	6		0.00	10.2
RC	DM	3S	40	5.6	736	695	30		53	38	9	5	10		85		33	11	157	1.48	4.4
RC	DM	4S	12	18.2	254	208	9	100						71	29		28	5	27	0.38	7.7
RC	OS	3S	48	20.9	1,031	816	36				100						36	22	598	5.07	1.4
RC	Totals		4	15.0	2,021	1,718	75	12	21	15	51	2	13		85		18	8	73	1.32	23.7
RA	CU	CU															4	7		0.00	7.0
RA	DM	UT	9		171	171	7	38	62			15	62	23			25	7	53	0.49	3.2
RA	DM	2S	15	6.0	278	262	11			100							40	13	224	1.52	1.2
RA	DM	3S	12	7.7	224	207	9		100				44	56			32	10	120	1.02	1.7
RA	DM	4S	21	7.1	410	381	17		100						100		40	8	95	0.73	4.0
RA	DM	4S	43	.9	753	746	33	100				10	4	11	74		33	6	44	0.41	17.1
RA	Totals		4	3.8	1,837	1,767	77	46	39	15		6	13	14	68		27	7	52	0.55	34.3
BM	CU	CU															4	7		0.00	8.1
BM	DM	UT	24		190	190	8	100				24	24		53		27	5	29	0.32	6.5
BM	DM	2S	8	10.3	67	60	3			100							40	14	260	1.98	.2
BM	DM	4S	68	2.2	539	528	23	100					32	10	58		32	5	36	0.33	14.6

T27N R07E S25 T00U1										T27N R07E S25 T00U1				
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt					
27N	07E	25	SIDEHILLSALM	00U1	43.61	62	155	S	W					

Spp	So	Gr	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre
								Log Scale Dia.				Log Length				Ln	Dia	Bd	CF/	
								5-7	8-11	12-15	16+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf	
BM	Totals		2	2.4	796	777	34	92	8	6	28	7	60	23	6	26	0.33	29.4		
CW	CU	CU												7	17		0.00	.6		
CW	DM	2S	10		39	39	2		100				100	40	16	400	2.14	.1		
CW	DM	UT	14		53	53	2	100			47	53		36	12	195	1.51	.3		
CW	OS	1S	51	10.2	210	188	8		100				100	40	22	793	4.05	.2		
CW	OS	UT	25		92	92	4		100				100	40	20	700	3.71	.1		
CW	Totals		1	5.5	393	372	16	14	86		7	93		24	17	277	2.50	1.3		
Type Totals				6.5	43,796	40,942	1,785	15	21	22	42	1	5	2	91	28	8	108	0.94	380.0

T TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)										Page 1										
Project: SIDEHILL												Date 2/11/2016										
												Time 10:26:37AM										
T27N R07E S25 T00U2										T27N R07E S25 T00U2												
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt													
27N	07E	25	SIDEHILLSALM	00U2	.29	5	21	S	W													
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln	Dia	Bd	CF/ Lf		
								5-7	8-11	12-15	16+	12-20	21-30	31-35	36-99	Ft	In	Ft				
DF		CU	CU													4	10		0.00		13.9	
DF		HA	2S	17	4.3	7,121	6,818	2		100					100	40	14	269	1.54		25.3	
DF		HB	2S	10	2.2	4,105	4,017	1		54	46				100	40	13	255	1.28		15.8	
DF		HB	3S	14	1.2	5,619	5,550	2		100					100	40	9	132	0.75		41.9	
DF		DM	2S	17	4.9	6,875	6,539	2		24	76				100	40	17	433	2.07		15.1	
DF		DM	3S	7		2,717	2,717	1	28	72				9	91	38	8	100	0.73		27.1	
DF		DM	4S	2		592	592	0	100				23	35	42	25	5	30	0.27		20.0	
DF		DM	UT			166	166	0		100			100			17	8	30	0.45		5.5	
DF		OS	SM	12	6.6	5,068	4,733	1			100				100	40	21	693	3.50		6.8	
DF		OS	2S	21	8.2	8,718	8,003	2			100				100	40	22	812	4.13		9.9	
DF	Totals			84	4.5	40,982	39,134	11	3	20	27	50	1	1	1	97	35	11	216	1.34		181.4
DF	D	CU	CU		100.0	1,114										34	11		0.00		8.2	
DF	D	DM	UT	100		1,485	1,485	0		100					100	40	15	360	1.93		4.1	
DF	D	Totals		3	42.9	2,598	1,485	0		100					100	36	12	120	0.72		12.4	
RC		CU	CU													4	5		0.00		28.2	
RC		DM	3S	93	1.8	2,350	2,309	1	62	38					100	36	7	82	0.81		28.2	
RC		DM	4S	7		165	165	0	100						100	36	5	40	0.53		4.1	
RC	Totals			5	1.6	2,515	2,474	1	65	35					100	21	6	41	0.71		60.5	
BM		CU	CU													3	10		0.00		15.6	
BM		DM	UT	42		624	624	0	38	63			63	38		21	8	40	0.45		15.6	
BM		DM	3S	58	8.3	936	858	0		100				100		28	11	110	1.12		7.8	
BM	Totals			3	5.0	1,560	1,482	0	16	84			26	74		15	9	38	0.66		39.0	
WH		CU	CU													10			0.00		4.5	
WH		DM	2S	70	5.6	1,630	1,539	0		100					100	40	15	340	1.82		4.5	
WH		DM	3S	30	6.7	679	634	0		100					100	40	10	140	0.89		4.5	
WH	Totals			5	5.9	2,309	2,173	1	29	71					100	27	12	160	1.35		13.6	
Type Totals					6.4	49,964	46,747	14	7	20	31	42	1	3	1	95	29	10	152	1.17		306.8

TC TSTATS				STATISTICS				PAGE	1		
				PROJECT	SIDEHILL			DATE	2/11/2016		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
27N	07E	25	SIDEHILLSALM	00U1	43.61	62	293	S	W		
				TREES	ESTIMATED	PERCENT					
				PER PLOT	TOTAL	SAMPLE					
				PLOTS	TREES	TREES	TREES				
TOTAL		62	293	4.7							
CRUISE		36	155	4.3	7,140		2.2				
DBH COUNT											
REFOREST											
COUNT		25	121	4.8							
BLANKS		1									
100 %											
STAND SUMMARY											
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET	
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC	
DOUG FIR	100	84.9	18.9	92	38.1	166.0	34,489	32,513	7,565	7,546	
DOUG FIR-D	2	1.1	17.0	62	0.4	1.8	301	184	66	51	
WHEMLOCK	13	31.7	12.9	67	8.1	29.0	3,959	3,610	1,005	1,004	
WR CEDAR	10	9.5	17.6	62	3.8	16.1	2,021	1,718	549	549	
R ALDER	13	14.7	13.9	72	4.2	15.5	1,837	1,767	515	515	
BL MAPLE	14	21.3	9.7	37	3.5	11.0	796	777	228	228	
COTWOOD	3	.4	31.0	90	0.3	1.9	393	372	81	81	
TOTAL	155	163.7	16.4	76	59.5	241.2	43,796	40,942	10,009	9,975	
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		83.0	8.3	685	747	809					
DOUG FIR-D		12.9	12.0	145	165	185					
WHEMLOCK		112.8	32.5	168	248	329					
WR CEDAR		121.4	40.4	382	641	900					
R ALDER		60.4	17.4	119	144	169					
BL MAPLE		112.3	31.1	37	54	71					
COTWOOD		31.5	21.8	821	1,050	1,279					
TOTAL		103.9	8.4	534	582	631	431	220	108		
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		75.1	7.5	154	166	179					
DOUG FIR-D		3.9	3.6	44	46	48					
WHEMLOCK		97.7	28.2	49	68	87					
WR CEDAR		109.2	36.3	124	194	265					
R ALDER		55.6	16.0	35	41	48					
BL MAPLE		113.6	31.5	11	16	22					
COTWOOD		23.2	16.1	190	227	263					
TOTAL		95.4	7.7	125	135	146	363	185	91		
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		100.3	12.7	74	85	96					
DOUG FIR-D		552.2	70.1	0	1	2					
WHEMLOCK		135.4	17.2	26	32	37					
WR CEDAR		313.0	39.7	6	10	13					
R ALDER		223.0	28.3	11	15	19					
BL MAPLE		567.7	72.0	6	21	37					
COTWOOD		568.0	72.1	0	0	1					
TOTAL		83.5	10.6	146	164	181	279	142	70		
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	SIDEHILL			DATE	2/11/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
27N	07E	25	SIDEHILLSALM	00U1	43.61	62	293	S	W	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		74.8	9.5	150	166	182				
DOUG FIR-D		552.2	70.1	1	2	3				
WHEMLOCK		121.3	15.4	25	29	33				
WR CEDAR		231.0	29.3	11	16	21				
R ALDER		221.2	28.1	11	15	20				
BL MAPLE		490.5	62.2	4	11	18				
COTWOOD		583.0	74.0	1	2	3				
TOTAL		49.2	6.2	226	241	256	97	49	24	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		77.2	9.8	29,330	32,513	35,697				
DOUG FIR-D		554.5	70.4	54	184	313				
WHEMLOCK		129.1	16.4	3,019	3,610	4,201				
WR CEDAR		218.2	27.7	1,243	1,718	2,194				
R ALDER		223.4	28.3	1,266	1,767	2,268				
BL MAPLE		491.6	62.4	292	777	1,261				
COTWOOD		590.4	74.9	93	372	650				
TOTAL		56.3	7.1	38,015	40,942	43,868	127	65	32	
CL:	68.1 %	COEFF	NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		76.7	9.7	6,812	7,546	8,280				
DOUG FIR-D		552.4	70.1	15	51	87				
WHEMLOCK		126.1	16.0	843	1,004	1,165				
WR CEDAR		220.3	28.0	395	549	702				
R ALDER		223.3	28.3	369	515	661				
BL MAPLE		477.3	60.6	90	228	367				
COTWOOD		581.8	73.8	21	81	141				
TOTAL		53.6	6.8	9,296	9,975	10,653	115	59	29	
CL:	68.1 %	COEFF	V-BAR/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR				177	196	215				
DOUG FIR-D		554.5	70.4	31	105	178				
WHEMLOCK		21.5	2.7	104	125	145				
WR CEDAR		79.2	10.1	77	107	136				
R ALDER		142.7	18.1	82	114	146				
BL MAPLE		471.2	59.8	27	71	115				
COTWOOD		590.4	74.9	48	192	336				
TOTAL		192.7	24.4	158	170	182	1,482	756	371	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	SIDEHILL		DATE	2/11/2016		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
27N	07E	25	SIDEHILLSALM	00U2	0.29	5	21	S	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
PLOTS		TREES			TREES	TREES				
TOTAL	5	21		4.2						
CRUISE	5	21		4.2	29	72.1				
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	15	55.8	23.2	116	33.9	163.3	40,982	39,134	8,374	8,373
DOUG FIR-D	1	4.1	22.0	110	2.3	10.9	2,598	1,485	556	319
WR CEDAR	3	28.2	14.6	65	8.6	32.7	2,515	2,474	899	899
BL MAPLE	1	7.8	16.0	78	2.7	10.9	1,560	1,482	388	388
WHEMLOCK	1	4.5	21.0	84	2.4	10.9	2,309	2,173	489	489
TOTAL	<i>21</i>	<i>100.4</i>	<i>20.4</i>	<i>97</i>	<i>50.6</i>	<i>228.6</i>	<i>49,964</i>	<i>46,747</i>	<i>10,706</i>	<i>10,469</i>
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	53.2	14.7		891	1,045	1,199				
DOUG FIR-D										
WR CEDAR	88.9	61.5		47	123	199				
BL MAPLE										
WHEMLOCK										
TOTAL	<i>75.4</i>	<i>17.3</i>		<i>663</i>	<i>802</i>	<i>940</i>	<i>239</i>	<i>122</i>	<i>60</i>	
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	46.9	13.0		189	217	245				
DOUG FIR-D										
WR CEDAR	89.1	61.6		17	46	74				
BL MAPLE										
WHEMLOCK										
TOTAL	<i>66.2</i>	<i>15.2</i>		<i>145</i>	<i>170</i>	<i>196</i>	<i>184</i>	<i>94</i>	<i>46</i>	
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	97.3	48.3		29	56	83				
DOUG FIR-D	223.6	111.1			4	9				
WR CEDAR	110.2	54.8		13	28	44				
BL MAPLE	223.6	111.1			8	16				
WHEMLOCK	223.6	111.1			5	10				
TOTAL	<i>27.2</i>	<i>13.5</i>		<i>87</i>	<i>100</i>	<i>114</i>	<i>37</i>	<i>19</i>	<i>9</i>	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	62.4	31.0		113	163	214				
DOUG FIR-D	223.6	111.1			11	23				
WR CEDAR	91.3	45.4		18	33	47				
BL MAPLE	223.6	111.1			11	23				
WHEMLOCK	223.6	111.1			11	23				
TOTAL	<i>31.0</i>	<i>15.4</i>		<i>193</i>	<i>229</i>	<i>264</i>	<i>48</i>	<i>24</i>	<i>12</i>	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	55.6	27.6		28,316	39,134	49,952				
DOUG FIR-D	223.6	111.1			1,485	3,135				

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	SIDEHILL			DATE	2/11/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
27N	07E	25	SIDEHILLSALM	00U2	0.29		5	21	S	W
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	7	10	
WR CEDAR		96.1	47.8	1,293	2,474	3,655				
BL MAPLE		223.6	111.1		1,482	3,128				
WHEMLOCK		223.6	111.1		2,173	4,587				
TOTAL		37.9	18.8	37,950	46,747	55,545	71	36	18	
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		58.5	29.1	5,939	8,373	10,808				
DOUG FIR-D		223.6	111.1		319	673				
WR CEDAR		95.5	47.4	473	899	1,326				
BL MAPLE		223.6	111.1		388	819				
WHEMLOCK		223.6	111.1		489	1,033				
TOTAL		36.0	17.9	8,597	10,469	12,341	64	33	16	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		55.6	27.6	173	240	306				
DOUG FIR-D		223.6	111.1		136	288				
WR CEDAR		96.1	47.8	40	76	112				
BL MAPLE		223.6	111.1		136	287				
WHEMLOCK		223.6	111.1		200	421				
TOTAL		37.9	18.8	166	204	243	71	36	18	

Species Summary - Trees, Logs, Tons, CCF, MBF

T27N R07E S25 Ty00U1	43.6
T27N R07E S25 Ty00U2	.2

Project SIDEHILL
Acres 43.90

Page No 1
Date: 2/11/2016
Time 10:26:37AM

Species	Total Trees	Total Logs	Total Tons	Net Cubic Ft/		CF/ LF	Total CCF		Total MBF	
				Tree	Log		Gross	Net	Gross	Net
DOUG FIR	3,719	8,147	9,471	89.13	40.69	1.13	3,323	3,315	1,516	1,429
WHEMLOCK	1,385	1,917	1,406	31.71	22.91	0.65	439	439	173	158
R ALDER	643	1,190	618	34.95	18.87	0.57	225	225	80	77
WR CEDAR	423	598	569	57.27	40.49	1.35	242	242	89	76
BL MAPLE	933	938	267	10.79	10.74	0.36	101	101	35	34
COTWOOD	16	32	87	220.07	110.04	2.82	35	35	17	16
DOUG FIR D	50	50	87	46.73	46.73	1.17	30	23	14	8
Totals	7,169	12,872	12,504	61.10	34.03	0.98	4,396	4,380	1,924	1,799

Wood Type Species	Total Trees	Total Logs	Total Tons	Net Cubic Ft/		CF/ LF	Total CCF		Total MBF	
				Tree	Log		Gross	Net	Gross	Net
C	5,577	10,712	11,533	72.08	37.53	1.06	4,035	4,020	1,792	1,671
H	1,592	2,160	971	22.66	16.70	0.53	361	361	132	128
Totals	7,169	12,872	12,504	61.10	34.03	0.98	4,396	4,380	1,924	1,799



WASHINGTON STATE DEPARTMENT OF
Natural Resources
 Peter Goldmark - Commissioner of Public Lands

FPA/N No: _____

Effective Date: _____

Expiration Date: _____

Shut Down Zone: _____

EARR Tax Credit: Eligible Non-eligible

Reference: _____

**Forest Practices Application/Notification
 Notice of Decision**

Decision

- Notification** Operations shall not begin before the effective date.
- Approved** This Forest Practices Application is subject to the conditions listed below.
- Disapproved** This Forest Practices Application is disapproved for the reasons listed below.
- Closed** Applicant has withdrawn approved FPA/N

FPA/N Classification

Class II Class III Class IVG Class IVS

Number of Years Granted on Multi-Year Request

4 yrs 5 yrs

Conditions on Approval / Reasons for Disapproval

Issued By: _____

Region: _____

Title: _____

Date: _____

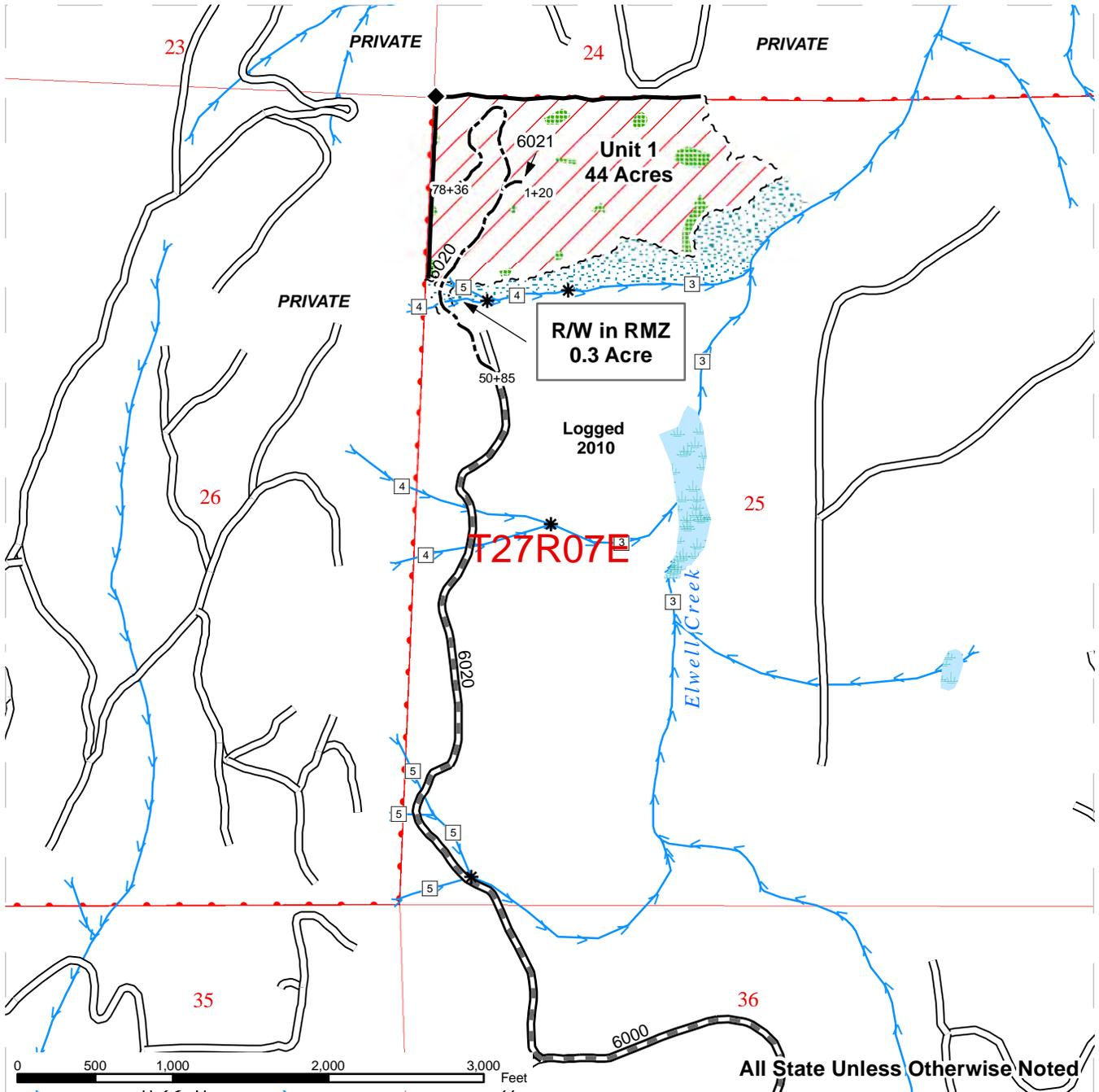
Copies to: Landowner, Timber Owner and Operator.

Issued in person: Landowner Timber Owner Operator **By:** _____

ROAD PLAN MAP

SALE NAME: Sidehill Salmon
AGREEMENT#: 30-091789
TOWNSHIP(S): T27NR07E, T27NR08E
TRUST(S): State Forest Transfer (01)

REGION: South Puget Sound
COUNTY(S): Snohomish
ELEVATION RGE: 290 - 930 ft



Timber Sale Area	Existing Roads	Streams
Riparian Mgt Zone	Required Pre-Haul Maintenance	Wetland
Leave Tree Areas Marked with Yellow "Leave Tree Area" Tags	Optional Construction	
White Timber Sale Boundary Tags	Survey Corner	
Timber Type Change marked with pink flagging	DNR Managed Lands	
Orange Right of Way Tags	Stream Type	
	Stream Type Break	

Prepared By: zbee490

Creation Date: 09/01/2015

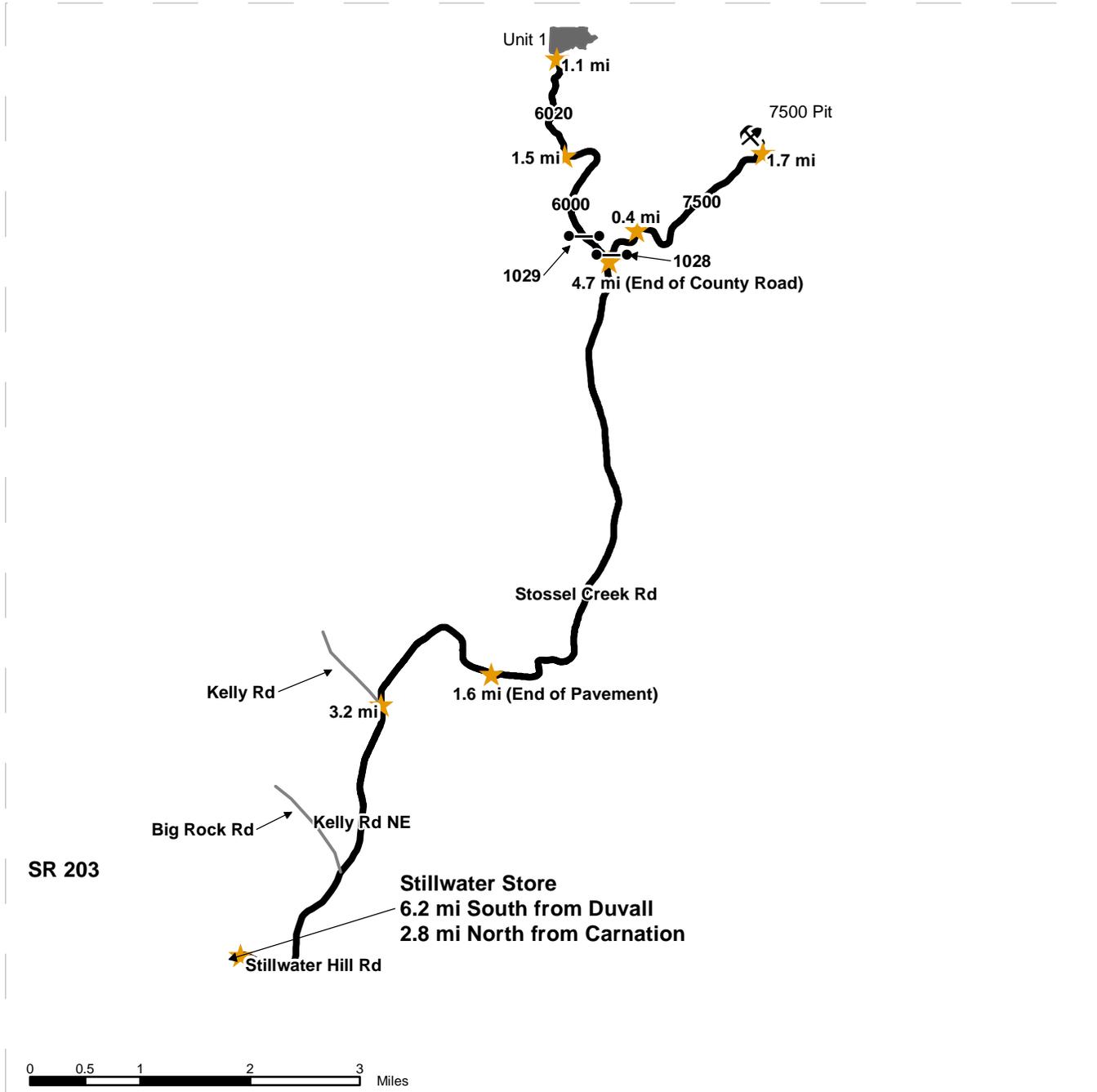
Modification Date: 10/27/2015

kfry490 - 02/10/2016

DRIVING MAP

SALE NAME: Sidehill Salmon
AGREEMENT#: 30-091789
TOWNSHIP(S): T27NR07E, T27NR08E
TRUST(S): State Forest Transfer (01)

REGION: South Puget Sound
COUNTY(S): Snohomish
ELEVATION RGE: 290 - 930 ft



- Timber Sale Unit
- Highways
- Haul Route
- Existing roads
- Milepost Markers
- Gate (Master 383)
- Rock Pit
- Distance Indicator

DRIVING DIRECTIONS:

Unit 1 - Traveling North on State Route 203 from Carnation turn right onto Stillwater Hill Rd after 2.8 miles. Stillwater Hill Rd becomes Kelly Rd NE. Travel 3.2 miles turn right onto Stossel Creek County Rd. Travel 6.3 miles then turn left onto the 6000 Rd. Gate 1029B will be 300 feet further, gate lock type Master 383. Travel 1.5 miles then turn right onto the 6020 Rd. The end of the 6020 Rd is 1.1 miles further and the unit is north, past the RMZ.

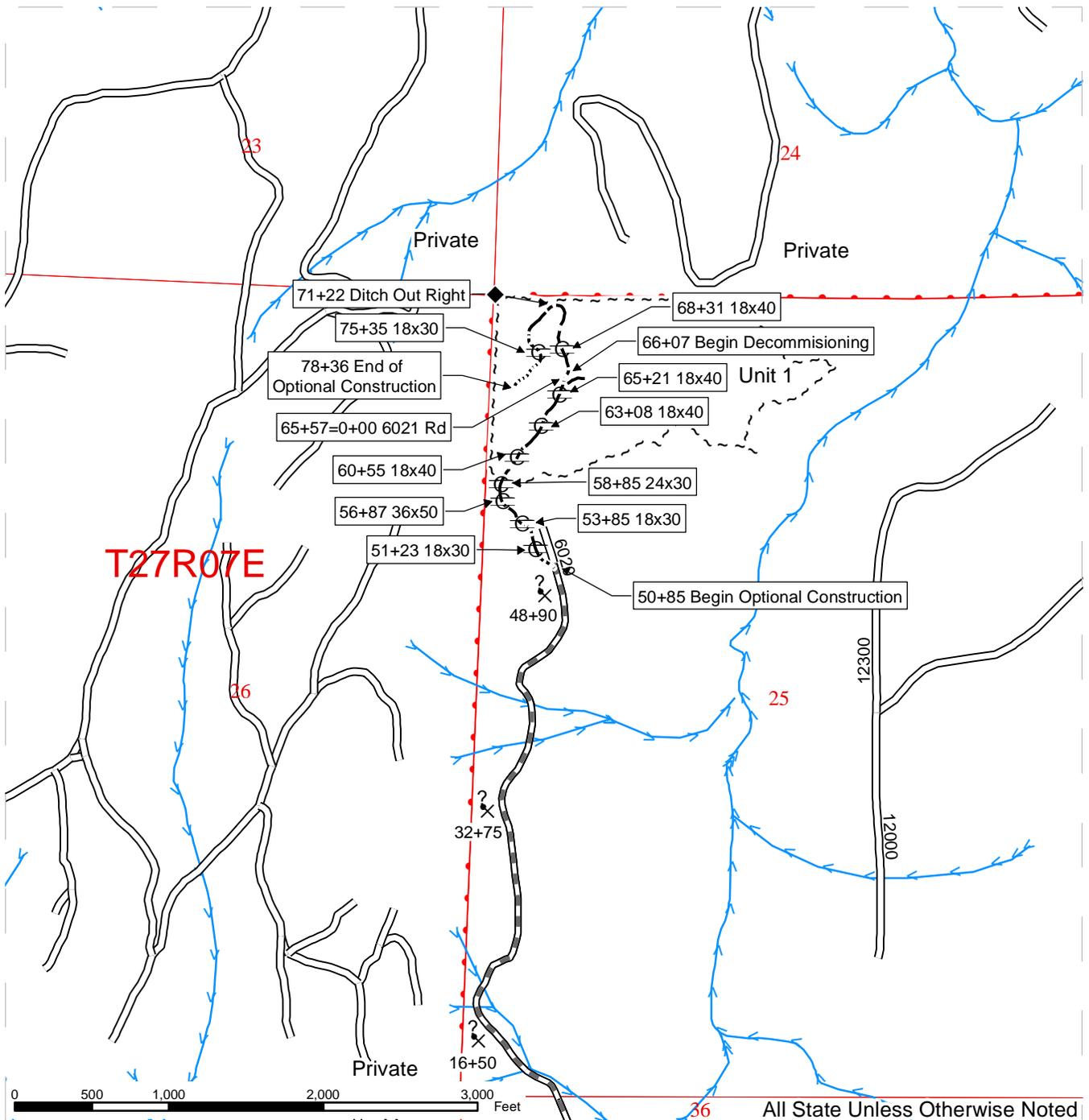
7500 Rock Pit - From the junction of the 6000 / 7000 / Stossel Creek Rd, travel north on the 7000 Rd through gate # 1028, gate lock type Master 383. Continue on the 7000 road for 0.4 mile. Turn right onto the 7500 road. Continue for 1.7 miles, the 7500 Rock Pit will be on the right.



ROAD VIEW MAP

SALE NAME: SIDEHILL SALMON
AGREEMENT#: 30-091789
TOWNSHIP(S): T27R07E, T26R07E
TRUST(S): State Forest Transfer(1)

REGION: South Puget Sound Region
COUNTY(S): SNOHOMISH
ELEVATION RGE: 290-930



Legend			
	Existing Roads		DNR Managed Lands
	Pre-haul Maintenance		Public Land Survey Sections
	Optional Construction		Monumented Corners
	Sale Boundary Tags		Gates (Master 383)
	Rock Pit		Streams
	Rock Source		
	Culvert installations		

Prepared By: bbal490

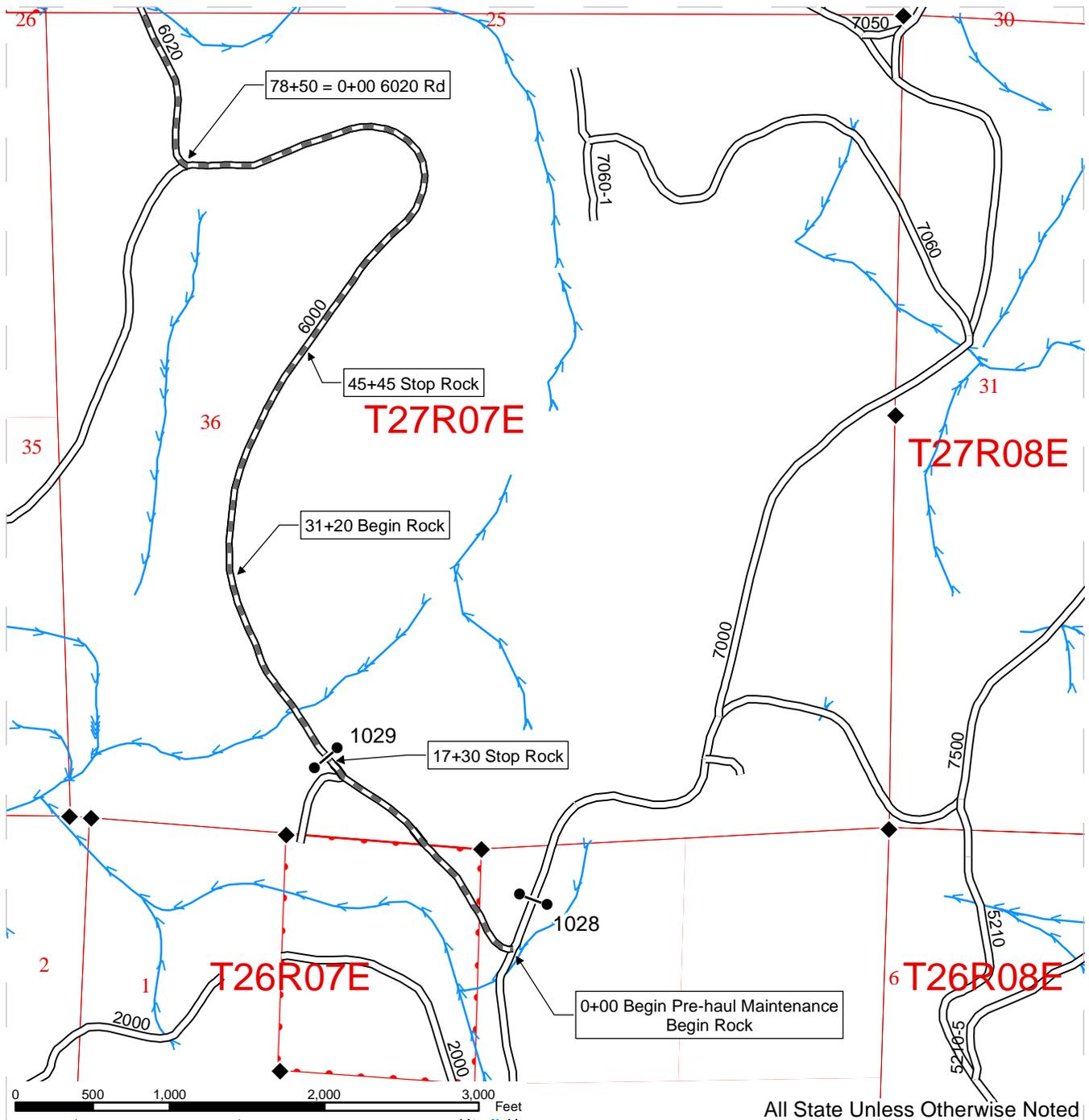
Creation Date: 7/23/2015

Modification Date: 10/22/2015
kfy490 - 02/16/2016

ROAD VIEW MAP

SALE NAME: SIDEHILL SALMON
AGREEMENT#: 30-091789
TOWNSHIP(S): T27R07E, T26R07E
TRUST(S): State Forest Transfer(1)

REGION: South Puget Sound Region
COUNTY(S): SNOHOMISH
ELEVATION RGE: 290-930



Legend					
	Existing Roads		Rock Pit		DNR Managed Lands
	Pre-haul Maintenance		Rock Source		Public Land Survey Sections
	Optional Construction		Culvert installations		Monumented Corners
	Sale Boundary Tags		Streams		Gates (Master 383)

Prepared By: bbal490

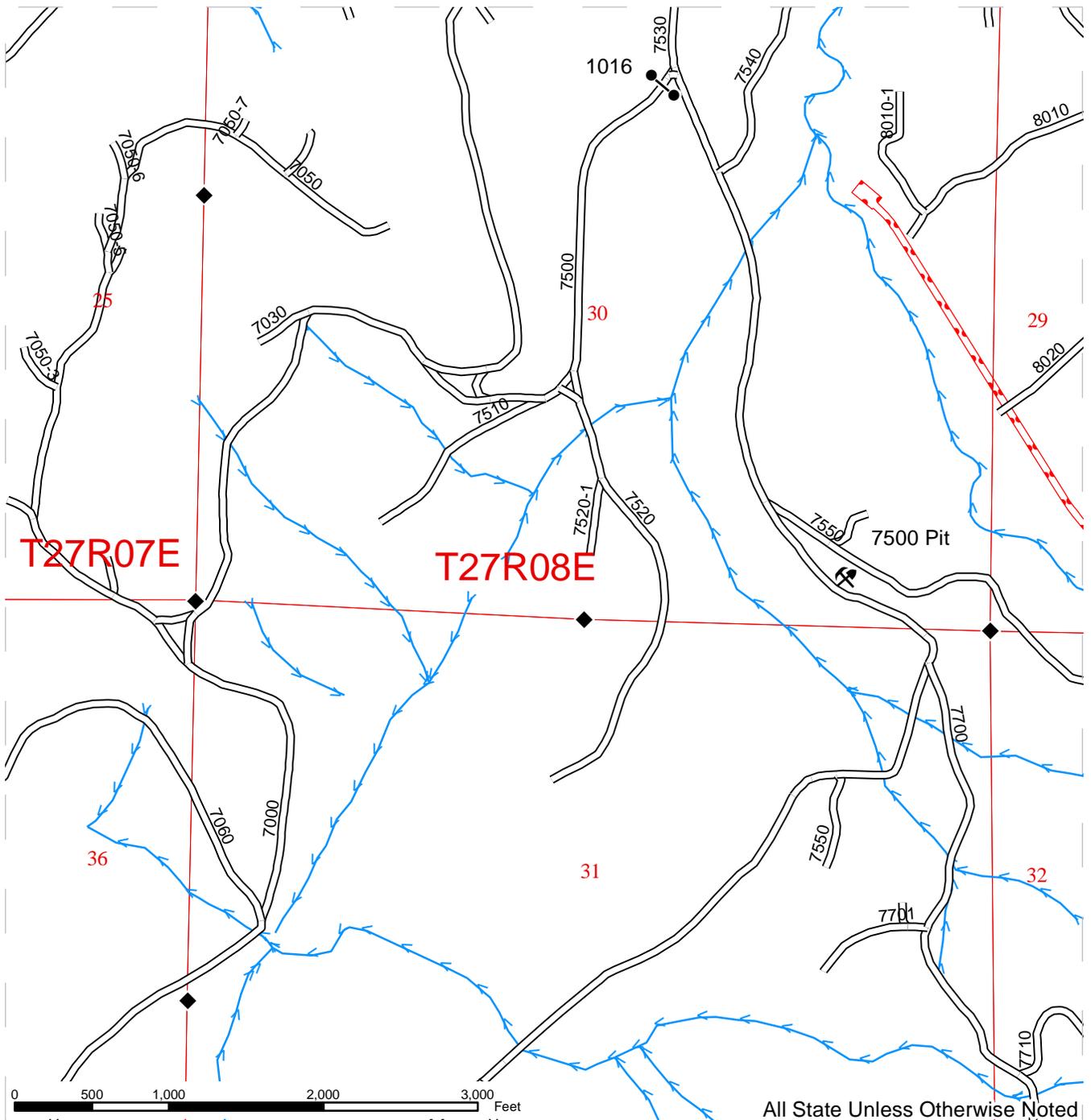
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kfry490 - 02/16/2016

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

SIDEHILL SALMON TIMBER SALE ROAD PLAN
KING COUNTY
SNOQUALMIE UNIT RAINIER DISTRICT

AGREEMENT NO.: 30-091789

STAFF ENGINEER: B. BALLARD

DATE: SEPTEMBER 1, 2015

DRAWN & COMPILED BY: B. BALLARD

SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

Clauses in this road plan apply to all road related work, including landings and rock source development, unless otherwise noted.

0-2 REQUIRED ROADS

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
6000	0+00 to 78+50	Pre/Post Haul Maintenance
6020	0+00 to 50+85	Pre/Post Haul Maintenance
6020	66+07 to 78+36	Decommissioning – If Built

0-3 OPTIONAL ROADS

The specified work on the following roads is not required. Any optional roads built by the Purchaser must meet all the specifications in the road plan.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
6020	50+85 to 78+36	Construction
6021	0+00 to 1+20	Construction

0-4 CONSTRUCTION

Construction includes, but is not limited to:
clearing;
grubbing;
right-of-way debris disposal;
excavation and/or embankment to subgrade;
landing construction;
acquisition and installation of drainage structures;
acquisition, manufacture, and application of rock;

grass seeding;
road deactivation.

0-6 PRE-HAUL MAINTENANCE

Pre-haul maintenance includes, but is not limited to:
removing fallen right-of-way debris;
pulling ditches;
cleaning ditches;
constructing catch basin and headwall;
cleaning culvert inlets and outlets;
grading and shaping existing road surface and turnouts;
compaction of road surface;
removing berms from road shoulders;
spot rocking;

0-7 POST-HAUL MAINTENANCE

This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE.

0-10 DECOMMISSIONING

This project includes abandonment listed in Clause 9-21 ROAD DECOMMISSIONING.

0-12 DEVELOP ROCK SOURCE

Purchaser may develop a new or an existing rock source. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Purchaser desires a change from this road plan including, but not limited to, relocation, extension, change in design, or adding roads; a revised road plan must be submitted in writing to the Contract Administrator for consideration. Before work begins, Purchaser shall obtain approval from the State for any submitted plan that changes the scope of work or environmental condition from the original road plan.

1-2 UNFORESEEN CONDITIONS

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions, or Purchaser's choice of construction season or techniques will be at the Purchaser's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

1-3 ROAD DIMENSIONS

Purchaser shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan, unless controlled by construction stakes or design data (plan, profile, and cross-sections).

1-4 ROAD TOLERANCES

Purchaser shall perform road work within the tolerances listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET.

<u>Tolerance Class</u>	<u>A</u>	<u>B</u>	<u>C</u>
Road and Subgrade Width (feet)	+1.5	+1.5	+2.0
Subgrade Elevation (feet +/-)	0.5	1.0	2.0
Centerline alignment (feet lt./rt.)	1.0	1.5	3.0

1-5 DESIGN DATA

Road Sections, Plan and Profile design data is available upon request at the Department of Natural Resources South Puget Sound Region Office in Enumclaw, WA.

1-6 ORDER OF PRECEDENCE

Any conflict or inconsistency in the road plan will be resolved by giving the documents precedence in the following order:

1. Addenda.
2. Designs or Plans. On designs and plans, figured dimensions shall take precedence over scaled dimensions.
3. Road Plan Clauses.
4. Typical Section Sheet.
5. Standard Lists.
6. Standard Details.

In case of any ambiguity or dispute over interpreting the road plan, the Contract Administrator’s or designee’s decision will be final.

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Purchaser shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer’s recommendation.

1-9 DAMAGED METALLIC COATING

Any damaged galvanized or aluminized coating on existing or new bridge components, culverts, downspouts, and flumes must be cleaned and treated with a minimum of two coats of zinc rich paint.

1-10 WSDOT STANDARD SPECIFICATION REFERENCE

References in this road plan to “WSDOT Standard Specifications” mean the Washington State Department of Transportation’s Standard Specifications for Road, Bridge, and Municipal Construction 2012 (M41-10).

SUBSECTION ROAD MARKING

1-15 ROAD MARKING

Purchaser shall perform road work in accordance with the state’s marked location. All road work is marked as follows:

- Orange pin flags and Orange flagging for centerline location
- Lath stakes at pre-haul maintenance stations

1-16 CONSTRUCTION STAKES SET BY STATE

Purchaser shall perform work on the following road in accordance with the reference points set in the field for grade and alignment.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
6020	50+85 to 78+36	Construction

1-18 REFERENCE POINT DAMAGE

Purchaser shall reset reference points (RPs) that were moved or damaged at any time during construction to their original locations. Excavation and embankment may not proceed on road segments controlled by said RPs until Purchaser resets all moved or damaged RPs.

SUBSECTION TIMING

1-20 COMPLETE BY DATE

Purchaser shall complete pre-haul road work before the start of timber haul.

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan for timber hauling other than timber cut on the right-of-way, without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

Purchaser shall notify the Contract Administrator a minimum of 7 calendar days before work begins.

1-23 ROAD WORK PHASE APPROVAL

Purchaser shall obtain written approval from the Contract Administrator upon completion of each of the following phases of road work:

- Subgrade construction
- Rock application

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION

The operation of road construction equipment is not allowed on weekends or state recognized holidays, unless authorized in writing by the Contract Administrator.

The specified activities are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
All Roads	All Stations	Operation of road construction equipment	Nov 1 to April 30

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION, Purchaser shall provide a maintenance plan to include further protection of state resources. Purchaser shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Purchaser is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

1-29 SEDIMENT RESTRICTION

Purchaser shall not allow silt-bearing runoff to enter any streams.

1-30 CLOSURE TO PREVENT DAMAGE

In accordance with Contract Clause G-220 STATE SUSPENDS OPERATION, the Contract Administrator will suspend road work or hauling right-of-way timber, forest products, or rock under the following conditions:

- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

Operations must stop unless authority to continue working or hauling is granted in writing by the Contract Administrator. In the event that surface or base stability problems persist, Purchaser shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Purchaser shall protect the work from damage or deterioration.

1-32 BRIDGE SURFACE RESTRICTION

The use of metal tracked equipment is not allowed on bridge surfaces at any time. If Purchaser must run equipment on bridge surfaces, then rubber tired equipment or other methods, approved in writing by Contract Administrator, must be used.

1-33 SNOW PLOWING RESTRICTION

Snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contract Administrator upon request. Purchaser shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Purchaser shall maintain all roads used under this contract in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS for the entire term of this contract. Maintenance is required even during periods of inactivity.

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

Purchaser shall perform maintenance on roads listed in Contract Clause C-050 PURCHASER ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-4 PASSAGE OF LIGHT VEHICLES

Purchaser shall maintain roads in a condition that will allow the passage of pickup trucks.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following road(s), Purchaser shall use a grader to shape the existing surface and pull the ditches before rock application. Purchaser shall accomplish all grading using a motor grader with a minimum of 175 horsepower.

<u>Road</u>	<u>Stations</u>
6000	0+00 to 78+50

2-6 CLEANING CULVERTS

On the following roads, Purchaser shall clean the inlets and outlets of all culverts.

<u>Road</u>	<u>Stations</u>
6000	0+00 to 78+50
6020	0+00 to 50+85

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following roads, Purchaser shall clean ditches, headwalls, and catchbasins. Work must be completed before rock application and must be done in accordance with the TYPICAL SECTION SHEET. Pulling ditch material across the road or mixing in with the road surface is not allowed.

<u>Road</u>	<u>Stations</u>
6000	0+00 to 78+50
6020	0+00 to 50+85

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION CLEARING

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 2 inches DBH or over 5 feet high between the marked right-of-way boundaries, or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

3-7 RIGHT-OF-WAY DECKING

Purchaser shall deck all right-of-way timber. Decks must be parallel to the road centerline and placed within the cleared right-of-way. Decks must be free of dirt, limbs, and other right-of-way debris, and removable by standard log loading equipment from the roadbed.

3-8 PROHIBITED DECKING AREAS

Purchaser shall not deck right-of-way timber in the following areas:

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Against standing trees unless approved by the Contract Administrator.

SUBSECTION GRUBBING

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Purchaser shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. Grubbing must be completed before starting excavation and embankment.

SUBSECTION ORGANIC DEBRIS

3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all vegetative material not eligible for removal by Contract Clause G-010 PRODUCTS SOLD AND SALE AREA or G-011 RIGHT TO REMOVE FOREST PRODUCTS AND CONTRACT AREA, that is larger than one cubic foot in volume within the clearing limits as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

Purchaser shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris, except by burning, before the application of rock and/or timber haul.

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

Purchaser shall not bury organic debris unless otherwise stated in this plan.

3-25 SCATTERING ORGANIC DEBRIS

Purchaser shall scatter organic debris outside of the clearing limits in natural openings unless otherwise detailed in this road plan. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

Purchaser shall use a track mounted hydraulic excavator for construction work, unless authorized in writing by the Contract Administrator.

4-2 PIONEERING

Pioneering may not extend past construction that will be completed during the current construction season. Pioneering may not extend more than 1500 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

- Drainage must be provided on all uncompleted construction.

- Road pioneering operations may not undercut the final cut slope or restrict drainage.
- Culverts at live stream crossings must be installed during pioneering operations prior to embankment.

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.

4-5 CUT SLOPE RATIO

Purchaser shall construct excavation slopes no steeper than shown on the following table ,unless construction staked or designed:

<u>Material Type</u>	<u>Excavation Slope Ratio</u>	<u>Excavation Slope Percent</u>
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (on slopes over 70%)	½:1	200
Fractured or loose rock	½:1	200
Hardpan or solid rock	¼:1	400

4-6 EMBANKMENT SLOPE RATIO

Purchaser shall construct embankment slopes no steeper than shown on the following table, unless designed:

<u>Material Type</u>	<u>Embankment Slope Ratio</u>	<u>Embankment Slope Percent</u>
Sandy Soils	2:1	50
Common Earth and Rounded Gravel	1½:1	67
Angular Rock	1¼:1	80

4-7 SHAPING CUT AND FILL SLOPE

Purchaser shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

- 6 feet for curves of 50 to 79 feet radius.
- 4 feet for curves of 80 to 100 feet radius.

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

- 2 feet for embankment heights at centerline of 2 to 6 feet.
- 4 feet for embankment heights at centerline of greater than 6 feet.

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width.

SUBSECTION INTERSECTIONS, TURNOUTS AND TURNAROUNDS

4-21 TURNOUTS

Purchaser shall construct turnouts intervisible with a maximum distance of 1,000 feet between turnouts. Locations may be adjusted to fit the final subgrade alignment and sight distances. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

Turnarounds must be no larger than 30 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

SUBSECTION DITCH CONSTRUCTION

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Purchaser shall construct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Ditches must be constructed concurrently with construction of the subgrade.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified and as needed. Purchaser shall construct ditchouts at locations shown on the CULVERT LIST and as needed. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio. L or R denotes ditchout left or ditchout right.

SUBSECTION WASTE MATERIAL (DIRT)

4-35 WASTE MATERIAL DEFINITION

Waste material is defined as all dirt, rock, mud, or related material that is extraneous or unsuitable for construction material. Waste material, as used in Section 4 EXCAVATION, is not organic debris.

4-36 DISPOSAL OF WASTE MATERIAL

Purchaser may sidecast waste material on side slopes up to 55% if the waste material is compacted and free of organic debris. On side slopes greater than 55%, all waste material must be end hauled or pushed to the designated embankment sites.

4-37 WASTE AREA LOCATION

Purchaser shall deposit waste material in areas approved by the Contract Administrator.

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas, except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- On side slopes steeper than 55%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

SUBSECTION SHAPING

4-55 ROAD SHAPING

Purchaser shall shape the subgrade and surface as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape must ensure runoff in an even, un-concentrated manner, and must be uniform, firm, and rut-free. Purchaser shall accomplish all shaping using a motor grader with a minimum of 175 horsepower.

4-56 DRY WEATHER SHAPING

At any time of year, the Contract Administrator may require the application of water to facilitate shaping activities. The method of water application is subject to written approval by the Contract Administrator.

SUBSECTION COMPACTION

4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. Waste material may be placed by end-dumping or sidecasting until sufficiently wide enough to support the equipment.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed subgrades in accordance with the COMPACTION LIST by routing equipment over the entire width except ditch.

4-62 DRY WEATHER COMPACTION

At any time of year, the Contract Administrator may require the application of water to facilitate compaction activities. The method of water application is subject to written approval by the Contract Administrator.

4-63 EXISTING SURFACE COMPACTION

Purchaser shall compact maintained road surfaces in accordance with the COMPACTION LIST by routing equipment over the entire width.

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

Purchaser shall remove berms from road shoulders to permit the escape of runoff.

SUBSECTION CULVERTS

5-5 CULVERTS

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material, except as provided in clause 5.6 USED CULVERT MATERIAL, and meet the specifications in Clauses 10-15 through 10-23.

5-6 USED CULVERT MATERIAL

Purchaser may install used culverts on the following roads. All other roads must have new culverts installed.

<u>Road</u>	<u>Stations</u>
6020	66+07 to 78+36

5-11 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the CULVERT LIST that are not installed will become the property of the state. Purchaser shall stockpile materials as directed by the Contract Administrator.

SUBSECTION CULVERT INSTALLATION

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the Corrugated Polyethylene Pipe Association’s “Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings”.

Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer's recommendations.

5-17 CROSS DRAIN SKEW AND SLOPE

Cross drains, on road grades in excess of 3%, must be skewed at least 30 degrees from perpendicular to the road centerline, except where the cross drain is at the low point in the road culverts will not be skewed. Cross drain culverts must be installed at a slope steeper than the incoming ditch grade, but not less than 3% or more than 12%.

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover recommended by the culvert manufacturer for the type and size of the pipe.

SUBSECTION ENERGY DISSIPATERS

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross drain culverts, except for temporary culverts. Energy dissipater installation is subject to approval by the Contract Administrator.

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT LIST. Rock must be set in place by machine. Placement must be by zero-drop-height method only.

SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

5-25 CATCH BASINS

Purchaser shall construct catch basins in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 2 feet wide and 4 feet long unless specified otherwise on the CULVERT LIST.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross drain culverts, except for temporary culverts. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be by zero-drop-height method only

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At the following culverts, Purchaser shall place Quarry Spalls in conjunction with or immediately following construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the ROCK LIST or as directed by the Contract Administrator. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be by zero-drop-height method only.

<u>Road</u>	<u>Station</u>
6020	56+87
6020	58+85

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. If other operators are using, or desire to use the rock source(s), a joint operating plan must be developed. All parties shall follow this plan.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
7500 Pit	SW ¼ SW ¼ of Sec 32 T27NR08E W. M.	4 inch minus and Quarry Spalls

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following existing stockpiles on state land at no charge to the Purchaser. Purchaser shall not remove more than 880 cubic yards of 1 ¼ inch minus rock. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator. The 4 inch minus stockpile may be used completely.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
7500	SW ¼ SW ¼ of Sec 32 T27NR08E W. M.	1 ¼ inch minus
7500	SW ¼ SW ¼ of Sec 32 T27NR08E W. M.	4 inch minus

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense. Rock sources are subject to written approval by the Contract Administrator before their use. Rock source must be a WSDOT certified source.

SUBSECTION ROCK SOURCE DEVELOPMENT

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Purchaser may conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator.

<u>Source</u>	<u>Rock Type</u>
7500	4 inch minus

6-11 ROCK SOURCE DEVELOPMENT PLAN BY PURCHASER

Purchaser may conduct rock source development and use at the following sources, in accordance with a written ROCK SOURCE DEVELOPMENT PLAN to be prepared by the Purchaser. The plan is subject to written approval by the Contract Administrator before any rock source operations. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator.

<u>Source</u>	<u>Station</u>	<u>Rock Type</u>
6020 Road	16+50 32+75 48+90	4 inch minus and Quarry Spalls

Rock source development plans prepared by the Purchaser must show the following information:

- Rock source location.
- Rock source overview showing access roads, development areas, stockpile locations, waste areas, and floor drainage.
- Rock source profiles showing development areas, bench locations including widths, and wall faces including heights.
- Rock source reclamation plan describing how the area will be left in a condition that will ensure public safety and minimize environmental impacts.

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following specifications, unless otherwise specified in the ROCK SOURCE DEVELOPMENT AND RECLAMATION PLAN:

- Pit walls may not be undermined or over steepened. The maximum slope of the walls must be consistent with recognized engineering standards for the type of material being excavated in accordance with the following table:

Material	Maximum Slope Ratio (Horiz. :Vert.)	Maximum Slope Percent
Sand	2:1	50
Gravel	1.5:1	67
Common Earth	1:1	100
Fractured Rock	0.5:1	200
Solid Rock	0:1	vertical

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches must be a minimum of 1.5 times the maximum length of the largest machine used.
- The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- All operations must be carried out in compliance with all regulations of the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- All vehicle access to the top of the pit faces must be blocked.

SUBSECTION ROCK MANUFACTURE

6-20 ROCK GRADATION TYPES

Purchaser shall manufacture rock in accordance with the types and amounts listed in the ROCK LIST. Rock must meet the following specifications for gradation and uniform quality during manufacture. Purchaser shall provide a sieve analysis upon request from the Contract Administrator.

6-22 FRACTURE REQUIREMENT FOR ROCK

A minimum of 50% by visual inspection of coarse aggregate must have at least one fractured face. Coarse aggregate is the material greater than 1/4-inch in size.

6-23 ROCK CRUSHING OPERATIONS

Rock crushing operations must conform to the following specifications:

- Operations and placement of oversize material must be conducted in or near the rock source site, as approved in writing by the Contract Administrator.
- The crushing operation must be concluded within 30 working days from the time it begins.

SUBSECTION ROCK GRADATIONS

6-36 4-INCH MINUS CRUSHED ROCK

% Passing 4" square sieve	100%
% Passing 2" square sieve	55 - 75%
% Passing U.S. #4 sieve	15 - 45%

The portion of aggregate retained on the No. 4 sieve may not contain more than 0.2 percent organic debris and trash. All percentages are by weight.

6-38 4-INCH IN-PLACE ROCK

4-inch in-place rock must have a minimum of 90 percent of the top 4 inches of the running surface pass a 4-inch square opening.

In-place rock may not contain more than 5 percent by weight of organic debris and trash. No more than 50 percent of rock may be larger than 8 inches in any dimension and no rock may be larger than 12 inches in any dimension.

6-43 QUARRY SPALLS

% Passing 8" square sieve	100%
% Passing 3" square sieve	40% maximum
% Passing 3/4" square sieve	10% maximum

Rock may not contain more than 5 percent vegetative debris or trash. All percentages are by weight.

SUBSECTION ROCK MEASUREMENT

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are compacted yards. Purchaser shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction.

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade completion before rock application.

6-71 ROCK APPLICATION

Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

6-73 ROCK FOR WIDENED PORTIONS

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way unless otherwise specified in the ROCK LIST.

SECTION 7 – STRUCTURES

SUBSECTION SIGNS

7-1 SIGN INSTALLATION

Purchaser shall purchase, install, and maintain the following road signs. Signs must comply with the Federal Highway Administration’s Manual on Uniform Traffic Control Devices.

<u>Road</u>	<u>Station</u>	<u>Sign</u>
6000	0+00	Active Logging Road Closed
7000	0+00	Road Closed

SUBSECTION GATE CLOSURE

7-70 GATE CLOSURE

On the following road, Purchaser shall keep gates closed and locked except during periods of haul. All gates that remain open during haul must be locked or securely fastened in the open position. All gates must be closed at termination of use.

<u>Road</u>	<u>Station</u>	<u>Gate No.</u>
6000	0+00	1029B
7000	0+00	1028

SECTION 8 – EROSION CONTROL

SUBSECTION REVEGETATION

8-15 REVEGETATION

Purchaser shall spread grass seed on all exposed soils at stream crossing culvert installations.

SUBSECTION SEED, FERTILIZER, AND MULCH

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil at stream crossing culvert installations at a rate of 50 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
 - a. Common name of seed
 - b. Net weight
 - c. Percent of purity
 - d. Percentage of germination
 - e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>
Perennial Rye	35-45
Tall Fescue	30-40
White Clover	10-20
Inert and Other Crop	0.5

8-26 PROTECTION FOR GRASS SEED

Purchaser shall provide and evenly spread a layer of straw to all grass seeded soils at stream culvert installations. Soils must be covered before the first anticipated storm event.

SECTION 9 – POST-HAUL ROAD WORK

SUBSECTION STRUCTURES

9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

Culverts removed from roads become the property of the Purchaser and must be removed from state land.

SUBSECTION POST-HAUL MAINTENANCE

9-5 POST-HAUL MAINTENANCE

Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS and as specified below.

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
6000	0+00 to 78+50	Grading

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

SUBSECTION DECOMMISSIONING

9-20 ROAD DECOMMISSIONING

If constructed, the purchaser shall decommission the following road before the termination of this contract.

<u>Road</u>	<u>Stations</u>
6020	66+07 to 78+36

9-22 DECOMMISSIONING

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 20 feet between waterbars or between natural drainage paths and with a maximum spacing of 400 feet, or as marked in the field.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Remove culverts.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Slope all trench walls and approach embankments no steeper than 1.5:1.

- Transport all removed culverts off site. All removed culverts are the property of the Purchaser.

SECTION 10 MATERIALS

SUBSECTION CULVERTS

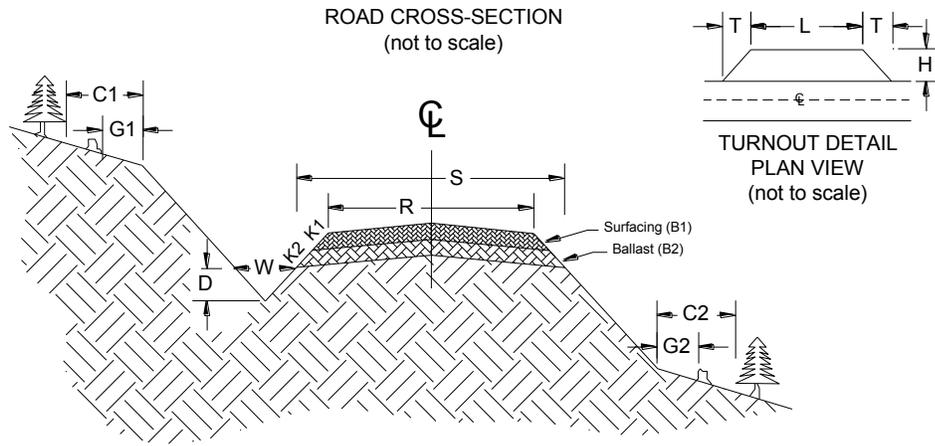
10-17 CORRUGATED PLASTIC CULVERT

Polyethylene culverts must meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene. Culverts must be Type S – double walled with a corrugated exterior and smooth interior.

10-22 PLASTIC BAND

Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe joint.

TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio %	Fill Slope Ratio %
						Width (feet)	Depth (feet)		G1	G2	C1	C2		
				S	R	W	D		G1	G2	C1	C2	%	%
6000	0+00	78+50	C	17	14	3	1	4	0	0	0	0	100	67
6020	0+00	55+80	C	15	12	3	1	4	5	5	10	10	100	67
6020	55+80	59+25	C	15	12	3	1	4	5	5	tags	tags	100	67
6020	59+25	78+36	C	15	12	3	1	4	5	5	10	10	100	67
6021	0+00	1+20	C	15	12	3	1	4	5	5	5	5	100	67

COMPACTION LIST

Road	From Station	To Station	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
6000	0+00	78+50	Subgrade	12	Vibratory Smooth Drum	14,000	4	3
6020	0+00	78+36	Fill	12				
6021	0+00	1+20	Waste Area	--				
			Pre-haul surface	--				
			Rock	4				
			Embankment	12				

ROCK LIST

BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y. Station	# of Stations	C.Y. Subtotal	Rock Source	
			K2	B2	4 Inch Minus or 4 inch In Place				
6020	50+85	78+36	67%	8	32	27.51	880	7500 Pit or 7500 Pit Stockpile or 6020 rd or Commercial	
6021	0+00	1+20	67%	8	32	1.2	38		
Culvert installations	Headwall and Energy Dissapators				Quarry Spalls				
					19	1	19		

BALLAST TOTAL: 937 Compacted Cubic Yards

SURFACE

Road Number	From Station	To Station	Rock Slope	Non-Compacted Rock Depth	C.Y. Station	# of Stations	C.Y. Total	Rock Source
			K1	B1	1 ¼ Inch Minus			
6000	0+00	17+30	67%	4	17	17.3	294	7500 Pit Stockpile
6000	31+20	45+45	67%	4	17	14.3	243	
Pit Access Road	0+00	2+30	67%	4	17	2.3	39	

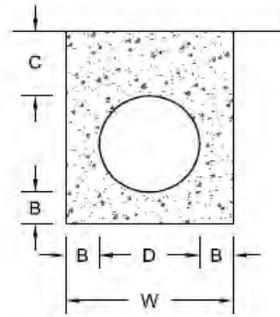
SURFACE TOTAL: 576 Compacted Cubic Yards

CROSS DRAIN CULVERT INSTALLATION DETAIL INSTALLATION REQUIREMENTS

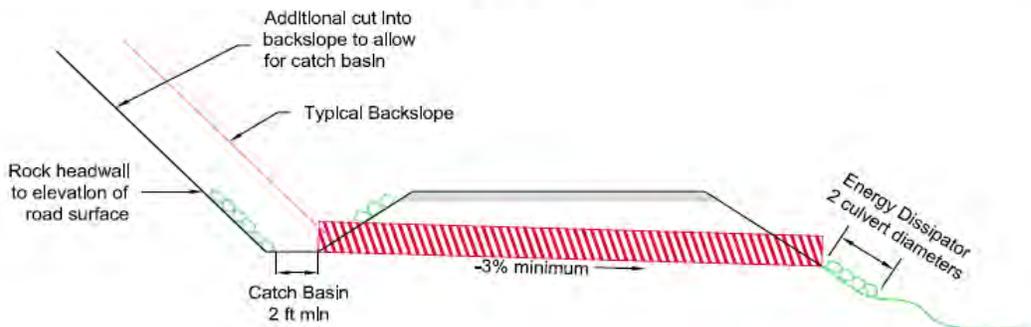
(Page 1 of 2)

1. Preparation of foundation and placement of bedding material shall precede the installation of all culvert pipes. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform, dense, unyielding, base. The backfill material shall be placed so that the pipe is uniformly supported along the barrel.
2. A 3 Inch minus Crushed Rock may be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed $\frac{1}{6}$ the pipe diameter or 4", whichever is smaller.
3. The corrugated pipe shall be installed at a minimum grade of 3%, on a layer of bedding material as shown. Backfill material shall be well compacted in six inch layers under the haunches, around the sides, and above the pipe to the recommended minimum height of cover. Acceptable compaction methods include mechanical hand tamping, vibratory plate compactor, and vibratory roller.
4. A catch basin, headwall, and energy dissipater shall be constructed at each cross drain culvert as shown below. Catch basin, headwall, and energy dissipater shall be constructed of rock ranging from 6 inches to 10 inches.

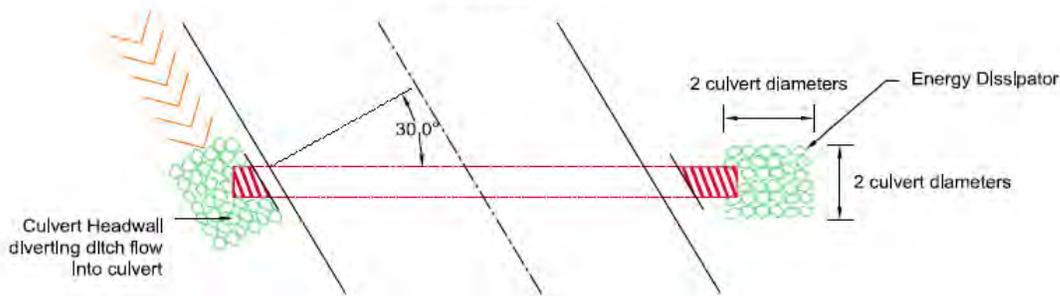
MINIMUM TRENCH DIMENSIONS			
Nominal Diameter	Minimum Thickness	Minimum Cover	Min. Trench Width
D	B	C	W
18"	6"	12"	36"
24"	6"	12"	42"
30"	6"	12"	48"
36"	6"	12"	54"



PROFILE VIEW

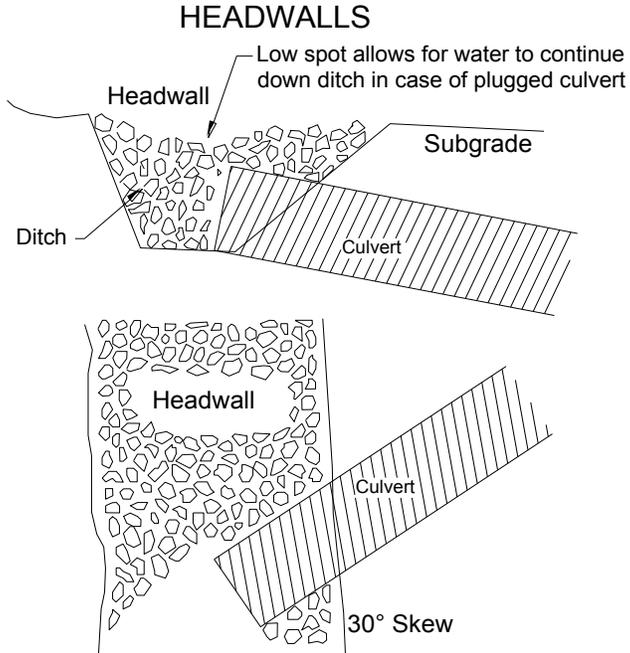


PLAN VIEW



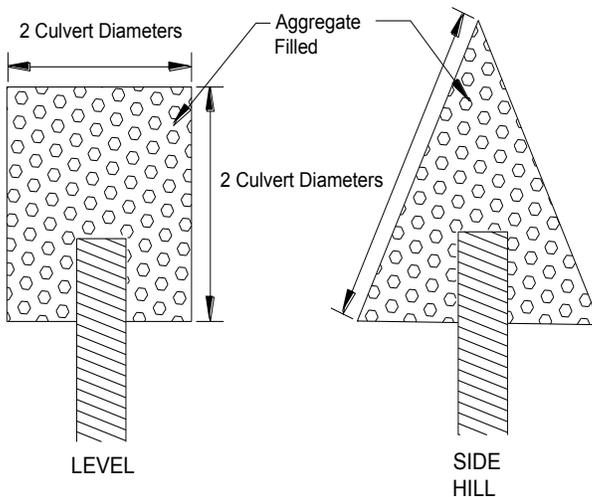
CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 2 of 2)



Headwalls to be constructed of material that will resist erosion.

ENERGY DISSIPATORS



Dissipator Specifications:
Depth: 1 culvert diameter
Average: as specified in the
CULVERT LIST

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS, Page 1 of 2

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. Remove slides from ditches and the roadway. Repair fill-failures, in accordance with Clause 4-6 EMBANKMENT SLOPE RATIO, with selected material or material approved by the Contract Administrator. Remove overhanging material from the top of cut slopes.
- Waste material from slides or other sources shall be placed and compacted in stable locations identified in the road plan or approved by the Contract Administrator, so that sediment will not deliver to any streams or wetlands.
- Slide material and debris shall not be mixed into the road surface materials, unless approved by the Contract Administrator.

Surface

- Grade and shape the road surface, turnouts, and shoulders to the original shape on the TYPICAL SECTION SHEET to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away, or as directed by the Contract Administrator.
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.
- For roads with geotextile fabric: spread surface aggregate to fill in soft spots and wheel ruts (barrel spread) to prevent damage to the geotextile fabric.

Drainage

- Prevent silt bearing road surface and ditch runoff from delivering sediment to any streams or wetlands.
- Maintain rolling dips and drivable waterbars as needed to keep them functioning as intended.
- Maintain headwalls to the road shoulder level with material that will resist erosion.
- Maintain energy dissipaters at culvert outlets with non-erodible material or rock.
- Keep ditches, culverts, and other drainage structures clear of obstructions and functioning as intended.
- Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This shall be done even during periods of inactivity.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS, Page 2 of 2

Preventative Maintenance

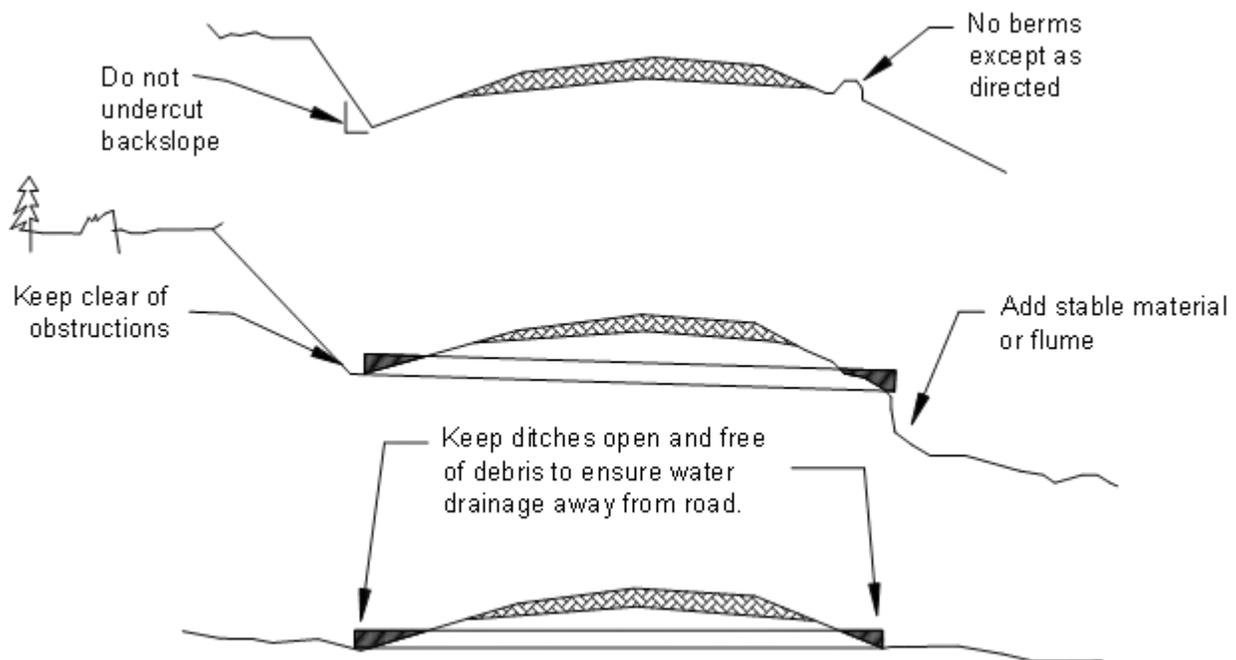
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

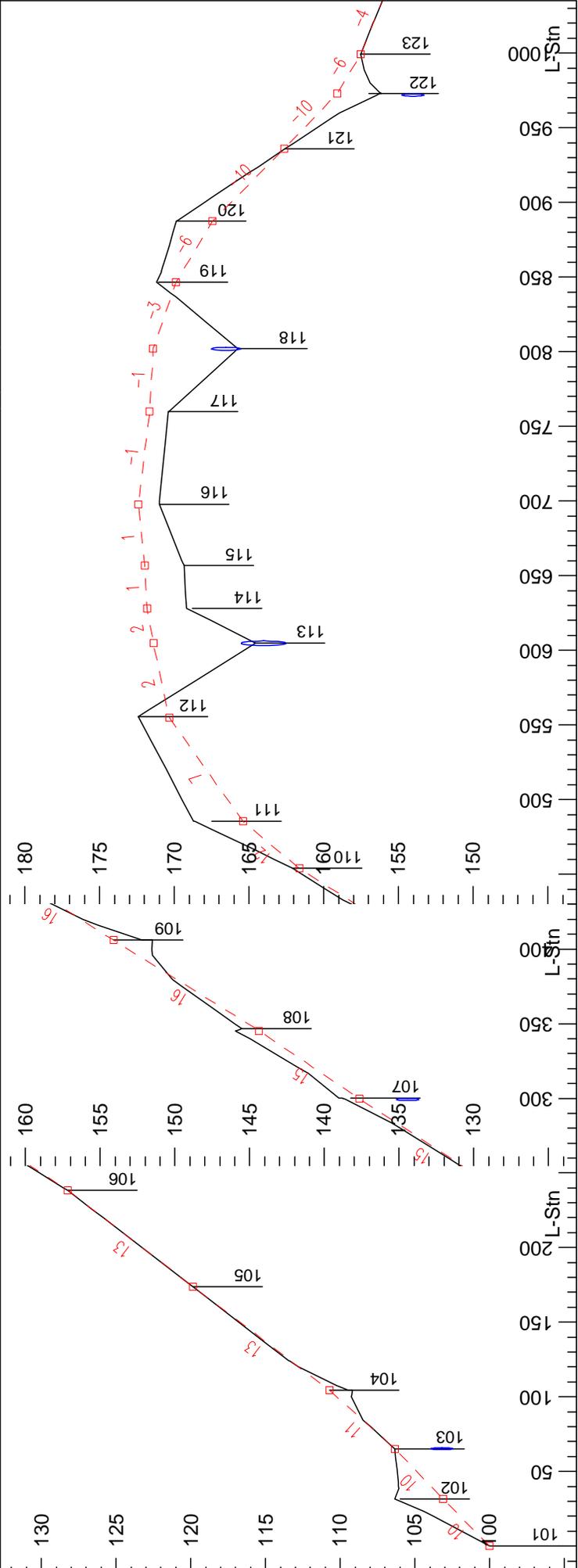
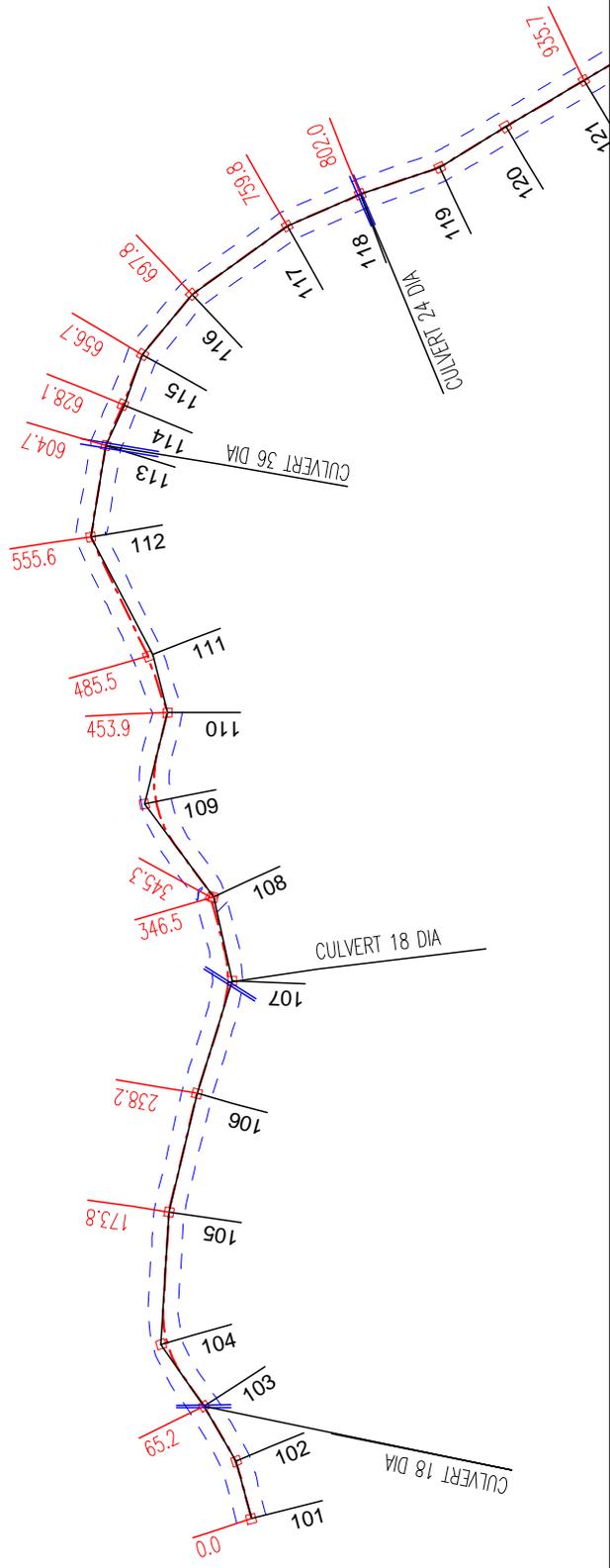
Termination of Use or End of Season

- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



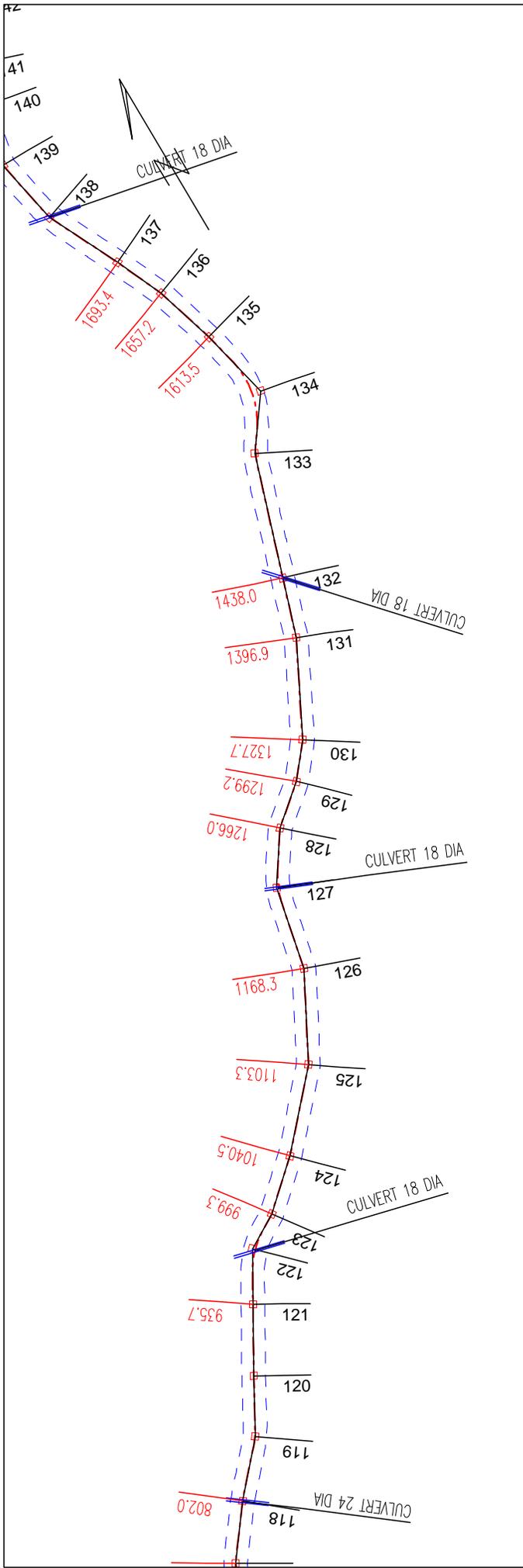


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 15/09/10

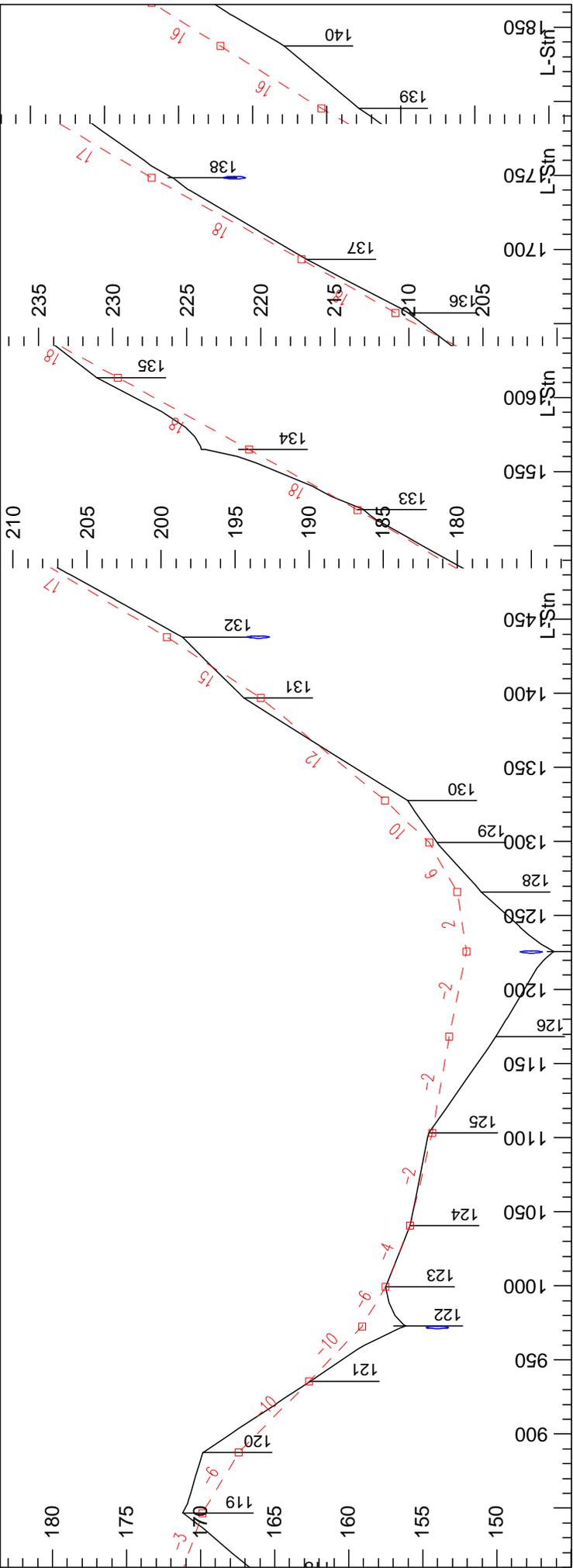
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Washington State Department of Natural Resources
 South Puget Sound Region

Sidehill Salmon Timber Sale
 Contract #: 30-091789



02/19/2016



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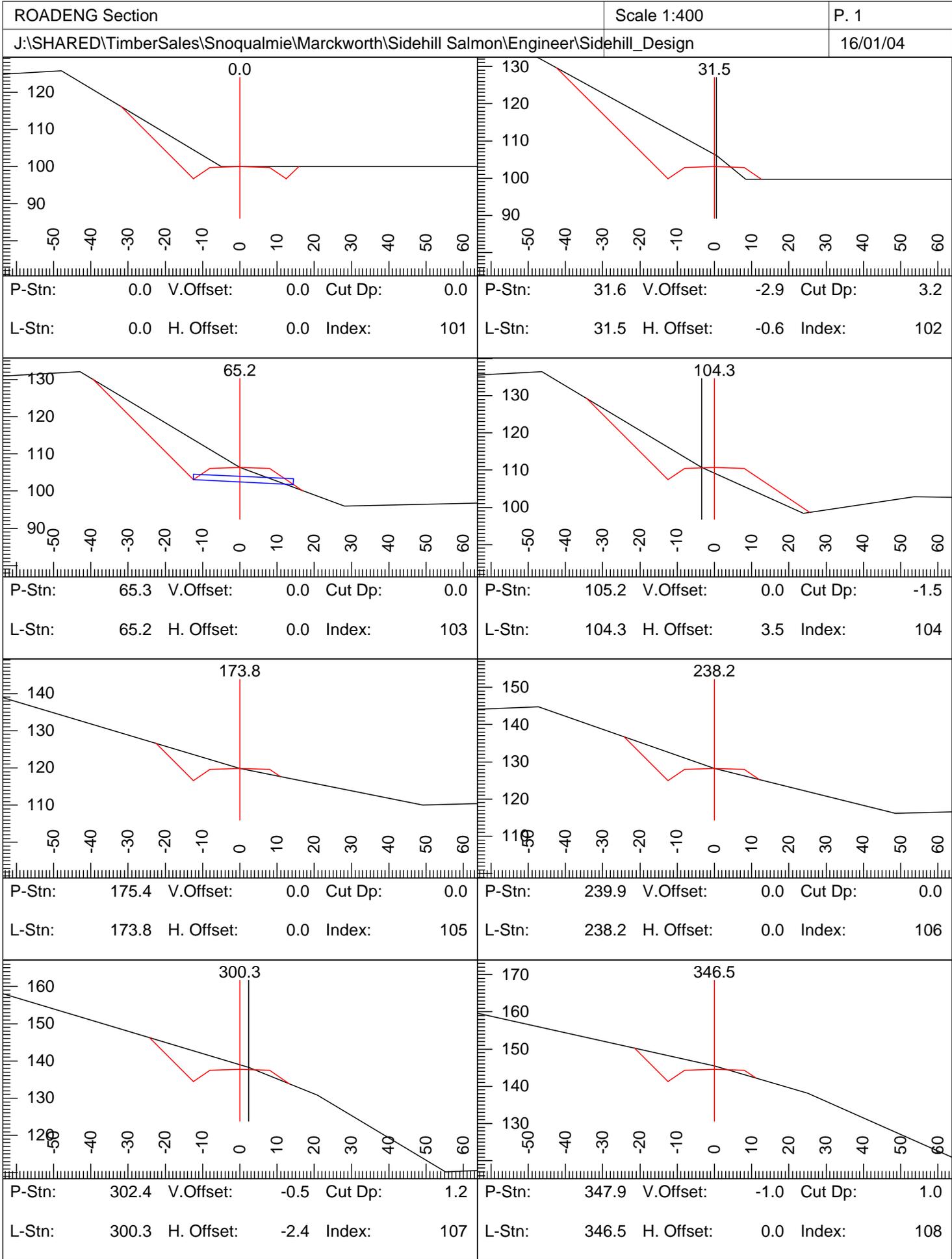
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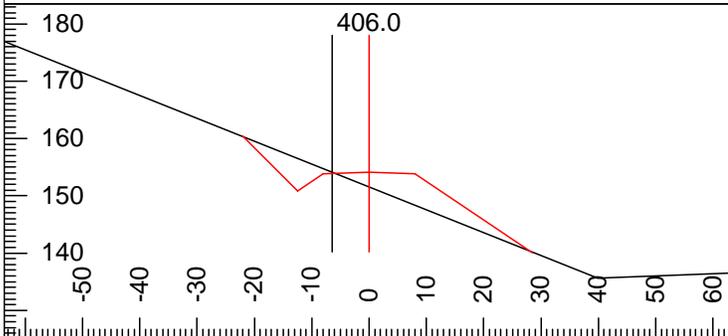
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15/09/10
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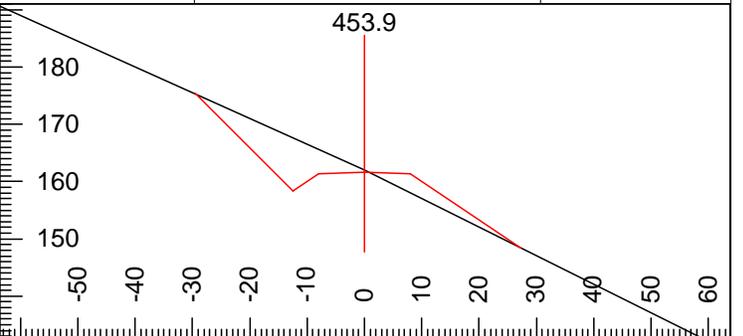
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South Puget Sound Region

Sidehill Salmon Timber Sale
Contract #: 30-091789

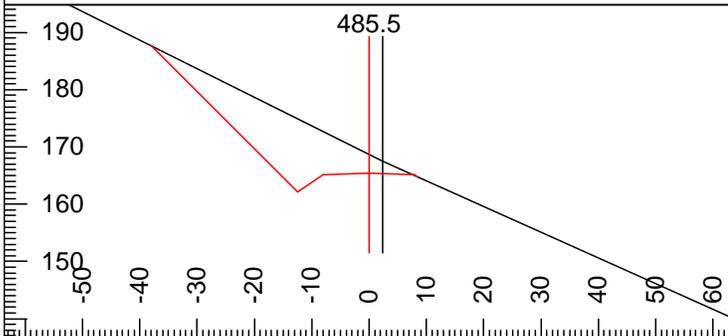




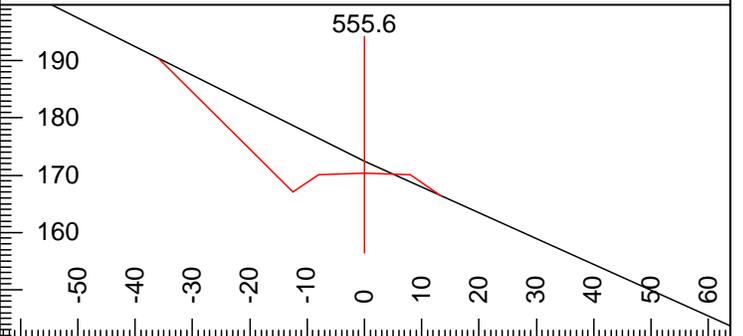
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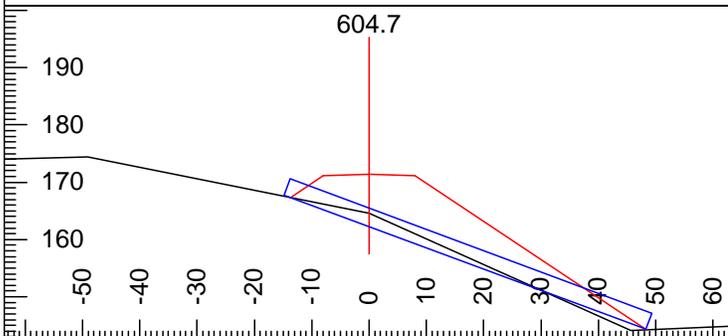
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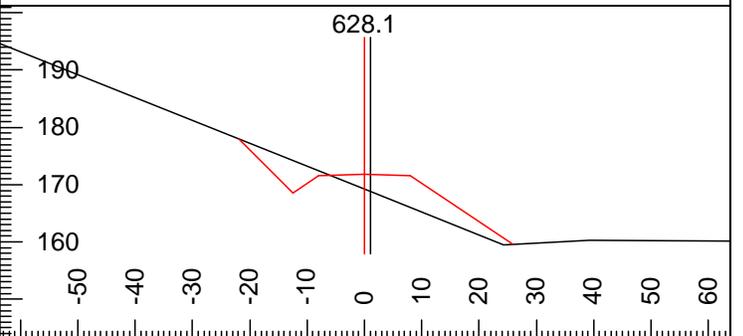
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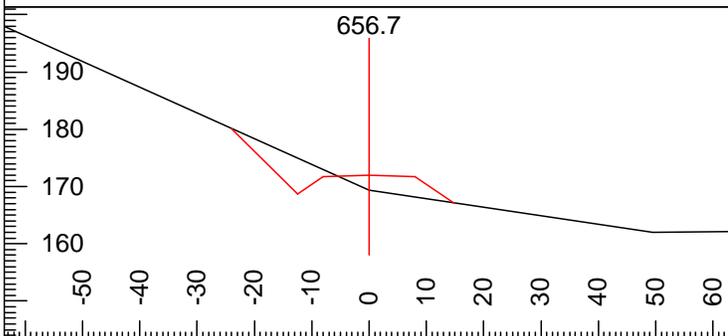
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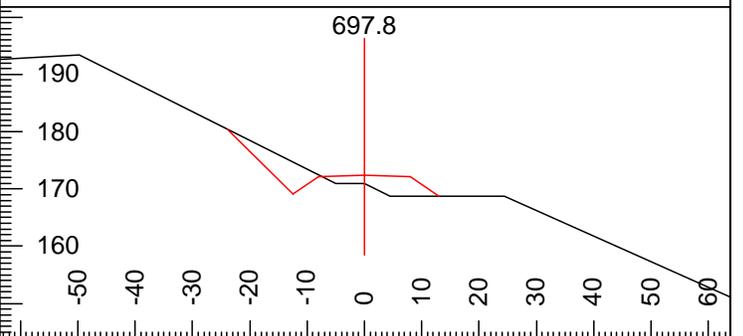
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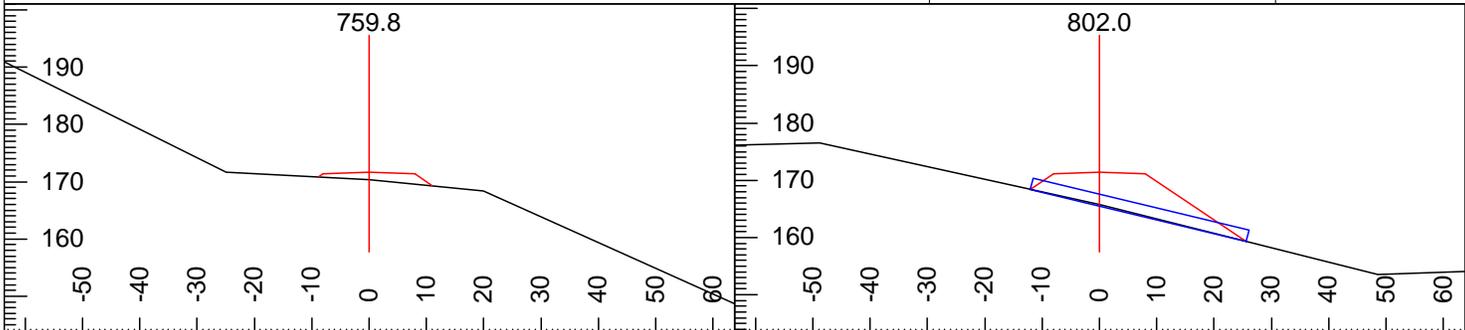
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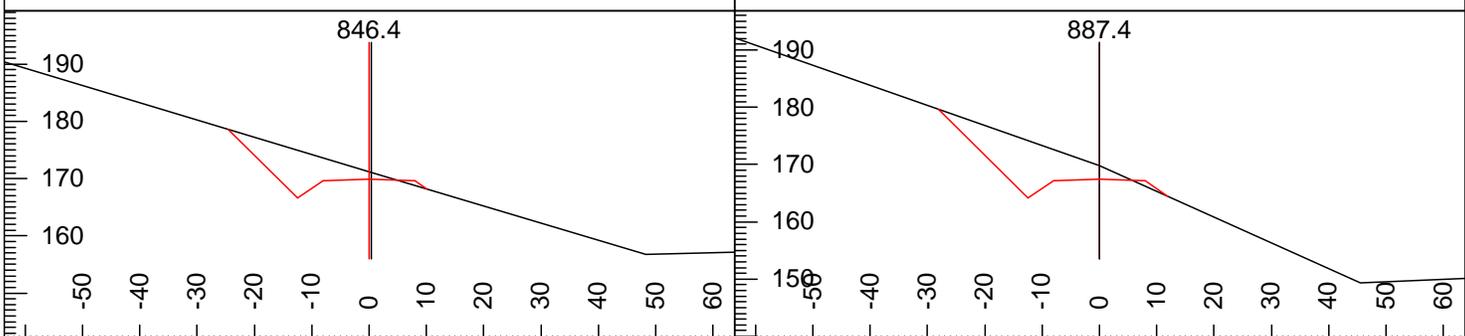
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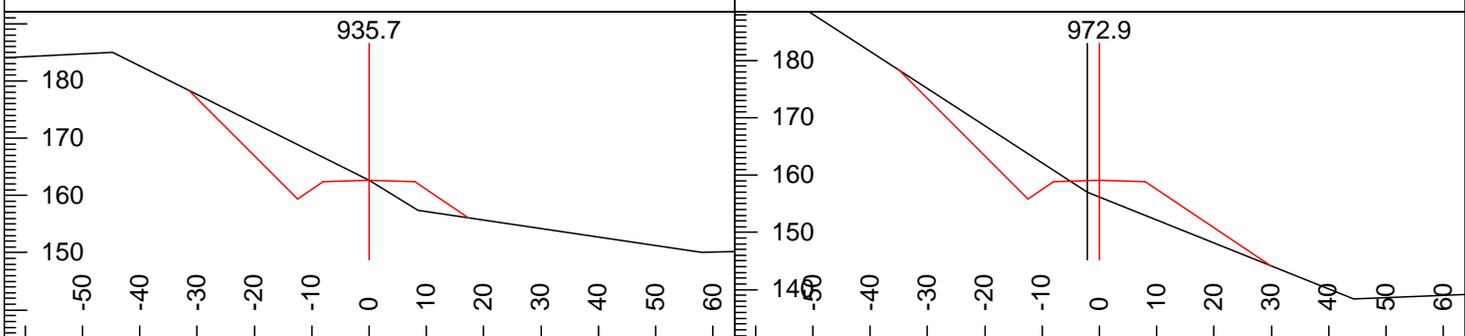
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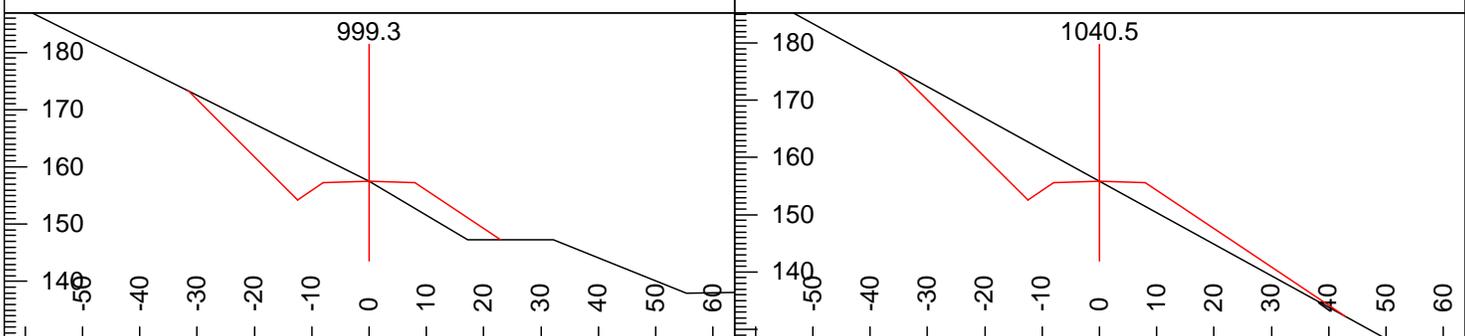
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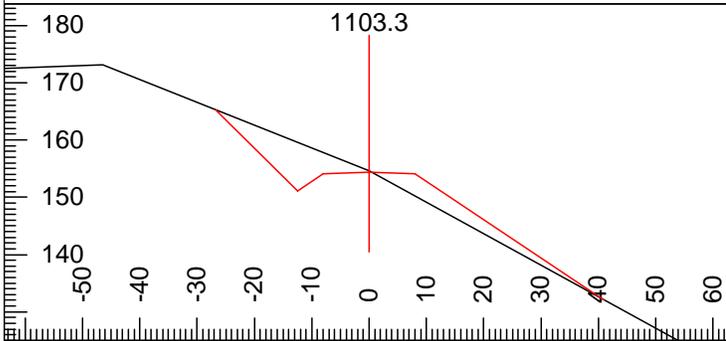
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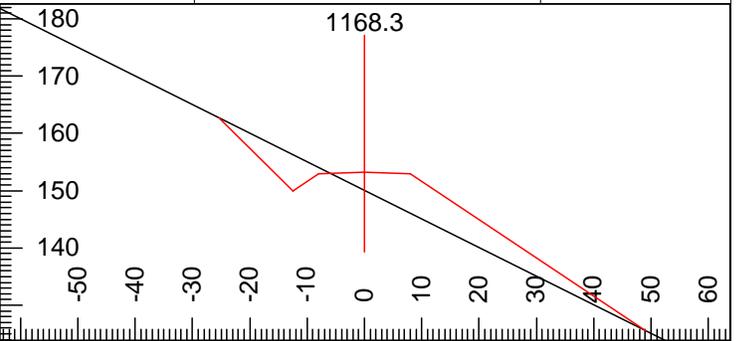
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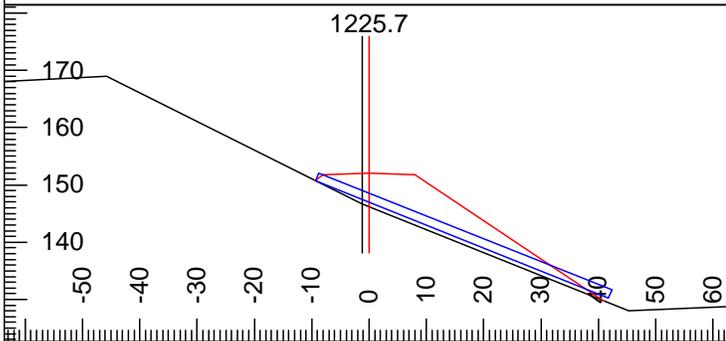
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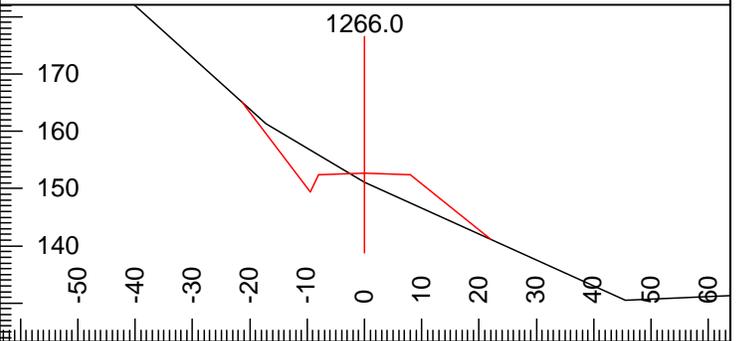
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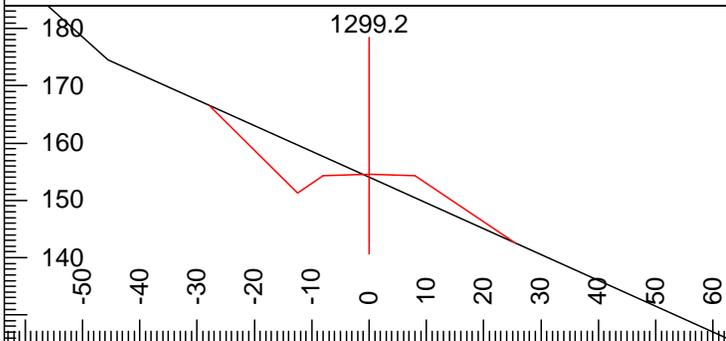
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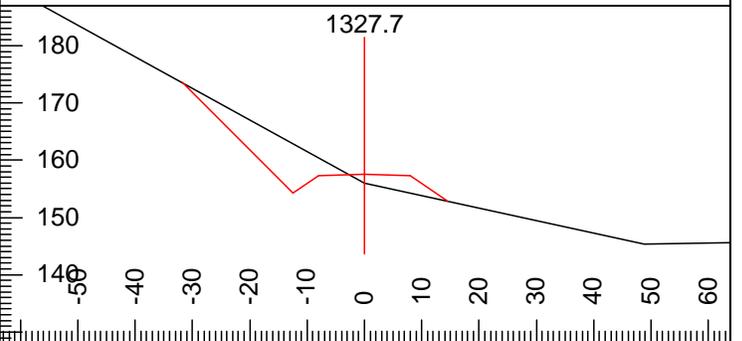
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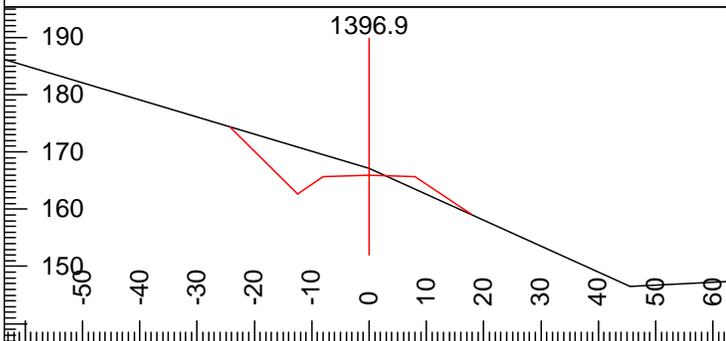
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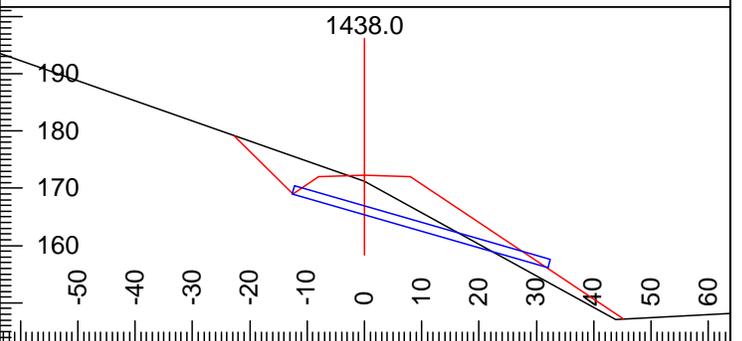
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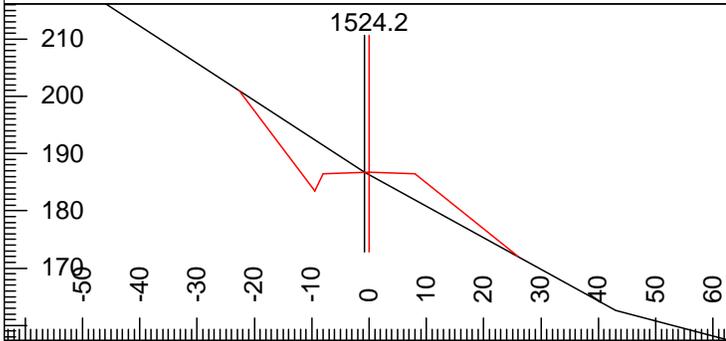
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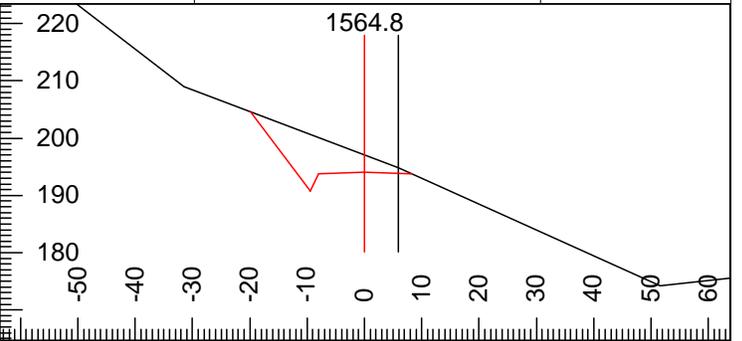
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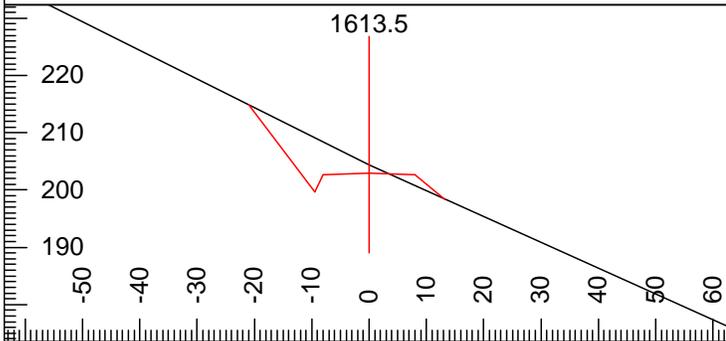
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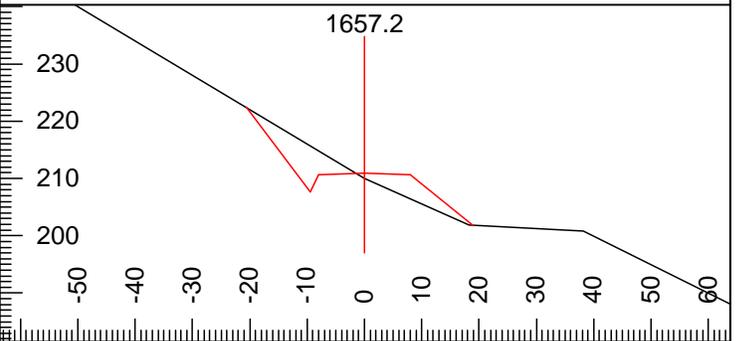
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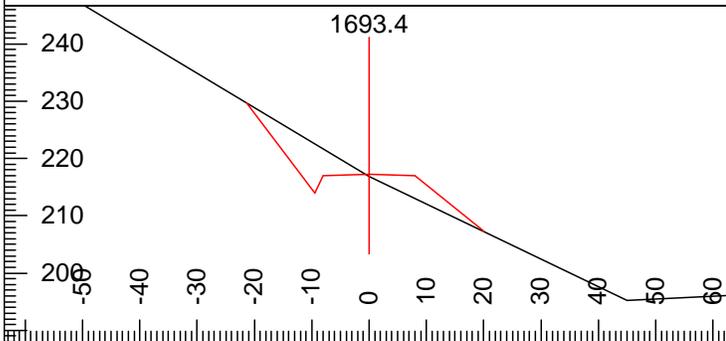
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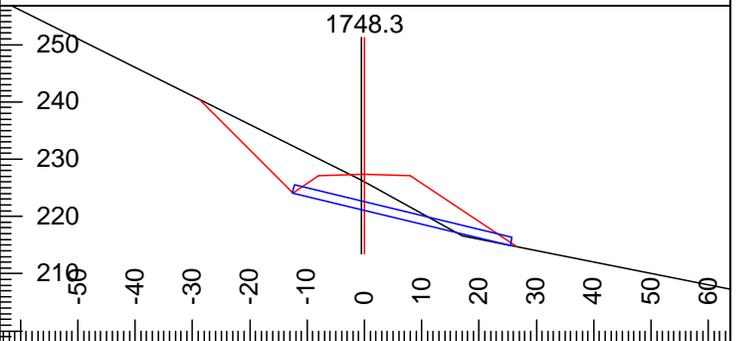
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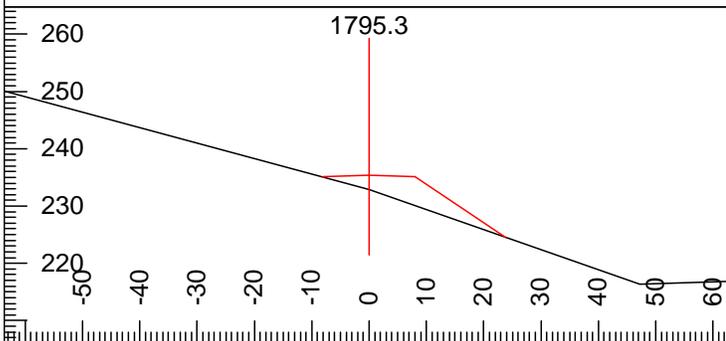
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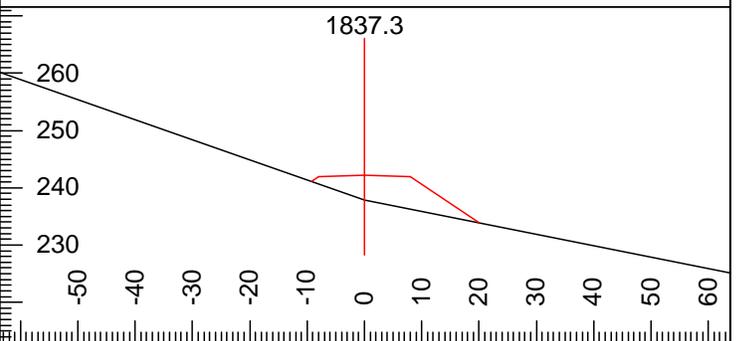
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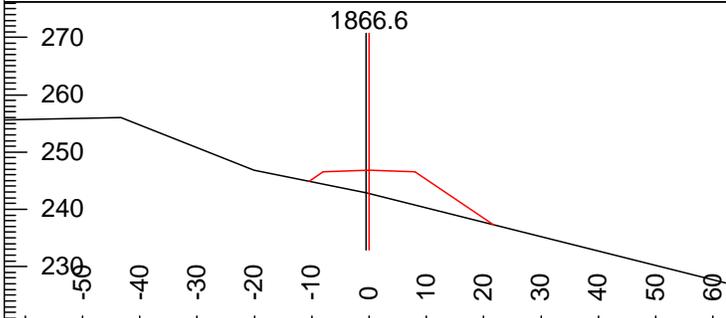
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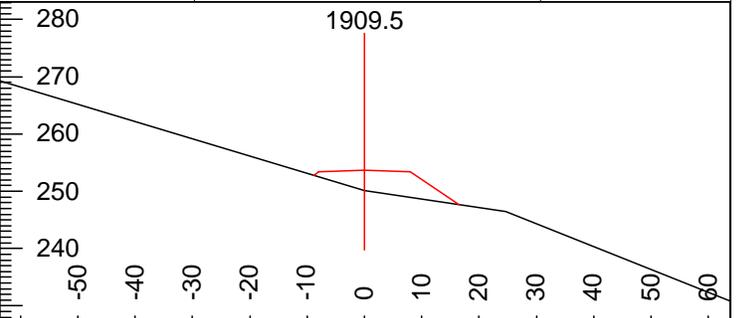
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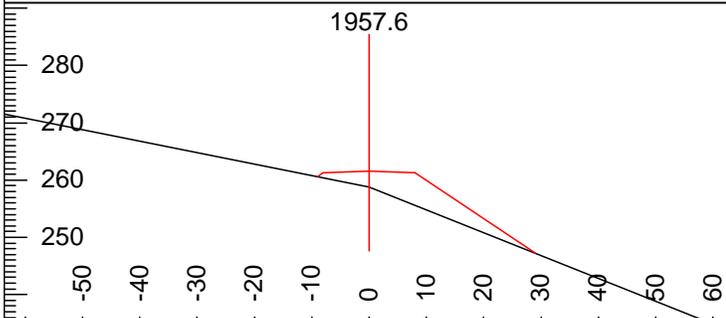
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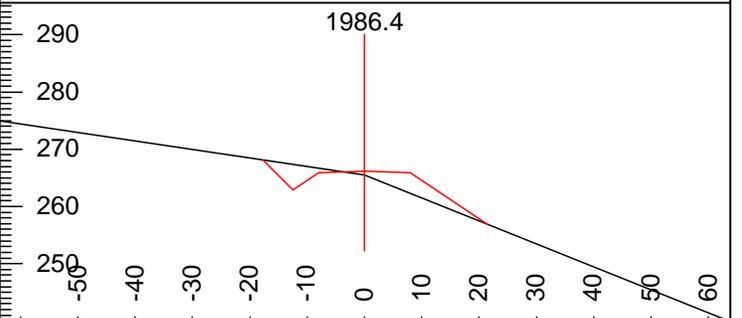
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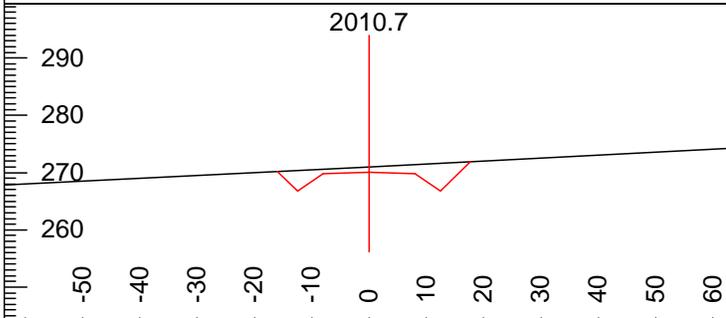
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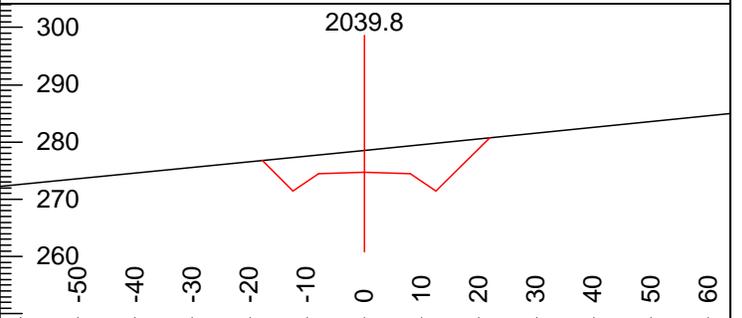
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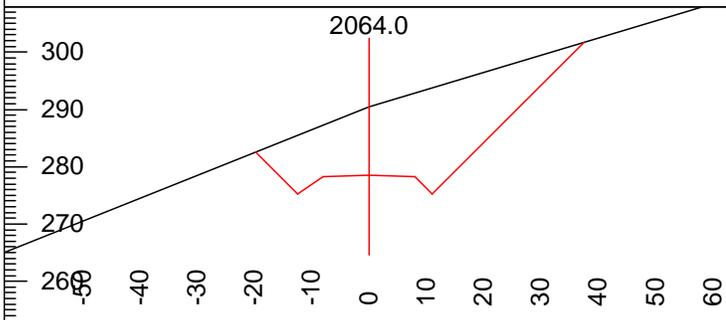
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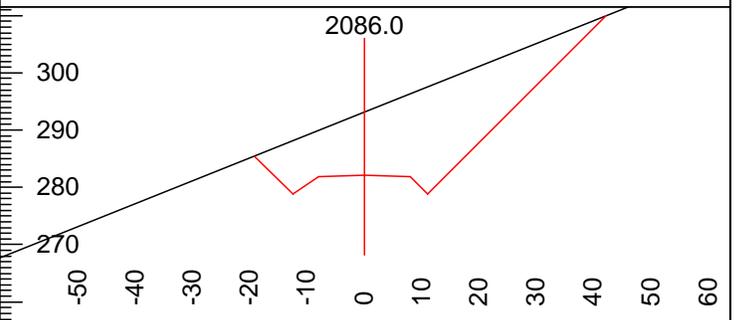
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 L-Stn: 2010.7 H. Offset: 0.0 Index: 145



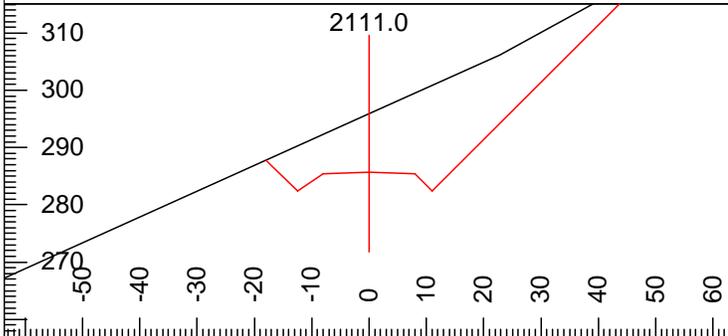
P-Stn: 2050.2 V.Offset: -3.9 Cut Dp: 3.9
 L-Stn: 2039.8 H. Offset: 0.0 Index: 146



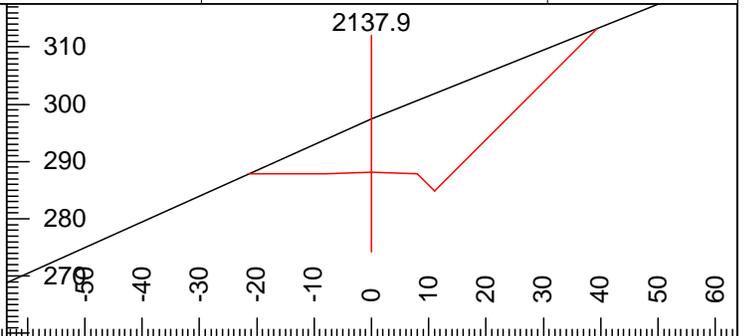
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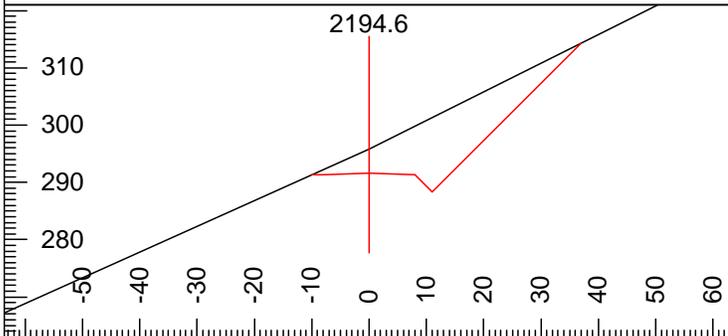
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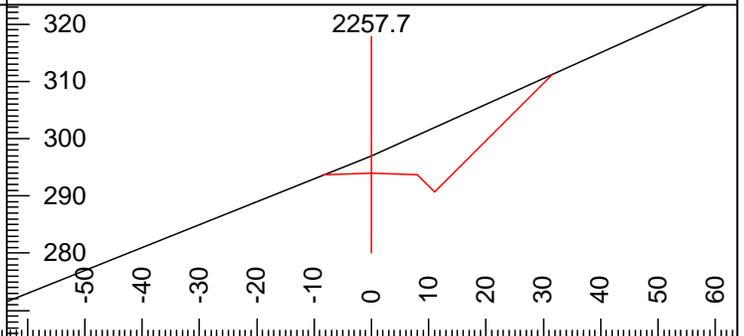
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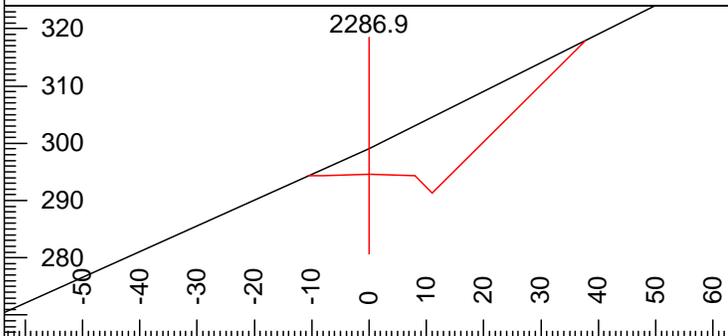
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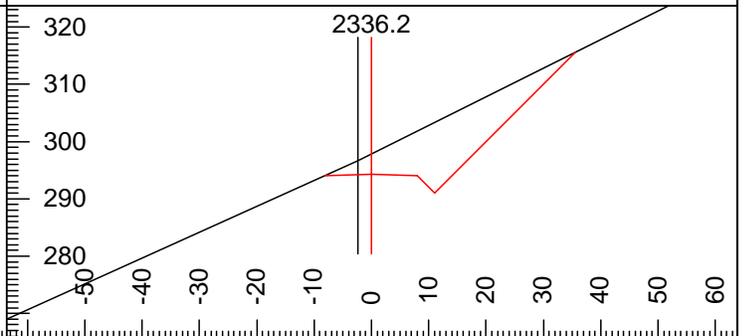
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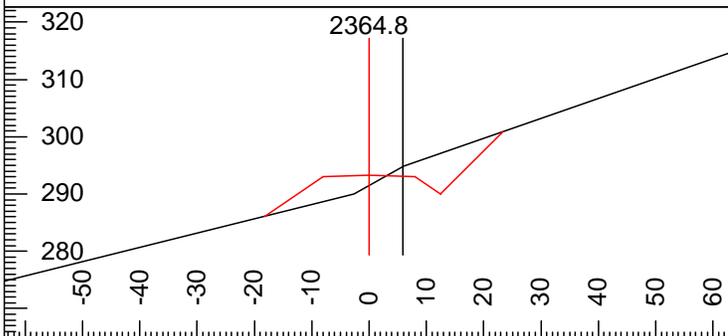
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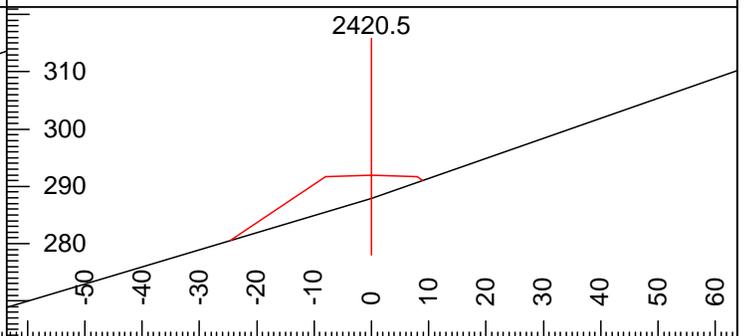
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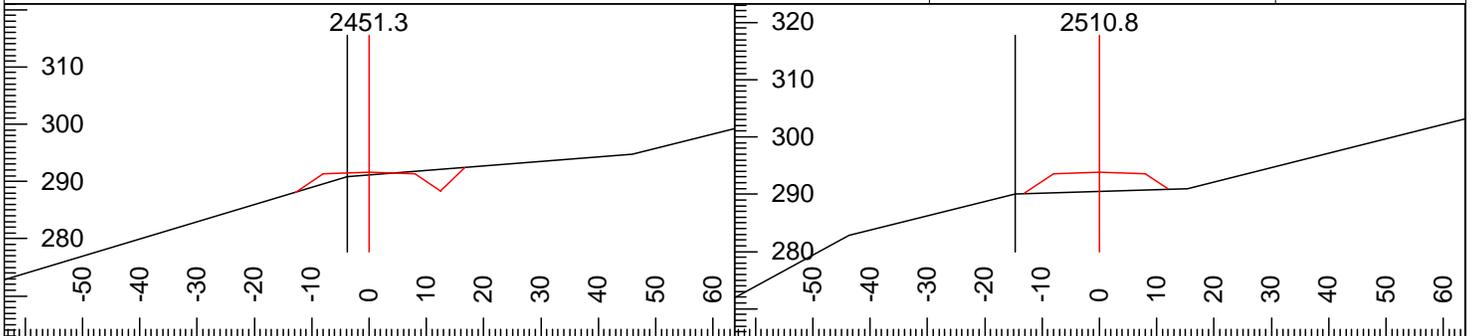
P-Stn: 2346.6 V.Offset: -2.3 Cut Dp: 3.5
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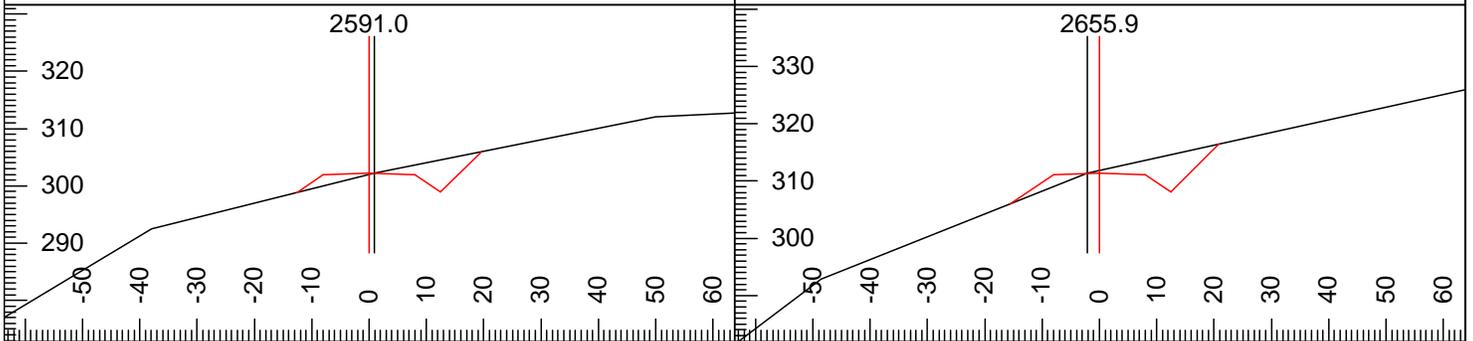


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 L-Stn: 2420.5 H. Offset: 0.0 Index: 156



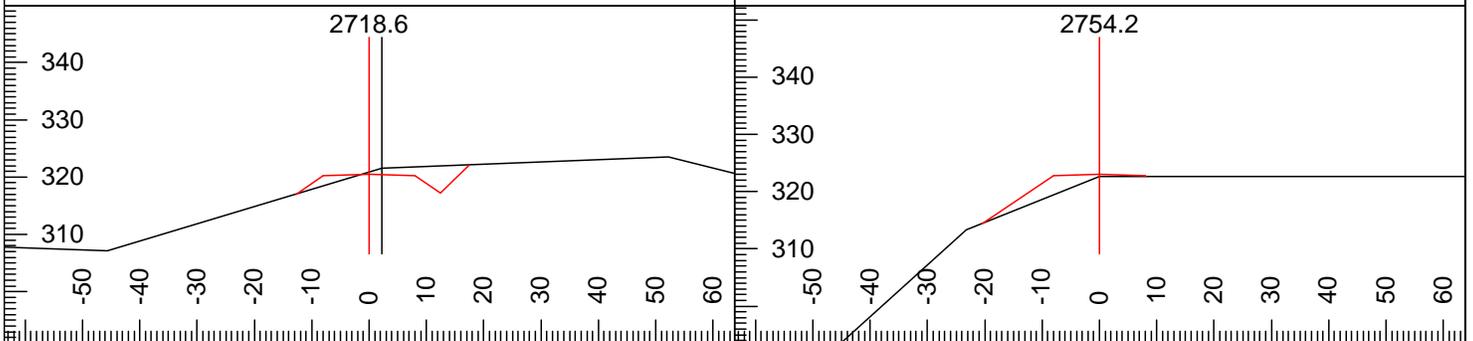
P-Stn: 2466.1 V.Offset: 0.8 Cut Dp: -0.5
 L-Stn: 2451.3 H. Offset: 3.9 Index: 157

P-Stn: 2532.6 V.Offset: 3.7 Cut Dp: -3.3
 L-Stn: 2510.8 H. Offset: 14.6 Index: 158



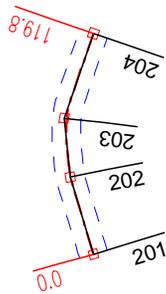
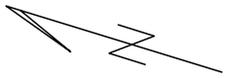
P-Stn: 2619.2 V.Offset: 0.0 Cut Dp: -0.2
 L-Stn: 2591.0 H. Offset: -0.9 Index: 159

P-Stn: 2684.5 V.Offset: 0.0 Cut Dp: 0.5
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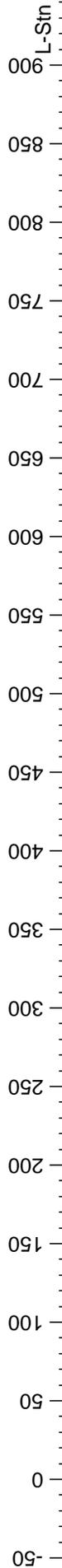
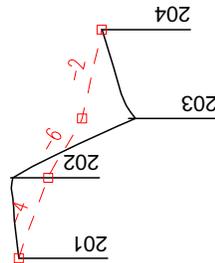


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P-Stn: 2784.0 V.Offset: 0.4 Cut Dp: -0.4
 L-Stn: 2754.2 H. Offset: 0.0 Index: 162



110
105
100
95
90
85

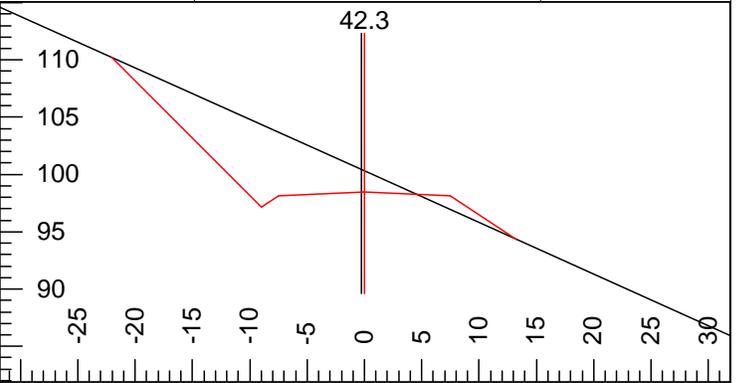
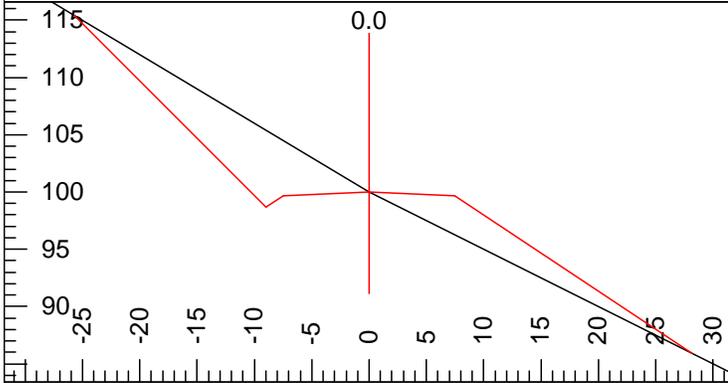


Sidehill Salmon Timber Sale
Contract #: 30-091789

Washington State Department of Natural Resources
South Puget Sound Region

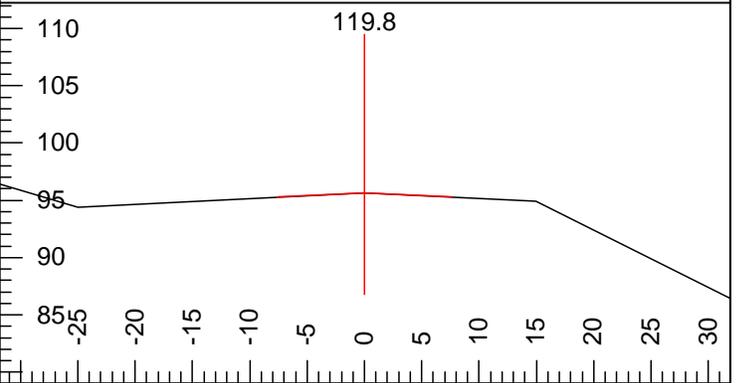
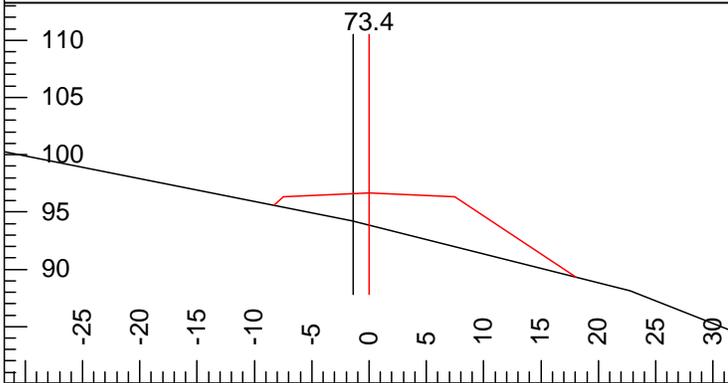
Plan Scale 1:1200
Profile Vert Scale 1:120
Profile Horz Scale 1:1200

Engineer: B. Ballard
15/09/14



P-Stn: 0.0 V.Offset: 0.0 Cut Dp: 0.0
 L-Stn: 0.0 H. Offset: 0.0 Index: 201

P-Stn: 42.3 V.Offset: -2.0 Cut Dp: 1.8
 L-Stn: 42.3 H. Offset: 0.3 Index: 202



P-Stn: 73.3 V.Offset: 2.4 Cut Dp: -2.8
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P-Stn: 120.3 V.Offset: 0.0 Cut Dp: 0.0
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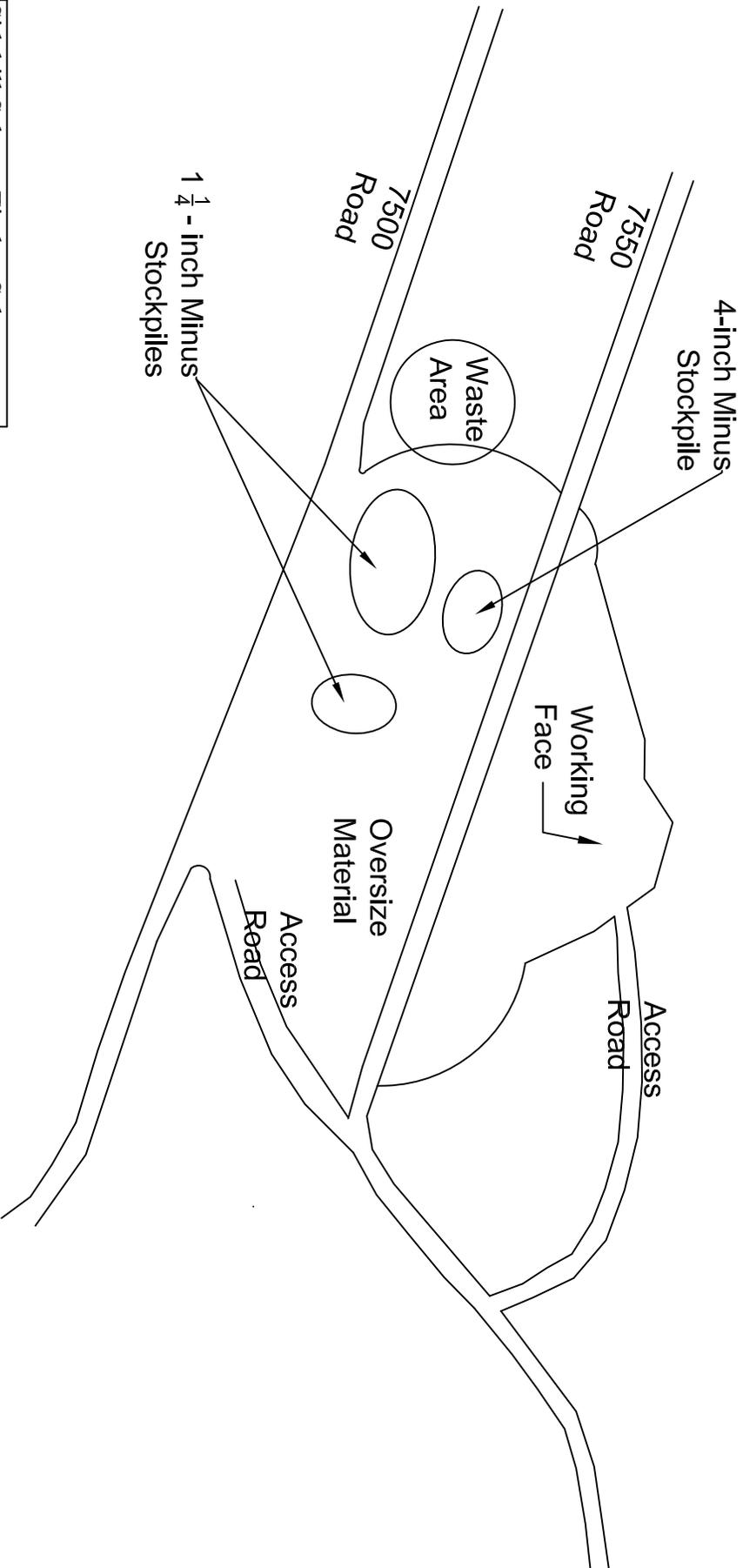
PIT DEVELOPMENT PLAN

Legal Description: SW ¼ SW ¼ of Sec 32 T27NR08E W. M.

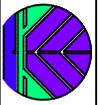
Rock Pit Name: 7500 Pit

1. Development shall begin at working face, as marked on the map. Development shall proceed upslope to the north.
2. All vegetation including stumps shall be cleared a minimum of 20 feet beyond the top of all working faces.
3. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden and piled in the designated waste area.
4. Overburden shall be pushed or end hauled to the designated disposal site and compacted. Minimal acceptable compaction is achieved by placing material in 2 foot or shallower lifts and routing excavation equipment over entire width of the lifts. A minimum stripping width of 10 feet must be maintained from all pit faces.
5. Pit faces and walls shall be sloped no steeper than 1 1/2H: 1V.
6. No rock development will be allowed in pit floor.
7. The pit floor shall have smooth continuity of slope, providing drainage. No ponding will be allowed.
8. At the end of operations, faces shall be scaled and cleared of loose and overhanging material, including overburden pushed over the face.
9. Oversize material remaining in the pit at the conclusion of operations shall not exceed 5 percent of the total volume mined during the operation. Oversize material is defined as rock or rock fragments larger than two feet in any direction. Oversize shall be piled in designated waste area.
10. The access road from the pit floor to the 7550 road must be improved to allow pickup traffic. Apply 60 cubic yards of 1 ¼ minus rock from stockpile, improve ditch and crown road.
11. Quantity and Quality of ballast pit is not guaranteed by the State.

7500 Pit Plan



Sidehill Salmon Timber Sale
30-091789 9/1/2015
Scale 1:30

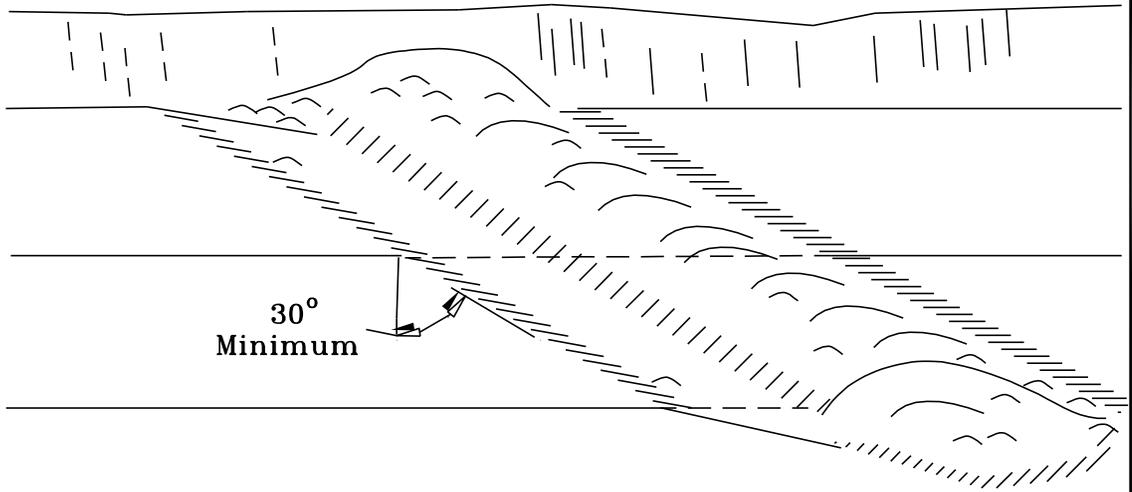


WASHINGTON STATE DEPARTMENT OF
Natural Resources
202 Hayden

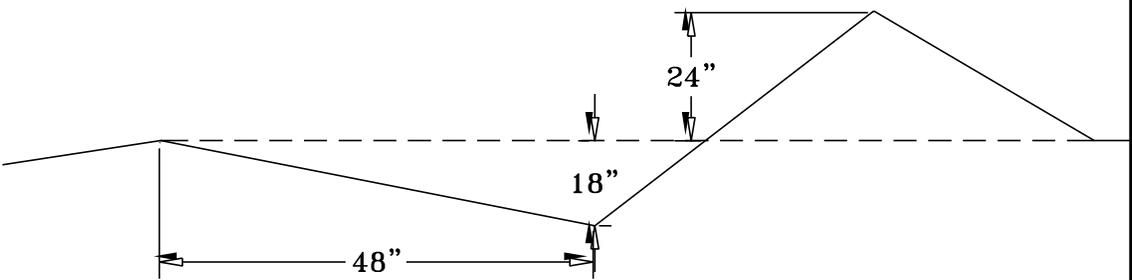
7550 road must remain at current elevation and location. Gravels are to be pushed over 7550 road and worked on the pit floor. Access road from pit floor to 7550 road must be improved to allow pickup traffic. Slopes on working face shall be left at 1 1/2 : 1

Non-Drivable Water Bar Detail

Cross Ditch



Cross Section at Centerline



Water Bar Detail

Date:
Scale : None
App#
Drawn by: M.A.D.



WASHINGTON STATE DEPARTMENT OF
Natural Resources

SPS Region

DEPARTMENT OF NATURAL RESOURCES

FORM 9-87(Rev. 01-08)

SUMMARY - Road Development Costs
 REGION: SOUTH PUGET SOUND
 DISTRICT: Rainier

SALE/PROJECT NAME: Sidehill Salmon

CONTRACT NUMBER: 30-091789

LEGAL DESCRIPTION: T27N R07E Sec 25 W.M.

ROAD NUMBER:	6020, 6021	0	6000, 6020
ROAD STANDARD:	Optional	0	Required
NUMBER OF STATIONS:	27.51	1.00	129.35
SIDESLOPE:	45%	0%	10%
CLEARING AND GRUBBING:	\$6,209	\$0	
EXCAVATION AND FILL:	\$13,860	\$0	
MISC. MAINTENANCE:			\$4,851
ROCK TOTALS (Cu. Yds.):			
Ballast: 660	\$9,126	\$0	\$0
Stockpile: 1369	\$5,037	\$0	\$7,634
Quarry Spalls: 19	\$186	\$0	\$0
CULVERTS AND FLUMES:	\$7,875	\$0	\$0
STRUCTURES:	\$0	\$0	\$0
GENERAL EXPENSES:	\$3,806	\$0	\$1,248
MOBILIZATION:	\$2,147	\$2,147	\$2,147
TOTAL COSTS:	\$48,247	\$2,147	\$15,881
COST PER STATION:	\$ 1,754	\$2,147	\$123
ROAD DEACTIVATION AND ABANDONMENT COSTS:	\$2,460		

NOTE: This appraisal has no allowance for profit and risk.

TOTAL (All Roads) = \$68,735

SALE VOLUME MBF = 1,799

TOTAL COST PER MBF = \$38.21

Plans to be furnished by:

Compiled by: Washington St. DNR

Date: B. Ballard

SOUTH PUGET SOUND REGION - ROAD COST ESTIMATE - CONSTRUCTION

SALE NAME: Sidehill Salmon

CONTRACT NUMBER: 30-091789

I. CLEARING AND GRUBBING:

Flat Rate -	% Side Slope	MBF/ac	Disposal Factor	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
6020	45	40	1.00	4.89	\$45	1.00	27.51	\$6,054
6021	25	40	1.00	2.88	\$45	1.00	1.20	\$156
			1.00	1.00	\$45	1.00		\$0
			1.00	1.00	\$45	1.00		\$0
			1.00	1.00	\$45	1.00		\$0
28.71								
Clear and Grub TOTAL =								\$6,209

II. EXCAVATION:

Flat Rate -	% Side Slope	Exc. Type Fact.	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total	
6,020	45.00	1.0	5.50	\$90	1.00	27.51	\$13,617	
6,021	25.00	1.0	2.25	\$90	1.00	1.20	\$243	
		1.0	1.00	\$90	1.00		\$0	
		1.0	1.00	\$90	1.00		\$0	
		1.0	1.00	\$90	1.00		\$0	
28.71								
*End Haul, Over Haul, Large Fills/Cuts				Estimated Vol. (cy)	No. of Equip. Days	Cost/day	Sub Total	
End Haul/ Over Haul Large Fills/ Cuts							\$0	
							\$0	
Excavation TOTAL =								\$13,860

III. BALLAST AND SURFACING :

Ballast source: 7500 Pit
 Ballast source: 7500 Pit Stockpile
 QS source : 7500 Pit

Description	cu.yds/sta x stations =	cubic yards
Ballast (4"-)	23 28.71	660
Stockpile	17 28.71	488
Quarry Spalls	19 1.00	19

* Haul Formula: (R.T.Miles/MPH+Delay)/(\$/hr / Cy/load)

R.T. Miles = 12.3
 Ave. Speed = 20
 Delay (Hrs.)= 0.2
 Cost / Hour = \$100.00
 CY / Load = 10

Ballast (4"-) 660 Cu. yds @ \$13.82 /cu. yd = \$9,126
 Stockpile 488 Cu. yds @ \$10.32 /cu. yd = \$5,037
 Quarry Spalls 19 Cu. yds @ \$9.80 /cu. yd = \$186

UNIT COSTS	Ballast	Ballast	Quarry Spalls
Drill & Shoot			
Dig and load	\$0.90	\$0.65	\$0.65
Crushing	\$3.25		
Purchase			
Haul *	\$8.15	\$8.15	\$8.15
Spread	\$1.00	\$1.00	\$1.00
Compact	\$0.52	\$0.52	
Strip			
Reclamation			
Use tax	\$0.00	\$0.00	\$0.00
TOTAL (\$/cy)	\$13.82	\$10.32	\$9.80

Rock total = \$14,349

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter	No/Length	Installed Cost/ft	Sub-total
CPP	1		18	250	\$17.50	\$4,375
	1		24	30	\$30.00	\$900
	1		36	50	\$52.00	\$2,600
			48		\$94.00	\$0
Bands & Gaskets						\$0

Culvert total = \$7,875

V. STRUCTURES

Description	Type	Width	Length	Cost/ft.	Sub-total
geotextile				\$1.5	\$0
					\$0
					\$0

Structure total = \$0

Sub-TOTAL = \$42,293

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 9% \$3,806

VII. MOBILIZATION:

Total Mobilization = \$6,442 Mobilization sub-total = \$2,147

Road No. 6020, 6021

Standard: Optional

Stations: 28.71

By: Washington St. DNR

SHEET TOTAL = \$48,247

Sheet 2 of 5

Date: B. Ballard

SOUTH PUGET SOUND REGION - ROAD COST ESTIMATE - RECONSTRUCTION

SALE NAME: Sidehill Salmon

CONTRACT NUMBER: 30-091789

I. CLEARING AND GRUBBING:

Flat Rate -	% Side Slope	MBF/ac	Disposal Factor	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
			1.00	1.00	\$45	1.0		\$0
			1.00	1.00	\$45	1.0		\$0
			1.00	1.00	\$45	1.0		\$0
			1.00	1.00	\$45	1.0		\$0
			1.00	1.00	\$45	1.0		\$0

Clear and Grub TOTAL = \$0

II. EXCAVATION:

Flat Rate -	% Side Slope	Exc. Type Fact.	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0
		1.0	1.00	\$90	1.00		\$0

*End Haul, Over Haul, Large Fills/Cuts

End Haul/ Over Haul Large Fills/ Cuts	Estimated Vol. (cy)	No. of Equip. Days	Cost/day	Sub Total
				\$0
				\$0

Excavation TOTAL = \$0

III. BALLAST AND SURFACING :

Ballast source:

Commercial source :

Description	cu.yds/sta x stations =	cubic yards
Ballast (4"-)		0
Surfacing (1 1/4"-)		0
Quarry Spalls		0

* Haul Formula: (R.T.Miles/MPH+Delay)(\$/hr / Cy/load)

R.T. Miles =	12.3
Ave. Speed =	20
Delay (Hrs.)=	0.2
Cost / Hour =	\$100.00
CY / Load =	10

Ballast (4"-)	0 Cu. yds @	\$8.80 /cu. yd =	\$0
Surfacing (1 1/4"-)	0 Cu. yds @	\$8.80 /cu. yd =	\$0
Quarry Spalls	0 Cu. yds @	\$8.80 /cu. yd =	\$0

UNIT COSTS	Ballast	Surfacing	Quarry Spalls
Drill & Shoot			
Dig and load			
Crushing			
Purchase			
Haul *	\$8.15	\$8.15	\$8.15
Spread			
Compact			
Strip			
Reclamation			
Use tax	\$0.08	\$0.08	\$0.08
TOTAL (\$/cy)	\$8.80	\$8.80	\$8.80

Rock total = \$0

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter (in.)	No/Length (ft)	Installed Cost/ft	Sub-total
Temp Culverts			18		\$17.50	\$0
			24		\$30.00	\$0
			36		\$52.00	\$0
			48		\$94.00	\$0
Bands & Gaskets						\$0

Culvert total = \$0

V. STRUCTURES

Description	Type	Width	Length	Cost/ft.	Sub-total
					\$0

Structure total = \$0

Sub-TOTAL = \$0

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 12% \$0

VII. MOBILIZATION:

Total Mobilization = \$6,442 Mobilization sub-total = \$2,147

Road No. 0
Standard: 0
Stations:

SHEET TOTAL = \$2,147

By: Washington St. DNR

Sheet 3 of 5

Date: B. Ballard

SOUTH PUGET SOUND REGION - ROAD COST ESTIMATE - PRE-HAUL MAINTENANCE

SALE NAME: Sidehill Salmon

CONTRACT NUMBER: 30-091789

Total stations Pre-Haul Maintenance = 129.35

I. MISC. MAINTENANCE ITEMS:

	Cost/ Station	Total Stations	Sub Total
mechanical brushing =			\$0
hand brushing =			\$0
ditch cleaning =	31.00	129.35	\$4,010
grading =	6.50	129.35	\$841
culvert cleanout =	2.00		\$0
compacting=			\$0
			\$0
			\$0
			\$0
			\$0

Misc TOTAL = \$4,851

III. BALLAST AND SURFACING :

Ballast source:
 Surface source: 7500 Pit Stockpile
 Riprap source :

Description	cu.yds/sta x stations =	cubic yards
Ballast (4"-)		0
Surfacing (2 1/2"-)	26 33.90	881
Stockpile (2"-)		0

UNIT COSTS	Ballast	Surfacing	Riprap
Drill & Shoot			
Dig and load		\$0.65	
Crushing			
Purchase			
Haul *	\$5.85	\$5.85	\$5.85
Spread		\$1.00	
Compact		\$0.52	
Strip			
Reclamation			
Use tax	\$0.08	\$0.08	\$0.08
TOTAL (\$/cy)	\$6.32	\$8.66	\$6.32

* Haul Formula: (R.T.Miles/MPH+Delay)/(\$/hr / Cy/load)

R.T. Miles = 7.7
 Ave. Speed = 20
 Delay (Hrs.)= 0.2
 Cost / Hour = \$100.00
 CY / Load = 10

Ballast (4"-)	0 Cu. yds @	\$6.32 /cu. yd =	\$0
Surfacing (2 1/2"-)	881 Cu. yds @	\$8.66 /cu. yd =	\$7,634
Stockpile (2"-)	0 Cu. yds @	\$8.66 /cu. yd =	\$0

Rock total = \$7,634

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter (in.)	No/Length (ft)	Installed Cost/ft	Sub-total
			18		\$17.50	\$0
			24		\$30.00	\$0
			36		\$52.00	\$0
			48		\$94.00	\$0
Bands & Gaskets						\$0

Culvert total = \$0

V. STRUCTURES

Description	Type	Width	Length	Cost/ft.	Sub-total
					\$0
					\$0
					\$0

Structure total = \$0

Sub-TOTAL = \$12,485

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 10% \$1,248

VII. MOBILIZATION:

Total Mobilization = \$6,442 Mobilization sub-total = \$2,147

Road No. 6000, 6020
 Standard: Required
 Stations: 129.35
 By: Washington St. DNR

Sheet 4 of 5

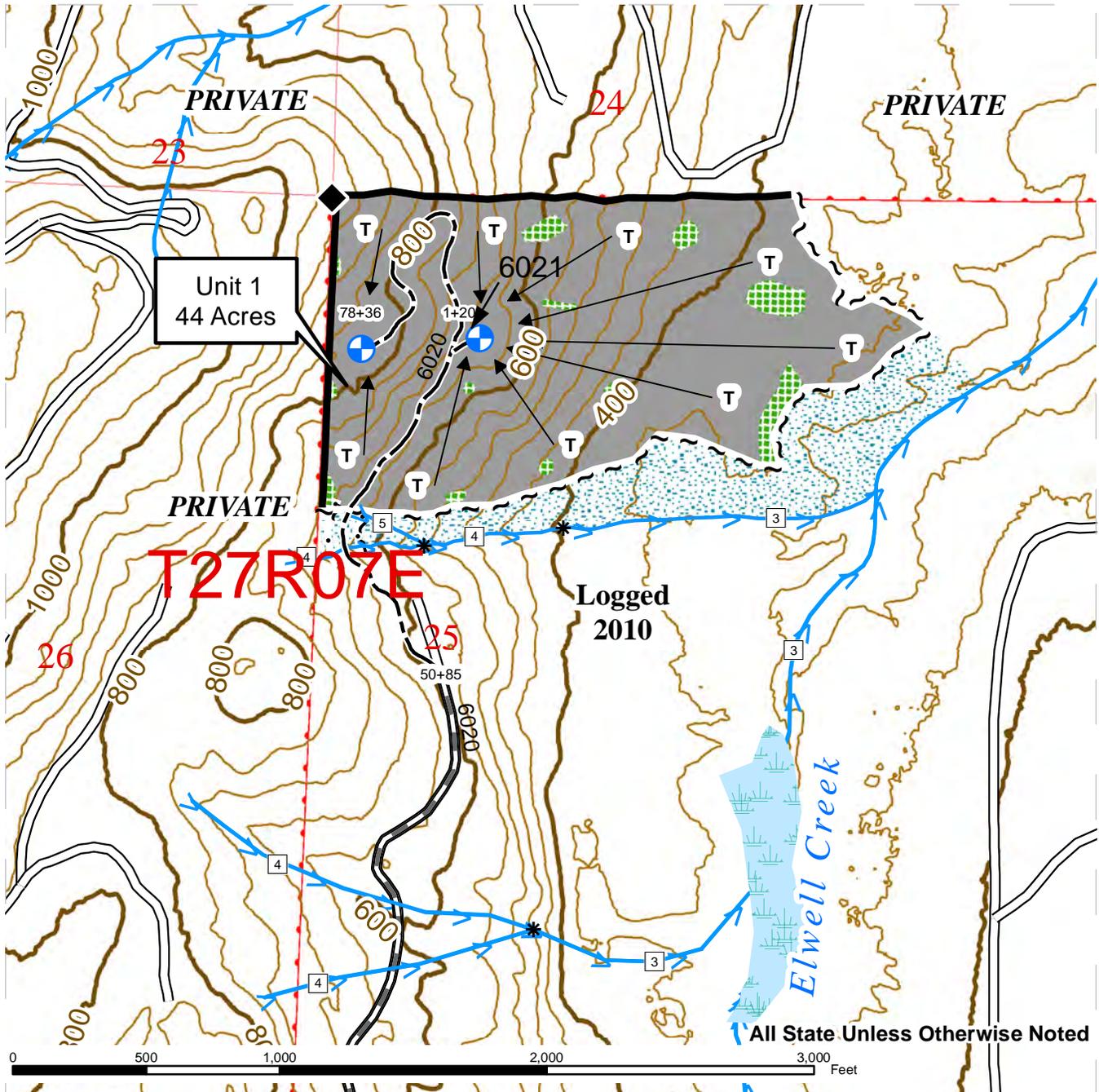
SHEET TOTAL = \$15,881

Date: B. Ballard

LOGGING PLAN MAP

SALE NAME: Sidehill Salmon
 AGREEMENT#: 30-091789
 TOWNSHIP(S): T27NR07E, T27NR08E
 TRUST(S): State Forest Transfer (01)

REGION: South Puget Sound
 COUNTY(S): Snohomish
 ELEVATION RGE: 290 - 930 ft



Timber Sale Area	Existing Roads	Stream Type
Riparian Mgt Zone	Required Pre-Haul Maintenance	Stream Type Break
Leave Tree Areas Marked with Yellow "Leave Tree Area" Tags	Optional Construction	Streams
White Timber Sale Boundary Tags	Landing - Proposed	Wetland
Timber Type Change	Survey Corner	Contours 40 ft
Orange Right of Way Tags	DNR Managed Lands	
Cable Yarding		