



TIMBER NOTICE OF SALE

SALE NAME: TRAIL MIX

AGREEMENT NO: 30-103627

AUCTION: December 12, 2023 starting at 10:00 a.m., COUNTY: Mason South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 5 miles west of Belfair, WA

PRODUCTS SOLD AND SALE AREA:

All timber, except leave trees bounded out by yellow leave tree tags or marked with blue paint, and down trees greater than 5 years from day of sale, bounded by the following: white Timber Sale Boundary tags, timber type change marked with pink flagging, and the F-2000 Road in Unit #1; white Timber Sale Boundary tags, and timber type change marked with pink flagging in Unit #2; white Timber Sale Boundary tags in Unit #3, white Timber Sale Boundary tags, timber type change marked with pink flagging, and the D-2020 Road in Unit #4; white Timber Sale Boundary tags, timber type change marked with pink flagging, property line marked with white Carsonite posts, and the D-2080 Road in Unit #5; white Timber Sale Boundary tags, and property line marked with white Carsonite posts in Unit #6;

All forest products above located on part(s) of Sections 3 all in Township 22 North, Range 2 West, Sections 22, 23, 26, 32, 33, 34, 35 and 36 all in Township 23 North, Range 2 West, W.M., containing 261 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BVC-SFIFM-018227) and FSC 100% raw materials under the Forest Stewardship Council® Standard (cert no: BV-FM/COC-080501).

ESTIMATED SALE VOLUMES AND QUALITY:

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

MINIMUM BID: \$3,212,000.00 BID METHOD: Sealed Bids

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

EXPIRATION DATE: October 31, 2025 ALLOCATION: Export Restricted

BID DEPOSIT: \$321,200.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Harvest activities are estimated to be 100 percent ground based harvest. Ground based equipment, with self-leveling equipment limited to sustained slopes 65 percent or less, and other ground based equipment limited to sustained slopes of 45 percent or less.



## TIMBER NOTICE OF SALE

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Falling, yarding and timber haul will not be permitted on State recognized holidays or weekends in any unit, nor weekdays from 7:00 p.m. to 7:00 a.m. in Units #1, #2, #4-#6, unless approved in writing by Contract Administrator.

### **ROADS:**

2.80 stations of required reconstruction. 44.65 stations of optional construction. 25.62 stations of optional reconstruction. 333.73 stations of required prehaul maintenance. 39.26 stations of optional prehaul maintenance. 372.99 stations of required post-haul maintenance. 44.65 stations of abandonment, if constructed. 10.12 stations of abandonment, if reconstructed. Purchaser maintenance on Spurs 1-5, and the D-1000, D-1020, D-1022, D-2000, D-2010, D-2020, D-2080, E-2500 and F-2000 roads. Designated maintenance on all other roads used.

Rock for this proposal can be obtained from the State owned Sandhill Pit at no cost to the Purchaser or any commercial rock source at the Purchaser's expense. Rock source development is to be completed per Section 6 in the Road Plan and according to the Rock Source Development Plan.

Operation of road construction equipment and rock haul will not be permitted on State recognized holidays or weekends in any unit, nor weekdays from 7:00 p.m. to 7:00 a.m. associated with Units 1, 2, 4-6, unless approved in writing by Contract Administrator.

### **ACREAGE DETERMINATION**

#### **CRUISE METHOD:**

Acreeage was determined by traversing boundaries by GPS. GPS data files are available at DNR's website for timber sale auction packets. See cruise narrative for cruise method.

### **FEES:**

\$122,468.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

### **SPECIAL REMARKS:**

This sale contains high quality Douglas-fir sawlogs and poles. See Cruise.

The last cut tree along the private property boundary in Units #5 and #6 are marked with pink paint. It is the Purchaser's responsibility to verify location of the sale boundary as defined by the Product Sold and Sale Area description.

Purchaser will be required to obtain a road approach permit with Mason County for Spur 5 located in Unit #6. A copy of the executed permit will need to be provided to the Contract Administrator prior to operations beginning in that unit.

Unit #6 will require road work under powerlines along Belfair Tahuya Road for the construction of Spur 5.

Purchaser shall fell all snags inside the sale area within 200 feet of Belfair Tahuya Road, as directed by the Contract Administrator.

Non-tradeable leave trees are marked with a double band of blue paint.

This sale includes extreme hazard abatement according to WAC 332-24-650 per contract clause S-020.

Purchaser shall cut all live stems within the harvest unit 2 inches and greater in diameter per contract clause H-250.



## TIMBER NOTICE OF SALE

Purchaser is responsible for closing trails with orange construction barricade netting and posting trail closure signs provided by DNR, at designated locations provided by the CA. Purchaser is responsible for giving five (5) calendar days notice before closing the trail.

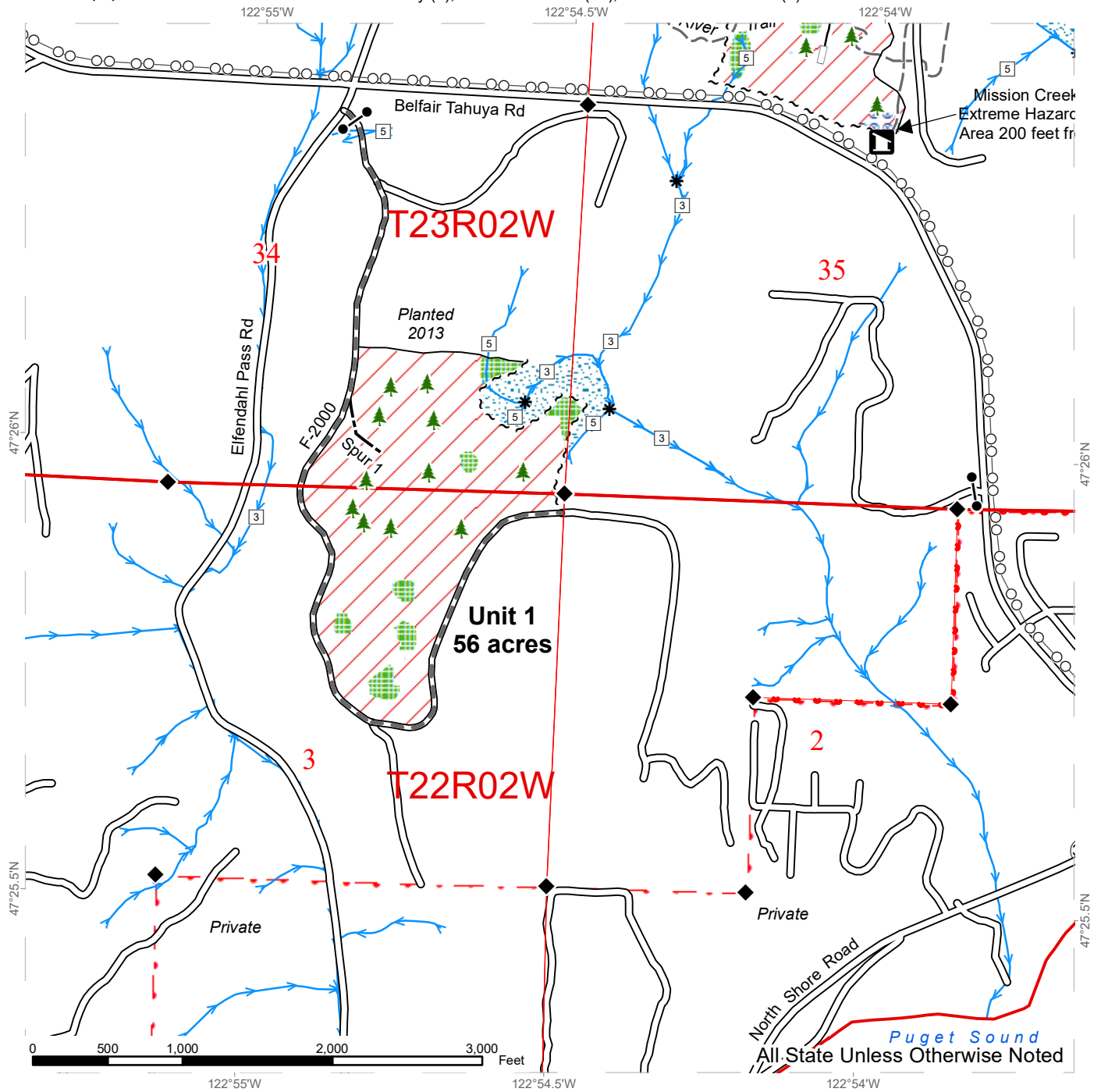
Note to cruisers and appraisers: Please refrain from leaving pink, orange or blue flagging from your cruises in or around the sale area to avoid confusion with DNR's marking. Additionally, for the safety of the public, please remove from roads and trails all string from string boxes used during appraising or cruising this sale.

See map for gate locations. Gate keys may be obtained by contacting the South Puget Sound Region office at 360-825-1631 or by contacting Austin Haworth at 360-552-8957.

# TIMBER SALE MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT #:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
**TRUST(S):** Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439



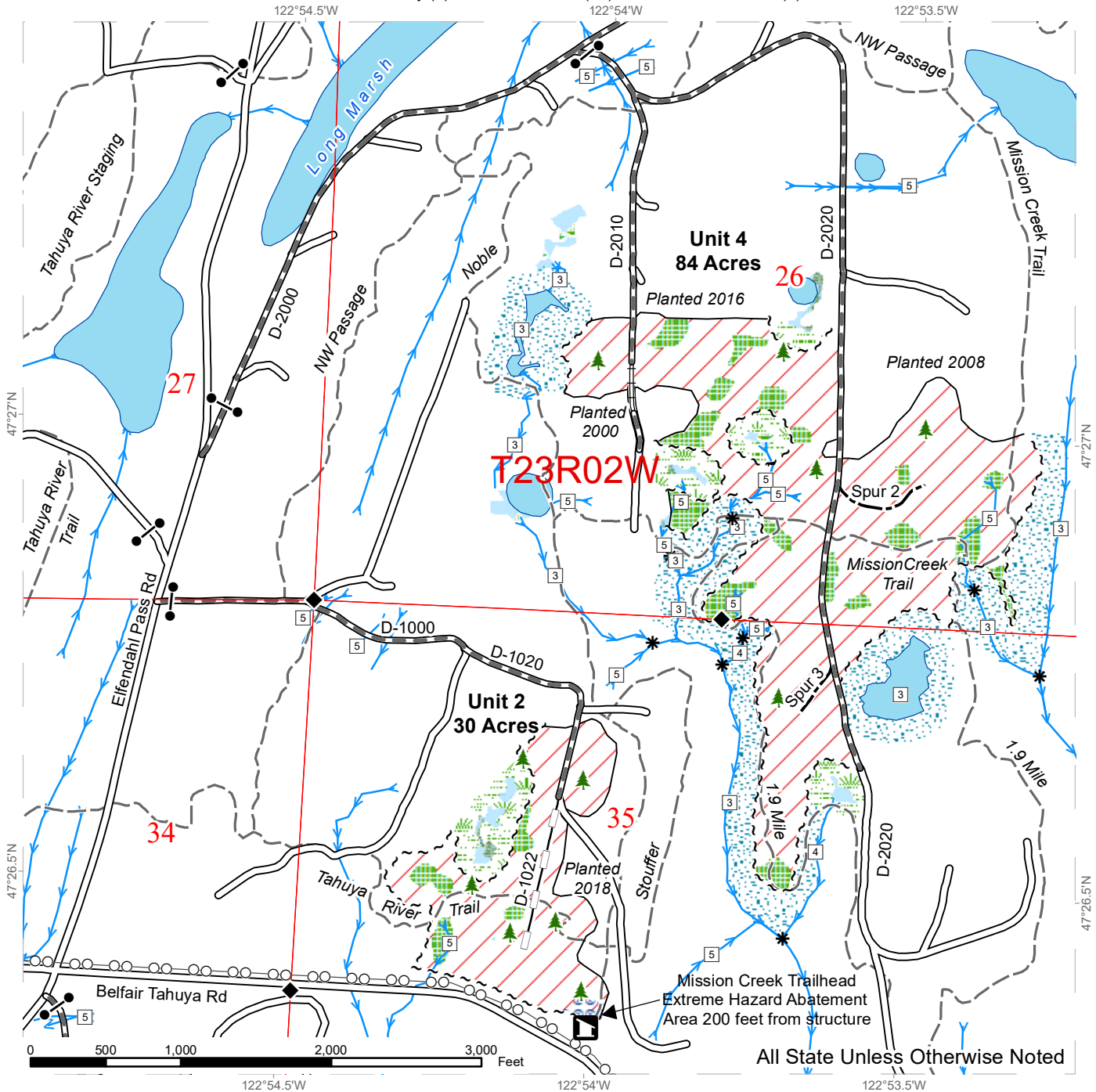
Sale Area	Sale Boundary Tags	Streams
Public Land Survey Townships	Property Line	Stream Type
Public Land Survey Sections	Timber Type Change	Stream Type Break
Leave Tree Area	Existing Roads	Gate (786)
Riparian Mgt Zone	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Forested Wetland	Optional Construction	Recreation Site
Hazard Abatement Area	Optional Reconstruction	Survey Monument
	Overhead Power Lines	
	DNR Designated Trail	



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All State Unless Otherwise Noted

Sale Area	Sale Boundary Tags	Streams
Public Land Survey Townships	Timber Type Change	Stream Type
Public Land Survey Sections	Existing Roads	Stream Type Break
Wetlands - Non-forested	Required Pre-Haul Maintenance	Gate (786)
Leave Tree Area	Required Reconstruction	Leave Tree Area <1/4-acre
Riparian Mgt Zone	Optional Construction	Recreation Site
Forested Wetland	Optional Reconstruction	Survey Monument
Wetland Mgt Zone	Overhead Power Lines	Open Water
Hazard Abatement Area	DNR Designated Trail	

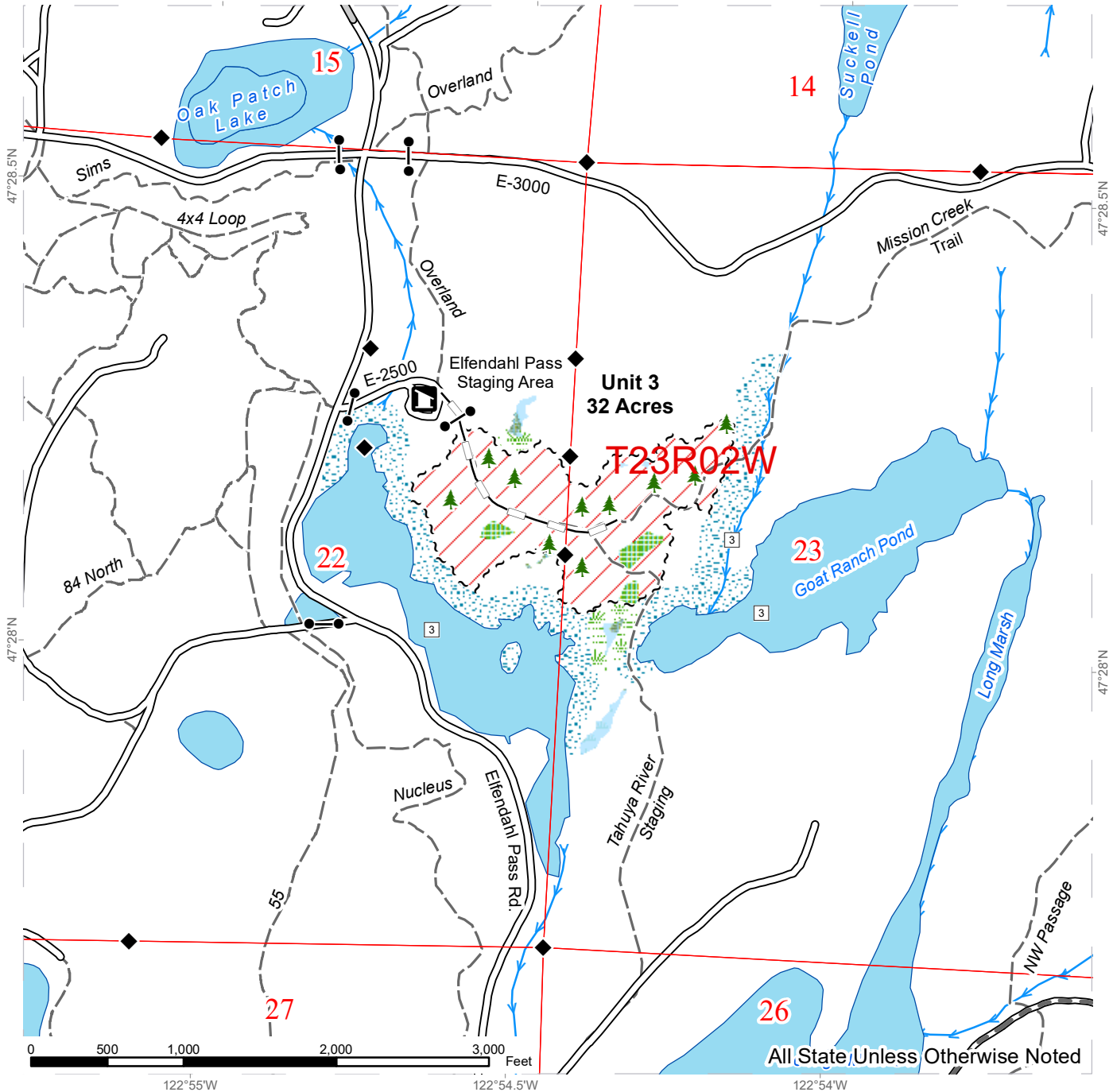


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122°55'W 122°54.5'W 122°54'W



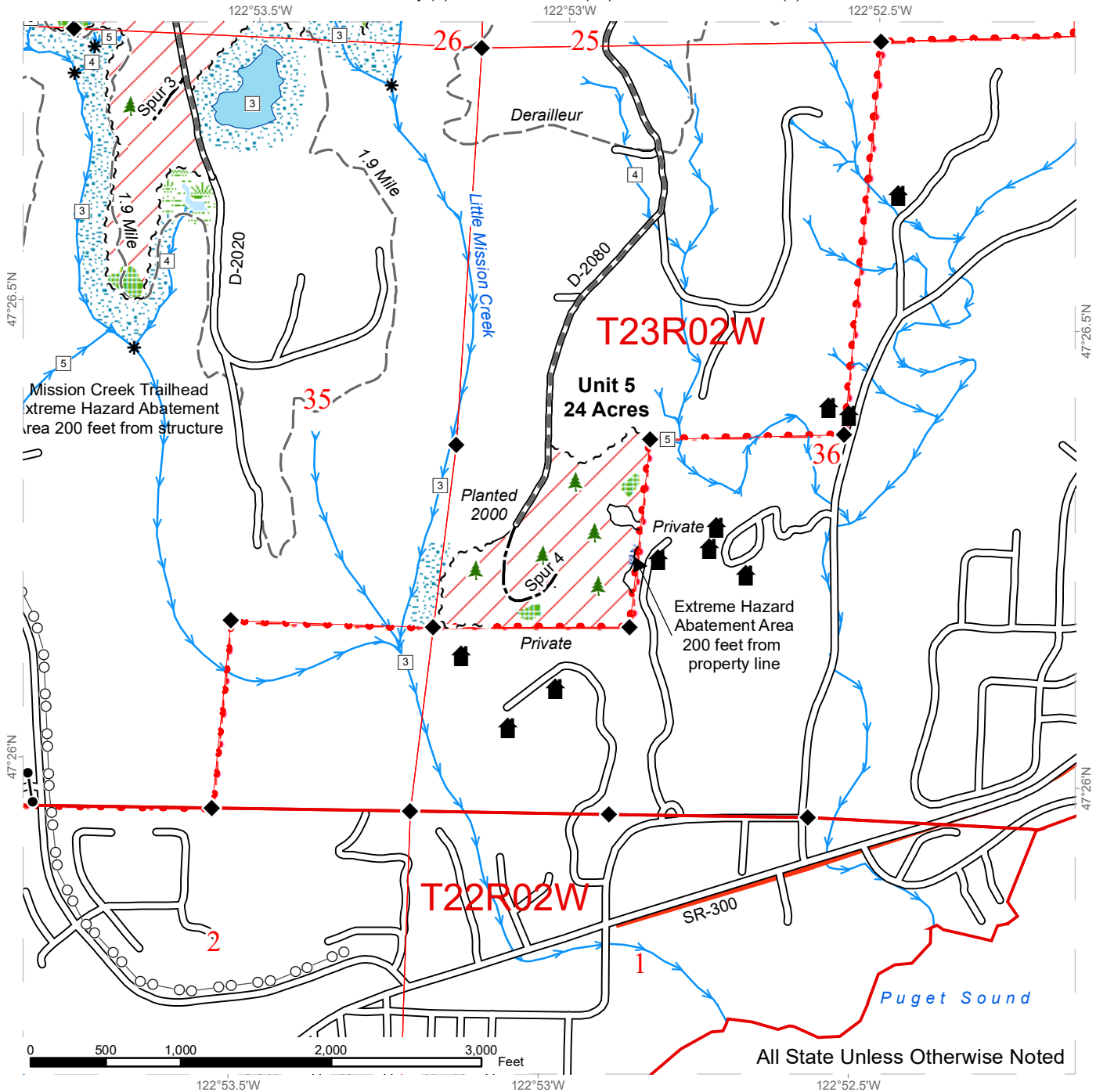
Sale Area	Sale Boundary Tags	Streams
Public Land Survey Townships	County Road	Stream Type
Public Land Survey Sections	Existing Roads	Stream Type Break
Leave Tree Area	Required Pre-Haul Maintenance	Gate (786)
Riparian Mgt Zone	Optional Reconstruction	Leave Tree Area <1/4-acre
Forested Wetland	DNR Designated Trail	Recreation Site
Wetland Mgt Zone		Survey Monument
		Open Water



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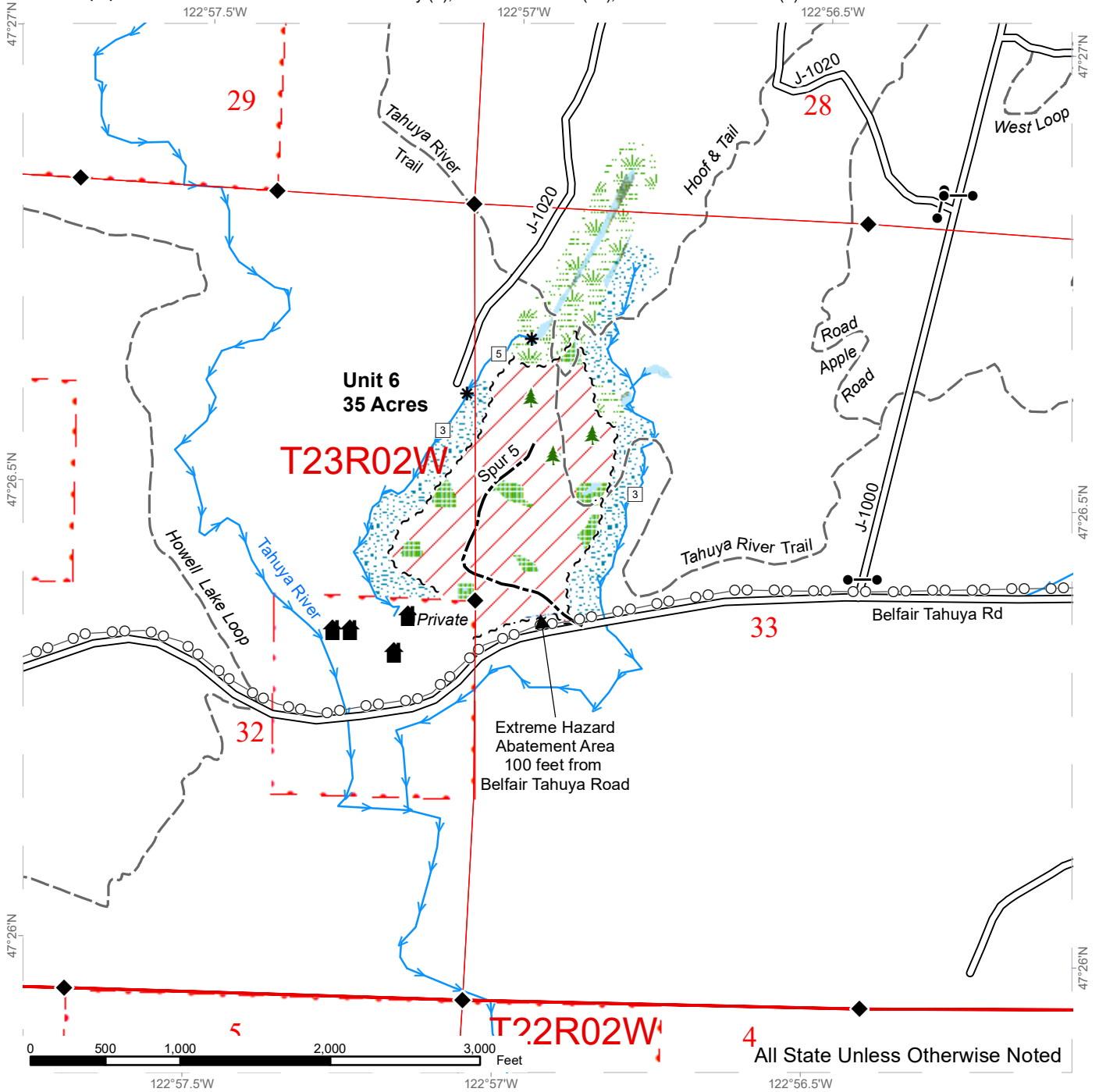
Sale Area	Sale Boundary Tags	Streams
Public Land Survey Townships	Property Line	Stream Type
Public Land Survey Sections	Timber Type Change	Stream Type Break
Wetlands - Non-forested	Existing Roads	Gate (786)
Leave Tree Area	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Riparian Mgt Zone	Optional Construction	Structure
Wetland Mgt Zone	Overhead Power Lines	Survey Monument
Hazard Abatement Area	DNR Designated Trail	Open Water



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Sale Area	Sale Boundary Tags	Streams
Public Land Survey Townships	Property Line	Stream Type
Public Land Survey Sections	Timber Type Change	Stream Type Break
Leave Tree Area	Existing Roads	Gate (786)
Riparian Mgt Zone	Optional Construction	Leave Tree Area <1/4-acre
Forested Wetland	Overhead Power Lines	Structure
Wetland Mgt Zone	DNR Designated Trail	Survey Monument
Hazard Abatement Area		

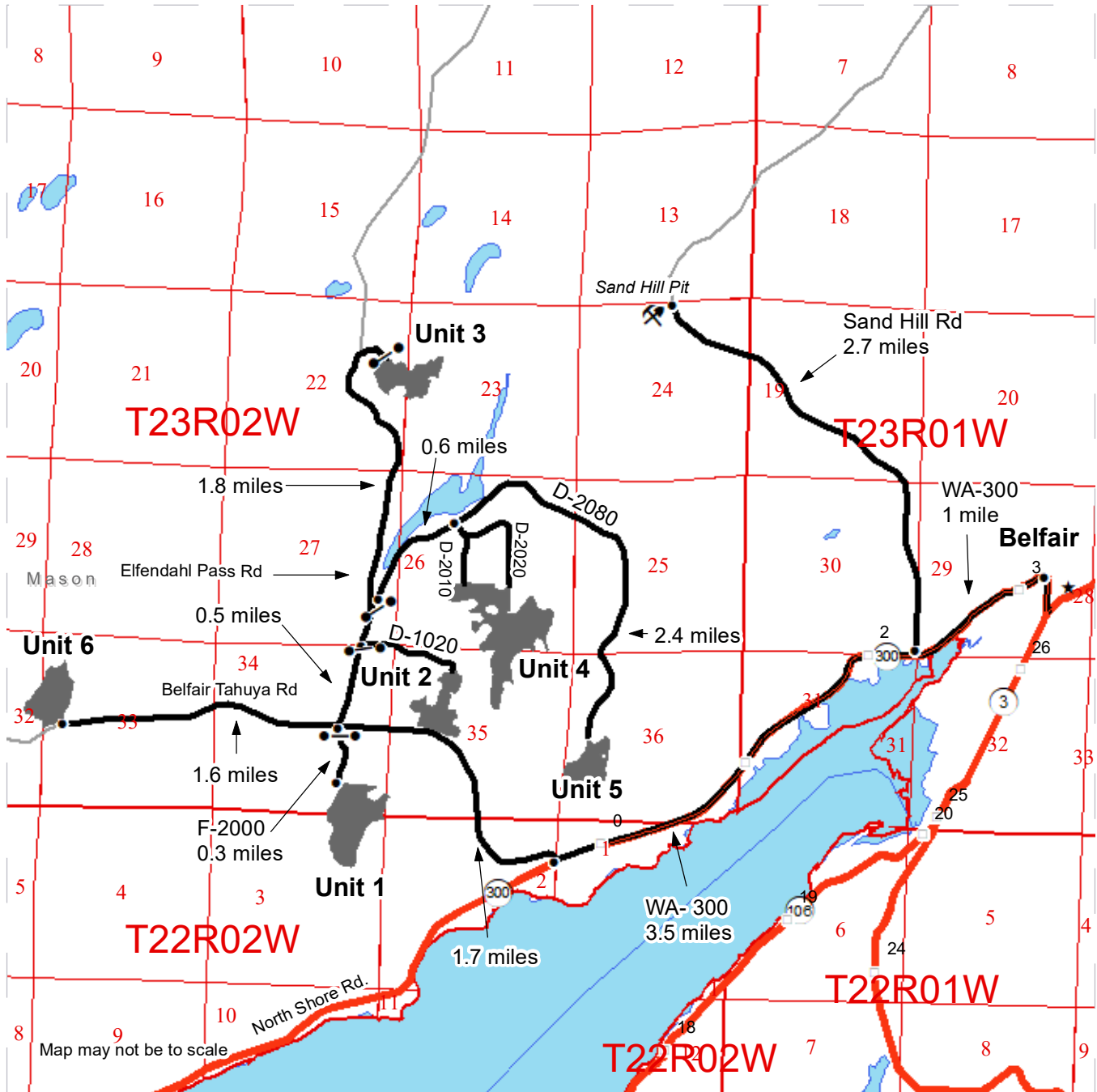




# DRIVING MAP

**SALE NAME:** TRAIL MIX  
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**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439



<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: gray; margin-right: 5px;"></span> Timber Sale Unit</li> <li><span style="display: inline-block; width: 15px; border-bottom: 2px solid black; margin-right: 5px;"></span> Haul Route</li> <li><span style="display: inline-block; width: 15px; border-bottom: 1px solid gray; margin-right: 5px;"></span> Other Road</li> <li><span style="display: inline-block; width: 15px; border-bottom: 3px solid orange; margin-right: 5px;"></span> Highway</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Milepost Markers</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> Distance Indicator</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%; border-style: dashed; margin-right: 5px;"></span> Gate (786)</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%; border-style: dashed; border-color: gray; margin-right: 5px;"></span> Rock Pit</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%; border-style: dashed; border-color: gray; margin-right: 5px;"></span> Town</li> <li><span style="display: inline-block; width: 15px; border-bottom: 1px solid red; margin-right: 5px;"></span> Survey - Section Lines</li> <li><span style="display: inline-block; width: 15px; border-bottom: 3px solid red; margin-right: 5px;"></span> Survey - Township Lines</li> </ul>	<p><b><u>DRIVING DIRECTIONS:</u></b></p> <p><b>Unit 1:</b> From Belfair, travel southwest on WA-300 W for 3.5 miles. Turn right onto Belfair Tahuya Rd. and follow for 1.7 miles. Turn left onto South Elfendahl Pass Rd. Turn left onto F-2000 and follow for 0.3 miles to reach unit.</p> <p><b>Unit 2:</b> From Belfair Tahuya turn right onto Elfendahl Pass Rd. Follow for 0.5 miles, turn right onto D-1020 and follow for 0.5 miles to reach unit.</p> <p><b>Unit 3:</b> Continue north on Elfendahl Pass Rd for 1.8 miles, turn right at the Elfendahl Pass staging area to access unit.</p> <p><b>Unit 4 and 5:</b> From Elfendahl Pass Rd. turn right onto D-2080. Follow for 0.6 miles and turn right to access Unit 4 via the D-2010 or D-2020. Continue straight on D-2080 for 2.4 miles to access Unit 5.</p> <p><b>Unit 6:</b> From WA-300 turn right onto Belfair Tahuya Rd. and follow for 11 miles to access unit.</p> <p><b>Rock Pit:</b> From Belfair, travel southwest along WA-300 for one mile. Turn right onto Sand Hill and follow for 2.7 miles to reach Sand Hill rock pit on the left.</p>
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**STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES**

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

**Export Restricted Lump Sum AGREEMENT NO. 30-0103627**

**SALE NAME: TRAIL MIX**

**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 December 12, 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 leave trees bounded out by yellow leave tree tags or marked with blue paint, and down trees greater than 5 years from day of sale, bounded by the following: white Timber Sale Boundary tags, timber type change marked with pink flagging, and the F-2000 Road in Unit #1; white Timber Sale Boundary tags, and timber type change marked with pink flagging in Unit #2; white Timber Sale Boundary tags in Unit #3, white Timber Sale Boundary tags, timber type change marked with pink flagging, and the D-2020 Road in Unit #4; white Timber Sale Boundary tags, timber type change marked with pink flagging, property line marked with white Carsonite posts, and the D-2080 Road in Unit #5; white Timber Sale Boundary tags, and property line marked with white Carsonite posts in Unit #6;

All forest products above located on approximately 261 acres on part(s) of Section 3 in Township 22 North, Range 2 West, Sections 22, 23, 26, 32, 33, 34, 35, and 36 all in Township 23 North, Range 2 West W.M. in Mason 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	Recreation Trail Repair and Cleanout

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 \$839.00 per acre per annum for the acres on which an operating release has not been issued within the harvest area.
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

#### G-053 Surveys - Sensitive, Threatened, Endangered Species

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

#### G-060 Exclusion of Warranties

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

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."
- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents are estimates only, provided solely for administrative and identification purposes.
- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The

descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.

- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any threatened or endangered species, or the presence of their habitat, within the sale area.
- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-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-115 Forest Stewardship Council® (FSC® C012959) Certification

Forest products purchased under this contract are FSC 100% certified as being in conformance with the Forest Stewardship Council Forest Management Standard under certificate number: BV-FM/COC-080501.

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

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

#### G-170 Assignment and Delegation

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

#### G-180 Modifications

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

#### G-190 Contract Complete

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

## G-200 Notice

Notices required to be given under the following clauses shall be in writing and shall be delivered to Purchaser's authorized agent or sent by certified mail to Purchaser's 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; the D-1000, D-1020, D-1022, D-2000, D-2010, D-2020, D-2030, D-2080, E-2500, and F-2000 roads, and Spurs 1-5. 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 E-2500 Road, unless authority is granted in writing by the Contract Administrator.

G-395 Road Approach Permit

Purchaser must enter into a road approach permit with Mason County.

Purchaser must provide the State with a copy of the executed permit, or a letter from Mason County, indicating that a satisfactory road approach permit has been consummated between Purchaser and Mason County.

G-396 Public Hauling Permit

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

G-430 Open Fires

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

G-450 Encumbrances

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

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

Section P: Payments and Securities

P-011 Initial Deposit

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

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$187,304.00. The total contract price consists of a \$0.00 contract bid price plus \$187,304.00 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-013 Reserve Tree Damage Definition

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

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

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

If the Contract Administrator determines that a reserve tree has been cut or damaged, the Purchaser shall provide a replacement reserve tree of like condition, size, and species within the sale 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 Units 1-6. The plan shall address the trail closures, extreme hazard abatement, snags along Belfair Tahuya Road, and potential Type 5 stream crossings, 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-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using ground based equipment, with self-leveling equipment limited to sustained slopes 65 percent or less, and other ground based equipment limited to sustained slopes of 45 percent or less. 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:

A. No operations shall occur outside the sale boundaries, as described within the contract.

B. Equipment limitation zones are required within 30 feet of Type 5 streams.

C. Crossings of Type 5 streams may be allowed at locations approved in writing by the Contract Administrator. Purchaser shall place a culvert or log puncheon at crossing locations (when water is present) to protect the stream bank and prevent sedimentation. All materials placed in and/or over the stream at these crossings shall be removed immediately upon completion of yarding on that skid trail.

D. Fell all snags inside the sale area within 200 feet of Belfair Tahuya Road, as directed by the Contract Administrator.

E. Any and all operations associated with this sale may be temporarily suspended when, in the opinion of the Contract Administrator, there is the potential for delivery to typed water.

F. Notify all employees and contractors working on this sale that any danger tree marked or unmarked may be felled. Any marked danger tree will be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.

G. Provide and maintain safety signs (“Active Logging Ahead,” “Heavy Truck Traffic,” “Trucks Entering Roadway”) on the haul route at locations to be determined by the Contract Administrator.

H. To facilitate proper reforestation in areas of high slash concentrations, purchaser shall, in concurrence with ground based yarding, clear plantable spots at a 12 foot by 12 foot spacing.

I. Falling, yarding, and timber haul will not be permitted on State recognized holidays or weekends in all units, nor weekdays from 7:00 p.m. to 7:00 a.m. in Units 1, 2, 4-6.

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

#### H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

A. Leave 2 down logs per acre. A log is defined as having a minimum diameter of 12 inches on the small end of the log and a minimum length of 20 feet or at least 100 board feet within Units 1-6.

B. Non-tradeable leave trees are marked with a double band of blue paint.

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.

**H-250 Additional Felling Requirements**

Within Units 1-6, all live stems 2 inches or greater, shall be felled concurrently with felling operations. Areas of young or immature timber may be excluded from this requirement 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 5/30/2023 are hereby made a part of this contract.

**C-050 Purchaser Road Maintenance and Repair**

Purchaser shall perform work at their own expense on the D-1000, D-1020, D-1022, D-2000, D-2010, D-2020, D-2080, E-2500, and F-2000 roads, and Spurs 1 - 5. 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 all other roads used not covered in clause C-050. 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-090 Landing Location**

Landings shall be built 75 feet off the F-2000, D-2010, D-2020, and D-2080 road(s).

**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-020 Extreme Hazard Abatement

Purchaser shall provide a written Extreme Hazard Abatement plan that meets the requirements of WAC 332-24 prior to the beginning of logging operations. The plan must be acceptable to the Contract Administrator. The plan will identify how Purchaser will accomplish abatement. Purchaser shall also provide, and keep current, a written timetable for completion of all specified work in the plan. The Contract Administrator's acceptance and approval of Purchaser's hazard abatement plan shall not be construed as any statement or warranty that the hazard abatement plan is adequate for Purchaser's purposes or complies with applicable laws.

Purchaser shall complete extreme hazard abatement according to WAC 332-24-650: 200 feet from structure at Mission Creek Trailhead in Unit #2, 200 feet from structures along property line in Unit #5, and 100 feet from Belfair-Tahuya Road in Unit #6.

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



## S-120 Stream Protection

No timber shall be felled into, across, or yarded through any stream, except at approved locations for Type 5 streams.

## 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 all units.

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

\_\_\_\_\_  
Don Melton, Acting  
South Puget Sound Region Manager

\_\_\_\_\_  
Print Name

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**  
**Recreation Trail Repair and Cleanout**

This schedule applies to the Mission Creek Staging, Tahuya River Staging, Tahuya River Trail, Overland Trail, and Mission Creek Trail.

Purchaser is responsible for closing trails with orange construction barricade netting and posting trail closure signs provided by DNR, at designated locations provided by the CA. Purchaser is responsible for giving five (5) calendar days notice before closing the trail.

Purchaser is responsible for locating and marking the recreation trail within the sale boundary on the ground prior to harvest as approved by the CA.

- If needed upon completion of harvest activities, Purchaser shall locate the original recreation trail with pink fluorescent flagging. The CA will then approve the trail location in writing and repair/clean out can begin.

Recreation trail repair/clean out shall occur within 2 weeks of completion of harvest activity within 200 feet of the trail and shall consist of the following:

- Remove all logging debris from the recreation trail and the area on each side of the trail within 5 feet of the travel path.
- Trail will be repaired where holes or ruts resulted due to logging damage. The trail will be returned to its original width on mineral soils and free of organic debris.
- Existing drainage control measures shall be returned to pre-harvest condition. Any Geoweb structures damaged during the logging operation will be replaced or repaired to pre-harvest condition.

All work described above shall be done as determined by the CA. The logging release for the unit will not be issued until repair and clean out is completed and approved in writing by the CA.



**WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES**  
**FOREST EXCISE TAX ROAD SUMMARY SHEET**

**Region:** South Puget Sound

**Timber Sale Name:** Trail Mix

**Application Number:** 30-103627

**EXCISE TAX APPLICABLE ACTIVITIES**

**Construction:** 0 linear feet  
*Road to be constructed (optional and required) but not abandoned*

**Reconstruction:** 1,830 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** 37,299 near feet  
*Existing road to receive maintenance work (optional and required) prior to haul*

**EXCISE TAX EXEMPT ACTIVITIES**

**Temporary Construction:** 4,465 linear feet  
*Roads to be constructed (optional and required) and then abandoned*

1,012 linear feet  
**Temporary Reconstruction:**  
*Roads to be reconstructed (optional and required) and then abandoned*

All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contact. 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 9/18)

# PRE-CRUISE NARRATIVE

Sale Name: <b>Trail Mix</b>	Region: <b>South Puget Sound</b>
Agreement #: <b>30-103627</b>	District: <b>Hood Canal</b>
Contact Forester: <b>Austin Haworth</b>	Phone: <b>360-552-8957</b>
Alternate Contact: <b>John Coble</b>	Phone: <b>360-801-6915</b>

Type of Sale: <b>lump sum</b> Evaluated for RFRS Implementation?: <b>Yes</b>  Percentage cable-uphill: <b>0%</b> Percentage cable-downhill: <b>0%</b> Percentage ground based: <b>100%</b>  Species Onsite: <input checked="" type="checkbox"/> RC, <input checked="" type="checkbox"/> DF, <input checked="" type="checkbox"/> WH, <input checked="" type="checkbox"/> RA, <input type="checkbox"/> BC, <input checked="" type="checkbox"/> BLM, <input type="checkbox"/> NF, <input type="checkbox"/> SF, <input type="checkbox"/> SS, <input type="checkbox"/> Other:(Please List)
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## UNIT ACREAGES\* AND METHOD OF DETERMINATION:

Unit #	Harvest R/W or RMZ WMZ	Legal Description Sec/Twp/Rng	Grant	Gross Traversed Acres	Deductions from Gross Acres (No harvest acres)			Net Harvest Acres	Acreage Determination (List method, dimensions and error of closure if applicable)	
					RMZ/WMZ Acres	Leave Tree Acres	Existing Road Acres			Other Acres (describe)
1		Sec 3 / T 22N / R02W Sec 34 / T 23N / R02W Sec 35 / T 23N / R02W	01	61.9	0	5.6	0	0	56.3	GPS (Garmin 64s and Trimble R1)
2		Sec 35 / T 23N / R02W	01 10	33.0	0	3.2	0	0	29.8	GPS (Garmin 64s and Trimble R1)
3		Sec 22 / T 23N / R02W Sec 23 / T 23N / R02W	01	34.3	0	2.3	0	0	32.0	GPS (Garmin 64s and Trimble R1)
4		Sec 26 / T 23N / R02W Sec 35 / T 23N / R02W	01 10	99.6	2.3	12.3	1.4	0	83.6	GPS (Garmin 64s and Trimble R1)
5		Sec 36 / T 23N / R02W	03	25.9	0	1.4	0	0	24.5	GPS (Garmin 64s and Trimble R1)
6		Sec 32 / T 23N / R02W Sec 33 / T 23N / R02W	01	39.1	0	4.0	0	0	35.1	GPS (Garmin 64s and Trimble R1)
<b>TOTAL ACRES</b>				293.8	2.3	28.8	1.4	0	261.3	

## HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Mark leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.) *For all marked thinnings, include a tree count by species.
1	<b>Variable Retention Harvest (VRH):</b> Boundaries are marked with white "Timber Sale Boundary" tags with pink flagging and pink flashers. Timber type change is marked with pink flagging. Boundary along the F-2000 road is marked with pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags with pink flagging and pink flashers. Individual leave trees are marked with a single band of blue paint. Non-tradeable leave trees are marked with two bands	N/A	Clumped LTs: 503 Scattered Individual LTs: 27 Total LTs: 530

	of blue paint.		
2	<b>Variable Retention Harvest (VRH):</b> Boundaries are marked with white “Timber Sale Boundary” tags with pink flagging and pink flashers. Timber type change is marked with pink flagging. Clumped leave trees are marked with yellow “Leave Tree Area” tags with pink flagging and pink flashers. Individual leave trees are marked with a single band of blue paint. Non-tradeable leave trees are marked with two bands of blue paint.	N/A	Clumped LTs: 230 Scattered Individual LTs: 54 Total LTs: 284
3	<b>Variable Retention Harvest (VRH):</b> Boundaries are marked with white “Timber Sale Boundary” tags with pink flagging and pink flashers. Clumped leave trees are marked with yellow “Leave Tree Area” tags with pink flagging and pink flashers. Individual leave trees are marked with a single band of blue paint. Non-tradeable leave trees are marked with two bands of blue paint.	N/A	Clumped LTs: 257 Scattered Individual LTs: 15 Total LTs: 272
4	<b>Variable Retention Harvest (VRH):</b> Boundaries are marked with white “Timber Sale Boundary” tags with pink flagging and pink flashers. Timber type change is marked with pink flagging. Boundary along the D-2020 road is marked with pink flagging. Clumped leave trees are marked with yellow “Leave Tree Area” tags with pink flagging and pink flashers. Individual leave trees are marked with a single band of blue paint. Non-tradeable leave trees are marked with two bands of blue paint.	N/A	Clumped LTs: 778 Scattered Individual LTs: 23 Total LTs: 801
5	<b>Variable Retention Harvest (VRH):</b> Boundaries are marked with white “Timber Sale Boundary” tags with pink flagging and pink flashers. Timber type change is marked with pink flagging. Boundary along the D-2080 road is marked with pink flagging. Boundary along private property is marked with pink flagging and carsonite DNR boundary posts. Clumped leave trees are marked with yellow “Leave Tree Area” tags with pink flagging and pink flashers. Individual leave trees are marked with a single band of blue paint. Non-tradeable leave trees are marked with two bands of blue paint.	N/A	Clumped LTs: 210 Scattered Individual LTs: 4 Total LTs: 214
6	<b>Variable Retention Harvest (VRH):</b> Boundaries are marked with white “Timber Sale Boundary” tags with pink flagging and pink flashers. Boundary along private property is marked with pink flagging and carsonite DNR boundary posts. Clumped leave trees are marked with yellow	N/A	Clumped LT's: 306 Scattered Individual LTs: 10 Total LTs: 316



	<p>"Leave Tree Area" tags with pink flagging and pink flashers. Individual leave trees are marked with a single band of blue paint. Non-tradeable leave trees are marked with two bands of blue paint.</p>		
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**OTHER PRE-CRUISE INFORMATION:**

Unit #	Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	See Cruise	Gate #: 112 (786) Park along F-2000	Available at Belfair Office
2		Gate #:115 (786) Park on D-1020 Alternatively, park at gate #111 off Belfair Tahuya Rd.	Available at Belfair Office
3		Gate #124: Always Open Park at end of E-2500	Available at Belfair Office
4		Gate #: 116 (786) Park along D-2010 or D-2020	Available at Belfair Office
5		Gate #: 116 (786) Park at the end of D-2080	Available at Belfair Office
6		Gate #: 120, 134 (786) Park at end of J-1020	Available at Belfair Office

**REMARKS:**

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<p><b>Prepared By: Austin Haworth</b> <b>Date: 04/18/2023</b></p>	<p><b>Title: Forester</b></p>	<p><b>CC: Nathan McReynolds</b></p>
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*Revised 2/23/2007 (PSLD), Revised 1/22/20 (SPS)*

## Timber Sale Cruise Report Trail Mix

**Sale Name:** TRAIL MIX

**Sale Type:** LUMP SUM

**Region:** SO PUGET

**District:** HOOD CANAL

**Lead Cruiser:** Aaron Coleman

**Other Cruisers:** Mike Sly

**Cruise Narrative:**

This sale consists of 6 variable retention harvest (VRH) units located off the F-2000, E-2500, D-2080, and the J-1020 within the Tahuya State Forest.

The primary species for this sale is:

Douglas-fir (98%) with an average diameter of 17 inches.

As good as it gets in the Tahuya: 6 DF-dominated stands full of high quality logs. Pole-quality trees present, but because of their abundance they were not cruised as such on the VP plots. This is shovel ground with favorable logging conditions. A plethora of morale-boosting trails within each unit aid in travel. Overall defect was low, but consisted mostly of scattered bear damage.

All roads to this sale are in good condition and there are good access points into all units. A 786 key was needed to access the gates.

### Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	17.3	8.4		7,061	72	3,318	2,976	658	37
LP	15.2			82		17	41	24	
WP	18.6			24		10	8	6	
WH	9.1			17				11	7
BC	14.0			12		9		3	
RA	10.9			8				8	
ALL	17.0	8.4		7,204	72	3,354	3,024	710	44

### Timber Sale Notice Weight (tons)

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	53,156	385	22,843	23,394	6,275	259
LP	751		131	356	264	
WH	165				117	48
WP	153		47	64	42	
RA	97				97	

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
BC	73		48		25	
ALL	54,396	385	23,068	23,814	6,821	307

### Timber Sale Overall Cruise Statistics

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
184.5	3.2	150.0	1.5	27,569	3.5

### Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
TRAIL MIX U1	B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 0 ft	56.3	62.0	34	22	2
TRAIL MIX U2	B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	29.8	33.0	16	10	1
TRAIL MIX U3	B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	32.0	34.3	18	10	0
TRAIL MIX U4	B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	83.6	99.6	42	25	1
TRAIL MIX U5	B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	24.5	25.8	16	8	0
TRAIL MIX U6	B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	35.1	39.1	19	10	1
All		261.3	293.8	145	85	5

### Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
BC	LIVE	2 SAW	Domestic	10.0	32	34	34	0.0	48.1	8.9
BC	LIVE	4 SAW	Domestic	5.3	40	12	12	0.0	24.9	3.1
DF	LIVE	2 SAW	Domestic	15.1	38	5,639	5,441	3.5	9,720.6	1,421.8
DF	LIVE	2 SAW	HQ-A	14.8	32	1,422	1,422	0.0	2,329.5	371.6
DF	LIVE	2 SAW	HQ-B	13.8	40	5,903	5,835	1.1	10,792.8	1,524.6
DF	LIVE	3 SAW	Domestic	8.5	37	4,865	4,815	1.0	10,526.6	1,258.1
DF	LIVE	3 SAW	HQ-B	10.2	39	6,644	6,573	1.1	12,867.1	1,717.5
DF	LIVE	4 SAW	Domestic	5.7	28	2,530	2,519	0.4	6,275.3	658.3
DF	LIVE	CULL	Cull	14.7	14	57	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	22.4	34	277	277	0.0	384.8	72.3

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	UTILITY	Pulp	6.3	22	142	142	0.0	259.0	37.1
LP	LIVE	2 SAW	Domestic	14.1	40	79	67	15.0	131.0	17.4
LP	LIVE	3 SAW	Domestic	8.4	36	170	155	8.7	356.1	40.6
LP	LIVE	4 SAW	Domestic	5.6	30	93	90	3.7	264.3	23.5
LP	LIVE	CULL	Cull	14.8	6	5	0	100.0	0.0	0.0
RA	LIVE	4 SAW	Domestic	5.3	32	31	31	2.4	97.2	8.0
WH	LIVE	4 SAW	Domestic	5.2	31	41	41	0.0	117.4	10.8
WH	LIVE	UTILITY	Pulp	5.4	24	25	25	0.0	47.7	6.5
WP	LIVE	2 SAW	Domestic	15.0	40	39	36	7.3	46.5	9.5
WP	LIVE	3 SAW	Domestic	8.9	33	30	30	0.0	64.4	7.8
WP	LIVE	4 SAW	Domestic	6.8	37	26	25	5.1	42.2	6.4
WP	LIVE	CULL	Cull	19.7	6	10	0	100.0	0.0	0.0

### Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
BC	5 - 7	LIVE	Domestic	5.3	40	12	0.0	24.9	3.1
BC	8 - 11	LIVE	Domestic	10.0	32	34	0.0	48.1	8.9
DF	5 - 7	LIVE	Pulp	5.3	24	116	0.0	215.3	30.2
DF	5 - 7	LIVE	Domestic	6.0	32	4,197	0.4	10,257.3	1,096.6
DF	8 - 11	LIVE	Domestic	9.7	34	3,113	1.3	6,499.0	813.5
DF	8 - 11	LIVE	HQ-B	10.2	39	6,573	1.1	12,867.1	1,717.5
DF	8 - 11	LIVE	Pulp	11.3	16	26	0.0	43.7	6.9
DF	12 - 15	LIVE	HQ-B	13.4	40	4,733	0.6	8,897.5	1,236.7
DF	12 - 15	LIVE	Domestic	13.7	38	2,656	1.5	4,934.1	693.9
DF	12 - 15	LIVE	HQ-A	13.7	32	913	0.0	1,620.8	238.6
DF	12 - 15	LIVE	Cull	13.8	16	0	100.0	0.0	0.0
DF	16 - 19	LIVE	Cull	17.5	6	0	100.0	0.0	0.0
DF	16 - 19	LIVE	HQ-B	17.6	40	1,036	3.0	1,772.5	270.8
DF	16 - 19	LIVE	Domestic	17.7	39	2,037	5.9	3,684.8	532.3
DF	16 - 19	LIVE	HQ-A	18.0	33	389	0.0	567.3	101.7
DF	20+	LIVE	HQ-B	21.2	40	66	10.0	122.7	17.1
DF	20+	LIVE	Domestic	21.4	39	773	3.5	1,147.3	201.9
DF	20+	LIVE	HQ-A	23.2	32	396	0.0	526.3	103.6
LP	5 - 7	LIVE	Domestic	5.9	31	136	4.0	379.9	35.5
LP	8 - 11	LIVE	Domestic	9.2	34	110	10.3	240.4	28.6
LP	12 - 15	LIVE	Domestic	14.1	40	67	15.0	131.0	17.4
LP	12 - 15	LIVE	Cull	14.8	6	0	100.0	0.0	0.0

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
RA	5 - 7	LIVE	Domestic	5.3	32	31	2.4	97.2	8.0
WH	5 - 7	LIVE	Domestic	5.2	33	41	0.0	117.4	10.8
WH	5 - 7	LIVE	Pulp	5.4	24	25	0.0	47.7	6.5
WP	5 - 7	LIVE	Domestic	5.8	30	12	0.0	22.8	3.2
WP	8 - 11	LIVE	Domestic	9.9	40	42	3.1	83.8	11.0
WP	12 - 15	LIVE	Domestic	15.0	40	36	7.3	46.5	9.5
WP	16 - 19	LIVE	Cull	19.7	6	0	100.0	0.0	0.0

## Cruise Unit Report TRAIL MIX U1

### Unit Sale Notice Volume (MBF): TRAIL MIX U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	16.3			1,265	52	555	463	189	7
LP	13.2			39			18	21	
BC	14.0			12		9		3	
RA	10.9			8				8	
WH	10.0			4				4	
ALL	15.5			1,328	52	564	481	225	7

### Unit Cruise Design: TRAIL MIX U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 0 ft	56.3	62.0	34	22	2

### Unit Cruise Summary: TRAIL MIX U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	78	126	3.7	0
LP	9	9	0.3	0
BC	1	1	0.0	0
RA	2	2	0.1	0
WH	1	1	0.0	0
ALL	91	139	4.1	0

### Unit Cruise Statistics: TRAIL MIX 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	174.0	58.1	10.0	129.2	39.0	4.4	22,473	70.0	10.9
LP	12.4	268.1	46.0	55.8	37.1	12.4	694	270.6	47.6
BC	1.4	583.1	100.0	154.3	0.0	0.0	213	583.1	100.0
RA	2.8	406.0	69.6	51.5	29.6	20.9	142	407.1	72.7
WH	1.4	583.1	100.0	51.3	0.0	0.0	71	583.1	100.0
ALL	191.9	44.8	7.7	122.9	43.5	4.6	23,593	62.5	8.9

**Unit Summary: TRAIL MIX U1**

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
BC	LIVE	CUT	1	ALL	14.0	76	98	213	213	0.0	1.3	1.4	0.4	12.0
DF	LIVE	CUT	78	ALL	16.3	62	79	22,630	22,473	0.7	120.0	174.0	43.1	1,265.2
LP	LIVE	CUT	9	ALL	13.2	43	56	751	694	7.6	13.1	12.4	3.4	39.0
RA	LIVE	CUT	2	ALL	10.9	35	51	146	142	2.4	4.3	2.8	0.8	8.0
WH	LIVE	CUT	1	ALL	10.0	27	37	71	71	0.0	2.5	1.4	0.4	4.0
ALL	LIVE	CUT	91	ALL	15.8	59	76	23,811	23,593	0.9	141.2	191.9	48.1	1,328.3
ALL	ALL	ALL	91	ALL	15.8	59	76	23,811	23,593	0.9	141.2	191.9	48.1	1,328.3

## Cruise Unit Report TRAIL MIX U2

### Unit Sale Notice Volume (MBF): TRAIL MIX U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	16.2			831	21	326	385	99
ALL	16.2			831	21	326	385	99

### Unit Cruise Design: TRAIL MIX U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	29.8	33.0	16	10	1

### Unit Cruise Summary: TRAIL MIX U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	40	64	4.0	0
ALL	40	64	4.0	0

### Unit Cruise Statistics: TRAIL MIX 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	187.8	40.8	10.2	148.5	24.0	3.8	27,877	47.4	10.9
ALL	187.8	40.8	10.2	148.5	24.0	3.8	27,877	47.4	10.9

### Unit Summary: TRAIL MIX U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	40	ALL	16.2	81	101	28,494	27,877	2.2	131.2	187.8	46.6	830.7
ALL	LIVE	CUT	40	ALL	16.2	81	101	28,494	27,877	2.2	131.2	187.8	46.6	830.7
ALL	ALL	ALL	40	ALL	16.2	81	101	28,494	27,877	2.2	131.2	187.8	46.6	830.7



## Cruise Unit Report TRAIL MIX U3

### Unit Sale Notice Volume (MBF): TRAIL MIX U3

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	17.3	9.0		820	346	393	81
LP	18.2			35	17	14	3
WP	18.6			24	10	8	6
ALL	17.4	9.0		878	373	415	90

### Unit Cruise Design: TRAIL MIX U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	32.0	34.3	18	10	0

### Unit Cruise Summary: TRAIL MIX U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	37	67	3.7	1
LP	3	3	0.2	0
WP	2	2	0.1	0
ALL	42	72	4.0	1

### Unit Cruise Statistics: TRAIL MIX 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	174.7	40.0	9.4	146.7	23.9	3.9	25,627	46.6	10.2
LP	7.8	230.1	54.2	137.9	15.3	8.8	1,079	230.6	54.9
WP	5.2	291.0	68.6	142.0	30.8	21.8	741	292.7	72.0
ALL	187.8	34.3	8.1	146.2	23.2	3.6	27,447	41.4	8.8

### Unit Summary: TRAIL MIX U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	37	ALL	17.3	93	105	26,186	25,627	2.1	107.0	174.7	42.0	820.1
LP	LIVE	CUT	3	ALL	18.2	99	113	1,244	1,079	13.2	4.3	7.8	1.8	34.5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WP	LIVE	CUT	2	ALL	18.6	104	114	856	741	13.5	2.8	5.2	1.2	23.7
ALL	LIVE	CUT	42	ALL	17.4	93	105	28,286	27,447	3.0	114.1	187.8	45.1	878.3
ALL	ALL	ALL	42	ALL	17.4	93	105	28,286	27,447	3.0	114.1	187.8	45.1	878.3

## Cruise Unit Report TRAIL MIX U4

### Unit Sale Notice Volume (MBF): TRAIL MIX U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	17.7	8.0		2,269	1,092	1,000	177
LP	12.0			8		8	
ALL	17.6	8.0		2,277	1,092	1,008	177

### Unit Cruise Design: TRAIL MIX U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	83.6	99.6	42	25	1

### Unit Cruise Summary: TRAIL MIX U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	78	152	3.6	1
LP	1	1	0.0	0
ALL	79	153	3.6	1

### Unit Cruise Statistics: TRAIL MIX 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	169.9	36.1	5.6	159.8	19.6	2.2	27,142	41.1	6.0
LP	1.1	648.1	100.0	85.3	0.0	0.0	95	648.1	100.0
ALL	171.0	36.3	5.6	159.3	20.2	2.3	27,237	41.5	6.0

### Unit Summary: TRAIL MIX U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	78	ALL	17.7	85	107	27,517	27,142	1.4	99.4	169.9	40.4	2,269.0
LP	LIVE	CUT	1	ALL	12.0	66	82	102	95	6.9	1.4	1.1	0.3	8.0
ALL	LIVE	CUT	79	ALL	17.6	85	107	27,620	27,237	1.4	100.8	171.0	40.7	2,277.0
ALL	ALL	ALL	79	ALL	17.6	85	107	27,620	27,237	1.4	100.8	171.0	40.7	2,277.0

## Cruise Unit Report TRAIL MIX U5

### Unit Sale Notice Volume (MBF): TRAIL MIX U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	20.1	9.0		803	492	270	42
ALL	20.1	9.0		803	492	270	42

### Unit Cruise Design: TRAIL MIX U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	24.5	25.8	16	8	0

### Unit Cruise Summary: TRAIL MIX U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	29	61	3.8	1
ALL	29	61	3.8	1

### Unit Cruise Statistics: TRAIL MIX 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	179.0	34.8	8.7	183.2	19.3	3.6	32,791	39.8	9.4
ALL	179.0	34.8	8.7	183.2	19.3	3.6	32,791	39.8	9.4

### Unit Summary: TRAIL MIX U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	29	ALL	20.1	96	122	33,696	32,791	2.7	81.2	179.0	39.9	803.4
ALL	LIVE	CUT	29	ALL	20.1	96	122	33,696	32,791	2.7	81.2	179.0	39.9	803.4
ALL	ALL	ALL	29	ALL	20.1	96	122	33,696	32,791	2.7	81.2	179.0	39.9	803.4

## Cruise Unit Report TRAIL MIX U6

### Unit Sale Notice Volume (MBF): TRAIL MIX U6

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	16.2			1,073	507	464	71	30
WH	8.8			13			7	7
ALL	15.4			1,086	507	464	78	37

### Unit Cruise Design: TRAIL MIX U6

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (46.94) Measure/Count Plots, Sighting Ht = 4.5 ft	35.1	39.1	19	10	1

### Unit Cruise Summary: TRAIL MIX U6

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	40	80	4.2	0
WH	2	2	0.1	0
ALL	42	82	4.3	0

### Unit Cruise Statistics: TRAIL MIX U6

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	197.6	34.1	7.8	154.6	26.2	4.1	30,561	43.0	8.9
WH	4.9	299.5	68.7	76.7	4.0	2.8	379	299.6	68.8
ALL	202.6	35.4	8.1	152.7	28.1	4.3	30,940	45.2	9.2

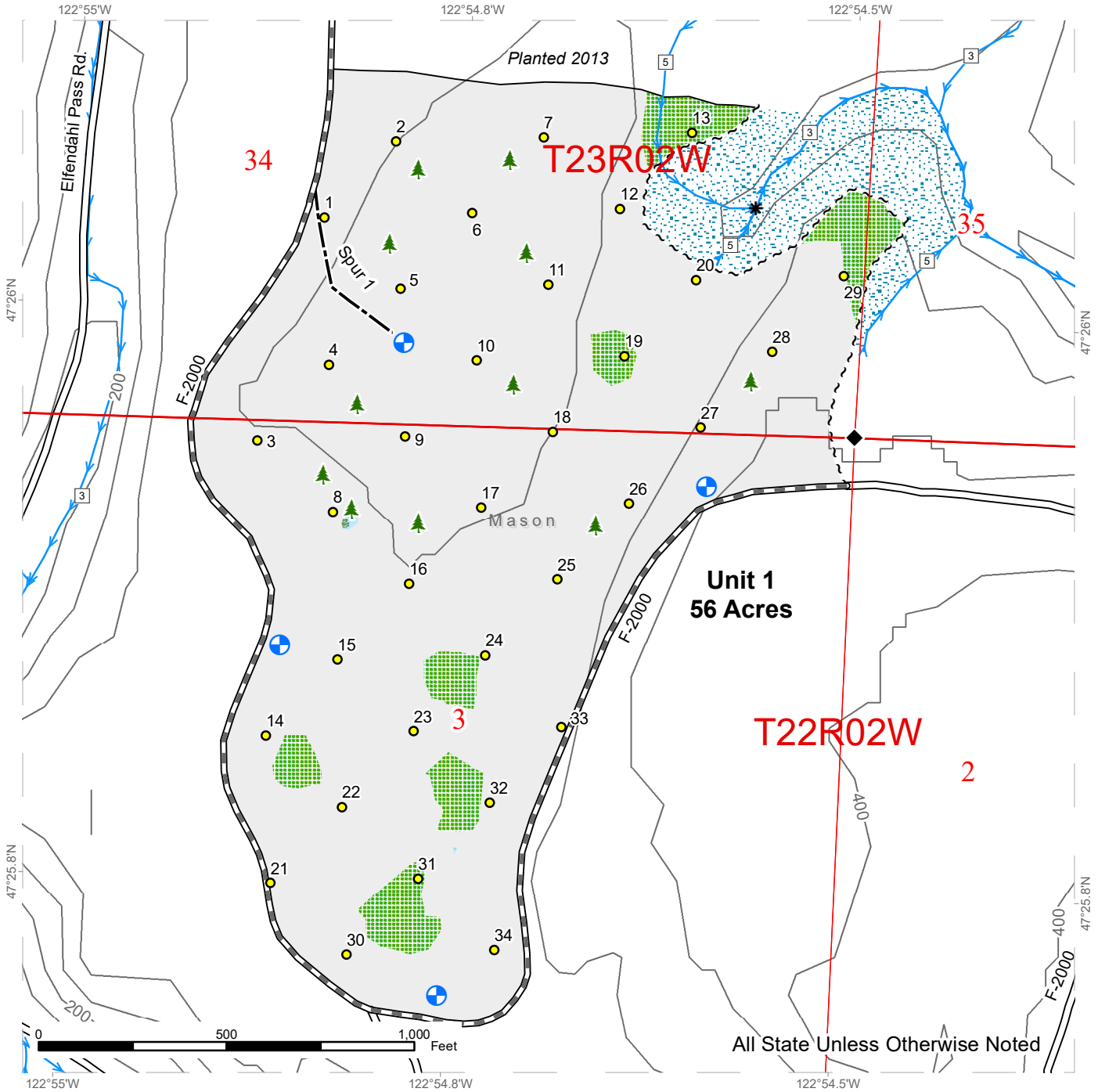
### Unit Summary: TRAIL MIX U6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	40	ALL	16.2	81	101	31,134	30,561	1.8	138.1	197.6	49.1	1,072.7
WH	LIVE	CUT	2	ALL	8.8	50	60	379	379	0.0	11.7	4.9	1.7	13.3
ALL	LIVE	CUT	42	ALL	15.7	79	98	31,513	30,940	1.8	149.8	202.6	50.8	1,086.0
ALL	ALL	ALL	42	ALL	15.7	79	98	31,513	30,940	1.8	149.8	202.6	50.8	1,086.0

# CRUISE MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT#:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
**TRUST(S):** Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439

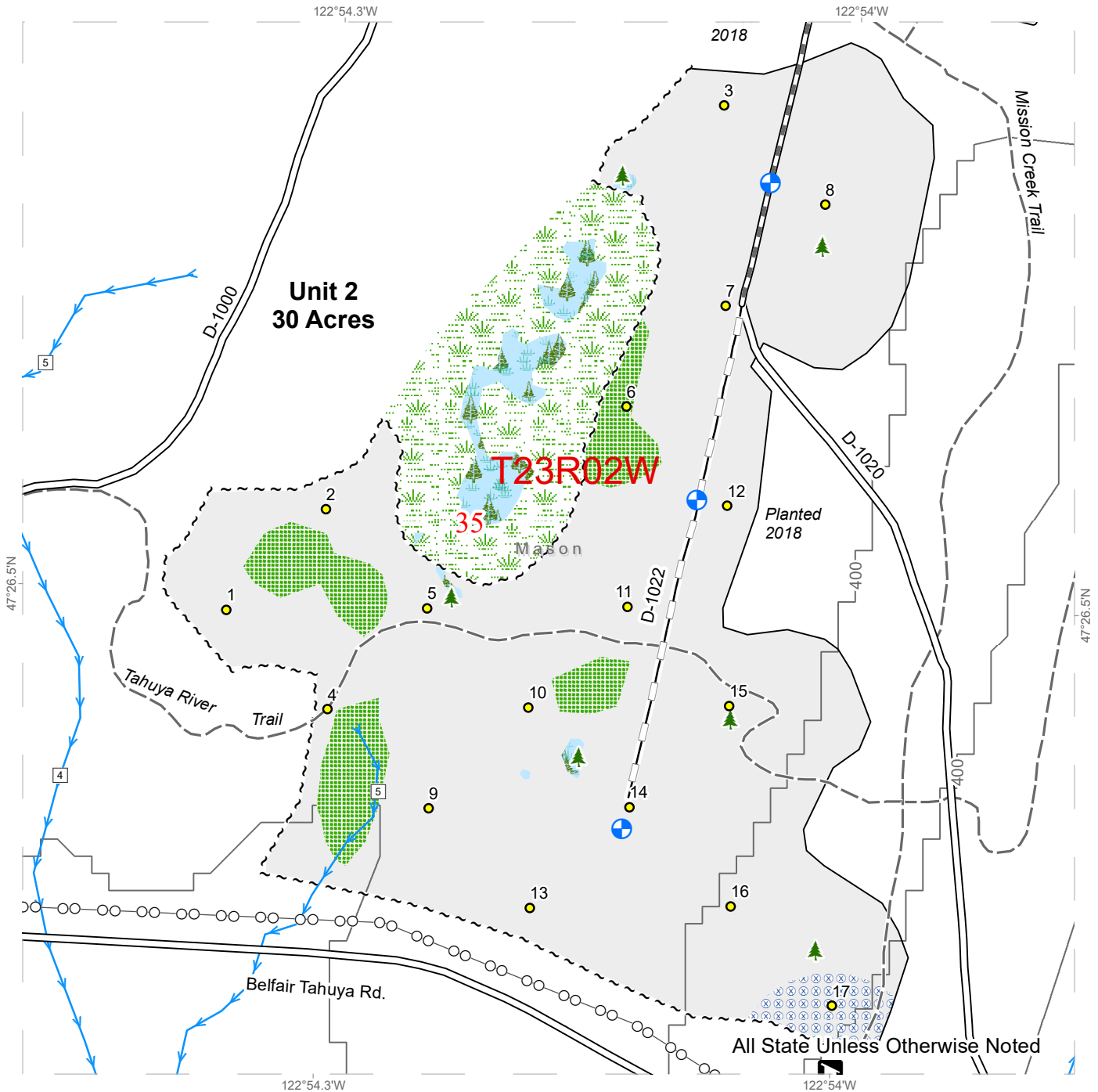


Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Ground Harvest	Optional Construction	Survey Monument
Forested Wetland	Streams	Stream Type	
Leave Tree Area	Stream Type Break		
Riparian Mgt Zone			
Contours 40-foot			

# CRUISE MAP

**SALE NAME:** TRAIL MIX  
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**TOWNSHIP(S):** T22R2W, T23R2W  
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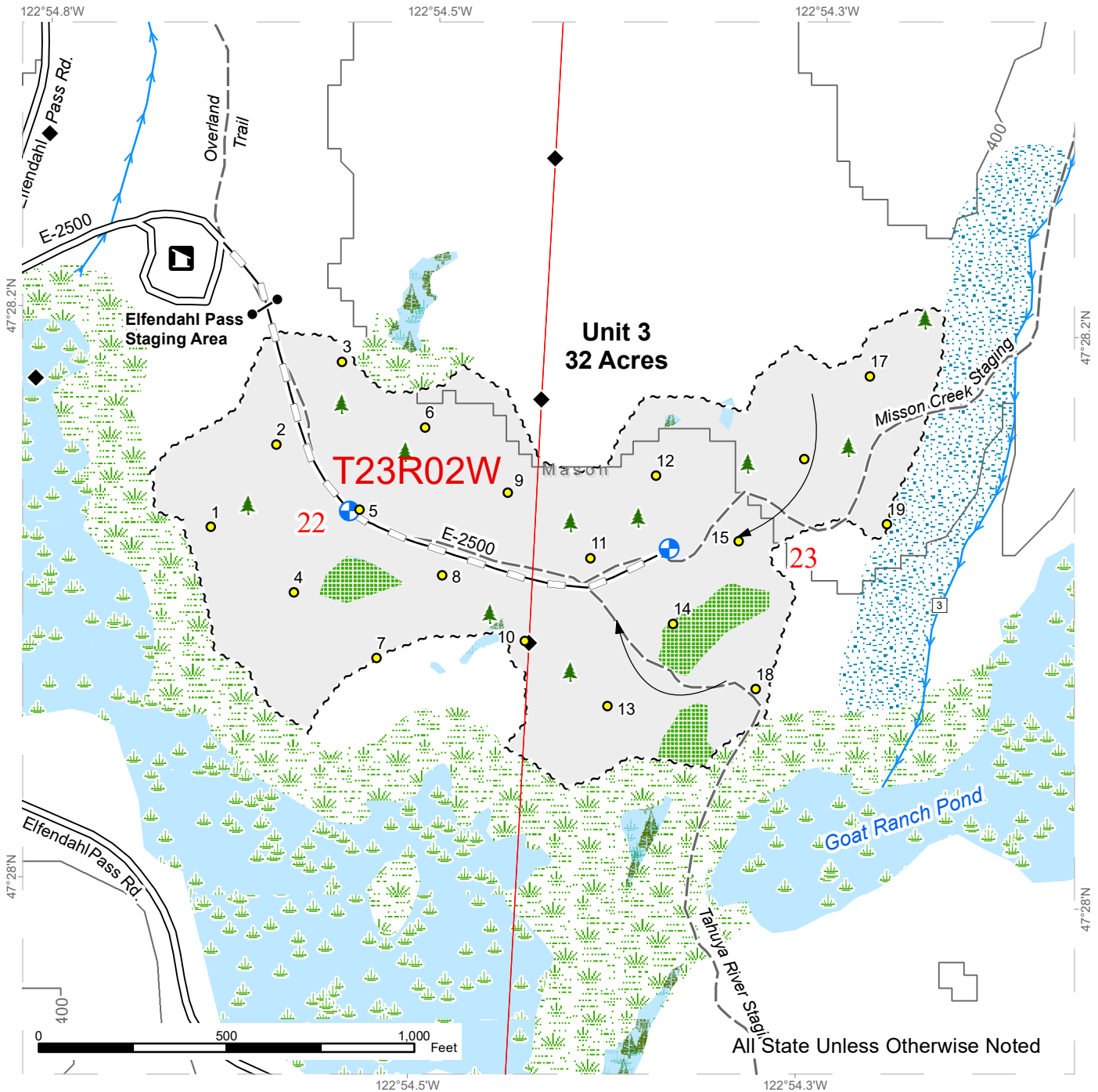


Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Ground Harvest	Optional Reconstruction	Recreation Site
Wetland Mgt Zone	Streams		Power Lines
Forested Wetland			Trail
Leave Tree Area			
Hazard Abatement Area			
Contours 40-foot			

# CRUISE MAP

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**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439



All State Unless Otherwise Noted

Sale Area	Sale Boundary Tags	Existing Roads	Gate (786)
Public Land Survey Sections	Ground Harvest	Optional Reconstruction	Landing - Proposed
Public Land Survey Townships	Streams	Survey Monument	Leave Tree Area <1/4-acre
Wetlands - Non-forested	Stream Type	Recreation Site	Trail
Wetland Mgt Zone			
Forested Wetland			
Leave Tree Area			
Riparian Mgt Zone			
Contours 40-foot			

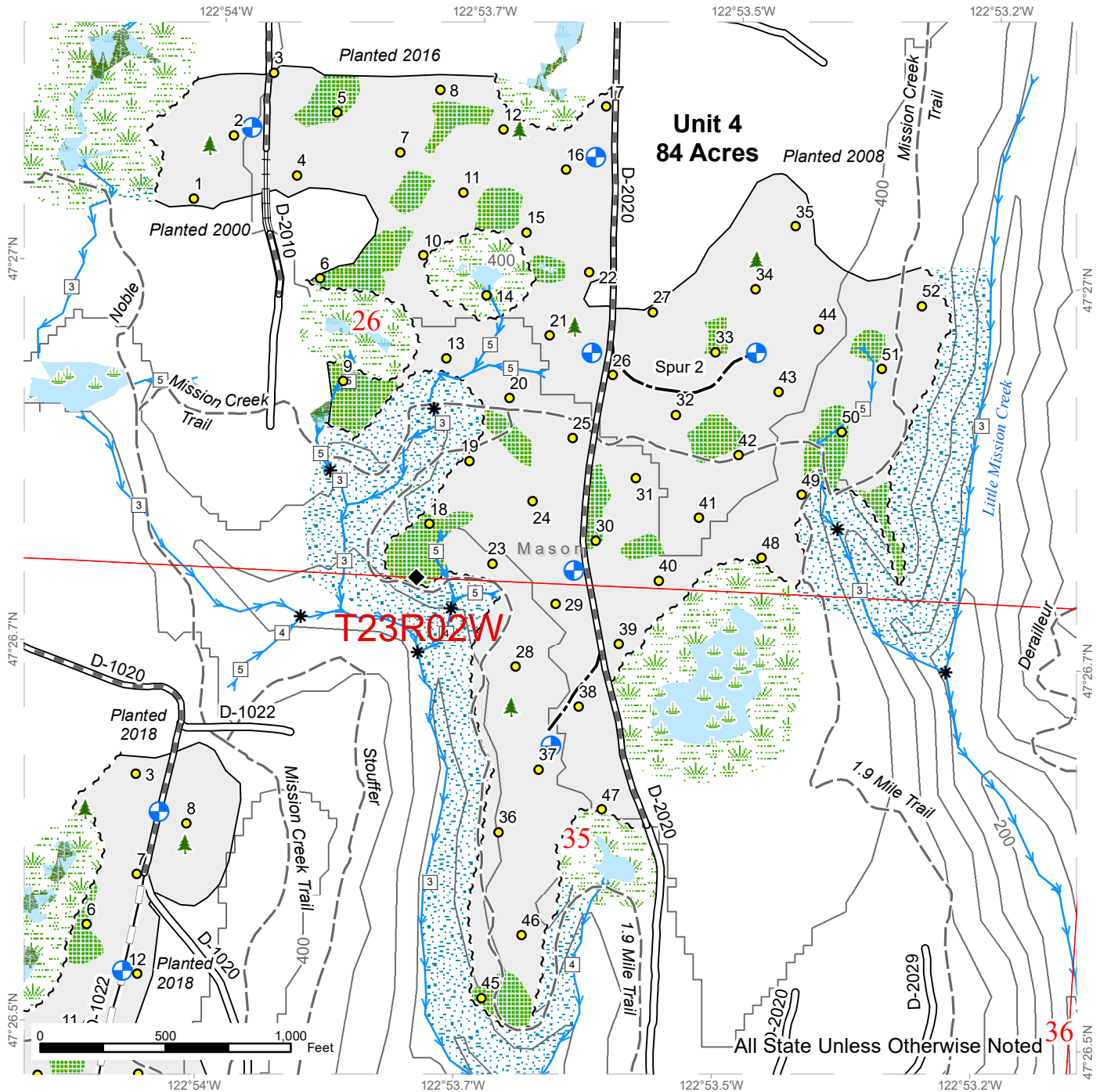




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**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
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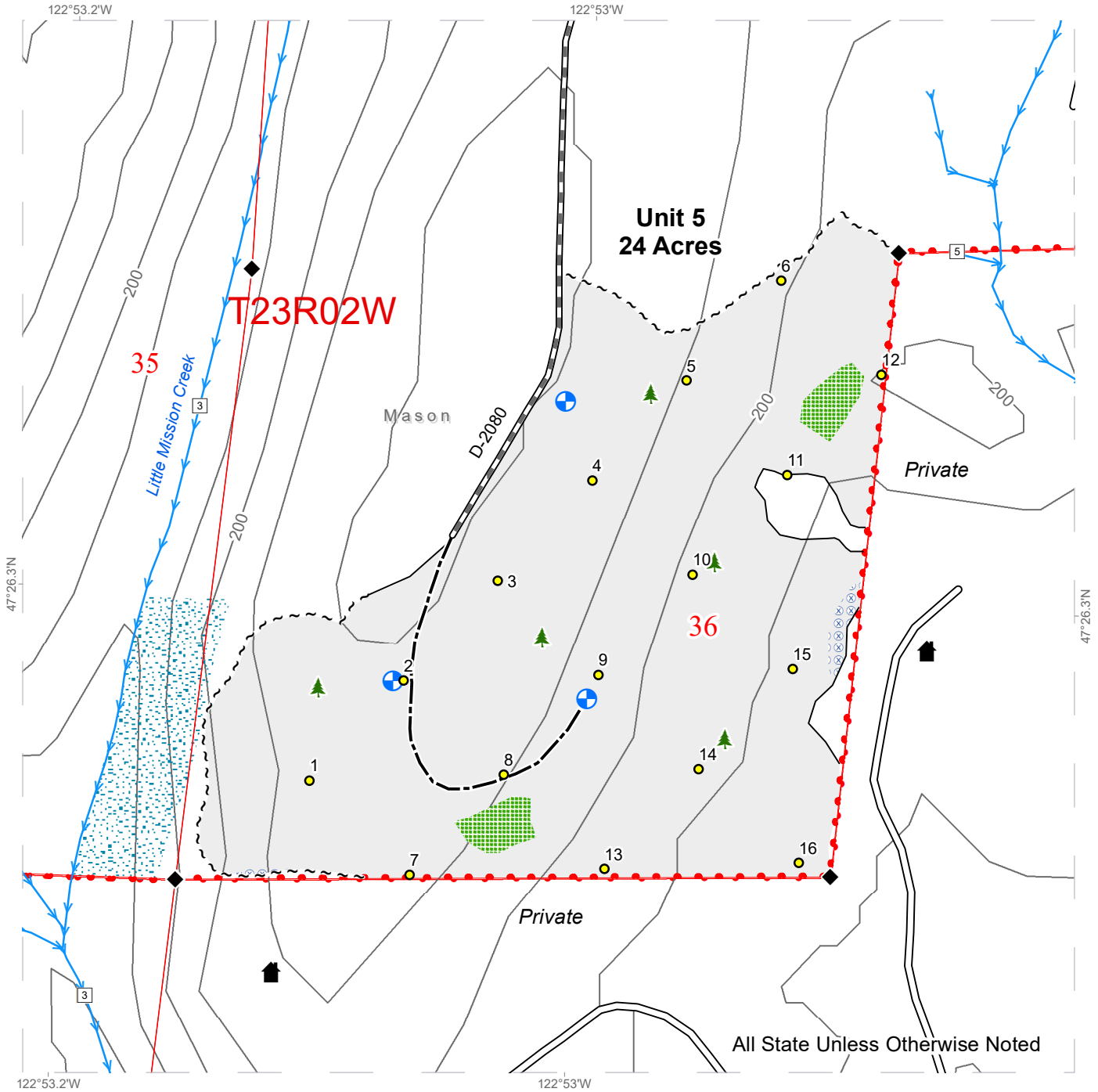
Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Ground Harvest	Required Reconstruction	Survey Monument
Wetlands - Non-forested	Streams	Optional Construction	Trail
Wetland Mgt Zone	Stream Type	Optional Reconstruction	
Forested Wetland	Stream Type Break		
Leave Tree Area			
Riparian Mgt Zone			
Contours 40-foot			



# CRUISE MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT#:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
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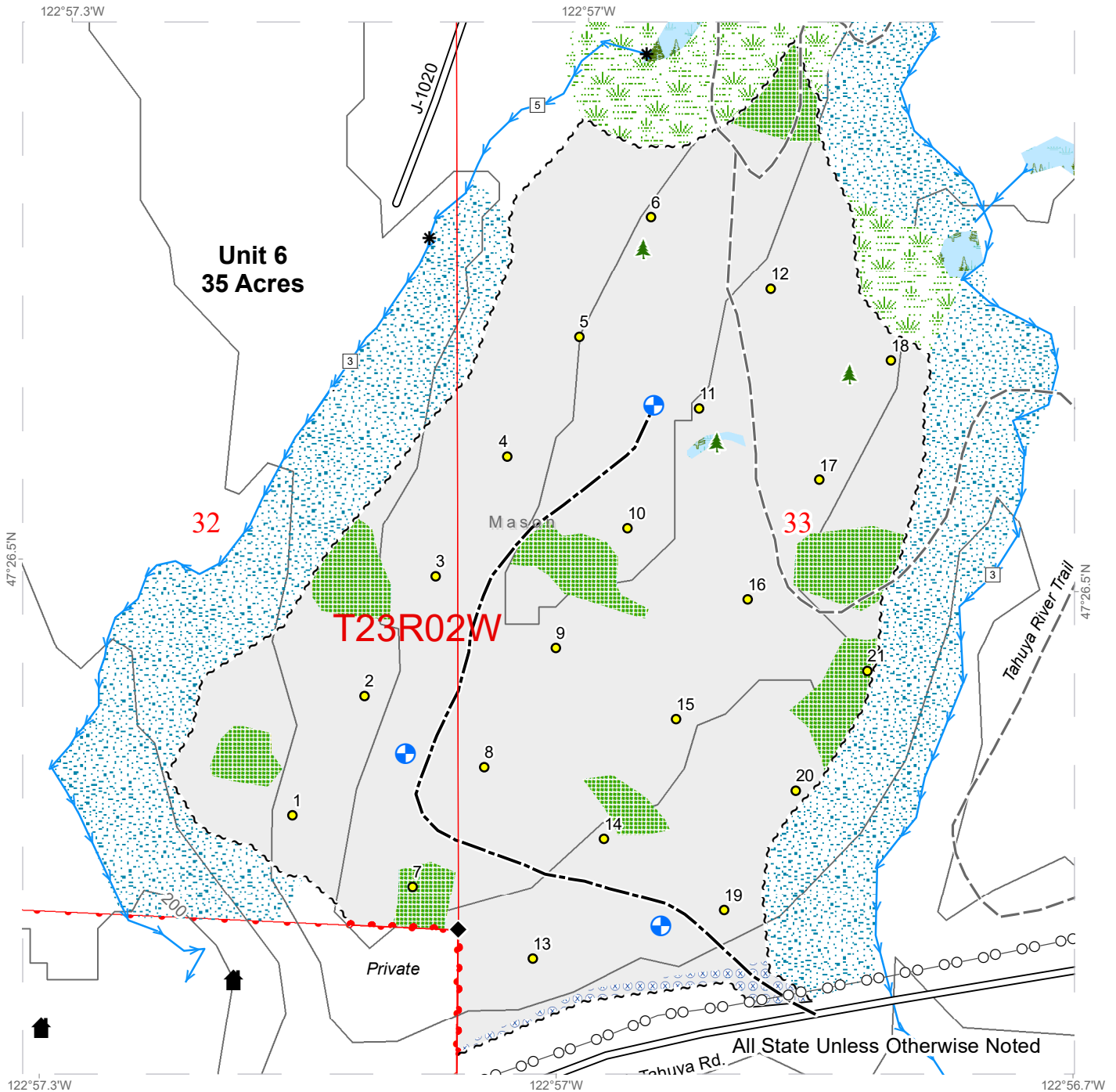


Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Property Line	Optional Construction	Structure
Leave Tree Area	Ground Harvest	Streams	Survey Monument
Riparian Mgt Zone	Stream Type		
Hazard Abatement Area			
Contours 40-foot			

# CRUISE MAP

**SALE NAME:** TRAIL MIX  
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**ELEVATION RGE:** 80-439



Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Optional Construction	Leave Tree Area <1/4-acre
Public Land Survey Townships	Property Line	Streams	Structure
Wetland Mgt Zone	Ground Harvest	Stream Type	Survey Monument
Forested Wetland	Stream Type Break	Hazard Abatement Area	Power Lines
Leave Tree Area		Contours 40-foot	Trail





# Forest Practices Application/Notification Notice of Decision

FPA/N No: 2423630

Effective Date: 10/5/2023

Expiration Date: 10/5/2026

Shut Down Zone: 654

EARR Tax Credit:  Eligible  Non-eligible

Reference: Trail Mix #30-103627

### Decision

- Notification Accepted** Operations shall not begin before the effective date.
- Approved** This Forest Practices Application is subject to the conditions listed below.
- Disapproved** This Forest Practices Application is disapproved for the reasons listed below.
- 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
- Class IVS

### Number of Years Granted on Multi-Year Request

- 4 years
- 5 years

### Conditions on Approval/Reasons for Disapproval

Issued By: Jason Sharp

Region: South Puget Sound Region

Title: Resource Protection Forester

Date: 10/5/2023

Copies to:  Landowner, Timber Owner and Operator

Issued in person:  LO  TO  OP By: 

Date: 10/05/2023

**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:**

<b>Pollution Control Hearings Board</b>	<b>Office of the Attorney General Natural Resources Division</b>	<b>Department Of Natural Resources South Puget Sound Region</b>
<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 Address</u> 950 Farman Ave N Enumclaw, WA 98022  <u>Mailing Address</u> 950 Farman Ave N Enumclaw, WA 98022

Information regarding the Pollution Control Hearings Board can be found at: <https://eluho.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, **Julie Antonsen**, caused the Notice of Decision for FPA/N No. **2423630** to be placed in the United States mail at **Olympia, WA**; postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the foregoing is true and correct.

**10/5/2023**









(Date)

**Enumclaw, WA**

(City & State where signed)

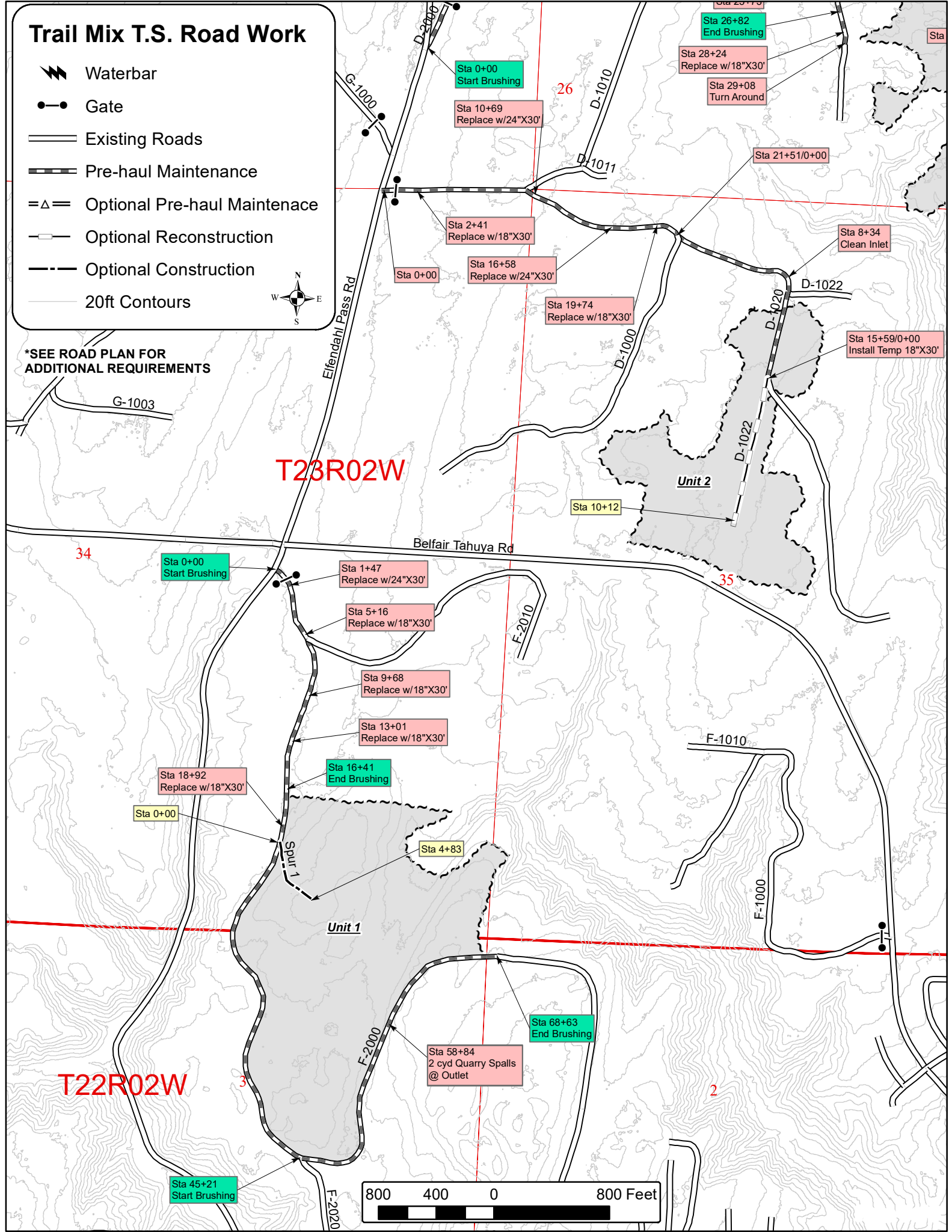
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# Trail Mix T.S. Road Work










-  Waterbar
-  Gate
-  Existing Roads
-  Pre-haul Maintenance
-  Optional Pre-haul Maintenance
-  Optional Reconstruction
-  Optional Construction
-  20ft Contours



\*SEE ROAD PLAN FOR ADDITIONAL REQUIREMENTS



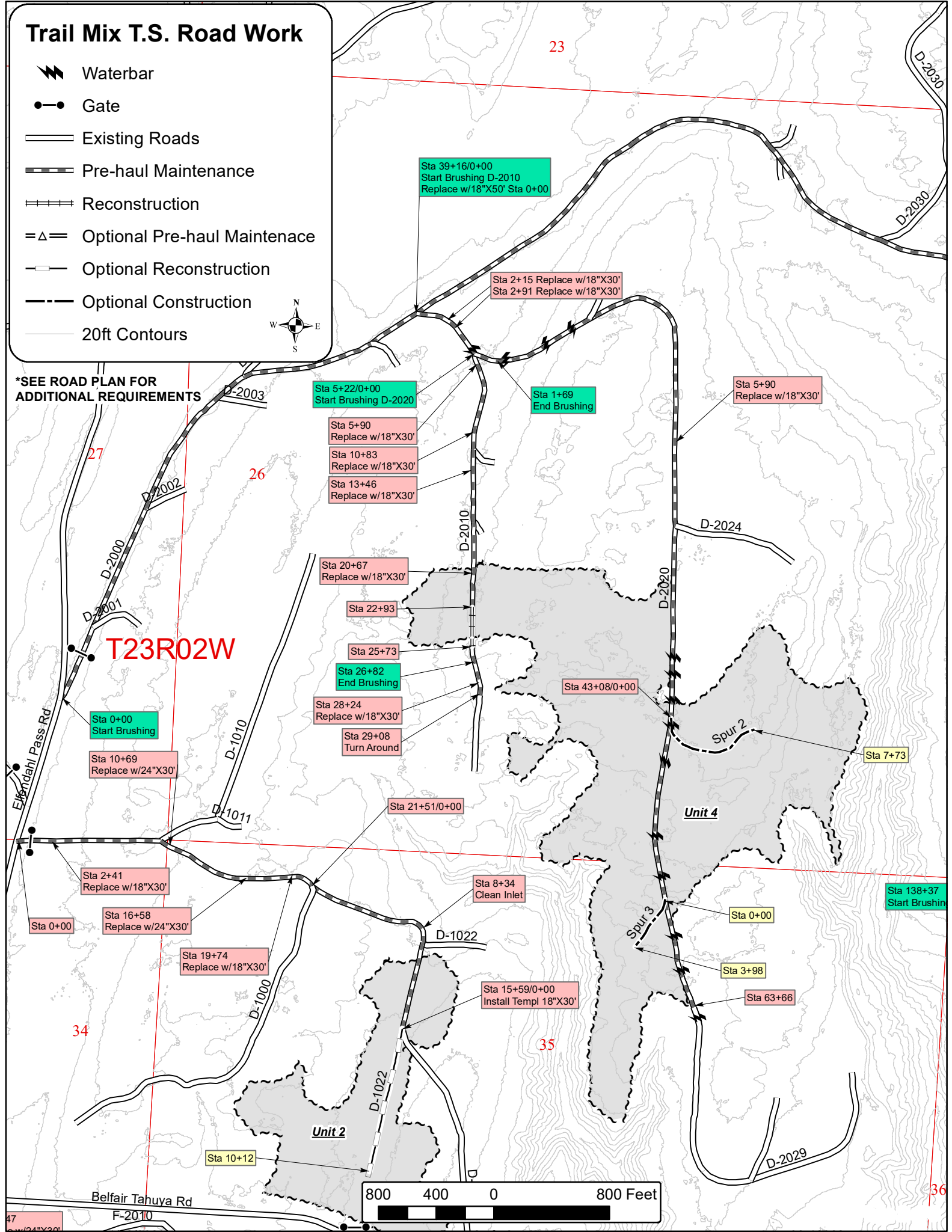
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**T23R02W**



Sta 5+22/0+00  
Start Brushing D-2020

Sta 5+90  
Replace w/18"X30'

Sta 10+83  
Replace w/18"X30'

Sta 13+46  
Replace w/18"X30'

Sta 20+67  
Replace w/18"X30'

Sta 22+93

Sta 25+73

Sta 26+82  
End Brushing

Sta 28+24  
Replace w/18"X30'

Sta 29+08  
Turn Around

Sta 39+16/0+00  
Start Brushing D-2010  
Replace w/18"X50' Sta 0+00

Sta 2+15 Replace w/18"X30'  
Sta 2+91 Replace w/18"X30'

Sta 1+69  
End Brushing

Sta 5+90  
Replace w/18"X30'

Sta 43+08/0+00

Sta 7+73

Sta 2+41  
Replace w/18"X30'

Sta 0+00

Sta 16+58  
Replace w/24"X30'

Sta 19+74  
Replace w/18"X30'

Sta 8+34  
Clean Inlet

Sta 15+59/0+00  
Install Templ 18"X30'

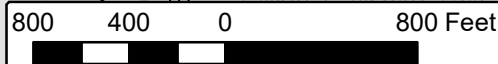
Sta 0+00

Sta 3+98









Sta 63+66

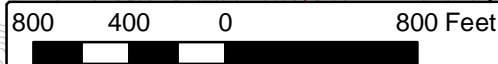
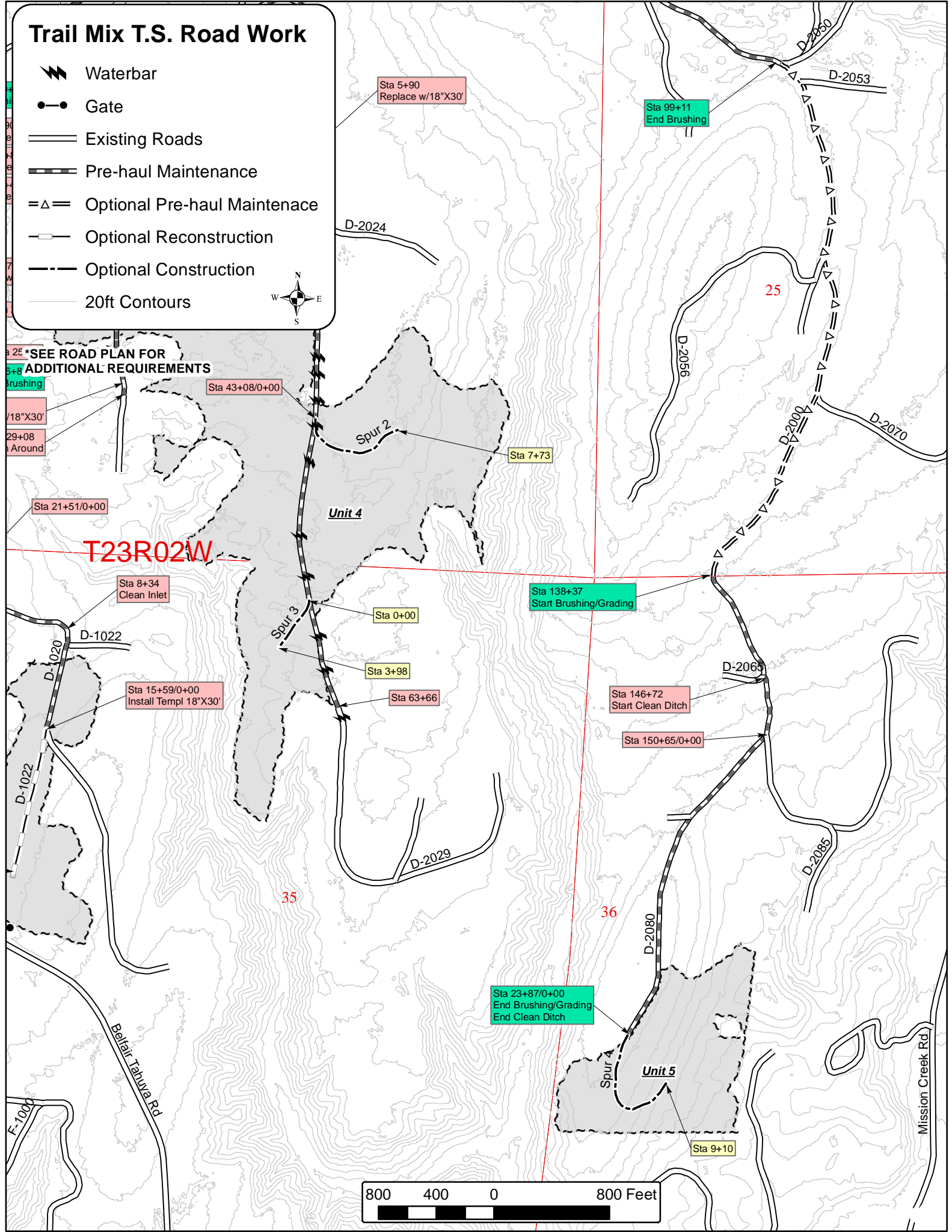
Sta 138+37  
Start Brushing

Sta 10+12











# Trail Mix T.S. Road Work

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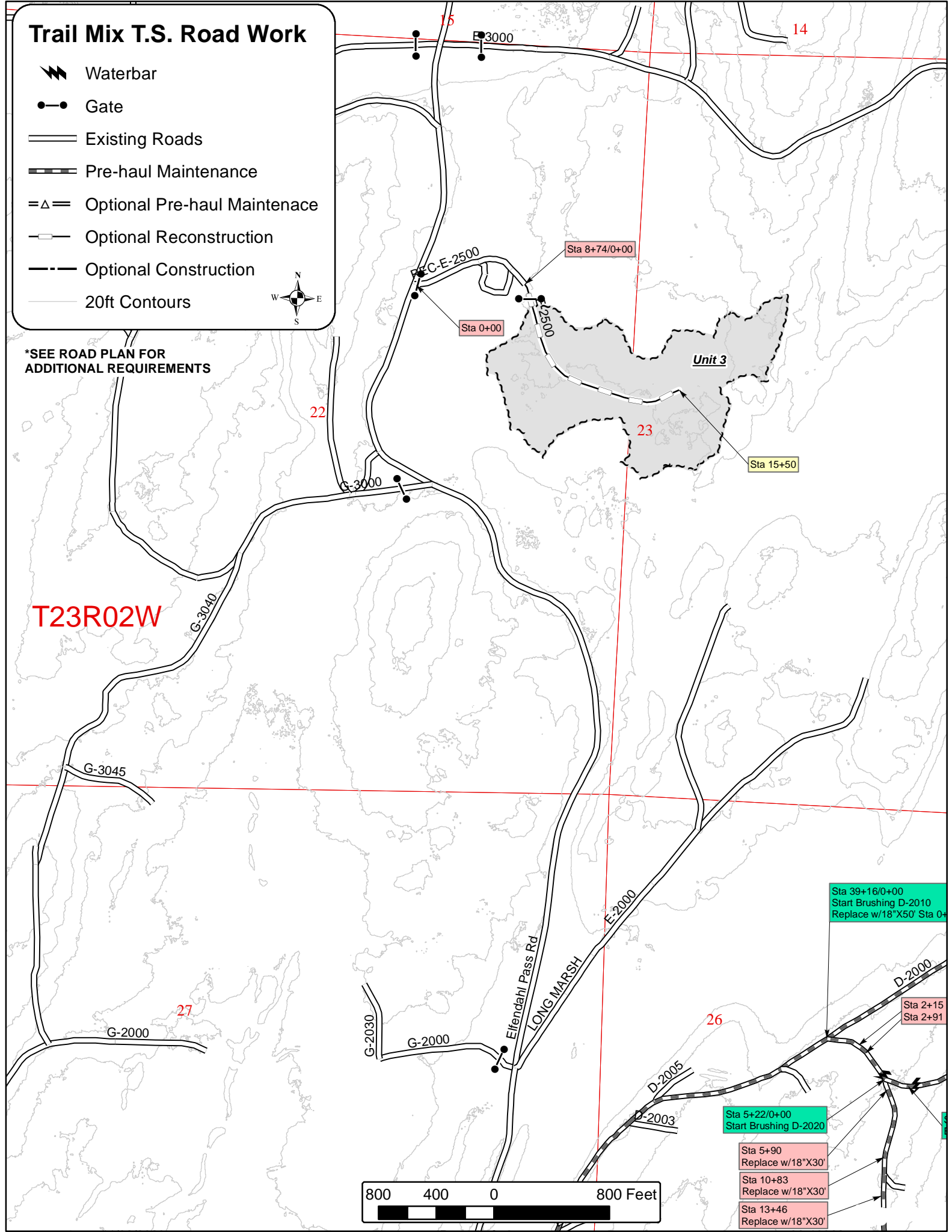
# Trail Mix T.S. Road Work

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-  20ft Contours



\*SEE ROAD PLAN FOR ADDITIONAL REQUIREMENTS

**T23R02W**



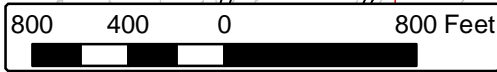
Sta 2+15  
Sta 2+91

Sta 5+22/0+00  
Start Brushing D-2020

Sta 5+90  
Replace w/18"X30'

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Replace w/18"X30'

Sta 13+46  
Replace w/18"X30'

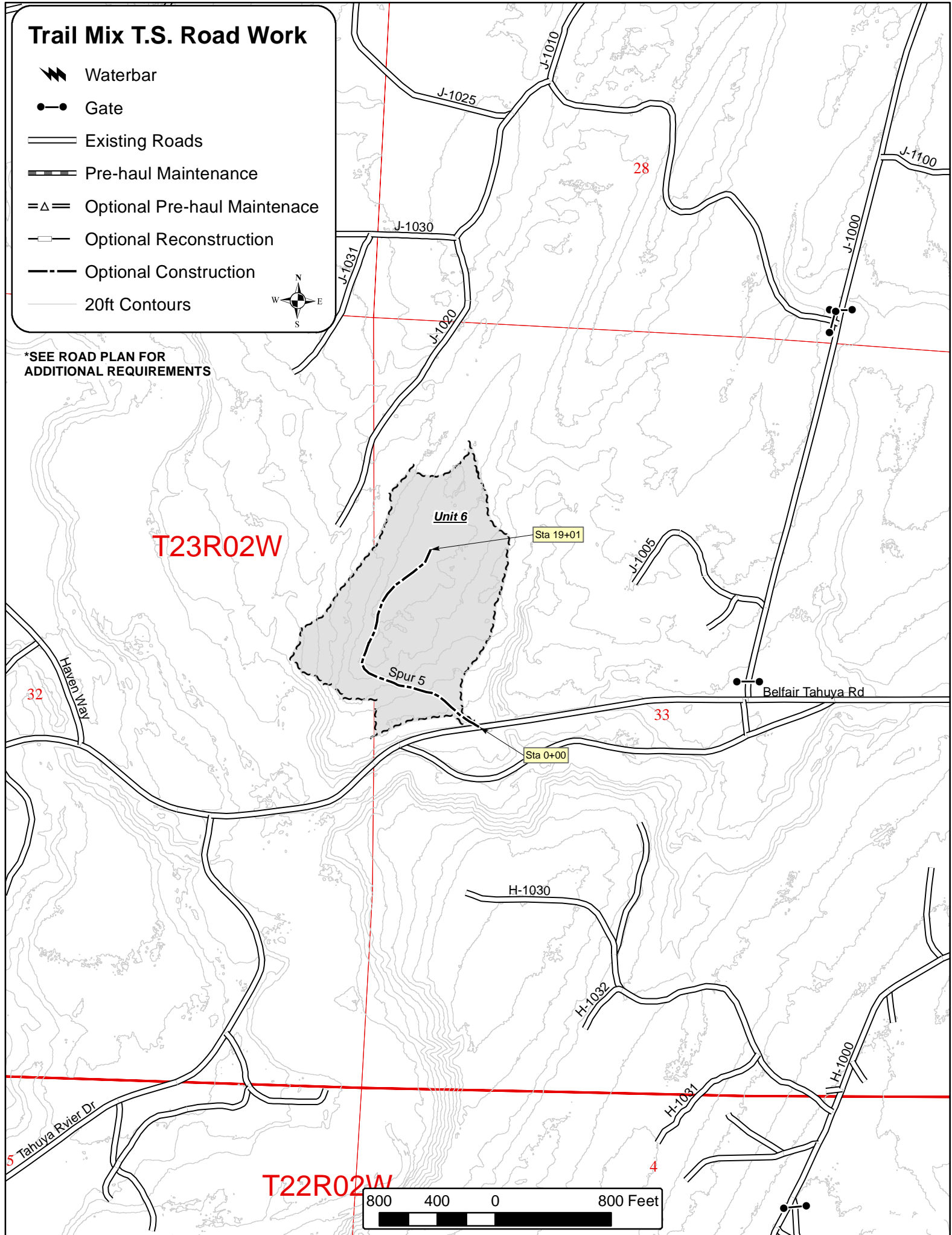


# Trail Mix T.S. Road Work

- ⚡ Waterbar
- Gate
- ══ Existing Roads
- ▬▬ Pre-haul Maintenance
- =Δ= Optional Pre-haul Maintenance
- Optional Reconstruction
- - - Optional Construction
- 20ft Contours



\*SEE ROAD PLAN FOR ADDITIONAL REQUIREMENTS



STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

TRAIL MIX TIMBER SALE ROAD PLAN  
MASON COUNTY  
HOOD CANAL DISTRICT  
SOUTH PUGET SOUND REGION

AGREEMENT NO.: 30-103627

ENGINEER: Heymann

DATE: 5/30/23

SECTION 0 – SCOPE OF PROJECT

**0-1 ROAD PLAN SCOPE**

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

**0-2 REQUIRED ROADS**

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
F-2000	0+00 to 68+63	Pre/Post-haul Maintenance
D-1000	0+00 to 21+51	Pre/Post-haul Maintenance
D-1020	0+00 to 15+59	Pre/Post-haul Maintenance
D-2000	0+00 to 99+11	Pre-haul Maintenance
D-2000	138+37 to 150+65	Pre-haul Maintenance
D-2000	0+00 to 150+65	Post-haul Maintenance
D-2010	22+93 to 25+73	Reconstruction
D-2010	0+00 to 29+08	Pre/Post-haul Maintenance
D-2020	0+00 to 63+66	Pre/Post-haul Maintenance
D-2080	0+00 to 23+87	Pre/Post-haul Maintenance
D-1022	0+00 to 10+12	Abandonment – if reconstructed
Spur 1	0+00 to 4+83	Abandonment – if constructed
Spur 2	0+00 to 7+73	Abandonment – if constructed
Spur 3	0+00 to 3+98	Abandonment – if constructed
Spur 4	0+00 to 9+10	Abandonment – if constructed
Spur 5	0+00 to 19+01	Abandonment – if constructed

### 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>
D-1022	0+00 to 10+12	Reconstruction
D-2000	99+11 to 138+37	Optional Pre-haul Maintenance
E-2500	0+00 to 15+50	Reconstruction
Spur 1	0+00 to 4+83	Construction
Spur 2	0+00 to 7+73	Construction
Spur 3	0+00 to 3+98	Construction
Spur 4	0+00 to 9+10	Construction
Spur 5	0+00 to 19+01	Construction

### 0-4 CONSTRUCTION

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

- clearing;
- grubbing;
- right-of-way debris disposal;
- excavation and/or embankment to subgrade;
- landing construction;
- acquisition and installation of drainage structures;
- acquisition, manufacture, and application of rock;
- road abandonment.

### 0-5 RECONSTRUCTION

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

- brushing right-of-way;
- clearing existing excavation and embankment slopes;
- grubbing existing excavation and embankment slopes;
- right-of-way debris disposal;
- landing construction;
- pulling ditches;
- cleaning ditches;
- constructing ditches;
- grading and shaping existing road surface and turnouts;
- compaction of road surface;
- acquisition, manufacture, and application of rock;
- road abandonment.

### 0-6 PRE-HAUL MAINTENANCE

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

- brushing right-of-way;
- removing fallen right-of-way debris;
- pulling ditches;
- cleaning ditches;

- constructing catch basin and headwall;
- cleaning culvert inlets and outlets;
- cross drain culvert replacement;
- acquisition and placement of quarry spalls;
- grading and shaping existing road surface and turnouts;
- compaction of road surface;
- removing berms from road shoulders.

**0-7 POST-HAUL MAINTENANCE**

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

**0-10 ABANDONMENT**

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

**0-12 DEVELOP ROCK SOURCE**

Purchaser may develop an existing rock source. Rock source development will involve clearing, grubbing and overburden removal. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

**1-1 ROAD PLAN CHANGES**

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

**1-2 UNFORESEEN CONDITIONS**

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

**1-3 ROAD DIMENSIONS**

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

**1-4 ROAD TOLERANCES**

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

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

## **1-6 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.
7. Road Work maps.

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

## **1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS**

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

## **1-15 ROAD MARKING**

Purchaser shall perform road work in accordance with the state's marked location.

## **1-16 CONSTRUCTION STAKES SET BY STATE**

Purchaser shall perform work in accordance with the construction stakes and reference points set in the field for grade and alignment. Reconstruction of existing road grades must conform to the original location except where construction staked or designed.

## **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.

## **1-21 HAUL APPROVAL**

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

## **1-23 ROAD WORK PHASE APPROVAL**

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

- Drainage installation & Subgrade compaction
- Rock compaction

#### **1-25 ACTIVITY TIMING RESTRICTION**

The operation of road construction equipment is not allowed on weekdays from 7 p.m. to 7 a.m. on roads associated with Units 1, 2, and 4-6, nor in all units on weekends or state recognized holidays, unless authorized in writing by the Contract Administrator. Restrictions for hauling forest products are specified in Contract Clause H-140 HAULING SCHEDULE.

#### **1-29 SEDIMENT RESTRICTION**

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

#### **1-30 CLOSURE TO PREVENT DAMAGE**

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

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

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

#### **1-32 ASPHALT SURFACE RESTRICTION**

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

If tracked equipment is used on asphalt surfaces, Purchaser shall immediately cease all road construction and hauling operations. Purchaser shall remove any dirt, rock, or other material tracked or spilled on the asphalt surface(s) and have surface(s) evaluated by the Region Engineer or their designee for any damage caused by transporting equipment. Any damage to the surface(s) will be repaired, at the Purchaser's expense, as directed by the Contract Administrator.

Purchaser shall have asphalt surfaces reviewed by a third party, specializing in asphalt construction and repair. The third party's scope of the damage and repairs must be agreed upon between the Purchaser and the Contract Administrator. Damage to the asphalt from transporting equipment will be repaired at the Purchaser's expense.

#### **1-33 SNOW PLOWING RESTRICTION**

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

**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.

**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.

**2-5 MAINTENANCE GRADING – EXISTING ROAD**

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
F-2000	0+00 to 68+63	
D-1000	0+00 to 21+51	
D-1020	0+00 to 15+59	
D-2000	0+00 to 99+11	
D-2000	99+11 to 138+37	Optional
D-2000	138+37 to 150+65	
D-2010	0+00 to 22+93	
D-2010	25+73 to 29+08	
D-2020	0+00 to 63+66	
D-2080	0+00 to 23+87	

**2-6 CLEANING CULVERTS**

On the following road(s), Purchaser shall clean the inlets and outlets of all listed culverts.

<u>Road</u>	<u>Stations</u>
D-1020	8+34



**2-7 CLEANING DITCHES, HEADWALLS, CUT BANK AND CATCH BASINS**

On the following road(s), Purchaser shall clean ditches, headwalls, cut bank and catchbasins. Work must be completed before timber haul and must be done in accordance with the TYPICAL SECTION SHEET dimensions.

<u>Road</u>	<u>Stations</u>
D-2000	146+72 to 150+65
D-2080	0+00 to 23+87

**SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL**

**3-1 BRUSHING**

On the following road(s), Purchaser shall cut vegetative material up to 4 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by manual or 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>
F-2000	0+00 to 16+41
F-2000	45+21 to 68+83
D-2000	0+00 to 99+11
D-2000	138+37 to 150+65
D-2010	0+00 to 26+82
D-2020	0+00 to 1+69
D-2080	0+00 to 23+87

**3-5 CLEARING**

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

**3-8 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 55%.
- Against standing trees.

**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. Grubbing must be completed before starting excavation and embankment.

### **3-20 ORGANIC DEBRIS DEFINITION**

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

### **3-21 DISPOSAL COMPLETION**

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

### **3-23 PROHIBITED DISPOSAL AREAS**

Purchaser shall not place organic debris in the following areas:

- Within 25 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

### **3-24 BURYING ORGANIC DEBRIS RESTRICTED**

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

### **3-25 SCATTERING ORGANIC DEBRIS**

Purchaser shall scatter organic debris in natural openings. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

## **SECTION 4 – EXCAVATION**

### **4-2 PIONEERING**

Pioneering may not extend past construction that will be completed during the current construction season. In addition, the following actions must be taken as pioneering progresses:

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

### **4-3 ROAD GRADE AND ALIGNMENT STANDARDS**

Purchaser shall follow these standards for road grade and alignment except as designed:

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

**4-5 CUT SLOPE RATIO**

Purchaser shall construct excavation slopes no steeper than shown on the following table:

<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:

<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.

**4-21 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. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

**4-22 TURNAROUNDS**

Optional Turnarounds must be no larger than 30 feet long and 30 feet wide.

**4-25 DITCH CONSTRUCTION AND RECONSTRUCTION**

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

#### **4-28 DITCH DRAINAGE**

Ditches must drain to cross-drain culverts or ditchouts.

#### **4-29 DITCHOUTS**

Purchaser shall construct ditchouts as identified and as needed. 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.

#### **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 55%, all waste material must be end hauled or pushed to a designated embankment sites and waste areas identified by the Contract Administrator.

#### **4-38 PROHIBITED WASTE DISPOSAL AREAS**

Purchaser shall not deposit waste material in the following areas:

- Within 25 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- Within a wetland management zone.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Against standing timber.

#### **4-55 ROAD SHAPING**

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

#### **4-60 FILL COMPACTION**

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

#### **4-61 SUBGRADE COMPACTION**

Purchaser shall compact constructed and/or 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 rock application and/or timber haul.

SECTION 5 – DRAINAGE

**5-1 REMOVAL OF SHOULDER BERMS**

Purchaser shall remove berms from road shoulders. The construction of ditchouts is required where ponding could result from the effects of sidecast debris.

**5-5 CULVERTS**

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

**5-7 USED CULVERT MATERIAL**

On the following road(s), Purchaser may install used culverts. All other culverts must have new culverts installed. Culverts must meet the specifications in Clauses 10-15 through 10-24.

<u>Road</u>	<u>Stations</u>
Spur 5	0+00 to 19+01
D-1022	0+00 to 10+12

**5-12 UNUSED MATERIALS STATE PROPERTY**

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

**5-15 CULVERT INSTALLATION**

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

**5-17 CROSS DRAIN SKEW AND SLOPE**

Cross drains, on road grades in excess of 3%, must be skewed at least 30 degrees from perpendicular to the road centerline, except where the cross drain is at the low point in the road culverts will not be skewed. Cross drain culverts must be installed at a slope steeper than the incoming ditch grade, but not less than 3% or more than 10%.

**5-18 CULVERT DEPTH OF COVER**

All culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point.

**5-20 ENERGY DISSIPATERS**

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

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT LIST. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed.

**5-25 CATCH BASINS**

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

**5-26 HEADWALLS FOR CROSS DRAIN CULVERTS**

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross-drain culverts, except for temporary culverts. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed.

**5-33 NATIVE SURFACE ROADS**

If overwintered, native surface roads must be waterbarred by November 1. Purchaser shall construct waterbars according to the attached DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 6 – ROCK AND SURFACING

**6-2 ROCK SOURCE ON STATE LAND**

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

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Sandhill Pit	NW, NE & NE, NW Sec 24 T23N R02W	Pit Run

**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.

<u>Rock Type</u>
Quarry Spalls

**6-12 ROCK SOURCE SPECIFICATIONS**

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

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

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

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

**6-23 ROCK GRADATION TYPES**

Purchaser shall provide rock in accordance with the types and amounts listed in the ROCK LIST. Rock must meet the following specifications for gradation and uniform quality when placed in hauling vehicles. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator.

**6-41 PIT RUN ROCK**

No more than 50 percent of the rock may be larger than 6 inches in any dimension and no rock may be larger than 8 inches in any dimension. Pit Run rock may not contain more than 5 percent by weight of organic debris, dirt, and trash. Rock may require processing to meet this specification.

**6-43 QUARRY SPALLS**

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

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

**6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH**

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

**6-70 APPROVAL BEFORE ROCK APPLICATION**

Purchaser shall obtain written approval from the Contract Administrator for subgrade, drainage installation and ditch construction 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. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

**6-73 ROCK FOR WIDENED PORTIONS**

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way.

SECTION 7 – STRUCTURES

**7-70 GATE CLOSURE**

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

SECTION 9 – POST-HAUL ROAD WORK

**9-1 BARRICADES**

Purchaser shall construct barricades in accordance with the BARRICADE DETAIL.

<u>Road</u>	<u>Stations</u>
D-1022	0+00
Spur 1	0+00
Spur 2	0+00
Spur 3	0+00
Spur 4	0+00
Spur 5	0+00

**9-3 CULVERT MATERIAL REMOVED FROM STATE LAND**

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



**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>
F-2000	0+00 to 68+63	Grade
D-1000	0+00 to 21+51	Grade
D-1020	0+00 to 15+59	Grade
D-2000	0+00 to 150+65	Grade
D-2010	0+00 to 29+08	Grade and install drivable waterbar
D-2020	0+00 to 63+66	Grade and install drivable waterbar
D-2080	0+00 to 23+87	Grade

**9-10 LANDING DRAINAGE**

Purchaser shall provide for drainage of the landing surface.

**9-21 ROAD ABANDONMENT**

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

<u>Road</u>	<u>Stations</u>
D-1022	0+00 to 10+12
Spur 1	0+00 to 4+83
Spur 2	0+00 to 7+73
Spur 3	0+00 to 3+98
Spur 4	0+00 to 9+10
Spur 5	0+00 to 19+01

**9-22 ABANDONMENT**

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 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 barricades in accordance with the attached BARRICADE DETAIL.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Slope all trench walls and approach embankments no steeper than 1.5:1.
- Scatter woody debris onto abandoned road surfaces.

## SECTION 10 MATERIALS

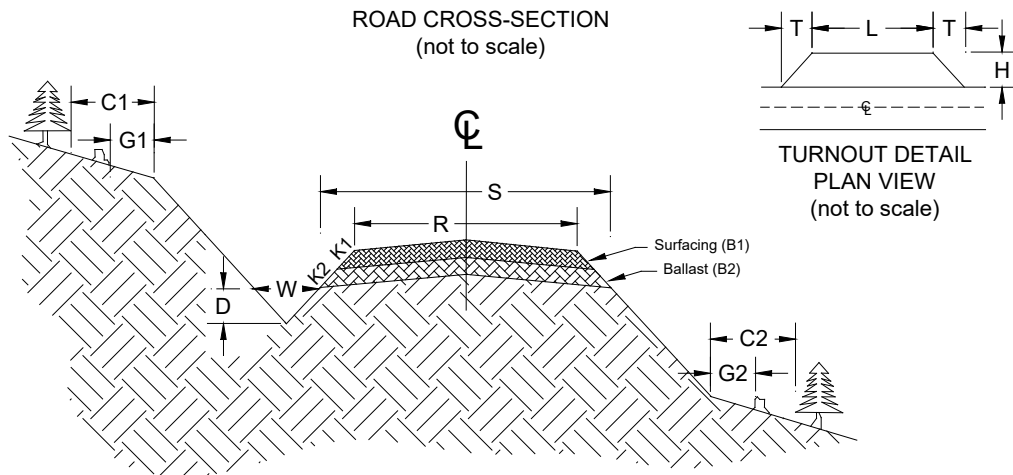
### **10-17 CORRUGATED PLASTIC CULVERT**

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

### **10-22 PLASTIC BAND**

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

# TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio	Fill Slope Ratio
						Width (feet)	Depth (feet)		G1	G2	C1	C2		
				S	R	W	D		G1	G2	C1	C2	%	%
F-2000	0+00	68+63	B	16	12	2.5	1	4	0	0	10	10	100	67
D-1000	0+00	21+51	B	16	12	2.5	1	4	0	0	0	0	100	67
D-1020	0+00	15+59	B	16	12	2.5	1	4	0	0	0	0	100	67
D-1022	0+00	10+12	C	16	12	2.5	1	4	0	0	0	0	100	67
D-2000	0+00	150+65	B	16	12	2.5	1	4	0	0	10	10	100	67
D-2010	0+00	29+08	B	16	12	2.5	1	4	0	0	10	10	100	67
D-2020	0+00	63+66	B	16	12	2.5	1	4	0	0	10	10	100	67
D-2080	0+00	23+87	B	16	12	2.5	1	4	0	0	10	10	100	67
E-2500	0+00	15+50	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 1	0+00	4+83	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 2	0+00	7+73	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 3	0+00	3+98	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 4	0+00	9+10	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 5	0+00	19+01	C	16	12	2.5	1	4	0	0	0	0	100	67

### COMPACTION LIST

Road	From Station	To Station	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
D-1022	0+00	10+12	Embankment Subgrade Rock Waste Culvert Install	12	Vibratory Smooth Drum	14,000	4	3
E-2500	0+00	15+50						
Spur 1	0+00	4+83						
Spur 2	0+00	7+73						
Spur 3	0+00	3+98						
Spur 4	0+00	9+10						
Spur 5	0+00	19+01						

## ROCK LIST

### BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y. Station	# of Stations	C.Y. Subtotal	Rock Source	Turnout			
									Length	Width	Taper	
			K2	B2				Pit run	L	H	T	
*D-2010	22+93	25+73	2:1	8"	32	2.80	90	Sandhill Pit*				
*D-1022	0+00	10+12	2:1	8"	32	10.12	324	Sandhill Pit*				
*E-2500	0+00	15+50	2:1	8"	32	15.50	496	Sandhill Pit*				
*Spur 1	0+00	4+83	2:1	8"	32	4.83	155	Sandhill Pit*				
*Spur 2	0+00	7+73	2:1	8"	32	7.73	247	Sandhill Pit*				
*Spur 3	0+00	3+98	2:1	8"	32	3.98	127	Sandhill Pit*				
*Spur 4	0+00	9+10	2:1	8"	32	9.10	291	Sandhill Pit*				
*Spur 5	0+00	19+01	2:1	8"	32	19.01	608	Sandhill Pit*				
			Quarry Spalls for culvert headwalls/energy dissipaters					22	Commercial			

OPTIONAL ROCK 2,338 Cubic Yards  
 REQUIRED ROCK 22 Cubic Yards  
 BALLAST TOTAL 2,360 Cubic Yards

\*Optional Rock: If Purchaser elects to haul on optional rock roads in wet weather, the depth listed above is recommended but not required.

NOTE: Yardages are estimated on a compacted (In-Place) basis. Compliance of required rock will be based on compacted depth measurement.

## CULVERT LIST

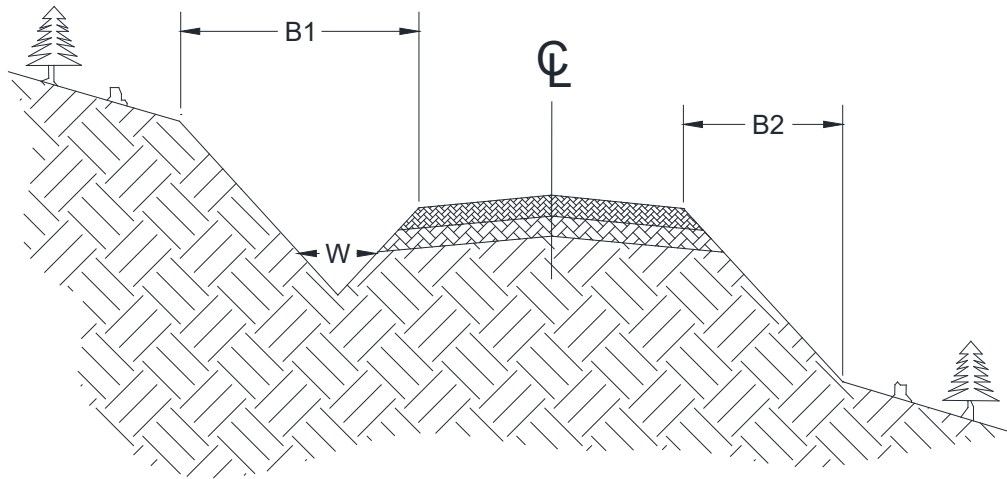
Road Number	Location	Culvert		Length (ft)			Riprap (C.Y.)			Backfill Material	Placement Method	Const. Staked	Remarks	
		Dia.	Type	Culvert	Downspt	Flume	Inlet	Outlet	Type					
F-2000	1+47	24"	PD	30			1	1	QS				Replace – T5	
	5+16	18"	PD	30			0.5	0.5	QS				Replace	
	9+68	18"	PD	30			0.5	0.5	QS				Replace	
	13+01	18"	PD	30			0.5	0.5	QS				Replace	
	58+84							2	QS					
D-1000	2+41	18"	PD	30			0.5	0.5	QS				Replace	
	10+69	24"	PD	30			1	1	QS				Replace – T5	
	16+58	24"	PD	30			1	1	QS				Replace – T5	
	19+74	18"	PD	30			0.5	0.5	QS				Replace	
D-1020	8+34											Clean Inlet		
D-1022	0+00	18"	TEMP	30										
D-2010	0+00	18"	PD	50			0.5	0.5	QS				Replace	
	2+15	18"	PD	30			0.5	0.5	QS				Replace – T5	
	2+91	18"	PD	30			0.5	0.5	QS				Replace – T5	
	5+90	18"	PD	30			0.5	0.5	QS				Replace	
	10+83	18"	PD	30			0.5	0.5	QS				Replace	
	13+46	18"	PD	30			0.5	0.5	QS				Replace	
	20+67	18"	PD	30			0.5	0.5	QS				Replace	
	28+24	18"	PD	30			0.5	0.5	QS				Replace	
	D-2020 Spur 5	5+90	18"	PD	24			0.5	0.5	QS				Replace – T5
		0+49	18"	TEMP	40									
3+90		18"	TEMP	30										
6+79		18"	TEMP	30										
10+94		18"	TEMP	30										

PD = Polyethylene Pipe Dual Wall AASHTO No. M294 Type S or ASTM F2648

QS = Quarry Spalls

TEMP = Temporary Culvert

**BRUSHING DETAIL**  
(not to scale)



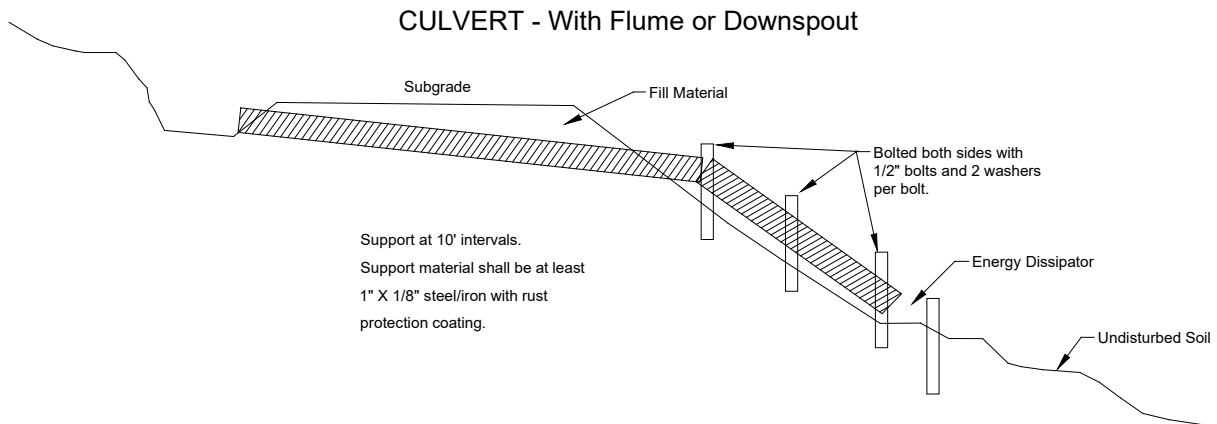
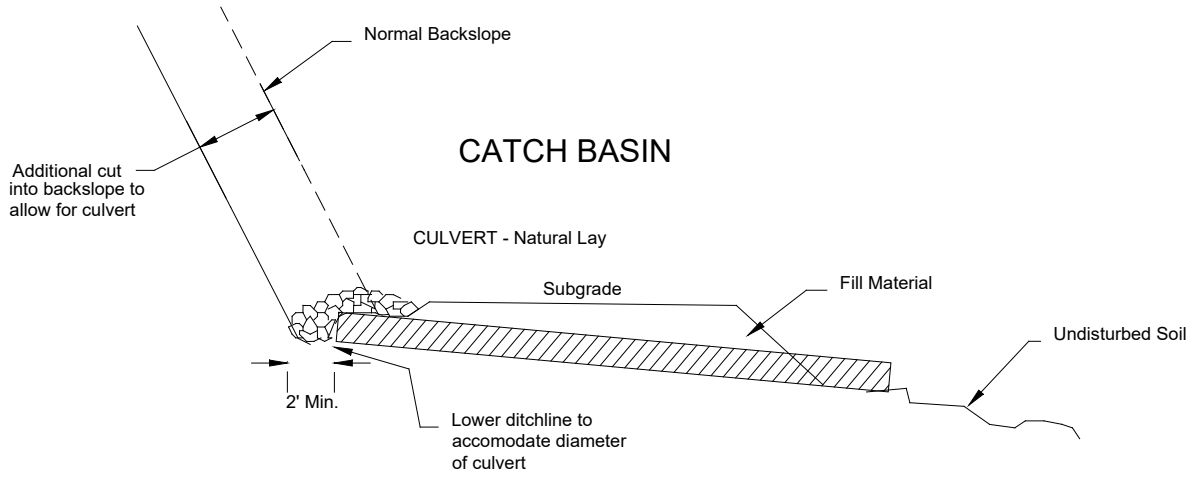
**BRUSHING LIST**

Road Number	From station	To station	Road Width (feet)	Ditch		Brushing Limits (feet)		Remarks  <i>In addition to brushing...</i>
				Width (feet)	Depth (feet)	B1	B2	
				W	D	B1	B2	
F-2000	0+00	16+41	12	2.5	1	10	10	
F-2000	45+21	68+83	12	2.5	1	10	10	
D-2000	0+00	99+11	12	2.5	1	10	10	
D-2000	138+37	150+65	12	2.5	1	10	10	
D-2010	0+00	26+82	12	2.5	1	10	10	
D-2020	0+00	1+69	12	2.5	1	10	10	
D-2080	0+00	23+87	12	2.5	1	10	10	

B1 extends horizontally the specified distance in feet from the back of the ditch. B2 extends horizontally the specified distance in feet from the outside edge of the running surface. Brush is defined as all non-merchantable vegetative material found within the specified limits. Brush that is cut shall be removed to the downhill side of the road and placed such that it will not block ditches, ditch-outs, or drainage structures. Signs, culvert location markers, culverts or any other identification features damaged by brushing shall be replaced at the Purchasers expense.

# CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 1 of 3)

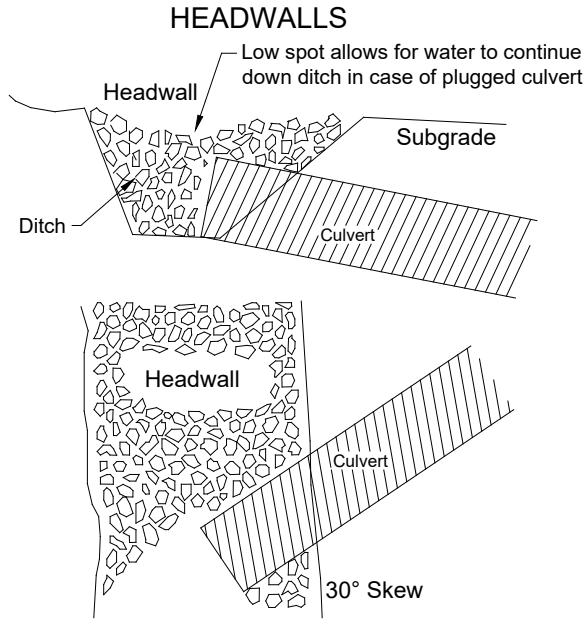




## CULVERT AND DRAINAGE SPECIFICATION DETAIL

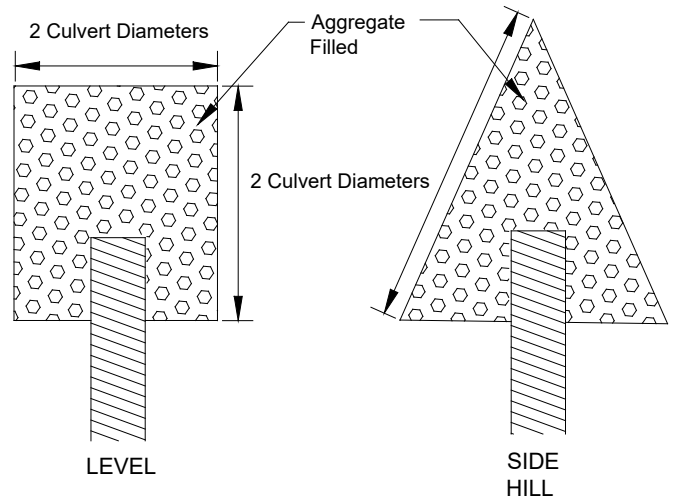
(Page 2 of 3)

Proper preparation of foundation and placement of bedding material shall precede the installation of all culvert pipe. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform dense unyielding base. The backfill material shall be placed so that the pipe is uniformly supported along the barrel.



Headwalls to be constructed of material that will resist erosion.

## ENERGY DISSIPATORS



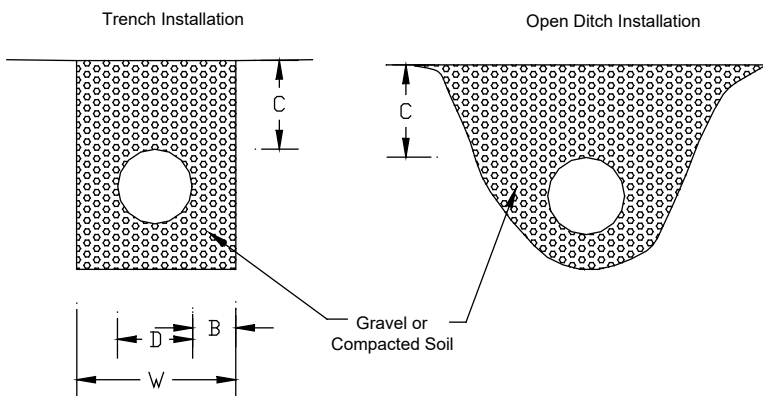
Dissipator Specifications:  
 Depth: 1 culvert diameter  
 Aggregate: as specified in the  
 CULVERT LIST.

## CULVERT AND DRAINAGE SPECIFICATION DETAIL

### POLYETHYLENE PIPE INSTALLATION

#### INSTALLATION REQUIREMENTS:

1. Crushed stone, gravel, or compacted soil backfill material shall be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed 1/6 pipe diameter or 4" diameter, whichever is smaller.
2. The corrugated pipe shall be laid on grade, on a layer of bedding material as shown for the two types of installations. If native soil is used as the bedding and backfill material, it shall be well compacted in six inch layers under the haunches, around the sides and above the pipe to the recommended minimum height of cover.
3. Either crushed aggregate or flexible (asphalt) pavement may be laid as part of the minimum cover requirements.
4. Site conditions and availability of bedding materials often dictate the type of installation method used.
5. The load bearing capability of flexible conduits is dependent on the type of backfill material used and the degree of compaction achieved. Crushed stone and gravel backfill materials typically reach a compaction level of 90-95% AASHTO standard density without compaction. When native soils are used as backfill material, a compaction level of 85% is required. This minimum compaction can be achieved by either hand or mechanical tamping.



#### MINIMUM DIMENSIONS

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

## FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

### Cuts and Fills

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

### Surface

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

### Drainage

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

### Preventative Maintenance

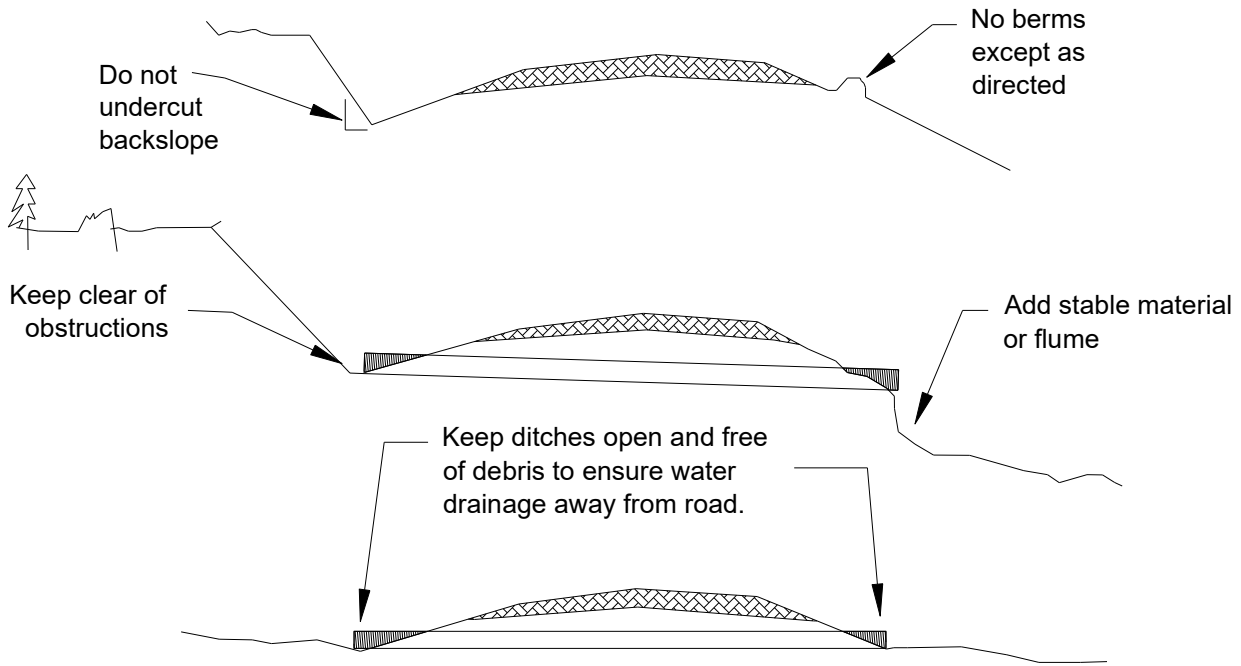
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

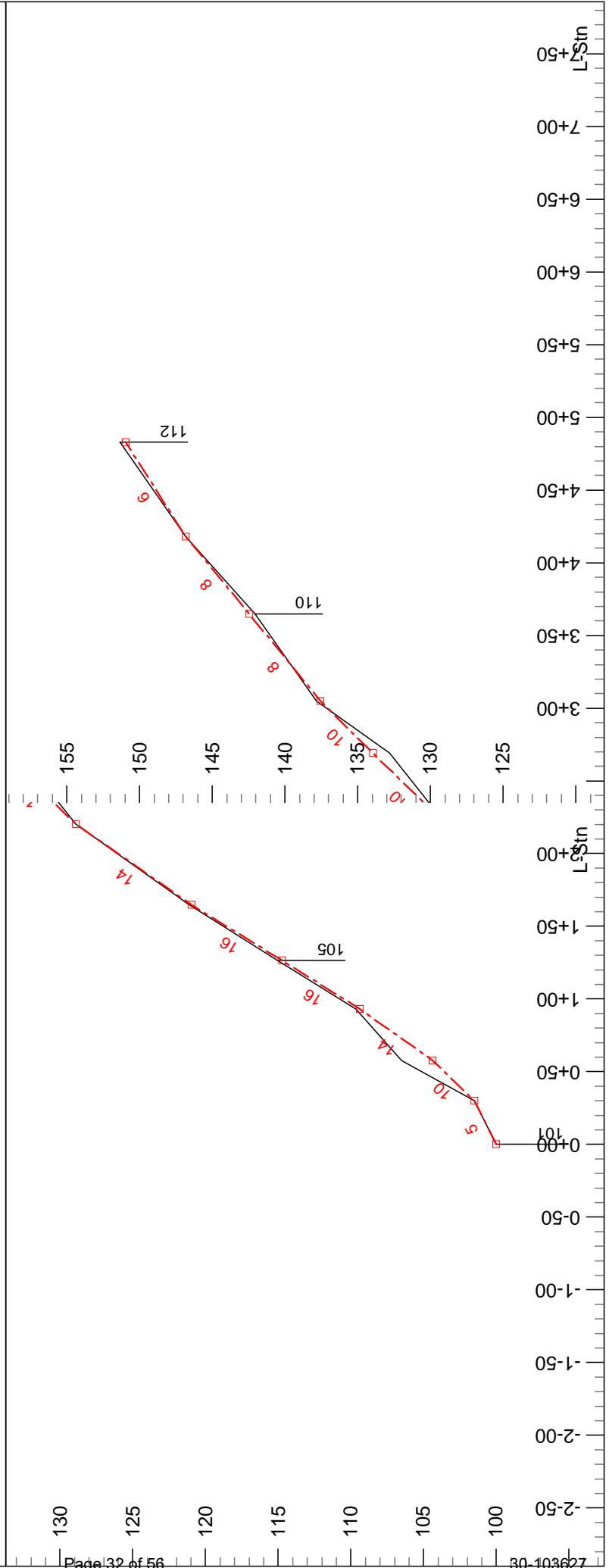
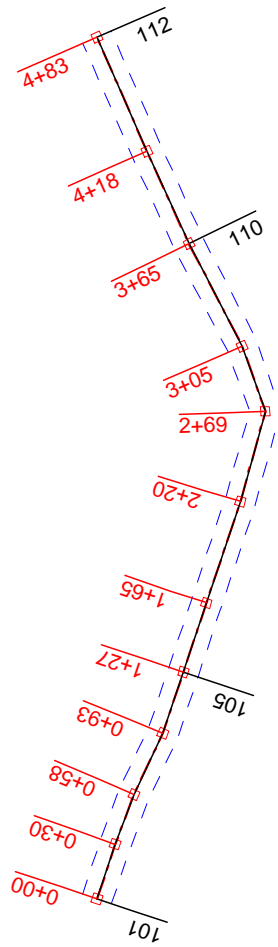
### Termination of Use or End of Season

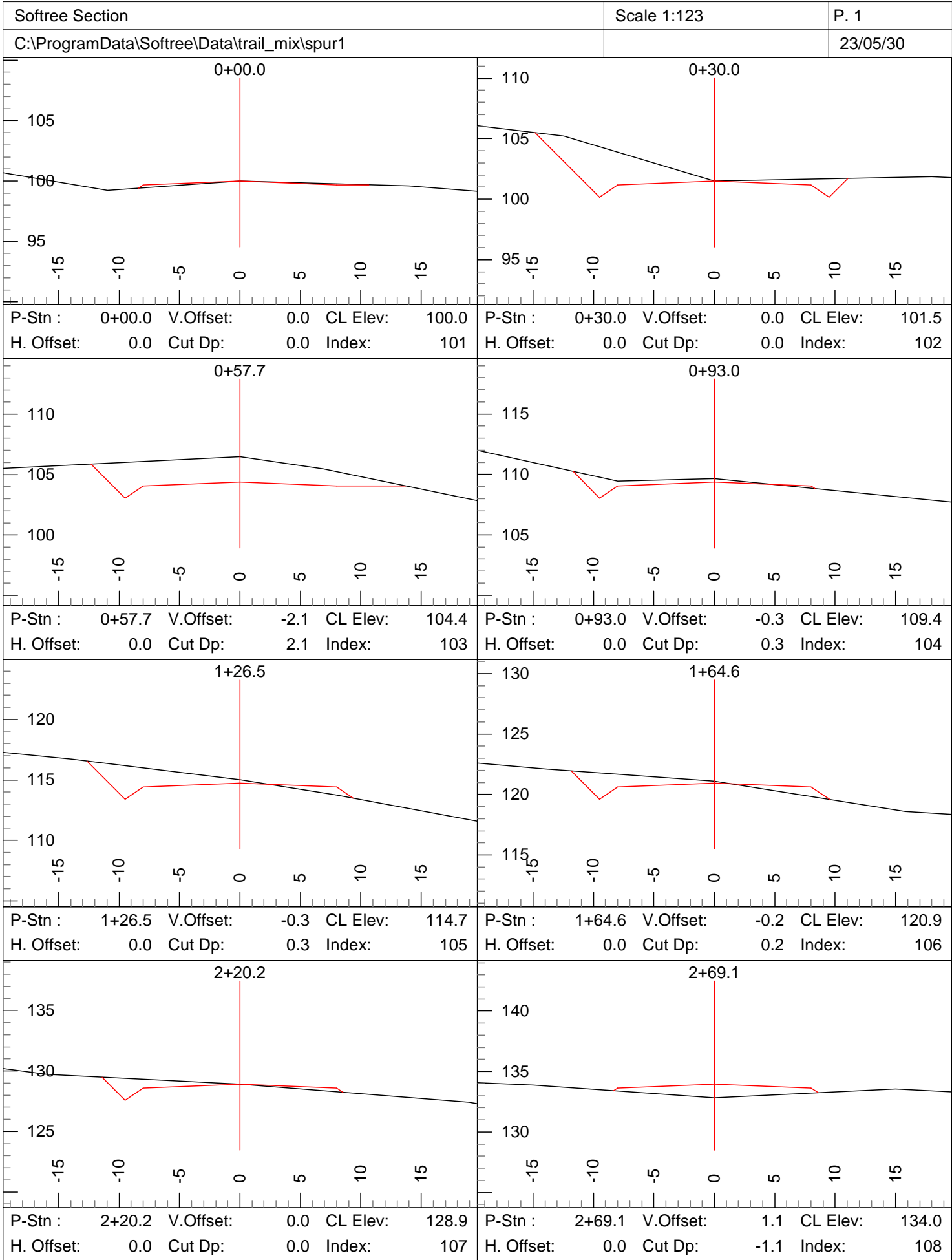
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

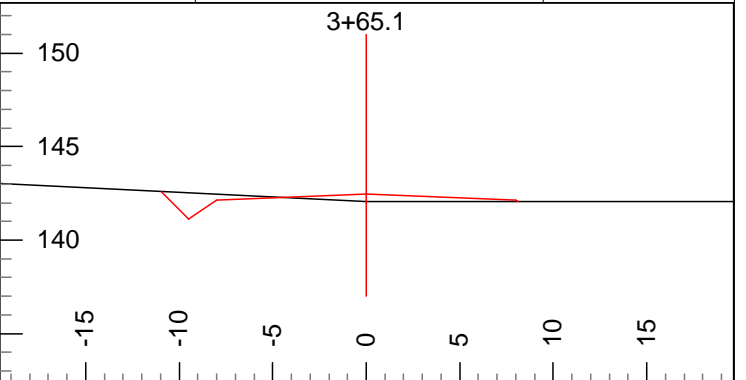
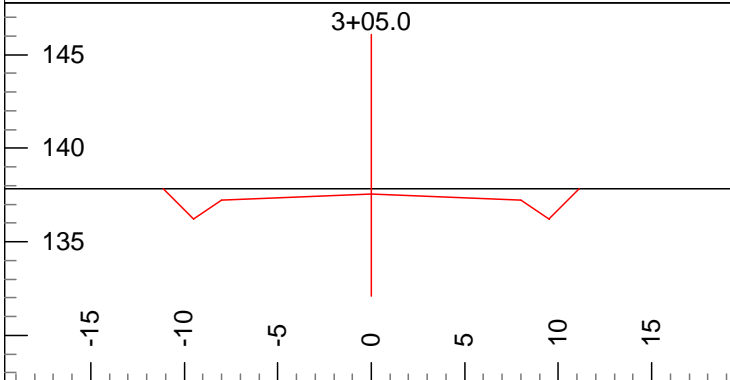
### Debris

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



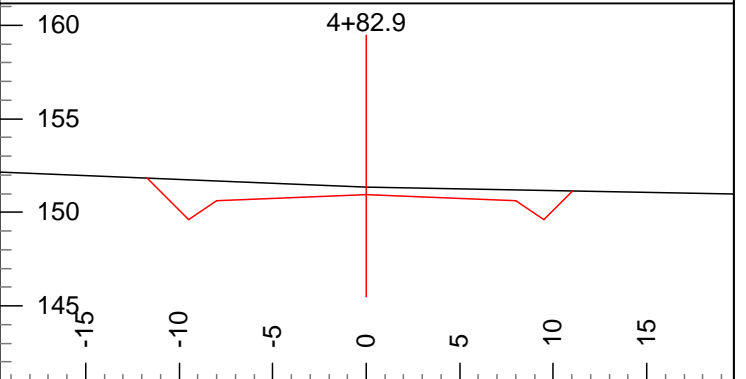
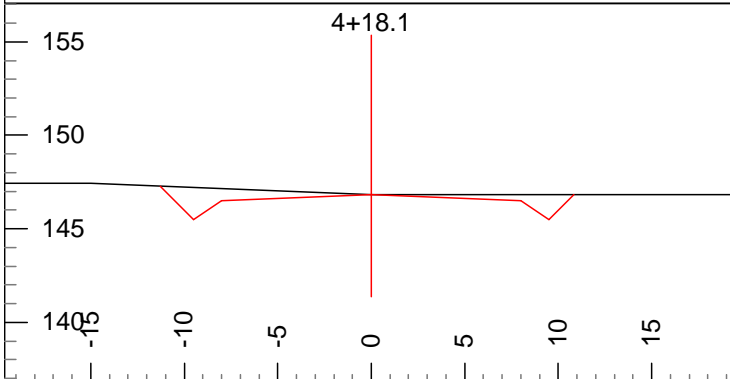






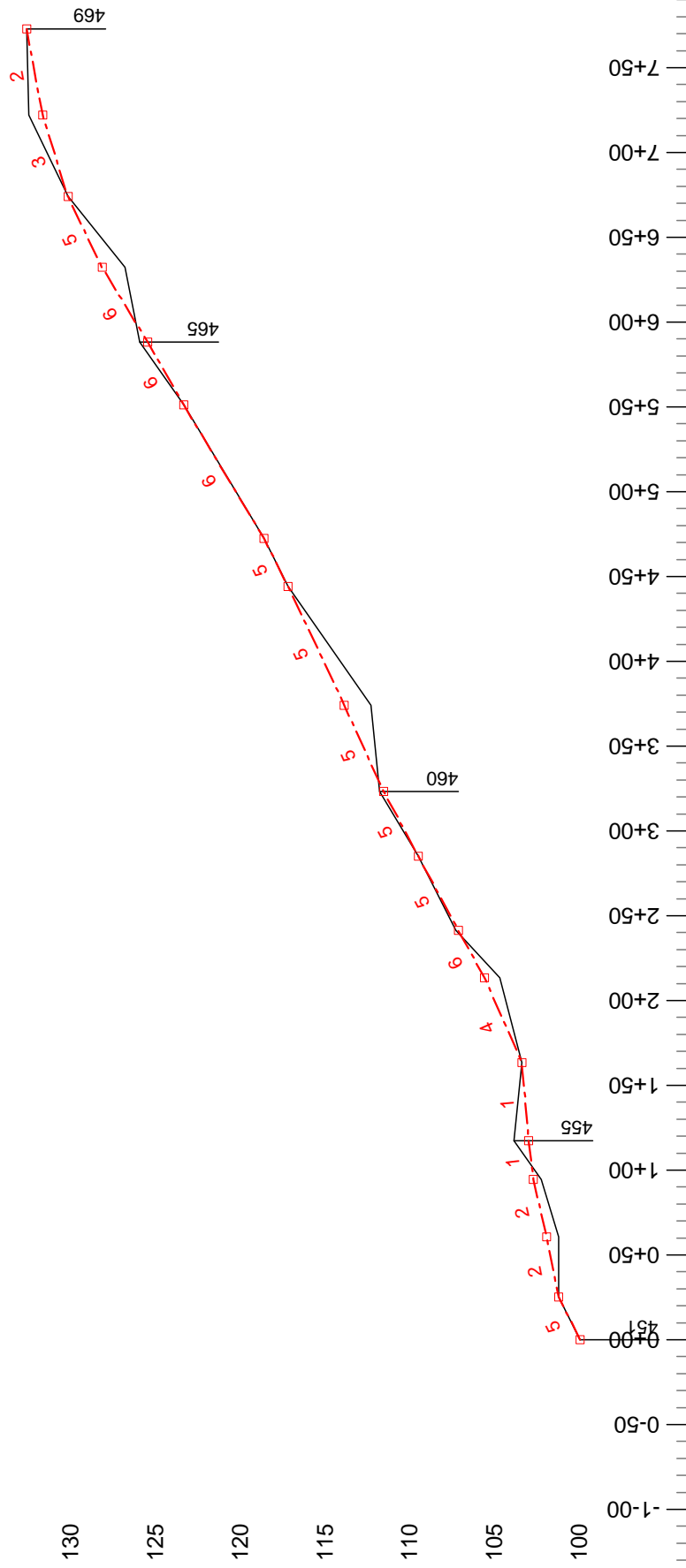
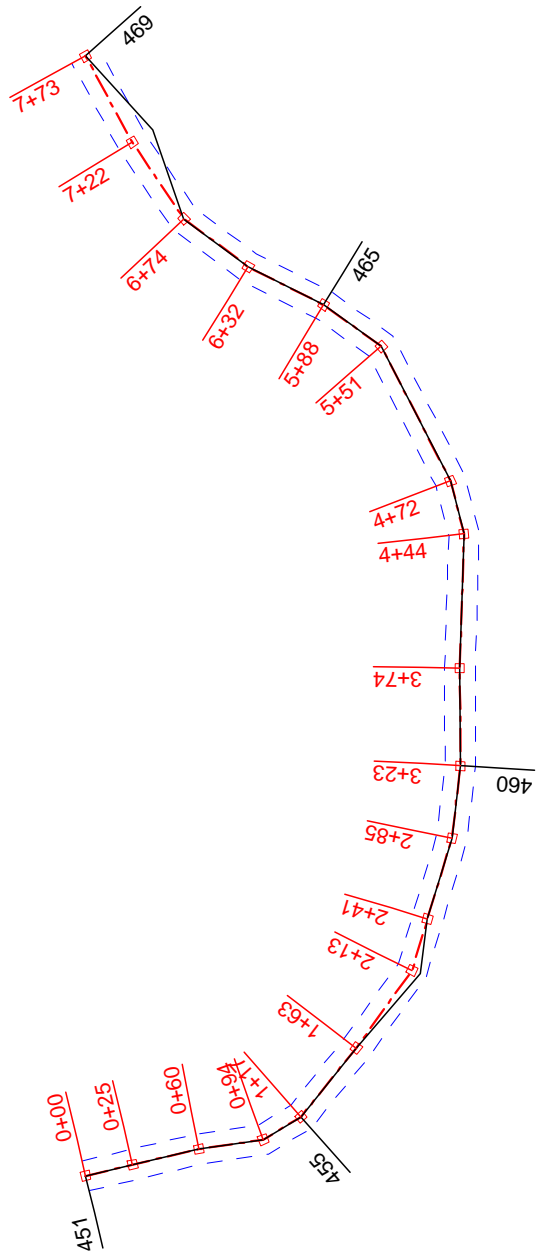
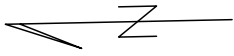
P-Stn : 3+05.0 V.Offset: -0.3 CL Elev: 137.6  
 H. Offset: 0.0 Cut Dp: 0.3 Index: 109

P-Stn : 3+65.1 V.Offset: 0.4 CL Elev: 142.5  
 H. Offset: 0.0 Cut Dp: -0.4 Index: 110



P-Stn : 4+18.1 V.Offset: 0.0 CL Elev: 146.8  
 H. Offset: 0.0 Cut Dp: 0.0 Index: 111

P-Stn : 4+82.9 V.Offset: -0.4 CL Elev: 150.9  
 H. Offset: 0.0 Cut Dp: 0.4 Index: 112



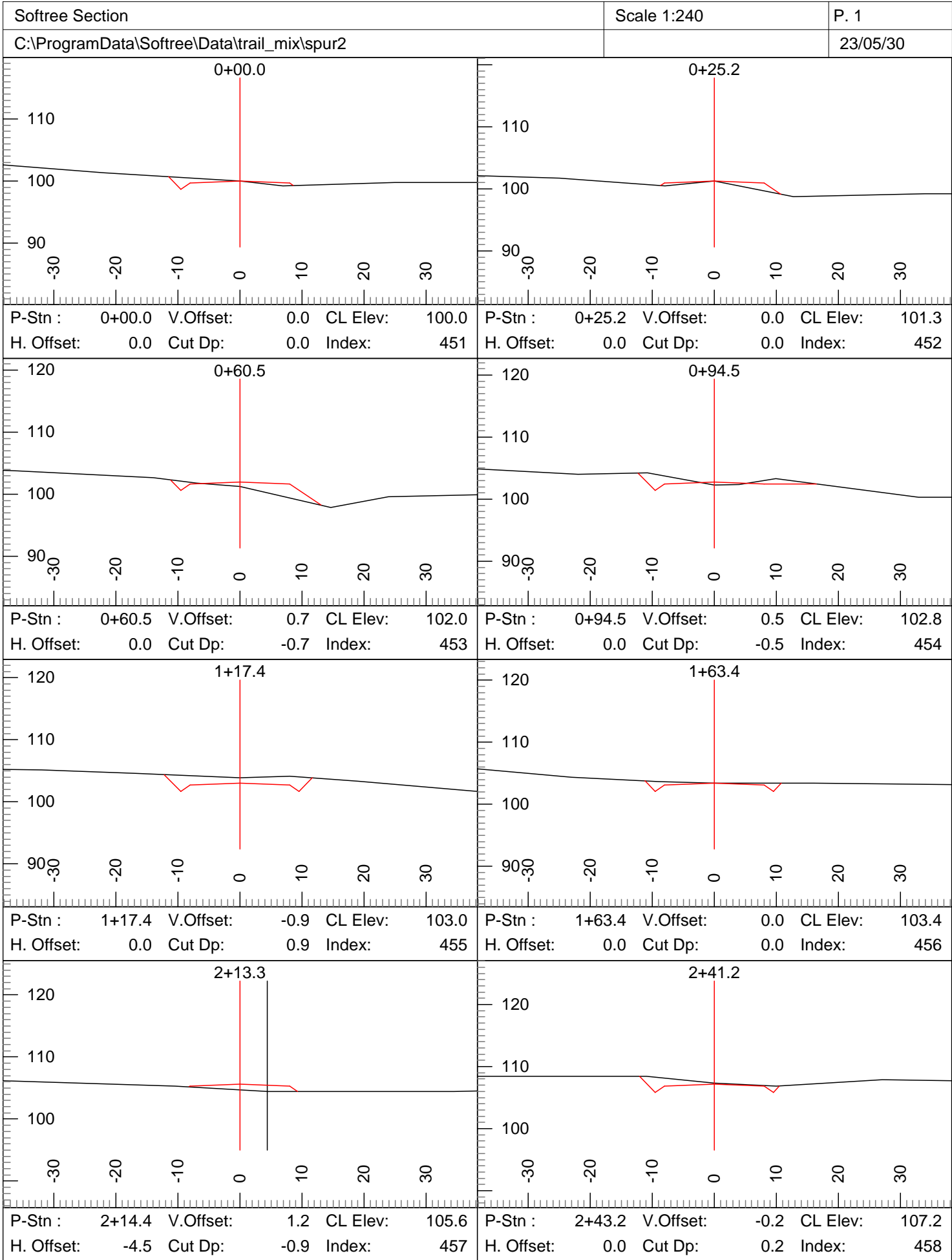
Plan Scale 1:1200  
 Profile Vert Scale 1:120  
 Profile Horz Scale 1:1200

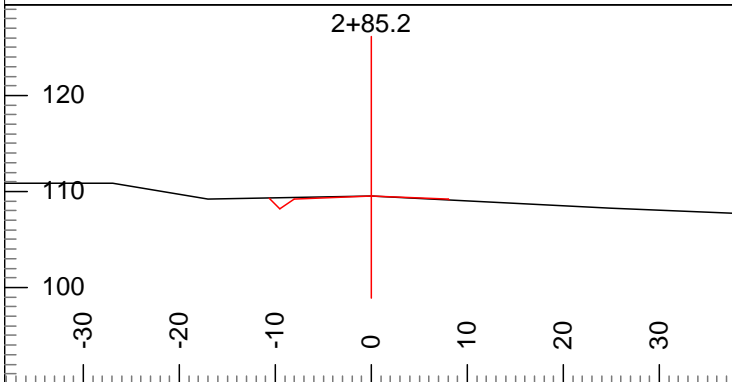
Engineer: Heymann  
 23/05/30



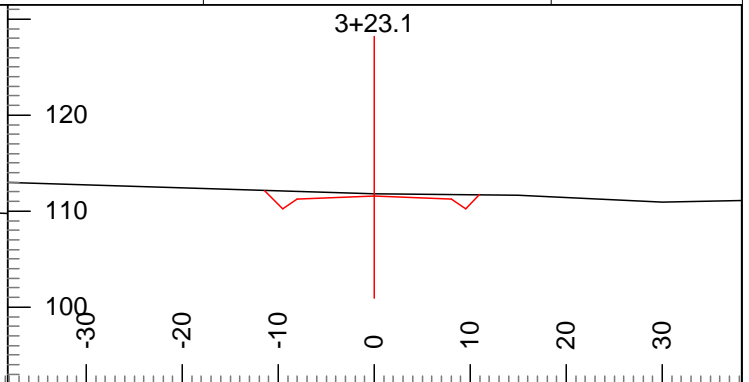
Trail Mix Timber Sale  
 Spur 2  
 Contract #: 30-103627



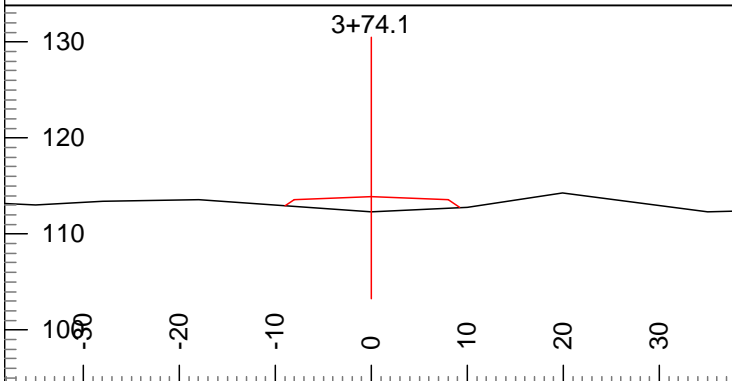




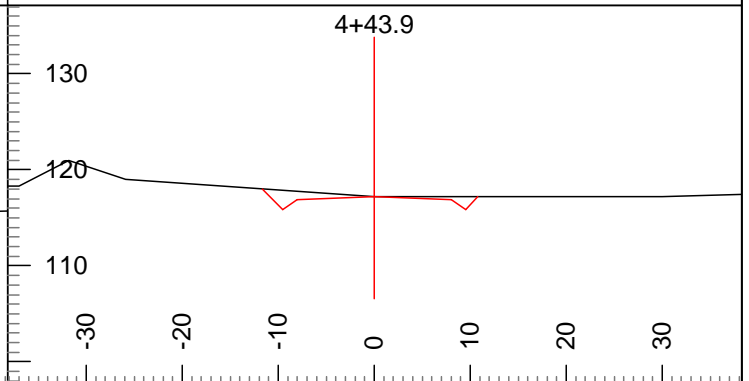
P-Stn : 2+87.2 V.Offset: 0.0 CL Elev: 109.5  
 H. Offset: 0.0 Cut Dp: 0.0 Index: 459



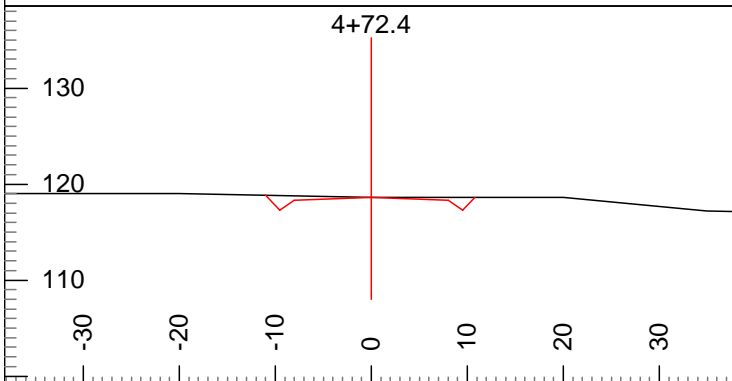
P-Stn : 3+25.1 V.Offset: -0.2 CL Elev: 111.6  
 H. Offset: 0.0 Cut Dp: 0.2 Index: 460



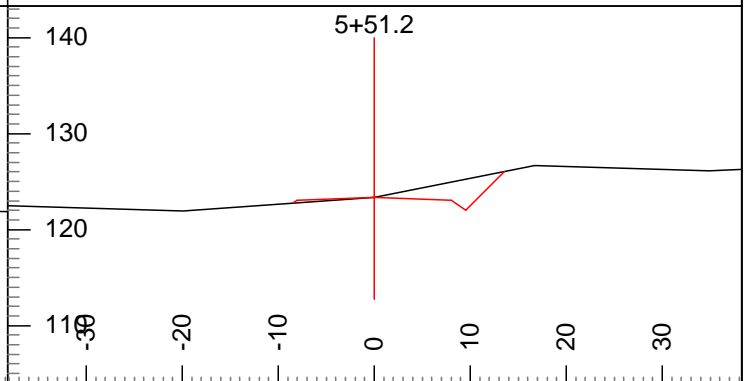
P-Stn : 3+76.1 V.Offset: 1.6 CL Elev: 113.9  
 H. Offset: 0.0 Cut Dp: -1.6 Index: 461



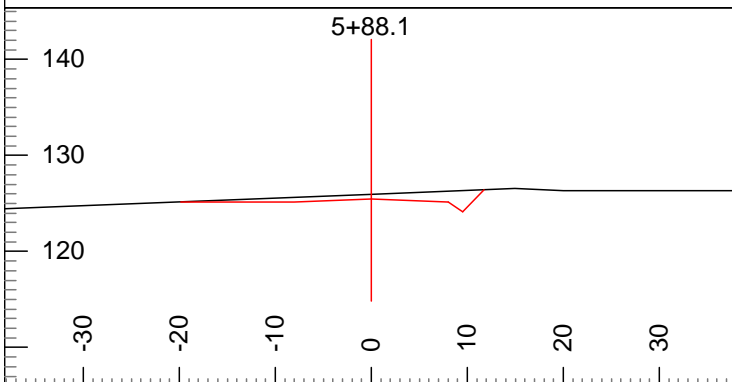
P-Stn : 4+45.9 V.Offset: 0.0 CL Elev: 117.2  
 H. Offset: 0.0 Cut Dp: 0.0 Index: 462



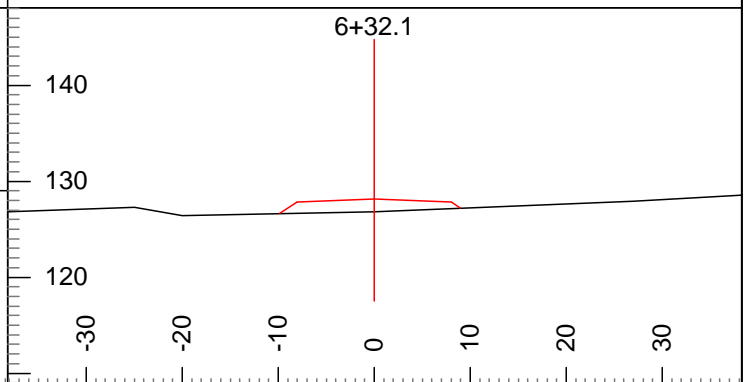
P-Stn : 4+74.4 V.Offset: 0.0 CL Elev: 118.6  
 H. Offset: 0.0 Cut Dp: 0.0 Index: 463



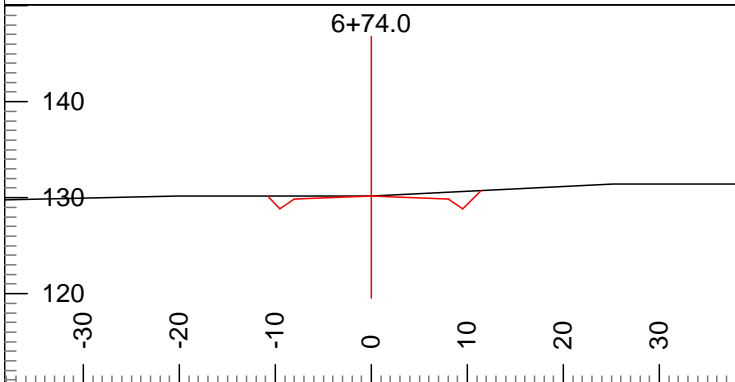
P-Stn : 5+53.3 V.Offset: 0.0 CL Elev: 123.4  
 H. Offset: 0.0 Cut Dp: 0.0 Index: 464



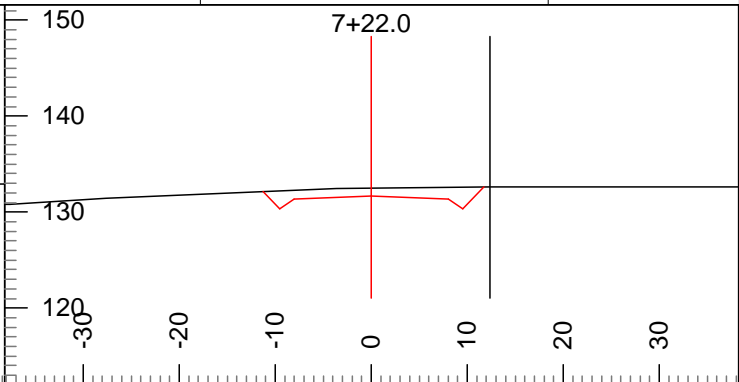
P-Stn : 5+90.2 V.Offset: -0.5 CL Elev: 125.5  
 H. Offset: 0.0 Cut Dp: 0.5 Index: 465



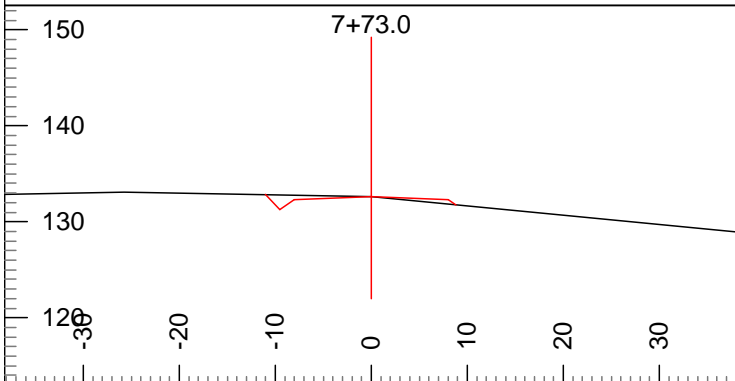
P-Stn : 6+34.2 V.Offset: 1.3 CL Elev: 128.2  
 H. Offset: 0.0 Cut Dp: -1.3 Index: 466



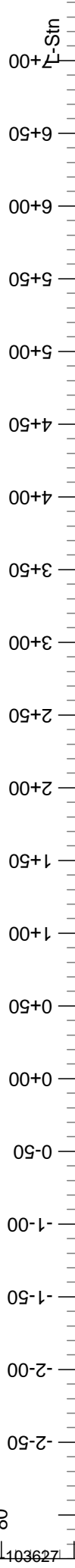
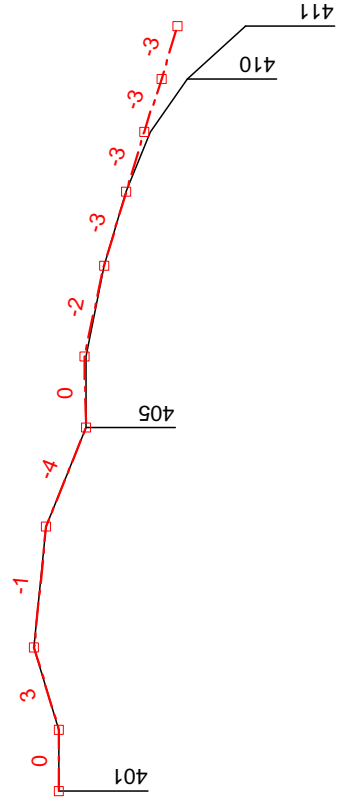
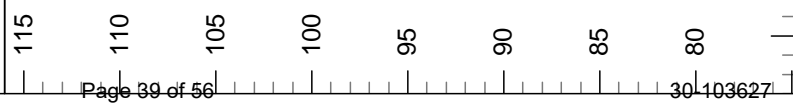
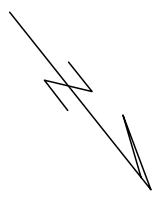
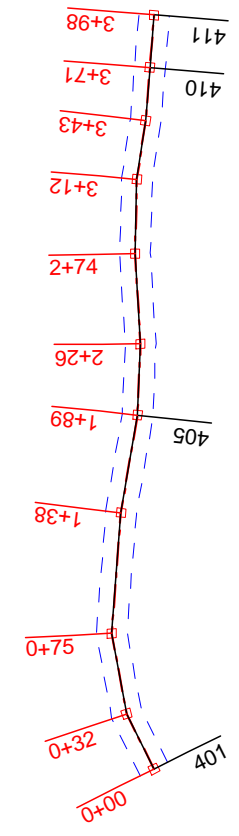
P-Stn :	6+76.0	V.Offset:	0.0	CL Elev:	130.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	467



P-Stn :	7+25.0	V.Offset:	-0.9	CL Elev:	131.7
H. Offset:	-12.4	Cut Dp:	0.8	Index:	468



P-Stn :	7+77.0	V.Offset:	0.0	CL Elev:	132.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	469

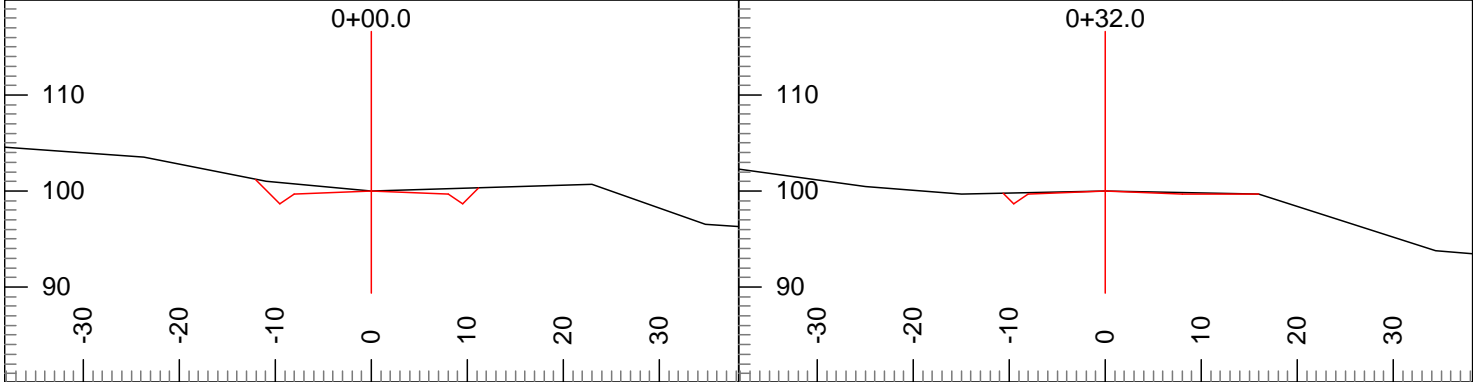


Trail Mix Timber Sale  
 Spur 3  
 Contract #: 30-103627

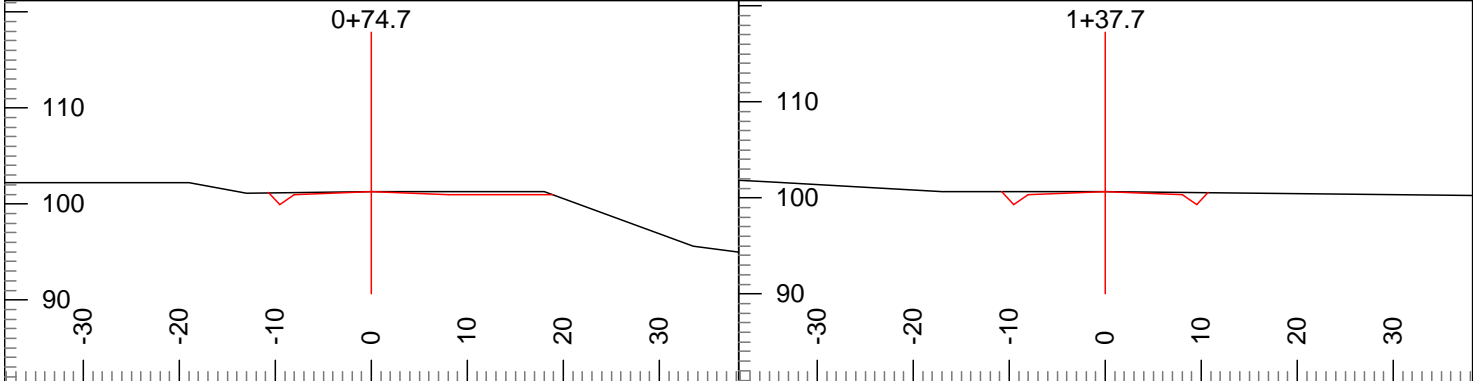
Plan Scale 1:1200  
 Profile Vert Scale 1:120  
 Profile Horz Scale 1:1200



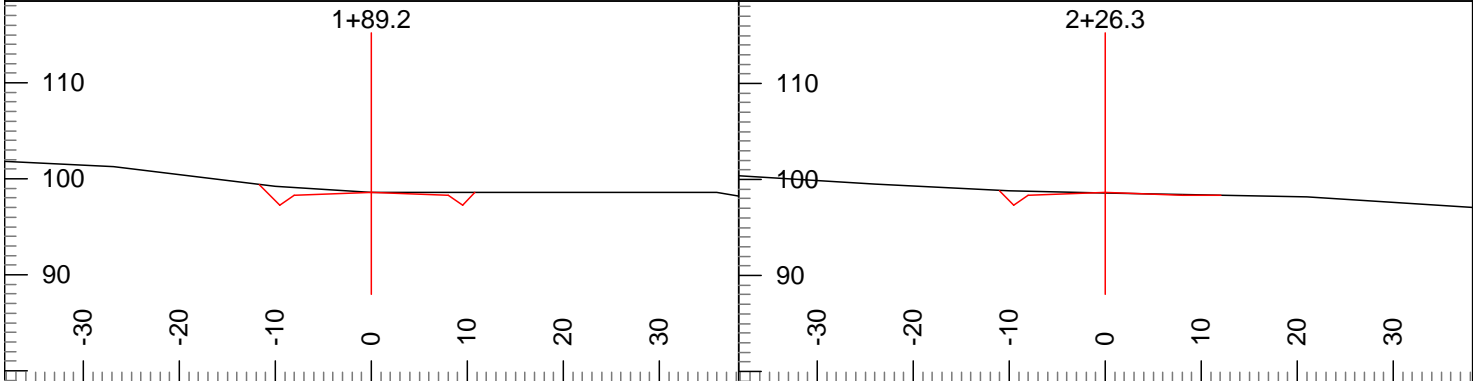
Engineer: Heymann  
 23/05/30



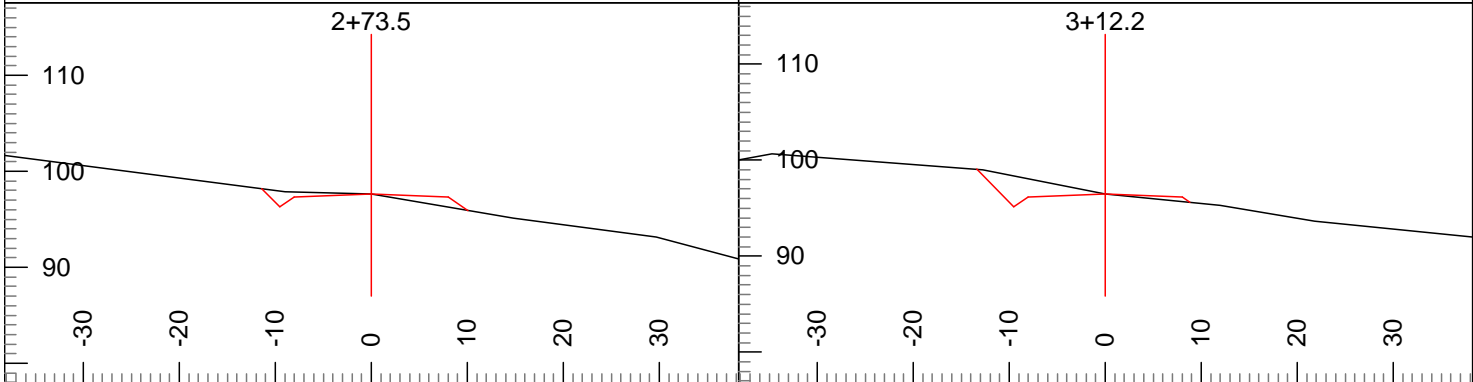
P-Stn : 0+00.0 V.Offset: 0.0 CL Elev: 100.0 H. Offset: 0.0 Cut Dp: 0.0 Index: 401	P-Stn : 0+32.0 V.Offset: 0.0 CL Elev: 100.0 H. Offset: 0.0 Cut Dp: 0.0 Index: 402
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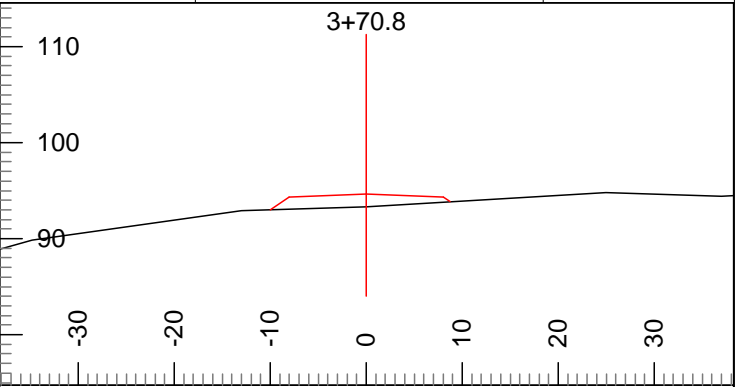
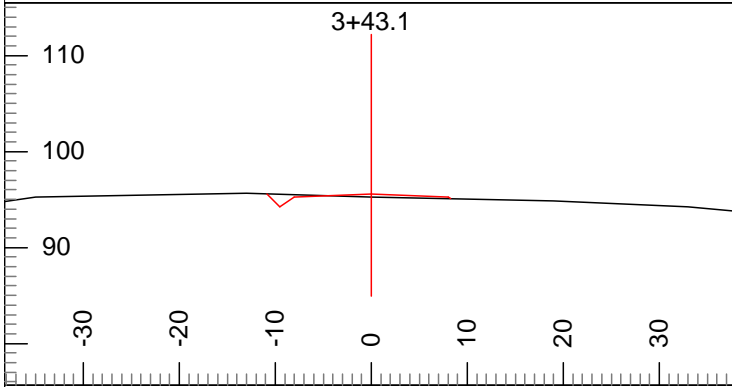
P-Stn : 0+74.7 V.Offset: 0.0 CL Elev: 101.3 H. Offset: 0.0 Cut Dp: 0.0 Index: 403	P-Stn : 1+37.7 V.Offset: 0.0 CL Elev: 100.7 H. Offset: 0.0 Cut Dp: 0.0 Index: 404
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P-Stn : 1+89.2 V.Offset: 0.0 CL Elev: 98.6 H. Offset: 0.0 Cut Dp: 0.0 Index: 405	P-Stn : 2+26.3 V.Offset: 0.1 CL Elev: 98.7 H. Offset: 0.0 Cut Dp: -0.1 Index: 406
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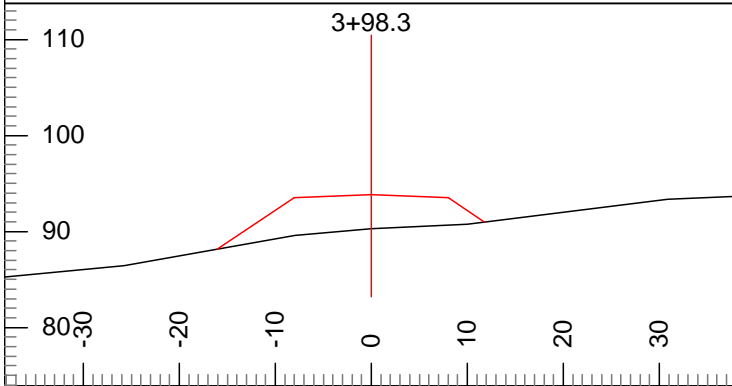


P-Stn : 2+73.5 V.Offset: 0.0 CL Elev: 97.6 H. Offset: 0.0 Cut Dp: 0.0 Index: 407	P-Stn : 3+12.2 V.Offset: 0.0 CL Elev: 96.5 H. Offset: 0.0 Cut Dp: 0.0 Index: 408
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P-Stn : 3+43.1 V.Offset: 0.3 CL Elev: 95.6  
H. Offset: 0.0 Cut Dp: -0.3 Index: 409

P-Stn : 3+70.8 V.Offset: 1.3 CL Elev: 94.6  
H. Offset: 0.0 Cut Dp: -1.3 Index: 410



P-Stn : 3+98.3 V.Offset: 3.5 CL Elev: 93.8  
H. Offset: 0.0 Cut Dp: -3.5 Index: 411

Trail Mix Timber Sale  
 Spur 4  
 Contract #: 30-103627

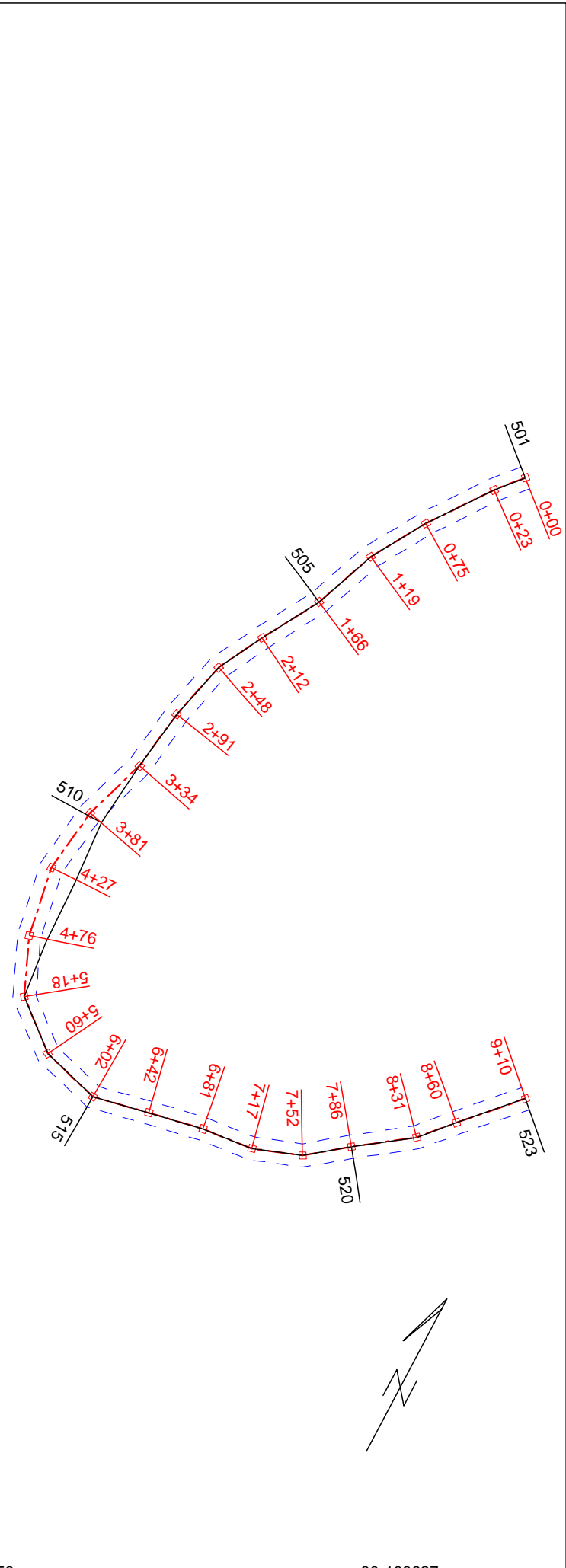
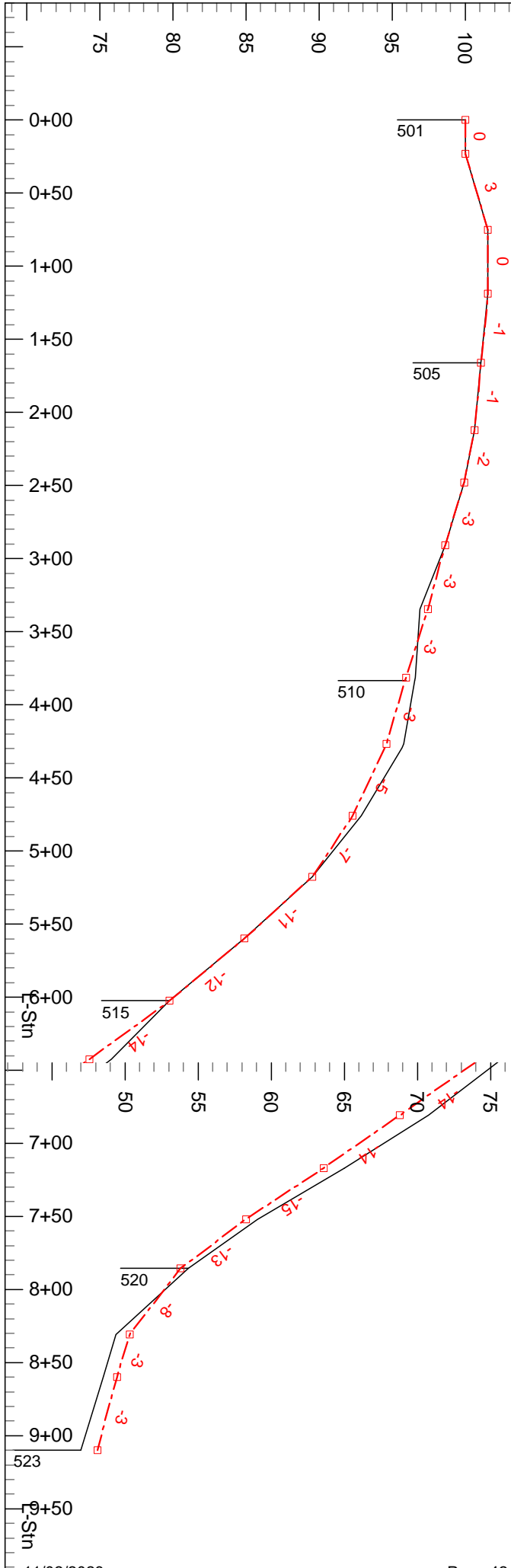


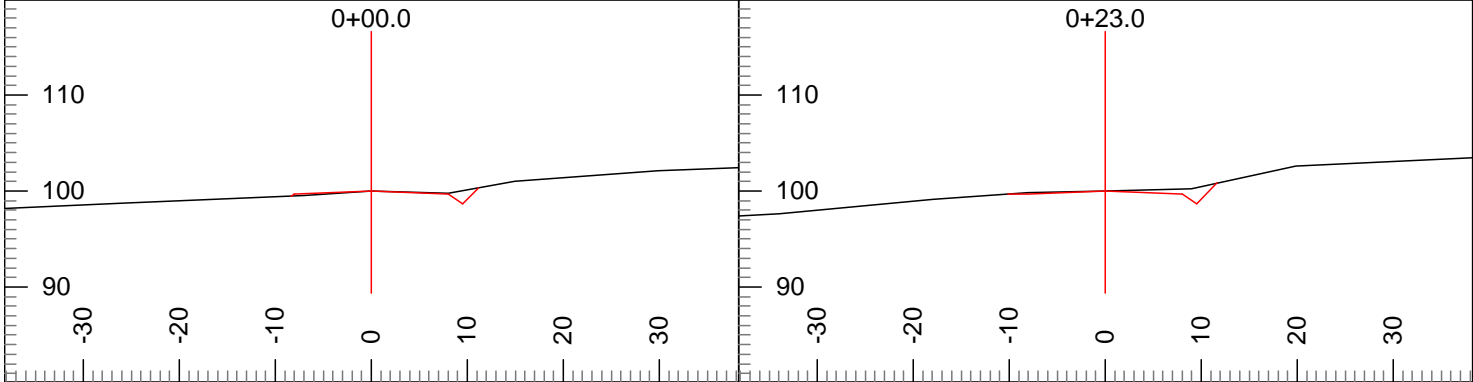
WASHINGTON STATE DEPARTMENT OF  
**NATURAL RESOURCES**

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

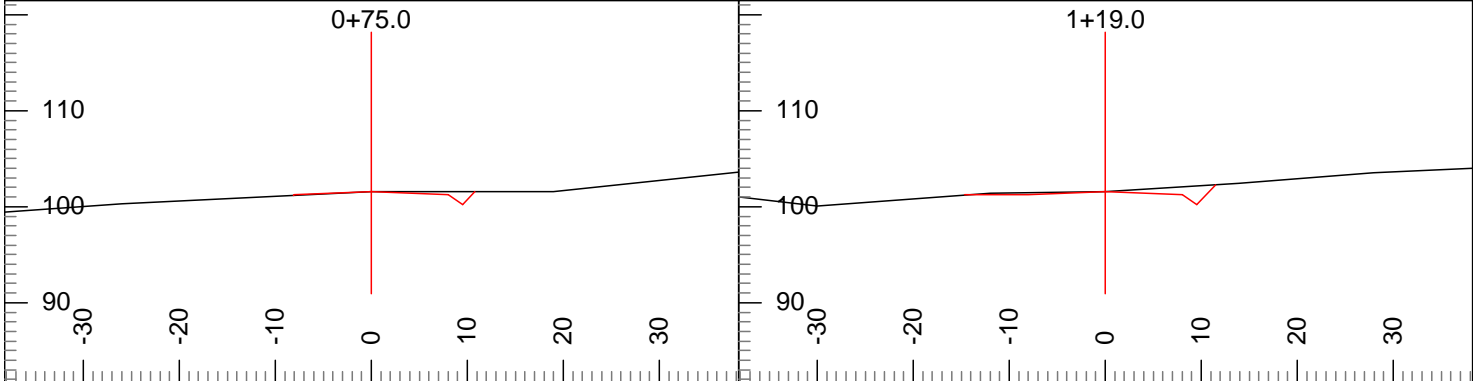
Engineer: Heymann  
 23/05/30

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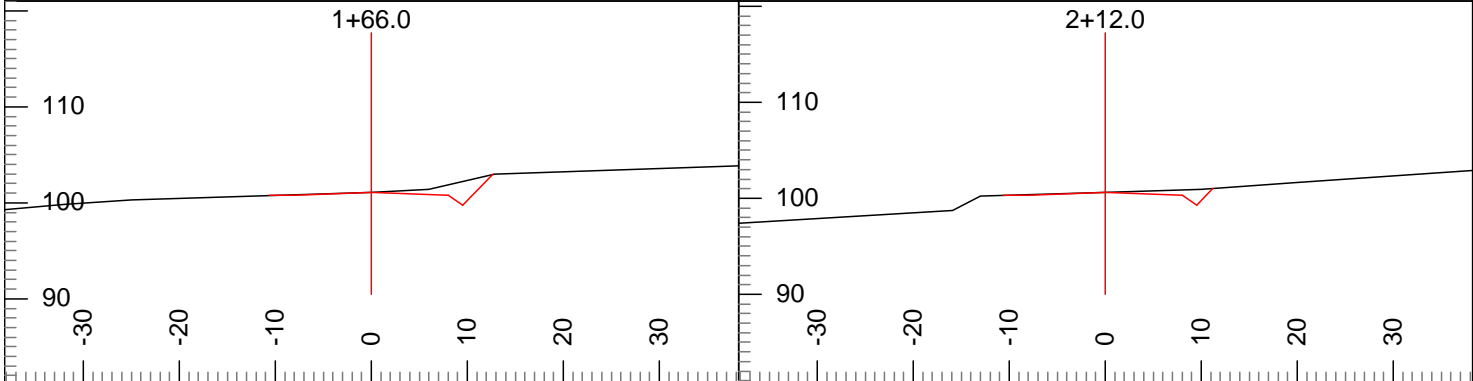




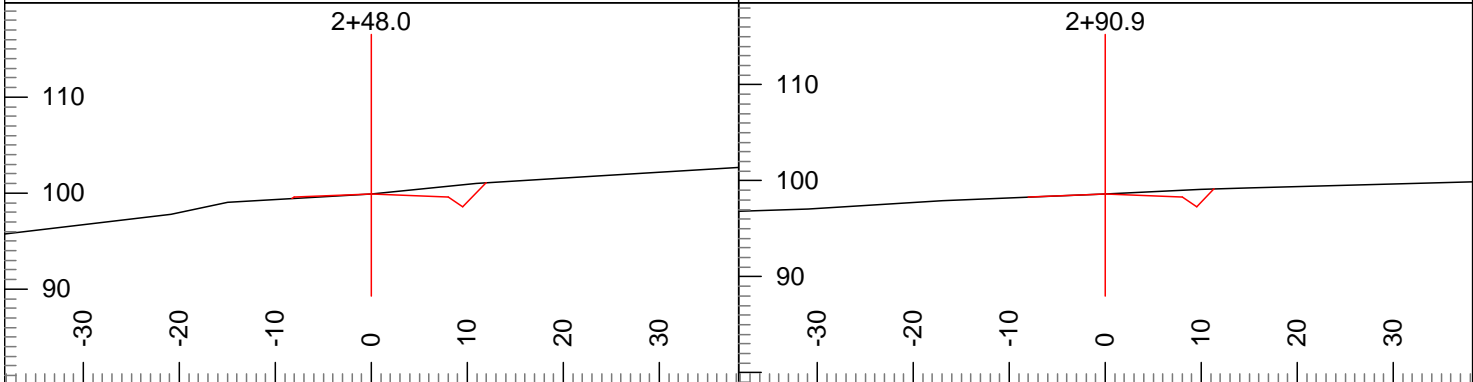
P-Stn : 0+00.0 V.Offset: 0.0 CL Elev: 100.0 H. Offset: 0.0 Cut Dp: 0.0 Index: 501	P-Stn : 0+23.0 V.Offset: 0.0 CL Elev: 100.0 H. Offset: 0.0 Cut Dp: 0.0 Index: 502
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P-Stn : 0+75.0 V.Offset: 0.0 CL Elev: 101.6 H. Offset: 0.0 Cut Dp: 0.0 Index: 503	P-Stn : 1+19.0 V.Offset: 0.0 CL Elev: 101.6 H. Offset: 0.0 Cut Dp: 0.0 Index: 504
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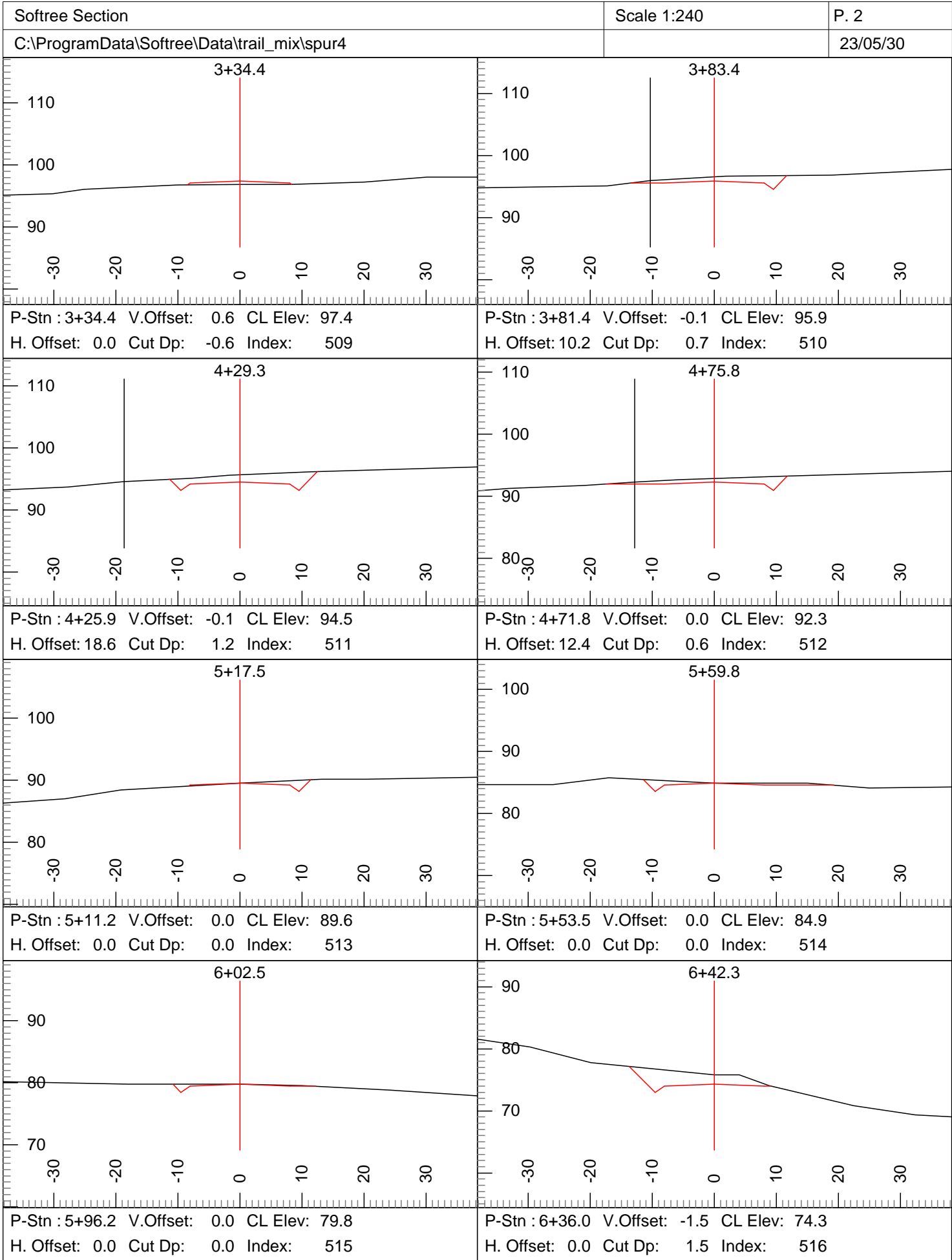


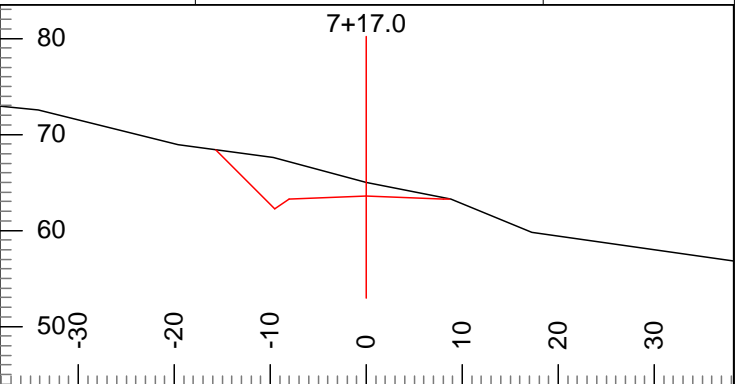
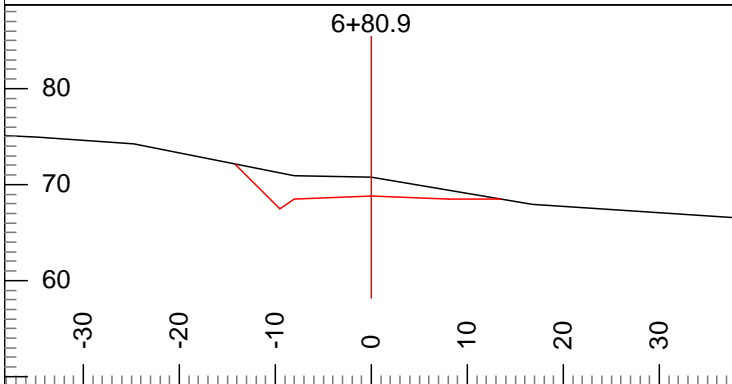
P-Stn : 1+66.0 V.Offset: 0.0 CL Elev: 101.1 H. Offset: 0.0 Cut Dp: 0.0 Index: 505	P-Stn : 2+12.0 V.Offset: 0.0 CL Elev: 100.6 H. Offset: 0.0 Cut Dp: 0.0 Index: 506
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P-Stn : 2+48.0 V.Offset: 0.0 CL Elev: 99.9 H. Offset: 0.0 Cut Dp: 0.0 Index: 507	P-Stn : 2+90.9 V.Offset: 0.0 CL Elev: 98.6 H. Offset: 0.0 Cut Dp: 0.0 Index: 508
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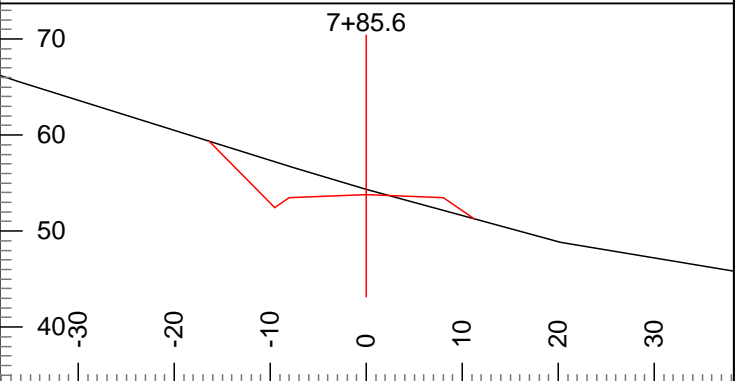
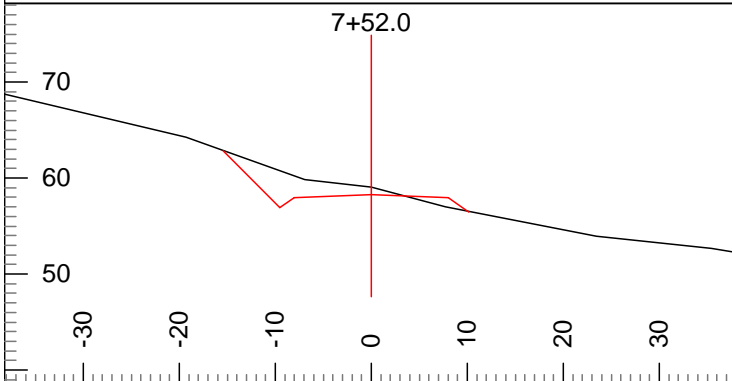






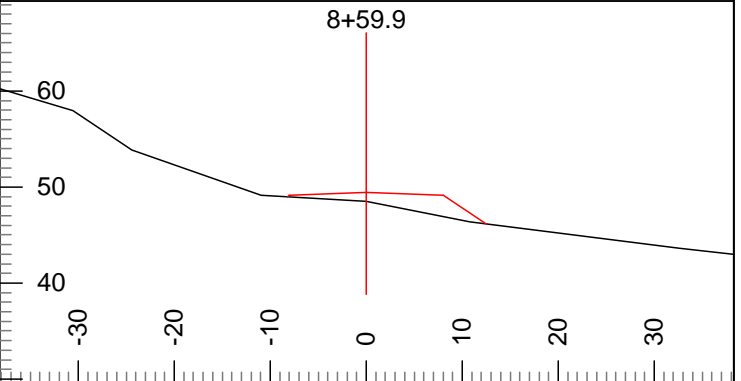
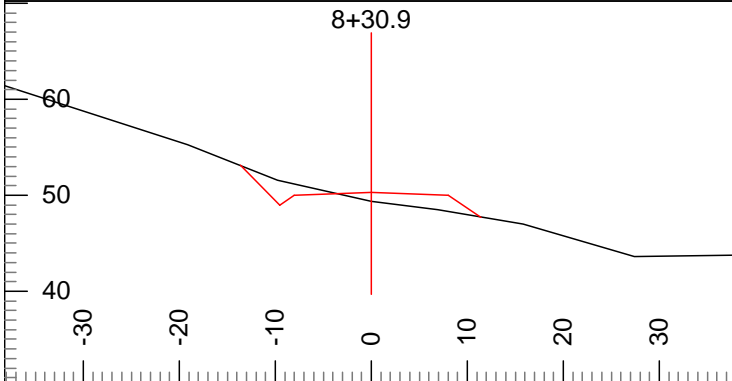
P-Stn : 6+74.6 V.Offset: -2.0 CL Elev: 68.8  
 H. Offset: 0.0 Cut Dp: 2.0 Index: 517

P-Stn : 7+10.7 V.Offset: -1.4 CL Elev: 63.6  
 H. Offset: 0.0 Cut Dp: 1.4 Index: 518



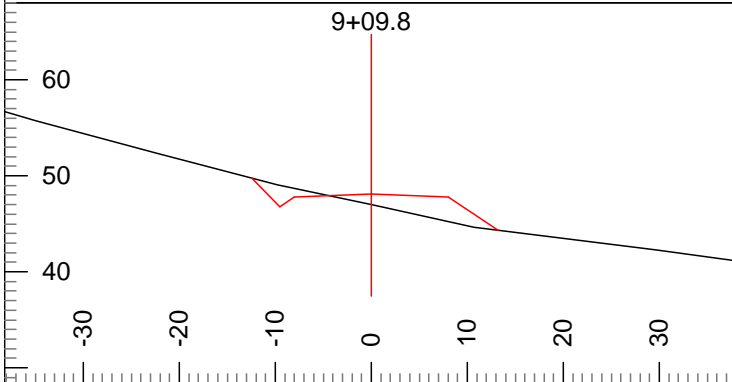
P-Stn : 7+45.7 V.Offset: -0.8 CL Elev: 58.3  
 H. Offset: 0.0 Cut Dp: 0.8 Index: 519

P-Stn : 7+79.4 V.Offset: -0.6 CL Elev: 53.8  
 H. Offset: 0.0 Cut Dp: 0.6 Index: 520

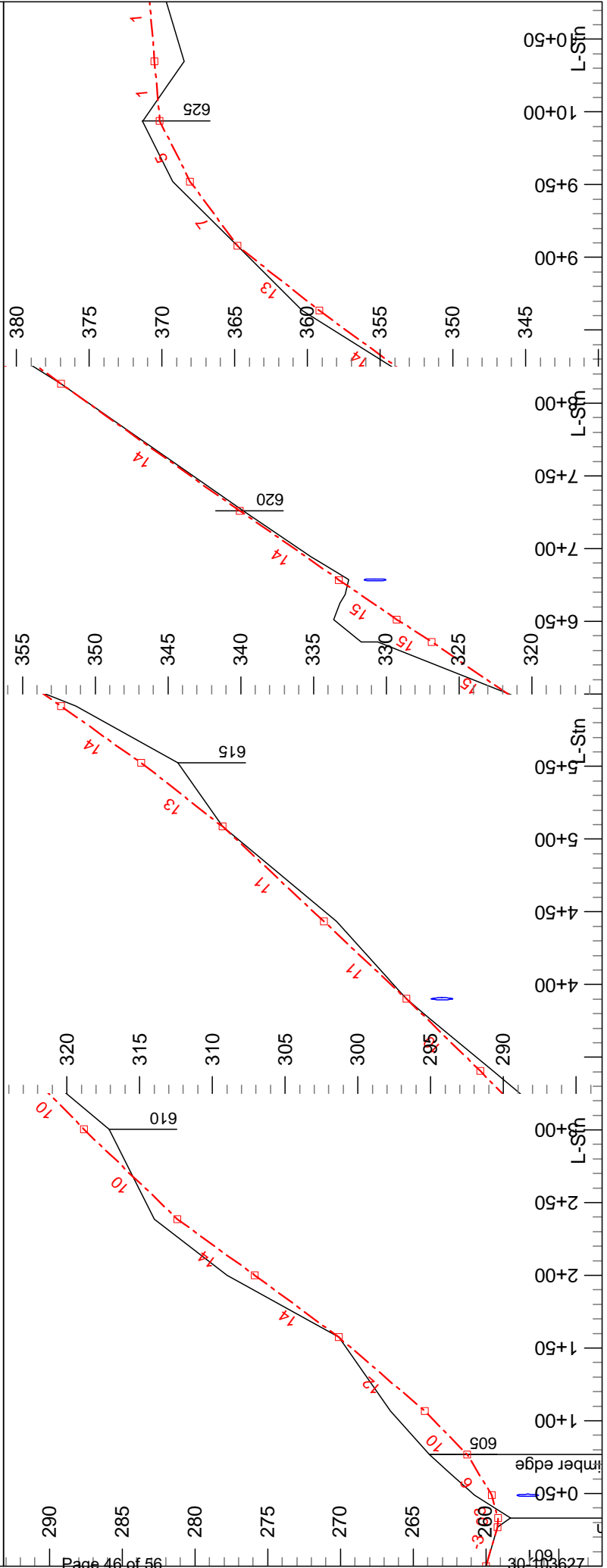
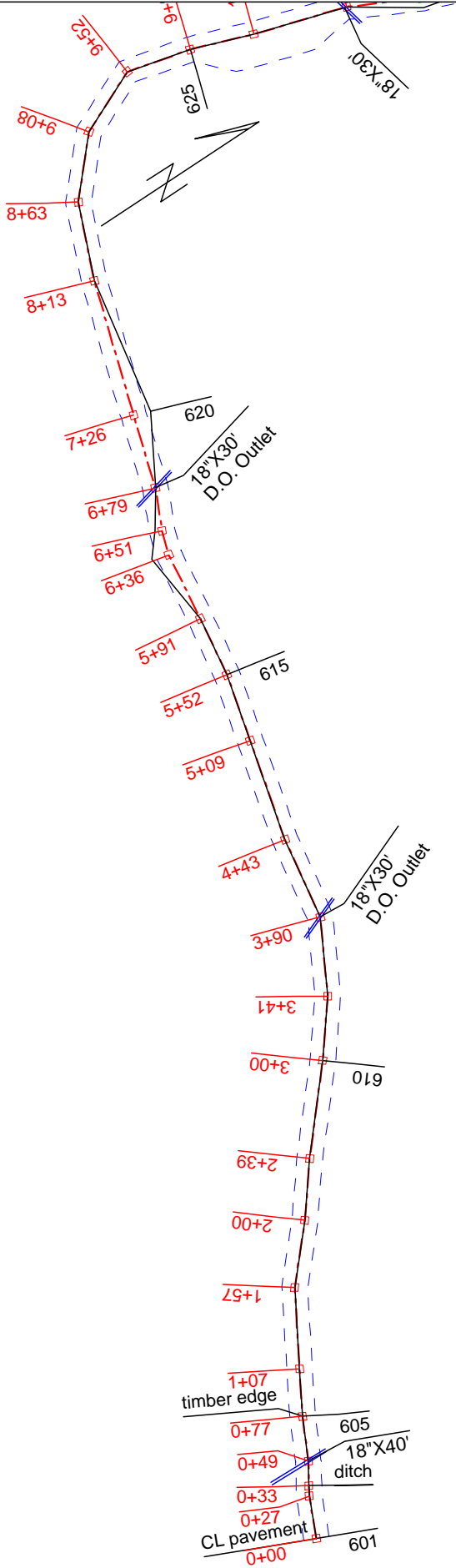


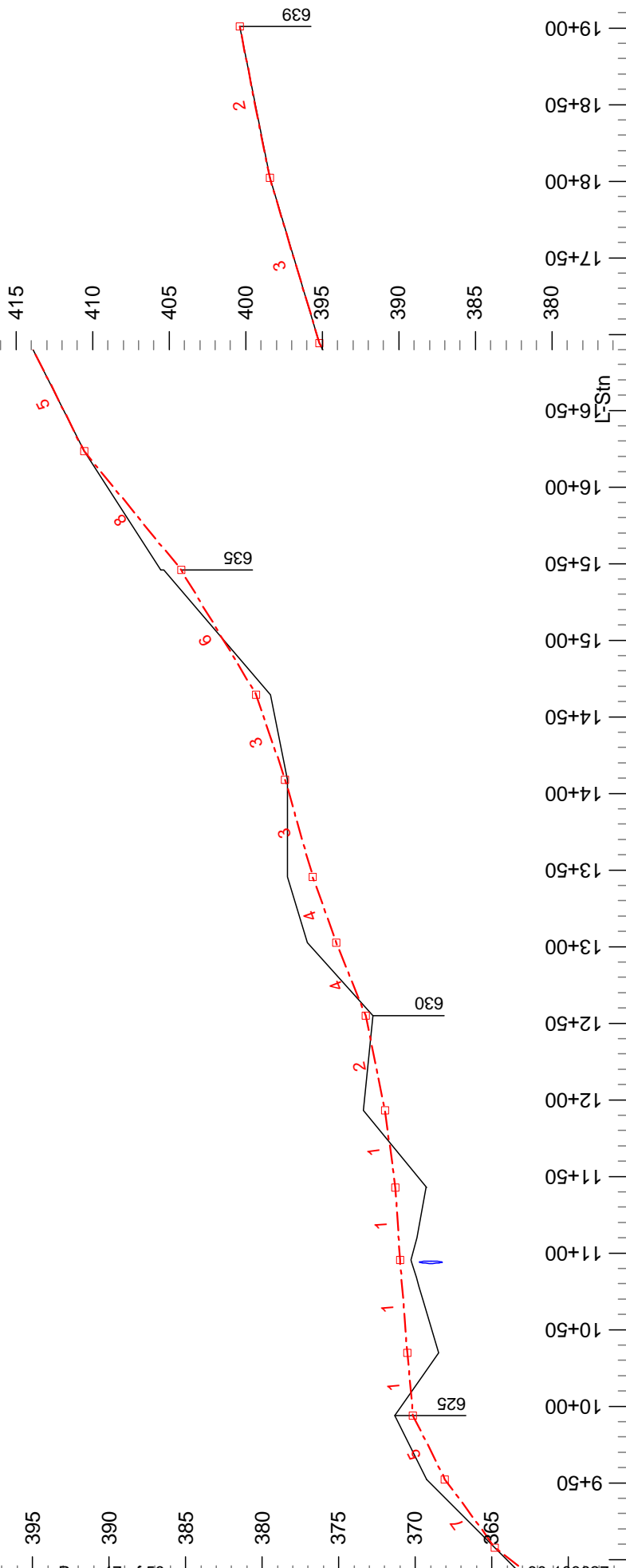
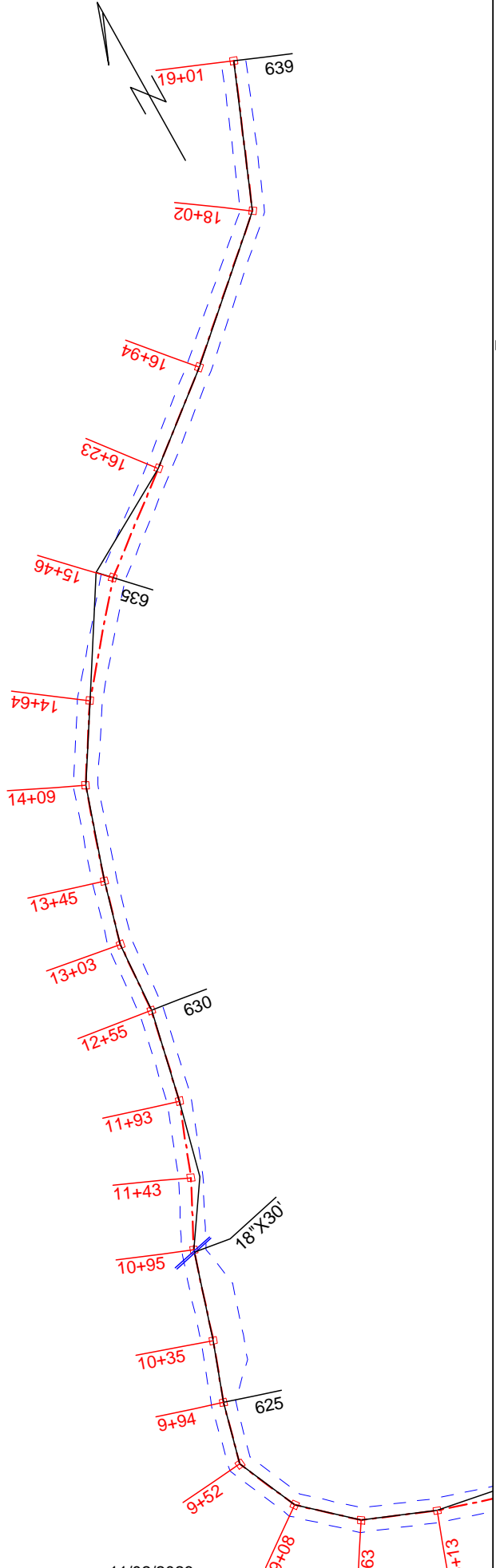
P-Stn : 8+24.6 V.Offset: 0.9 CL Elev: 50.3  
 H. Offset: 0.0 Cut Dp: -0.9 Index: 521

P-Stn : 8+53.6 V.Offset: 0.9 CL Elev: 49.4  
 H. Offset: 0.0 Cut Dp: -0.9 Index: 522



P-Stn : 9+03.5 V.Offset: 1.1 CL Elev: 48.1  
 H. Offset: 0.0 Cut Dp: -1.1 Index: 523



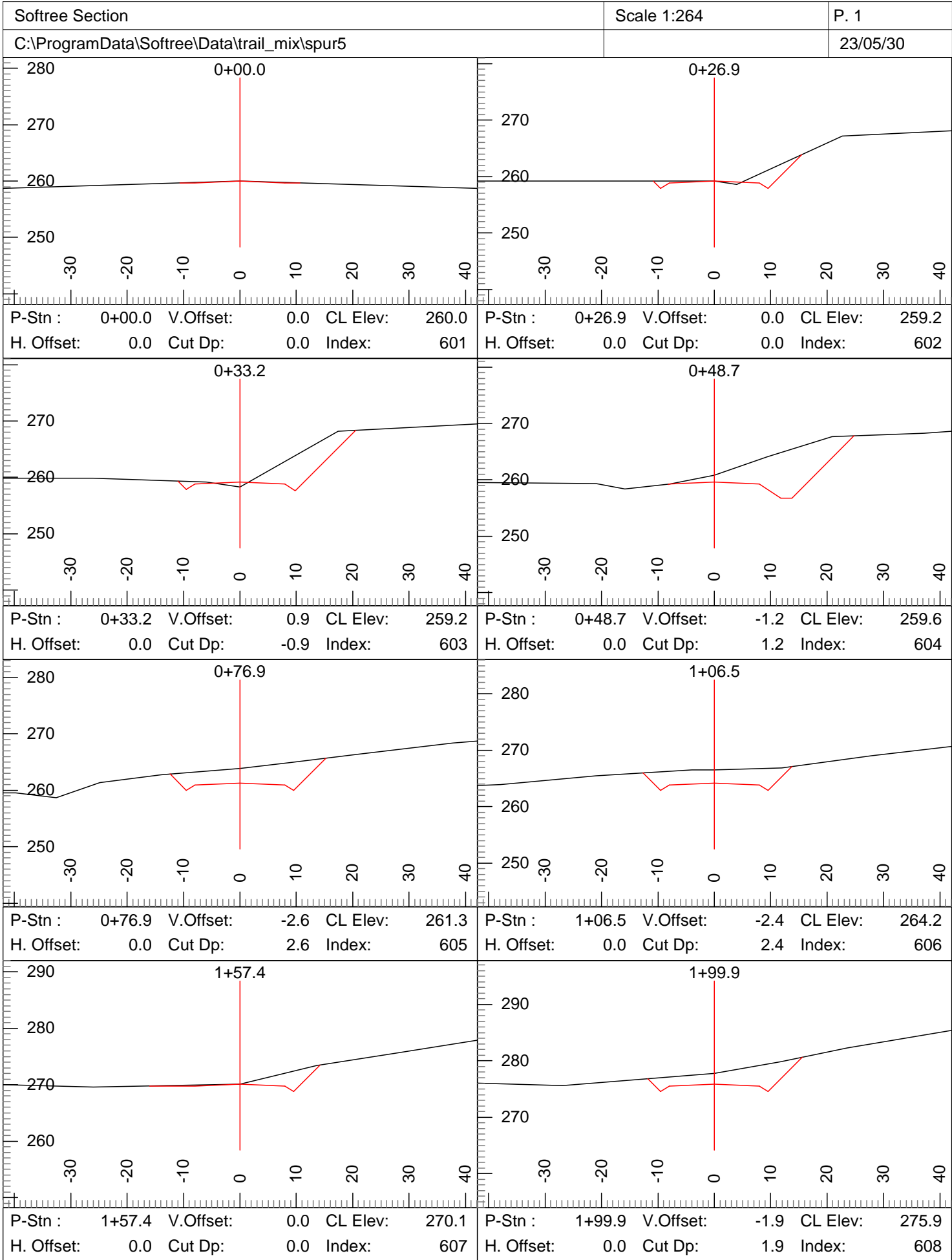


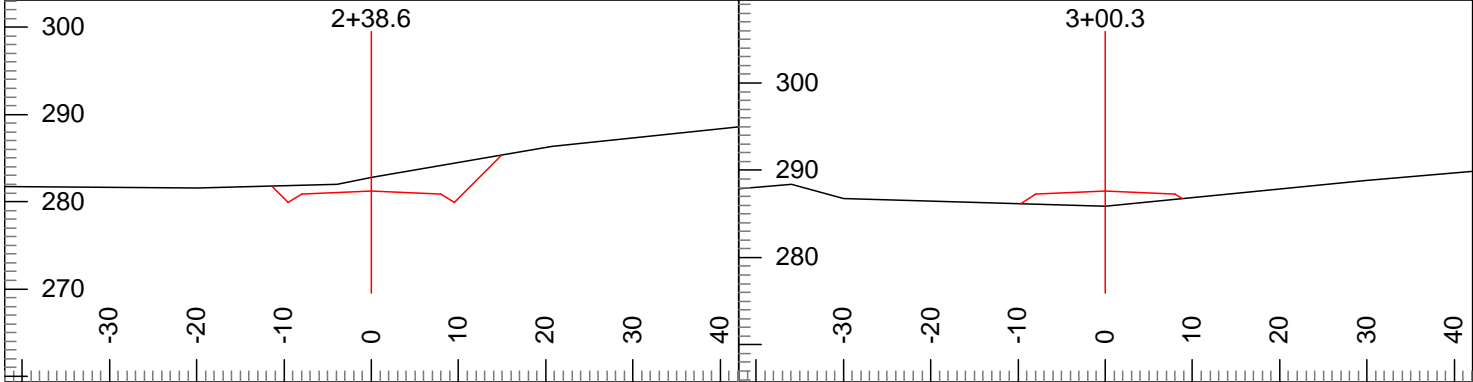
Engineer: Heymann  
 23/05/30

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

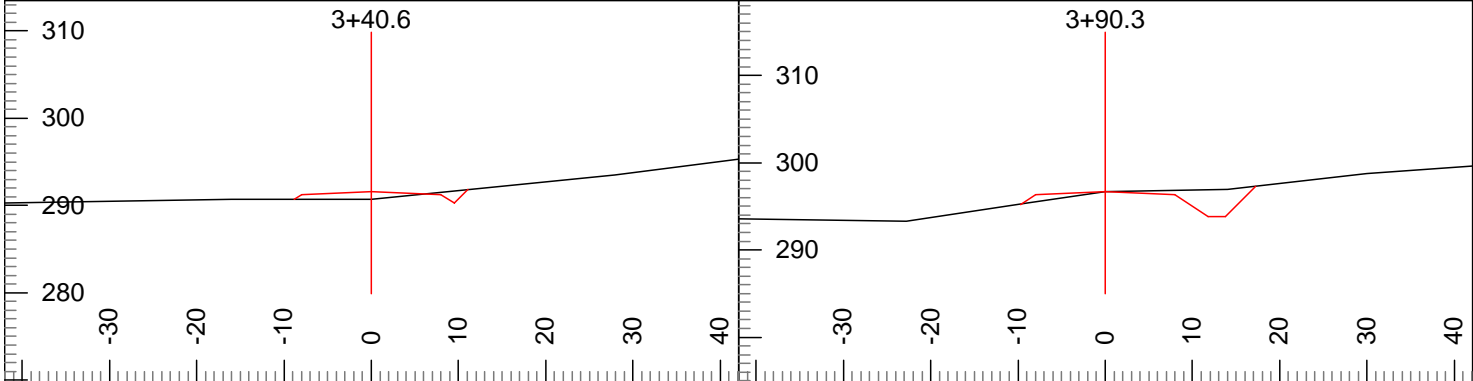


Trail Mix Timber Sale  
 Spur 5  
 Contract #: 30-103627

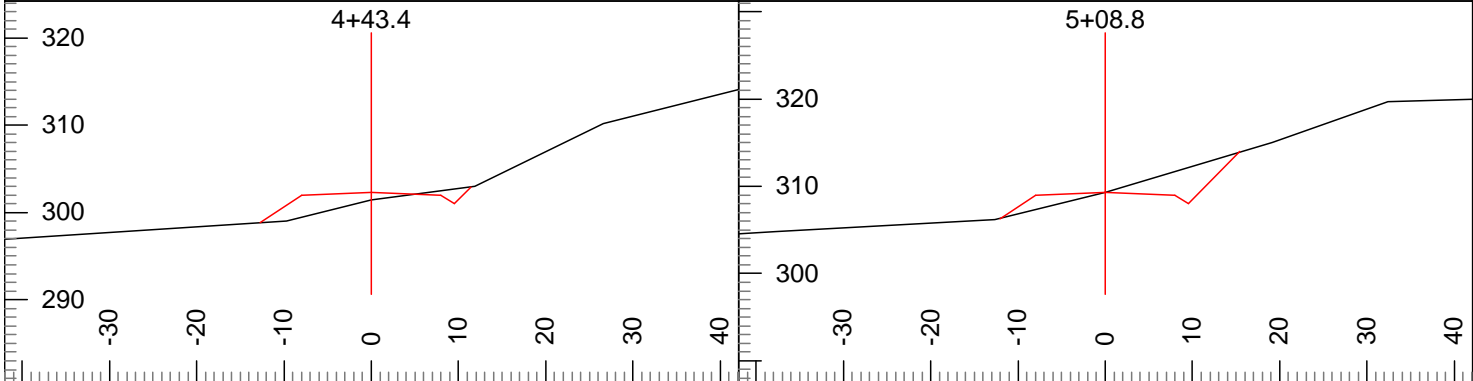




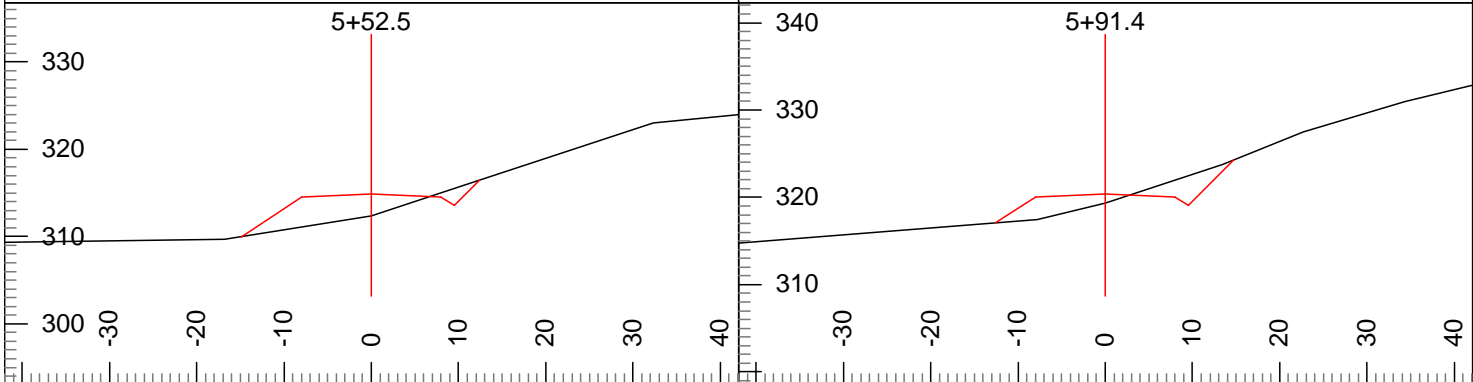
P-Stn :	2+38.6	V.Offset:	-1.6	CL Elev:	281.2	P-Stn :	3+00.3	V.Offset:	1.7	CL Elev:	287.6
H. Offset:	0.0	Cut Dp:	1.6	Index:	609	H. Offset:	0.0	Cut Dp:	-1.7	Index:	610



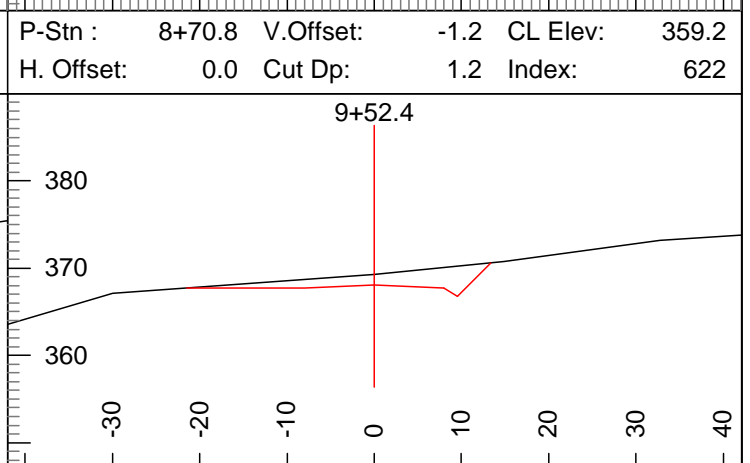
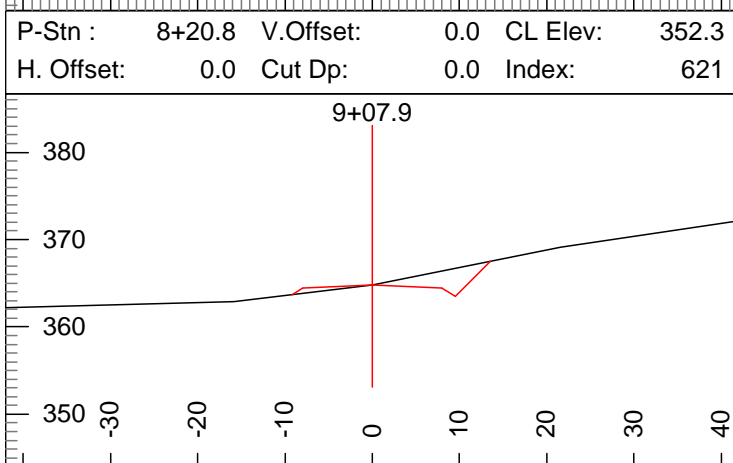
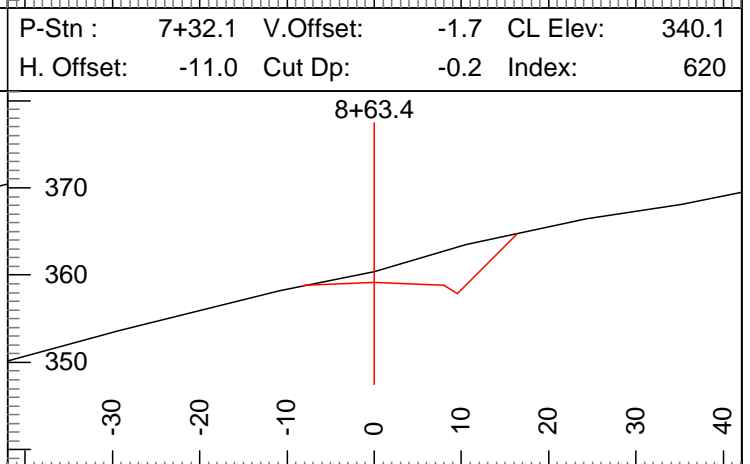
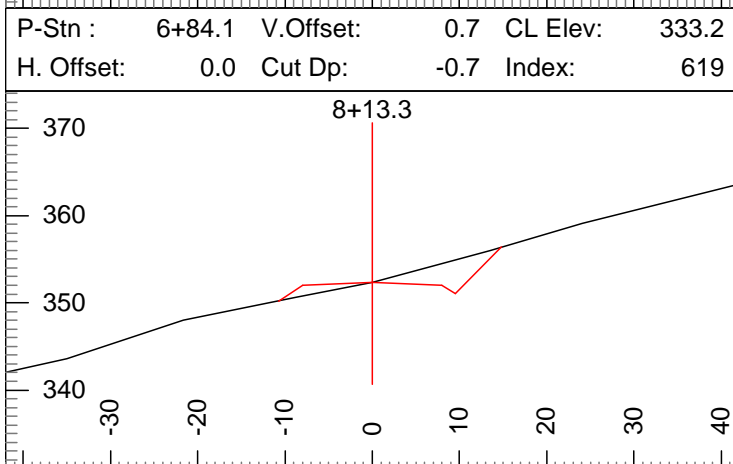
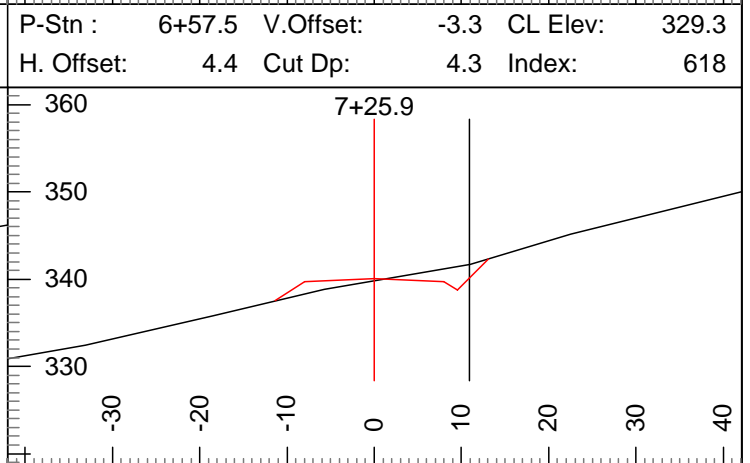
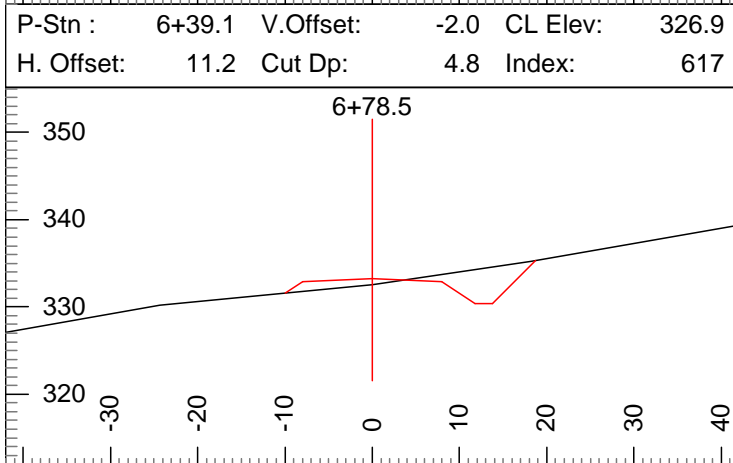
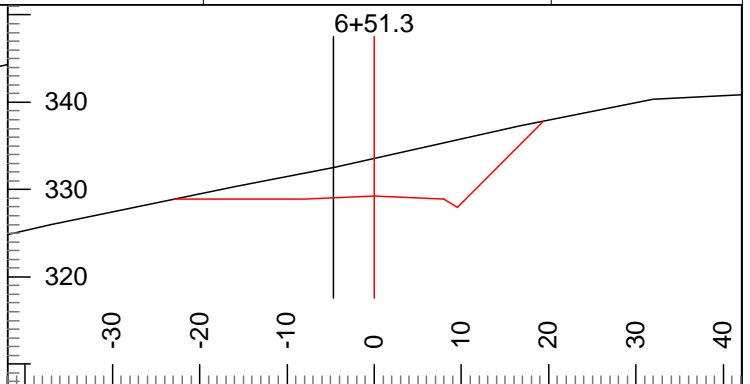
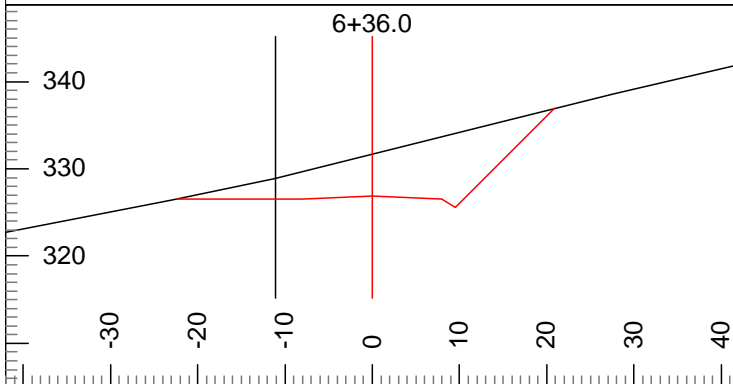
P-Stn :	3+40.6	V.Offset:	0.9	CL Elev:	291.6	P-Stn :	3+90.3	V.Offset:	0.0	CL Elev:	296.7
H. Offset:	0.0	Cut Dp:	-0.9	Index:	611	H. Offset:	0.0	Cut Dp:	0.0	Index:	612

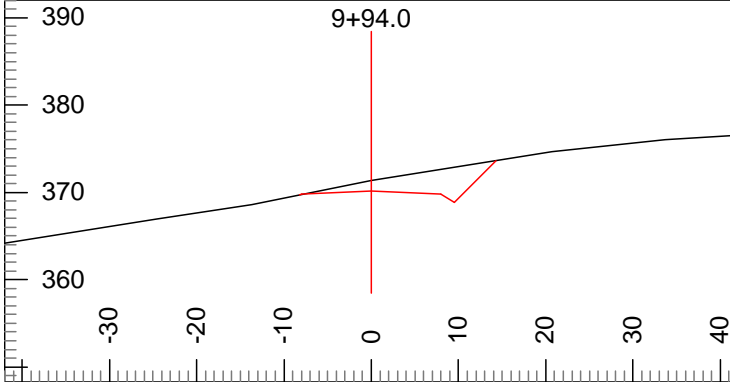


P-Stn :	4+43.4	V.Offset:	0.9	CL Elev:	302.3	P-Stn :	5+08.8	V.Offset:	0.0	CL Elev:	309.3
H. Offset:	0.0	Cut Dp:	-0.9	Index:	613	H. Offset:	0.0	Cut Dp:	0.0	Index:	614

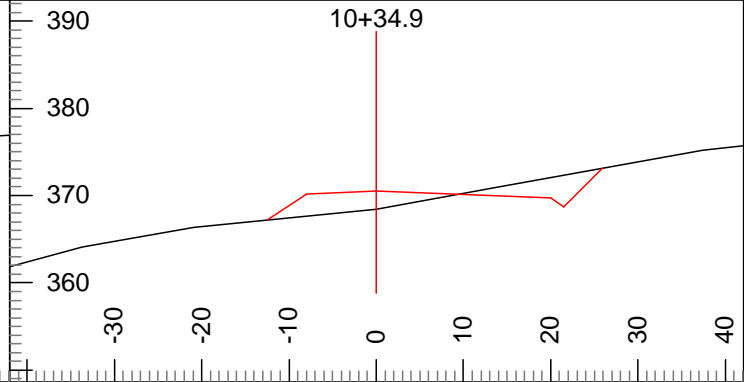


P-Stn :	5+52.5	V.Offset:	2.5	CL Elev:	314.9	P-Stn :	5+91.4	V.Offset:	1.0	CL Elev:	320.4
H. Offset:	0.0	Cut Dp:	-2.5	Index:	615	H. Offset:	0.0	Cut Dp:	-1.0	Index:	616

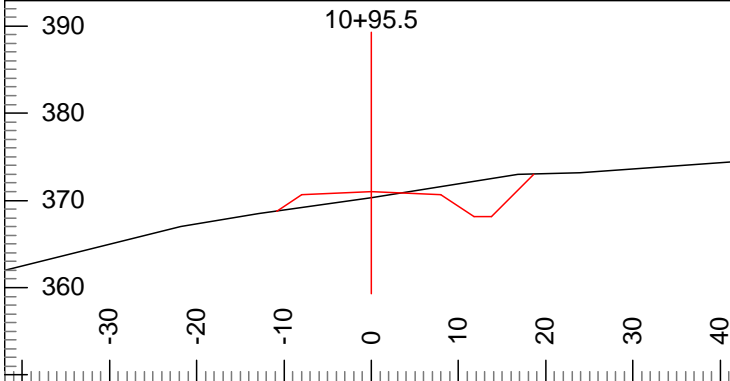




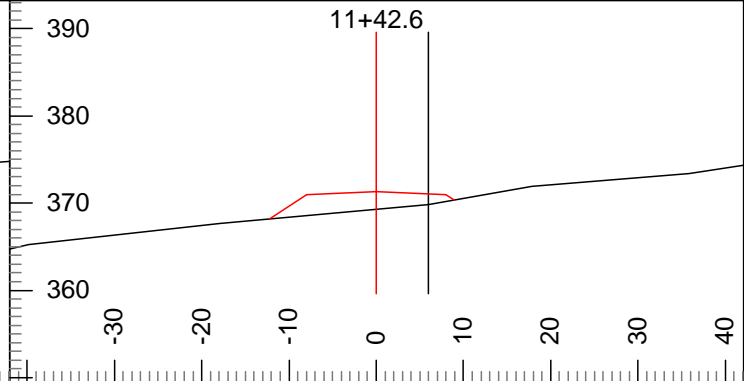
P-Stn :	10+01.4	V.Offset:	-1.2	CL Elev:	370.2
H. Offset:	0.0	Cut Dp:	1.2	Index:	625



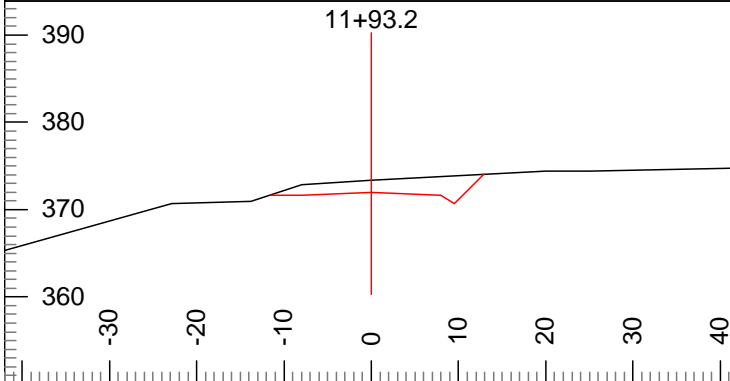
P-Stn :	10+42.3	V.Offset:	2.0	CL Elev:	370.5
H. Offset:	0.0	Cut Dp:	-2.0	Index:	626



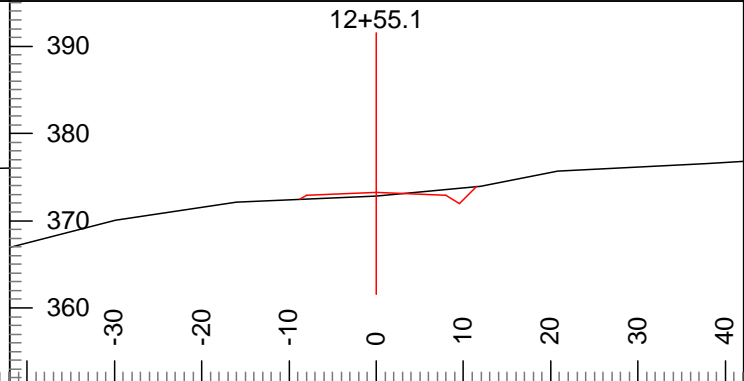
P-Stn :	11+02.9	V.Offset:	0.7	CL Elev:	371.0
H. Offset:	0.0	Cut Dp:	-0.7	Index:	627



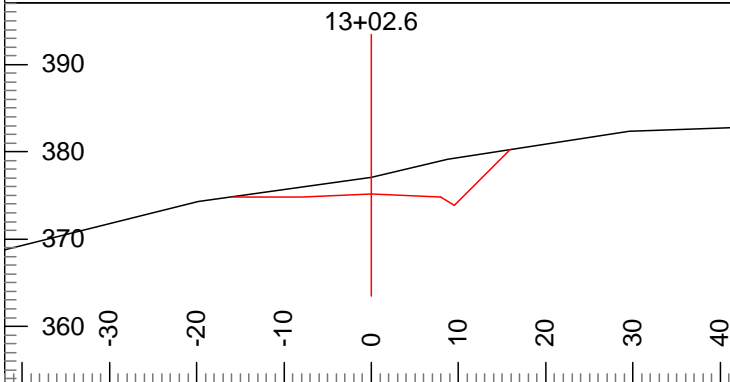
P-Stn :	11+50.7	V.Offset:	1.5	CL Elev:	371.3
H. Offset:	-6.0	Cut Dp:	-2.0	Index:	628



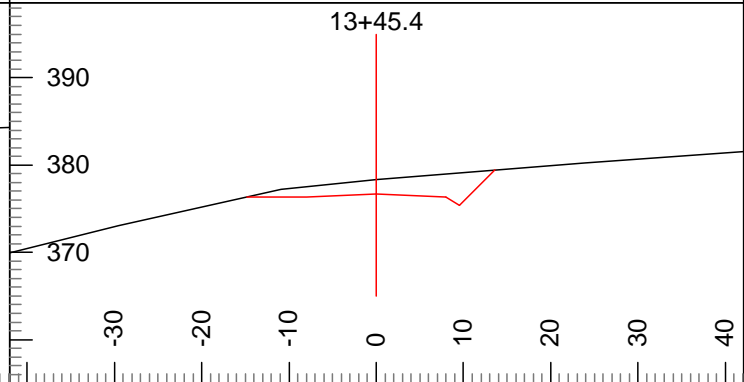
P-Stn :	12+02.0	V.Offset:	-1.4	CL Elev:	372.0
H. Offset:	0.0	Cut Dp:	1.4	Index:	629



P-Stn :	12+63.9	V.Offset:	0.5	CL Elev:	373.3
H. Offset:	0.0	Cut Dp:	-0.5	Index:	630

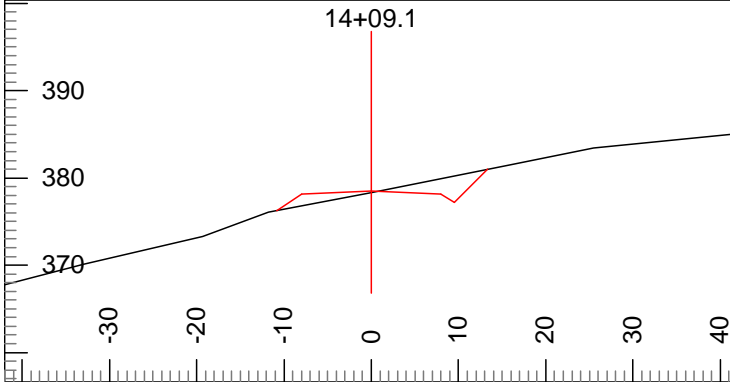


P-Stn :	13+11.4	V.Offset:	-1.9	CL Elev:	375.2
H. Offset:	0.0	Cut Dp:	1.9	Index:	631

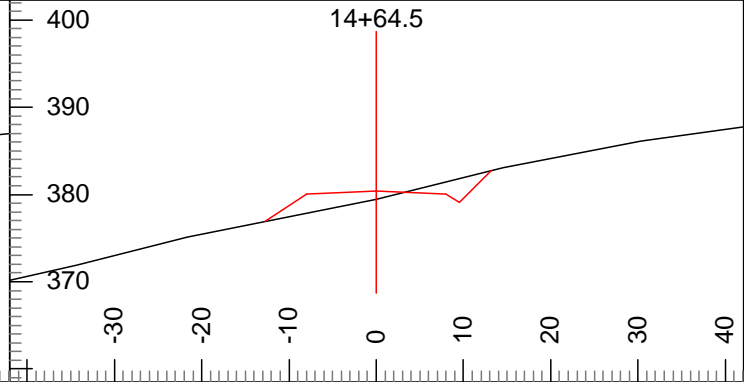


P-Stn :	13+54.2	V.Offset:	-1.7	CL Elev:	376.7
H. Offset:	0.0	Cut Dp:	1.7	Index:	632

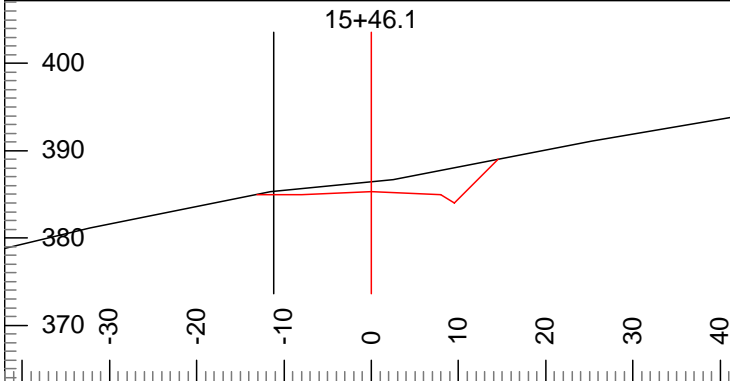




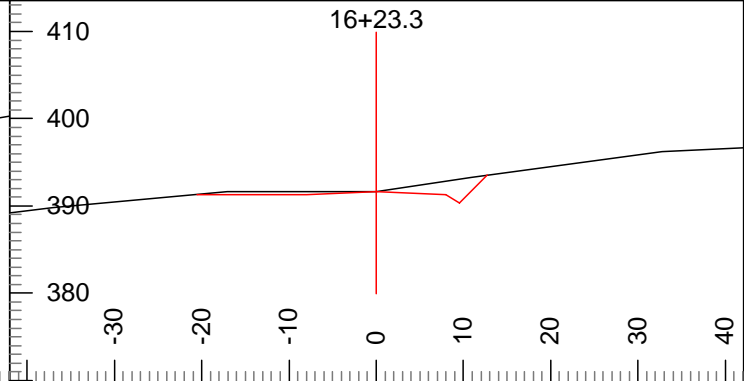
P-Stn :	14+17.9	V.Offset:	0.2	CL Elev:	378.5
H. Offset:	0.0	Cut Dp:	-0.2	Index:	633



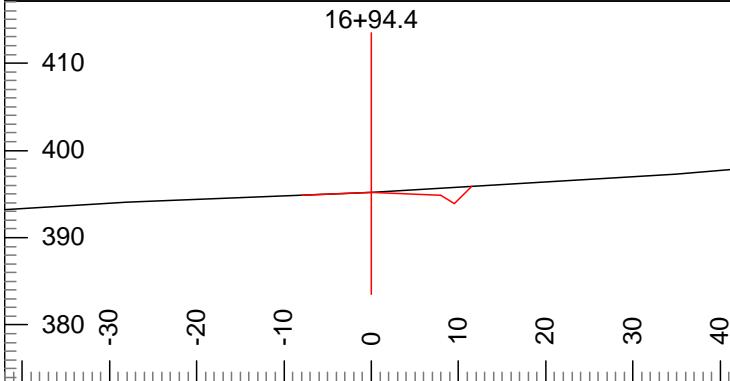
P-Stn :	14+73.3	V.Offset:	0.9	CL Elev:	380.4
H. Offset:	0.0	Cut Dp:	-0.9	Index:	634



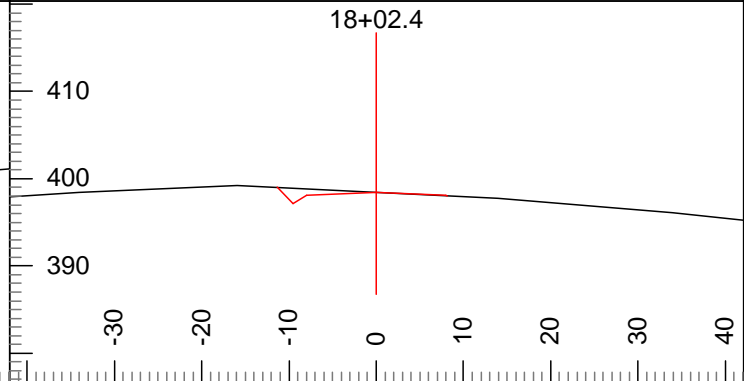
P-Stn :	15+56.8	V.Offset:	0.0	CL Elev:	385.3
H. Offset:	11.4	Cut Dp:	1.1	Index:	635



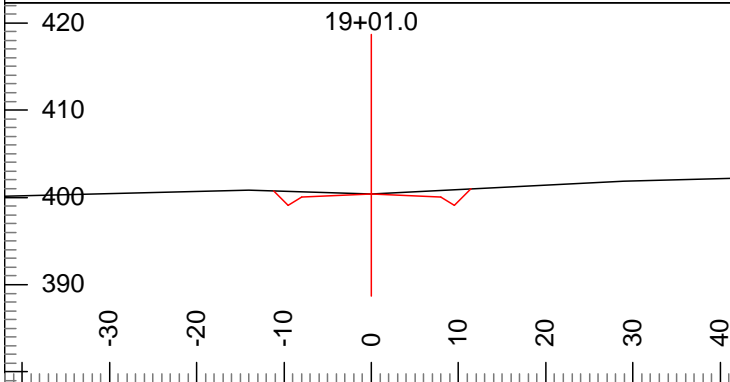
P-Stn :	16+36.1	V.Offset:	0.0	CL Elev:	391.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	636



P-Stn :	17+07.2	V.Offset:	0.0	CL Elev:	395.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	637



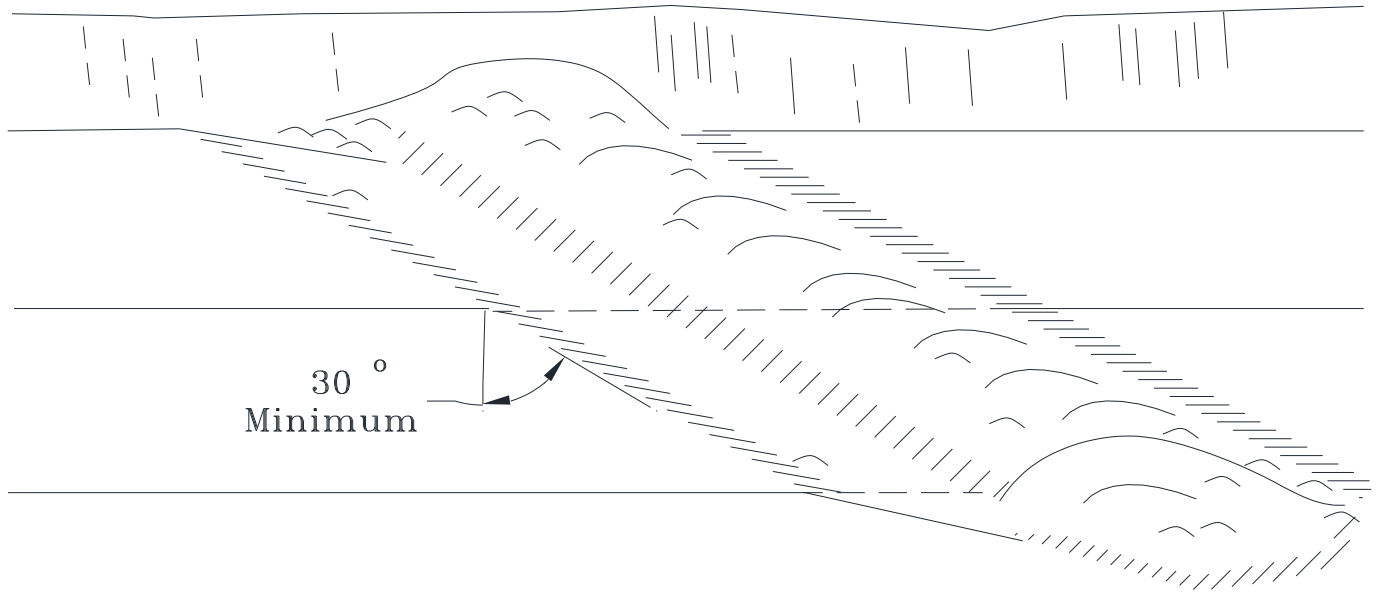
P-Stn :	18+15.2	V.Offset:	0.0	CL Elev:	398.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	638



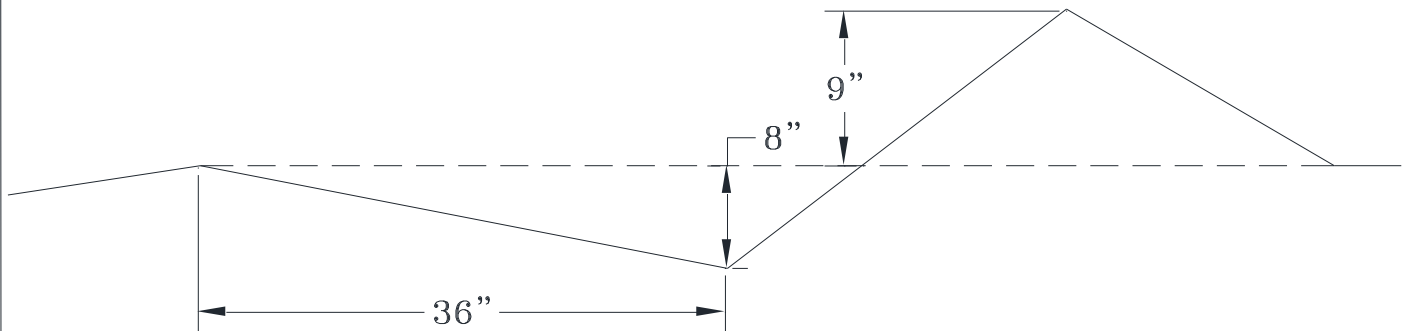
P-Stn :	19+13.7	V.Offset:	0.0	CL Elev:	400.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	639

# Drivable Water Bar Detail

## Cross Ditch



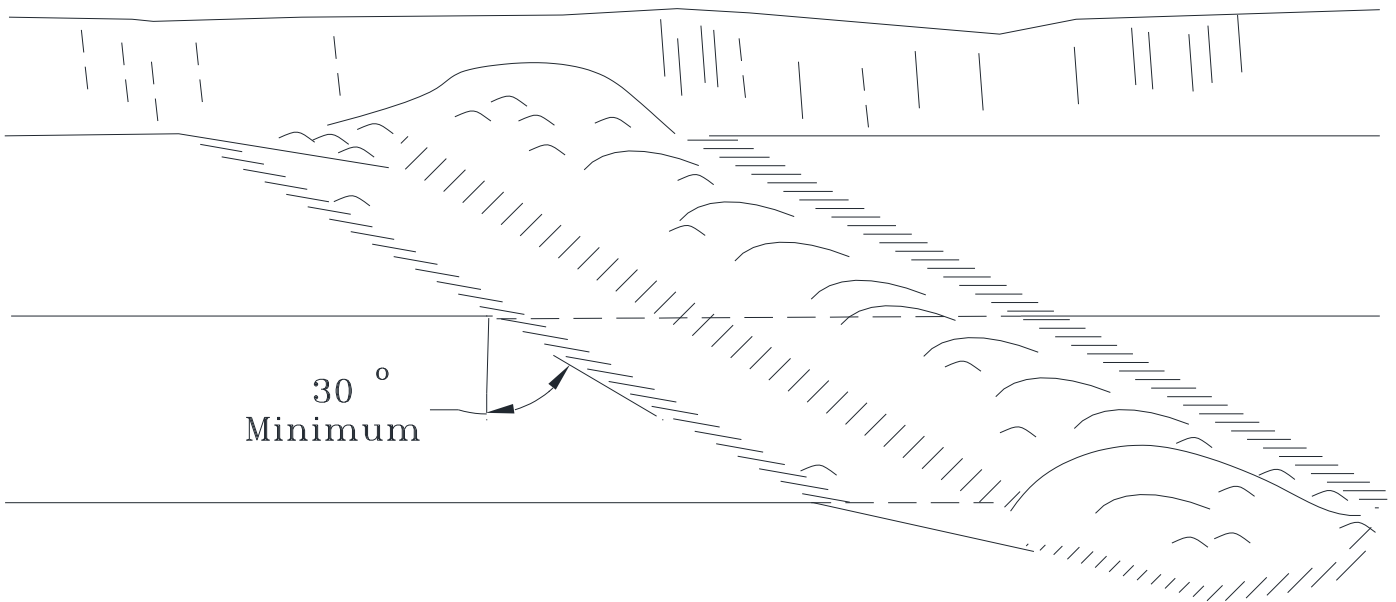
## Cross Section at Centerline



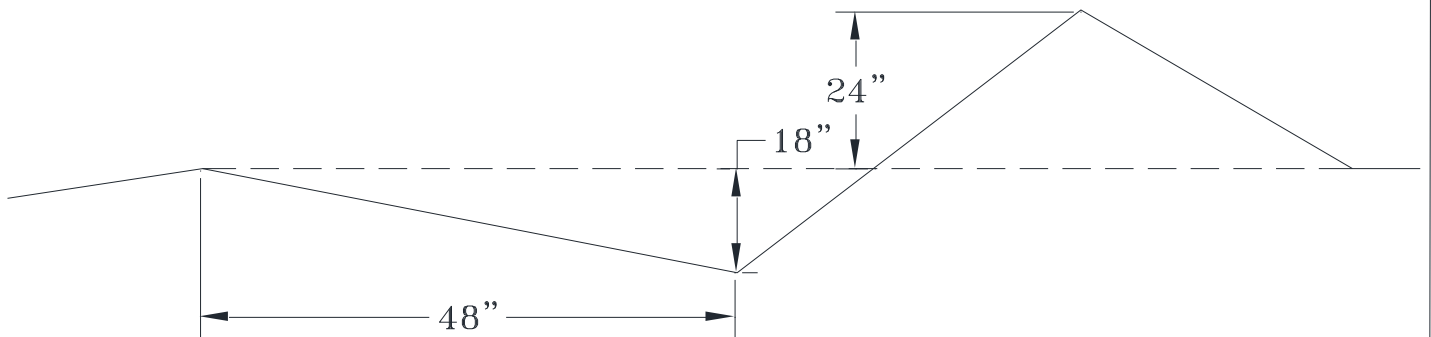
Revised February 2018

# Non-Drivable Water Bar Detail

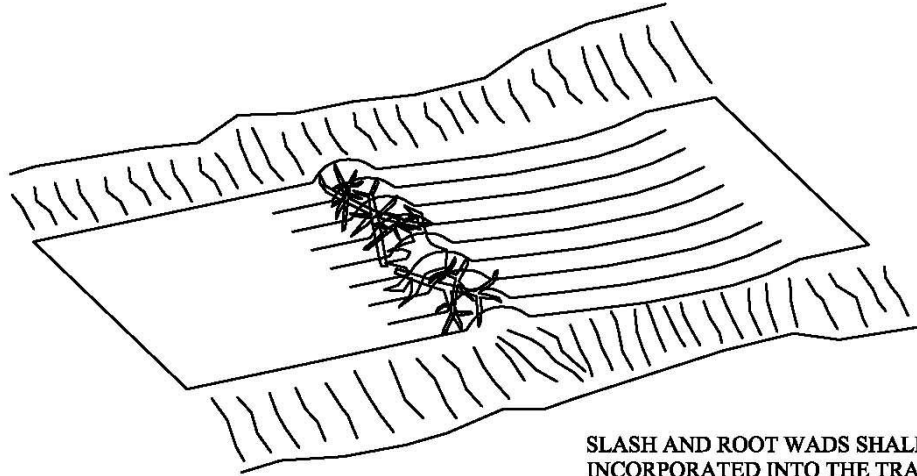
## Cross Ditch



## Cross Section at Centerline



# BARRICADE DETAIL

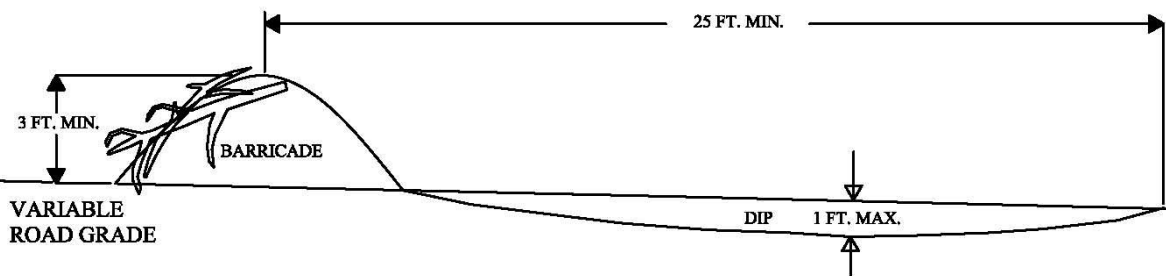


SLASH AND ROOT WADS SHALL BE INCORPORATED INTO THE TRAFFIC SIDE OF THE BARRICADE.

PLAN VIEW

TRAFFIC SIDE  
OF BARRICADE

CLOSED SIDE  
OF BARRICADE



BOTTOM OF DIP SHALL BE  
OUTSLOPED SO AS TO DRAIN  
FREELY

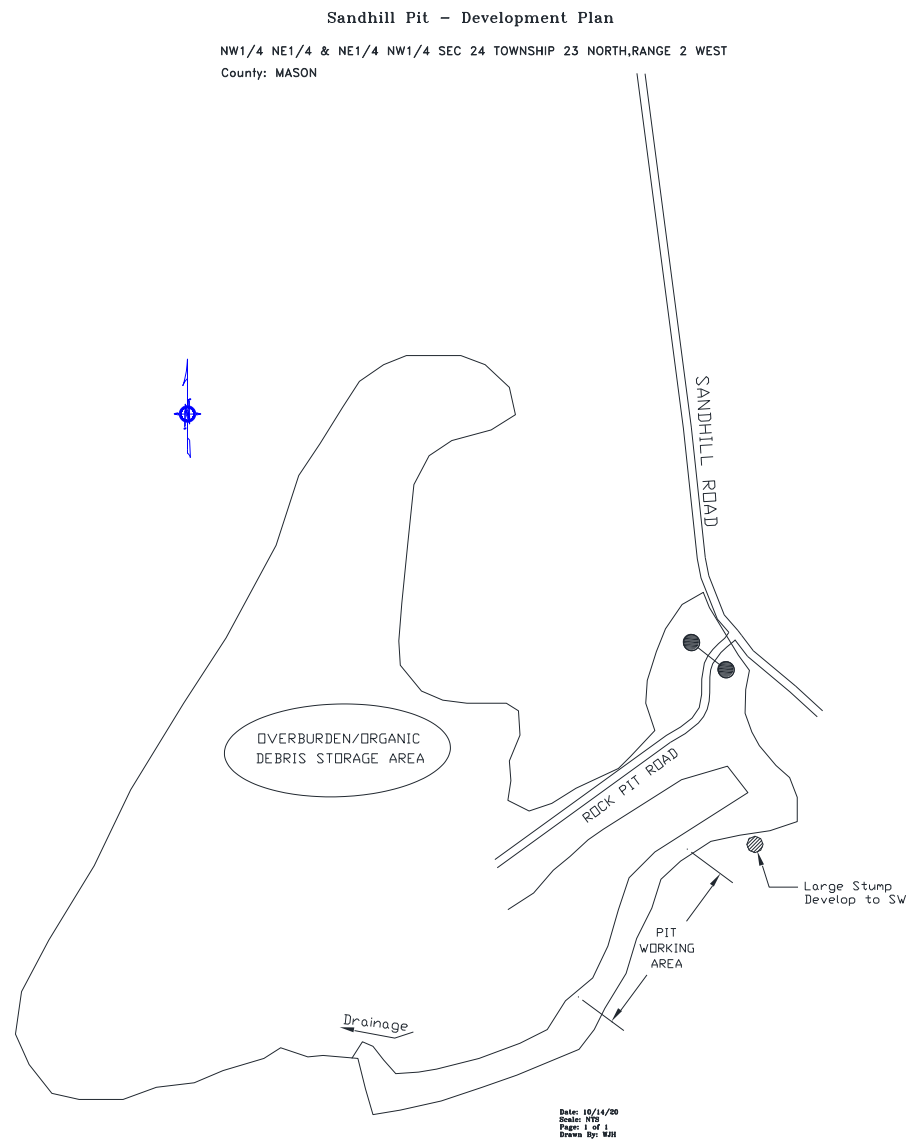
PROFILE VIEW

Legal Description: NW, NE & NE, NW Sec 24 T23N R02W

Rock Pit Name: Sandhill Pit

### PIT DEVELOPMENT PLAN

1. Place root wads and organic debris larger than one cubic foot in volume as shown on pit plan.
2. A minimum stripping width of 20 feet must be maintained from all pit faces and at the termination of operations pit shall be left in said condition.
3. Pile all reject rock and overburden away from pit working area as shown.
4. Pit floor shall be sloped to allow drainage as shown. No ponding will be allowed.
5. Maximum face height shall not exceed 30 feet in height.
6. Pit face shall have a maximum backslope of 1/4:1.
7. At the completion of operations, Contractor shall request written approval from the Contract Administrator for final rock source condition and compliance with the terms of this plan.
8. Quantity and Quality of ballast pit is not guaranteed by the State.



DEPARTMENT OF NATURAL RESOURCES - SOUTH PUGET SOUND REGION

FORM 9-87(Rev. 01-09)

Road Development Cost Estimate

(For internal DNR use only. Costs are estimates only & are not guaranteed by the State or part of the Road Plan.)

REGION: South Puget Sound  
DISTRICT: Hood Canal

SALE/PROJECT NAME: Trail Mix

CONTRACT NUMBER: 30-103627

LEGAL DESCRIPTION: Sec 3 T22N R02W & Sec 22, 23, 26, 32, 33, 34, 35 & 36 T23N R03W

ROAD NUMBER:	Spur 1 Spur 4	Spur 2 Spur 5	Spur 3	D-1022	D-2010	E-2500	F-2000 D-2000	D-1000 D-2010	D-1020 D-2020	D-2080
ROAD STANDARD:	Construction			Reconstruction			Pre/Post-haul maintenance			
NUMBER OF STATIONS:	44.65			28.42			745.89			
SIDESLOPE:	10-20%			5-10%			10-20%			
CLEARING AND GRUBBING:	\$3,933			\$1,238						
EXCAVATION AND FILL:	\$3,634			\$3,126						
MISC. MAINTENANCE:							\$11,147			
ROCK TOTALS (Cu. Yds.):										
Ballast:	3069	\$20,428		\$13,003				\$0		
Surface:	0	\$0		\$0				\$0		
Quarry Spalls:	22	\$0		\$0				\$581		
CULVERTS AND FLUMES:	\$2,620			\$599			\$11,353			
STRUCTURES:	\$0			\$0			\$0			
GENERAL EXPENSES:	\$2,755			\$1,797			\$2,077			
MOBILIZATION:	\$4,167			\$4,167			\$4,167			
TOTAL COSTS:	\$37,537			\$23,929			\$29,326			
COST PER STATION:	\$841			\$842			\$39			

ROAD DEACTIVATION AND ABANDONMENT COSTS: \$10,971

NOTE<sup>1</sup>: This appraisal has no allowance for profit and risk.

TOTAL (All Roads) = \$101,763

SALE VOLUME MBF = 7,204

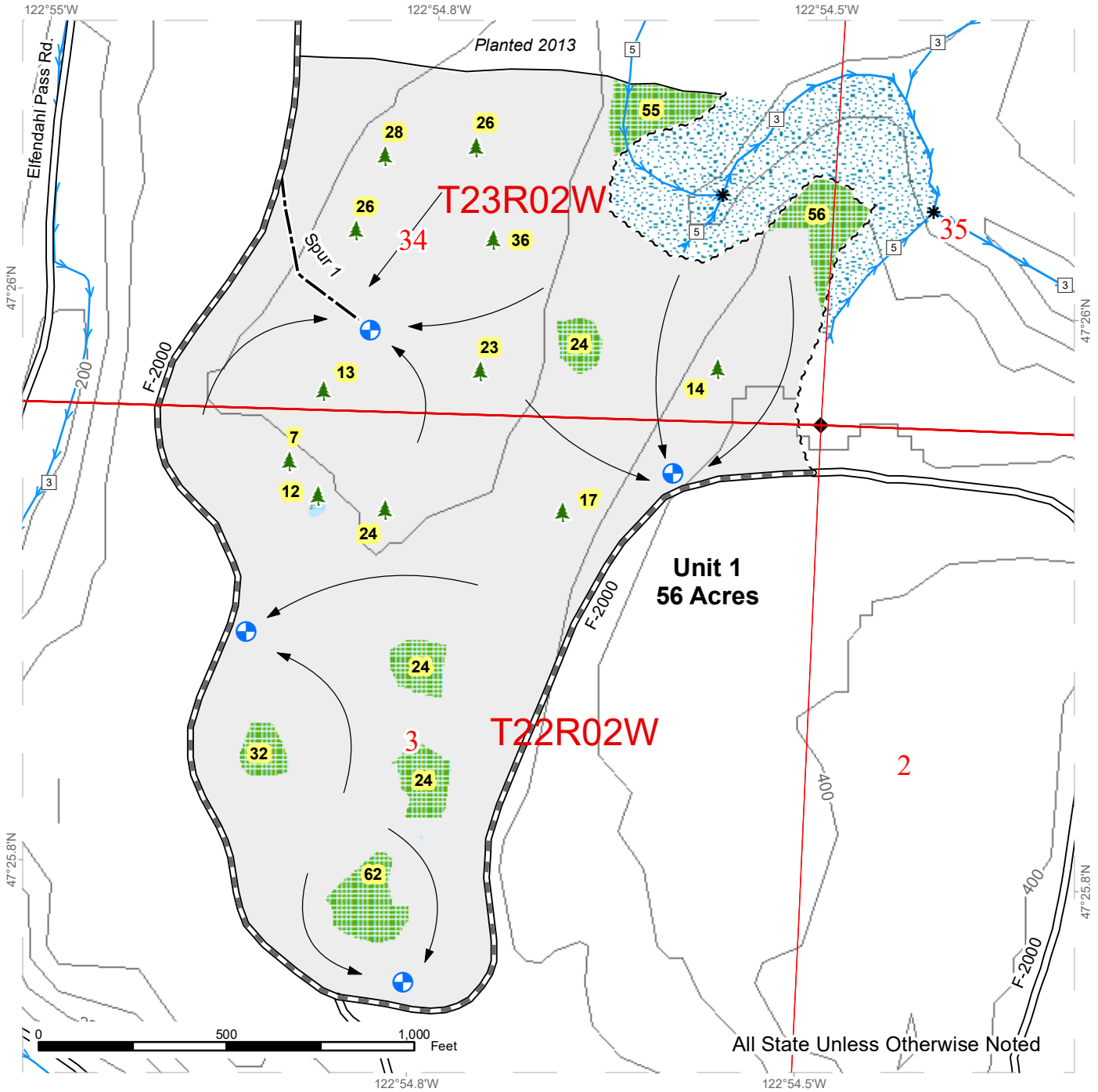
TOTAL COST PER MBF = \$14.13

Date: 05/30/23

# LOGGING PLAN MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT#:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
**TRUST(S):** Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439



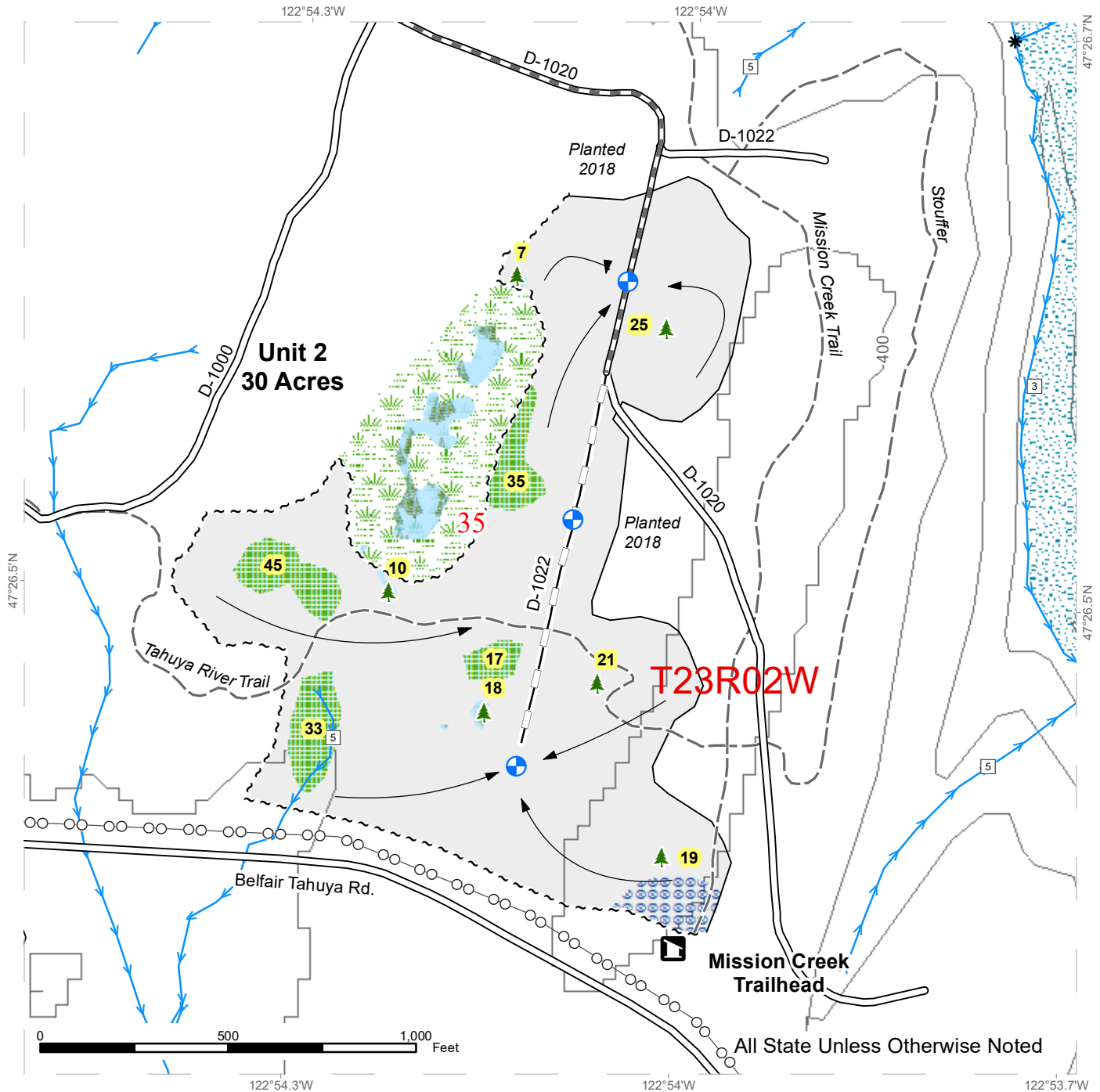
Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Ground Harvest	Optional Construction	Survey Monument
Forested Wetland	Streams	Stream Type	
Leave Tree Area	Stream Type Break		
Riparian Mgt Zone			
Contours 40-foot			



# LOGGING PLAN MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT#:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
**TRUST(S):** Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439



All State Unless Otherwise Noted

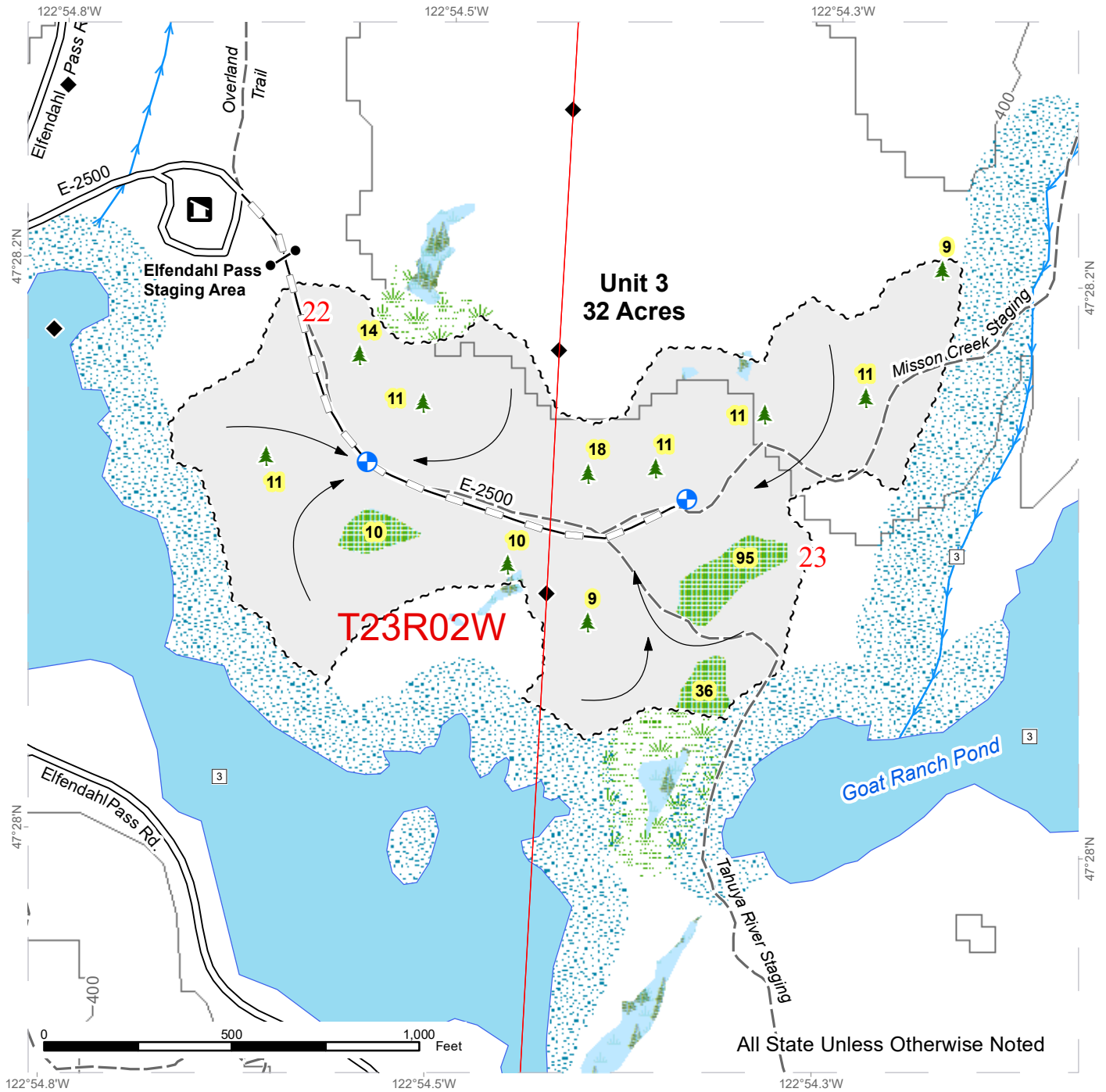
Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Ground Harvest	Optional Reconstruction	Recreation Site
Wetland Mgt Zone	Streams	Stream Type	Power Lines
Forested Wetland	Stream Type Break		Trail
Leave Tree Area			
Riparian Mgt Zone			
Hazard Abatement Area			
Contours 40-foot			



# LOGGING PLAN MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT#:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
**TRUST(S):** Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

**REGION:** South Puget Sound Region  
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**ELEVATION RGE:** 80-439



All State Unless Otherwise Noted

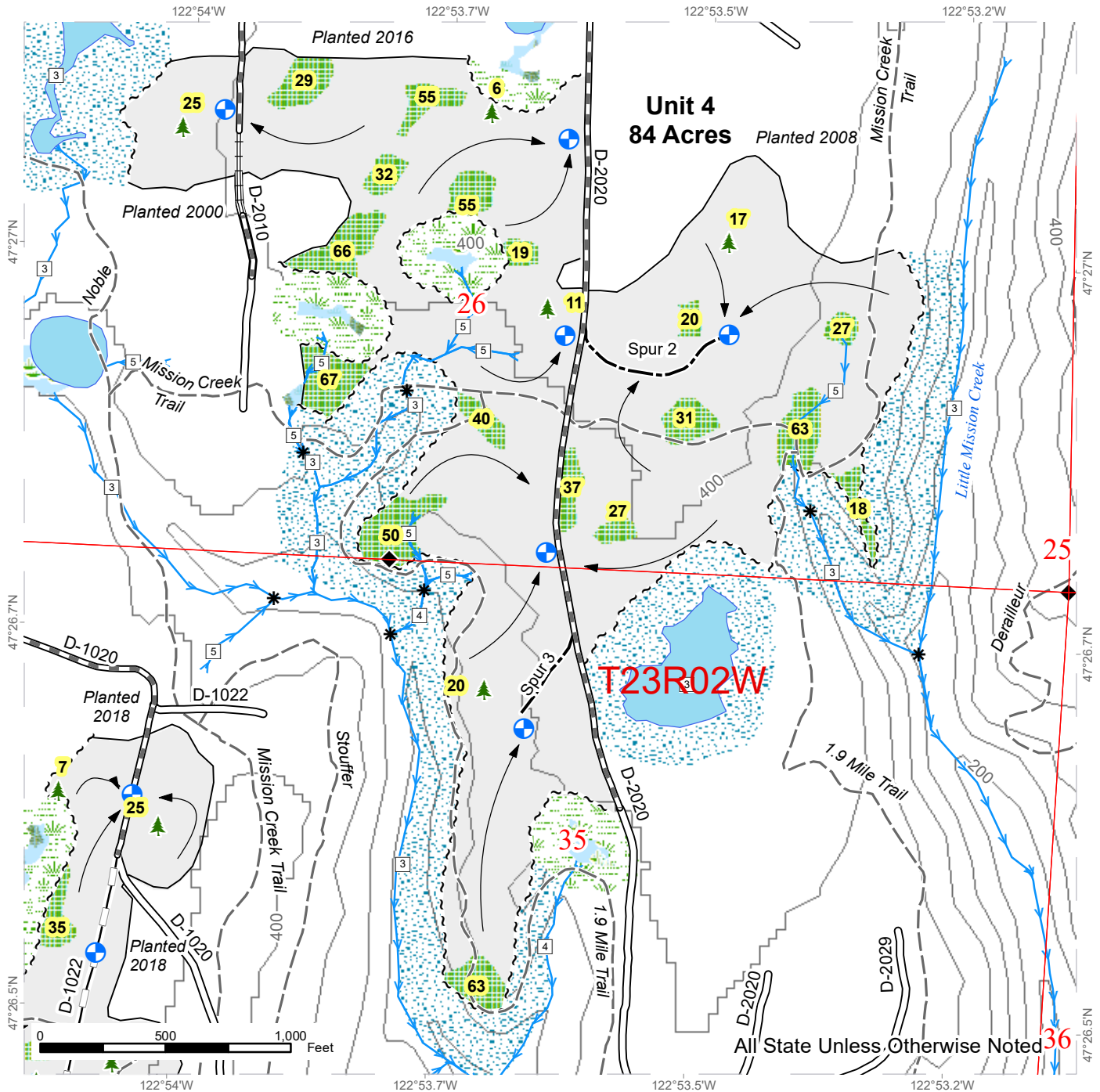
Sale Area	Sale Boundary Tags	Existing Roads	Gate (786)
Public Land Survey Sections	Ground Harvest	Optional Reconstruction	Landing - Proposed
Public Land Survey Townships	Streams	Stream Type	Leave Tree Area <1/4-acre
Wetland Mgt Zone	Open Water	Recreation Site	Survey Monument
Forested Wetland		Recreation Site	Trail
Leave Tree Area			
Riparian Mgt Zone			
Contours 40-foot			



# LOGGING PLAN MAP

**SALE NAME:** TRAIL MIX  
**AGREEMENT#:** 30-103627  
**TOWNSHIP(S):** T22R2W, T23R2W  
**TRUST(S):** Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Mason  
**ELEVATION RGE:** 80-439

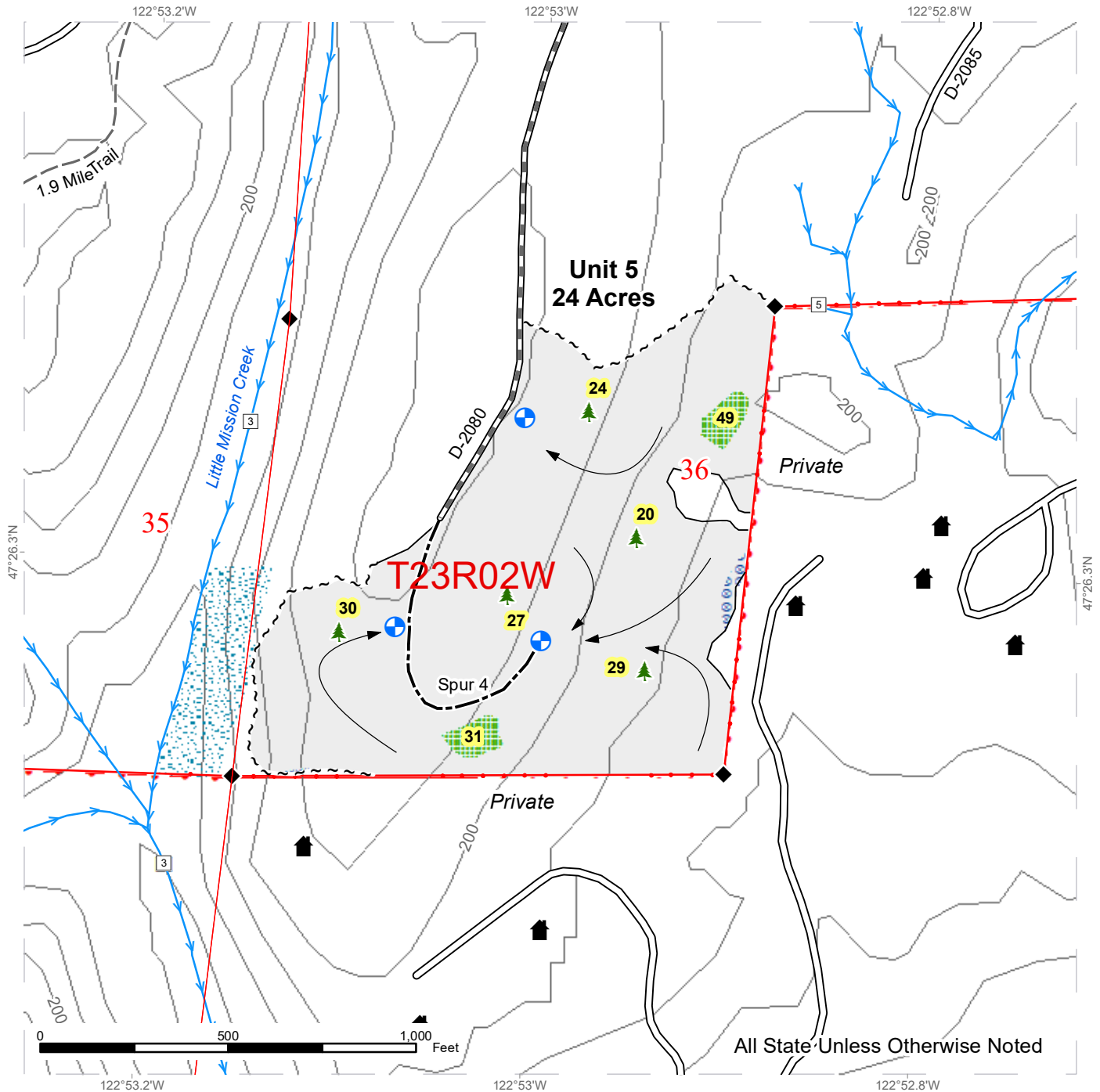


Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Ground Harvest	Required Reconstruction	Survey Monument
Wetlands - Non-forested	Streams	Optional Construction	Trail
Wetland Mgt Zone	Stream Type	Optional Reconstruction	
Forested Wetland	Stream Type Break		
Leave Tree Area	Open Water		
Riparian Mgt Zone			
Contours 40-foot			

# LOGGING PLAN MAP

SALE NAME: TRAIL MIX  
 AGREEMENT#: 30-103627  
 TOWNSHIP(S): T22R2W, T23R2W  
 TRUST(S): Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

REGION: South Puget Sound Region  
 COUNTY(S): Mason  
 ELEVATION RGE: 80-439



All State Unless Otherwise Noted

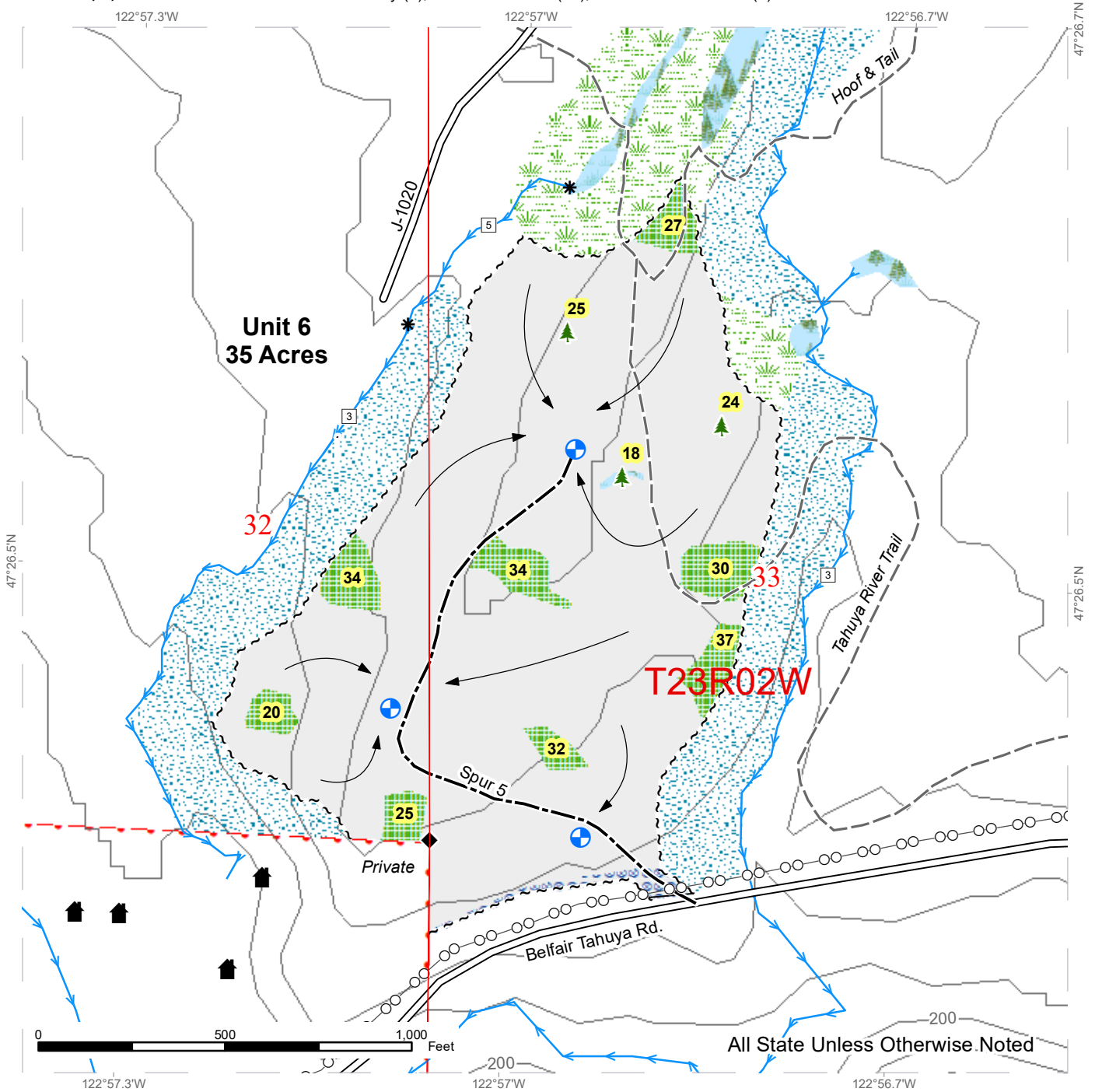
Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Required Pre-Haul Maintenance	Leave Tree Area <1/4-acre
Public Land Survey Townships	Property Line	Optional Construction	Structure
Leave Tree Area	Ground Harvest	Streams	Survey Monument
Riparian Mgt Zone	Stream Type		Trail
Hazard Abatement Area			
Contours 40-foot			



# LOGGING PLAN MAP

SALE NAME: TRAIL MIX  
 AGREEMENT#: 30-103627  
 TOWNSHIP(S): T22R2W, T23R2W  
 TRUST(S): Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

REGION: South Puget Sound Region  
 COUNTY(S): Mason  
 ELEVATION RGE: 80-439



Sale Area	Sale Boundary Tags	Existing Roads	Landing - Proposed
Public Land Survey Sections	Timber Type Change	Optional Construction	Leave Tree Area <1/4-acre
Public Land Survey Townships	Property Line	Ground Harvest	Structure
Wetland Mgt Zone	Streams	Stream Type Break	Survey Monument
Forested Wetland	Stream Type	Power Lines	Trail
Leave Tree Area	Stream Type Break		
Riparian Mgt Zone			
Hazard Abatement Area			
Contours 40-foot			

