Washington DNR Timber Sales Program

Updated information is being provided for <u>Sure Wood</u> Timber Sale #30-102110 documents as follows:

Documents amended:

Brief Description	DATE	Initials
Road Plan **Added language to clause 6-12 requiring scraping, stockpiling and containing top 6" of material in Sherwood Pit.**	5/22/23	AM
Timber Notice of Sale **Notification of current legal appeal.**	5/17/23	AM
Timber Sale Contract **Clause G-060 - Added notification of current legal appeal.**	5/17/23	AM
Timber Notice of Sale **CERTIFICATION: FSC language added - FSC 100% raw material under the Forest Stewardship Council® Standard (cert no: BV-FM/COC-080501).**	5/11/2023	KF
Timber Sale Contract **Added Clause G-115 – Forest Stewardship Council® (FSC®) Certification**	5/11/2023	KF

DEPARTMENT OF NATURAL RESOURCES

PRODUCT SALES & LEASING DIVISION
1111 WASHINGTON STREET SE, MS 47014
OLYMPIA, WA 98504-7014

360-902-1600
WWW.DNR.WA.GOV

To: Prospective Purchasers of Sure Wood Timber Sale

Subject: Notice of Legal Appeal

Date: May 17, 2023

This letter is to ensure you are aware that the Mason County Climate Justice and Legacy Forest Defense Coalition filed a legal appeal on the Sure Wood Timber Sale and associated environmental review. Language about the lawsuit has been added to the Notice of Sale.

The appeal requests:

- an order invalidating the decision to approve the Sure Wood project for auction,
- an order invalidating the SEPA Determination of Non-Significance as "clearly erroneous",
- a declaration that the Sure Wood project could have probable, significant adverse impacts to the environment, necessitating preparation of an Environmental Impact Statement,
- a declaration that the development, planning and approval of the Sure Wood action was not developed consistent with SEPA's direction to interpret and implement laws and regulations consistent with SEPA goals and policies,
- a declaration that the approval of the Sure Wood project for auction without consideration of alternatives violated SEPA, and
- other relief requested.

The lawsuit was filed with Mason County Superior Court as Cause No. 23-2-00249-23.

Please consult an attorney before bidding on this sale if you have questions about the risk associated with the lawsuit.

Notice of the appeal will be shared again verbally prior to auction of the sale on May 23rd.

Please be aware:

- Appellants may request a temporary restraining order or preliminary injunction from the court.
- Your bid on the Sure Wood sale, and your operations under the contract, will be conducted with the acknowledgment that the court could order DNR to shut down your operations.
- The State is not responsible for legal actions filed by third-parties that may affect the operability of timber sales.
- The purchaser assumes the risk of loss for any costs, damages, or business expectations related to this auction resulting from such legal action.
- The standard 10-day confirmation period applies as with all DNR timber sales.

DNR values our customers and wanted ensure you are informed of the situation prior to auction.

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

TIMBER NOTICE OF SALE

***SALE NAME**: SURE WOOD* ***AGREEMENT NO**: 30-102110*

AUCTION: May 23, 2023 starting at 10:00 a.m., South Puget Sound Region Office, Enumclaw, WA **COUNTY:** Mason

SALE LOCATION: Sale located approximately 10 miles southwest of Allyn.

PRODUCTS SOLD AND SALE AREA: All timber, except trees marked with blue paint, orange and blue paint, or bounded out by yellow leave tree area tags, and down timber existing more than 5 years from the day of sale, bounded by the following: white timber sale boundary tags, property boundary marked with white Carsonite posts, and the Powerline 2 Road in Unit #1; white timber sale boundary tags, property boundary marked with white Carsonite posts, and the Powerline Road in Units #2; white timber sale boundary tags, and property line marked with white Carsonite posts in Units #3, and #4;

All timber, except as described in Road Plan clause 3-6, bounded by orange right of way tags, except that title to timber within the right of way tags is not conveyed to the Purchaser unless the road segment is actually constructed in Unit #5;

All timber bounded with orange right of way tags in Unit #6;

All forest products above located on part(s) of Sections 25 and 36 all in Township 22 North, Range 2 West, Sections 19 and 30 all in Township 22 North, Range 1 West, W.M., containing 154 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: PwC-SFIFM-513) and FSC 100% raw materials under the Forest Stewardship Council® Standard (cert no: BV-FM/COC-080501).

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	MBF by Grade 1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	17.6	9	4,857				28		2,692	1,728	381	28
Redcedar	19.9		262							231	31	
Hemlock	18.6		176						104	52	19	1
Red alder	13.1		34							16	18	
White pine	16		14							11	3	
Sale Total			5,343									

MINIMUM BID: $2,182,000.00 **BID METHOD:** Sealed Bids

PERFORMANCE SECURITY: $150,000.00 **SALE TYPE:** Lump Sum

EXPIRATION DATE: October 31, 2025 **ALLOCATION:** Export Restricted

BID DEPOSIT: $218,200.00 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. Yarding may be restricted during wet weather if rutting becomes excessive, per clause H-017.

Falling, yarding, and timber haul will not be permitted on weekends or State recognized holidays, unless approved in writing by the Contract Administrator.

ROADS: 7.78 stations of required construction. 9.99 stations of required reconstruction. 86.60 stations of optional construction. 340.58 stations of required prehaul maintenance. 77.55 stations of abandonment, if constructed. Purchaser maintenance on Spurs 1-7, the Sherwood Mainline, Powerline, Powerline 2, and Archer roads. Designated maintenance on all other roads used.

Rock for this proposal may be obtained from the State owned Sherwood 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 and as specified in the Rock Source Development Plan in the Road Plan.

Operation of road construction equipment and rock haul will not be permitted on weekends or State recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator.

This sale includes three stream crossings, two of which are Type 3 fish culvert replacement/installations with one 96"x40' AS12. These are located on the Archer Road, Powerline Road, and Sherwood Mainline. See section 7 and culvert list in the Road Plan for more information. Stream culvert work on the Sherwood Mainline and Archer Road are not permitted between October 1 to July 15 per Road Plan 1-25. Timber haul may be allowed prior to stream culvert installations with approval by the Contract Administrator per Road Plan 1-21.

ACREAGE DETERMINATION

CRUISE METHOD: Acreage was determined by traversing boundaries by GPS and by multiplying length times width. GPS data files are available at DNR's website for timber sale packets. See cruise narrative for cruise method.

FEES: $90,831.00 is due on day of sale. $9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: The Mason County Climate Justice and Legacy Forest Defense Coalition appealed the Board’s approval of the "Sure Wood" timber sale to Mason County Superior Court, Cause No. 23-2-00249-23. Please consult an attorney before bidding on this sale if you have questions about the risk of impacts to operability under the contract.

This sale contains Douglas-fir poles and high quality saw logs.

Purchaser is responsible to acquire and install a steel gate with a 4-lever lock box on the Archer Road at station 2+92. See Road Plan for additional details.

Extreme hazard abatement is required a minimum of 100 feet from the gravel edge of the railroad in Units #2, #3 and #4 and a minimum of 200-250 feet from structures valued over $1,000.00. Purchaser shall provide a slash disposal plan for hazard abatement, per contract clause S-020.

The haul route for this sale includes crossing an active railroad.

Units #1, and #2 are adjacent to overhead BPA powerlines. A safety plan is required as part of the harvest plan for operations under and adjacent to these lines.

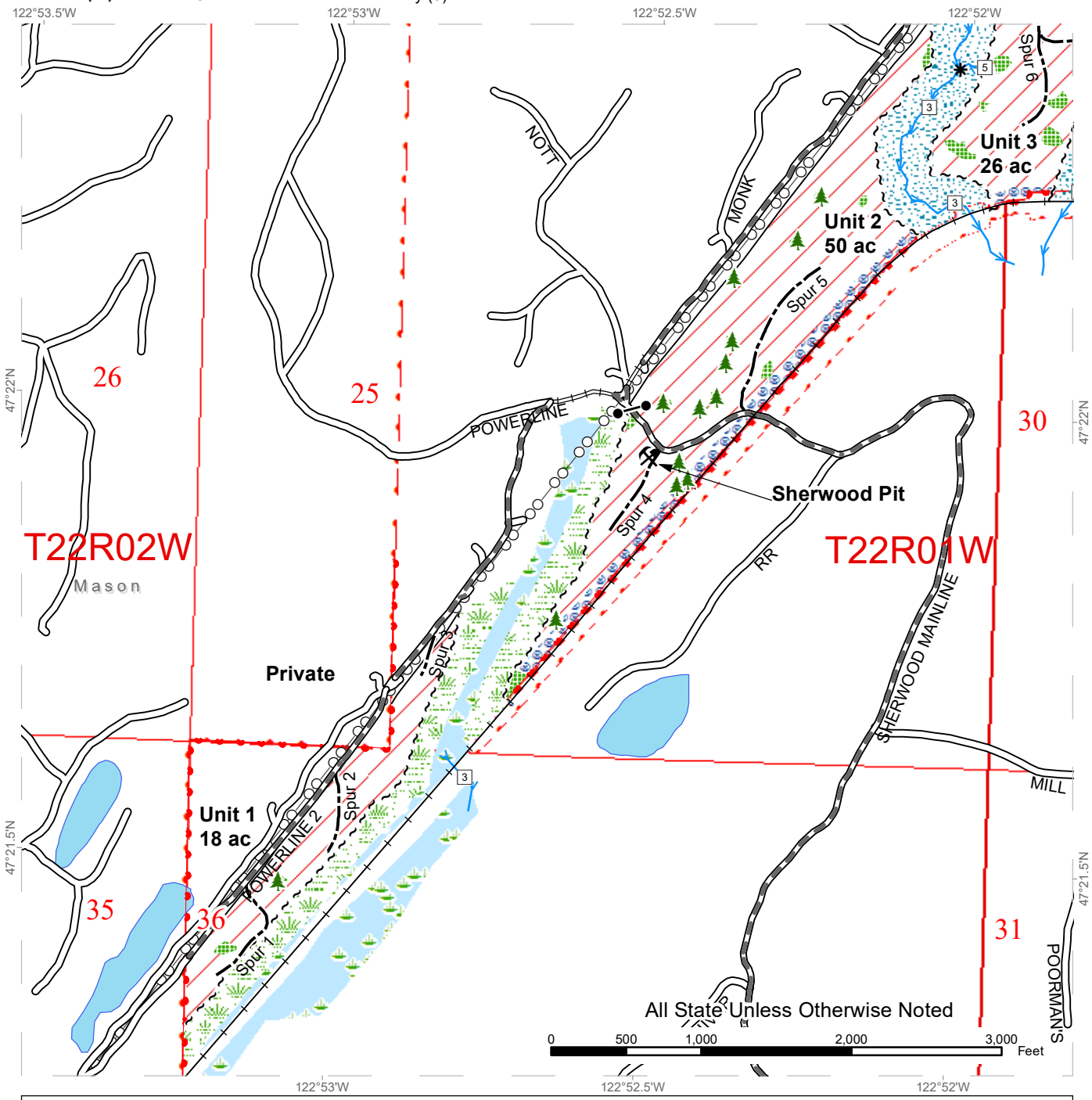
Note to cruisers and appraisers: Please refrain from leaving pink, orange or blue flagging from your cruises in or around the sale area to avoid confusion with DNR's marking. Additionally, for the safety of the public, please remove from roads and trails all string from string boxes used during appraising 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 John Coble at 360-801-6915.

TIMBER SALE MAP

SALE NAME: SURE WOOD
AGREEMENT #: 30-102110
TOWNSHIP(S): T22R2W, T22R01W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Variable Retention Harvest
- Sale Boundary Tags
- Right of Way Tags
- Property Line
- Flag Line
- Timber Type Change
- Power Lines
- Existing Roads
- Required Reconstruction
- Required Pre-Haul Maintenance
- Optional Construction
- Railroad
- Wetlands - Non-forested
- Riparian Mgt Zone
- Wetland Mgt Zone
- Hazard Abatement Area
- Rock Pit
- Gates
- Railroad
- Streams
- Stream Type
- Stream Type Break
- Leave Tree Area <1/4-acre
- Leave Tree Area
- Public Land Survey Townships
- Public Land Survey Sections

N

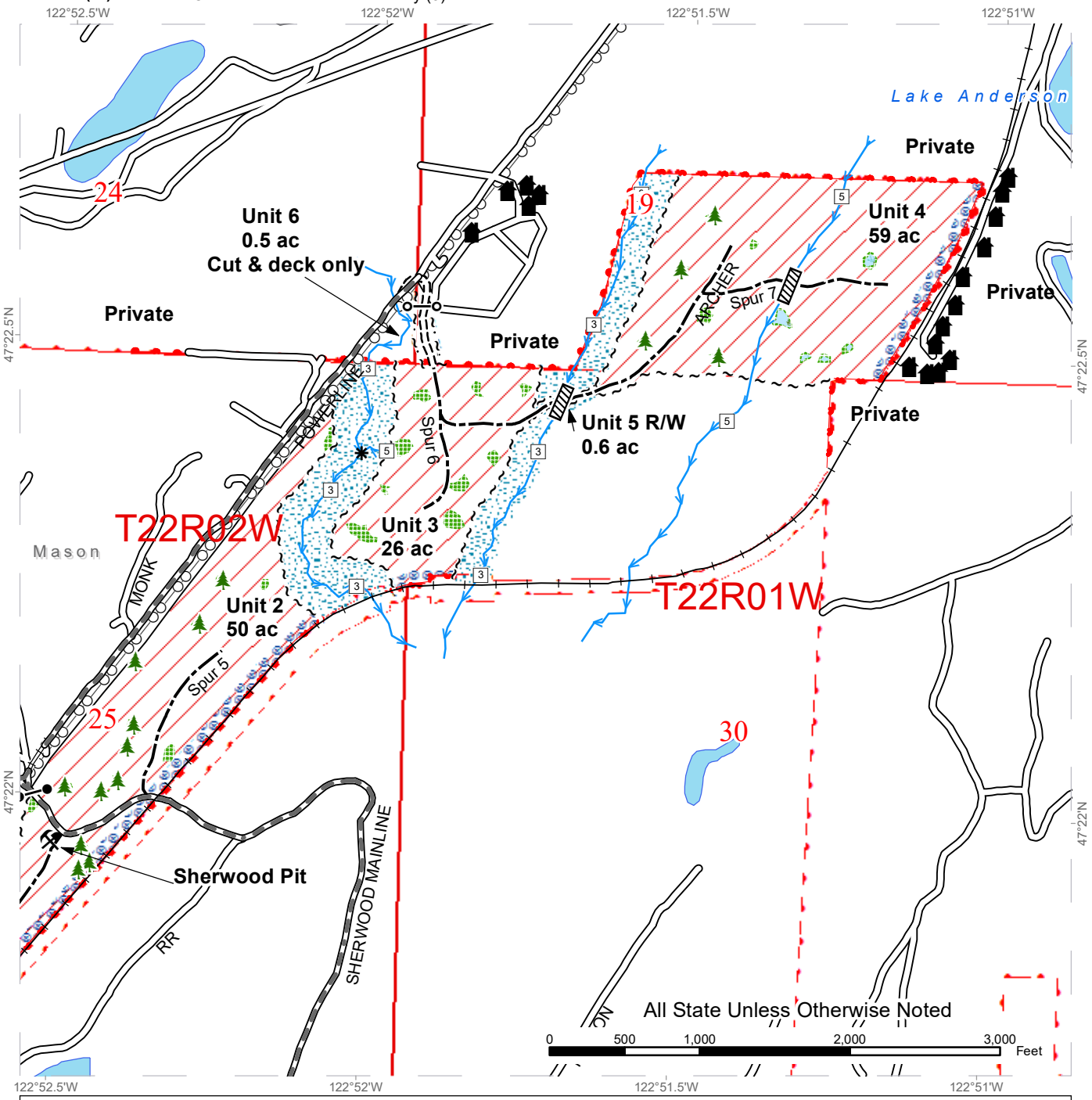
Prepared By: jcob490

Modification Date: jhom490 2/23/2023

TIMBER SALE MAP

SALE NAME: SURE WOOD
AGREEMENT #: 30-102110
TOWNSHIP(S): T22R2W, T22R01W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

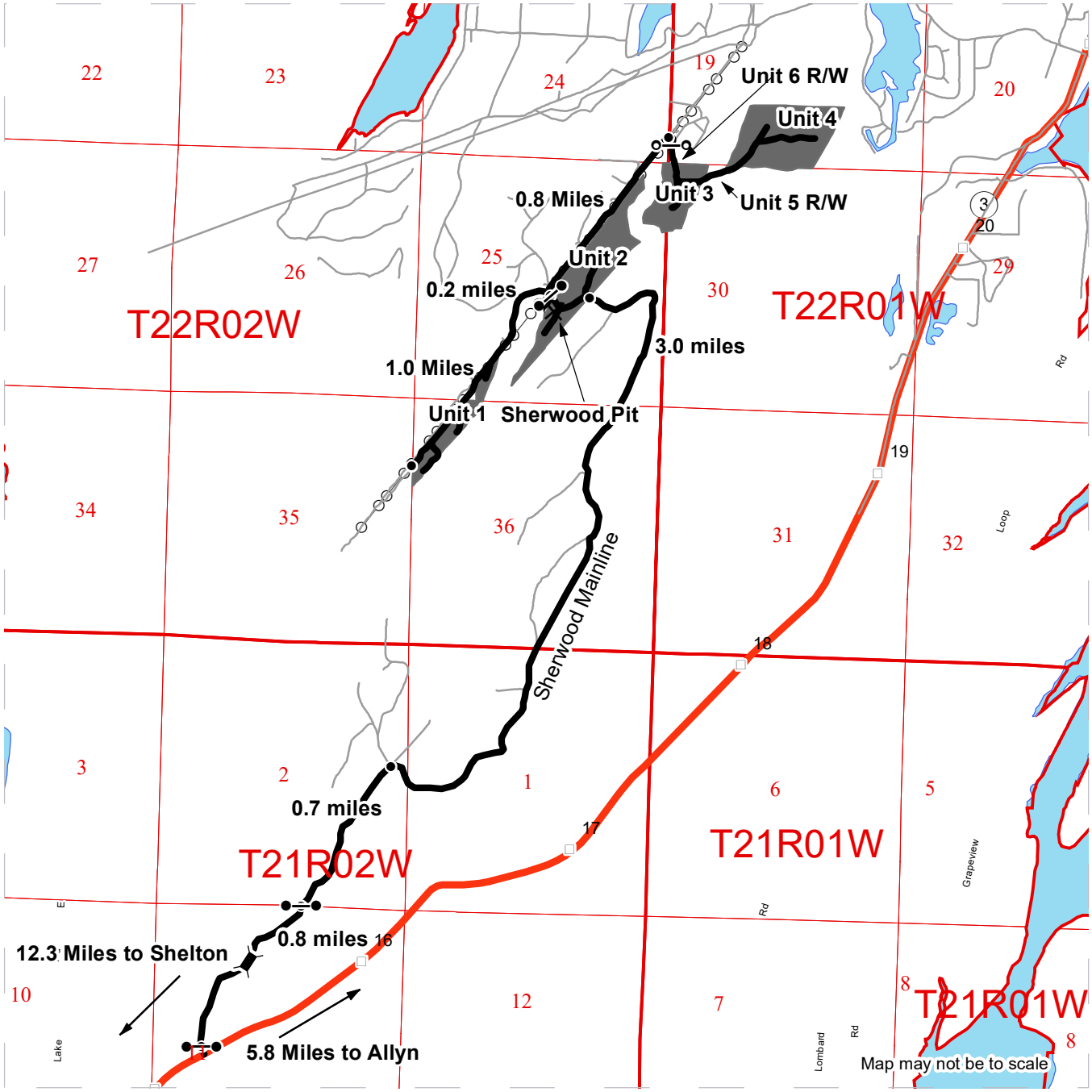
- Variable Retention Harvest
- Sale Boundary Tags
- Right of Way Tags
- Property Line
- Flag Line
- Timber Type Change
- Power Lines
- Existing Roads
- Required Reconstruction
- Required Pre-Haul Maintenance
- Required Construction
- Optional Construction
- Railroad
- Riparian Mgt Zone
- Wetland Mgt Zone
- Hazard Abatement Area
- Rock Pit
- Gates
- Railroad
- Streams
- Stream Type
- Stream Type Break
- Culvert
- Gate Installation
- Leave Tree Area <1/4-acre
- Structure
- Leave Tree Area
- Public Land Survey Townships
- Public Land Survey Sections

N

DRIVING MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Timber Sale Unit	Rock Pit
Haul Route	Power Lines
Other Road	Public Land Survey Townships
Bridge	Public Land Survey Sections
Distance Indicator	
Gate (A383)	
Gate Installation	
Milepost Markers	

DRIVING DIRECTIONS:

Form Allyn, drive approximately 5.75 miles south on Hwy 3. At orange gate (#301) go 0.8 miles to blue gate (#302) on the Sherwood mainline. Continue on the mainline for 0.7 miles to a 4 way intersection. Head northwest on the mainline for 3.0 miles to the RR tacks (Unit 2). Continue 0.2 miles to Gate #305 at powerlines. At powerlines head southwest to unit 1, head northeast to unit 3 and 4 for 0.8 Miles.

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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. 30-0102110

SALE NAME: SURE WOOD

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 May 23, 2023 and the sale was confirmed on _____. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All timber, except trees marked with blue paint, orange and blue paint, or bounded out by yellow leave tree area tags, and down timber existing more than 5 years from the day of sale, bounded by the following: white timber sale boundary tags, property boundary marked with white Carsonite posts, and the Powerline 2 Road in Unit #1; white timber sale boundary tags, property boundary marked with white Carsonite posts, and the Powerline Road in Units #2; white timber sale boundary tags, and property line marked with white Carsonite posts in Units #3, and #4;

All timber, except as described in Road Plan clause 3-6, bounded by orange right of way tags, except that title to timber within the right of way tags is not conveyed to the Purchaser unless the road segment is actually constructed in Unit #5;

All timber bounded with orange right of way tags in Unit #6;

All forest products above located on approximately 154 acres on part(s) of Sections 25, and 36 all in Township 22 North, Range 2 West, Sections 19, and 30 all in Township 22 North, Range 1 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-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 $1,053.00 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.

The Mason County Climate Justice and Legacy Forest Defense Coalition appealed the Board's approval of the "Sure Wood" timber sale to Mason County Superior Court, Cause No. 23-2-00249-23. Please consult an attorney before bidding on this sale if you have questions about the risk of impacts to operability under the contract.

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-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®) Certification

Forest products purchased under this contract are FSC 100% certified as being in conformance with the Forest Stewardship Council 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 program Standard under certificate number: PwC-SFIFM-513.

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

G-120 Responsibility for Work

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

G-121 Exceptions

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

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 Sherwood Mainline, Powerline, Powerline 2, and Archer roads, and Spurs 1 - 7. 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-380 Road Easement and Road Use Permit Requirements

Purchaser agrees to comply with the terms and conditions of the attached:

Easement No. 55-001225 entered into between State of Washington, Department of Natural Resources and Pope & Talbot, Inc., dated April 1, 1975.

Easement No. 55-103875 entered into between State of Washington, Department of Natural Resources and Mason County, dated October 19, 2022.

Easement No. 55-103876 entered into between State of Washington, Department of Natural Resources and Cascade Natural Gas Company, dated October 12, 2022.

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-400 Memorandum of Understanding Requirements

Purchaser agrees to comply with the attached terms and conditions of the Memorandum of Understanding entered into between the State and Bonneville Power Administration (BPA).

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:

Lease, including the terms and provisions thereof,
For: Brush
In Favor of: Pacific Coast Evergreens
Disclosed by Application No.: 35-100924
Granted: 7/1/2020
Expires: 6/30/2025

Easement, including the terms and provisions thereof,
For: Overhead Transmission Lines
In Favor of: Bonneville Power Administration
Disclosed by Application No.: 50-019305
Granted: 9/22/1955
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Overhead Transmission Lines
In Favor of: Bonneville Power Administration
Disclosed by Application No.: 50-030435
Granted: 9/10/1965
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Overhead Transmission Lines and Road
In Favor of: United States of America
Disclosed by Application No.: 50-050399
Granted: 3/18/1953
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Overhead Transmission Lines and Road
In Favor of: United States of America
Disclosed by Application No.: 50-050419
Granted: 6/8/1965
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Overhead Transmission Lines and Road
In Favor of: United States of America
Disclosed by Application No.: 50-050424
Granted: 4/25/1947
Expires: Indefinite

Lease, including the terms and provisions thereof,
For: Special Use
In Favor of: Mason County
Disclosed by Application No.: 60-A72406
Granted: 4/1/2022
Expires: 3/31/2046

Lease, including the terms and provisions thereof,
For: Land Use License
In Favor of: Washington Department of Fish and Wildlife
Disclosed by Application No.: 60-100312
Granted: 1/1/2020
Expires: 12/31/2024

Pending Applications

Easement, including the terms and provisions thereof,
For: Culvert
In Favor of: United State Navy
Disclosed by Application No.: 50-103120
Application Date: 1/26/2022

Region Encumbrances

Lease, including the terms and provisions thereof,
For: Land Use License
In Favor of: The Mountaineers
Disclosed by Application No.: 60-WS1023
Granted: 2/15/2019
Expires: 12/31/2028

Special Notations

Located within the Medicine Creek Treaty area. Intergovernmental agreements for vehicle access with Squaxin Island Tribe, Puyallup Tribe, Muckleshoot Tribe, and Nisqually Indian Tribe.

Per condemnation 82-000619 on 3/19/1954 the United States acquired railroad corridor across Sec. 36.

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 $138,918.00. The total contract price consists of a $0.00 contract bid price plus $138,918.00 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 $150,000.00. 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-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. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

A. Falling, yarding, and timber haul will not be permitted on weekends or State recognized holidays, unless approved in writing by the Contract Administrator.

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

C. Equipment crossings in Type 5 streams require Contract Administrator approval. Approved crossings require bank and channel protection and clean out.

D. Notify BPA regional representative before road construction or logging operations under or immediately adjacent to BPA powerlines commence. Purchaser shall review guidelines for logging activities on or near BPA rights-of-way with all employees and contractors. BPA regional representative is Jason Hunt (253) 880-4112.

E. Trees are to be felled away from BPA powerlilnes and the Navy Railroad.

F. No equipment shall operate, or trees felled or damaged, outside the timber sale boundary.

G. Provide, install, maintain caution signs approved by the Contract Administrator along 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. 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.

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

K. In the event operations become inactive for long periods of time, skid trails shall be water barred prior to completion of yarding tributary timber to prevent water accumulation and sediment movement, if required by the Contract Administrator.

L. 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.

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.

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

H-190 Completion of Settings

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

H-220 Protection of Residual or Adjacent Trees

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

H-230 Tops and Limbs Outside the Sale Boundary

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

Section C: Construction and Maintenance

C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 7/11/2022 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on Spurs 1 - 7, the Sherwood Mainline, Powerline, Powerline 2, and Archer roads. 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-080 Landing Locations Approved Prior to Construction

Landings shall be marked by Purchaser and approved by the Contract Administrator prior to construction.

C-140 Water Bars

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

Section S: Site Preparation and Protection

S-001 Emergency Response Plan

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical

emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

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

S-010 Fire Hazardous Conditions

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

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

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

S-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.

Extreme hazard abatement is required a minimum of 100 feet from the gravel edge of the railroad in Units #2, #3, and #4 and a minimum of 200-250 feet from structures valued over $1,000.00.

S-030 Landing Debris Clean Up

Landing debris shall be disposed of 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-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	_____ Scott Sargent South Puget Sound Region Manager
_____ Print Name	
Date: _____ Address:	Date: _____

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 _____

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: South Puget Sound

Timber Sale Name: Sure Wood

Application Number: 30-102110

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 1,683 **linear feet**
Road to be constructed (optional and required) but not abandoned

Reconstruction: 999 **linear feet**
Road to be reconstructed (optional and required) but not abandoned

Abandonment: 0 **linear feet**
Abandonment of existing roads not reconstructed under the contract

Decommission: 0 **linear feet**
Road to be made undriveable but not officially abandoned.

Pre-Haul Maintenance: 34,058 **linear feet**
Existing road to receive maintenance work (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Construction: 7,755 **linear feet**
Roads to be constructed (optional and required) and then abandoned

Temporary Reconstruction: **linear feet**
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: **Sure Wood**	Region: **South Puget Sound**
Agreement #: **30-102110**	District: **Hoodcanal**
Contact Forester: **John Coble**	Phone/ Location: **(360)-801-6915** Ext: /
Alternate Contact: **Kyle Rosette**	Phone/ Location: **(360)-968-4324** Ext: /

Type of Sale (lump sum, mbf scale, tonnage scale or contract harvest): **Lump Sum**
Required or Optional removal of utility as pulp (*for scale sales only*):
Evaluated for RFRS Implementation?: **Yes**

Percentage cable-uphill: **0%**
Percentage cable-downhill: **0%**
Percentage ground based: **100%**

Species Onsite: ☒RC, ☒DF, ☒WH, ☒RA, ☒BC, ☐BLM, ☐NF, ☐SF, ☐SS, ☐ Other:(Please List)

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) RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)	Net Harvest Acres	Acreage Determination (List method, dimensions and error of closure if applicable)
1	Sec 25,36/ T 22N/R02W	03	17.8	0	0.2	0		17.6	LxW, GIS
2	Sec 25/ T22N/ R02W	03	53.9	0	1.3	1.2	1.2 Pit	50.2	LxW, GIS
3	Sec 25/ T 22N/ R02W Sec 30/ T 22N/ R01W	03	27.5	0	1.7	0		25.8	LxW, GIS
4	Sec 19,30/ T22N/ R01W	03	60.1	0	1.1	0		59.0	LxW, GIS
5 R/W	Sec 30/ T22N/ R01W	03	0.6	0	0	0		0.6	LxW, GIS
6 Private R/W	Sec 19/ T22N/ R01W		0.5	0	0	0		0.5	LxW, GIS
TOTAL ACRES			160.4	0	4.3	1.2	1.2	153.7	

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	VRH with blue painted and yellow tagged clumps	None	144 leave trees
2	VRH with blue painted and yellow tagged clumps	None	427 leave trees
3	VRH with blue painted and yellow tagged clumps	None	223 leave trees
4	VRH with blue painted and yellow tagged clumps	None	487 leave trees

5	R/W with orange tags and orange ribbon	None	None
6	R/W with orange tags and orange ribbon	None	None

OTHER PRE-CRUISE INFORMATION:

Unit #	Estimated Volume	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	See Cruise	Gate #301,302,305 383 lock	See attached maps.
2		Gate #301,302,305 383 lock	See attached maps
3		Gate #301,302,305 383 lock	See attached maps
4		Gate #301,302,305 383 lock	See attached maps
5		Gate #301,302,305 383 lock	See attached maps
6		Gate #301,302,305 383 lock	See attached maps

REMARKS:

Prepared By: John Coble **Date:**	**Title: NRS2**	**CC:**

Revised 2/23/2007 (PSLD), Revised 1/22/20 (SPS)

Timber Sale Cruise Report
Sure Wood

Sale Name: SURE WOOD

Sale Type: LUMP SUM

Region: SO PUGET

District: HOOD CANAL

Lead Cruiser: Aaron Coleman

Other Cruisers:n/a

Cruise Narrative:
This sale consists of 4 variable retention harvest (VRH), and 2 right-of-way (R/W) units located off the Sherwood mainline, 6 miles south of the town of Allyn.

The primary species for this sale is:
Douglas-fir (91%) with an average diameter of 17 inches.
Western redcedar (5%) with an average diameter of 19 inches.
Western Hemlock (3%) with an average diameter of 18 inches.

DF Poles, which were captured on VP plots, are scattered throughout the sale in all units. High quality logs present in all units as well as soul-crushing walls of brush. Previous harvest activities and root rot pockets affect stocking levels leaving some areas well-stocked and others patchy. There are a few acres of big RC in the middle of unit 4.

This is shovel ground with favorable logging conditions. Common defect observed consisted of broken/ forked tops, epicormic branches, cat-face.

All roads to this sale are in good condition and there are good access points into all units. A 383 key was needed to access both gates.

** FMA acres were used as cruise acres. Plots that fell within or next to leave tree clumps were sampled. Leave trees contribute to the overall statistics of the sale, but do not contribute to the overall sale volume. **

Timber Sale Notice Volume (MBF)

				MBF Volume by Grade					
Sp	DBH	Rings/In	Age	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	17.6	9.0		4,857	28	2,692	1,728	381	28
RC	19.9			263			231	31	
WH	18.6			176		105	52	19	1
RA	13.1			34			16	18	
WP	16.0			14			11	3	
ALL	17.2	9.0		5,343	28	2,797	2,037	453	29

Timber Sale Notice Weight (tons)

	Tons by Grade					
Sp	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility

	Tons by Grade					
Sp	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	33,902	166	17,457	12,933	3,191	155
RC	1,960			1,696	265	
WH	1,835		1,099	553	174	8
RA	286			127	159	
WP	90			69	21	
ALL	38,072	166	18,557	15,378	3,809	163

Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
211.1	4.7	168.9	2.1	35,548	5.2

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
SURE WOOD U1	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	17.8	17.8	10	5	0
SURE WOOD U2	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	53.9	53.9	29	16	2
SURE WOOD U3	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	27.5	27.5	14	7	0
SURE WOOD U4	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	60.1	60.1	32	19	1
SURE WOOD U5	B1: VR, 1 BAF (54.44) Measure All, Sighting Ht = 4.5 ft	0.6	0.6	1	1	0
R/W U6	ST: Strip/Percent Sample (1 tree expansion)	0.5		1	1	0
All		160.4	159.9	87	49	3

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	15.5	36	11,837	11,630	1.7	11,706.4	1,865.5
DF	LIVE	2 SAW	HQ-B	13.4	37	5,219	5,151	1.3	5,750.7	826.2
DF	LIVE	3 SAW	Domestic	8.9	37	6,538	6,499	0.6	8,082.8	1,042.4
DF	LIVE	3 SAW	HQ-B	9.8	37	4,292	4,271	0.5	4,850.4	685.0

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	4 SAW	Domestic	5.6	27	2,380	2,377	0.1	3,190.7	381.3
DF	LIVE	SPECIAL MILL	HQ-A	17.2	36	177	177	0.0	165.5	28.3
DF	LIVE	UTILITY	Pulp	24.3	36	175	175	0.0	154.9	28.0
RA	LIVE	3 SAW	Domestic	11.1	30	99	97	2.0	127.1	15.6
RA	LIVE	4 SAW	Domestic	7.1	29	116	113	2.8	158.8	18.1
RC	LIVE	3 SAW	Domestic	13.0	35	1,635	1,441	11.8	1,695.5	231.2
RC	LIVE	4 SAW	Domestic	5.7	30	200	195	2.2	264.7	31.3
RC	LIVE	CULL	Cull	17.7	10	35	0	100.0	0.0	0.0
WH	LIVE	2 SAW	Domestic	13.5	40	859	653	24.0	1,099.4	104.8
WH	LIVE	3 SAW	Domestic	8.5	40	361	321	11.0	553.5	51.5
WH	LIVE	4 SAW	Domestic	5.6	23	125	120	4.0	173.5	19.2
WH	LIVE	UTILITY	Pulp	8.1	17	5	5	0.0	8.4	0.8
WP	LIVE	3 SAW	Domestic	10.4	40	70	70	0.0	68.5	11.2
WP	LIVE	4 SAW	Domestic	5.1	34	17	17	0.0	21.4	2.7

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.9	30	4,037	0.1	5,499.5	647.5
DF	8 - 11	LIVE	HQ-B	9.8	37	4,271	0.5	4,850.4	685.0
DF	8 - 11	LIVE	Domestic	9.9	36	4,787	0.7	5,712.9	767.8
DF	12 - 15	LIVE	HQ-B	13.3	37	4,588	1.0	5,201.0	735.9
DF	12 - 15	LIVE	Domestic	13.9	36	6,010	1.2	6,413.7	963.9
DF	16 - 19	LIVE	HQ-A	17.2	36	177	0.0	165.5	28.3
DF	16 - 19	LIVE	HQ-B	17.2	37	563	3.6	549.8	90.3
DF	16 - 19	LIVE	Domestic	17.9	37	3,866	2.2	3,759.7	620.1
DF	20+	LIVE	Domestic	21.7	37	1,807	2.7	1,594.1	289.9
DF	20+	LIVE	Pulp	24.3	36	175	0.0	154.9	28.0
RA	5 - 7	LIVE	Domestic	6.5	28	69	1.8	94.1	11.1
RA	8 - 11	LIVE	Domestic	9.8	30	141	2.7	191.8	22.6
RC	5 - 7	LIVE	Domestic	5.6	27	225	0.7	320.3	36.1
RC	8 - 11	LIVE	Domestic	9.2	34	279	5.5	423.1	44.7
RC	8 - 11	LIVE	Cull	10.6	8	0	100.0	0.0	0.0
RC	12 - 15	LIVE	Domestic	14.0	35	352	9.5	379.1	56.5
RC	16 - 19	LIVE	Domestic	17.4	35	359	11.4	376.7	57.6
RC	20+	LIVE	Domestic	22.7	35	421	18.7	460.9	67.5
RC	20+	LIVE	Cull	24.1	11	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Domestic	5.6	28	202	1.0	314.1	32.4

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WH	8 - 11	LIVE	Pulp	8.1	17	5	0.0	8.4	0.8
WH	8 - 11	LIVE	Domestic	9.8	35	239	15.1	412.9	38.3
WH	12 - 15	LIVE	Domestic	12.9	40	494	8.7	705.4	79.2
WH	16 - 19	LIVE	Domestic	18.2	40	118	49.9	294.6	18.9
WH	20+	LIVE	Domestic	21.4	40	41	50.0	99.4	6.6
WP	5 - 7	LIVE	Domestic	5.1	34	17	0.0	21.4	2.7
WP	8 - 11	LIVE	Domestic	10.4	40	70	0.0	68.5	11.2

Cruise Unit Report
SURE WOOD U1

Unit Sale Notice Volume (MBF): SURE WOOD U1

				MBF Volume by Grade					
Sp	DBH	Rings/In	Age	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	13.4			418	28	126	198	65	
WH	24.5			52		42	9	1	1
RC	10.2			25			15	10	
ALL	13.8			495	28	168	222	76	1

Unit Cruise Design: SURE WOOD U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	17.8	17.8	10	5	0

Unit Cruise Summary: SURE WOOD U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	13	34	3.4	0
WH	5	5	0.5	0
RC	5	8	0.8	0
ALL	23	47	4.7	0

Unit Cruise Statistics (Cut + Leave Trees): SURE WOOD 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	185.1	54.1	17.1	139.1	21.1	5.9	25,752	58.0	18.1
WH	27.2	253.9	80.3	108.1	20.6	9.2	2,943	254.7	80.8
RC	26.9	153.7	48.6	83.0	22.3	10.0	2,231	155.3	49.6
ALL	239.2	29.7	9.4	129.3	26.5	5.5	30,926	39.8	10.9

Unit Summary: SURE WOOD U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	10	ALL	12.6	65	80	18,944	18,935	0.0	157.2	136.1	38.3	337.0
DF	LIVE	POLE	3	ALL	17.8	82	104	4,547	4,544	0.0	18.9	32.7	7.7	80.9

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
RC	LIVE	CUT	5	ALL	10.2	43	52	1,394	1,394	0.0	29.6	16.8	5.3	24.8
WH	LIVE	CUT	5	ALL	24.5	94	118	5,037	2,943	41.6	8.3	27.2	5.5	52.4
ALL	LIVE	CUT	20	ALL	13.0	62	78	25,376	23,273	8.3	195.1	180.1	49.1	414.3
ALL	LIVE	POLE	3	ALL	17.8	82	104	4,547	4,544	0.0	18.9	32.7	7.7	80.9
ALL	ALL	ALL	23	ALL	13.5	64	80	29,923	27,817	7.0	214.0	212.8	56.8	495.1

Cruise Unit Report
SURE WOOD U2

Unit Sale Notice Volume (MBF): SURE WOOD U2

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	2 Saw	3 Saw	4 Saw
DF	16.6	9.0		1,896	901	821	175
WH	9.1			15		6	8
RC	18.0			5		4	1
ALL	16.1	9.0		1,915	901	831	184

Unit Cruise Design: SURE WOOD U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	53.9	53.9	29	16	2

Unit Cruise Summary: SURE WOOD U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RA		1	0.0	0
DF	62	112	3.9	1
WH	2	2	0.1	0
RC	1	1	0.0	0
ALL	65	116	4.0	1

Unit Cruise Statistics (Cut + Leave Trees): SURE WOOD 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 (%)
RA	1.2	538.5	100.0						
DF	210.3	46.3	8.6	173.5	22.3	2.8	36,480	51.4	9.0
WH	3.8	538.5	100.0	72.7	18.8	13.3	273	538.8	100.9
RC	1.2	538.5	100.0	73.6	0.0	0.0	85	538.5	100.0
ALL	216.3	48.6	9.0	171.2	25.4	3.1	37,037	54.8	9.6

Unit Summary: SURE WOOD U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	54	ALL	16.6	82	104	33,078	32,572	1.5	124.9	187.7	46.1	1,755.6
DF	LIVE	POLE	8	ALL	16.8	93	119	2,646	2,606	1.5	9.8	15.0	3.7	140.4
RC	LIVE	CUT	1	ALL	18.0	65	82	85	85	0.0	0.7	1.2	0.3	4.6
WH	LIVE	CUT	2	ALL	9.1	42	50	273	273	0.0	8.3	3.8	1.2	14.7
ALL	LIVE	POLE	8	ALL	16.8	93	119	2,646	2,606	1.5	9.8	15.0	3.7	140.4
ALL	LIVE	CUT	57	ALL	16.2	79	101	33,436	32,930	1.5	133.9	192.6	47.6	1,774.9
ALL	ALL	ALL	65	ALL	16.3	80	102	36,082	35,536	1.5	143.7	207.7	51.3	1,915.4

Cruise Unit Report
SURE WOOD U3

Unit Sale Notice Volume (MBF): SURE WOOD U3

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	2 Saw	3 Saw	4 Saw
DF	18.1			936	531	337	68
RC	11.0			3			3
ALL	17.7			939	531	337	71

Unit Cruise Design: SURE WOOD U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	27.5	27.4	14	7	0

Unit Cruise Summary: SURE WOOD U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	22	56	4.0	0
RC	1	4	0.3	0
ALL	23	60	4.3	0

Unit Cruise Statistics (Cut + Leave Trees): SURE WOOD 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	217.8	36.7	9.8	178.7	18.5	3.9	38,914	41.1	10.6
RC	9.6	288.9	77.2	45.5	0.0	0.0	437	288.9	77.2
ALL	227.4	40.7	10.9	173.1	24.5	5.1	39,351	47.5	12.0

Unit Summary: SURE WOOD U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	16	ALL	18.1	91	116	29,358	29,186	0.6	91.4	163.3	38.4	802.6
DF	LIVE	POLE	6	ALL	18.1	93	118	4,893	4,864	0.6	15.2	27.2	6.4	133.8
RC	LIVE	CUT	1	ALL	11.0	38	38	109	109	0.0	3.6	2.4	0.7	3.0
ALL	LIVE	POLE	6	ALL	18.1	93	118	4,893	4,864	0.6	15.2	27.2	6.4	133.8
ALL	LIVE	CUT	17	ALL	17.9	89	113	29,467	29,295	0.6	95.0	165.7	39.1	805.6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	ALL	ALL	23	ALL	17.9	90	114	34,360	34,159	0.6	110.2	192.9	45.5	939.4

Cruise Unit Report
SURE WOOD U4

Unit Sale Notice Volume (MBF): SURE WOOD U4

				MBF Volume by Grade				
Sp	DBH	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	Utility
DF	19.5			1,595	1,128	366	73	28
RC	21.1			230		212	18	
WH	17.0			109	63	37	10	
RA	13.1			34		16	18	
WP	16.0			14		11	3	
ALL	19.0			1,981	1,190	642	121	28

Unit Cruise Design: SURE WOOD U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	60.1	60.1	32	19	1

Unit Cruise Summary: SURE WOOD U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	42	84	2.6	0
RC	21	27	0.8	0
WH	4	7	0.2	0
RA	5	5	0.2	0
WP	1	1	0.0	0
ALL	73	124	3.9	0

Unit Cruise Statistics (Cut + Leave Trees): SURE WOOD 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	142.9	48.1	8.5	194.9	23.6	3.6	27,859	53.6	9.3
RC	31.6	213.3	37.7	121.1	42.4	9.3	3,828	217.5	38.8
WH	11.9	224.4	39.7	152.6	8.6	4.3	1,818	224.6	39.9
RA	5.3	329.5	58.3	106.8	17.6	7.9	561	330.0	58.8
WP	1.7	565.7	100.0	135.4	0.0	0.0	230	565.7	100.0
ALL	193.4	44.0	7.8	177.3	32.2	3.8	34,295	54.5	8.6

Unit Summary: SURE WOOD U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	40	ALL	19.5	87	111	26,177	25,869	1.2	64.0	132.7	30.1	1,554.7
DF	LIVE	POLE	2	ALL	18.0	91	116	671	663	1.2	1.9	3.4	0.8	39.9
RA	LIVE	CUT	5	ALL	13.1	64	80	575	561	2.4	5.6	5.3	1.5	33.7
RC	LIVE	CUT	21	ALL	21.1	70	88	4,450	3,828	14.0	13.0	31.6	6.9	230.1
WH	LIVE	CUT	4	ALL	17.0	81	106	1,865	1,818	2.6	7.6	11.9	2.9	109.2
WP	LIVE	CUT	1	ALL	16.0	76	95	230	230	0.0	1.2	1.7	0.4	13.8
ALL	LIVE	POLE	2	ALL	18.0	91	116	671	663	1.2	1.9	3.4	0.8	39.9
ALL	LIVE	CUT	71	ALL	19.2	83	105	33,297	32,305	3.0	91.4	183.2	41.7	1,941.5
ALL	ALL	ALL	73	ALL	19.1	83	105	33,968	32,968	2.9	93.3	186.6	42.5	1,981.4

Cruise Unit Report
SURE WOOD U5

Unit Sale Notice Volume (MBF): SURE WOOD U5

				MBF Volume by Grade		
Sp	DBH	Rings/In	Age	All	2 Saw	3 Saw
DF	18.8			11	6	5
ALL	18.8			11	6	5

Unit Cruise Design: SURE WOOD U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (54.44) Measure All, Sighting Ht = 4.5 ft	0.6	0.6	1	1	0

Unit Cruise Summary: SURE WOOD U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	2	2	2.0	0
ALL	2	2	2.0	0

Unit Cruise Statistics (Cut + Leave Trees): SURE WOOD 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	108.9	0.0	0.0	173.6	24.8	17.5	18,907	24.8	17.5
ALL	108.9	0.0	0.0	173.6	24.8	17.5	18,907	24.8	17.5

Unit Summary: SURE WOOD U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	2	ALL	18.8	91	117	18,907	18,907	0.0	56.5	108.9	25.1	11.3
ALL	LIVE	CUT	2	ALL	18.8	91	117	18,907	18,907	0.0	56.5	108.9	25.1	11.3
ALL	ALL	ALL	2	ALL	18.8	91	117	18,907	18,907	0.0	56.5	108.9	25.1	11.3

Cruise Unit Report
R/W U6

Unit Sale Notice Volume (MBF): R/W U6

				MBF Volume by Grade	
Sp	DBH	Rings/In	Age	All	4 Saw
DF	7.9			1	1
WP	10.0			0	0
ALL	8.0			1	1

Unit Cruise Design: R/W U6

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
ST: Strip/Percent Sample (1 tree expansion)	0.5		1	1	0

Unit Cruise Summary: R/W U6

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	3	19	19.0	0
WP	1	1	1.0	0
ALL	4	20	20.0	0

Unit Cruise Statistics (Cut + Leave Trees): R/W 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	12.8	0.0	0.0	83.0	4.6	2.6	1,066	4.6	2.6
WP	1.1	0.0	0.0	78.9	0.0	0.0	86	0.0	0.0
ALL	13.9	0.0	0.0	82.7	4.4	2.2	1,152	4.4	2.2

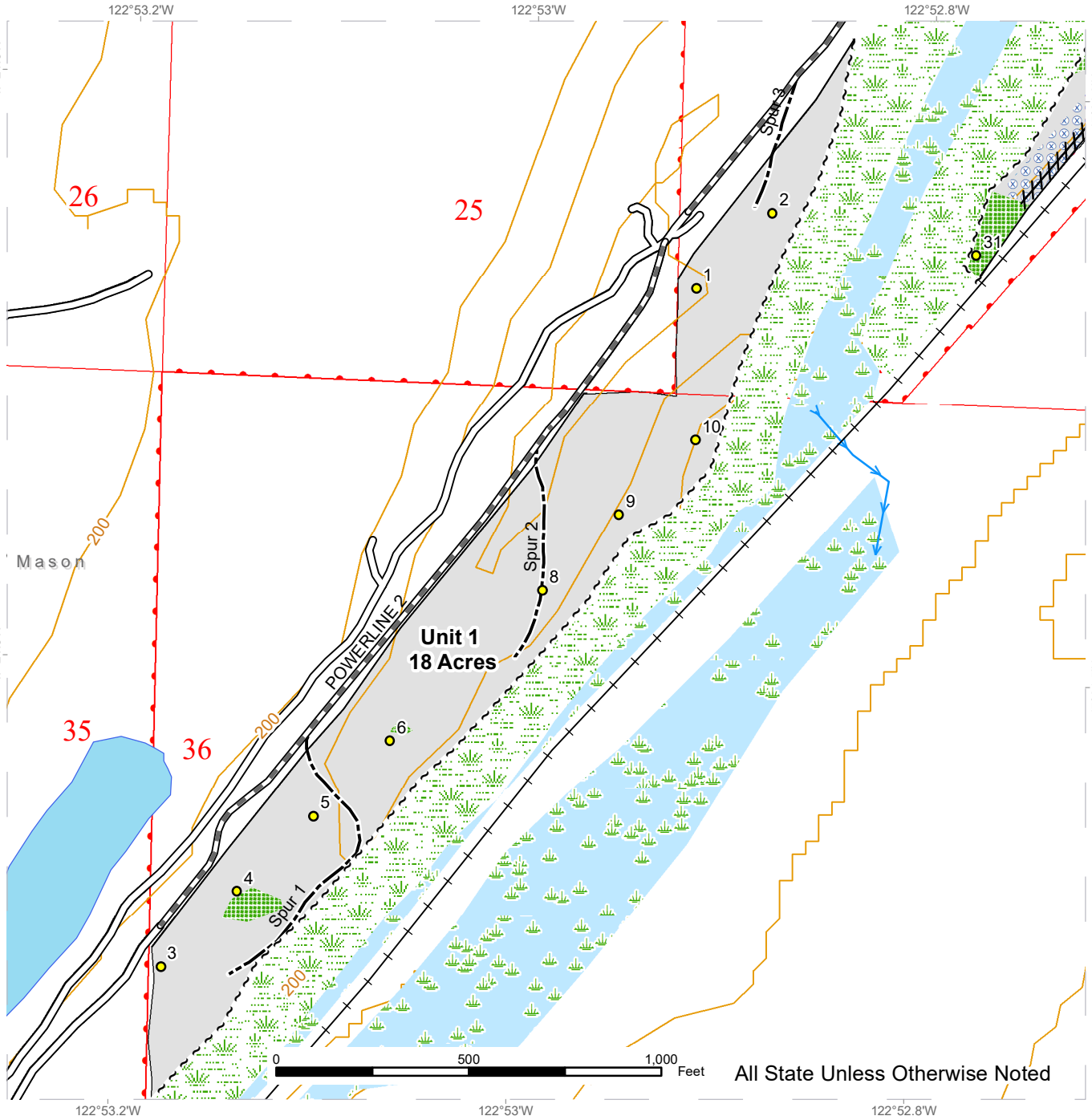
Unit Summary: R/W U6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	3	ALL	7.9	41	50	1,066	1,066	0.0	37.7	12.8	4.6	0.5
WP	LIVE	CUT	1	ALL	10.0	45	68	86	86	0.0	2.0	1.1	0.3	0.0
ALL	LIVE	CUT	4	ALL	8.0	42	51	1,152	1,152	0.0	39.7	13.9	4.9	0.6
ALL	ALL	ALL	4	ALL	8.0	42	51	1,152	1,152	0.0	39.7	13.9	4.9	0.6

CRUISE MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Timber Type Change
- Flag Line
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Construction
- Railroad
- Leave Tree Area
- Streams
- Contours 40-foot
- Wetlands - Non-forested
- Wetland Mgt Zone
- Hazard Abatement Area
- Public Land Survey Townships
- Public Land Survey Sections
- DNR Managed Lands

N

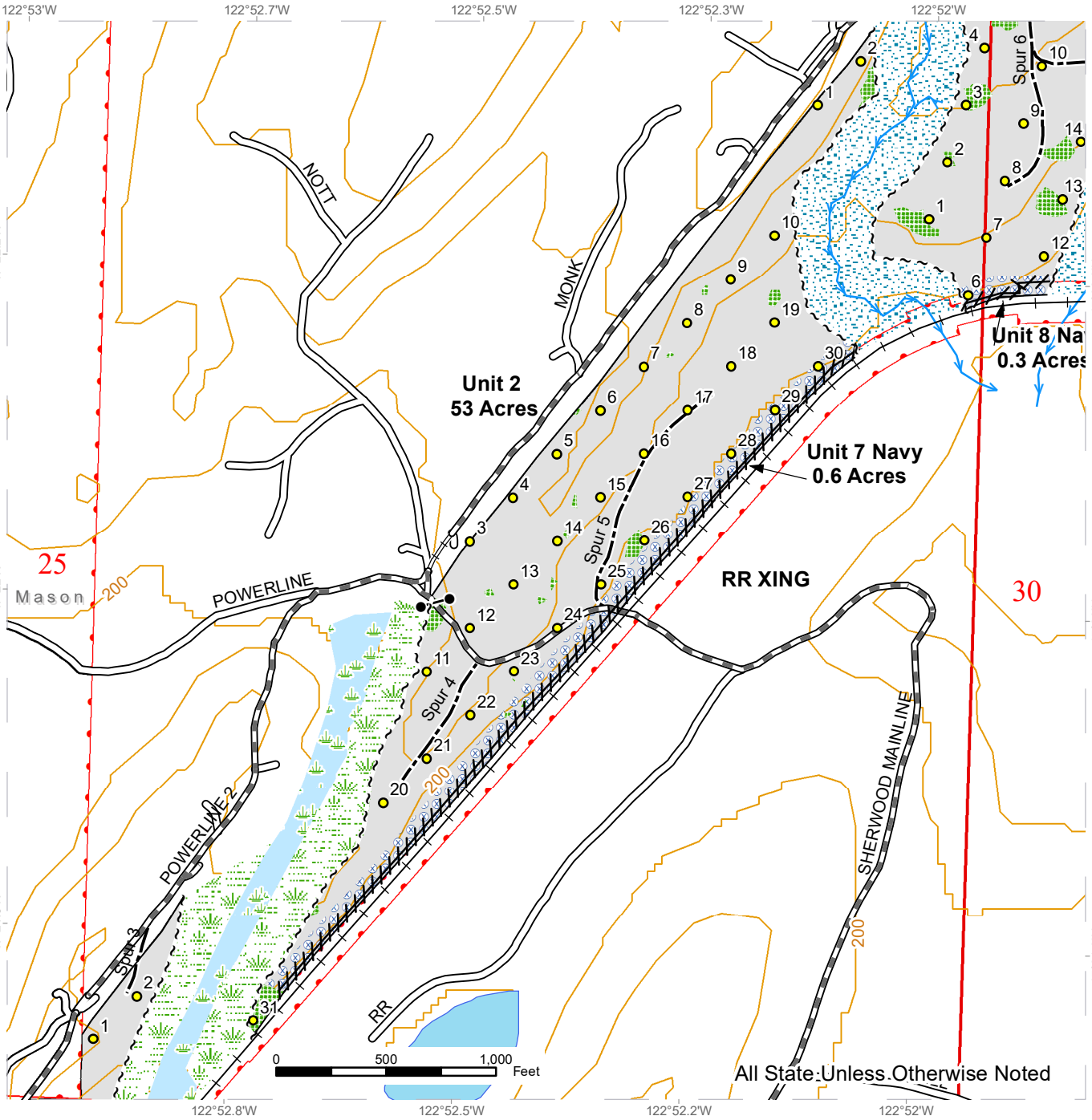
Prepared By: jcob490

Modification Date: acol490 6/8/2022

CRUISE MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Timber Type Change
- Flag Line
- Existing Roads
- Required Pre-Haul Maintenance
- Required Reconstruction
- Optional Construction
- Railroad
- Leave Tree Area
- Streams
- Gates
- Contours 40-foot
- Wetlands - Non-forested
- Riparian Mgt Zone
- Wetland Mgt Zone
- Hazard Abatement Area
- Public Land Survey Townships
- Public Land Survey Sections
- DNR Managed Lands

N

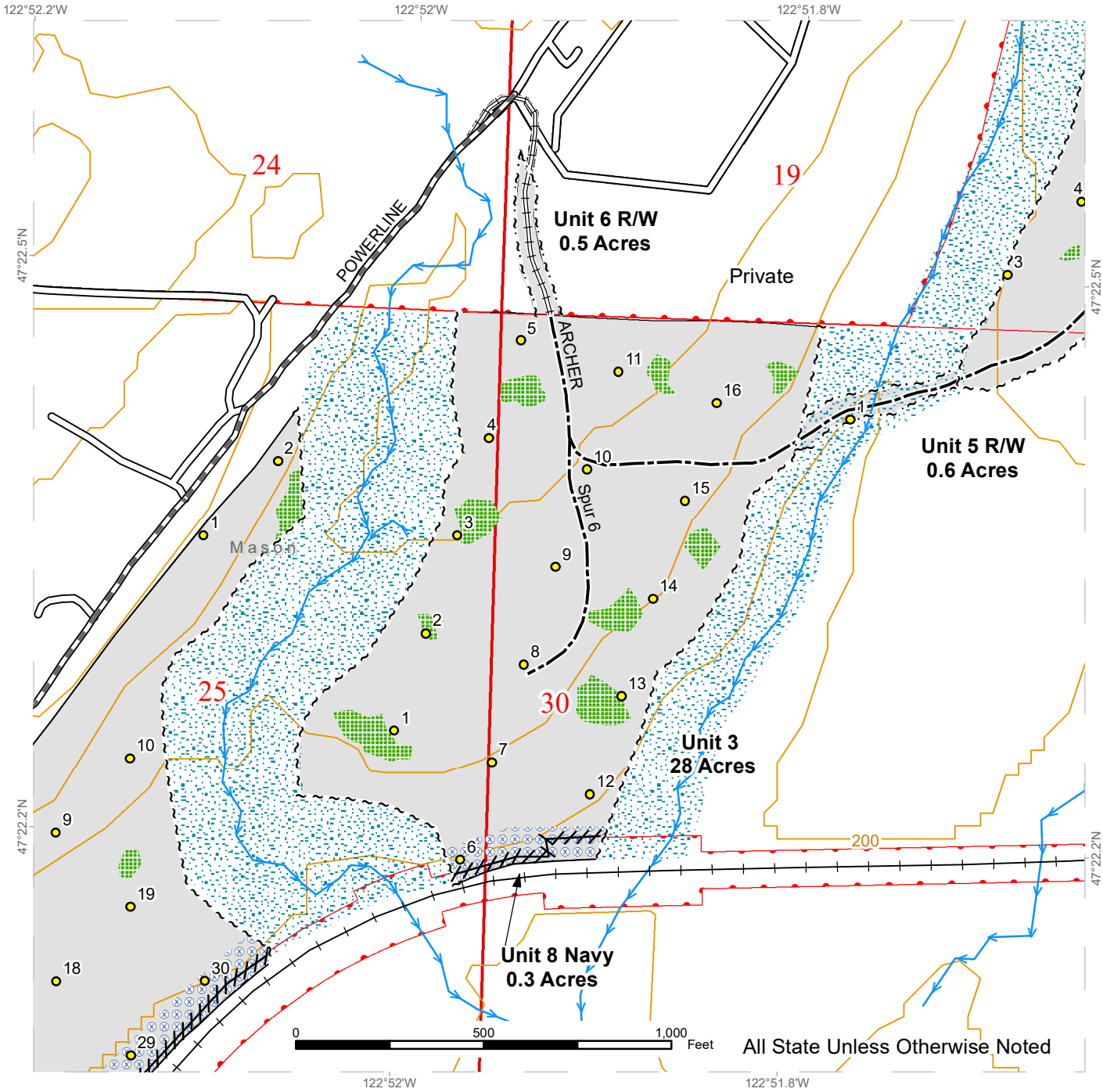
Prepared By: jcob490

Modification Date: acol490 6/8/2022

CRUISE MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Timber Type Change
- Right of Way Tags
- Flag Line
- Existing Roads
- Required Pre-Haul Maintenance
- Required Reconstruction
- Optional Construction
- Railroad
- Leave Tree Area
- Leave Tree Area
- Streams
- Contours 40-foot
- Riparian Mgt Zone
- Hazard Abatement Area
- Public Land Survey Townships
- Public Land Survey Sections
- DNR Managed Lands

N

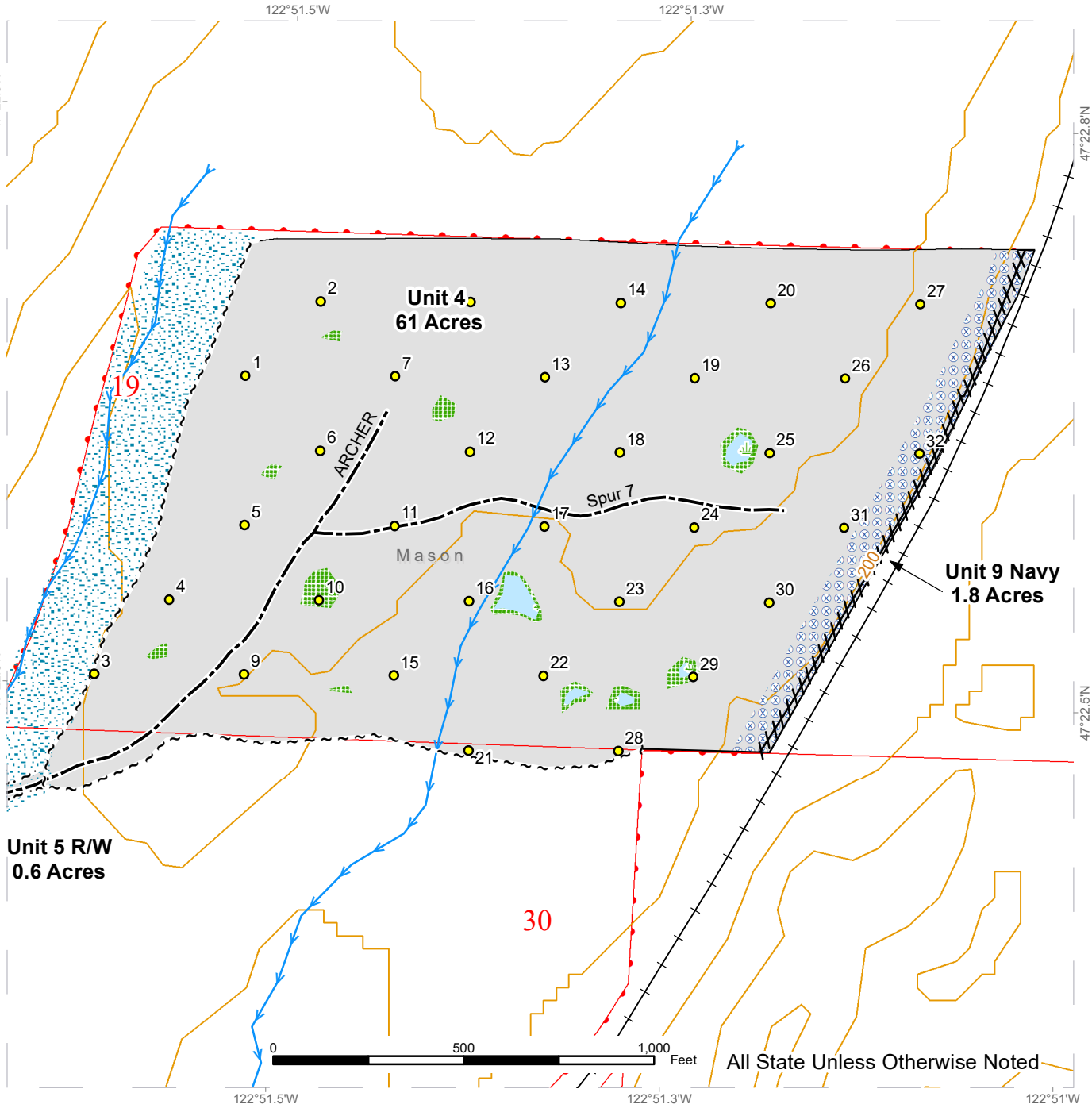
Prepared By: jcob490

Modification Date: acol490 6/8/2022

CRUISE MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Timber Type Change
- Right of Way Tags
- Flag Line
- Optional Construction
- Railroad
- Leave Tree Area
- U4 Wetland
- Streams
- Contours 40-foot
- Riparian Mgt Zone
- Hazard Abatement Area
- Public Land Survey Townships
- Public Land Survey Sections
- DNR Managed Lands

N

Prepared By: jcob490

Modification Date: acol490 6/8/2022

FPA/N No: 2423299

Effective Date: 2/21/2023

Expiration Date: 2/21/2026

Shut Down Zone: 654

EARR Tax Credit: ☒ Eligible ☐ Non-eligible

Reference: Sure Wood TS 30-102110

Forest Practices Application/Notification
Notice of Decision

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

All work below the ordinary high water line shall only occur between July 15 and September 30.

NOTE: Be aware that there are buried and/or overhead utilities in the vicinity of this proposal. Remember to call the appropriate utility companies before you disturb the ground or cut vegetation near utilities.

NOTE: The forest debris resulting from the proposed logging may create an extreme fire hazard. Abate logging slash within 100 feet of a public road or within 500 feet of a structure valued at $1,000.00 or more. Responsibilities for abatement are described under RCW 76.04.660 and WAC 332-24-650.

Issued By: Dave Dalzotto **Region:** South Puget Sound Region

Title: Resource Protection Forester **Date:** 2/21/2023

Copies to: ☒ **Landowner, Timber Owner and Operator**

Issued in person: ☐ **LO** ☐ **TO** ☐ **OP** **By:** _____ **Date:** _____

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

You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources South Puget Sound Region
Physical Address 1111 Israel Road SW Suite 301 Tumwater, WA 98501 Mailing address Post Office Box 40903 Olympia, WA 98504-0903	Physical Address 1125 Washington Street, SE Olympia, WA 98504 Mailing Address Post Office Box 40100 Olympia, WA 98504-0100	Physical Address 950 Farman Ave N Enumclaw, WA 98022 Mailing Address 950 Farman Ave N Enumclaw, WA 98022

Information regarding the Pollution Control Hearings Board can be found at: https://eluho.wa.gov/content/11

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, **Betty Burton**, caused the Notice of Decision for FPA/N No. **2423299** 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.

2/21/2023	Enumclaw, WA	Betty Burton
(Date)	*(City & State where signed)*	*(Signature)*

From:	Dalzotto, Dave (DNR)
To:	MAINWARING, AUDREY (DNR)
Cc:	HOMER, JEREMY (DNR); FRYBERGER, KRISTIE (DNR)
Subject:	RE: Notice of Decision - FPA 2423299 - Sure Wood TS 30-102110
Date:	Friday, February 24, 2023 2:27:50 PM
Attachments:	image001.png

Hello,

The work window only applies to the Type F (3) crossings. We have started a new way to approve the FPAs, and there is a blanket statement for crossings. Thank you for bringing this to my attention.

Dave Dalzotto, *Forest Practices Forester*
Hood Canal Unit
South Puget Sound Region
WA Department of Natural Resources
Cell: 360.480.7921
dave.dalzotto@dnr.wa.gov

From: MAINWARING, AUDREY (DNR) <AUDREY.MAINWARING@dnr.wa.gov>
Sent: Tuesday, February 21, 2023 13:10
To: Dalzotto, Dave (DNR) <Dave.Dalzotto@dnr.wa.gov>
Cc: HOMER, JEREMY (DNR) <Jeremy.Homer@dnr.wa.gov>; FRYBERGER, KRISTIE (DNR) <KRISTIE.FRYBERGER@dnr.wa.gov>
Subject: FW: Notice of Decision - FPA 2423299 - Sure Wood TS 30-102110

Hi Dave,
I wanted to clarify on the attached condition "All work below the ordinary high water line shall only occur between July 15 and September 30." Does this pertain to C1 Type 5 stream culvert work, which is a temporary crossing on Spur 7 or does the condition only apply to C2 & C3 work?

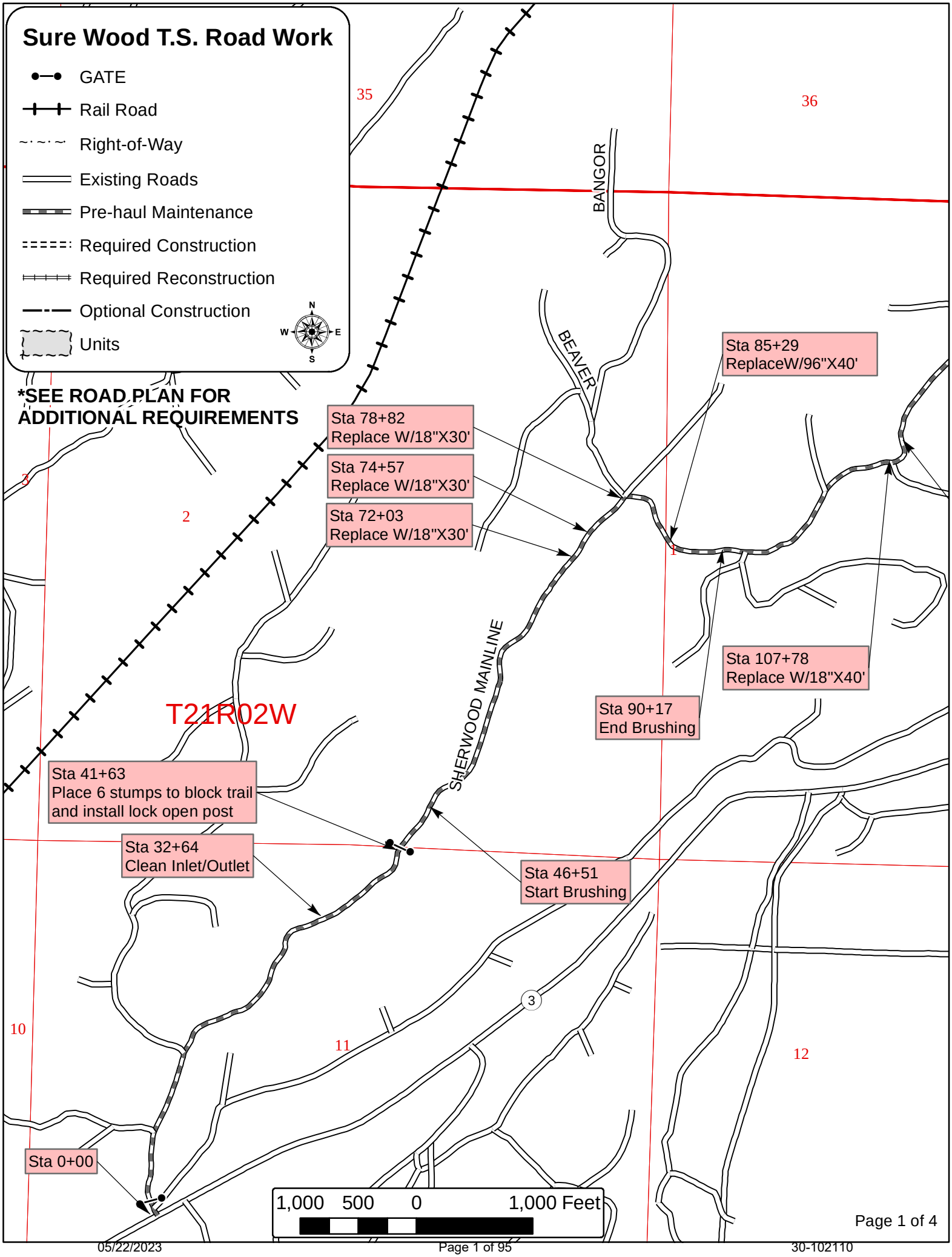
Thanks.

Audrey Mainwaring
SPS Management Forester
206.949.0137

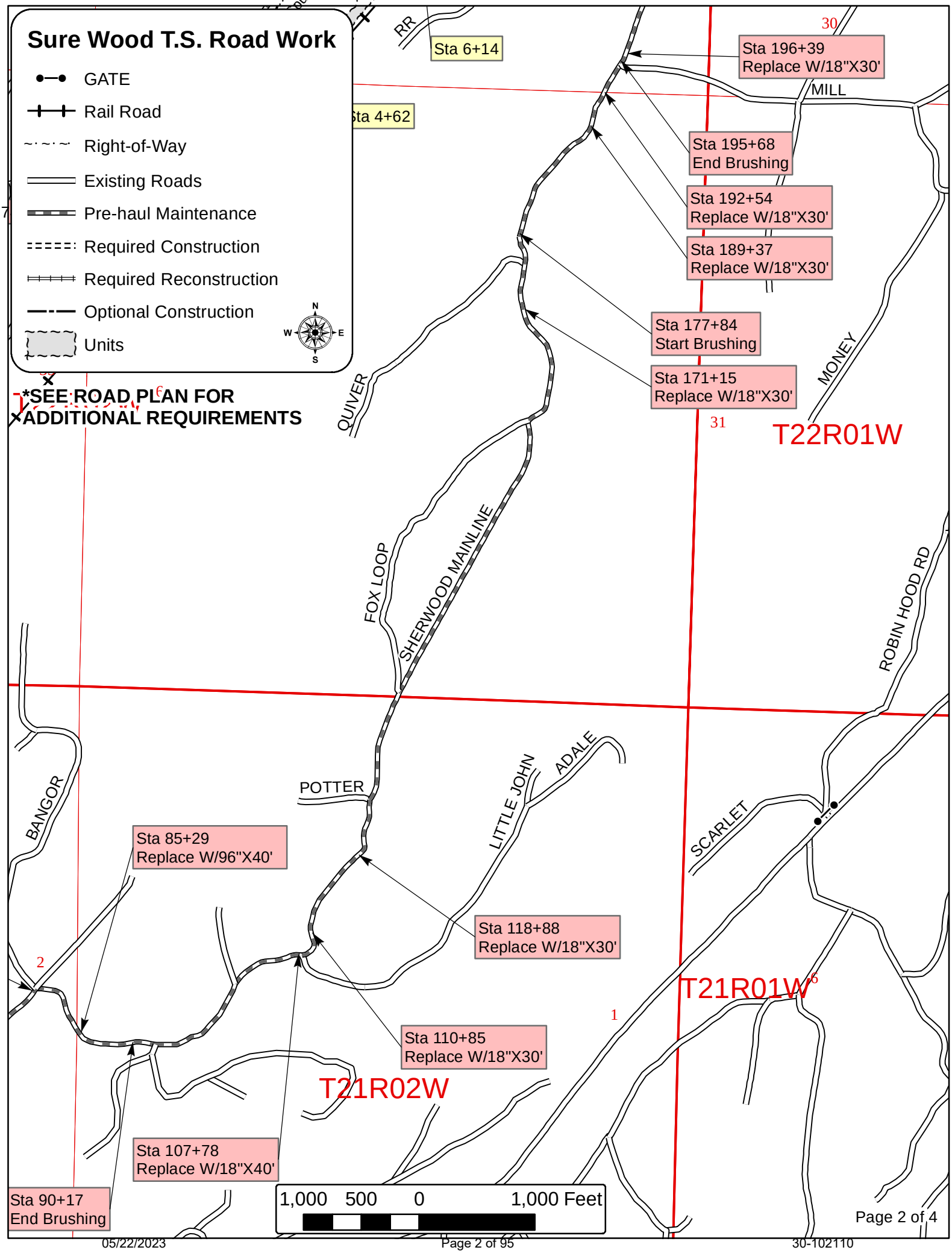
From: Burton, Betty (DNR) <Betty.Burton@dnr.wa.gov>
Sent: Tuesday, February 21, 2023 12:41 PM
To: MAINWARING, AUDREY (DNR) <AUDREY.MAINWARING@dnr.wa.gov>; FRYBERGER, KRISTIE (DNR) <KRISTIE.FRYBERGER@dnr.wa.gov>; Mackay, Andrea (DNR) <Andrea.MacKay@dnr.wa.gov>; Loretta Swanson <LorettaS@masoncountywa.gov>; clint.mathews@cngc.com
Subject: Notice of Decision - FPA 2423299 - Sure Wood TS 30-102110

Thank you
Betty

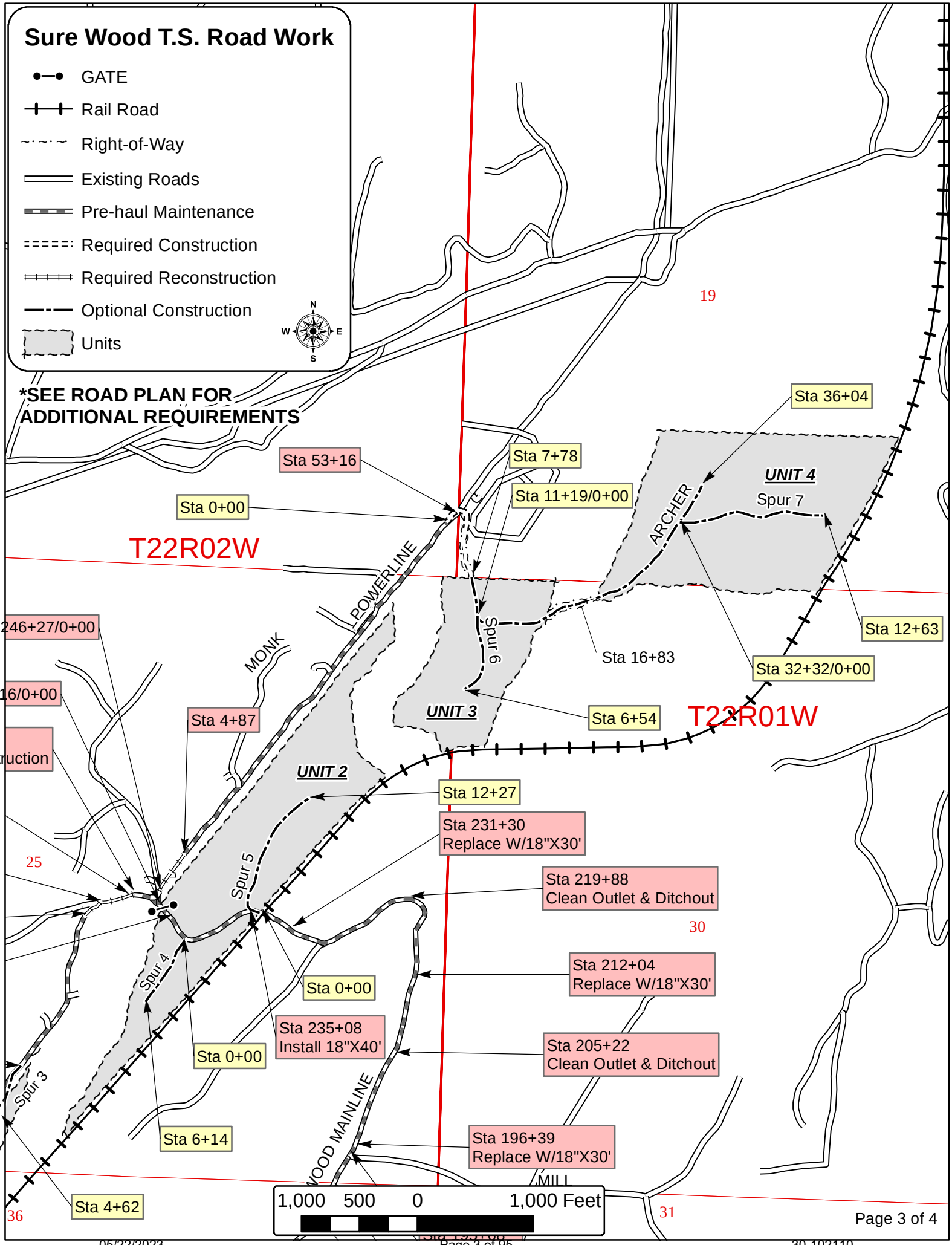
Betty Burton
Natural Resource Technician 3
South Puget Sound Region – Forest Practices
Washington State Department of Natural Resources (DNR)
(360) 688-4197
southpuget.forestpractices@dnr.wa.gov


Sure Wood T.S. Road Work
GATE
Rail Road
Right-of-Way
Existing Roads
Pre-haul Maintenance
Required Construction
Required Reconstruction
Optional Construction
Units
N
W
E
S
*SEE ROAD PLAN FOR ADDITIONAL REQUIREMENTS
35
36
BANGOR
BEAVER
SHERWOOD MAINLINE
T21R02W
Sta 85+29
ReplaceW/96"X40'
Sta 78+82
Replace W/18"X30'
Sta 74+57
Replace W/18"X30'
Sta 72+03
Replace W/18"X30'
Sta 107+78
Replace W/18"X40'
Sta 90+17
End Brushing
Sta 41+63
Place 6 stumps to block trail
and install lock open post
Sta 32+64
Clean Inlet/Outlet
Sta 46+51
Start Brushing
Sta 0+00
3
2
1
10
11
12
3
1,000 500 0 1,000 Feet

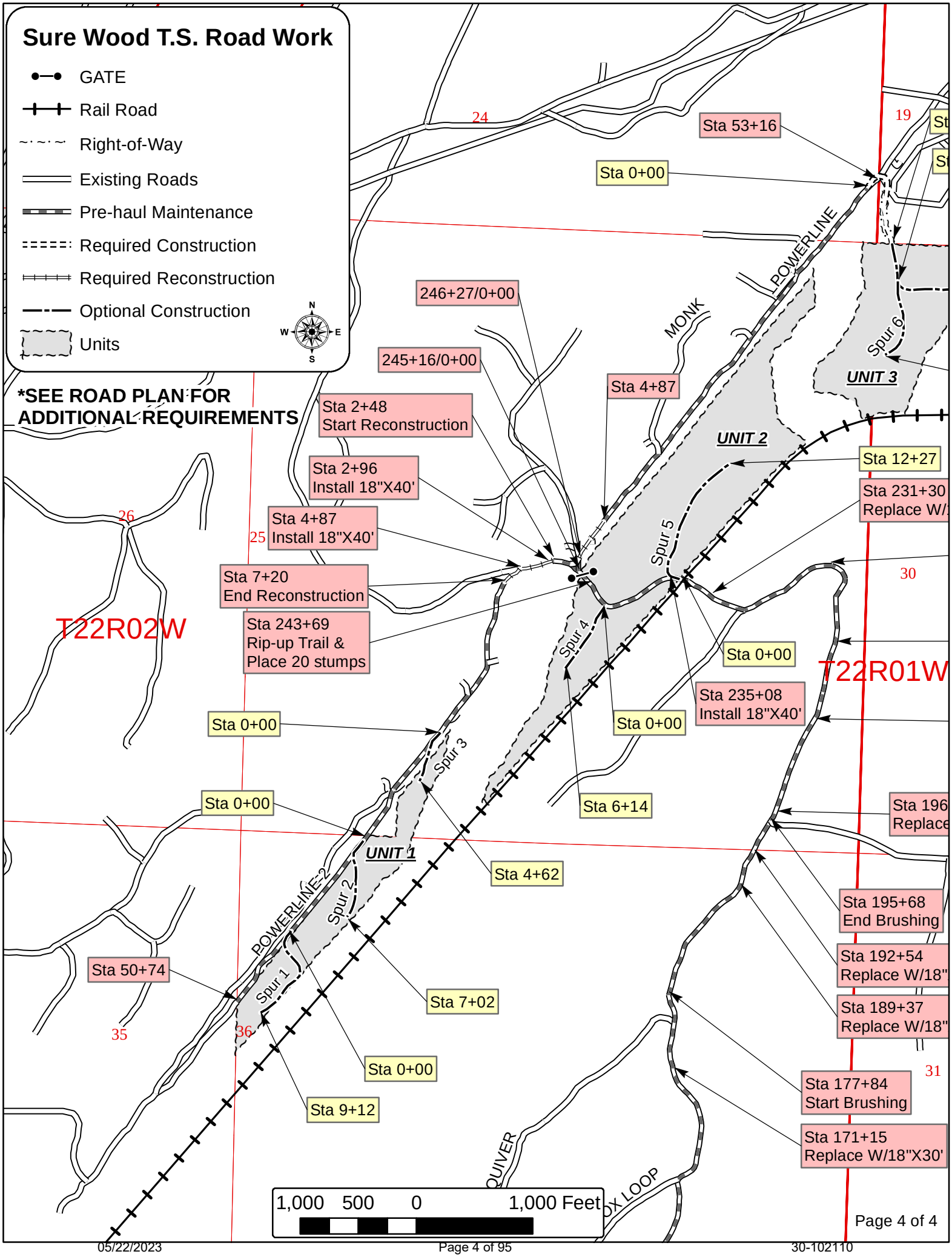
Page 1 of 4


Sure Wood T.S. Road Work
GATE
Rail Road
Right-of-Way
Existing Roads
Pre-haul Maintenance
Required Construction
Required Reconstruction
Optional Construction
Units
N
W
E
S
*SEE ROAD PLAN FOR
ADDITIONAL REQUIREMENTS
RR
Sta 6+14
Sta 4+62
Sta 196+39
Replace W/18"X30'
MILL
Sta 195+68
End Brushing
Sta 192+54
Replace W/18"X30'
Sta 189+37
Replace W/18"X30'
Sta 177+84
Start Brushing
Sta 171+15
Replace W/18"X30'
MONEY
QUIVER
30
31
T22R01W
FOX LOOP
SHERWOOD MAINLINE
ROBIN HOOD RD
BANGOR
POTTER
LITTLE JOHN
ADALE
SCARLET
Sta 85+29
Replace W/96"X40'
Sta 118+88
Replace W/18"X30'
2
1
6
T21R01W
Sta 110+85
Replace W/18"X30'
T21R02W
Sta 107+78
Replace W/18"X40'
Sta 90+17
End Brushing
1,000 500 0 1,000 Feet

Page 2 of 4



End Brushing


Sure Wood T.S. Road Work
GATE
Rail Road
Right-of-Way
Existing Roads
Pre-haul Maintenance
Required Construction
Required Reconstruction
Optional Construction
Units
N
W
E
S
*SEE ROAD PLAN FOR ADDITIONAL REQUIREMENTS
24
19
26
25
30
35
36
31
T22R02W
T22R01W
Sta 53+16
Sta 0+00
POWERLINE
MONK
246+27/0+00
245+16/0+00
Sta 4+87
Sta 2+48
Start Reconstruction
Sta 2+96
Install 18"X40'
Sta 4+87
Install 18"X40'
Sta 7+20
End Reconstruction
Sta 243+69
Rip-up Trail &
Place 20 stumps
UNIT 3
Spur 6
UNIT 2
Sta 12+27
Sta 231+30
Replace W/
Spur 5
Spur 4
Sta 0+00
Sta 235+08
Install 18"X40'
Sta 0+00
Sta 0+00
Spur 3
Sta 6+14
Sta 0+00
Sta 196
Replace
UNIT 1
Sta 4+62
POWERLINE 2
Spur 2
Sta 195+68
End Brushing
Sta 192+54
Replace W/18"
Sta 50+74
Spur 1
Sta 7+02
Sta 189+37
Replace W/18"
Sta 0+00
Sta 9+12
Sta 177+84
Start Brushing
Sta 171+15
Replace W/18"X30'
QUIVER
OX LOOP
1,000 500 0 1,000 Feet
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1STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

SURE WOOD TIMBER SALE ROAD PLAN
MASON COUNTY
HOOD CANAL DISTRICT
SOUTH PUGET SOUND REGION

AGREEMENT NO.: 30-102110 STAFF ENGINEER: Heymann

DATE: 7/11/22

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.

Road	Stations	Type
Sherwood Mainline	0+00 to 246+27	Pre-haul Maintenance
Sherwood Mainline	85+09 to 85+49	Reconstruction
Powerline	0+00 to 4+87	Reconstruction
Powerline	4+87 to 53+16	Pre-haul Maintenance
Powerline 2	0+00 to 2+48	Pre-haul Maintenance
Powerline 2	2+48 to 7+20	Reconstruction
Powerline 2	7+20 to 50+74	Pre-haul Maintenance
Archer	0+00 to 7+78	Construction
Archer	16+83 to 36+04	Abandon, if built
Spur 1	0+00 to 9+12	Abandon, if built
Spur 2	0+00 to 7+02	Abandon, if built
Spur 3	0+00 to 4+62	Abandon, if built
Spur 4	0+00 to 6+14	Abandon, if built
Spur 5	0+00 to 12+27	Abandon, if built
Spur 6	0+00 to 6+54	Abandon, if built
Spur 7	0+00 to 12+63	Abandon, if built

0-3 OPTIONAL ROADS

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

Road	Stations	Type
Archer	7+78 to 36+04	Construction
Spur 1	0+00 to 9+12	Construction

Spur 2	0+00 to 7+02	Construction
Spur 3	0+00 to 4+62	Construction
Spur 4	0+00 to 6+14	Construction
Spur 5	0+00 to 12+27	Construction
Spur 6	0+00 to 6+54	Construction
Spur 7	0+00 to 12+63	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 gate w/ 4-lever lock box;
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:

clearing existing excavation and embankment slopes;
grubbing existing excavation and embankment slopes;
right-of-way debris disposal;
pulling ditches;
cleaning ditches;
constructing ditches;
acquisition and installation of additional drainage structures;
grading and shaping existing road surface and turnouts;
compaction of road surface;
acquisition, manufacture, and application of rock;
grass seeding.

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;
constructing catch basin and headwall;
cleaning culvert inlets and outlets;
cross drain culvert replacement;
acquisition and installation of additional drainage structures;
acquisition and placement of riprap;
grading and shaping existing road surface and turnouts;
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 striping. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

0-13 STRUCTURES

Purchaser shall provide and install 96”X40’ AS12. Requirements for these structures are listed in Section 7 STRUCTURES.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

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

1-2 UNFORESEEN CONDITIONS

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

1-3 ROAD DIMENSIONS

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

1-4 ROAD TOLERANCES

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

Tolerance Class	A	B	C
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 on the following road(s) 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 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 SPECIAL HARVEST REQUIREMENTS. The specified activities are not permitted during the listed closure period(s) unless authorized in writing by the Contract Administrator.

Activity	Station	Closure Period
Mainline - Type 3 Culvert Replacement	85+29	Oct. 1 to July 15
Archer – Type 3 Temp.	20+18	Oct. 1 to July 15

1-29 SEDIMENT RESTRICTION

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

1-30 CLOSURE TO PREVENT DAMAGE

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

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

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

1-32 BRIDGE SURFACE RESTRICTION

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

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

1-33 SNOW PLOWING RESTRICTION

Snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact 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.

Road	Stations
Sherwood Mainline	0+00 to 85+09
Sherwood Mainline	85+49 to 246+27
Powerline	4+87 to 53+16
Powerline 2	0+00 to 2+48
Powerline 2	7+20 to 50+74

2-6 CLEANING CULVERTS

On the following road(s), Purchaser shall clean the inlets, outlets and ditchouts of culverts listed below before timber haul.

Road	Stations
Sherwood Mainline	32+64, 205+22 & 219+88

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

On the following road(s), Purchaser shall cut vegetative material up to 5 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by 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.

Road	Stations
Sherwood Mainline	46+51 to 90+17
Sherwood Mainline	177+84 to 195+68

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.

3-6 CLEARING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING

At the following stream crossing location(s), Purchaser shall place a log, with length equal to two (2) times the width of the ordinary high water, from the largest diameter class conifer tree cut from within the Inner Zone (25 feet either side of the stream) in the stream in accordance with the TYPICAL RIPARIAN STRATEGY STREAM CROSSING PLAN.

Road	Stations
Archer	20+18

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. Purchaser shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. Grubbing must be completed before starting excavation and embankment.

3-11 GRUBBING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING

Purchaser shall retain all grubbed stumps (root wads) within the Inner Zone (25 feet either side of the stream) for placement in accordance with the TYPICAL RIPARIAN STRATEGY STREAM CROSSING PLAN. Three root wads must be placed in or adjacent to the stream channel. The remaining stumps grubbed from the Inner Zone must be placed at least 50 feet from the roadway in the Middle (25 feet to 100 feet from the stream) or the Outer Zones (remaining portion of RMZ).

Road	Stations
Archer	20+18

3-12 STUMP PLACEMENT

On the following road(s), Purchaser shall place grubbed stumps as directed by the Contract Administrator and in compliance with all other clauses in this road plan.

Road	Stations	Comments
Sherwood Mainline	41+63	Place 6 stumps
Sherwood Mainline	243+69	Place 20 stumps
Archer	2+92	30 cubic yards

3-20 ORGANIC DEBRIS DEFINITION

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

3-21 DISPOSAL COMPLETION

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

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland,unless used to comply with the specifications detailed in the Riparian Strategy, Clause 3-6 CLEARING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING, and Clause 3-11 GRUBBING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 55%.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

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

3-25 SCATTERING ORGANIC DEBRIS

Purchaser shall scatter organic debris outside of the grubbing limits 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 , unless construction staked or designed:

Material Type	Excavation Slope Ratio	Excavation Slope Percent
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (56% to 70% side slopes)	¾:1	133
Common Earth (on slopes over 70%)	½:1	200
Fractured or loose rock	½:1	200
Hardpan or solid rock	¼:1	400

4-6 EMBANKMENT SLOPE RATIO

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

Material Type	Embankment Slope Ratio	Embankment Slope Percent
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.

4-22 TURNAROUNDS

Purchaser may construct optional 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 55% if the waste material is compacted and free of organic debris. On side slopes greater than 55%, all waste material must be end hauled or pushed to the designated embankment sites and waste areas identified in Clause 4-37 WASTE AREA LOCATION.

4-37 WASTE AREA LOCATION

Purchaser shall deposit waste material in the listed designated areas. Additional waste areas may also be identified or approved by the Contract Administrator. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

Road	Waste Area Location	Comments
Archer	16+83 to 19+10 & 21+73 to 23+36	Use road surface and side cast as needed for abandonment.
Sherwood Mainline	81+78	Left side of road, inbound.

4-38 PROHIBITED WASTE DISPOSAL AREAS

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

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- Within a wetland management zone.
- On side slopes steeper than 55%.
- In locations that interfere with the construction of the road prism.

- In locations that impede drainage.
- Against standing timber.

4-48 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 6 inches in any dimension.

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

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-22.

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 10-22.

Road	Stations
Archer	7+78 to 36+04
Spur 1	0+00 to 9+12
Spur 2	0+00 to 7+02

Spur 3	0+00 to 4+62
Spur 4	0+00 to 6+14
Spur 5	0+00 to 12+27
Spur 6	0+00 to 6+54
Spur 7	0+00 to 12+63

5-8 TEMPORARY STREAM CULVERT INSTALLATION

Purchaser shall install temporary culverts as shown in the CULVERT LIST. Temporary stream culverts must be located in the natural channel of the stream. Temporary culverts must be removed as indicated in Clause 9-21 ROAD ABANDONMENT.

Road	Stations
Archer	20+18

5-12 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the CULVERT AND DRAINAGE 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.

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

Purchaser shall obtain written approval from the Contract Administrator for the installation of culverts 30 inches in diameter and over before backfilling.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

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. Stream crossing culverts must be installed with a depth of cover specified in the Engineer's design or recommended by the culvert manufacturer for the type and size of the pipe.

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.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At the following culvert(s), Purchaser shall place Quarry Spalls in conjunction with or immediately following construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the CULVERT LIST. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed.

Road	Stations	Rock Type
Sherwood Mainline	85+29	Quarry Spalls

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.

Source	Location	Rock Type
Sherwood Pit	NW$^1/_4$, SE$^1/_4$ Sec. 25 T22N R02W	Pit Run

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the ROCK LIST shall be obtained from any commercial source at the Purchaser's expense.

Rock Type
Quarry Spalls & 2 ½ Inch Minus

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

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

6-12 ROCK SOURCE SPECIFICATIONS

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

- At the beginning of pit operations, Purchaser shall remove the top 6” of material and stockpile this material, within the pit, covering it with a minimum 12 mil. plastic sheeting. The material shall be placed, with CA approval, away from operations, but must remain with the pit area.
    - Conduct visual assessment of excavated face, if debris is observed, continue to remove material until no debris is identified. Record the depth of excavation and report it to CA.
    - Do not mix the excavated material with over burden or other material.
    - Excavated material needs to be placed in a location, separate from any stockpile.
    - Do not put excavated material in a location where water runoff, from the excavated material, can enter into any waterbody.
    - Do not perch the excavated material where there is any risk of a slope failure.
    - Cover the excavated material with 12 mil. plastic sheeting and secure with sand bags.
- 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 or manufacture rock in accordance with the types and amounts listed in the ROCK LIST. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator.

6-32 2 ½-INCH MINUS CRUSHED ROCK

% Passing 2 ½" square sieve	100%
% Passing 1 ¼" square sieve	55 - 75%
% Passing U.S. #4 sieve	20 - 45%

Of the fraction passing the No. 4 sieve, 40% to 60% must pass the No. 10 sieve.

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 ROCKR 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.

7-6 STREAM CROSSING INSTALLATION

Purchaser shall install stream crossing structures in accordance with the manufacturer's requirements, and Sure Wood T.S. – Mainline Design and Sure Wood – Temp Design.

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.

7-55 LARGE CULVERT INSTALLATION

Purchaser shall provide and install large culverts in accordance with the Sure Wood - Mainline DESIGN. Culvert designs must meet or exceed the following specifications:

Road	Sherwood Mainline
Station	85+29
Type	Culvert
Material and Coating Type*	AS12
Span (<ft.> <in.>)	96”
Rise (<ft.> <in.>)	96”
Length (ft.)	40’
Corrugations	5” x 1”
Gauge	12

* See Clause 10-15 CORRUGATED STEEL CULVERT

7-56 STEEL PIPE, PIPE ARCH, AND STRUCTURAL PLATE INSTALLATION

Purchaser shall install steel pipe, pipe arches, and structural plate culverts in accordance with the National Corrugated Steel Pipe Association "Installation Manual for Corrugated Steel Pipe, Pipe Arches, and Structural Plate.” Installation is subject to the inspection and approval of the Contract Administrator before placement and backfill. The latest edition of the NCSPA Installation Manual can be found at www.ncspa.org.

7-57 CULVERT SHAPE CONTROL

Purchaser shall monitor the culvert shape during backfill and compaction. Special attention must be paid to maintaining the structure’s rise dimensions, concentricity, and smooth uniform curvature. If compaction methods are resulting in peaking or deflection of the culvert, Purchaser shall modify the compaction method to achieve the appropriate end result.

7-76 GATE INSTALLATION

Purchaser shall install the listed gate(s)**.**

Road	Station	Type*	Provided by
Archer	2+92	Steel Gate W/ 4-Lever Lock Box	Purchaser

* Steel gate installation(s) must be in accordance with the STEEL GATE DETAIL & LEVR LOCK BOX DETAIL.

The gate and 4-lever lock box must be installed plumb and aligned to ensure all mating components match with precision. Each post must be filled with concrete or capped and set in a minimum of 2 ½ cubic yards of poured-in-place concrete. The gate must be installed with a post and locking device to allow the gate to be locked in an open position.

If Purchaser wishes to install an alternate design, detailed plans for the construction of the gate must be submitted to the Contract Administrator. Purchaser shall obtain written approval for the plans from the Contract Administrator or their designee, before gate installation begins.

The gate must be primed and painted Rodda Safety Yellow in accordance with the STEEL GATE DETAIL.

Purchaser shall provide and place 30 cubic yards of stumps to prevent vehicles driving around the gate.

7-78 GATE SUPPLIED BY PURCHASER

Purchaser shall provide all gates specified for installation in Clause 7-76 GATE INSTALLATION. Purchaser shall obtain written approval for the gates from the Contract Administrator before installation.

SECTION 8 – EROSION CONTROL

8-15 REVEGETATION

On the following road(s), Purchaser shall spread grass seed and a layer of straw on all exposed soils within 25 feet of stream or with potential to deliver to typed water. Other methods of covering must be approved in writing by the Contract Administrator.

Road	Location	Qty	Type	Comments
Sherwood Mainline	85+49	50 lbs/acre	Pasture Mix	Seed and Straw after Replacement
Archer	20+18	50 lbs/acre	Pasture Mix	Seed and Straw with Abandonment

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the Pasture Mix seed and straw.

SECTION 9 – POST-HAUL ROAD WORK

9-1 BARRICADES

Purchaser shall construct barricades in accordance with the BARRICADE DETAIL.

Road	Stations
Archer	7+78
Spur 1	1+10
Spur 2	1+31

Spur 3	1+36
Spur 4	2+57
Spur 5	0+97
Spur 6	0+53

9-2 CULVERT REMOVAL FROM LIVE STREAM

On the following road(s), Purchaser shall remove temporary culverts from live streams and leave the resulting channel open with excavation slope and excavated channel width as specified. End haul excavated material to a waste area designated in Clause 4-37 WASTE AREA LOCATION or as approved by the Contract Administrator.

Road	Stations	Excavated Channel Width	Slope Ratio	Comments
Archer	20+18	4 feet	Match Natural	In-stream work to be completed between July 15th – October 1st

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.

Road	Stations	Requirements
Sherwood Mainline	0+00 to 246+27	Grade
Archer	0+00 to 7+78	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.

Road	Stations
Archer	16+83 to 36+04
Spur 1	0+00 to 9+12
Spur 2	0+00 to 7+02
Spur 3	0+00 to 4+62
Spur 4	0+00 to 6+14
Spur 5	0+00 to 12+27
Spur 6	0+00 to 6+54
Spur 7	0+00 to 12+63

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 200 feet.
- 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 fill according to Clause 9-2 CULVERT REMOVAL FROM LIVE STREAM.
- 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.
- Apply grass seed and straw in accordance with Section 8 EROSION CONTROL.

SECTION 10 MATERIALS

10-15 CORRUGATED STEEL CULVERT

Culverts must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

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.

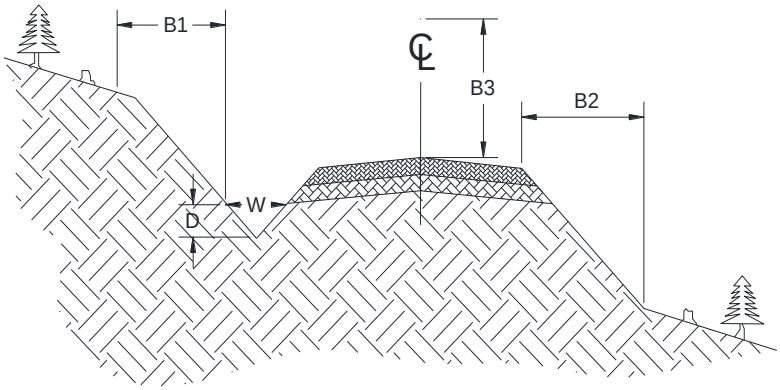
10-22 PLASTIC BAND

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.

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)
Sherwood Mainline	85+09	85+49	Embankment Subgrade Rock Waste Culvert Install	12	Vibratory Smooth Drum	14,000	4	3
Powerline	0+00	4+87						
Powerline 2	2+48	7+20						
Archer	0+00	36+04						
Spur 1	0+00	9+12						
Spur 2	0+00	7+02						
Spur 3	0+00	4+62						
Spur 4	0+00	6+14						
Spur 5	0+00	12+27						
Spur 6	0+00	6+54						
Spur 7	0+00	12+63						

BRUSHING DETAIL
(not to scale)



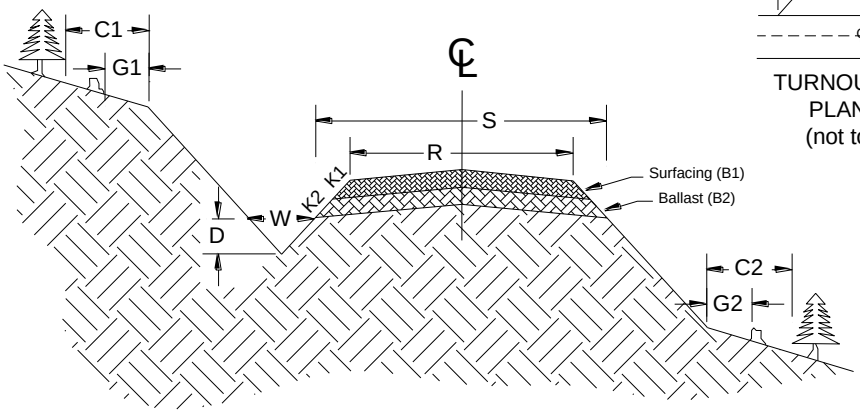
BRUSHING LIST

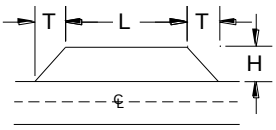
Road Number	From station	To station	Road Width (feet)	Ditch Width (feet)	Ditch Depth (feet)	Brushing Limits (feet)			Remarks In addition to brushing…
				W	D	B1	B2	B3	
Sherwood Mainline	46+51	212+44	12	2.5	1	10	10	14	
Sherwood Mainline	177+84	195+68	12	2	1	10	10	14	

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.

TYPICAL SECTION SHEET

ROAD CROSS-SECTION
(not to scale)





TURNOUT DETAIL
PLAN VIEW
(not to scale)

Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch Width (feet)	Ditch Depth (feet)	Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio	Fill Slope Ratio
				S	R	W	D		G1	G2	C1	C2	%	%
Sherwood Mainline	0+00	246+27	A	16	14	2.5	1	4	0	0	0	0	100	67
Powerline	0+00	53+16	C	16	12	2.5	1	4	0	0	0	0	100	67
Powerline 2	0+00	50+74	C	16	12	2.5	1	4	0	0	0	0	100	67
Archer	0+00	3+80	C	16	12	2.5	1	4	0	0	0	0	100	67
	3+80	7+78	C	16	12	2.5	1	4	0	0	Tags	Tags	100	67
	7+78	18+21	C	16	12	2.5	1	4	0	0	0	0	100	67
	18+21	22+57	C	16	12	2.5	1	4	0	0	Tags	Tags	100	67
	22+57	36+04	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 1	0+00	9+12	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 2	0+00	7+02	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 3	0+00	4+62	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 4	0+00	6+14	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 5	0+00	12+27	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 6	0+00	6+45	C	16	12	2.5	1	4	0	0	0	0	100	67
Spur 7	0+00	12+63	C	16	12	2.5	1	4	0	0	0	0	100	67

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	Turnout Width	Turnout Taper
			K2	B2					L	H	T
Sherwood Mainline	0+00	246+27	Spot Rock for Culvert Replacement and/or Install – 10 cubic yars per Culvert				120	Sherwood Pit			
*Powerline	0+00	53+16	2:1	8”	32	53.16	1701	Sherwood Pit*			
*Powerline 2	0+00	2+48	2:1	8”	32	2.48	79	Sherwood Pit*			
Powerline 2	2+48	7+20	1 ½ : 1	Place quarry spalls in six low spots			115	Commercial – Quarry Spalls			
*Archer	0+00	36+04	2:1	8”	32	36.04	1153	Sherwood Pit*			
*Spur 1	0+00	9+12	2:1	8”	32	9.12	292	Sherwood Pit*			
*Spur 2	0+00	7+02	2:1	8”	32	7.02	225	Sherwood Pit*			
*Spur 3	0+00	4+62	2:1	8”	32	4.62	148	Sherwood Pit*			
*Spur 4	0+00	6+14	2:1	8”	32	6.14	197	Sherwood Pit*			
*Spur 5	0+00	12+27	2:1	8”	32	12.27	393	Sherwood Pit*			
*Spur 6	0+00	6+45	2:1	8”	32	6.45	206	Sherwood Pit*			
*Spur 7	0+00	12+63	2:1	8”	32	12.63	404	Sherwood Pit*			
			Quarry Spalls for Culvert headwalls/energy dissipaters				38	Commercial			

OPTIONAL ROCK 4,798 Cubic Yards
REQUIRED ROCK 273 Cubic Yards
BALLAST TOTAL 5,071 Cubic Yards

SURFACE

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y. Station	# of Stations	C.Y. Total	Rock Source
			K1	B1				
Sherwood Mainline	85+49	85+49	1 ½ : 1	8”	37	0.4	15	Commercial – 2 ½ Inch Minus
Powerline 2	2+48	7+20	2:1	8”	32	4.72	151	Sherwood Pit

SURFACE TOTAL 166 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

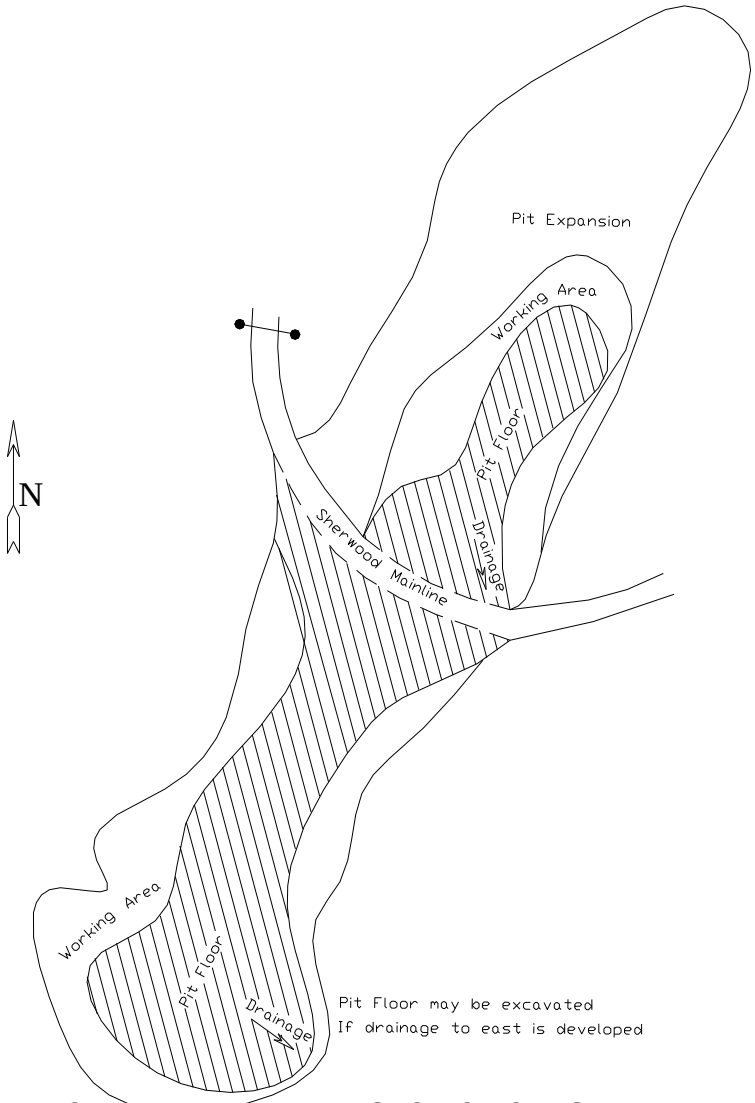
Road Number	Location	Culvert Dia.	Culvert Type	Length (ft) Culvert	Length (ft) Downspt	Length (ft) Flume	Riprap (C.Y.) Inlet	Riprap (C.Y.) Outlet	Riprap (C.Y.) Type	Remarks
Sherwood Mainline	32+64									Clean Inlet/ Outlet
	72+03	18"	PD	30			0.5	0.5	QS	Replace
	74+57	18"	PD	30			0.5	0.5	QS	Replace
	78+82	18"	PD	30			0.5	0.5	QS	Replace
	85+29	96"	AS12	40			10	10	QS	Replace – Type 3
	107+78	18"	PD	40			0.5	0.5	QS	Replace
	110+85	18"	PD	30			0.5	0.5	QS	Replace
	118+88	18"	PD	30			0.5	0.5	QS	Replace
	171+15	18"	PD	30			0.5	0.5	QS	Replace
	189+37	18"	PD	30			0.5	0.5	QS	Replace
	192+54	18"	PD	30			0.5	0.5	QS	Replace
	196+39	18"	PD	30			0.5	0.5	QS	Replace
	205+22									Clean Oulet & Ditchout
	212+04	18"	PD	30			0.5	0.5	QS	Replace
	219+88									Clean Outlet & Ditchout
	231+30	18"	PD	30			0.5	0.5	QS	Replace
	235+08	18"	PD	40			0.5	0.5	QS	
Powerline 2	2+96	18"	PD	40			0.5	0.5	QS	
	4+87	18"	PD	40			0.5	0.5	QS	
Archer	2+00	18"	PD	40			0.5	0.5	QS	
	12+50	18"	PD	40			0.5	0.5	QS	Ditchout Outlet
	16+42	18"	TEMP	36			0.5	0.5	QS	Ditchout Outlet
	19+36	18"	TEMP	30						
	20+18	48"	TEMP	40						Type 3
	21+73	18"	TEMP	30						
	24+83	18"	TEMP	30						
Spur 2	4+42	18"	TEMP	30						
Spur 5	6+50	18"	TEMP	30						Ditchout Outlet
Spur 6	2+98	18"	TEMP	36						Ditchout Outlet
Spur 7	4+42	18"	TEMP	36						Ditchout Outlet
	6+07	24"	TEMP	30						Type 5

PD = Polyethylene Pipe Dual Wall AASHTO No. M294 Type S or ASTM F2648
GS16 = Galvanized Steel AASHTO No. M36, 16 Gauge
AS12 = Aluminized Steel AASHTO No. M274, 12 Gauge
TEMP = Temporary Culvert
QS = Quarry Spalls

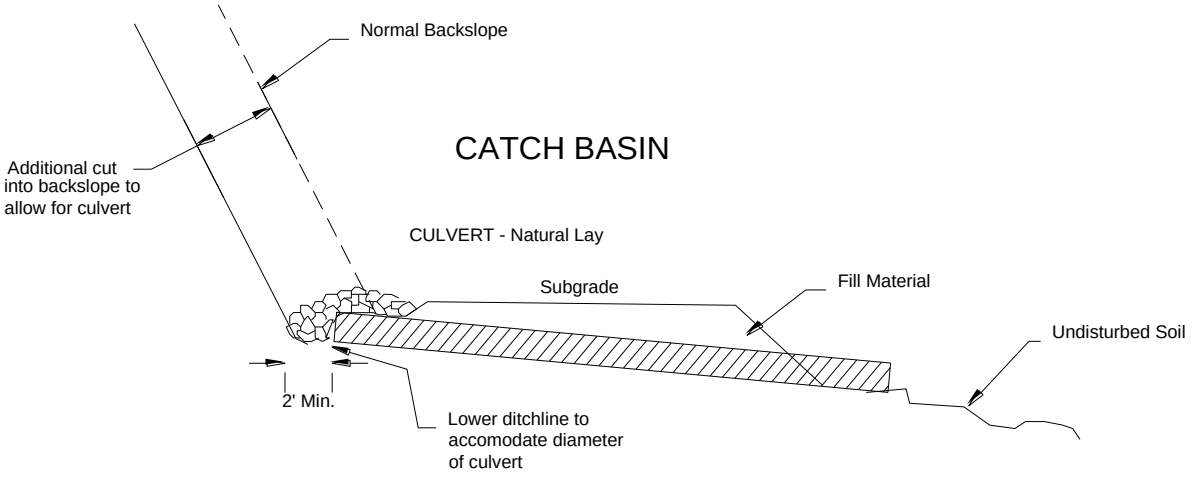
Legal Description: NW$^1/_4$, SE$^1/_4$ Sec. 25 T22N R02W
Rock Pit Name: Sherwood Pit

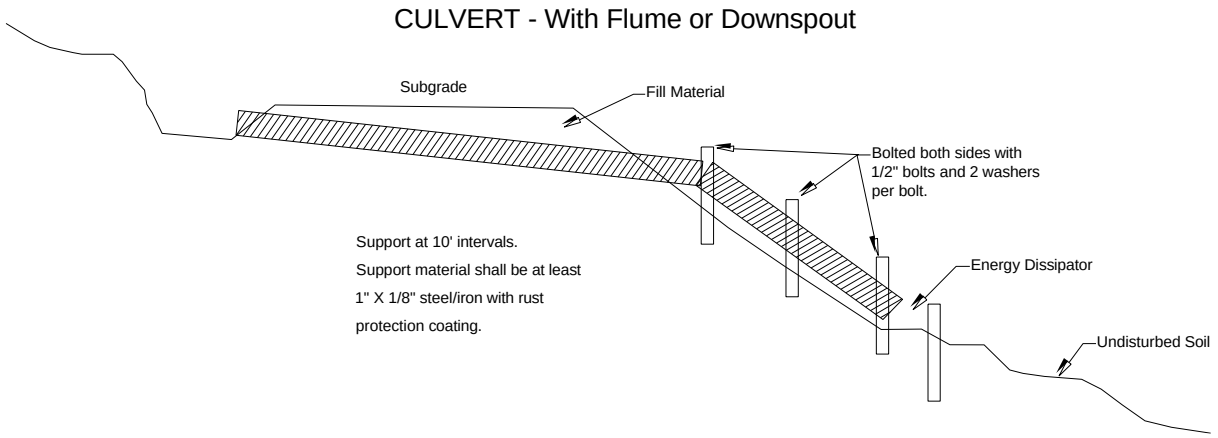
PIT DEVELOPMENT PLAN

1. Scatter root wads and organic debris larger than one cubic foot in volume as directed by the Contract Administrator.
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. Working bench width shall be a minimum of 18 feet.
8. At the completion of operations, Contractor shall request written approval from te Contract Administrator for final rock source condition and compliance with the terms of this plan
9. Quantity and Quality of ballast pit is not guaranteed by the State.



CULVERT AND DRAINAGE SPECIFICATION DETAIL


Normal Backslope
CATCH BASIN
Additional cut
into backslope to
allow for culvert
CULVERT - Natural Lay
Subgrade
Fill Material
Undisturbed Soil
2' Min.
Lower ditchline to
accomodate diameter
of culvert

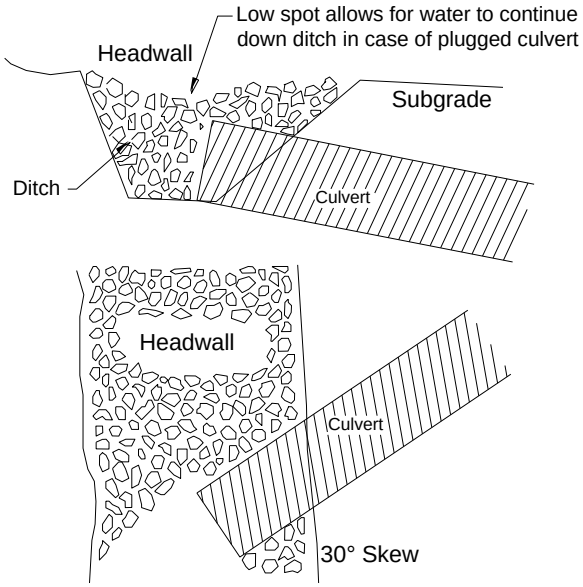

CULVERT - With Flume or Downspout
Subgrade
Fill Material
Bolted both sides with
1/2" bolts and 2 washers
per bolt.
Support at 10' intervals.
Support material shall be at least
1" X 1/8" steel/iron with rust
protection coating.
Energy Dissipator
Undisturbed Soil

CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 2 of 3)

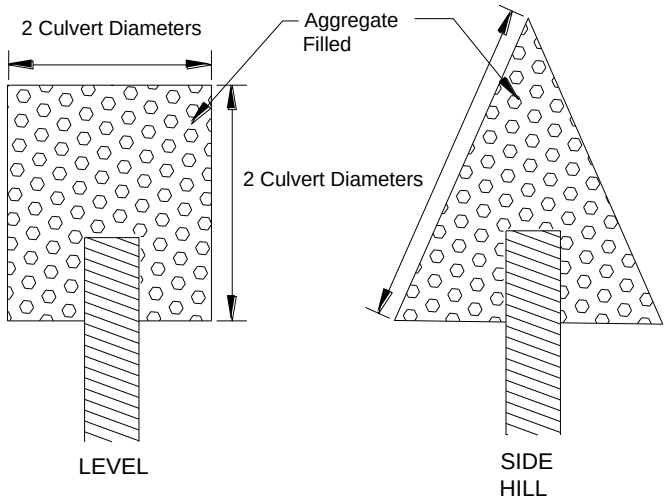
Proper preparation of foundation and placement of bedding material shall precede the installation of all culvert pipe. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform dense unyielding base. The backfill material shall be placed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

HEADWALLS



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

(Page 3 of 3)

POLYETHYLENE PIPE INSTALLATION

INSTALLATION REQUIREMENTS:

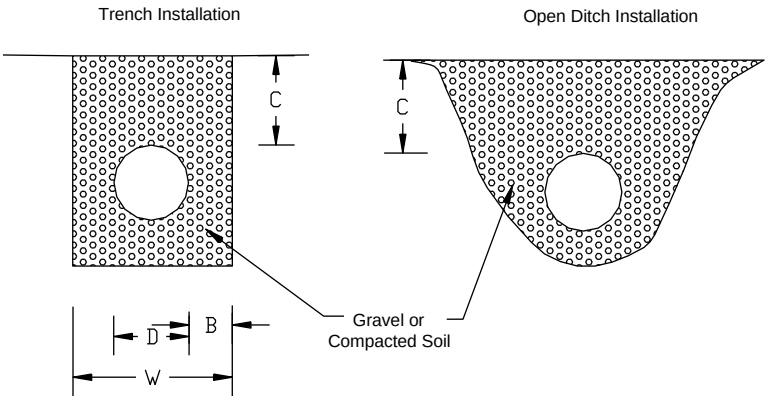
1. Crushed stone, gravel, or compacted soil backfill material shall be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed 1/6 pipe diameter or 4" diameter, whichever is smaller.

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"

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

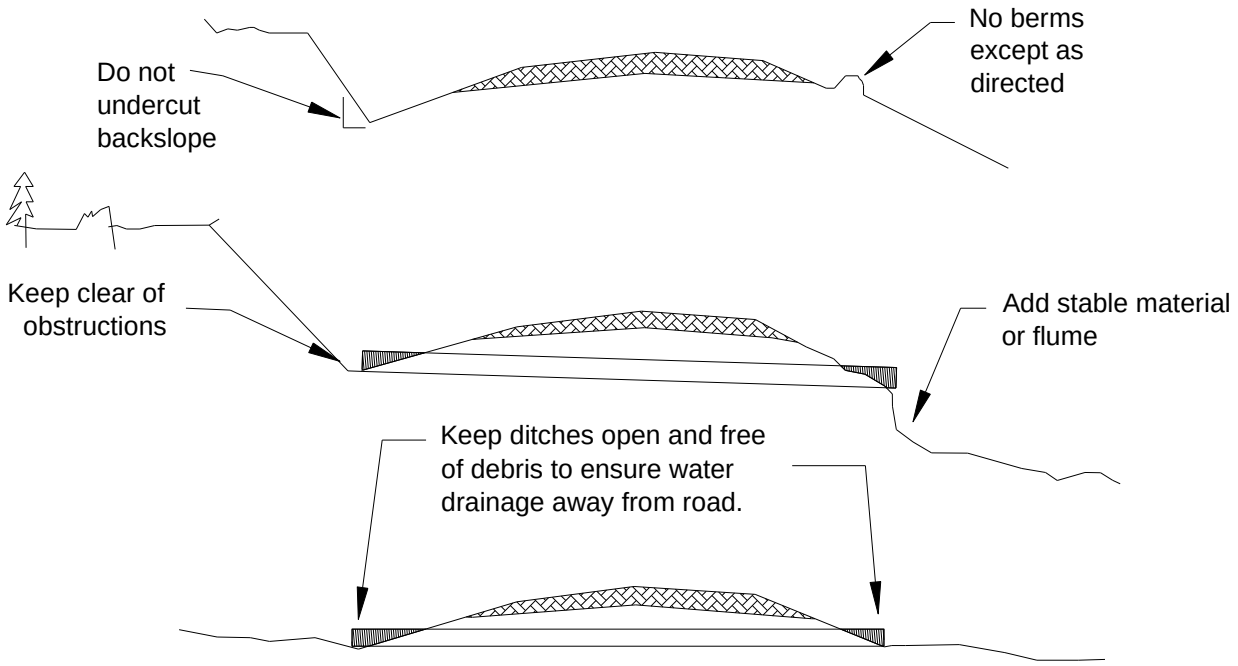
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

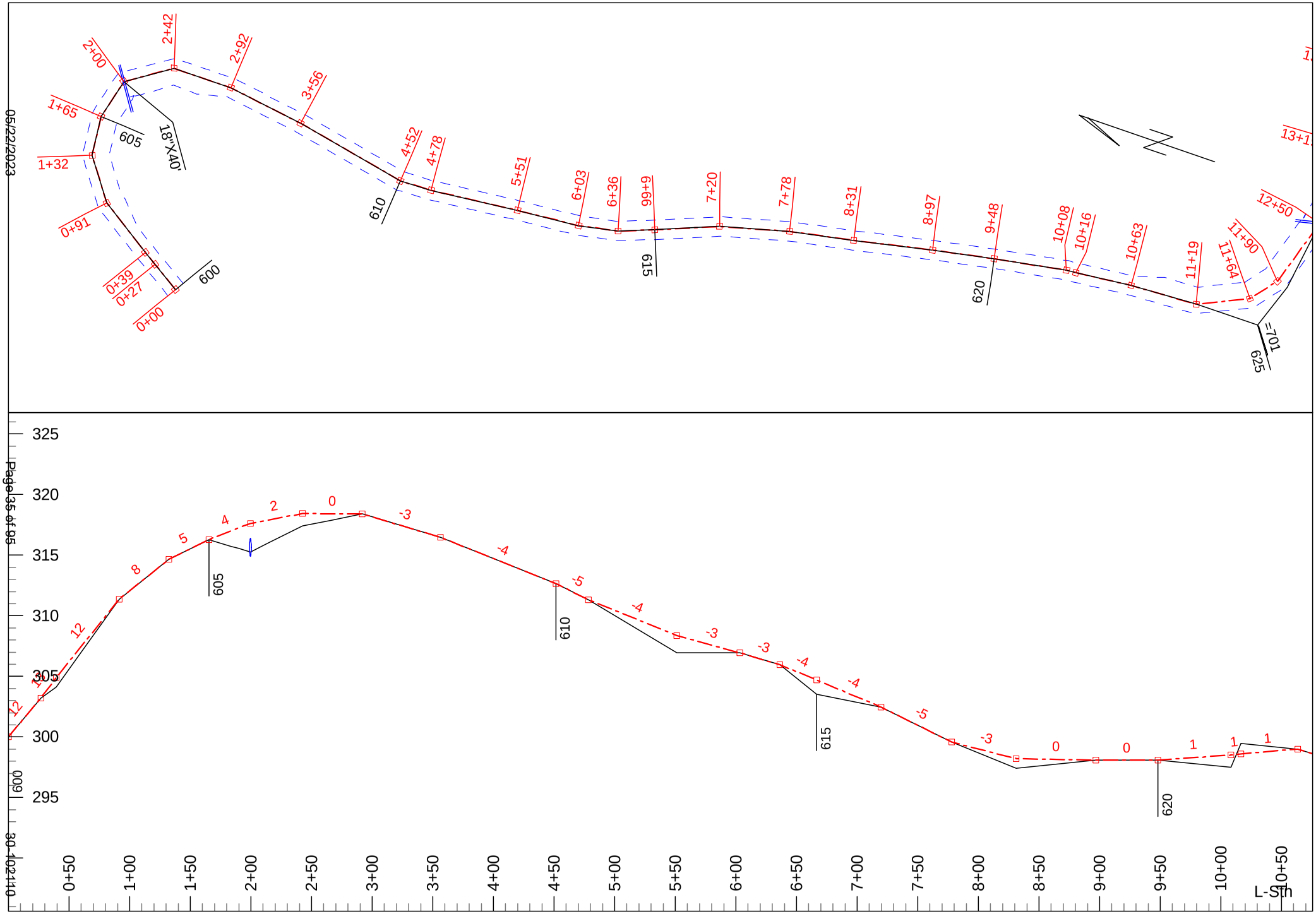
Termination of Use or End of Season

- 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.


No berms
except as
directed
Do not
undercut
backslope
Keep clear of
obstructions
Add stable material
or flume
Keep ditches open and free
of debris to ensure water
drainage away from road.



Sure Wood Timber Sale
Archer
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

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

Engineer: Heymann
22/05/12
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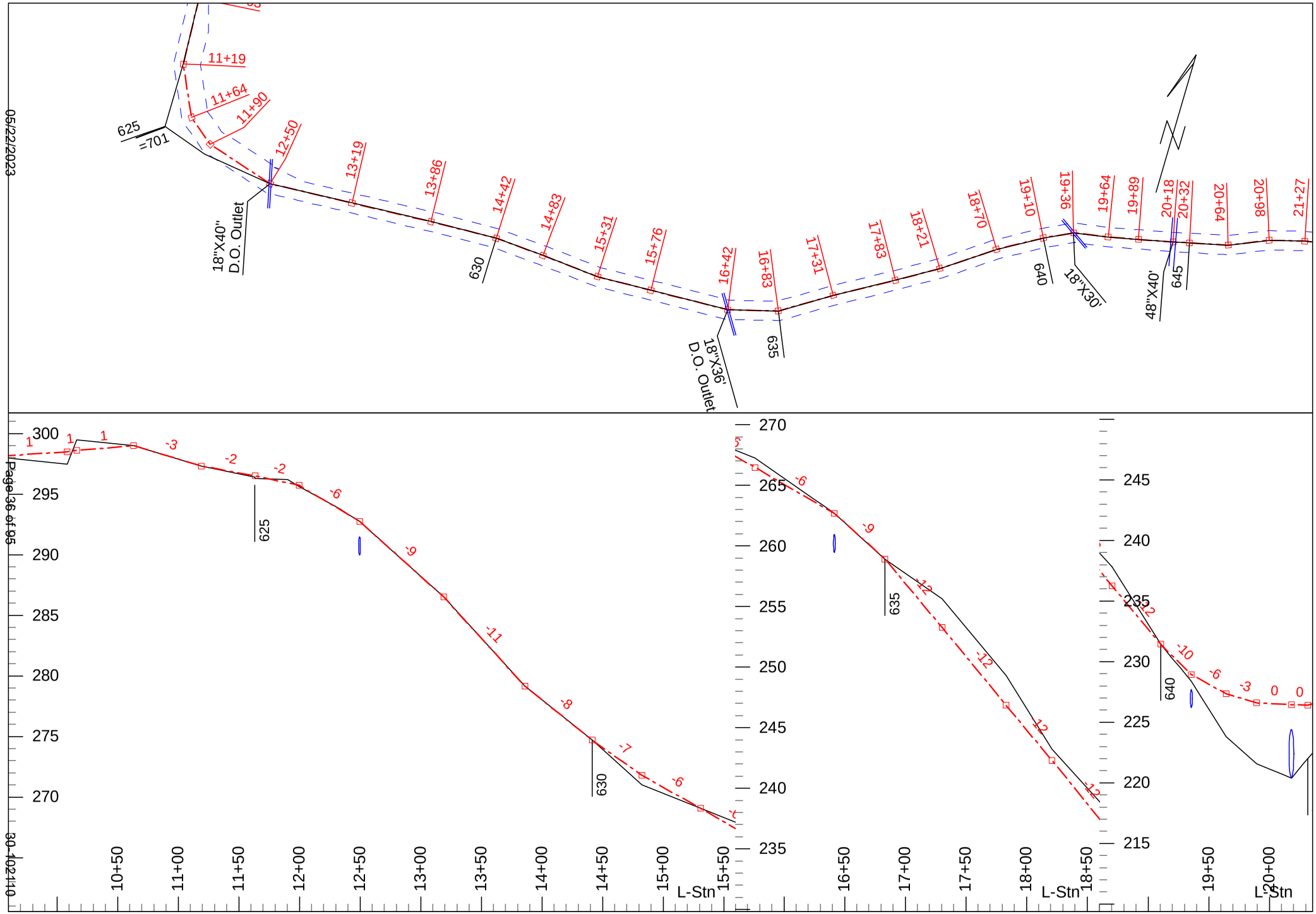
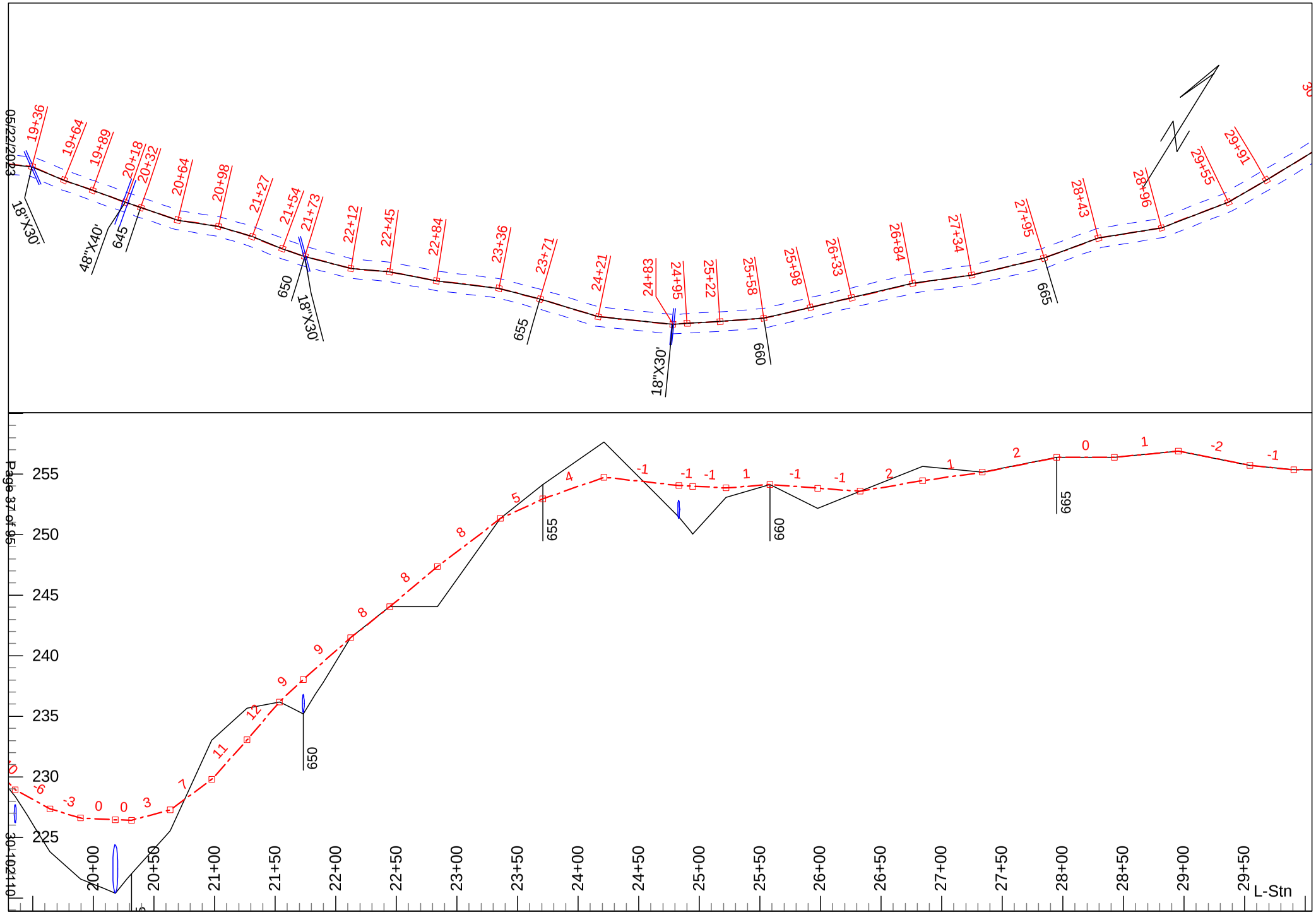


Sure Wood Timber Sale
Archer
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

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

Engineer: Heymann
22/05/12



Sure Wood Timber Sale
Archer
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

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

Engineer: Heymann
22/05/12
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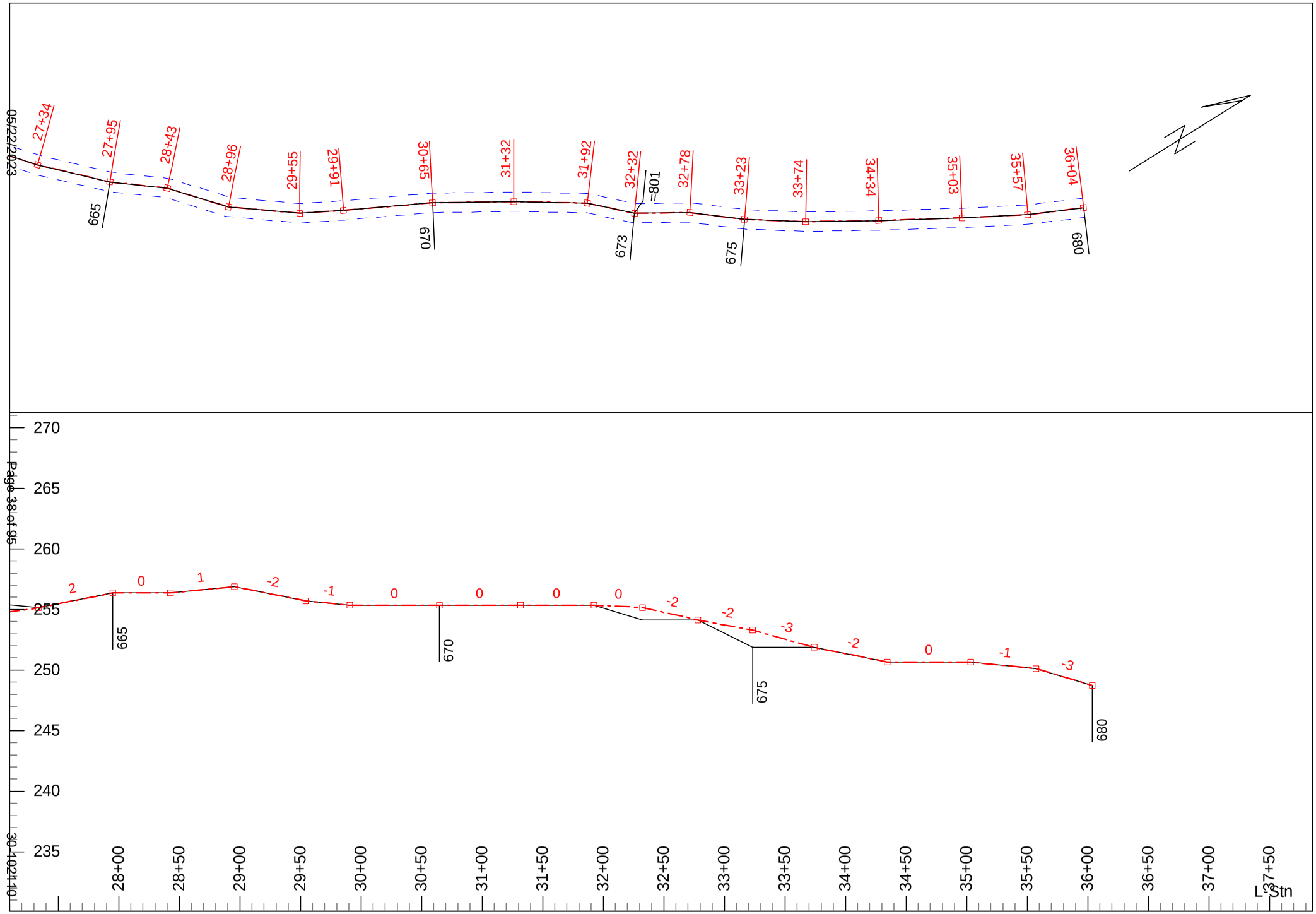

Sure Wood Timber Sale
Archer
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

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

Engineer: Heymann
22/05/12

05/22/2023
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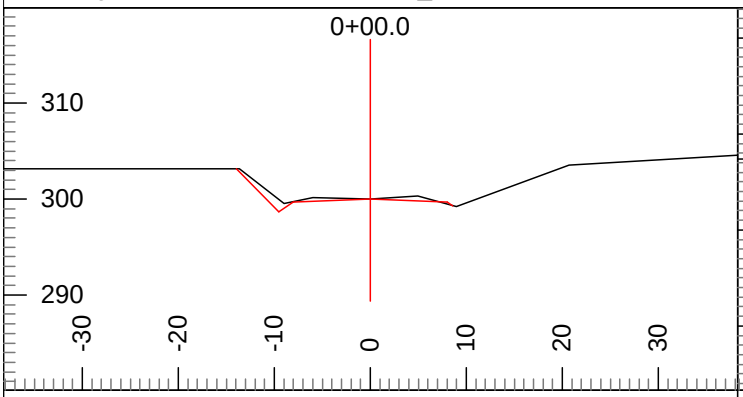
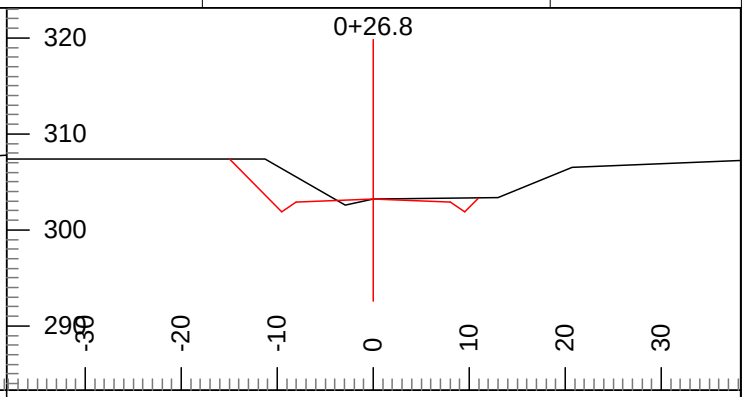
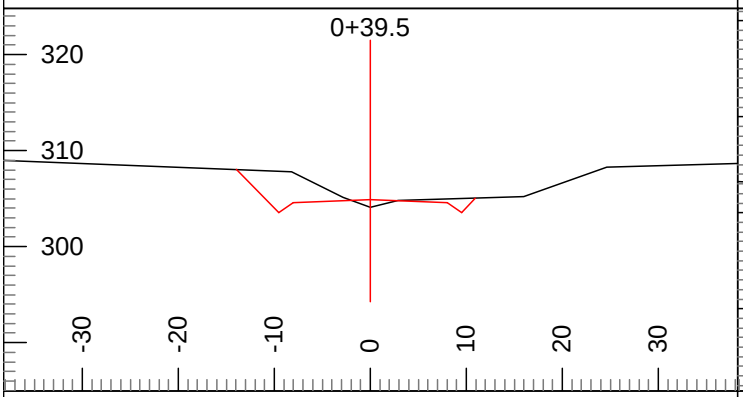
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\archer		22/05/12



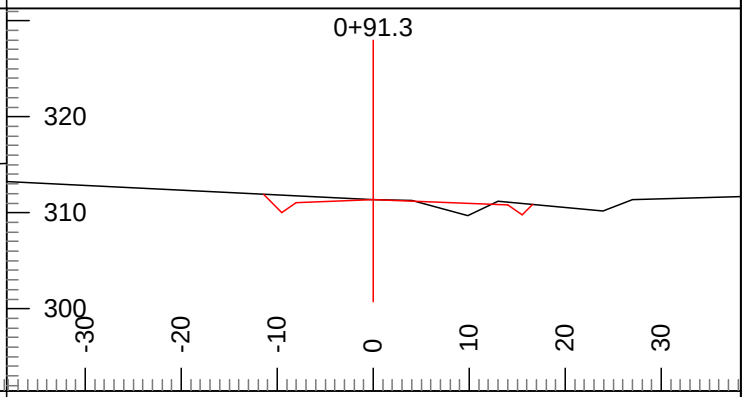
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	300.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	600



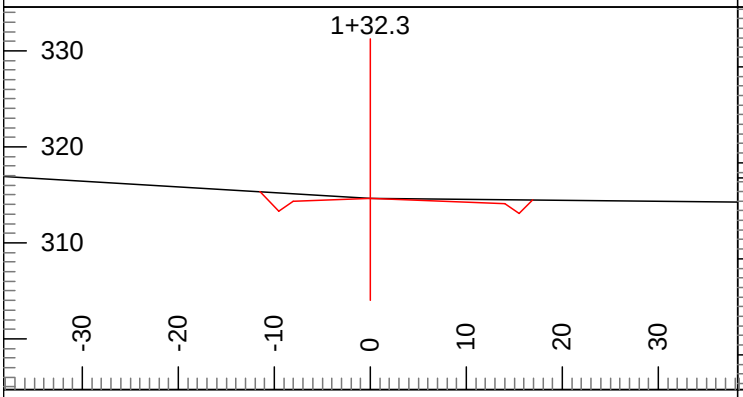
P-Stn :	0+26.8	V.Offset:	0.0	CL Elev:	303.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	601



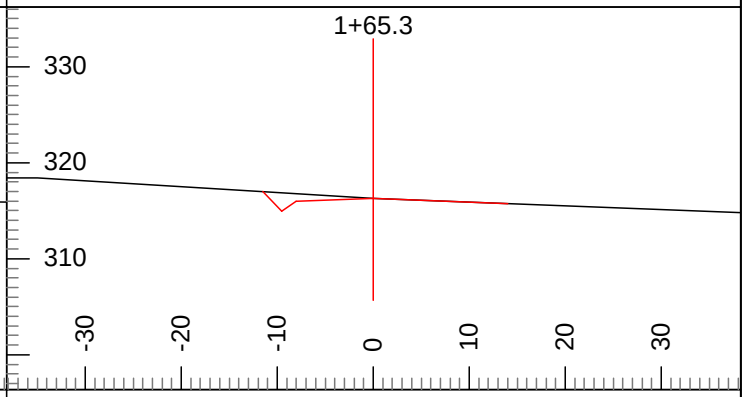
P-Stn :	0+39.5	V.Offset:	0.8	CL Elev:	304.9
H. Offset:	0.0	Cut Dp:	-0.8	Index:	602



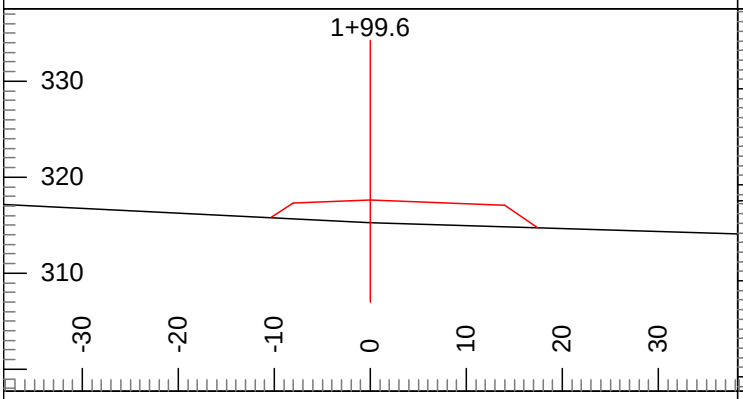
P-Stn :	0+91.3	V.Offset:	0.0	CL Elev:	311.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	603



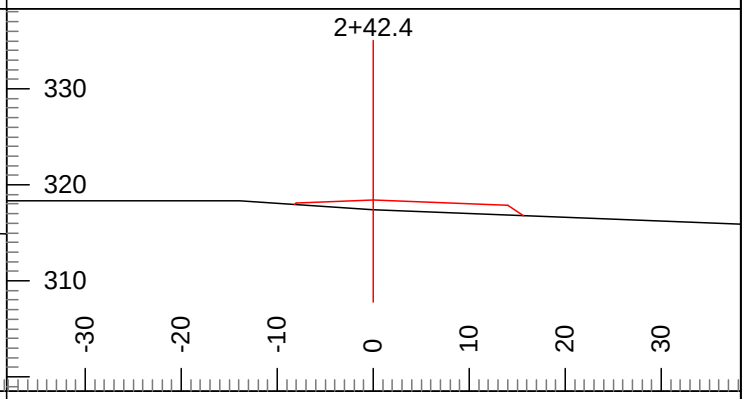
P-Stn :	1+32.3	V.Offset:	0.0	CL Elev:	314.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	604



P-Stn :	1+65.3	V.Offset:	0.0	CL Elev:	316.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	605

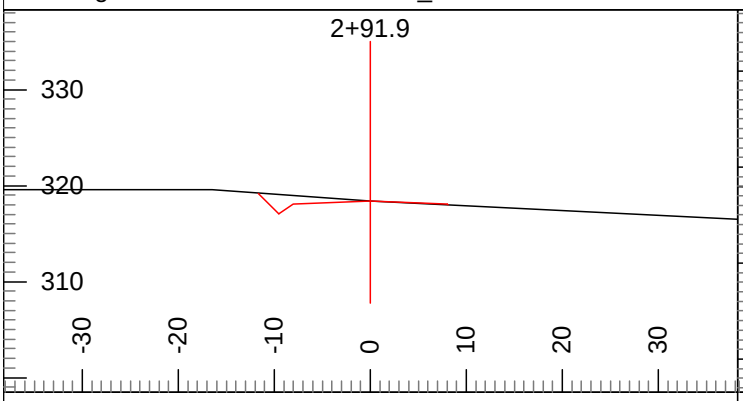


P-Stn :	1+99.6	V.Offset:	2.4	CL Elev:	317.6
H. Offset:	0.0	Cut Dp:	-2.4	Index:	606

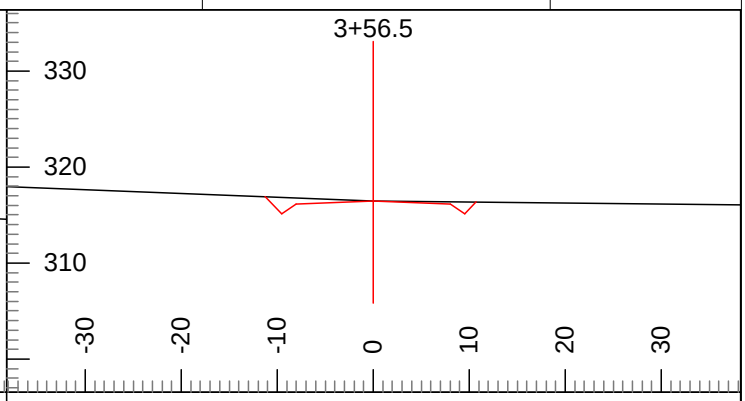


P-Stn :	2+42.4	V.Offset:	1.0	CL Elev:	318.4
H. Offset:	0.0	Cut Dp:	-1.0	Index:	607

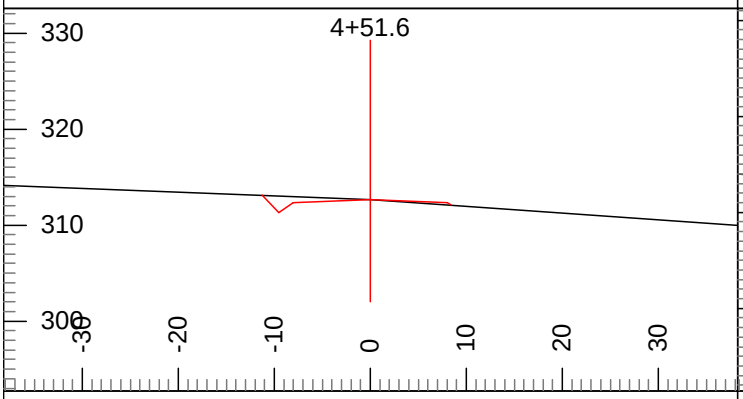
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\archer		22/05/12



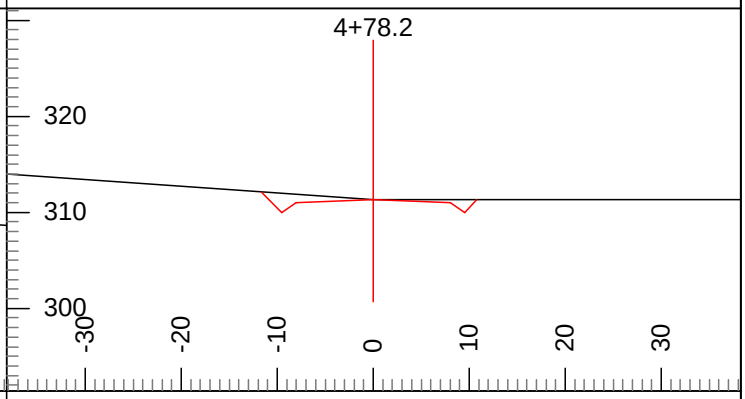
P-Stn :	2+91.9	V.Offset:	0.0	CL Elev:	318.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	608



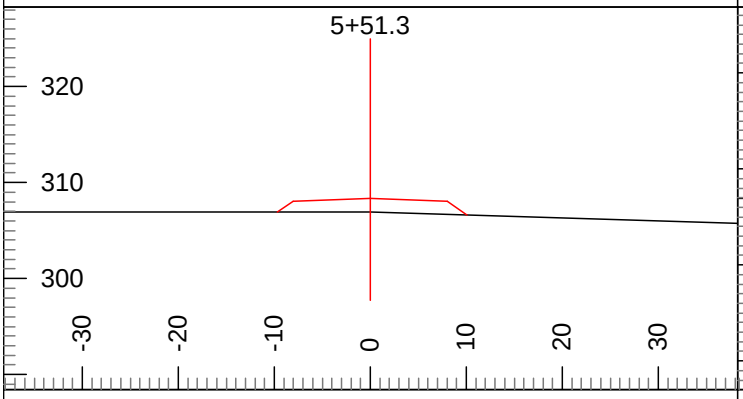
P-Stn :	3+56.5	V.Offset:	0.0	CL Elev:	316.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	609



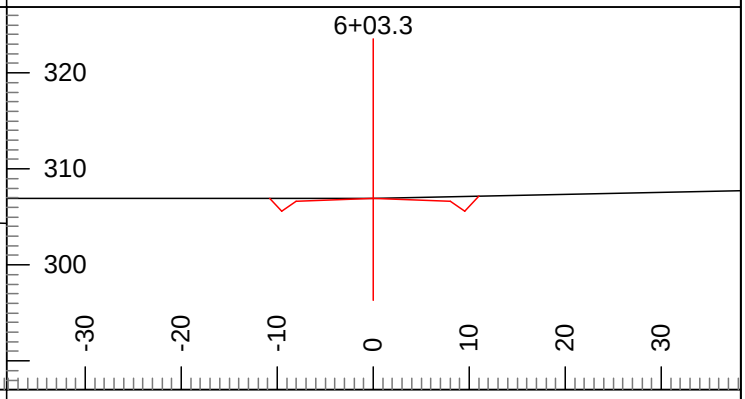
P-Stn :	4+51.6	V.Offset:	0.0	CL Elev:	312.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	610



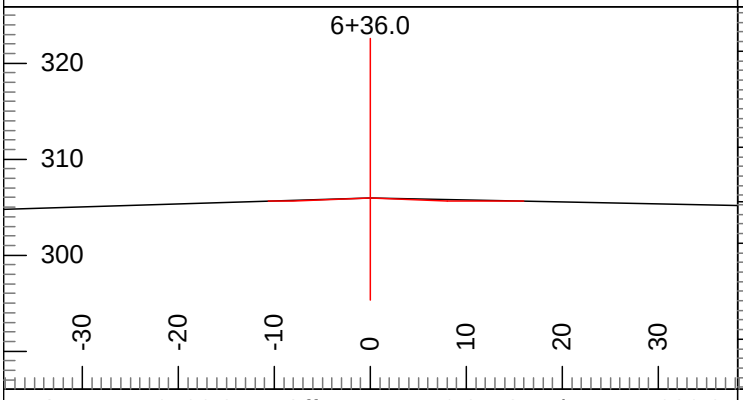
P-Stn :	4+78.2	V.Offset:	0.0	CL Elev:	311.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	611



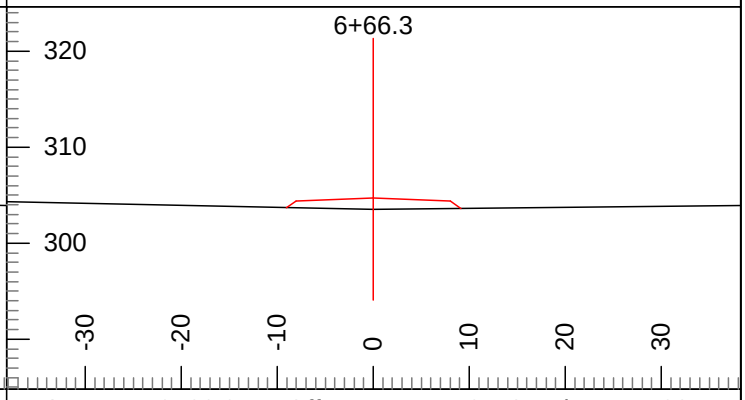
P-Stn :	5+51.3	V.Offset:	1.4	CL Elev:	308.4
H. Offset:	0.0	Cut Dp:	-1.4	Index:	612



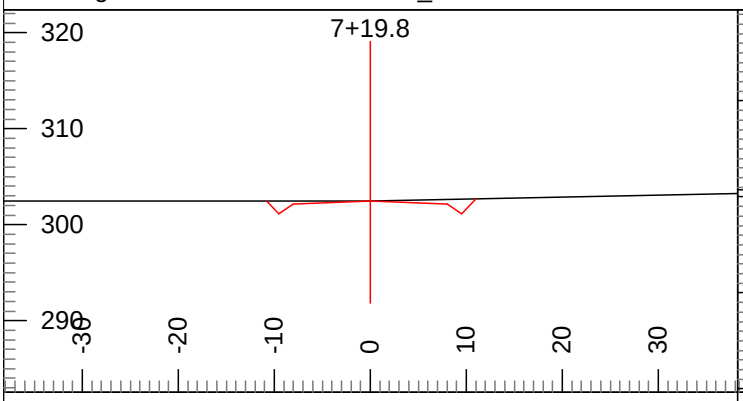
P-Stn :	6+03.3	V.Offset:	0.0	CL Elev:	306.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	613



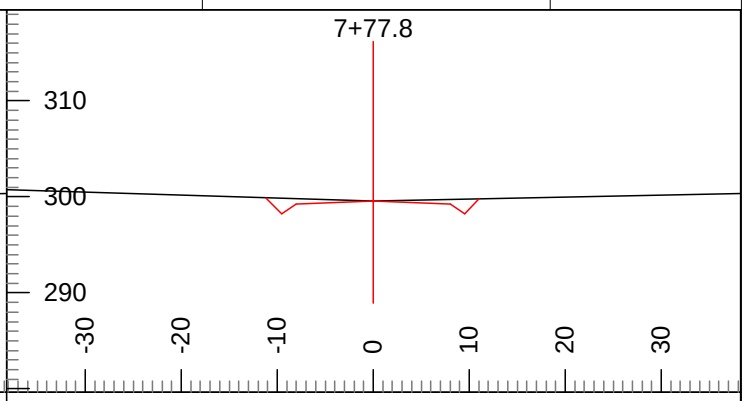
P-Stn :	6+36.0	V.Offset:	0.0	CL Elev:	306.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	614



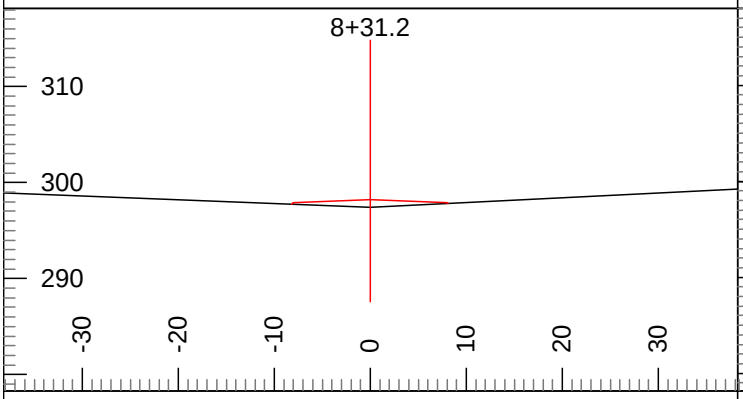
P-Stn :	6+66.3	V.Offset:	1.2	CL Elev:	304.7
H. Offset:	0.0	Cut Dp:	-1.2	Index:	615



P-Stn :	7+19.8	V.Offset:	0.0	CL Elev:	302.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	616



P-Stn :	7+77.8	V.Offset:	0.0	CL Elev:	299.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	617



P-Stn :	8+31.2	V.Offset:	0.8	CL Elev:	298.2
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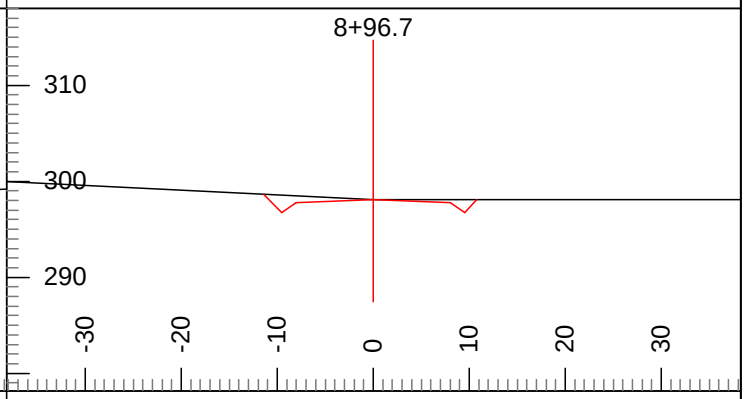
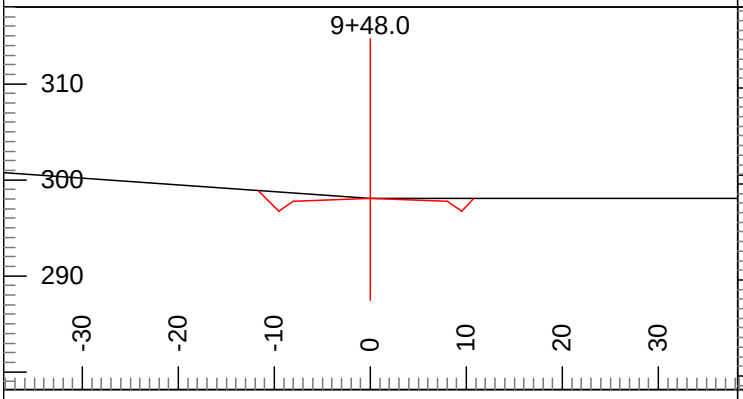
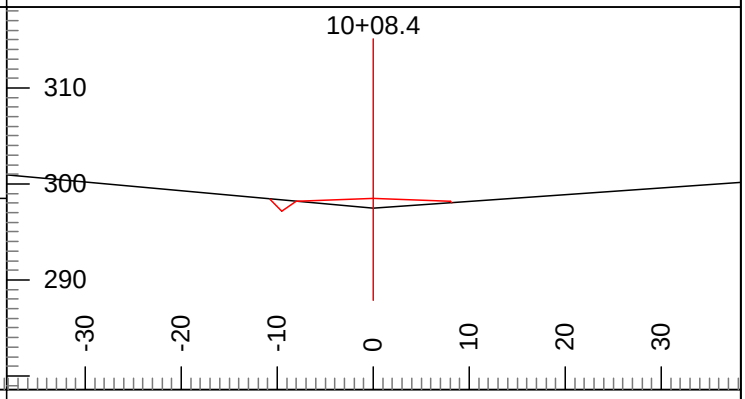


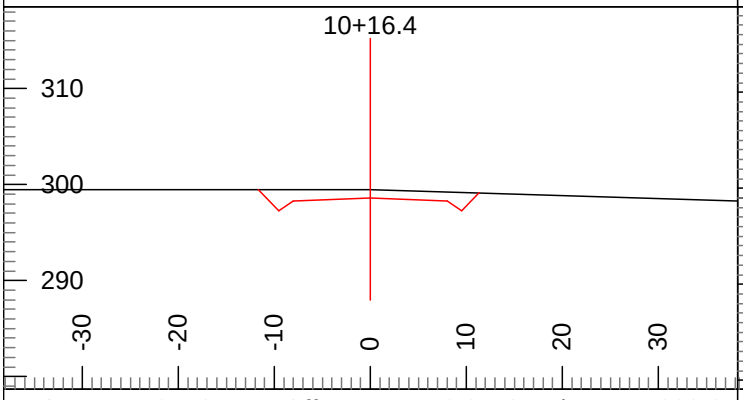
P-Stn :	8+96.7	V.Offset:	0.0	CL Elev:	298.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	619



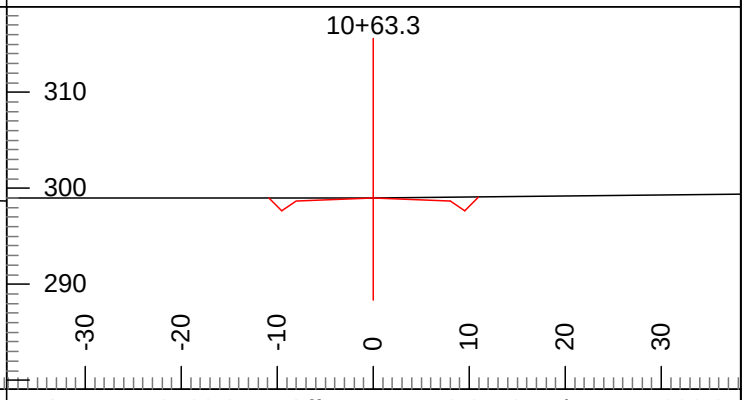
P-Stn :	9+48.0	V.Offset:	0.0	CL Elev:	298.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	620



P-Stn :	10+08.4	V.Offset:	1.0	CL Elev:	298.5
H. Offset:	0.0	Cut Dp:	-1.0	Index:	621

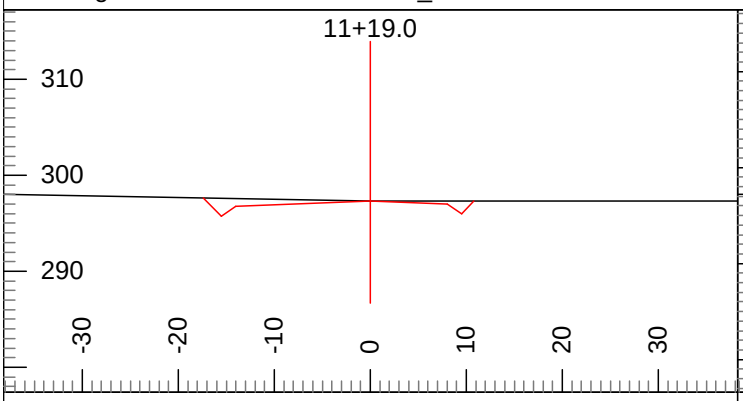


P-Stn :	10+16.4	V.Offset:	-0.9	CL Elev:	298.6
H. Offset:	0.0	Cut Dp:	0.9	Index:	622

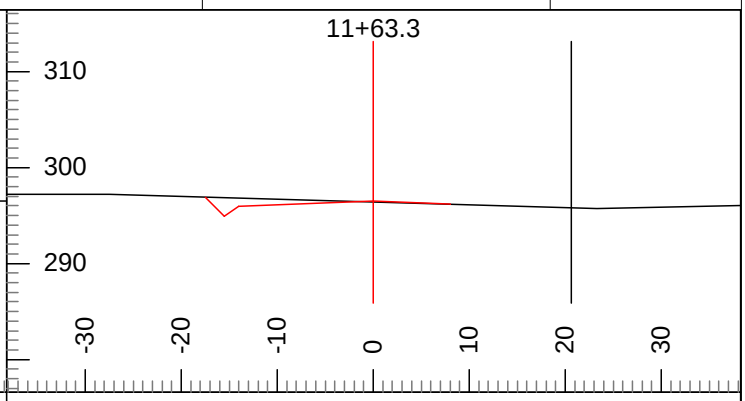


P-Stn :	10+63.3	V.Offset:	0.0	CL Elev:	299.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	623

Softree Section	Scale 1:240	P. 4
C:\ProgramData\Softree\Data\sure_wood\archer		22/05/12



P-Stn :	11+19.0	V.Offset:	0.0	CL Elev:	297.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	624



P-Stn :	11+72.5	V.Offset:	0.8	CL Elev:	296.5
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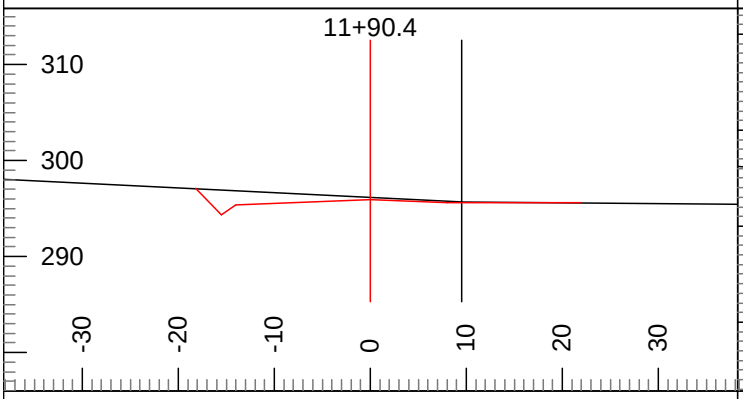

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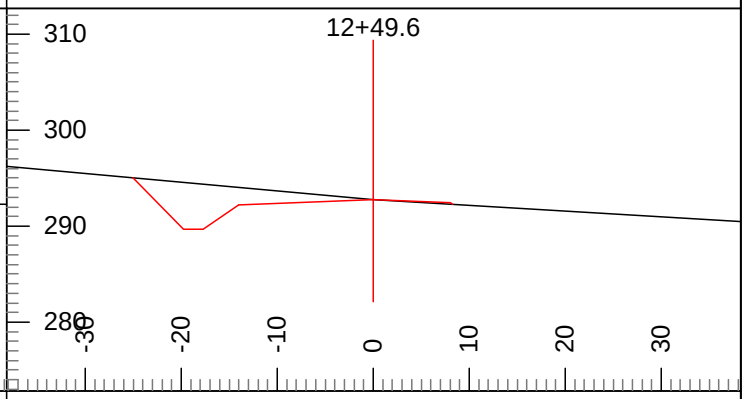

P-Stn :	12+71.5	V.Offset:	0.0	CL Elev:	292.8
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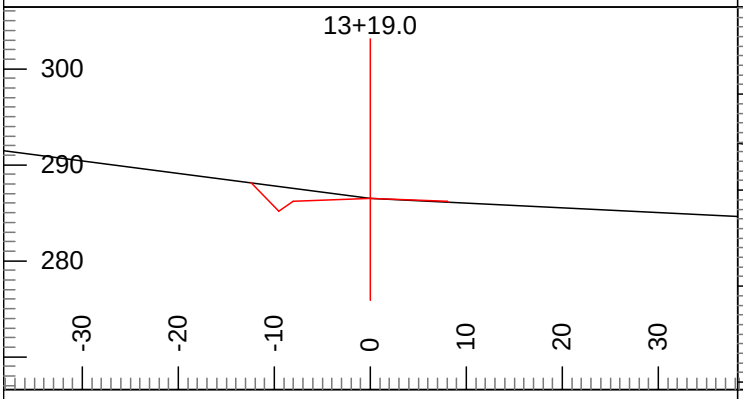
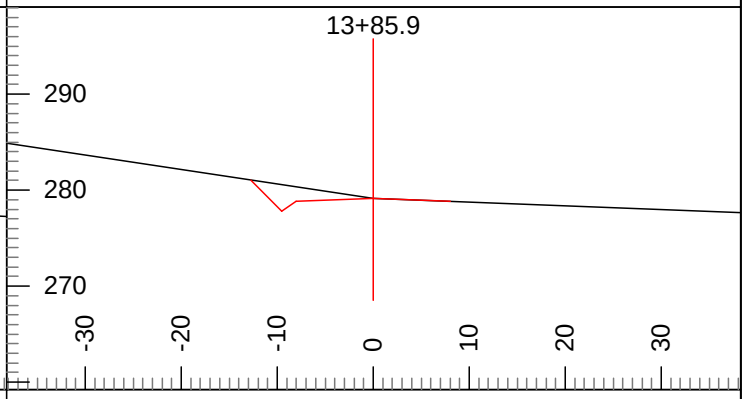
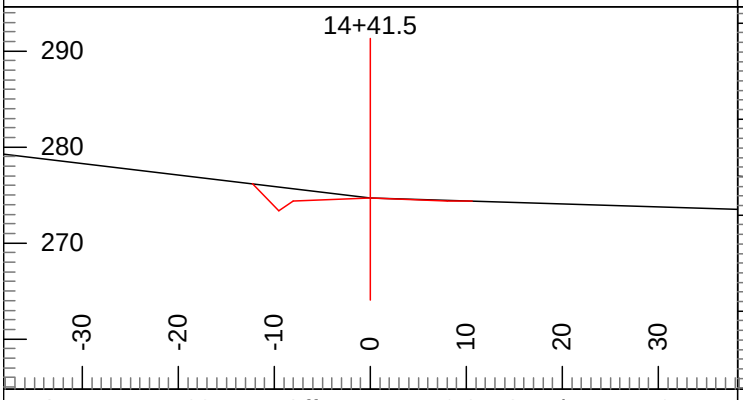


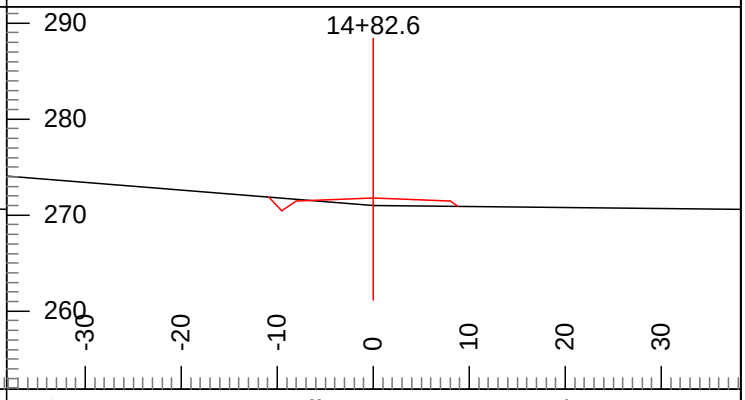
P-Stn :	13+41.0	V.Offset:	0.0	CL Elev:	286.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	628



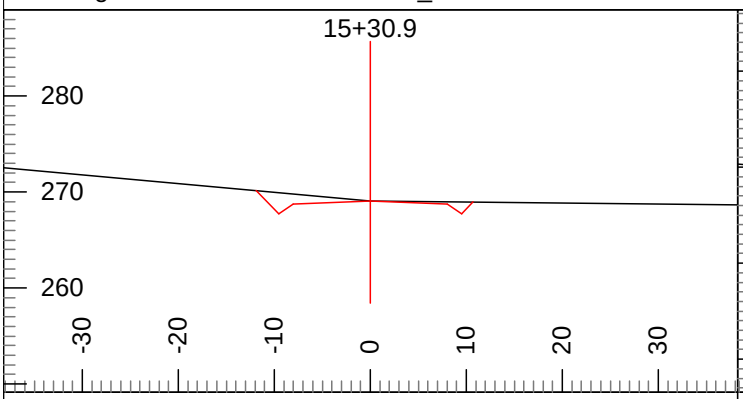
P-Stn :	14+07.9	V.Offset:	0.0	CL Elev:	279.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	629



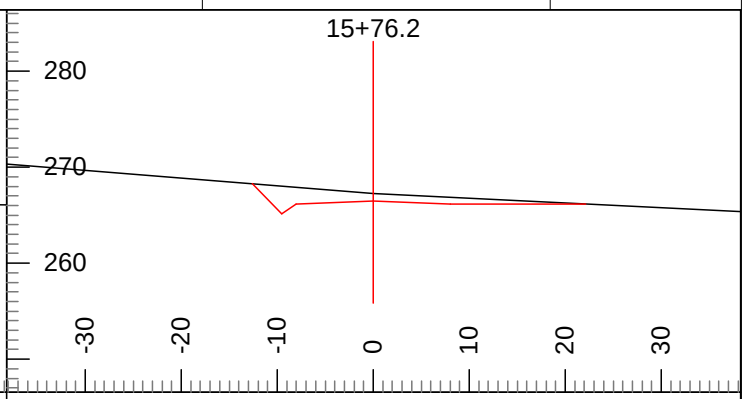
P-Stn :	14+63.5	V.Offset:	0.0	CL Elev:	274.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	630



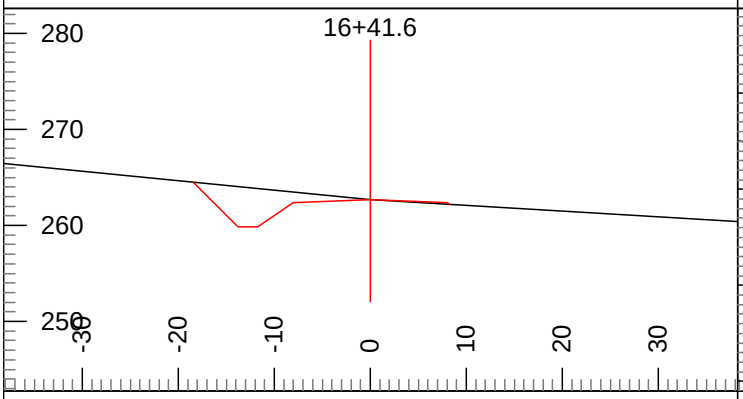
P-Stn :	15+04.5	V.Offset:	0.8	CL Elev:	271.8
H. Offset:	0.0	Cut Dp:	-0.8	Index:	631



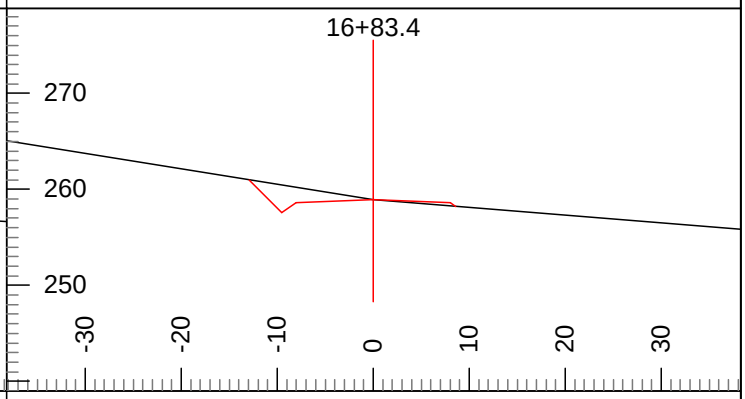
P-Stn :	15+52.9	V.Offset:	0.0	CL Elev:	269.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	632



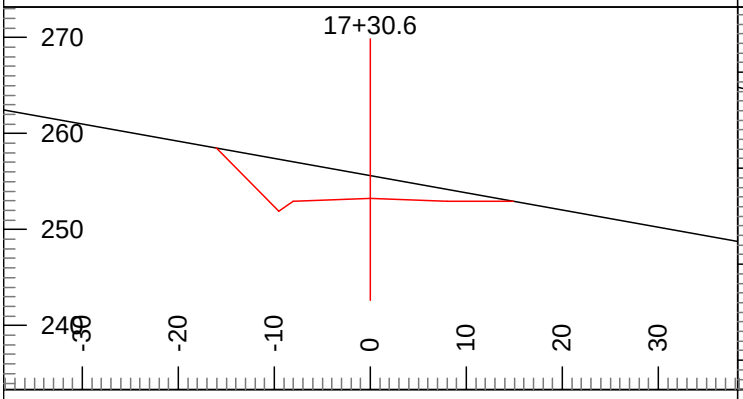
P-Stn :	15+98.1	V.Offset:	-0.8	CL Elev:	266.5
H. Offset:	0.0	Cut Dp:	0.8	Index:	633



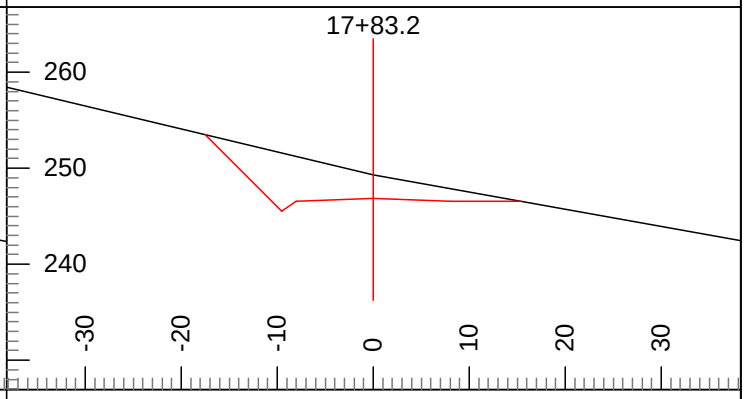
P-Stn :	16+63.6	V.Offset:	0.0	CL Elev:	262.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	634



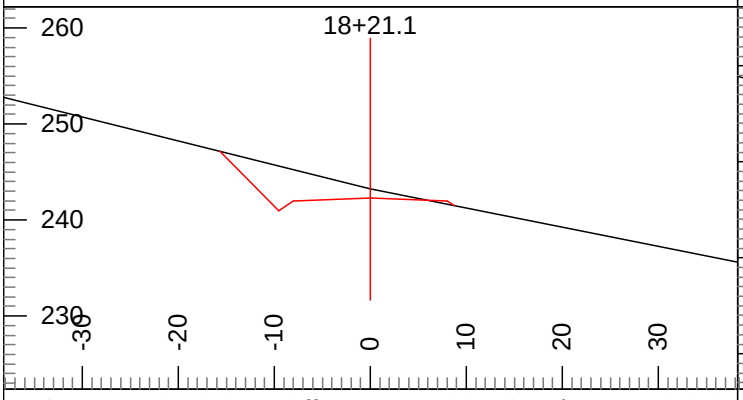
P-Stn :	17+05.3	V.Offset:	0.0	CL Elev:	258.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	635



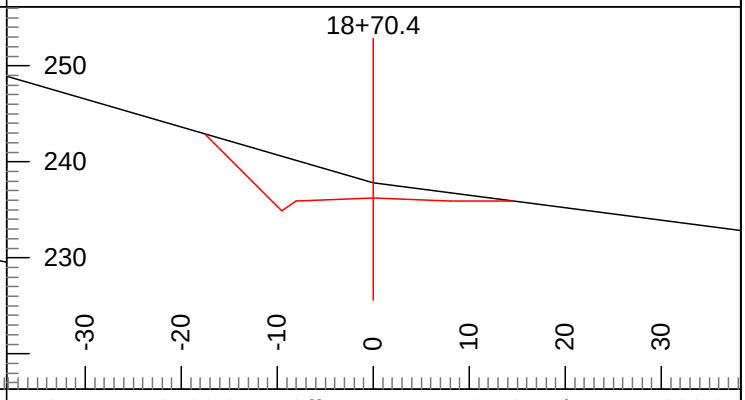
P-Stn :	17+52.5	V.Offset:	-2.4	CL Elev:	253.3
H. Offset:	0.0	Cut Dp:	2.4	Index:	636



P-Stn :	18+05.1	V.Offset:	-2.4	CL Elev:	246.9
H. Offset:	0.0	Cut Dp:	2.4	Index:	637

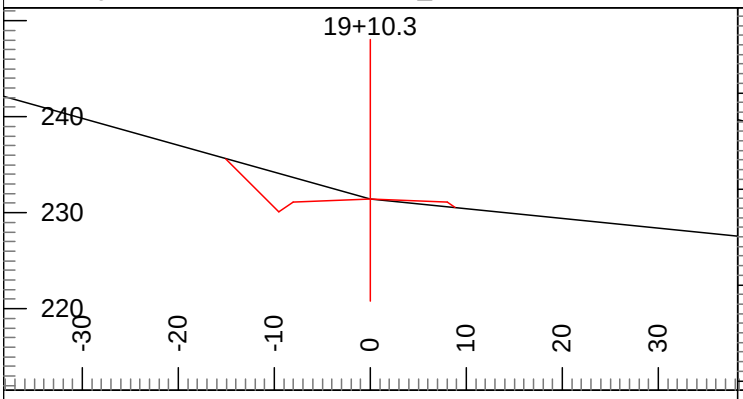


P-Stn :	18+43.0	V.Offset:	-0.9	CL Elev:	242.3
H. Offset:	0.0	Cut Dp:	0.9	Index:	638



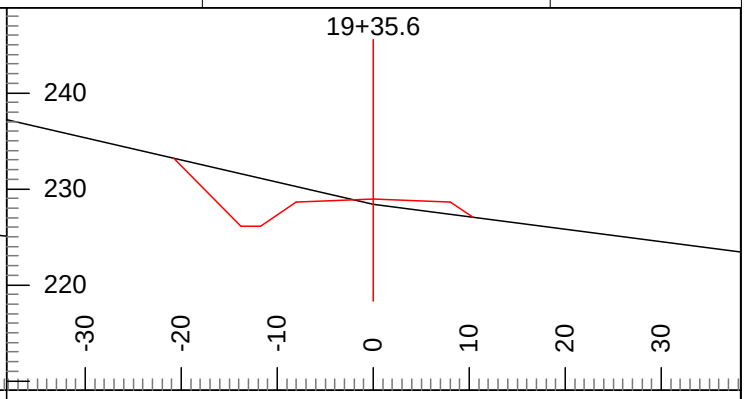
P-Stn :	18+92.3	V.Offset:	-1.6	CL Elev:	236.2
H. Offset:	0.0	Cut Dp:	1.6	Index:	639

19+10.3



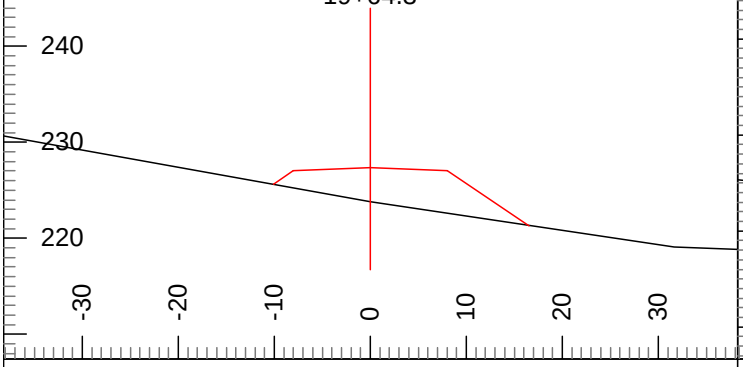
P-Stn :	19+32.2	V.Offset:	0.0	CL Elev:	231.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	640

19+35.6



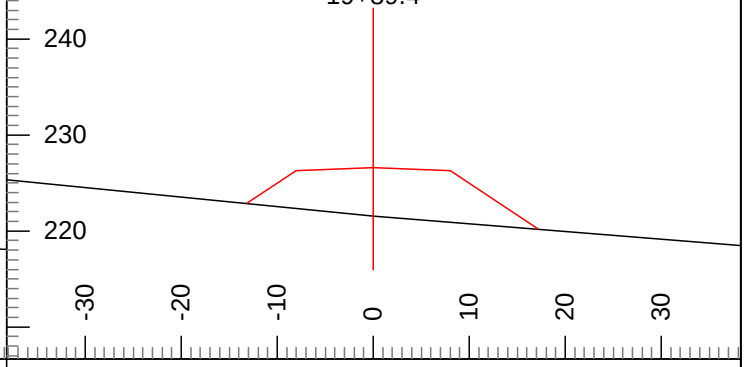
P-Stn :	19+57.5	V.Offset:	0.6	CL Elev:	228.9
H. Offset:	0.0	Cut Dp:	-0.6	Index:	641

19+64.3



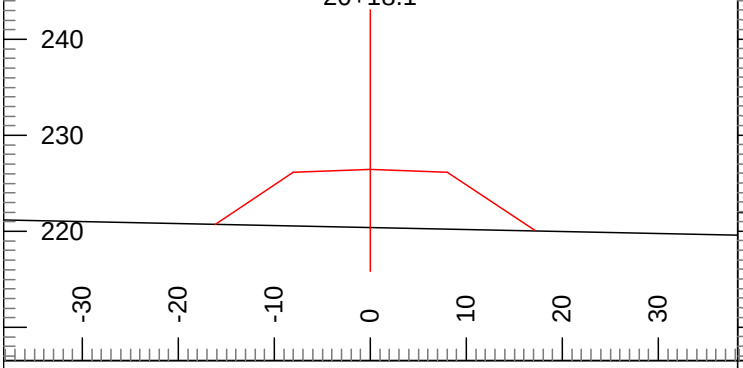
P-Stn :	19+86.2	V.Offset:	3.5	CL Elev:	227.4
H. Offset:	0.0	Cut Dp:	-3.5	Index:	642

19+89.4



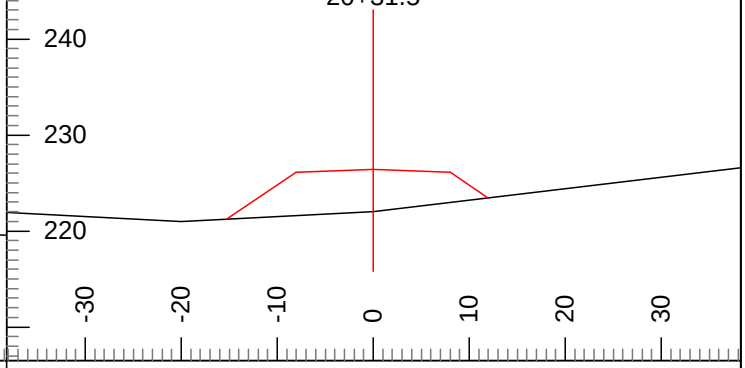
P-Stn :	20+11.3	V.Offset:	5.0	CL Elev:	226.6
H. Offset:	0.0	Cut Dp:	-5.0	Index:	643

20+18.1



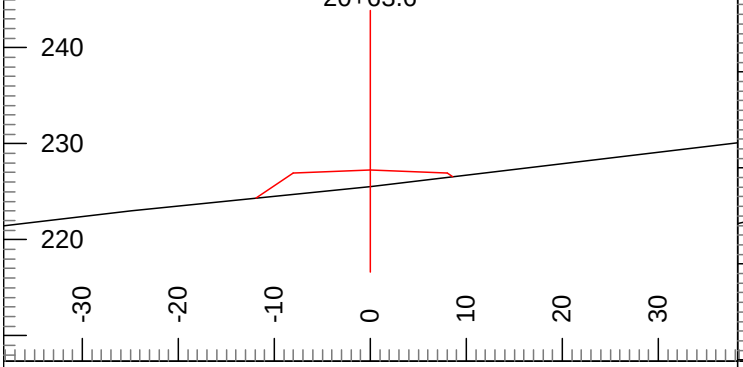
P-Stn :	20+40.1	V.Offset:	6.1	CL Elev:	226.5
H. Offset:	0.0	Cut Dp:	-6.1	Index:	644

20+31.5



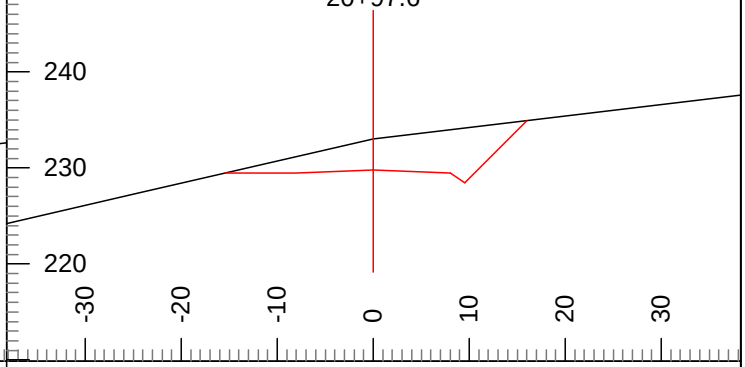
P-Stn :	20+53.5	V.Offset:	4.4	CL Elev:	226.4
H. Offset:	0.0	Cut Dp:	-4.4	Index:	645

20+63.6

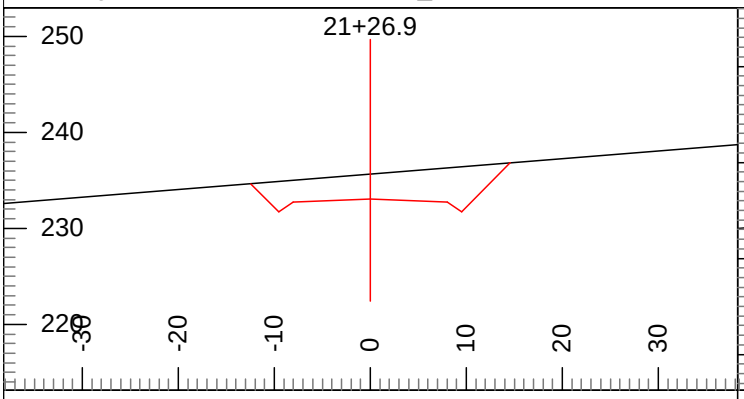


P-Stn :	20+85.6	V.Offset:	1.7	CL Elev:	227.3
H. Offset:	0.0	Cut Dp:	-1.7	Index:	646

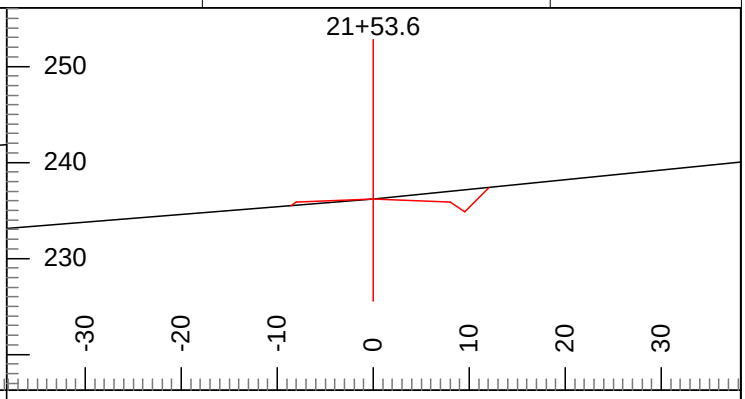
20+97.6



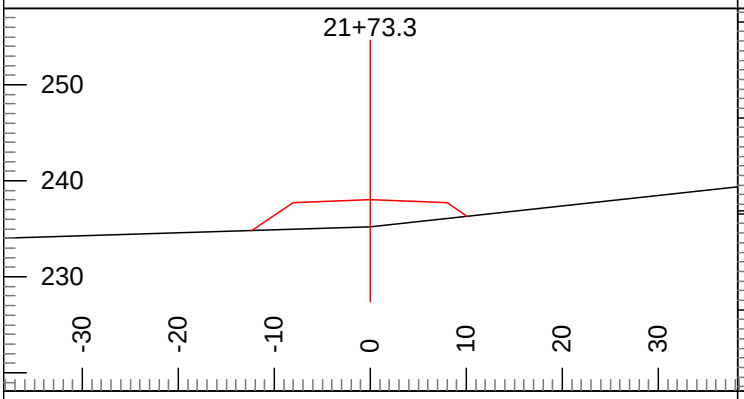
P-Stn :	21+19.6	V.Offset:	-3.2	CL Elev:	229.8
H. Offset:	0.0	Cut Dp:	3.2	Index:	647



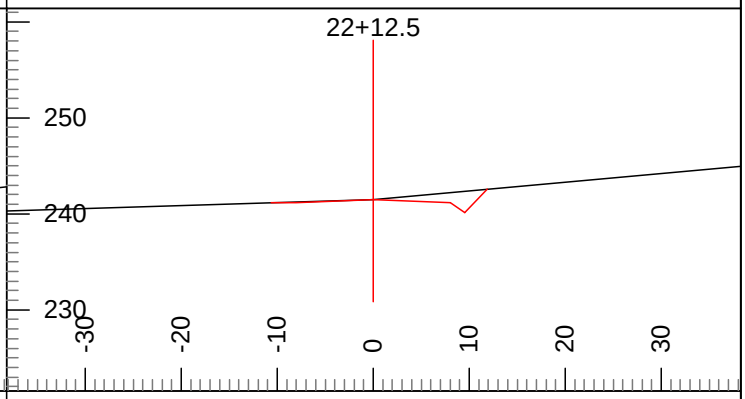
P-Stn :	21+48.8	V.Offset:	-2.6	CL Elev:	233.1
H. Offset:	0.0	Cut Dp:	2.6	Index:	648



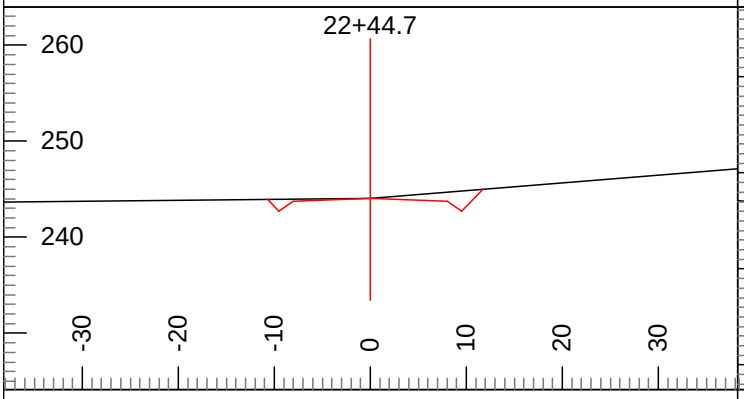
P-Stn :	21+75.5	V.Offset:	0.0	CL Elev:	236.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	649



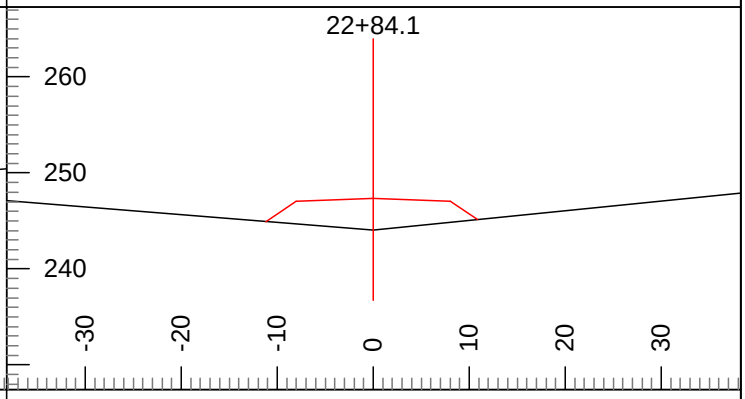
P-Stn :	21+95.2	V.Offset:	2.8	CL Elev:	238.0
H. Offset:	0.0	Cut Dp:	-2.8	Index:	650



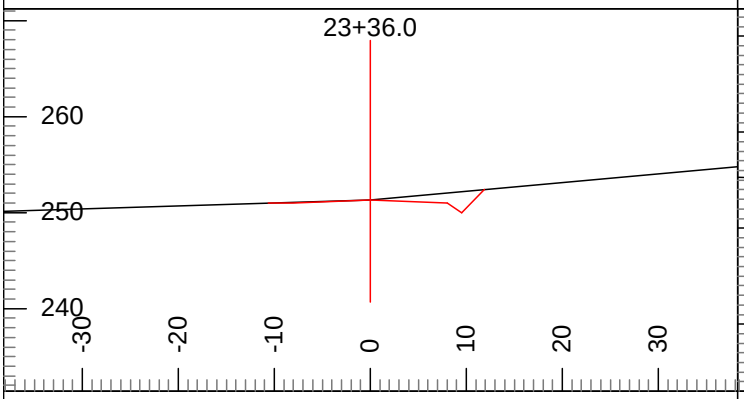
P-Stn :	22+34.4	V.Offset:	0.0	CL Elev:	241.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	651



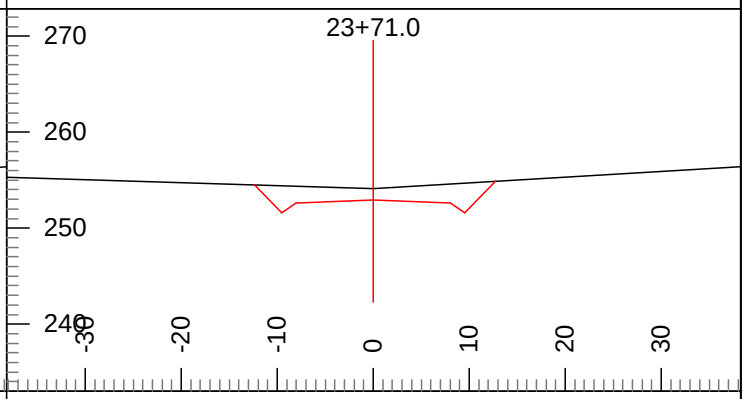
P-Stn :	22+66.6	V.Offset:	0.0	CL Elev:	244.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	652



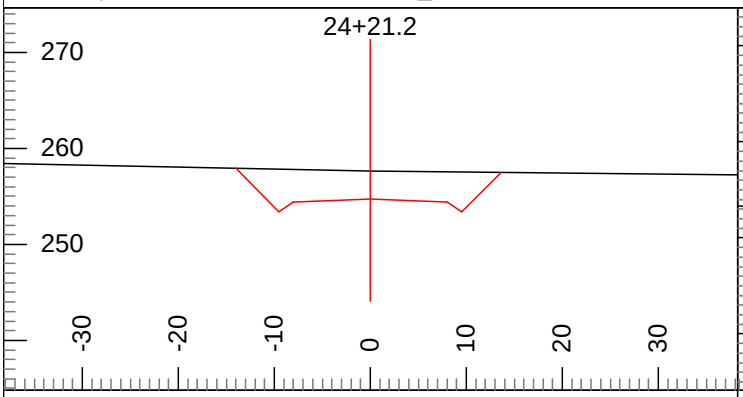
P-Stn :	23+06.0	V.Offset:	3.3	CL Elev:	247.4
H. Offset:	0.0	Cut Dp:	-3.3	Index:	653



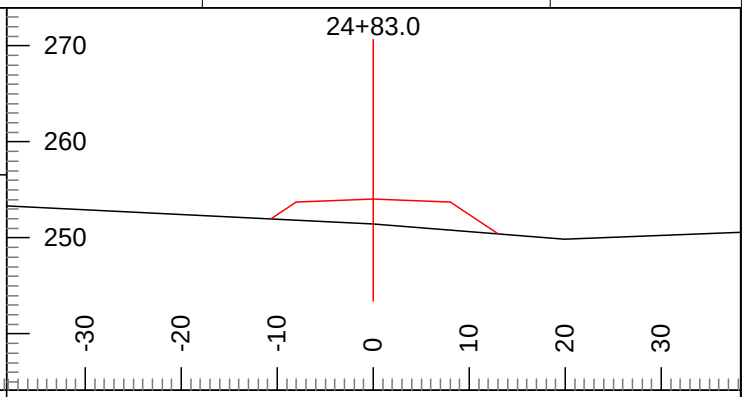
P-Stn :	23+57.9	V.Offset:	0.0	CL Elev:	251.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	654



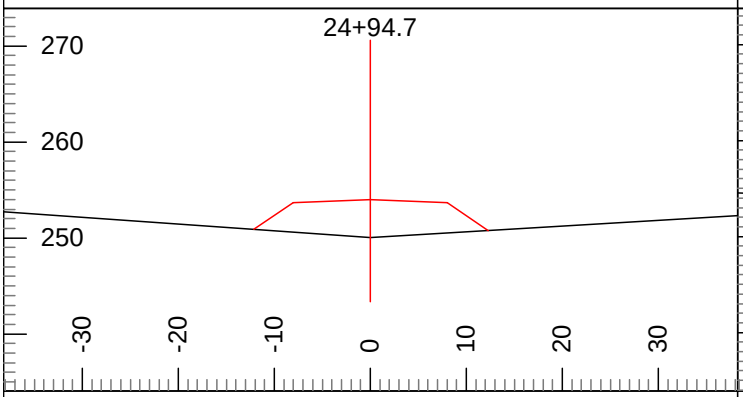
P-Stn :	23+92.9	V.Offset:	-1.2	CL Elev:	252.9
H. Offset:	0.0	Cut Dp:	1.2	Index:	655



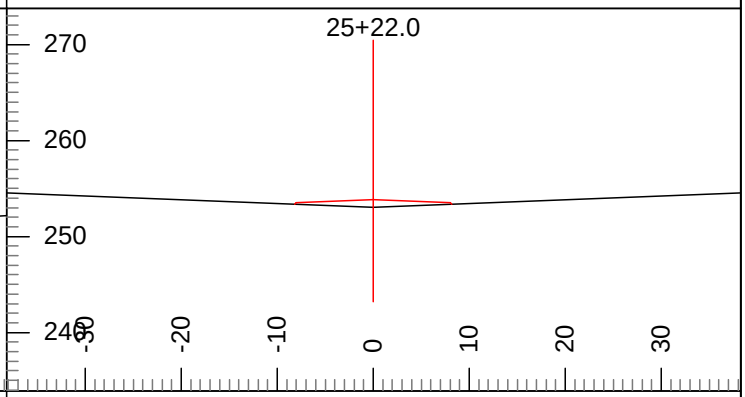
P-Stn :	24+43.2	V.Offset:	-2.9	CL Elev:	254.7
H. Offset:	0.0	Cut Dp:	2.9	Index:	656



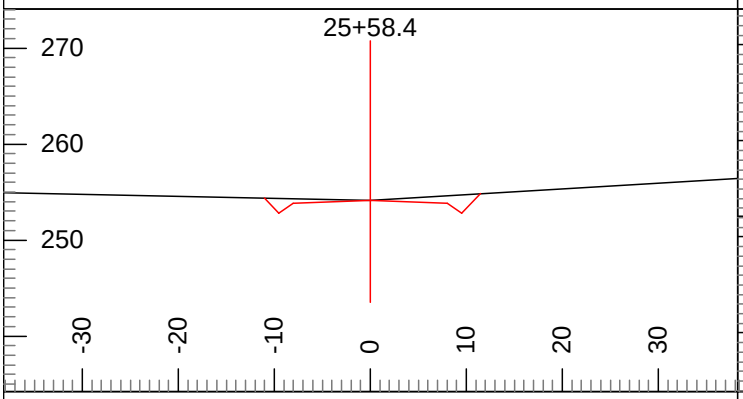
P-Stn :	25+05.0	V.Offset:	2.6	CL Elev:	254.1
H. Offset:	0.0	Cut Dp:	-2.6	Index:	657



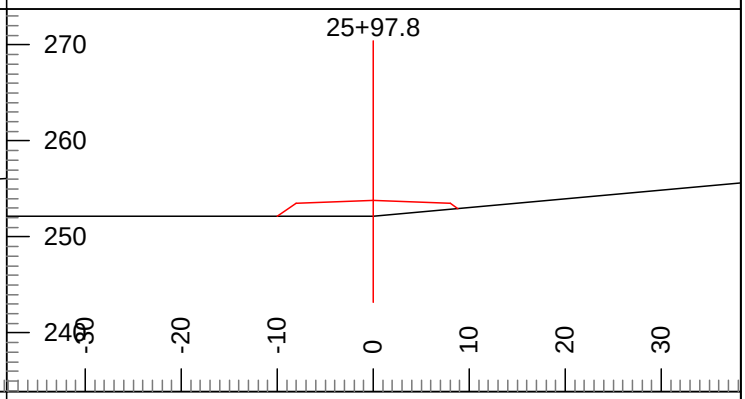
P-Stn :	25+16.7	V.Offset:	3.9	CL Elev:	254.0
H. Offset:	0.0	Cut Dp:	-3.9	Index:	658



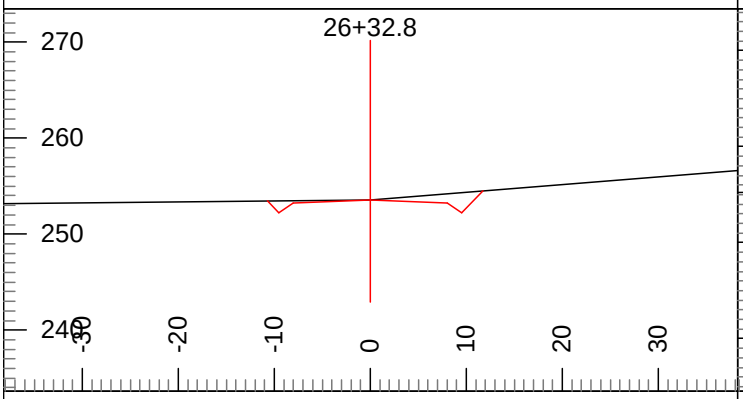
P-Stn :	25+43.9	V.Offset:	0.8	CL Elev:	253.8
H. Offset:	0.0	Cut Dp:	-0.8	Index:	659



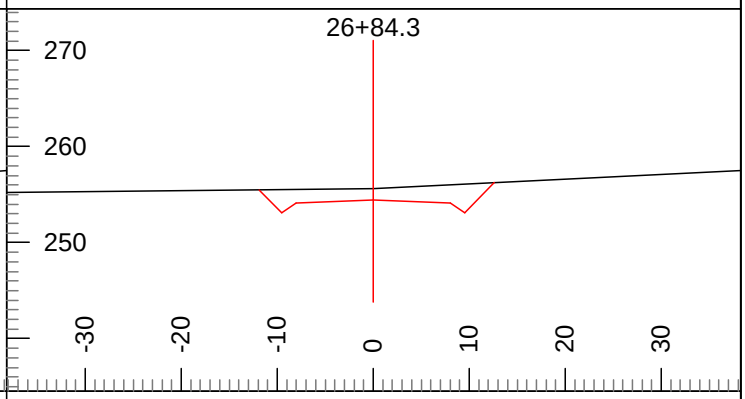
P-Stn :	25+80.3	V.Offset:	0.0	CL Elev:	254.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	660



P-Stn :	26+19.7	V.Offset:	1.7	CL Elev:	253.8
H. Offset:	0.0	Cut Dp:	-1.7	Index:	661

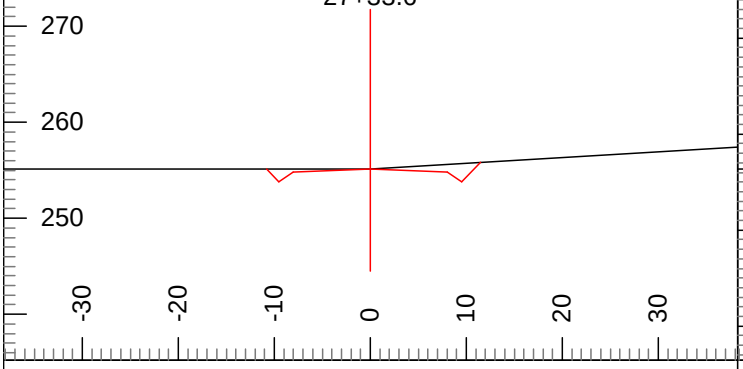


P-Stn :	26+54.7	V.Offset:	0.0	CL Elev:	253.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	662



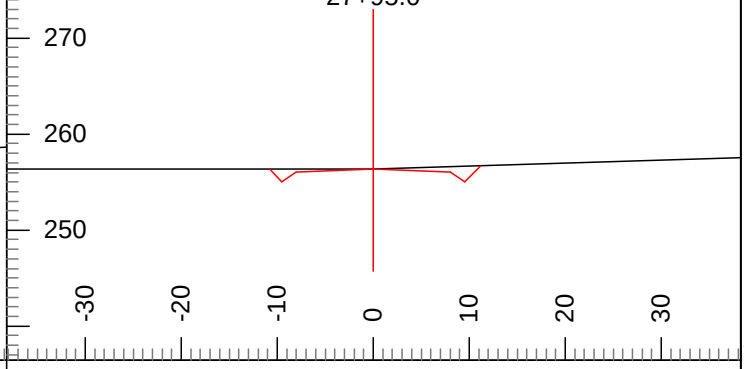
P-Stn :	27+06.3	V.Offset:	-1.2	CL Elev:	254.4
H. Offset:	0.0	Cut Dp:	1.2	Index:	663

27+33.6



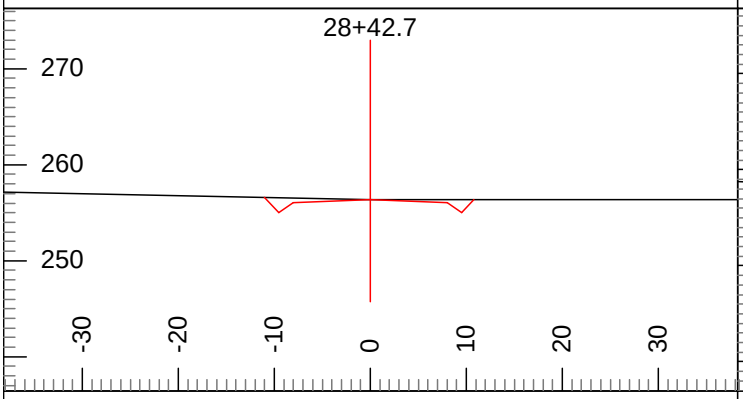
P-Stn :	27+55.6	V.Offset:	0.0	CL Elev:	255.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	664

27+95.0



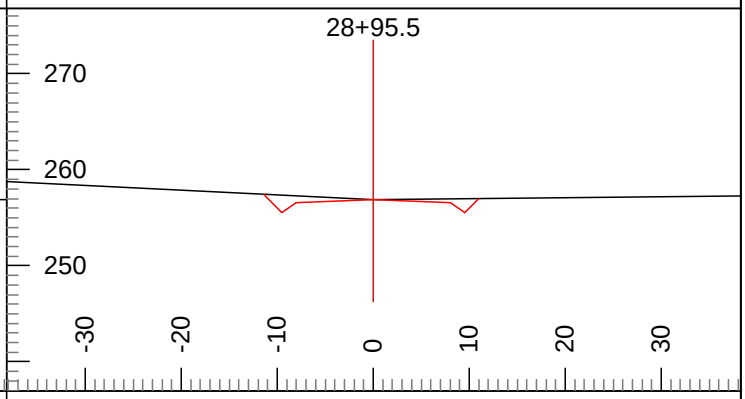
P-Stn :	28+17.0	V.Offset:	0.0	CL Elev:	256.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	665

28+42.7



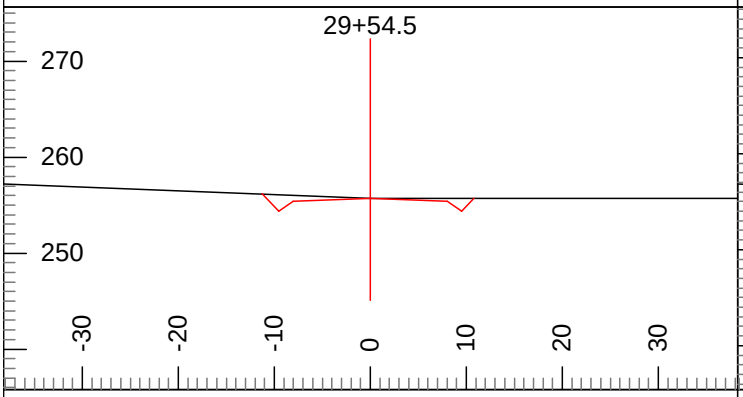
P-Stn :	28+64.7	V.Offset:	0.0	CL Elev:	256.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	666

28+95.5



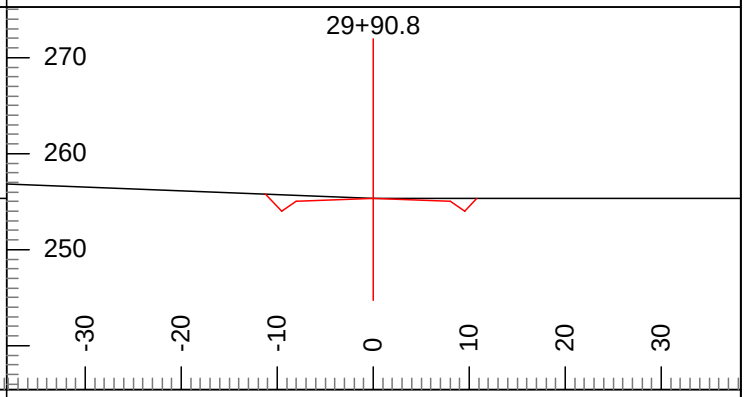
P-Stn :	29+17.5	V.Offset:	0.0	CL Elev:	256.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	667

29+54.5



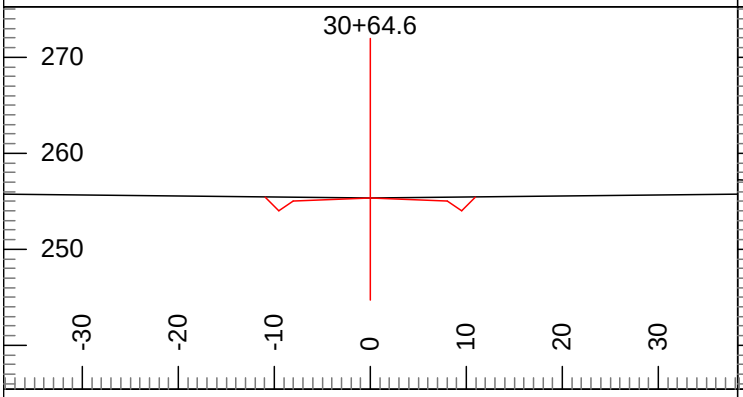
P-Stn :	29+76.4	V.Offset:	0.0	CL Elev:	255.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	668

29+90.8



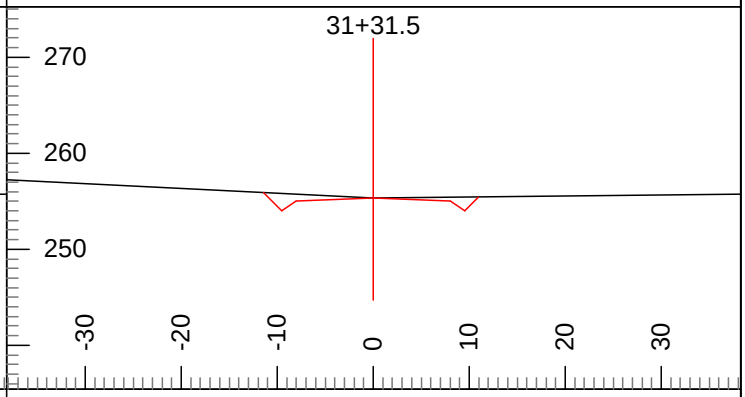
P-Stn :	30+12.7	V.Offset:	0.0	CL Elev:	255.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	669

30+64.6



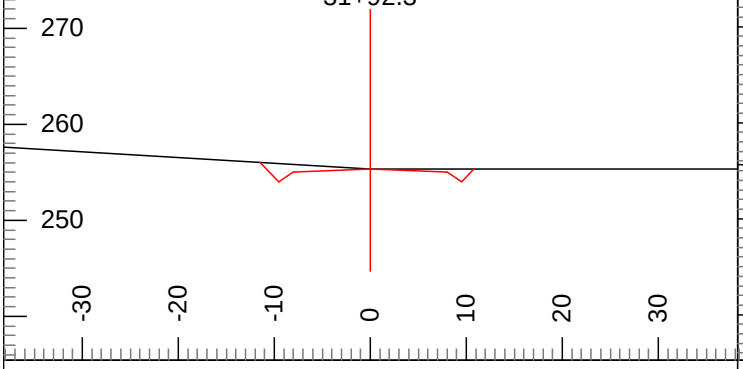
P-Stn :	30+86.5	V.Offset:	0.0	CL Elev:	255.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	670

31+31.5



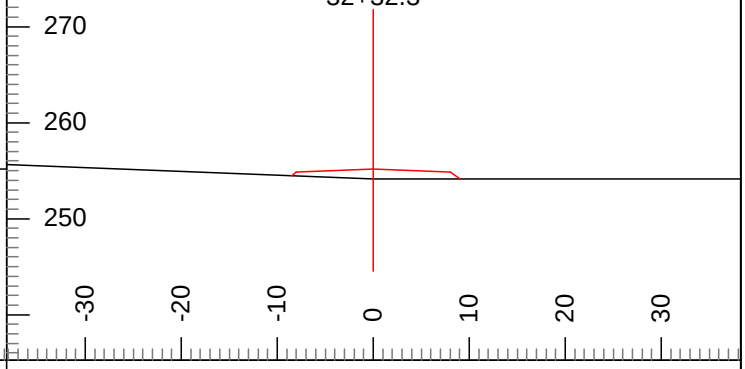
P-Stn :	31+53.4	V.Offset:	0.0	CL Elev:	255.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	671

31+92.3



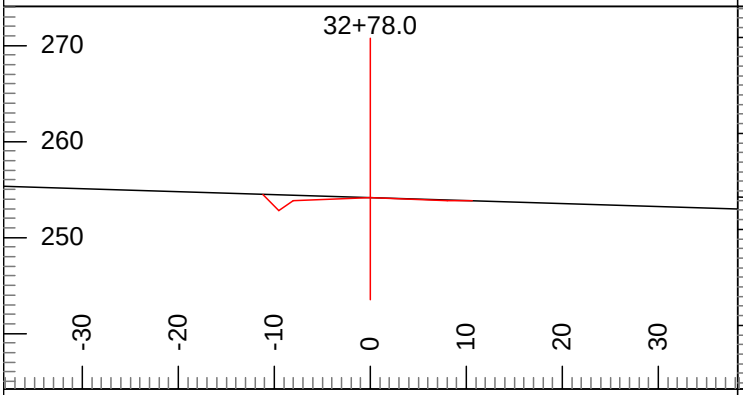
P-Stn :	32+14.2	V.Offset:	0.0	CL Elev:	255.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	672

32+32.3



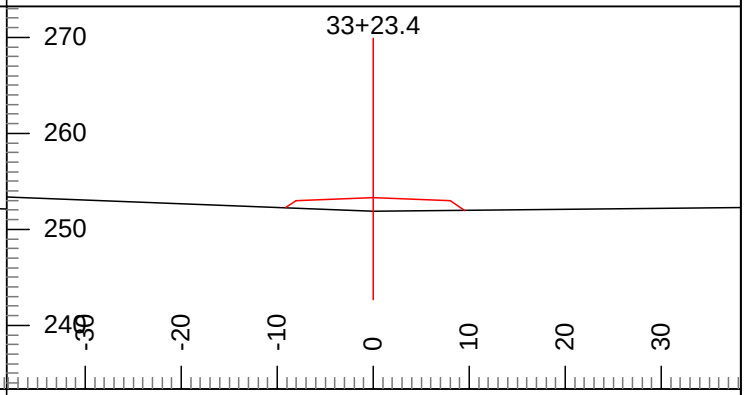
P-Stn :	32+54.2	V.Offset:	1.0	CL Elev:	255.2
H. Offset:	0.0	Cut Dp:	-1.0	Index:	673

32+78.0



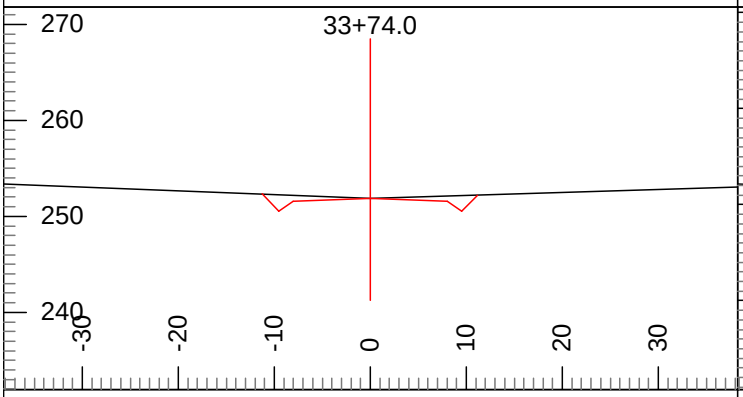
P-Stn :	32+99.9	V.Offset:	0.0	CL Elev:	254.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	674

33+23.4



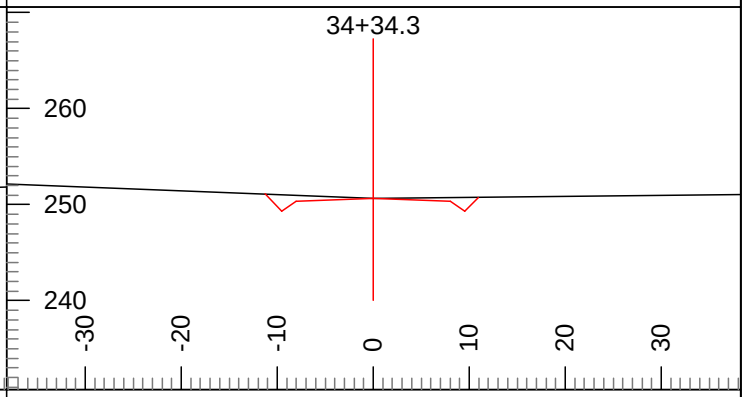
P-Stn :	33+45.4	V.Offset:	1.4	CL Elev:	253.3
H. Offset:	0.0	Cut Dp:	-1.4	Index:	675

33+74.0



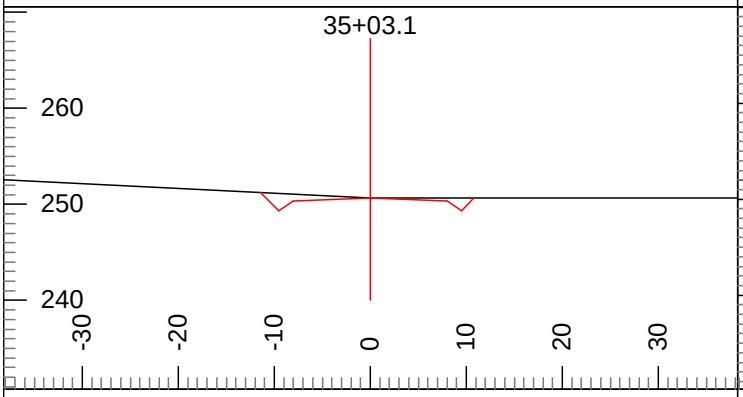
P-Stn :	33+96.0	V.Offset:	0.0	CL Elev:	251.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	676

34+34.3



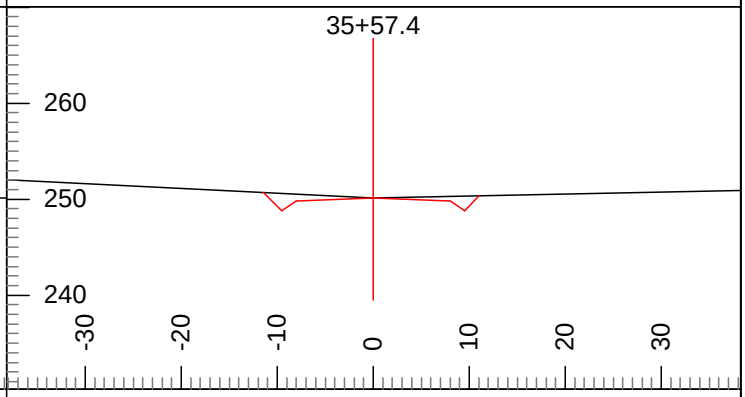
P-Stn :	34+56.3	V.Offset:	0.0	CL Elev:	250.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	677

35+03.1



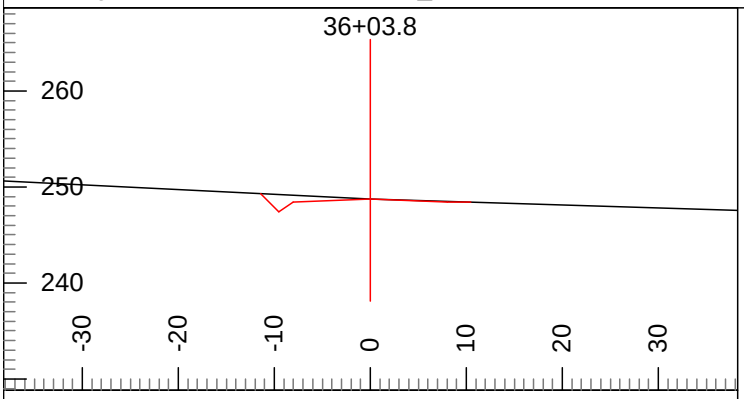
P-Stn :	35+25.1	V.Offset:	0.0	CL Elev:	250.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	678

35+57.4

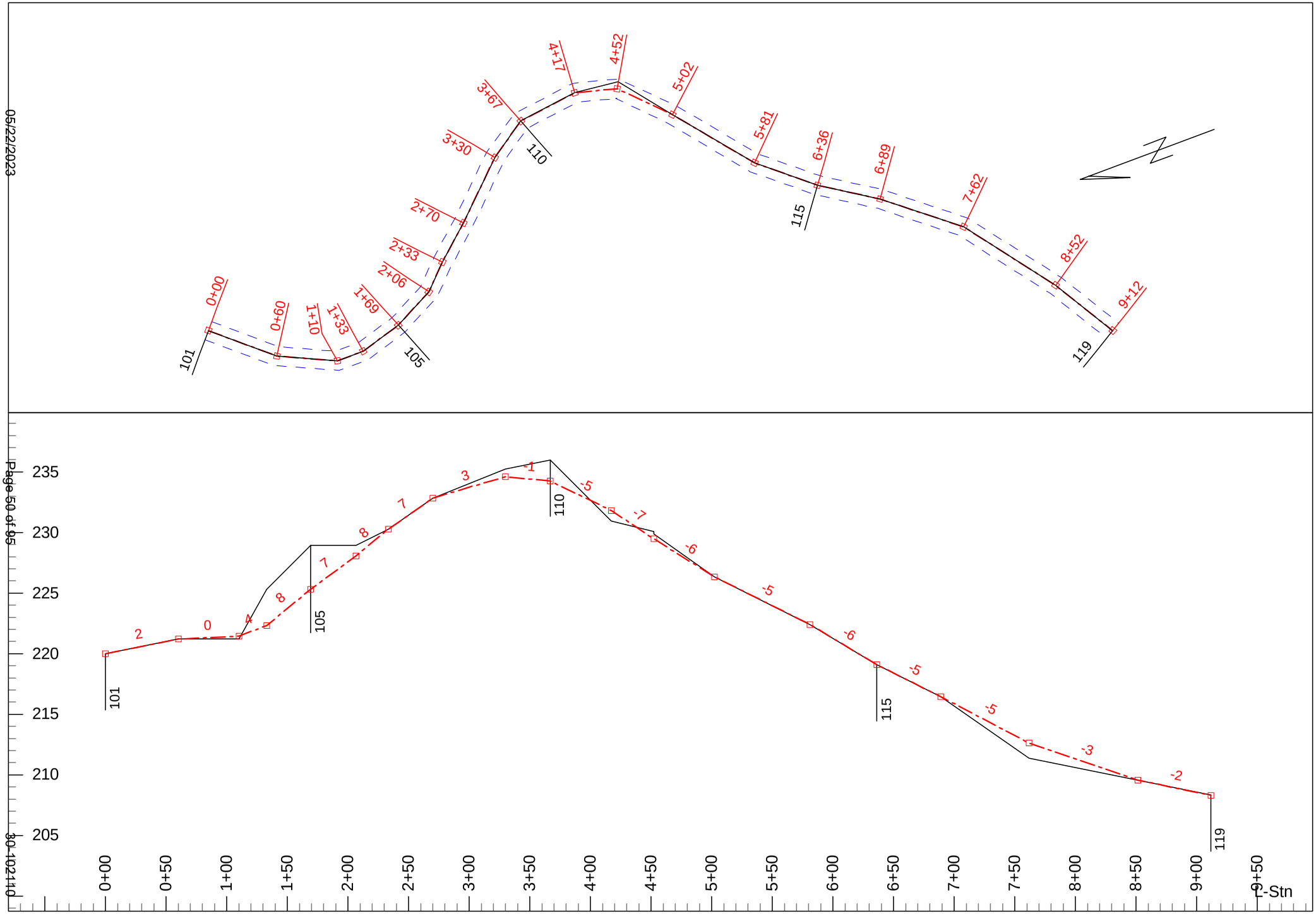


P-Stn :	35+79.3	V.Offset:	0.0	CL Elev:	250.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	679

Softree Section	Scale 1:240	P. 11
C:\ProgramData\Softree\Data\sure_wood\archer		22/05/12



P-Stn :	36+25.7	V.Offset:	0.0	CL Elev:	248.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	680



Sure Wood Timber Sale
Spur 1
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

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

Engineer: Heymann
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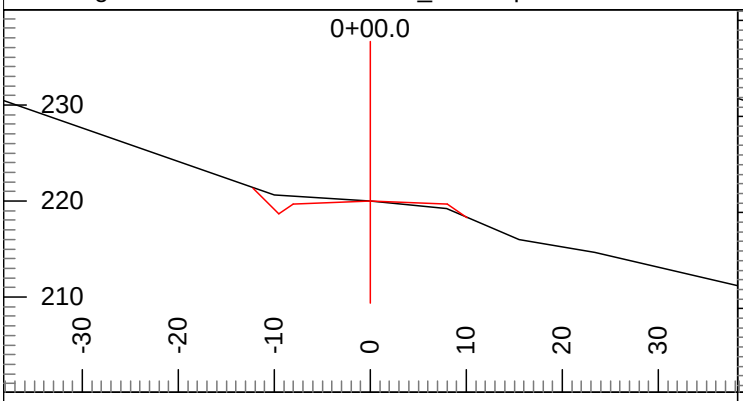
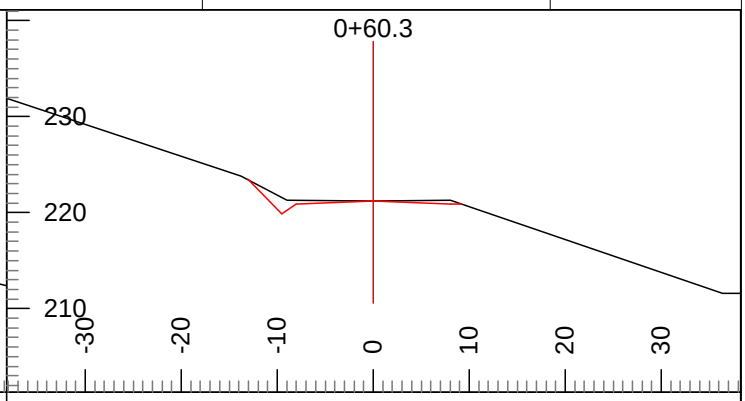
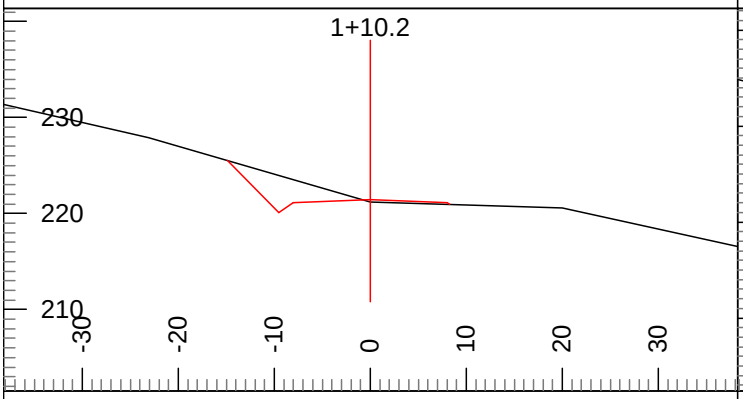
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur1		22/05/12



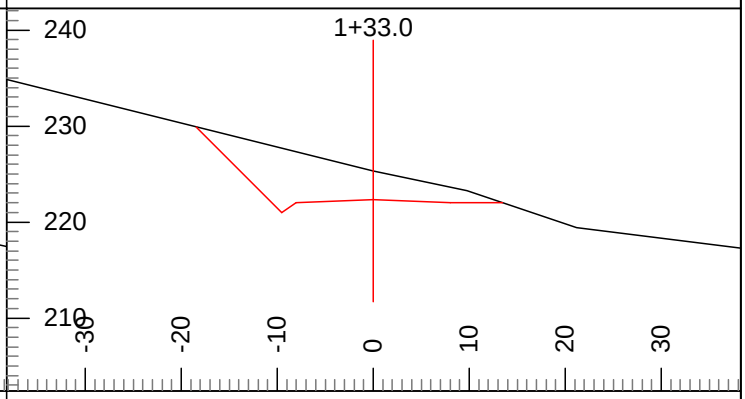
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	220.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	101



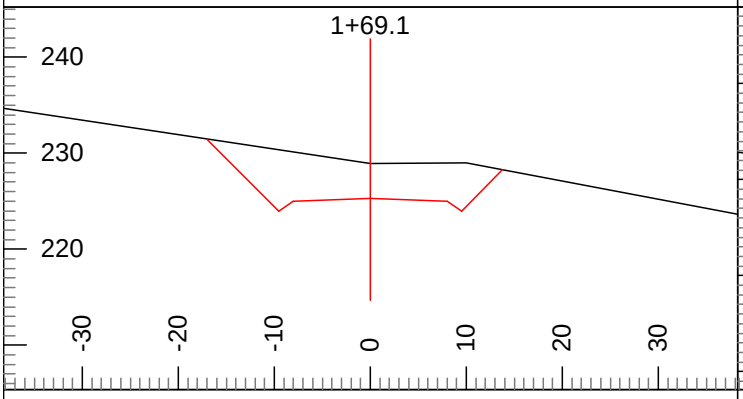
P-Stn :	0+60.3	V.Offset:	0.0	CL Elev:	221.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	102



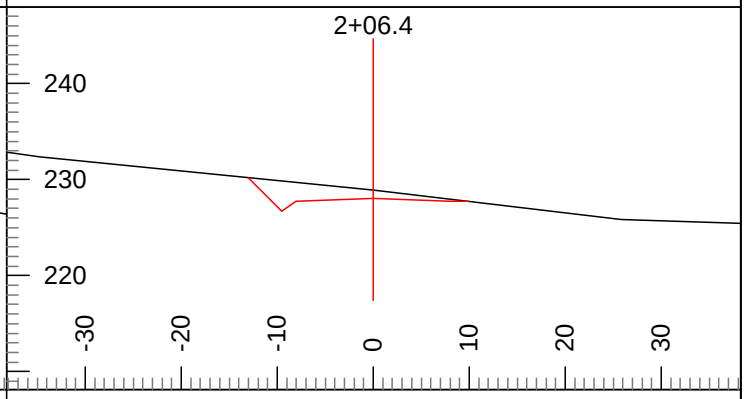
P-Stn :	1+10.2	V.Offset:	0.2	CL Elev:	221.4
H. Offset:	0.0	Cut Dp:	-0.2	Index:	103



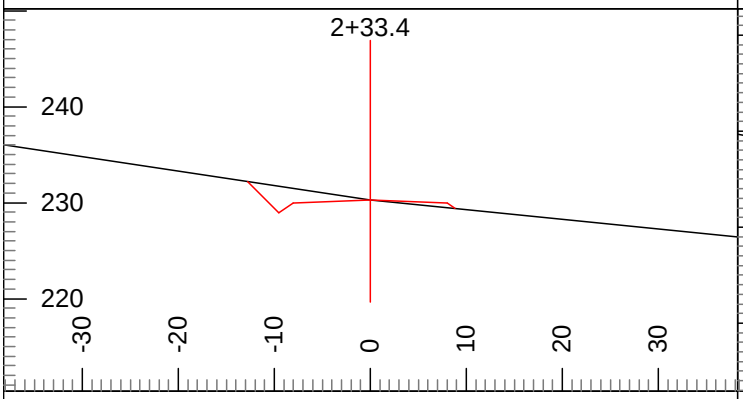
P-Stn :	1+33.0	V.Offset:	-3.0	CL Elev:	222.3
H. Offset:	0.0	Cut Dp:	3.0	Index:	104



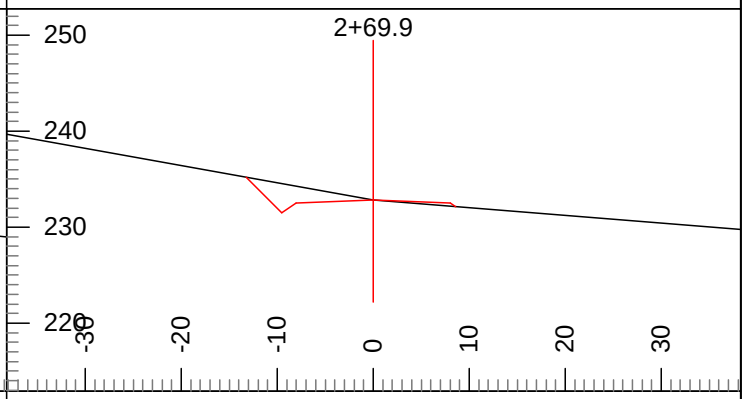
P-Stn :	1+69.1	V.Offset:	-3.6	CL Elev:	225.3
H. Offset:	0.0	Cut Dp:	3.6	Index:	105



P-Stn :	2+06.4	V.Offset:	-0.9	CL Elev:	228.1
H. Offset:	0.0	Cut Dp:	0.9	Index:	106

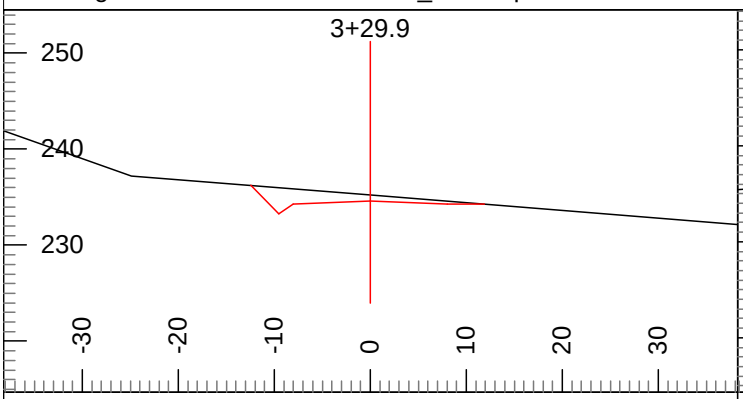


P-Stn :	2+33.4	V.Offset:	0.0	CL Elev:	230.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	107

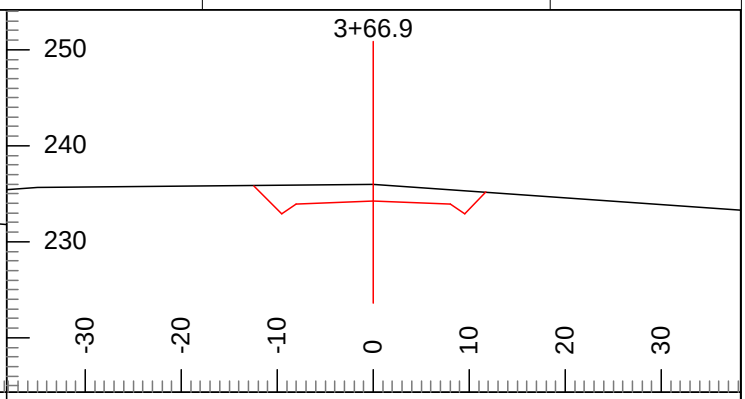


P-Stn :	2+69.9	V.Offset:	0.0	CL Elev:	232.8
H. Offset:	0.0	Cut Dp:	0.0	Index:	108

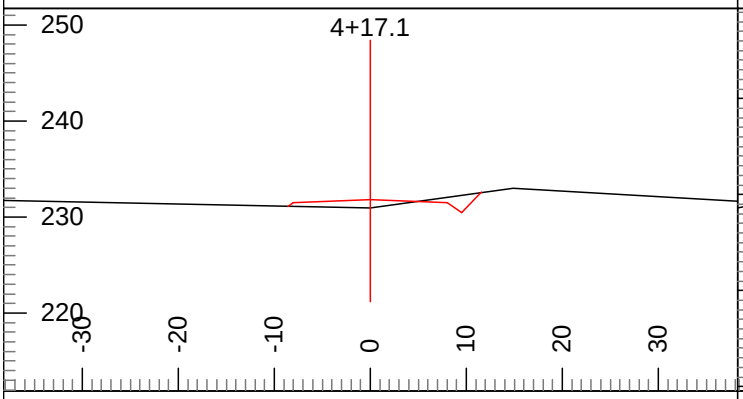
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur1		22/05/12



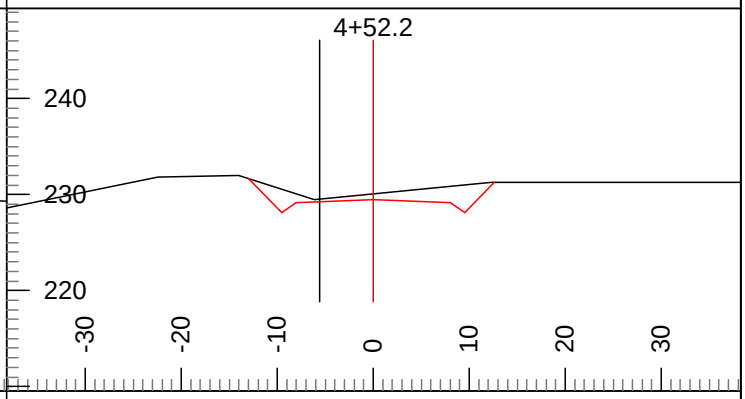
P-Stn :	3+29.9	V.Offset:	-0.6	CL Elev:	234.6
H. Offset:	0.0	Cut Dp:	0.6	Index:	109



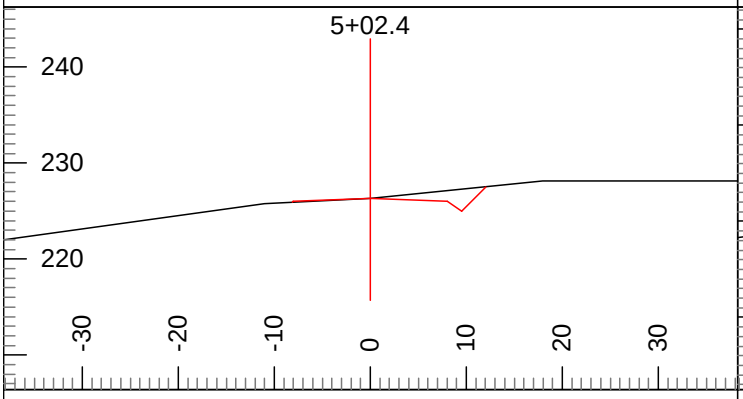
P-Stn :	3+66.9	V.Offset:	-1.7	CL Elev:	234.2
H. Offset:	0.0	Cut Dp:	1.7	Index:	110



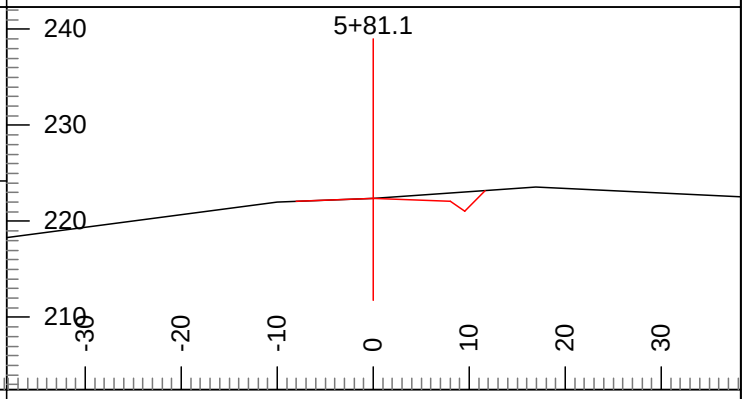
P-Stn :	4+17.1	V.Offset:	0.9	CL Elev:	231.8
H. Offset:	0.0	Cut Dp:	-0.9	Index:	111



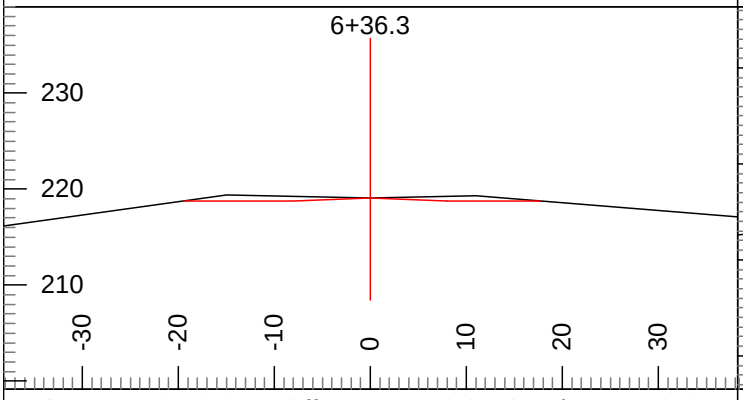
P-Stn :	4+54.1	V.Offset:	0.0	CL Elev:	229.5
H. Offset:	6.0	Cut Dp:	0.6	Index:	112



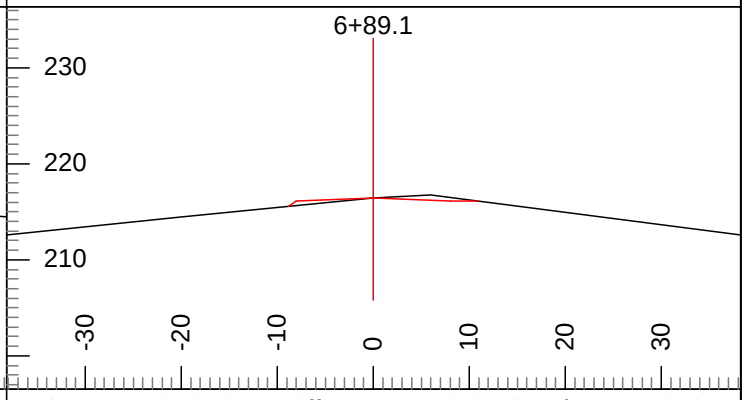
P-Stn :	5+06.4	V.Offset:	0.0	CL Elev:	226.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	113



P-Stn :	5+85.0	V.Offset:	0.0	CL Elev:	222.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	114

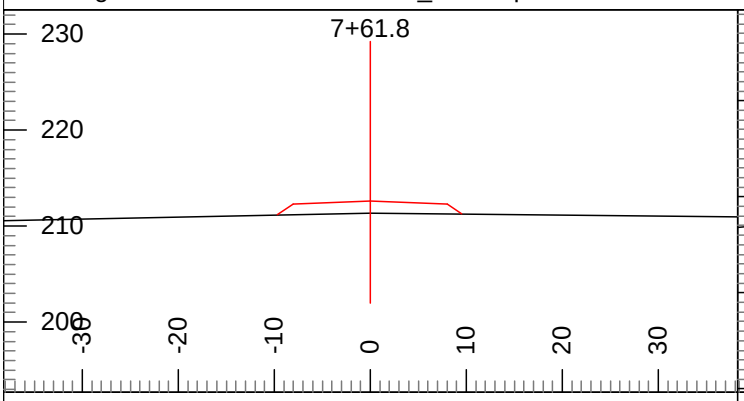


P-Stn :	6+40.2	V.Offset:	0.0	CL Elev:	219.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	115

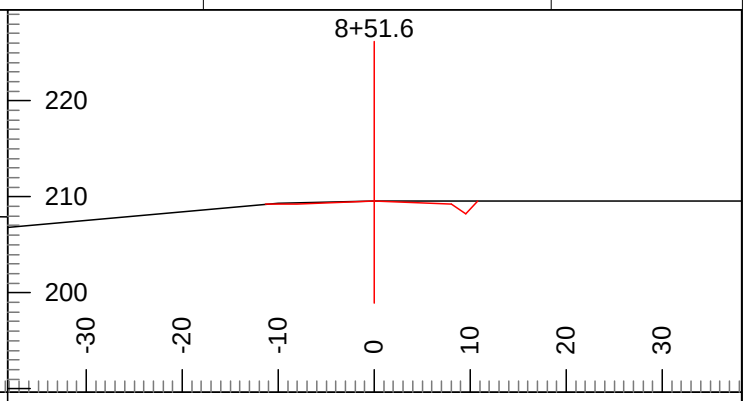


P-Stn :	6+93.0	V.Offset:	0.0	CL Elev:	216.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	116

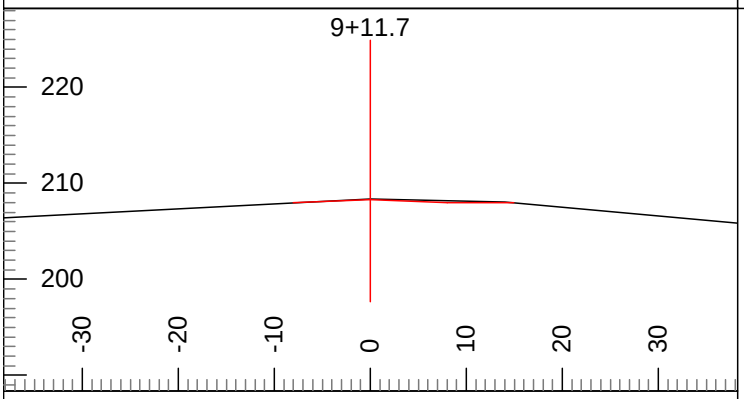
Softree Section	Scale 1:240	P. 3
C:\ProgramData\Softree\Data\sure_wood\spur1		22/05/12



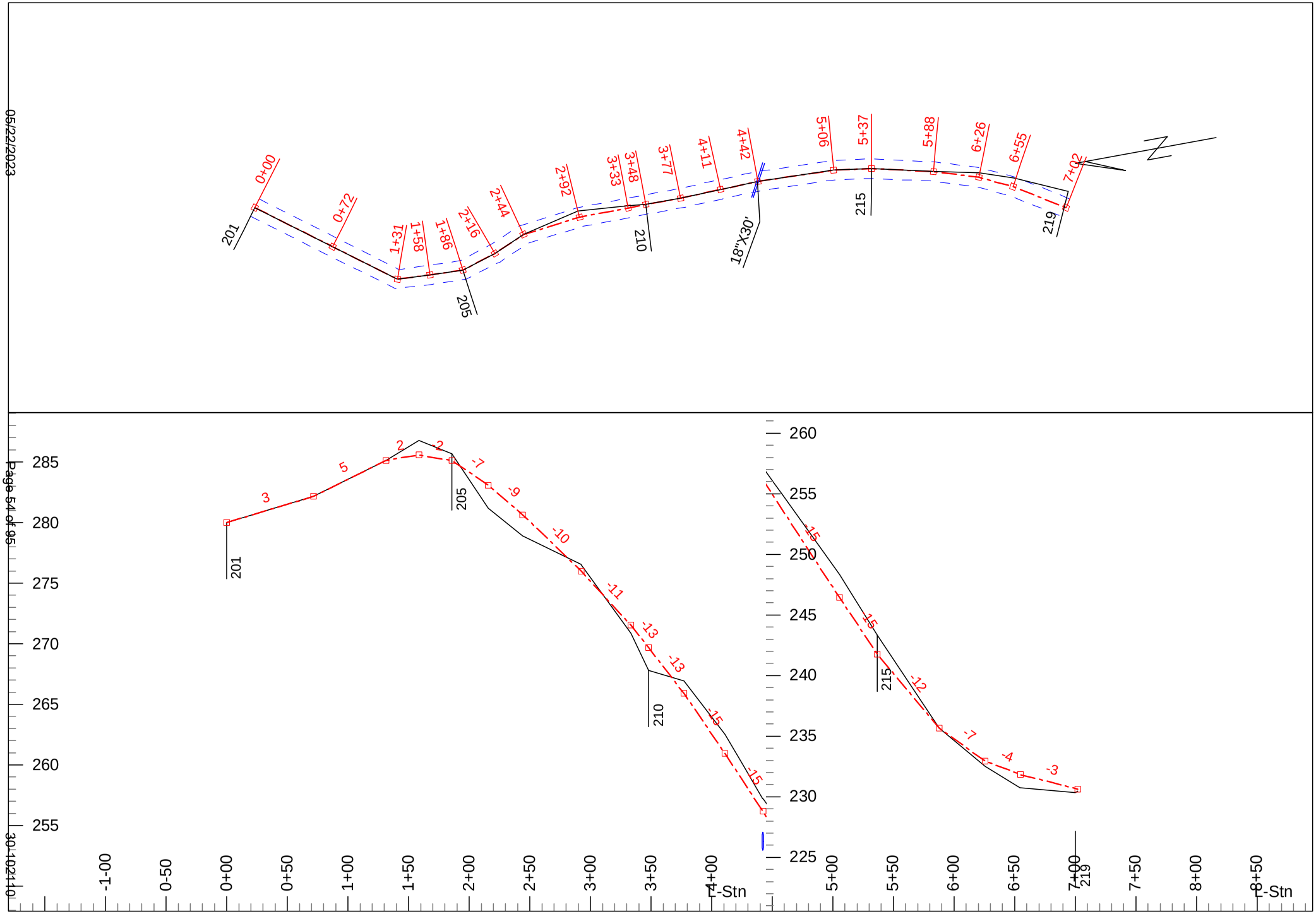
P-Stn :	7+65.7	V.Offset:	1.3	CL Elev:	212.6
H. Offset:	0.0	Cut Dp:	-1.3	Index:	117



P-Stn :	8+55.5	V.Offset:	0.0	CL Elev:	209.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	118



P-Stn :	9+15.6	V.Offset:	0.0	CL Elev:	208.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	119



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Sure Wood Timber Sale
Spur 2
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF
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Plan Scale 1:1200
Profile Vert Scale 1:120
Profile Horz Scale 1:1200

Engineer: Heymann
22/05/12
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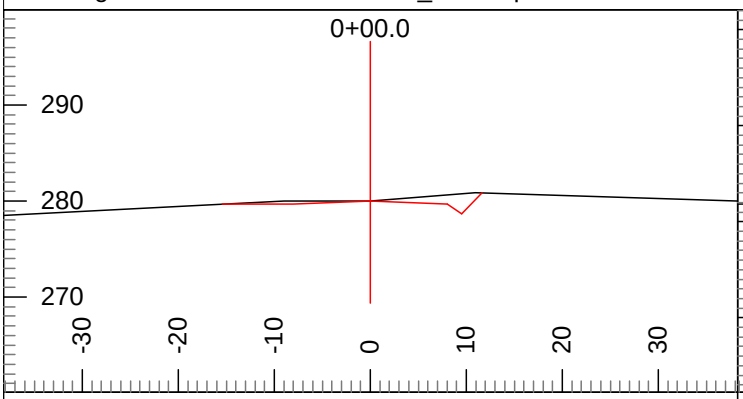
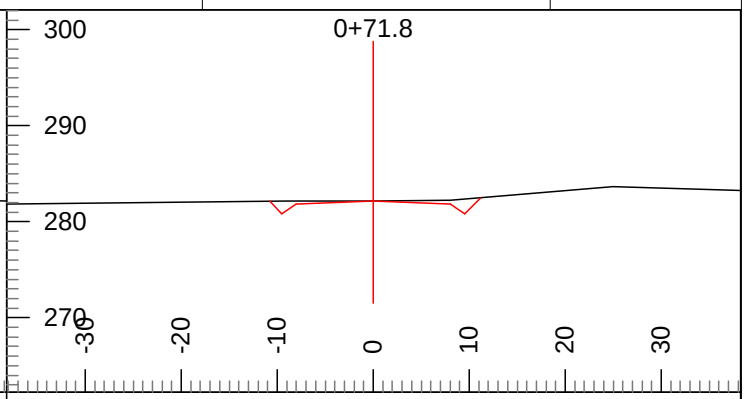
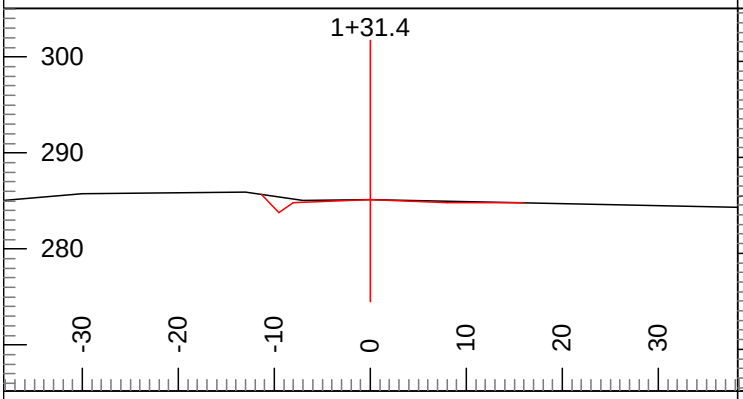
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur2		22/05/12



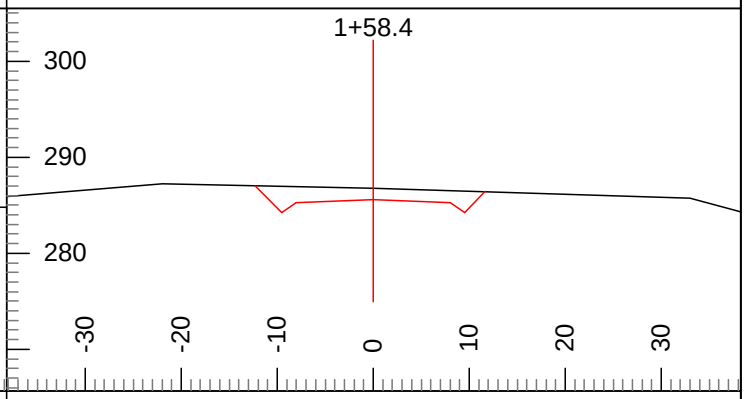
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	280.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	201



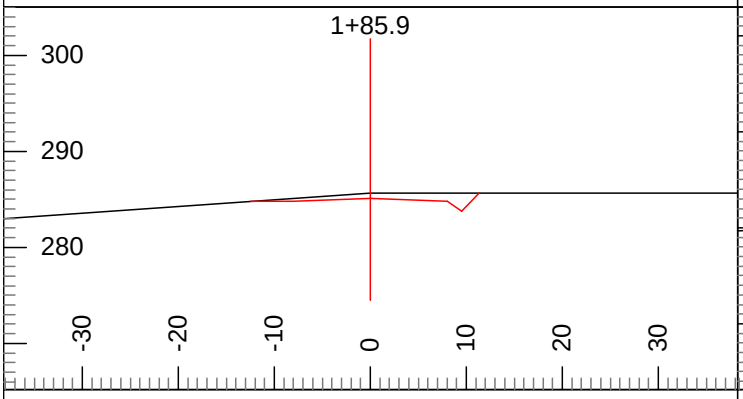
P-Stn :	0+71.8	V.Offset:	0.0	CL Elev:	282.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	202



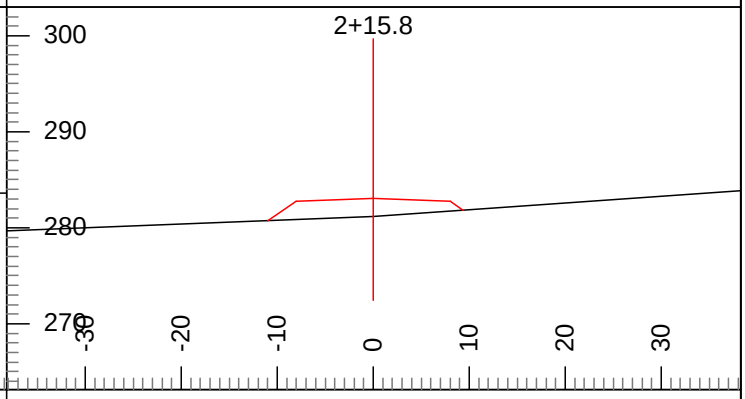
P-Stn :	1+31.4	V.Offset:	0.0	CL Elev:	285.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	203



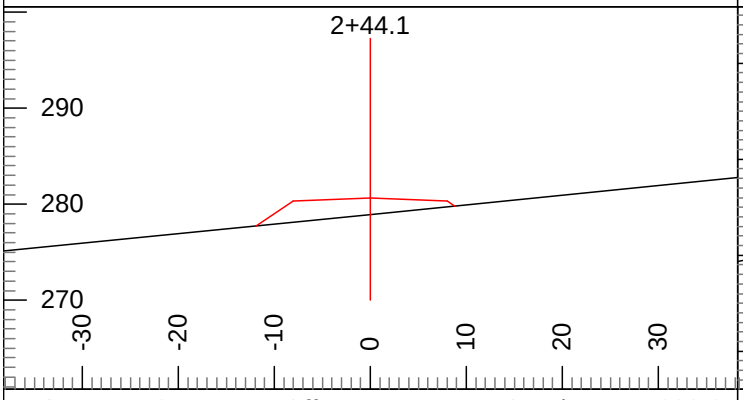
P-Stn :	1+58.4	V.Offset:	-1.2	CL Elev:	285.6
H. Offset:	0.0	Cut Dp:	1.2	Index:	204



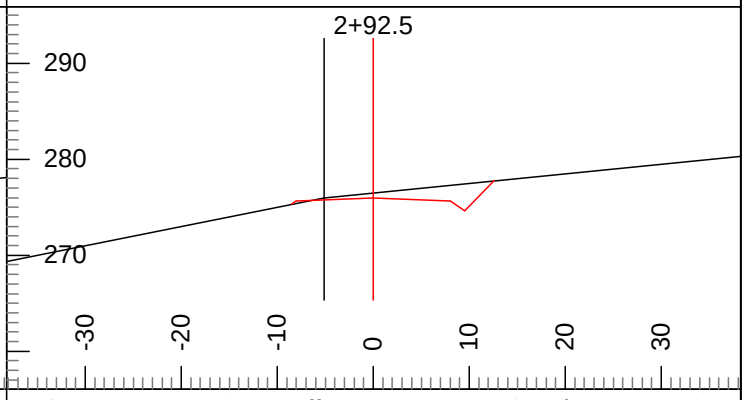
P-Stn :	1+85.9	V.Offset:	-0.6	CL Elev:	285.1
H. Offset:	0.0	Cut Dp:	0.6	Index:	205



P-Stn :	2+15.8	V.Offset:	1.9	CL Elev:	283.1
H. Offset:	0.0	Cut Dp:	-1.9	Index:	206

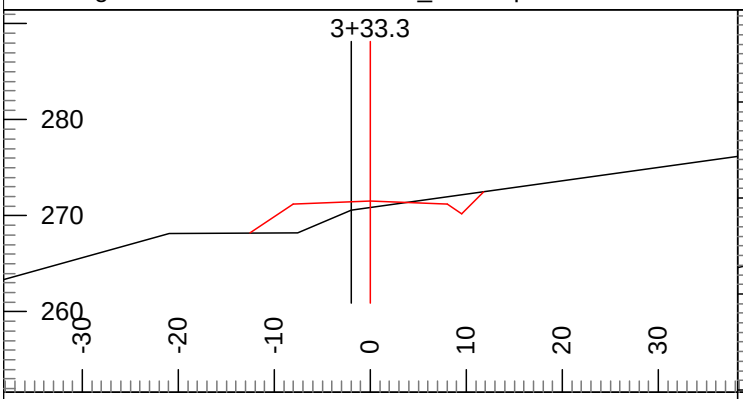


P-Stn :	2+44.1	V.Offset:	1.7	CL Elev:	280.6
H. Offset:	0.0	Cut Dp:	-1.7	Index:	207

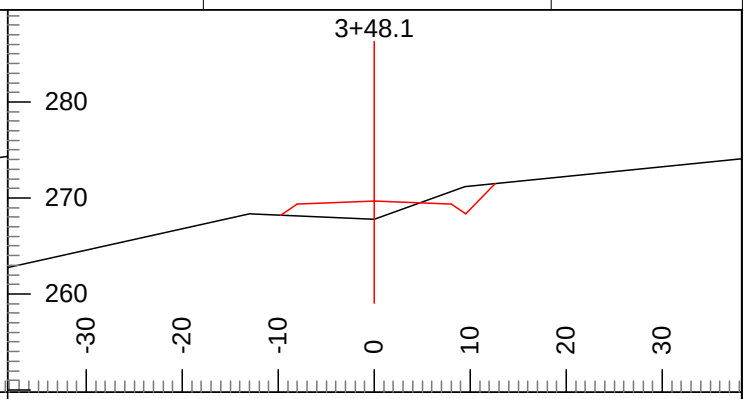


P-Stn :	2+93.0	V.Offset:	0.0	CL Elev:	276.0
H. Offset:	5.1	Cut Dp:	0.5	Index:	208

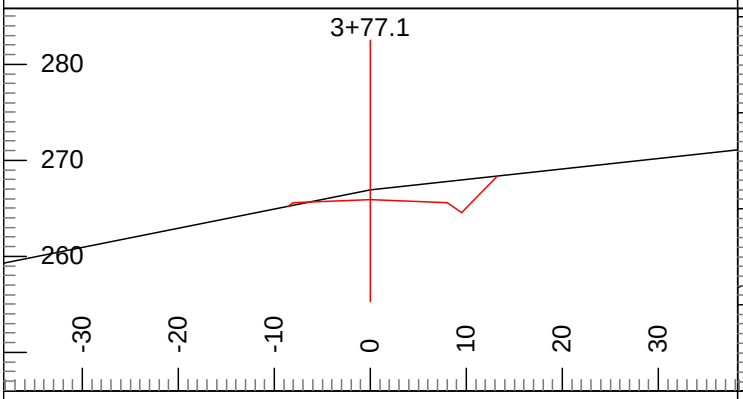
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur2		22/05/12



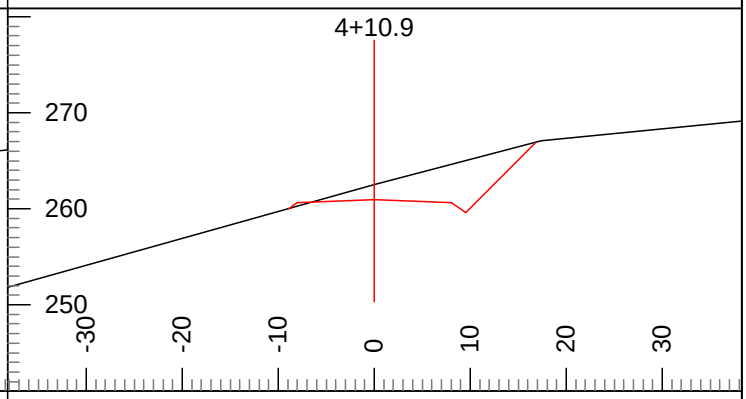
P-Stn :	3+34.5	V.Offset:	0.9	CL Elev:	271.5
H. Offset:	2.0	Cut Dp:	-0.7	Index:	209



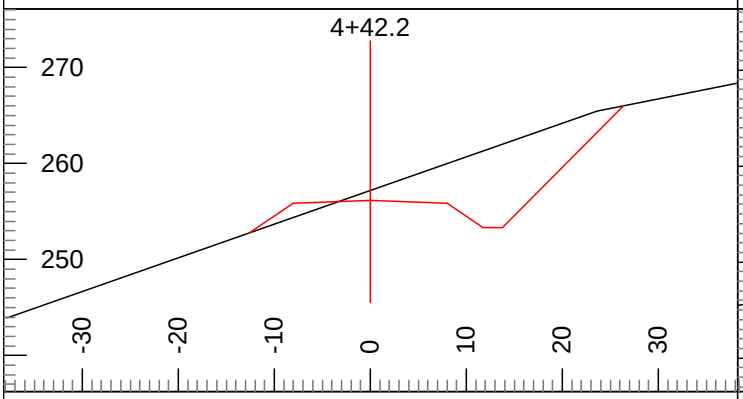
P-Stn :	3+49.2	V.Offset:	1.9	CL Elev:	269.7
H. Offset:	0.0	Cut Dp:	-1.9	Index:	210



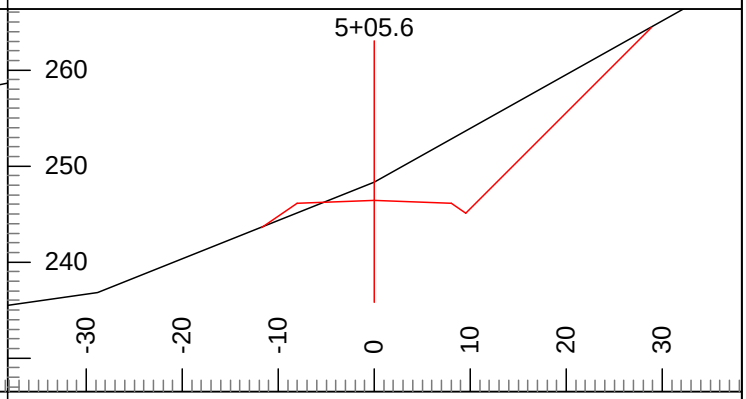
P-Stn :	3+78.2	V.Offset:	-1.0	CL Elev:	265.9
H. Offset:	0.0	Cut Dp:	1.0	Index:	211



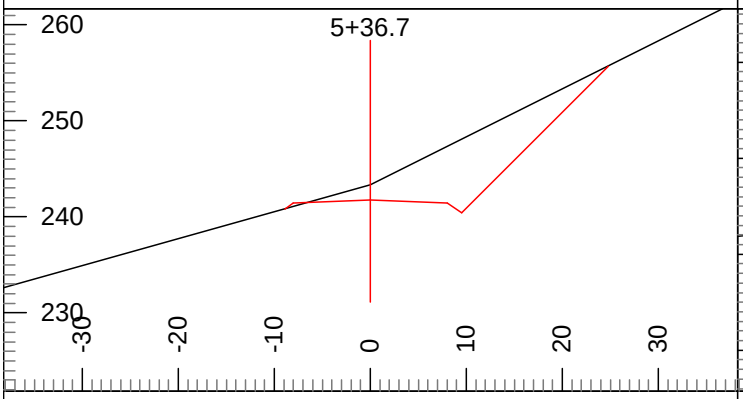
P-Stn :	4+12.0	V.Offset:	-1.6	CL Elev:	260.9
H. Offset:	0.0	Cut Dp:	1.6	Index:	212



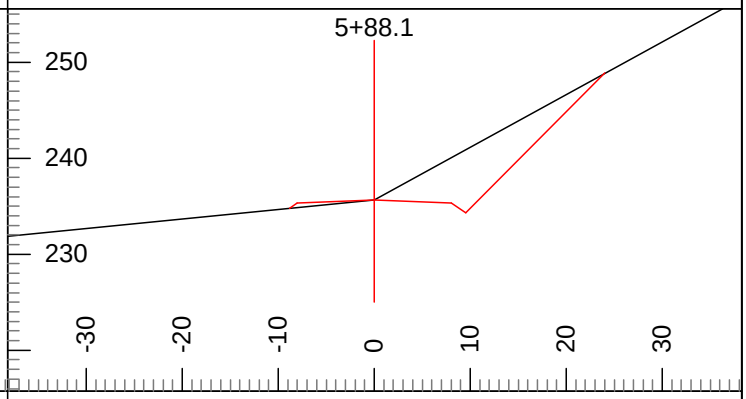
P-Stn :	4+43.4	V.Offset:	-1.0	CL Elev:	256.2
H. Offset:	0.0	Cut Dp:	1.0	Index:	213



P-Stn :	5+06.7	V.Offset:	-1.9	CL Elev:	246.4
H. Offset:	0.0	Cut Dp:	1.9	Index:	214

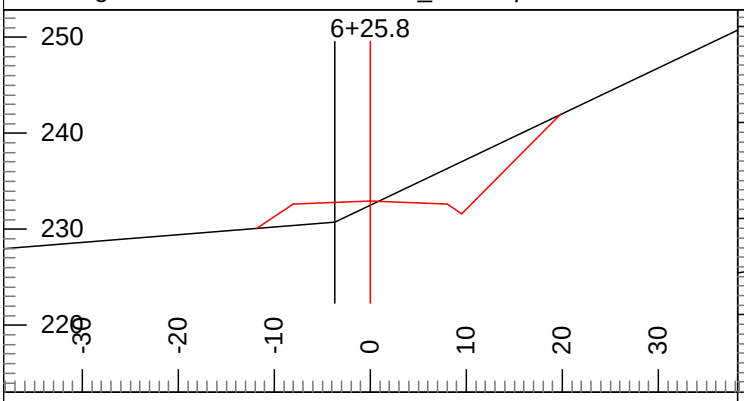


P-Stn :	5+37.8	V.Offset:	-1.6	CL Elev:	241.8
H. Offset:	0.0	Cut Dp:	1.6	Index:	215

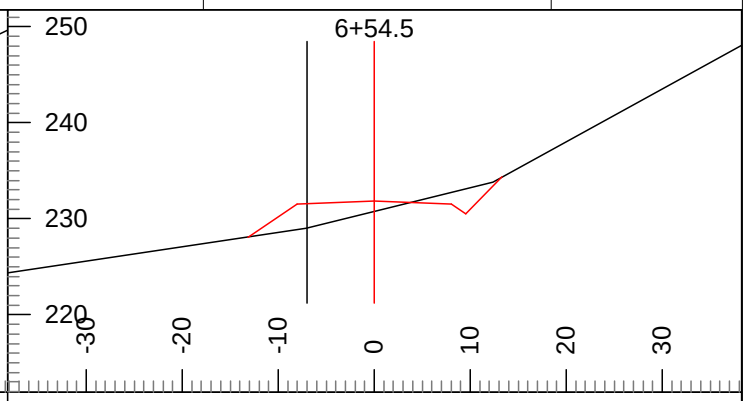


P-Stn :	5+89.2	V.Offset:	0.0	CL Elev:	235.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	216

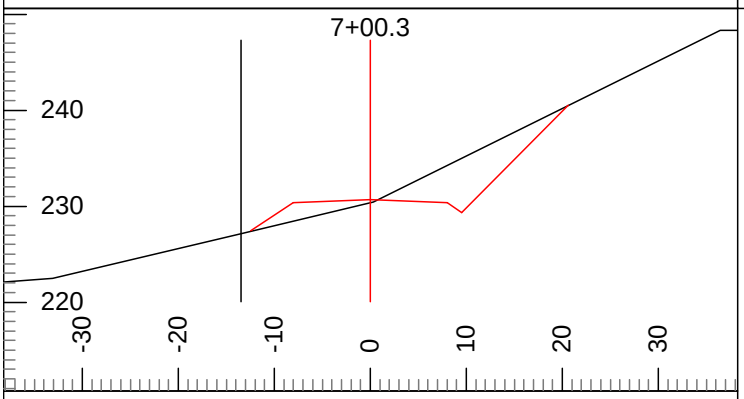
Softree Section	Scale 1:240	P. 3
C:\ProgramData\Softree\Data\sure_wood\spur2		22/05/12



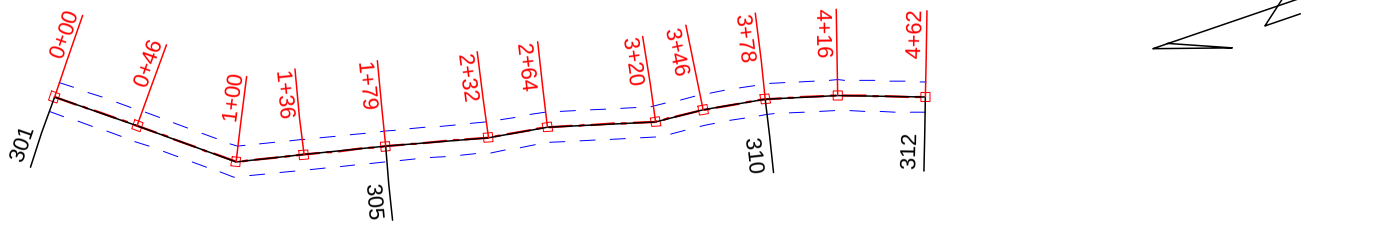
P-Stn :	6+26.9	V.Offset:	2.2	CL Elev:	232.9
H. Offset:	3.7	Cut Dp:	-0.4	Index:	217

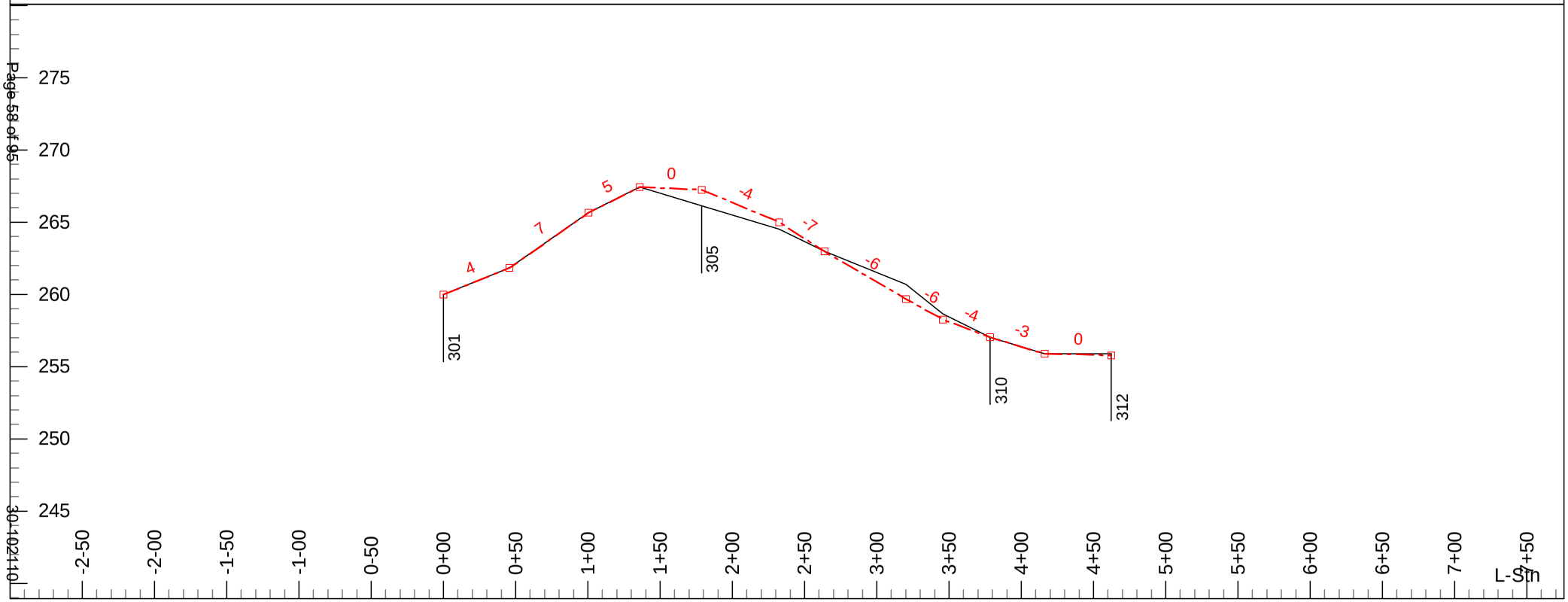


P-Stn :	6+56.0	V.Offset:	2.9	CL Elev:	231.8
H. Offset:	7.0	Cut Dp:	-1.1	Index:	218



P-Stn :	7+01.7	V.Offset:	3.5	CL Elev:	230.7
H. Offset:	13.3	Cut Dp:	-0.3	Index:	219





Sure Wood Timber Sale
Spur 3
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

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

Engineer: Heymann
22/05/12
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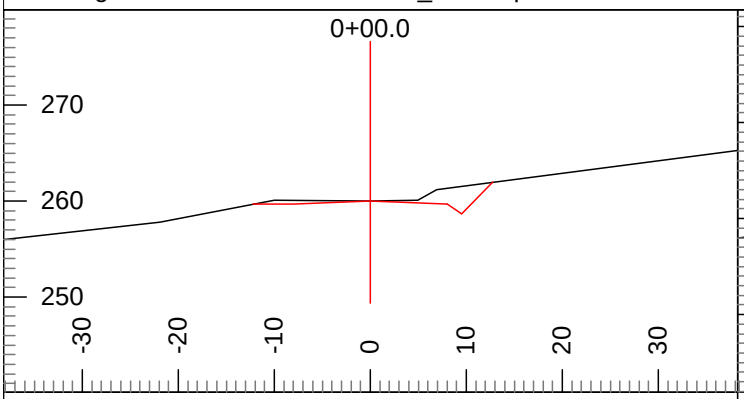
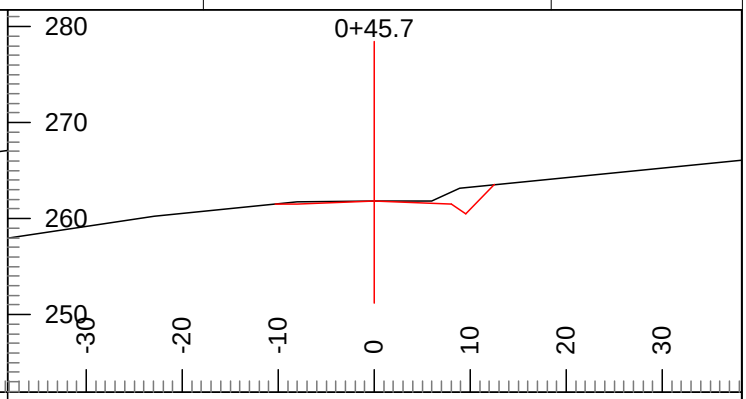
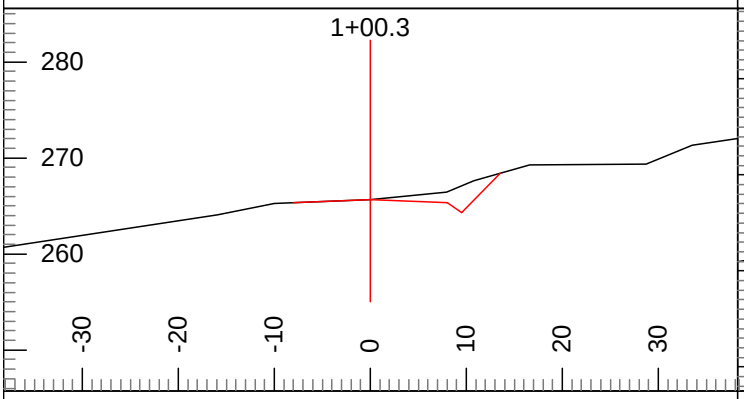
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur3		22/05/12



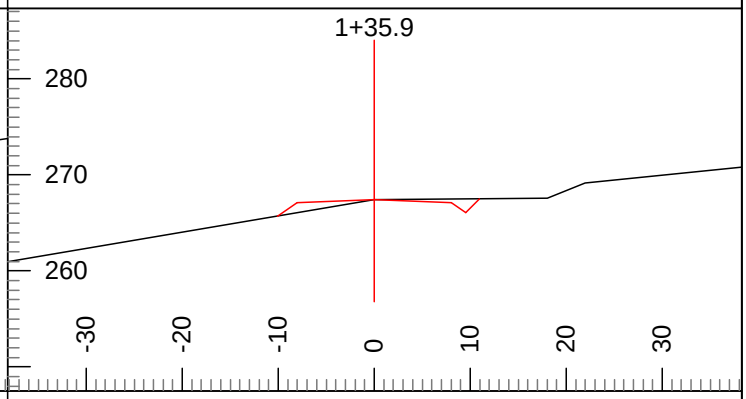
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	260.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	301



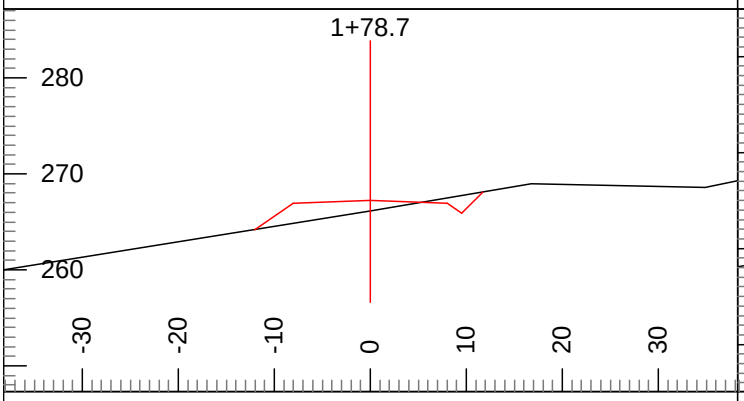
P-Stn :	0+45.7	V.Offset:	0.0	CL Elev:	261.8
H. Offset:	0.0	Cut Dp:	0.0	Index:	302



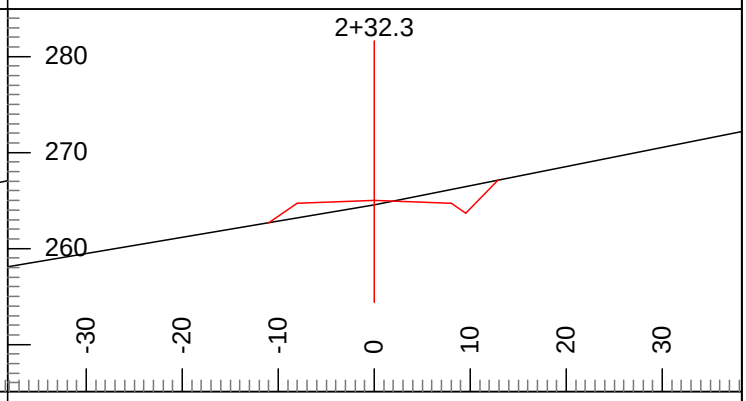
P-Stn :	1+00.3	V.Offset:	0.0	CL Elev:	265.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	303



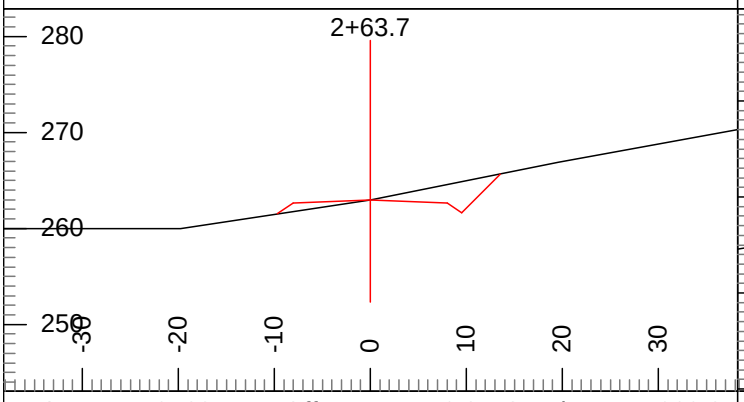
P-Stn :	1+35.9	V.Offset:	0.0	CL Elev:	267.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	304



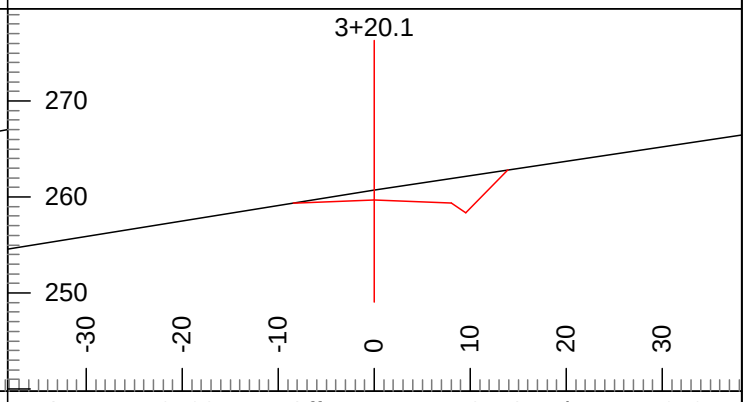
P-Stn :	1+78.7	V.Offset:	1.1	CL Elev:	267.2
H. Offset:	0.0	Cut Dp:	-1.1	Index:	305



P-Stn :	2+32.3	V.Offset:	0.5	CL Elev:	265.0
H. Offset:	0.0	Cut Dp:	-0.5	Index:	306

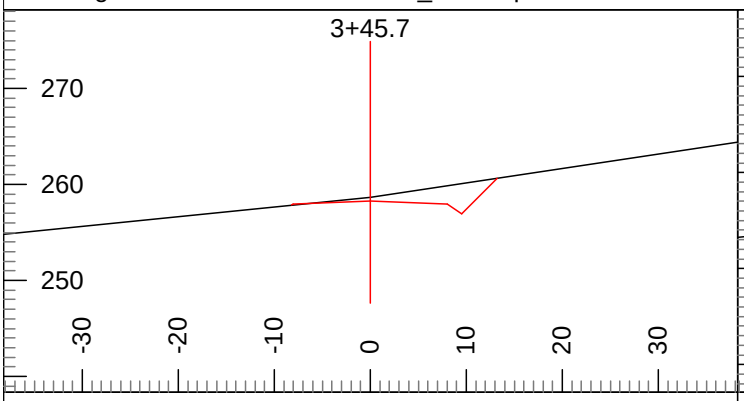


P-Stn :	2+63.7	V.Offset:	0.0	CL Elev:	263.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	307

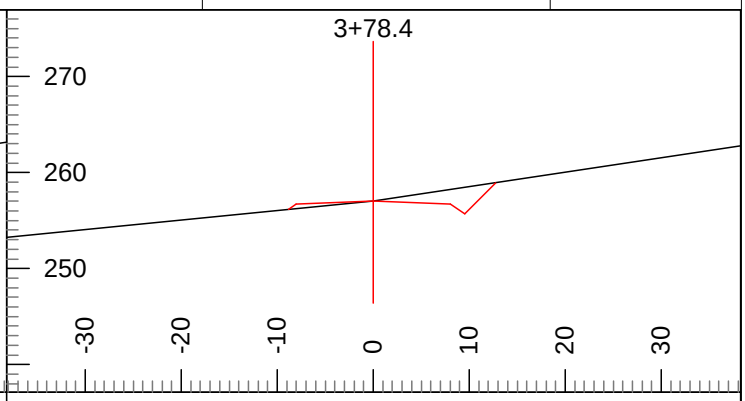


P-Stn :	3+20.1	V.Offset:	-1.0	CL Elev:	259.7
H. Offset:	0.0	Cut Dp:	1.0	Index:	308

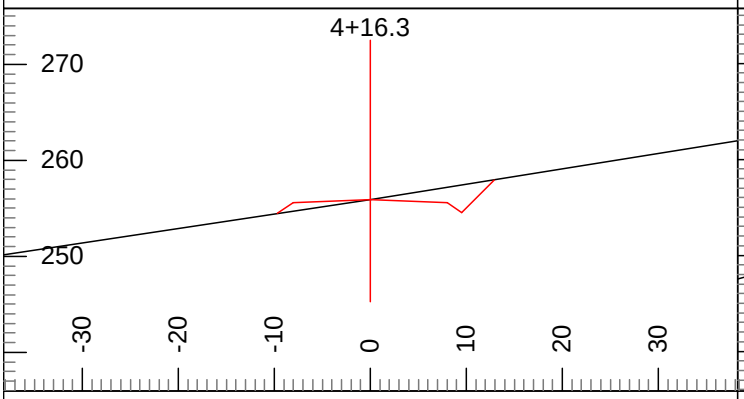
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur3		22/05/12



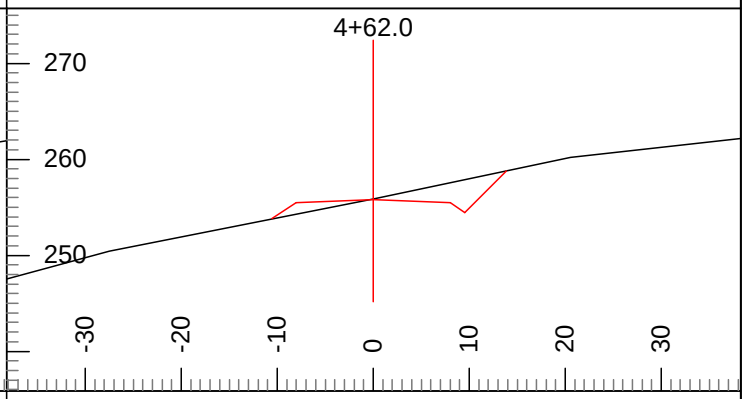
P-Stn :	3+45.7	V.Offset:	-0.4	CL Elev:	258.3
H. Offset:	0.0	Cut Dp:	0.4	Index:	309



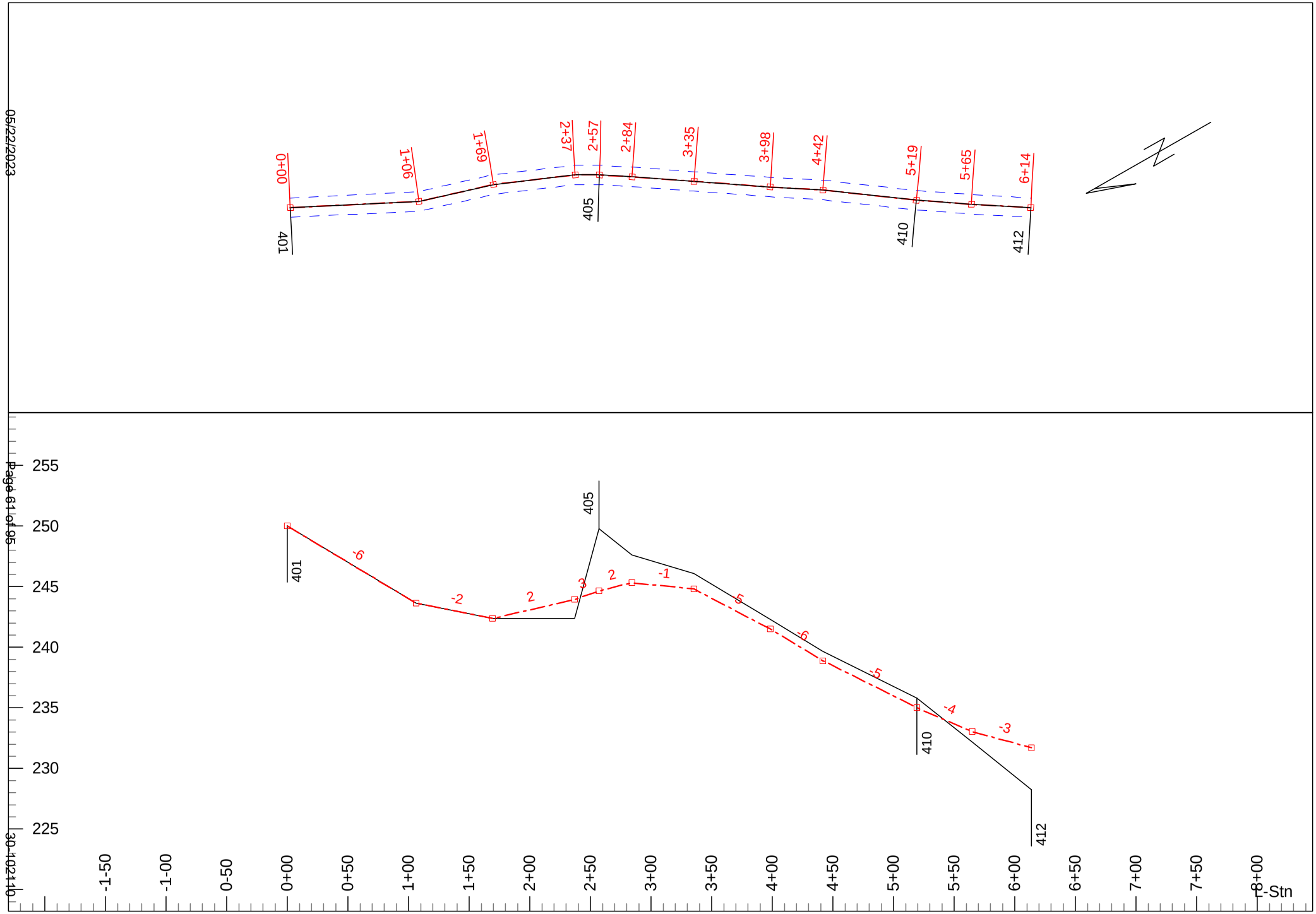
P-Stn :	3+78.4	V.Offset:	0.0	CL Elev:	257.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	310



P-Stn :	4+16.3	V.Offset:	0.0	CL Elev:	255.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	311



P-Stn :	4+62.0	V.Offset:	-0.1	CL Elev:	255.8
H. Offset:	0.0	Cut Dp:	0.1	Index:	312



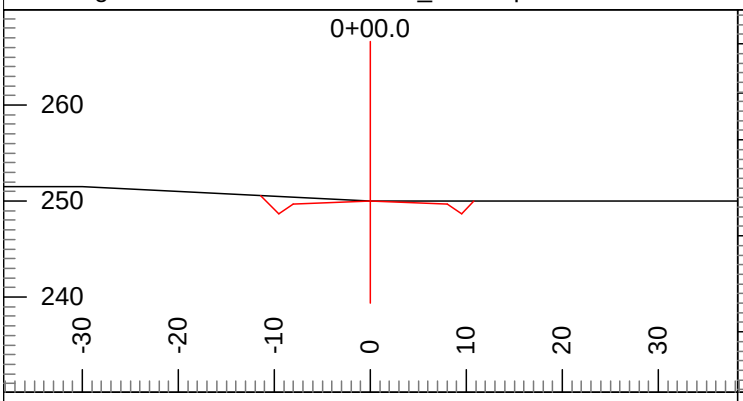
Sure Wood Timber Sale
Spur 4
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

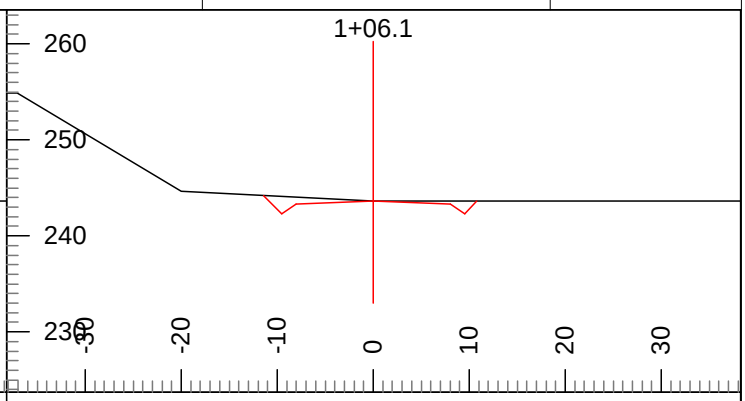
Plan Scale 1:1200
Profile Vert Scale 1:120
Profile Horz Scale 1:1200

Engineer: Heymann
22/05/12

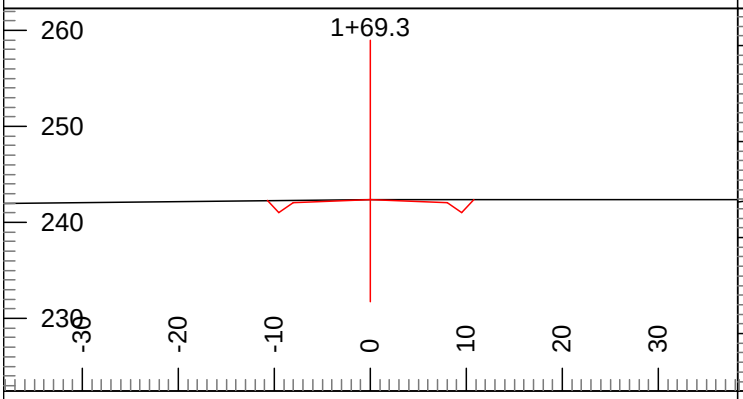
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur4		22/05/12



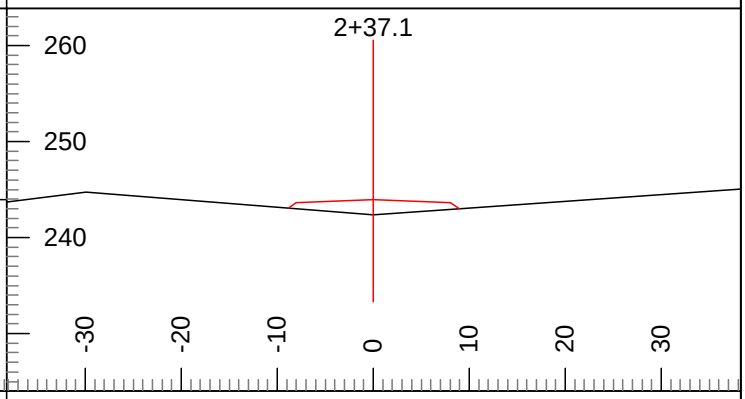
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	250.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	401



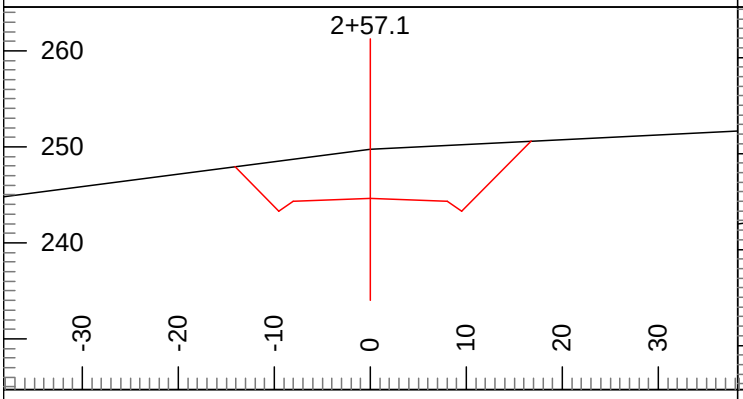
P-Stn :	1+06.1	V.Offset:	0.0	CL Elev:	243.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	402



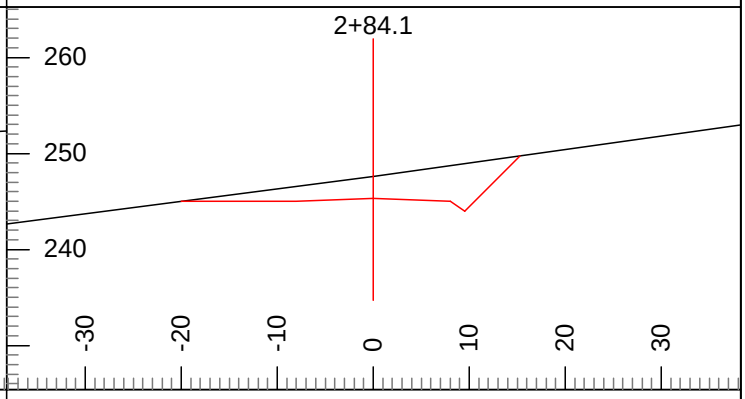
P-Stn :	1+69.3	V.Offset:	0.0	CL Elev:	242.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	403



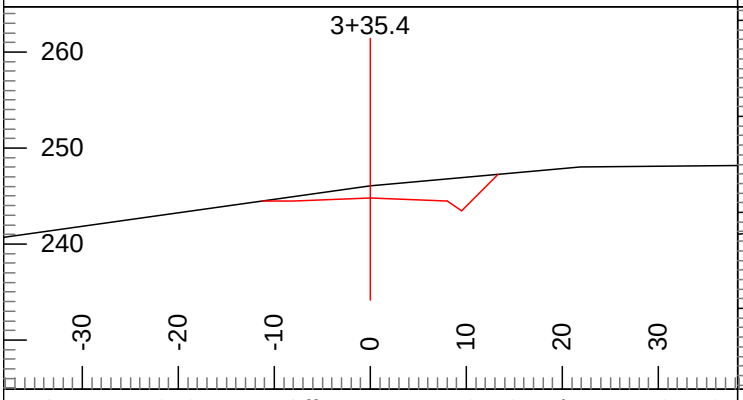
P-Stn :	2+37.1	V.Offset:	1.6	CL Elev:	243.9
H. Offset:	0.0	Cut Dp:	-1.6	Index:	404



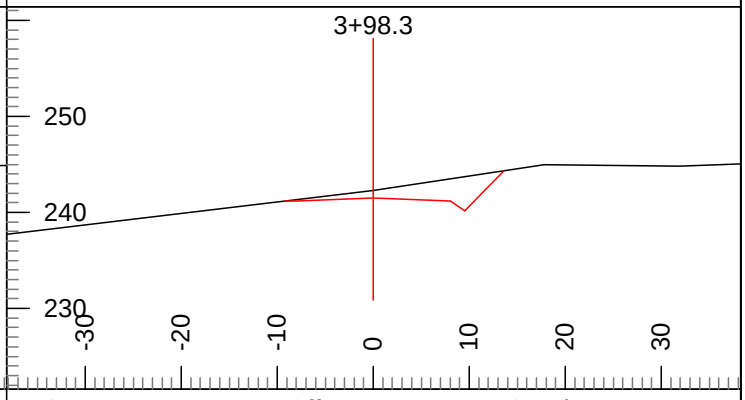
P-Stn :	2+57.1	V.Offset:	-5.1	CL Elev:	244.6
H. Offset:	0.0	Cut Dp:	5.1	Index:	405



P-Stn :	2+84.1	V.Offset:	-2.3	CL Elev:	245.3
H. Offset:	0.0	Cut Dp:	2.3	Index:	406

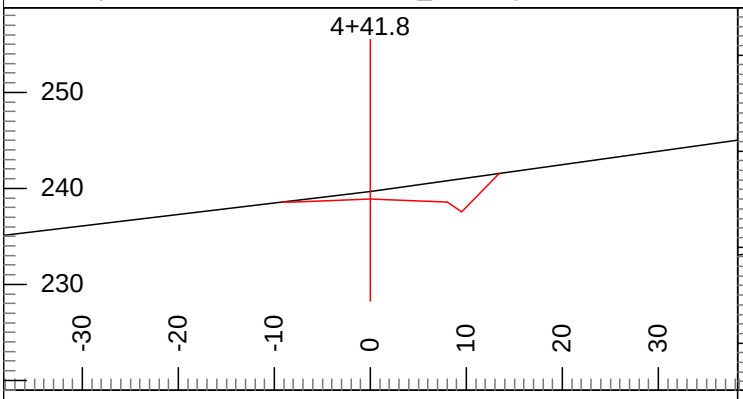


P-Stn :	3+35.4	V.Offset:	-1.3	CL Elev:	244.8
H. Offset:	0.0	Cut Dp:	1.3	Index:	407

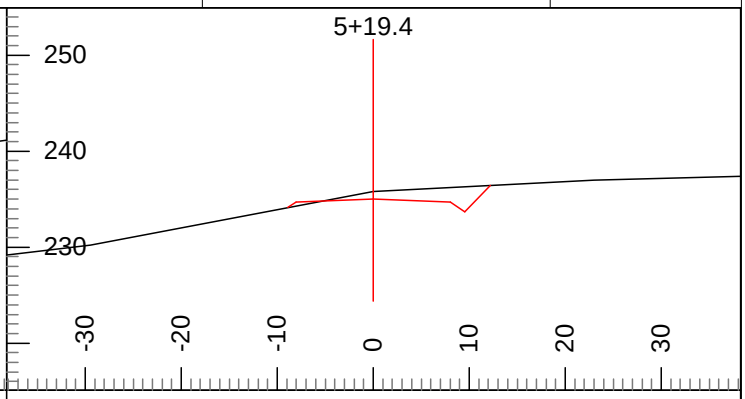


P-Stn :	3+98.3	V.Offset:	-0.8	CL Elev:	241.5
H. Offset:	0.0	Cut Dp:	0.8	Index:	408

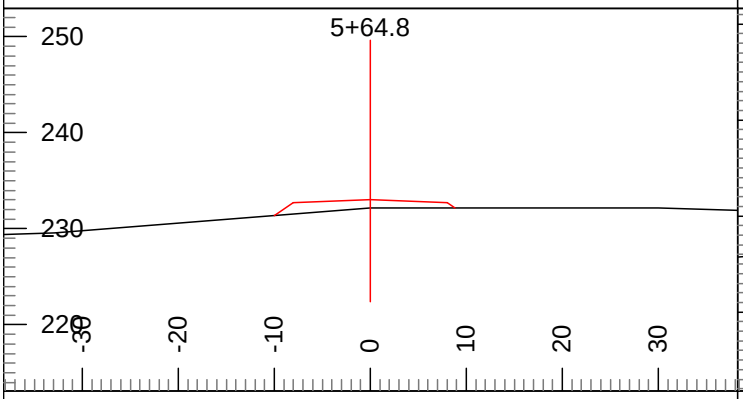
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur4		22/05/12



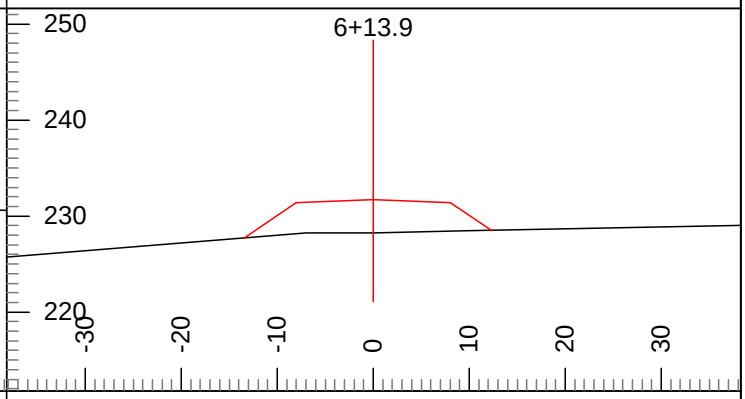
P-Stn :	4+41.8	V.Offset:	-0.8	CL Elev:	238.9
H. Offset:	0.0	Cut Dp:	0.8	Index:	409



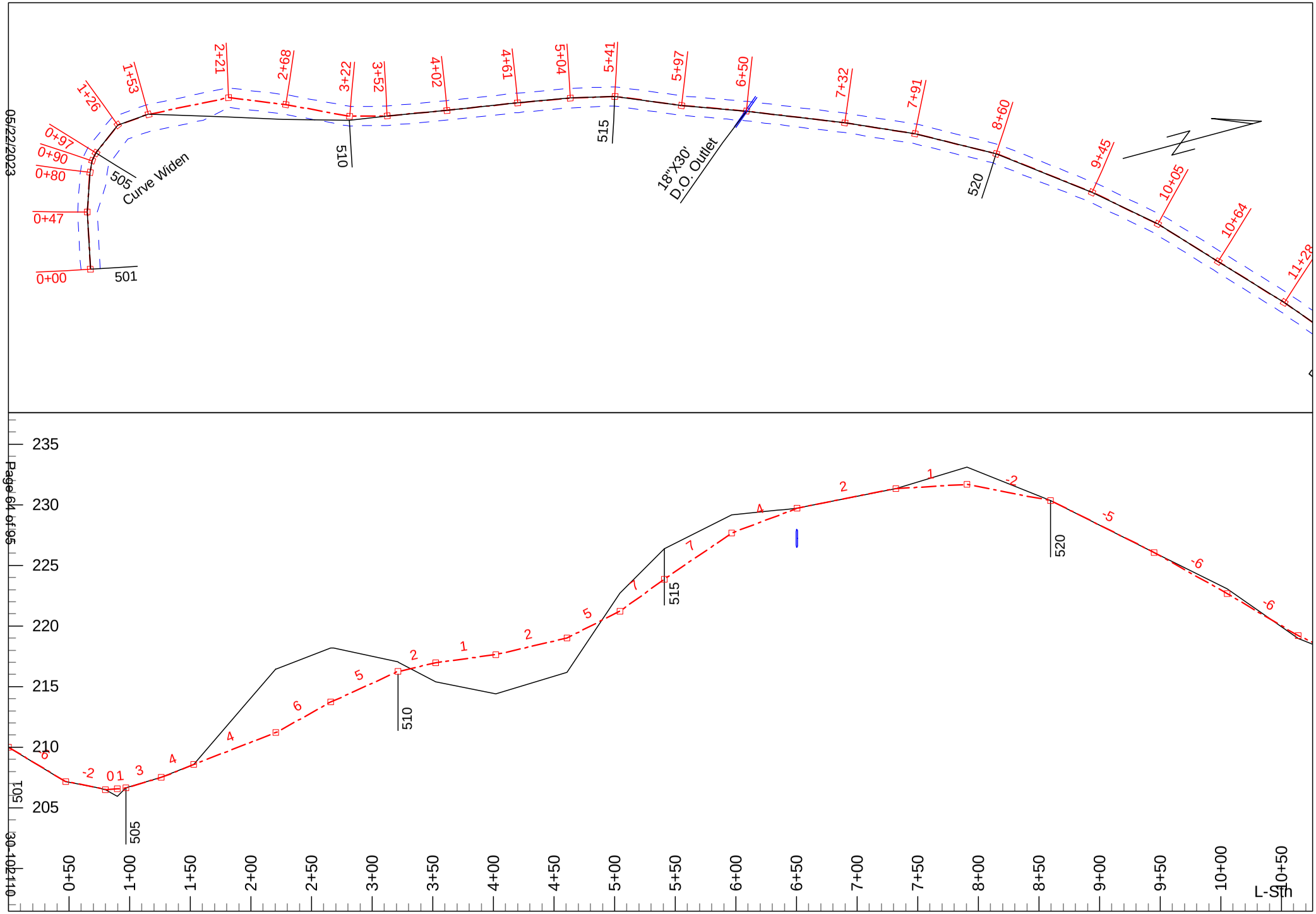
P-Stn :	5+19.4	V.Offset:	-0.8	CL Elev:	235.0
H. Offset:	0.0	Cut Dp:	0.8	Index:	410



P-Stn :	5+64.8	V.Offset:	0.9	CL Elev:	233.0
H. Offset:	0.0	Cut Dp:	-0.9	Index:	411



P-Stn :	6+13.9	V.Offset:	3.5	CL Elev:	231.7
H. Offset:	0.0	Cut Dp:	-3.5	Index:	412



Sure Wood Timber Sale
Spur 5
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

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

Engineer: Heymann
22/05/12
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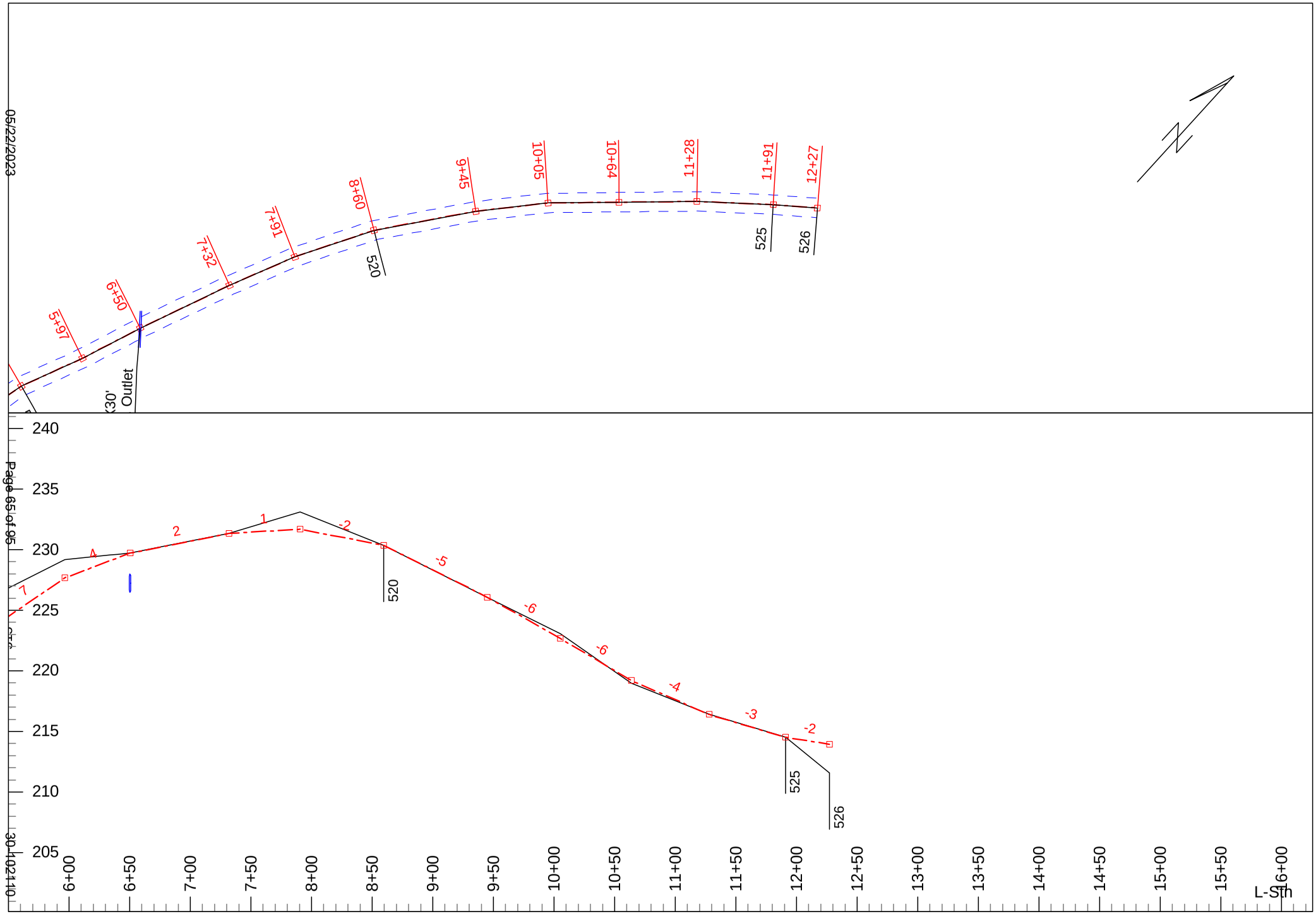


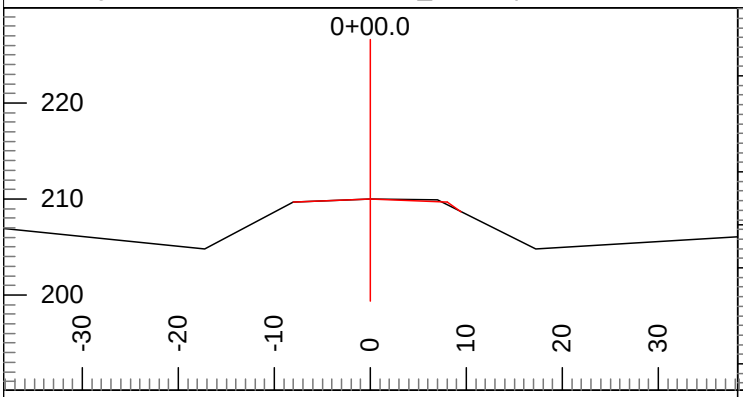
Sure Wood Timber Sale
Spur 5
Contract #: 30-102110

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

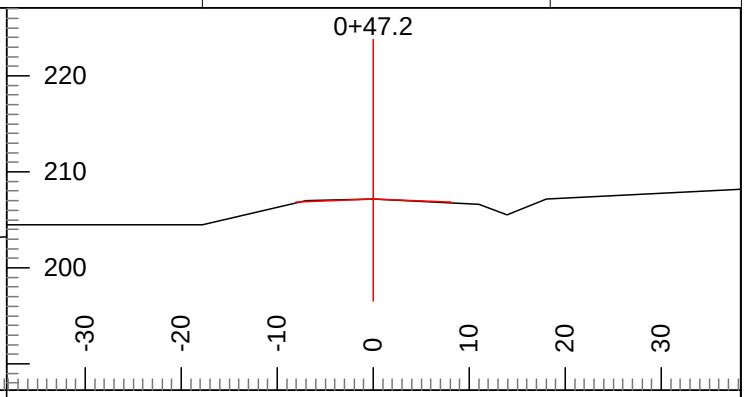
Plan Scale 1:1200
Profile Vert Scale 1:120
Profile Horz Scale 1:1200

Engineer: Heymann
22/05/12
Page 2 of 2

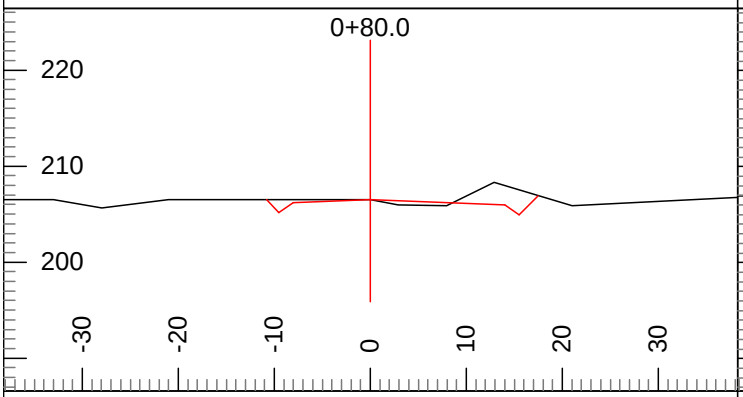
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur5		22/05/12



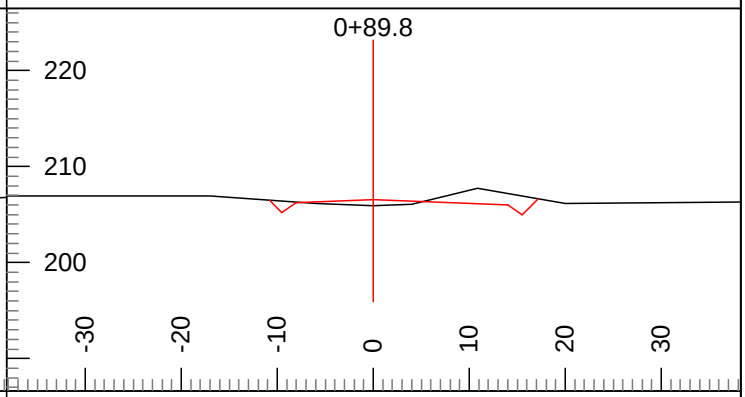
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	210.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	501



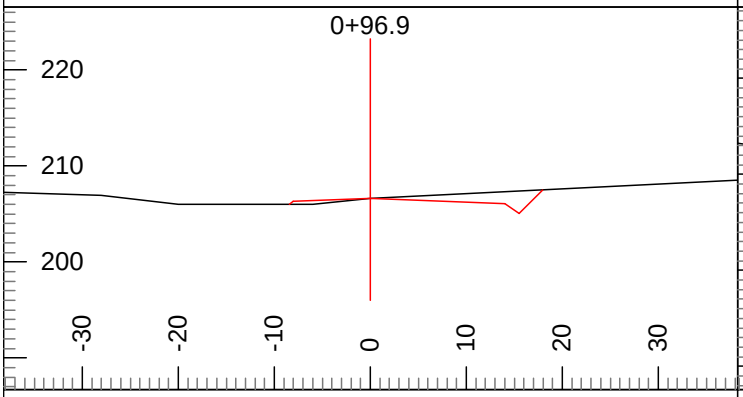
P-Stn :	0+47.2	V.Offset:	0.0	CL Elev:	207.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	502



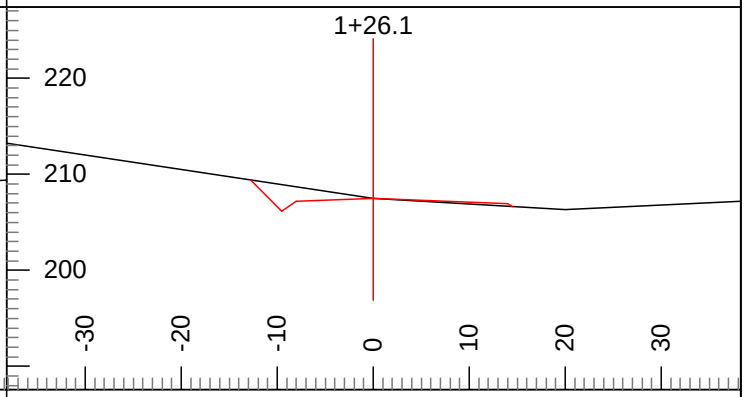
P-Stn :	0+80.0	V.Offset:	0.0	CL Elev:	206.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	503



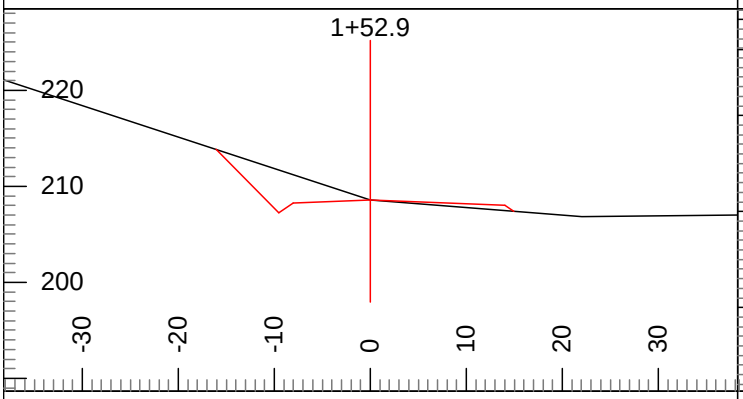
P-Stn :	0+89.8	V.Offset:	0.6	CL Elev:	206.6
H. Offset:	0.0	Cut Dp:	-0.6	Index:	504



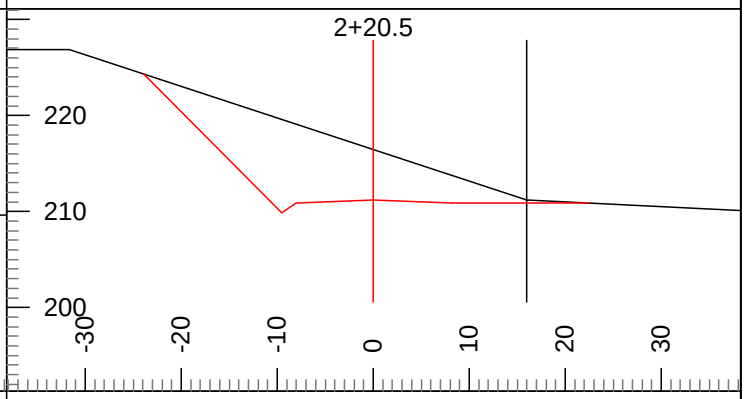
P-Stn :	0+96.9	V.Offset:	0.0	CL Elev:	206.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	505



P-Stn :	1+26.1	V.Offset:	0.0	CL Elev:	207.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	506

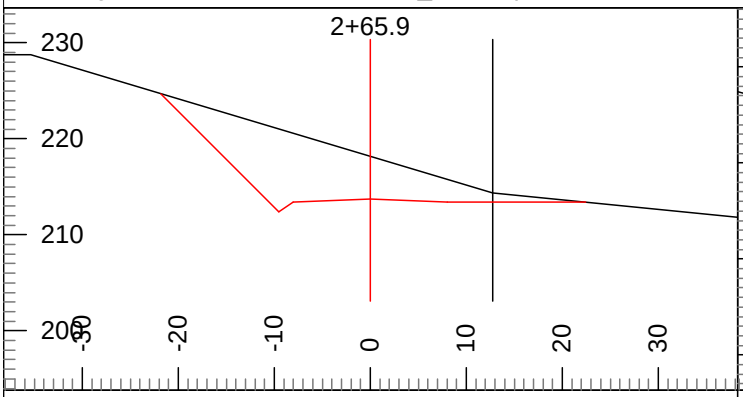


P-Stn :	1+52.9	V.Offset:	0.0	CL Elev:	208.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	507

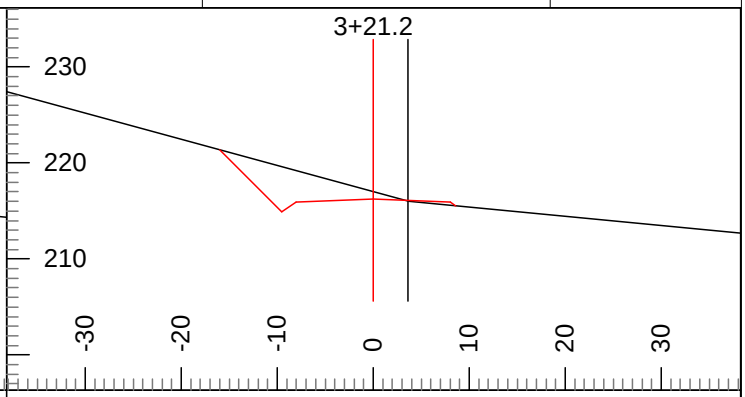


P-Stn :	2+18.5	V.Offset:	0.0	CL Elev:	211.2
H. Offset:	-15.9	Cut Dp:	5.2	Index:	508

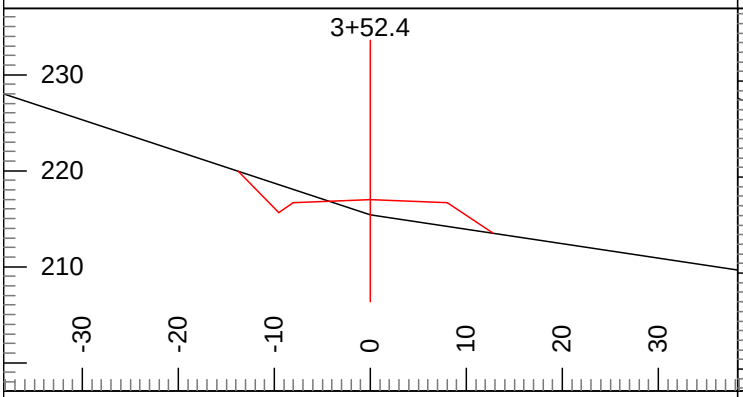
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur5		22/05/12



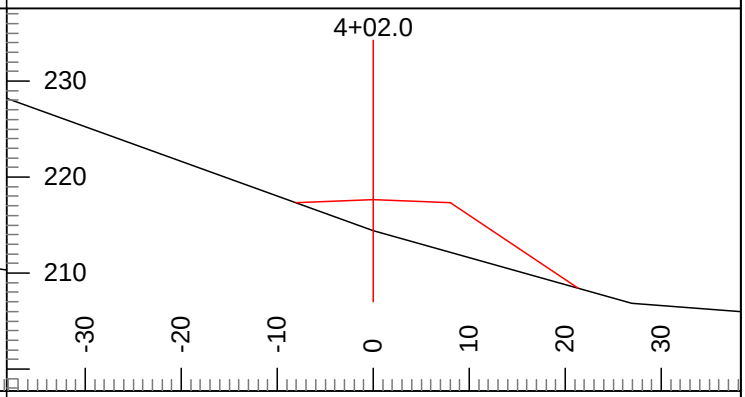
P-Stn :	2+63.9	V.Offset:	-0.6	CL Elev:	213.7
H. Offset:	-12.7	Cut Dp:	4.5	Index:	509



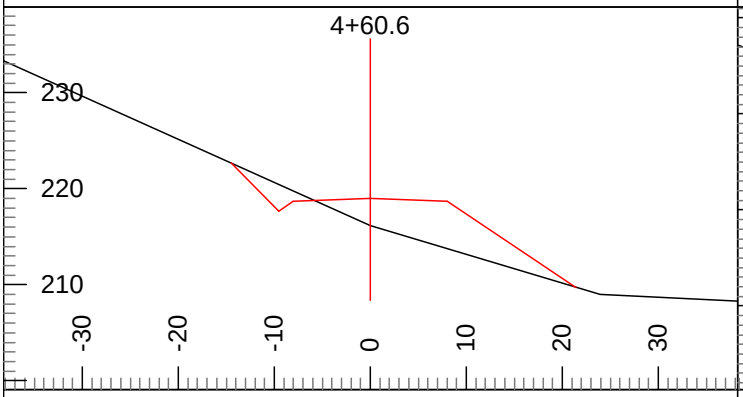
P-Stn :	3+18.8	V.Offset:	0.2	CL Elev:	216.2
H. Offset:	-3.6	Cut Dp:	0.8	Index:	510



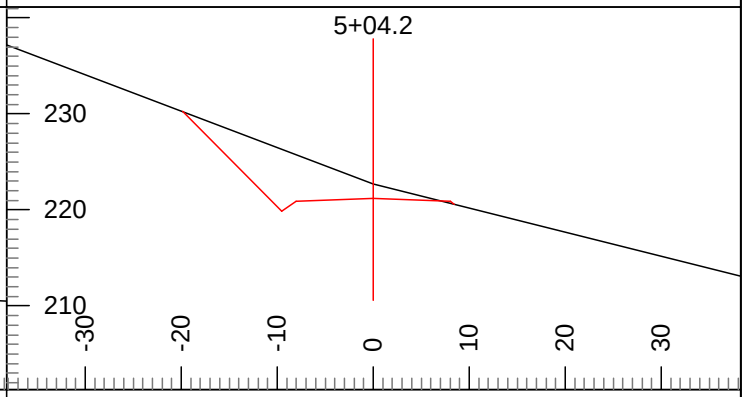
P-Stn :	3+50.1	V.Offset:	1.6	CL Elev:	217.0
H. Offset:	0.0	Cut Dp:	-1.6	Index:	511



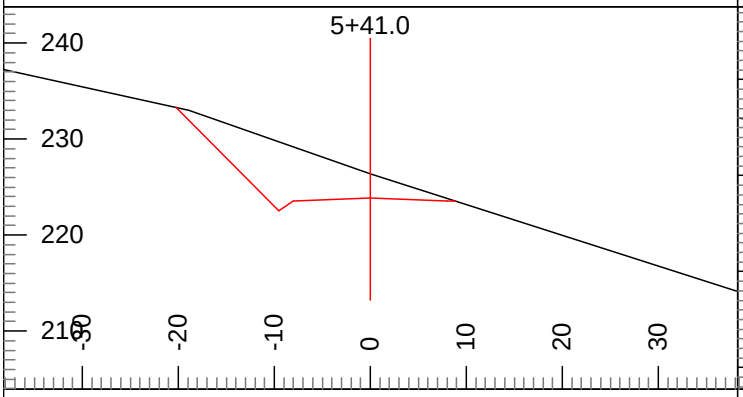
P-Stn :	3+99.7	V.Offset:	3.2	CL Elev:	217.6
H. Offset:	0.0	Cut Dp:	-3.2	Index:	512



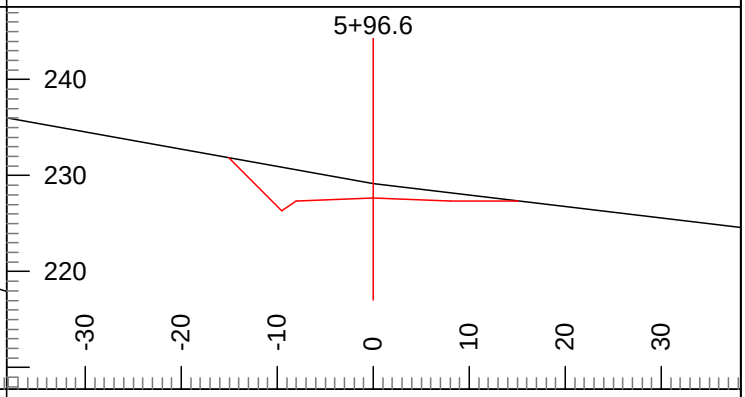
P-Stn :	4+58.3	V.Offset:	2.8	CL Elev:	219.0
H. Offset:	0.0	Cut Dp:	-2.8	Index:	513



P-Stn :	5+01.9	V.Offset:	-1.5	CL Elev:	221.2
H. Offset:	0.0	Cut Dp:	1.5	Index:	514

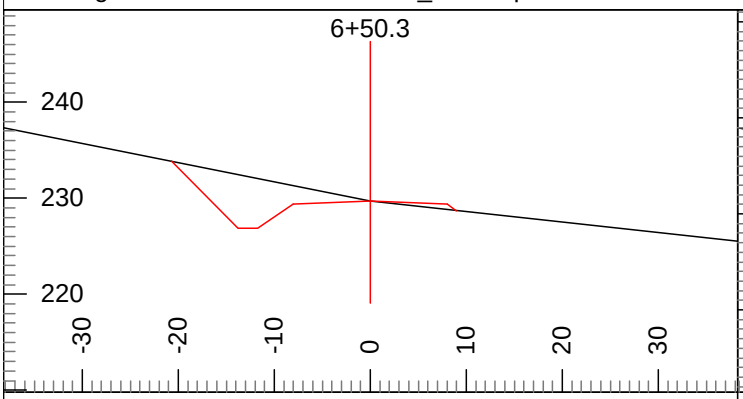


P-Stn :	5+38.7	V.Offset:	-2.5	CL Elev:	223.9
H. Offset:	0.0	Cut Dp:	2.5	Index:	515

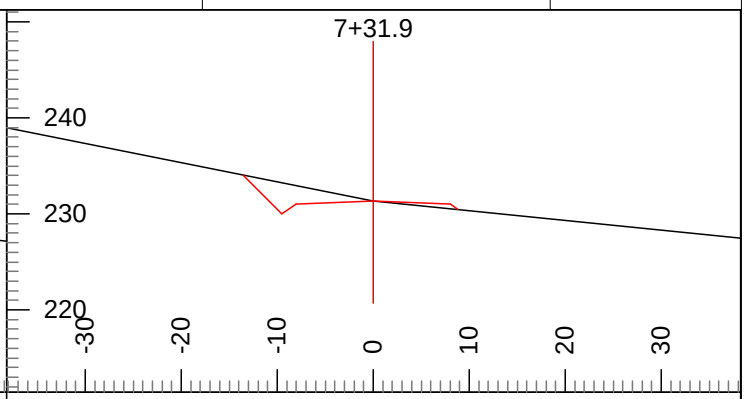


P-Stn :	5+94.2	V.Offset:	-1.5	CL Elev:	227.7
H. Offset:	0.0	Cut Dp:	1.5	Index:	516

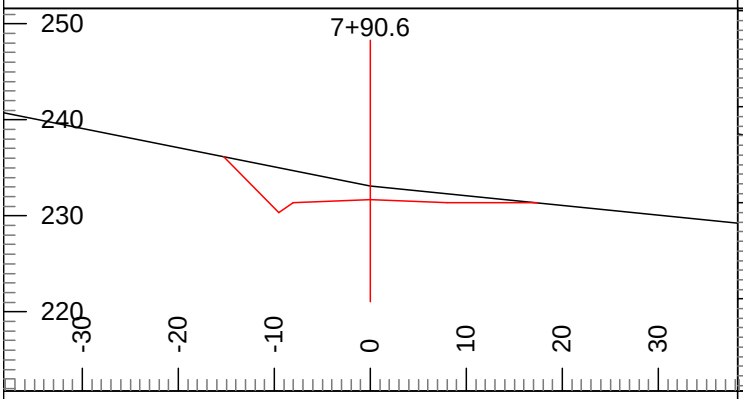
Softree Section	Scale 1:240	P. 3
C:\ProgramData\Softree\Data\sure_wood\spur5		22/05/12



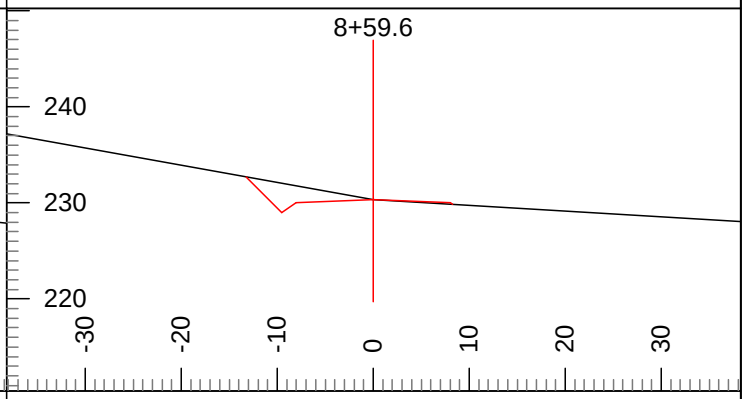
P-Stn :	6+47.9	V.Offset:	0.0	CL Elev:	229.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	517



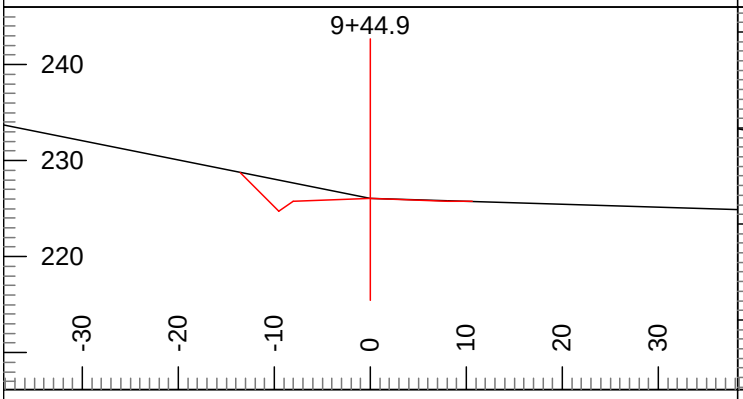
P-Stn :	7+29.6	V.Offset:	0.0	CL Elev:	231.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	518



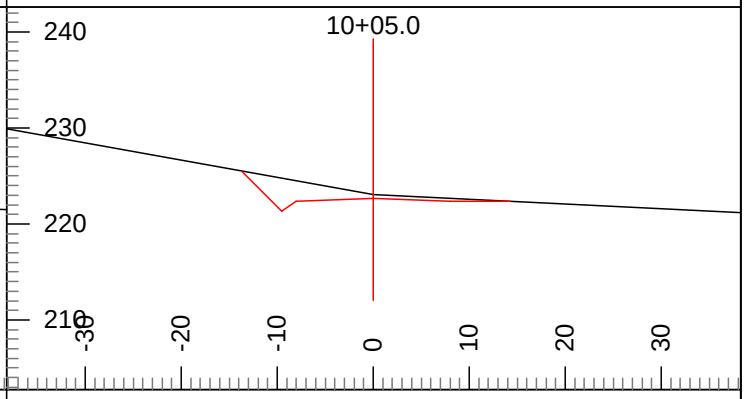
P-Stn :	7+88.3	V.Offset:	-1.4	CL Elev:	231.7
H. Offset:	0.0	Cut Dp:	1.4	Index:	519



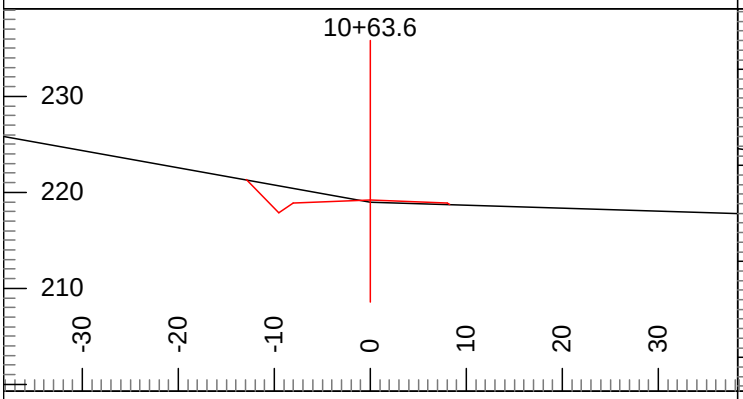
P-Stn :	8+57.2	V.Offset:	0.0	CL Elev:	230.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	520



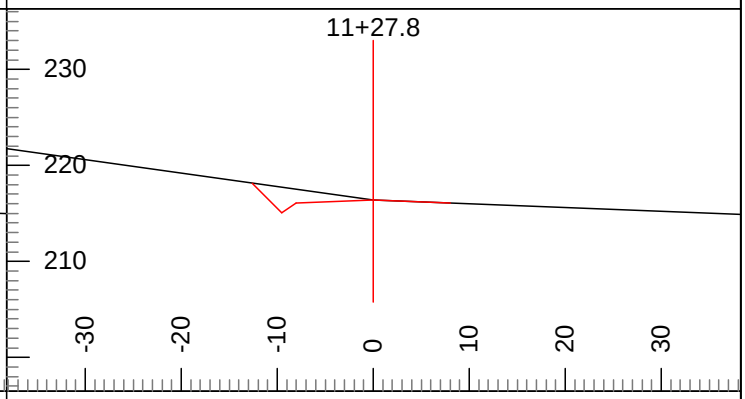
P-Stn :	9+42.5	V.Offset:	0.0	CL Elev:	226.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	521



P-Stn :	10+02.7	V.Offset:	-0.4	CL Elev:	222.7
H. Offset:	0.0	Cut Dp:	0.4	Index:	522

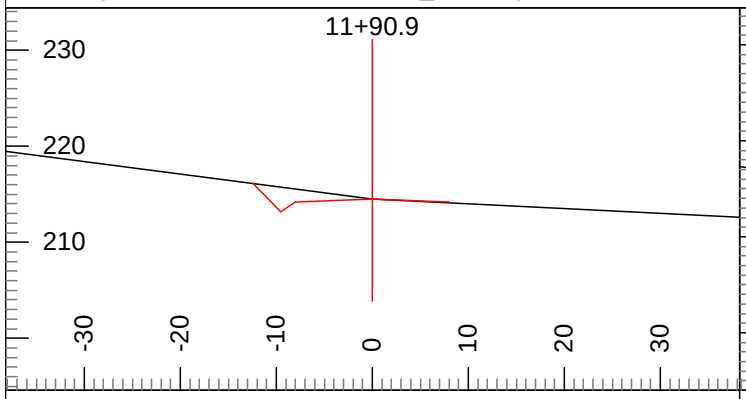


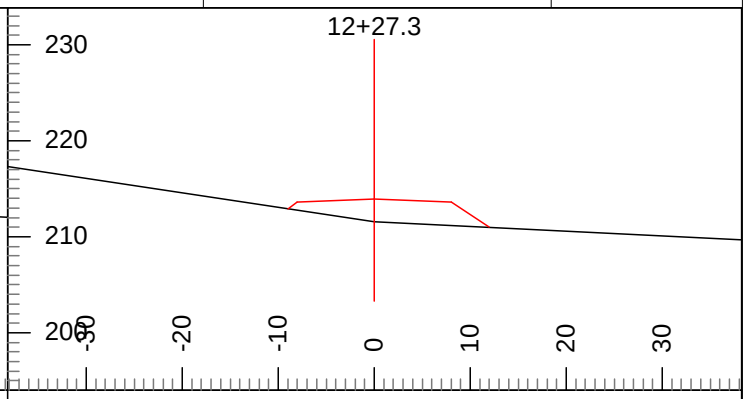
P-Stn :	10+61.3	V.Offset:	0.2	CL Elev:	219.2
H. Offset:	0.0	Cut Dp:	-0.2	Index:	523



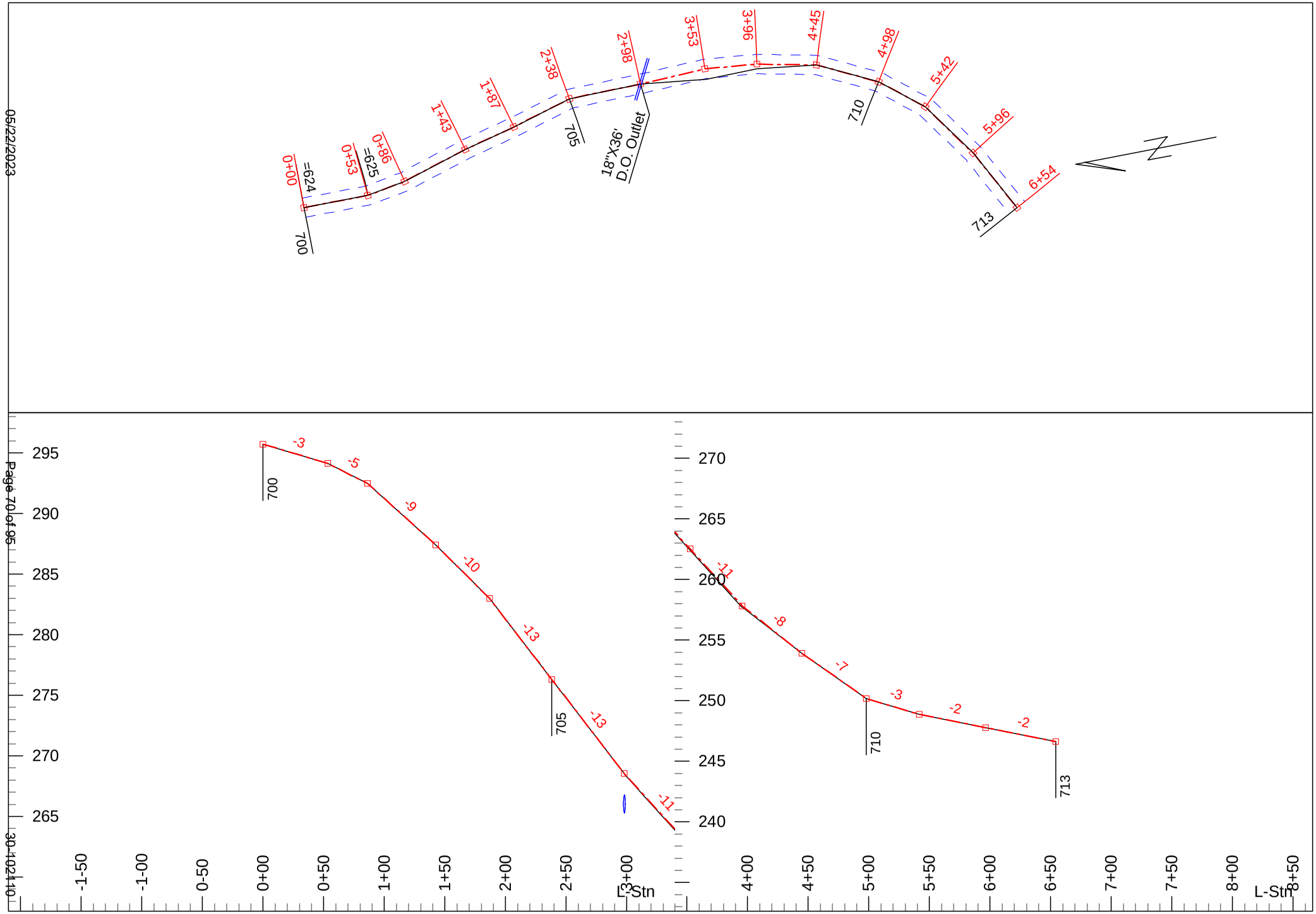
P-Stn :	11+25.5	V.Offset:	0.0	CL Elev:	216.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	524

Softree Section	Scale 1:240	P. 4
C:\ProgramData\Softree\Data\sure_wood\spur5		22/05/12





P-Stn :	11+88.5	V.Offset:	0.0	CL Elev:	214.5	P-Stn :	12+25.0	V.Offset:	2.3	CL Elev:	213.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	525	H. Offset:	0.0	Cut Dp:	-2.3	Index:	526



Sure Wood Timber Sale
Spur 6
Contract #: 30-102110

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

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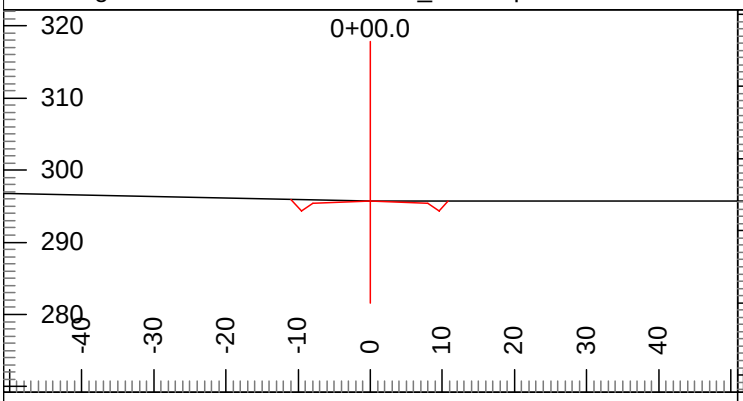
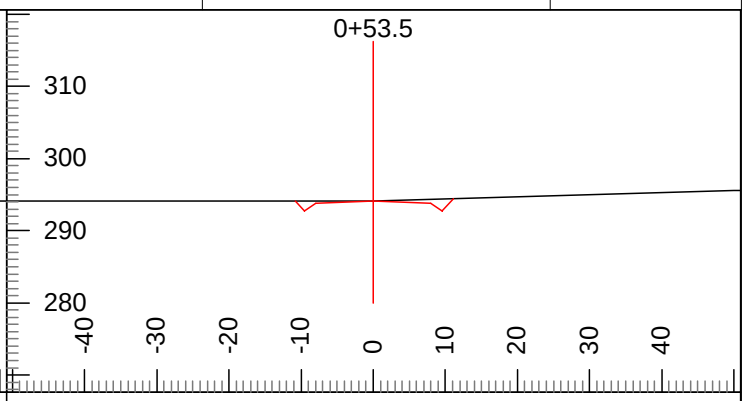
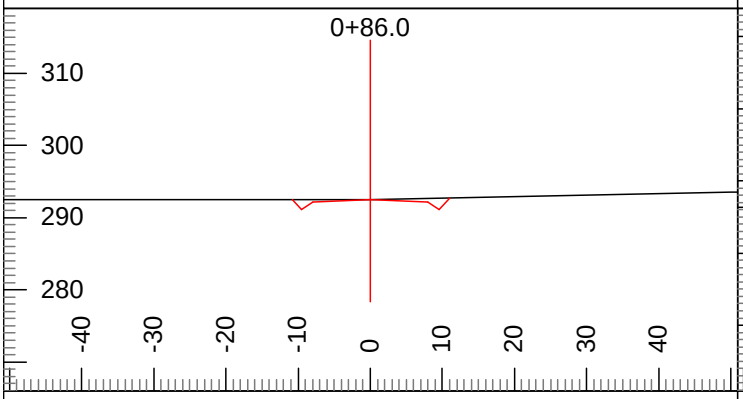
Softree Section	Scale 1:319	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur6		22/05/12



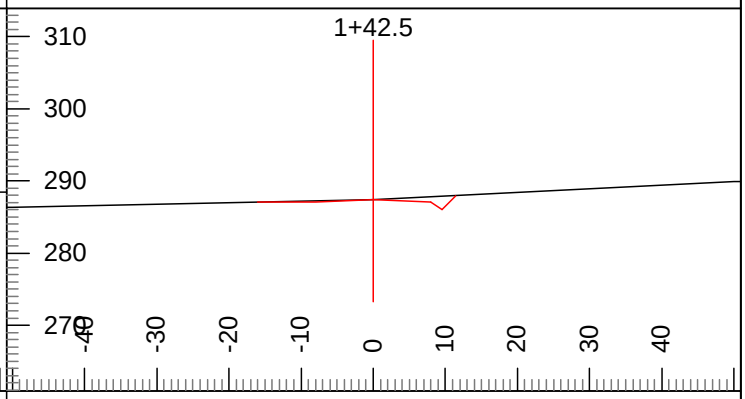
P-Stn :	0+00.0	V.Offset:	0.0	CL Elev:	295.7
H. Offset:	0.0	Cut Dp:	0.0	Index:	700



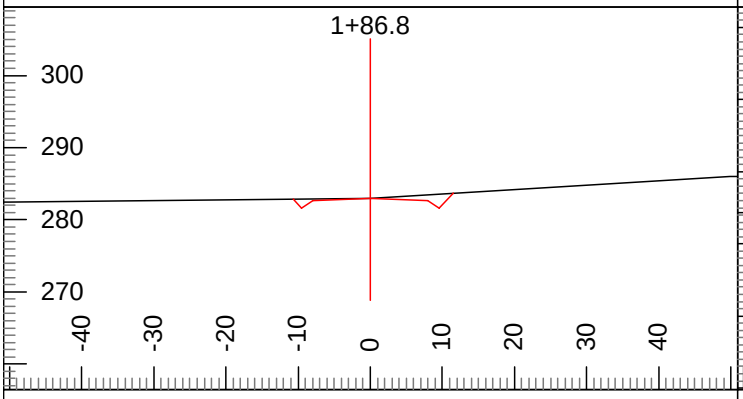
P-Stn :	0+53.5	V.Offset:	0.0	CL Elev:	294.1
H. Offset:	0.0	Cut Dp:	0.0	Index:	701



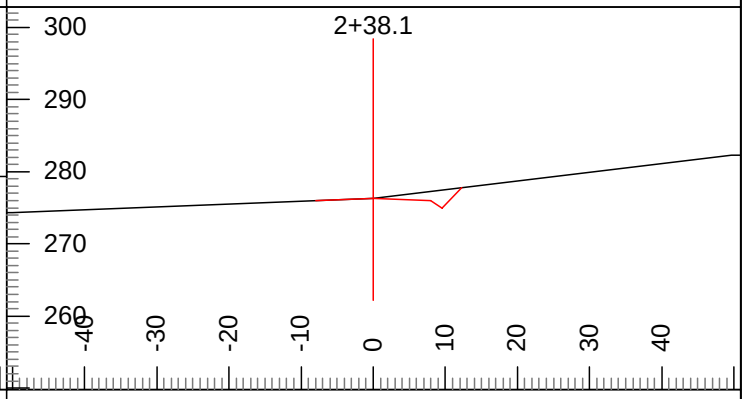
P-Stn :	0+86.0	V.Offset:	0.0	CL Elev:	292.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	702



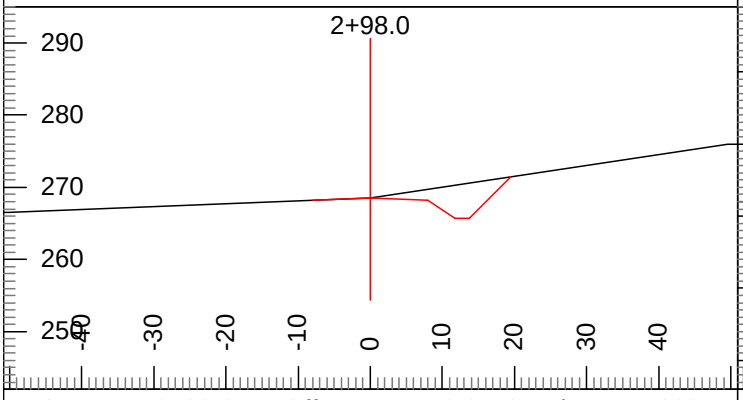
P-Stn :	1+42.5	V.Offset:	0.0	CL Elev:	287.4
H. Offset:	0.0	Cut Dp:	0.0	Index:	703



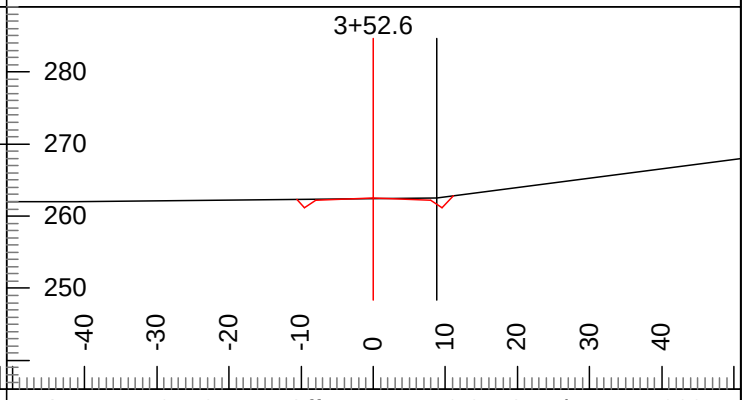
P-Stn :	1+86.8	V.Offset:	0.0	CL Elev:	283.0
H. Offset:	0.0	Cut Dp:	0.0	Index:	704



P-Stn :	2+38.1	V.Offset:	0.0	CL Elev:	276.3
H. Offset:	0.0	Cut Dp:	0.0	Index:	705

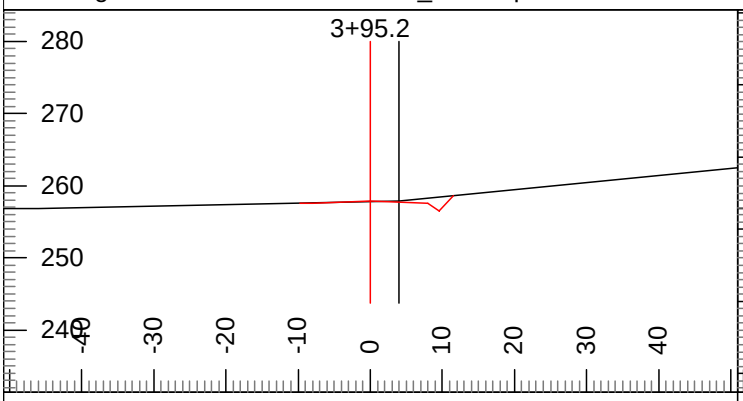


P-Stn :	2+98.0	V.Offset:	0.0	CL Elev:	268.5
H. Offset:	0.0	Cut Dp:	0.0	Index:	706

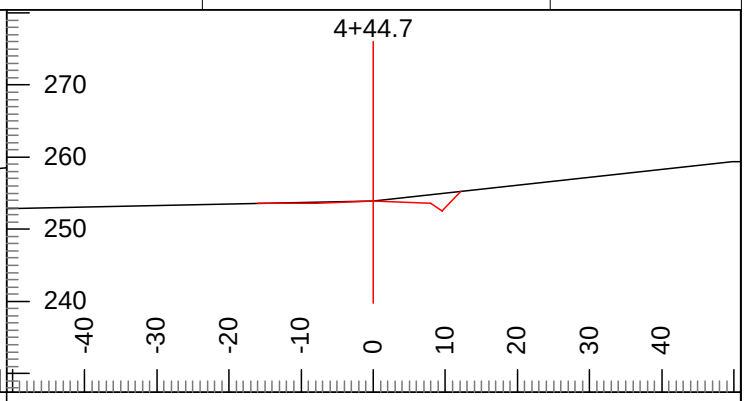


P-Stn :	3+52.5	V.Offset:	0.0	CL Elev:	262.5
H. Offset:	-8.8	Cut Dp:	-0.1	Index:	707

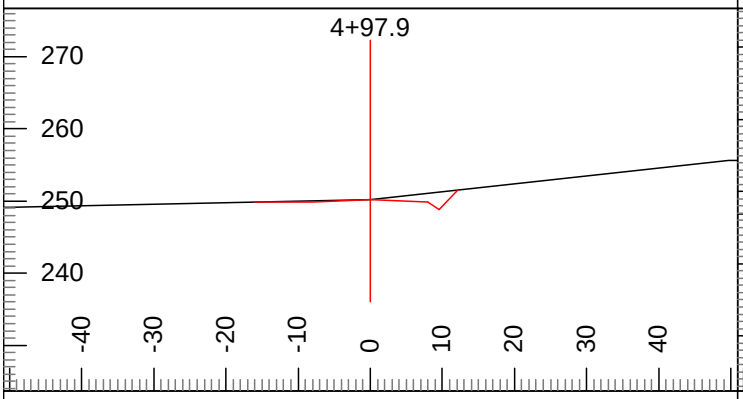
Softree Section	Scale 1:319	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur6		22/05/12



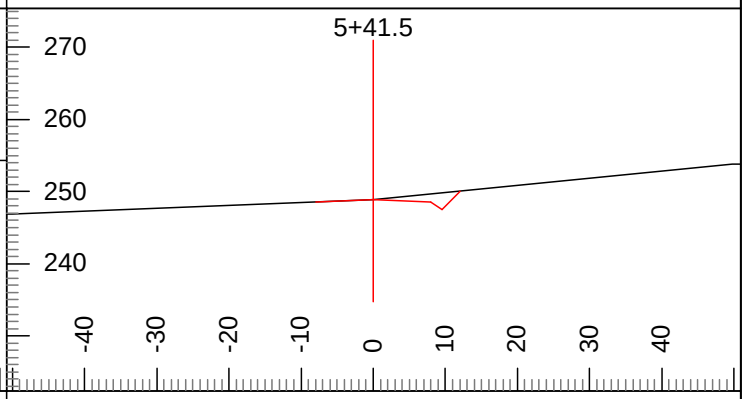
P-Stn :	3+95.2	V.Offset:	0.0	CL Elev:	257.9
H. Offset:	-4.0	Cut Dp:	-0.1	Index:	708



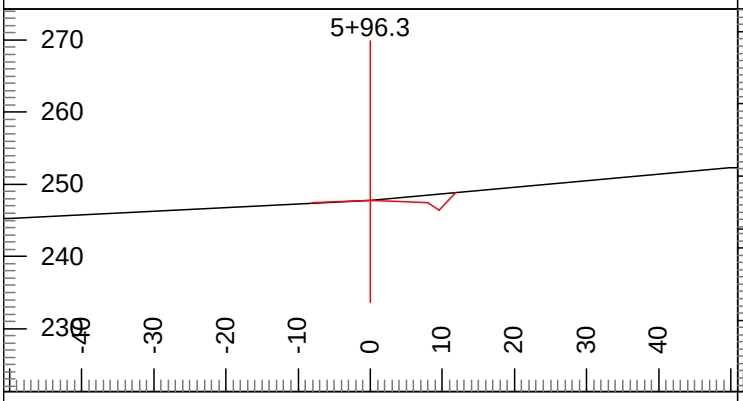
P-Stn :	4+44.2	V.Offset:	0.0	CL Elev:	253.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	709



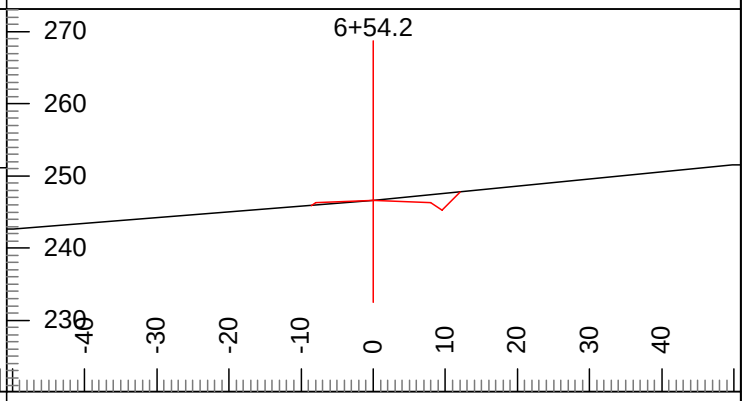
P-Stn :	4+97.4	V.Offset:	0.0	CL Elev:	250.2
H. Offset:	0.0	Cut Dp:	0.0	Index:	710



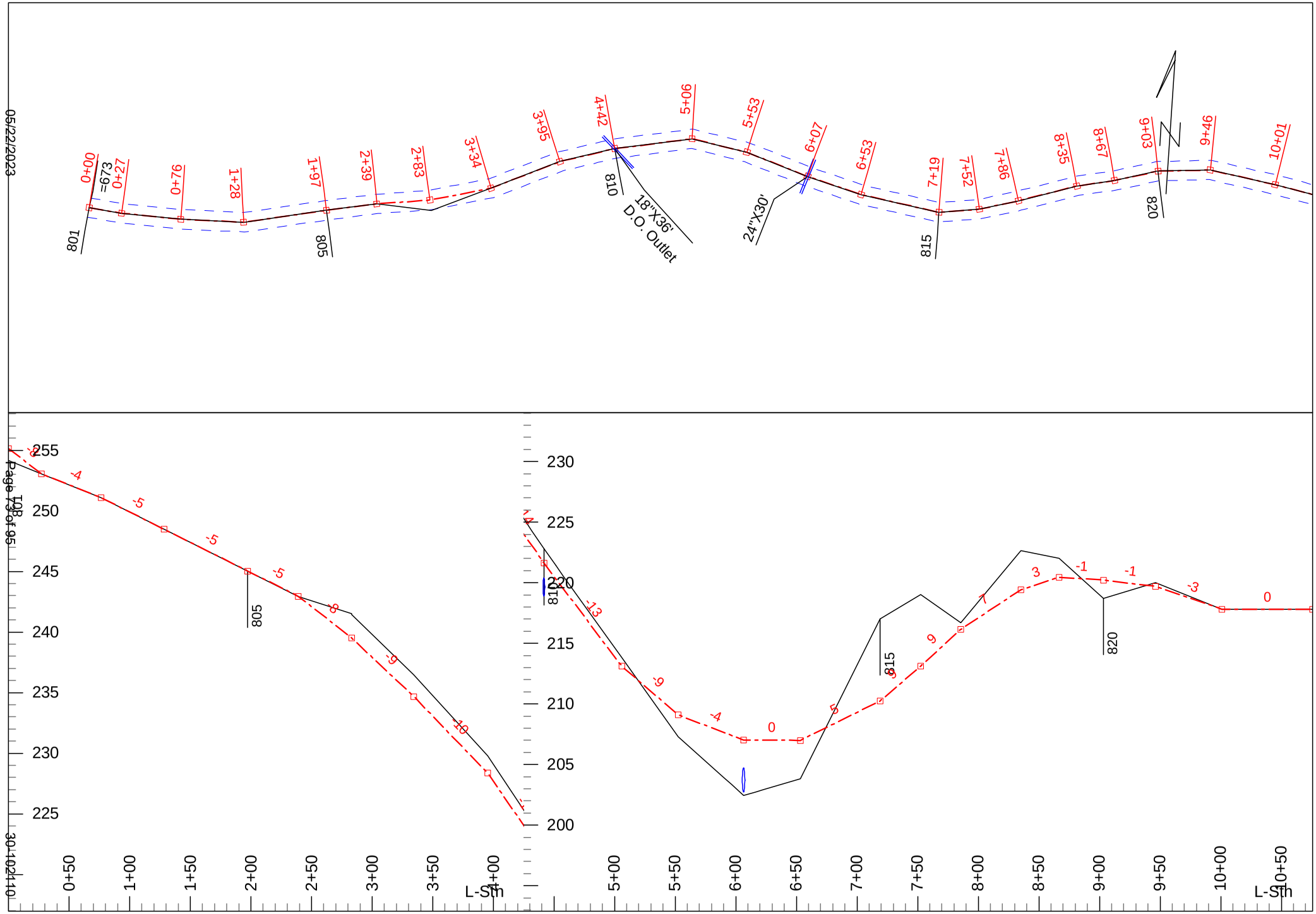
P-Stn :	5+41.1	V.Offset:	0.0	CL Elev:	248.9
H. Offset:	0.0	Cut Dp:	0.0	Index:	711



P-Stn :	5+95.8	V.Offset:	0.0	CL Elev:	247.8
H. Offset:	0.0	Cut Dp:	0.0	Index:	712



P-Stn :	6+53.7	V.Offset:	0.0	CL Elev:	246.6
H. Offset:	0.0	Cut Dp:	0.0	Index:	713



Sure Wood Timber Sale
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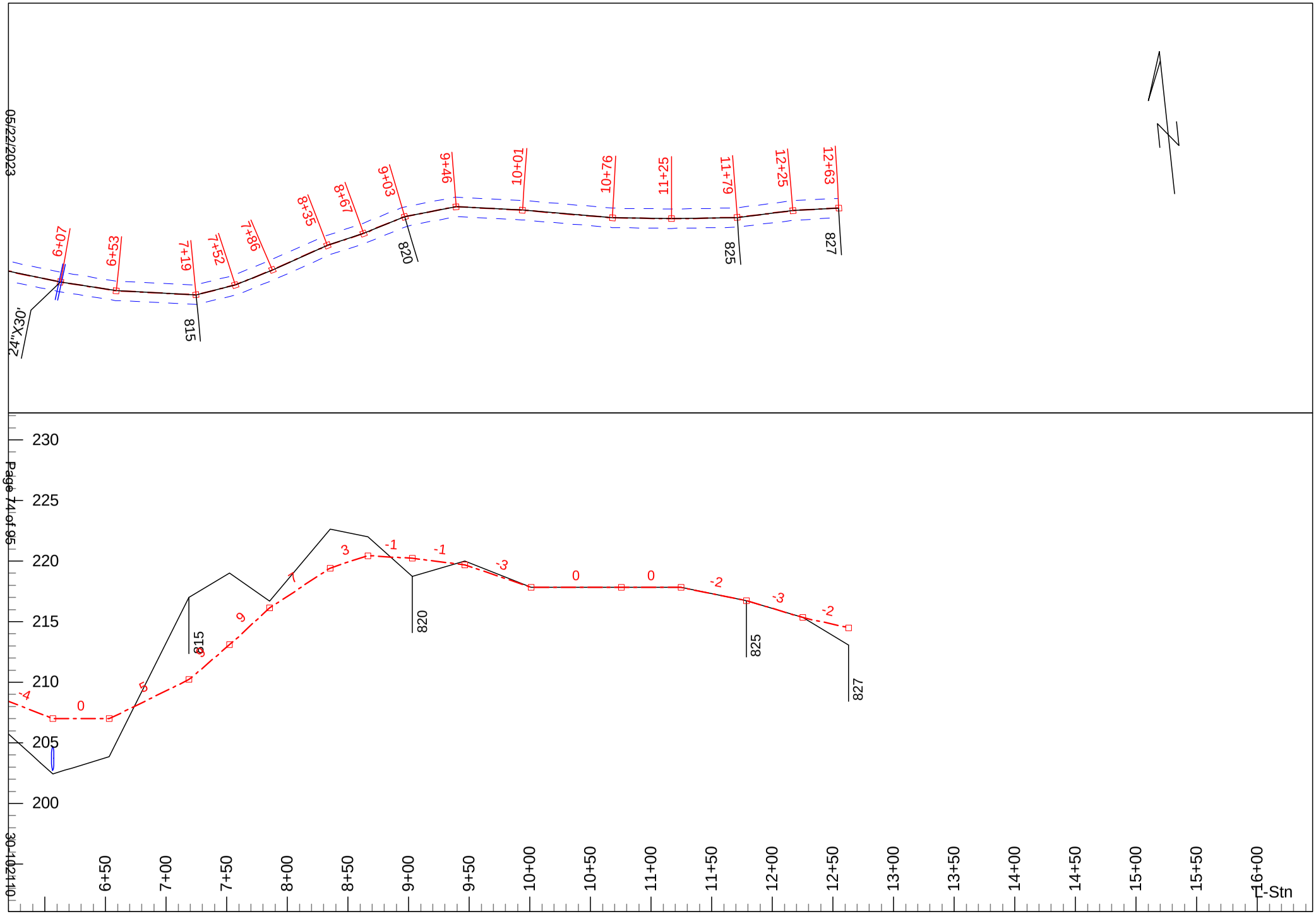

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Plan Scale 1:1200
Profile Vert Scale 1:120
Profile Horz Scale 1:1200

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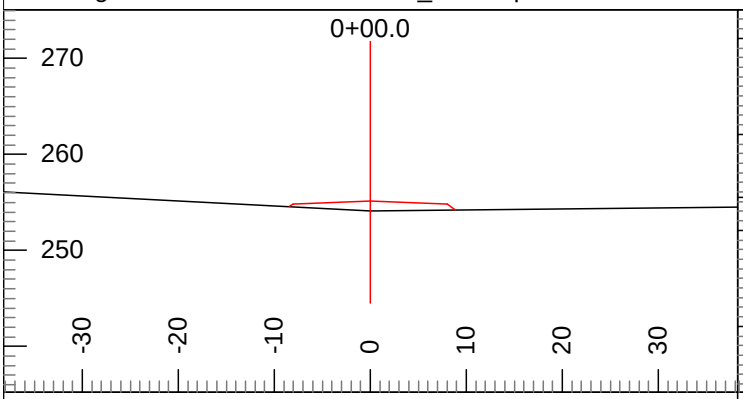
Softree Section	Scale 1:240	P. 1
C:\ProgramData\Softree\Data\sure_wood\spur7		22/05/12



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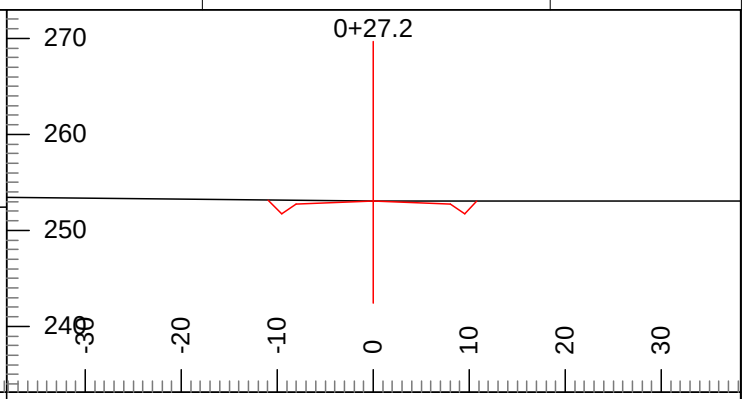

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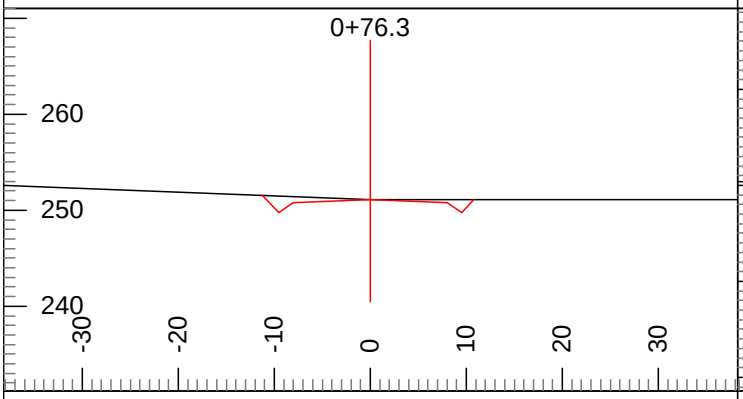

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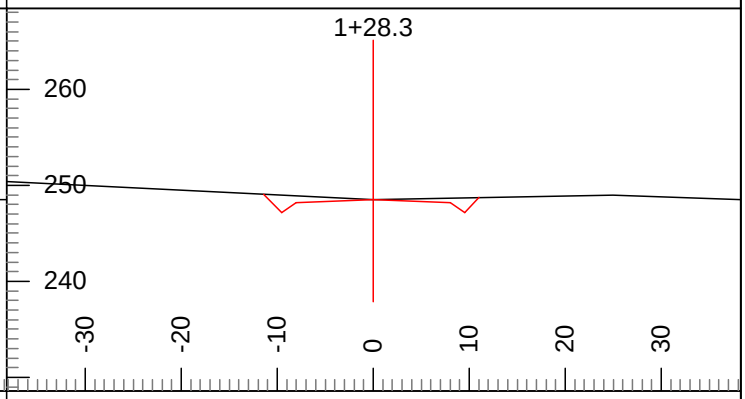

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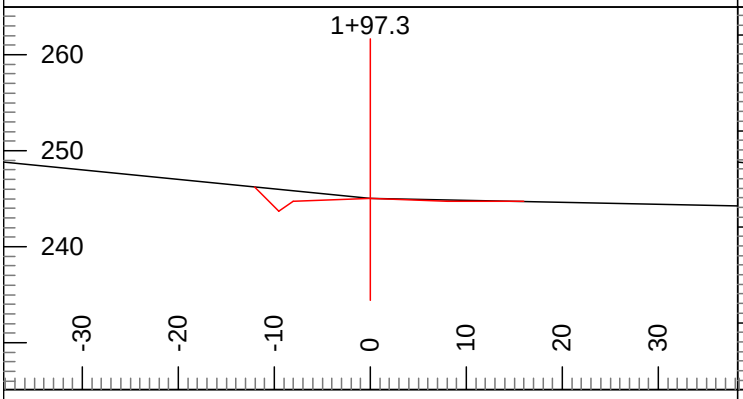

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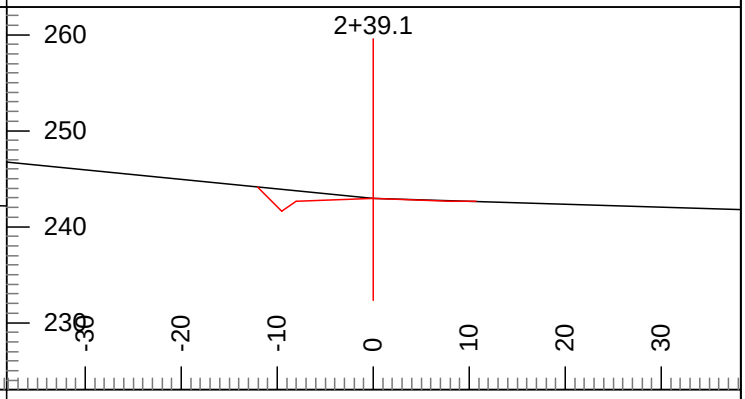

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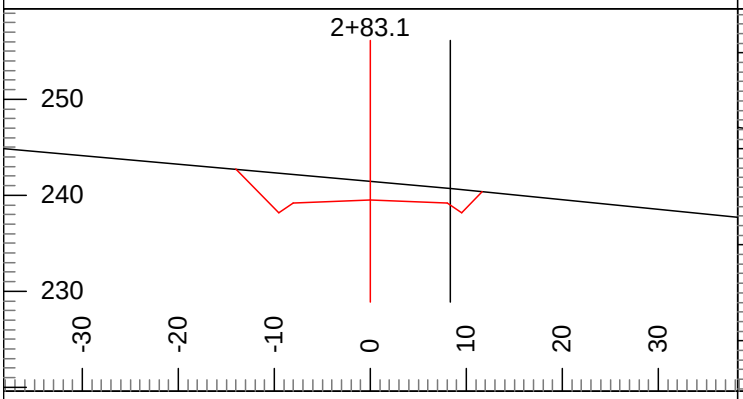

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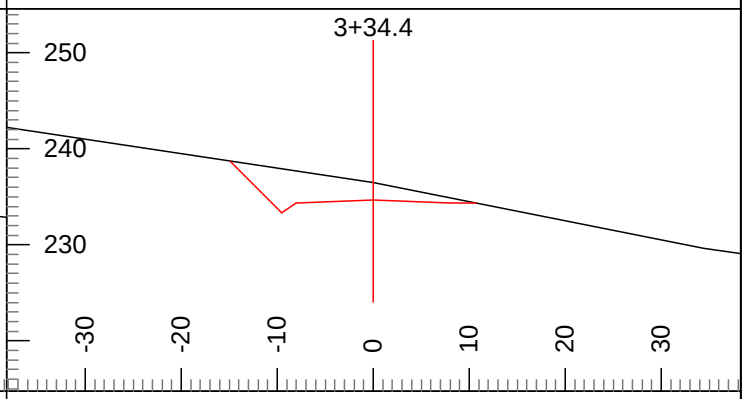

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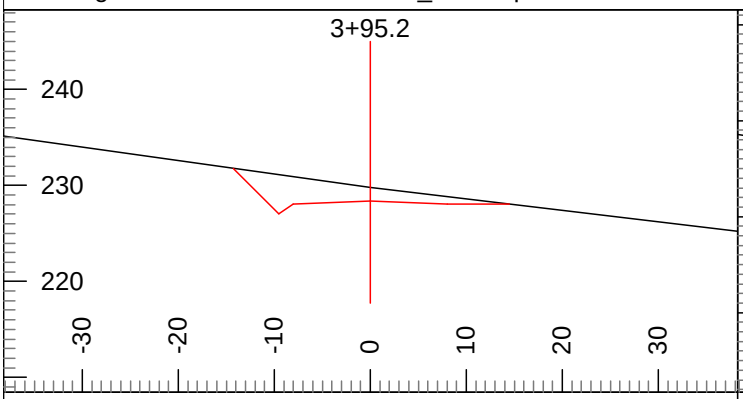
Softree Section	Scale 1:240	P. 2
C:\ProgramData\Softree\Data\sure_wood\spur7		22/05/12



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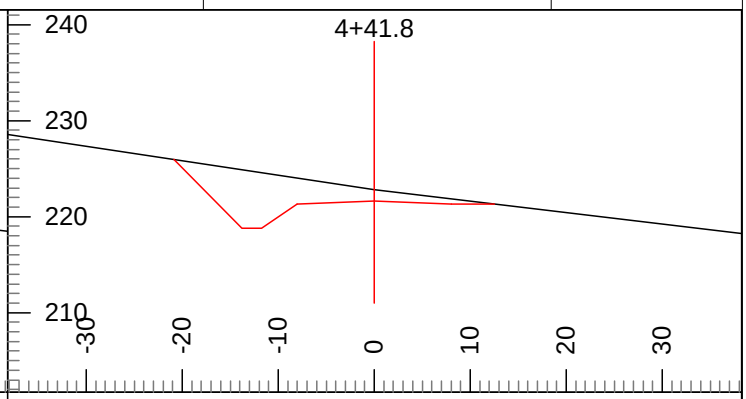

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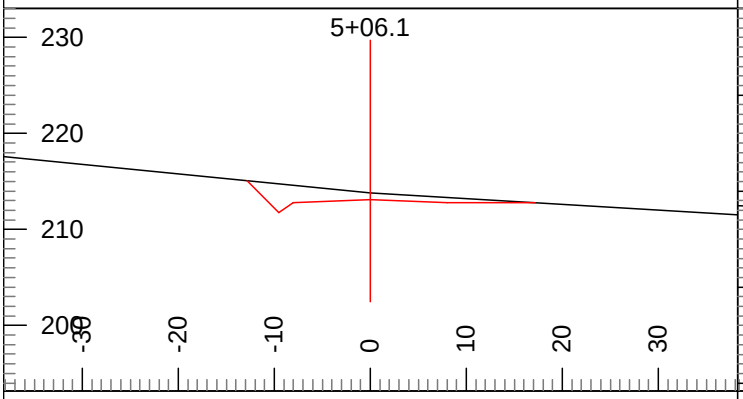

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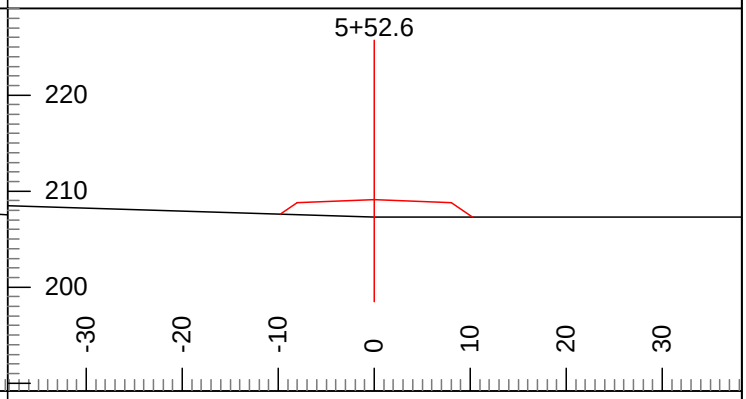

P-Stn :	5+55.1	V.Offset:	1.8	CL Elev:	209.1
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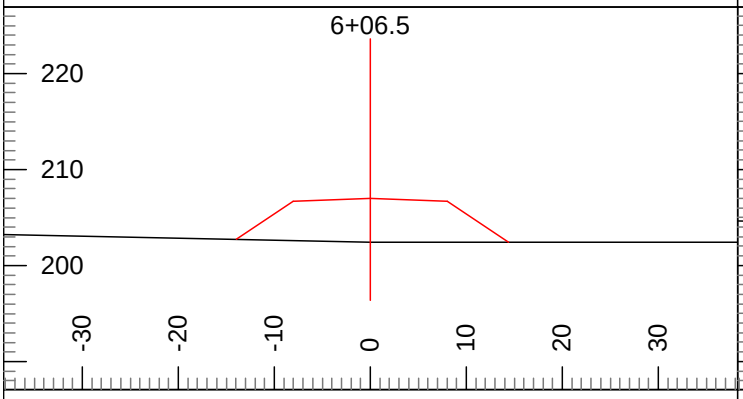

P-Stn :	6+09.0	V.Offset:	4.6	CL Elev:	207.0
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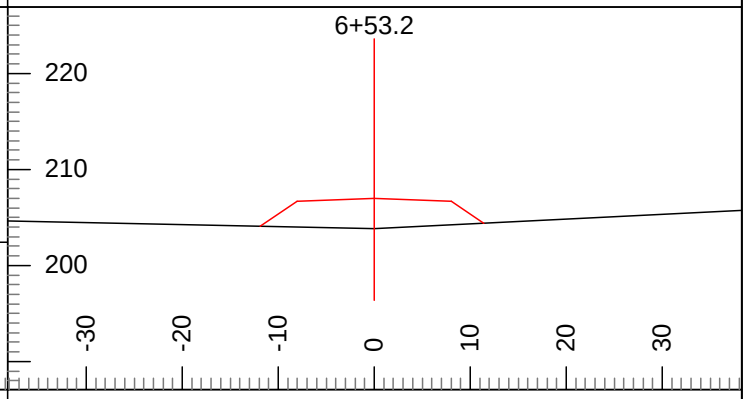

P-Stn :	6+55.7	V.Offset:	3.1	CL Elev:	207.0
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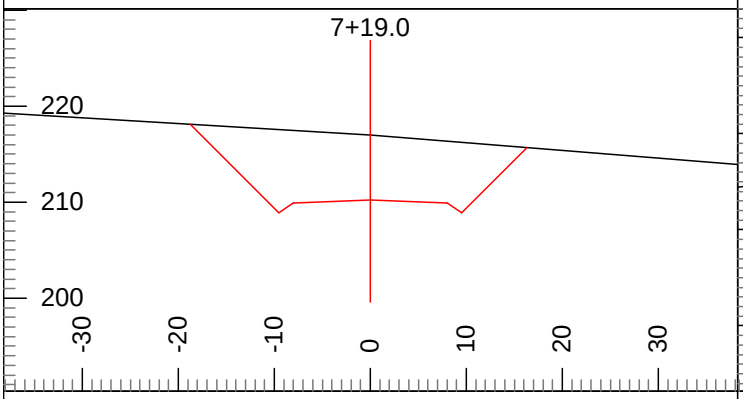

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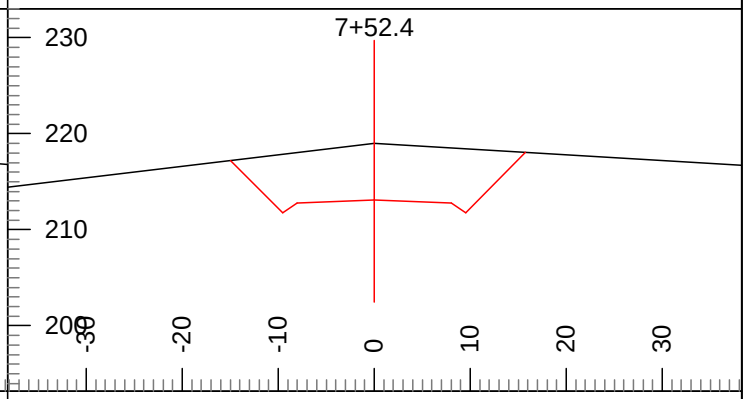

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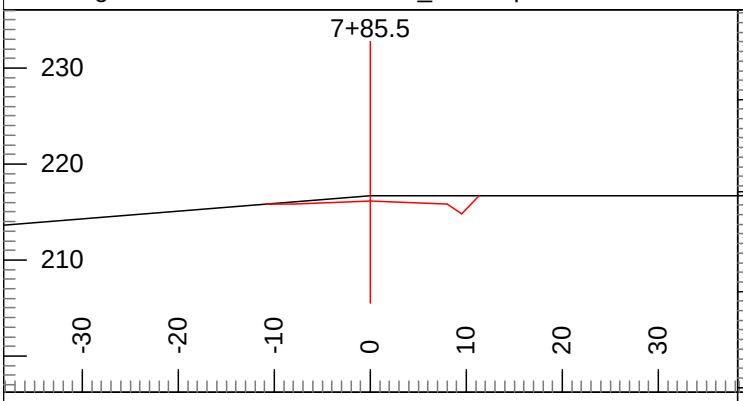
H. Offset:	0.0	Cut Dp:	5.9	Index:	816

Softree Section	Scale 1:240	P. 3
C:\ProgramData\Softree\Data\sure_wood\spur7		22/05/12



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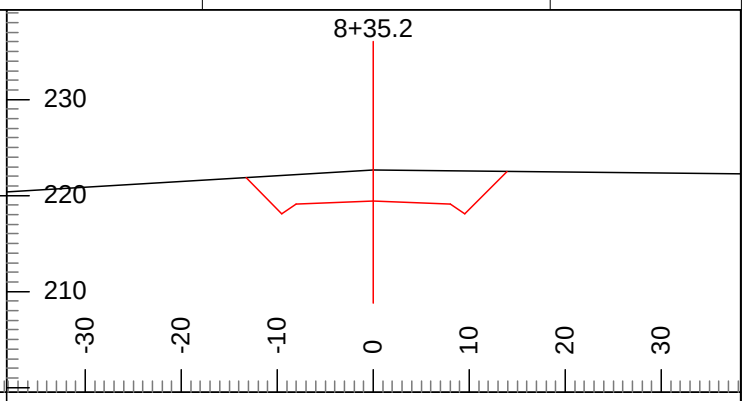

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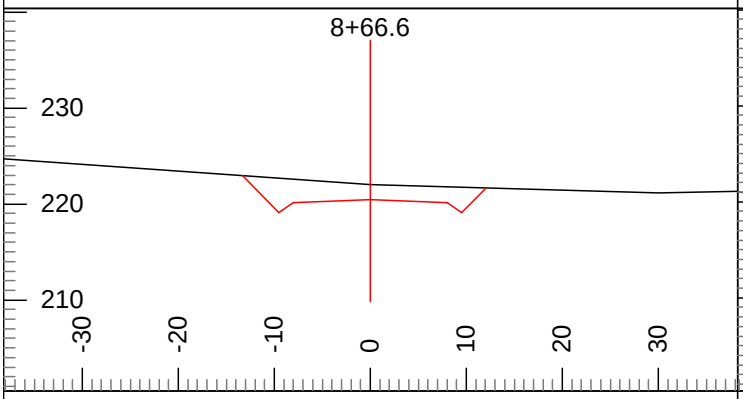

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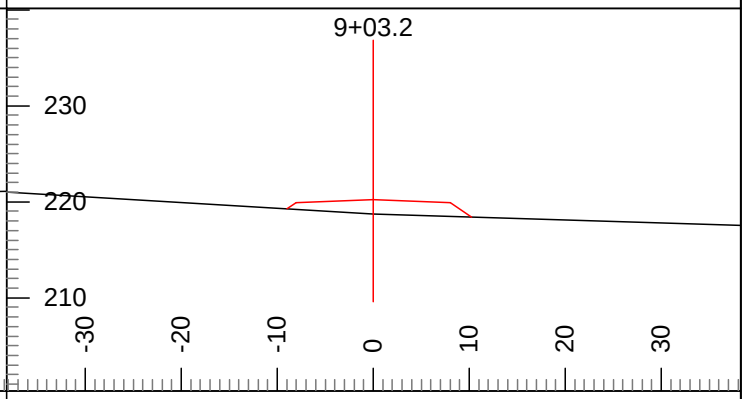

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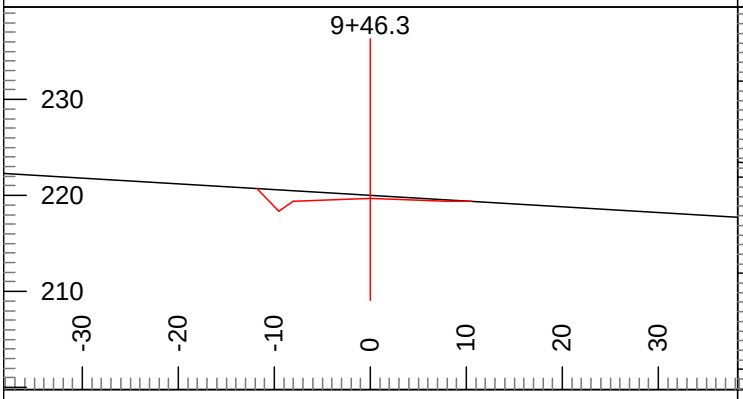

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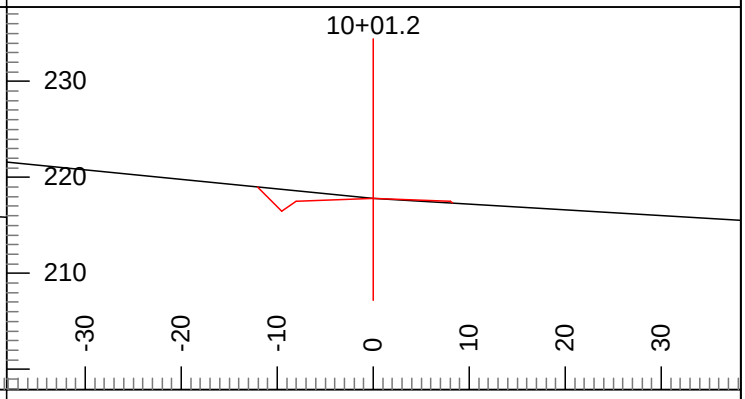

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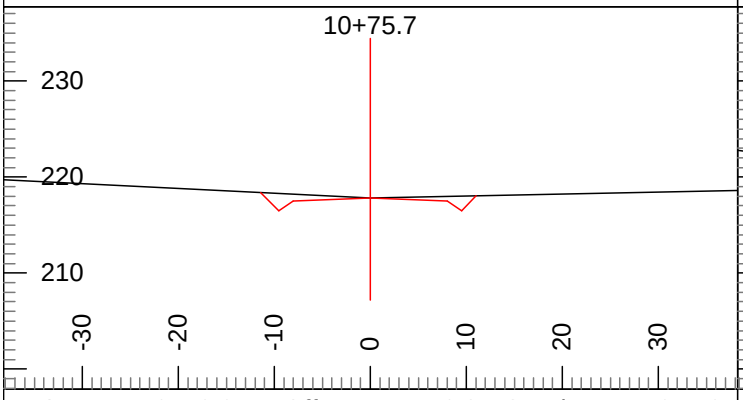

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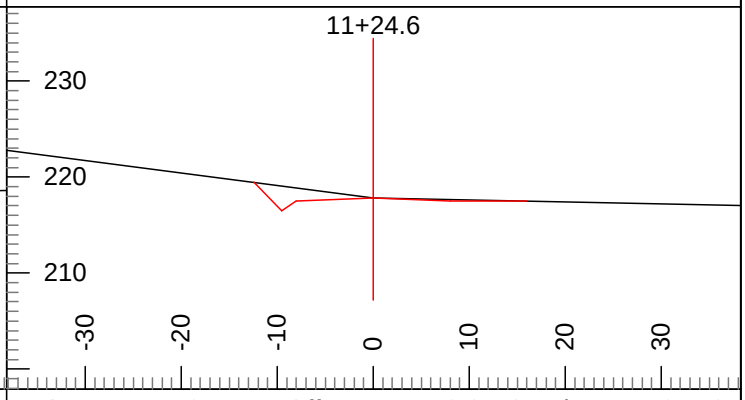

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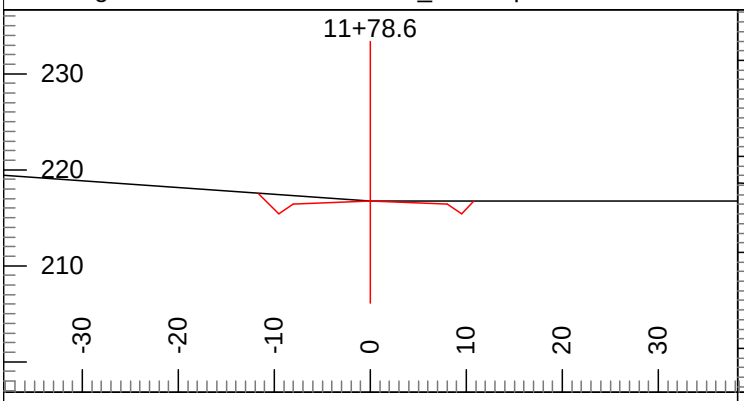
H. Offset:	0.0	Cut Dp:	0.0	Index:	824

Softree Section	Scale 1:240	P. 4
C:\ProgramData\Softree\Data\sure_wood\spur7		22/05/12



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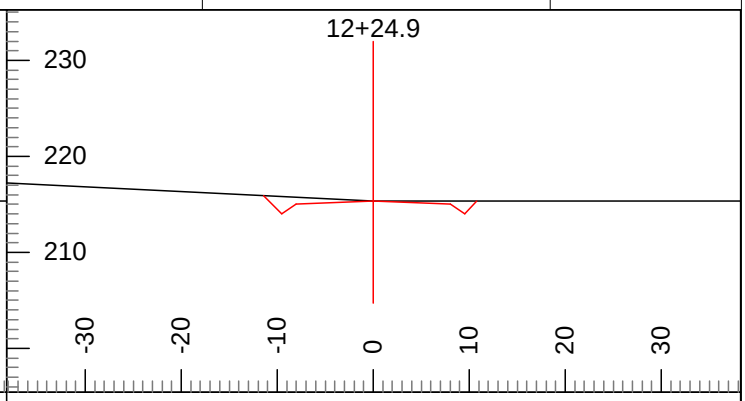

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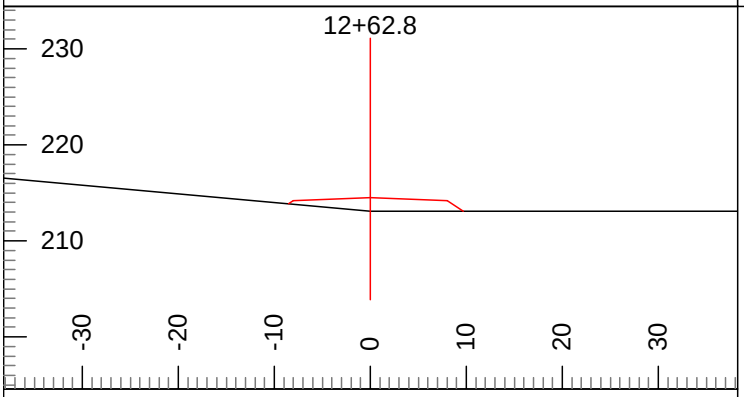

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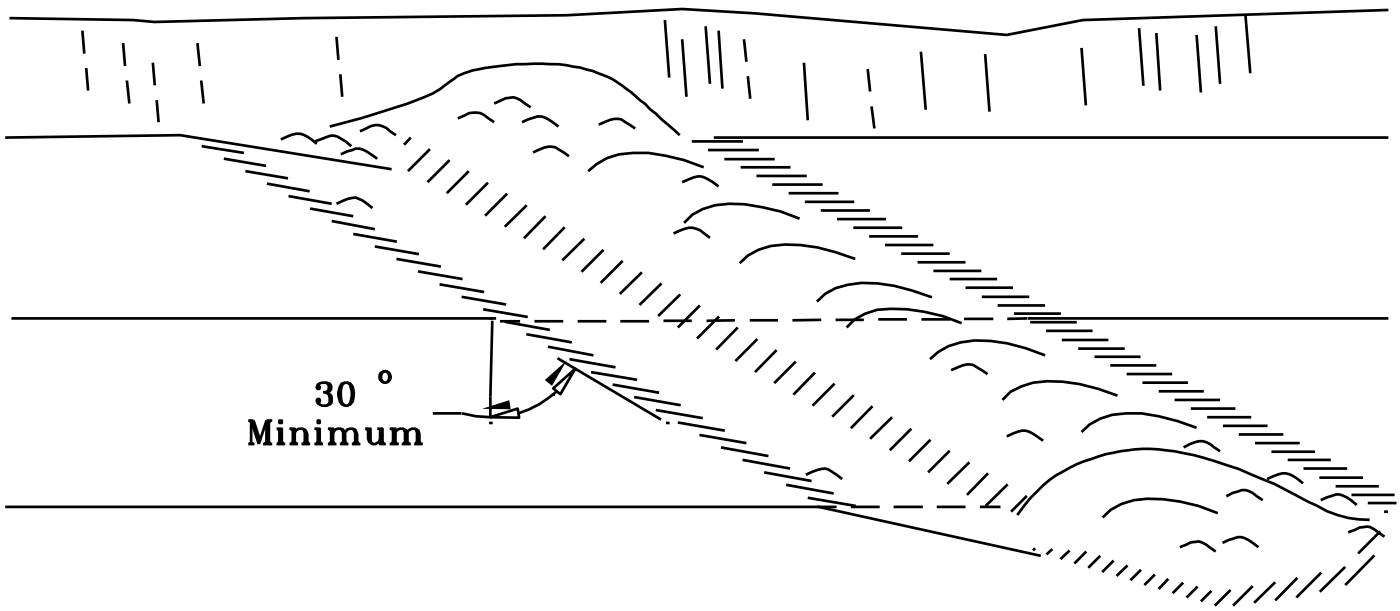
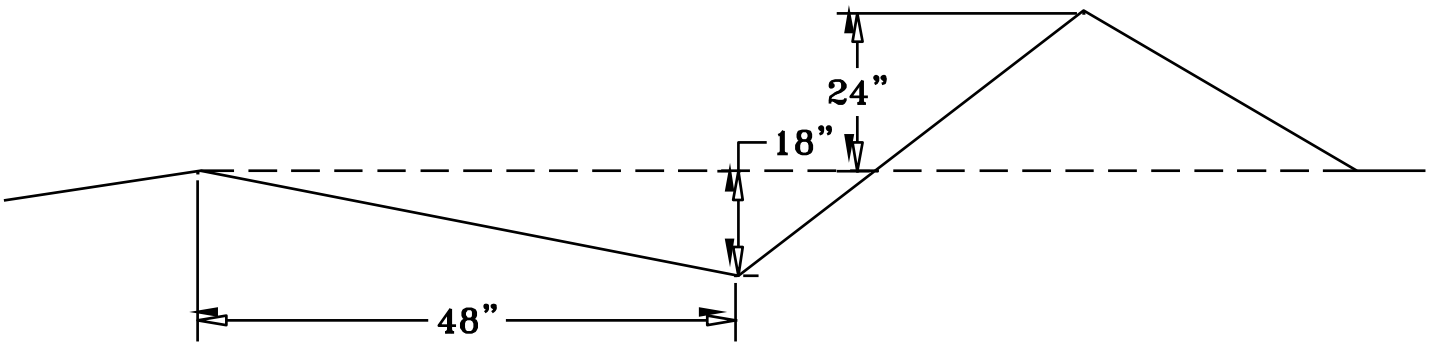
Non-Drivable Water Bar Detail

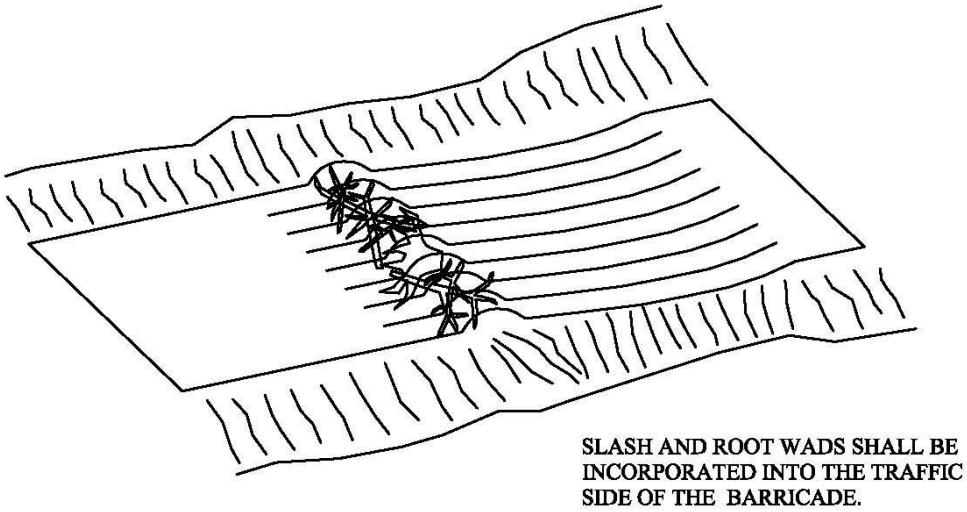
Cross Ditch



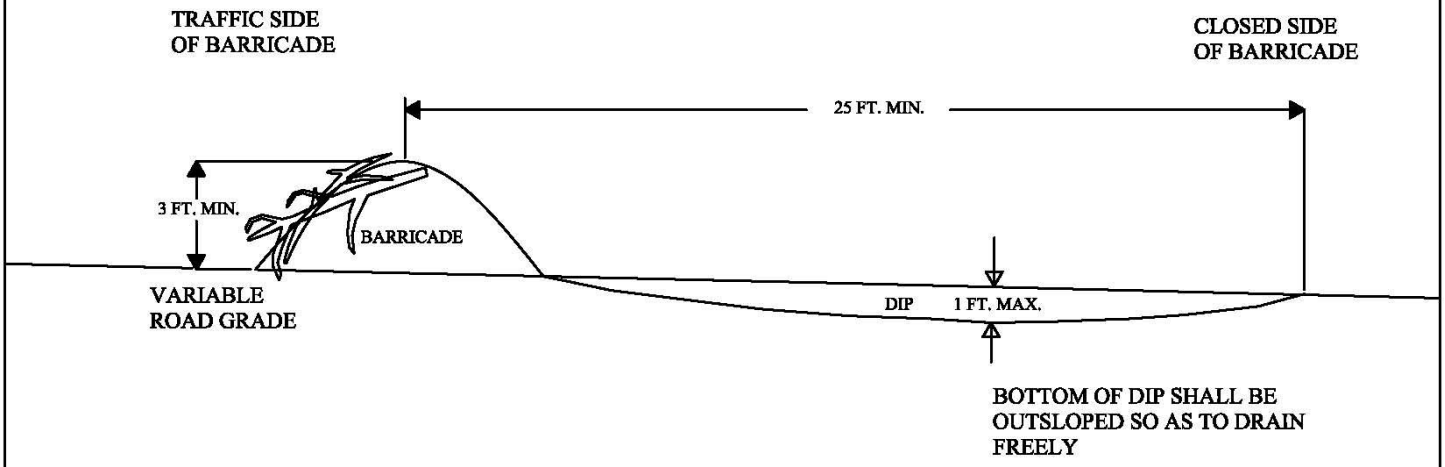
Cross Section at Centerline



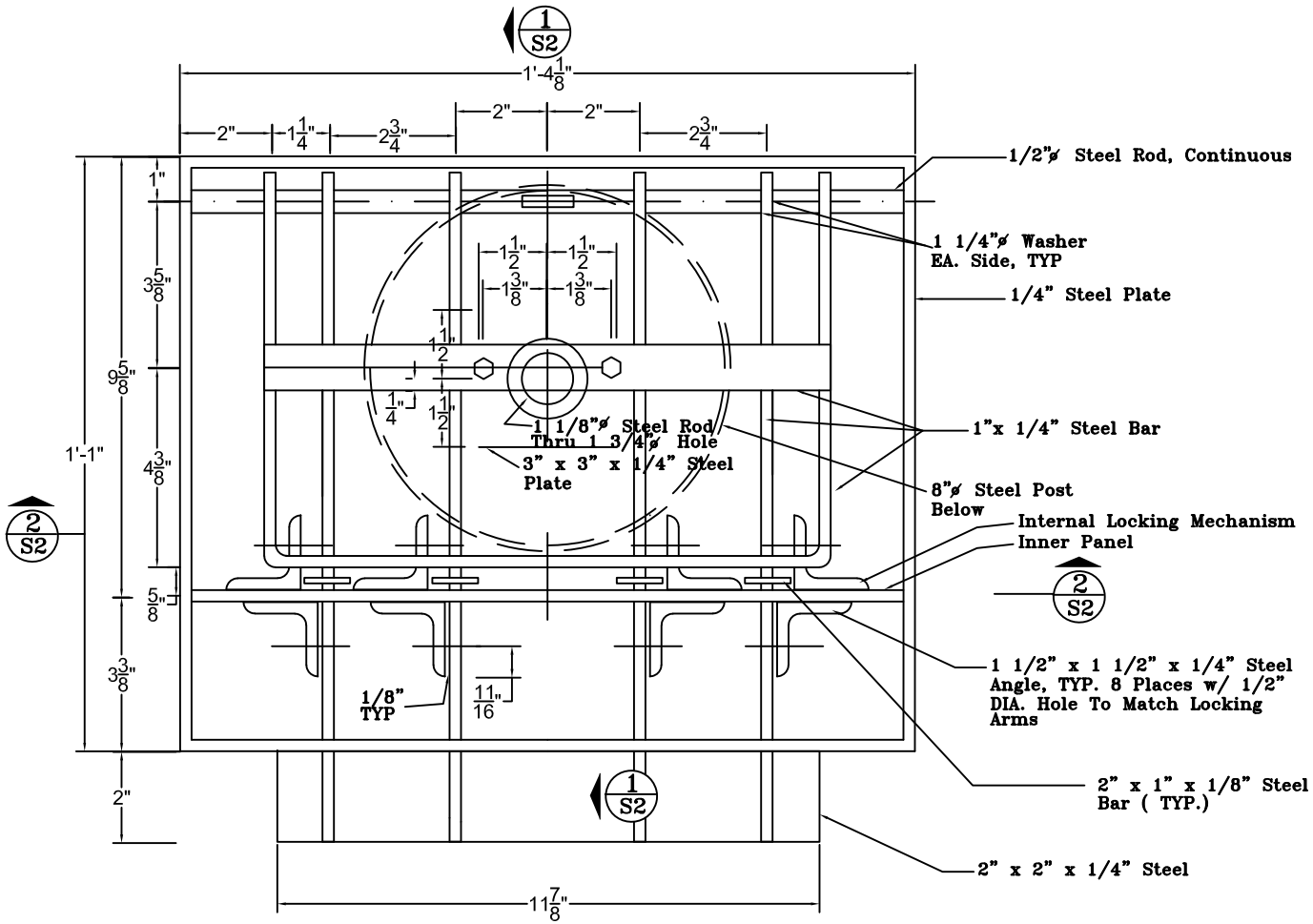
BARRICADE DETAIL



PLAN VIEW



PROFILE VIEW



SECTION 3/S2
SCALE: 3" = 1'-0"

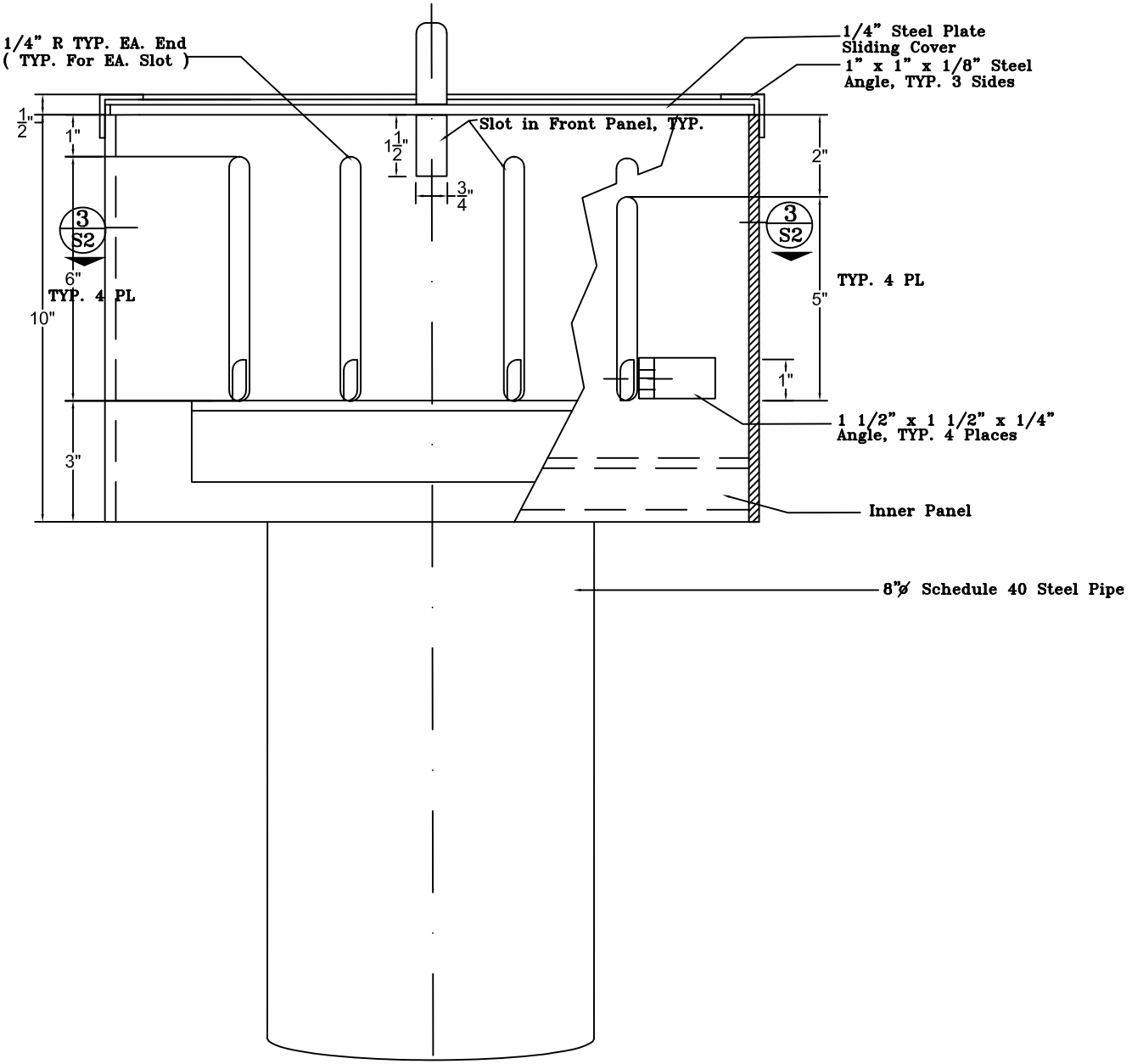
4 Lever Lock Box Detail Schematic Drawing

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

SPS Region

Original Designed By:
THE WELDING SHOP
Bill Kramer
939 14Th NW
North Bend, WA 98045
(425) 888-0911

Date: 10/4/99
Scale : 3"=1'-0"
Page : 1 of 5
Drawn By: M.A.D.
Revised 7/17/14 WJH



FRONT ELEVATION
SCALE: 3" = 1'-0"

4 Lever Lock Box Detail
Schematic Drawing

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

SPS Region

Date: 10/4/99
Scale : 3"=1'-0"
Page : 2 of 5
Drawn By: M.A.D.
Revised 7/17/14 WJH

Original Designed By:
THE WELDING SHOP
Bill Kramer
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North Bend, WA 98045
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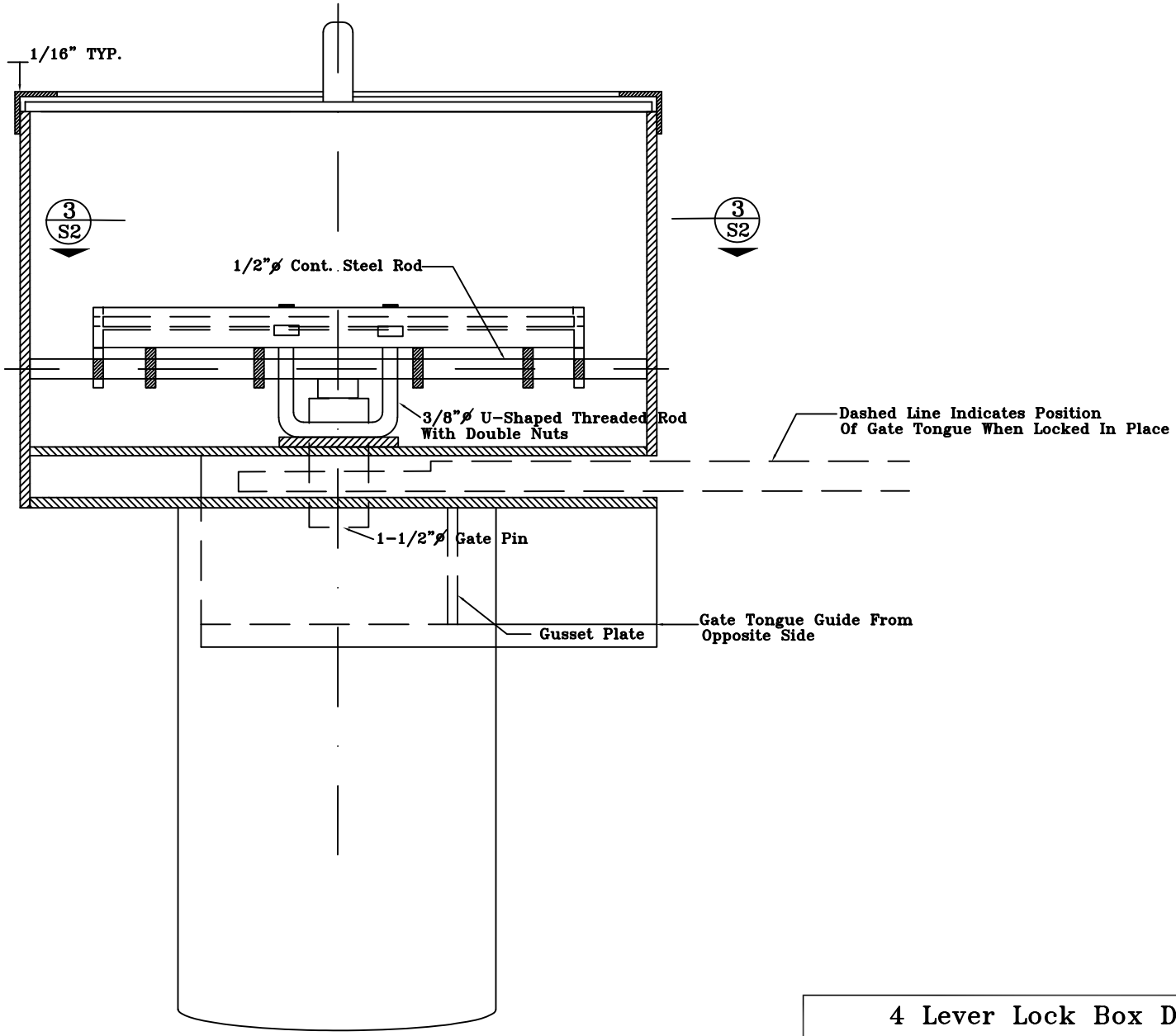


SECTION 2/S2
SCALE: 3" = 1'-0"

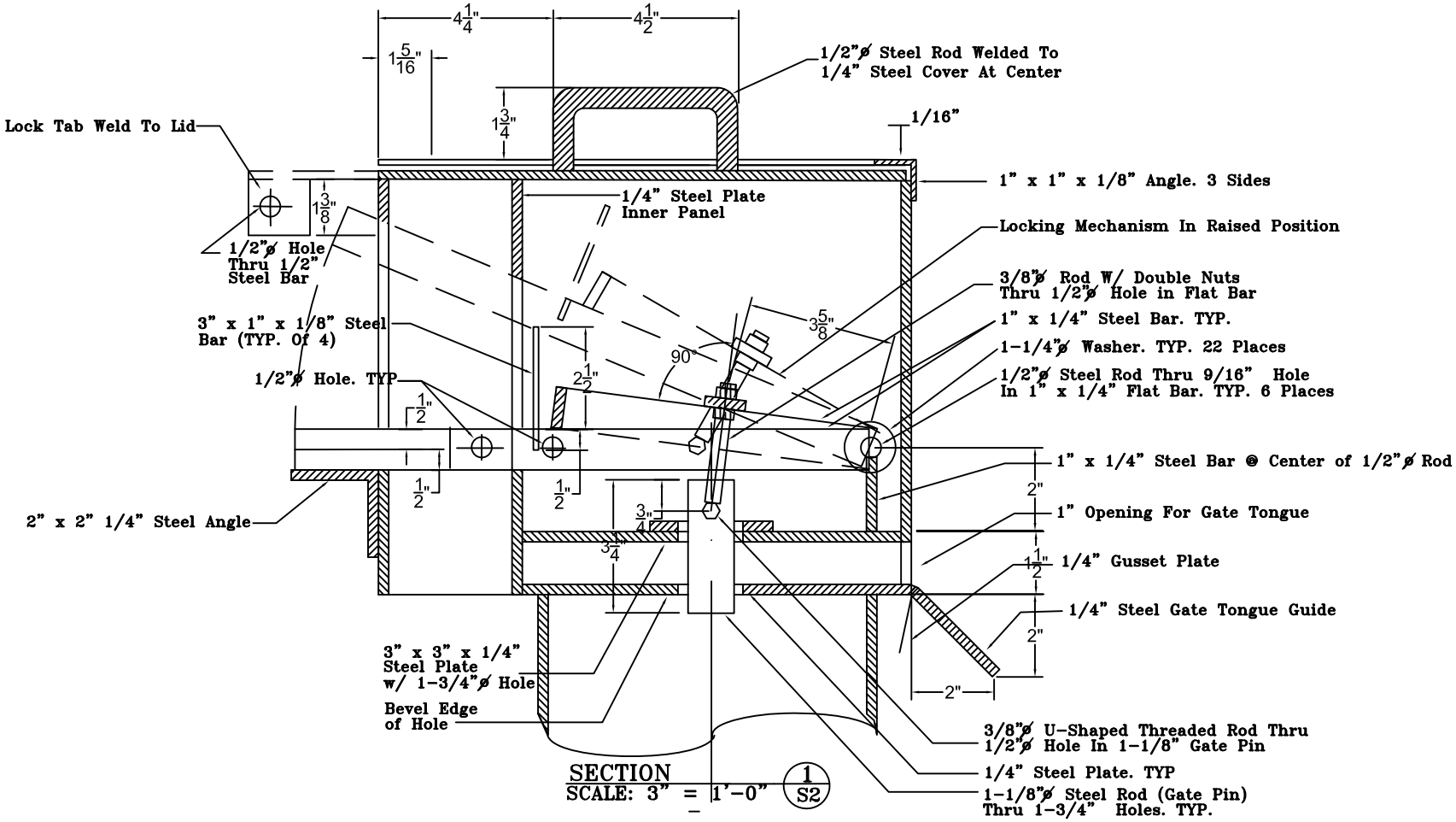
Original Designed By:
THE WELDING SHOP
Bill Kramer
939 14Th NW
North Bend, WA 98045
(425) 888-0911

Date: 10/4/99
Scale : 3"=1'-0"
Page : 3 of 5
Drawn By: M.A.D.
Revised 7/17/14 WJH

4 Lever Lock Box Detail
Schematic Drawing

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

SPS Region



Original Designed By:
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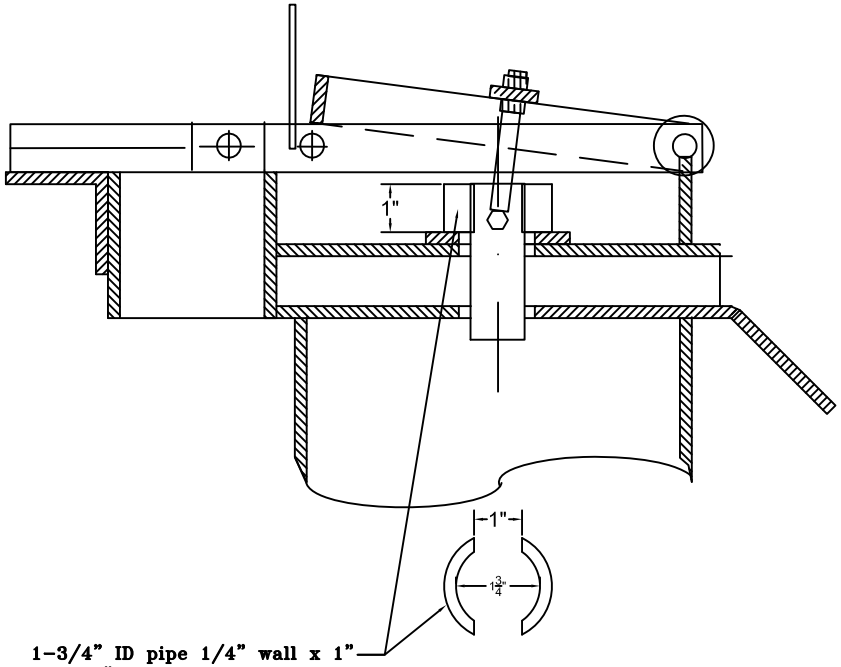
Date: 10/4/99
Scale : 3"=1'-0"
Page : 4 of 5
Drawn By: M.A.D.
Revised 7/17/14 WJH

4 Lever Lock Box Detail
Schematic Drawing

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

SPS Region



1-3/4" ID pipe 1/4" wall x 1"
1" split - used to retain
pin - Not shown in other
drawings for clarity

4 Lever Lock Box Detail
Schematic Drawing

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

SPS Region

Date: 10/4/99
Scale : 3"=1'-0"
Page : 5 of 5
Drawn By: M.A.D.
Revised 7/17/14 WJH

Original Designed By:
THE WELDING SHOP
Bill Kramer
939 14Th NW
North Bend, WA 98045
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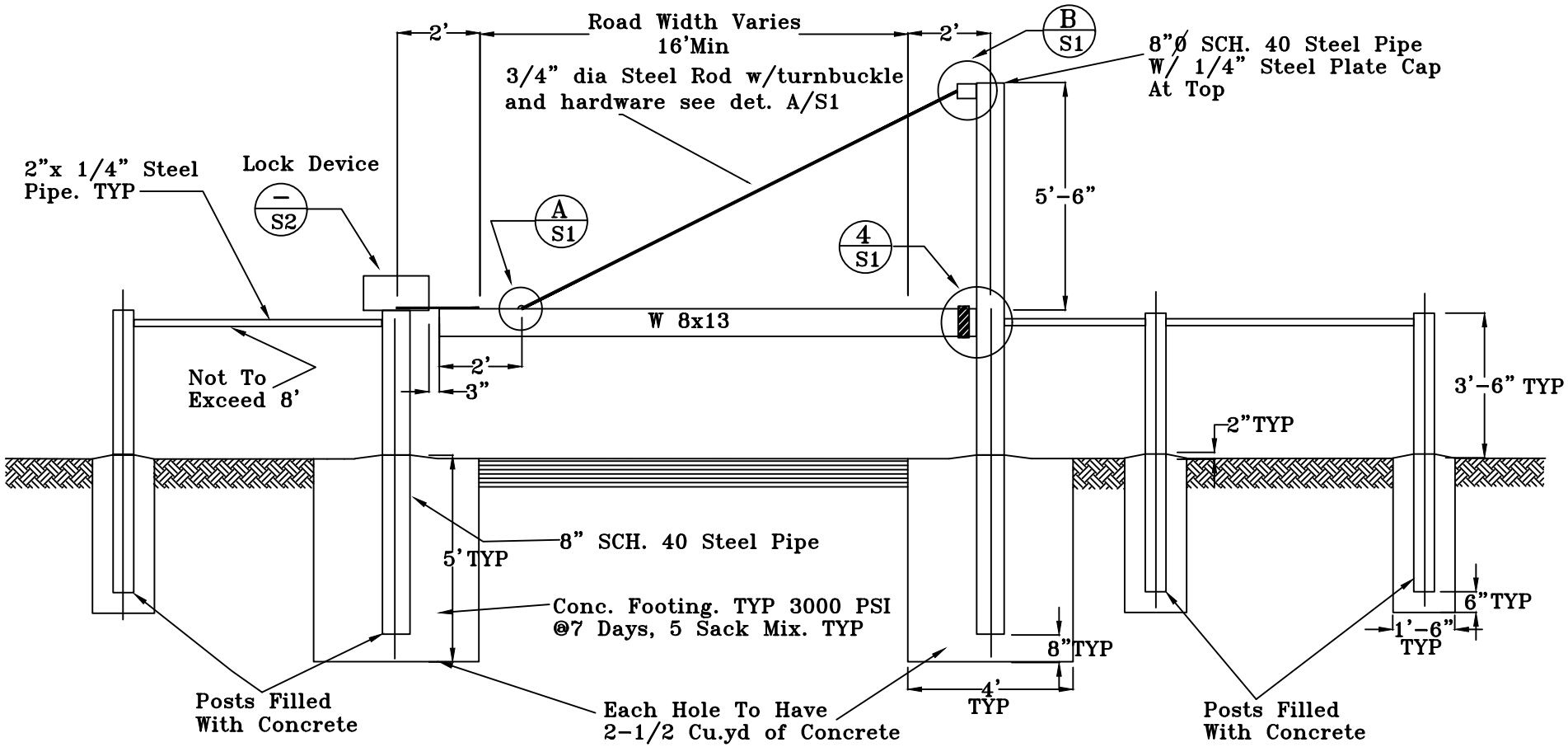
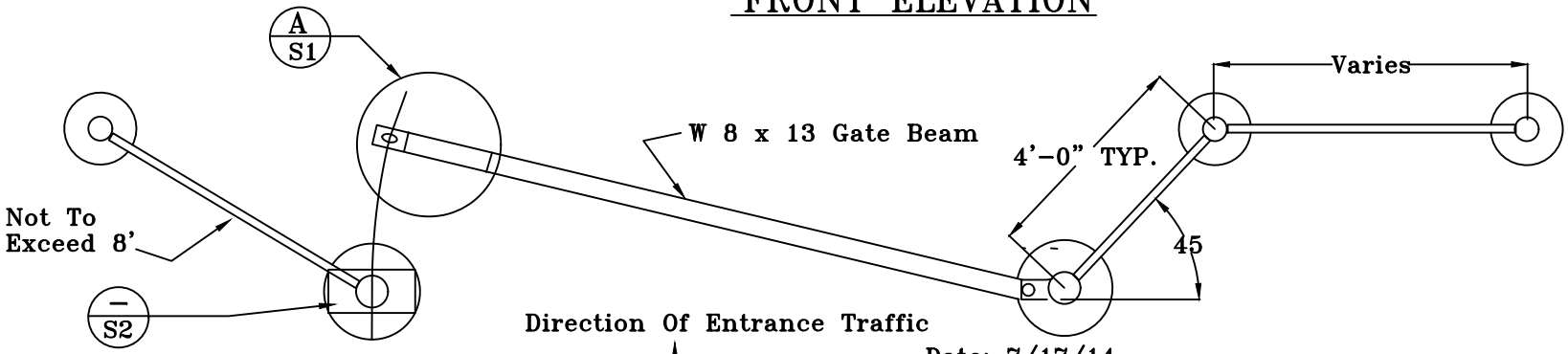
Gate Plan Detail



FRONT ELEVATION



PLAN

Date: 7/17/14
Scale : None
Page : 1 of 3
Edited By: W.J.H.

Gate Plan And Elevations

Sections and Details

GENERAL NOTES:

1. Fabrication materials shall meet the following criteria:
   A. Non-structural steel bars, plates and items ASTM A36 or ASTM A283 Steel.
   B. Pipe columns ASTM A53 and ASTM A120, Grade B Steel.
   C. Steel bolts ASTM A307, Grade A Steel.
   D. Standard rolled steel sections ASTM A36.
   E. Structural steel tubing ASTM A500, Grade B Steel.

2. Welding shall conform to AWS code for arc welding in building construction.

3. No drifting of bolts nor enlargement of holes will be allowed to correct misalignment. Mismatched holes shall be corrected with new material.

4. Locate grease fittings for convenient access.

5. Each gate is to be assembled to the specifications below.

   A. Cut the vertical pipes to length & cap, and provide opening(s) to fit 2" SCH. 40 horizontal members as shown on DWG. S1, Front Elevation.

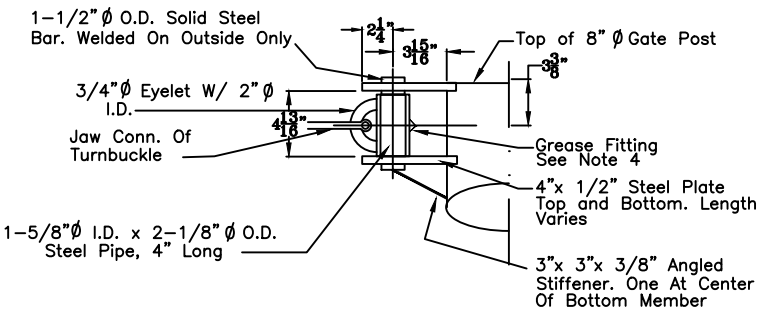
   B. Fabricate, assemble and attach assemblies shown in detail (B/S1) and in section (4/S1) to the 8"dia SCH. 40 pipe as shown on DWG. S1, Front Elevation.

   C. Fabricate locking device and lock open device.

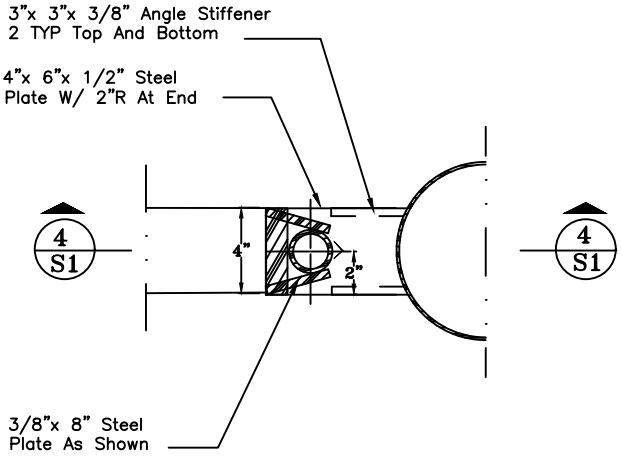
   D. Clean all surfaces of grease and oils before applying primer.

   E. Paint Gate with color: Rodda Safety Yellow.

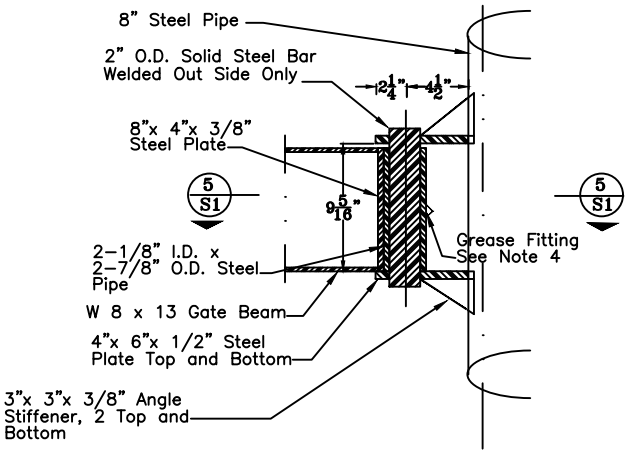
6. All materials shown on DWG. (S1 & S2) is to be supplied.



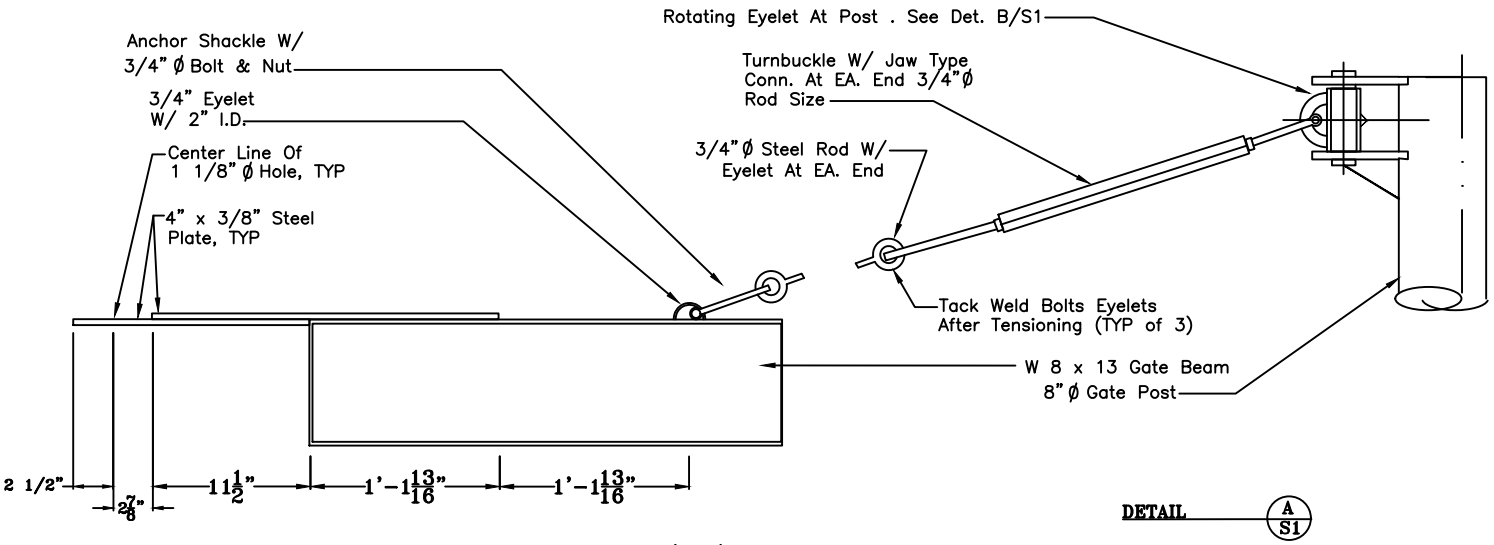
DETAIL B/S1



SECTION 5/S1



SECTION 4/S1

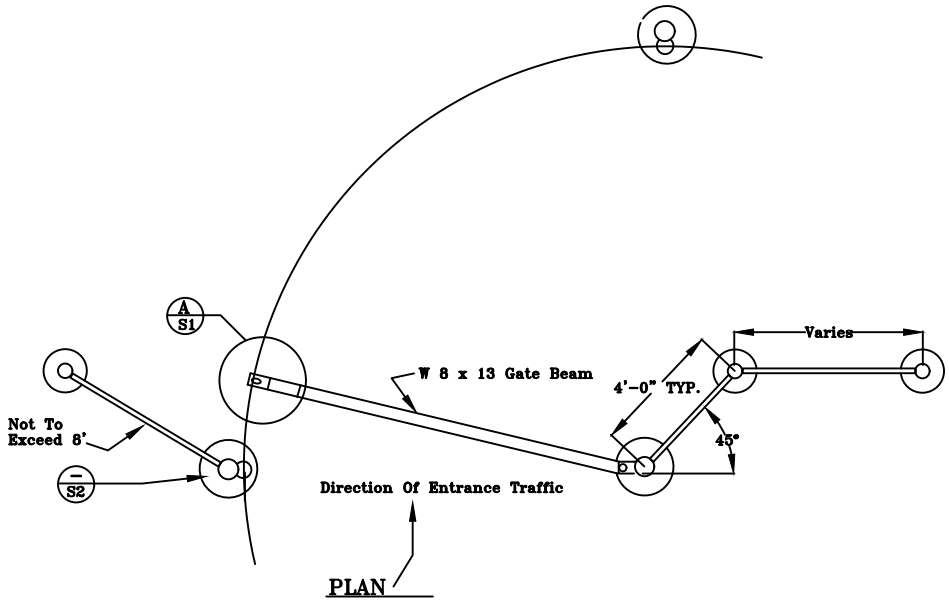


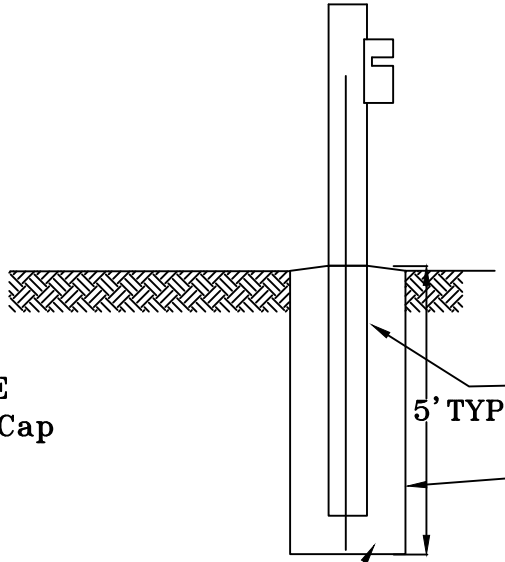
DETAIL A/S1

Date: 7/17/14
Scale : None
Page : 2 of 3
Edited by: W.J.H.

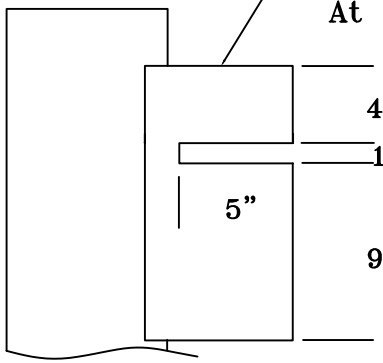
Steel Gate Details

STANDARD LOCK OPEN DEVICE





8" LOCKING POST



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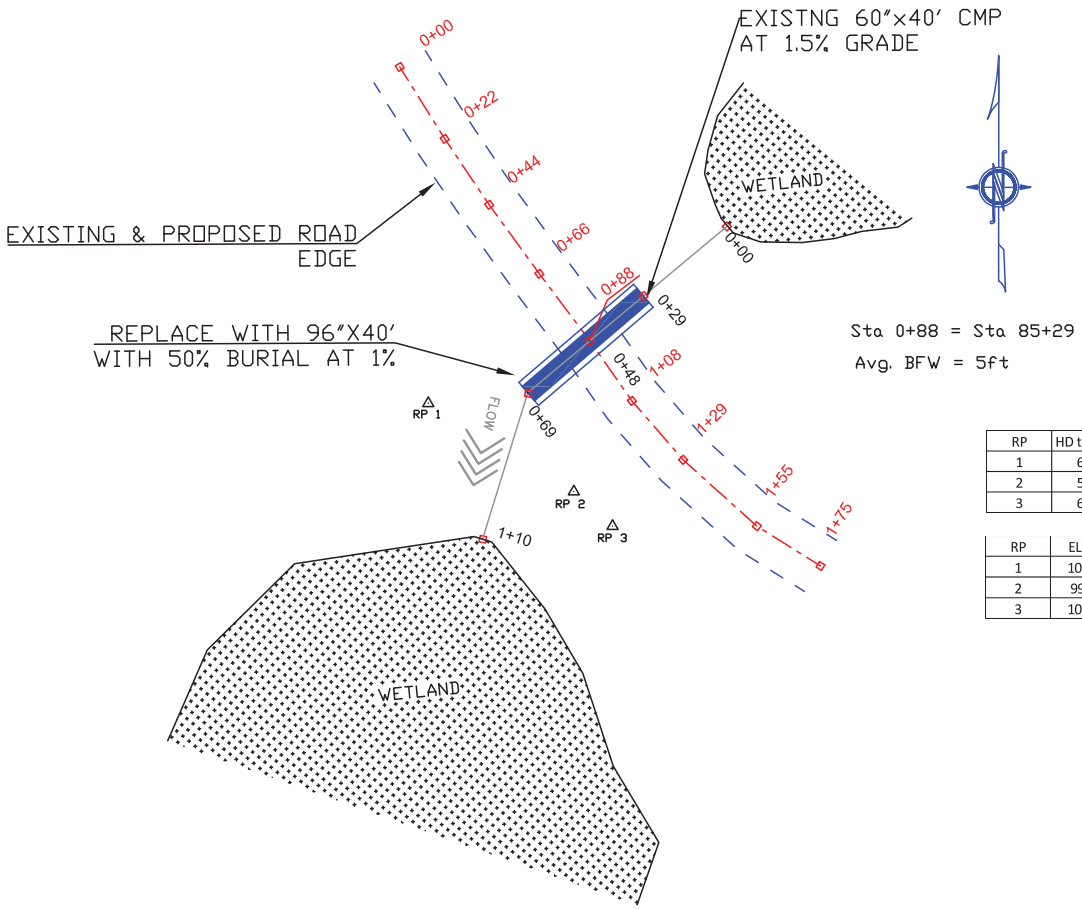
Page : 3 of 3
Drawn by: W.J.H.

Steel Gate Details



Sta 0+88 = Sta 85+29

Avg. BFW = 5ft

RP	HD to Inlet	AZ to Inlet	HD to Outlet	AZ to Outlet
1	63.8	63	26.5	84
2	55.1	20	28.9	335
3	61.6	8	41.9	328

RP	ELEV
1	100.5
2	99.6
3	100.0

PLAN VIEW

0 40 80 Feet

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

DRAWING TITLE: SITE PLAN
Sure Wood T.S. – Mainline

LANDOWNER: WA–DNR

SEC. TWNSHP RANGE: SEC. 1 T21N R2W

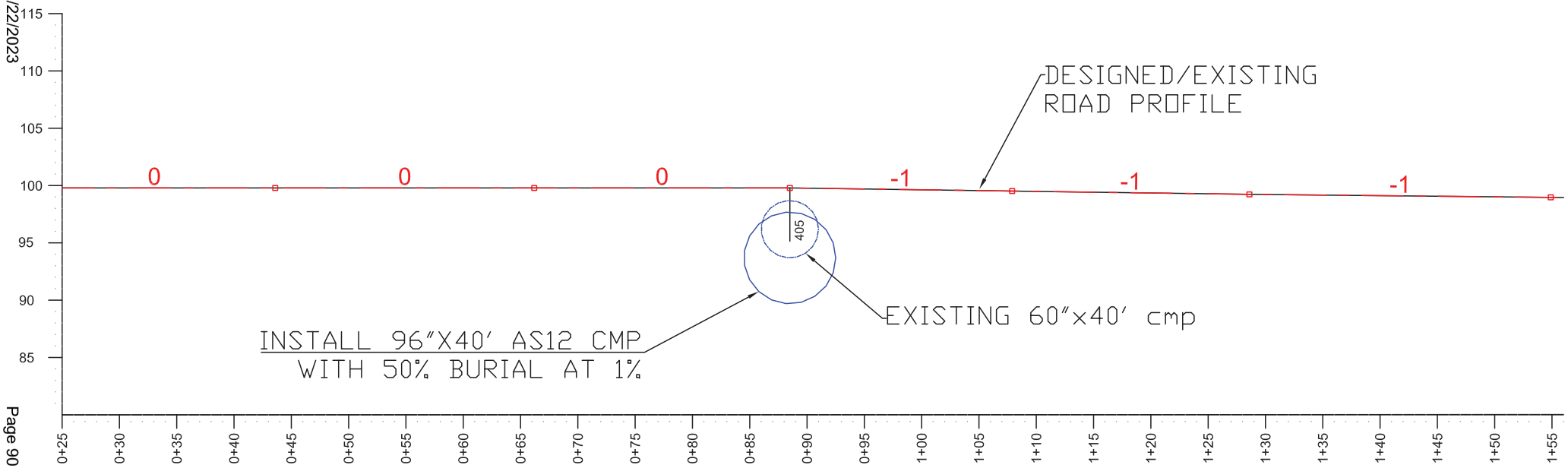
LAT & LONG: N47.337653° W122.886624°

DATE: 07/11/2022 – Revised 00/00/0000

SHEET 1 OF 3

DRAWN BY: Heymann

30-102110



ROAD PROFILE

0 10 20 Feet

1. IN-STREAM WORK ASSOCIATED WITH THIS PROJECT WILL BE COMPLETED BETWEEN JULY 15TH AND OCTOBER 1ST OF ANY GIVEN YEAR, UNLESS ADDITIONAL DAYS ARE ALLOWED BY FOREST PRACTICES IN CONSULTATION WITH DEPARTMENT OF FISH AND WILDLIFE, THE CONSTRUCTION SHALL OCCUR WITHIN THIS TIME.
2. ANY DISTURBANCE TO THE STREAMBED OR BANKS WILL BE LIMITED TO THAT NECESSARY TO REMOVE EXISTING AND INSTALL NEW CULVERT.
3. STREAM FLOW SHALL BE ISOLATED FROM THE WORK AREA THROUGH THE USE OF A BYPASS CULVERT OR PUMPING. ANY DEVICE USED FOR PUMPING WATER FROM FISH-BEARING STREAM SHALL BE EQUIPPED WITH A FISH GUARD TO PREVENT PASSAGE OF FISH INTO THE DIVERSION DEVICE AS DESCRIBED IN THE FOREST PRACTICES BOARD MANUAL.
4. WHEN DIVERTING STREAM FLOW FISH LIFE IN THE DEWATERED AREA WILL BE SAFELY CAPTURED AND RETURNED TO THE STREAM BELOW THE PROJECT.
5. PRIOR TO RELEASING THE STREAM FLOW INTO THE PROJECT AREA, ALL BANK AND EROSION PROTECTION MEASURES WILL BE COMPLETE.
6. WASTE WATER AND DEWATERING WILL BE ROUTED TO AN AREA OUTSIDE THE ORDINARY HIGH WATER MARK TO ALLOW REMOVAL OF FINE SEDIMENT AND CONTAMINANTS PRIOR TO ENTERING THE STREAM.
8. EXCESS EXCAVATED MATERIAL WILL BE END-HAULED TO A WASTE AREA IDENTIFIED IN THE ROAD PLAN AND AS APPROVED BY THE CONTRACT ADMINISTRATOR.
9. GRASS SEED AND COVER ALL EXPOSED SOILS WITHIN 25FT OF THE STREAM CHANNEL WITH A LAYER OF STRAW.

30-102110

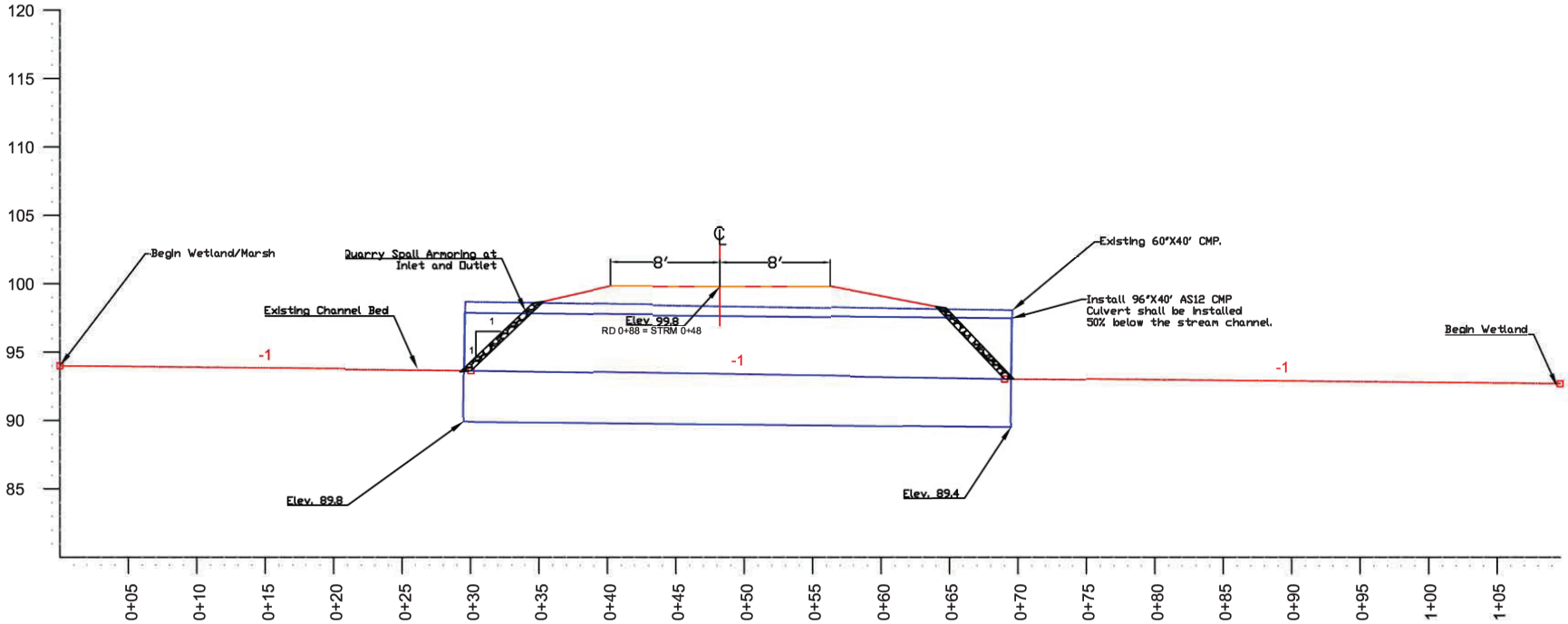
DRAWN BY: Heymann

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

DRAWING TITLE: SITE PLAN
Sure Wood T.S. – Mainline
LANDOWNER: WA–DNR

SEC. TWNSHP RANGE: SEC. 1 T21N R2W
LAT & LONG: N47.337653° W122.886624°
DATE: 07/07/2022 – Revised 00/00/0000

SHEET 2 OF 3



CULVERT/CHANNEL PROFILE

0 10 20 Feet

30-102110

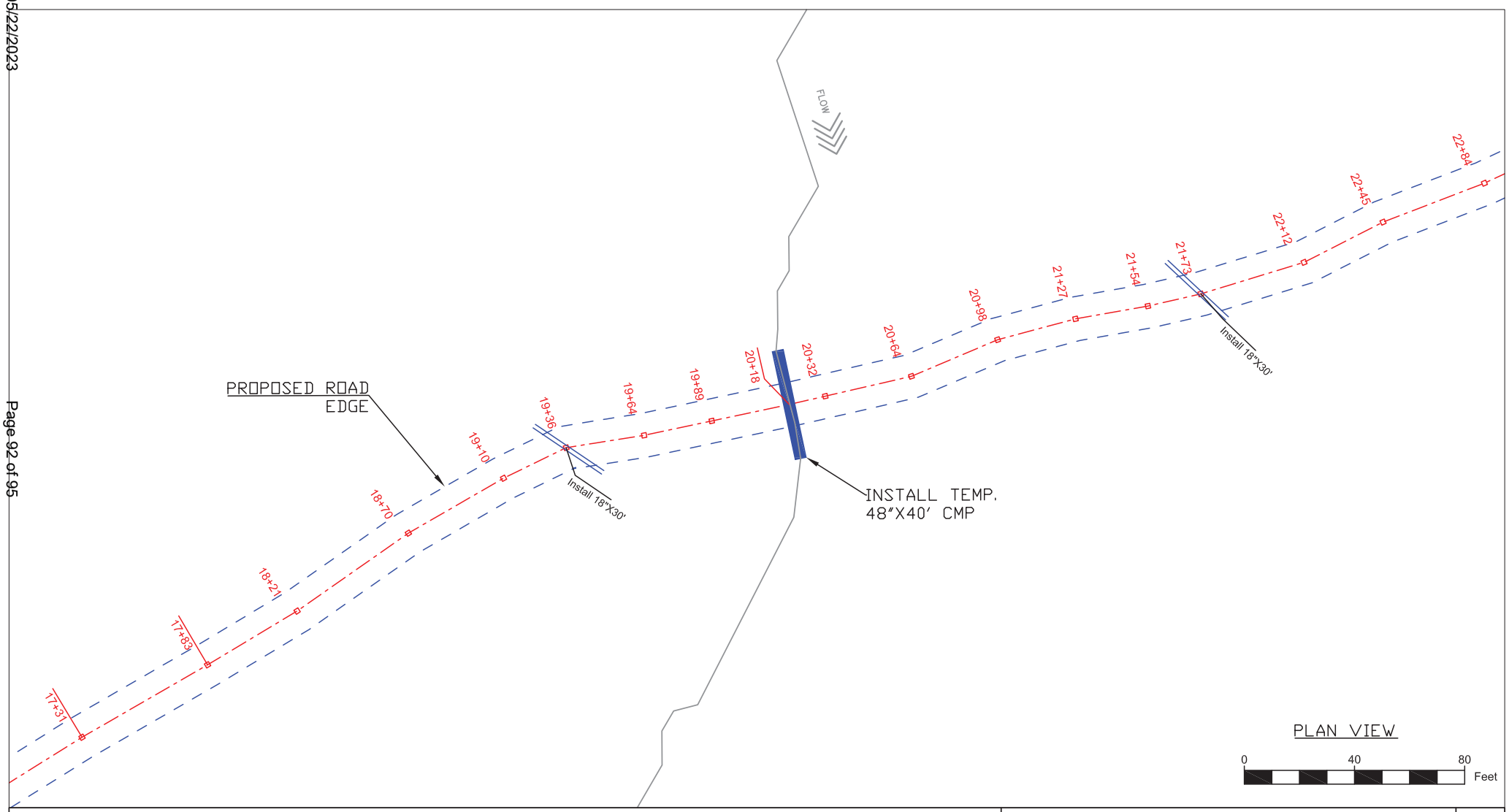
DRAWN BY: Heymann

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

DRAWING TITLE: SITE PLAN
Sure Wood T.S. – Mainline
LANDOWNER: WA–DNR

SEC. TWNSHP RANGE: SEC. 1 T21N R2W
LAT & LONG: N47.337653° W122.886624°
DATE: 07/11/2022 – Revised 00/00/0000

SHEET 3 OF 3



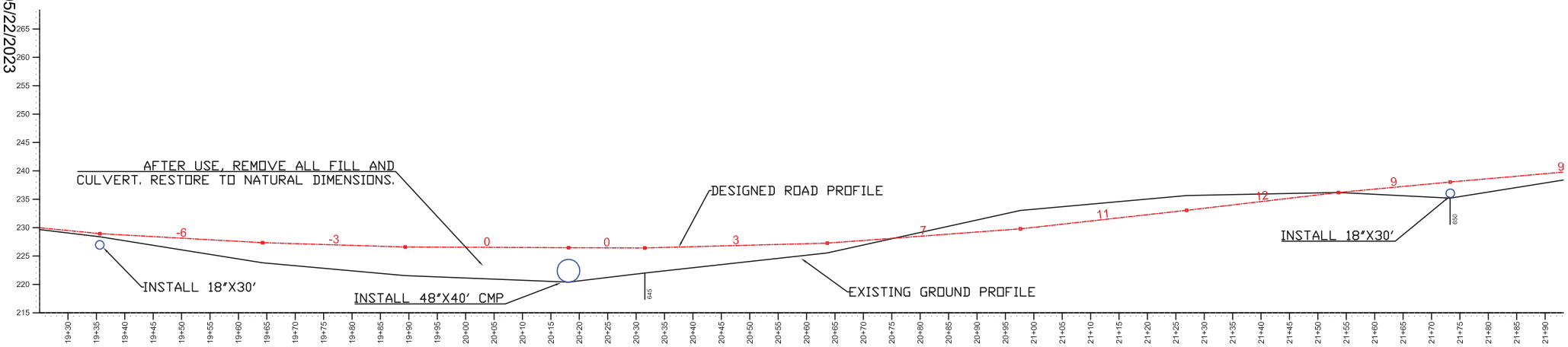
DRAWN BY: Heymann

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

DRAWING TITLE: SITE PLAN
Sure Wood T.S. – Temp Pipe On Archer RD
LANDOWNER: WA–DNR

SEC. TWNSHP RANGE: SEC. 30 T22N R1W
LAT & LONG: N47.374091° W122.861687°
DATE: 07/07/2022 – Revised 00/00/0000

SHEET 1 OF 4



ROAD PROFILE

0 20 40 Feet

1. IN-STREAM WORK ASSOCIATED WITH THIS PROJECT WILL BE COMPLETED BETWEEN JULY 15TH AND OCTOBER 1ST OF ANY GIVEN YEAR, UNLESS ADDITIONAL DAYS ARE ALLOWED BY FOREST PRACTICES IN CONSULTATION WITH DEPARTMENT OF FISH AND WILDLIFE, THE CONSTRUCTION AND ABANDONMENT SHALL OCCUR WITHIN THIS TIME.
2. ANY DISTURBANCE TO THE STREAMBED OR BANKS WILL BE LIMITED TO THAT NECESSARY TO INSTALL THE TEMPORARY CULVERT.
3. STREAM FLOW SHALL BE ISOLATED FROM THE WORK AREA THROUGH THE USE OF A BYPASS CULVERT OR PUMPING. ANY DEVICE USED FOR PUMPING WATER FROM FISH-BEARING STREAM SHALL BE EQUIPPED WITH A FISH GUARD TO PREVENT PASSAGE OF FISH INTO THE DIVERSION DEVICE AS DESCRIBED IN THE FOREST PRACTICES BOARD MANUAL.
4. WHEN DIVERTING STREAM FLOW FISH LIFE IN THE DEWATERED AREA WILL BE SAFELY CAPTURED AND RETURNED TO THE STREAM BELOW THE PROJECT.
5. PRIOR TO RELEASING THE STREAM FLOW INTO THE PROJECT AREA, ALL BANK AND EROSION PROTECTION MEASURES WILL BE COMPLETE.
6. WASTE WATER AND DEWATERING WILL BE ROUTED TO AN AREA OUTSIDE THE ORDINARY HIGH WATER MARK TO ALLOW REMOVAL OF FINE SEDIMENT AND CONTAMINANTS PRIOR TO ENTERING THE STREAM.
8. EXCESS EXCAVATED MATERIAL AND REMOVAL OF FILL FROM THE TEMPORARY CULVERT WILL BE END-HAULED TO A WASTE AREA IDENTIFIED IN THE ROAD PLAN AND AS APPROVED BY THE CONTRACT ADMINISTRATOR.
9. UPON COMPLETION OF THE PROJECT, ALL MATERIAL USED IN THE TEMPORARY CROSSING SHALL BE REMOVED FROM THE SITE AND THE CHANNEL BED, BANK AND SHORELINE AREAS RESTORED SIMILAR TO PRE-PROJECT NATURAL CONDITION.
10. GRASS SEED AND COVER ALL EXPOSED SOILS WITHIN 25FT OF THE STREAM CHANNEL WITH A LAYER OF STRAW. REPLANTING OF THE DISTURBED RMZ WILL OCCUR DURING PLANTING OF THE ASSOCIATED HARVEST UNITS.

30-102110

DRAWN BY: Heymann

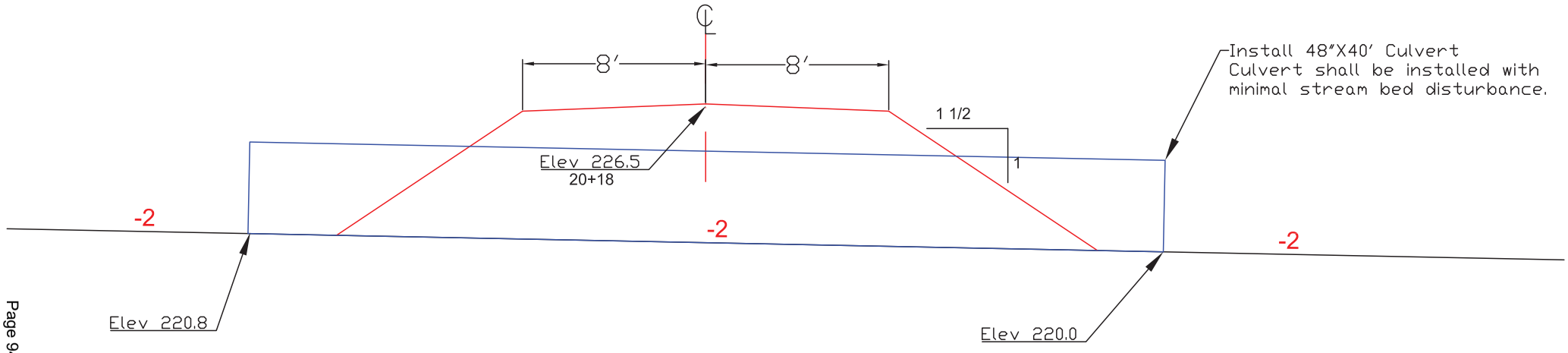
WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

DRAWING TITLE: SITE PLAN
Sure Wood T.S. – Temp Pipe
On Archer Rd

LANDOWNER: WA–DNR

SEC. TWNSHP RANGE: SEC. 30 T22N R1W
LAT & LONG: N47.374091° W122.861687°
DATE: 07/07/2022 – Revised 00/00/0000

SHEET 2 OF 4



CULVERT PROFILE

0 5 10 Feet

30-102110

DRAWN BY: Heymann

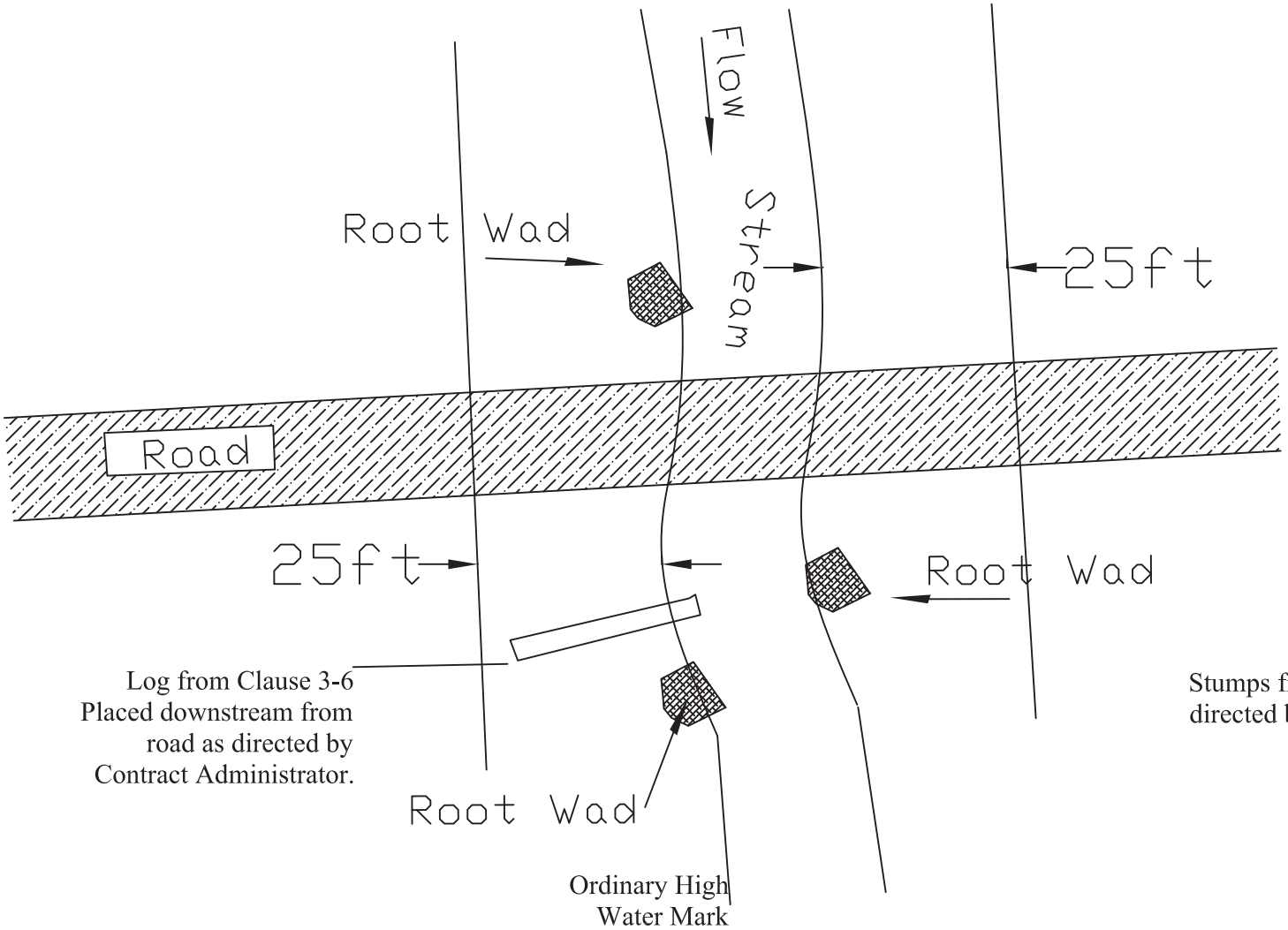
WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

DRAWING TITLE: SITE PLAN
Sure Wood T.S. – Temp Pipe
On Archer RD

LANDOWNER: WA–DNR

SEC. TWNSHP RANGE: SEC. 30 T22N R1W
LAT & LONG: N47.374091° W122.861687°
DATE: 07/07/2022 – Revised 00/00/0000

SHEET 3 OF 4



Contract #: 30-102110
Date: 7/11/2022
Scale: None
Sheet: 4 Of 4
Drawn by: MDB

Typical Riparian Strategy Stream Crossing Detail

Sure Wood Timber Sale - Temp Pipe

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: Sure Wood T.S. CONTRACT NUMBER: 30-102110
LEGAL DESCRIPTION: Sec 25 & 26 T22N R02W & Sec 19 &30 T22N R01W

ROAD NUMBER:	Archer Spurs 1-7	erwood Mainl Powerline Powerline 2	erwood Mainl Powerline Powerline 2
ROAD STANDARD:	Construction	Reconstruction	Pre-haul maintenance
NUMBER OF STATIONS:	94.38	9.99	340.18
SIDESLOPE:	10-25%	5-10%	10-25%
CLEARING AND GRUBBING:	$10,476	$400	
EXCAVATION AND FILL:	$16,517	$1,099	
MISC. MAINTENANCE:			$5,276
ROCK TOTALS (Cu. Yds.):			
Ballast: 3752	$23,165	$671	$0
Surface: 19	$0	$591	$0
Riprap: 115	$0	$3,545	$0
CULVERTS AND FLUMES:	$11,175	$1,647	$8,234
STRUCTURES:	$0	$6,800	$0
GENERAL EXPENSES:	$5,520	$1,475	$1,351
MOBILIZATION:	$1,433	$1,433	$1,433
TOTAL COSTS:	$68,286	$17,661	$16,294
COST PER STATION:	$724	$1,768	$48

ROAD DEACTIVATION AND ABANDONMENT COSTS: $10,200

NOTE[1]: This appraisal has no allowance for profit and risk.
NOTE[2]: This appraisal does not account for optional rock.

TOTAL (All Roads) = $112,442

SALE VOLUME MBF = 5,343

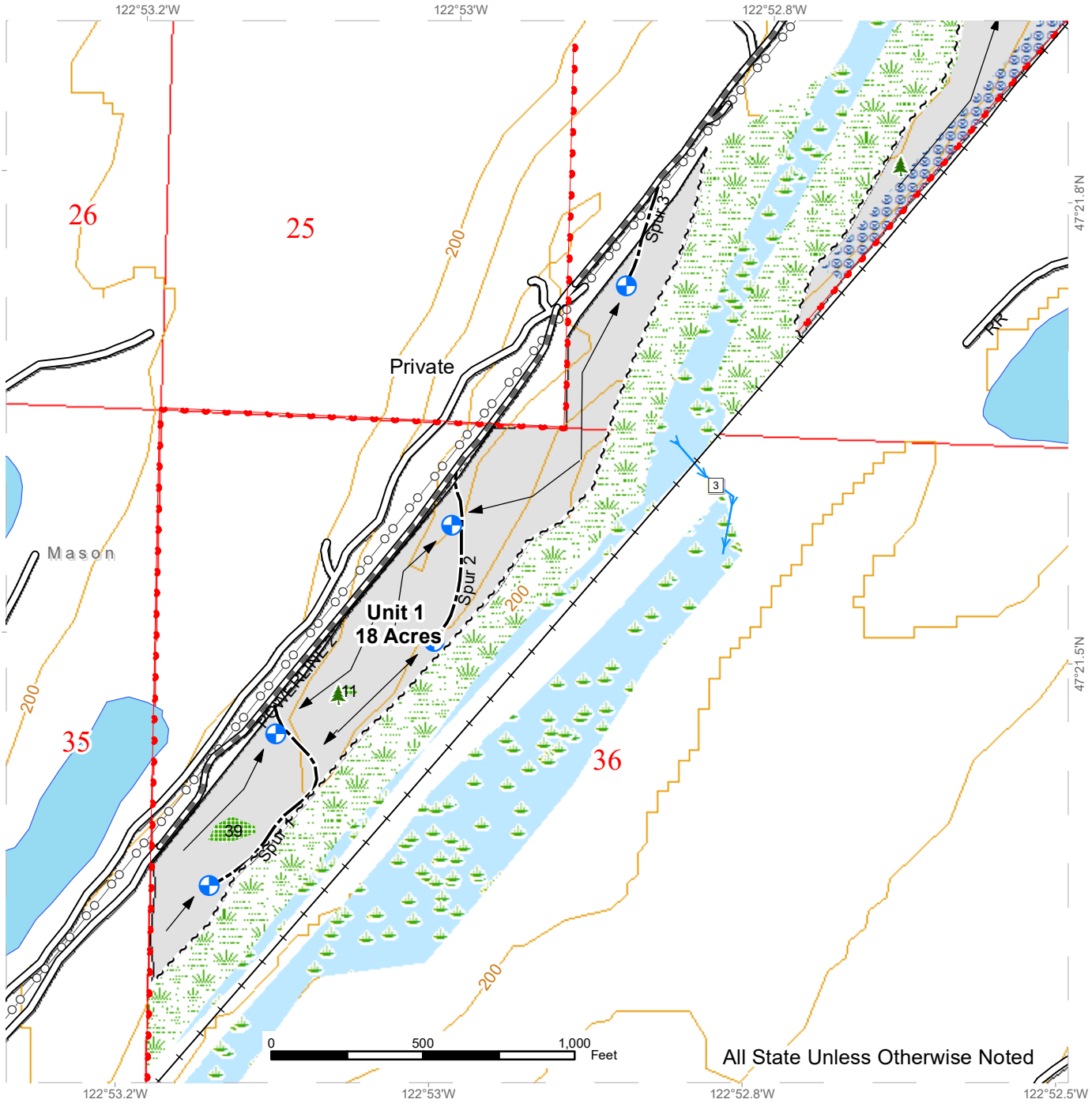
TOTAL COST PER MBF = $21.04

Date: 07/11/22

LOGGING PLAN MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Timber Type Change
- Property Line
- Ground Harvest
- Wetlands - Non-forested
- Wetland Mgt Zone
- Hazard Abatement Area
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Construction
- Railroad
- Power Lines
- Landing - Proposed
- Leave Tree Area <1/4-acre
- Streams
- Stream Type
- Contours 40-foot
- Public Land Survey Townships
- Public Land Survey Sections

N

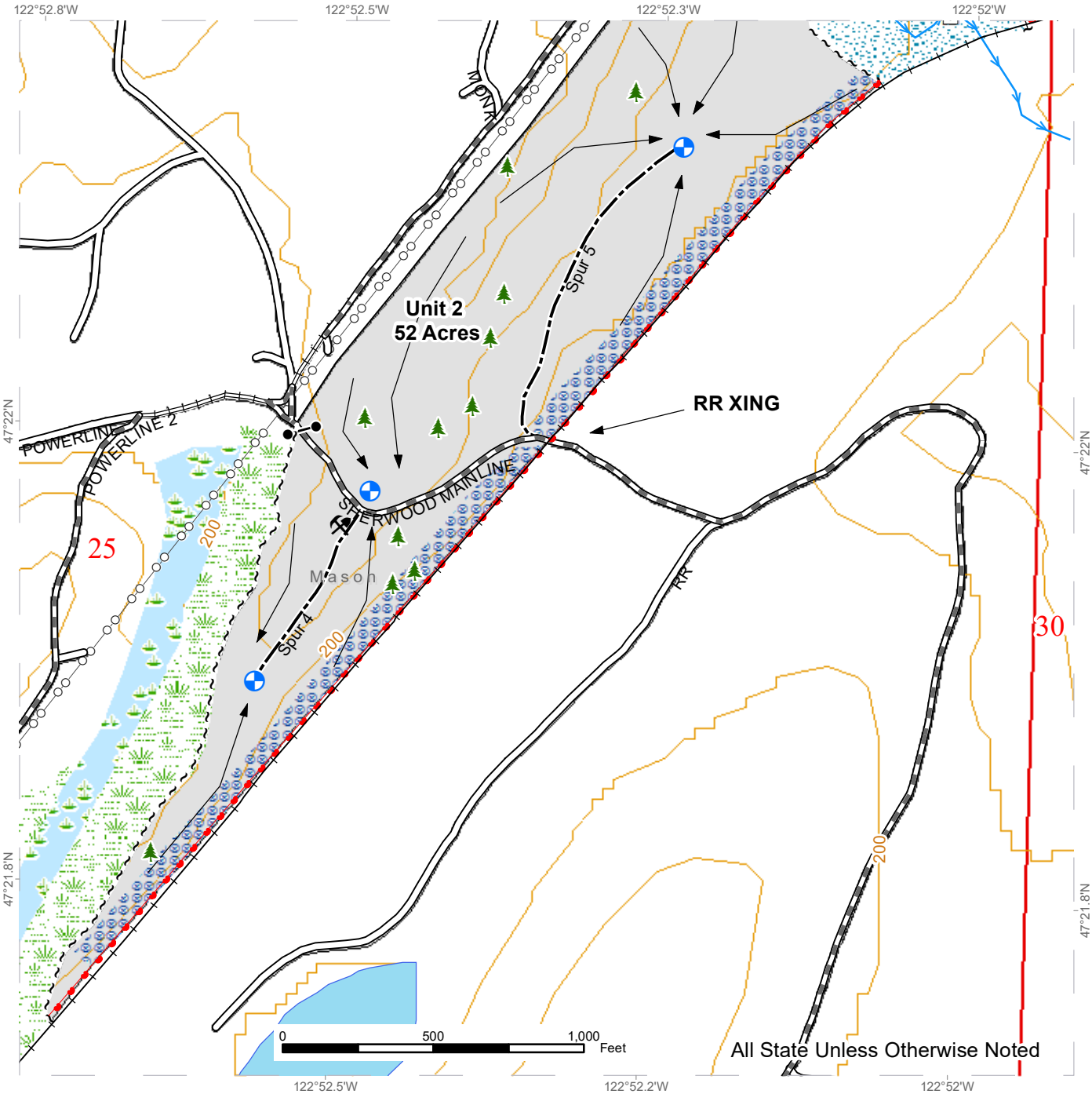
Prepared By: jcob490

Modification Date: jhom490 3/30/2023

LOGGING PLAN MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Timber Type Change
- Property Line
- Ground Harvest
- Wetlands - Non-forested
- Riparian Mgt Zone
- Wetland Mgt Zone
- Hazard Abatement Area
- Existing Roads
- Required Reconstruction
- Required Pre-Haul Maintenance
- Optional Construction
- Railroad
- Power Lines
- Landing - Proposed
- Leave Tree Area <1/4-acre
- Streams
- Stream Type
- Rock Pit
- Gates
- Contours 40-foot
- Public Land Survey Townships
- Public Land Survey Sections

N

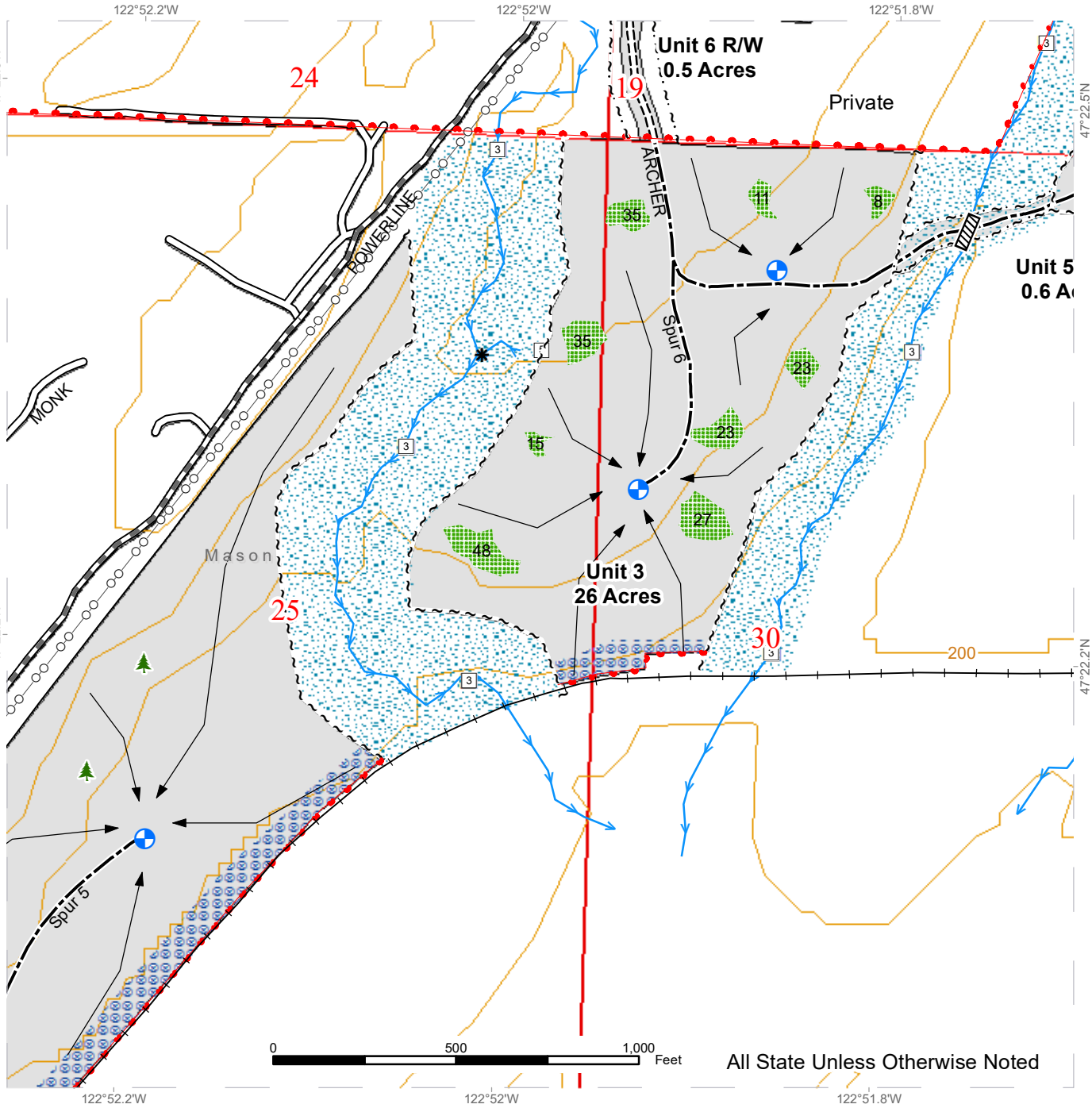
Prepared By: jcob490

Modification Date: jhom490 3/30/2023

LOGGING PLAN MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

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

N

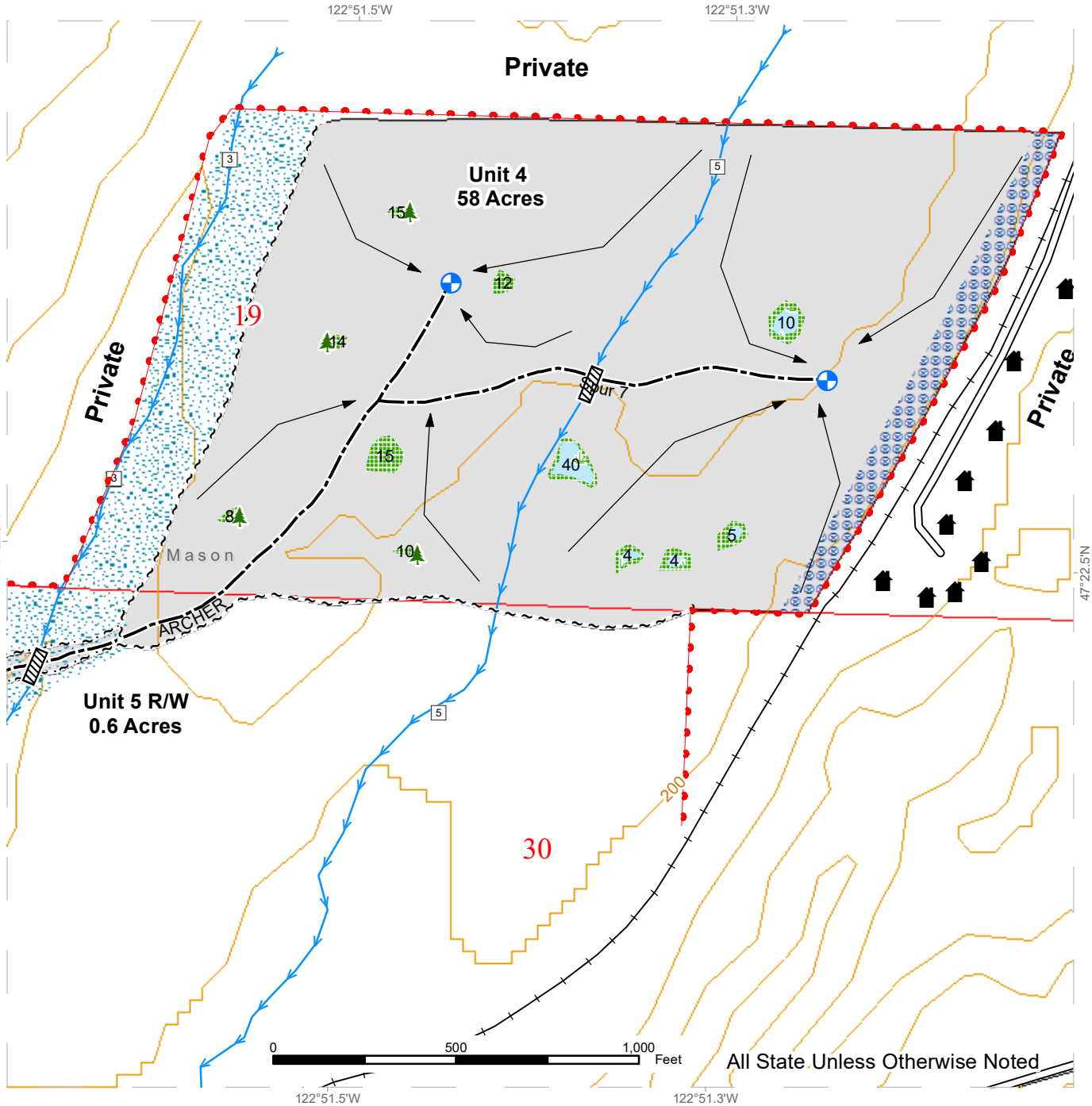
Prepared By: jcob490

Modification Date: jhom490 3/30/2023

LOGGING PLAN MAP

SALE NAME: SURE WOOD
AGREEMENT#: 30-102110
TOWNSHIP(S): T22R1W, T22R2W
TRUST(S): Common School and Indemnity (3)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 200-280



Legend

- Units
- Sale Boundary Tags
- Right of Way Tags
- Property Line
- Ground Harvest
- Riparian Mgt Zone
- Hazard Abatement Area
- U4 Wetland
- Existing Roads
- Optional Construction
- Railroad
- Culvert
- Landing - Proposed
- Leave Tree Area <1/4-acre
- Structure
- Leave Tree Area
- Streams
- Stream Type
- Contours 40-foot
- Public Land Survey Townships
- Public Land Survey Sections

N

Prepared By: jcob490

Modification Date: jhom490 3/30/2023