

Washington DNR Timber Sales Program

Updated information is being provided for Goodman 1 Resale timber sale documents as follows:

Documents amended:

Brief Description	DATE	Initials
<p>Contract</p> <p>S-050- 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.</p> <p>S-100- Slash or debris which enters any typed waters as a result of operations under this contract and which is identified by the Contract Administrator shall be removed...</p> <p>S-110- No equipment may operate within 30 feet of any typed waters unless authority is granted in writing by the Contract Administrator.</p> <p>C-40- Road construction and associated work provisions of the Road Plan for this sale, dated 9/28/2023 are hereby made a part of this contract.</p>	10/4/2023	KK
<p>Cruise</p> <p>Sale name: Goodman 1 Resale</p>	10/4/2023	KK
<p>FRE Form</p> <p>Sale Name: Goodman 1 Resale</p>	10/4/2023	KK
<p>Road Plan</p> <p>Sale Name: Goodman 1 Resale</p> <p>Date: 9/28/2023</p>	10/4/2023	KK
<p>Add attached map-Showing timing restrictions per H-142</p>	10/4/2023	KK



TIMBER NOTICE OF SALE

SALE NAME: GOODMAN 1 RESALE

AGREEMENT NO: 30-105111

AUCTION: October 25, 2023 starting at 10:00 a.m., Olympic Region Office, Forks, WA

COUNTY: Jefferson

SALE LOCATION: Sale located approximately 8 miles South of Forks

PRODUCTS SOLD AND SALE AREA:

All timber, except trees marked with a band of blue paint or bounded out by leave tree area boundary tags, bounded by timber sale boundary tags, a property line, a timber type change and the G-1000 Road in Unit 1; timber sale boundary tags, the 4+20 spur, and the G-1400 Road in Unit 2; timber sale boundary tags, the G-1040 Road and the G-1040.1 Road in Unit 3; timber sale boundary tags and a timber type change in Unit 4; timber sale boundary tags, a timber type change and the G-1000 Road in Unit 5

All forest products above located on part(s) of Sections 14, 15, 20, 21, 22, 23 and 28 all in Township 27 North, Range 13 West, W.M., containing 170 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BVC-SFIFM-018227)

ESTIMATED SALE VOLUMES AND QUALITY:

Table with columns: Species, Avg DBH, Ring Count, Total MBF, and MBF by Grade (1P, 2P, 3P, SM, 1S, 2S, 3S, 4S, UT). Rows include Douglas fir, Hemlock, Spruce, Red alder, Redcedar, and Sale Total.

MINIMUM BID: \$903,000.00

BID METHOD: Sealed Bids

PERFORMANCE SECURITY:

\$100,000.00

SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2025

ALLOCATION: Export Restricted

BID DEPOSIT: \$90,300.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Cable - 30%/Ground - 70% - with rubber tire skidders only allowed if rutting and skidding requirements can be met and a harvest plan is submitted and approved.

ROADS: 35.25 stations of optional construction. 474.60 stations of optional prehaul maintenance. 42.10 stations of abandonment, if built. The temporary fish pipe on the G-1400 Road cannot be installed until June 15th and must be removed by October 15th.

Maintenance activities or operation of heavy equipment on portions of the G-1000, G-1040, G-1050 and G-1400 Roads (see road plan for locations), is not permitted from one hour before official sunrise to two hours after official sunrise and from one hour before



TIMBER NOTICE OF SALE

official sunset to one hour after official sunset from April 1 through September 23. This restriction does not apply to the hauling of timber, rock or equipment.

ACREAGE DETERMINATION

CRUISE METHOD: Sale acreage was 100% GPS'd. Sale units were cruised using a variable plot sample.

FEES: \$64,991.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

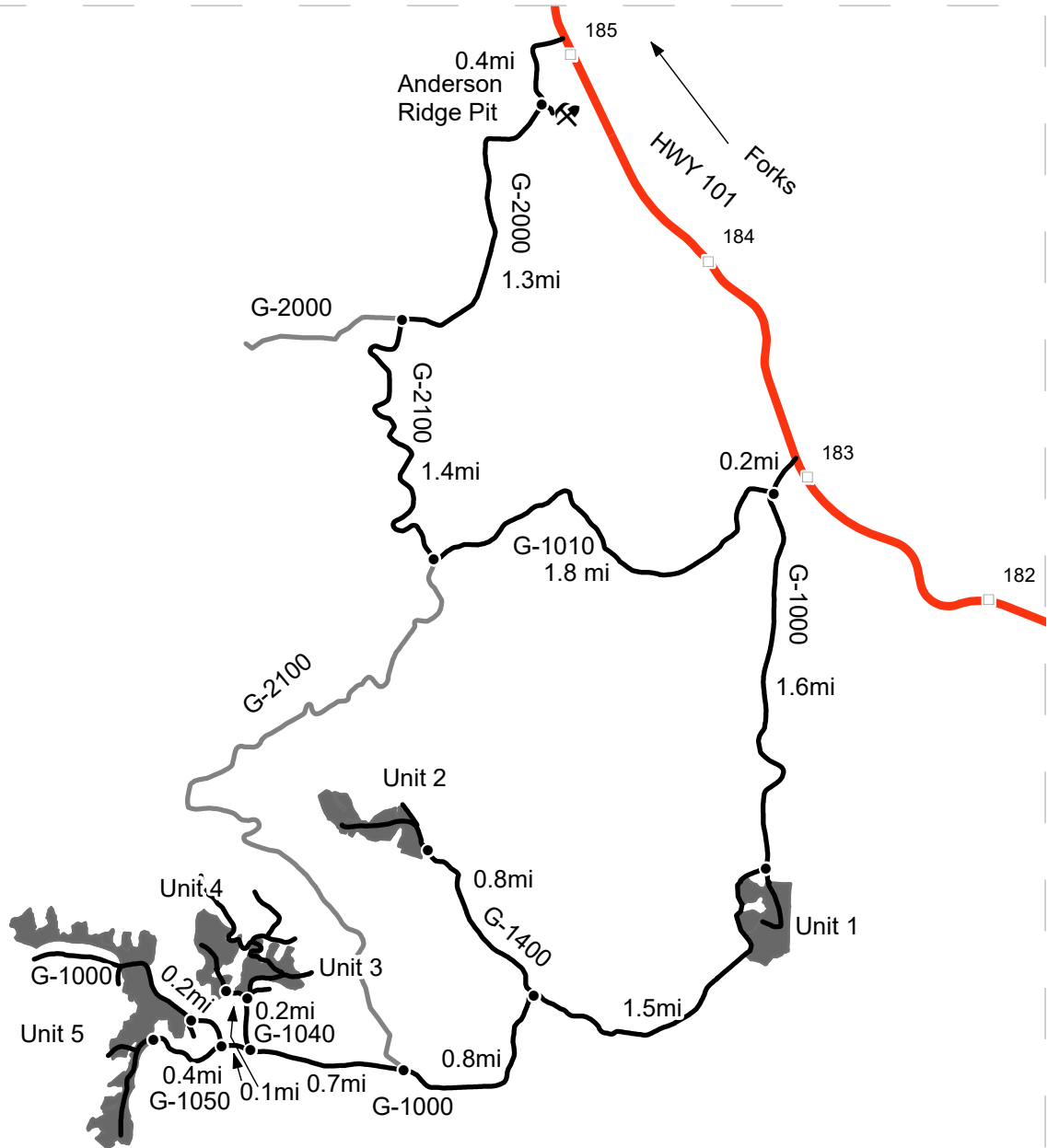
SPECIAL REMARKS: Rock source development is required in accordance with the approved Rock Source Development and Reclamation Plan and as directed by the Contract Administrator in Anderson Ridge Pit.

The Center for Sustainable Economy appealed the Board's approvals of the Taylor Downhill Sorts timber sales to Jefferson County Superior Court, Cause No. 22-2-00015-16. Please consult an attorney before bidding on this sale if you have questions about the risk of impacts to operability under the contract.

DRIVING MAP

SALE NAME: GOODMAN 1
 AGREEMENT#: 30-102255
 TOWNSHIP(S): T27R13W
 TRUST(S): University - Transferred (5)

REGION: Olympic Region
 COUNTY(S): Jefferson
 ELEVATION RGE: 320-1080'



Map may not be to scale

- Timber Sale Unit
- Milepost Markers
- Highway
- Driving Roads
- Existing Roads
- Rock Pit (Corporate)
- Distance Indicators

Driving Directions

Unit 1: From Forks, drive south on HWY 101 for 7.5 miles. Turn right on G-1000 and continue for 0.2 miles to the junction of G-1010, keep left to stay on the G-1000 and continue 1.6 miles to reach U1.

Unit 2: Continue on G-1000 for 1.5 miles to the junction of the G-1400, then turn right onto the G-1400 then continue 0.8 miles to reach U2.

Unit 3: Continue on G-1000, from the G-1400 Junction, for 0.8 miles, until you come to the junction of the G-2100, keep left to stay on the G-1000. In 0.7 miles turn right onto the G-1040 and continue for 0.2 miles to reach U3.

Unit 4: From U3 turn left on the G1040.1 and you will reach U4 in 0.1 miles.

Unit 5: From the junction of the G-1040 continue on the G-1000 for 0.1 miles to the junction of the G-1050. Continue on the G-1000 for 0.2 miles or turn left on the G-1050 for 0.4 miles to reach U5.

Anderson Ridge Pit: From Forks drive south on HWY 101 for 5.5 miles. Turn right on G-2000 and drive 0.4 miles then turn left to enter the pit.

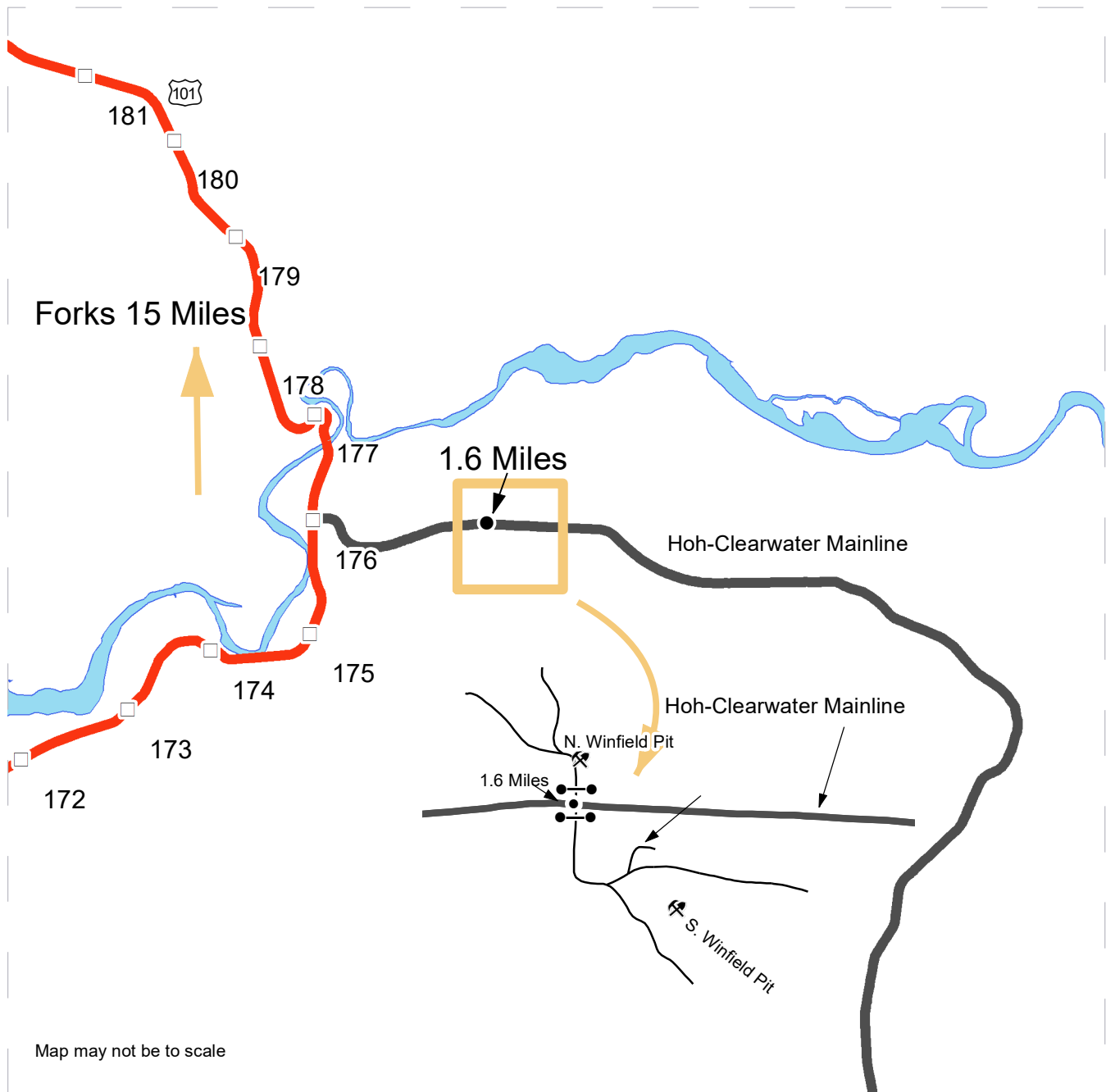
Rock Haul: From Anderson Ridge Pit turn left onto the G-2000 and drive for 1.3 miles and then turn left onto the G-2100. Drive 1.4 miles on the G-2100 then turn left on the G-1010. Drive 1.8 miles on the G-1010 to reach the G-1000 junctions and turn right to go to the units.



DRIVING MAP

SALE NAME: GOODMAN 1
AGREEMENT#: 30-102255
TOWNSHIP(S): T25R11W, T27R12W
TRUST(S): Capitol Grant (7), Common School and Indemnity (3)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 360'-1040'



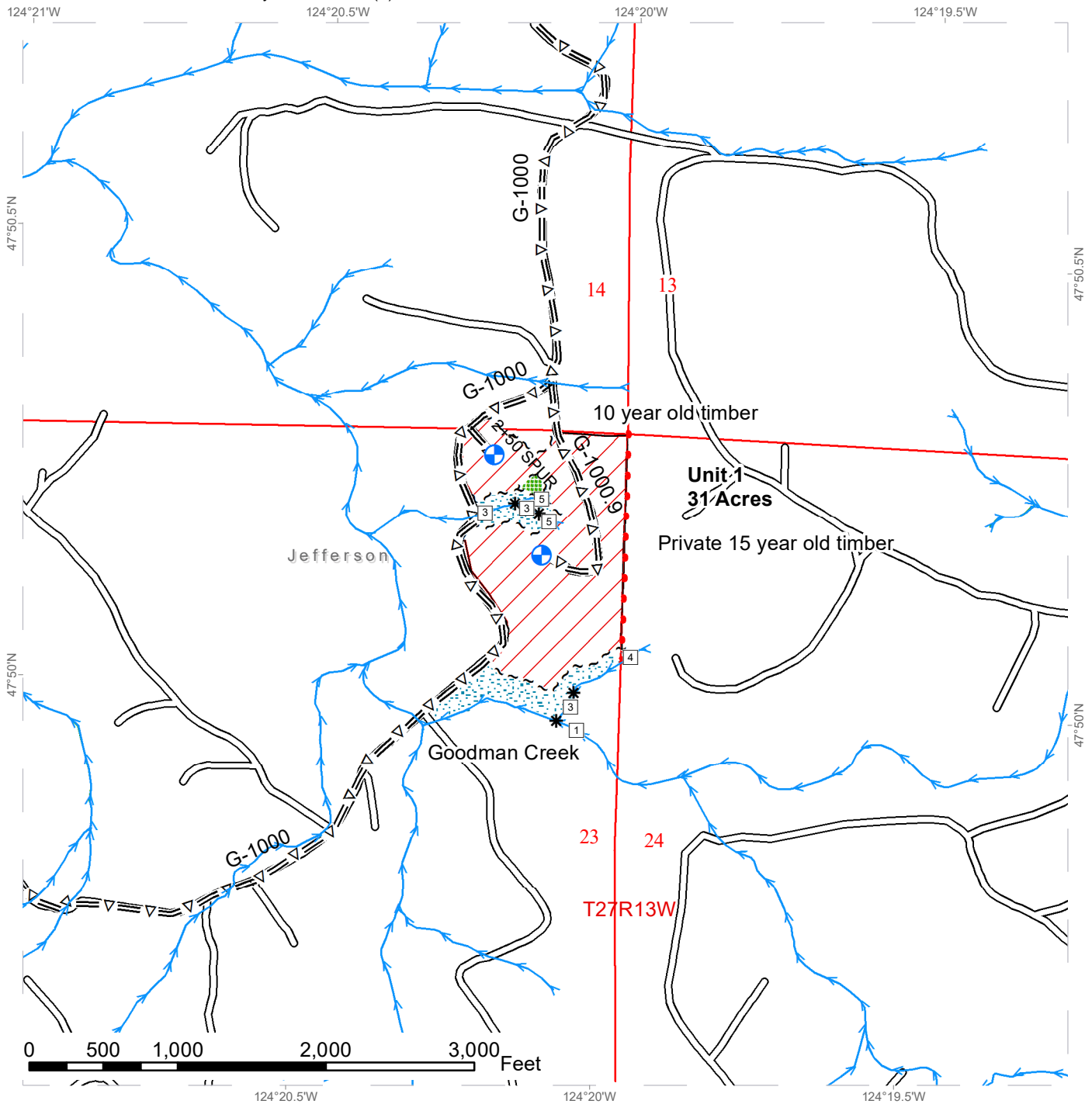
<ul style="list-style-type: none"> • Distance Indicator ● Gate (<<AA-1>>) ⚡ Rock Pit □ Milepost Markers — Driving Roads — Other Roads — Open Water — Highway 	<p>South Winfield Pit Access: From Forks drive 15 mi south and turn left onto the Hoh-Clearwater Mainline. Then continue for 1.6 mi and turn right into South Winfield Pit.</p> <p>North Winfield Pit Access: From Forks drive 15 mi south and turn left onto the Hoh-Clearwater Mainline. Then continue for 1.6 mi and turn left into North Winfield Pit.</p>
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Timber Sale Map

SALE NAME: GOODMAN 1
AGREEMENT #: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'

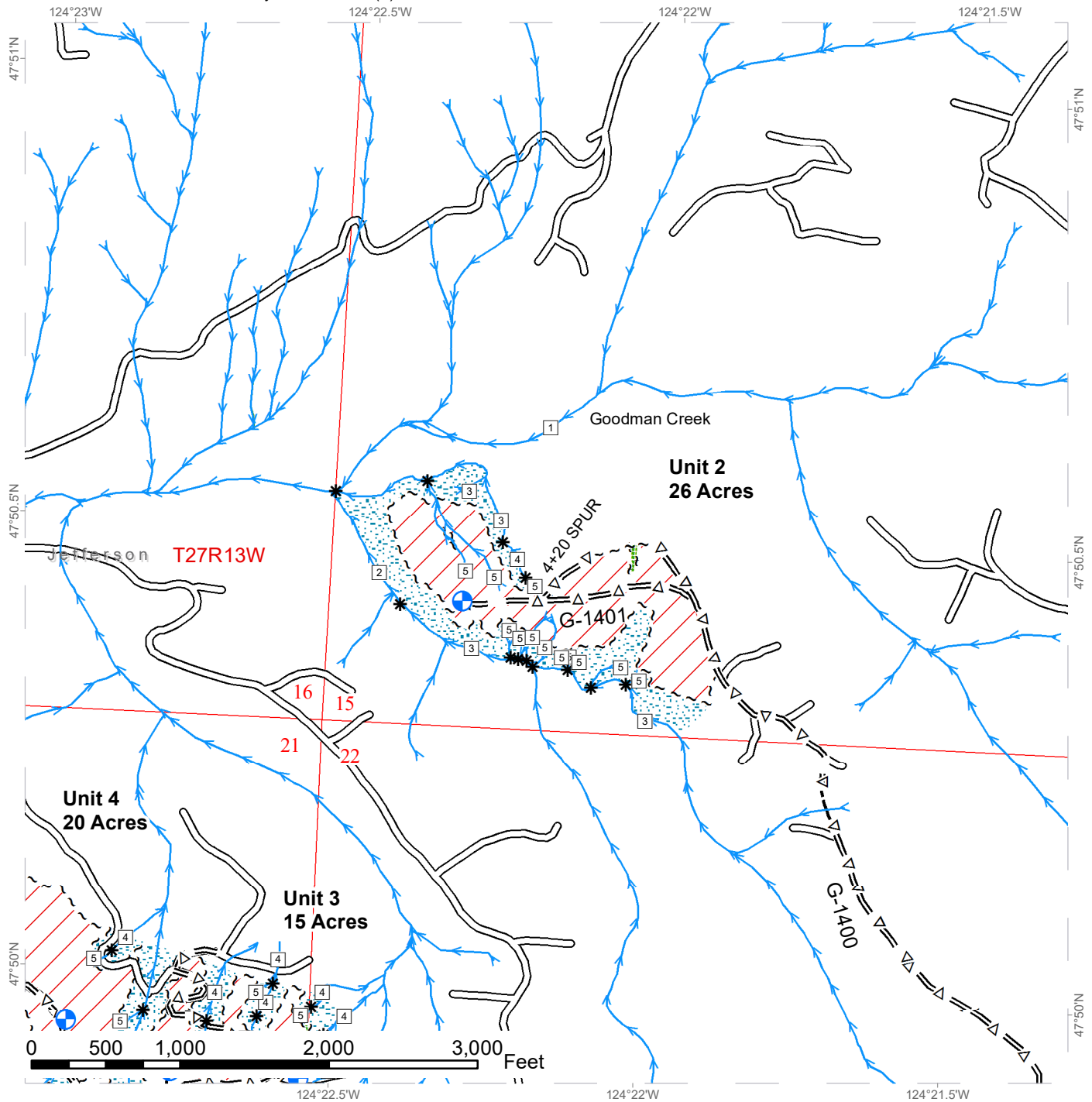


* Stream Break	~ ~ ~ ~ Sale Boundary Tags	Green Grid Leave Tree Area
□ Stream Type	• • • • Property Line	Blue Stippled Riparian Mgt Zone
→ Streams	— Timber Type Change	Red Diagonal Variable Retention Harvest
Existing Roads	~ ~ ~ Leave Tree Tags	Red Box Public Land Survey Townships
=Δ= Optional Pre-Haul Maintenance	⊕ Landing - Proposed	Red Line Public Lands Survey Sections

Timber Sale Map

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AGREEMENT #: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'



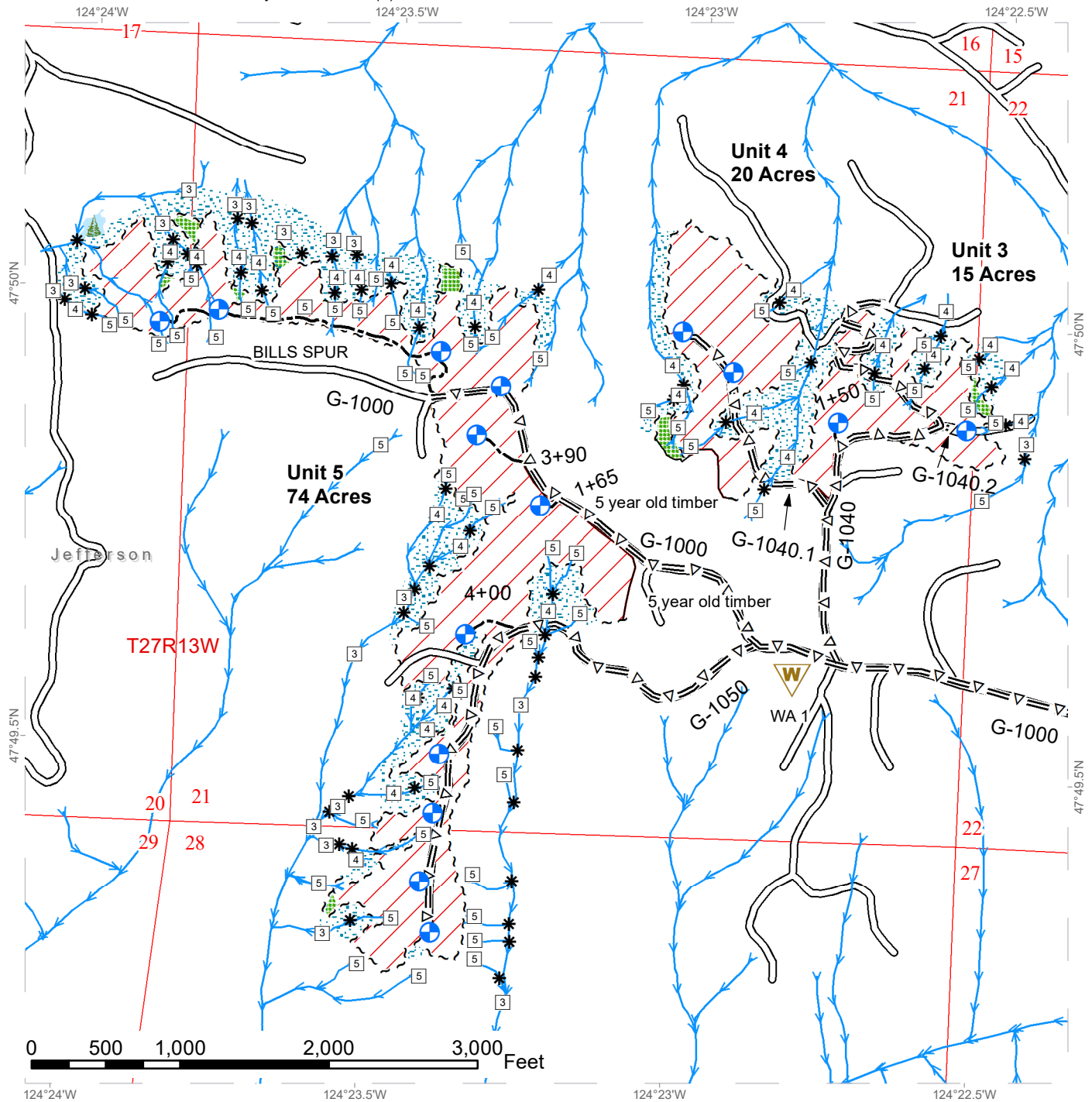
* Stream Break	⊕ Landing - Proposed	▒ Leave Tree Area
□ Stream Type	— Existing Roads	▒ Riparian Mgt Zone
→ Streams	=Δ= Optional Pre-Haul Maintenance	▒ Variable Retention Harvest
~ ~ ~ Sale Boundary Tags	--- Optional Construction	▒ Public Land Survey Townships
~ ~ ~ Leave Tree Tags		▒ Public Land Survey Sections



Timber Sale Map

SALE NAME: GOODMAN 1
AGREEMENT #: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'



* Stream Break	W Waste Area	Leave Tree Area
□ Stream Type	⊕ Landing - Proposed	Riparian Mgt Zone
→ Streams	— Existing Roads	Forested Wetland
--- Sale Boundary Tags	=Δ= Optional Pre-Haul Maintenance	Variable Retention Harvest
— Timber Type Change	- - - Optional Construction	Public Land Survey Townships
~ ~ ~ Leave Tree Tags		Public Land Survey Sections



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

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

Export Restricted Lump Sum AGREEMENT NO. 30-0105111

SALE NAME: GOODMAN 1 RESALE

**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 into 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 October 25, 2023 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 trees marked with a band of blue paint or bounded out by leave tree area boundary tags, bounded by timber sale boundary tags, a property line, a timber type change and the G-1000 Road in Unit 1; timber sale boundary tags, the 4+20 spur, and the G-1400 Road in Unit 2; timber sale boundary tags, the G-1040 Road and the G-1040.1 Road in Unit 3; timber sale boundary tags and a timber type change in Unit 4; timber sale boundary tags, a timber type change and the G-1000 Road in Unit 5

All forest products above located on approximately 170 acres on part(s) of Sections 14, 15, 20, 21, 22, 23, and 28 all in Township 27 North, Range 13 West W.M. in Jefferson 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-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	SLASH PILING SPECS
B	GREEN TREE RETENTION PLAN

G-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2025.

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 \$824.00 per acre per annum for the acres on which an operating release has not been issued .
- 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-061 Inadvertent Discovery of Cultural Resources

Purchaser acknowledges that cultural resources as defined in WAC 222-16-010 may exist within the timber sale area and that the existence and location of such resources may be unknown at the time this contract is executed. Purchaser has a duty to exercise due care in its operations and in the event any human skeletal remains are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify local law enforcement in the most expeditious manner possible then notifying the Contract Administrator. In the event cultural resources are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify the Contract Administrator. Any potential resources shall not be removed or disturbed. Purchaser shall resume operations as directed in writing by the Contract Administrator.

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. TE812521-1 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, ITP TE812521-1 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-106 Adding Naturally Damaged Forest Products

Any forest products not designated for removal that are seriously damaged by disease, insects or wind, or that may contribute seriously to the spread of insect or disease damage may be added to this sale by the State's Contract Administrator. Additions must be in unlogged areas of the sale and added volume shall not exceed an amount equal to 10 percent of the original advertised volume. Added forest products become a

part of this contract and shall be paid for at the rate set forth in clause G-101, G-102 or G-103.

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 2022 Forest Management Standard under certificate number: BVC-SFIFM-018227.

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 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.

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.

Road is defined as the road bed, including but not limited to its component parts, such as cut and fill slopes, 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.

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 via endorsement 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 Forks, 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 address of record:

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 Operations

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; G-1000, G-2000, G-2100, G-1010, G-1000.9, 2+50 SPUR, G-1400, G-1401, 4+20 SPUR, G-1040, G-1040.1, G-1040.2, 1+50 SPUR, G-1050, 4+00 SPUR, 1+65 SPUR, 3+90 SPUR, Bills SPUR, Winfield Pit North Access road, and Anderson Ridge Pit access road. 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 G-1000, G-2000, G-2100, & G-1010, unless authority is granted in writing by the Contract Administrator.

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:

Application Date: 8/16/2020

Lease, including the terms and provisions thereof,

For: Land Use License

In Favor of: Pacific Coast Salmon Coalition

Disclosed by Application No.: 60-102596

Granted: 8/16/2020

Expires: 9/30/2023

Pending Applications

Lease, including the terms and provisions thereof,

For: Land Use License

In Favor of: Quileute Tribe

Disclosed by Application No.: 60-096725

Application Date: 1/18/2018

Lease, including the terms and provisions thereof,

For: Land Use License

In Favor of: University of Washington – School of Environmental & Forest Sciences

Disclosed by Application No.: 60-101197

Application Date: 7/21/2020

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 \$99,398.00. The total contract price consists of a \$0.00 contract bid price plus \$99,398.00 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 100 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 unit containing the damaged leave tree, 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 '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-040 Purchaser Harvest Plan

Purchaser shall, as part of the plan of operations, prepare an acceptable harvest plan for utilizing rubber tired skidders in sale area. The plan shall address the location and timing of desired use, which are part(s) of this contract. The harvest plan shall be approved by the Contract Administrator prior to beginning the harvest operation. Purchaser shall not deviate from the harvest plan without prior written approval 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 harvested and removed using cable and ground methods, with rubber tired skidders allowed only if rutting and skidding requirements can be met and a harvest plan is submitted and approved by the Contract Administrator. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved 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:

1. While felling timber, two warning signs must be posted on the G-1050, G-1000 and the G-1400 Roads.
2. Yarding equipment shall not cross live streams without an FPHP.

3. The Purchaser shall notify all employees and contractors working on this sale that any danger tree, marked or unmarked, may be felled. Any felled danger tree shall be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.

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

H-142 Wildlife Timing Restrictions

The following wildlife timing restrictions apply to this contract and shall be in place in the locations shown on the attached timber sale map.

Maintenance activities or operation of heavy equipment on the G-1000, G-1040, G-1050 and G-1400 Roads (see road plan for locations), is not permitted from one hour before official sunrise to two hours after official sunrise and from one hour before official sunset to one hour after official sunset from April 1 through September 23. This restriction does not apply to the hauling of timber, rock, or equipment.

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 9/28/2023 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 listed in the Road Plan, authorized in clause G-310, and not listed in clause C-060. All work shall be completed to the specifications detailed in the Road Plan.

C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on the G-1010, G-1000, G-2000, G-2100,

Winfield Pit North Access road and the Anderson Pit access road. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

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

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 typed waters 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 30 feet of any typed waters 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.

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 or other releases of hazardous material/waste during operations conducted under this contract.

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 10 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 covered in part a., the Purchaser is responsible for immediately notifying all the following:

- Department of Emergency Management at 1-800-258-5990
- National Response Center at 1-800-424-8802
- Appropriate Department of Ecology (ECY) at 1-800-645-7911
- DNR Contract Administrator

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 Units 1-5.

SIGNATURES

This agreement may be executed in any number of counterparts (including by electronic mail in portable document format (.pdf), or by facsimile) each of which shall be deemed an original but all of which, when taken together, shall constitute one and the same Agreement binding on all parties.

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Jill DeCianne, Acting

Print Name

Olympic Region Manager

Date: _____

Date: _____

Address: _____

CORPORATE ACKNOWLEDGEMENT
(Required for both LLC and Inc. Entities)

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 _____

Schedule A
SLASH PILING SPECS

Specifications for Slash Piling

The areas shall be piled by creating circular piles of slash and brush conforming to the following specifications:

1. Piles shall be a minimum of 12 feet tall by 8 feet wide to a maximum of 30 feet tall and 16 feet wide. Piles shall be cone shaped and stable.
2. Piles shall be free of topsoil, large rotten logs and large stumps. No material larger than 8 inches in diameter shall be piled. Any burnable material shall be well scattered.
3. Piles shall not be placed on large stumps or logs.
4. Piles shall be stacked a minimum of 50 feet from all unit boundaries, Riparian Management Zones, leave tree areas and any standing timber; a minimum of 100 feet from any public roads and highways; and a minimum of 200 feet from any structures.
5. Piling shall be completed using an approved hydraulic shovel and grapples.
6. Slash and displaced soil shall be removed from swales and natural drainage channels concurrent with yarding.
7. Slash shall be placed in skid roads or ahead of machinery. Slash which accumulates on landings and/or roads shall be lopped and scattered within the harvest area or as designated by the Contract Administrator.
8. Slash generated during cable yarding shall be stacked in dirt free piles and shall not block roads or interfere with functioning of drainage structures, ditches, or stream channels.

Schedule B
GREEN TREE RETENTION PLAN

Leave the following as directed by the Contract Administrator:

1. All trees marked with a blue band of paint and all leave tree area clumps shall remain standing.

The perimeter of the leave tree clumps are designated by Leave Tree Area tags. The tags face outward from the leave tree clumps.

Unit #	# of Individually Marked Trees	# of Clumps	# of Trees Clumped	Total # of Leave Trees
1	185	1	63	248
2	205	1	27	232
3	66	1	54	120
4	113	1	47	160
5	172	7	420	592



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 1/17)

PRE-CRUISE NARRATIVE

Sale Name: Goodman 1	Region: Olympic
Agreement #: 30-102255	District: Coast
Contact Forester: Isaac Nequette Phone / Location: 360-640-9471	County(s): Jefferson
Alternate Contact: Mike Potter Phone / Location: 360-640-0722	Other information: Click here to enter text.

Type of Sale: Lump Sum	
Harvest System: Uphill Cable	30%
Harvest System: Ground based	70%

UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit # Harvest R/W or RMZ WMZ	Legal Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Trust	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	S23/T27N/R13W	5	40	7	0.7	1.3		31	GPS (Garmin)
2	S15/T27N/R13W	5	47	19	0.4	1.6		26	GPS (Garmin)
3	S21/T27N/R13W	5	26	9	0.3	1.7		15	GPS (Garmin)
4	S21/T27N/R13W	5	33	11	1	1		20	GPS (Garmin)
5	S21/T27N/R13W	5	128	48	2.7	3.3		74	GPS (Garmin)
	Enter Sec / Twp / Rng								GPS (Garmin)
	Enter Sec / Twp / Rng								GPS (Garmin)
TOTAL ACRES			274	94	5.1	8.9		166	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	<p>Harvest Boundaries: Timber sale boundary tags, pink flagging, red flashers, blue paint, timber type change, and roads.</p> <p>Leave Tree Areas: Leave tree area tags, pink flagging, red flashers, and blue paint.</p> <p>Individual Leave Trees: Blue paint.</p>		<p>Individual Leave Trees: 185</p> <p>Clumped Leave Trees: 63</p> <p>Total Leave Trees: 248</p>
2	<p>Harvest Boundaries: Timber sale boundary tags, pink flagging, red flashers, blue paint, timber type change, and roads.</p> <p>Leave Tree Areas: Leave tree area tags, pink flagging, red flashers, and blue paint.</p> <p>Individual Leave Trees: Blue paint.</p>		<p>Individual Leave Trees: 189</p> <p>Clumped Leave Trees: 27</p> <p>Total Leave Trees: 216</p>
3	<p>Harvest Boundaries: Timber sale boundary tags, pink flagging, red flashers, blue paint, timber type change, and roads.</p> <p>Leave Tree Areas: Leave tree area tags, pink flagging, red flashers, and blue paint.</p> <p>Individual Leave Trees: Blue paint.</p>		<p>Individual Leave Trees: 66</p> <p>Clumped Leave Trees: 54</p> <p>Total Leave Trees: 120</p>
4	<p>Harvest Boundaries: Timber sale boundary tags, pink flagging, red flashers, blue paint, timber type change, and roads.</p> <p>Leave Tree Areas: Leave tree area tags, pink flagging, red flashers, and blue paint.</p> <p>Individual Leave Trees: Blue paint.</p>		<p>Individual Leave Trees: 113</p> <p>Clumped Leave Trees: 47</p> <p>Total Leave Trees: 160</p>
5	<p>Harvest Boundaries: Timber sale boundary tags, pink flagging, red flashers, blue paint, timber type change, and roads.</p> <p>Leave Tree Areas: Leave tree area tags, pink flagging, red flashers, and blue paint.</p> <p>Individual Leave Trees: Blue paint.</p>		<p>Individual Leave Trees: 172</p> <p>Clumped Leave Trees: 420</p> <p>Total Leave Trees: 592</p>

OTHER PRE-CRUISE INFORMATION:

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	Douglas-fir, Sitka Spruce 800	Walk in from G-1000	Cruise Map
2	Western Hemlock, Douglas-fir 750	Walk in from G-1400	Cruise Map
3	Western Hemlock, Douglas-fir 400	Walk in from G-1040	Cruise Map
4	Western Hemlock, Douglas-fir 500	Walk in from G-1040	Cruise Map
5	Western Hemlock, Douglas-fir 1,800	Walk in from G-1000	Cruise Map
TOTAL MBF	4250		

REMARKS:

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Prepared By: Isaac Nequette Date: 4/29/2021	Title: Forester	CC:
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Timber Sale Cruise Report Goodman 1 Resale

Sale Name: GOODMAN 1Resale

Sale Type: LUMP SUM

Region: OLYMPIC

District: OZETTE

Lead Cruiser: Kevin Peterson

Other Cruisers:

Cruise Narrative:

Location:

This sale is located off of the G-1000 road system, about 10 miles South of Forks. All units are accessible from the road, except unit 2. There are not locked gates.

Cruise Design:

For this sale I used a 54.44/40 BAF, Red Alder and Red Cedar were cruised with the 40 BAF.

Top diameter was determined at 40% of the diameter at 16'. All logs were cruised in 40' lengths, except RC at 36'.

Timber Quality:

This sale is a mixture of mature DF and WH with Spruce in some of the units. Red Alder was found along old roads within the units.

Common defect were sweep and forked tops.

Logging and Stand Conditions:

This sale is 70% ground based harvest and 30% up hill cable harvest. Stand conditions were pretty good to walk in, with the exception of unit 2 due to heavy brush.

Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	15.4	5.6		1,965	536	1,080	320	30
WH	14.4	5.4		1,570	300	924	346	
SS	13.9			223	63	94	67	
RA	13.1			33			33	
RC	9.5			32		11	21	
ALL	14.4	5.4		3,822	898	2,108	786	30

Timber Sale Notice Weight (tons)

Sp	Tons by Grade				
	All	2 Saw	3 Saw	4 Saw	Utility
WH	14,428	2,314	8,997	3,118	
DF	13,711	3,447	7,987	2,101	178
SS	1,736	373	751	612	
RA	358			358	
RC	241		113	128	
ALL	30,474	6,133	17,848	6,317	178

Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
246.4	2.6	93.7	1.7	23,062	3.1

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
GOODMAN 1 U1	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	31.3	31.3	16	8	0
GOODMAN 1 U2	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	26.0	29.0	15	8	0
GOODMAN 1 U3	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	15.4	15.4	9	5	0
GOODMAN 1 U4	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	20.2	20.2	11	6	0
GOODMAN 1 U5	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	74.4	74.4	37	14	0
All		167.3	170.4	88	41	0

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.3	40	3,369	3,202	5.0	3,446.4	535.6
DF	LIVE	3 SAW	Domestic	8.0	39	6,729	6,452	4.1	7,986.6	1,079.5
DF	LIVE	4 SAW	Domestic	5.2	25	1,921	1,911	0.5	2,100.9	319.8

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	UTILITY	Pulp	7.2	32	179	179	0.0	177.5	30.0
RA	LIVE	4 SAW	Domestic	6.2	34	204	196	4.2	358.5	32.8
RC	LIVE	3 SAW	Domestic	9.7	36	63	63	0.0	113.3	10.5
RC	LIVE	4 SAW	Domestic	5.9	15	126	126	0.0	127.5	21.0
SS	LIVE	2 SAW	Domestic	14.0	40	402	375	6.8	372.7	62.7
SS	LIVE	3 SAW	Domestic	8.7	40	566	560	1.1	751.1	93.6
SS	LIVE	4 SAW	Domestic	5.2	25	408	397	2.7	611.6	66.5
WH	LIVE	2 SAW	Domestic	13.2	40	1,843	1,790	2.9	2,313.6	299.5
WH	LIVE	3 SAW	Domestic	8.4	40	5,582	5,526	1.0	8,996.6	924.5
WH	LIVE	4 SAW	Domestic	5.2	25	2,069	2,069	0.0	3,118.1	346.2

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Pulp	5.6	27	55	0.0	58.1	9.2
DF	5 - 8	LIVE	Domestic	5.9	32	4,843	2.9	5,997.0	810.2
DF	9 - 11	LIVE	Domestic	10.2	40	3,521	3.8	4,090.5	589.0
DF	9 - 11	LIVE	Pulp	10.7	40	124	0.0	119.4	20.7
DF	12 - 14	LIVE	Domestic	13.3	40	2,649	5.3	2,988.1	443.2
DF	15 - 19	LIVE	Domestic	17.1	40	552	3.4	458.2	92.4
RA	5 - 8	LIVE	Domestic	6.1	31	161	2.8	296.1	26.9
RA	9 - 11	LIVE	Domestic	9.4	40	35	10.3	62.4	5.8
RC	5 - 8	LIVE	Domestic	5.7	16	126	0.0	127.5	21.0
RC	9 - 11	LIVE	Domestic	9.7	36	63	0.0	113.3	10.5
SS	5 - 8	LIVE	Domestic	5.6	28	653	2.6	927.2	109.2
SS	9 - 11	LIVE	Domestic	10.1	40	304	0.0	435.5	50.9
SS	12 - 14	LIVE	Domestic	12.1	40	109	5.1	120.9	18.2
SS	15 - 19	LIVE	Domestic	15.4	40	266	7.5	251.8	44.5
WH	5 - 8	LIVE	Domestic	6.0	29	5,194	0.8	8,723.3	869.0
WH	9 - 11	LIVE	Domestic	10.7	40	2,401	0.6	3,391.3	401.6
WH	12 - 14	LIVE	Domestic	12.8	40	1,584	3.3	2,163.6	265.0
WH	15 - 19	LIVE	Domestic	16.0	40	206	0.0	150.0	34.5

Cruise Unit Report GOODMAN 1 U1

Unit Sale Notice Volume (MBF): GOODMAN 1 U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade				Utility
				All	2 Saw	3 Saw	4 Saw	
DF	17.3	6.0		296	82	152	37	25
WH	14.5	5.5		219	25	161	33	
SS	14.8			181	63	79	40	
RA	13.5			28			28	
RC	8.0			10			10	
ALL	14.3	5.7		735	170	392	148	25

Unit Cruise Design: GOODMAN 1 U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	31.3	31.3	16	8	0

Unit Cruise Summary: GOODMAN 1 U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	12	29	1.8	1
WH	7	20	1.3	2
SS	10	21	1.3	0
RA	4	4	0.3	0
RC	2	3	0.2	0
ALL	35	77	4.8	3

Unit Cruise Statistics (Cut + Leave Trees): GOODMAN 1 U1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	98.7	99.1	24.8	103.1	12.5	3.6	10,173	99.9	25.0
WH	68.1	111.2	27.8	102.9	10.7	4.0	7,001	111.7	28.1
SS	71.5	106.7	26.7	85.1	41.1	13.0	6,080	114.4	29.7
RA	10.0	400.0	100.0	87.9	6.6	3.3	879	400.1	100.1
RC	10.2	400.0	100.0	48.7	0.0	0.0	497	400.0	100.0
ALL	258.4	28.3	7.1	95.3	25.6	4.3	24,629	38.2	8.3

Unit Summary: GOODMAN 1 U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	12	ALL	17.3	71	88	9,853	9,471	3.9	56.3	91.9	22.1	296.4
RA	LIVE	CUT	4	ALL	13.5	57	70	925	879	5.0	10.1	10.0	2.7	27.5
RC	LIVE	CUT	2	ALL	8.0	18	19	331	331	0.0	19.5	6.8	2.4	10.4
SS	LIVE	CUT	10	ALL	14.8	49	60	6,030	5,790	4.0	57.0	68.0	17.7	181.2
WH	LIVE	CUT	7	ALL	14.5	65	81	7,175	7,001	2.4	59.3	68.0	17.9	219.1
ALL	LIVE	CUT	35	ALL	14.9	57	71	24,314	23,472	3.5	202.2	244.8	62.8	734.7
ALL	ALL	ALL	35	ALL	14.9	57	71	24,314	23,472	3.5	202.2	244.8	62.8	734.7

Cruise Unit Report GOODMAN 1 U2

Unit Sale Notice Volume (MBF): GOODMAN 1 U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	13.7	6.0		339	89	179	72
WH	11.2	6.0		222	30	110	83
SS	10.0			42		15	27
ALL	12.1	6.0		603	119	303	181

Unit Cruise Design: GOODMAN 1 U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	26.0	29.0	15	8	0

Unit Cruise Summary: GOODMAN 1 U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	17	34	2.3	1
WH	14	24	1.6	1
SS	3	5	0.3	0
ALL	34	63	4.2	2

Unit Cruise Statistics (Cut + Leave Trees): GOODMAN 1 U2

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	123.4	71.7	18.5	105.8	18.5	4.5	13,053	74.0	19.0
WH	87.1	99.7	25.7	98.1	18.6	5.0	8,545	101.4	26.2
SS	18.1	217.1	56.1	88.1	24.5	14.1	1,598	218.5	57.8
ALL	228.6	24.1	6.2	101.4	19.1	3.3	23,196	30.8	7.0

Unit Summary: GOODMAN 1 U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	17	ALL	13.7	58	71	13,266	13,053	1.6	120.5	123.4	33.3	339.4
SS	LIVE	CUT	3	ALL	10.0	45	55	1,598	1,598	0.0	33.3	18.1	5.7	41.5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	14	ALL	11.2	50	61	8,704	8,545	1.8	127.3	87.1	26.0	222.2
ALL	LIVE	CUT	34	ALL	12.2	53	65	23,568	23,196	1.6	281.1	228.6	65.1	603.1
ALL	ALL	ALL	34	ALL	12.2	53	65	23,568	23,196	1.6	281.1	228.6	65.1	603.1

Cruise Unit Report GOODMAN 1 U3

Unit Sale Notice Volume (MBF): GOODMAN 1 U3

Sp	DBH	Rings/In	Age	MBF Volume by Grade				Utility
				All	2 Saw	3 Saw	4 Saw	
DF	17.2	6.0		208	95	77	34	2
WH	18.2	5.0		128	57	54	17	
RC	10.3			8		4	4	
ALL	16.7	5.5		344	152	134	55	2

Unit Cruise Design: GOODMAN 1 U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	15.4	15.4	9	5	0

Unit Cruise Summary: GOODMAN 1 U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	13	25	2.8	1
WH	10	13	1.4	1
RC	2	2	0.2	0
ALL	25	40	4.4	2

Unit Cruise Statistics (Cut + Leave Trees): GOODMAN 1 U3

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	151.2	61.8	20.6	89.2	28.3	7.9	13,485	68.0	22.0
WH	78.6	110.1	36.7	105.6	11.6	3.7	8,307	110.7	36.9
RC	8.9	300.0	100.0	58.3	23.3	16.5	518	300.9	101.3
ALL	238.7	23.9	8.0	93.4	25.3	5.1	22,310	34.8	9.4

Unit Summary: GOODMAN 1 U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	13	ALL	17.2	62	77	14,614	13,485	7.7	93.7	151.2	36.5	207.7
RC	LIVE	CUT	2	ALL	10.3	25	27	518	518	0.0	15.4	8.9	2.8	8.0

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	10	ALL	18.2	67	83	8,425	8,307	1.4	43.5	78.6	18.4	127.9
ALL	LIVE	CUT	25	ALL	16.9	60	74	23,557	22,310	5.3	152.6	238.7	57.7	343.6
ALL	ALL	ALL	25	ALL	16.9	60	74	23,557	22,310	5.3	152.6	238.7	57.7	343.6

Cruise Unit Report GOODMAN 1 U4

Unit Sale Notice Volume (MBF): GOODMAN 1 U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade				Utility
				All	2 Saw	3 Saw	4 Saw	
DF	17.1	6.0		245	109	95	39	2
WH	18.5	5.0		203	99	80	24	
RC	10.3			13		7	7	
ALL	16.8	5.5		461	208	181	70	2

Unit Cruise Design: GOODMAN 1 U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	20.2	20.2	11	6	0

Unit Cruise Summary: GOODMAN 1 U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	15	27	2.5	1
WH	11	19	1.7	1
RC	2	3	0.3	0
ALL	28	49	4.5	2

Unit Cruise Statistics (Cut + Leave Trees): GOODMAN 1 U4

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	133.6	71.4	21.5	90.9	26.2	6.8	12,145	76.1	22.6
WH	94.0	103.9	31.3	106.6	11.3	3.4	10,026	104.5	31.5
RC	10.9	237.1	71.5	59.7	19.3	13.7	652	237.9	72.8
ALL	238.6	25.6	7.7	95.7	23.6	4.5	22,823	34.8	8.9

Unit Summary: GOODMAN 1 U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	15	ALL	17.1	64	79	13,080	12,145	7.1	83.8	133.6	32.3	245.3
RC	LIVE	CUT	2	ALL	10.3	27	31	652	652	0.0	18.9	10.9	3.4	13.2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	11	ALL	18.5	67	83	10,154	10,026	1.3	50.4	94.0	21.9	202.5
ALL	LIVE	CUT	28	ALL	16.9	60	74	23,886	22,823	4.4	153.1	238.6	57.6	461.0
ALL	ALL	ALL	28	ALL	16.9	60	74	23,886	22,823	4.4	153.1	238.6	57.6	461.0

Cruise Unit Report GOODMAN 1 U5

Unit Sale Notice Volume (MBF): GOODMAN 1 U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	14.5	5.0		876	162	577	138
WH	13.6			798	88	520	190
RA	11.0			5			5
ALL	14.1	5.0		1,680	250	1,097	333

Unit Cruise Design: GOODMAN 1 U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft	74.4	74.4	37	14	0

Unit Cruise Summary: GOODMAN 1 U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	36	90	2.4	1
WH	17	80	2.2	0
RA	1	1	0.0	0
ALL	54	171	4.6	1

Unit Cruise Statistics (Cut + Leave Trees): GOODMAN 1 U5

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	132.4	79.0	13.0	88.9	16.4	2.7	11,775	80.7	13.3
WH	117.7	92.2	15.2	91.2	25.8	6.3	10,731	95.7	16.4
RA	1.1	608.3	100.0	65.2	0.0	0.0	70	608.3	100.0
ALL	251.2	21.4	3.5	89.9	19.9	2.7	22,577	29.2	4.4

Unit Summary: GOODMAN 1 U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	36	ALL	14.5	58	71	12,071	11,775	2.5	115.5	132.4	34.8	876.0
RA	LIVE	CUT	1	ALL	11.0	52	63	70	70	0.0	1.6	1.1	0.3	5.2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	17	ALL	13.2	53	54	10,790	10,731	0.5	123.9	117.7	32.4	798.4
ALL	LIVE	CUT	54	ALL	13.8	55	62	22,931	22,577	1.5	241.0	251.2	67.5	1,679.7
ALL	ALL	ALL	54	ALL	13.8	55	62	22,931	22,577	1.5	241.0	251.2	67.5	1,679.7



Forest Practices Application/Notification
Notice of Decision

FPA/N No: 2618013
Effective Date: 8/4/2023
Expiration Date: 8/4/2026
Shut Down Zone: 650
EARR Tax Credit: [X] Eligible [] Non-eligible
Reference: WA DNR
Goodman 1

Decision

- [] Notification Accepted Operations shall not begin before the effective date.
[X] Approved This Forest Practices Application is subject to the conditions listed below.
[] Disapproved This Forest Practices Application is disapproved for the reasons listed below.
[] Withdrawn Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).
[] Closed All forest practices obligations are met.

FPA/N Classification

[] Class II [] Class III [] Class IVG [X] Class IVS

Number of Years Granted on Multi-Year Request

[] 4 years [] 5 years

Conditions on Approval/Reasons for Disapproval

Timing Limitations on Type S and F water(s):

All work below the ordinary high water line shall only occur between July 1 and September 30.

Issued By: Tom Shedd

Region: Olympic

Title: Forest Practices Forester

Date: 8/5/2023

Copies to: [X] Landowner, Timber Owner and Operator

Issued in person: [] LO [] TO [] OP By: Date:

Appeal Information

You have thirty (30) days to **file** (i.e., **actually deliver**) an appeal in writing of this Decision and any related State Environmental Policy Act (SEPA) determinations to the Pollution Control Hearings Board, the Attorney General's Office, and the Department of Natural Resources' region office. See [RCW 76.09.205](http://www.wa.gov/RCW76.09.205). The appeal period starts when the applicant receives this decision, which usually happens electronically on the date indicated below.

You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources Olympic Region
<u>Physical Address</u> 1111 Israel Road, SW Suite 301 Tumwater, WA 98501 <u>Mailing address</u> Post Office Box 40903 Olympia, WA 98504-0903	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504 <u>Mailing Address</u> Post Office Box 40100 Olympia, WA 98504-0100	<u>Physical & Mailing Address</u> 411 Tillicum Lane Forks, WA 98331

Information regarding the Pollution Control Hearings Board can be found at: <http://elaho.wa.gov/>

Other Applicable Laws

Operating as described in this application/notification does not ensure compliance with the Endangered Species Act, or other federal, state, or local laws.

Transfer of Forest Practices Application/Notification (WAC 222-20-010)

Use the "Notice of Transfer of Approved Forest Practices Application/Notification" form. This form is available at region offices and on the Forest Practices website <https://www.dnr.wa.gov/programs-and-services/forest-practices/review-applications-fpars/forest-practices-forms-and>. Notify DNR of new Operators within 48 hours.

Continuing Forestland Obligations (RCW 76.09.060, RCW 76.09.070, RCW 76.09.390, and WAC 222-20-055)

Obligations include reforestation, road maintenance and abandonment plans, conversions of forestland to non- forestry use and/or harvest strategies on perennial non-fish habitat (Type Np) waters in Eastern Washington.

Before the sale or transfer of land or perpetual timber rights subject to continuing forest and obligations, the seller must notify the buyer of such an obligation on a form titled "Notice of Continuing Forest Land Obligation". The seller and buyer must both sign the "Notice of Continuing Forest Land Obligation" form and send it to the DNR Region Office for retention. This form is available at DNR region offices.

If the seller fails to notify the buyer about the continuing forestland obligation, the seller must pay the buyer's costs related to continuing forestland obligations, including all legal costs and reasonable attorneys' fees incurred by the buyer in enforcing the continuing forestland obligation against the seller.


Failure by the seller to send the required notice to DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forestland obligation prior to sale.

DNR Declaration of Mailing

I, Rosielly Sanchez, caused the Notice of Decision for FPA/N No. 2618013 to be placed in the United States mail at Forks, WA, postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the foregoing is true and correct.

8/5/2023
(Date)

Forks, Washington
(City & State where signed)


(Signature)

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
GOODMAN 1 RESALE TIMBER SALE ROAD PLAN
JEFFERSON COUNTY
COAST DISTRICT

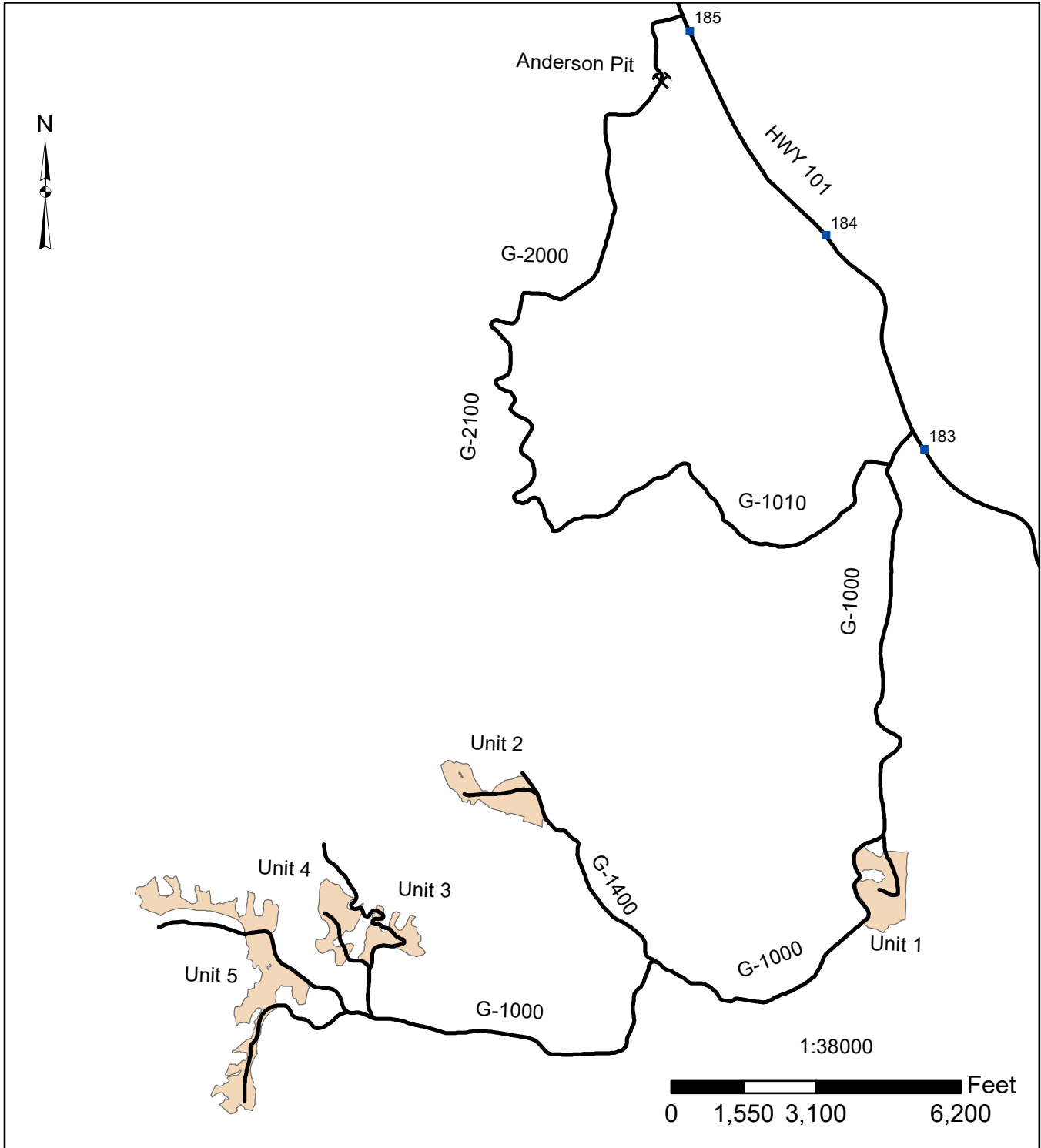
AGREEMENT NO: 30-102255

DISTRICT ENGINEER: BILL MEHL

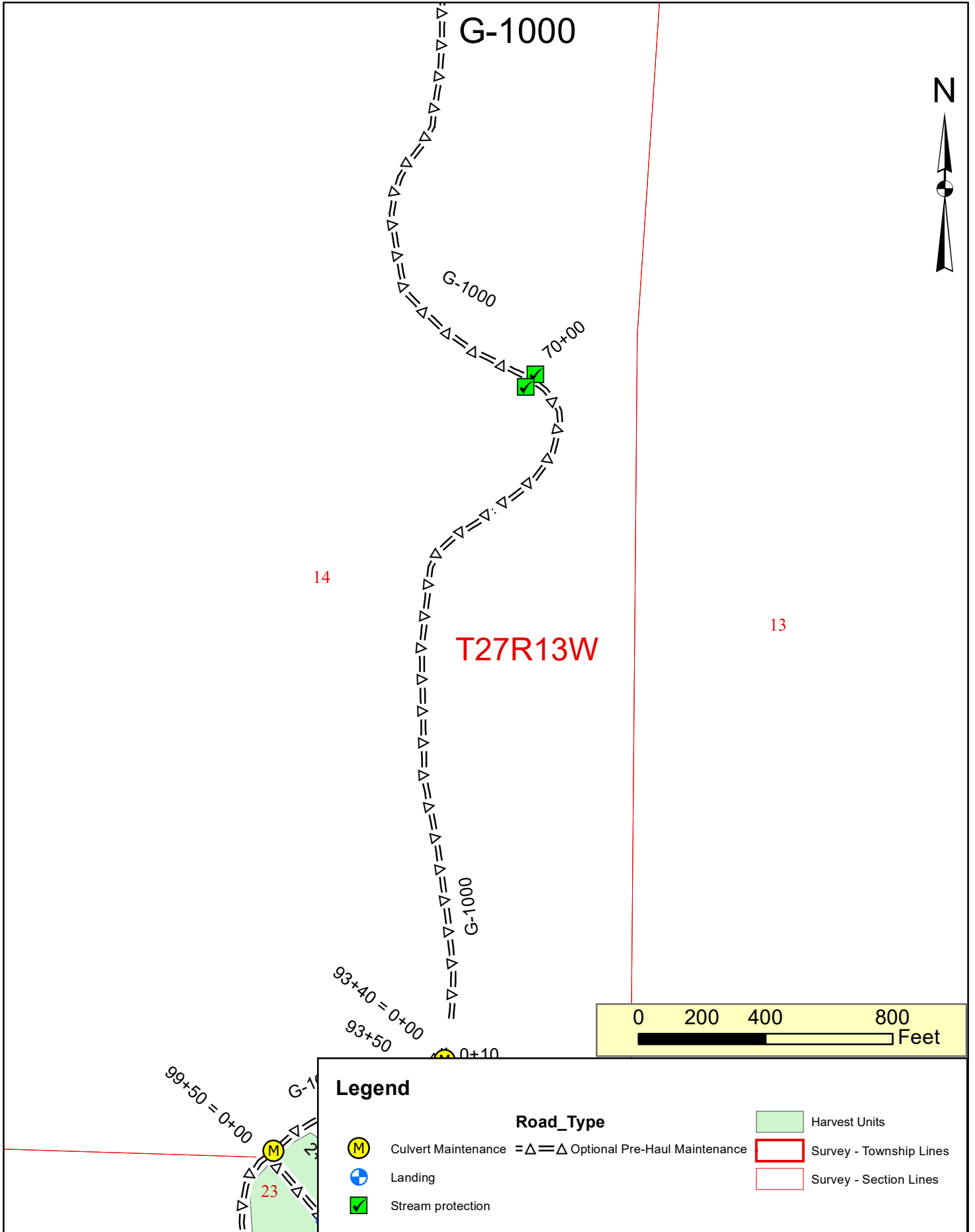
DATE: November 15, 2021

DRAWN AND COMPILED BY: RYAN SKERBECK

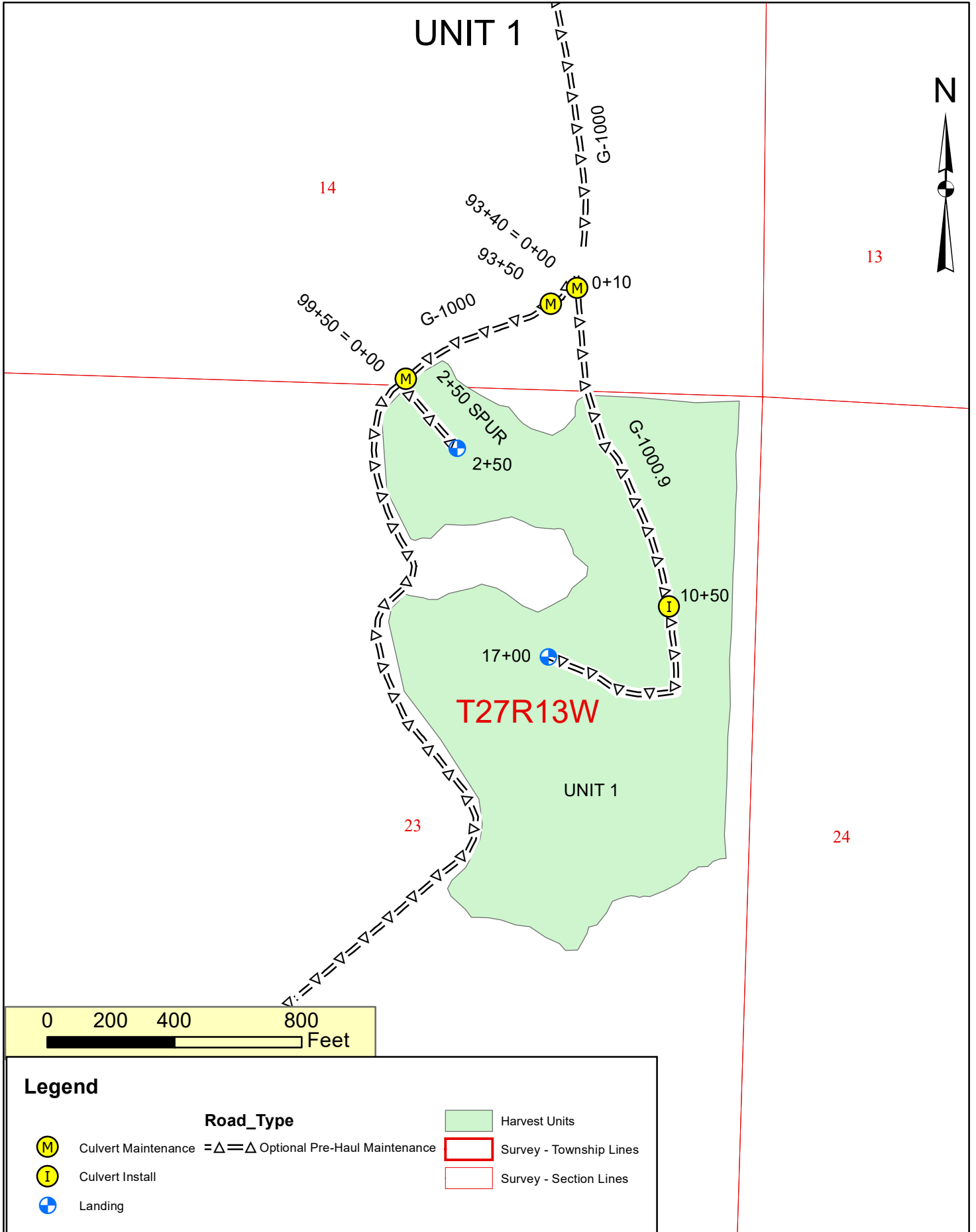
PROJECT MAP



GOODMAN 1 TIMBER SALE

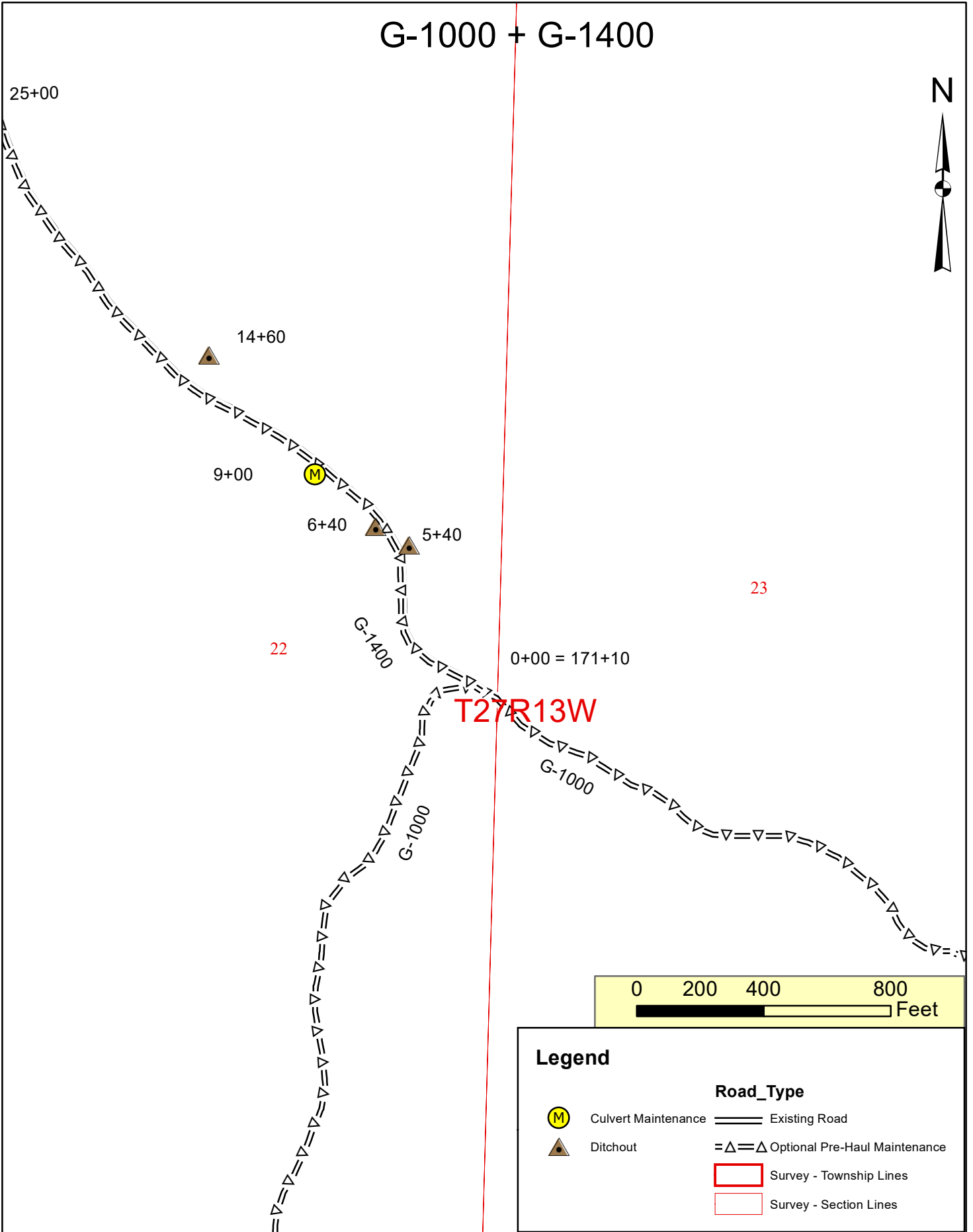


GOODMAN 1 TIMBER SALE



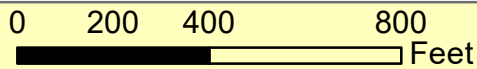
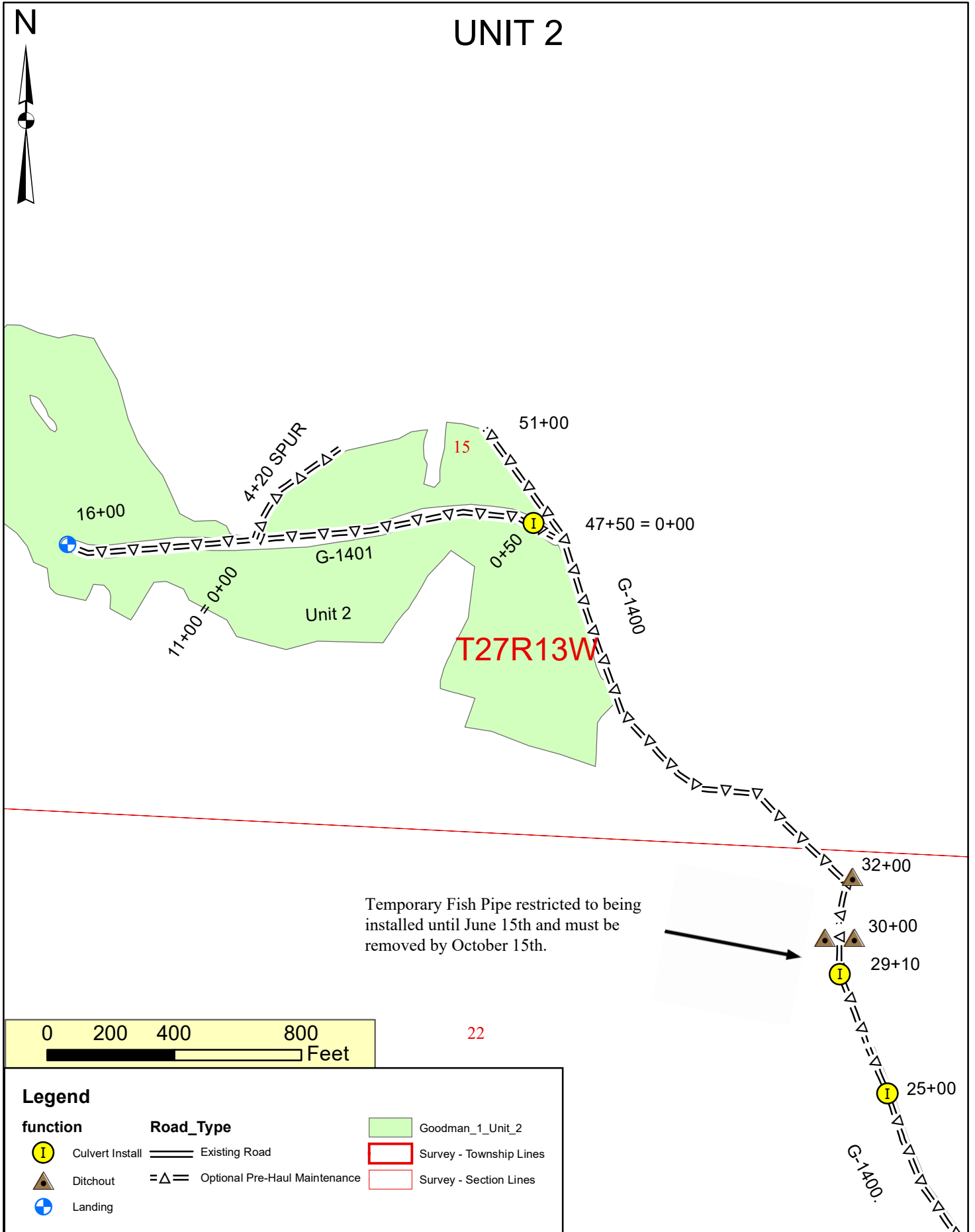
GOODMAN 1 TIMBER SALE

G-1000 + G-1400



GOODMAN 1 TIMBER SALE

UNIT 2

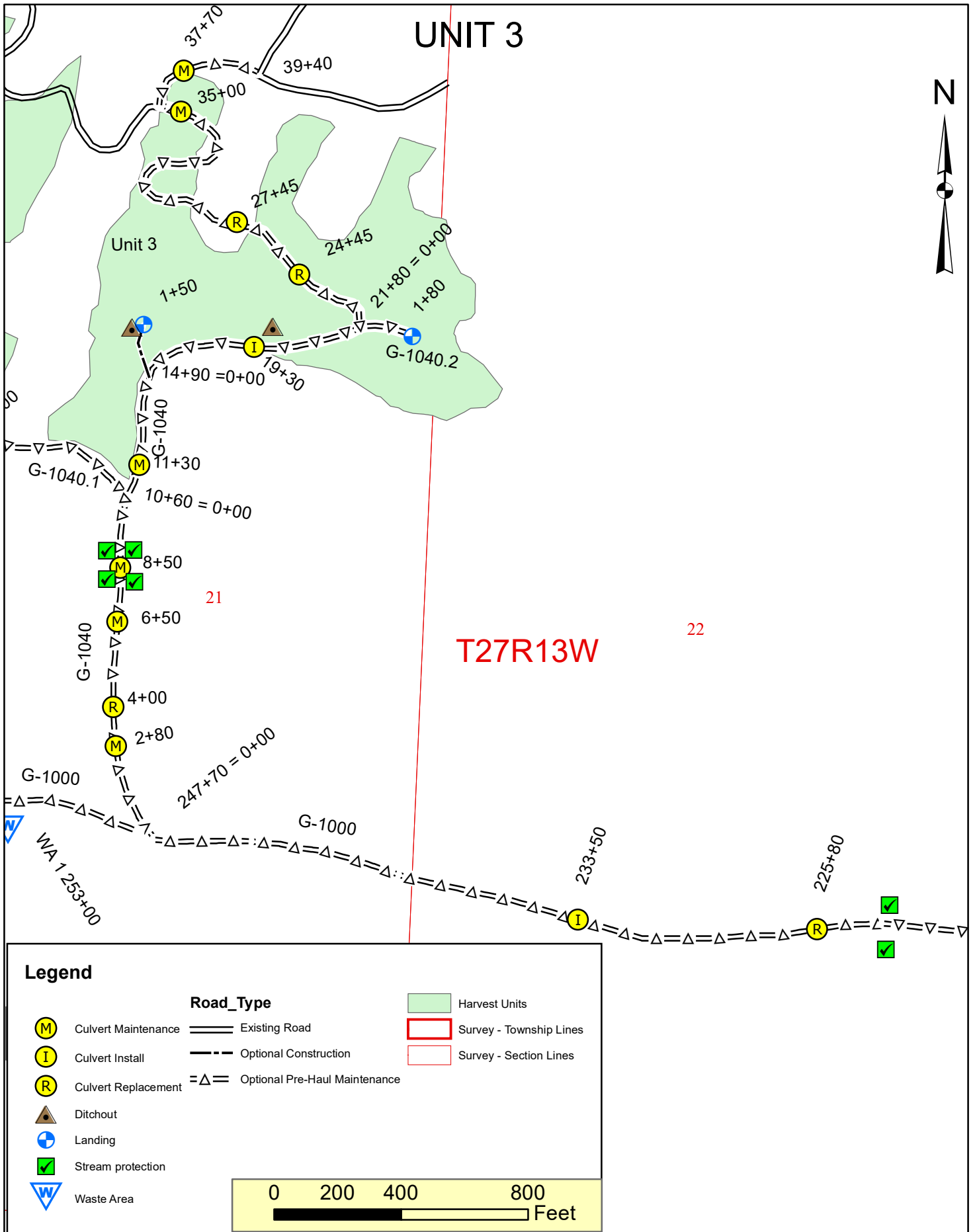


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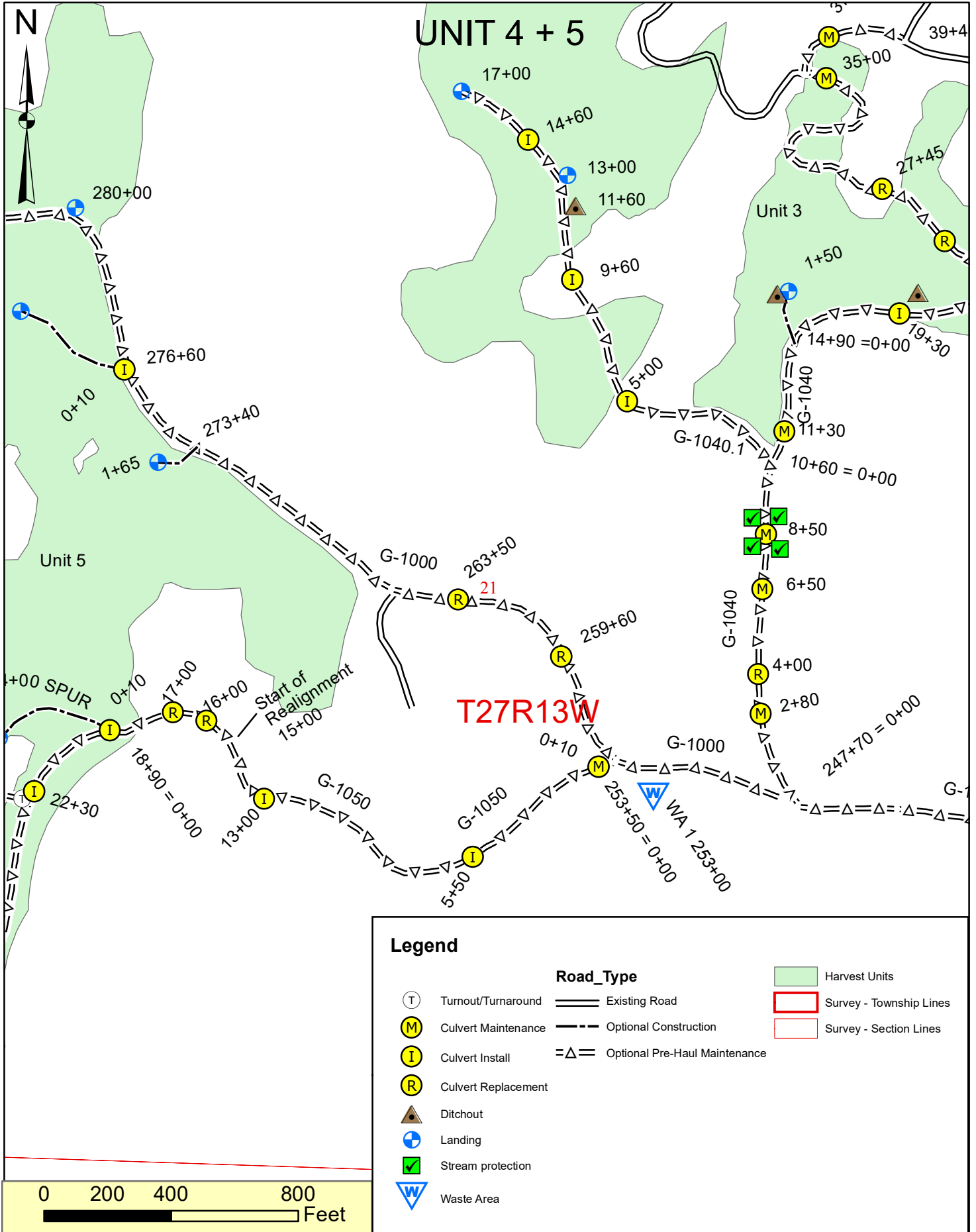
Legend

function	Road_Type	
Culvert Install	Existing Road	Goodman_1_Unit_2
Ditchout	Optional Pre-Haul Maintenance	Survey - Township Lines
Landing		Survey - Section Lines

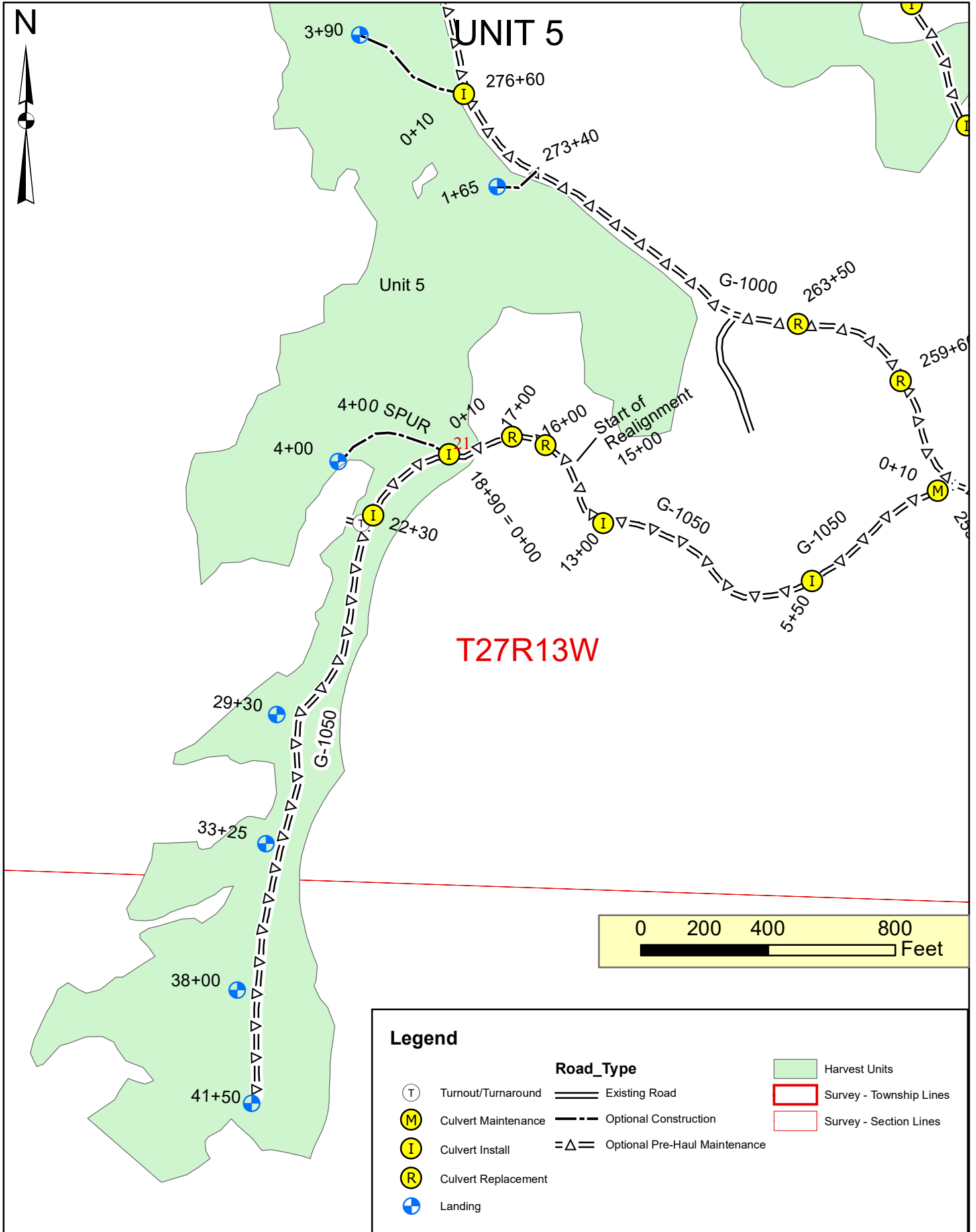
GOODMAN 1 TIMBER SALE



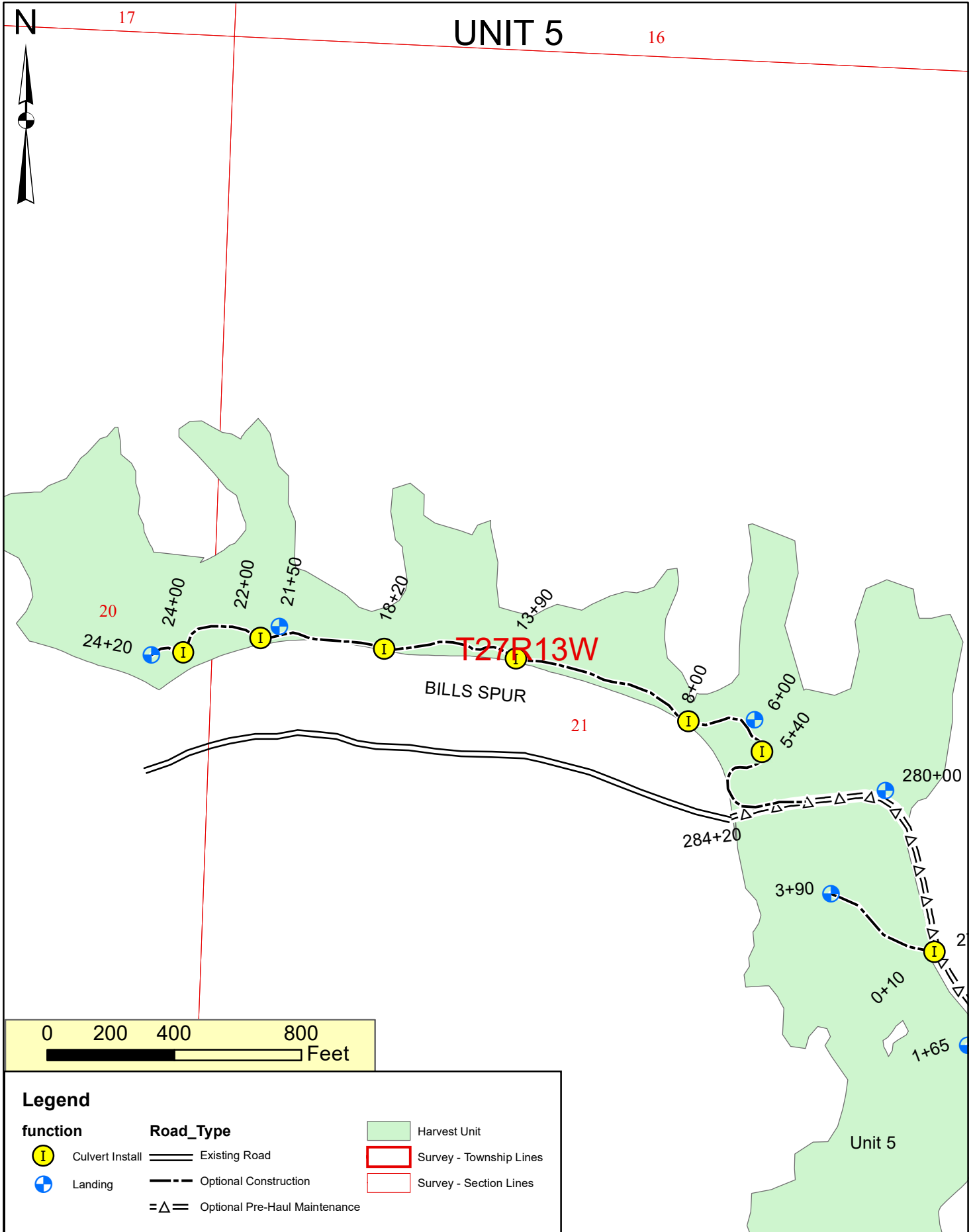
GOODMAN 1 TIMBER SALE



GOODMAN 1 TIMBER SALE

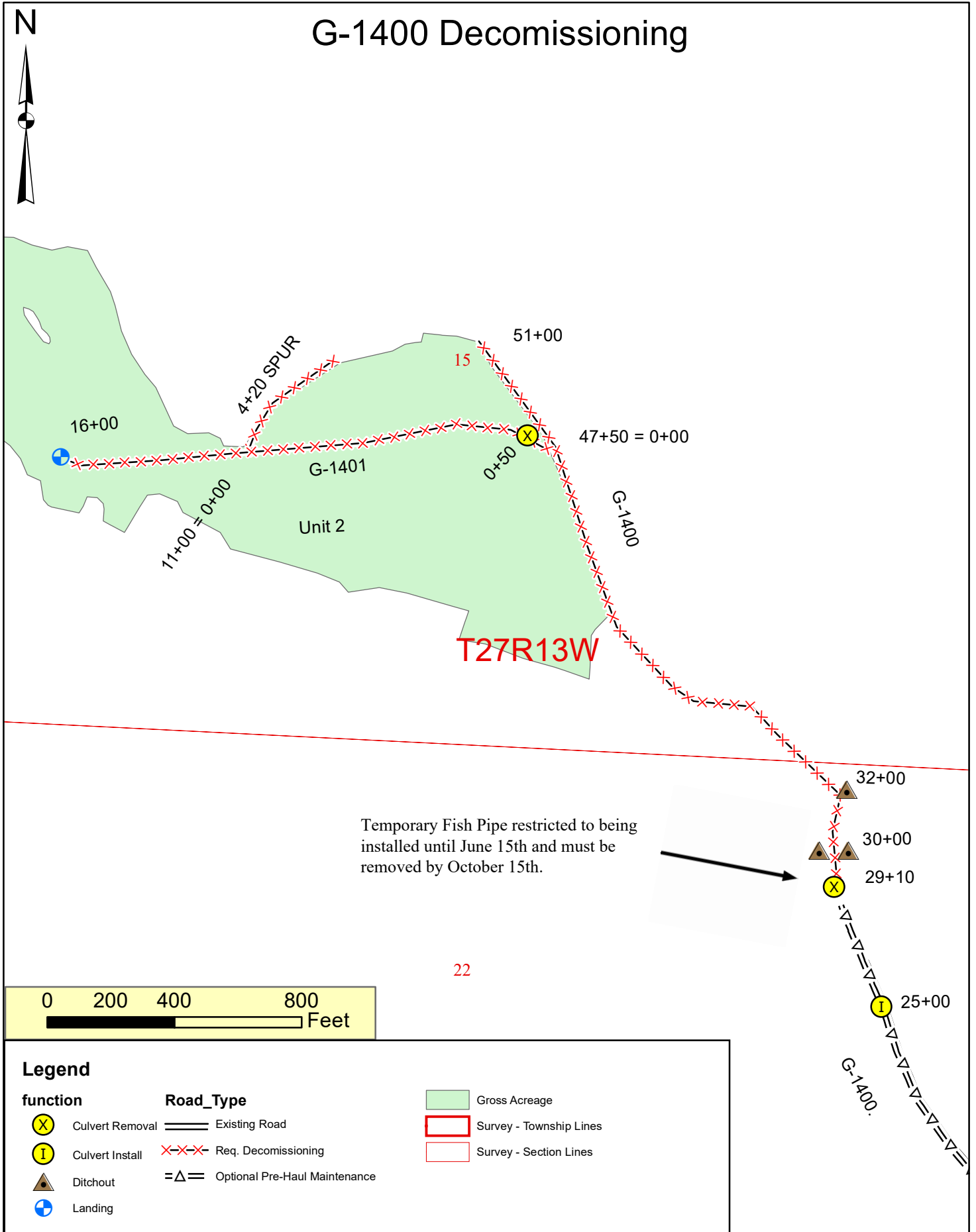


GOODMAN 1 TIMBER SALE



GOODMAN 1 TIMBER SALE

G-1400 Decomissioning



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.

0-3 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>
G-1000	0+00 – 284+20	Pre-haul Maintenance
G-1000.9	0+00 – 17+00	Pre-haul Maintenance
2+50 SPUR	0+00 – 2+50	Pre-haul Maintenance
G-1400	0+00 – 51+00	Pre-haul Maintenance
G-1401	0+00 – 16+00	Pre-haul Maintenance
4+20 SPUR	0+00 – 4+20	Pre-haul Maintenance
G-1040	0+00 – 39+40	Pre-haul Maintenance
G-1040.1	0+00 – 17+00	Pre-haul Maintenance
G-1040.2	0+00 – 1+80	Pre-haul Maintenance
1+50 SPUR	0+00 – 1+50	Construction
G-1050	0+00 – 41+50	Pre-haul Maintenance
4+00 SPUR	0+00 – 4+00	Construction
1+65 SPUR	0+00 – 1+65	Construction
3+90 SPUR	0+00 – 3+90	Construction
BILLS SPUR	0+00 – 24+20	Construction

0-4 CONSTRUCTION

This project includes, but is not limited to the following construction requirements:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
1+50 SPUR	0+00 – 1+50	Construction
4+00 SPUR	0+00 – 4+00	Construction
1+65 SPUR	0+00 – 1+65	Construction
3+90 SPUR	0+00 – 3+90	Construction
BILLS SPUR	0+00 – 24+20	Construction
Total Stations	35.25 Stations	

Construction includes, but is not limited to: Clearing, grubbing, right-of-way debris disposal, excavation and/or embankment to subgrade, end hauling material for construction, compacting road surfaces, constructing ditchlines, constructing ditchouts, constructing turnouts and turnarounds, curve widening, acquisition and installation of drainage structures, application of rock, spreading grass seed and hay.

0-6 PRE-HAUL MAINTENANCE

This project includes, but is not limited to the following pre-haul maintenance requirements:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
G-1000	0+00 – 284+20	Grade and shape road in accordance with Clause 2-5. Brush road in accordance with Clause 3-1 and Brushing Detail. Install sediment control structures in accordance with 8-1 and 2-7. Conduct bridge maintenance in accordance with Clause 7-30 and associated drawings. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
G-1000.9	0+00 – 17+00	Grade and shape road in accordance with Clause 2-5. Clean culverts in accordance with Clause 2-6 and Culvert List. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
2+50 SPUR	0+00 – 2+50	Grade and shape road in accordance with. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.

G-1400	0+00 – 51+00	Grade and shape road in accordance with Clause 2-5. Clean culverts in accordance with Clause 2-6 and Culvert List. Construct ditch outs in accordance with Clause 4-29 and 4-38. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Brush road in accordance with Clause 3-1 and Brushing Detail. Install temporary stream culvert in accordance with Clause 5-7 and associated drawings. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
G-1401	0+00 – 16+00	Grade and shape road in accordance with Clause 2-5. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Brush road in accordance with Clause 3-1 and Brushing Detail. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
G-1040	0+00 – 39+40	Grade and shape road in accordance with Clause 2-5. Construct ditch outs in accordance with Clause 4-29 and 4-38. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
G-1040.1	0+00 – 17+00	Grade and shape road in accordance with Clause 2-5. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Brush road in accordance with Clause 3-1 and Brushing Detail. Construct ditch outs in accordance with Clause 4-29 and 4-38. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.

G-1040.2	0+00 – 1+80	Grade and shape road in accordance with Clause 2-5. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
G-1050	0+00 – 41+50	Grade and shape road in accordance with Clause 2-5. Clean culverts in accordance with Clause 2-6 and Culvert List. Construct and/or clean ditches in accordance with Clause 2-7, 4-37, and 4-38. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Brush road in accordance with Clause 3-1 and Brushing Detail. Construct ditch outs in accordance with Clause 4-29 and 4-38. Install/replace/maintain culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List.
4+20 SPUR	0+00 – 4+20	Grade and shape road in accordance with Clause 2-5. Compact rock in accordance with Compaction List.
Total Stations	474.60 Stations	

Pre-haul maintenance includes, but is not limited to: Brushing right-of-way, right-of-way debris disposal, cleaning ditches, constructing ditches, installing additional culverts, widening road segments, constructing headwalls, cleaning culvert inlets and outlets, cross drain culvert replacements, installing erosion control materials and sediment removal structures, spot rocking, grading and shaping existing road surface and turnouts, constructing additional turnouts, compaction of road surface, application of rock, acquisition and application of grass seed and hay.

0-7 POST-HAUL MAINTENANCE

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

0-8 CLOSURE

This project includes road closure listed in Clause 9-15 ROAD CLOSURE.

0-12 DEVELOP ROCK SOURCE

The Purchaser shall develop Anderson Pit. Purchaser shall also perform crushing to obtain 6,000 cubic yards of 4" Jawrun. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING. Pit Development to be completed by 8/30/2022.

0-13 STRUCTURES

Purchaser shall provide and install temporary pipe. Requirements for structures are listed in Section 7 STRUCTURES.

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 the submitted 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).

1-5 DESIGN DATA

Design data is available upon request at the Department of Natural Resources Olympic Region Office in Forks, 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.

1-7 TEMPORARY ROAD CLOSURE

The Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before the closure of any road. Road work shall not close any road for more than 3 consecutive days.

<u>Road</u>	<u>Number of Allowable Closed Days</u>
G-1000	2 (Road needs to be passable to traffic at night)

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, and may not begin without written approval from the Contract Administrator.

1-9 DAMAGED METALLIC COATING

Any cut ends, or 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 or cold galvanizing compound.

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).

1-11 FPHP REQUIREMENTS

The following work is subject to requirements under a Forest Practice Hydraulics Project Approval issued by the State of Washington. To be installed and removed between June 15th and October 15th of the same year.

<u>FPA Crossing Identifier</u>	<u>Road</u>	<u>Stations</u>	<u>Work Type</u>
C1	G-1400	29+10	Temp Fish Pipe

1-12 SURVEY MONUMENTS

At no time during construction, reconstruction, or maintenance shall survey monuments, witness trees, or bearing trees be disturbed or damaged. If damaged or disturbed, Purchaser shall hire a licensed land surveyor to repair, replace, and/or reset them.

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 ribbon and paint for construction centerlines.
- Construction stakes for everything else.

1-16 CONSTRUCTION STAKES SET BY STATE

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

<u>Road</u>	<u>Stations</u>	<u>Type</u>
G-1400	29+10	Pipe Install

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 start of the timber haul.

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

The Purchaser shall notify the Contract Administrator a minimum of 3 calendar days before work begins on new construction, fish pipe work, and bridge install.

1-23 ROAD WORK PHASE APPROVAL

Written approval by Contract Administrator needs to be given at these phases of road work:

- Subgrade approval
- Drainage installation
- Subgrade compaction
- Rock application
- Rock compaction

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION

On the following road(s), the specified activities are not permitted 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>
G-1400	29+10	Construction and Decommissioning	June 15 th –October 15 th

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause **Error! Reference source not found.** or Contract Clause H-130 HAULING SCHEDULE, 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.

1-27 TIMING RESTRICTION FOR MARBLED MURRELET

On the following road(s), timber felling, road work or operation of heavy equipment performed during the marbled murrelet nesting season (April 1 through September 23), is restricted to, two hours after sunrise to two hours before sunset. This does not apply to hauling timber, rock or equipment.

<u>Road</u>	<u>Stations</u>
G-1000	124+50 – 137+25, 168+50 – 176+70, 195+75 – 244+00
G-1400	0+00 – 28+00
G-1040	37+70 – 39+40
G-1050	4+50 – 16+00

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:

- 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 AND ASPHALT SURFACE RESTRICTION

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

If tracked equipment is used on bridge or asphalt surfaces, Purchaser shall immediately cease all road work and hauling operations. Any dirt, rock, or other material tracked or spilled on bridge or asphalt surface(s) shall be removed immediately. Any damage to the surface(s) shall be repaired at the Purchaser’s expense as directed by the Contract Administrator.

1-33 SNOW PLOWING RESTRICTION

On the following road(s), snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact 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.

SUBSECTION OTHER INFRASTRUCTURE

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

Purchaser shall immediately remove any mud, dirt, rock, or other material tracked or spilled on to county roads and state highways.

If additional damage to the surface, signs, guardrails, etc. occurs then the damage will be repaired, at the Purchaser’s expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

The following county roads and state highways are affected by this sale:

<u>Road Name</u>
HWY 101

1-41 REQUIREMENTS FOR PAVED ROAD APPROACHES

Requirements for the paved road approaches:
Purchaser shall build up approaches to allow a smooth grade transition. The top of the rock road surfacing must be kept level with the surface of the paved roads at all times.

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.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Purchaser may be required to perform maintenance on roads listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Purchaser shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

<u>Road</u>	<u>Stations</u>
G-1000	0+00 – 284+20
G-1010	0+00 – 96+00
G-2000	0+00 – 67+40
G-2100	0+00 – 75+80
Anderson Ridge Pit Access	All
Winfeild Pit Access	All

2-4 PASSAGE OF LIGHT VEHICLES

Purchaser shall maintain the following roads in a condition that will allow the passage of light administrative vehicles.

<u>Road</u>	<u>Stations</u>
G-1000	0+00 – 284+20
G-1400	0+00 – 51+00
G-1040	0+00 – 39+40
G-1050	0+00 – 41+50
G-2000	0+00 – 67+40
G-2100	0+00 – 75+80
G-1010	0+00 – 96+00

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following road(s), Purchaser shall use a grader to shape the existing surface.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
G-1000	0+00 – 284+20	Grade, shape, and remove shoulder and surface vegetation.
G-1000.9	0+00 – 17+00	Grade, shape, and remove shoulder and surface vegetation.
2+50 SPUR	0+00 – 0+70	Grade, shape, and remove shoulder and surface vegetation.
G-1400	0+00 – 51+00	Grade, shape, and remove shoulder and surface vegetation.
G-1401	0+00 – 16+00	Grade, shape, and remove shoulder and surface vegetation.
4+20 SPUR	0+00 – 4+20	Grade, shape, and remove shoulder and surface vegetation.
G-1040	0+00 – 39+40	Grade, shape, and remove shoulder and surface vegetation.
G-1040.1	0+00 – 17+00	Grade, shape, and remove shoulder and surface vegetation.
G-1040.2	0+00 – 1+80	Grade, shape, and remove shoulder and surface vegetation.
G-1050	0+00 – 41+50	Grade, shape, and remove shoulder and surface vegetation.

2-6 CLEANING CULVERTS

On the following road(s), Purchaser shall clean the inlets and outlets of all culverts and shall obtain written approval from the Contract Administrator before start of timber haul.

<u>Road</u>	<u>Stations</u>
G-1000.9	0+00 – 17+00
G-1400	0+00 – 51+00
G-1040	0+00 – 39+40
G-1050	0+00 – 41+50

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following road(s), Purchaser shall clean and/or construct ditches, headwalls, and catchbasins. Work must be completed before the start of timber haul 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. Ditchlines, headwalls, and catch basins shall not encroach into the existing road.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
G-1000	77+00	L	Catch Basin Both Sides of Crossing
G-1050	0+00 – 18+90	R	Clean Ditch
G-1400	14+60 – 17+10	R	Clean Ditch

2-8 MAINTAINING EROSION CONTROL STRUCTURES

On the following road, Purchaser shall clean and maintain all erosion control structures. Work must be completed before the start timber haul and must be done in accordance with the pertaining clauses contained in this Road Plan. Excavated material must be disposed of as specified in Clauses 4-35 through 4-38.

2-9 REMOVING VEGETATIVE MATERIAL

On the following road(s), Purchaser shall remove all vegetative material, dirt, mud and other debris on the existing road surface with a minimum loss of rock. Material must be disposed of as specified in Clauses 4-35 through 4-38.

<u>Road</u>	<u>Stations</u>
G-1000.9	0+00 – 17+00
2+50 SPUR	0+00 – 2+50
G-1040.1	5+00 – 17+00
G-1401	11+00 – 16+00
1+80 SPUR	0+00 – 1+80
G-1050	0+00 – 41+50

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION BRUSHING

3-1 BRUSHING

On the following road(s), Purchaser shall cut vegetative material up to 5 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
G-1000	279+00 -284+20
G-1400	11+00 – 51+00
G-1401	0+00 – 5+00
4+20 SPUR	0+00 – 4+20
G-1040.1	0+00 – 5+00
G-1050	0+00 – 41+50

3-2 BRUSHING RESTRICTION

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal may not be used for brushing. Excavator buckets, log loaders and similar equipment may not be used for brushing.

3-3 BRUSH REMOVAL

Remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets. Brush should be disposed of so that it will not fall back onto the road prism.

SUBSECTION CLEARING

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 5 inches DBH or over 15 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.
- On slopes greater than 40%.
- Against standing trees.

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.

3-12 STUMP PLACEMENT

Purchaser shall place grubbed stumps outside of the clearing limits, as directed by the Contract Administrator and in compliance with all other clauses in this road plan. Stumps must be positioned upright, with root wads in contact with the forest floor and on stable locations.

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 grubbing 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, before the application of rock.

3-23 PROHIBITED DISPOSAL AREAS

Organic debris shall not be deposited in the following areas:

- Within 5 feet of a cross drain culvert.
- Within 50 feet of a live stream, or wetland.
- On road subgrades road prism excavation and embankment slopes.
- On slopes greater than 45%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush will 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 grubbing limits in accordance with Clause 3-23 unless otherwise detailed in this road plan and as directed by the Contract Administrator.

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

Purchaser shall use a track mounted hydraulic excavator for construction, reconstruction and maintenance work unless stated otherwise within this Road Plan or 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 1000 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.

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 16 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-4 SWITCHBACK STANDARDS

A switchback is defined as a curved segment of road between a beginning and end of the same curve, where the change of traffic travel direction is greater than 90 degrees.

Purchaser shall follow these standards for switchbacks:

- Maximum adverse grades for switchbacks is 10%.
- Maximum favorable grades for switchbacks is 12%.
- Maximum transition grades entering and leaving switchbacks is a 5% grade change.
- Transition grades required to meet switchback grade limitations must be constructed on the tangents preceding and departing from the switchbacks.

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 (56% to 70% side slopes)	¾:1	133
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 construction staked or 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.

4-12 FULL BENCH CONSTRUCTION

On roads where side slopes exceed 45%, purchaser shall use full bench construction for the entire subgrade width except as construction staked or designed. If designated, purchaser shall end haul waste material to the location specified in Clause4-37.

SUBSECTION INTERSECTIONS, TURNOUTS AND TURNAROUNDS

4-20 SUBGRADE DIMENSIONS FOR INTERSECTIONS

On the following road(s), Purchaser shall construct the subgrade to the dimensions shown on the INTERSECTION DETAIL.

<u>Road</u>	<u>Stations</u>
G-1000	99+50

4-21 TURNOUTS

Purchaser shall construct turnouts intervisible with a maximum distance of 1,000 feet between turnouts unless otherwise shown on drawings. Locations may be adjusted to fit the final subgrade alignment and sight distances. Locations changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

Turnarounds must be no larger than 50 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

4-23 SUBGRADE FLARE FOR INTERSECTIONS

The G-1000/2+50 SPUR intersections shall be constructed/reconstructed to include additional intersection flare.

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.

4-27 DITCH WORK – MATERIAL USE PROHIBITED

Purchaser shall not pull ditch material across the road or mix in with the road surface. Excavated material must be end hauled to the location specified in Clauses 4-36 through 4-38.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified in the table below and as needed to fit as built conditions. 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.

<u>Road</u>	<u>Stations</u>	<u>L or R</u>
G-1400	5+40, 14+60	R
G-1400	6+40	L
G-1400	30+00	L + R
G-1400	32+00	R
G-1040	19+30	L
G-1040.1	11+60	R
1+50 SPUR	1+50	L

SUBSECTION WASTE MATERIAL

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 45% if the waste material is compacted and free of organic debris. On side slopes greater than 45%, all waste material must be end hauled or pushed to the designated embankment sites and waste areas identified in Clause 4-37.

4-37 WASTE AREA LOCATION

Purchaser shall deposit waste material in the listed designated areas. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

Note: All amount values are estimated bank yards.

<u>Waste Area Location</u>	<u>Waste Generated From Road</u>	<u>Waste Generated at Stations</u>	<u>Estimated Volume</u>
G-1000 STA 253+00	G-1050	15+50 – 18+00	1000 YD ³

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

- 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 45%.
- 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.

4-39 WASTE AREA COMPACTION

Excavated material may be deposited adjacent to the road prism on side slopes up to 45% if the waste material is compacted and free of debris. On side slopes of 45% or more, all excavation shall be end hauled or pushed to designated waste areas. All waste material shall be compacted. The minimum acceptable compaction is achieved by placing embankments in 2 foot or shallower lifts and routing excavation equipment over the entire width of the lifts, with the exception of side hill embankments too narrow to accommodate excavation equipment which may be placed by end-dumping or sidecasting until sufficiently wide to support the equipment.

SUBSECTION BORROW

4-46 COMMON BORROW

Common borrow consists of soil, and/or aggregate that is non-plastic and contains no more than 5% clay, organic debris, or trash by volume. The material is considered non-plastic if the fines in the sample cannot be rolled, between the hand and a smooth surface, into a thread at any moisture content.

4-47 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 12 inches in any dimension.

4-48 BORROW MATERIAL

Borrow material may not contain more than 5% clay, organic debris, or trash by volume.

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.

4-56 DRY WEATHER SHAPING

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. A plate compactor must be used for areas specifically requiring keyed embankment construction and for embankment segments too narrow to accommodate equipment.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed and reconstructed subgrades in accordance with the COMPACTION LIST by routing equipment over the entire width, except ditch. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before placement of rock.

4-62 DRY WEATHER COMPACTION

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.

4-64 WASTE MATERIAL COMPACTION

All waste material shall be compacted by running equipment over it or bucket tamping.

4-65 CULVERT BACKFILL COMPACTION

Culvert backfills shall be accomplished by using a jumping jack compactor, performing at least 2 passes per lift, in lifts not to exceed 8 inches.

4-66 COMPACTION BY METHOD

Compaction shall consist of three complete passes over the entire width of each lift with a vibratory drum roller weighing a minimum of 6,000 pounds at a maximum operating speed of 3 mph. For embankment segments too narrow to accommodate a drum roller, a plate compactor shall be used.

SECTION 5 – DRAINAGE

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 and meet the specifications in Clauses 10-15 through 10-23.

5-6 USED CULVERT MATERIAL

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

<u>Road</u>	<u>Stations</u>
G-1400	29+10

5-7 TEMPORARY STREAM CULVERT INSTALLATION

On the following roads, temporary stream culverts shall be located in the natural channel of the stream. Temporary culverts shall be installed as shown in the Temporary Log Fill Stream Crossing Detail. Temporary culverts shall be removed as directed by the Contract Administrator. Geotextile fabric shall meet the specifications in Clause 10-2 Geotextile For Separation. Temporary Fish Pipe on the G-1400 will be restricted from being installed until June 15th and must be removed by October 15th of the same year.

<u>Road</u>	<u>Stations</u>
G-1400	29+10

5-12 UNUSED MATERIALS STATE PROPERTY

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

5-13 CONTINGENCY CULVERTS

The following culverts will be supplied by the Purchaser and are available for installation as directed by the Contract Administrator. In the event that culverts are not used, culverts shall be stockpiled at Anderson Pit.

<u>Road</u>	<u>Size</u>
As Directed	(2) 18x30

SUBSECTION CULVERT INSTALLATION

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL SHEET, TYPICAL TYPE NS NP CULVERT INSTALLATION DETAIL SHEET, the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures" 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. Culverts over 15 inches diameter shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet. Shorter section of banded culvert shall be installed at the inlet end.

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

Purchaser shall obtain written approval from the District Engineer or his/her designee for the installation of culverts 30 inches in diameter and over before backfilling.

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 10%.

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 18 inches of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover specified in the Engineer's design, TYPICAL TYPE NS NP DETAIL SHEET, or recommended by the culvert manufacturer for the type and size of the pipe, whichever is greater.

SUBSECTION ENERGY DISSIPATERS

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters at all culverts on the CULVERT AND ROCK LIST that specify the placement of rock. Energy dissipater installation is subject to approval by the Contract Administrator.

Rock used for energy dissipaters must weigh at least 10 pounds. Energy dissipaters must extend a minimum of 1 foot to each side of the culvert at the outlet and a minimum of 2 feet beyond the outlet. Placement must be with a zero-drop-height method only.

5-21 DOWNSPOUTS AND FLUMES

Downspouts and flumes longer than 10 feet must be staked on both sides at maximum intervals of 10 feet with 6-foot heavy-duty steel posts, and fastened securely to the posts with No. 10 galvanized smooth wire or 1/2-inch bolts in accordance with the TYPICAL CULVERT INSTALLATION DETAILS SHEET.

SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

5-25 CATCH BASINS

Purchaser shall construct catch basins to resist erosion. Minimum dimensions of catch basins are 1-2 feet wide, 1-2 feet deep and 2-4 feet long.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL at all cross drain culverts that specify the placement of rock. Rock used for headwalls must consist of oversize or quarry spall material. 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. No placement by end dumping or dropping of rock is allowed.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At the following culvert(s), rip rap shall be set in place immediately following construction of the embankment. Rock shall be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the Typical Type Ns Np Culvert Installation Detail as directed by the Contract Administrator. Rock shall not restrict the flow of water into culvert inlets or catch basins. Rock shall be set in place by machine. Placement shall be by zero-drop-height method only. No placement by end dumping or dropping of rock shall be allowed.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>
G-1050	17+00	Oversized
G-1050	16+00	Oversized

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 sources 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 sources, a joint operating plan must be developed. All parties shall follow this plan. Purchaser shall notify the Contract Administrator a minimum of 5 business days before starting any operations in the listed locations.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Anderson Ridge Pit	T28 R13W Sec 34	Pit Run/ Oversized/ 4" Jaw Run
North Windfeild Pit	MP 1.6 Hoh Mainline	1½"

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 stockpile on state land at no charge to the Purchaser. Purchaser shall not remove more than 300 cubic yards of 1 ½" minus crushed rock. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator. Other stockpiles may not be used without prior written approval from the Contract Administrator

<u>Source</u>	<u>Location</u>	<u>Quantity</u>
North Winfeild pit	Anderson Pit	300yd ³

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 sources must be a WSDOT certified source. Prior to approval, purchaser shall submit a passing sieve test performed by procedure described in WSDOT FOP for WAQTC T 27/11.

SUBSECTION ROCK SOURCE DEVELOPMENT

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

All rock source development and use shall be in accordance with a written Rock Source Development and Reclamation Plan prepared by the State and included in this Road Plan. Rock source operations shall be conducted as directed by the Contract Administrator and in accordance with the plan. Upon completion of operations, the rock source shall be left in the condition specified in the Rock Source Development and Reclamation Plan, and approved in writing by the Contract Administrator. The Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before starting any operations in the rock source.

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources shall be in accordance with the following unless otherwise specified in Rock Source Development and reclamation plan:

- Pit walls shall not be undermined or over-steepened. The maximum slope of the walls shall 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 shall be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches shall be a minimum of 1.5 times the maximum length of the largest machine used.
- The surface of pit floors and benches shall be uniform and free-draining at a minimum 2% outslope gradient.
- All operations shall 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.
- Block all vehicle access to the top of the pit faces.

6-15 REQUIRED ROCK SOURCE WORK

The following rock source work is required. Work is to be done according to the approved Rock Source Development and Reclamation Plan and as directed by the Contract Administrator.

<u>Site</u>	<u>Requirements</u>
Anderson Ridge Pit	Crush 6,000 CY 4" Jaw Run. Complete by 8/30/2022

6-23 ROCK CRUSHING OPERATIONS

Rock crushing operations shall conform to the following specifications:

- Operations and placement of oversize material shall be conducted in or near the rock source site, as approved in writing by the Contract Administrator.
- The Purchaser is required to test the rock.
- All testing and operations shall be performed in accordance with 6-24 Rock Crushing Compliance Procedure.

6-24 ROCK CRUSHING COMPLIANCE PROCEEDURE

Phase I. Equipment Adjustment

Step 1:

At start up of crushing operations, the Purchaser will notify the Contract Administrator when the rock meets the gradation specifications in the contract. None of the rock crushed during this calibration period will be counted toward the amount required to be crushed, and this rock must be kept separate from accepted rock crushed later.

Step 2:

The Purchaser will test the rock. Two samples will be taken. If the rock meets specifications, crushing may begin. If the rock does not meet specifications, return to Step 1.

Phase II. Production

Step 3:

The Purchaser will continue periodic testing to ensure that rock stays in spec. Testing will take place according to the following schedule:

- After the first 500 yards

- After every 2,000 yards thereafter.

a) Any time a sample is out of spec, but is within 5%, the Purchaser will be notified and a second sample will be taken later in the day. If the second sample meets specifications, the rock crushed during that day will be accepted. If the second sample also fails to meet spec, none of the rock crushed since the last acceptable test will be counted toward the amount to be crushed.

b) Any time a sample is out of spec and is more than 5% off in any category, none of the rock crushed since the last acceptable test will be accepted and that rock must be kept separate from the stockpile. Return to Step 1.

c) Purchaser is strongly encouraged to take their own samples regularly and keep their operations in spec to avoid unnecessary expenses.

- The 5% will be applied only to sieve specs for 2" to 1/4"; rock that is out of spec in larger sizes must be kept separate from the acceptable rock.

SUBSECTION ROCK MANUFACTURE

6-28 1 1/2-INCH MINUS CRUSHED ROCK

% Passing 1 1/2" square sieve	100%
% Passing 5/8" square sieve	50 - 80%
% Passing U.S. #4 sieve	30 - 50%
% Passing U.S. #40 sieve	3 - 18%
% Passing U.S. #200 sieve	5%

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.

- 6-40 4-INCH JAW RUN ROCK**
 % Passing 4" in one dimension 100%
 % Passing 3" square sieve 45 - 65%

Rock shall not contain more than 5% organic debris and trash. All percentages are by weight

6-50 LIGHT LOOSE RIP RAP

Light loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather. Light loose rip rap must be free of rock fines, soil, organic debris or other extraneous material, and must meet the following requirements:

<u>Quantity</u>	<u>Approximate Size Range</u>
20% to 90%	500 lbs. to 1 ton (18" - 28")

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 estimated truck 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. Unless otherwise stated in Clause 6-75 OPTIONAL ROCK EXCEPTION.

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade drainage installation included grading and compaction 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 and in lifts not to exceed 6 inches.

6-72 ROCK APPLICATION AFTER HAULING

On the following road(s), upon completion of all hauling operations, Purchaser shall apply 1 ½" minus crushed rock in accordance with the quantities shown on the ROCK LIST.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>	<u>Amount</u>
G-1000	All	1½" Crushed	300yd ³

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.

6-78 ROCK FOR SPOT PATCHING

Rock for spot patching shall be applied before any grading is done and before any rock lifts are applied. Once applied, spot patches shall be graded into the existing running surface.

SECTION 7 – STRUCTURES

SUBSECTION STREAM CROSSING STRUCTURES GENERAL

7-5 STRUCTURE DEBRIS

Purchaser shall not allow debris from the installation or removal of structures to enter any stream. Components removed from existing structure(s) must be removed from state land or, as directed in writing, by the Contract Administrator. Purchaser shall maintain a clean jobsite, with all materials stored away from the high water mark or other area presenting a risk of the materials entering a stream. Debris entering any stream must be removed immediately, and placed in the site(s) designated for stockpiling or disposal. Purchaser shall retrieve all material carried downstream from the jobsite.

7-6 STREAM CROSSING INSTALLATION

Purchaser shall install stream crossing structures in accordance with the manufacturer's requirements, and as directed by the District Engineer or their designee.

7-7 BANK PROTECTION FOR STREAM CROSSING STRUCTURES

Purchaser shall design and construct bank protection to prevent the undermining of the structure.

7-30 BRIDGE MAINTENANCE

On the following road, bridge maintenance, as listed below, is required as part of this contract. All old bridge material shall be removed from state land by the Purchaser before the termination of the contract.

<u>Road</u>	<u>Station</u>	<u>Requirements</u>
G-1000	124+10	Post Haul Cleaning

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

On the following roads, Purchaser shall install insert sediment structures in accordance with the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
G-1000	70+00	L + R	50' Silt Fence Both Sides
G-1000	224+10	L + R	100' Silt Fence Both Sides
G-1040	8+50	L + R	Settling Ponds Both sides of Creek

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 3-inch layer of straw to all exposed soils at culvert installations. Soils must be covered before the first anticipated storm event. Soils may not sit exposed during any rain event.

SUBSECTION REVEGETATION

8-15 REVEGETATION

Purchaser shall grass seed and hay mulch all exposed soils including, but not limited to, stream culverts, waste areas, sidecast pull back areas, stream crossing removals, bridge installations, and other areas directed by the Contract Administrator. Revegetation of exposed soils shall be accomplished by manual dispersal of grass seed unless otherwise detailed in this Road Plan. Other methods of revegetation must be approved in writing by the Contract Administrator.

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the all seed, mulch, straw and/or hay, matting etc..

8-17 REVEGETATION TIMING

Purchaser shall revegetation during the first available opportunity after road work is completed. Soils may not be allowed to sit exposed for longer than one month without receiving revegetation treatment unless otherwise approved in writing by the Contract Administrator. Soils shall not be allowed to sit exposed during any rain event.

8-18 PROTECTION FOR SEED

Purchaser shall provide a protective cover over the revegetated area. The protective cover may consist of but not be limited to, such items as dispersed hay mulch 3” thick or jute matting

8-19 ASSURANCE FOR SEEDED AREA

Purchaser shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Purchaser shall reapply in areas that have failed to germinate or have been damaged through any cause, restore eroded or disturbed areas, clean up and properly dispose of eroded materials, and reapply at no addition cost to the state.

SUBSECTION SEED, FERTILIZER, AND MULCH

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soils at a rate of 60 pounds per acre of exposed soil.

<u>Seed Species</u>	<u>% by Weight</u>
• Perennial Ryegrass	40.00
• Creeping Red Fescue	40.00
• White Dutch Clover	10.00
• Colonial Bentgrass	10.00

Grass seed shall 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

SECTION 9 – POST-HAUL ROAD WORK

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>
All, G-2000, G-1010, G-2100	All	Clean culverts, clean ditches, grade road shape and compact as directed by the Contract Administrator.
G-1000	All	Apply post haul rock per Clause 6-72.
G-1000	All	Bridge Cleaning at STA 124+10

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface as approved in writing by the Contract Administrator.

9-11 LANDING EMBANKMENT

Purchaser shall slope landing embankments to the original construction specifications.

SUBSECTION DECOMMISSIONING

9-20 ROAD DECOMMISSIONING

Purchaser shall decommission the following roads before the termination of this contract.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
G-1400	29+10 – 51+00	LIGHT DECOMMISSIONING (to be completed between June 15th and must be removed by October 15 th of the same year as construction)
G-1401	0+00 – 16+00	LIGHT DECOMMISSIONING
4+20 SPUR	0+00 – 4+20	LIGHT DECOMMISSIONING
Total	42.10 Stations	

9-22 LIGHT DECOMMISSIONING AND ABANDONMENT

- Remove road shoulder berms except as directed.
- Rip the surface to a minimum depth of 10 inches.
- 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 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 100 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.
- Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.
- Remove culverts.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Apply grass seed concurrently with abandonment and in accordance with Section 8 EROSION CONTROL.
- Provide and evenly spread a 6-inch layer of straw to all exposed soils associated with stream culvert and puncheon removals, as well as all waste material generated by fill removal that is within 30 feet of excavation limits.
- Scatter woody debris onto abandoned road surfaces.

SECTION 10 MATERIALS

SUBSECTION CULVERTS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be galvanized (zinc coated meeting AASHTO M-218) except culverts over 36 inches must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

10-16 CORRUGATED ALUMINUM CULVERT

Aluminum culverts must meet AASHTO M-196 (ASTM A-745) specifications.

10-17 CORRUGATED PLASTIC CULVERT

Polyethylene culverts must meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene.

10-20 FLUME AND DOWNSPOUT

Downspouts and flumes must meet the AASHTO specification designated for the culvert. Plastic downspouts and flumes must be Type S – double walled with a corrugated exterior and smooth interior

10-21 METAL BAND

Metal coupling and end bands must meet the AASHTO specification designated for the culvert and must have matching corrugations. Culverts 24 inches and smaller must have bands with a minimum width of 12 inches. Culverts over 24 inches must have bands with a minimum width of 24 inches.

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. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe joint.

10-23 RUBBER CULVERT GASKETS

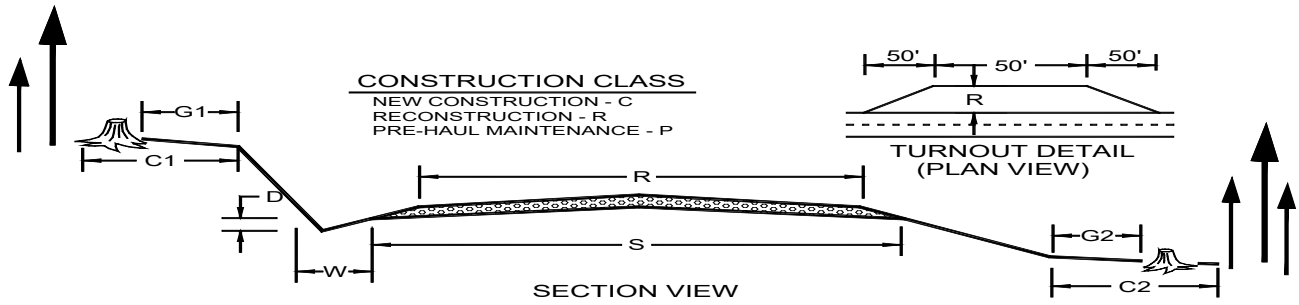
Rubber gaskets must be continuous closed cell, synthetic expanded rubber gaskets conforming to the requirements of ASTM D 1056. Rubber gaskets must be used with all corrugated metal pipe coupling bands.

10-24 GAUGE AND CORRUGATION

Unless otherwise stated in the engineer’s design, metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

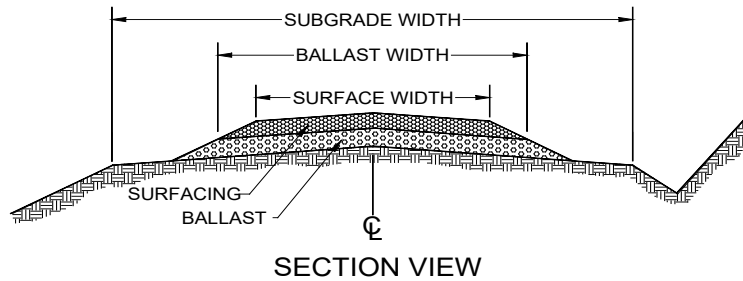
<u>Diameter</u>	<u>Gauge</u>	<u>Corrugation</u>
18"	16 (0.064")	2 2/3" X 1/2"
24" to 48"	14 (0.079")	2 2/3" X 1/2"
54" to 96"	12 (0.109")	3" X 1"

TYPICAL SECTION SHEET



ROAD NAME	START STATION	END STATION	CONSTRUCTION CLASS	SUBGRADE WIDTH (S)	ROAD WIDTH (R)	CROWN AT CL (in)	DITCH WIDTH (W)	DITCH DEPTH (D)	GRUBBING CUT BANK (G1)	GRUBBING FILL TOE (G2)	ROAD CUT CLEARING (C1)	ROAD FILL CLEARING (C2)
G-1000	0+00	284+20	P		14'	3"	3'	1'				
G-1000.9	0+00	17+00	P		12'	3"	3'	1'				
2+50 SPUR	0+00	2+50	P		12'	3"	3'	1'				
G-1400	0+00	51+00	P		14'	3"	3'	1'				
G-1401	0+00	16+00	P		12'	3"	3'	1'				
G-1040	0+00	39+40	P		14'	3"	3'	1'				
G-1040.1	0+00	17+00	P		12'	3"	3'	1'				
G-1040.2	0+00	1+80	P		12'	3"	3'	1'				
1+50 SPUR	0+00	1+50	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
G1050	0+00	41+50	P		14'	3"	3'	1'				
4+00 SPUR	0+00	4+00	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
1+65 SPUR	0+00	1+65	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
3+90 SPUR	0+00	3+90	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
BILL SPUR	0+00	24+20	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
4+20 SPUR	0+00	4+20	P		14'	3"	3'	1'				

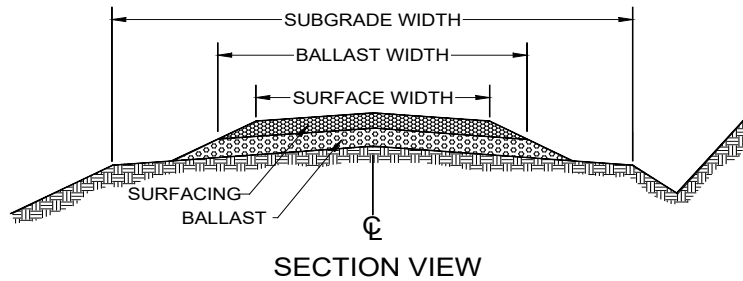
ROCK LIST SHEET



1. Rock quantities, subtotals and totals are "truck measure" estimates. Rock shall be applied to at least the depths listed.
2. All depths are compacted depths.
3. Rock slopes shall be 1½ (H) : 1 (V).
4. All rock sources are subject to approval by the Contract Administrator.
5. Pitrun is defined as pitrun or ballast per Line 6. Crushed is defined as any crushed rock from ¼" minus to 4" minus per Line 6.
6. Oversize is defined as oversize, quarry spalls, light loose rip rap, or heavy loose rip rap per Line 6.
6. Rock sources : Anderson Pit Pit Run, 2: Anderson Pit 4" Jaw Run, 3: Anderson Pit Oversized 4: Winfield Pit 1½" Crushed

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
G-1000															
Post Haul Rock	0+00	284+20							4				100		
Culvert	225+80			1			20								
Culvert	233+50			1			20								
Culvert	259+60			1			20								
Culvert	263+50			1			20								
Landing	280+00			1			50								
G-1000.9															
Lift	0+00	17+00		1	12	70	1190								
Culvert	10+50			1			20								
Landing	17+00			1			50								
G-1400															
Misc. Rock	0+00	51+00							4				100		
Culvert	25+00			1			20							3	2
Culvert	29+10			1			100								
G-1401															
Lift	11+00	16+00		1	12	70	350								
Culvert	0+10			1			50								
G-1040															
Misc. Rock	0+00	39+40							4				100		
Culvert	4+00			1			20							3	2
Totals:								1930					300		4

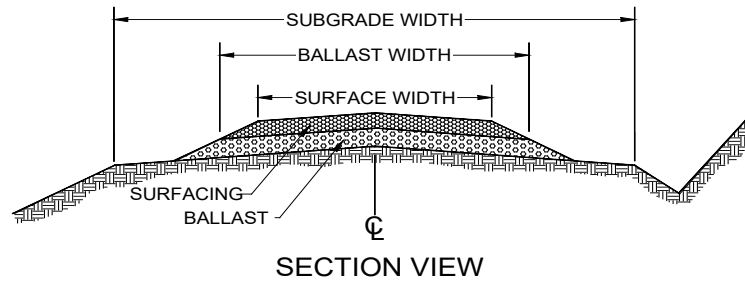
ROCK LIST SHEET CONTINUED



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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
G-1040 Cont.															
Culvert	6+50													3	2
Culvert	19+30			1			20								
Culvert	24+45			1			20								
Culvert	27+45			1			20								
Culvert	37+70													3	2
G1040.1															
Lift	4+00	17+00		1		12	70	910							
Culvert	5+00			1			40								
Culvert	9+60			1			30								
Landing	13+00			1			50								
Culvert	14+60			1			20								
Landing	17+00			1			50								
G-1040.2															
Lift	0+00	1+80		1		6	35	70							
Landing	1+80			1			50								
1+50 SPUR															
Lift	0+00	1+50		1		18	110	170							
Landing	1+50			1			50								
Totals:								1500							

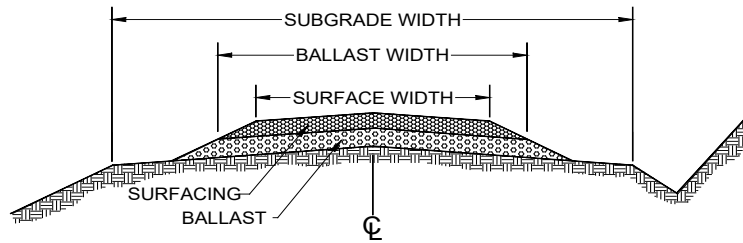
ROCK LIST SHEET CONTINUED



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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
3+90 SPUR															
Lift	0+00	3+90		1		18	110	430							
Culvert	0+10			1				30							
Landing	3+90			1				50							
BILLS SPUR															
Lift	0+00	24+20		1		18	110	2670							
Culvert	5+40			1				20							
Landing	5+90			1				50							
Culvert	8+00			1				20							
Culvert	13+90			1				20							
Culvert	18+20			1				20							
Landing	21+55			1				50							
Culvert	22+00			1				20							
Culvert	24+00			1				20							
Landing	24+20			1				50							
G-1050															
Lift	0+00	41+50		1		8	50	2075							
Culvert	5+50			1				20							
Culvert	13+00			1				20							
Culvert	16+00			1				40							
Culvert	17+00			1				40							
Realignment	15+00	19+00		1				300							
Totals:								5945							

ROCK LIST SHEET CONTINUED



SECTION VIEW

1. Rock quantities, subtotals and totals are "truck measure" estimates. Rock shall be applied to at least the depths listed.
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6. Rock sources : Anderson Pit Pit Run, 2: Anderson Pit 4" Jaw Run, 3: Anderson Pit Oversized 4: Winfield Pit 1½" Crushed

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
G-1050 Cont.															
Culvert	22+30			1				20							
Turn Around	22+50			1				30							
Landing	29+30			1				50							
Landing	33+25			1				50							
Landing	38+00			1				50							
Landing	41+50			1				50							
4+00 SPUR															
Lift	0+00	4+00		1		18	110	440							
Culvert	0+10			1				20							
Landing	4+00			1				50							
2+50 SPUR															
Intersection	0+00			1				100							
Lift	0+00	2+50		1		8	50	125							
Landing	2+50			1				50							
1+65 SPUR															
Lift	0+00	1+65		1		18	110	190							
Landing	1+65			1				50							
Totals:								1275							

ROCK LIST SHEET GRAND TOTAL

Source	Quantity (yd ³)
1: Anderson Pit Pit Run	10650
2: Winfield Pit 1½" Crushed	300
3: Anderson Pit Oversize	10

CULVERT LIST

Typed Water Crossing Noted With * After Road Name

ROAD NAME	STATION	CULVERT DIAMETER (in)	CULVERT LENGTH (ft)	FLUME LENGTH (ft)		RIP RAP - INLET (cy)	RIP RAP - OUTLET (cy)	BACKFILL MATERIAL	NOTES
G-1000	93+50								Clean Inlet/Outlet
G-1000	99+50								Clean Inlet/Outlet
G-1000	225+80	24	30						Replace Culvert
G-1000	233+50	18	30					PR	New Culvert
G-1000	259+60	18	30						Replace Culvert
G-1000	263+50	18	40						Replace Culvert
G-1000	0+10								Clean Inlet/Outlet
G-1000.9	10+50	18	30					PR	New Culvert
G-1400	9+00								Clean Inlet/Outlet
G-1400	25+00	18	30					PR	New Culvert
G-1400*	29+10	18	50						Install Temp Fish Pipe
G-1401	0+50	18	30					PR	New Culvert
G-1040	2+80								Clean Inlet/Outlet
G-1040	4+00	18	30						Replace Culvert
G-1040	6+50								Clean Inlet/Add ED
G-1040	8+50								Clean Inlet/Outlet
G-1040	11+30								Clean Inlet
G-1040	19+30	18	30					PR	New Culvert
G-1040*	24+45	18	30						Replace Culvert
G-1040*	27+45	18	40						Replace Culvert
G-1040	35+00								Clean Outlet
G-1040	37+70								Add ED
G-1040.1*	5+00	24	40					PR	New Culvert
G-1040.1*	9+60	24	30					PR	New Culvert
G-1040.1	14+60	18	30					PR	New Culvert
3+90 SPUR	0+10	18	40					PR	New Culvert
BILLS SPUR	5+40	18	30					PR	New Culvert
BILLS SPUR*	8+00	18	30					PR	New Culvert
BILLS SPUR*	13+90	18	30					PR	New Culvert
BILLS SPUR	18+20	18	30					PR	New Culvert
BILLS SPUR*	22+00	18	30					PR	New Culvert
BILLS SPUR*	24+00	18	30					PR	New Culvert

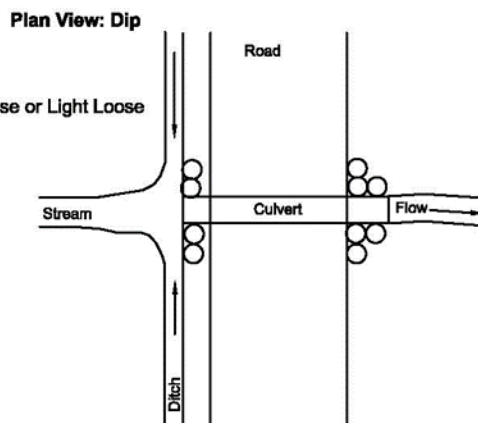
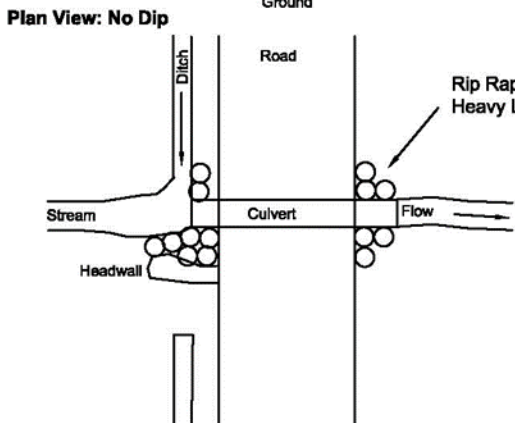
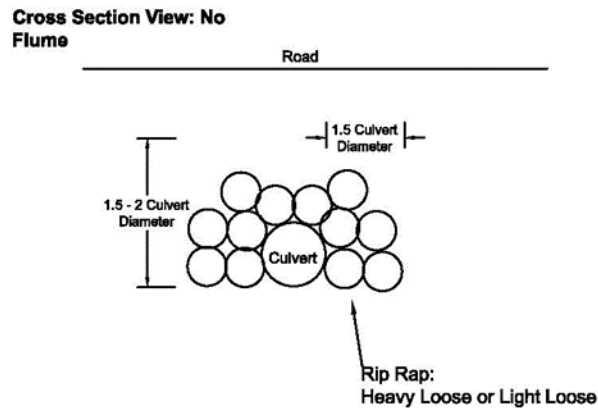
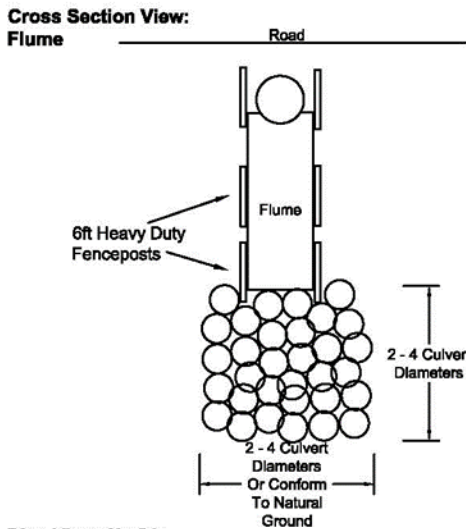
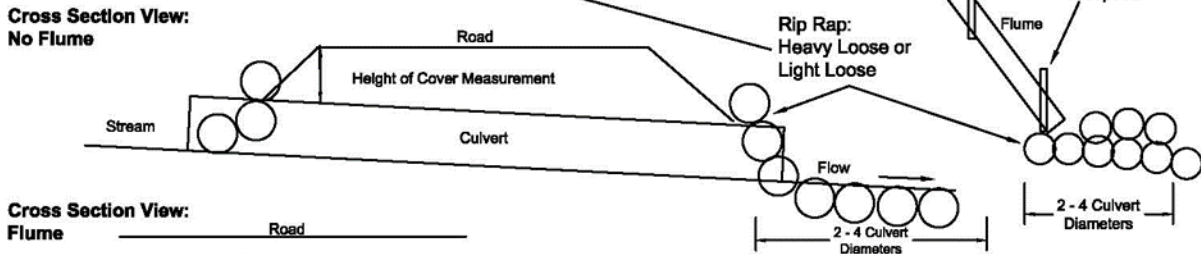
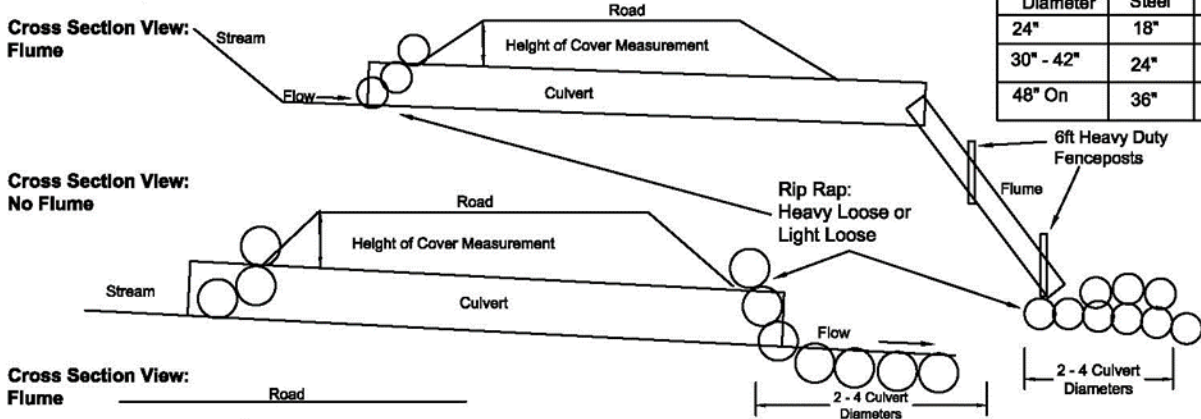
COMPACTION LIST

Road	Stations	Type	Max Depth Per Lift (inches)	Equipment Type	Minimum Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
Pre-haul	All	Culvert Backfill	8"	Jumping Jack		3	
Pre-haul	All	Rock Lifts	6"	Vibratory Smooth Drum	6,000	3	3
Pre-haul	All	Pre-haul Surface		Vibratory Smooth Drum	6,000	3	3
Construction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Construction	All	Culvert Backfill	8"	Jumping Jack		3	
Construction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Culvert Backfill	8"	Jumping Jack		3	
Reconstruction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Post-haul Maintenance	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3

Typical Type Ns, Np Culvert Installation Detail Sheet.

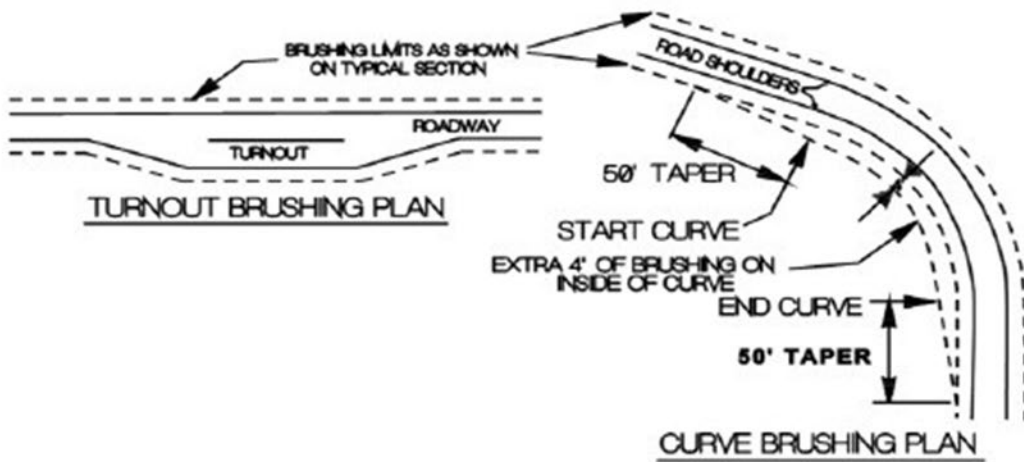
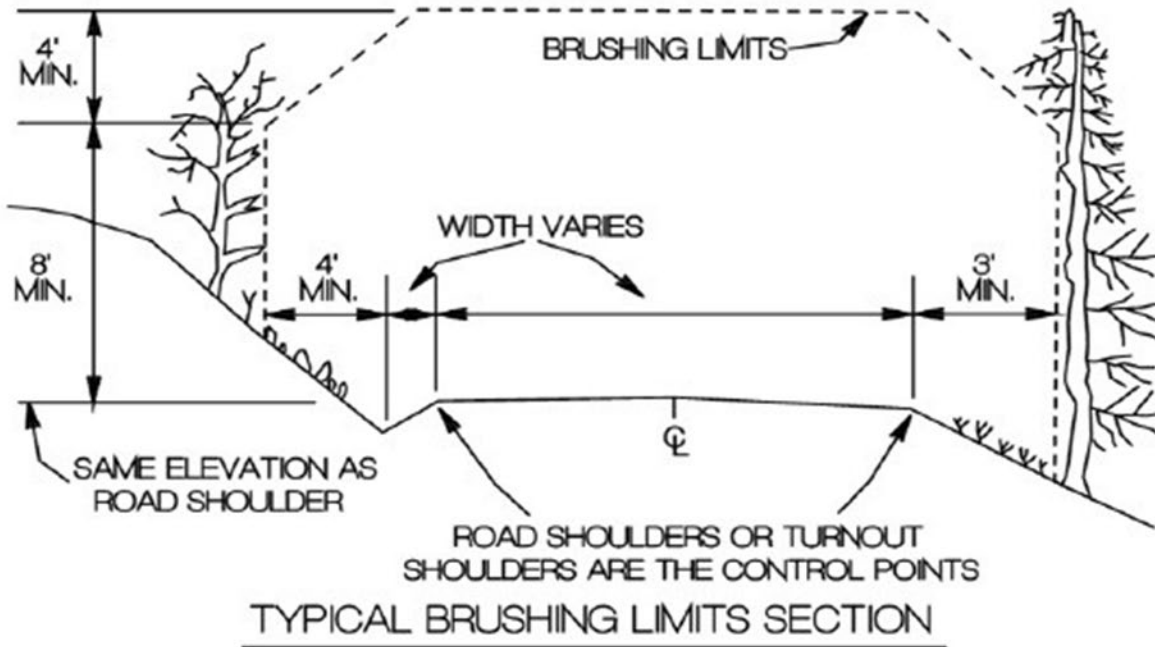
- Water shall be diverted away from the work site before any "in stream" work begins, and shall continue until culvert installation is complete.
- Culvert lay shall match stream gradient up to 5%.
- Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.
- Rip rap shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.
- Rip rap shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume rip rap shall be placed along the fill at the outlet, unless there is stream drop or it is called for in the Road Plan, at which point it will be installed as an energy dissipater at the end of the culvert as specified in this Detail. All rip rap distance to be determined by the Contract Administrator or the District Engineer.
- Backfill compaction shall be achieved using a jumping jack, walk behind vibratory roller, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus 3 times the width of the compactor footprint used.

Culvert Minimum Cover		
Diameter	Steel	Plastic
24"	18"	24"
30" - 42"	24"	24"
48" On	36"	36"



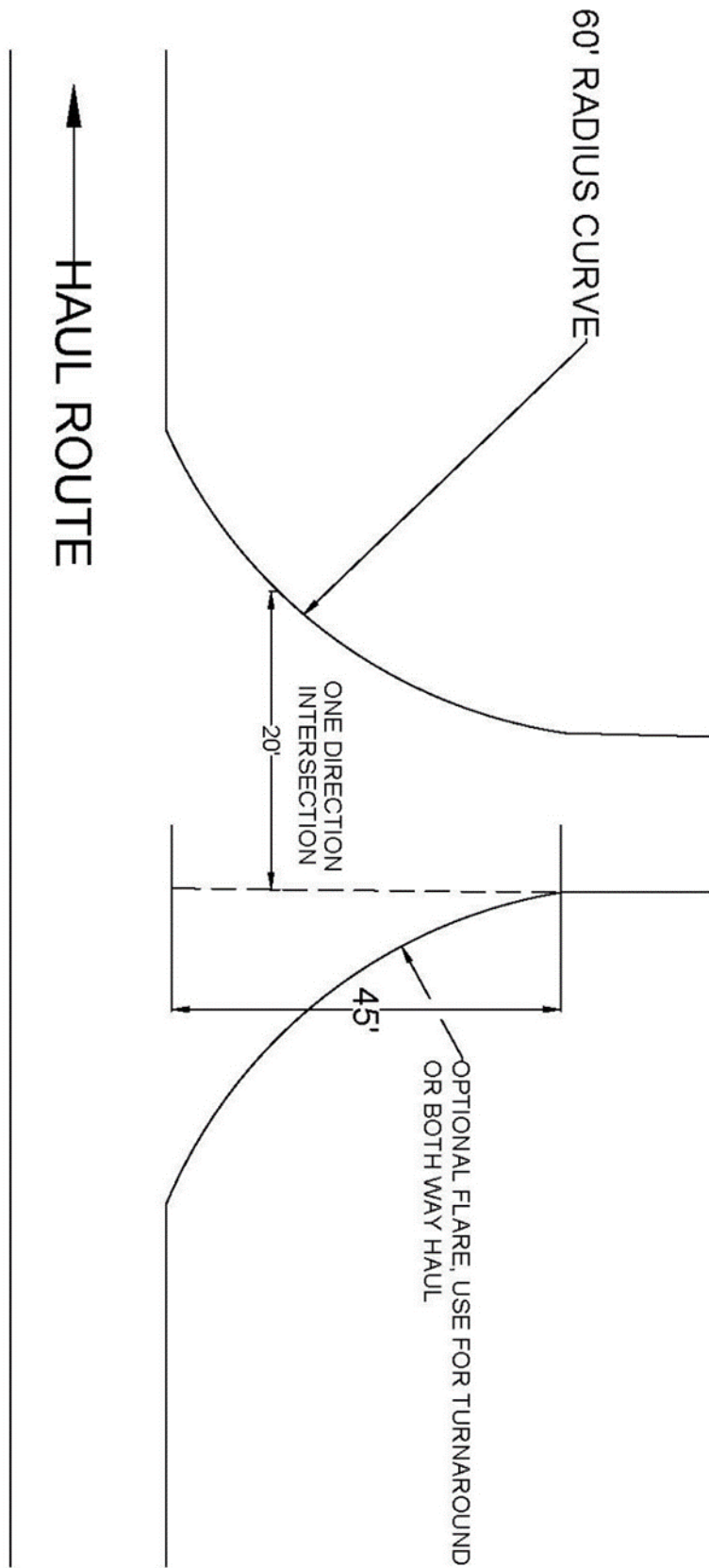
Not To Scale

BRUSHING DETAIL



- 1) ALL VEGETATION WITHIN THE BRUSHING LIMITS SHALL BE CUT TO WITHIN 8' OF THE GROUND, UNLESS OTHERWISE DIRECTED BY THE CONTRACT ADMINISTRATOR.
- 2) ALL BRUSH, TREES, LIMBS, ETC. SHALL BE REMOVED FROM THE ROAD SURFACE.
- 3) ALL BRUSH, TREES, LIMBS, ETC. THAT MAY RESTRICT THE FLOW OF WATER SHALL BE REMOVED FROM THE DITCH LINE.
- 4) ALL DEBRIS THAT MAY ROLL OR MIGRATE INTO THE DITCHLINE SHALL BE REMOVED.

TYPICAL INTERSECTION



NOT TO SCALE

SUMMARY - Road Development Costs															
SALE NAME:	Goodman	CONTRACT#:	30-102255	REGION:	Olympic	DISTRICT:	Coast					TOTAL			
LEGAL DESCRIPTION:	0														
ROAD NAME:	1+50 SPUR	4+00 SPUR	1+65 SPUR	3+90 SPUR	BILL SPUR	G-1000	G-1000.9	2+50 SPUR	G-1400	G-1401	G-1040	TOTAL:	SHEET #2-4		
ROAD TYPE:	Construction	Construction	Construction	Construction	Construction	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul				
NUMBER OF STATIONS:	2	4	2	4	24	284	17	3	51	16	39	445.35	439.10		
SIDESLOPE:	0	0	0	0	0	0	0	0	0	0	0	60%	0%		
CLEARING AND GRUBBING:	\$209	\$556	\$229	\$342	\$5,669	\$0	\$0	\$0	\$0	\$0	\$0	\$7,206	\$0		
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$306	\$45	\$666	\$288	\$0	\$1,305	\$1,161		
EXCAVATION AND FILL:	\$212	\$678	\$233	\$551	\$8,204	\$0	\$0	\$0	\$0	\$0	\$0	\$9,878	\$0		
ROAD GRADING:	\$0	\$0	\$0	\$0	\$0	\$1,847	\$111	\$16	\$332	\$104	\$256	\$2,666	\$2,854		
DITCH CLEANING/CONSTRUCTION:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$195	\$0	\$0	\$195	\$0		
ROCK TOTALS (GL Yds.)/ROCK COSTS:															
Ballast:	10650	10,650	220	520	240	510	2,940	130	1,260	275	110	400	80	6,685	3,965
Surface:	300	300	\$2,739	\$6,375	\$2,996	\$6,401	\$37,661	\$1,645	\$13,091	\$2,857	\$1,273	\$4,796	\$1,074	\$80,908	\$49,639
Oversize:	10	10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,318	\$1,318
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$0	\$0	\$6	\$8
CULVERTS AND FLLMES:	0	1,040	0	1,040	0	1,040	3,900	5,840	780	0	2,080	780	3,540	\$19,001	\$9,061
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$9	\$23	\$10	\$23	\$142	\$2,723	\$1,754	\$258	\$418	\$775	\$418	\$775	\$270	\$6,405	\$6,091
OVERHEAD:	\$253	\$694	\$277	\$685	\$4,446	\$964	\$1,283	\$254	\$400	\$539	\$400	\$539	\$526	\$10,322	\$5,848
TOTAL COSTS:	\$3,422	\$9,367	\$3,746	\$9,241	\$60,022	\$13,019	\$17,325	\$3,431	\$5,398	\$7,282	\$7,101	\$139,353	\$77,114		
COST PER STATION:	\$2,281	\$2,342	\$2,270	\$2,370	\$2,480	\$46	\$1,019	\$1,372	\$106	\$455	\$180	\$313	\$176		
MOBILIZATION:												\$18,300			
ROAD DEACTIVATION AND ABANDONMENT COSTS:												\$1,162			
Pit Work												\$30,000			
NOTE: This appraisal has no allowance for profit and risk.															
Sheet 1 of 2															
Plans to be furnished by:	Skerbeck														
Compiled by:	Ryan Skerbeck														
Date:	2/4/2022														

SUMMARY - Road Development Costs

SALE NAME: Goodman1 CONTRACT#: 30-102255 REGION: Olympic DISTRICT: Coast
 LEGAL DESCRIPTION: 0

ROAD NAME:	G-1040.1	G-1040.2	G-1050	4+20 SPUR	G-1000	G-1400	G-1040
ROAD TYPE:	Prehaul	Prehaul	Prehaul	Prehaul	Posthaul	Posthaul	Posthaul
NUMBER OF STATIONS:	17	2	42	4	284	51	39
SIDESLOPE:	0	0	0	0	0	0	0
CLEARING AND GRUBBING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD BRUSHING:	\$306	\$32	\$747	\$76	\$0	\$0	\$0
EXCAVATION AND FILL:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD GRADING:	\$111	\$12	\$270	\$27	\$1,847	\$332	\$256
DITCH CLEANING/CONSTRUCTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROCK TOTALS (Cu. Yds./ROCK COI:	0	0	0	0	0	0	0
Ballast:	1,100	120	2,745	0	0	0	0
Surface:	\$13,695	\$1,494	\$34,450	0	0	0	0
Oversize:	0	0	0	0	100	0	100
Oversize:	\$0	\$0	\$0	\$0	\$1,240	\$0	\$1,220
CULVERTS AND FLUMES:	\$2,881	\$0	\$6,180	0	0	0	0
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$1,774	\$11	\$4,282	\$25	\$0	\$0	\$0
OVERHEAD:	\$1,501	\$124	\$3,674	\$10	\$340	\$36	\$162
TOTAL COSTS:	\$20,268	\$1,673	\$49,603	\$138	\$3,427	\$368	\$1,638
COST PER STATION:	\$1,192	\$929	\$1,195	\$33	\$12	\$7	\$42

Total
 Costs \$77,114
 Stations 439.10
 Cost/station \$175.62

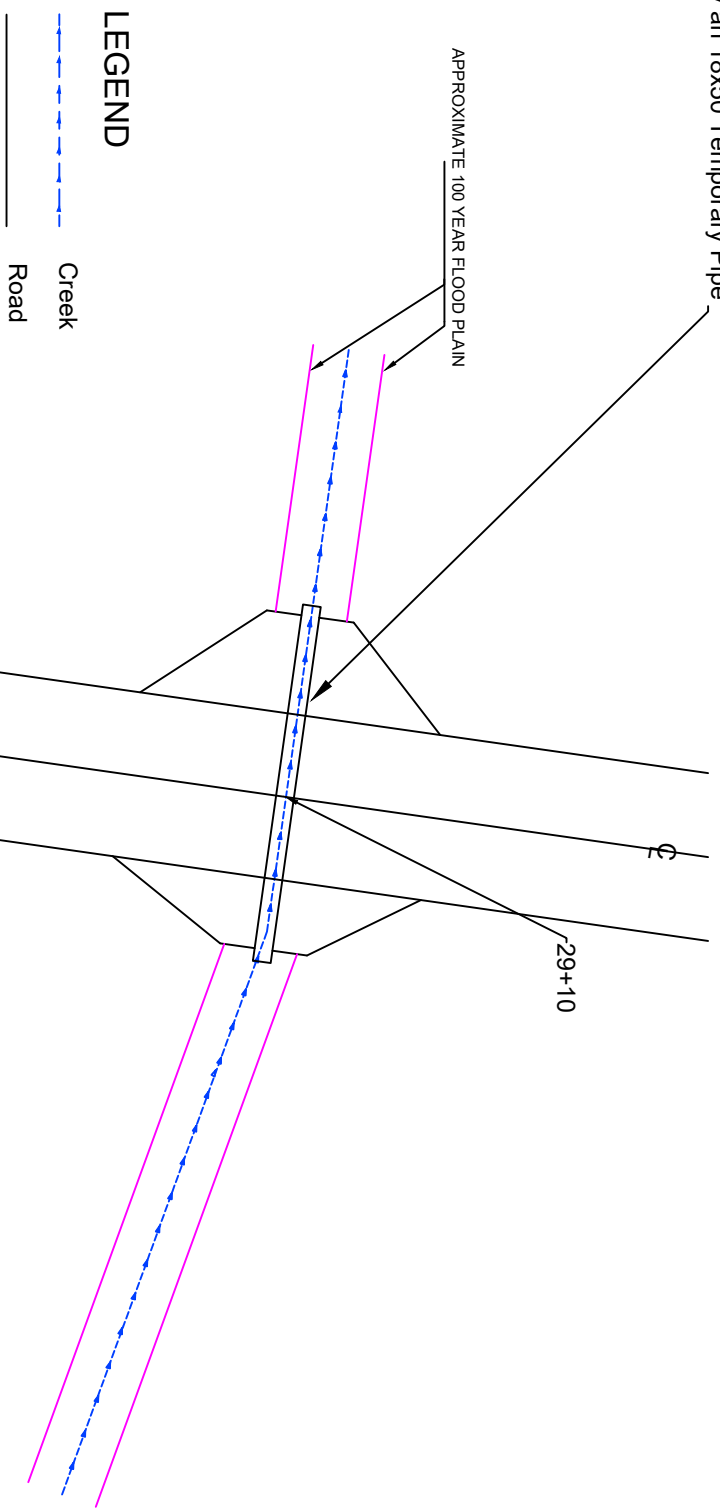
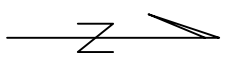
Temporary Pipe Install G-1400

G-1400 Sta 29+10

SECTION 22 T27N R13W

Plan View

Previously Removed Culvert to be Replaced
by an 18x50 Temporary Pipe



LEGEND

-  Creek
-  Road

Notes:

- Crossing C1
- 29+10 Temporary Pipe Install
- T 27N R13W Sec.22
- N47° 50' 13.9" W124° 21' 42.4"
- Avg. Channel Bed Width of 4'
- No changes in road or stream alignment.
- Work to be completed between June 15th and Oct 15th or when dry.

SCALE 1" = 16'



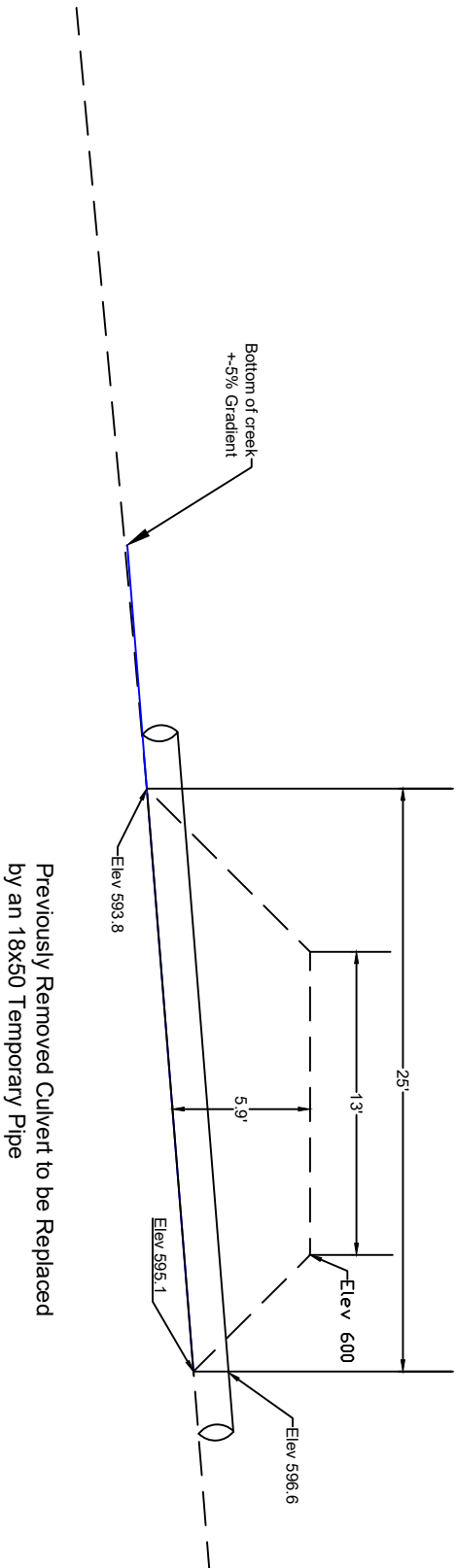
Temporary Pipe
Site Plan
Drawn By: Ryan Skerbek
Date Drawn: 6/28/2021
Date Revised:
Sheet 1 of 3

Temporary Pipe Install G-1400

G-1400 Sta 29+10

SECTION 22 T27N R13W

Creek Profile



LEGEND

- EXISTING GROUND
- FINAL GROUND LINE

Notes:

- Crossing C1
- 29+10 Temporary Pipe Install
- T 27N R13W Sec.22
- N47° 50' 13.9" W124° 21' 42.4"
- Avg. Channel Bed Width of 4'
- No changes in road or stream alignment.
- BM assumed elevation: 600'
- Work to be completed between June 15th and Oct 15th or when dry

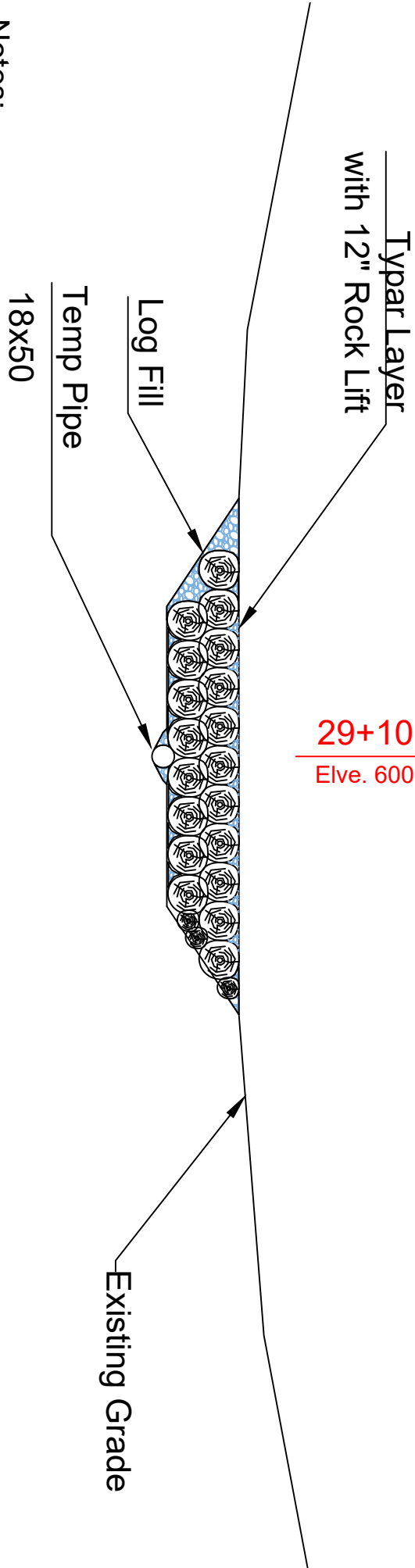
SCALE 1" = 8'



Temporary Pipe
Creek Profile
Drawn By: Ryan Skerbek
Date Drawn: 6/28/2021
Date Revised:
Sheet 2 of 3

Temporary Pipe Install G-1400

G-1400 Sta 29+10
SECTION 22 T27N R13W
Road Profile



Notes:

- Crossing C1
- 29+10 Temporary Pipe Install
- T 27N R13W Sec.22
- N47° 50' 13.9" W124° 21' 42.4"
- Avg. Channel Bed Width of 4'
- No changes in road or stream alignment.
- Work to be completed between June 15th and Oct 15th or when dry

SCALE 1" = 10'



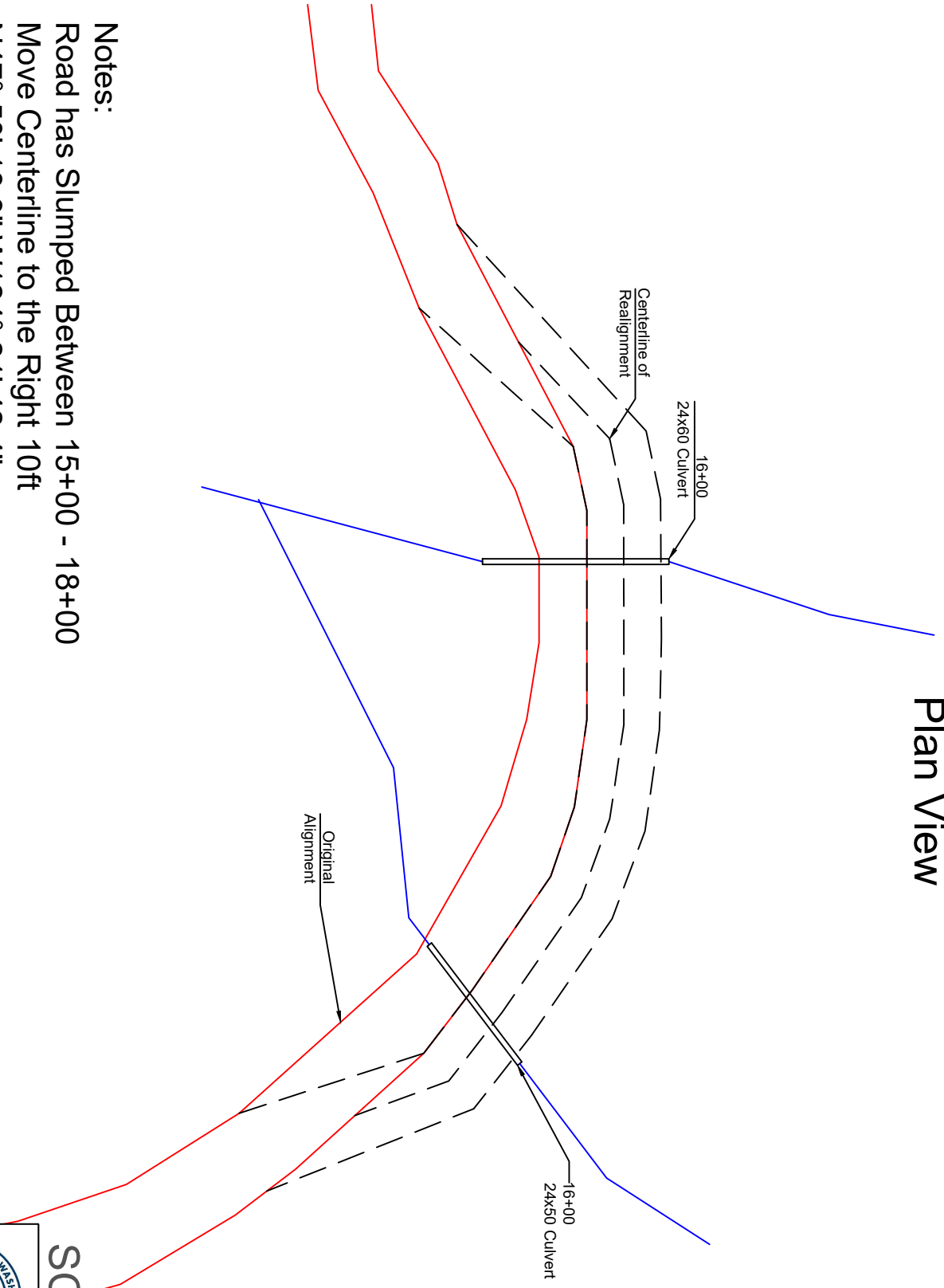
Temporary Pipe
Road Profile
Drawn By: Ryan Skerbek
Date Drawn: 6/28/2021
Date Revised:
Sheet 3 of 3

G-1050 Realignment

G-1050 Sta 15+00 - 18+00

SECTION 22 T27N R13W

Plan View



Notes:

Road has Slumped Between 15+00 - 18+00

Move Centerline to the Right 10ft

N47° 50' 13.9" W124° 21' 42.4"

Approximate Reroute Location Shown, District Engineer

Approval Needed Before Project Completion.

SCALE 1" = 16'



Temporary Pipe
Site Plan
Drawn By: Ryan Skerbek
Date Drawn: 6/28/2021
Date Revised:
Sheet 1 of 3

Anderson Ridge Pit Plan

T28N, R13W Sec. 34
T27N, R13W Sec. 03

Sta 20+00 G-2000

Gate

G-2000

Existing Pit Floor

New Drainage Ditch

New Overburden Storage Area

Sec. 34, T28N, R13W

Sec. 03, T27N, R13W








**Stripped Area
+/- 1 acre**

Pit Development Plan

1. Areas to be developed as directed by the Contract Administrator.
2. Waste material and oversize material to be placed as directed by the Contract Administrator.
3. Suitable drainage shall be maintained at all times.
4. Working Face height shall not exceed 15 feet.
5. Safety berms shall be installed as directed by the Contract Administrator.
6. All operations shall comply with the Spill Response Plans.

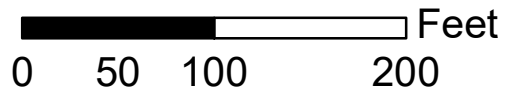
Crushing to be completed by 6/30/2022 with Goodman 1 timber sale No. 30-102255.

Legend

-  Existing Pit Floor
-  Overburden Storage
-  Stripped Area
-  Existing Culvert
-  Gate
-  Drainage Ditch
-  Existing Roads



1"=100'



Skerbeck, Aug. 2021

North Winfield Pit T27N R12W Sec 35

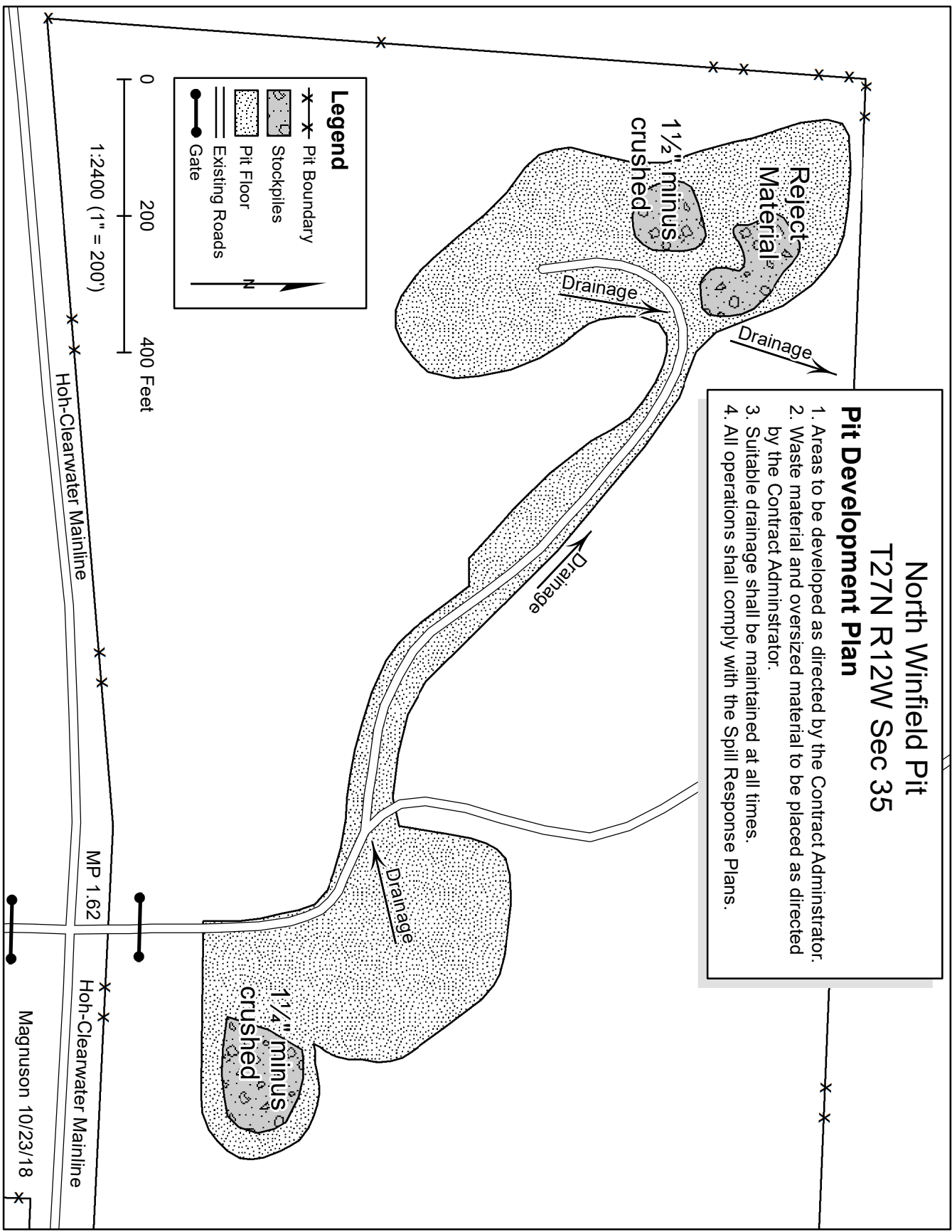
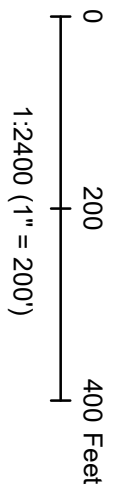
Pit Development Plan

1. Areas to be developed as directed by the Contract Administrator.
2. Waste material and oversized material to be placed as directed by the Contract Administrator.
3. Suitable drainage shall be maintained at all times.
4. All operations shall comply with the Spill Response Plans.

Legend

- ✕-✕ Pit Boundary
- ▨ Stockpiles
- ▨ Pit Floor
- ▨ Existing Roads
- Gate

N



Forest Access Road Maintenance Specifications

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the construction materials cut slope/fill slope ratios. Remove slides up to 100 cubic yards in volume 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 shape > compact > the road surface, turnouts, and shoulders to the original shape on the TYPICAL SECTION SHEET In slope or out slope as directed, 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

Preventative Maintenance

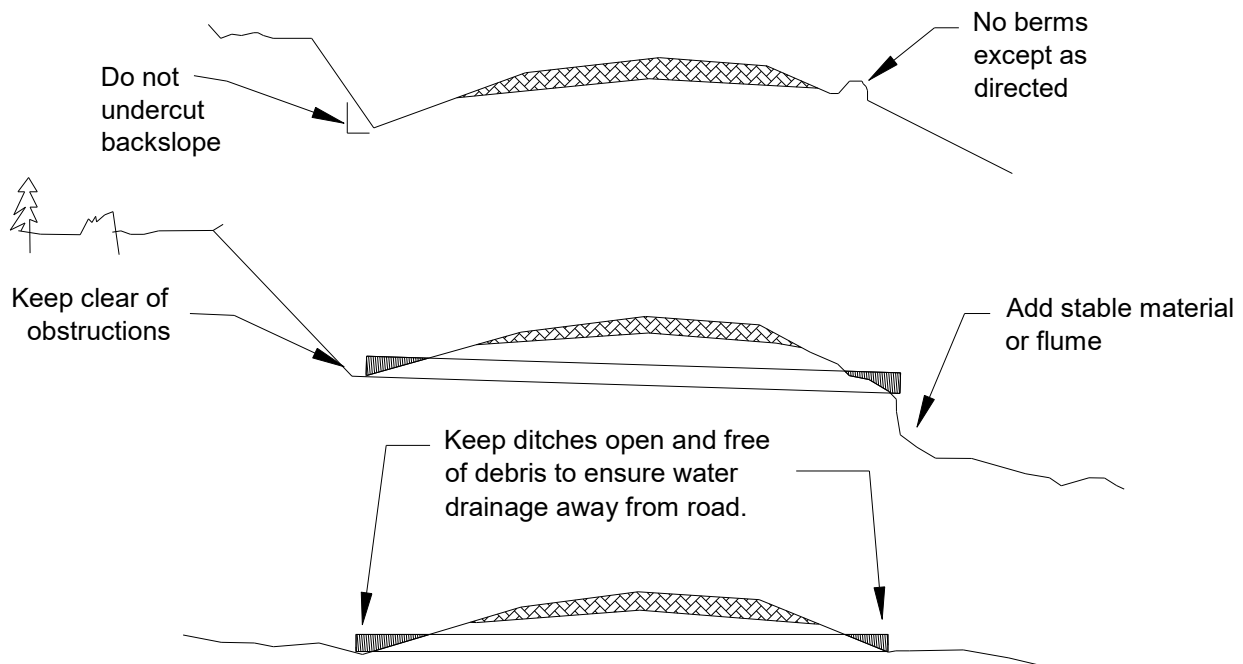
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

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

Debris

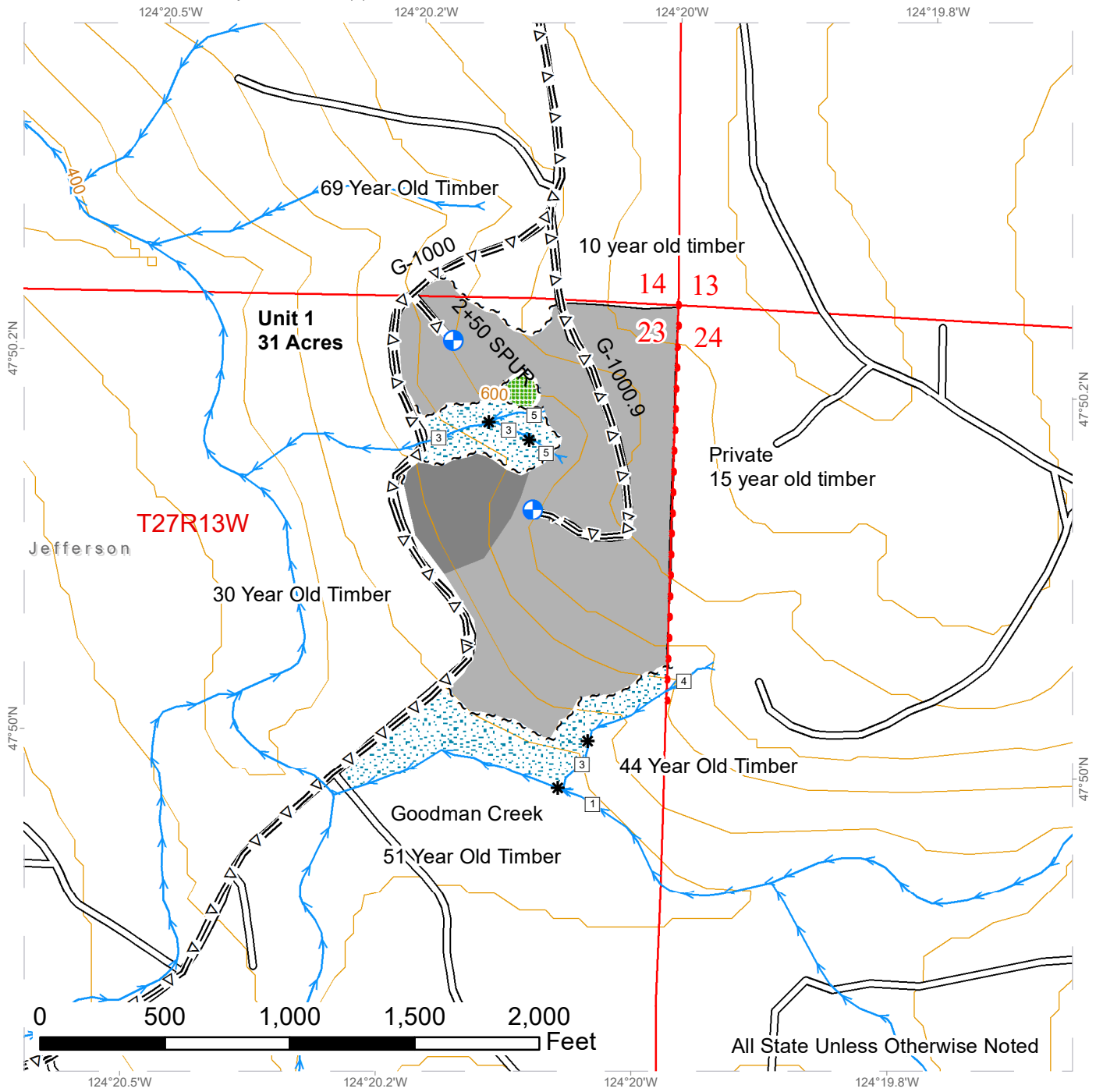
- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



LOGGING PLAN MAP

SALE NAME: GOODMAN 1
AGREEMENT#: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'



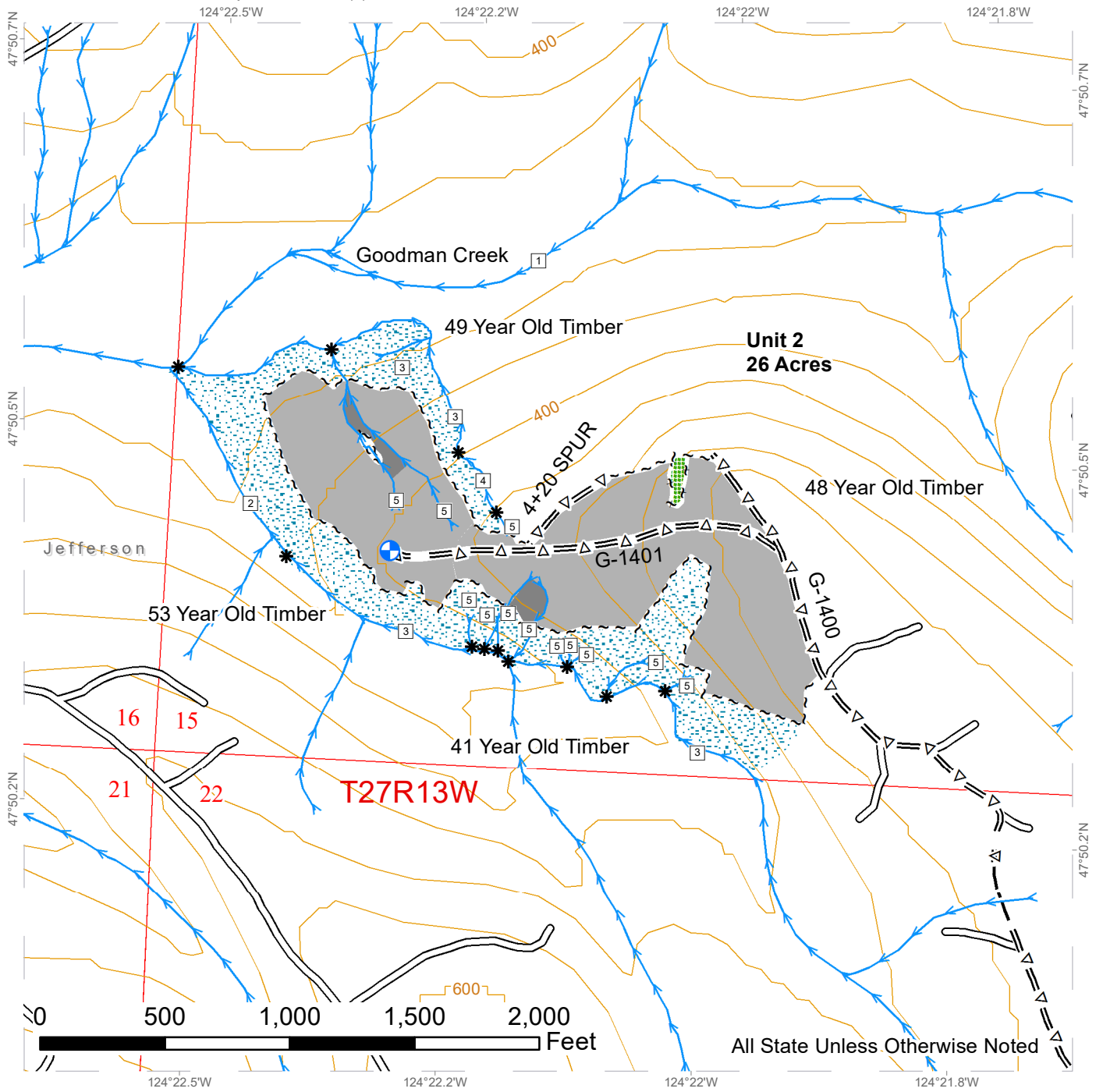
* Stream Break	Existing Roads	Leave Tree Area
□ Stream Type	=Δ= Optional Pre-Haul Maintenance	Riparian Mgt Zone
⊕ Landing - Proposed	~~~~ Sale Boundary Tags	Ground
→ Streams	— Timber Type Change	Cable
	~ ~ ~ Leave Tree Tags	Public Lands Survey Sections
	•••• Property Line	Public Land Survey Townships



LOGGING PLAN MAP

SALE NAME: GOODMAN 1
AGREEMENT#: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'



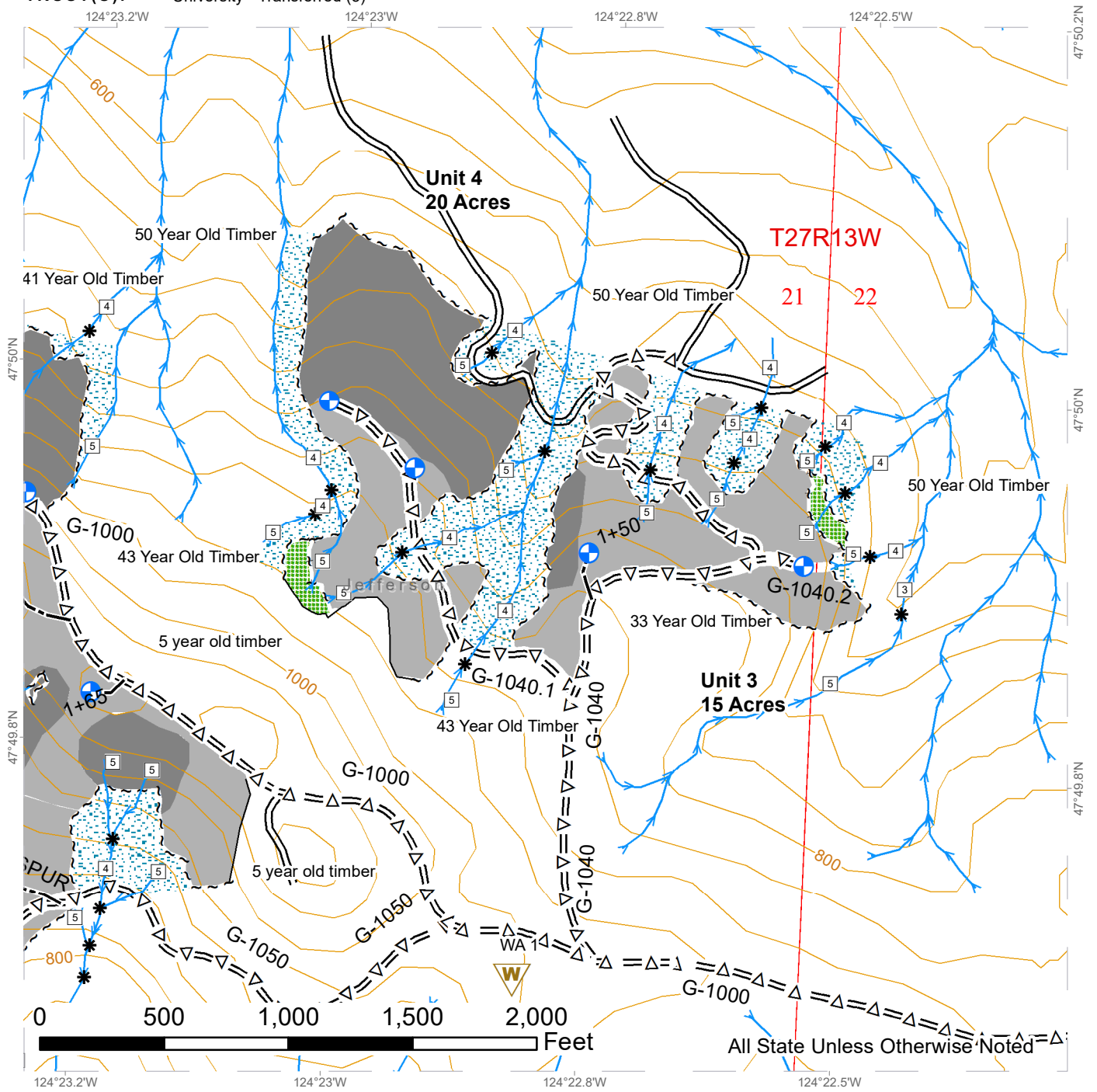
* Stream Break	Existing Roads	Leave Tree Area
□ Stream Type	=Δ= Optional Pre-Haul Maintenance	Riparian Mgt Zone
⊕ Landing - Proposed	--- Optional Construction	Ground
→ Streams	~ ~ ~ Sale Boundary Tags	Cable
	~ ~ ~ Leave Tree Tags	Public Land Survey Townships
		Public Land Survey Sections



LOGGING PLAN MAP

SALE NAME: GOODMAN 1
AGREEMENT#: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'



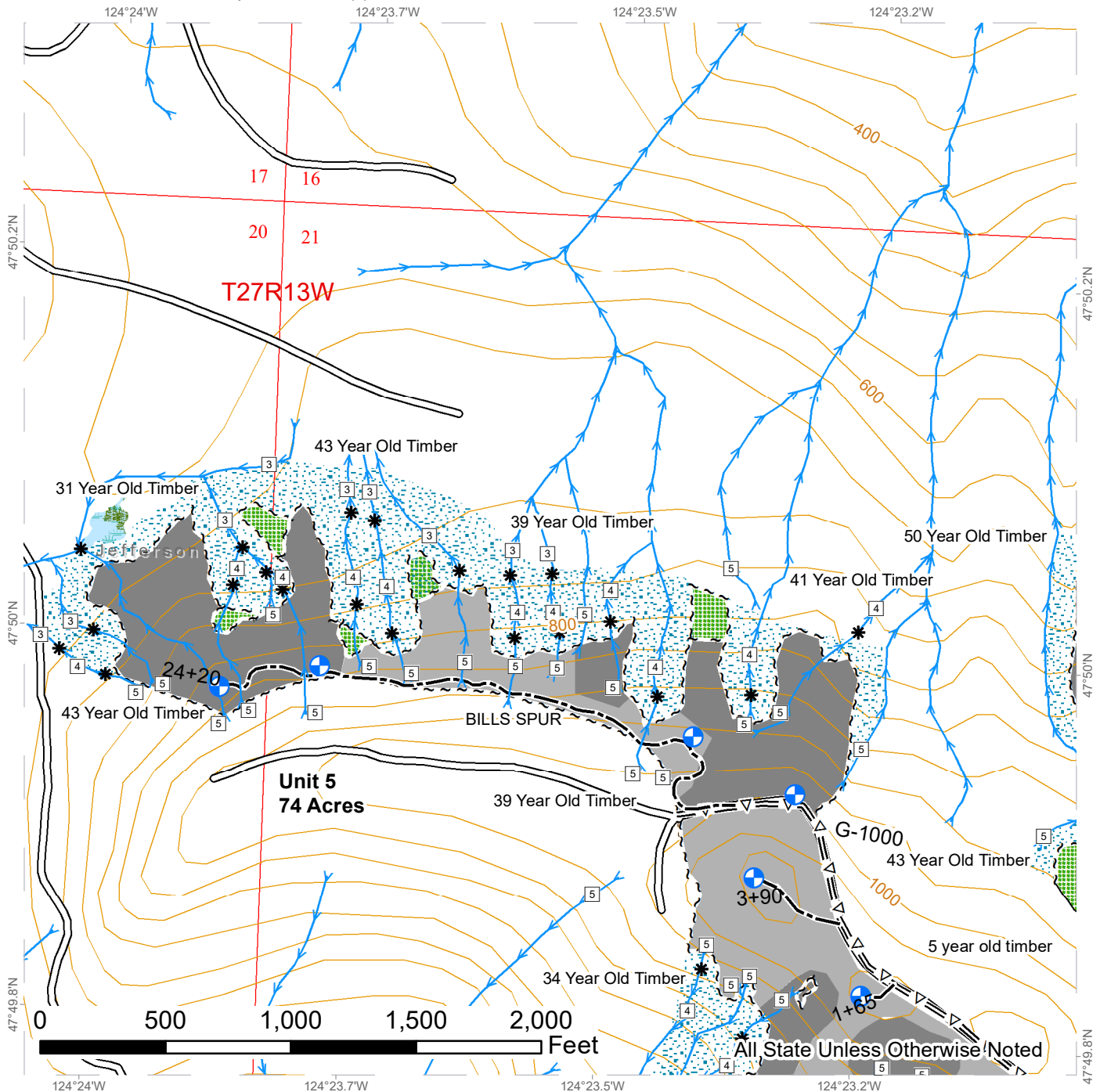
* Stream Break	== Existing Road	▒ Leave Tree Area
□ Stream Type	- - - Optional Construction	▒ Riparian Mgt Zone
⊕ Landing - Proposed	=Δ=Δ Optional Pre-Haul Maintenance	▒ Ground
W Waste Area	~ ~ ~ Sale Boundary Tags	▒ Cable
→ Streams	— Timber Type Change	▒ Public Land Survey Townships
	~ ~ ~ Leave Tree Tags	▒ Public Land Survey Sections



LOGGING PLAN MAP

SALE NAME: GOODMAN 1
AGREEMENT#: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 480-680'



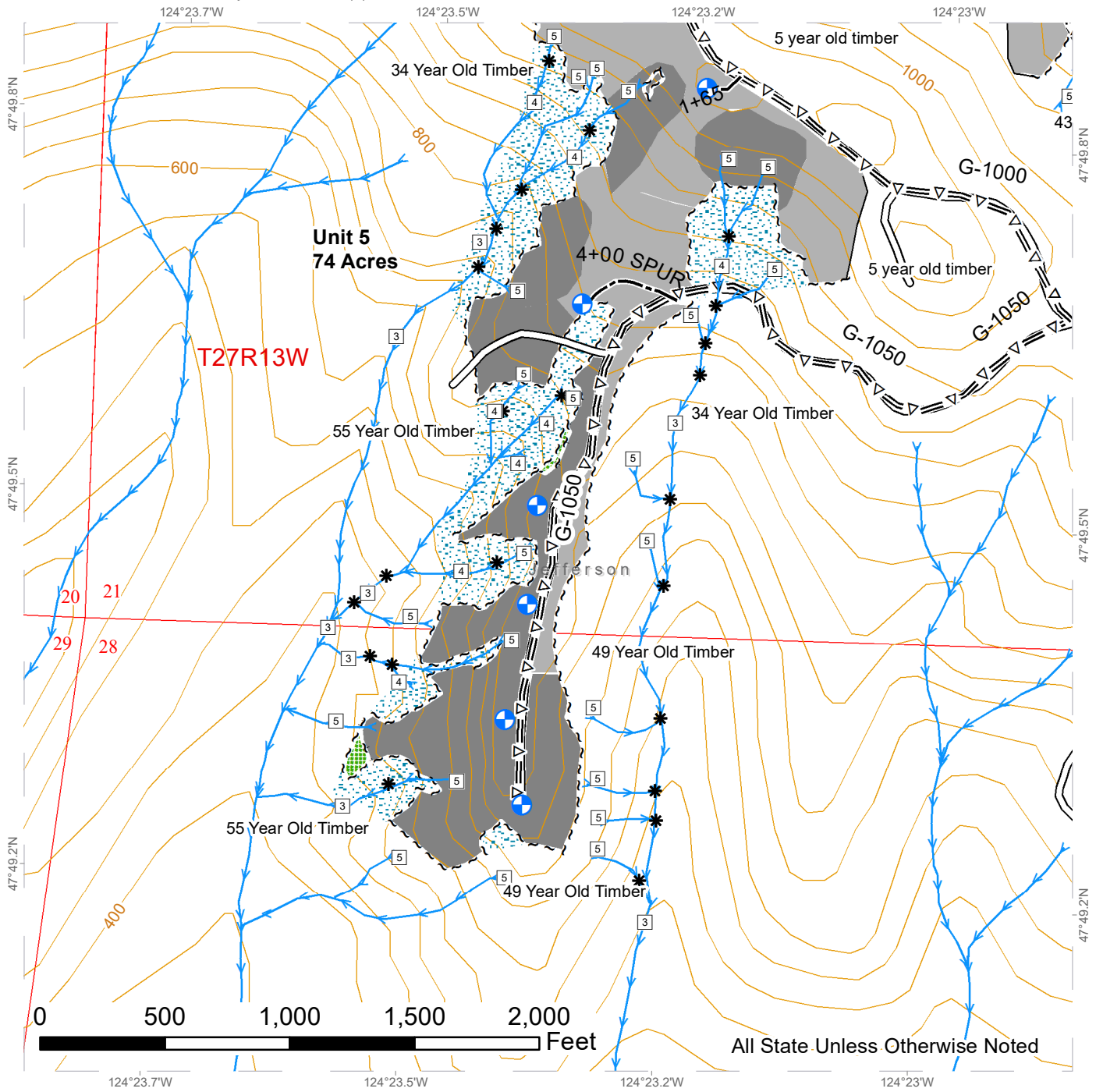
* Stream Break	Existing Roads	Leave Tree Area
□ Stream Type	=Δ= Optional Pre-Haul Maintenance	Riparian Mgt Zone
⊕ Landing - Proposed	- - - Optional Construction	Forested Wetland
→ Streams	~ ~ ~ Sale Boundary Tags	Ground
Public Land Survey Townships	— Timber Type Change	Cable
Public Land Survey Sections	~ ~ ~ Leave Tree Tags	



LOGGING PLAN MAP

SALE NAME: GOODMAN 1
 AGREEMENT#: 30-102255
 TOWNSHIP(S): T27R13W
 TRUST(S): University - Transferred (5)

REGION: Olympic Region
 COUNTY(S): Jefferson
 ELEVATION RGE: 480-680'



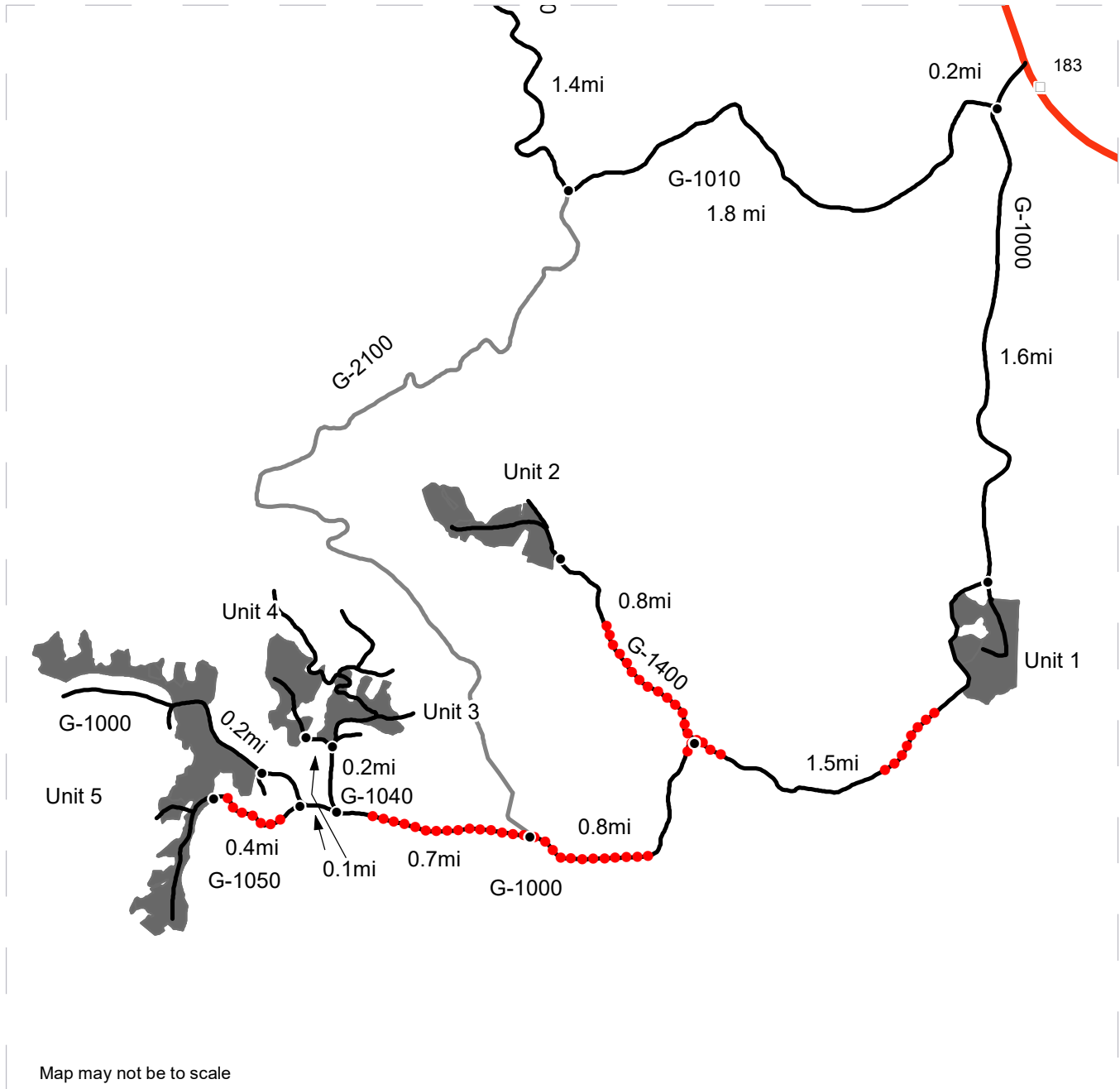
* Stream Break	Existing Roads	Leave Tree Area
□ Stream Type	=Δ= Optional Pre-Haul Maintenance	Riparian Mgt Zone
⊕ Landing - Proposed	Optional Construction	Ground
→ Streams	~ ~ ~ Sale Boundary Tags	Cable
	— Timber Type Change	Public Land Survey Townships
	~ ~ ~ Leave Tree Tags	Public Land Survey Sections



TIMING RESTRICTION MAP

SALE NAME: GOODMAN 1 RESALE
AGREEMENT#: 30-102255
TOWNSHIP(S): T27R13W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 320-1080'



Map may not be to scale

- Timber Sale Unit
- Milepost Markers
- Highway
- Driving Roads
- Existing Roads
- Rock Pit (Corporate)
- Timing Restriction Zone
- Distance Indicators

Timing Restriction

In timing restriction zones, timber felling, road work or operation of heavy equipment performed during the marbled murrelet nesting season (April 1 through September 23) is restricted to two hours after sunrise to two hours before sunset. This does not apply to hauling of timber, rock or equipment.

