



Timber Sale Appraisal
Bark Beetle Bailey
Sale WO-341-2024-WO1089-01

District: West Oregon

Date: April 24, 2024

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$971,127.48	\$56,976.30	\$1,028,103.78
		Project Work:	(\$142,307.00)
		Advertised Value:	\$885,796.78



Timber Sale Appraisal Bark Beetle Bailey Sale WO-341-2024-WO1089-01

District: West Oregon

Date: April 24, 2024

Timber Description

Location: Portions of Section 7, T10S, R7W, W.M., Benton & Polk Counties, OR.

Stand Stocking: 40%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	24	0	98
Alder (Red)	14	0	97

Volume by Grade	2S	3S & 4S 6"-11"	3S 12"+	Camprun	Total
Douglas - Fir	1,814	331	134	0	2,279
Alder (Red)	0	0	0	522	522
Total	1,814	331	134	522	2,801

Comments: Pond Values Used: local Pond Values, March 2024

Western Hemlock and other Conifers Stumpage Price = Pond value minus logging costs:
\$176.84/MBF = \$538/MBF - \$361.16/MBF

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
\$718.84/MBF = \$1230/MBF - (\$361.16/MBF + \$150/MBF(Extra Haul Cost))

Bigleaf Maple and Other Hardwoods Stumpage Price = Hardwood Pulp price using a conversion factor of 10 ton/MBF: = \$25.00/MBF
PULP (Conifer and Hardwood Price) = \$2.50/TON

Other Costs (with Profit and Risk to be added)
Intermediate Support/Tail Tree: 8 supports @ \$100/support = \$800
TOTAL Other Costs (with Profit and Risk to be added) = \$800

Other Costs (No Profit and Risk to be added):
Equipment Cleaning (Invasive Species): \$2500
Landing slash piling and firewood sorting: 5 Landings @ \$180/ Landing = \$900
TOTAL Other Costs (No Profit and Risk) = \$3400

ROAD MAINTENANCE
Landing Maintenance rock 30 cubic yards 3"-0": \$1,084.80
Move-in: Grader & Vibratory Roller \$1900
Final Road Maintenance: \$26,277.52
TOTAL Road Maintenance: \$ 29,262.32 / 2801 MBF = \$10.45/MBF



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Logging Conditions

Combination#: 1 Douglas - Fir 95.74%
 Alder (Red) 96.34%

Logging System: Cable: Large Tower >=70 **Process:** Manual Falling/Delimbing
yarding distance: Short (400 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 8 **bd. ft / load:** 4800
cost / mbf: \$223.42
machines: Log Loader (A)
 Tower Yarder (Large)

Combination#: 2 Douglas - Fir 4.26%
 Alder (Red) 3.66%

Logging System: Shovel **Process:** Manual Falling/Delimbing
yarding distance: Short (400 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10 **bd. ft / load:** 4800
cost / mbf: \$208.34
machines: Shovel Logger



"STEWARDSHIP IN FORESTRY"

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District: West Oregon

Date: April 24, 2024

Logging Costs

Operating Seasons: 2.00	Profit Risk: 10%
Project Costs: \$142,307.00	Other Costs (P/R): \$800.00
Slash Disposal: \$0.00	Other Costs: \$3,400.00

Miles of Road

Road Maintenance: \$10.45

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	4.8
Alder (Red)	\$0.00	3.0	3.5



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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
\$222.78	\$10.66	\$3.13	\$88.55	\$0.29	\$32.54	\$0.00	\$2.00	\$1.21	\$361.16
Alder (Red)									
\$222.87	\$10.76	\$3.13	\$122.62	\$0.29	\$35.97	\$0.00	\$2.00	\$1.21	\$398.85

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$787.28	\$426.12	\$0.00
Alder (Red)	\$0.00	\$508.00	\$109.15	\$0.00



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Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	2,279	\$426.12	\$971,127.48
Alder (Red)	522	\$109.15	\$56,976.30

Gross Timber Sale Value

Recovery: \$1,028,103.78

Prepared By: Aaron McEwen

Phone: 541-929-9168

SUMMARY OF ALL PROJECT COSTS

Sale Name: Bark Beetle Bailey

Date: July 2024

Time: 8:35

Project #1 - New Construction

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
A to B	22.6 sta	\$75,626
C to D	1.6 sta	\$4,330
TOTALS	24.2 sta	\$79,956

Project #2 - Road Improvement, Surface Rock Replacement and Maintenance

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
1 to 2	240.0 sta	\$11,446
2 to 3	92.0 sta	\$15,111
3 to 4	65.0 sta	\$29,458
5 to 6	3.0 sta	\$1,036
TOTALS	400.0 sta	\$57,051

Project #3 - Move in

	<u>Cost</u>
Excavator, C325 or equiv.	\$1,500
Dozer, D-7 or equiv.	\$950
Grader, Cat 14-G or equiv.	\$950
Vibratory roller	\$950
Front End Loader	\$950
TOTAL	\$5,300

GRAND TOTAL

\$142,307

Compiled by: Aaron McEwen

Date 07/09/2024

SUMMARY OF CONSTRUCTION COST

SALE Bark Beetle Bailey Project # 1 LENGTH 22.6 sta
ROAD A to B (Surfaced)

CLEARING AND GRUBBING

			<u>Rate</u>			
Road	1.8 ac	@	\$1,470.00	/acre	=	\$2,646
Remove large stumps (35+" diameter)	28 stumps	@	\$90.00	/stump	=	\$2,520
TOTAL CLEARING AND GRUBBING =						\$5,166

EXCAVATION

			<u>Rate</u>			
Construct road (full bench)	22.6 sta	@	\$235.00	/sta	=	\$5,311
Construct Landing (Sta. 11+90, 17+60 and 22+60)	3 Ldg	@	\$480.00	/Ldg	=	\$1,440
End-haul excavation (Expanded 30%)	1300 CY	@	\$5.85	/CY	=	\$7,605
Construct turnout (w/ dozer) (Sta. 6+50)	0.5 hrs	@	\$178.00	/hr	=	\$89
Shape subgrade (w/ grader)	22.6 sta	@	\$22.69	/sta	=	\$513
Compact subgrade (w/ roller)	22.6 sta	@	\$17.50	/sta	=	\$396
TOTAL EXCAVATION =						\$15,354

IMPROVEMENT

			<u>Rate</u>			
Process surface (w/ grader)	22.6 sta	@	\$22.69	/sta	=	\$513
Process surface (w/ dozer)	22.6 sta	@	\$22.69	/sta	=	\$513
Compact surface (w/ roller)	67.8 sta	@	\$17.50	/sta	=	\$1,187
TOTAL IMPROVEMENT =						\$2,213

SURFACING

		<u>Size</u>		<u>Rate</u>			
Base rock (8" lift)	990 CY	Jaw-Run	@	\$30.15	/CY	=	\$29,849
Curve widening rock	90 CY	Jaw-Run	@	\$30.15	/CY	=	\$2,714
Surface rock (3"lift)	370 CY	3"-0"	@	\$31.16	/CY	=	\$11,529
Traction rock (1"lift)	120 CY	1 1/2"-0"	@	\$32.51	/CY	=	\$3,901
Turnout rock (Sta. 6+50)	20 CY	Jaw-Run	@	\$30.15	/CY	=	\$603
Landing rock (Sta. 11+90, 17+60 and 22+60)	110 CY	Jaw-Run	@	\$30.15	/CY	=	\$3,317
TOTAL ROCK COST =						\$51,913	

SPECIAL PROJECTS

			<u>Rate</u>			
Cross drain culvert (18" x 40')	40 ft	@	\$16.50	/ft	=	\$660
Install culvert (w/ excavator) (Sta. 5+71)	1 hr	@	\$160.00	/hr	=	\$160
Construct catch basin (w/ excavator)	0.5 hrs	@	\$160.00	/hr	=	\$80
Construct ditchout (w/ excavator) (Sta. 11+90)	0.5 hrs	@	\$160.00	/hr	=	\$80
TOTAL SPECIAL PROJECTS COST =						\$980

Compiled by:
Date:

Aaron McEwen
Jul 9, 2024

GRAND TOTAL =====> \$75,626

SUMMARY OF CONSTRUCTION COST

SALE	Bark Beetle Bailey	Project #	1	LENGTH	1.6 sta
ROAD	C to D	(Surfaced)			

CLEARING AND GRUBBING

Road	0.11 ac	@	<u>Rate</u> \$1,470.00 /acre	=	\$162
TOTAL CLEARING AND GRUBBING =					\$162

EXCAVATION

Construct road (balanced cut and fill)	1.6 sta	@	<u>Rate</u> \$152.00 /sta	=	\$243
Construct Landing	1 Ldg	@	\$480.00 /Ldg	=	\$480
Shape subgrade (w/ grader)	1.6 sta	@	\$22.69 /sta	=	\$36
Compact subgrade (w/ roller)	1.6 sta	@	\$17.50 /sta	=	\$28
TOTAL EXCAVATION =					\$787

IMPROVEMENT

Process surface (w/ dozer)	1.6 sta	@	<u>Rate</u> \$22.69 /sta	=	\$36
Compact surface (w/ roller)	1.6 sta	@	\$17.50 /sta	=	\$28
TOTAL IMPROVEMENT =					\$64

SURFACING

Base rock (8' lift)	70 CY	<u>Size</u> Jaw-Run	@	<u>Rate</u> \$30.15 /CY	=	\$2,111
Landing rock	40 CY	Jaw-Run	@	\$30.15 /CY	=	\$1,206
TOTAL ROCK COST =					\$3,317	

Compiled by:
Date:

Aaron McEwen
Jul 9, 2024

GRAND TOTAL =====> \$4,330

SUMMARY OF CONSTRUCTION COST

SALE	Bark Beetle Bailey	Project #	2	LENGTH	240.0 sta
ROAD	1 to 2	Green Mountain Road			

IMPROVEMENT

			<u>Rate</u>				
Shape surface (w/ grader)	60.0 sta	@	\$22.69 /sta	=		\$1,361	
Compact surface (w/ roller)	60.0 sta	@	\$17.50 /sta	=		\$1,050	
Re-establish ditch (w/ grader)	115.0 sta	@	\$48.00 /sta	=		\$5,520	
TOTAL IMPROVEMENT =						\$7,931	

SURFACING

		<u>Size</u>	<u>Rate</u>				
Spot rock	126 CY	1½"-0"	@ \$26.31 /CY	=		\$3,315	
TOTAL ROCK COST =						\$3,315	

SPECIAL PROJECTS

			<u>Rate</u>				
Clean out culverts (inlets and outlets)	8 culverts	@	\$25 ea	=		\$200	
TOTAL SPECIAL PROJECTS COST =						\$200	

Compiled by:
Date:

Aaron McEwen
Jul 9, 2024

GRAND TOTAL =====> \$11,446

SUMMARY OF CONSTRUCTION COST

SALE	Bark Beetle Bailey	Project #	2	LENGTH	92.0 sta
ROAD	2 to 3 Little Grass Road				

IMPROVEMENT

Ditch re-establishment	30.0 sta	@	<u>Rate</u> \$48.00	/sta	=	\$1,440
Endhaul waste (Ditch Waste)	10 CY	@	\$5.85	/cy	=	\$59
TOTAL IMPROVEMENT =						\$1,499

SURFACING

Turnout rock	30 CY	<u>Size</u> 3"-0"	@	<u>Rate</u> \$31.16	/CY	=	\$935
(Sta. 25+12, 63+82, 85+95)							
Spot rock	200 CY	1½"-0"	@	\$32.51	/CY	=	\$6,502
Patch rock	20 CY	3"-0"	@	\$31.16	/CY	=	\$623
(Sta. 31+85 & 87+23)							
Process surface	95.0 sta		@	\$22.69	/sta	=	\$2,156
(w/ grader)							
Compact surface	95.0 sta		@	\$17.50	/sta	=	\$1,663
(w/ roller)							
TOTAL ROCK COST =						\$11,879	

SPECIAL PROJECTS

Cross drain culvert	40 ft		@	<u>Rate</u> \$16.50	/ft	=	\$660
(18" x 40')							
Install culvert	1 hr		@	\$160.00	/hr	=	\$160
(w/ excavator)							
Culvert Bedding & Backfill	20 CY	1½"-0"	@	\$32.51	/CY	=	\$650
(Sta. 69+36)							
Compaction	1 hrs		@	\$63.00	/hr	=	\$63
(w/ handheld tamper + labor)							
Clean out culverts	8 culverts		@	\$25	ea	=	\$200
(inlets and outlets)							
TOTAL SPECIAL PROJECTS COST =						\$1,733	

Compiled by:

Aaron McEwen

Date:

Jul 9, 2024

GRAND TOTAL =====> \$15,111

SUMMARY OF CONSTRUCTION COST

SALE	Bark Beetle Bailey	Project #	2	LENGTH	65.0 sta
ROAD	3 to 4 Little Grass South Road				

EXCAVATION

				<u>Rate</u>			
Cutslope rounding (Sta. 3+70)	1.0 sta	@	\$54.00	/sta	=	\$54	
Pull stumps (Sta. 3+70) (w/ excavator)	0.5 hrs	@	\$160.00	/hr	=	\$80	
Bank slough removal (w/ excavator)	2.0 hrs	@	\$160.00	/hr	=	\$320	
End-haul waste	50 CY	@	\$5.85	/CY	=	\$293	
TOTAL EXCAVATION =						\$747	

IMPROVEMENT

				<u>Rate</u>			
Ditch re-establishment (w/ grader)	65.0 sta	@	\$48.00	/sta	=	\$3,120	
Sod Removal (w/ grader)	65.0 sta	@	\$16.95	/sta	=	\$1,102	
Re-open turnaround (Sta. 59+00) (w/ dozer)	0.5 hr	@	\$178.00	/hr	=	\$89	
Compact surface (w/ roller)	65.0 sta	@	\$17.50	/sta	=	\$1,138	
Roadway limb pruning (w/ excavator)	1.5 hrs	@	\$160.00	/hr	=	\$240	
TOTAL IMPROVEMENT =						\$5,689	

SURFACING

			<u>Size</u>		<u>Rate</u>		
Surface rock (2"lift)	590 CY	@	1½"-0"	\$32.51	/CY	=	\$19,181
Curve widening rock (Sta. 6+30)	20 CY	@	3"-0"	\$31.16	/CY	=	\$623
Patch rock (Sta. 21+37)	20 CY	@	3"-0"	\$31.16	/CY	=	\$623
Turnout rock (Sta. 27+00)	10 CY	@	1½"-0"	\$32.51	/CY	=	\$325
Process surface (w/ grader)	54.0 sta	@		\$22.69	/sta	=	\$1,225
Compact surface (w/ roller)	54.0 sta	@		\$17.50	/sta	=	\$945
TOTAL ROCK COST =						\$22,922	

SPECIAL PROJECTS

				<u>Rate</u>			
Clean out culverts (inlets and outlets)	4 culverts	@		\$25	ea	=	\$100
TOTAL SPECIAL PROJECTS COST =						\$100	

Compiled by:
Date:

Aaron McEwen
Jul 9, 2024

GRAND TOTAL =====> \$29,458

SUMMARY OF CONSTRUCTION COST

SALE	Bark Beetle Bailey	Project #	2	LENGTH	3.0 sta
ROAD	5 to 6	Unsurfaced Road - Waste Area			

EXCAVATION

			<u>Rate</u>				
Remove brush from subgrade	2.0 hr	@	\$178.00	/sta	=	\$356	
(w/ Dozer)							
Compact Waste Area	1360 CY	@	\$0.50	/CY	=	\$680	

TOTAL EXCAVATION = \$1,036

Compiled by:	Aaron McEwen
Date:	Jul 9, 2024

GRAND TOTAL =====> \$1,036

SUMMARY OF MAINTENANCE COST

SALE

Bark Beetle Bailey

Final log haul Maintenance Cost Estimate

(Costed in appraisal, not in project costs)

Move-in

Grader

\$ 950

Vibratory Roller

\$ 950

Road Segment	Length	Cost/Sta	Cost	Mileage
1 to 2	240.0	\$40.19	\$9,645.60	4.55
2 to 3	92.0	\$40.19	\$3,697.48	1.74
3 to 4	65.0	\$40.19	\$2,612.35	1.23
A to B	22.6	\$40.19	\$908.29	0.43
C to D	1.6	\$22.69	\$36.30	0.03
Total	421.2		\$16,900.02	7.98

Maintenance Rock:

	Volume	Cost/CY	Cost	
1½"-0"	250	\$37.51	\$9,377.50	
3"-0"	30	\$36.16	\$1,084.80	A to B Landing Rock

Grand Total

\$ 29,262.32

TS Volume

2,801 MBF

$$\text{Cost} / \text{MBF} =$$

\$10.45

NOTES:

Rock Haul Cost Computation

SALE NAME:	Bark Beetle Bailey	DATE:	Jul 9, 2024
ROAD NAME:	Green Mountain Stockpile	CLASS:	Medium
ROCK SOURCE:	Rickard		18 CY truck
Route:	Hwy 20, Summit Hwy, Logsden Rd., Green Mountain Rd., Pt.2		

TIME Computation:

Road speed time factors:

1.	55 MPH		MRT	0.0 minutes
2.	50 MPH	12.6	MRT	15.1 minutes
3.	45 MPH		MRT	0.0 minutes
4.	40 MPH		MRT	0.0 minutes
5.	35 MPH	21.0	MRT	36.0 minutes
6.	30 MPH		MRT	0.0 minutes
7.	25 MPH		MRT	0.0 minutes
8.	20 MPH	9.1	MRT	27.3 minutes
9.	15 MPH	2.6	MRT	10.4 minutes
10.	10 MPH		MRT	0.0 minutes
11.	05 MPH		MRT	0.0 minutes

Dump or spread time per RT	0.50 minutes
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Total hauling cycle time for this setting (100% efficiency)	89.30 minutes
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Operator efficiency correction	0.85	105.06 minutes
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Job efficiency correction	0.90	116.73 minutes
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Truck capacity (CY)	18.00	6.49 min/CY
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Loading time, delay time per CY	0.25 min/CY
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TIME (minutes) per cubic yard	6.74 min/CY
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COST per CY computation

Cost of truck and operator per hour	\$114.00 /hr.
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Cost of truck and operator per minute	\$1.90 /min
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Cost per CY	\$12.81 /CY
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Size	Cost/Yd (Pit)	Cost Delivered w/o processing
3\4" - 0"	\$ 13.50	\$26.31
1½" - 0"	\$ 13.50	\$26.31
3" - 0"	\$ 12.15	\$24.96
Jaw-Run	\$ 11.14	\$23.95
Pit-Run	\$ 9.45	\$22.26

Rock Haul Cost Computation

SALE NAME:	Bark Beetle Bailey	DATE:	Jul 9, 2024
ROAD NAME:	Little Grass/Little Grass South/Pt. A	CLASS:	Medium
ROCK SOURCE:	Pt. 2 Stockpile		10 CY truck
Route:	Pt. 2, Little Grass Rd., Little Grass South Rd., Pt. A + 9 Stations		

TIME Computation:

Road speed time factors:

1.	55 MPH		MRT	0.0 minutes
2.	50 MPH		MRT	0.0 minutes
3.	45 MPH		MRT	0.0 minutes
4.	40 MPH		MRT	0.0 minutes
5.	35 MPH		MRT	0.0 minutes
6.	30 MPH		MRT	0.0 minutes
7.	25 MPH		MRT	0.0 minutes
8.	20 MPH		MRT	0.0 minutes
9.	15 MPH	6.3	MRT	25.2 minutes
10.	10 MPH		MRT	0.0 minutes
11.	05 MPH		MRT	0.0 minutes

Dump or spread time per RT 0.50 minutes

Total hauling cycle time for this setting
(100% efficiency) 25.70 minutes

Operator efficiency correction	0.85	30.24 minutes
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Job efficiency correction	0.90	33.60 minutes
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Truck capacity (CY)	10.00	3.36	min/CY
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Loading time, delay time per CY	0.35	min/CY
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TIME (minutes) per cubic yard	3.71	min/CY
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COST per CY computation

Cost of truck and operator per hour	\$100.00 /hr.
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Cost of truck and operator per minute	\$1.67 /min
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Cost per CY	\$6.20 /CY
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Size	Cost/Yd (Stockpile)	Cost Delivered w/o processing
3\4" - 0"	\$ -	\$6.20
1½" - 0"	\$ -	\$6.20
3" - 0"	\$ -	\$6.20
Jaw-Run	\$ -	\$6.20
Pit-Run	\$ -	\$6.20

SALE NAME:	Bark Beetle Bailey	DATE:	Jul 9, 2024
ROAD NAME:	Little Grass/Little Grass South	CLASS:	Medium
ROCK SOURCE:	Rickard		10 CY truck
Route:	Pt. A to B, Little Grass South Rd., Little Grass Rd., Green Mountain Rd., Pt. 7 to 8.		

Road speed time factors:

1.	55 MPH		MRT	0.0 minutes
2.	50 MPH		MRT	0.0 minutes
3.	45 MPH		MRT	0.0 minutes
4.	40 MPH		MRT	0.0 minutes
5.	35 MPH		MRT	0.0 minutes
6.	30 MPH		MRT	0.0 minutes
7.	25 MPH		MRT	0.0 minutes
8.	20 MPH		MRT	0.0 minutes
9.	15 MPH	6.0	MRT	24.0 minutes
10.	10 MPH	0.5	MRT	3.0 minutes
11.	05 MPH		MRT	0.0 minutes

Total hauling cycle time for this setting
(100% efficiency) 27.50 minutes

Job efficiency correction	0.90	35.94 minutes
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TIME (minutes) per cubic yard 3.50 min/CY

Cost of truck and operator per minute	\$1.67 /min
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Cost per CY	\$5.85 /CY
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Size	Cost/Yd	Cost Delivered w/o processing
Waste	\$ -	\$5.85

Rock Haul Cost Computation

SALE NAME:	Bark Beetle Bailey	DATE:	Jul 9, 2024
ROAD NAME:	Final Maintenance	CLASS:	Medium
ROCK SOURCE:	Rickard		10 CY truck
Route:	Hwy 20, Summit Hwy, Logsden Rd., Green Mountain Rd., Little Grass Rd., Little Grass South Rd.		

TIME Computation:

Road speed time factors:

1.	55 MPH		MRT	0.0 minutes
2.	50 MPH	12.6	MRT	15.1 minutes
3.	45 MPH		MRT	0.0 minutes
4.	40 MPH		MRT	0.0 minutes
5.	35 MPH	21.0	MRT	36.0 minutes
6.	30 MPH		MRT	0.0 minutes
7.	25 MPH		MRT	0.0 minutes
8.	20 MPH	9.1	MRT	27.3 minutes
9.	15 MPH	7.3	MRT	29.2 minutes
10.	10 MPH		MRT	0.0 minutes
11.	05 MPH		MRT	0.0 minutes

Dump or spread time per RT	0.50 minutes
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Total hauling cycle time for this setting (100% efficiency)	108.10 minutes
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Operator efficiency correction	0.85	127.18 minutes
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Job efficiency correction	0.90	141.31 minutes
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Truck capacity (CY)	10.00	14.13 min/CY
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Loading time, delay time per CY	0.25 min/CY
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TIME (minutes) per cubic yard	14.38 min/CY
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COST per CY computation

Cost of truck and operator per hour	\$100.00 /hr.
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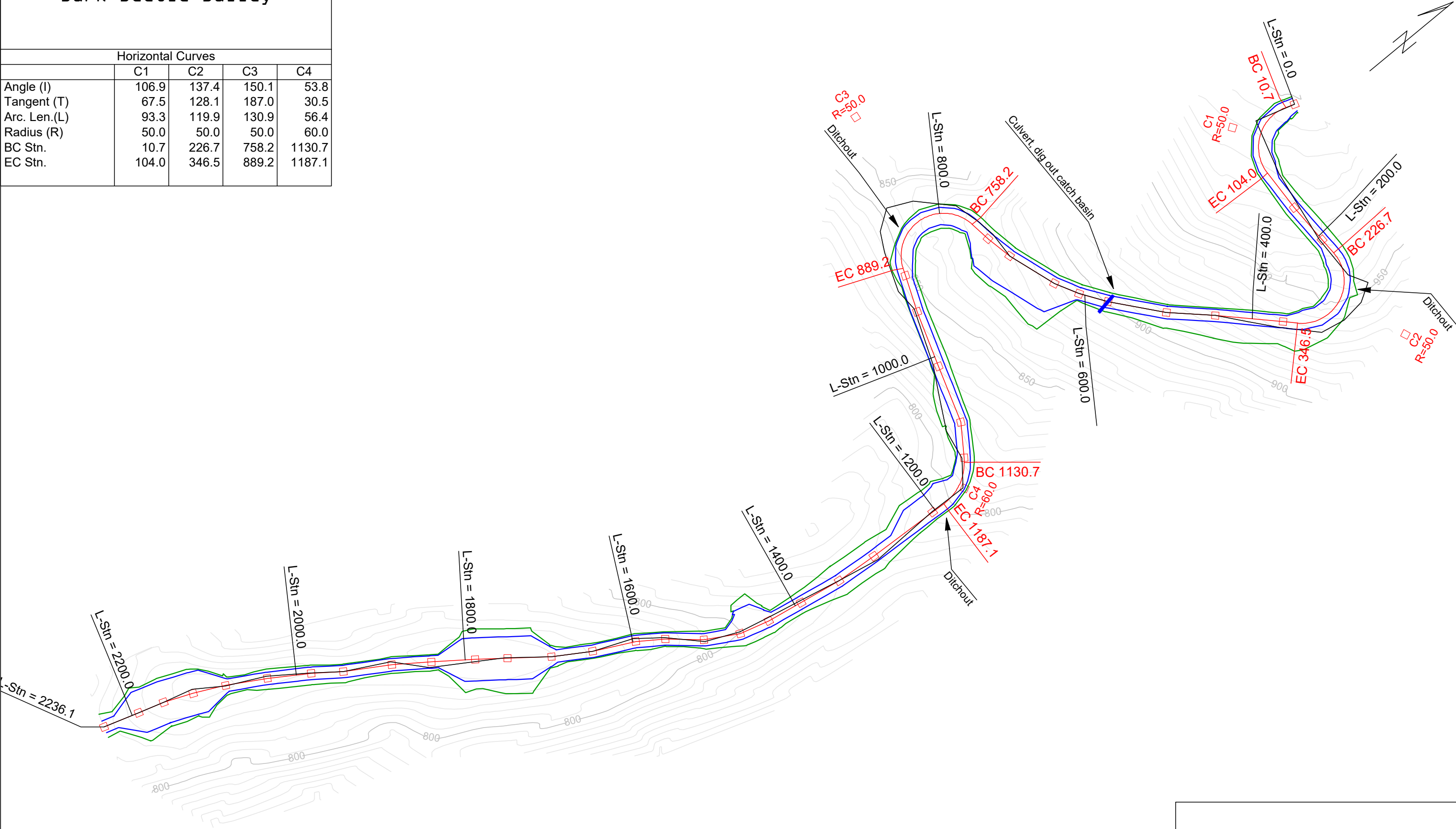
Cost of truck and operator per minute	\$1.67 /min
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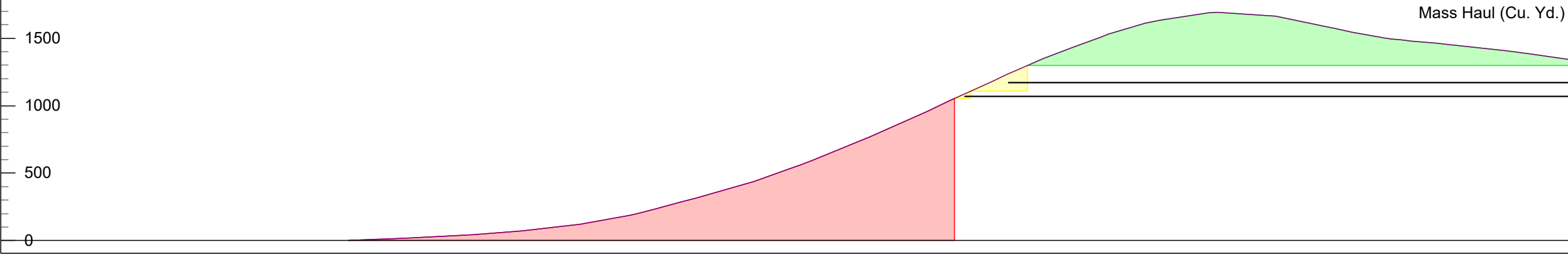
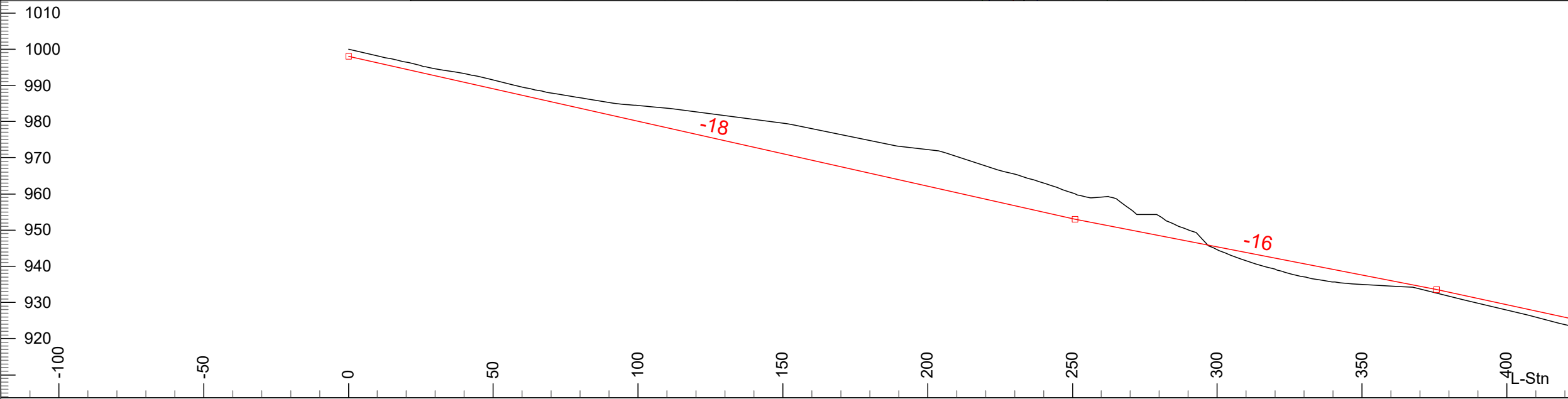
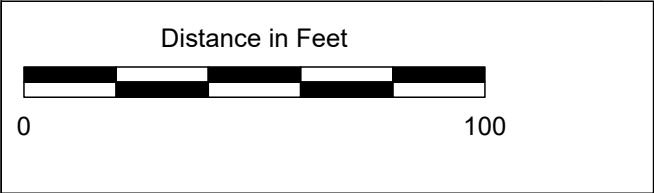
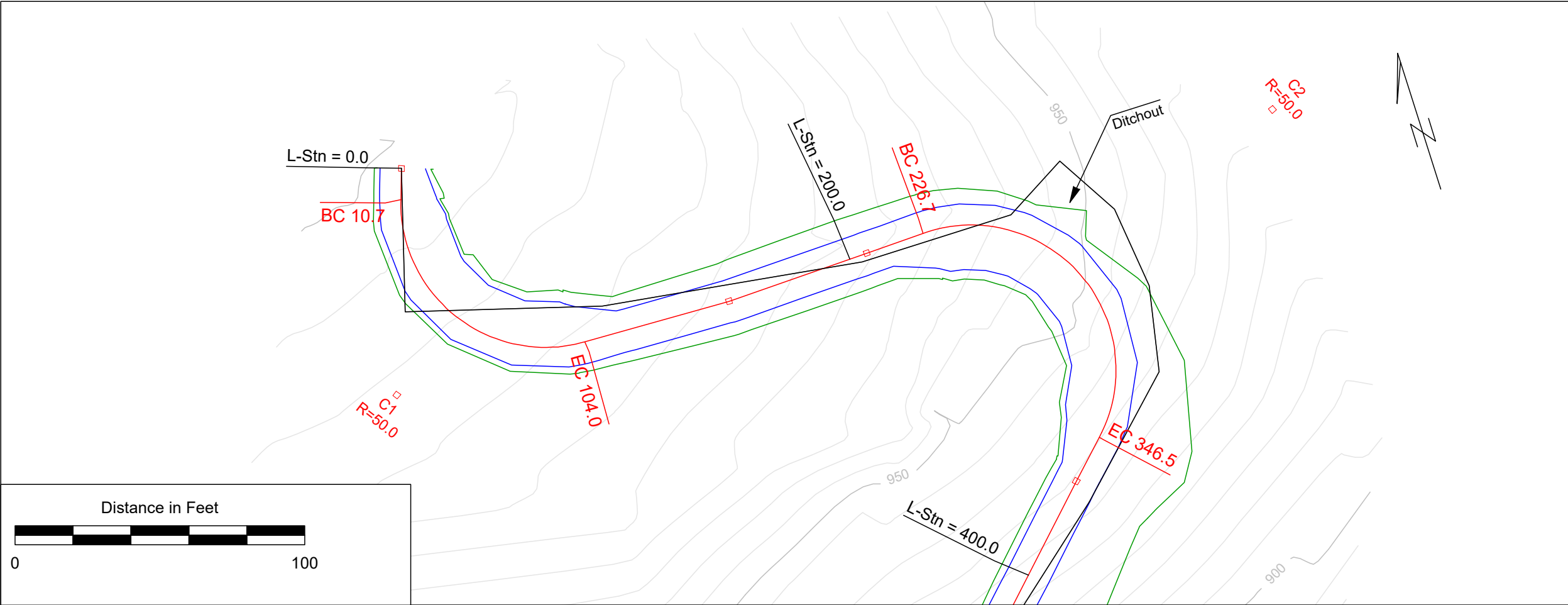
Cost per CY	\$24.01 /CY
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Size	Cost/Yd (Stockpile)	Cost Delivered w/o processing
3\4" - 0"	\$ 13.50	\$37.51
1½" - 0"	\$ 13.50	\$37.51
3" - 0"	\$ 12.15	\$36.16
Jaw-Run	\$ 11.14	\$35.15
Pit-Run	\$ 9.45	\$33.46

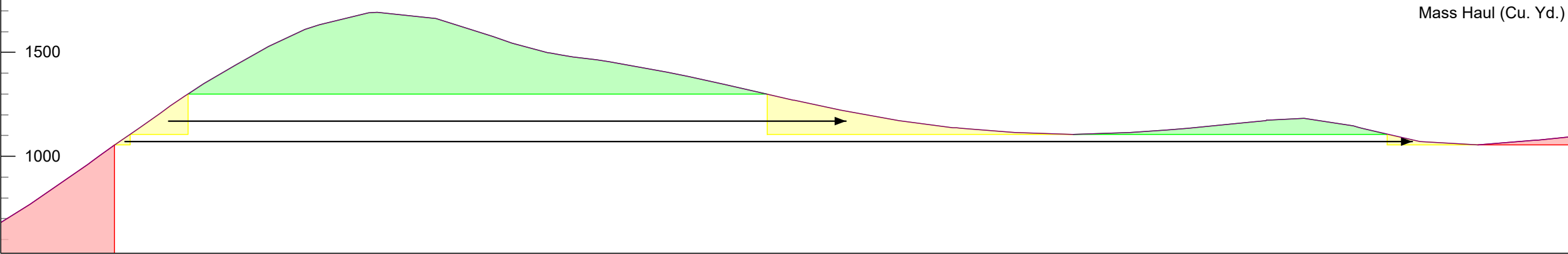
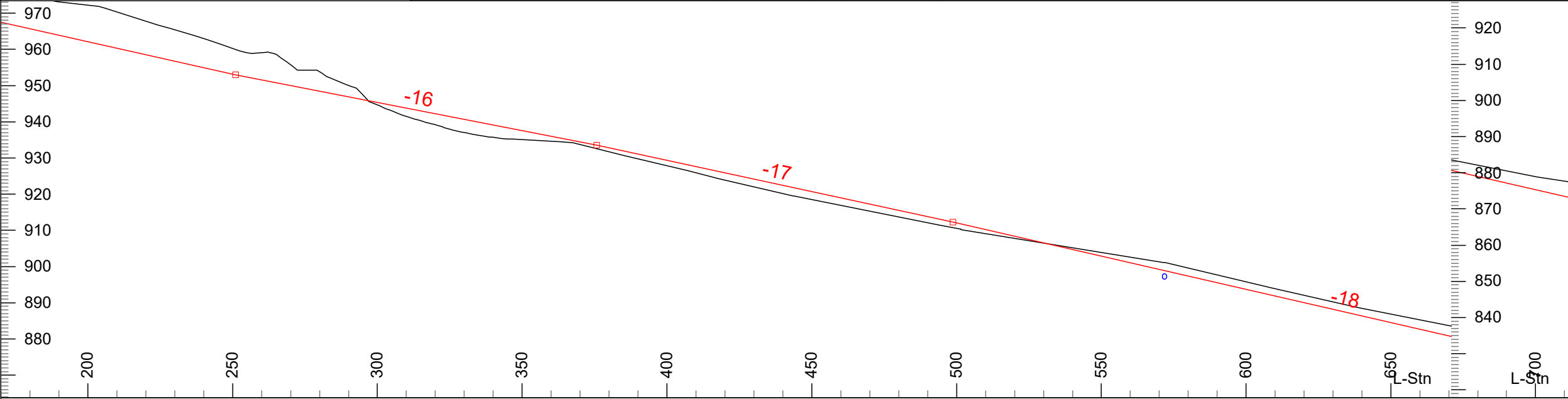
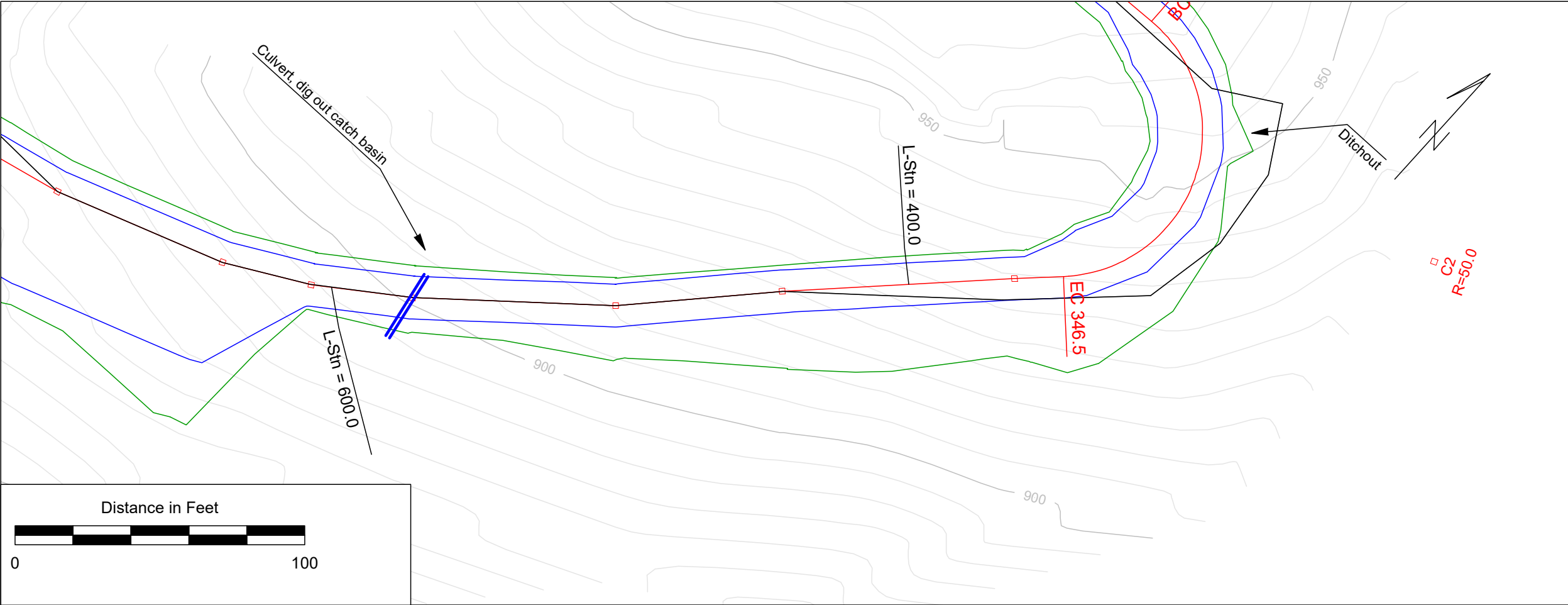
Bark Beetle Bailey

Horizontal Curves				
	C1	C2	C3	C4
Angle (I)	106.9	137.4	150.1	53.8
Tangent (T)	67.5	128.1	187.0	30.5
Arc. Len.(L)	93.3	119.9	130.9	56.4
Radius (R)	50.0	50.0	50.0	60.0
BC Stn.	10.7	226.7	758.2	1130.7
EC Stn.	104.0	346.5	889.2	1187.1





Bark Beetle Bailey				
Legend				
	L-line			
	P-Line			
	Slope Stakes			
	Road Edges			
	Vertical Alignment			
	Topography			
	Free Haul (100ft)			
	Over Haul (500ft)			
	Waste			
	Borrow			
L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
0.0	0.0	0.0	* -1561	0.0
0.1	0.1	2.0		0.0
10.7	10.7	1.9	-18	9.9
20.0	20.0	1.9	-18	17.0
40.0	38.7	2.4	-18	38.5
43.1	49.5	2.5	-18	42.7
60.0	69.3	2.3	-18	70.8
80.0	87.3	2.8	-18	120.6
100.0	107.2	4.3	-18	202.1
104.0	111.1	4.7	-18	224.8
111.3	117.5	5.6	-18	266.2
120.0	125.4	6.2	-18	313.3
140.0	145.3	7.7	-18	439.0
154.3	159.5	8.7	-18	547.8
160.0	165.1	8.8	-18	594.6
180.0	184.8	9.0	-18	769.4
200.0	204.6	10.1	-18	961.1
203.8	208.5	10.5	-18	999.8
220.0	224.8	9.2	-18	1158.3
226.7	231.5	8.8	-18	1224.6
240.0	244.7	8.1	-18	1349.8
251.0	255.0	7.0	-18	1440.3
260.0	262.5	7.6	-16	1510.5
262.4	262.5	8.1	-16	1529.3
275.0	312.5	5.1	-16	1610.5
279.1	287.5	5.7	-16	1630.3
280.0	322.2	5.4	-16	1634.6
297.0	341.5	-0.1	-16	1690.0
300.0	347.2	-0.7	-16	1694.0
Created By: M. Kawakami				
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Bark Beetle Bailey

Legend

L-line

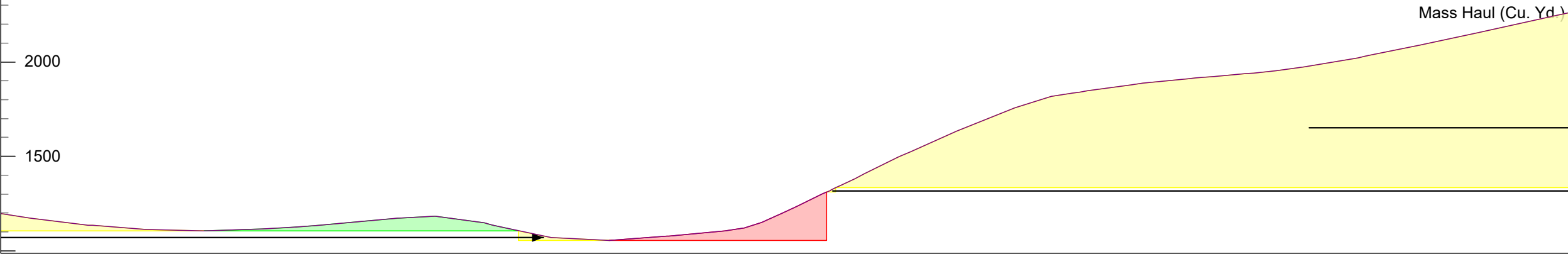
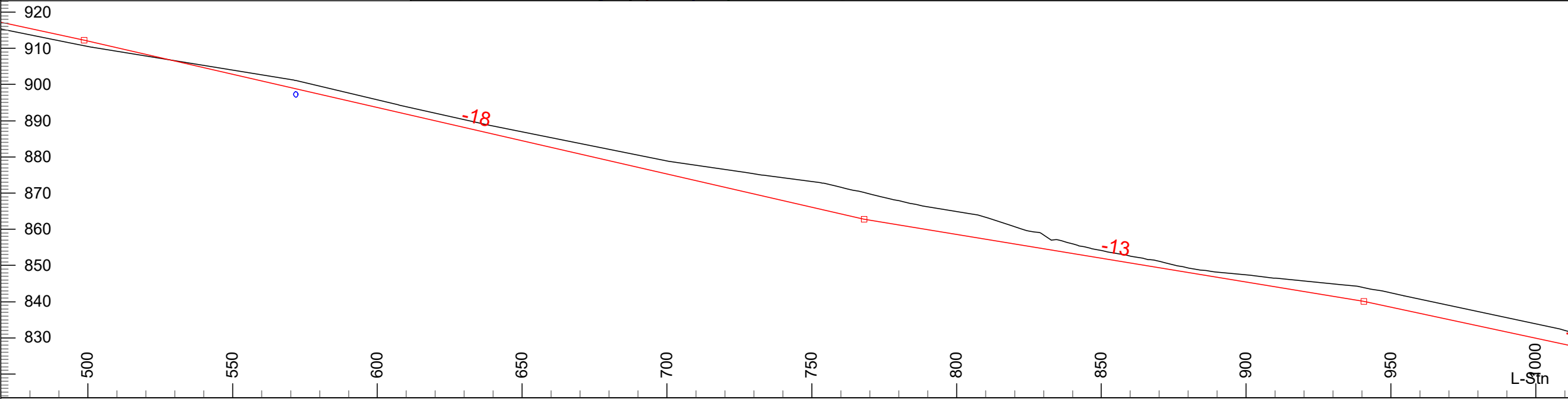
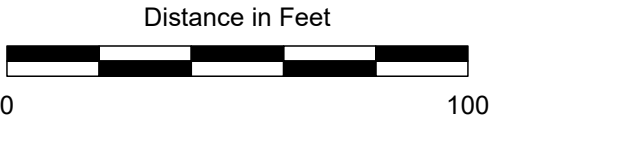
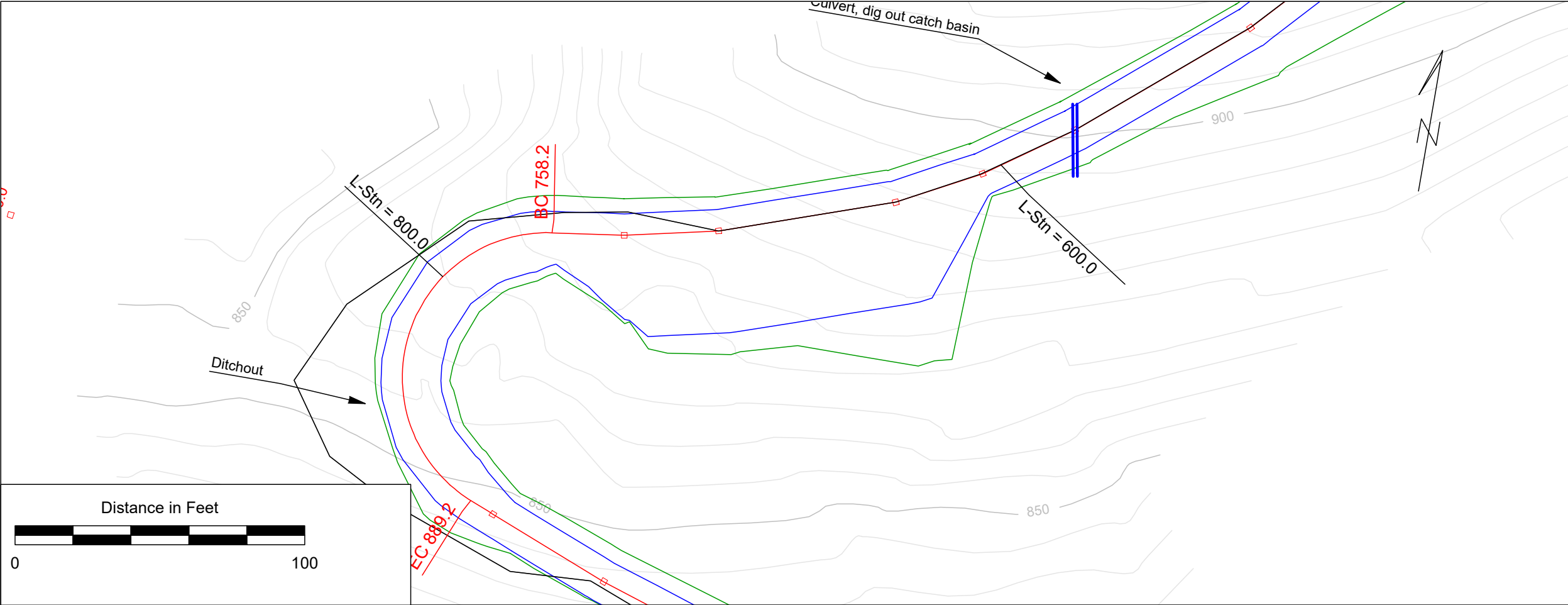
P-Line

L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
300.0	347.2	-0.7		1694.0
320.0	366.9	-3.0	-16	1663.5
320.1	371.5	-3.0	-16	1663.3
340.0	394.8	-3.4	-16	1576.2
346.5	401.3	-2.9	-16	1545.3
360.0	414.7	-1.4	-16	1495.7
367.5	422.5	-0.6	-16	1479.0
375.7	430.9	-1.0	-16	1463.5
380.0	435.2	-1.1	-17	1454.5
400.0	455.1	-1.5	-17	1405.9
407.4	462.5	-1.6	-17	1385.0
420.0	475.0	-2.0	-17	1346.7
440.0	494.9	-2.2	-17	1282.4
443.6	498.5	-2.3	-17	1270.7
460.0	514.9	-2.1	-17	1221.8
480.0	534.9	-1.8	-17	1172.9
498.7	553.6	-1.6	-18	1138.4
500.0	554.9	-1.5	-18	1136.4
501.6	556.5	-1.5	-18	1134.1
520.0	574.9	-0.5	-18	1113.7
540.0	594.9	0.6	-18	1106.4
560.0	614.9	1.6	-18	1114.0
571.6	626.5	2.2	-18	1125.0
580.0	634.9	2.2	-18	1135.3
600.0	654.9	2.1	-18	1162.7

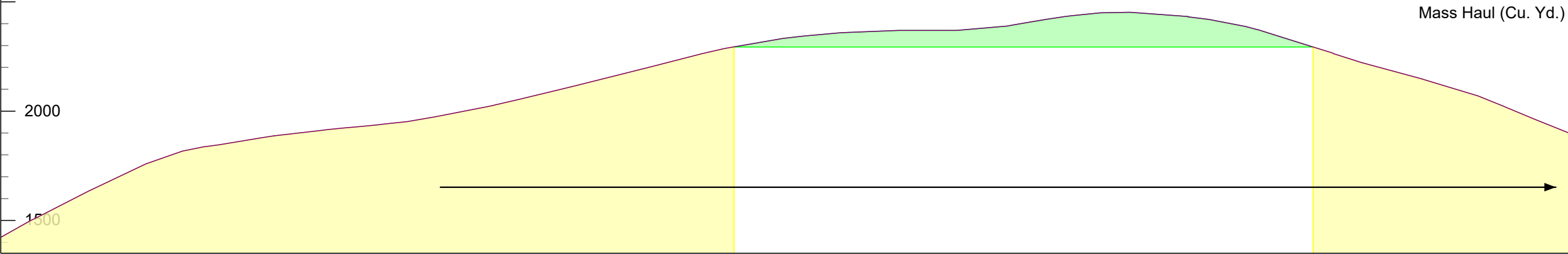
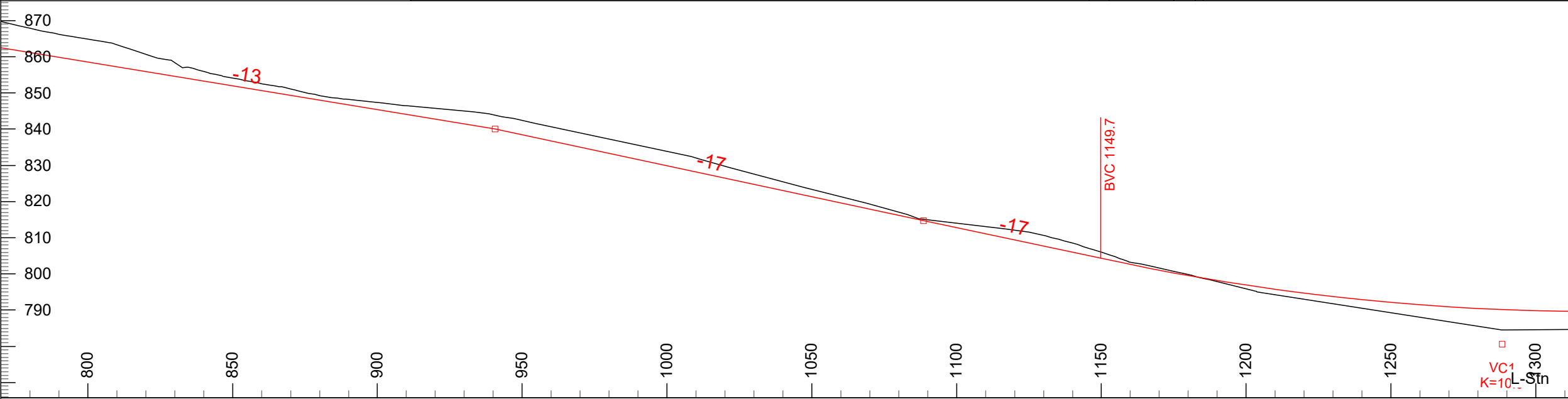
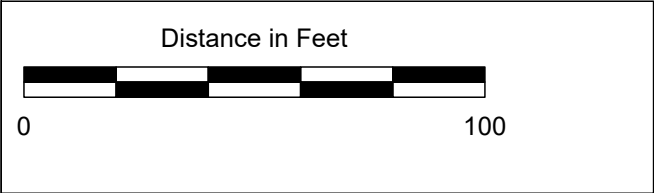
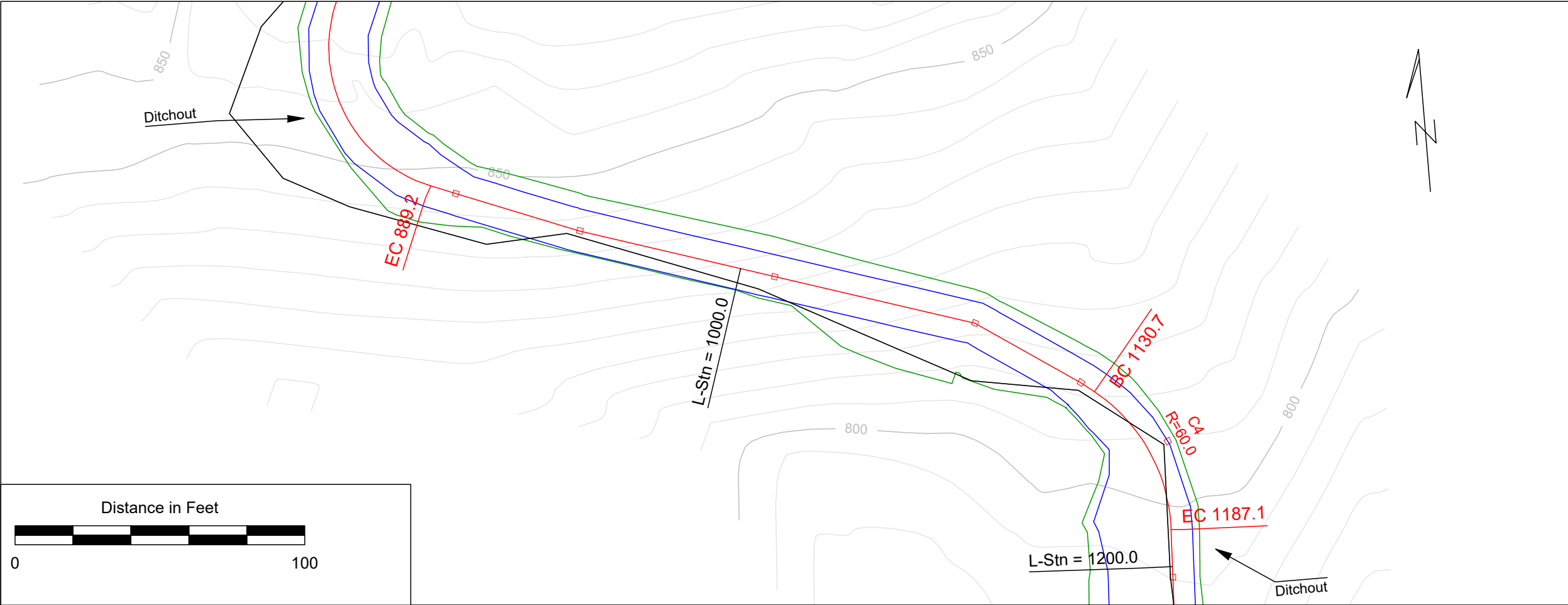
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Bark Beetle Bailey				
Legend				
	L-line			
	P-Line			
	Slope Stakes			
	Road Edges			
	Vertical Alignment			
	Topography			
	Free Haul (100ft)			
	Over Haul (500ft)			
	Waste			
	Borrow			
L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
600.0	654.9	2.1	-18	1162.7
607.6	662.5	2.0	-18	1173.8
620.0	674.9	2.1	-18	1184.0
638.6	693.5	2.2	-18	1140.2
640.0	694.9	2.2	-18	1134.1
660.0	714.9	2.7	-18	1070.3
680.0	734.9	3.1	-18	1054.0
700.0	754.9	3.6	-18	1077.2
700.6	755.5	3.6	-18	1078.5
720.0	774.3	4.9	-18	1106.1
732.8	787.5	5.7	-18	1149.6
740.0	795.6	6.3	-18	1200.3
753.6	809.5	7.3	-18	1300.6
758.2	814.4	7.4	-18	1333.1
760.0	816.1	7.4	-18	1345.9
768.1	824.2	7.3	-18	1407.8
780.0	835.9	6.7	-13	1497.1
784.3	842.5	6.4	-13	1526.6
800.0	860.8	6.3	-13	1632.7
820.0	879.0	4.8	-13	1758.2
832.7	893.5	2.7	-13	1816.7
840.0	904.7	2.6	-13	1836.1
842.5	925.5	2.4	-13	1841.1
845.1	954.5	2.3	-13	1846.9
860.0	974.1	1.9	-13	1879.0
864.3	979.5	1.9	-13	1887.1
880.0	995.5	1.3	-13	1911.5
889.2	1004.6	1.4	-13	1924.3
900.0	1015.5	1.9	-13	1937.9
Created By: M. Kawakami				
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Bark Beetle Bailey

Legend

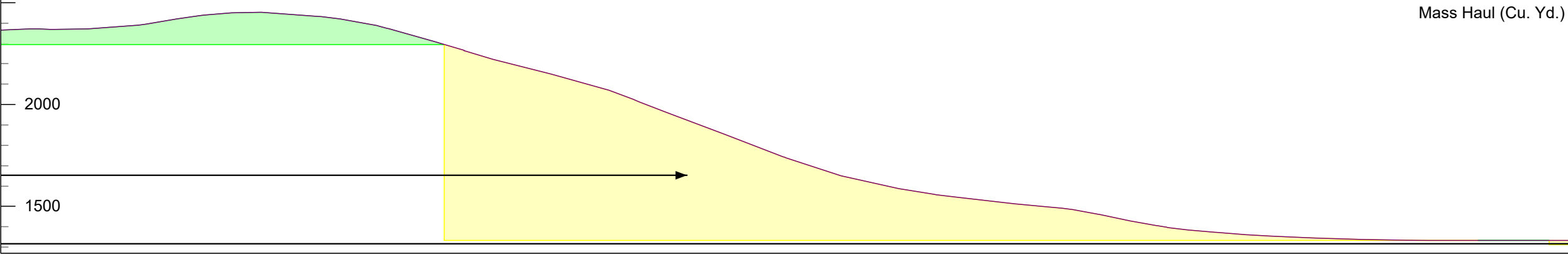
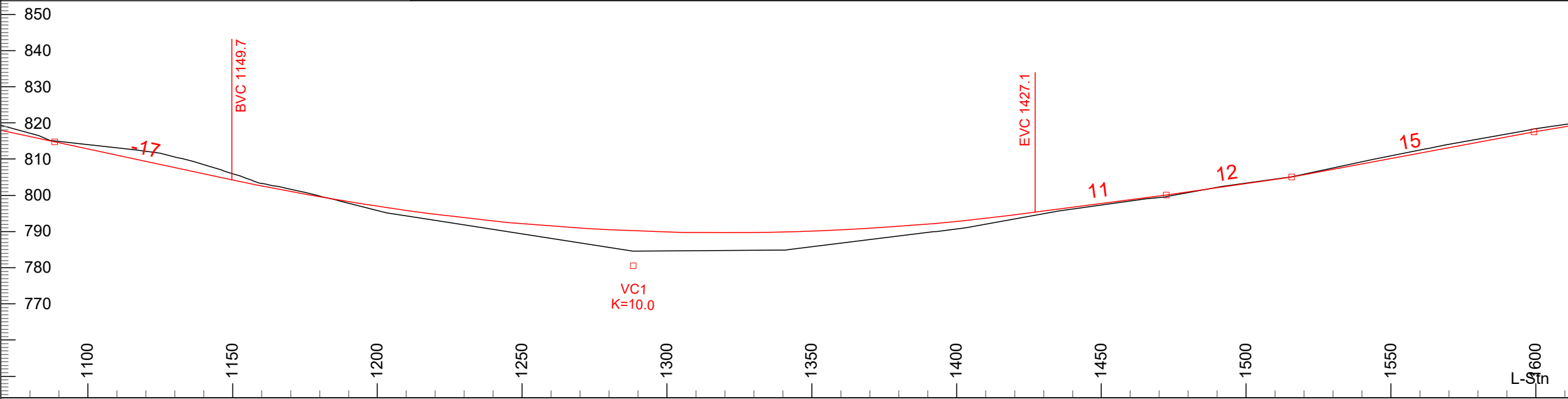
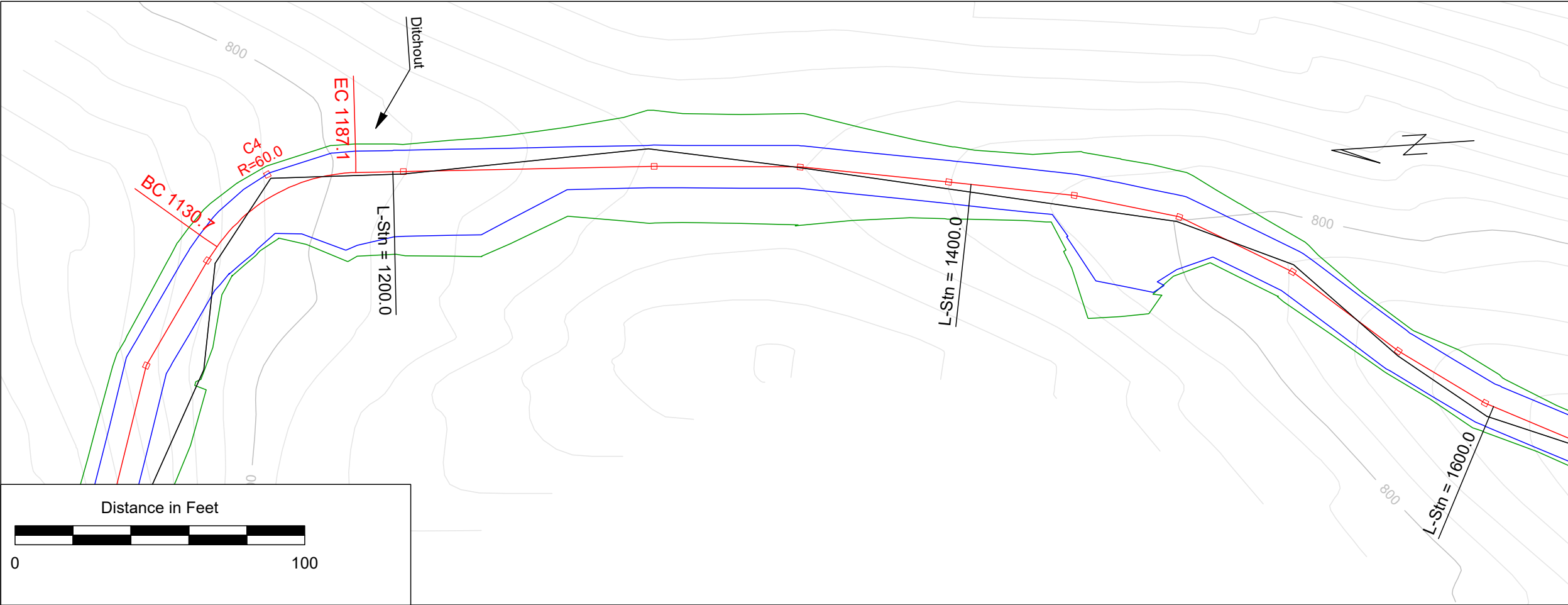
- L-line
- P-Line
- Slope Stakes
- Road Edges
- Vertical Alignment
- Topography
- Free Haul (100ft)
- Over Haul (500ft)
- Waste
- Borrow

L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
900.0	1015.5	1.9		1937.9
910.3	1028.5	2.5	-13	1952.6
920.0	1040.2	3.0	-13	1973.2
938.4	1056.5	3.9	-13	2022.7
940.0	1057.6	3.8	-13	2027.4
940.7	1058.3	3.8	-13	2029.4
960.0	1077.6	3.9	-17	2088.8
980.0	1097.6	3.9	-17	2154.8
1000.0	1117.6	3.9	-17	2222.9
1008.3	1125.5	3.9	-17	2251.3
1020.0	1136.7	3.3	-17	2287.6
1040.0	1156.4	2.4	-17	2333.2
1047.2	1163.5	2.0	-17	2344.8
1060.0	1176.1	1.7	-17	2359.9
1080.0	1195.7	0.9	-17	2370.3
1086.9	1205.5	0.2	-17	2370.1
1088.5	1209.8	0.3	-17	2369.5
1100.0	1220.3	1.2	-17	2370.2
1120.0	1238.6	2.8	-17	2395.5
1125.0	1242.5	3.0	-17	2406.4
1130.7	1247.6	2.9	-17	2419.4
1140.0	1256.8	2.5	-17	2438.1
1149.7	1266.1	1.8	-17	2451.3
1159.4	1277.5	0.7	p -17	2453.6
1160.0	1280.6	0.7	p -16	2453.3
1180.0	1299.8	0.2	p -15	2432.3
1187.1	1306.9	-0.2	p -14	2420.0
1200.0	1319.8	-1.1	p -13	2387.0

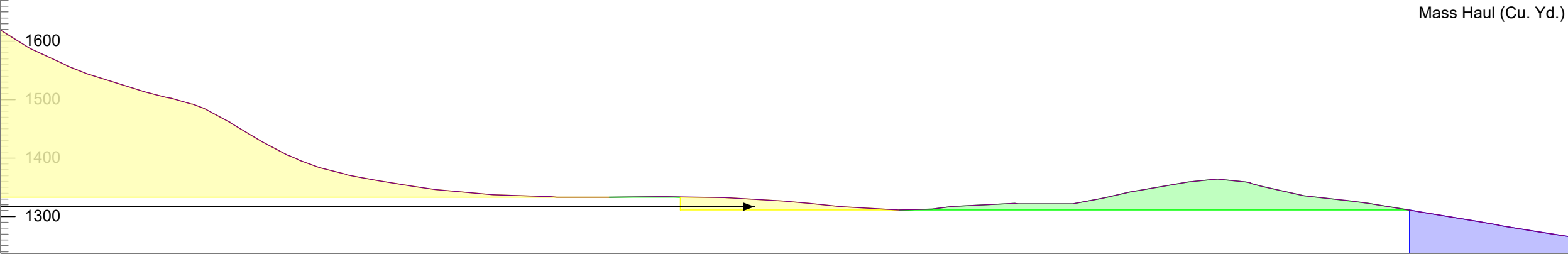
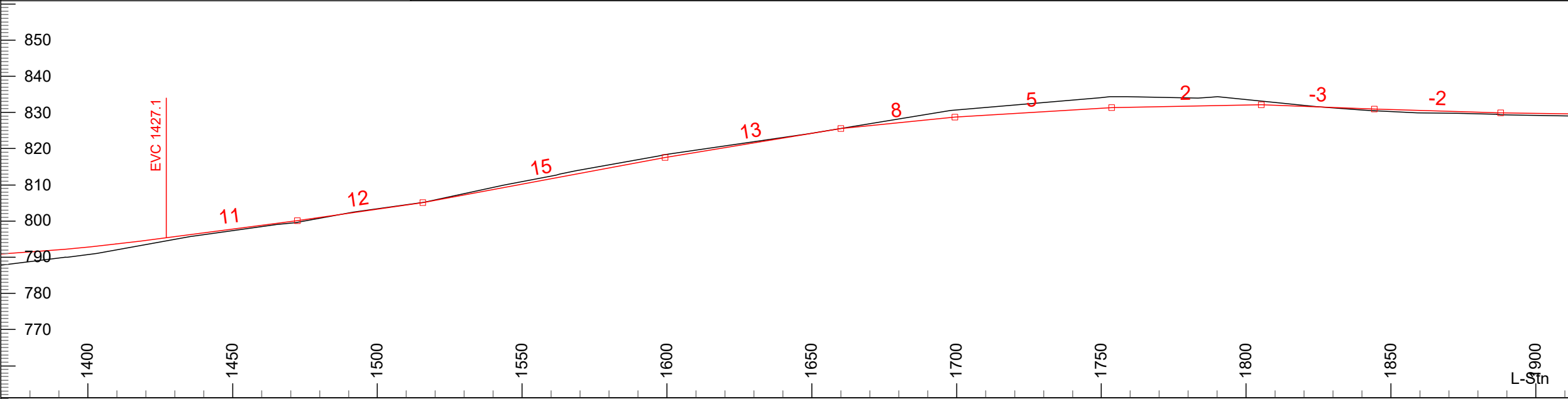
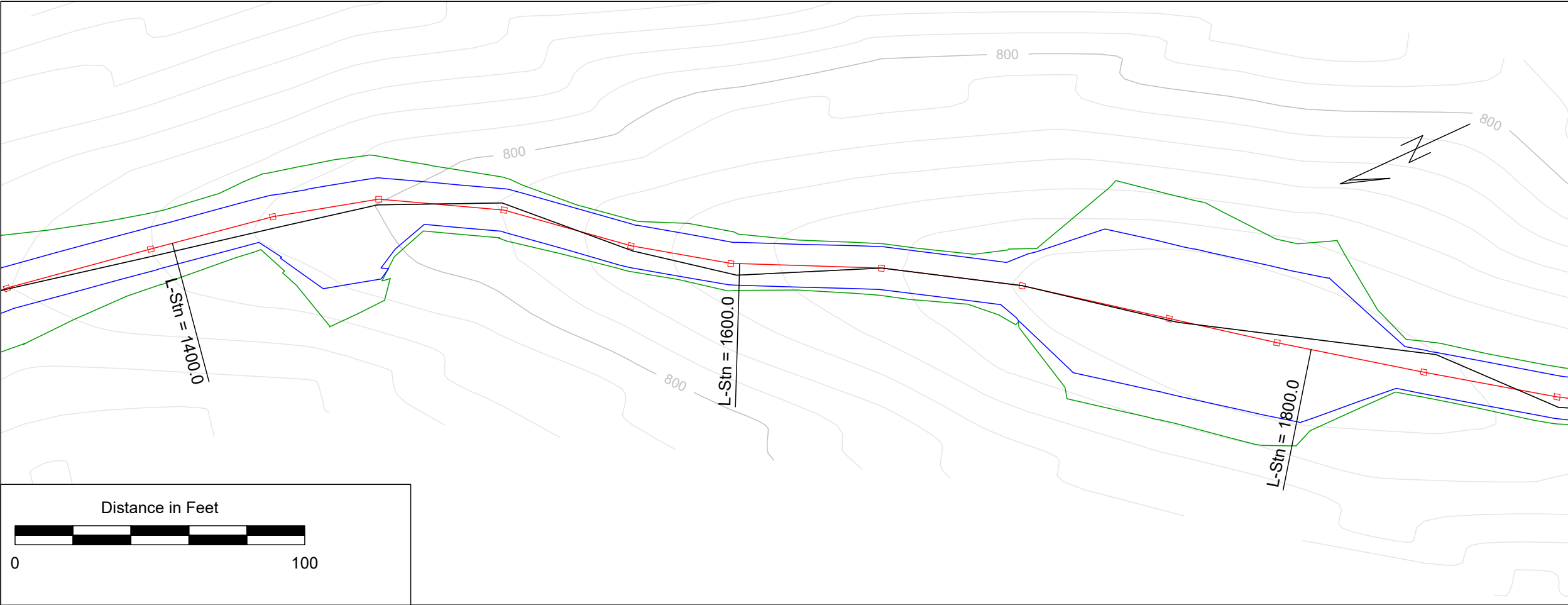
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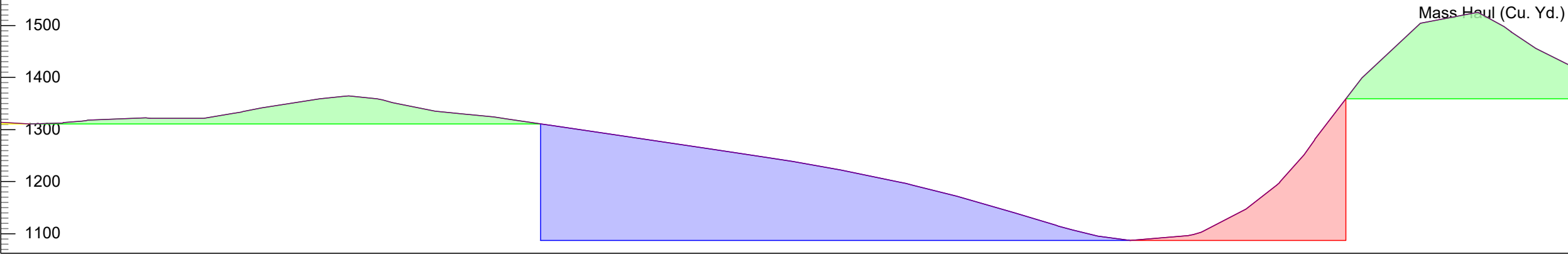
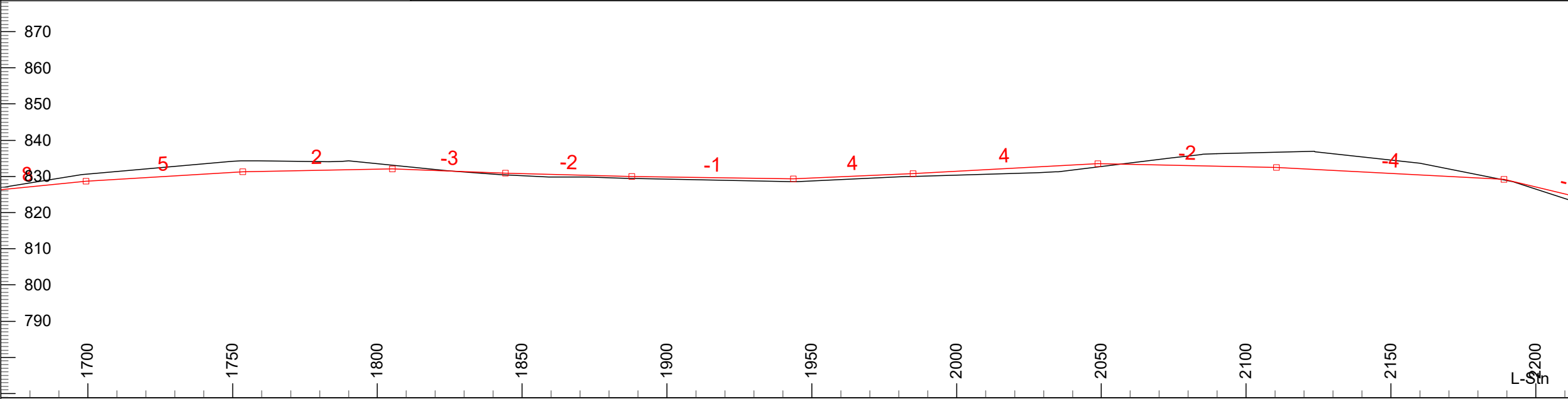
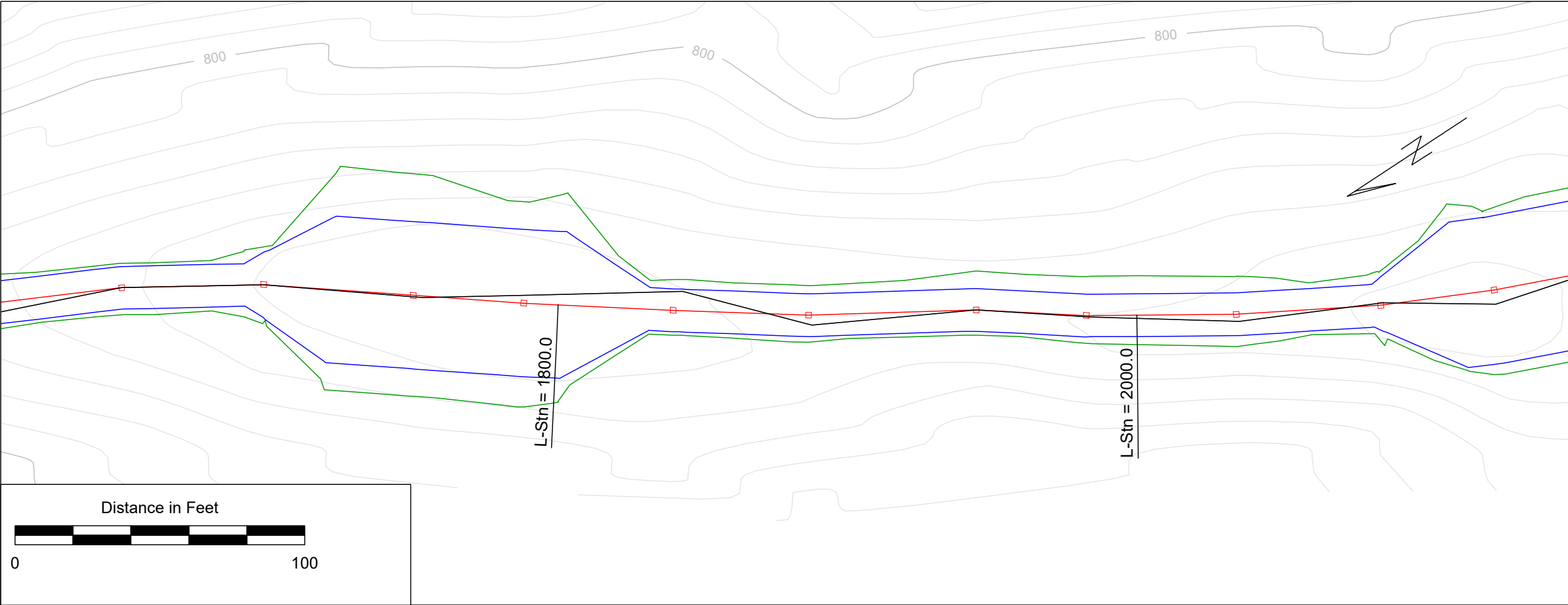
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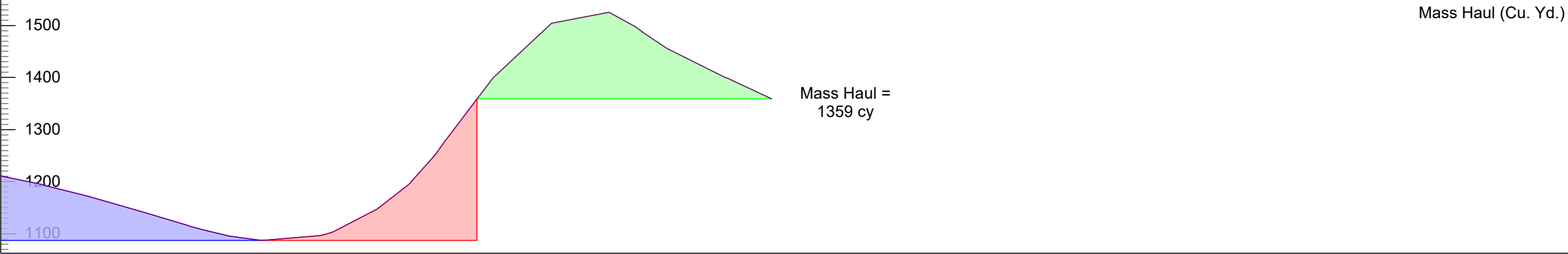
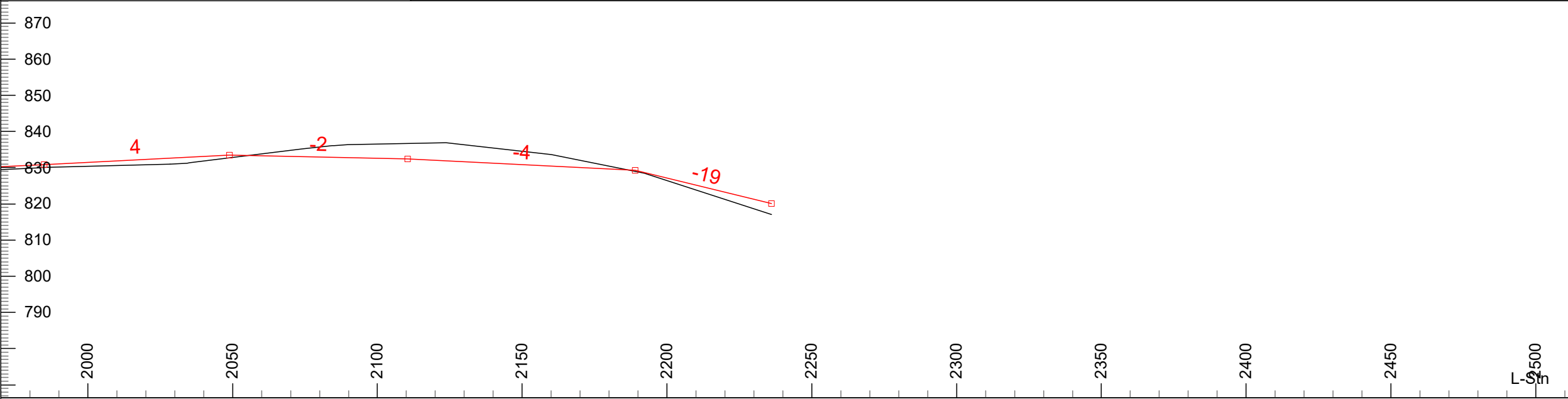
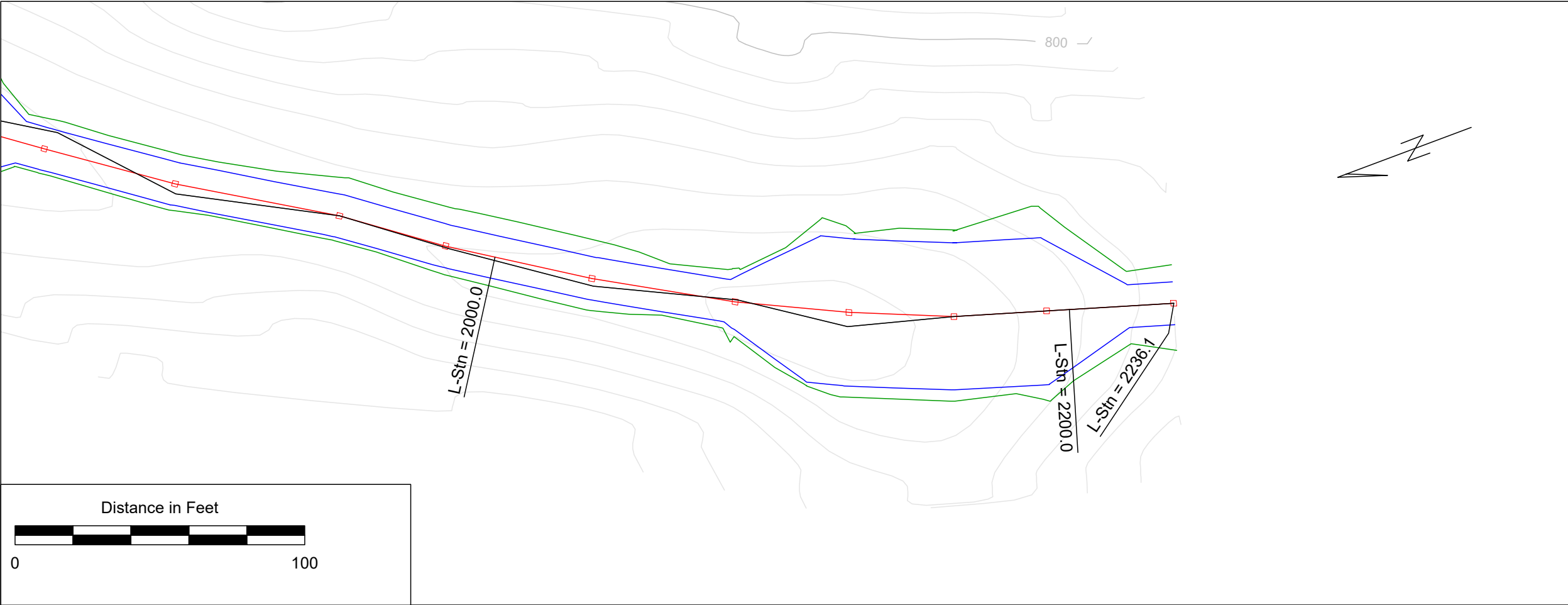
Bark Beetle Bailey				
Legend				
	L-line			
	P-Line			
	Slope Stakes			
	Road Edges			
	Vertical Alignment			
	Topography			
	Free Haul (100ft)			
	Over Haul (500ft)			
	Waste			
	Borrow			
L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
1200.0	1319.8	-1.1	p -12	2387.0
1203.7	1323.5	-1.4	p -11	2373.7
1220.0	1339.8	-1.7	p -9	2308.0
1240.0	1359.7	-2.3	p -7	2222.4
1260.0	1379.6	-3.4	p -5	2149.6
1280.0	1399.6	-4.9	p -4	2069.1
1288.3	1408.5	-5.6	p -3	2025.8
1300.0	1420.8	-5.2	p -1	1961.0
1320.0	1440.7	-4.9	p 1	1854.3
1340.0	1460.5	-5.0	p 2	1744.7
1341.0	1461.5	-5.0	p 3	1739.2
1360.0	1480.5	-3.7	p 5	1649.7
1380.0	1500.5	-2.7	p 7	1587.8
1393.0	1513.5	-2.2	p 8	1557.9
1400.0	1520.5	-2.0	p 9	1544.1
1420.0	1540.5	-1.1	p 10	1512.7
1427.1	1547.6	-0.8	11	1503.9
1436.0	1556.5	-0.5	11	1492.3
1440.0	1560.5	-0.4	11	1485.3
1460.0	1580.4	-0.4	11	1428.2
1472.3	1592.5	-0.5	11	1397.9
1472.3	1592.5	-0.5	11	1397.8
1480.0	1600.0	-0.3	12	1383.7
1500.0	1619.9	0.0	12	1361.7
Created By: M. Kawakami				
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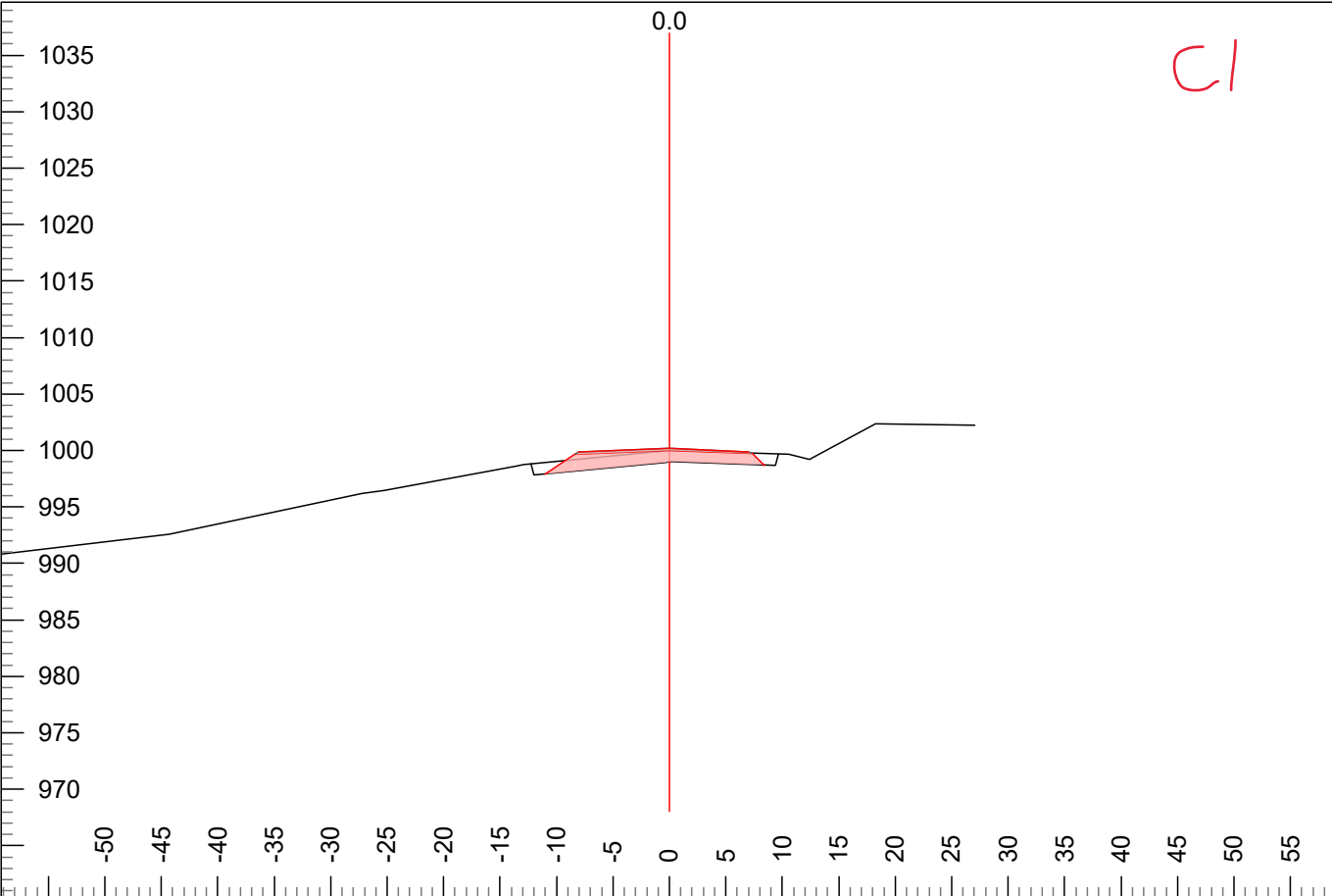
Bark Beetle Bailey				
Legend				
	L-line			
	P-Line			
	Slope Stakes			
	Road Edges			
	Vertical Alignment			
	Topography			
	Free Haul (100ft)			
	Over Haul (500ft)			
	Waste			
	Borrow			
L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
1500.0	1619.9	0.0		1361.7
1515.3	1635.5	0.0	12	1349.6
1515.6	1636.3	0.0	12	1349.3
1520.0	1640.6	0.1	15	1346.4
1540.0	1660.6	0.5	15	1337.4
1560.0	1680.5	0.8	15	1333.6
1562.9	1683.5	0.8	15	1333.4
1580.0	1700.7	0.9	15	1333.4
1599.3	1719.9	0.8	15	1333.7
1599.4	1720.5	0.8	13	1333.7
1600.0	1721.7	0.8	13	1333.7
1620.0	1741.6	0.5	13	1332.2
1640.0	1761.6	0.2	13	1326.8
1649.0	1770.5	0.1	13	1322.8
1660.0	1781.5	0.1	13	1317.0
1660.0	1781.5	0.1	8	1317.0
1680.0	1801.5	1.1	8	1311.1
1698.0	1819.5	1.9	8	1316.5
1699.3	1820.9	1.9	5	1317.5
1700.0	1821.5	1.9	5	1317.9
1720.0	1841.5	2.4	5	1322.7
1740.0	1861.5	2.8	5	1321.8
1752.9	1874.5	3.0	5	1333.9
1753.5	1875.1	3.0	5	1334.6
1760.0	1881.6	2.9	2	1341.8
1780.0	1901.5	2.3	2	1359.1
1790.1	1911.5	2.4	2	1364.4
1800.0	1921.4	1.5	2	1359.5
Created By: M. Kawakami				
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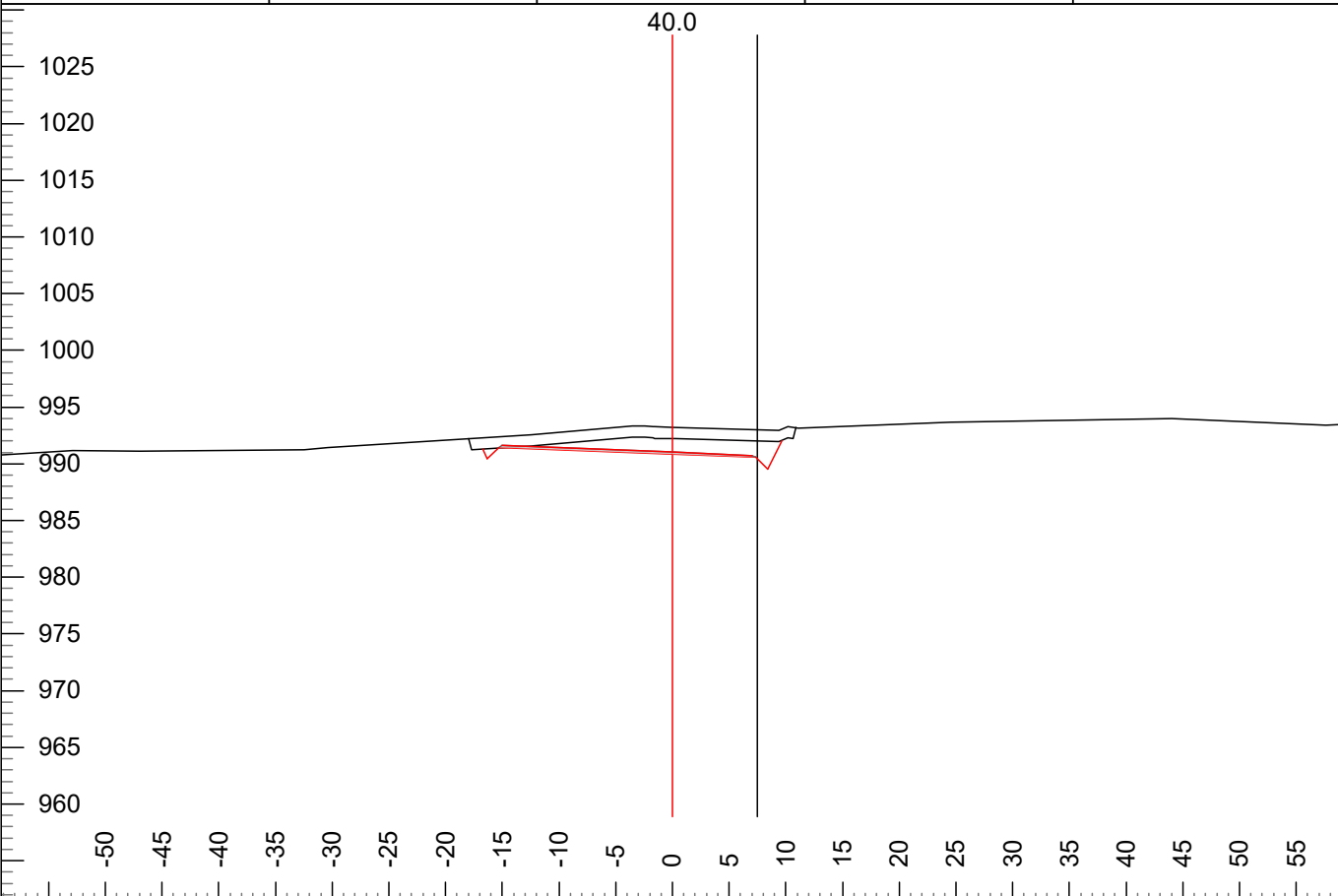
Bark Beetle Bailey				
Legend				
	L-line			
	P-Line			
	Slope Stakes			
	Road Edges			
	Vertical Alignment			
	Topography			
	Free Haul (100ft)			
	Over Haul (500ft)			
	Waste			
	Borrow			
L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
1800.0	1921.4	1.5		1359.5
1805.2	1926.5	1.0	2	1351.4
1820.0	1941.4	0.2	-3	1335.8
1840.0	1961.3	-0.4	-3	1324.0
1842.3	1964.5	-0.5	-3	1322.4
1844.2	1967.3	-0.5	-3	1320.9
1860.0	1982.7	-0.7	-2	1308.2
1880.0	2002.2	-0.5	-2	1291.3
1887.9	2010.5	-0.5	-2	1284.7
1887.9	2011.1	-0.5	-2	1284.7
1900.0	2023.2	-0.6	-1	1274.9
1920.0	2043.2	-0.6	-1	1258.9
1940.0	2063.1	-0.7	-1	1241.8
1943.7	2066.8	-0.7	-1	1238.4
1944.4	2067.5	-0.8	4	1237.8
1960.0	2083.1	-0.8	4	1222.1
1980.0	2103.1	-0.7	4	1199.3
1984.4	2107.5	-0.8	4	1193.8
1985.0	2108.1	-0.8	4	1192.9
2000.0	2123.1	-1.1	4	1171.6
2020.0	2143.1	-1.4	4	1139.8
2035.2	2158.5	-1.5	4	1114.4
2040.0	2163.5	-1.3	4	1106.8
2048.8	2172.3	-0.8	4	1106.8
2060.0	2183.5	0.5	-2	1095.1
2080.0	2203.4	2.7	-2	1086.8
2085.0	2208.5	3.3	-2	1096.3
2100.0	2223.3	3.9	-2	1104.3
				1147.1
Created By: M. Kawakami				
23/11/08			Page 8 of 51	



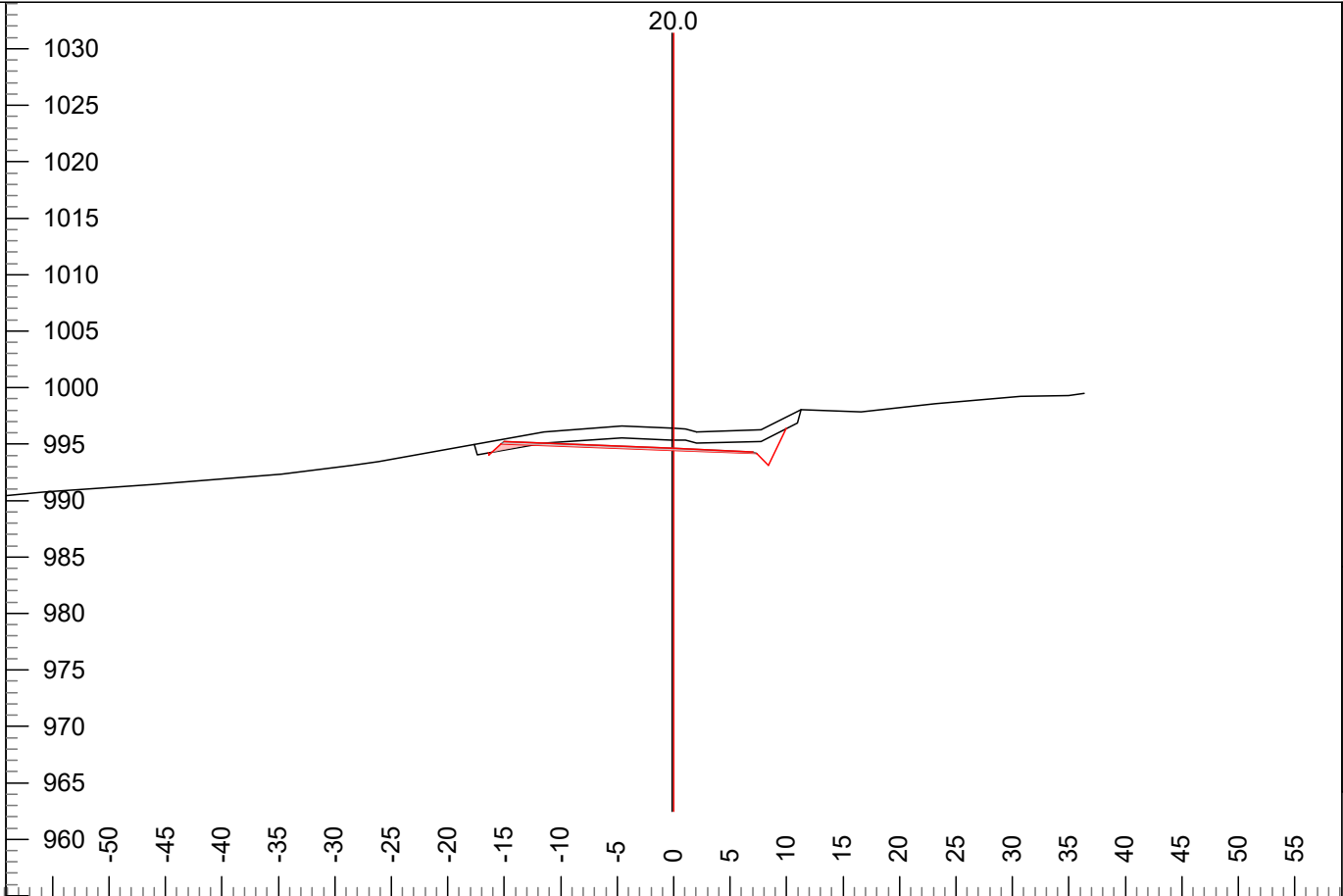
Bark Beetle Bailey				
Legend				
	L-line			
	P-Line			
	Slope Stakes			
	Road Edges			
	Vertical Alignment			
	Topography			
	Free Haul (100ft)			
	Over Haul (500ft)			
	Waste			
	Borrow			
L-Stn ft.	P-Stn ft.	Cut Dp. ft.	Grade %	Mass H. Cu. Yd.
2100.0	2223.3	3.9	-2	1147.1
2110.4	2233.6	4.3	-4	1192.7
2120.0	2243.1	4.8	-4	1251.6
2123.6	2247.5	5.0	-4	1279.5
2140.0	2264.6	4.2	-4	1399.5
2160.0	2284.4	3.3	-4	1503.5
2160.1	2284.5	3.2	-4	1503.9
2180.0	2304.4	0.9	-4	1525.5
2189.1	2313.5	-0.2	-19	1497.5
2192.1	2316.5	-0.1	-19	1484.8
2200.0	2324.4	-0.6	-19	1455.6
2220.0	2344.4	-2.0	-19	1400.4
2236.1	2360.5	-3.0	-19	1358.7
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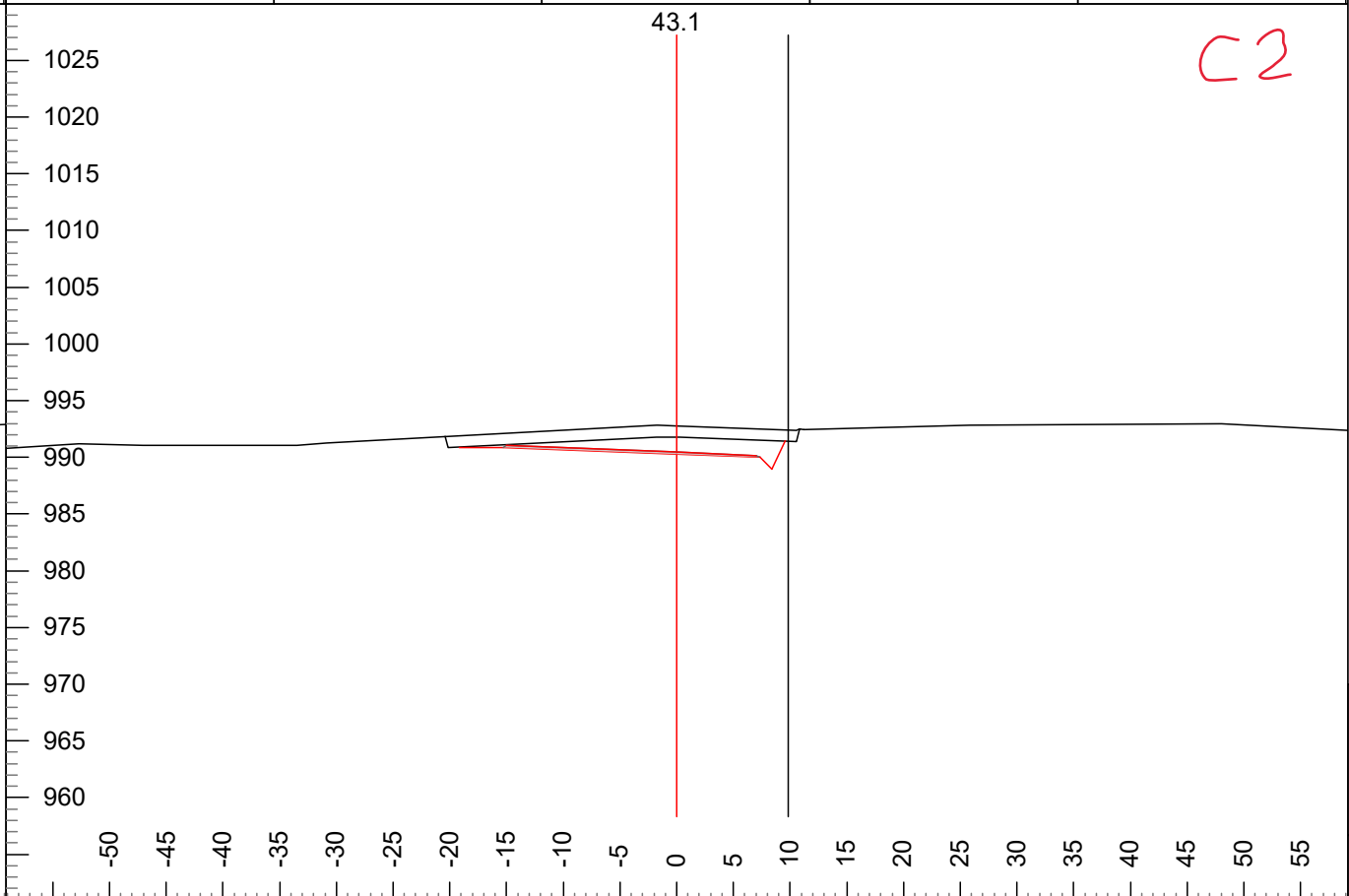
L-Stn :	0.0	Cut Dp:	0.0	CL X:	10000.0	Clr L X:	-11.0	CL Elev:	1000.0
P-Stn :	0.0	H. Offset:	0.0	CL Y:	10000.0	Clr R X:	8.4	Gnd Elev:	1000.0



L-Stn :	40.0	Cut Dp:	2.4	CL X:	9995.5	Clr L X:	-16.7	CL Elev:	990.8
P-Stn :	38.7	H. Offset:	-6.5	CL Y:	9961.0	Clr R X:	9.6	Gnd Elev:	993.2



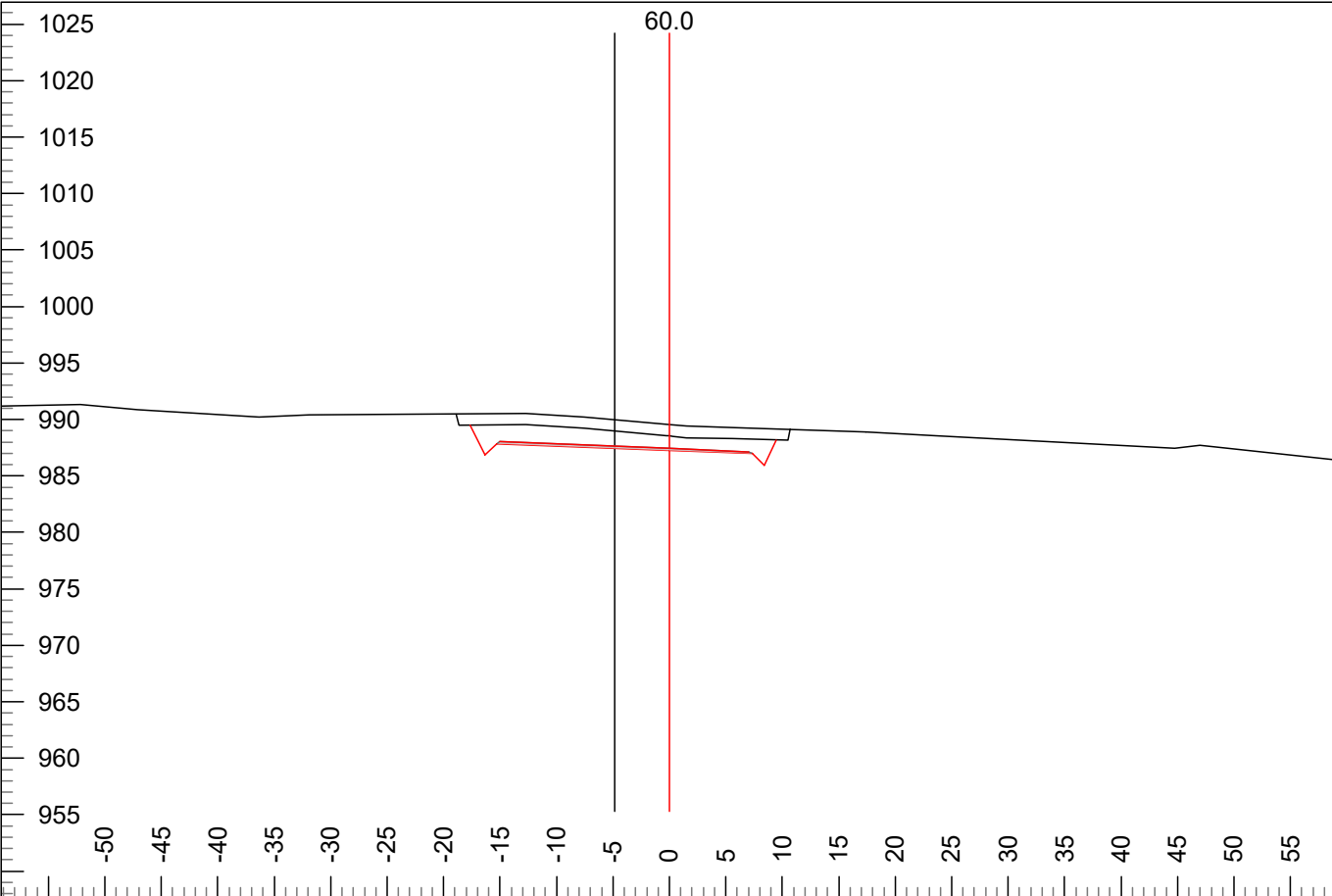
L-Stn :	20.0	Cut Dp:	1.9	CL X:	9994.4	Clr L X:	-16.4	CL Elev:	994.4
P-Stn :	20.0	H. Offset:	0.1	CL Y:	9980.8	Clr R X:	10.0	Gnd Elev:	996.4



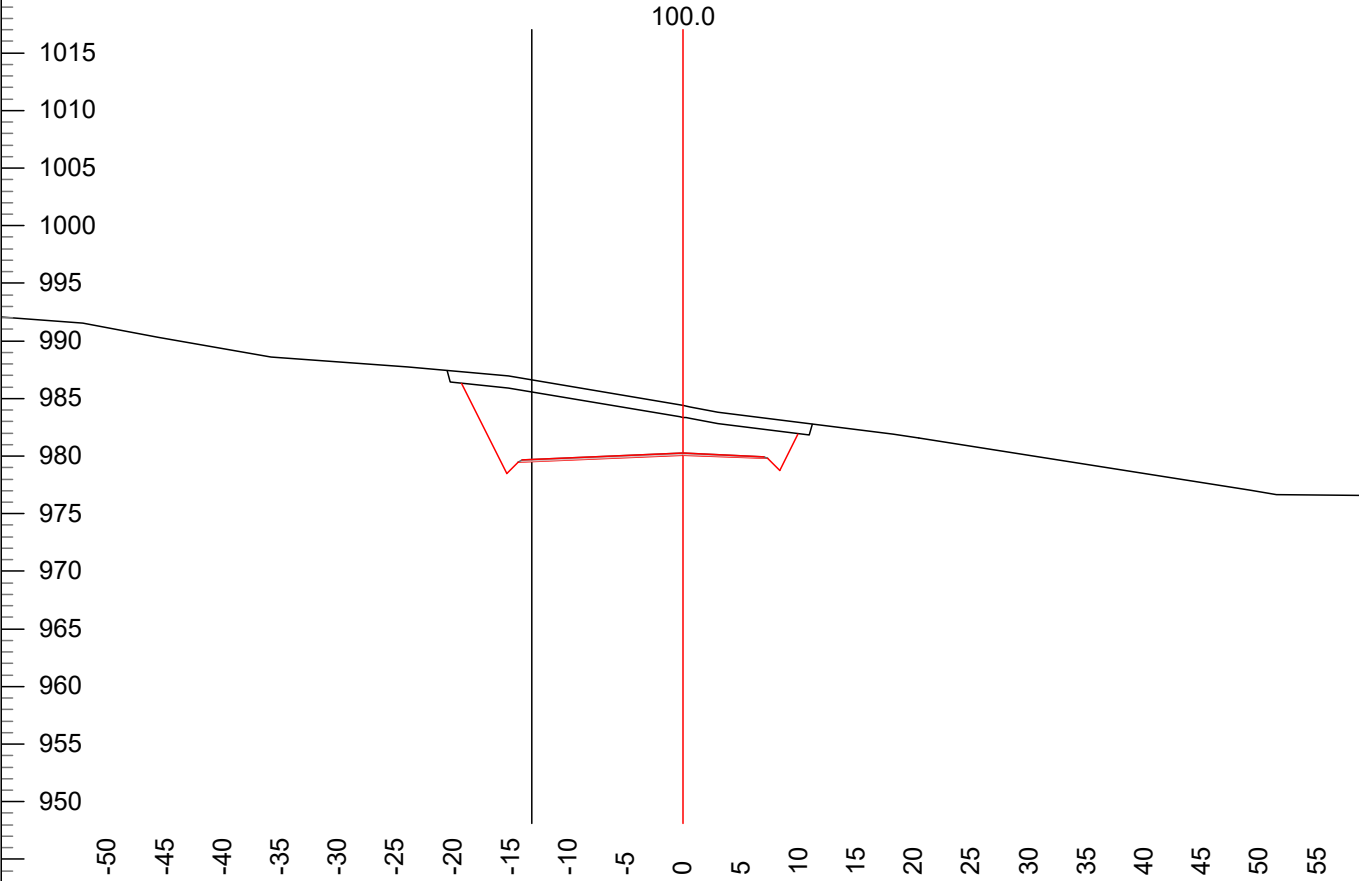
L-Stn :	43.1	Cut Dp:	2.5	CL X:	9996.4	Clr L X:	-19.2	CL Elev:	990.3
P-Stn :	49.5	H. Offset:	-11.5	CL Y:	9958.0	Clr R X:	9.6	Gnd Elev:	992.8

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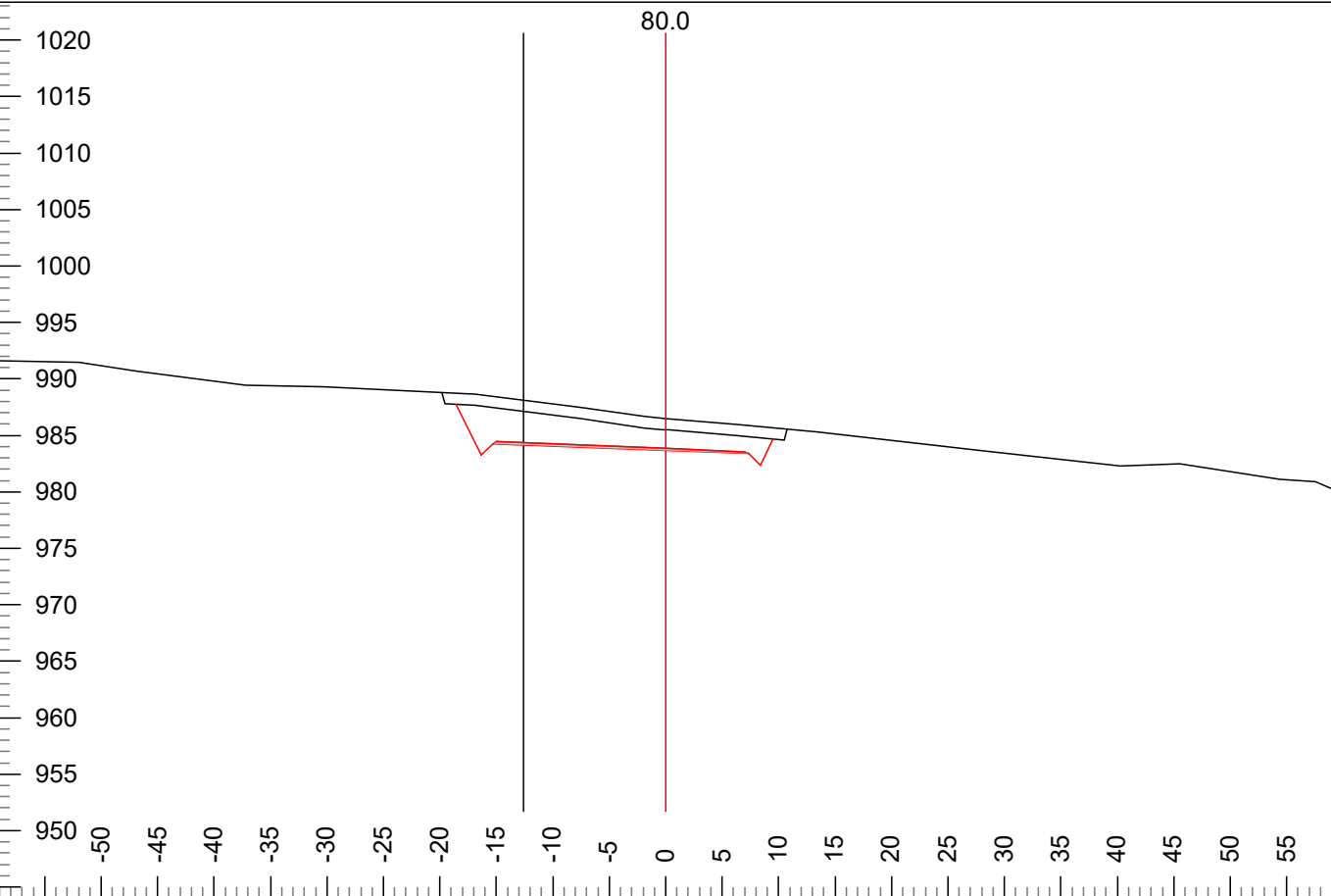
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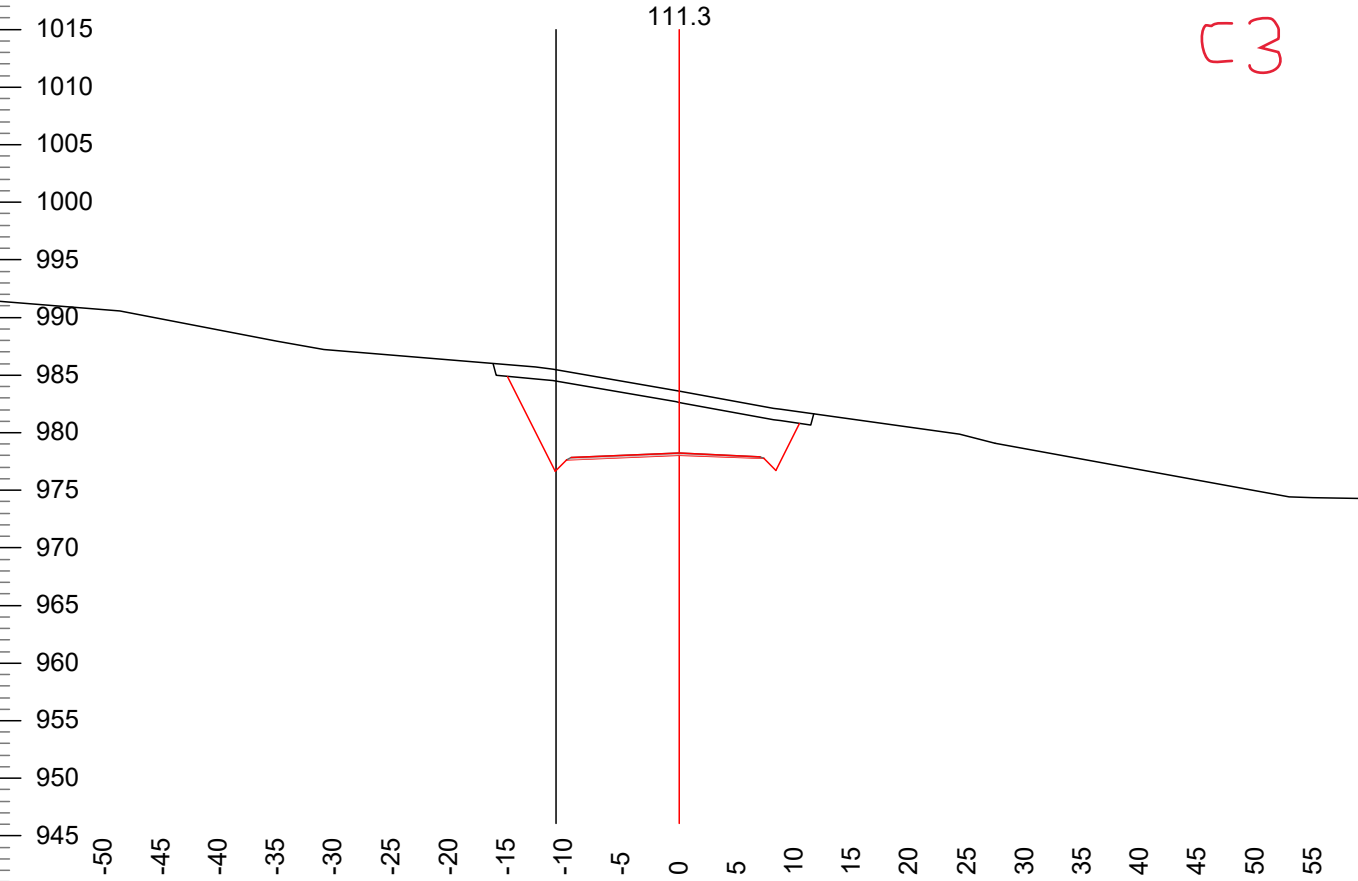
L-Stn :	60.0	Cut Dp:	2.3	CL X:	10004.3	Clr L X:	-17.6	CL Elev:	987.2
P-Stn :	69.3	H. Offset:	3.9	CL Y:	9943.2	Clr R X:	9.5	Gnd Elev:	989.5



L-Stn :	100.0	Cut Dp:	4.3	CL X:	10038.2	Clr L X:	-19.2	CL Elev:	980.1
P-Stn :	107.2	H. Offset:	13.0	CL Y:	9924.1	Clr R X:	10.0	Gnd Elev:	984.4



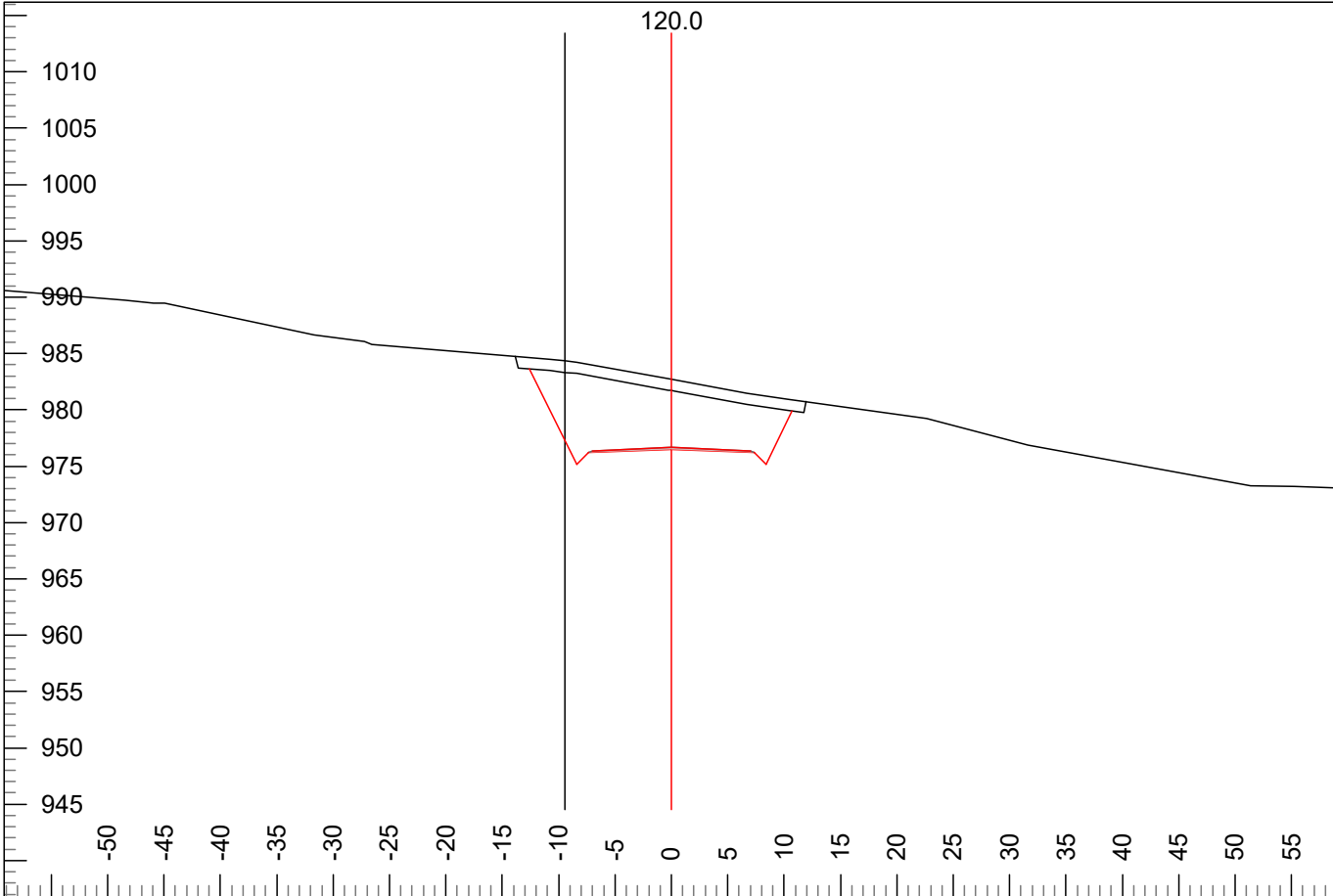
L-Stn :	80.0	Cut Dp:	2.8	CL X:	10019.3	Clr L X:	-18.6	CL Elev:	983.7
P-Stn :	87.3	H. Offset:	12.3	CL Y:	9930.2	Clr R X:	9.5	Gnd Elev:	986.5



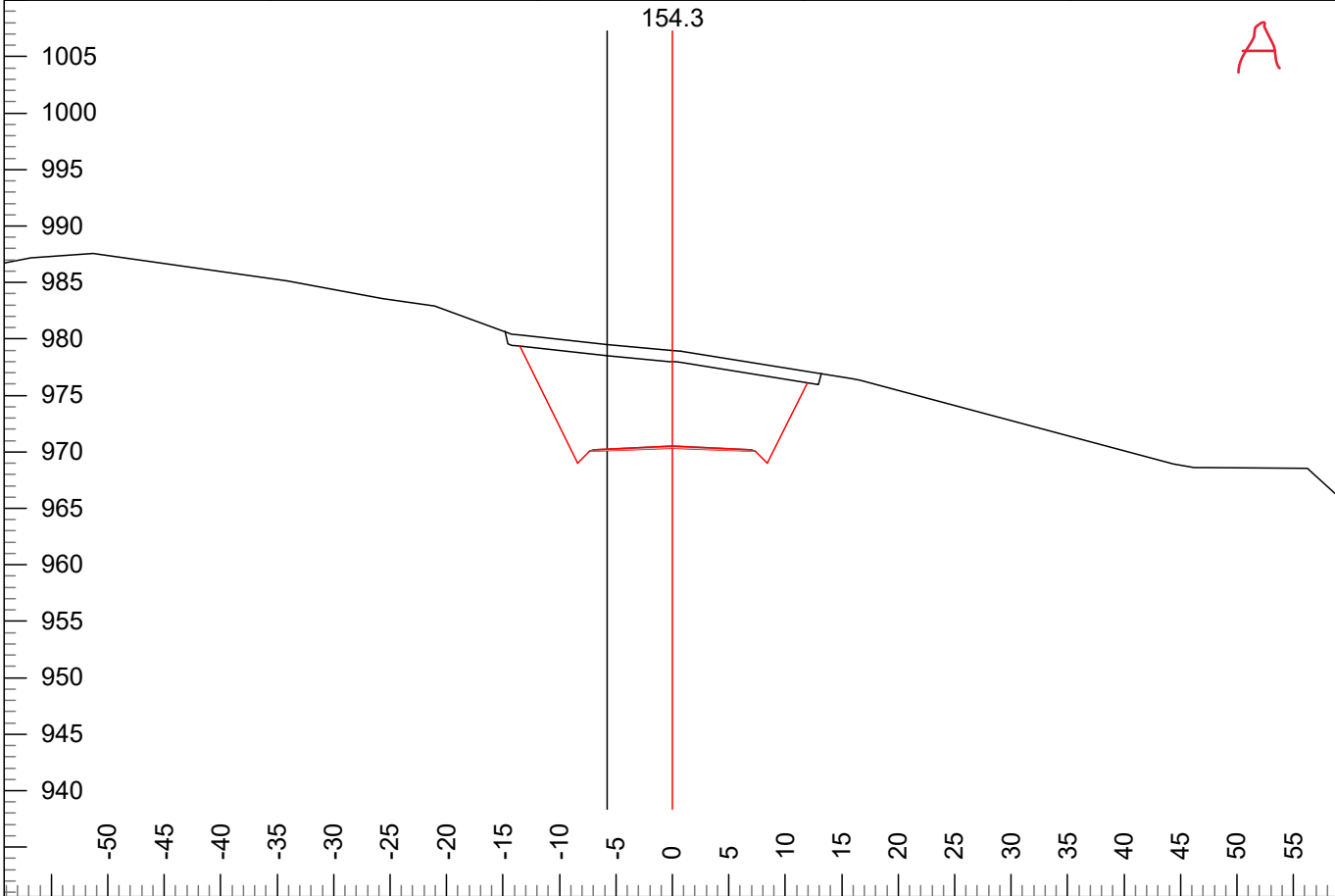
L-Stn :	111.3	Cut Dp:	5.6	CL X:	10049.6	Clr L X:	-14.9	CL Elev:	978.0
P-Stn :	117.5	H. Offset:	10.4	CL Y:	9923.5	Clr R X:	10.4	Gnd Elev:	983.6

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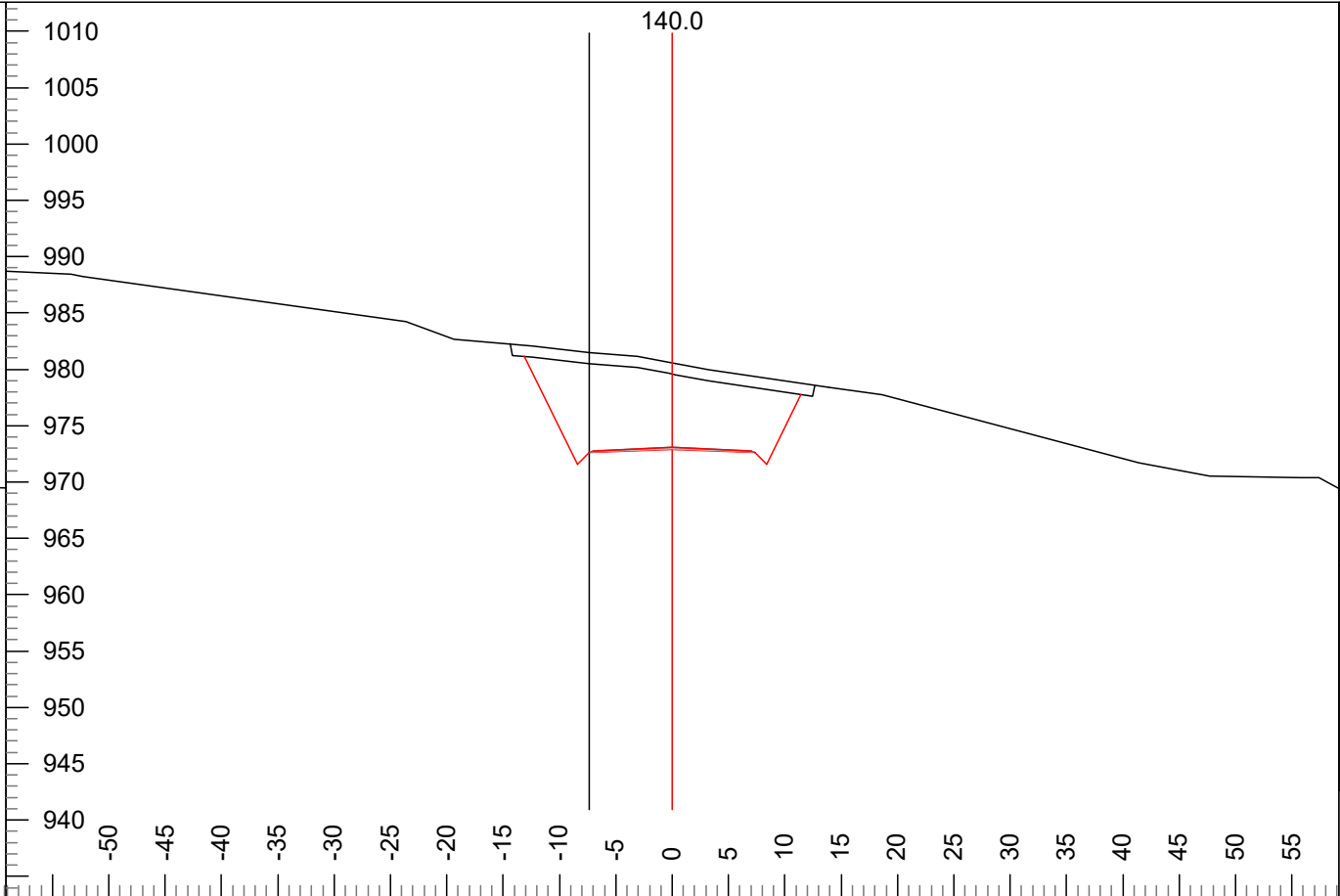
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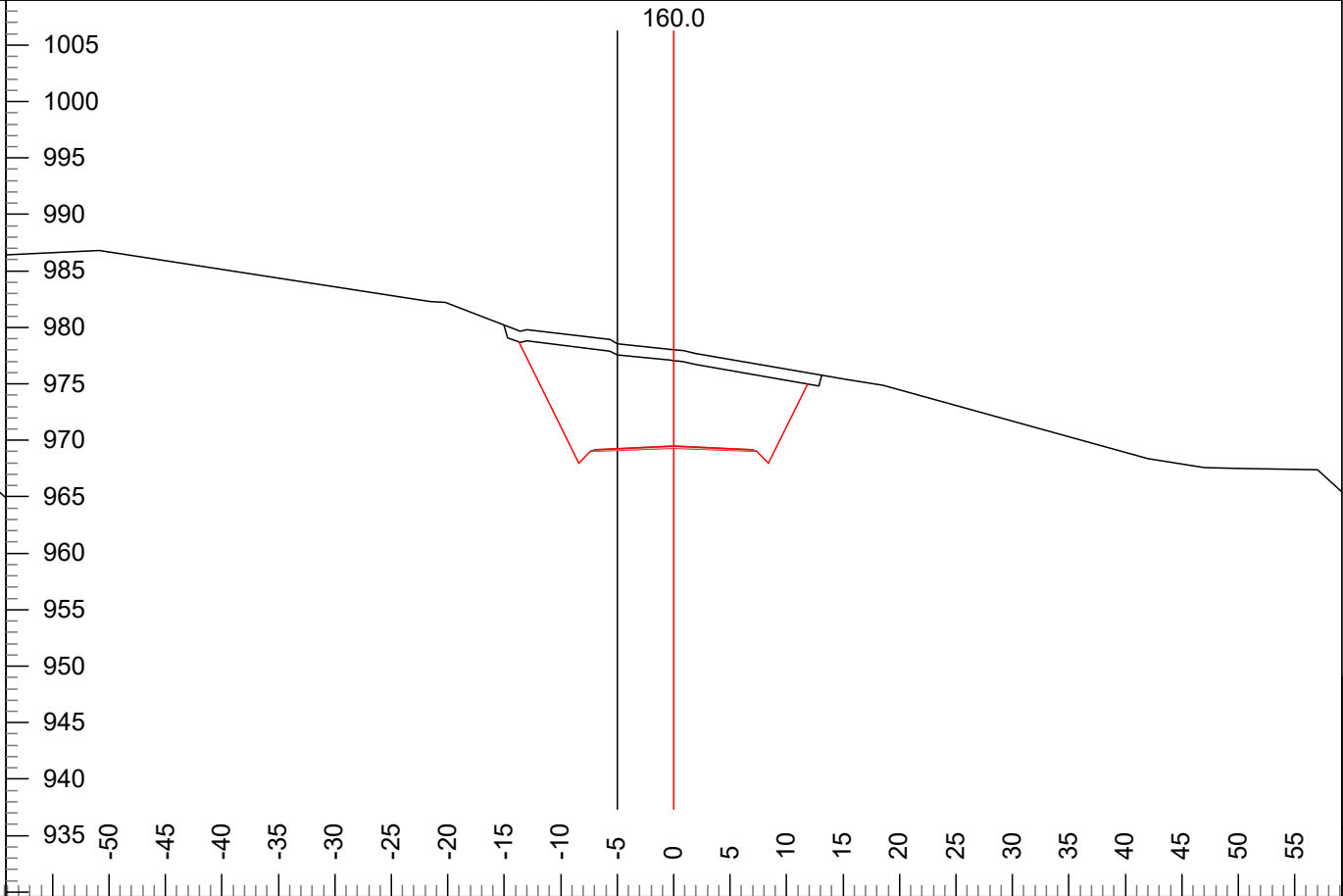
L-Stn :	120.0	Cut Dp:	6.2	CL X:	10058.2	Clr L X:	-12.6	CL Elev:	976.5
P-Stn :	125.4	H. Offset:	9.4	CL Y:	9923.2	Clr R X:	10.7	Gnd Elev:	982.7



L-Stn :	154.3	Cut Dp:	8.7	CL X:	10092.5	Clr L X:	-13.5	CL Elev:	970.3
P-Stn :	159.5	H. Offset:	5.8	CL Y:	9922.1	Clr R X:	11.9	Gnd Elev:	979.0



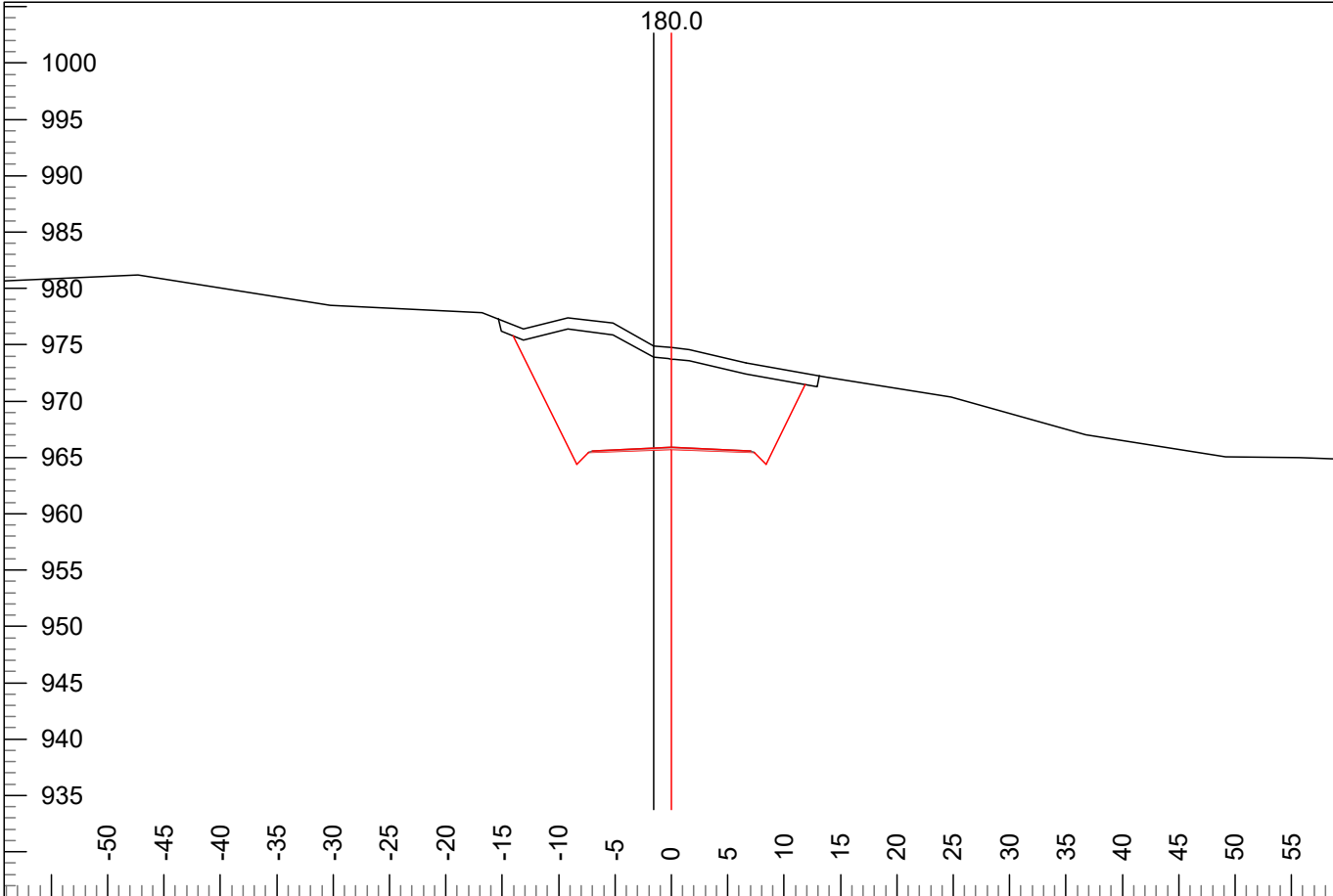
L-Stn :	140.0	Cut Dp:	7.7	CL X:	10078.2	Clr L X:	-13.1	CL Elev:	972.9
P-Stn :	145.3	H. Offset:	7.3	CL Y:	9922.6	Clr R X:	11.4	Gnd Elev:	980.6



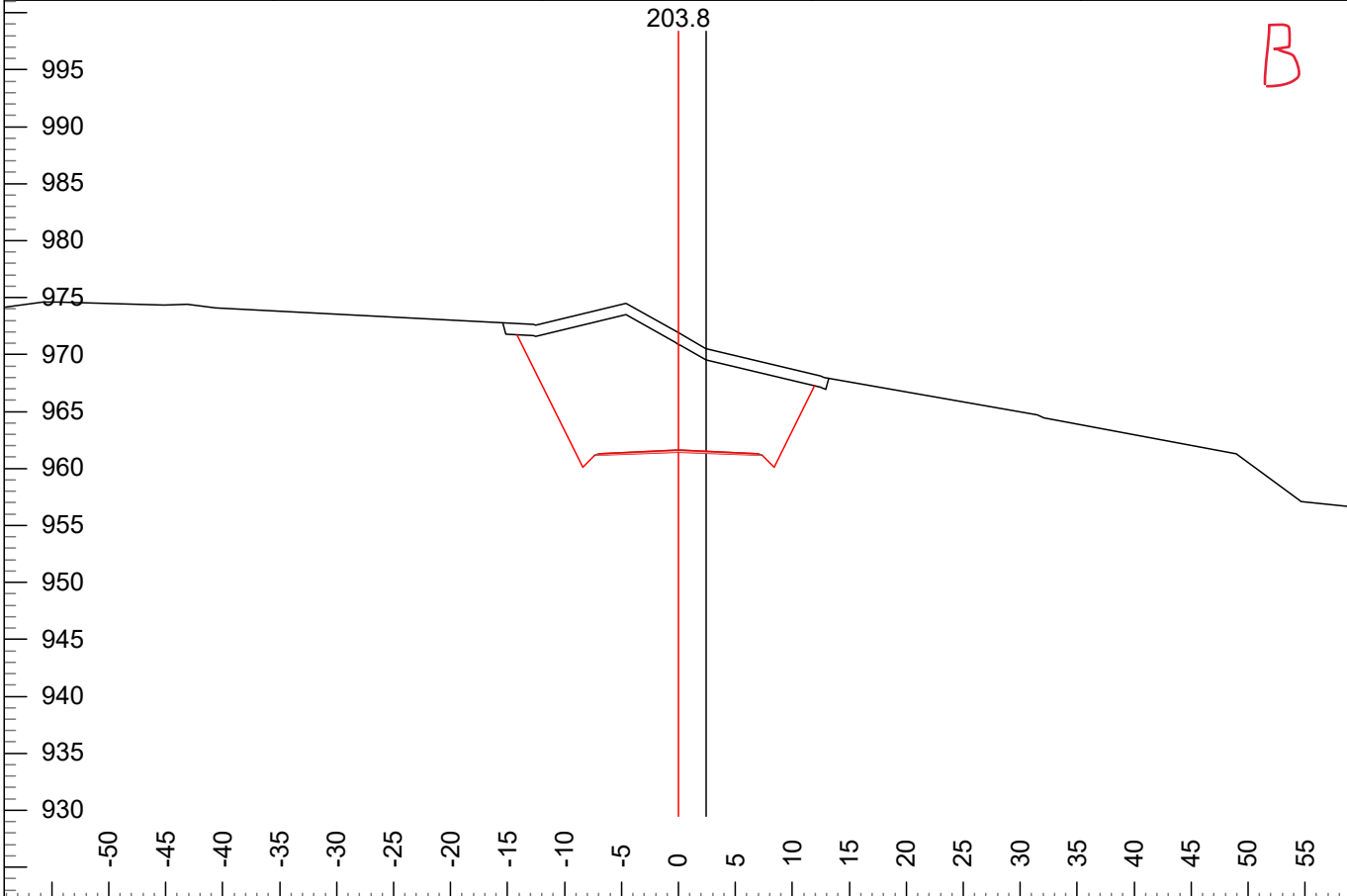
L-Stn :	160.0	Cut Dp:	8.8	CL X:	10098.2	Clr L X:	-13.7	CL Elev:	969.3
P-Stn :	165.1	H. Offset:	4.9	CL Y:	9922.2	Clr R X:	11.9	Gnd Elev:	978.0

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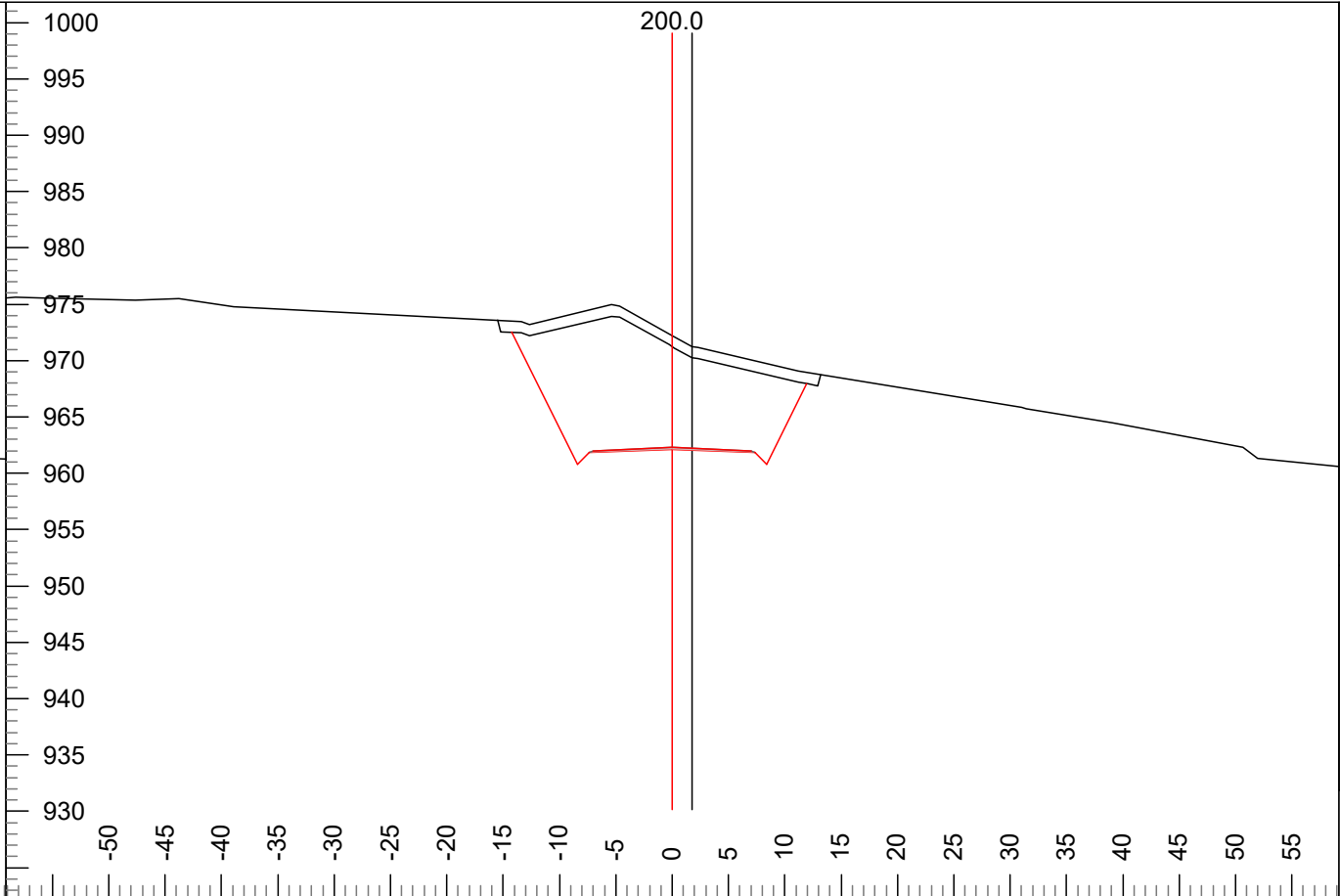
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L-Stn :	180.0	Cut Dp:	9.0	CL X:	10118.2	Clr L X:	-14.1	CL Elev:	965.7
P-Stn :	184.8	H. Offset:	1.6	CL Y:	9922.7	Clr R X:	11.9	Gnd Elev:	974.7



L-Stn :	203.8	Cut Dp:	10.5	CL X:	10142.0	Clr L X:	-14.2	CL Elev:	961.4
P-Stn :	208.5	H. Offset:	-2.4	CL Y:	9923.4	Clr R X:	11.9	Gnd Elev:	971.9



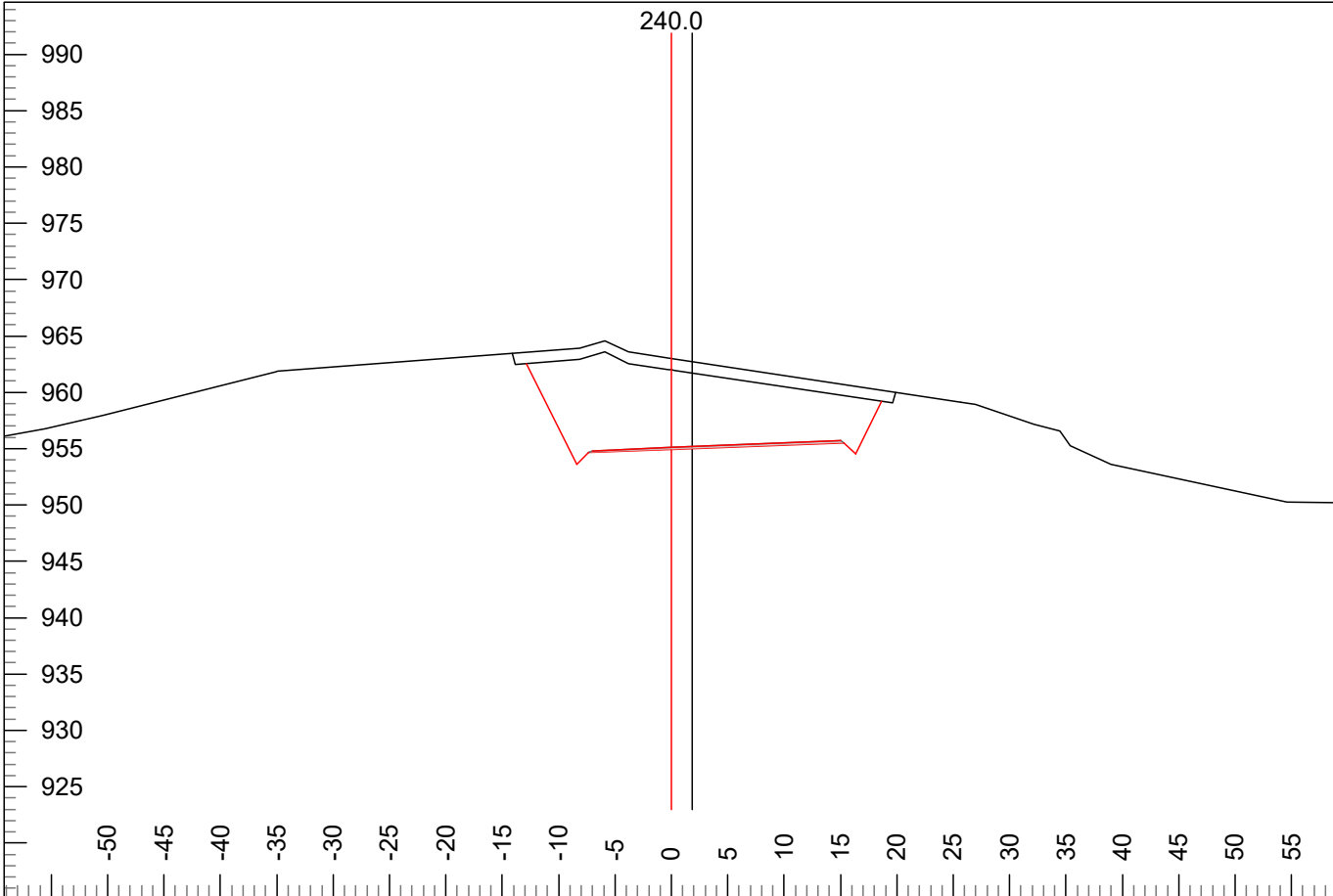
L-Stn :	200.0	Cut Dp:	10.1	CL X:	10138.2	Clr L X:	-14.2	CL Elev:	962.1
P-Stn :	204.6	H. Offset:	-1.8	CL Y:	9923.3	Clr R X:	11.9	Gnd Elev:	972.2



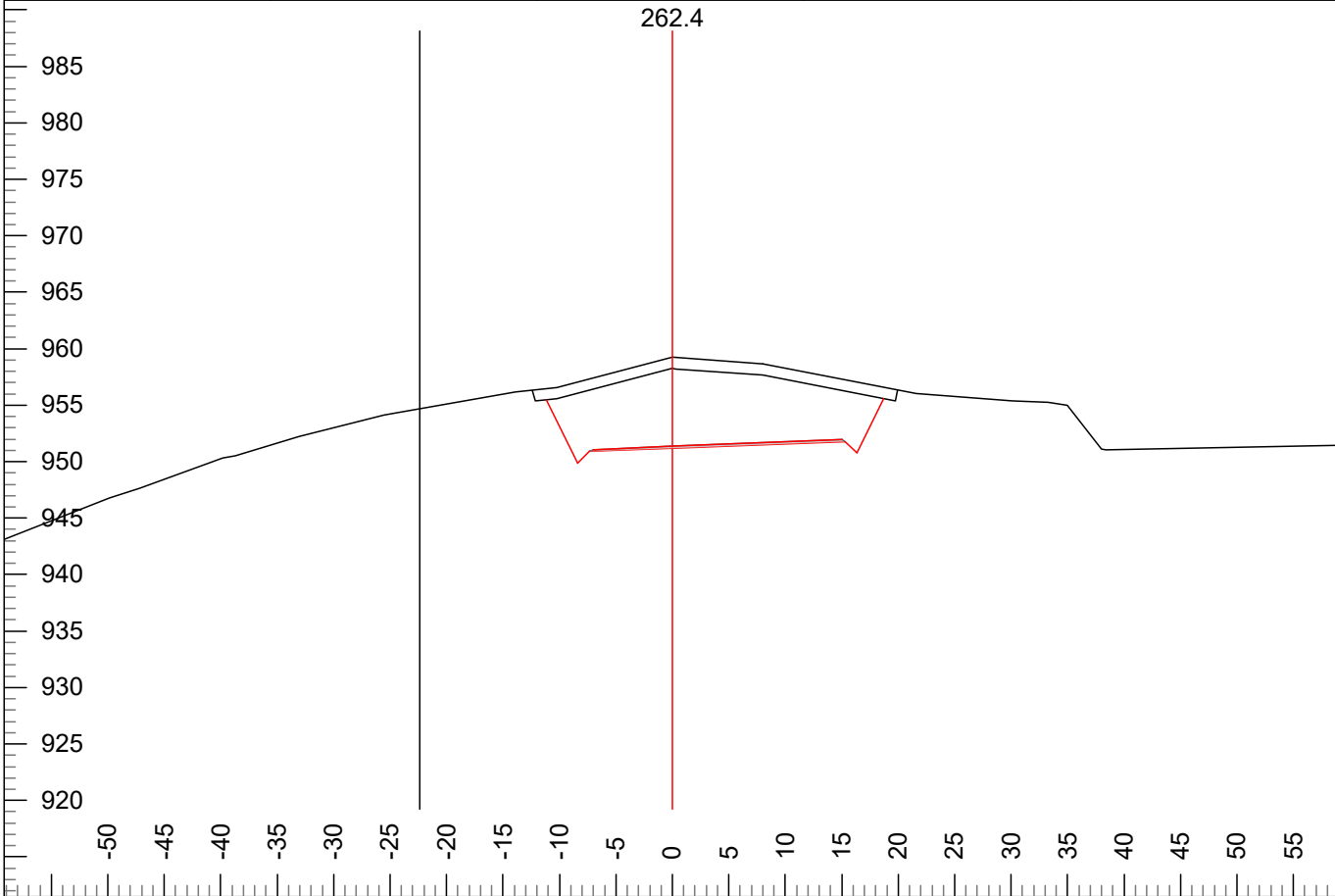
L-Stn :	220.0	Cut Dp:	9.2	CL X:	10158.2	Clr L X:	-13.7	CL Elev:	958.5
P-Stn :	224.8	H. Offset:	-2.9	CL Y:	9923.9	Clr R X:	14.2	Gnd Elev:	967.8

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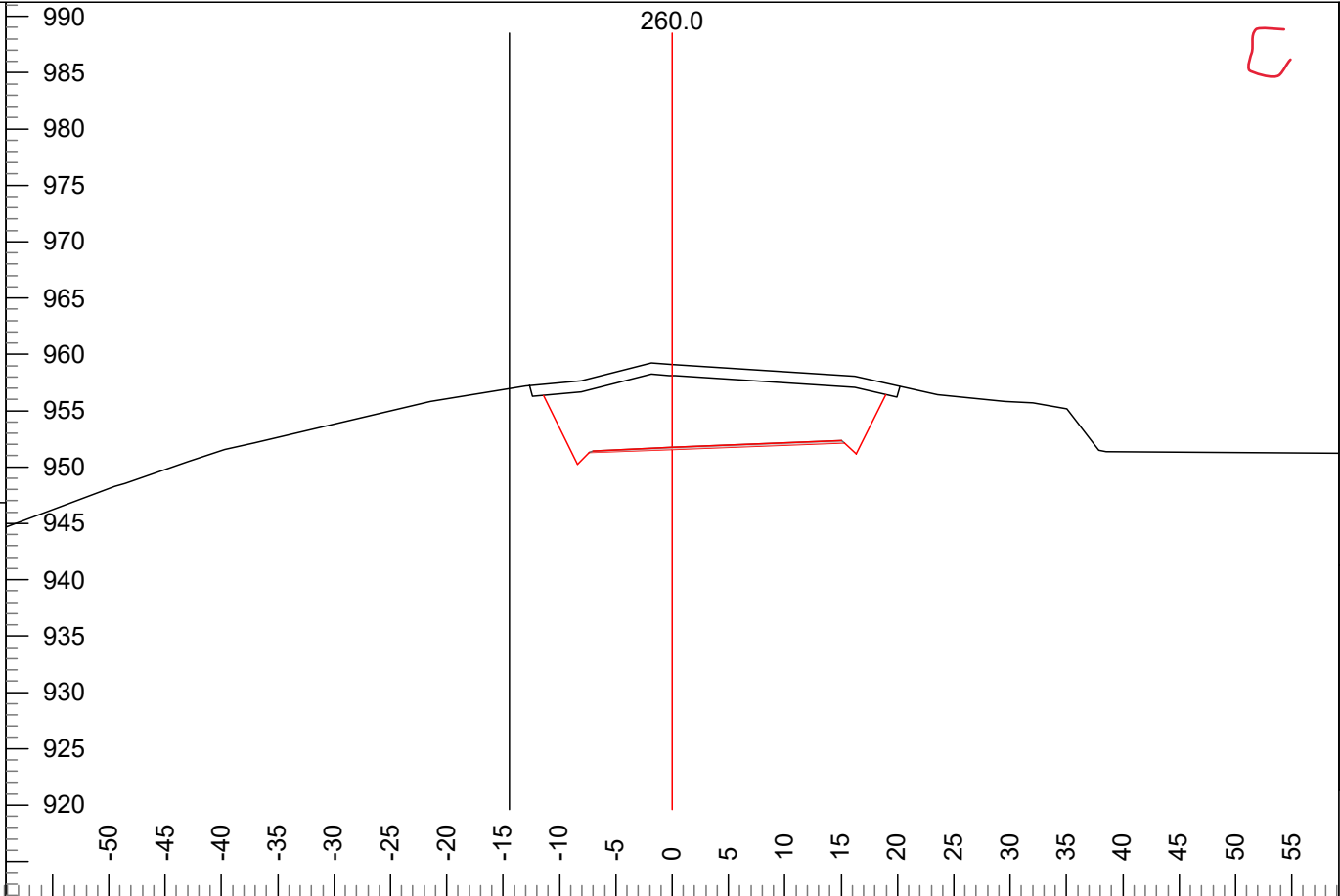
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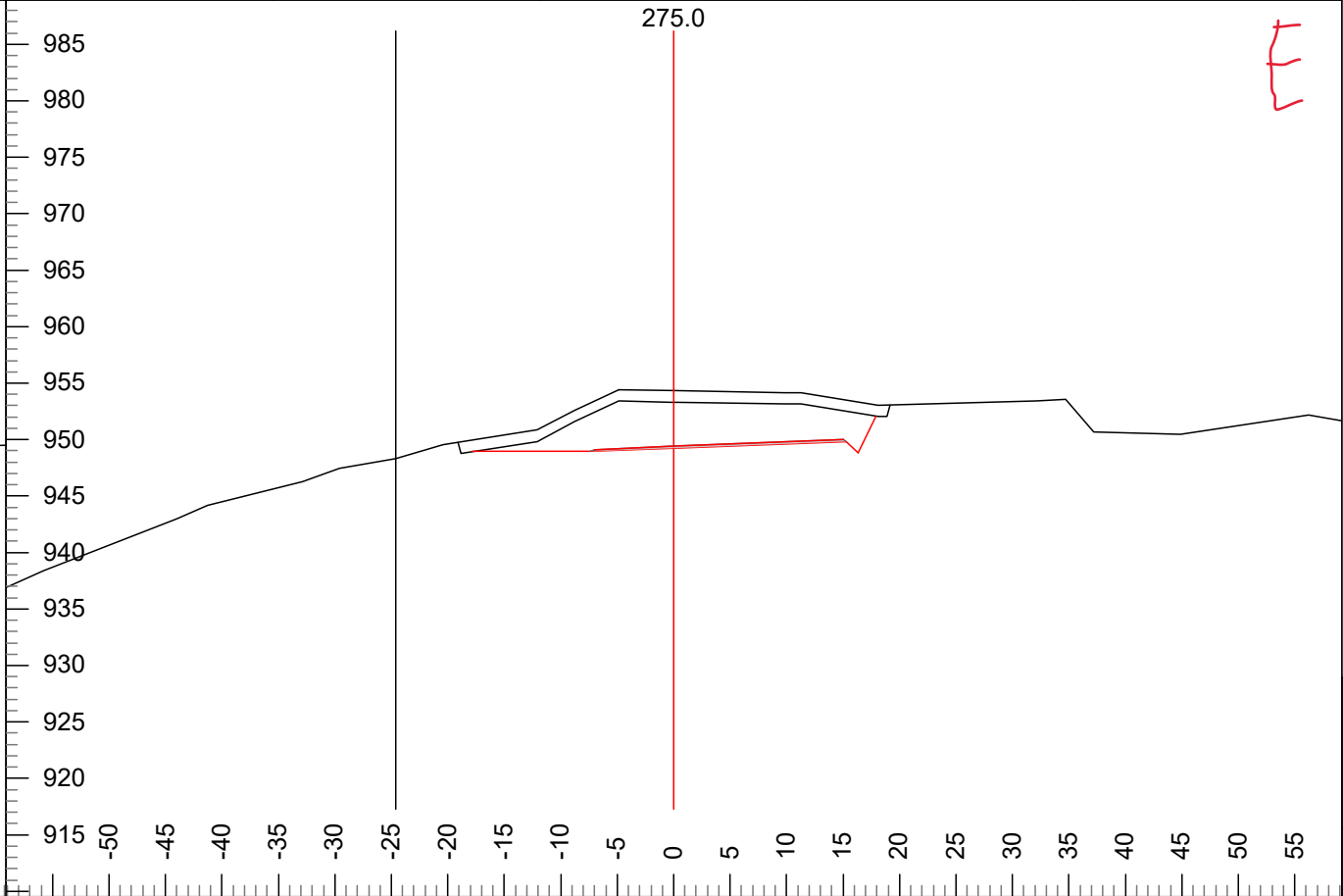
L-Stn :	240.0	Cut Dp:	8.1	CL X:	10178.1	Clr L X:	-12.8	CL Elev:	954.9
P-Stn :	244.7	H. Offset:	-1.8	CL Y:	9922.8	Clr R X:	18.6	Gnd Elev:	963.0



L-Stn :	262.4	Cut Dp:	8.1	CL X:	10198.0	Clr L X:	-11.2	CL Elev:	951.2
P-Stn :	262.5	H. Offset:	8.3	CL Y:	9913.0	Clr R X:	18.7	Gnd Elev:	959.2



L-Stn :	260.0	Cut Dp:	7.6	CL X:	10196.1	Clr L X:	-11.4	CL Elev:	951.6
P-Stn :	262.5	H. Offset:	6.5	CL Y:	9914.5	Clr R X:	19.0	Gnd Elev:	959.1

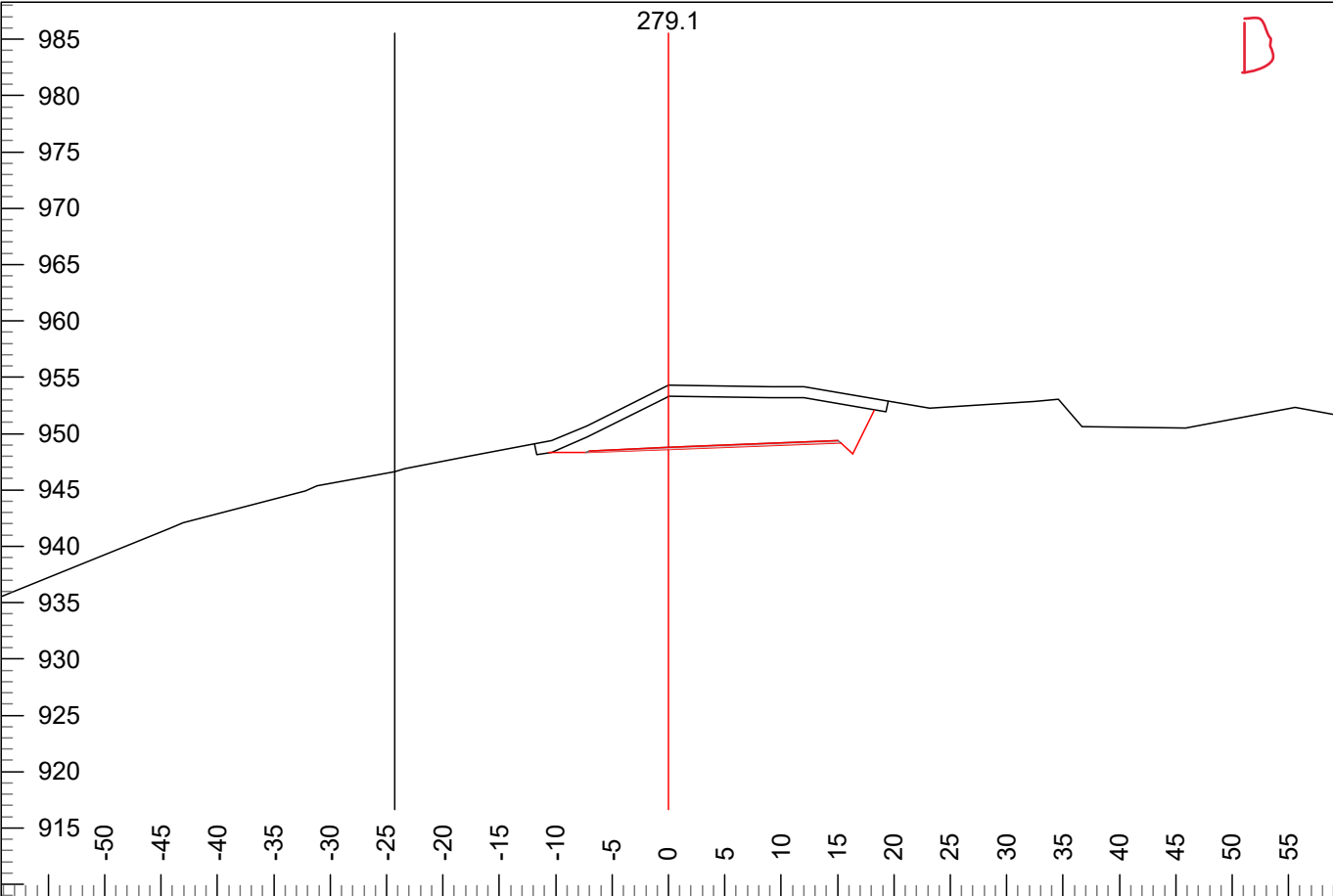


L-Stn :	275.0	Cut Dp:	5.1	CL X:	10206.7	Clr L X:	-17.8	CL Elev:	949.2
P-Stn :	312.5	H. Offset:	25.1	CL Y:	9903.9	Clr R X:	17.9	Gnd Elev:	954.3

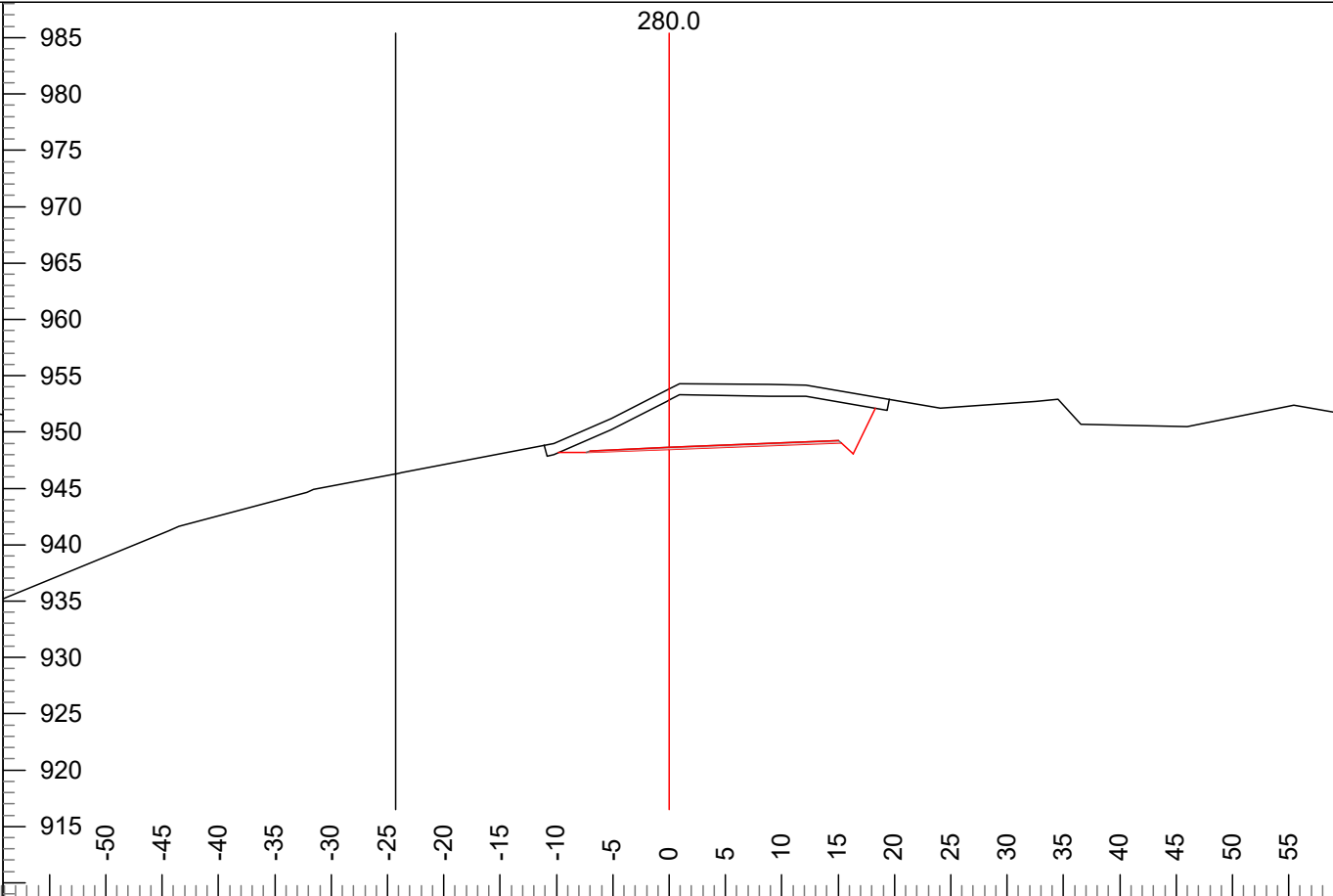
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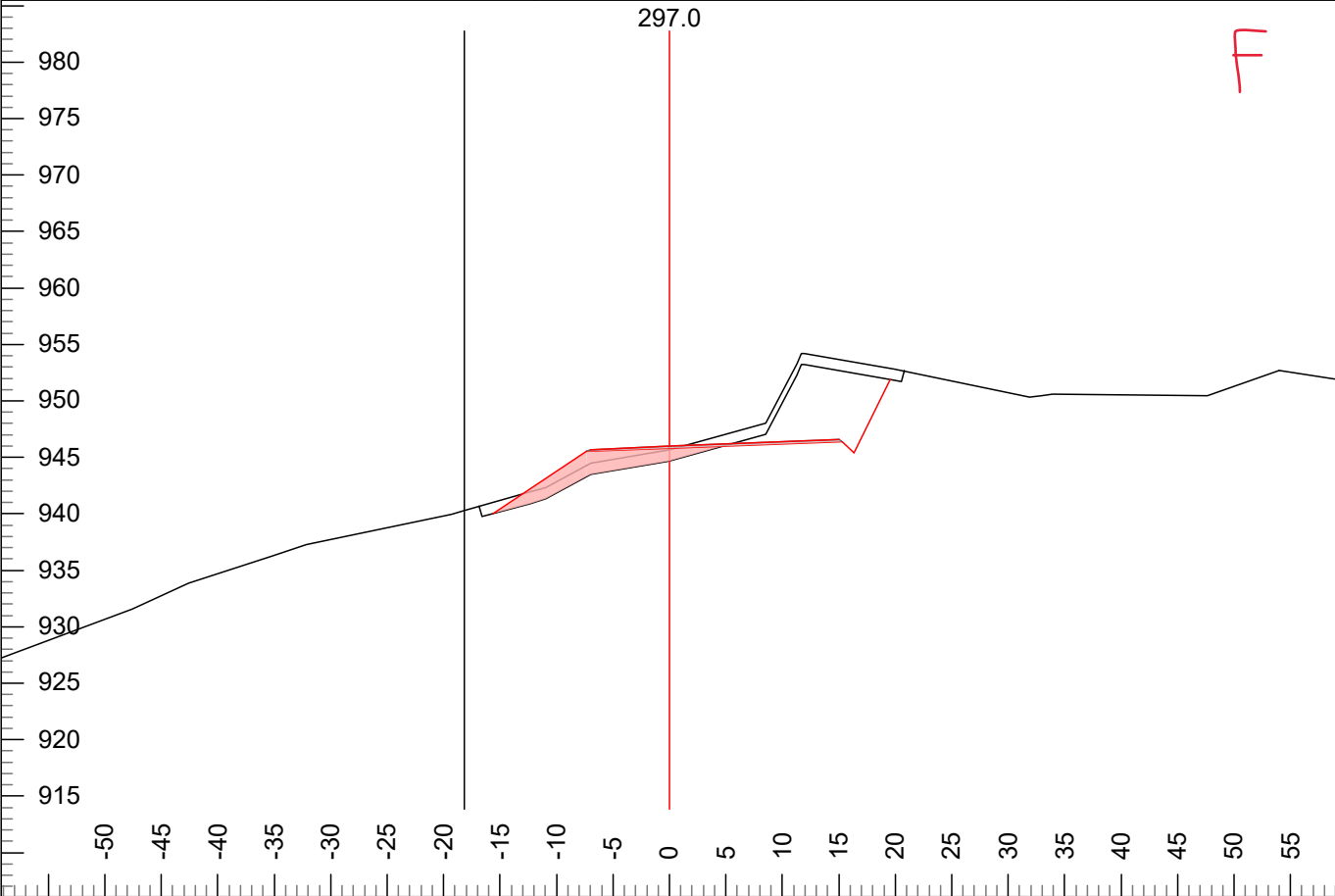
23/11/08



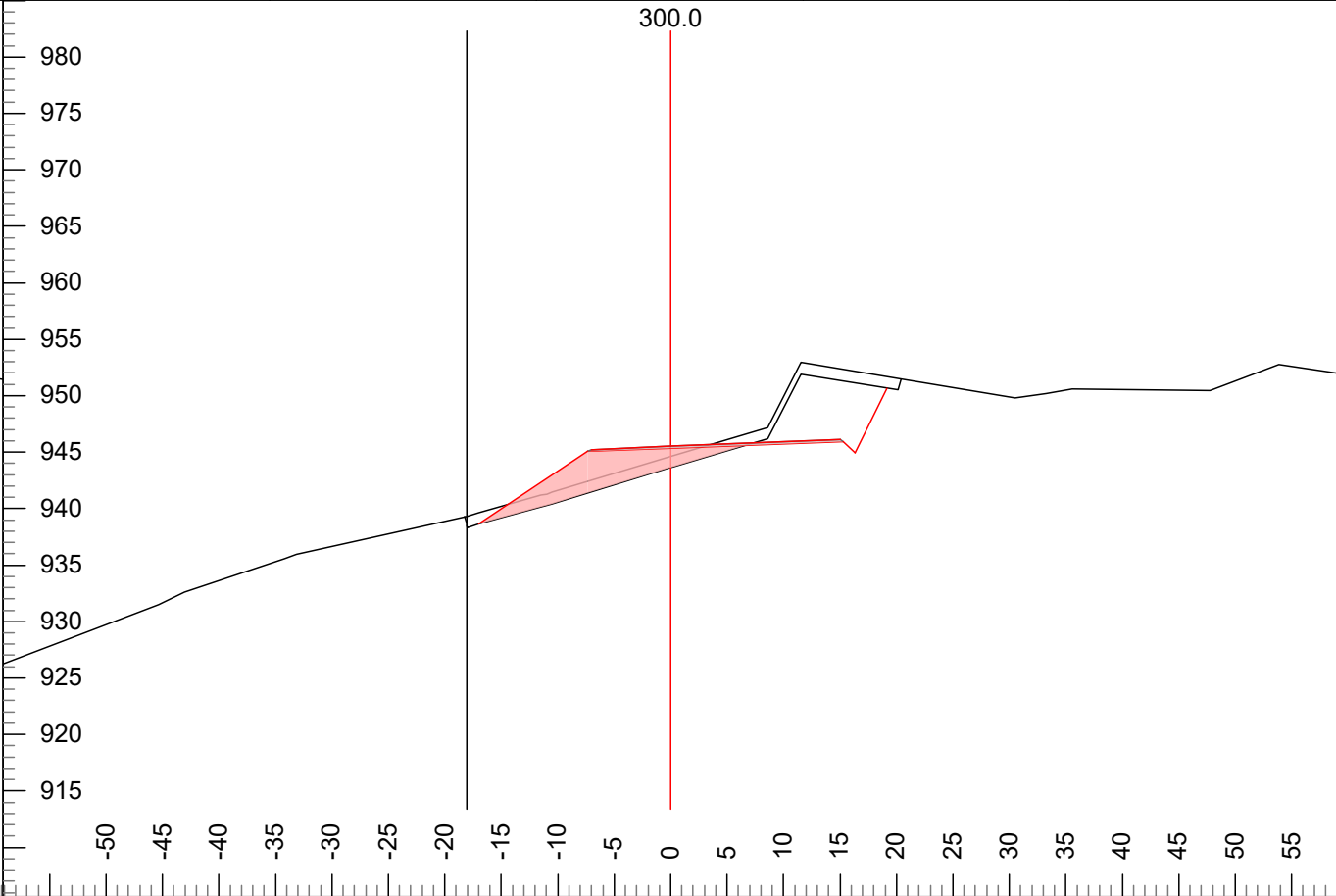
L-Stn :	279.1	Cut Dp:	5.7	CL X:	10209.0	Clr L X:	-10.6	CL Elev:	948.6
P-Stn :	287.5	H. Offset:	34.0	CL Y:	9900.5	Clr R X:	18.3	Gnd Elev:	954.3



L-Stn :	280.0	Cut Dp:	5.4	CL X:	10209.4	Clr L X:	-9.8	CL Elev:	948.4
P-Stn :	322.2	H. Offset:	22.3	CL Y:	9899.8	Clr R X:	18.3	Gnd Elev:	953.8



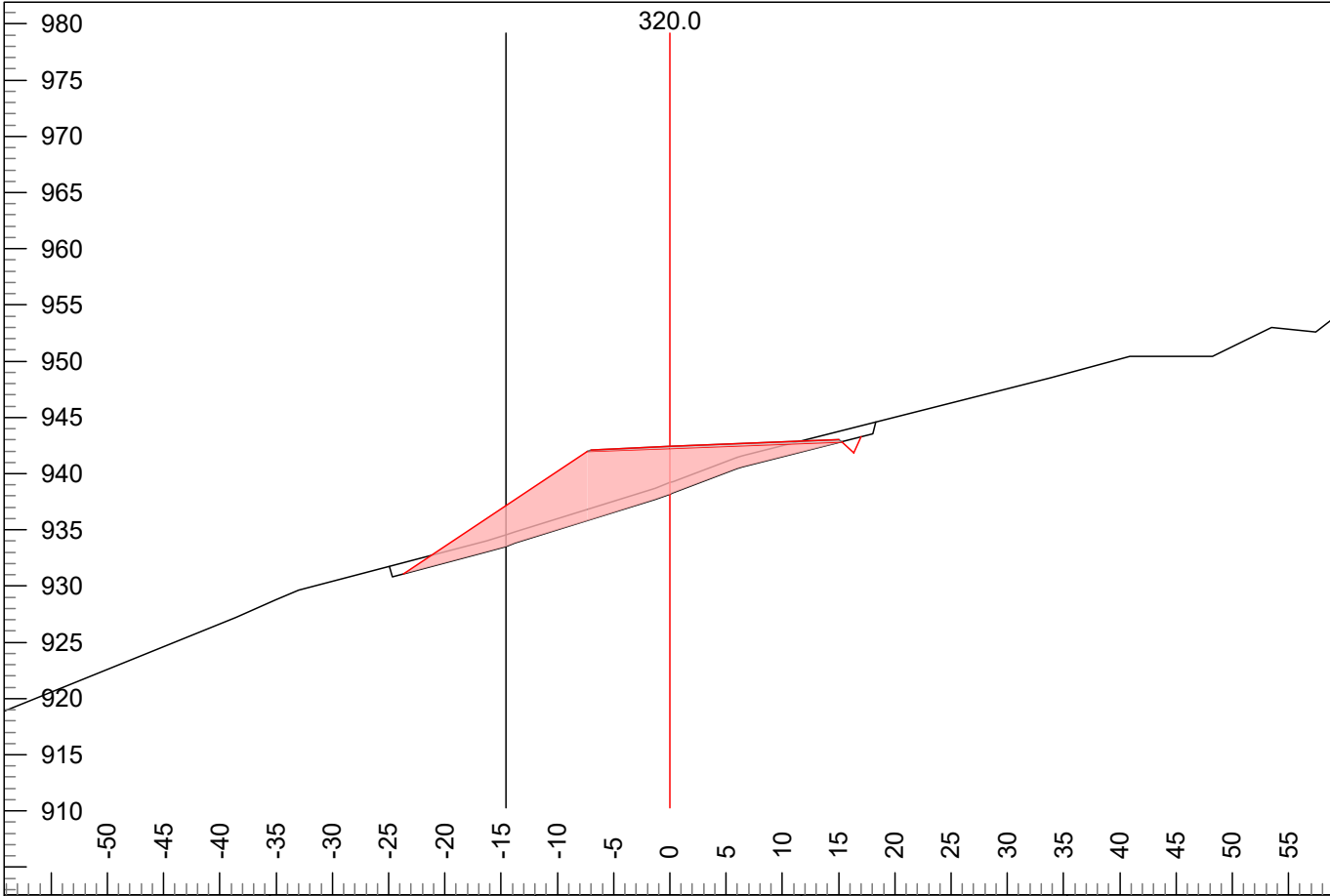
L-Stn :	297.0	Cut Dp:	-0.1	CL X:	10215.5	Clr L X:	-15.6	CL Elev:	945.8
P-Stn :	341.5	H. Offset:	18.4	CL Y:	9883.9	Clr R X:	19.6	Gnd Elev:	945.7



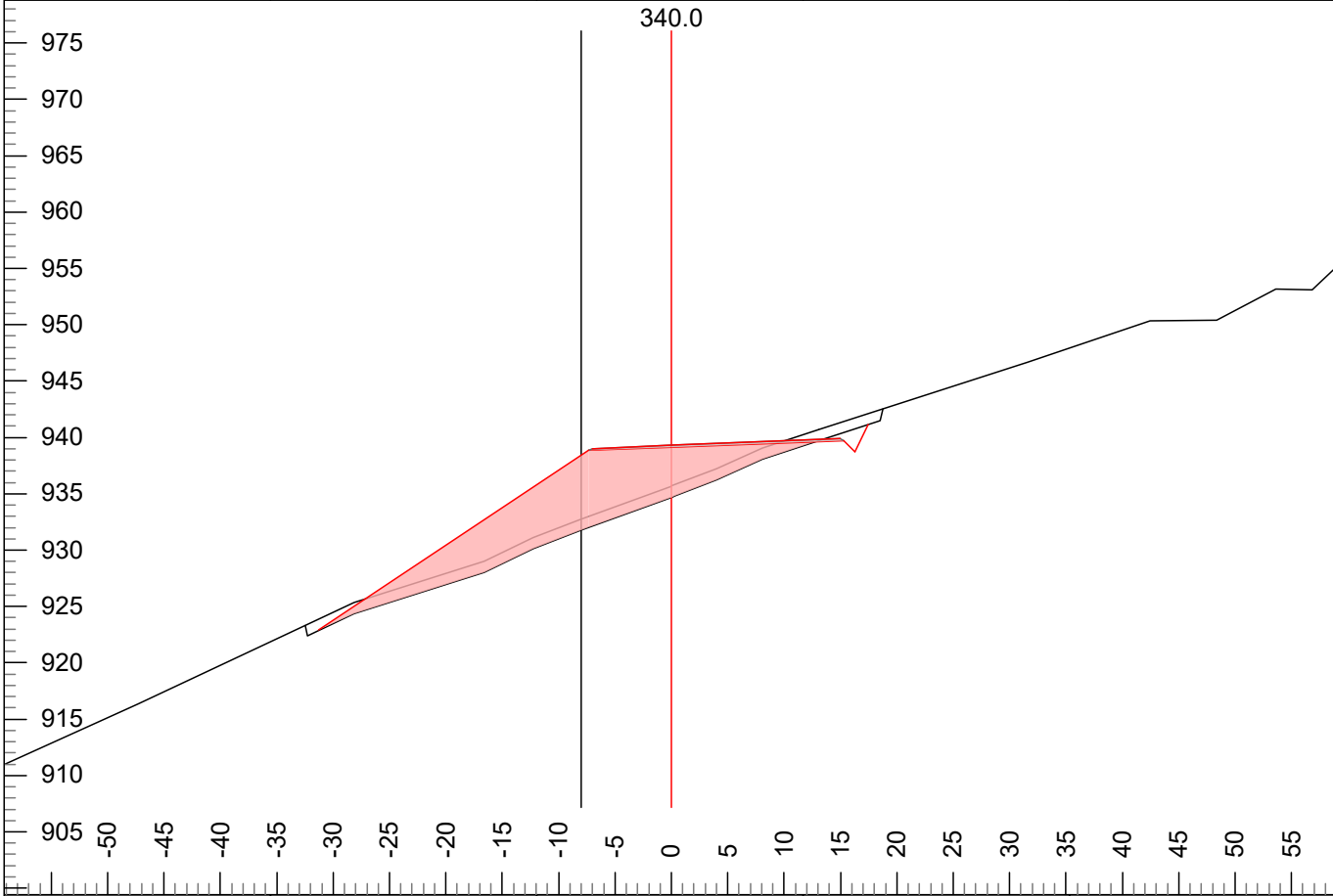
L-Stn :	300.0	Cut Dp:	-0.7	CL X:	10216.0	Clr L X:	-17.0	CL Elev:	945.3
P-Stn :	347.2	H. Offset:	17.1	CL Y:	9881.0	Clr R X:	19.2	Gnd Elev:	944.6

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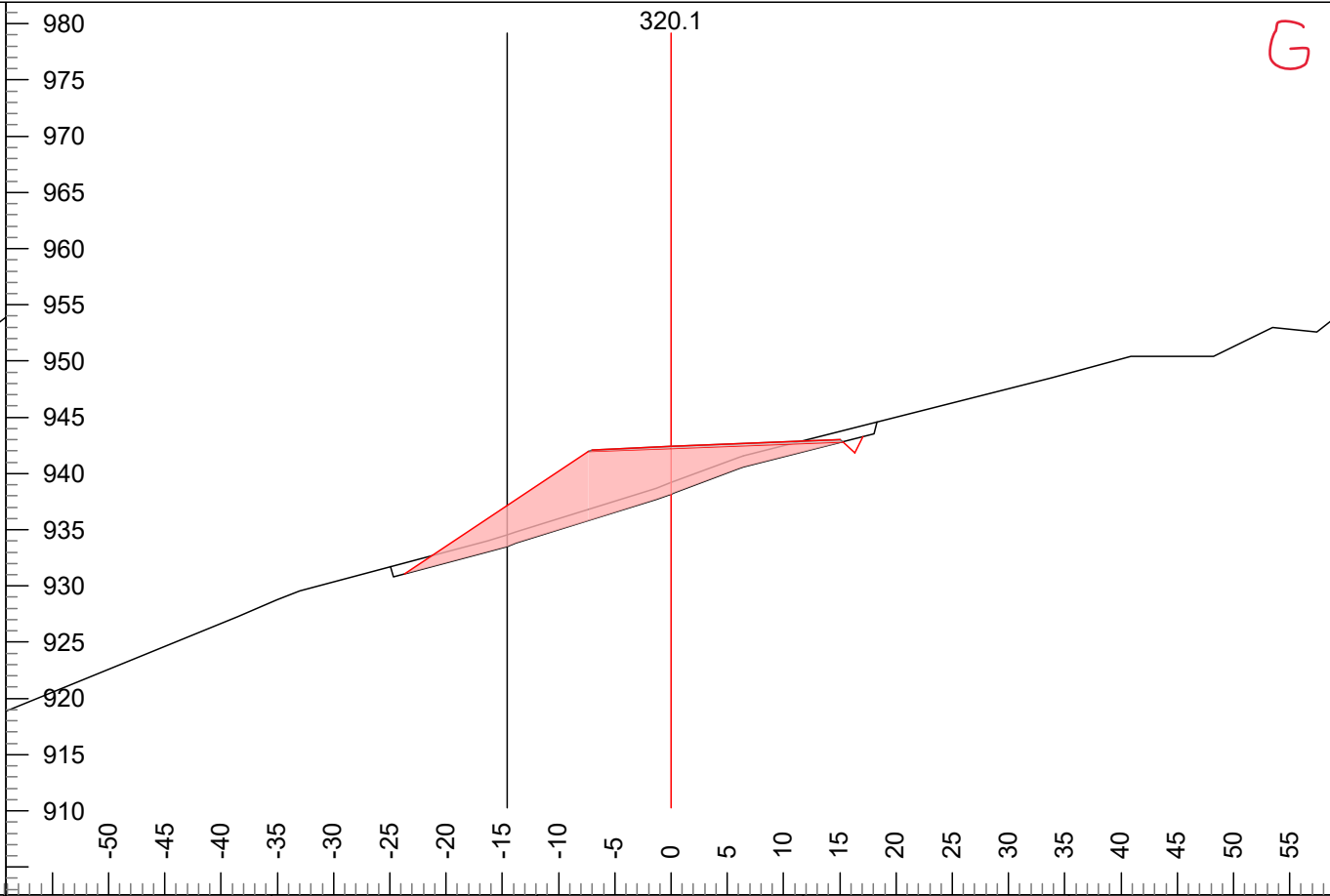
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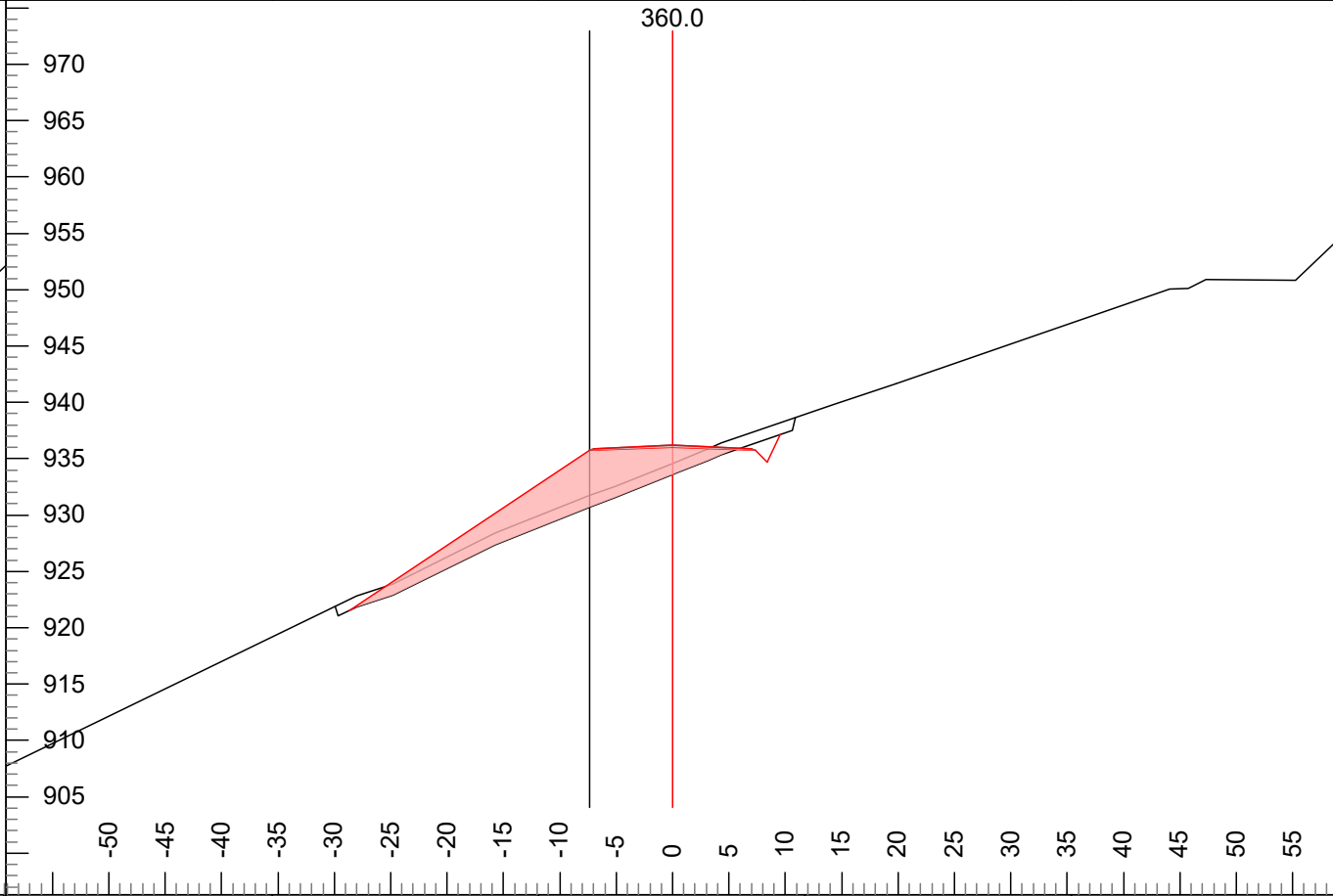
L-Stn :	320.0	Cut Dp:	-3.0	CL X:	10214.8	Clr L X:	-23.7	CL Elev:	942.2
P-Stn :	366.9	H. Offset:	14.6	CL Y:	9861.2	Clr R X:	17.0	Gnd Elev:	939.2



L-Stn :	340.0	Cut Dp:	-3.4	CL X:	10205.9	Clr L X:	-31.3	CL Elev:	939.1
P-Stn :	394.8	H. Offset:	8.0	CL Y:	9843.4	Clr R X:	17.5	Gnd Elev:	935.7



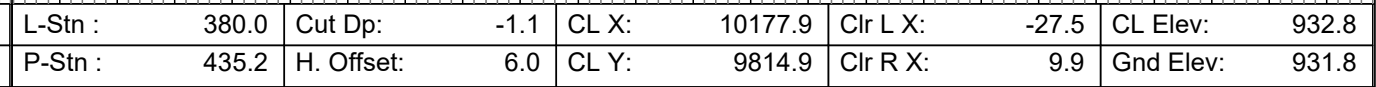
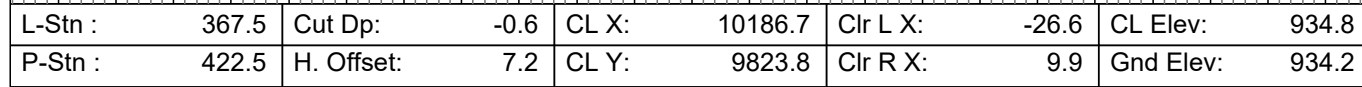
L-Stn :	320.1	Cut Dp:	-3.0	CL X:	10214.8	Clr L X:	-23.7	CL Elev:	942.2
P-Stn :	371.5	H. Offset:	15.3	CL Y:	9861.1	Clr R X:	17.0	Gnd Elev:	939.2



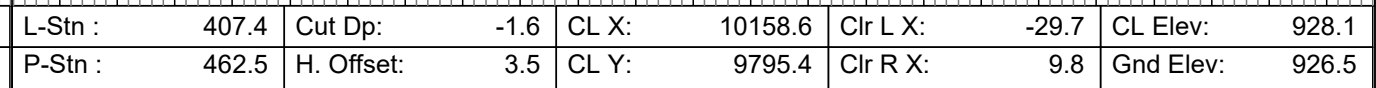
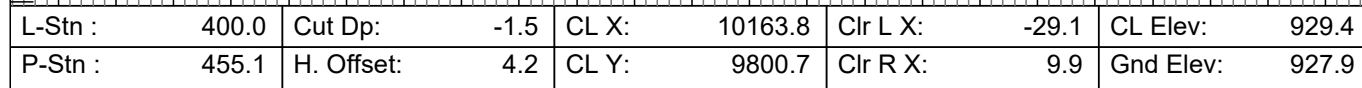
L-Stn :	360.0	Cut Dp:	-1.4	CL X:	10192.0	Clr L X:	-28.7	CL Elev:	936.0
P-Stn :	414.7	H. Offset:	7.3	CL Y:	9829.1	Clr R X:	9.6	Gnd Elev:	934.6

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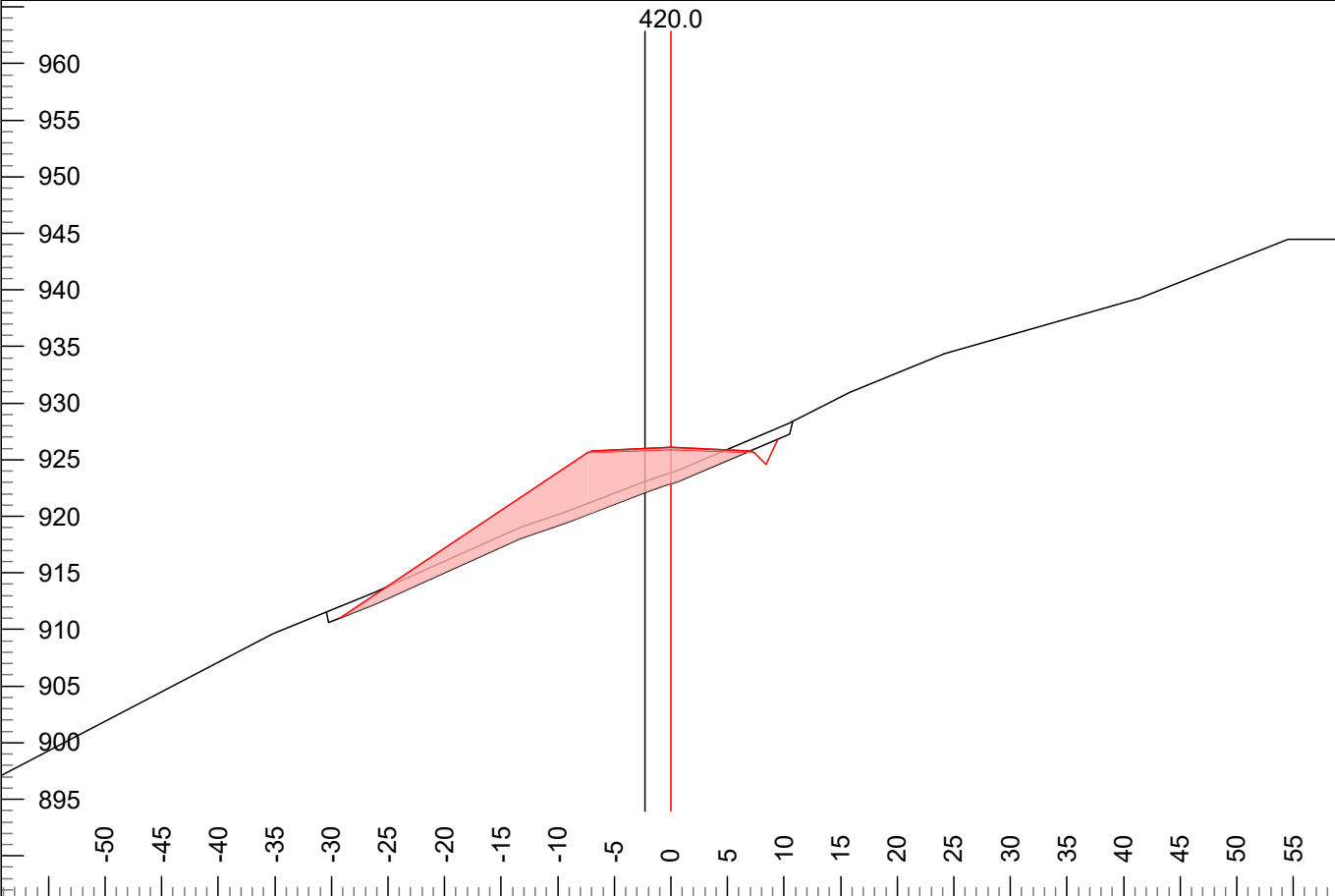
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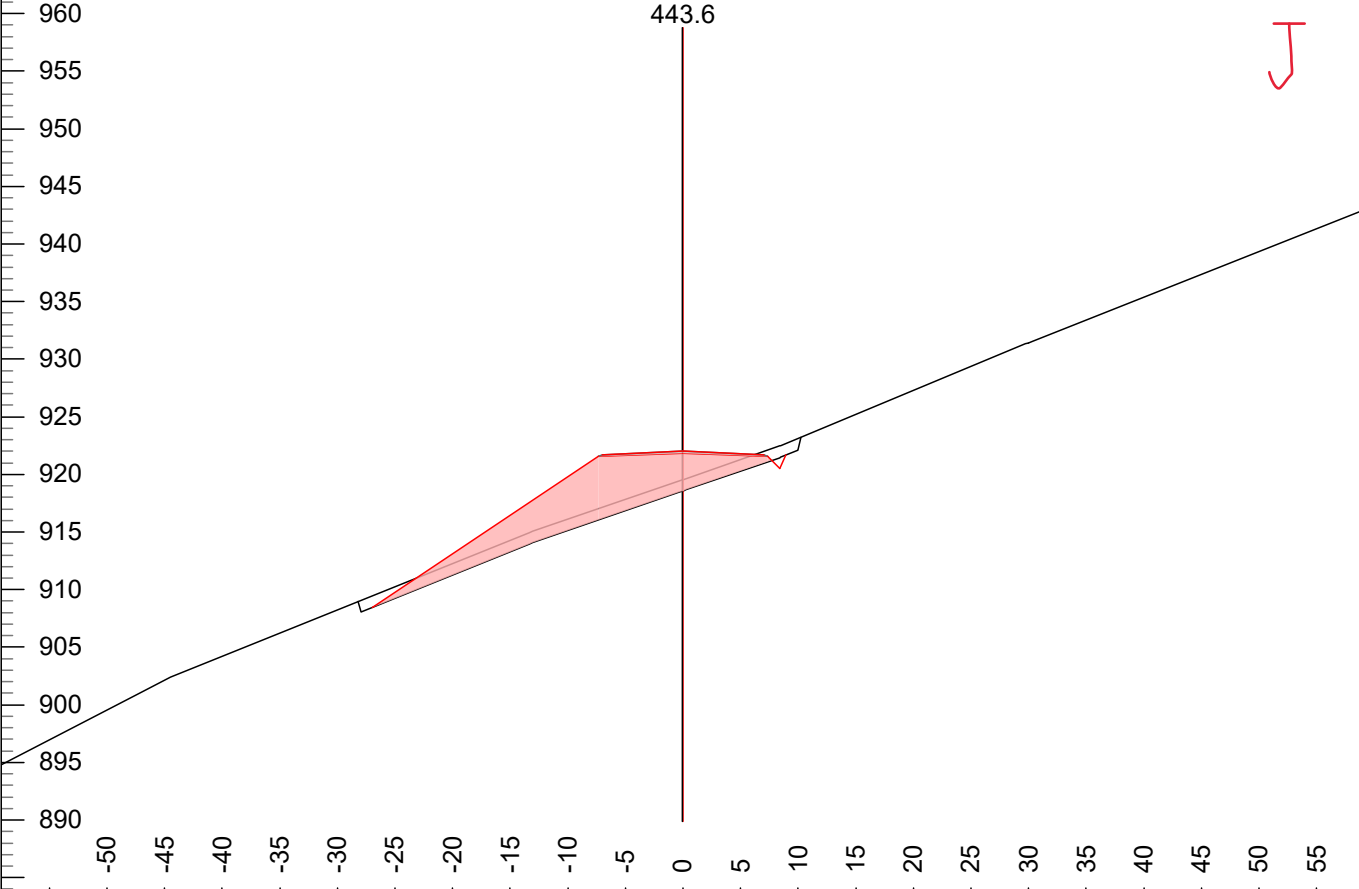
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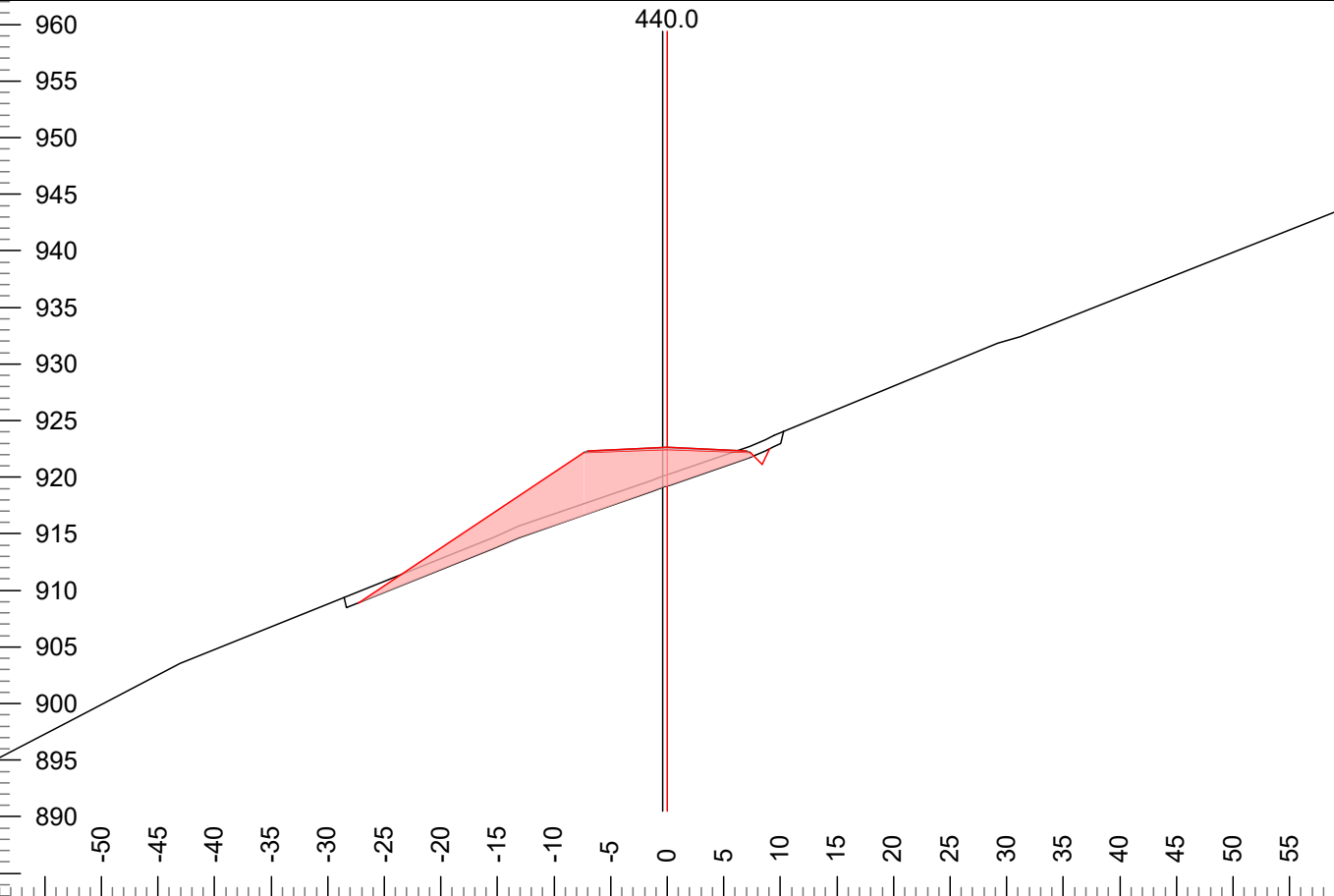
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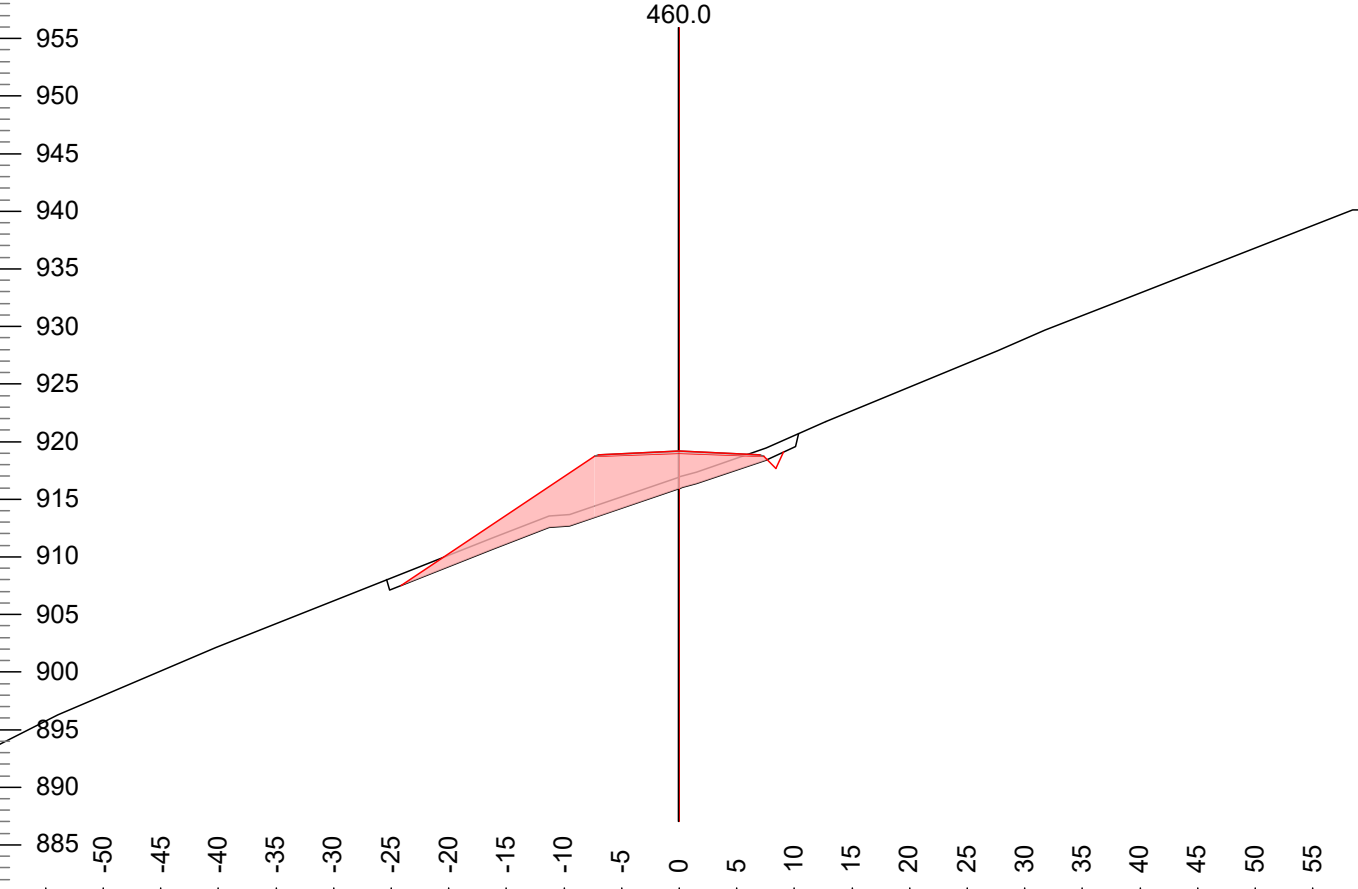
L-Stn :	420.0	Cut Dp:	-2.0	CL X:	10149.8	Clr L X:	-29.2	CL Elev:	925.9
P-Stn :	475.0	H. Offset:	2.3	CL Y:	9786.4	Clr R X:	9.5	Gnd Elev:	923.9



L-Stn :	443.6	Cut Dp:	-2.3	CL X:	10133.2	Clr L X:	-27.0	CL Elev:	921.8
P-Stn :	498.5	H. Offset:	0.1	CL Y:	9769.6	Clr R X:	9.0	Gnd Elev:	919.6



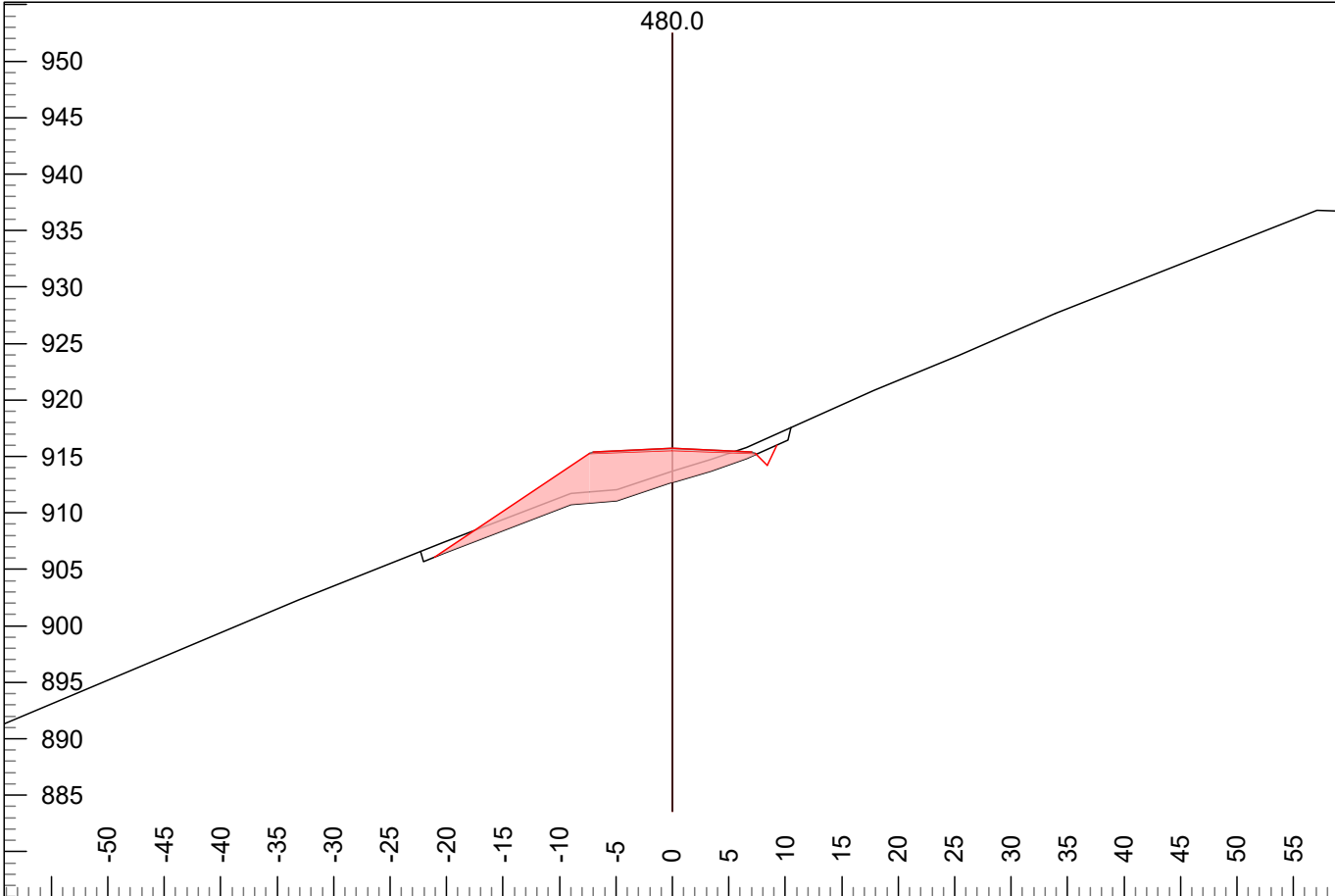
L-Stn :	440.0	Cut Dp:	-2.2	CL X:	10135.7	Clr L X:	-27.3	CL Elev:	922.4
P-Stn :	494.9	H. Offset:	0.4	CL Y:	9772.2	Clr R X:	9.0	Gnd Elev:	920.2



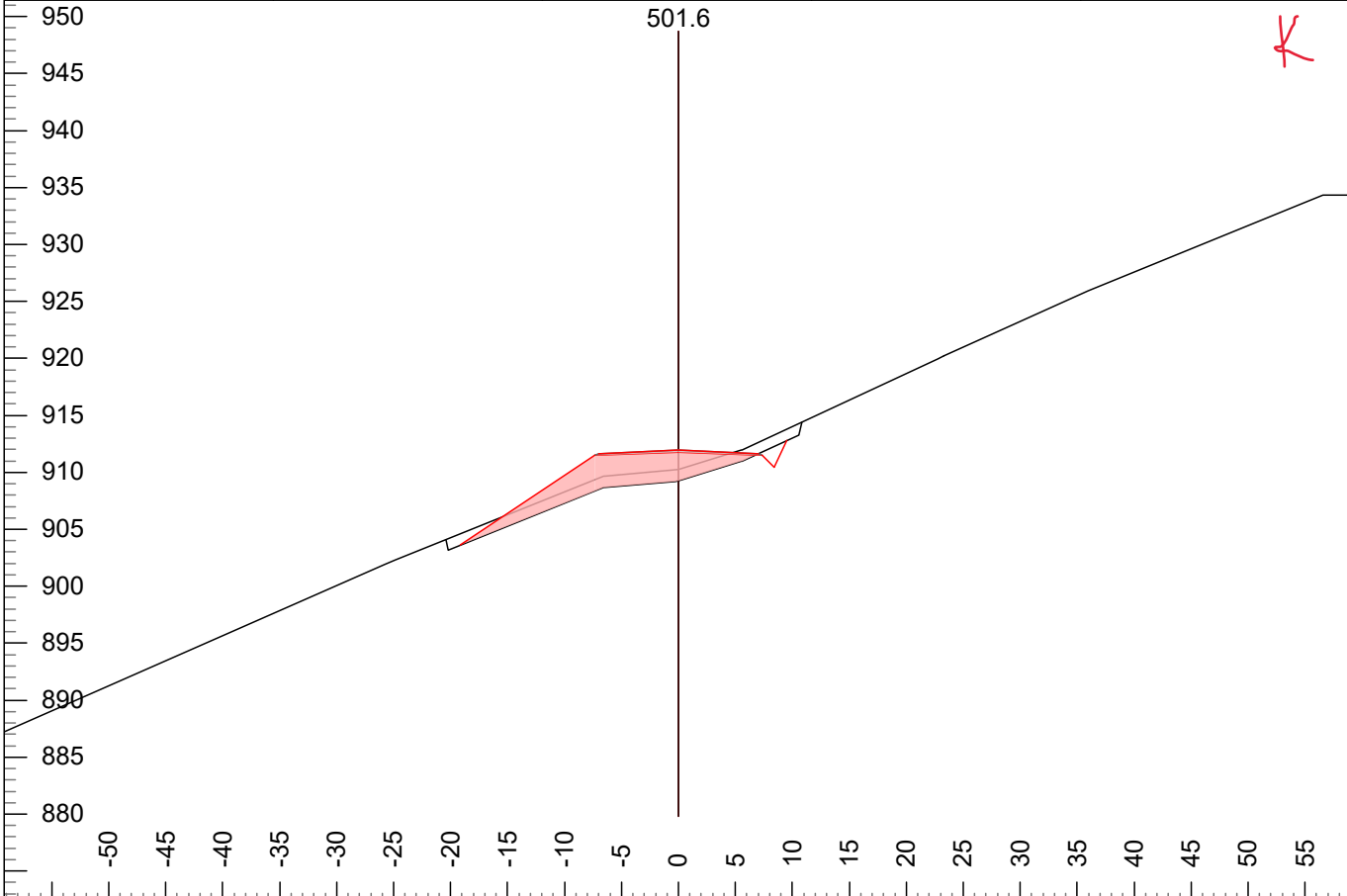
L-Stn :	460.0	Cut Dp:	-2.1	CL X:	10122.0	Clr L X:	-24.1	CL Elev:	919.0
P-Stn :	514.9	H. Offset:	0.1	CL Y:	9757.6	Clr R X:	9.1	Gnd Elev:	916.9

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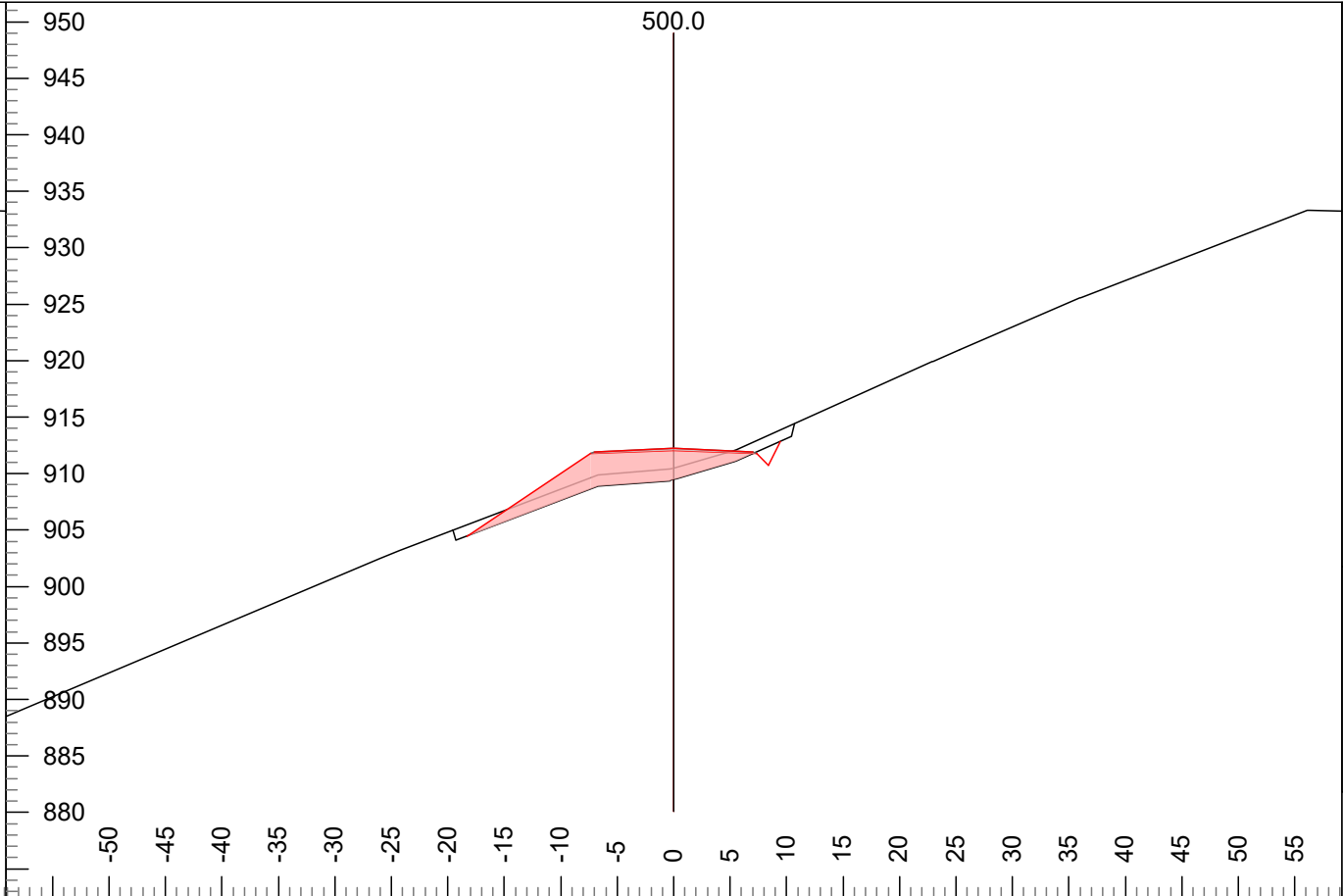
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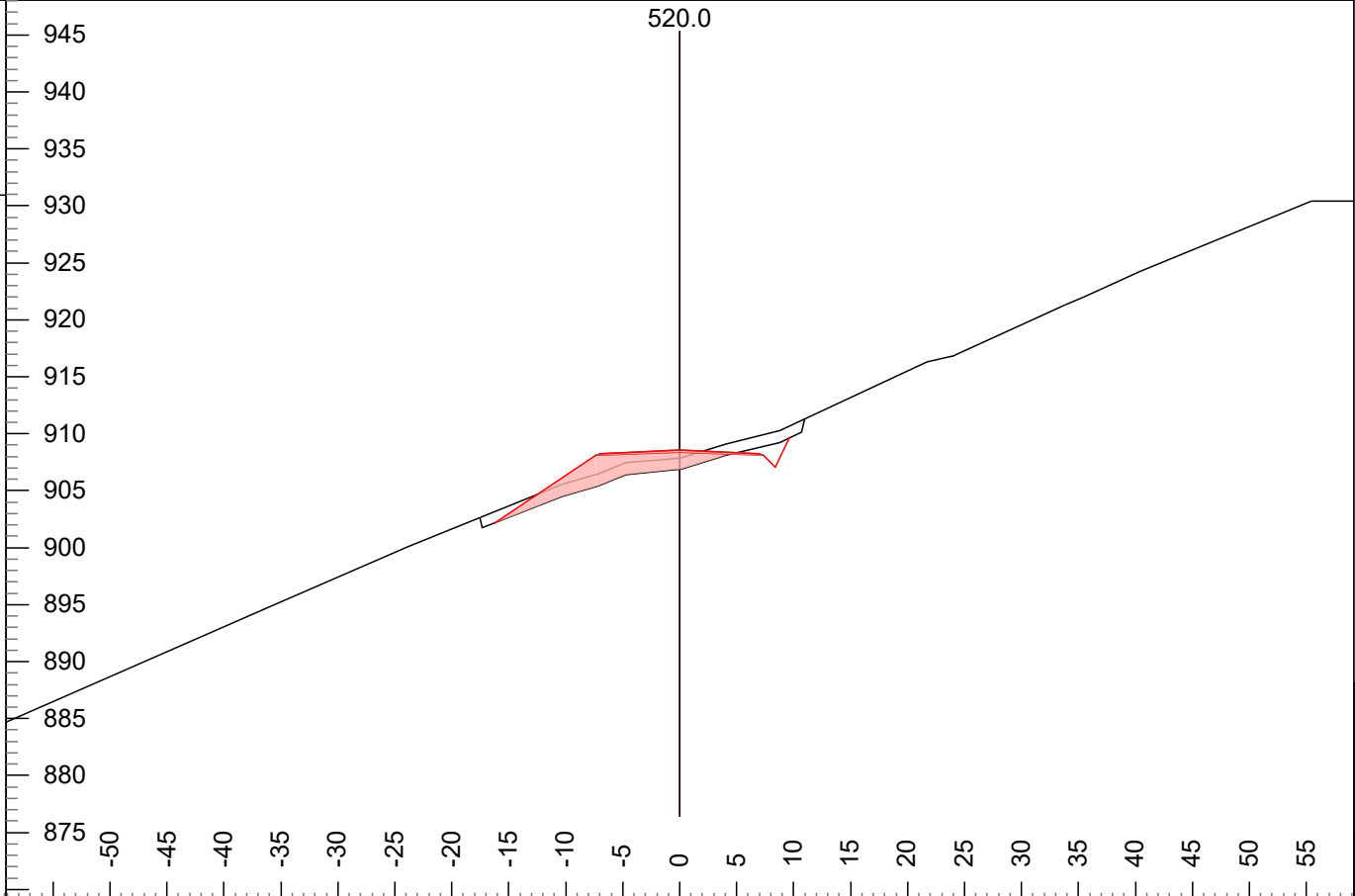
L-Stn :	480.0	Cut Dp:	-1.8	CL X:	10108.4	Clr L X:	-21.1	CL Elev:	915.5
P-Stn :	534.9	H. Offset:	0.0	CL Y:	9743.0	Clr R X:	9.2	Gnd Elev:	913.7



L-Stn :	501.6	Cut Dp:	-1.5	CL X:	10093.7	Clr L X:	-19.2	CL Elev:	911.8
P-Stn :	556.5	H. Offset:	0.0	CL Y:	9727.1	Clr R X:	9.5	Gnd Elev:	910.2



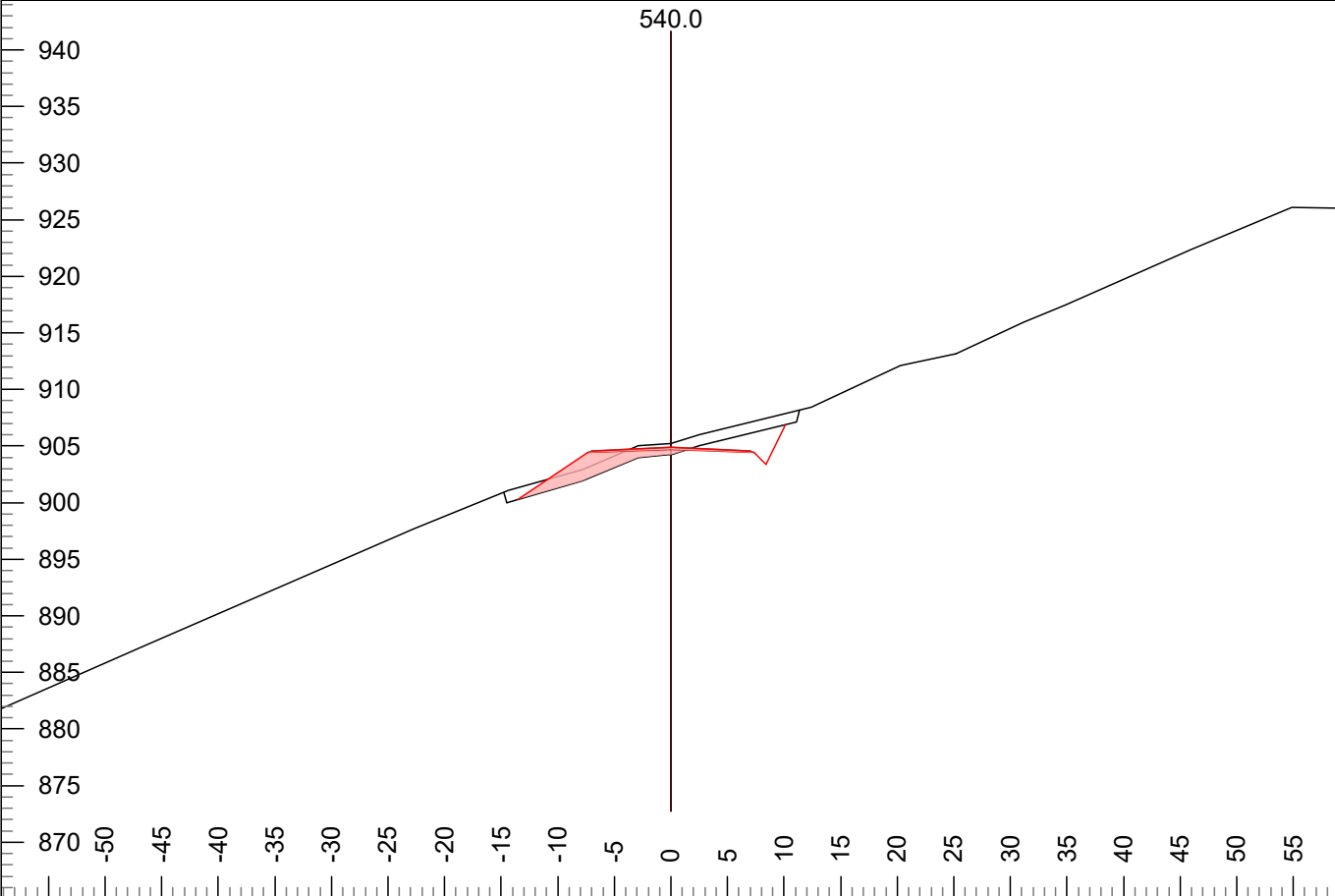
L-Stn :	500.0	Cut Dp:	-1.5	CL X:	10094.8	Clr L X:	-18.3	CL Elev:	912.1
P-Stn :	554.9	H. Offset:	0.0	CL Y:	9728.3	Clr R X:	9.4	Gnd Elev:	910.5



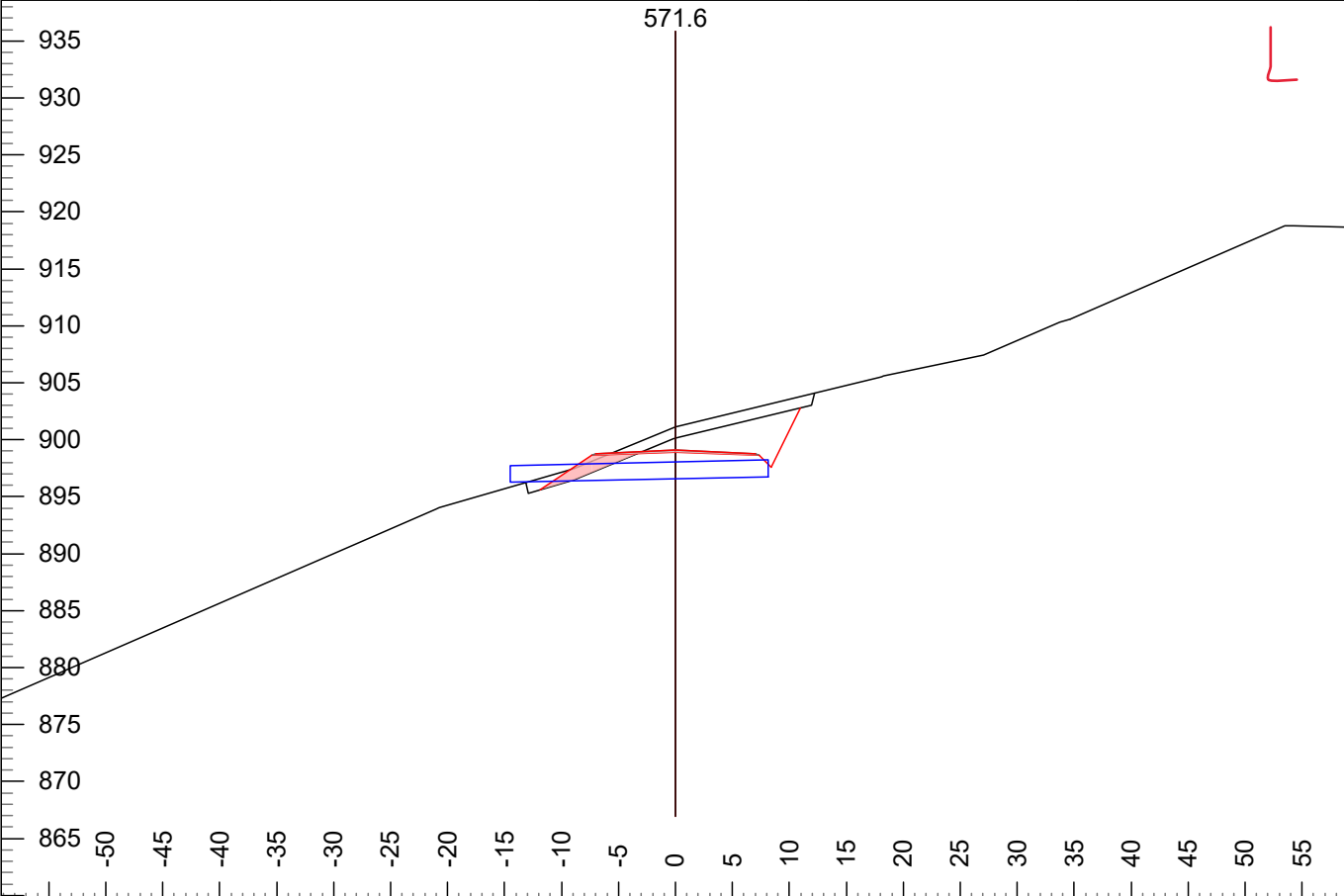
L-Stn :	520.0	Cut Dp:	-0.5	CL X:	10079.6	Clr L X:	-16.3	CL Elev:	908.4
P-Stn :	574.9	H. Offset:	0.0	CL Y:	9715.3	Clr R X:	9.7	Gnd Elev:	907.9

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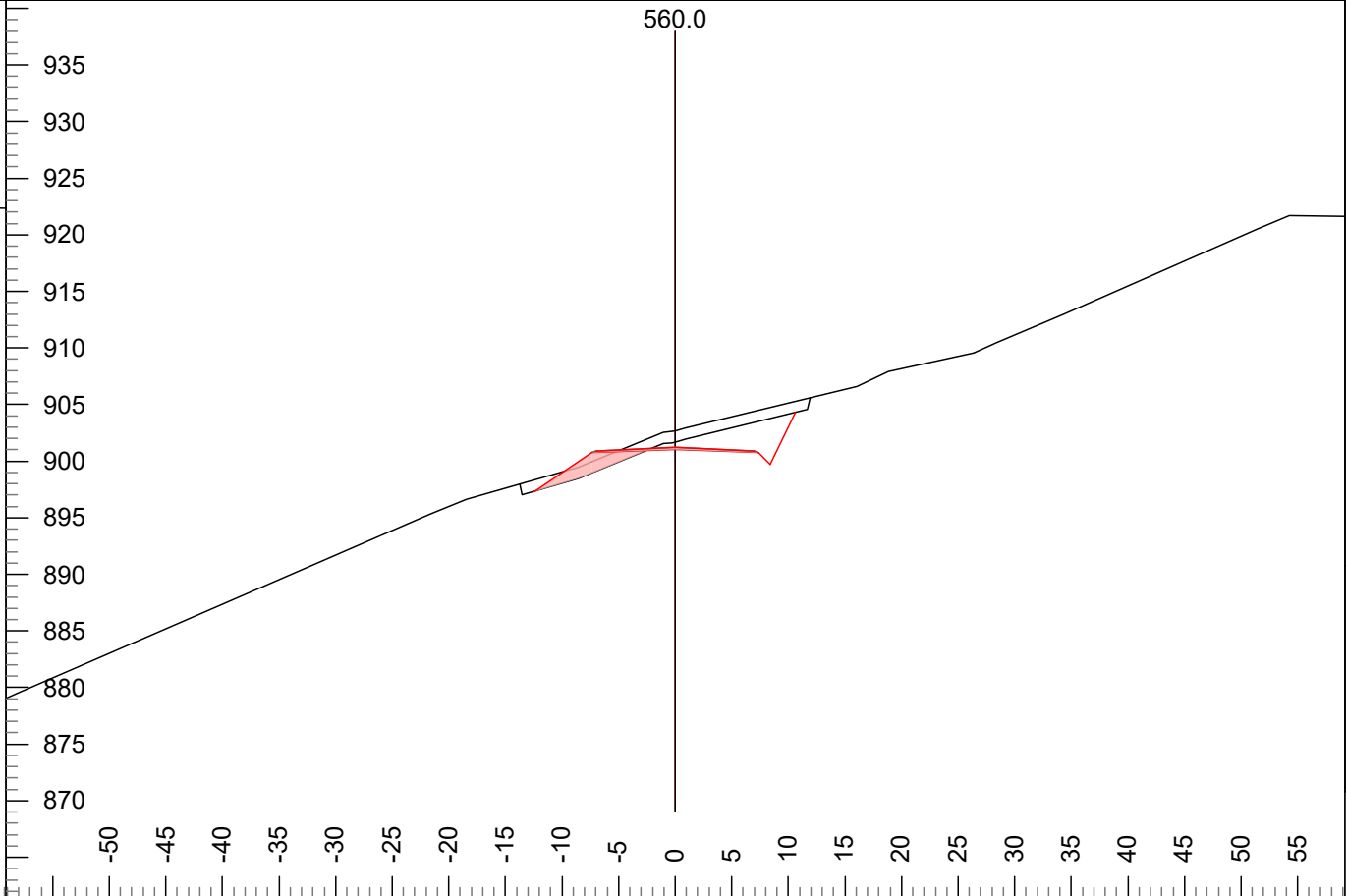
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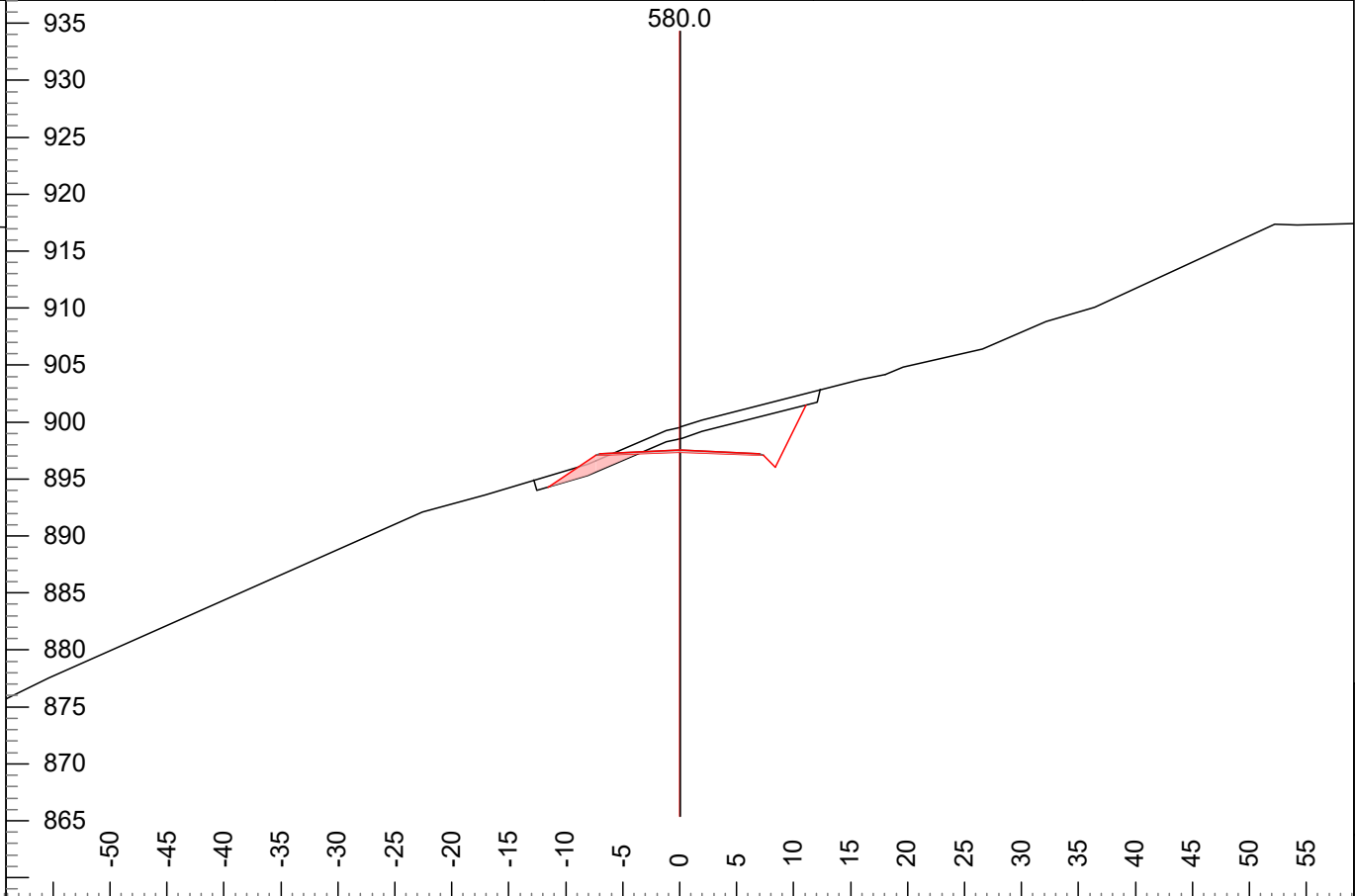
L-Stn :	540.0	Cut Dp:	0.6	CL X:	10064.3	Clr L X:	-13.5	CL Elev:	904.7
P-Stn :	594.9	H. Offset:	0.0	CL Y:	9702.4	Clr R X:	10.1	Gnd Elev:	905.3



L-Stn :	571.6	Cut Dp:	2.2	CL X:	10040.1	Clr L X:	-11.9	CL Elev:	898.9
P-Stn :	626.5	H. Offset:	0.0	CL Y:	9682.1	Clr R X:	11.0	Gnd Elev:	901.1



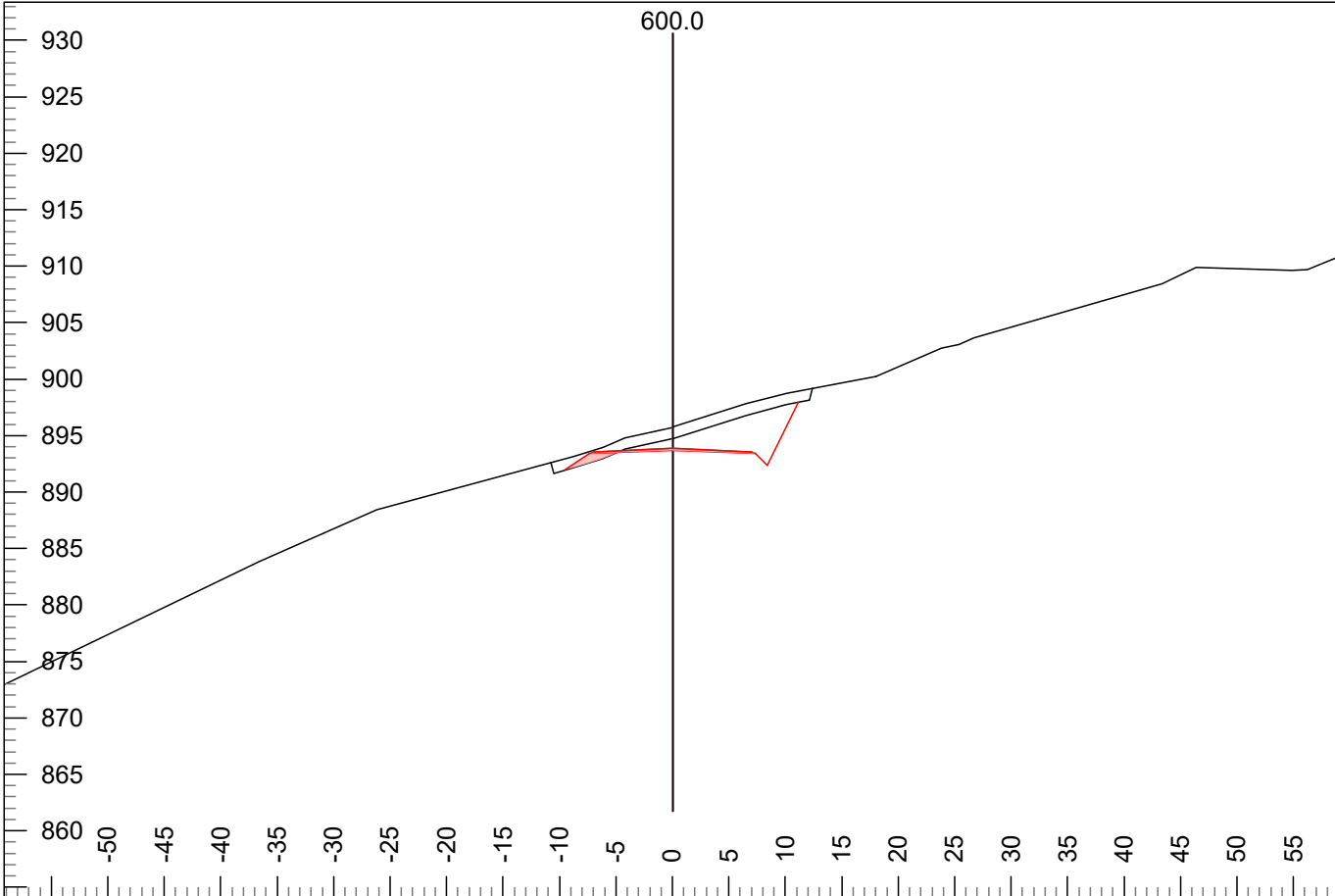
L-Stn :	560.0	Cut Dp:	1.6	CL X:	10049.0	Clr L X:	-12.5	CL Elev:	901.0
P-Stn :	614.9	H. Offset:	0.0	CL Y:	9689.6	Clr R X:	10.7	Gnd Elev:	902.7



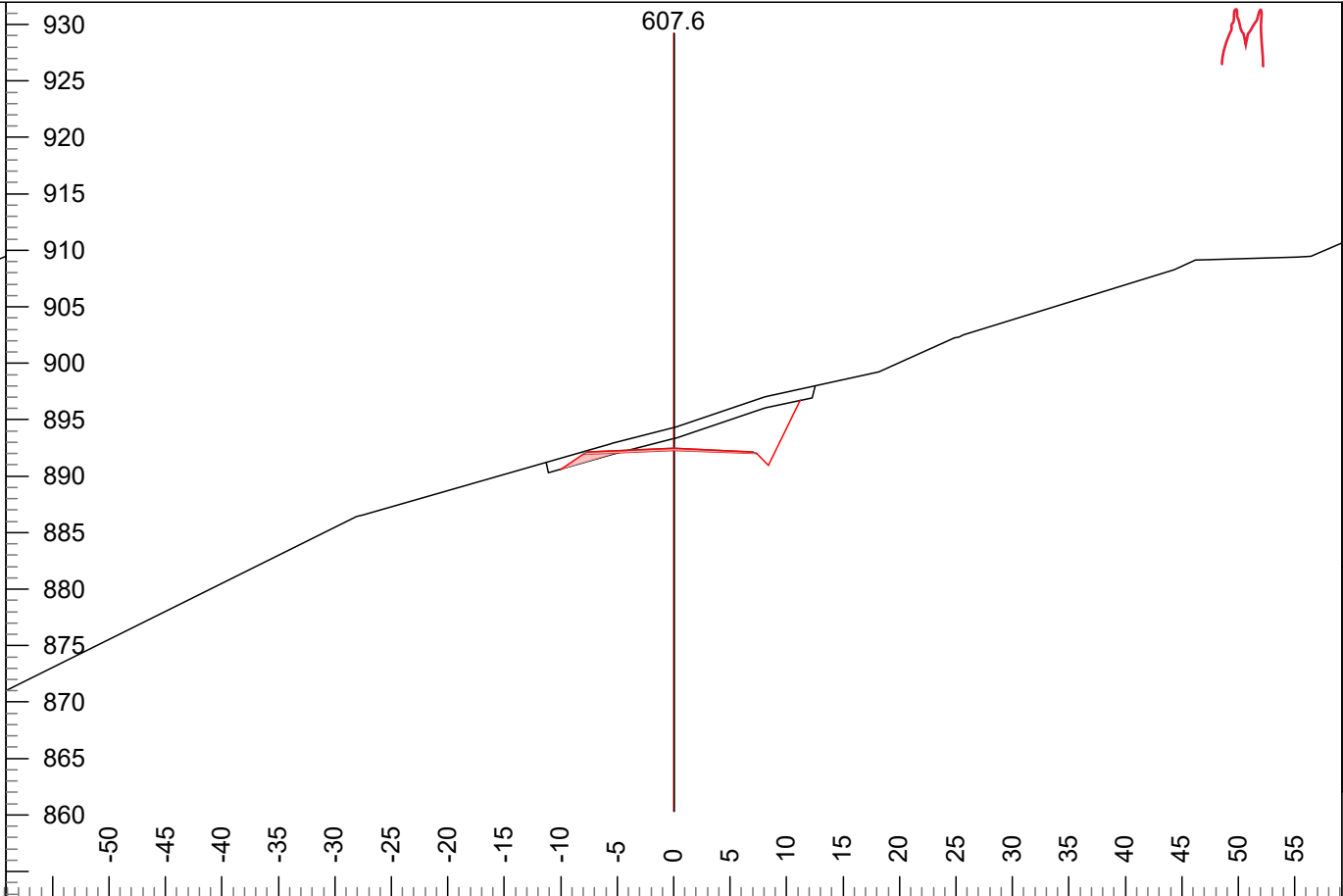
L-Stn :	580.0	Cut Dp:	2.2	CL X:	10033.2	Clr L X:	-11.5	CL Elev:	897.3
P-Stn :	634.9	H. Offset:	-0.1	CL Y:	9677.3	Clr R X:	11.1	Gnd Elev:	899.5

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Beetle
Bailey

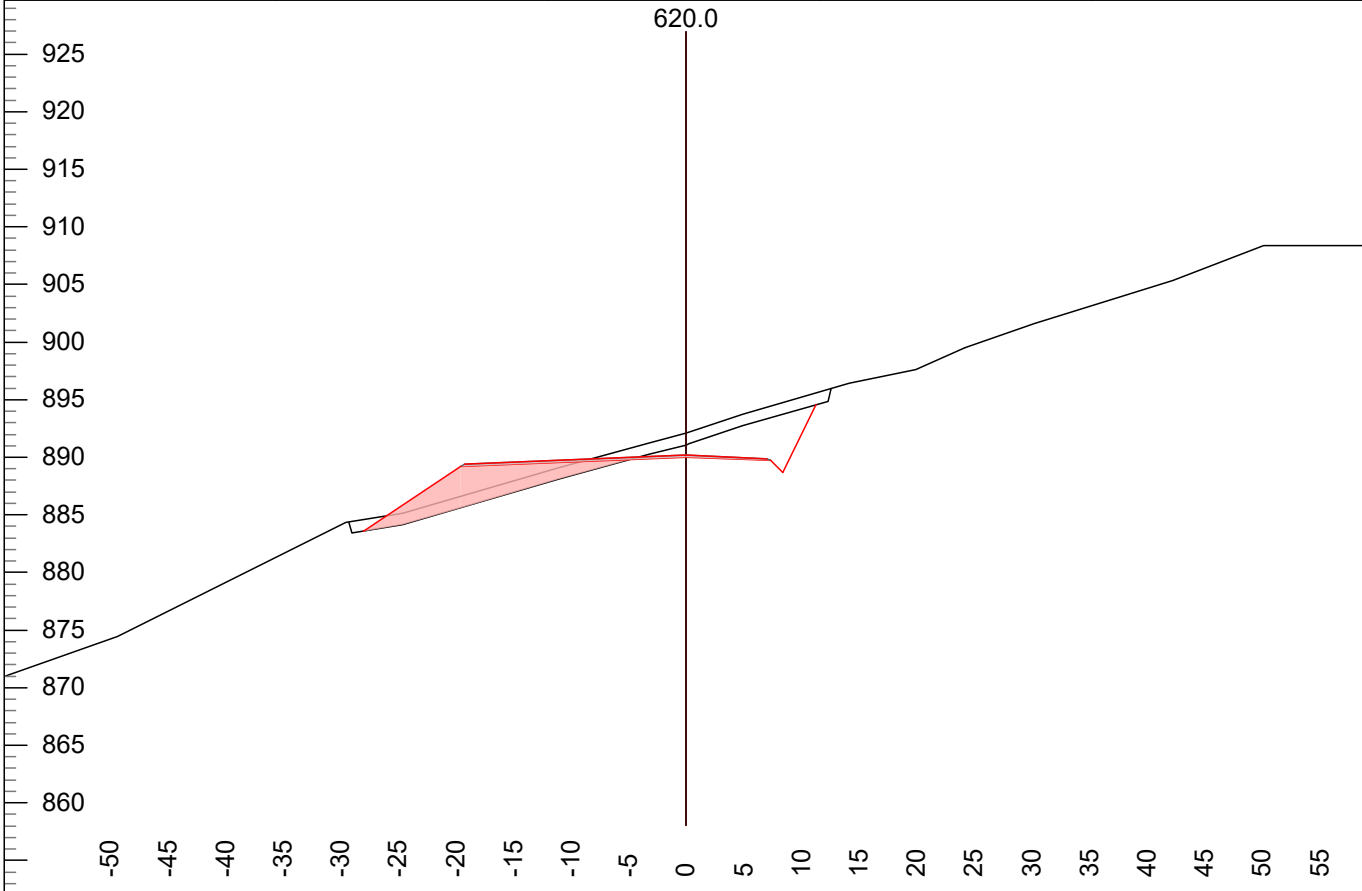
Created By:
M. Kawakami



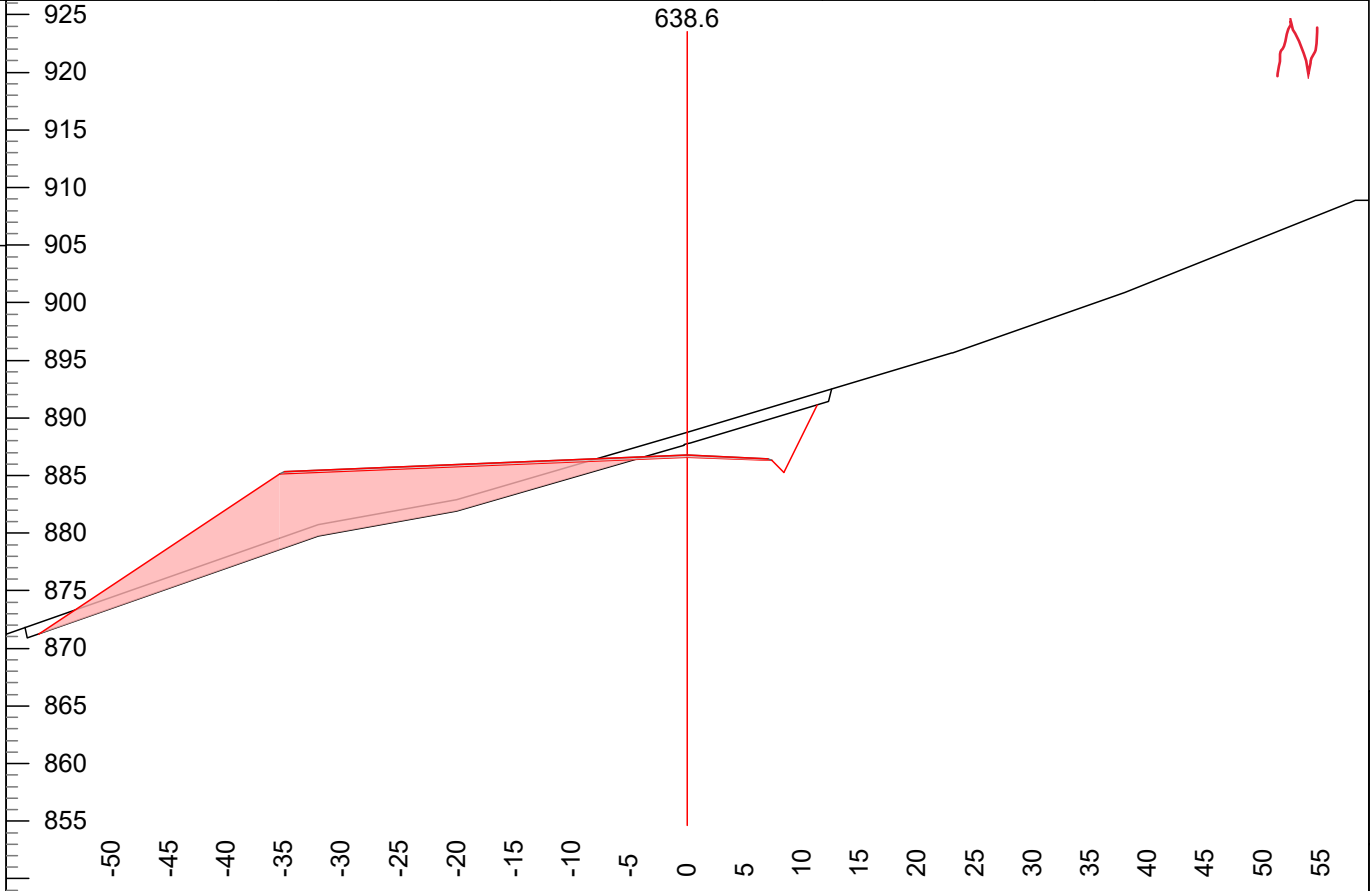
L-Stn :	600.0	Cut Dp:	2.1	CL X:	10016.9	Clr L X:	-9.5	CL Elev:	893.7
P-Stn :	654.9	H. Offset:	-0.1	CL Y:	9665.8	Clr R X:	11.1	Gnd Elev:	895.7



L-Stn :	607.6	Cut Dp:	2.0	CL X:	10010.6	Clr L X:	-10.1	CL Elev:	892.3
P-Stn :	662.5	H. Offset:	0.0	CL Y:	9661.5	Clr R X:	11.2	Gnd Elev:	894.3



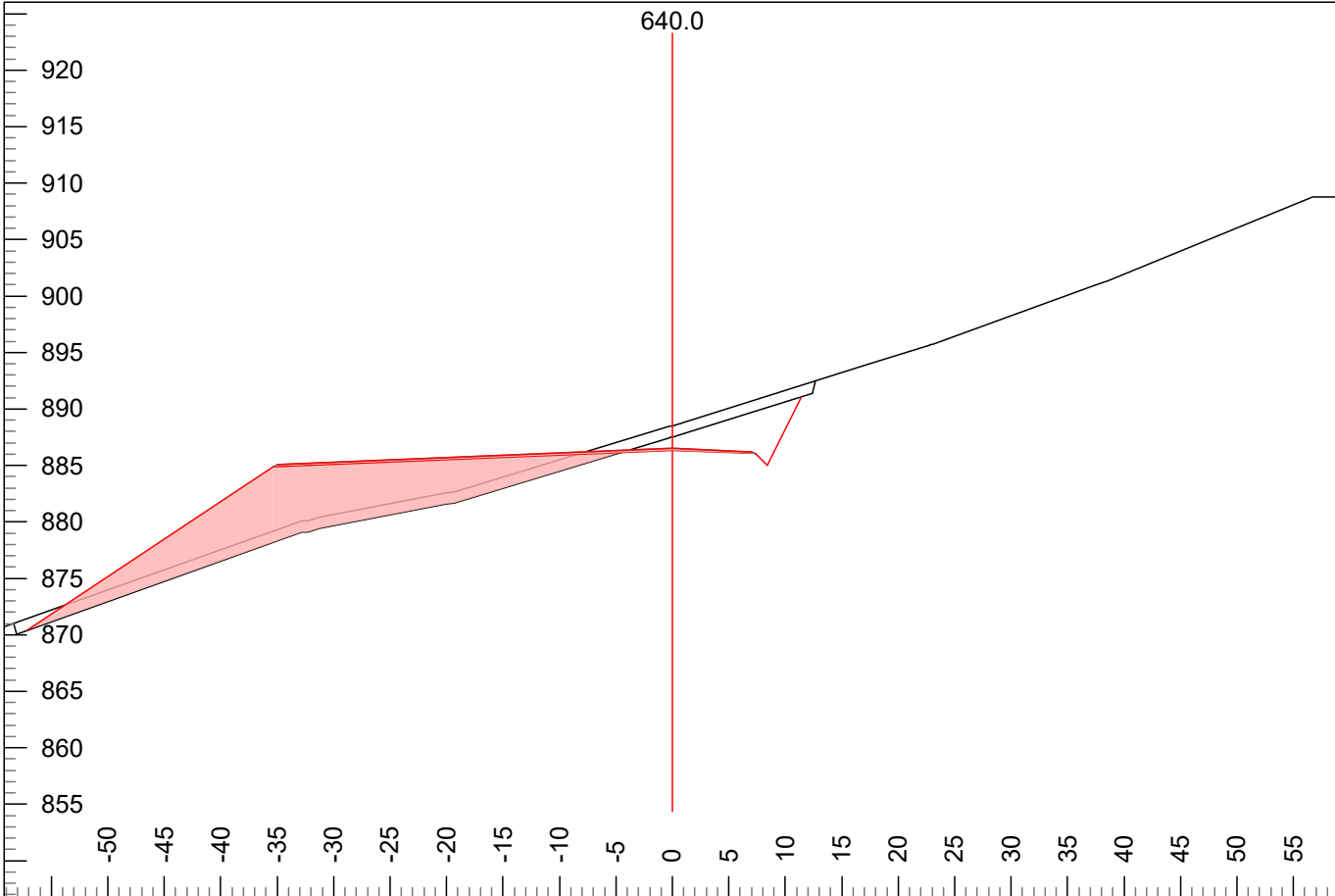
L-Stn :	620.0	Cut Dp:	2.1	CL X:	9999.7	Clr L X:	-28.0	CL Elev:	890.0
P-Stn :	674.9	H. Offset:	0.0	CL Y:	9655.7	Clr R X:	11.3	Gnd Elev:	892.1



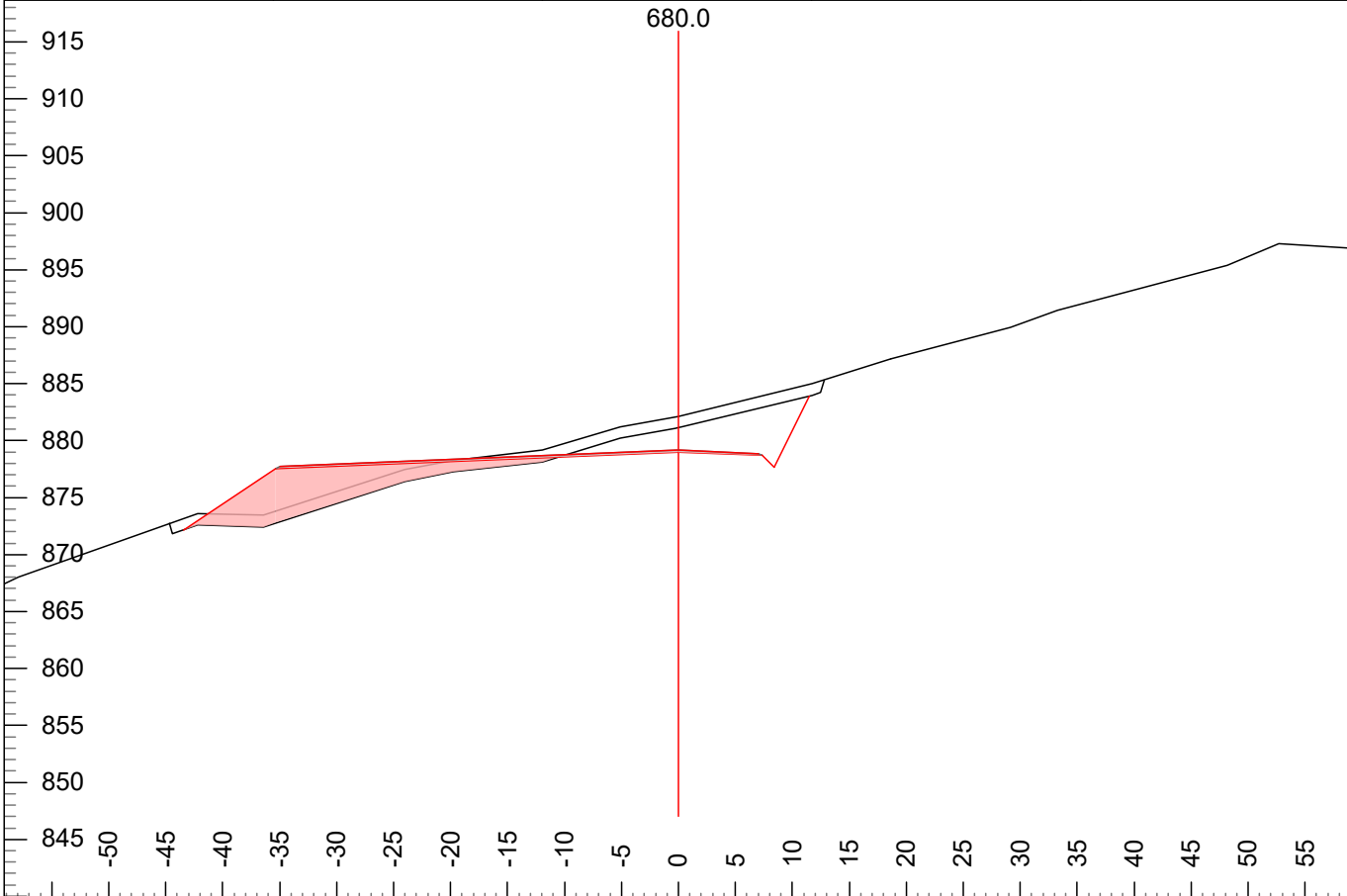
L-Stn :	638.6	Cut Dp:	2.2	CL X:	9983.2	Clr L X:	-56.3	CL Elev:	886.6
P-Stn :	693.5	H. Offset:	0.0	CL Y:	9647.0	Clr R X:	11.3	Gnd Elev:	888.7

Bark
Beetle
Bailey

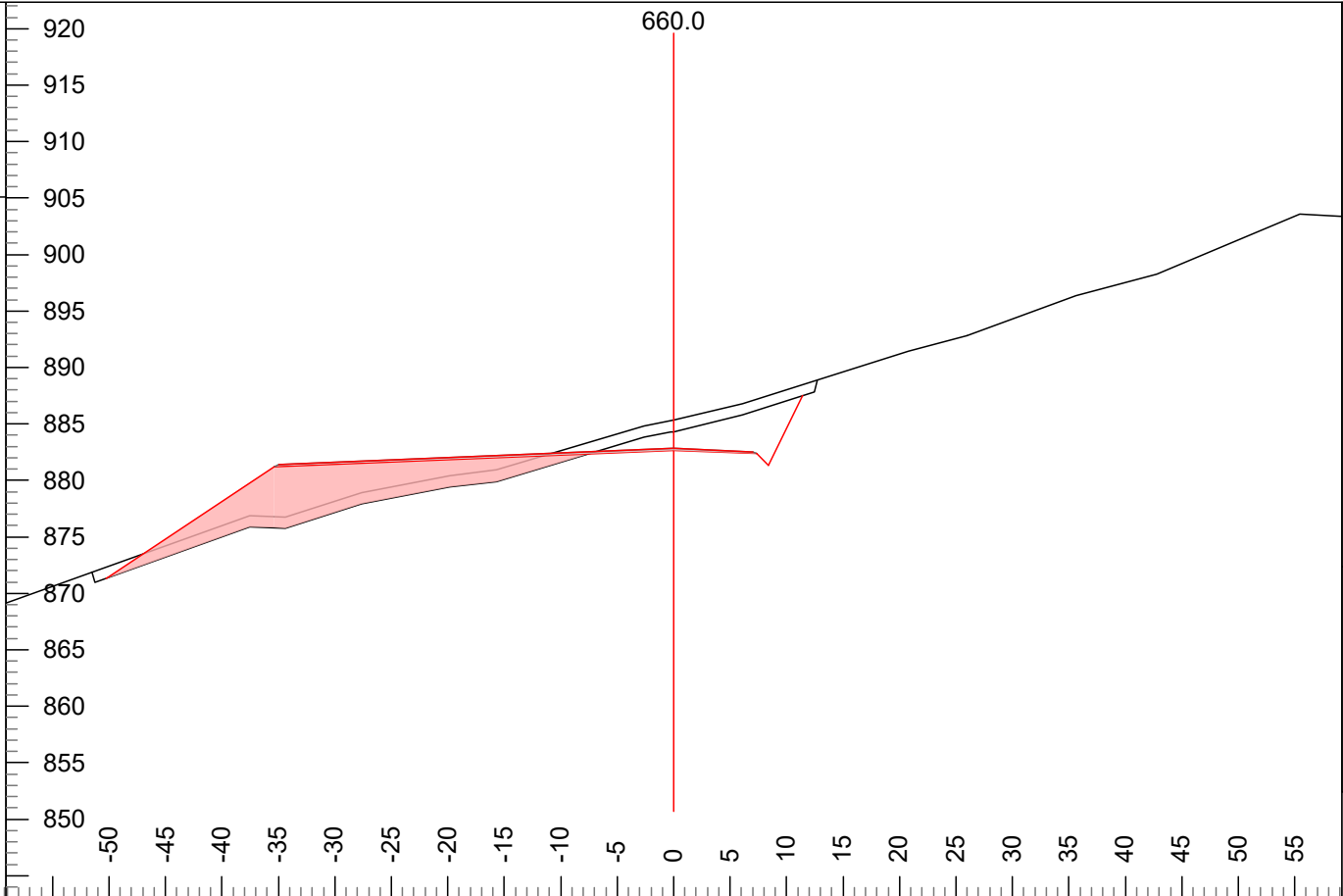
Created By:
M. Kawakami



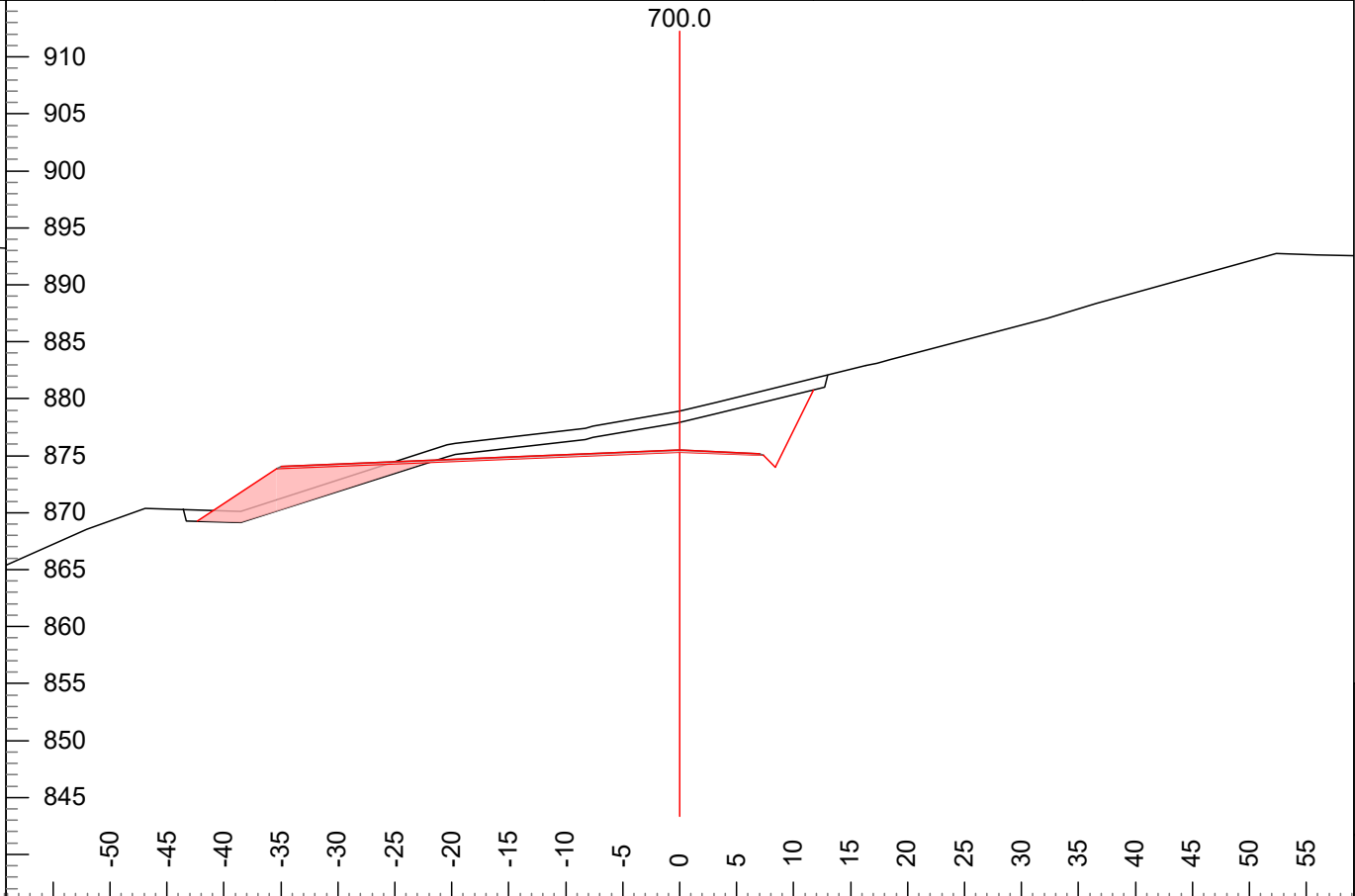
L-Stn :	640.0	Cut Dp:	2.2	CL X:	9981.9	Clr L X:	-57.1	CL Elev:	886.3
P-Stn :	694.9	H. Offset:	0.0	CL Y:	9646.5	Clr R X:	11.4	Gnd Elev:	888.5



L-Stn :	680.0	Cut Dp:	3.1	CL X:	9944.1	Clr L X:	-43.4	CL Elev:	879.0
P-Stn :	734.9	H. Offset:	0.0	CL Y:	9633.5	Clr R X:	11.5	Gnd Elev:	882.1



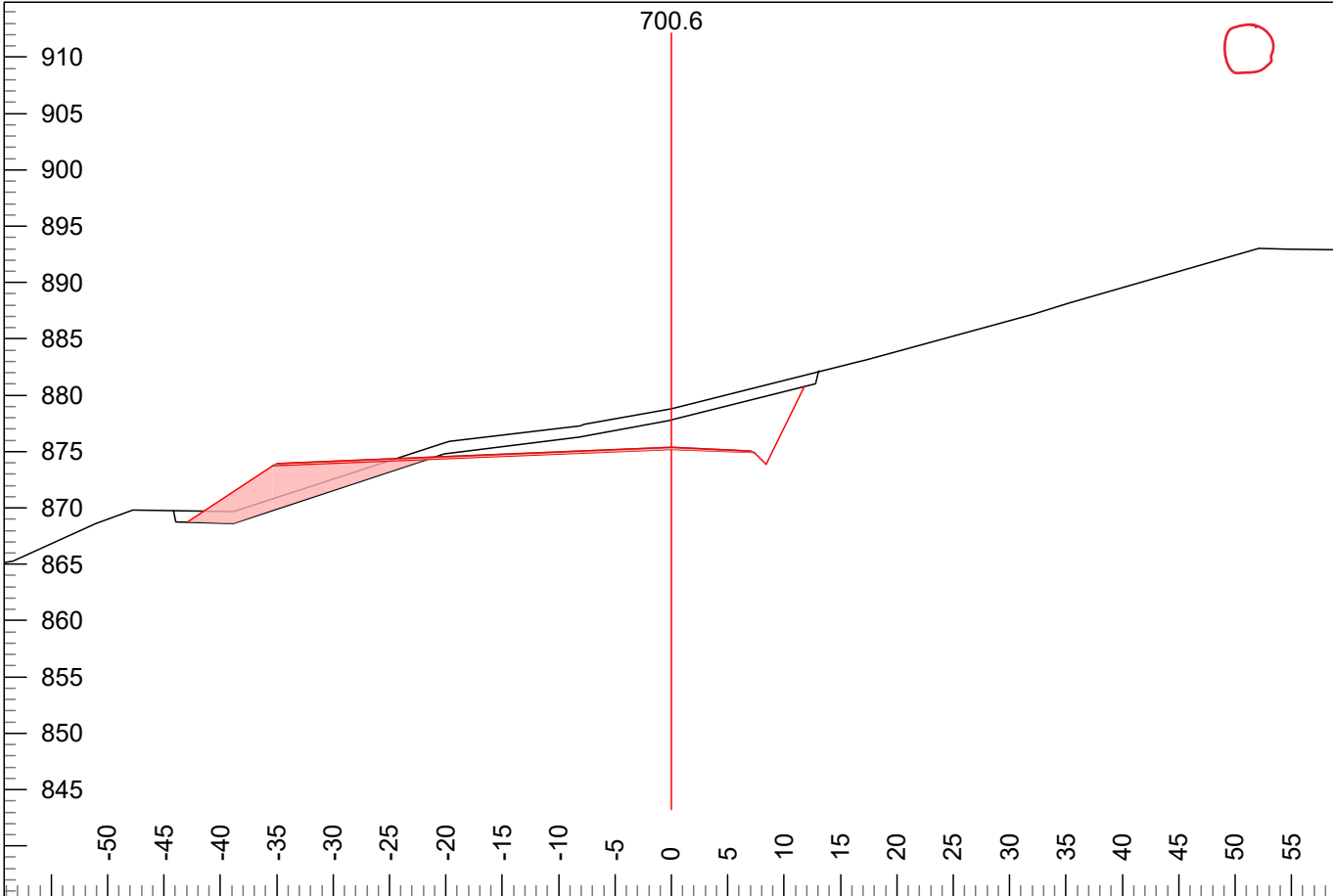
L-Stn :	660.0	Cut Dp:	2.7	CL X:	9963.0	Clr L X:	-50.3	CL Elev:	882.6
P-Stn :	714.9	H. Offset:	0.0	CL Y:	9640.0	Clr R X:	11.4	Gnd Elev:	885.3



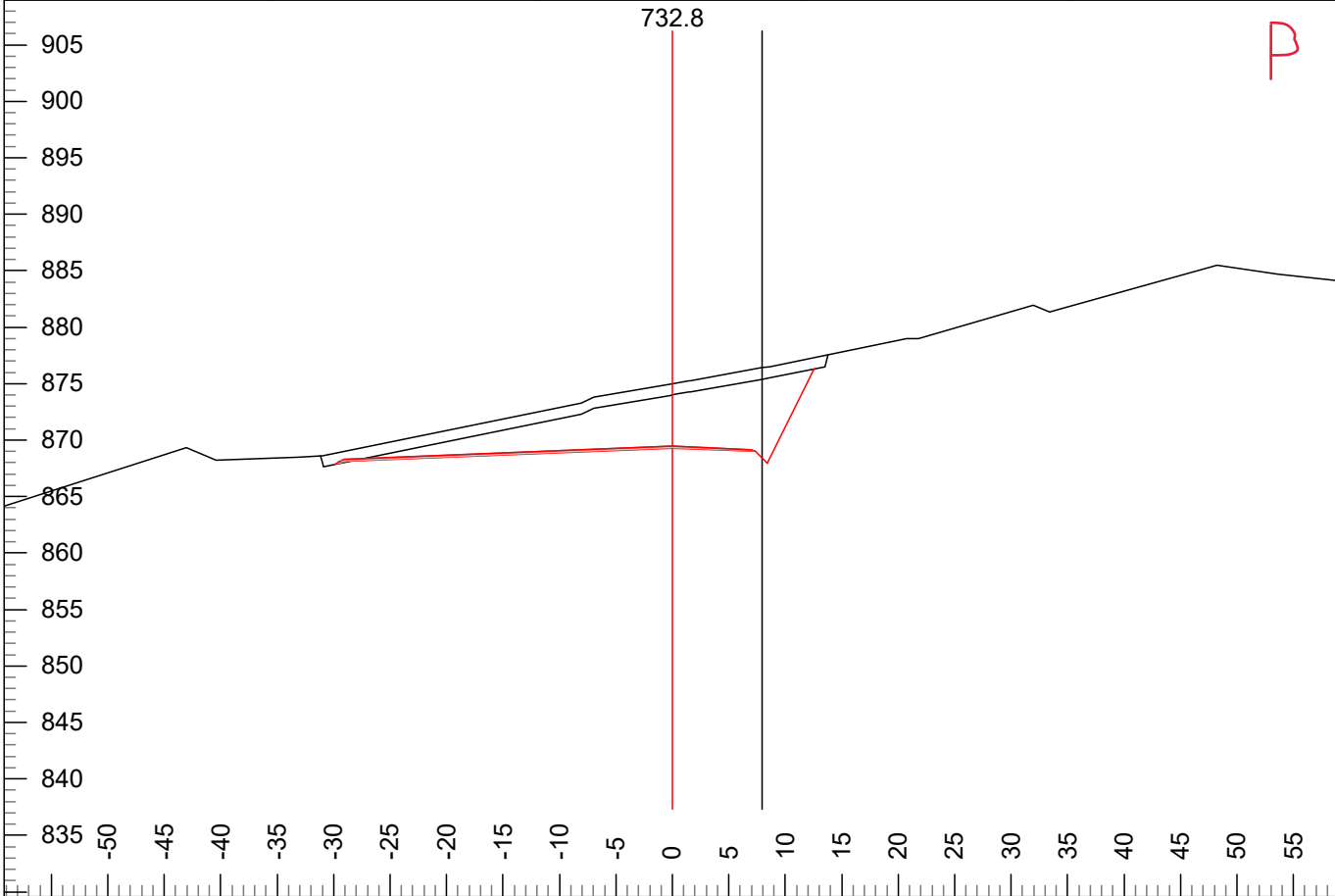
L-Stn :	700.0	Cut Dp:	3.6	CL X:	9925.2	Clr L X:	-42.3	CL Elev:	875.3
P-Stn :	754.9	H. Offset:	0.0	CL Y:	9627.0	Clr R X:	11.8	Gnd Elev:	878.9

Bark
Beetle
Bailey

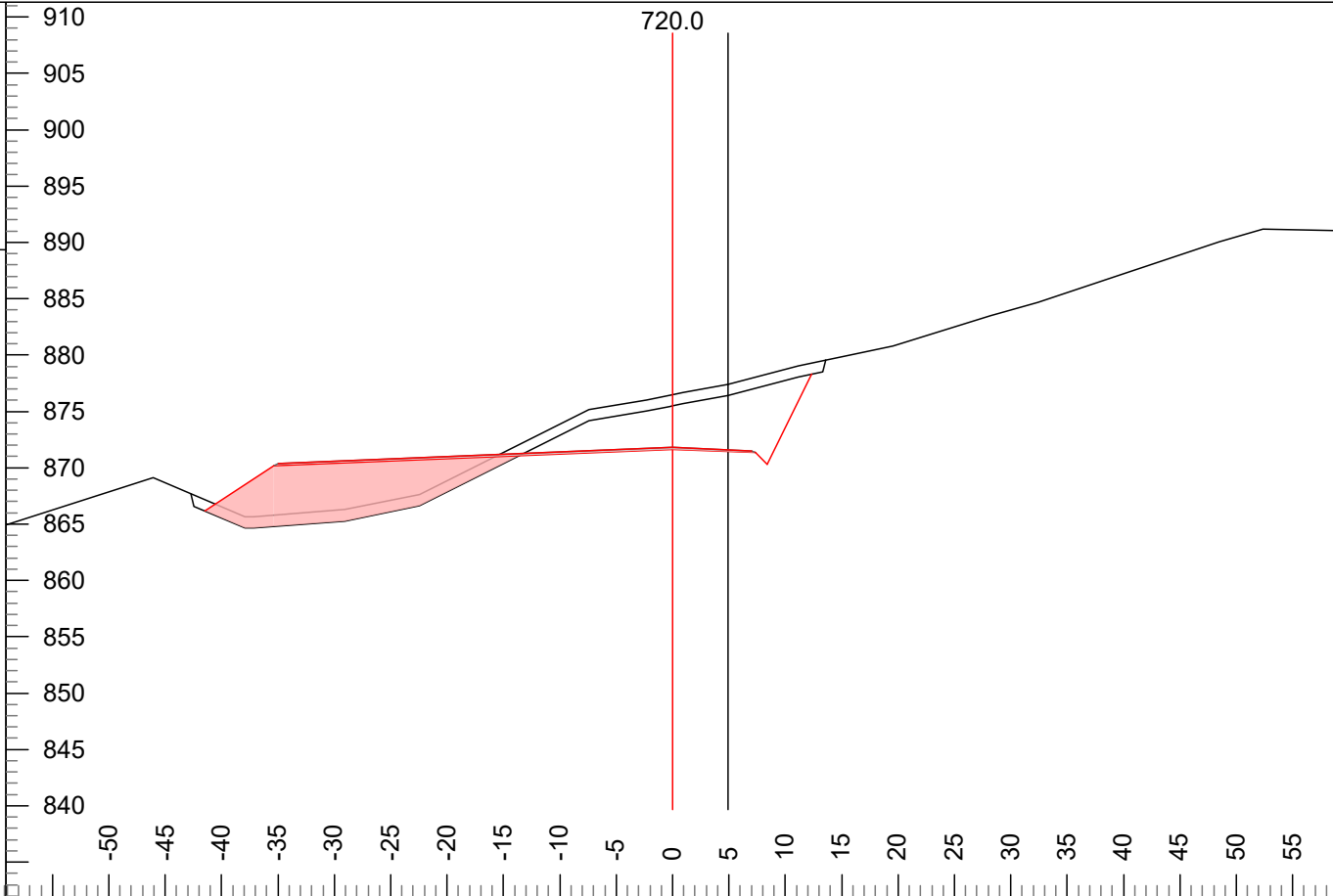
Created By:
M. Kawakami



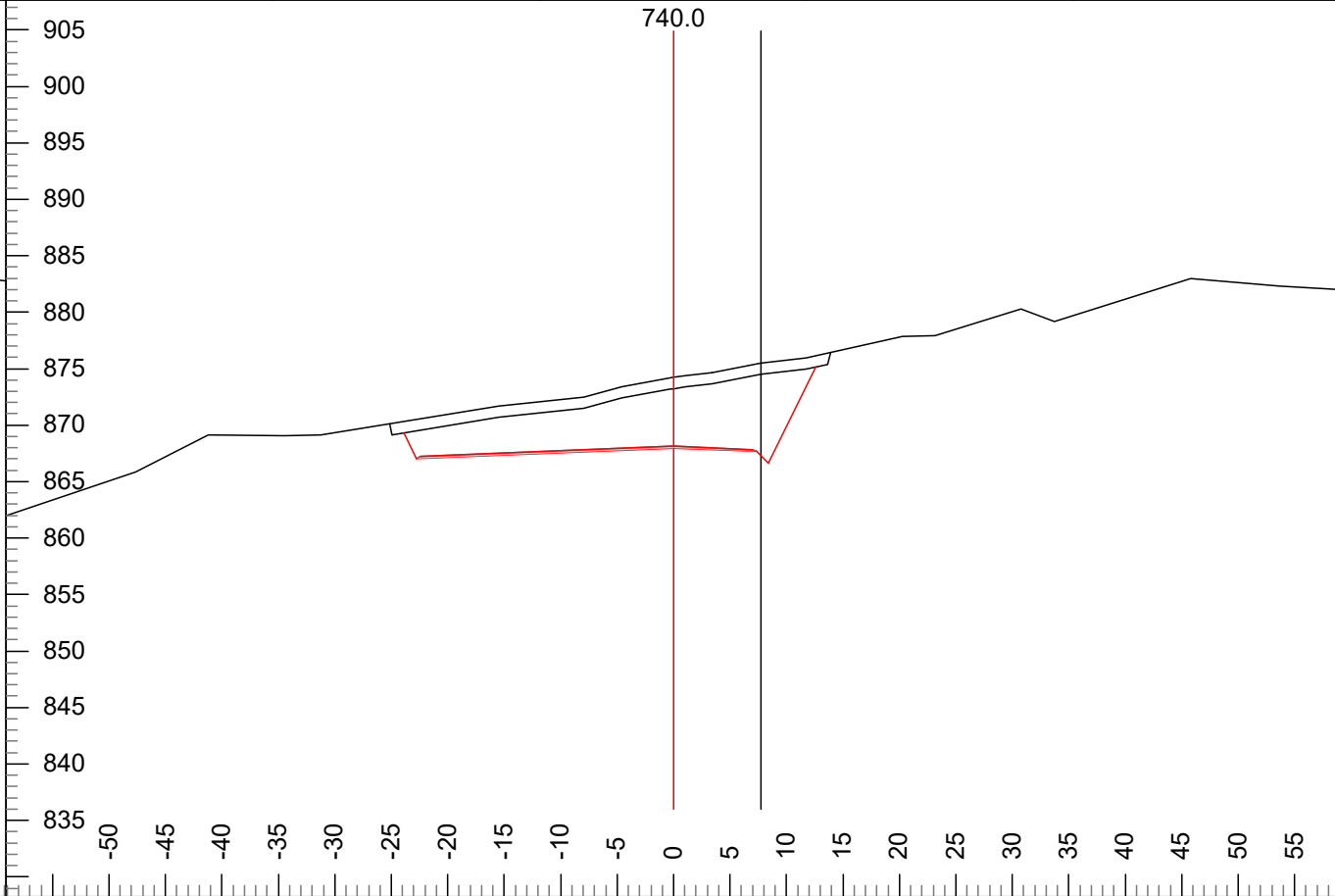
L-Stn :	700.6	Cut Dp:	3.6	CL X:	9924.6	Clr L X:	-42.9	CL Elev:	875.2
P-Stn :	755.5	H. Offset:	0.0	CL Y:	9626.8	Clr R X:	11.8	Gnd Elev:	878.8



L-Stn :	732.8	Cut Dp:	5.7	CL X:	9893.2	Clr L X:	-29.9	CL Elev:	869.3
P-Stn :	787.5	H. Offset:	-8.0	CL Y:	9619.9	Clr R X:	12.5	Gnd Elev:	875.0



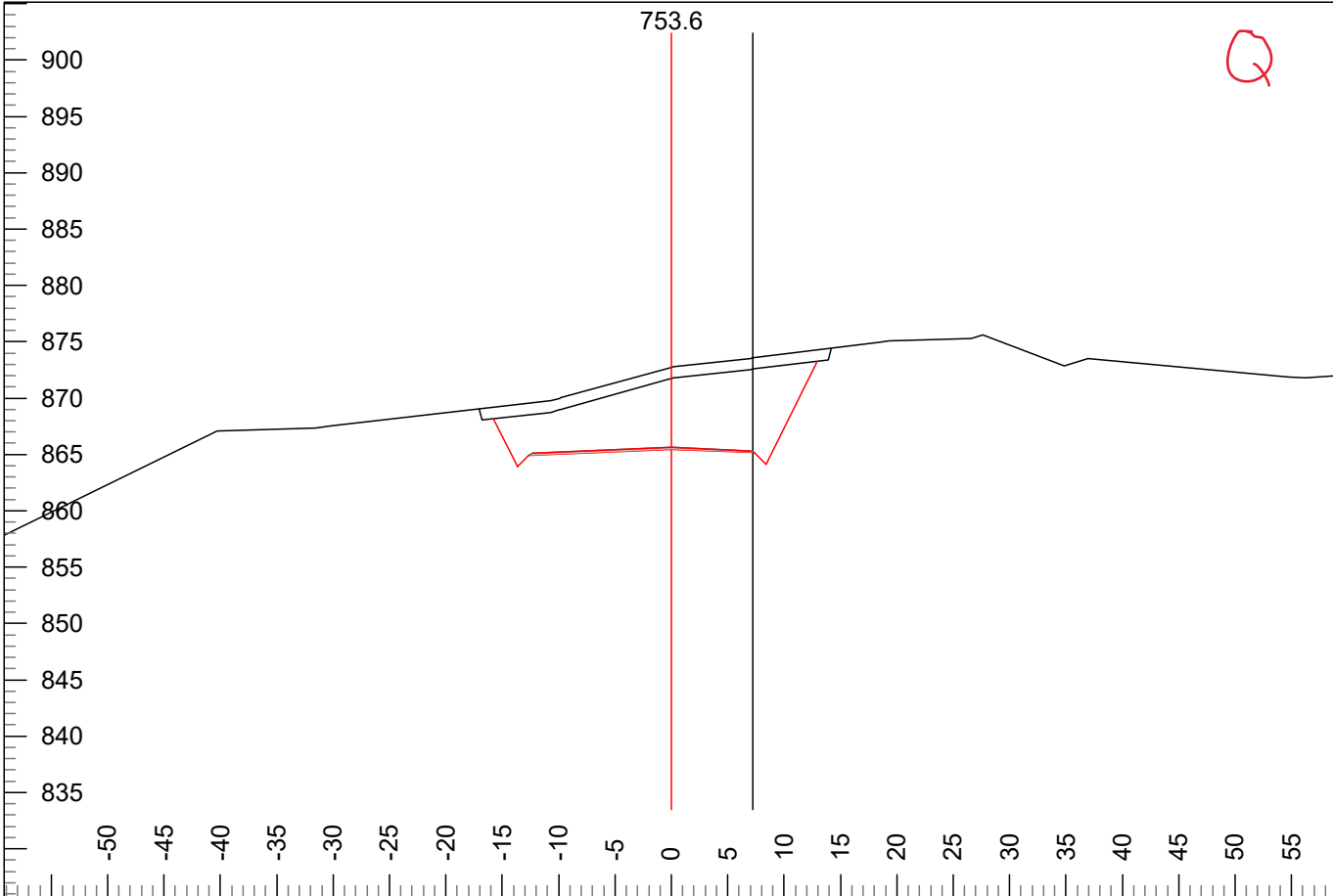
L-Stn :	720.0	Cut Dp:	4.9	CL X:	9905.7	Clr L X:	-41.4	CL Elev:	871.6
P-Stn :	774.3	H. Offset:	-4.8	CL Y:	9622.6	Clr R X:	12.3	Gnd Elev:	876.5



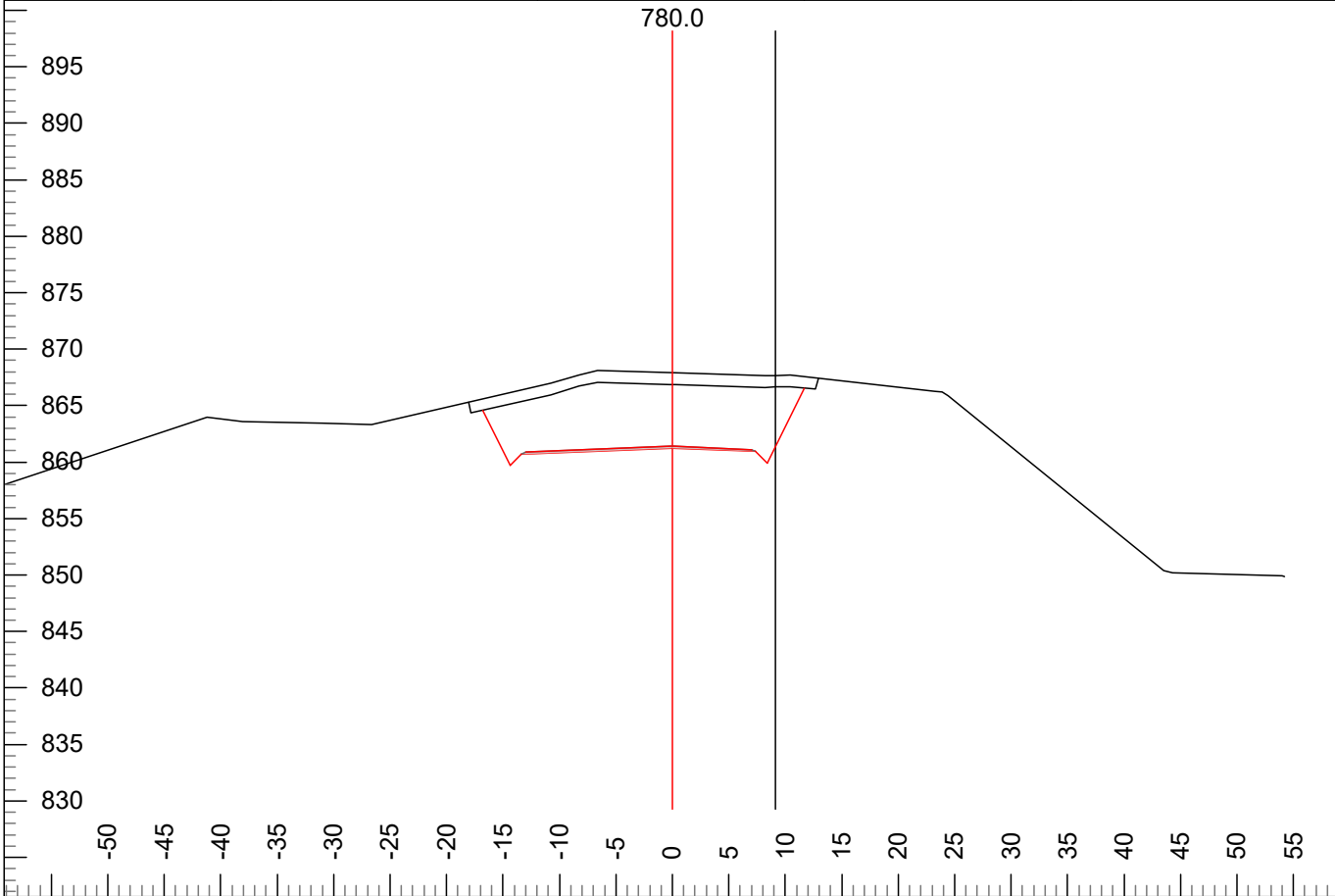
L-Stn :	740.0	Cut Dp:	6.3	CL X:	9886.0	Clr L X:	-23.9	CL Elev:	867.9
P-Stn :	795.6	H. Offset:	-7.7	CL Y:	9618.9	Clr R X:	12.6	Gnd Elev:	874.2

Bark
Beetle
Bailey

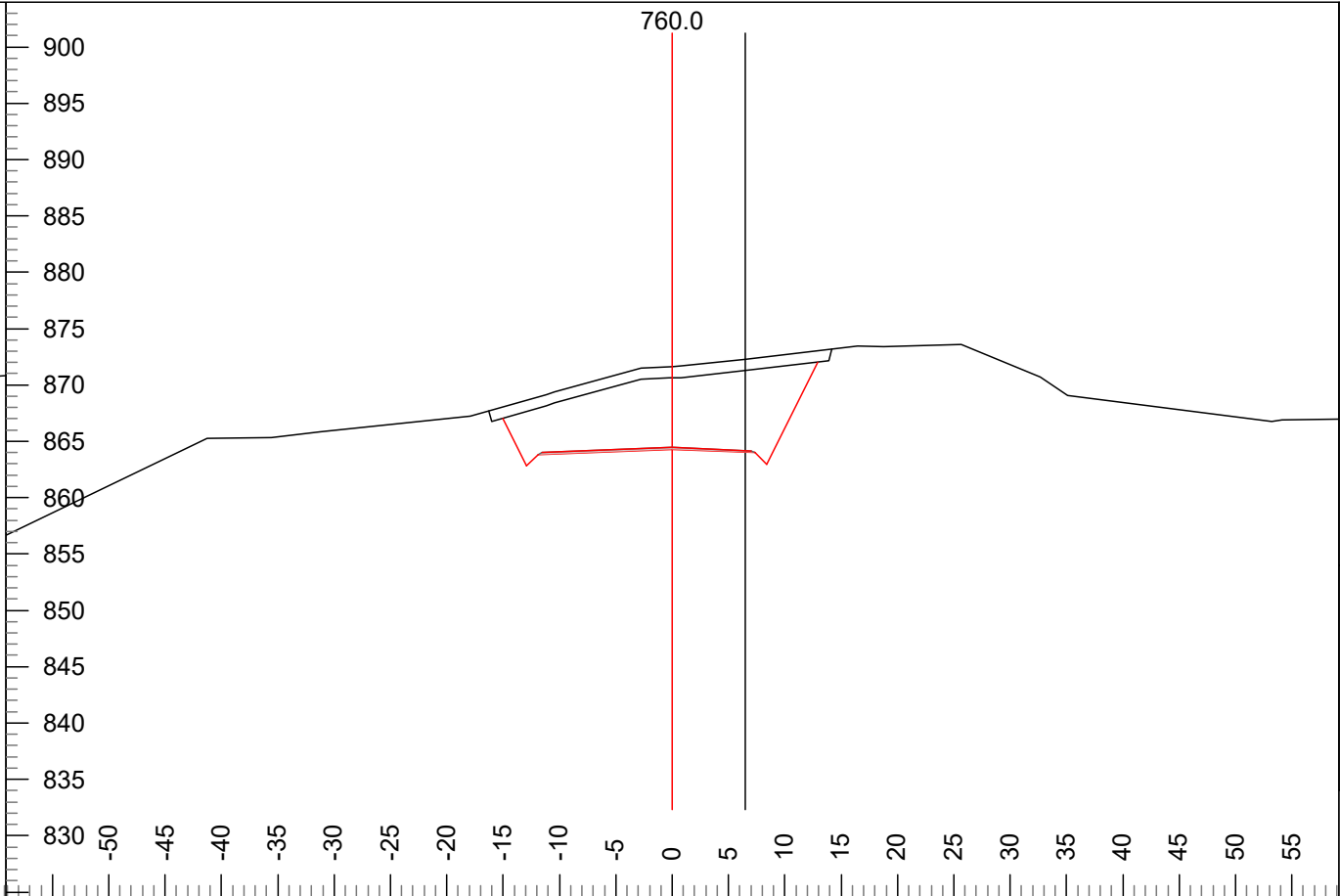
Created By:
M. Kawakami



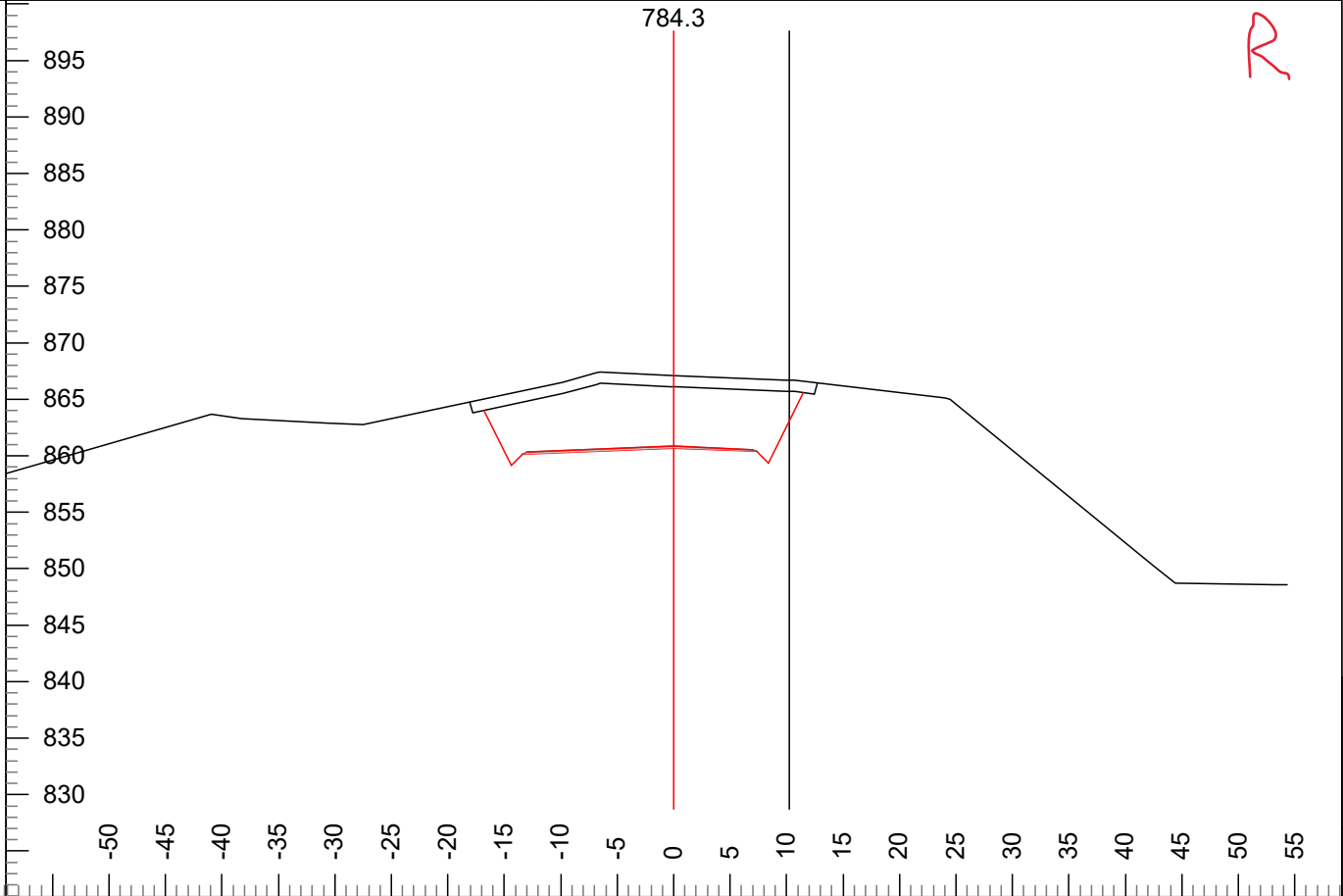
L-Stn :	753.6	Cut Dp:	7.3	CL X:	9872.5	Clr L X:	-15.8	CL Elev:	865.4
P-Stn :	809.5	H. Offset:	-7.2	CL Y:	9617.0	Clr R X:	12.9	Gnd Elev:	872.7



L-Stn :	780.0	Cut Dp:	6.7	CL X:	9847.7	Clr L X:	-16.8	CL Elev:	861.2
P-Stn :	835.9	H. Offset:	-8.7	CL Y:	9608.9	Clr R X:	11.7	Gnd Elev:	867.9



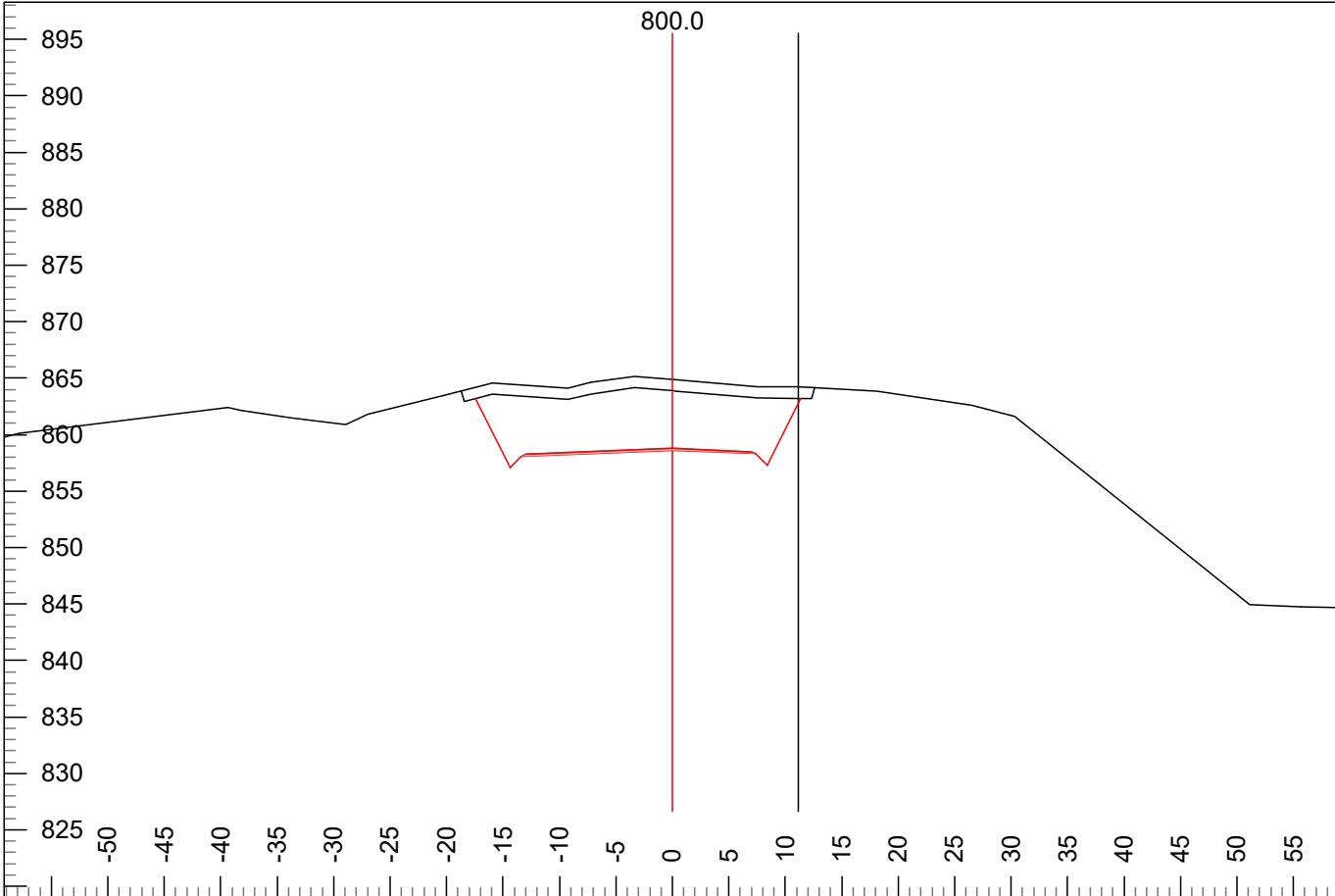
L-Stn :	760.0	Cut Dp:	7.4	CL X:	9866.2	Clr L X:	-15.0	CL Elev:	864.3
P-Stn :	816.1	H. Offset:	-6.5	CL Y:	9616.1	Clr R X:	12.9	Gnd Elev:	871.6



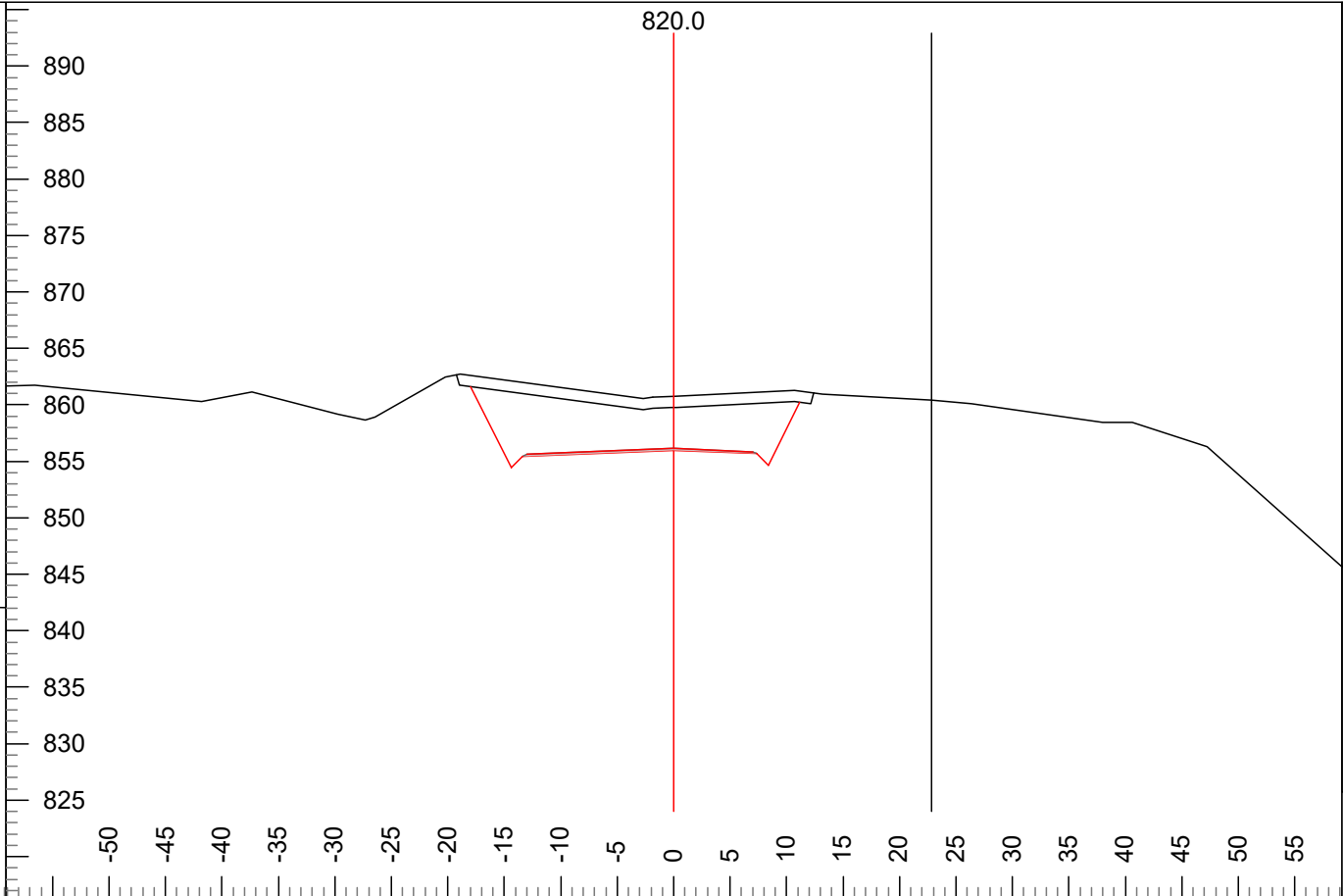
L-Stn :	784.3	Cut Dp:	6.4	CL X:	9844.2	Clr L X:	-16.8	CL Elev:	860.7
P-Stn :	842.5	H. Offset:	-10.5	CL Y:	9606.4	Clr R X:	11.5	Gnd Elev:	867.1

Bark
Beetle
Bailey

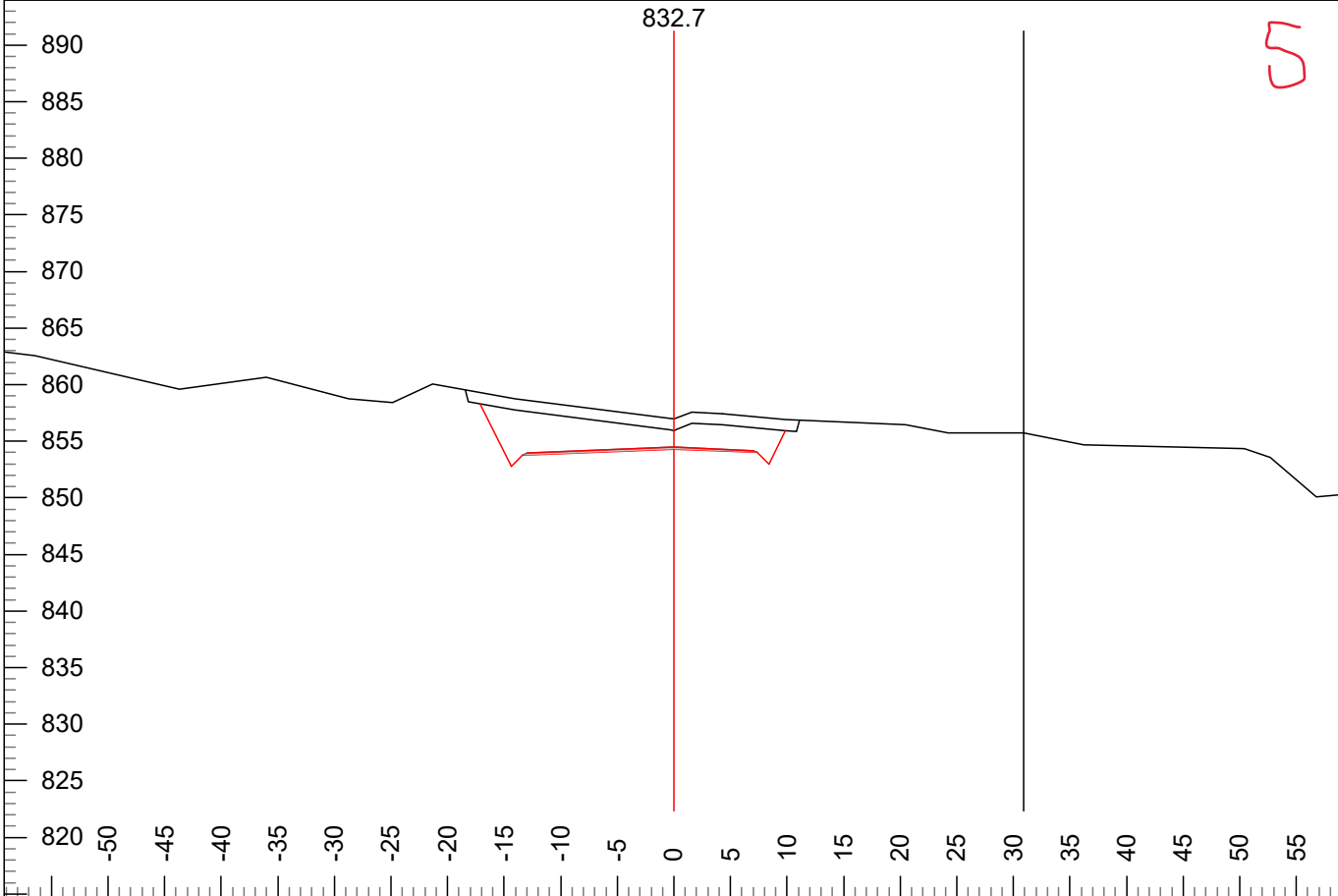
Created By:
M. Kawakami



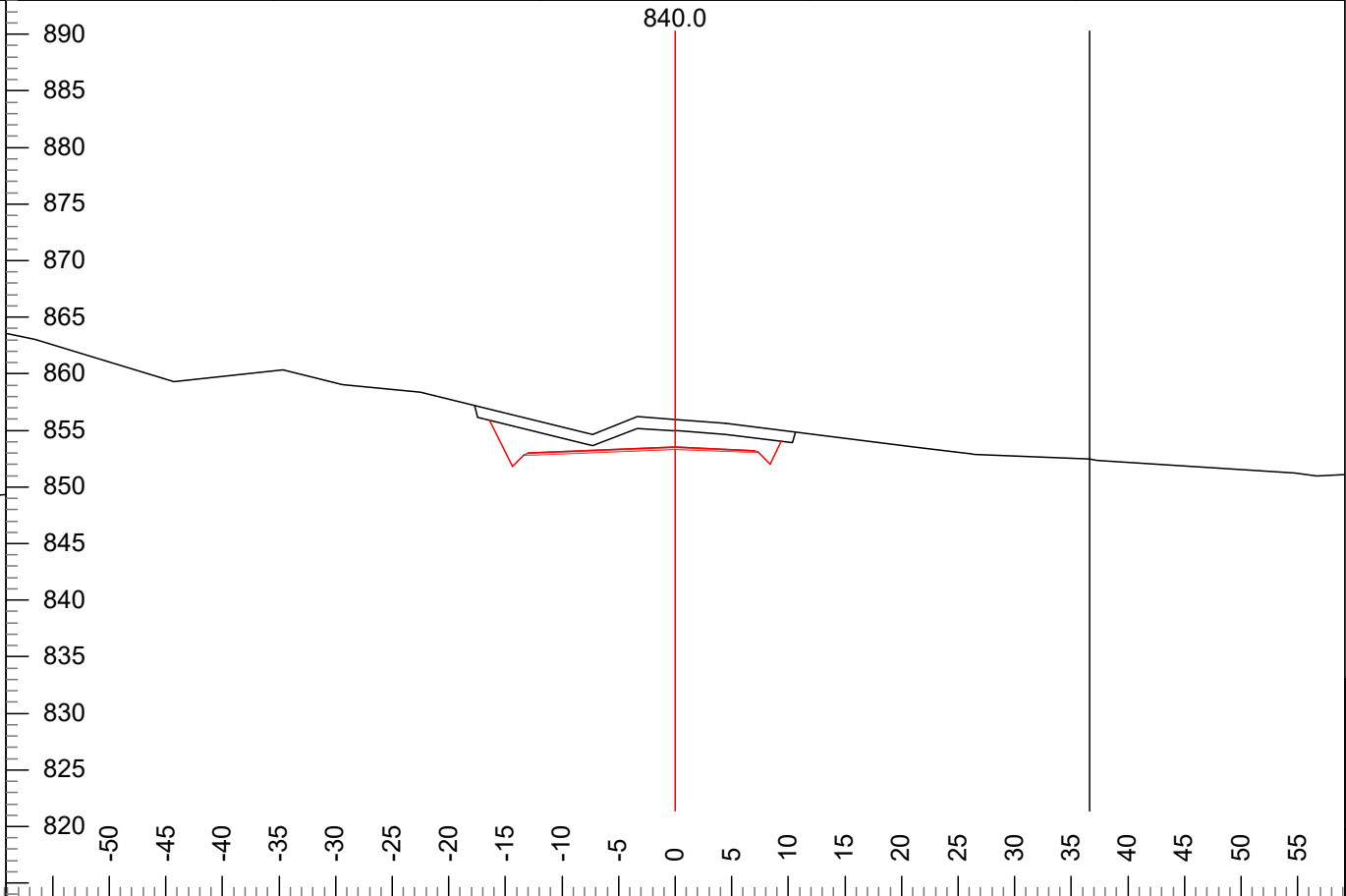
L-Stn :	800.0	Cut Dp:	6.3	CL X:	9833.5	Clr L X:	-17.4	CL Elev:	858.6
P-Stn :	860.8	H. Offset:	-10.9	CL Y:	9595.0	Clr R X:	11.3	Gnd Elev:	864.9



L-Stn :	820.0	Cut Dp:	4.8	CL X:	9825.8	Clr L X:	-18.0	CL Elev:	856.0
P-Stn :	879.0	H. Offset:	-18.8	CL Y:	9576.6	Clr R X:	11.2	Gnd Elev:	860.8



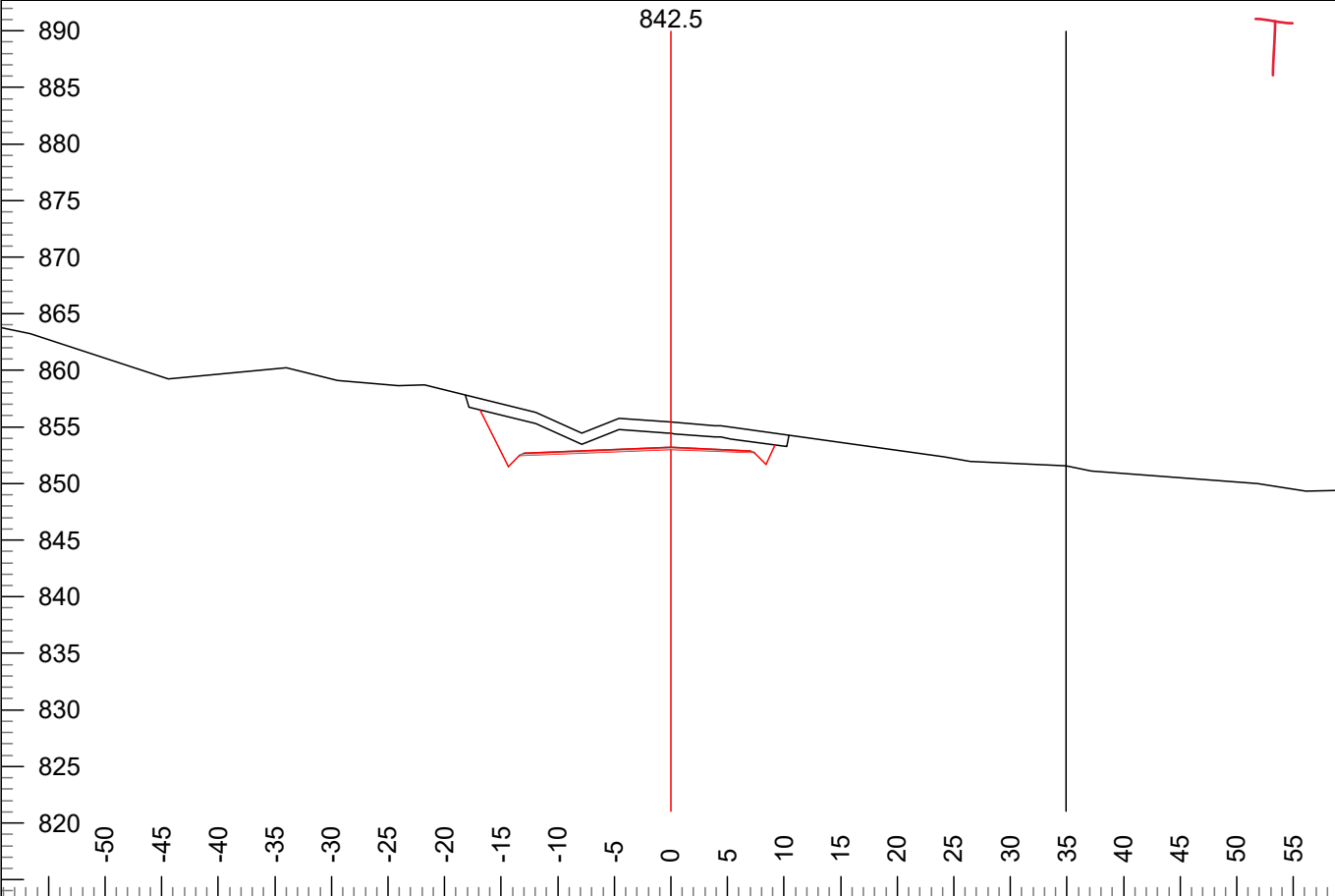
L-Stn :	832.7	Cut Dp:	2.7	CL X:	9824.9	Clr L X:	-17.1	CL Elev:	854.3
P-Stn :	893.5	H. Offset:	-27.7	CL Y:	9564.0	Clr R X:	9.8	Gnd Elev:	857.0



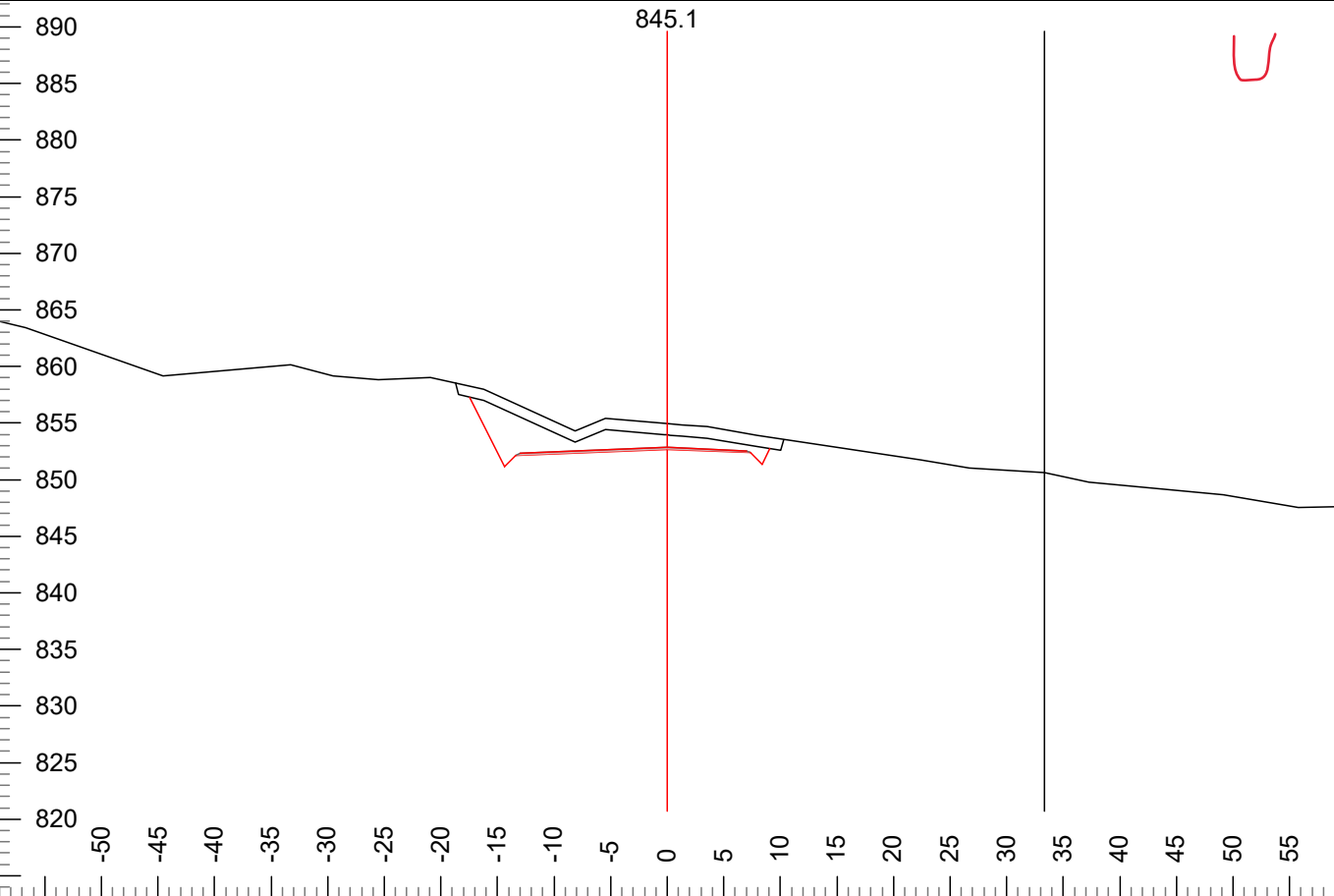
L-Stn :	840.0	Cut Dp:	2.6	CL X:	9825.9	Clr L X:	-16.4	CL Elev:	853.3
P-Stn :	904.7	H. Offset:	-31.1	CL Y:	9556.8	Clr R X:	9.4	Gnd Elev:	856.0

Bark
Beetle
Bailey

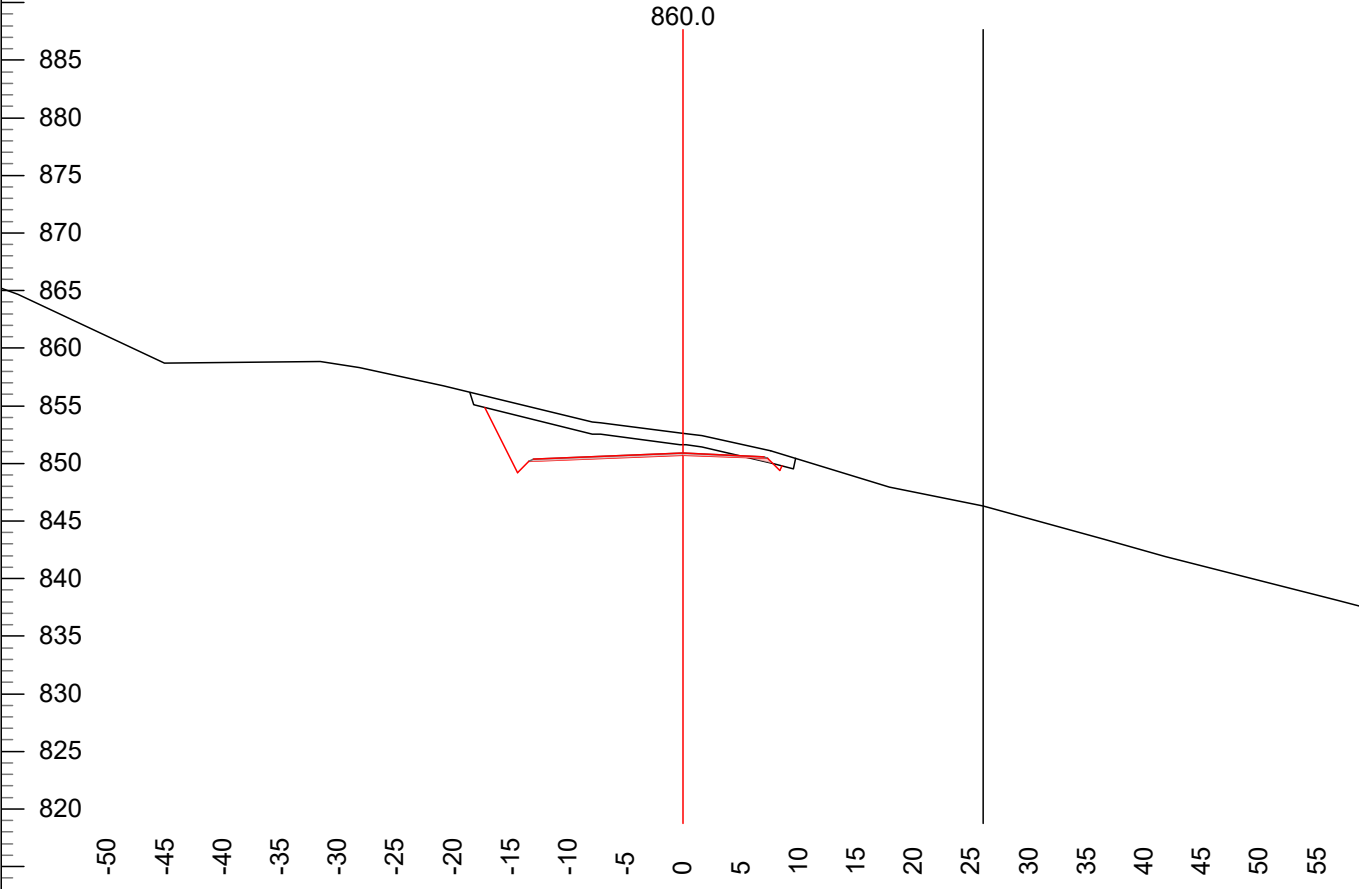
Created By:
M. Kawakami



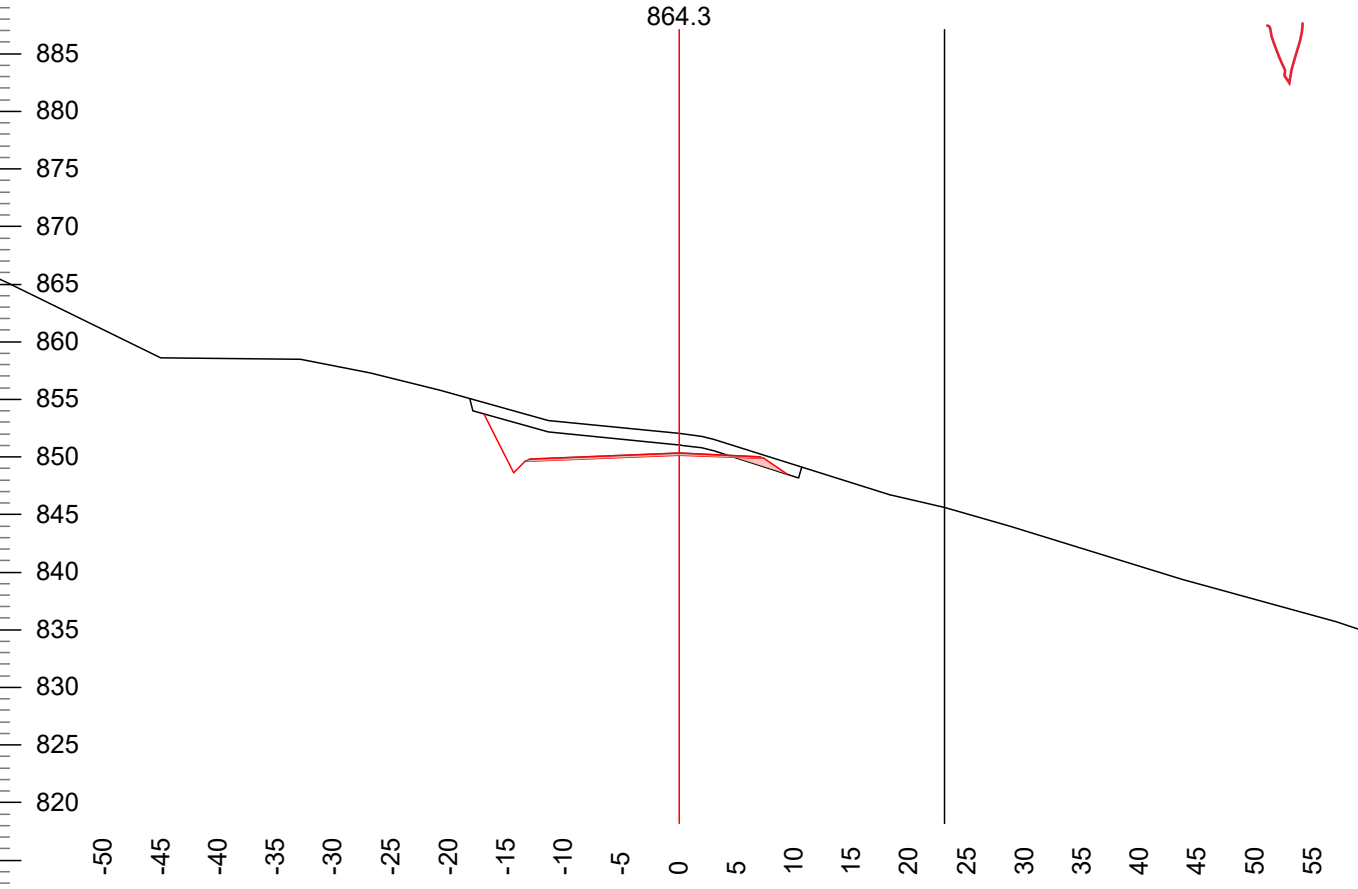
L-Stn :	842.5	Cut Dp:	2.4	CL X:	9826.4	Clr L X:	-16.9	CL Elev:	853.0
P-Stn :	925.5	H. Offset:	-37.7	CL Y:	9554.4	Clr R X:	9.2	Gnd Elev:	855.4



L-Stn :	845.1	Cut Dp:	2.3	CL X:	9827.2	Clr L X:	-17.4	CL Elev:	852.7
P-Stn :	954.5	H. Offset:	-32.7	CL Y:	9551.8	Clr R X:	9.1	Gnd Elev:	855.0



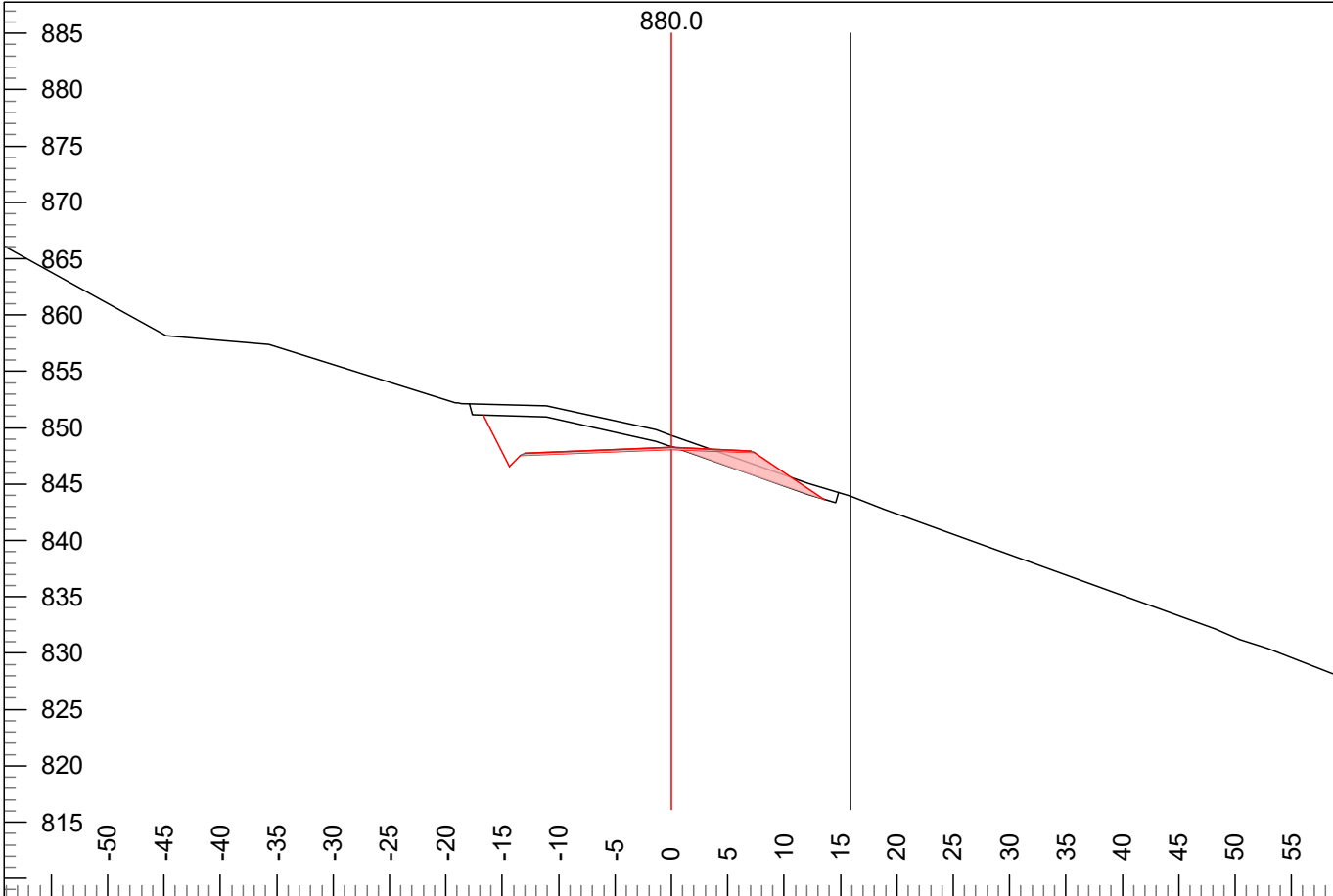
L-Stn :	860.0	Cut Dp:	1.9	CL X:	9833.7	Clr L X:	-17.2	CL Elev:	850.7
P-Stn :	974.1	H. Offset:	-23.1	CL Y:	9538.5	Clr R X:	8.6	Gnd Elev:	852.6



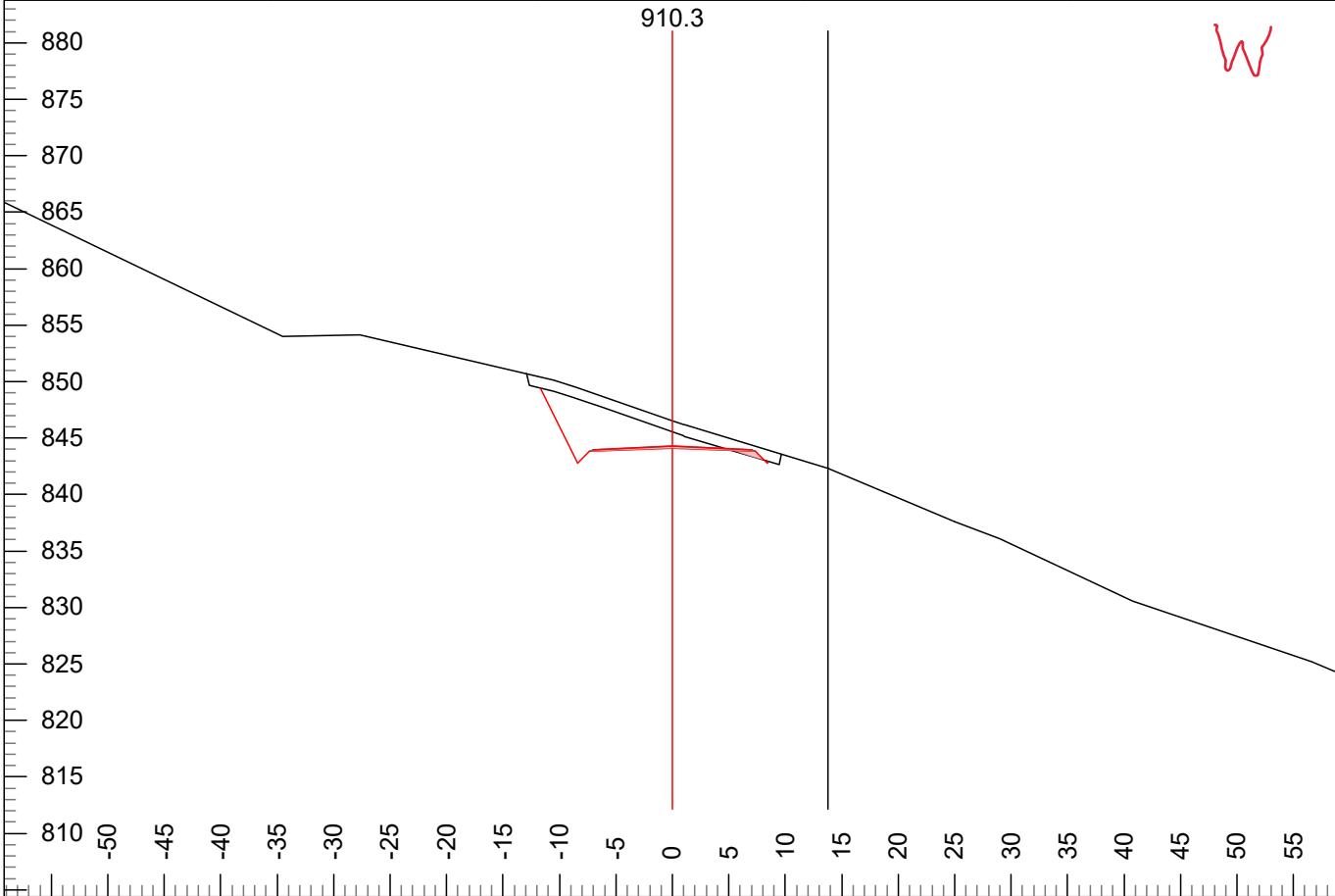
L-Stn :	864.3	Cut Dp:	1.9	CL X:	9836.3	Clr L X:	-16.9	CL Elev:	850.1
P-Stn :	979.5	H. Offset:	-21.3	CL Y:	9535.1	Clr R X:	9.4	Gnd Elev:	852.0

Bark
Beetle
Bailey

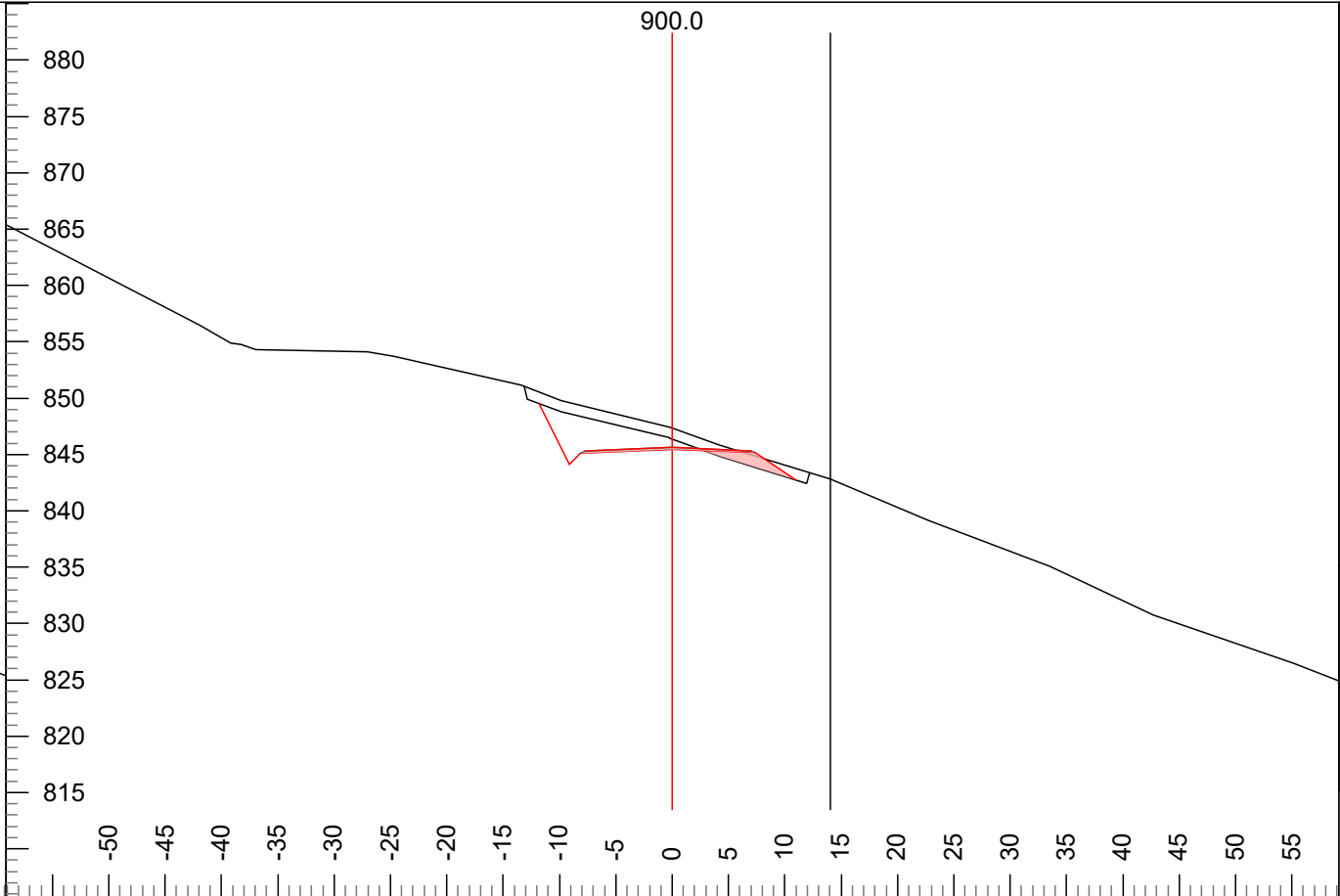
Created By:
M. Kawakami



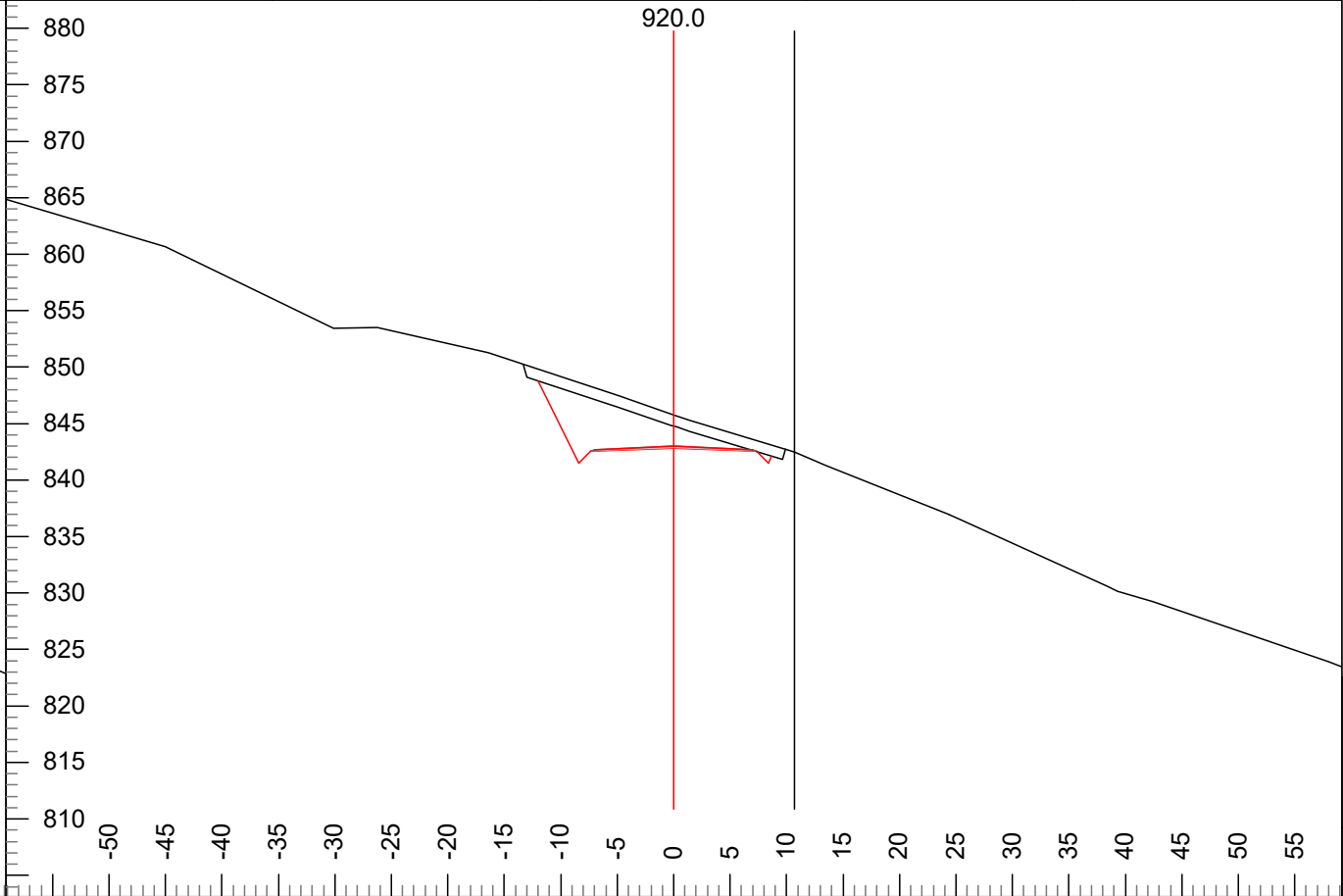
L-Stn :	880.0	Cut Dp:	1.3	CL X:	9848.0	Clr L X:	-16.7	CL Elev:	848.1
P-Stn :	995.5	H. Offset:	-15.5	CL Y:	9524.7	Clr R X:	13.6	Gnd Elev:	849.3



L-Stn :	910.3	Cut Dp:	2.5	CL X:	9875.7	Clr L X:	-11.7	CL Elev:	844.1
P-Stn :	1028.5	H. Offset:	-14.0	CL Y:	9512.7	Clr R X:	8.4	Gnd Elev:	846.5



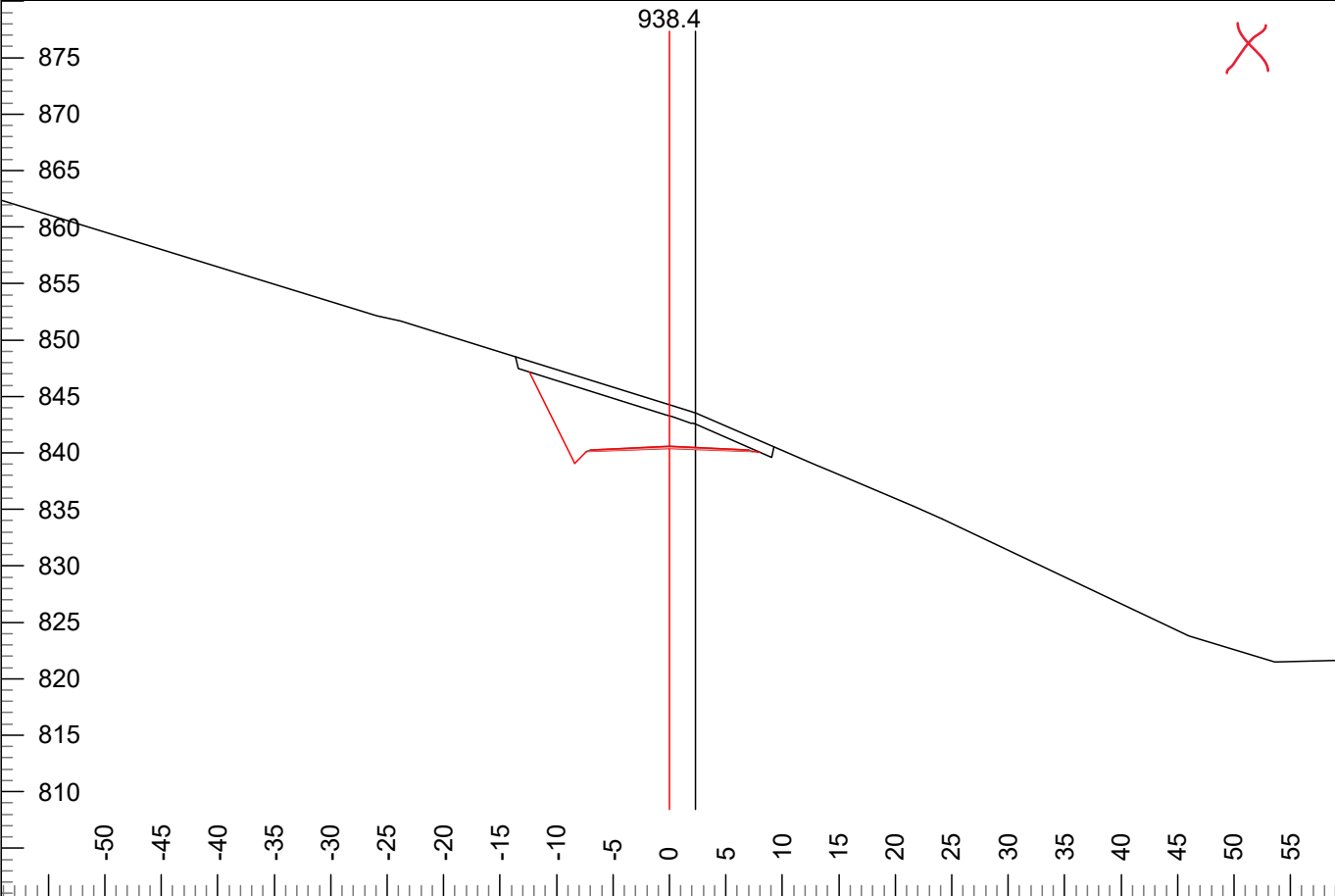
L-Stn :	900.0	Cut Dp:	1.9	CL X:	9866.2	Clr L X:	-11.8	CL Elev:	845.4
P-Stn :	1015.5	H. Offset:	-14.0	CL Y:	9516.5	Clr R X:	11.0	Gnd Elev:	847.4



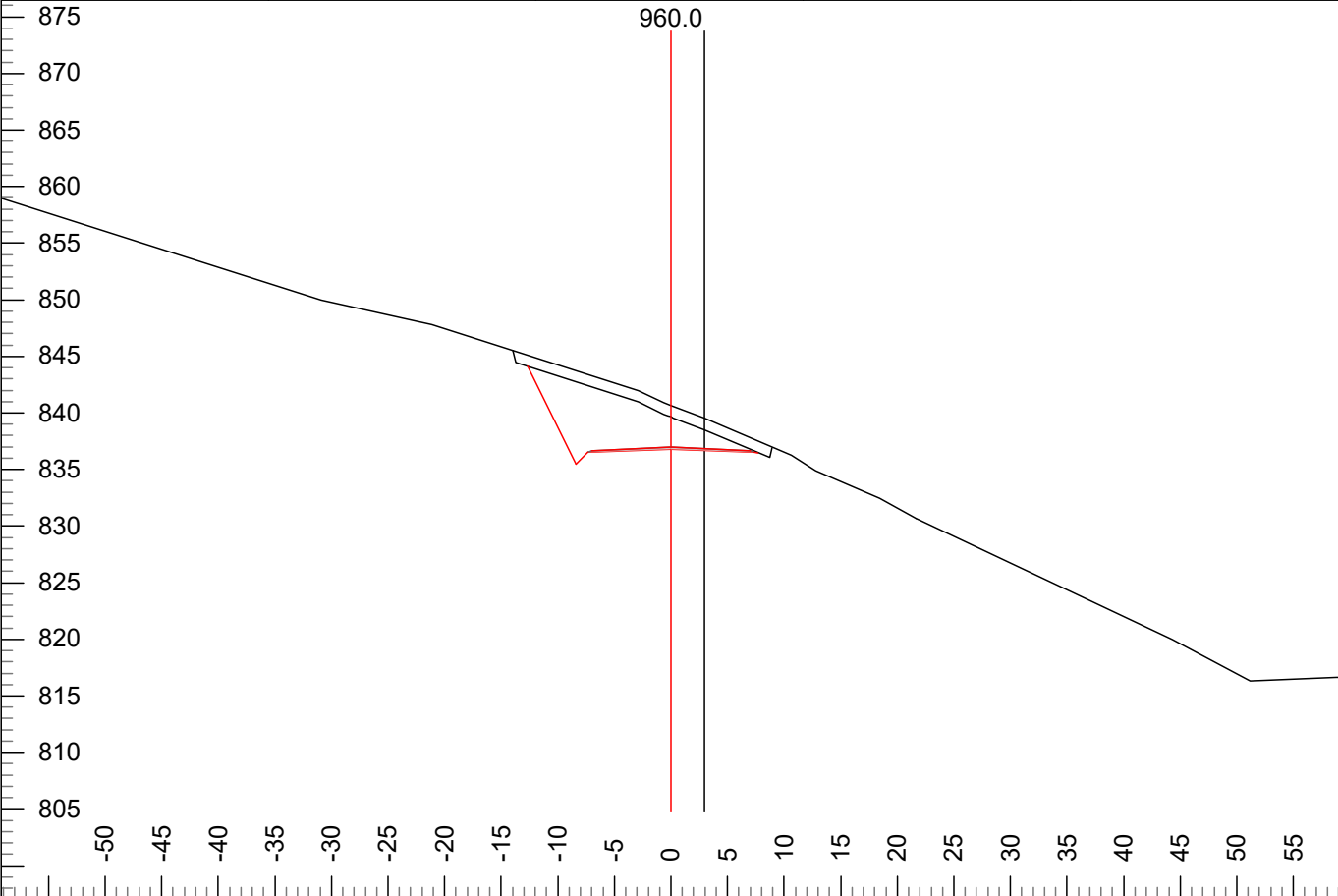
L-Stn :	920.0	Cut Dp:	3.0	CL X:	9884.8	Clr L X:	-12.0	CL Elev:	842.8
P-Stn :	1040.2	H. Offset:	-9.7	CL Y:	9509.2	Clr R X:	8.7	Gnd Elev:	845.8

Bark
Beetle
Bailey

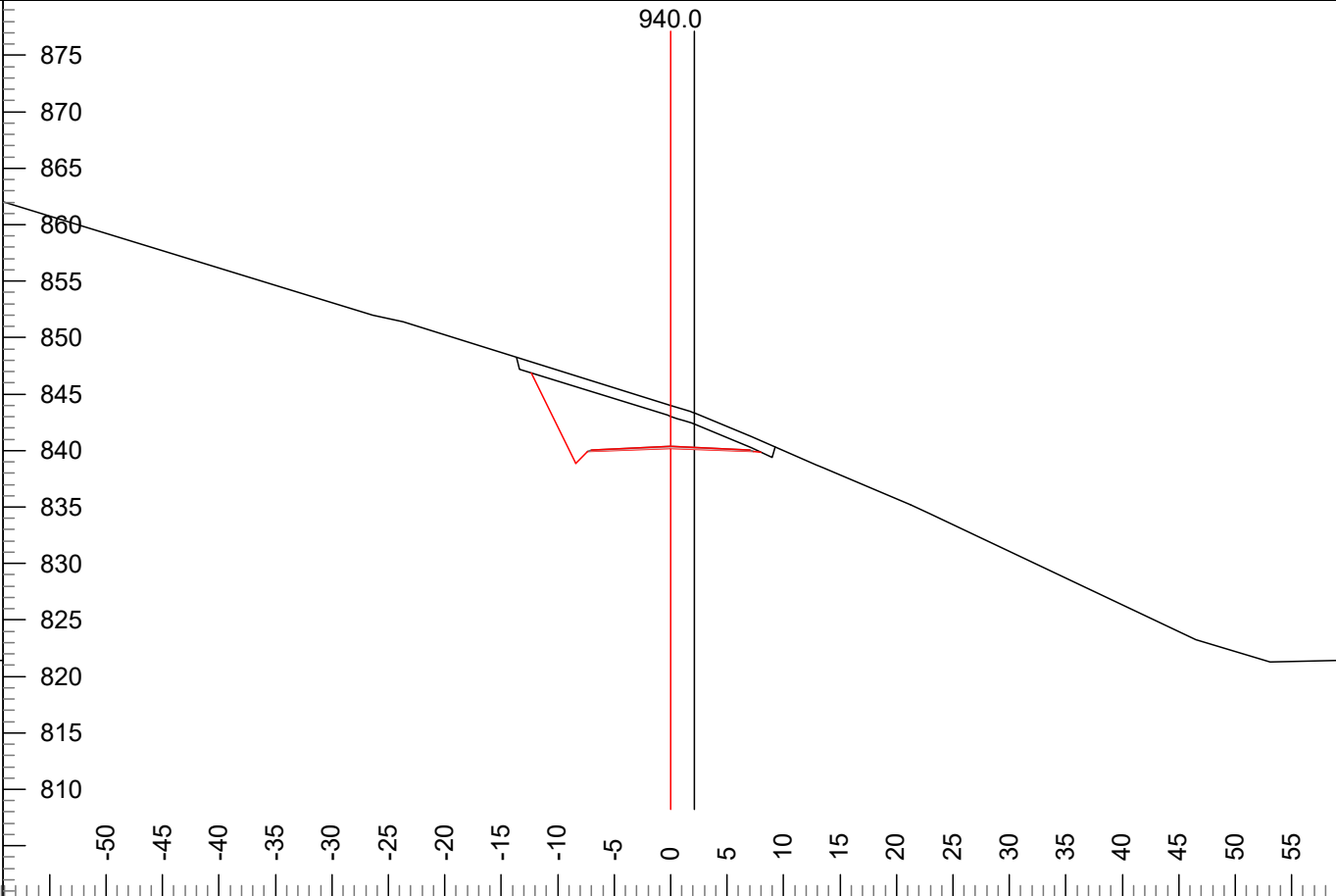
Created By:
M. Kawakami



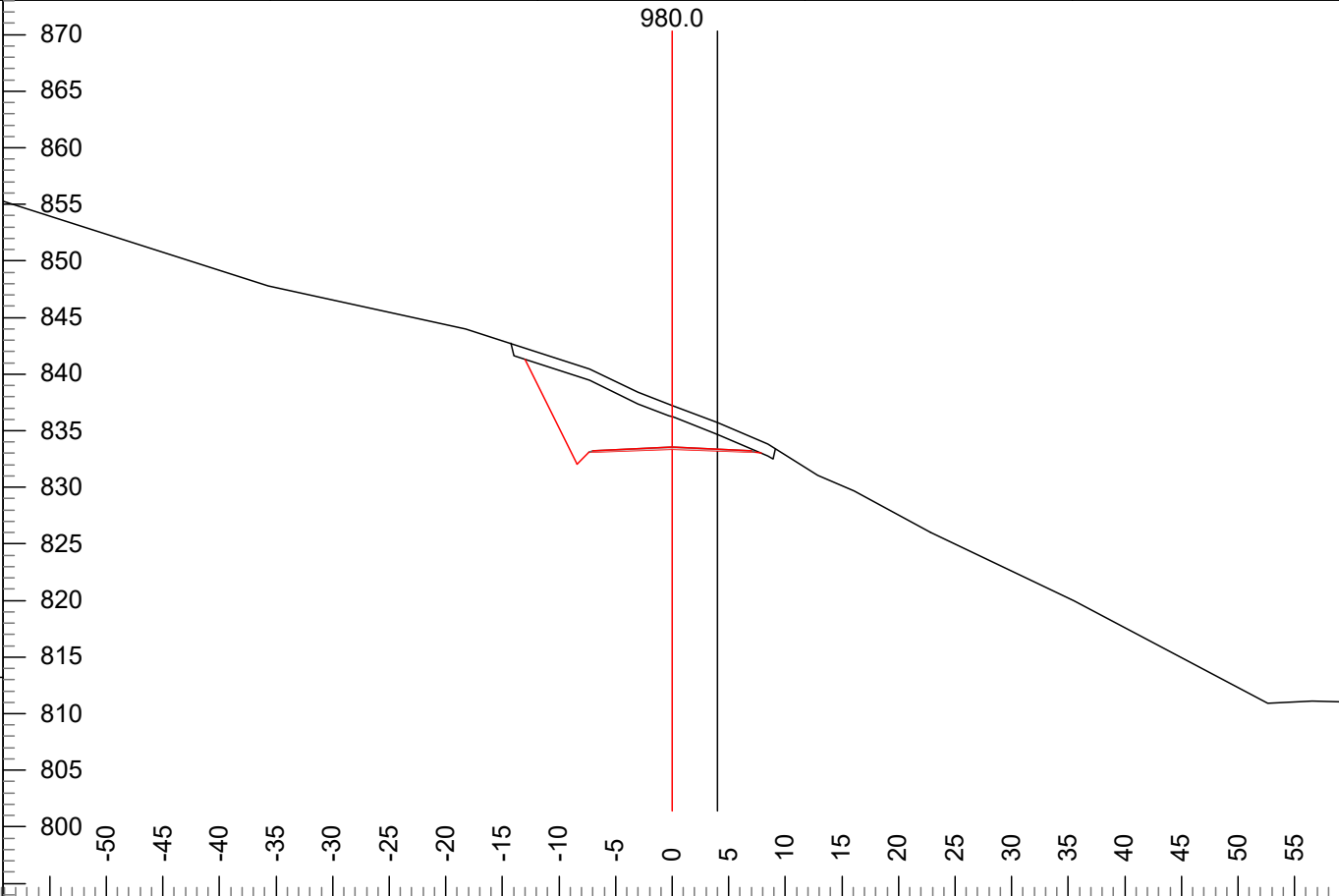
L-Stn :	938.4	Cut Dp:	3.9	CL X:	9901.9	Clr L X:	-12.4	CL Elev:	840.4
P-Stn :	1056.5	H. Offset:	-2.1	CL Y:	9502.4	Clr R X:	8.0	Gnd Elev:	844.3



L-Stn :	960.0	Cut Dp:	3.9	CL X:	9922.4	Clr L X:	-12.7	CL Elev:	836.8
P-Stn :	1077.6	H. Offset:	-3.0	CL Y:	9495.5	Clr R X:	7.7	Gnd Elev:	840.6



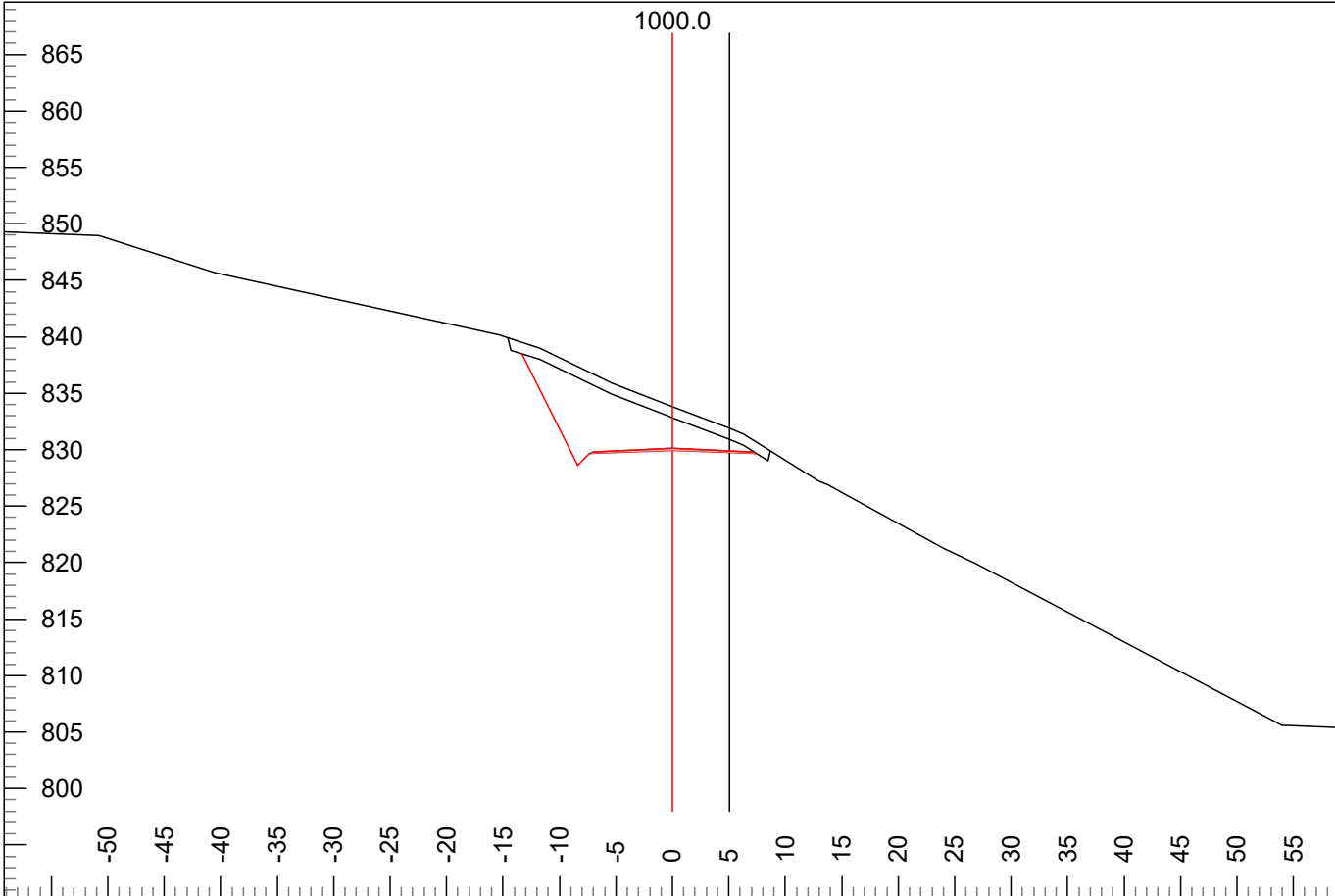
L-Stn :	940.0	Cut Dp:	3.8	CL X:	9903.4	Clr L X:	-12.4	CL Elev:	840.2
P-Stn :	1057.6	H. Offset:	-2.1	CL Y:	9501.9	Clr R X:	8.0	Gnd Elev:	844.0



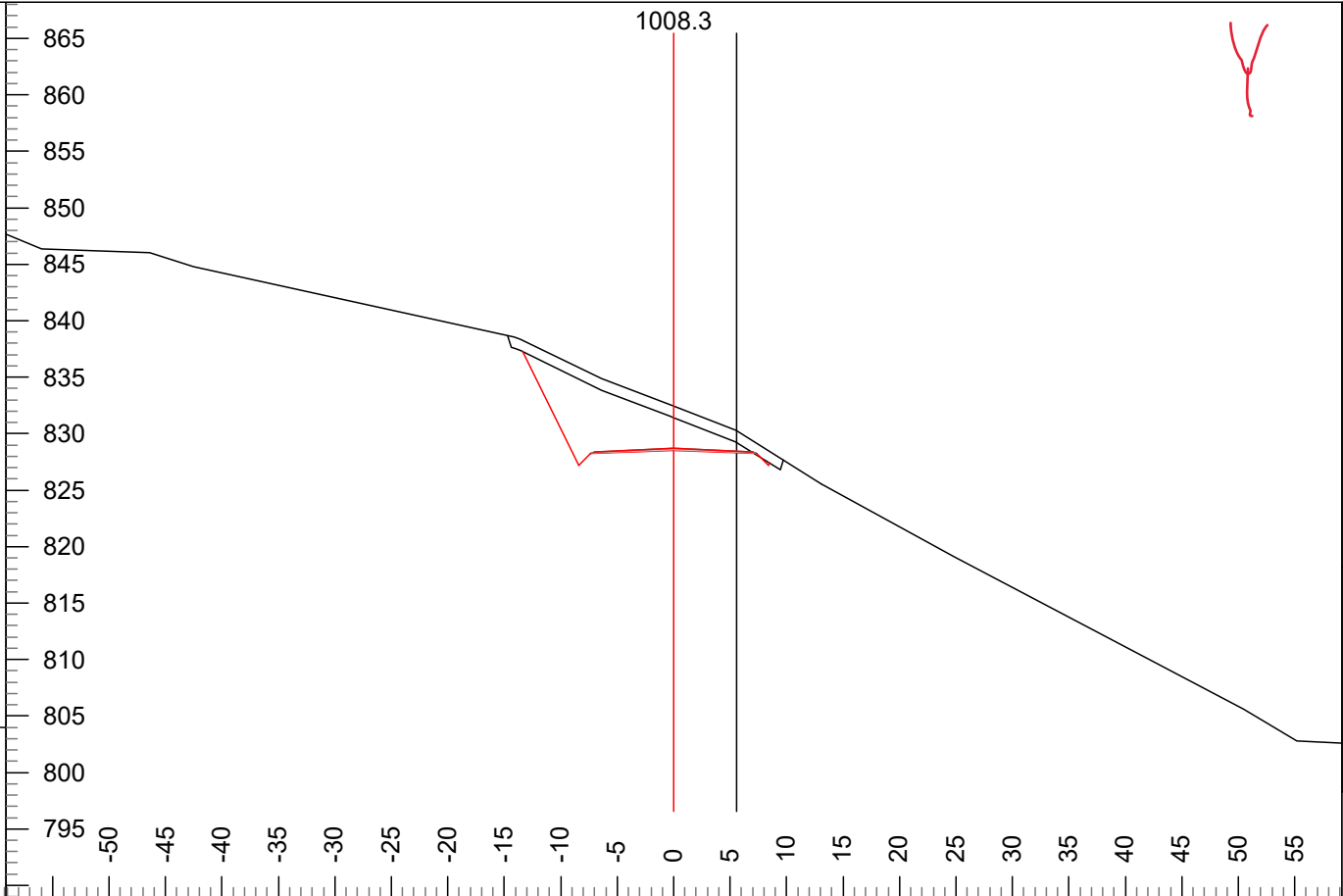
L-Stn :	980.0	Cut Dp:	3.9	CL X:	9941.4	Clr L X:	-13.0	CL Elev:	833.4
P-Stn :	1097.6	H. Offset:	-4.0	CL Y:	9489.3	Clr R X:	7.9	Gnd Elev:	837.2

Bark
Beetle
Bailey

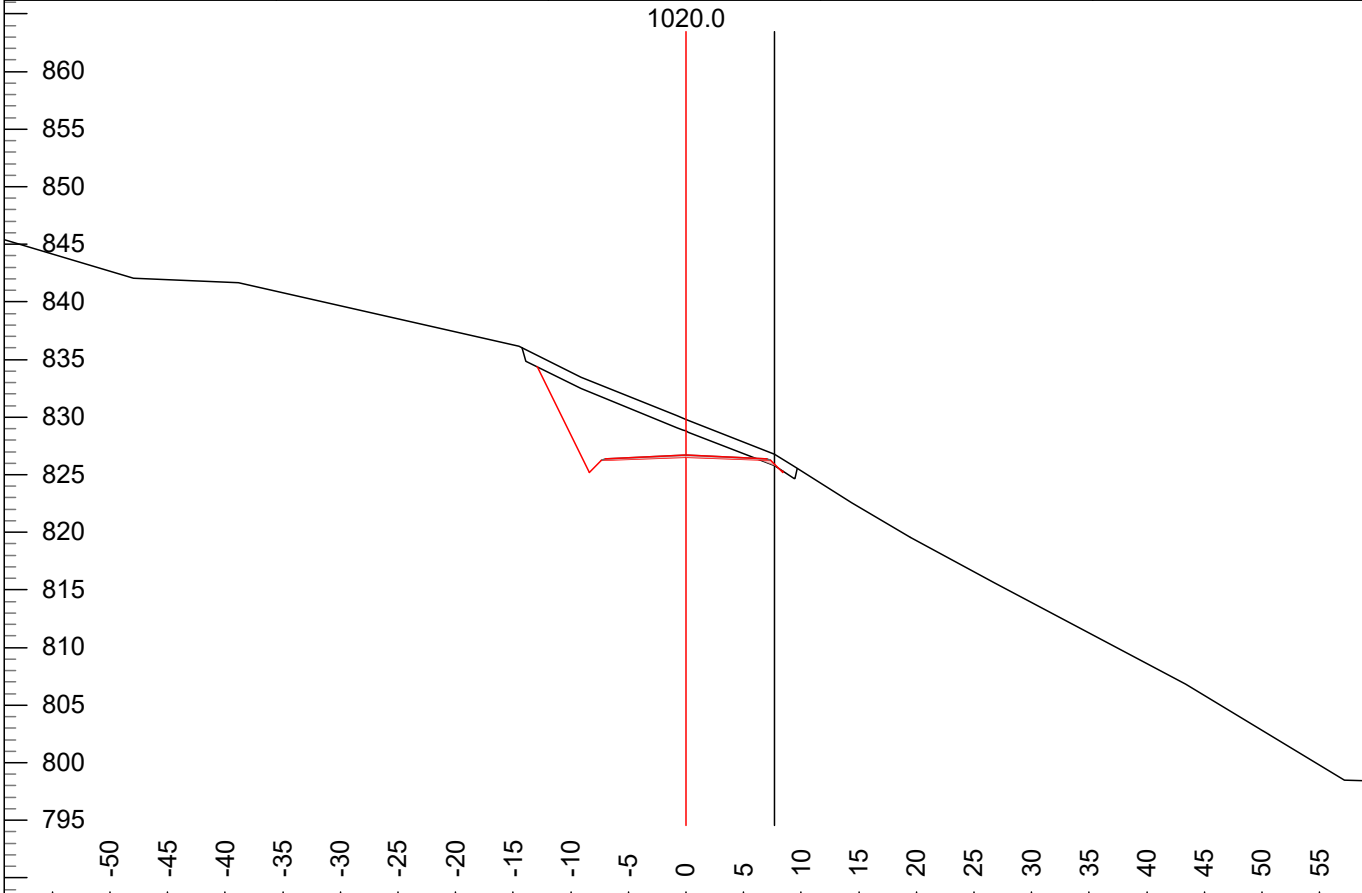
Created By:
M. Kawakami



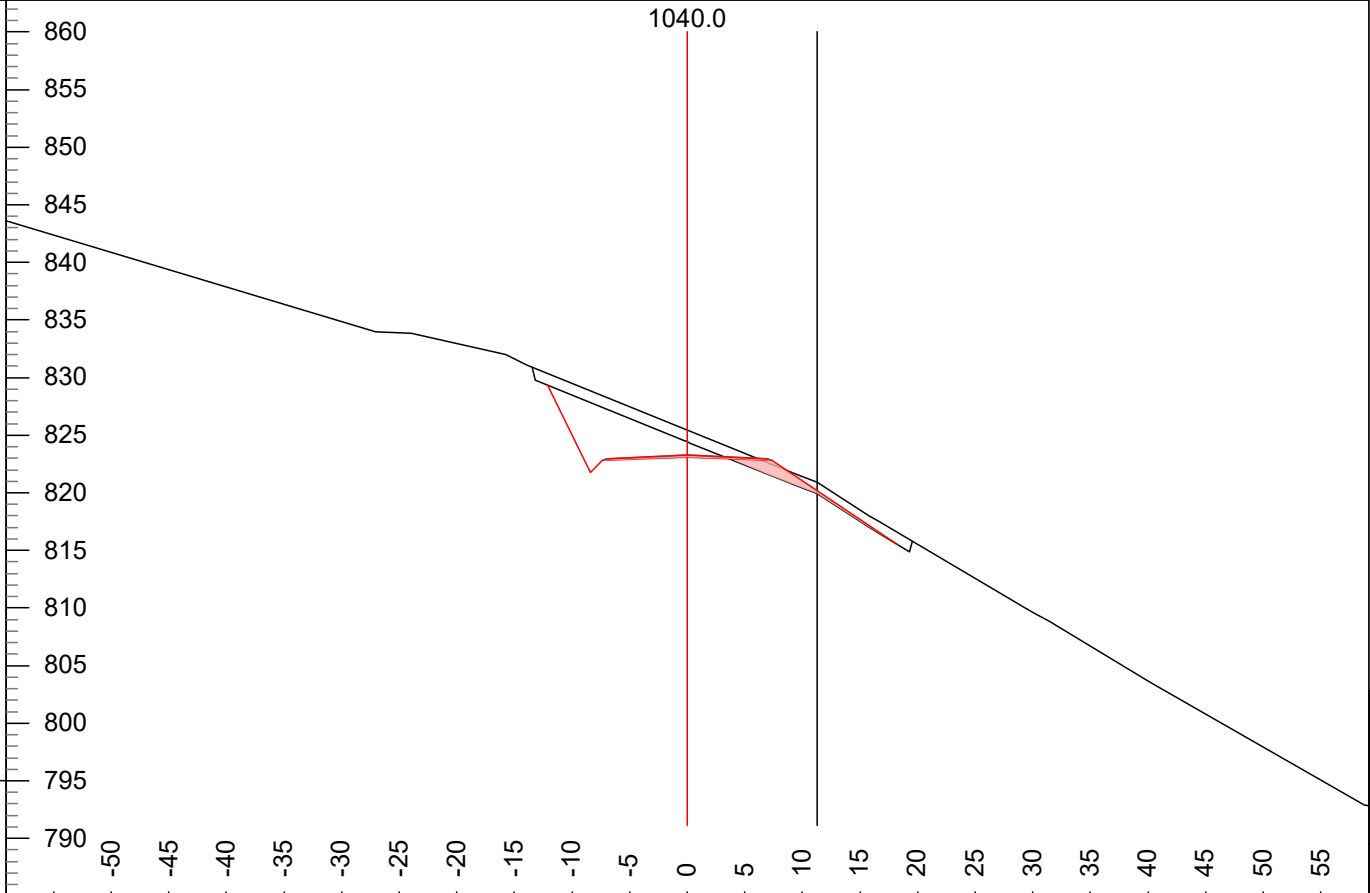
L-Stn :	1000.0	Cut Dp:	3.9	CL X:	9960.4	Clr L X:	-13.3	CL Elev:	829.9
P-Stn :	1117.6	H. Offset:	-5.1	CL Y:	9483.2	Clr R X:	7.5	Gnd Elev:	833.8



L-Stn :	1008.3	Cut Dp:	3.9	CL X:	9968.3	Clr L X:	-13.4	CL Elev:	828.5
P-Stn :	1125.5	H. Offset:	-5.5	CL Y:	9480.6	Clr R X:	8.5	Gnd Elev:	832.4



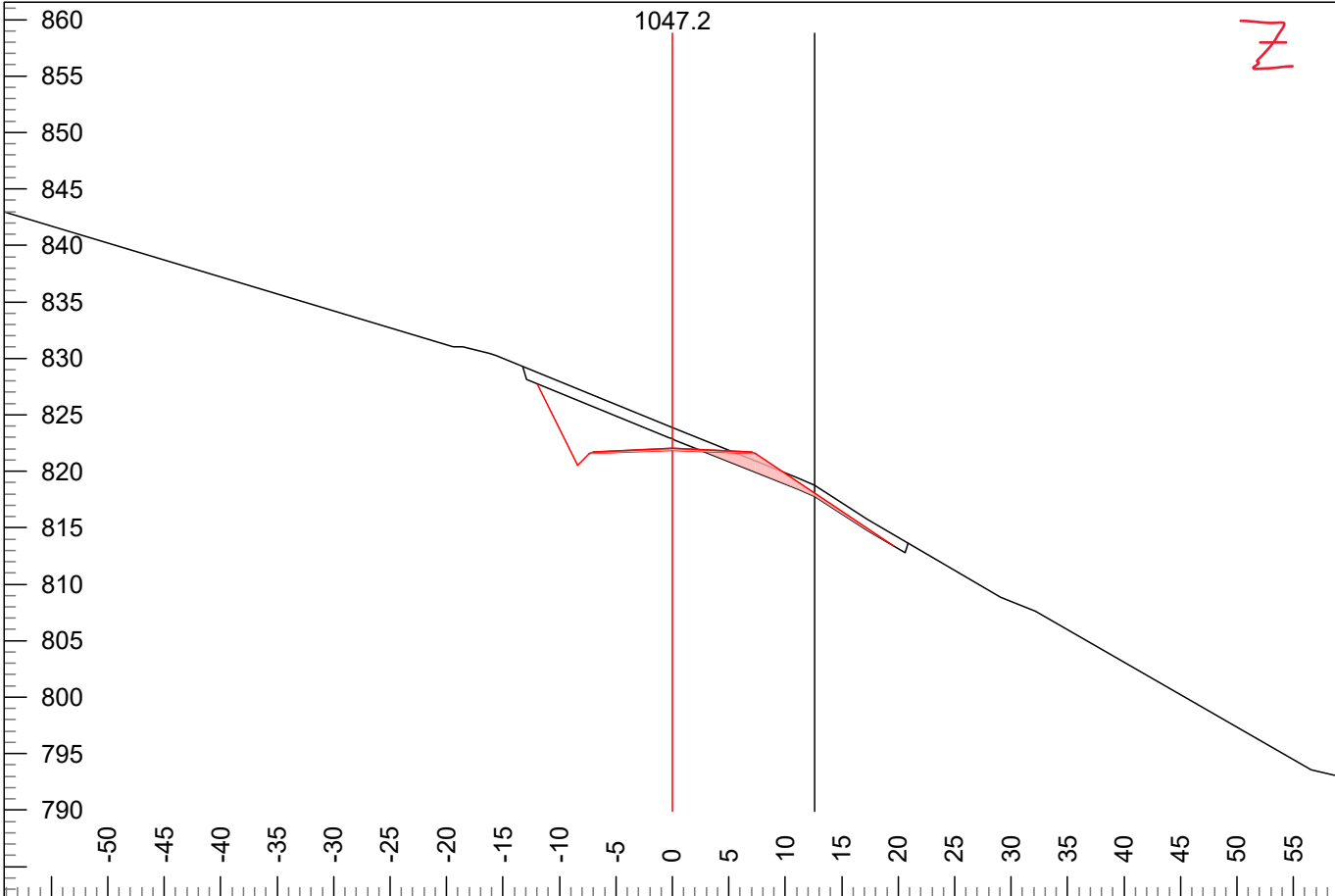
L-Stn :	1020.0	Cut Dp:	3.3	CL X:	9979.4	Clr L X:	-12.9	CL Elev:	826.5
P-Stn :	1136.7	H. Offset:	-7.6	CL Y:	9477.0	Clr R X:	8.4	Gnd Elev:	829.8



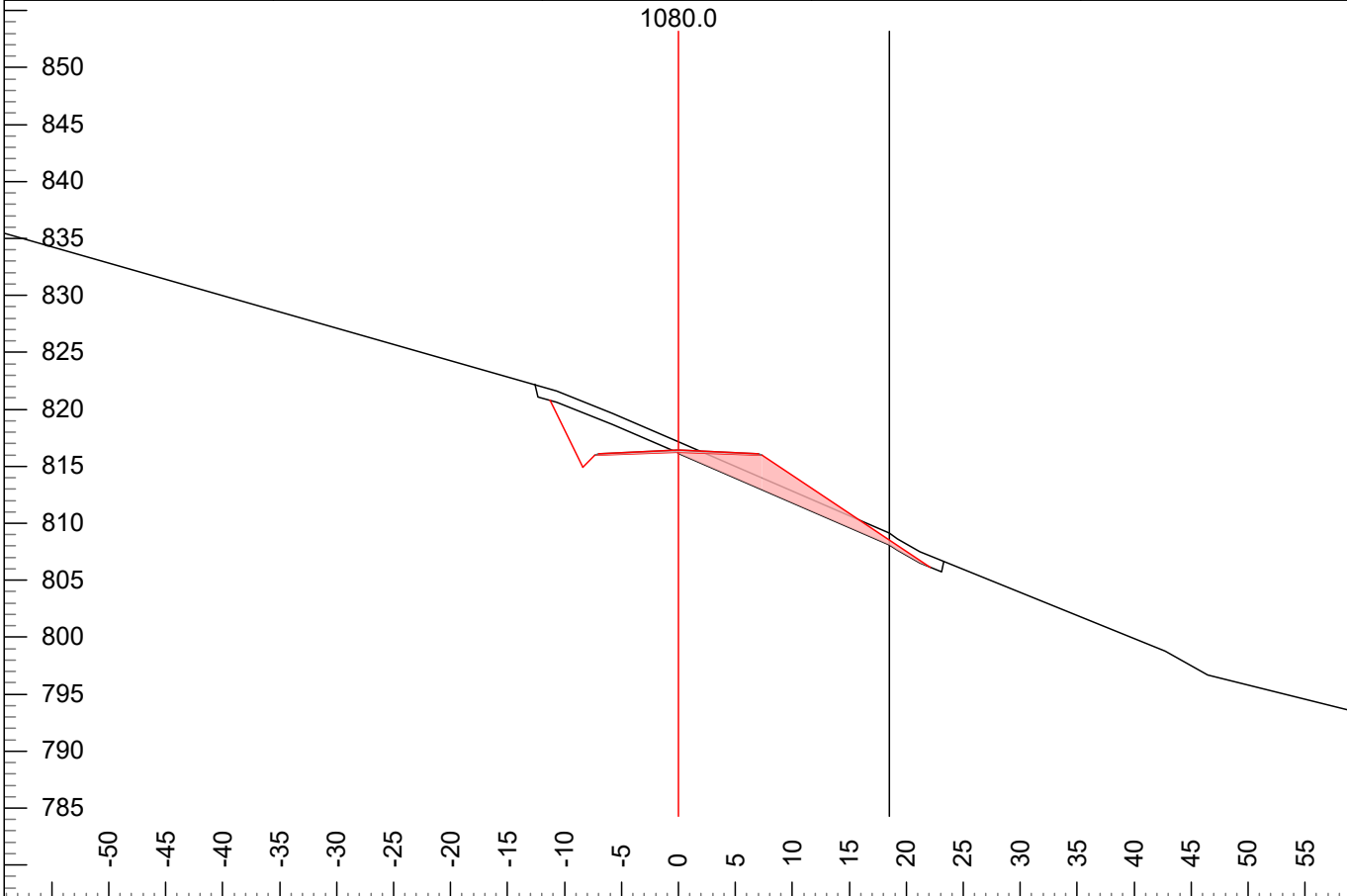
L-Stn :	1040.0	Cut Dp:	2.4	CL X:	9998.5	Clr L X:	-12.2	CL Elev:	823.1
P-Stn :	1156.4	H. Offset:	-11.1	CL Y:	9470.9	Clr R X:	18.3	Gnd Elev:	825.4

Bark
Beetle
Bailey

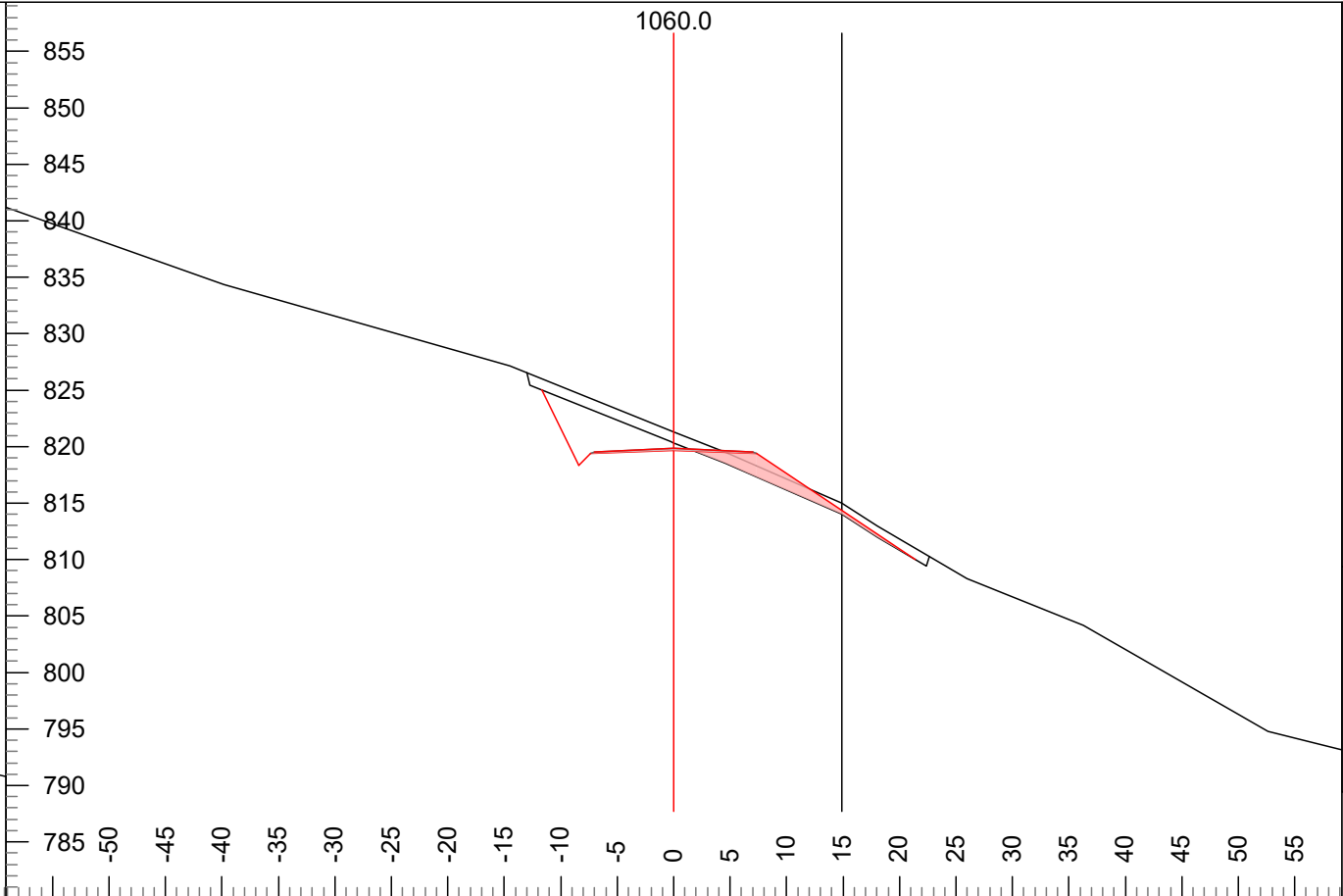
Created By:
M. Kawakami



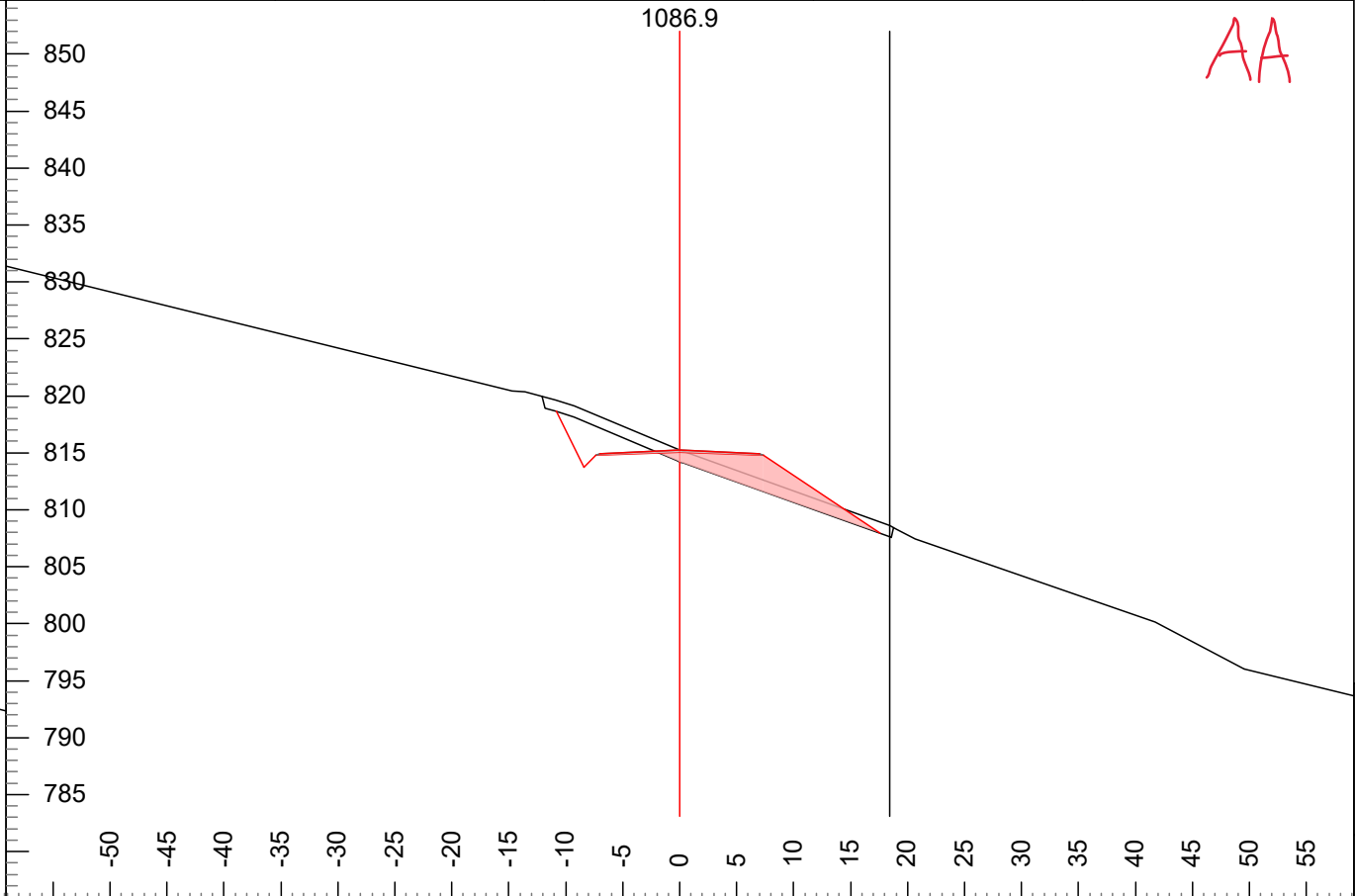
L-Stn :	1047.2	Cut Dp:	2.0	CL X:	10005.4	Clr L X:	-12.0	CL Elev:	821.8
P-Stn :	1163.5	H. Offset:	-12.4	CL Y:	9468.7	Clr R X:	19.6	Gnd Elev:	823.9



L-Stn :	1080.0	Cut Dp:	0.9	CL X:	10036.6	Clr L X:	-11.3	CL Elev:	816.2
P-Stn :	1195.7	H. Offset:	-18.2	CL Y:	9458.7	Clr R X:	22.1	Gnd Elev:	817.2



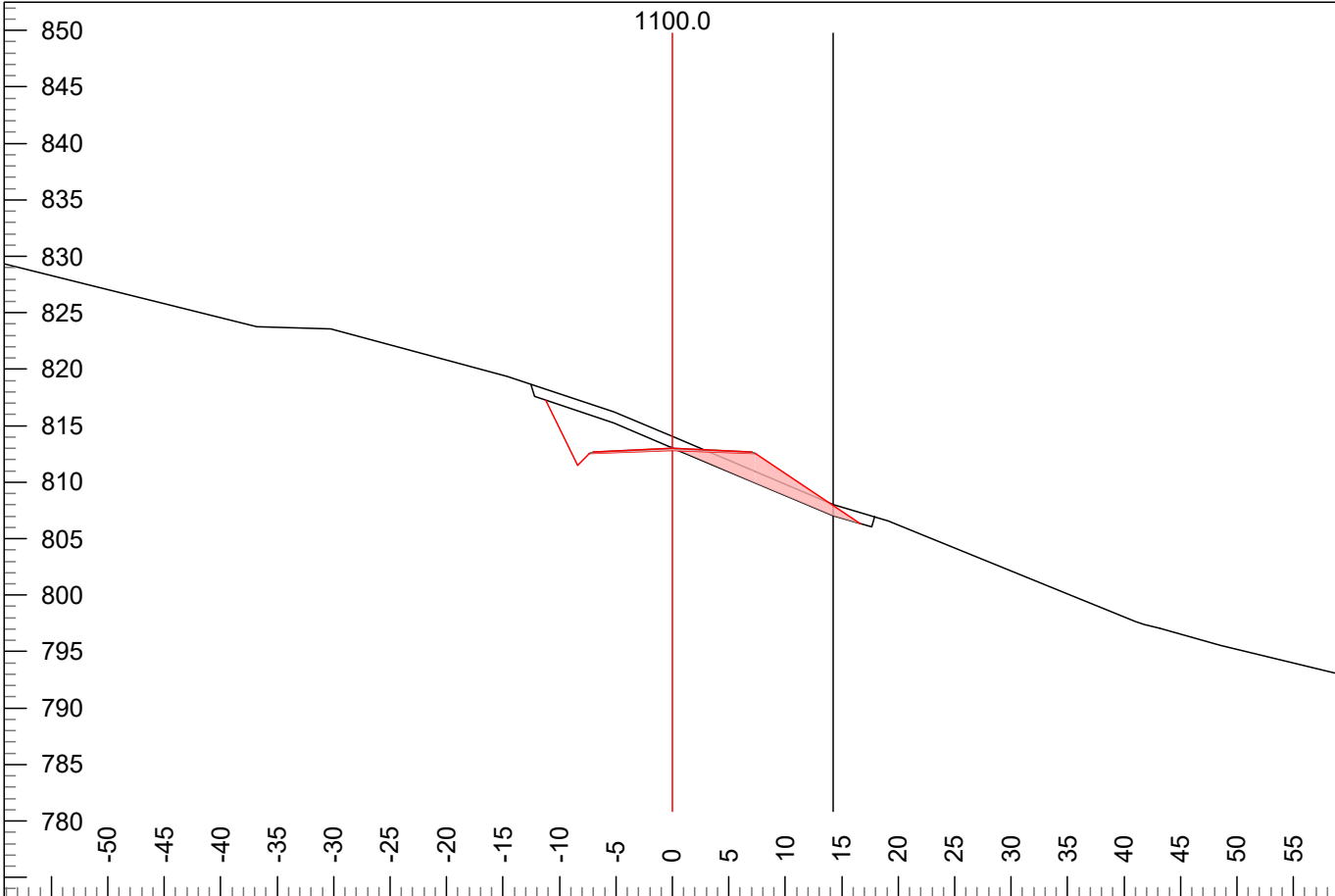
L-Stn :	1060.0	Cut Dp:	1.7	CL X:	10017.5	Clr L X:	-11.7	CL Elev:	819.7
P-Stn :	1176.1	H. Offset:	-14.6	CL Y:	9464.8	Clr R X:	21.4	Gnd Elev:	821.3



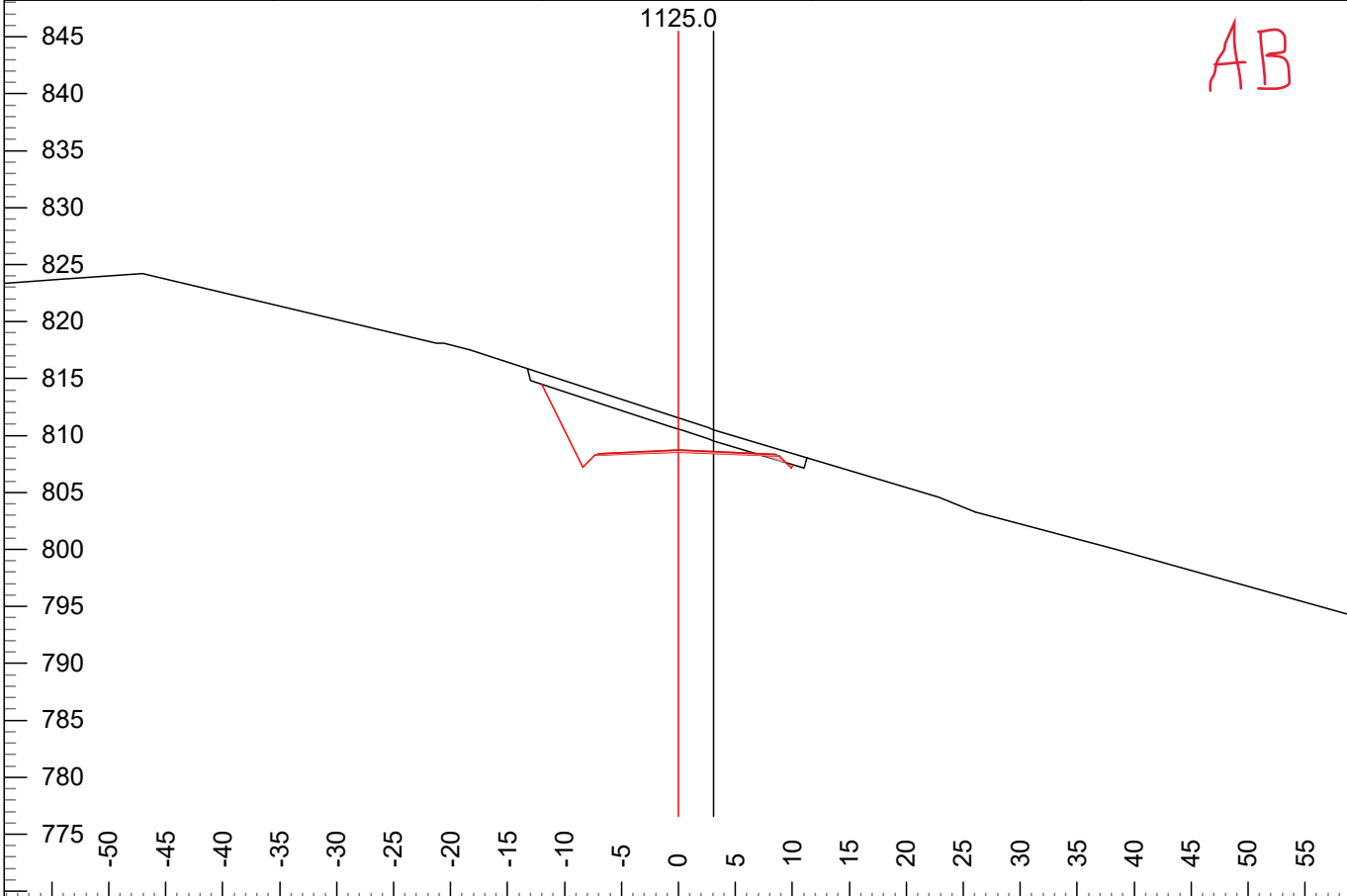
L-Stn :	1086.9	Cut Dp:	0.2	CL X:	10042.7	Clr L X:	-10.8	CL Elev:	815.0
P-Stn :	1205.5	H. Offset:	-18.5	CL Y:	9455.6	Clr R X:	17.6	Gnd Elev:	815.2

Bark
Beetle
Bailey

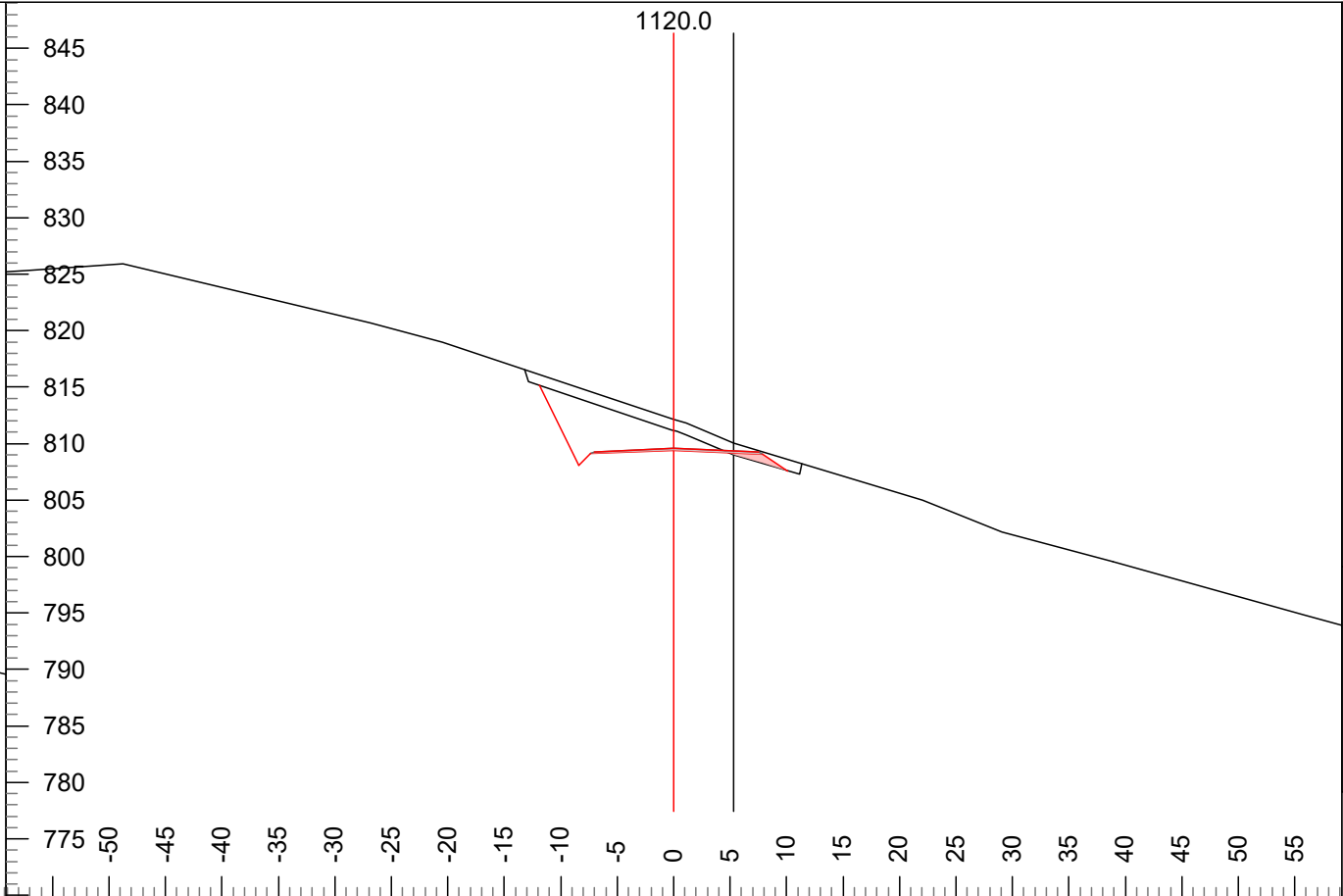
Created By:
M. Kawakami



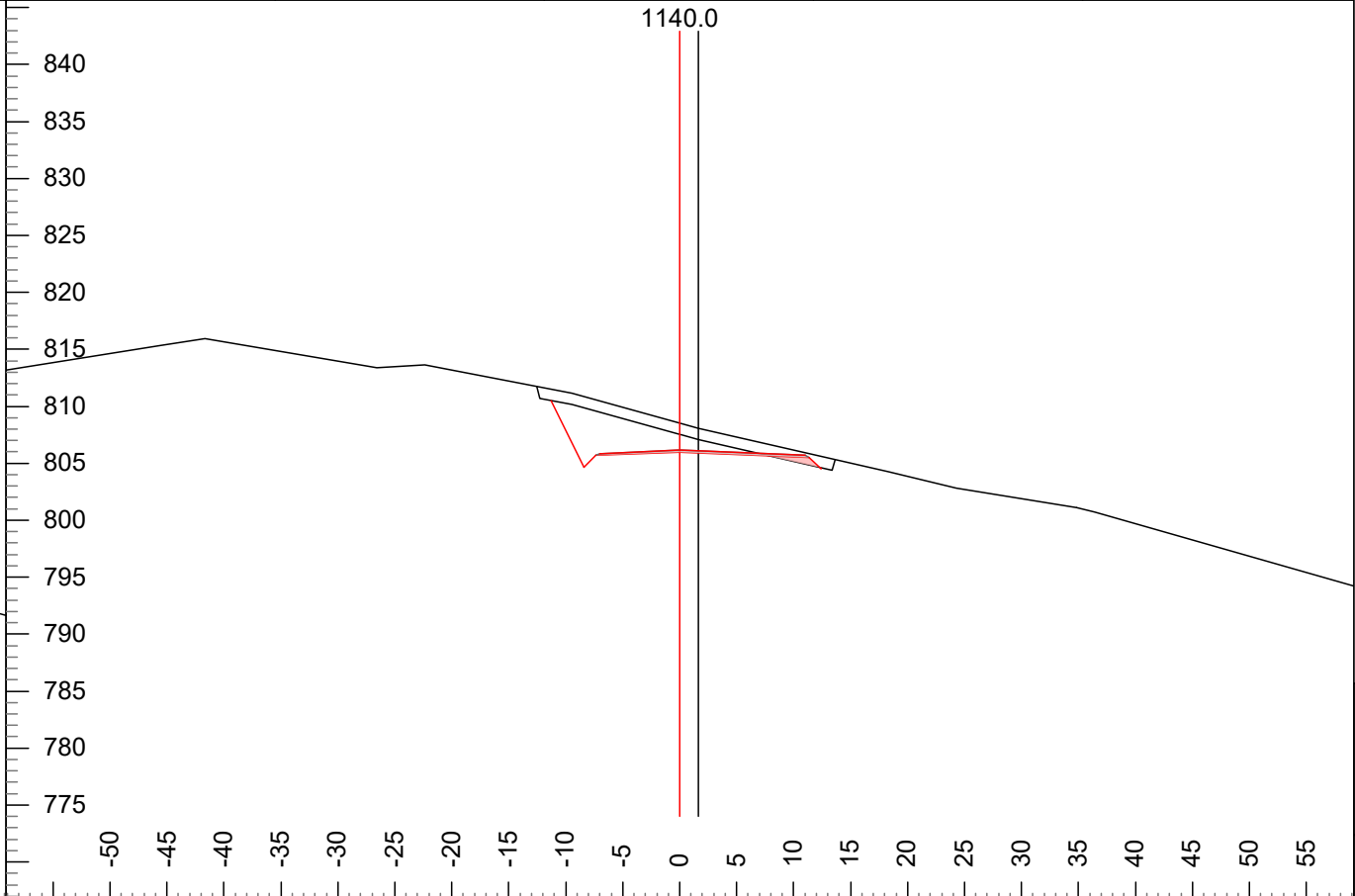
L-Stn :	1100.0	Cut Dp:	1.2	CL X:	10053.5	Clr L X:	-11.2	CL Elev:	812.8
P-Stn :	1220.3	H. Offset:	-13.0	CL Y:	9448.2	Clr R X:	16.7	Gnd Elev:	814.0



L-Stn :	1125.0	Cut Dp:	3.0	CL X:	10074.2	Clr L X:	-12.0	CL Elev:	808.5
P-Stn :	1242.5	H. Offset:	-2.9	CL Y:	9434.2	Clr R X:	10.0	Gnd Elev:	811.6



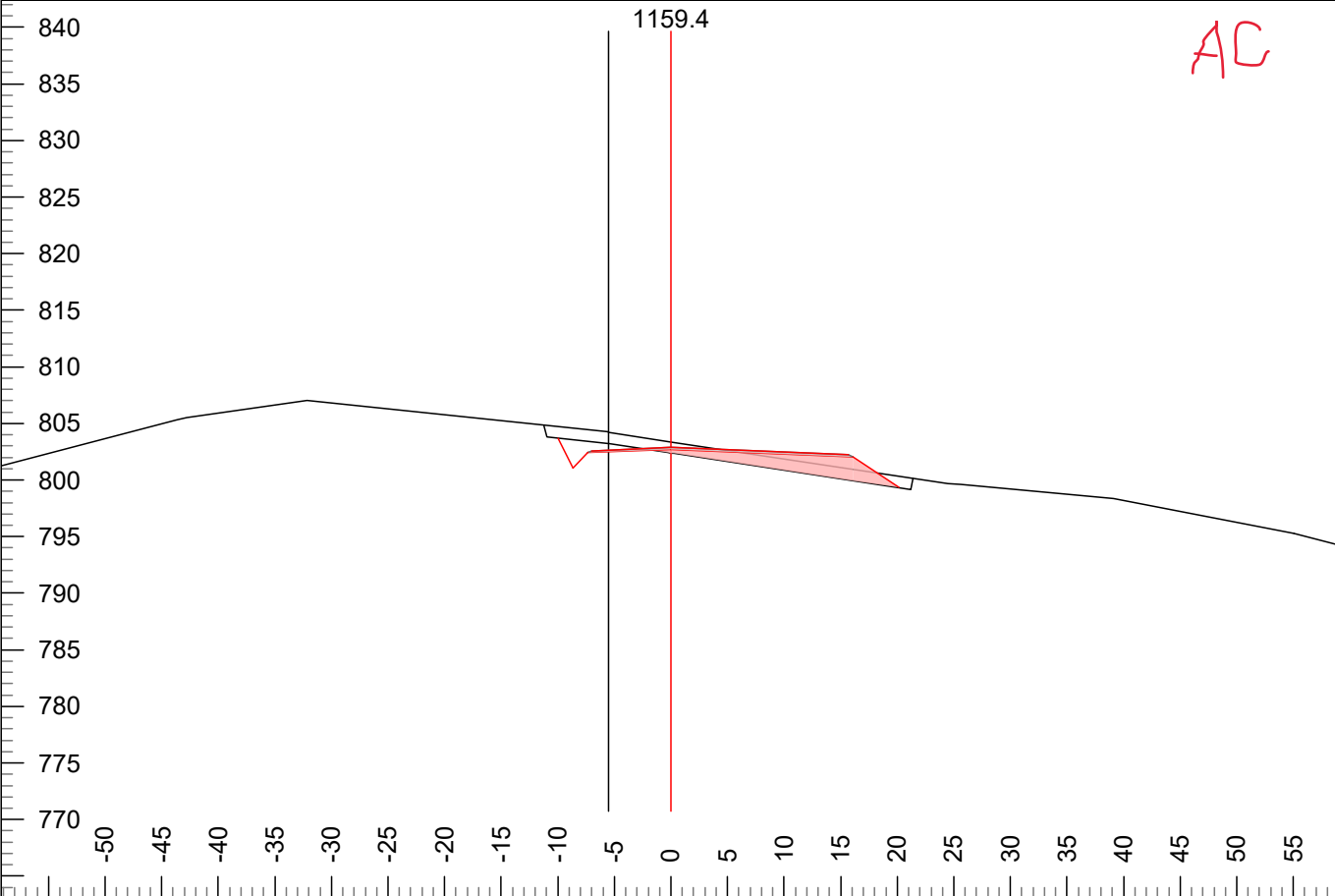
L-Stn :	1120.0	Cut Dp:	2.8	CL X:	10070.1	Clr L X:	-11.9	CL Elev:	809.4
P-Stn :	1238.6	H. Offset:	-4.8	CL Y:	9437.0	Clr R X:	10.1	Gnd Elev:	812.2



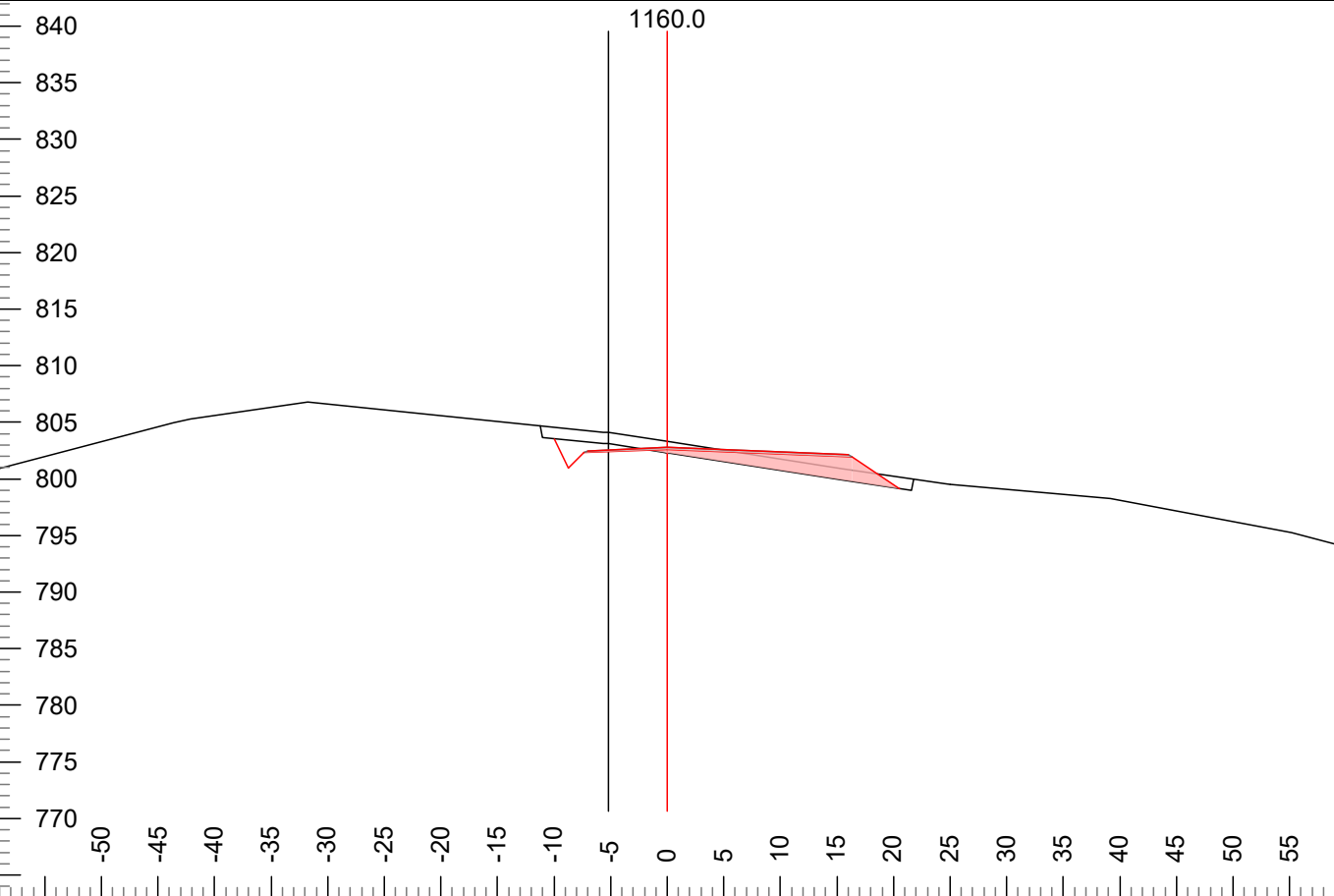
L-Stn :	1140.0	Cut Dp:	2.5	CL X:	10085.4	Clr L X:	-11.3	CL Elev:	806.0
P-Stn :	1256.8	H. Offset:	-1.6	CL Y:	9424.3	Clr R X:	12.4	Gnd Elev:	808.5

Bark
Beetle
Bailey

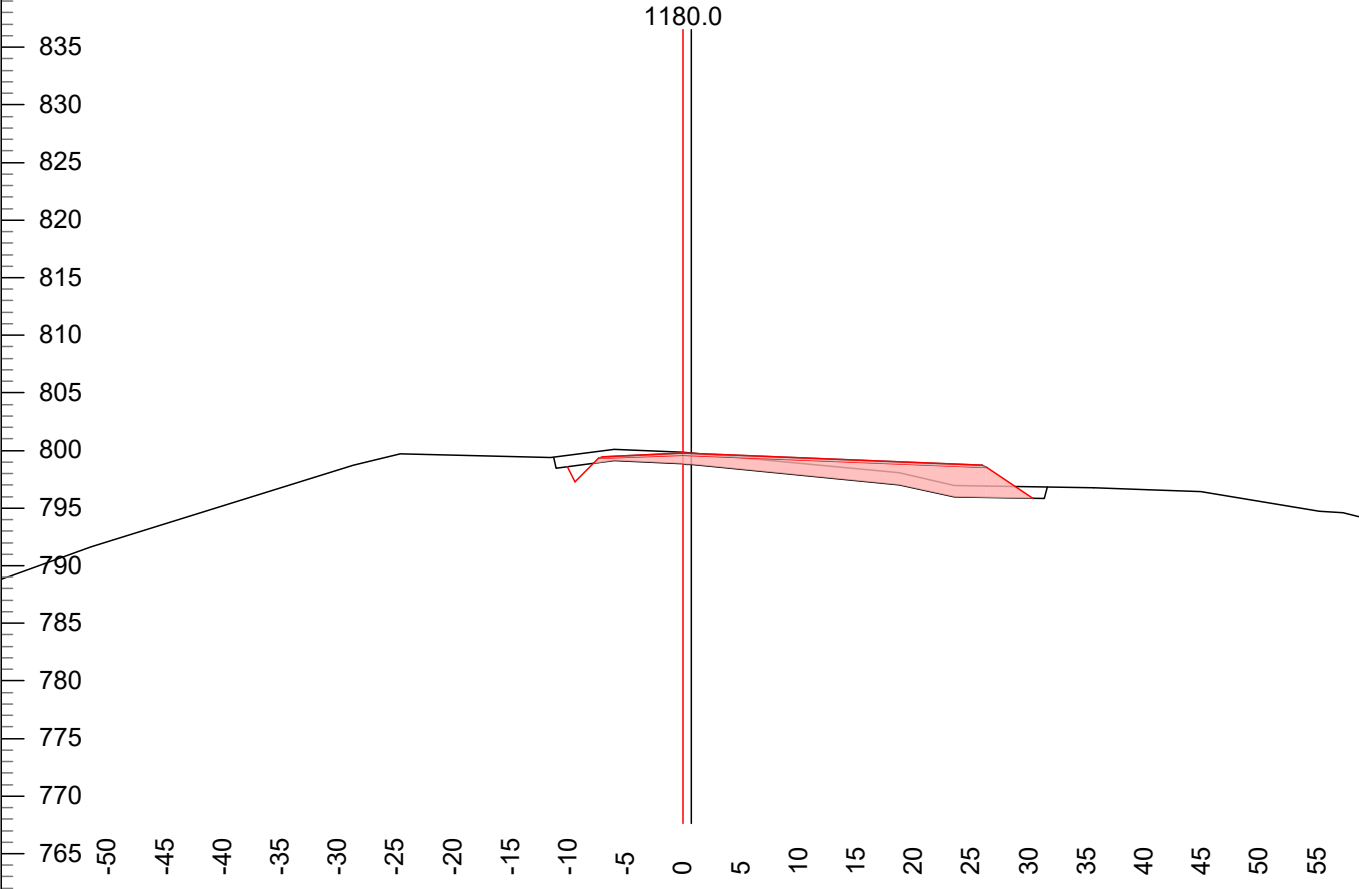
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M. Kawakami



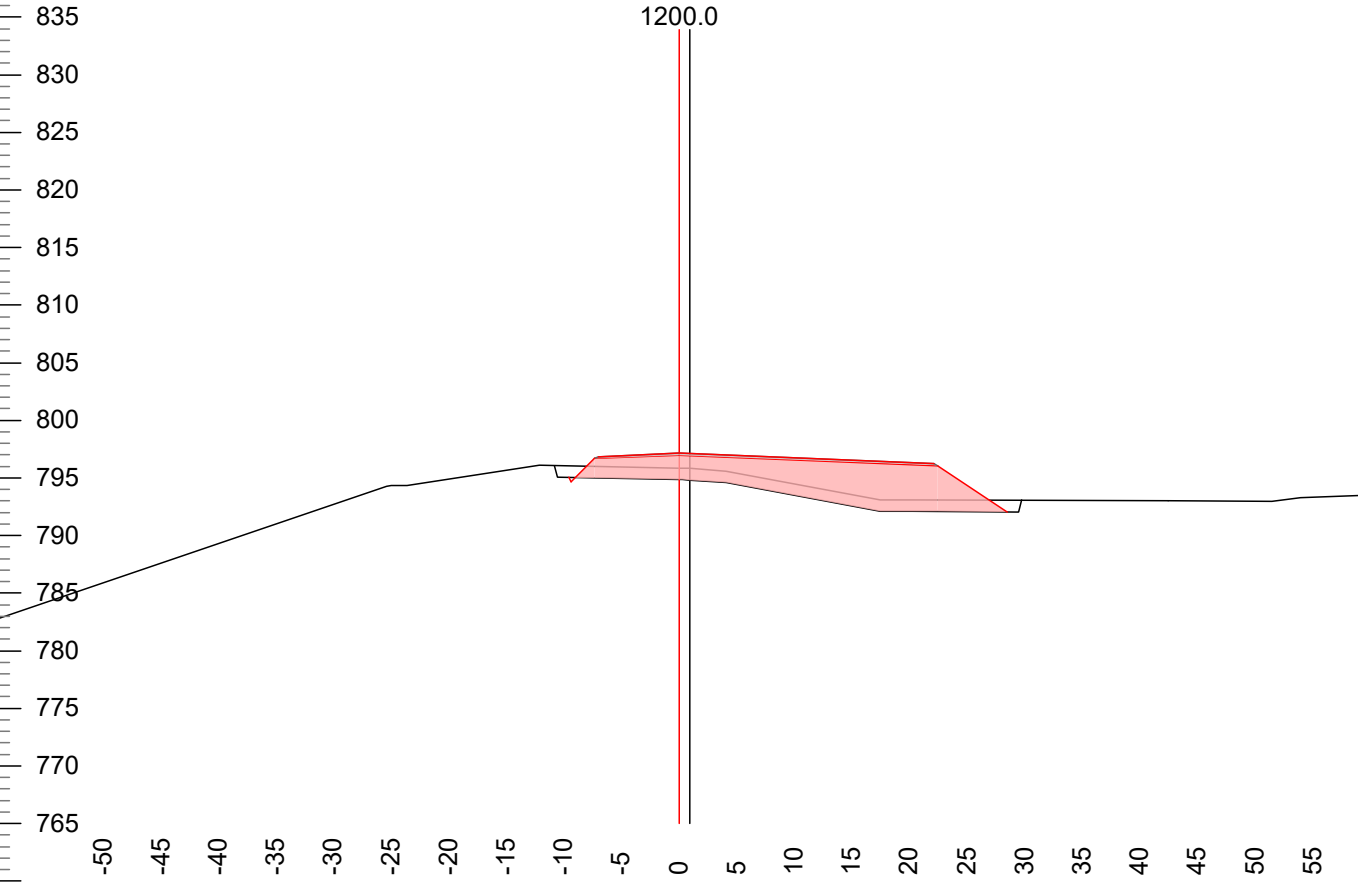
L-Stn :	1159.4	Cut Dp:	0.7	CL X:	10096.0	Clr L X:	-10.0	CL Elev:	802.7
P-Stn :	1277.5	H. Offset:	5.6	CL Y:	9408.1	Clr R X:	20.2	Gnd Elev:	803.4



L-Stn :	1160.0	Cut Dp:	0.7	CL X:	10096.2	Clr L X:	-10.0	CL Elev:	802.6
P-Stn :	1280.6	H. Offset:	4.7	CL Y:	9407.6	Clr R X:	20.6	Gnd Elev:	803.3



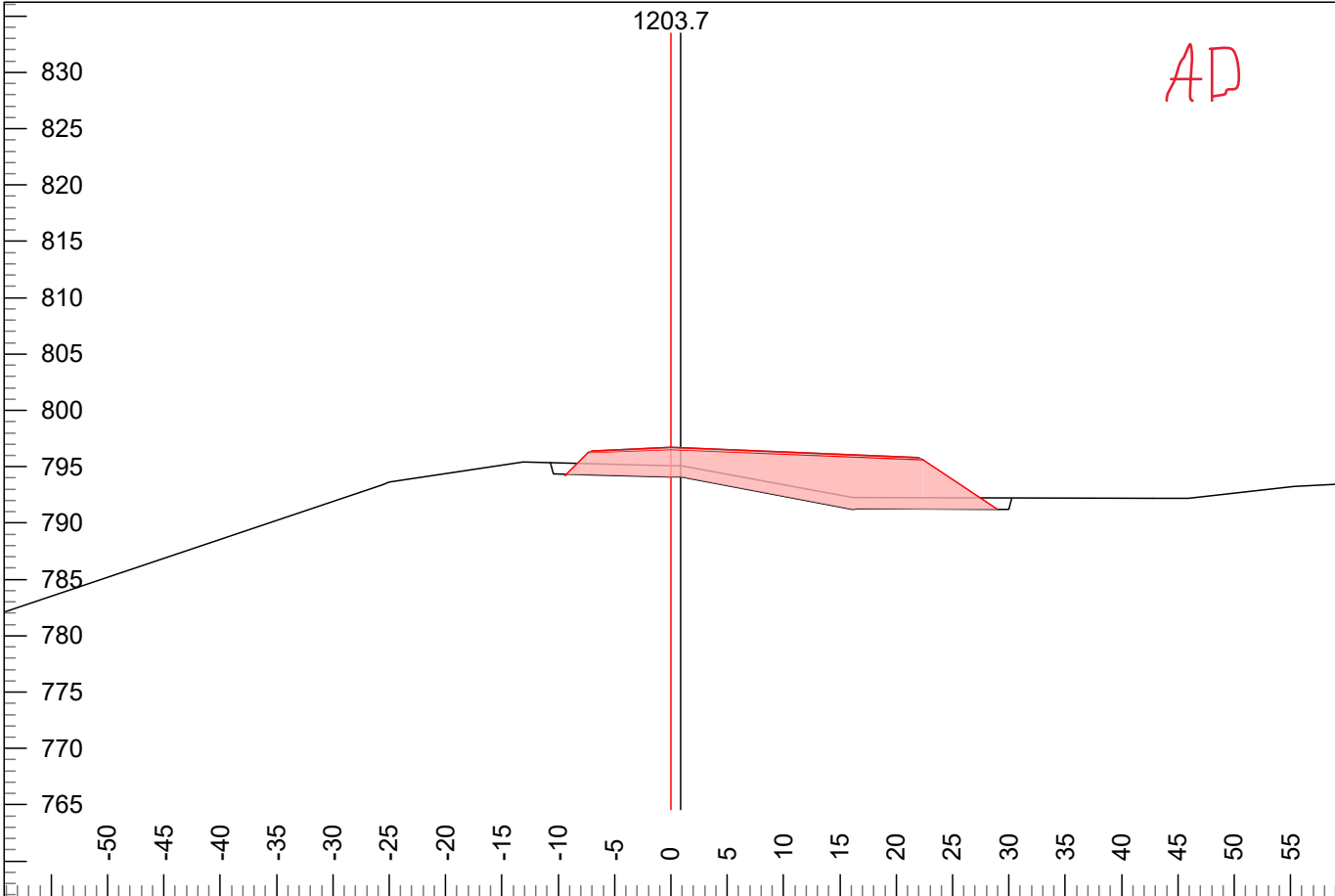
L-Stn :	1180.0	Cut Dp:	0.2	CL X:	10101.0	Clr L X:	-10.0	CL Elev:	799.6
P-Stn :	1299.8	H. Offset:	-0.7	CL Y:	9388.2	Clr R X:	30.4	Gnd Elev:	799.8



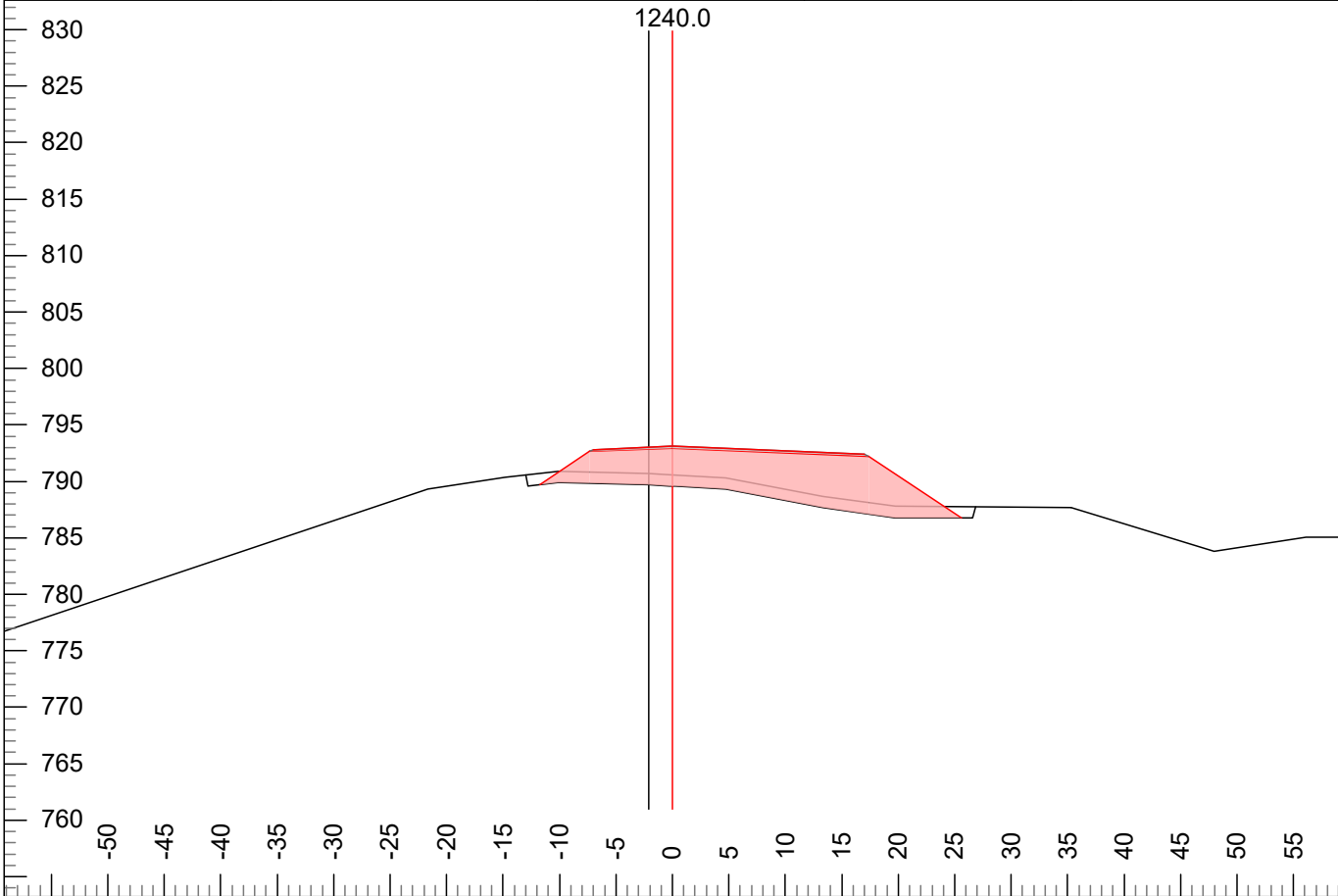
L-Stn :	1200.0	Cut Dp:	-1.1	CL X:	10100.5	Clr L X:	-9.6	CL Elev:	797.0
P-Stn :	1319.8	H. Offset:	-0.9	CL Y:	9368.3	Clr R X:	28.5	Gnd Elev:	795.8

Bark
Beetle
Bailey

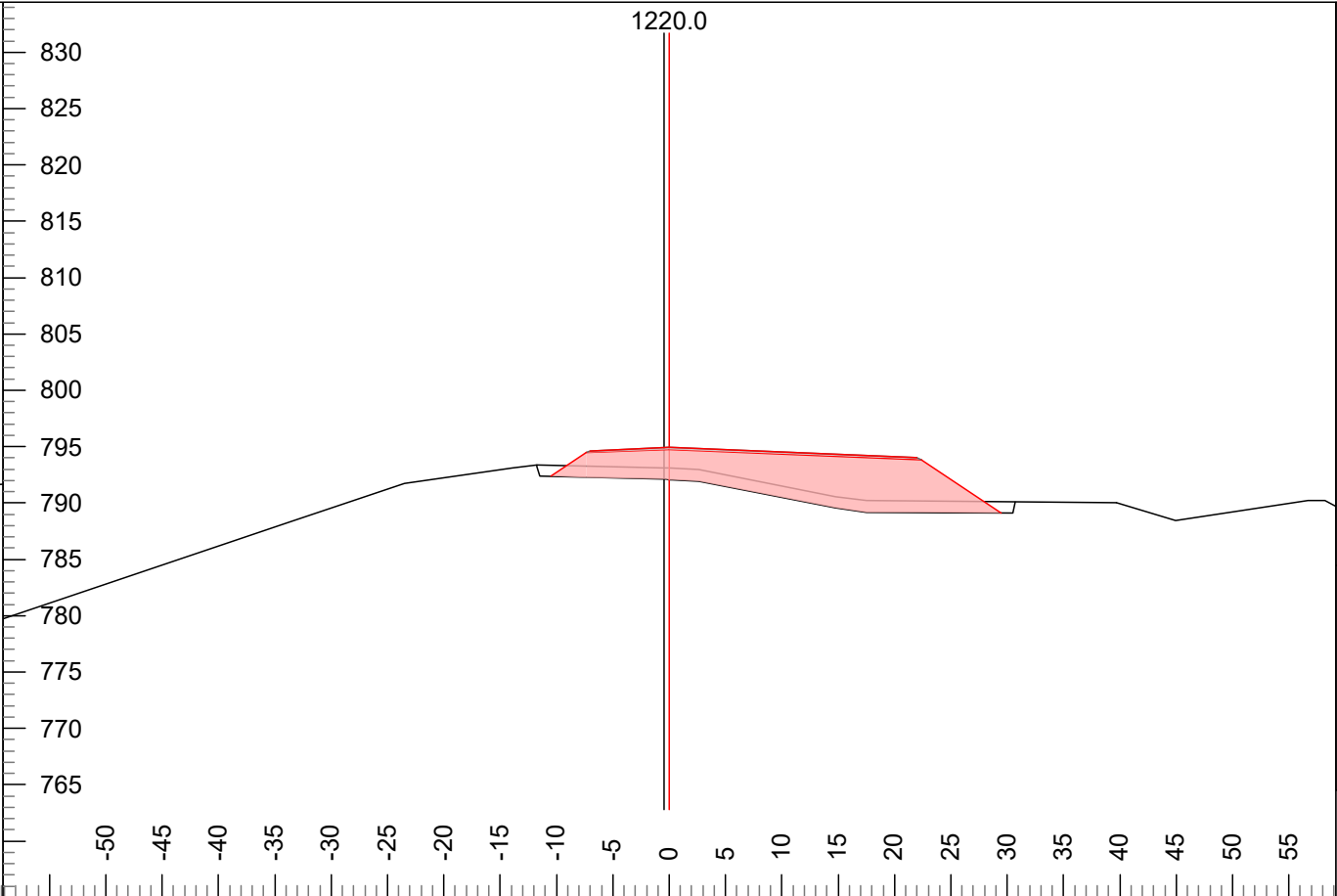
Created By:
M. Kawakami



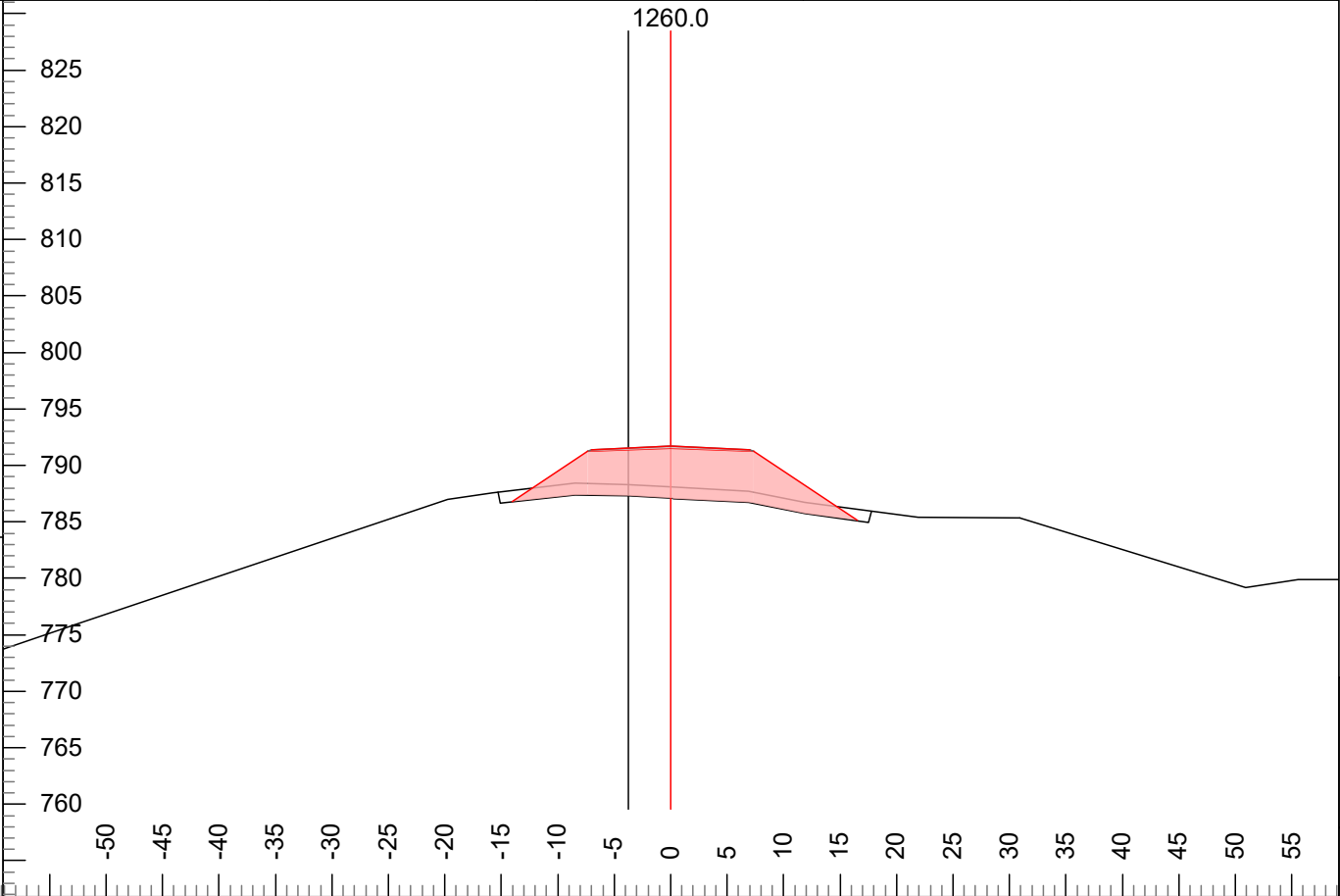
L-Stn :	1203.7	Cut Dp:	-1.4	CL X:	10100.3	Clr L X:	-9.4	CL Elev:	796.5
P-Stn :	1323.5	H. Offset:	-0.9	CL Y:	9364.6	Clr R X:	29.0	Gnd Elev:	795.1



L-Stn :	1240.0	Cut Dp:	-2.3	CL X:	10098.6	Clr L X:	-11.8	CL Elev:	792.9
P-Stn :	1359.7	H. Offset:	2.1	CL Y:	9328.3	Clr R X:	25.6	Gnd Elev:	790.6



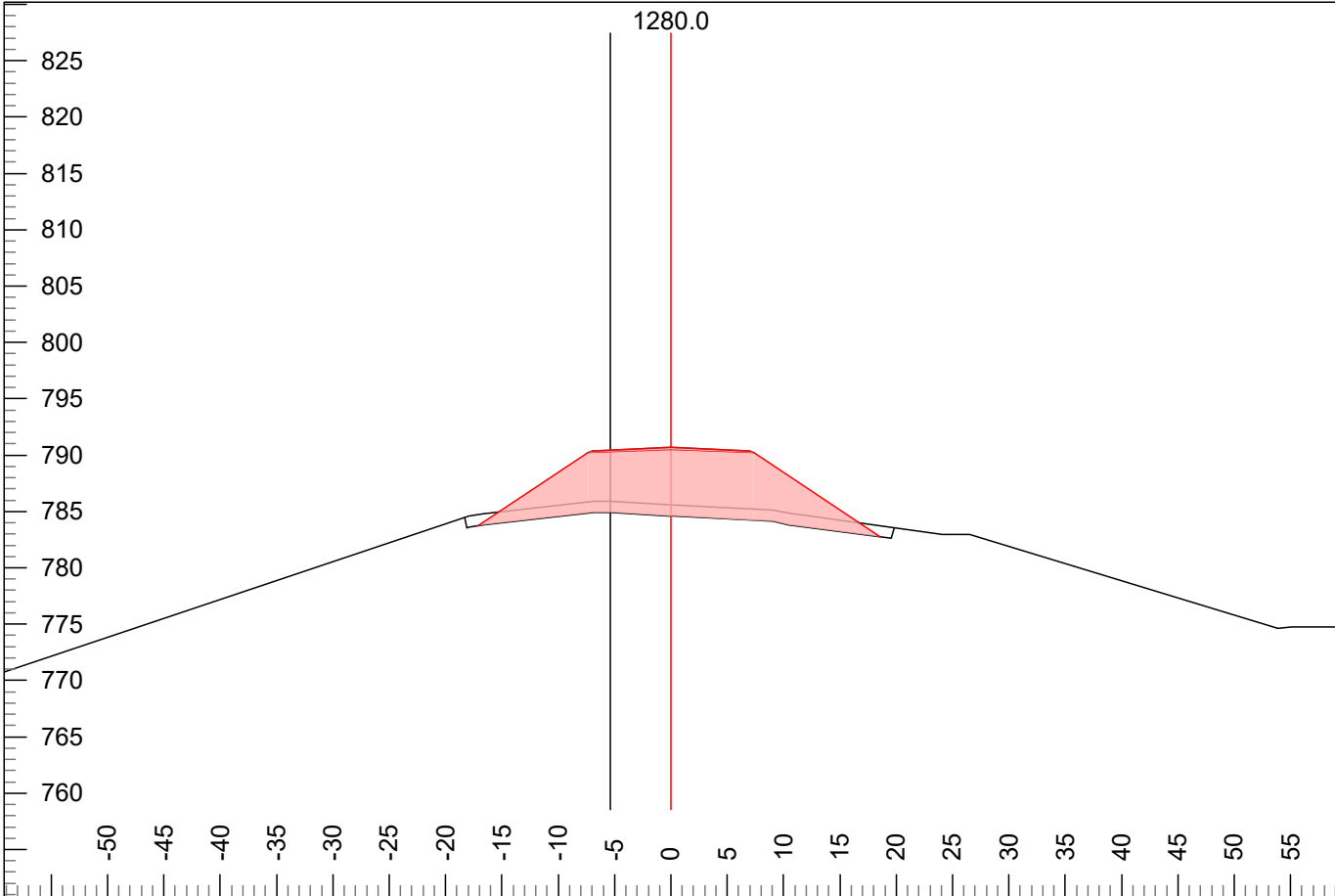
L-Stn :	1220.0	Cut Dp:	-1.7	CL X:	10099.5	Clr L X:	-10.5	CL Elev:	794.7
P-Stn :	1339.8	H. Offset:	0.5	CL Y:	9348.3	Clr R X:	29.5	Gnd Elev:	793.1



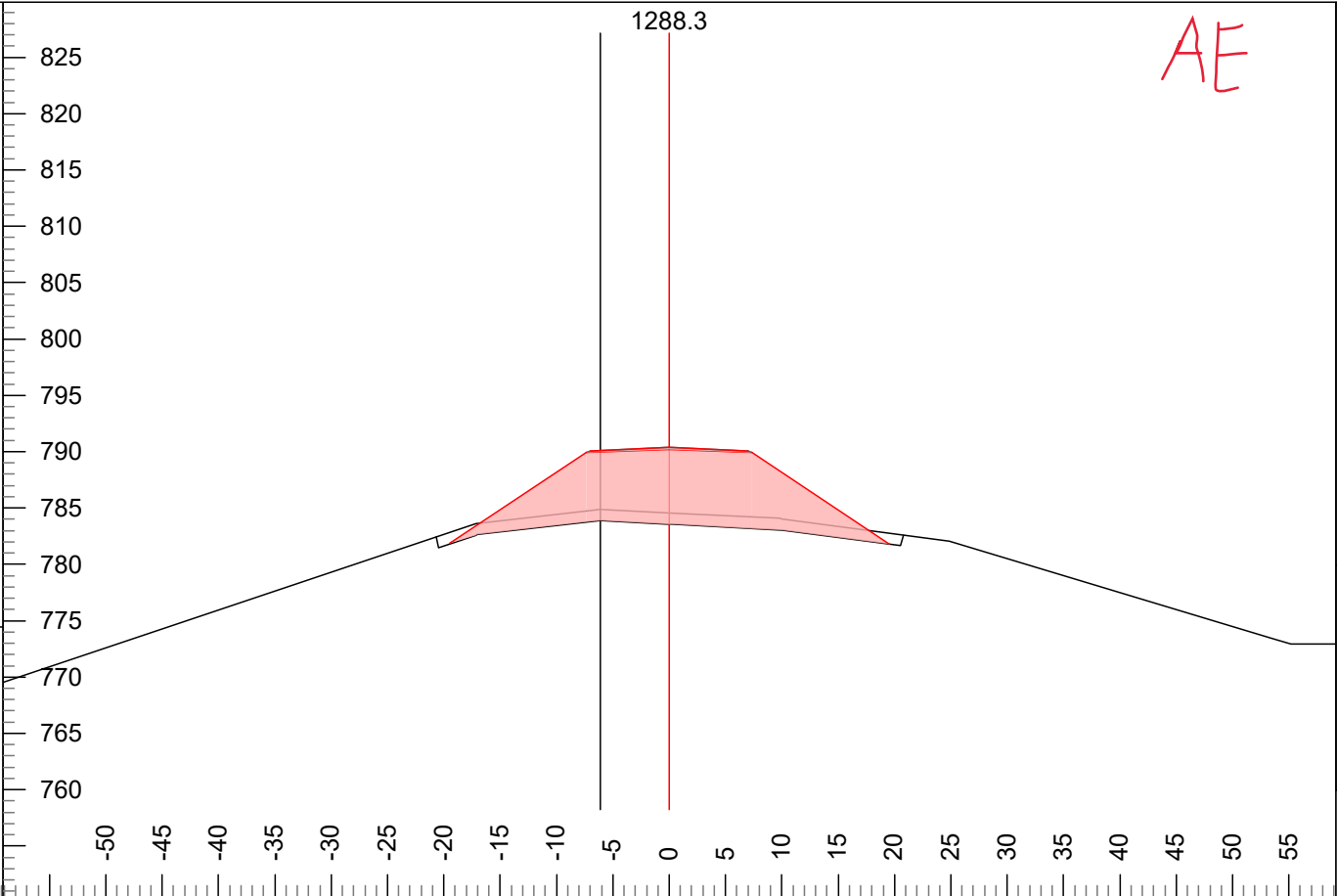
L-Stn :	1260.0	Cut Dp:	-3.4	CL X:	10097.6	Clr L X:	-14.1	CL Elev:	791.5
P-Stn :	1379.6	H. Offset:	3.7	CL Y:	9308.3	Clr R X:	16.5	Gnd Elev:	788.1

Bark
Beetle
Bailey

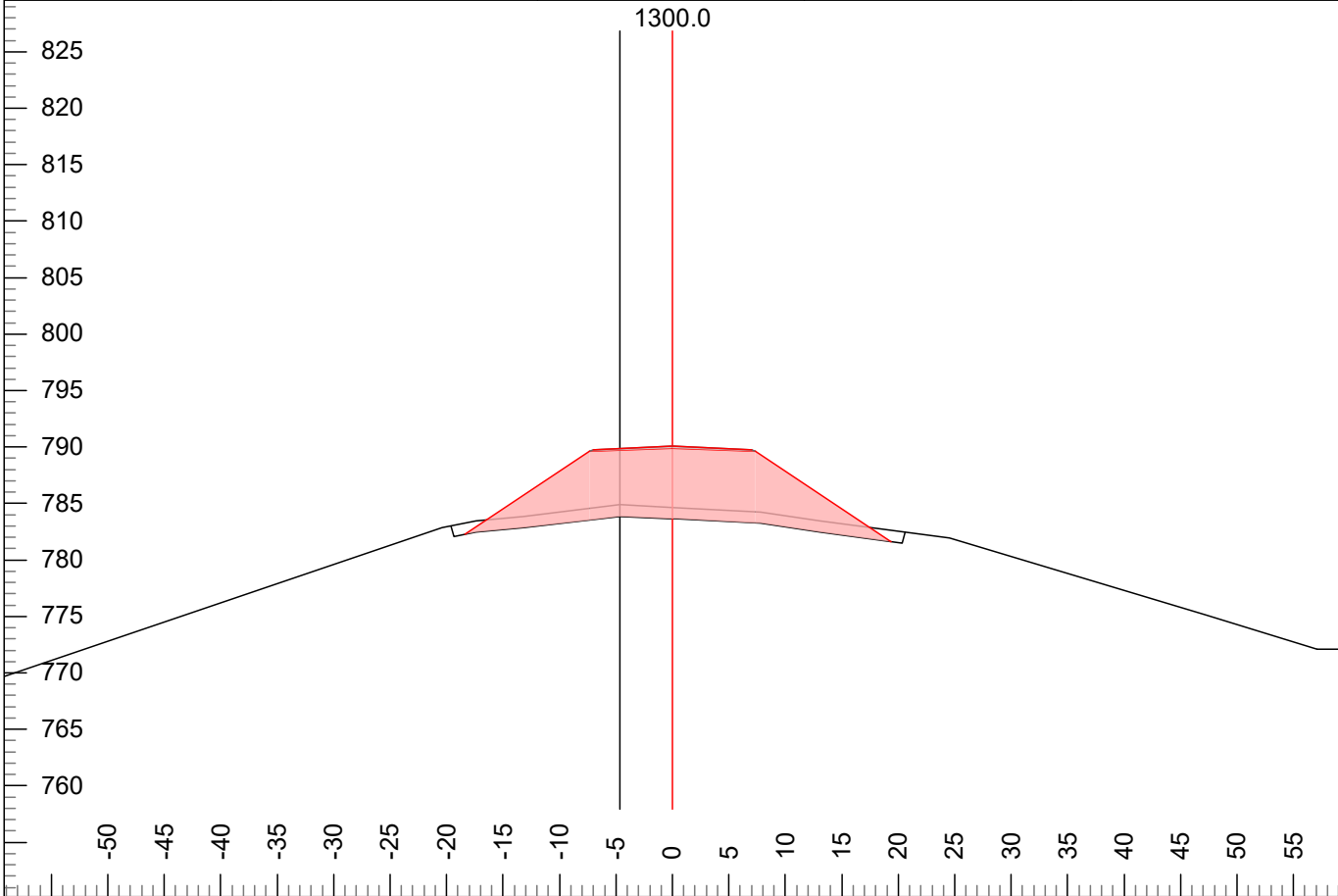
Created By:
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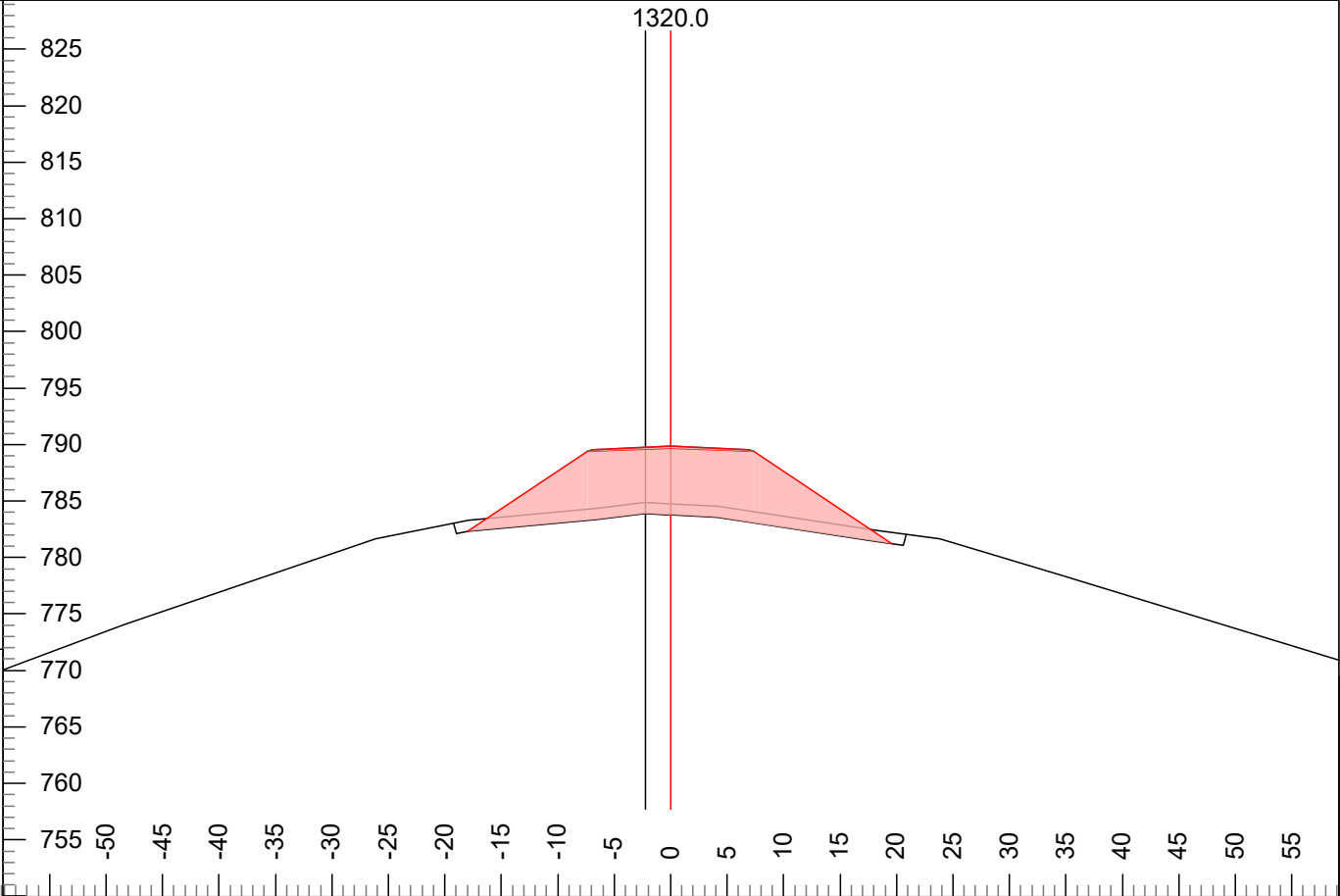
L-Stn :	1280.0	Cut Dp:	-4.9	CL X:	10096.7	Clr L X:	-17.1	CL Elev:	790.5
P-Stn :	1399.6	H. Offset:	5.4	CL Y:	9288.3	Clr R X:	18.6	Gnd Elev:	785.6



L-Stn :	1288.3	Cut Dp:	-5.6	CL X:	10096.3	Clr L X:	-19.5	CL Elev:	790.2
P-Stn :	1408.5	H. Offset:	6.1	CL Y:	9280.1	Clr R X:	19.6	Gnd Elev:	784.6



L-Stn :	1300.0	Cut Dp:	-5.2	CL X:	10095.5	Clr L X:	-18.4	CL Elev:	789.9
P-Stn :	1420.8	H. Offset:	4.6	CL Y:	9268.4	Clr R X:	19.3	Gnd Elev:	784.6



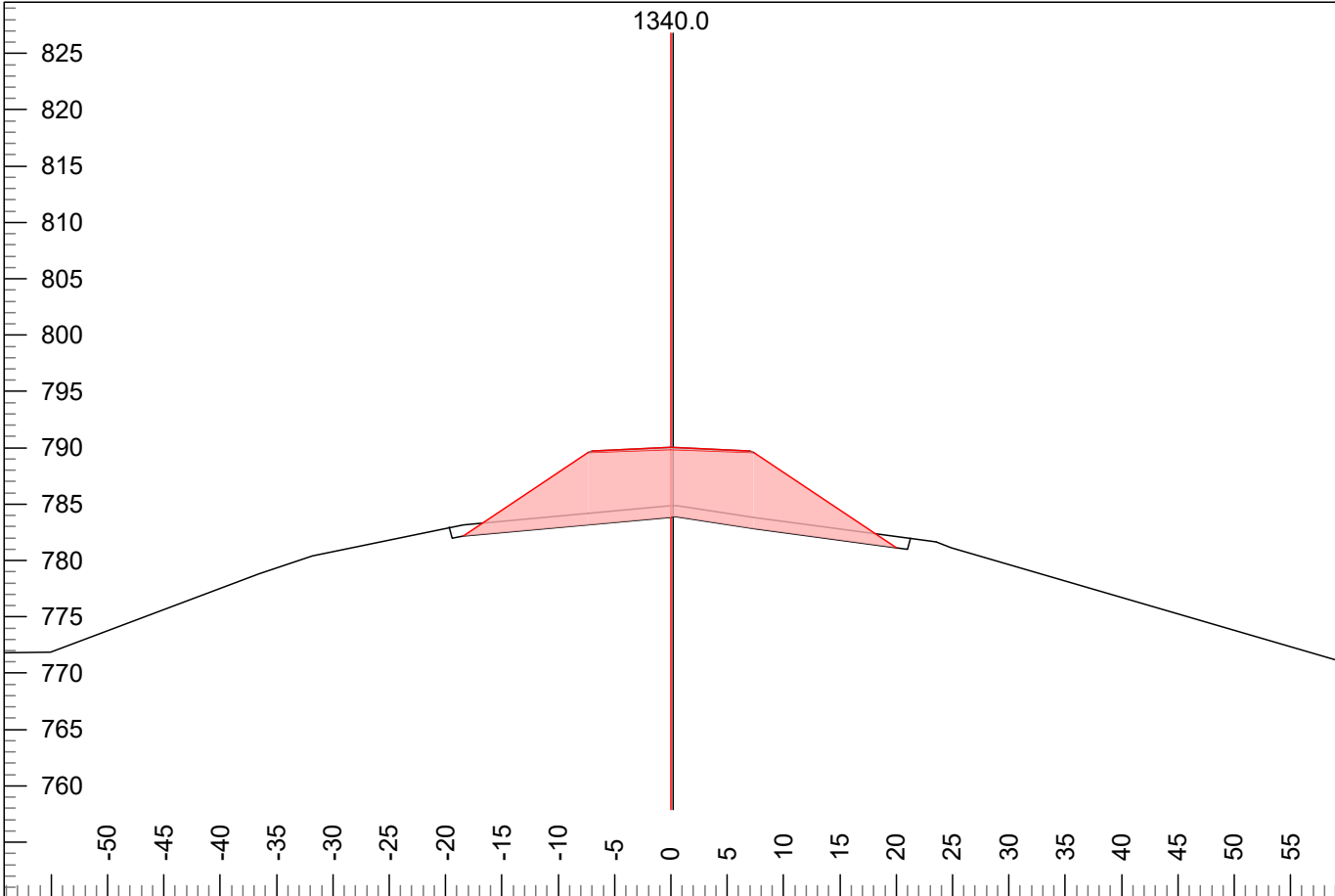
L-Stn :	1320.0	Cut Dp:	-4.9	CL X:	10094.1	Clr L X:	-18.0	CL Elev:	789.7
P-Stn :	1440.7	H. Offset:	2.2	CL Y:	9248.4	Clr R X:	19.6	Gnd Elev:	784.8

AE

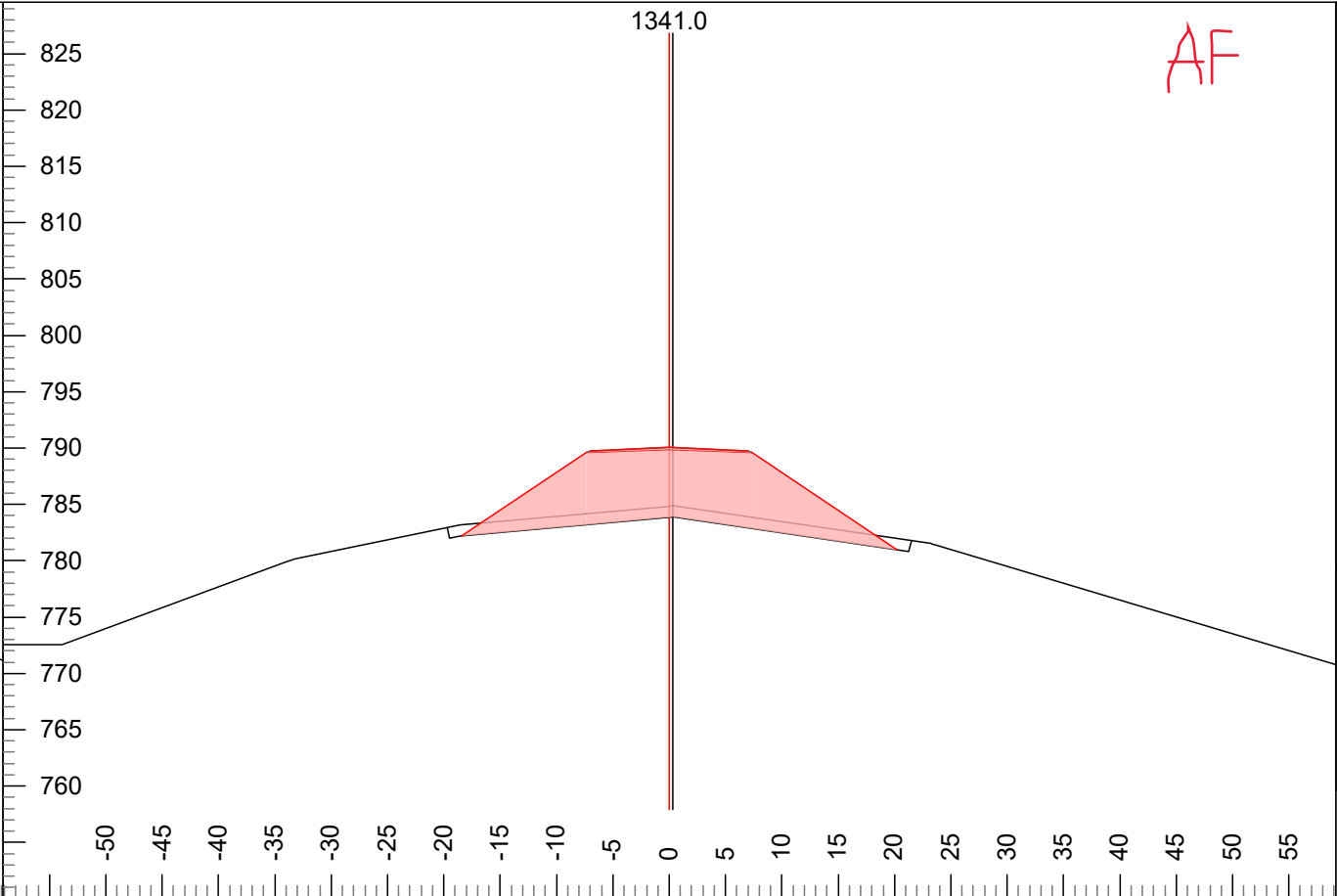
Bark
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Bailey

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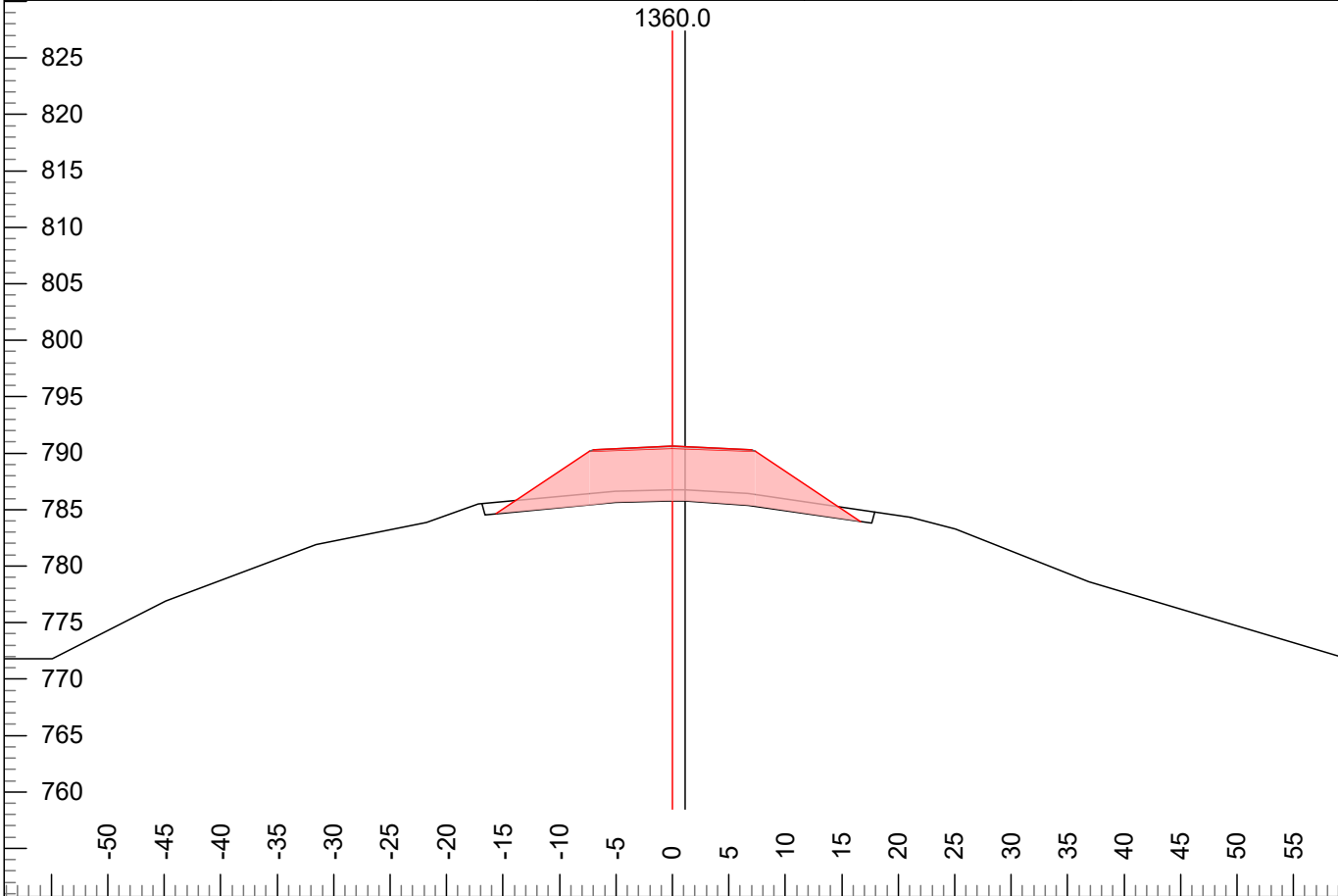
23/11/08



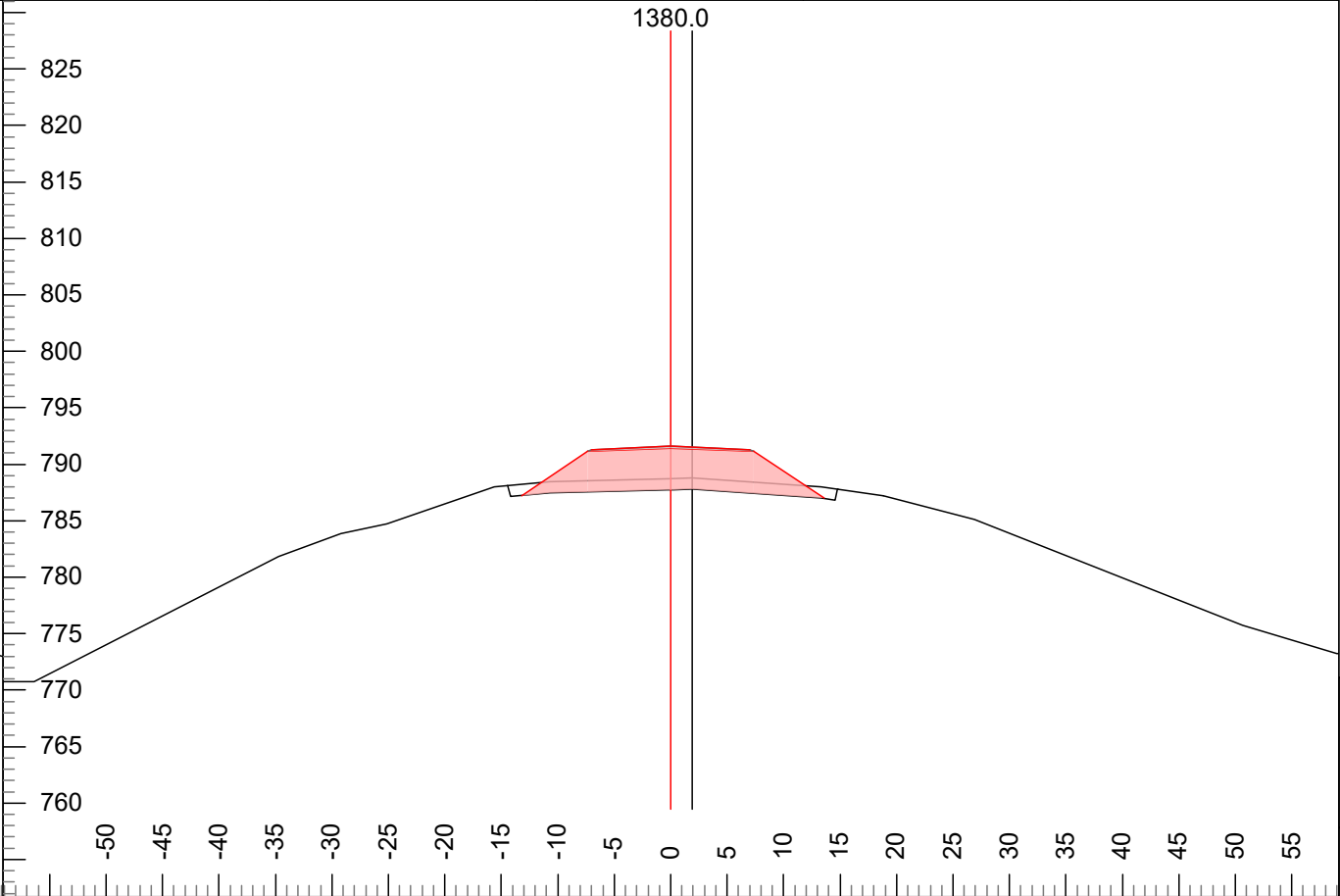
L-Stn :	1340.0	Cut Dp:	-5.0	CL X:	10092.7	Clr L X:	-18.4	CL Elev:	789.8
P-Stn :	1460.5	H. Offset:	-0.2	CL Y:	9228.5	Clr R X:	20.0	Gnd Elev:	784.8



L-Stn :	1341.0	Cut Dp:	-5.0	CL X:	10092.6	Clr L X:	-18.5	CL Elev:	789.9
P-Stn :	1461.5	H. Offset:	-0.3	CL Y:	9227.5	Clr R X:	20.3	Gnd Elev:	784.8



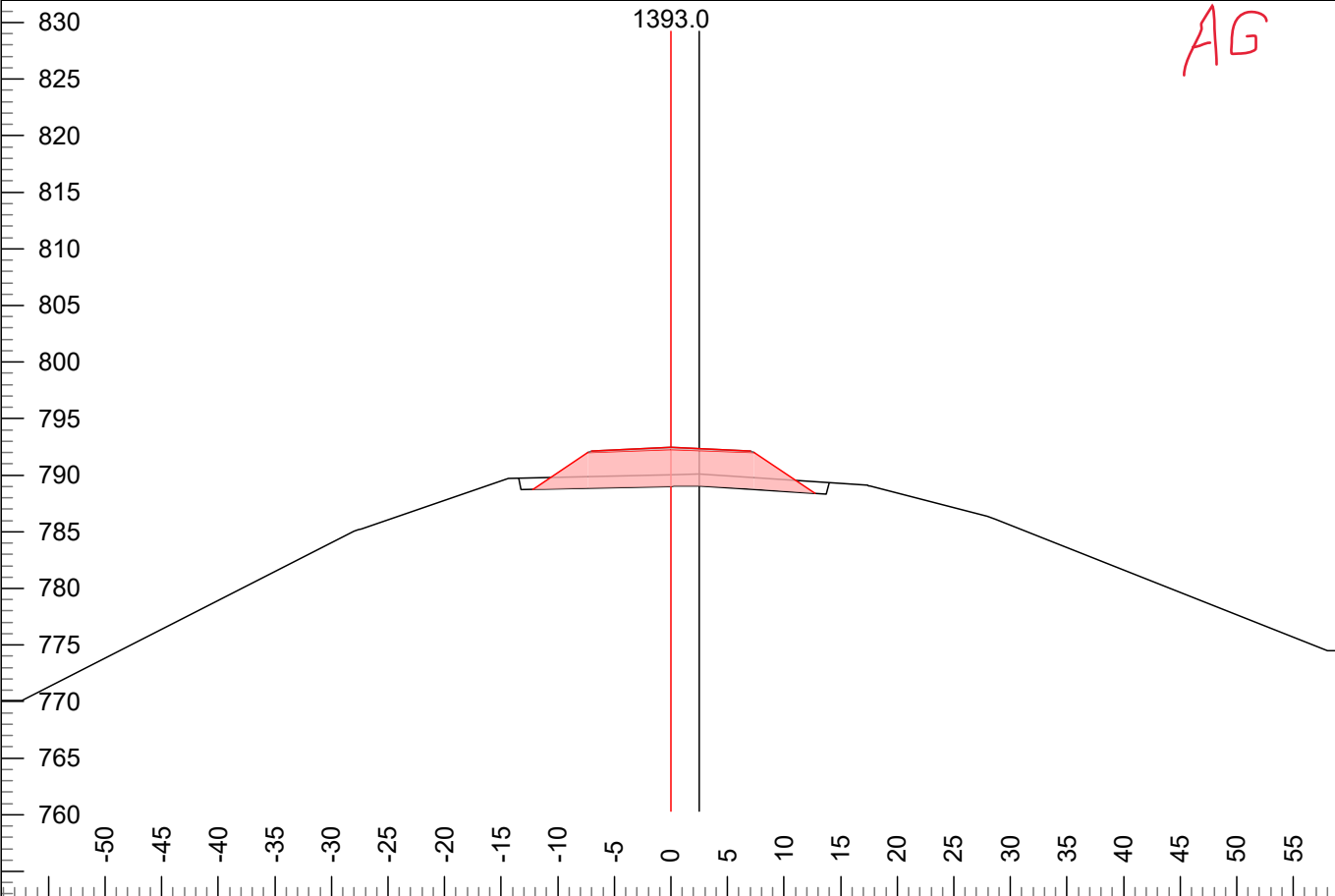
L-Stn :	1360.0	Cut Dp:	-3.7	CL X:	10089.4	Clr L X:	-15.6	CL Elev:	790.4
P-Stn :	1480.5	H. Offset:	-1.1	CL Y:	9208.8	Clr R X:	16.6	Gnd Elev:	786.7



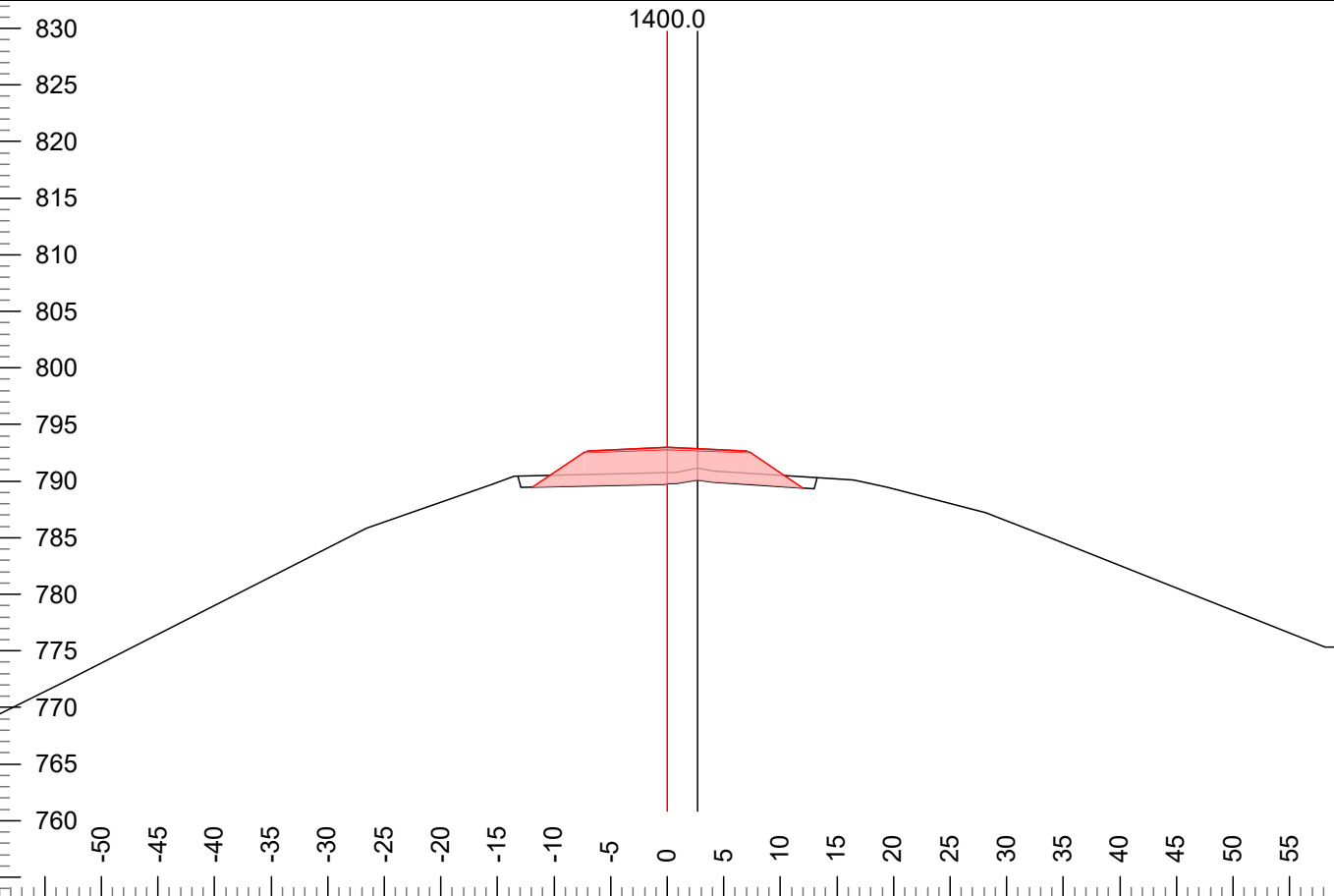
L-Stn :	1380.0	Cut Dp:	-2.7	CL X:	10086.1	Clr L X:	-13.2	CL Elev:	791.4
P-Stn :	1500.5	H. Offset:	-1.9	CL Y:	9189.0	Clr R X:	13.6	Gnd Elev:	788.7

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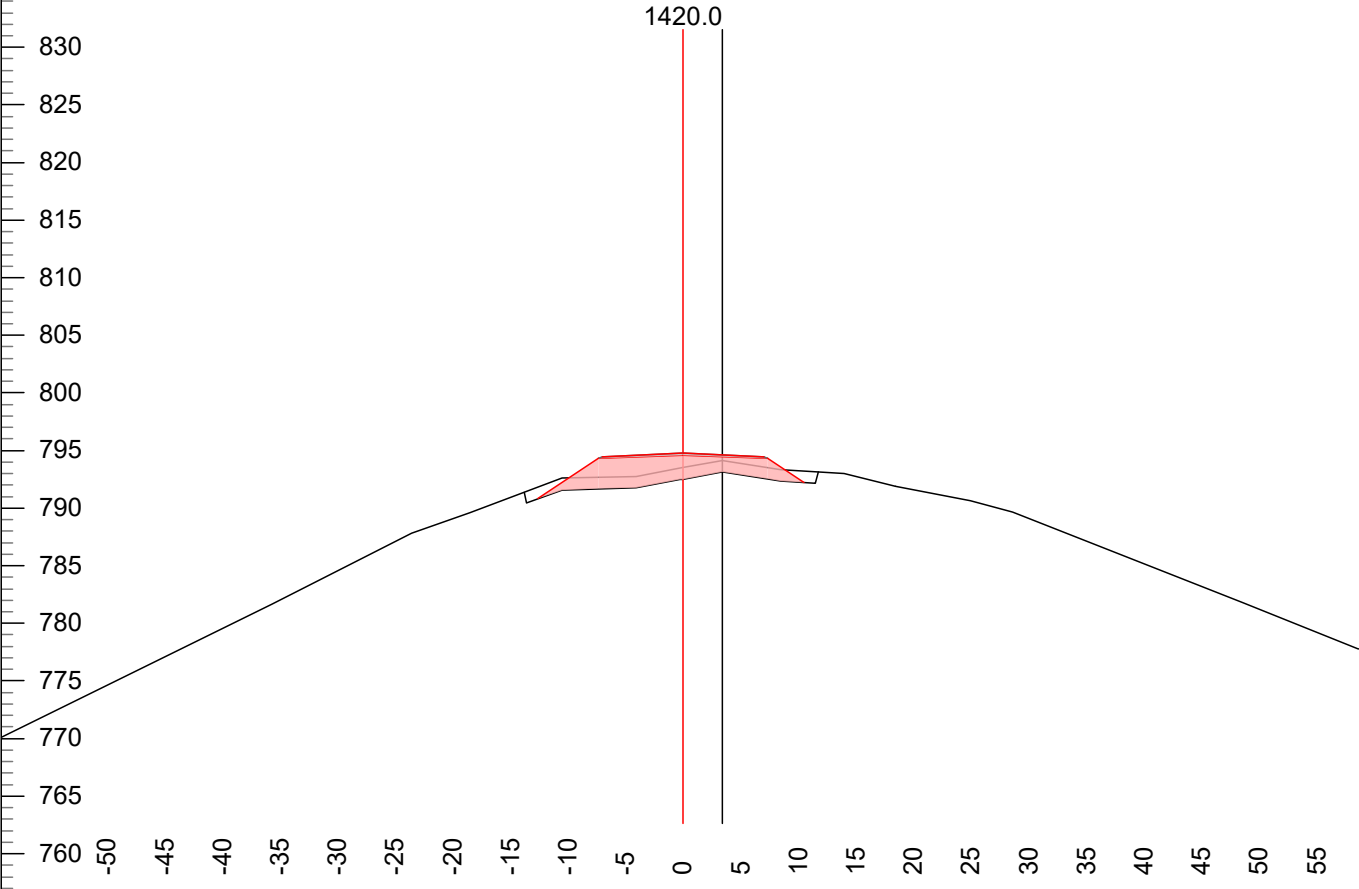
L-Stn :	1393.0	Cut Dp:	-2.2	CL X:	10083.9	Clr L X:	-12.2	CL Elev:	792.3
P-Stn :	1513.5	H. Offset:	-2.5	CL Y:	9176.2	Clr R X:	12.7	Gnd Elev:	790.0



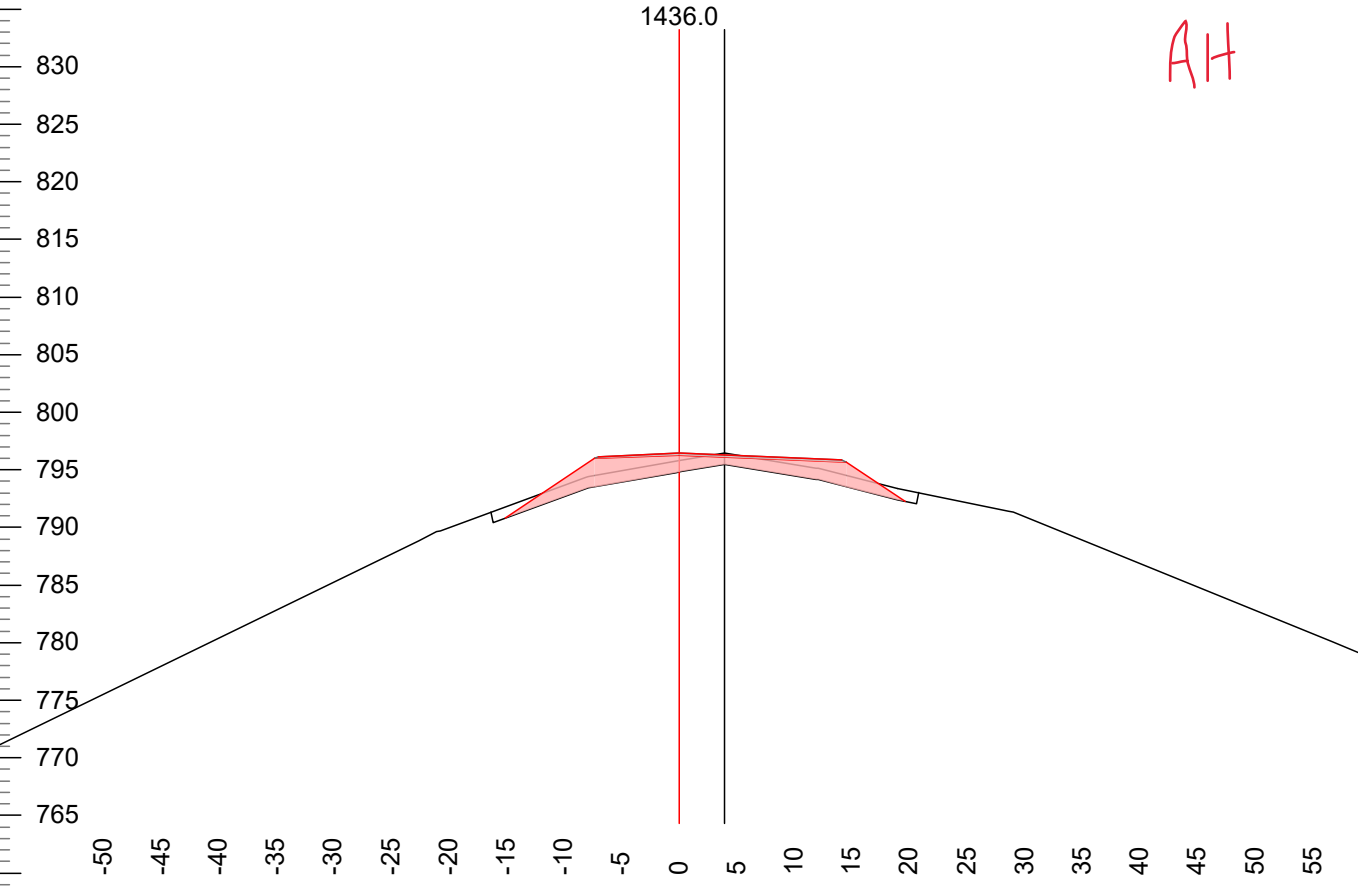
L-Stn :	1400.0	Cut Dp:	-2.0	CL X:	10082.7	Clr L X:	-11.9	CL Elev:	792.8
P-Stn :	1520.5	H. Offset:	-2.7	CL Y:	9169.3	Clr R X:	12.0	Gnd Elev:	790.8

Bark
Beetle
Bailey

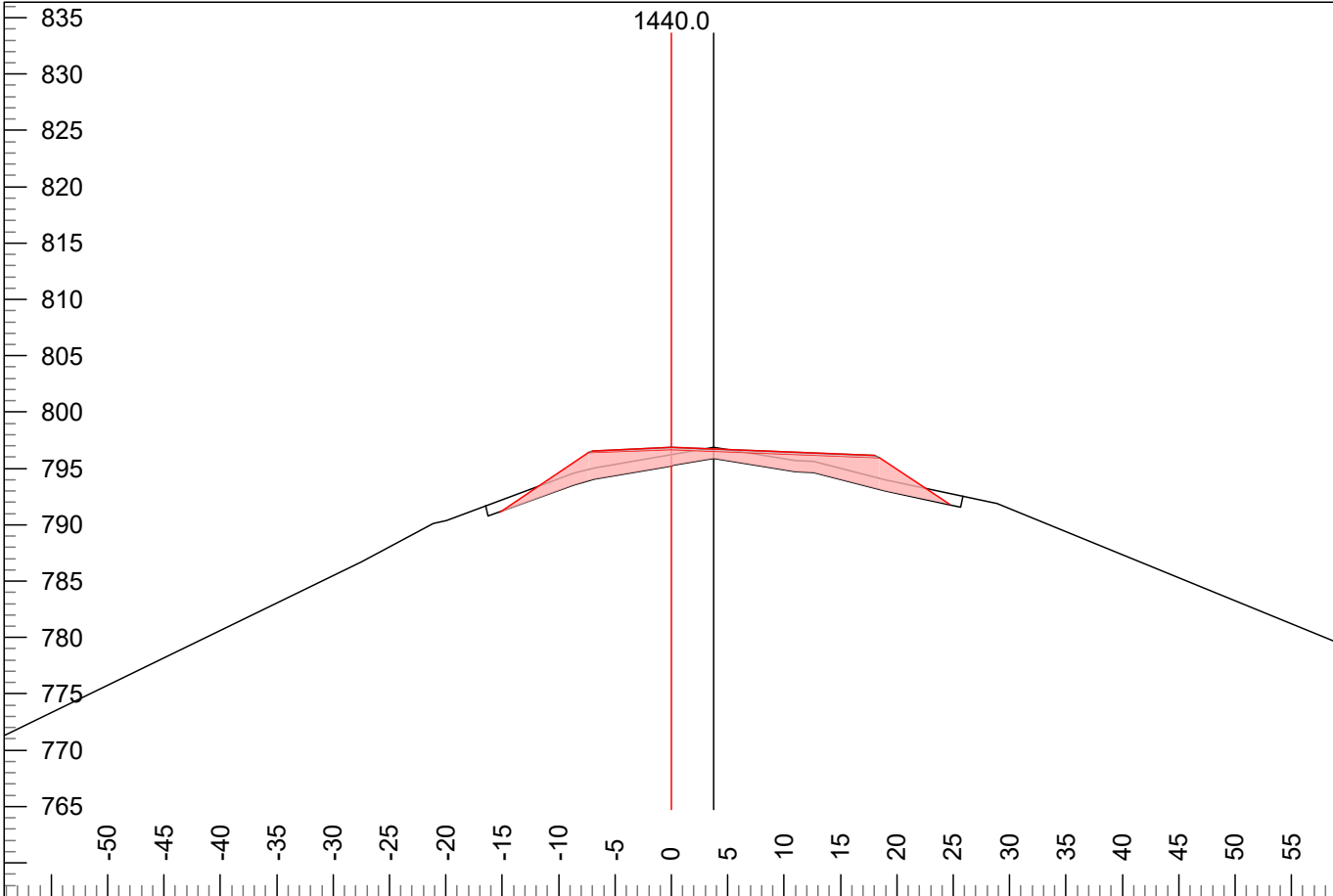
Created By:
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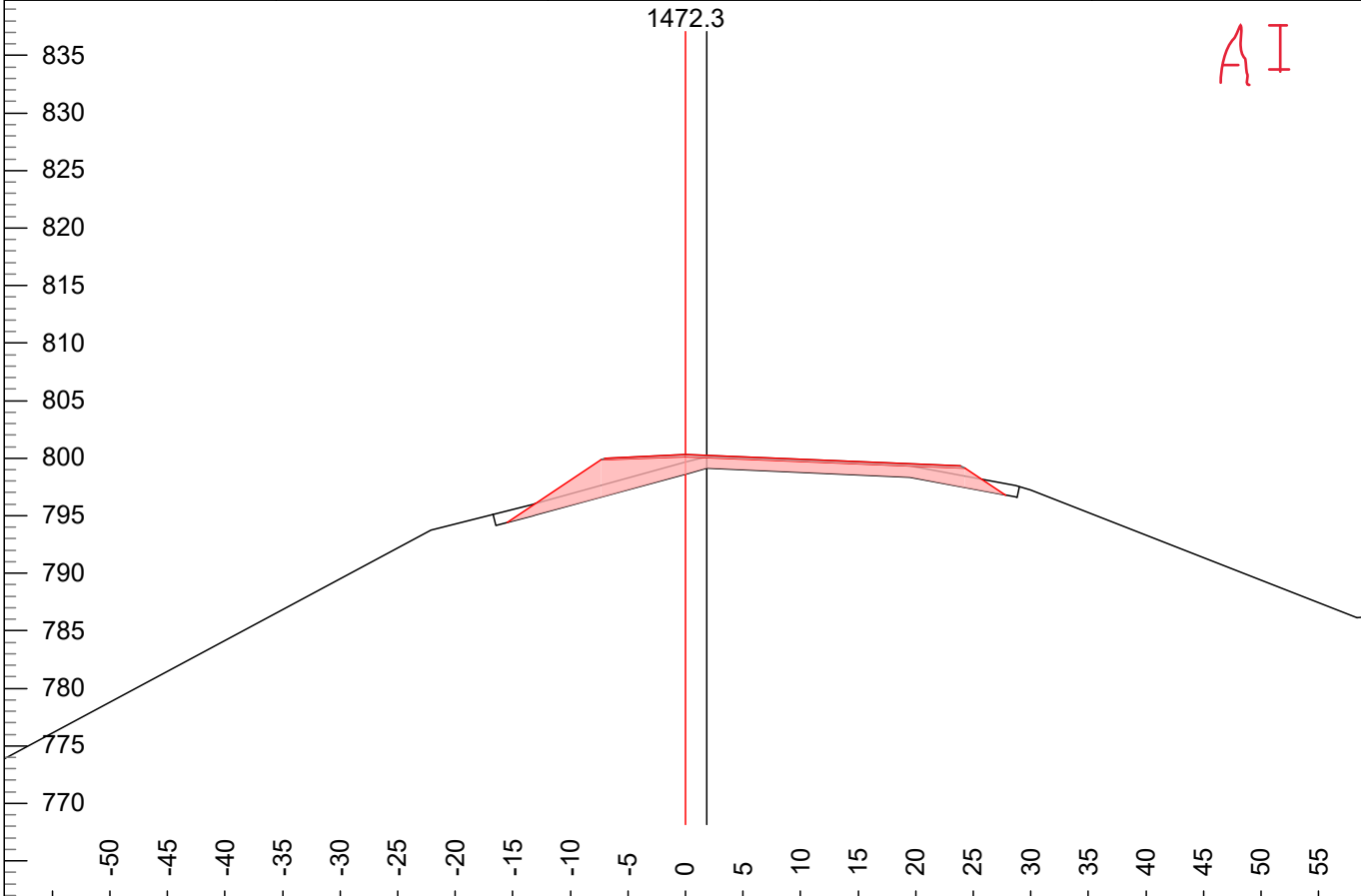
L-Stn :	1420.0	Cut Dp:	-1.1	CL X:	10079.2	Clr L X:	-12.6	CL Elev:	794.6
P-Stn :	1540.5	H. Offset:	-3.4	CL Y:	9149.6	Clr R X:	10.5	Gnd Elev:	793.5



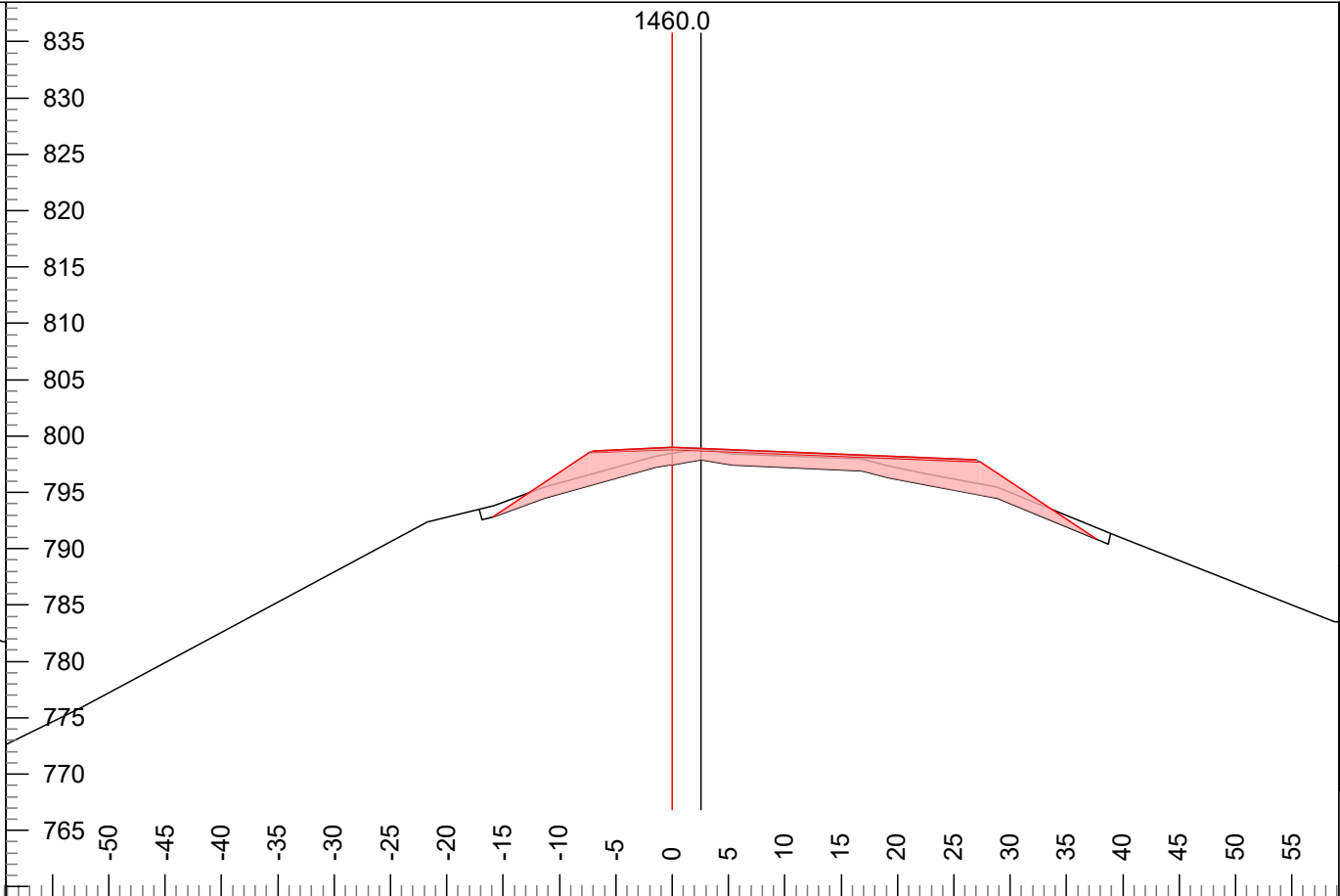
L-Stn :	1436.0	Cut Dp:	-0.5	CL X:	10076.4	Clr L X:	-15.1	CL Elev:	796.3
P-Stn :	1556.5	H. Offset:	-4.0	CL Y:	9133.8	Clr R X:	19.6	Gnd Elev:	795.8



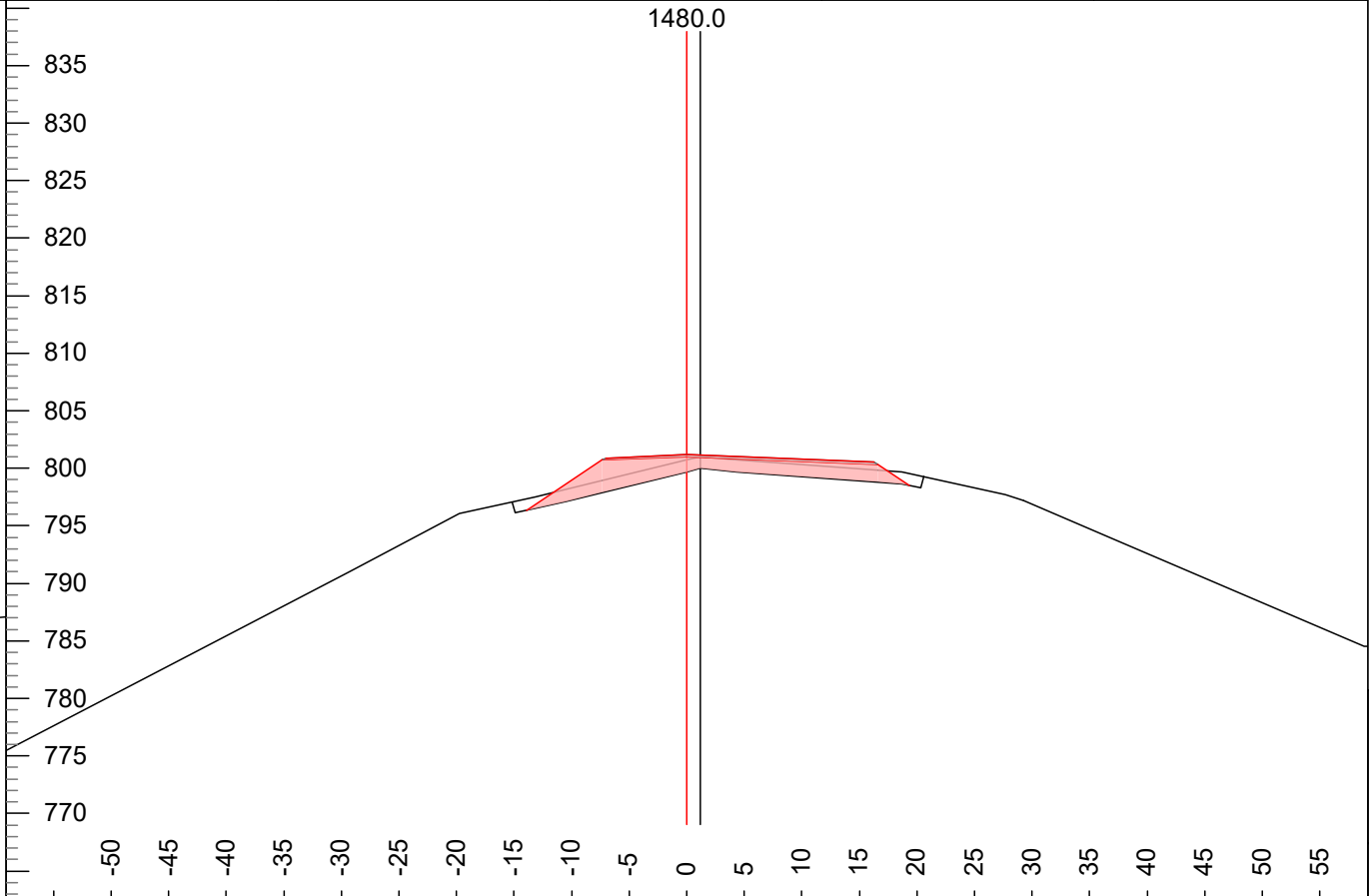
L-Stn :	1440.0	Cut Dp:	-0.4	CL X:	10075.3	Clr L X:	-15.2	CL Elev:	796.7
P-Stn :	1560.5	H. Offset:	-3.7	CL Y:	9130.0	Clr R X:	24.6	Gnd Elev:	796.2



L-Stn :	1472.3	Cut Dp:	-0.5	CL X:	10066.8	Clr L X:	-15.5	CL Elev:	800.1
P-Stn :	1592.5	H. Offset:	-1.8	CL Y:	9098.9	Clr R X:	27.8	Gnd Elev:	799.6



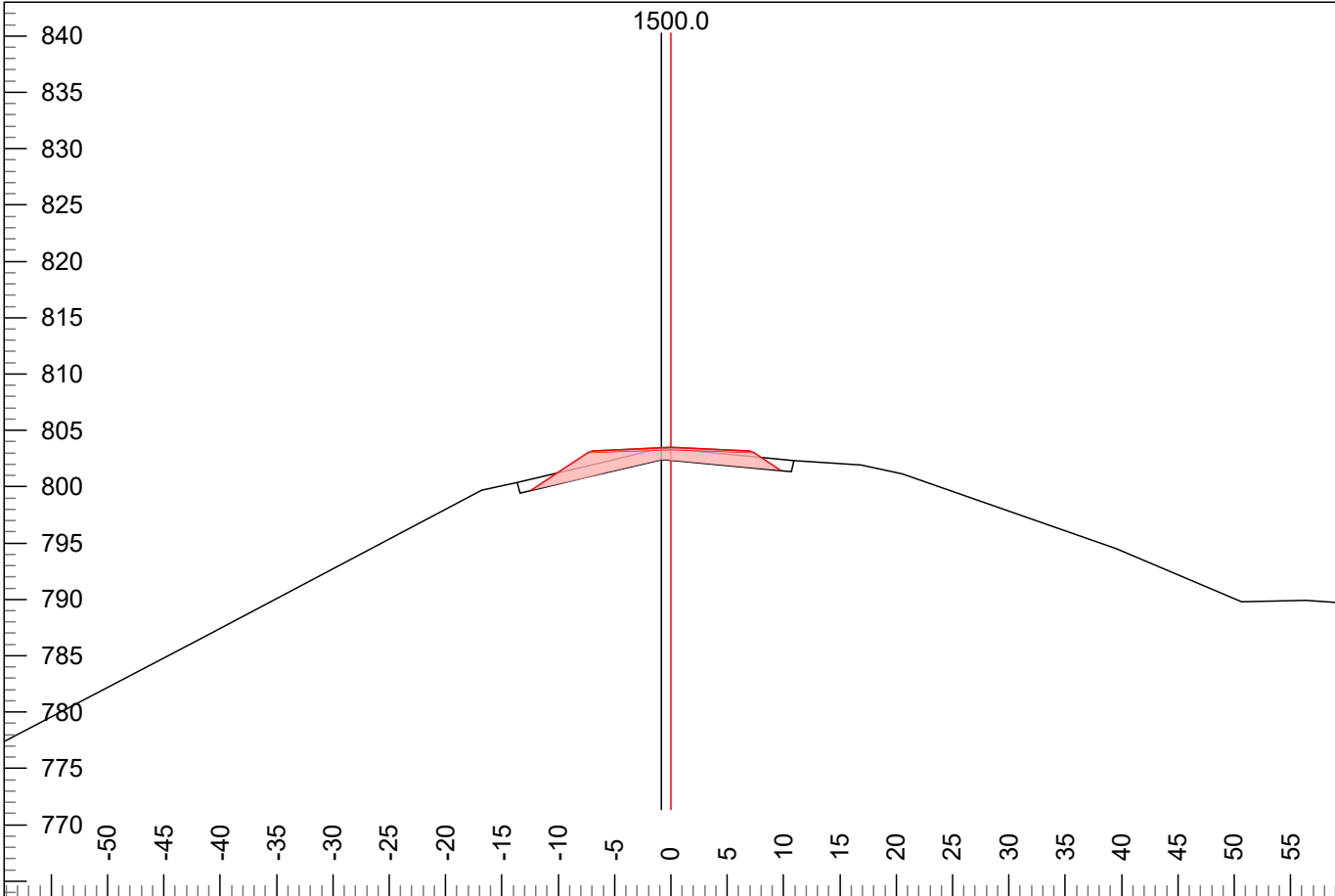
L-Stn :	1460.0	Cut Dp:	-0.4	CL X:	10070.0	Clr L X:	-15.9	CL Elev:	798.8
P-Stn :	1580.4	H. Offset:	-2.5	CL Y:	9110.7	Clr R X:	37.7	Gnd Elev:	798.5



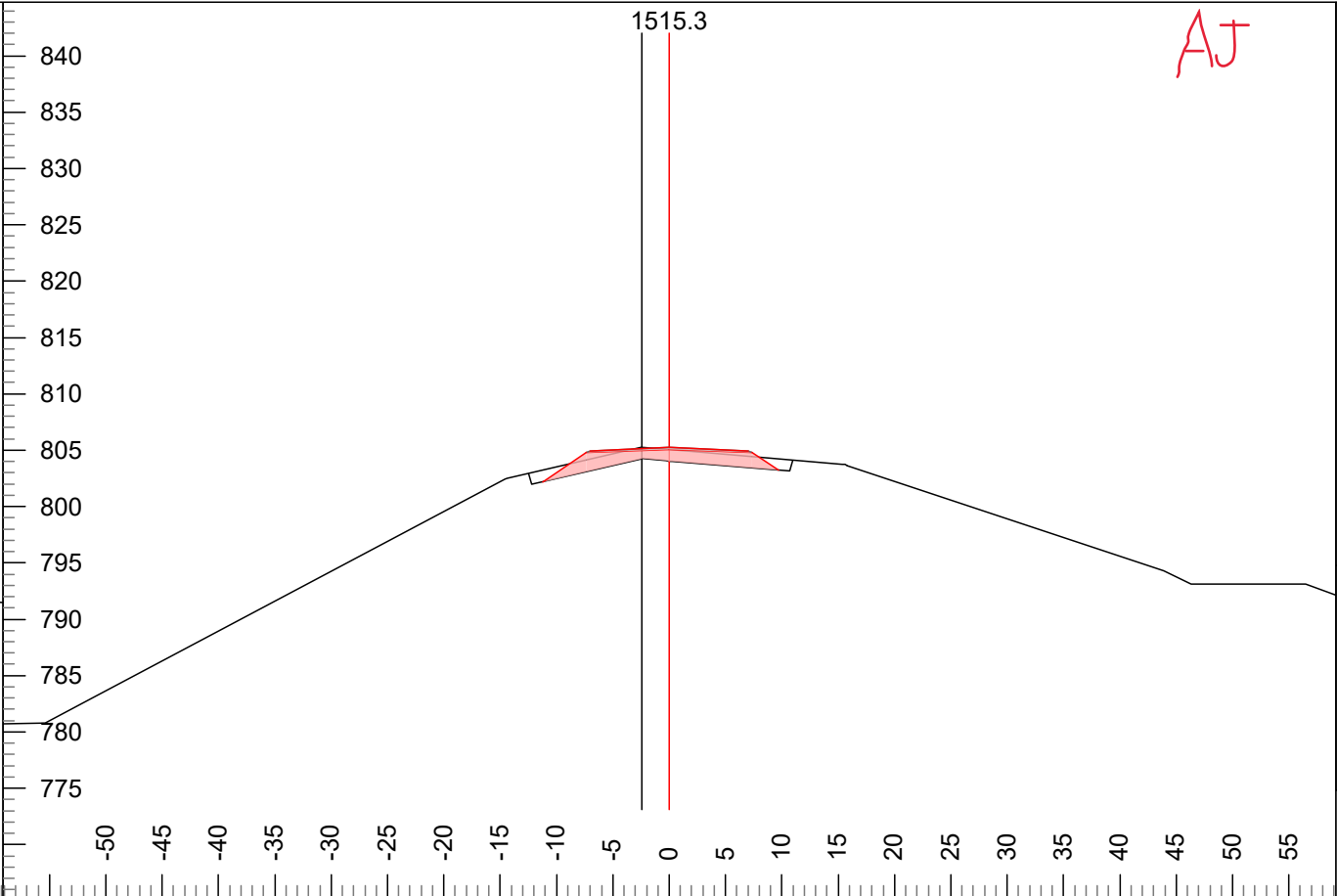
L-Stn :	1480.0	Cut Dp:	-0.3	CL X:	10063.1	Clr L X:	-13.9	CL Elev:	801.0
P-Stn :	1600.0	H. Offset:	-1.2	CL Y:	9092.1	Clr R X:	19.3	Gnd Elev:	800.7

Bark
Beetle
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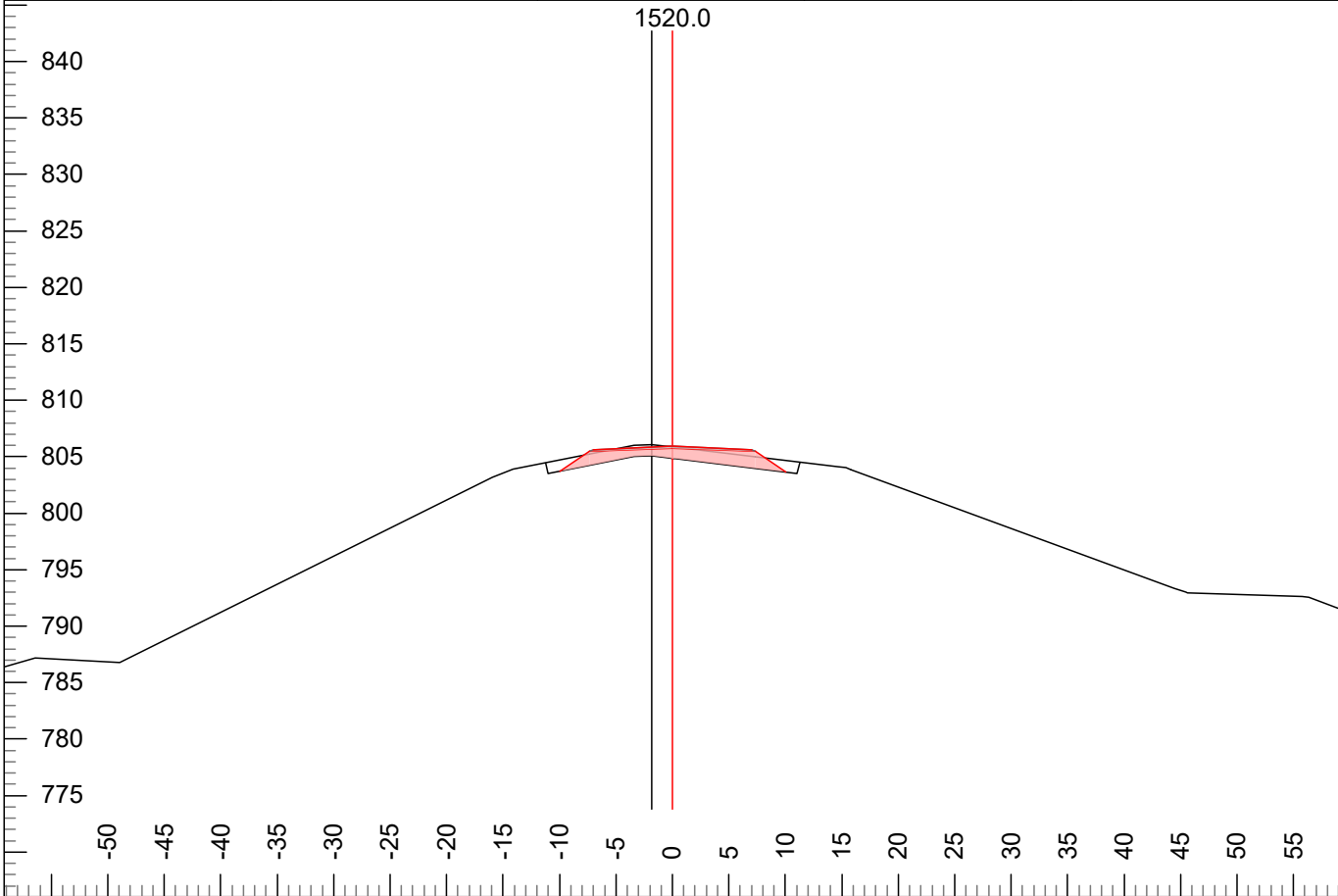
Created By:
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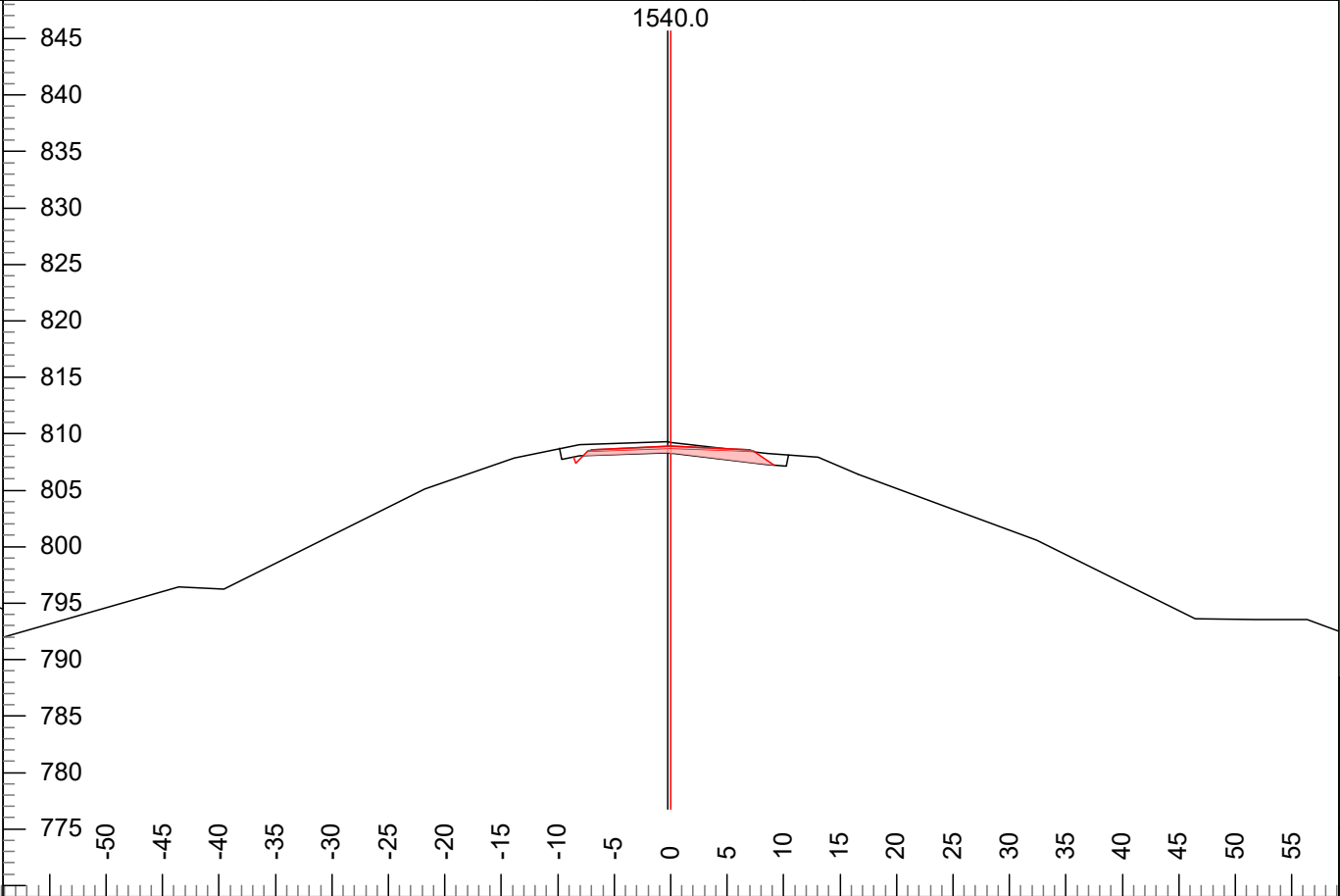
L-Stn :	1500.0	Cut Dp:	0.0	CL X:	10053.1	Clr L X:	-12.4	CL Elev:	803.3
P-Stn :	1619.9	H. Offset:	0.8	CL Y:	9074.8	Clr R X:	9.7	Gnd Elev:	803.3



L-Stn :	1515.3	Cut Dp:	0.0	CL X:	10045.6	Clr L X:	-11.2	CL Elev:	805.1
P-Stn :	1635.5	H. Offset:	2.4	CL Y:	9061.5	Clr R X:	9.7	Gnd Elev:	805.0



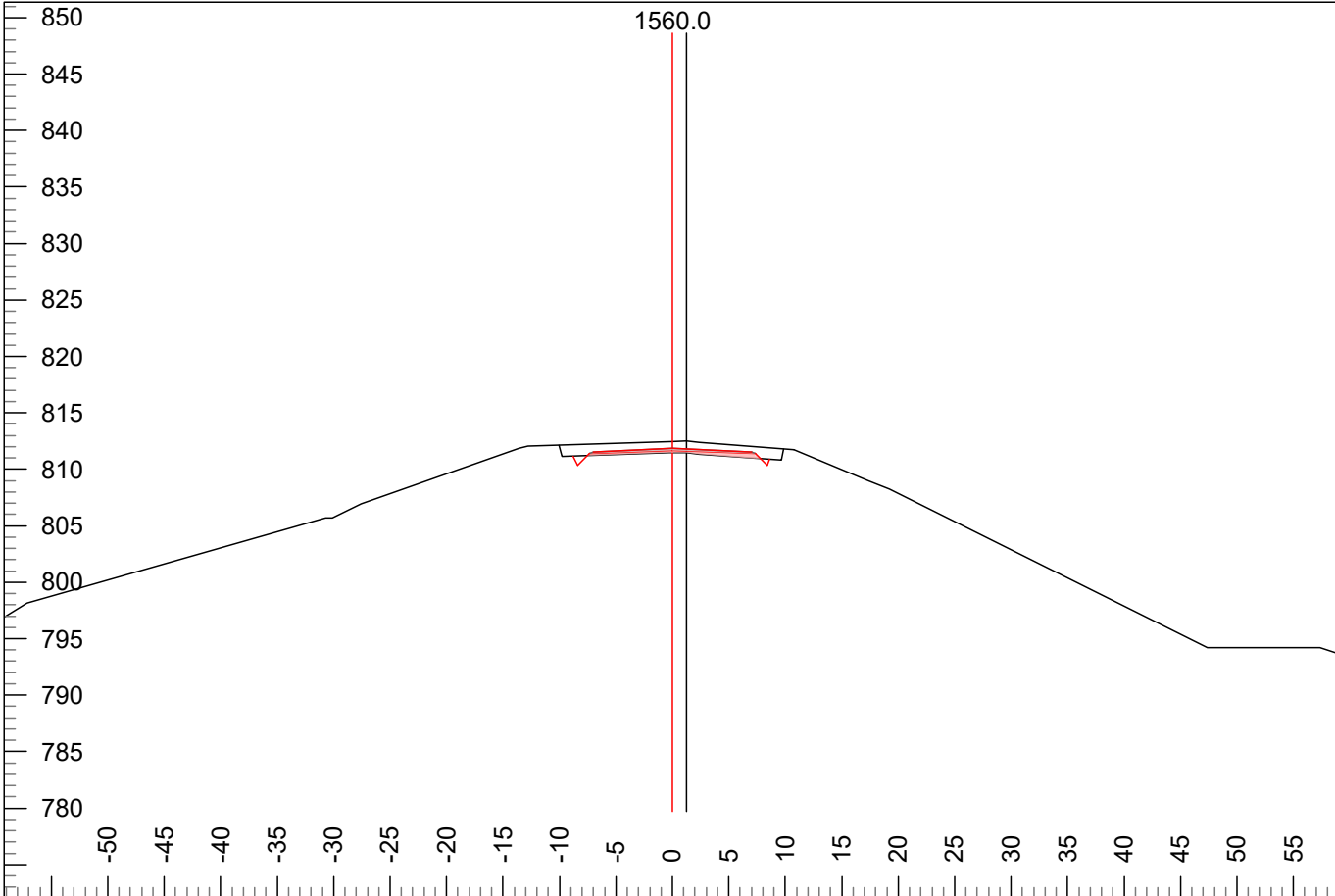
L-Stn :	1520.0	Cut Dp:	0.1	CL X:	10042.6	Clr L X:	-10.0	CL Elev:	805.7
P-Stn :	1640.6	H. Offset:	1.8	CL Y:	9057.8	Clr R X:	10.1	Gnd Elev:	805.9



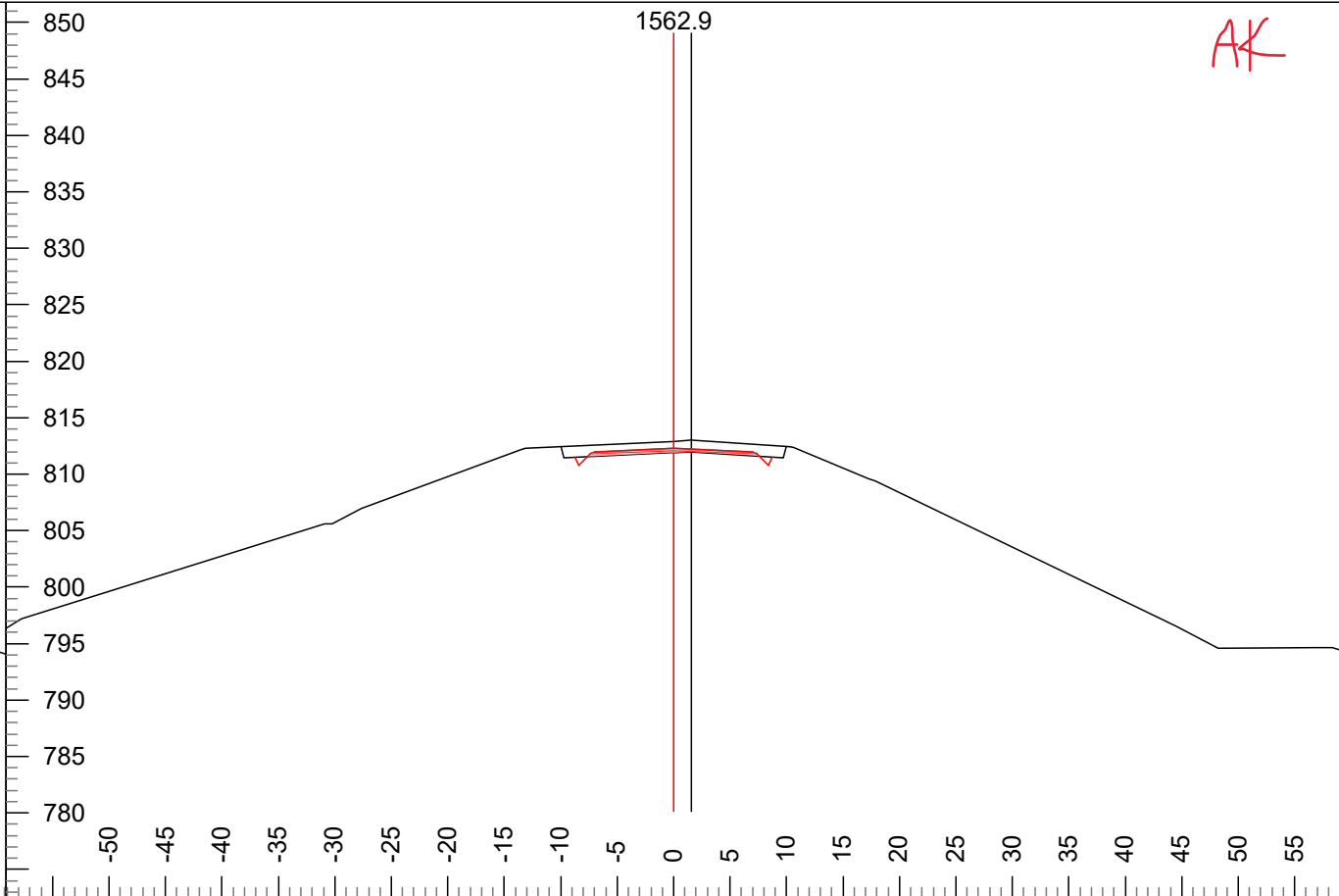
L-Stn :	1540.0	Cut Dp:	0.5	CL X:	10029.6	Clr L X:	-8.6	CL Elev:	808.7
P-Stn :	1660.6	H. Offset:	0.3	CL Y:	9042.6	Clr R X:	9.2	Gnd Elev:	809.3

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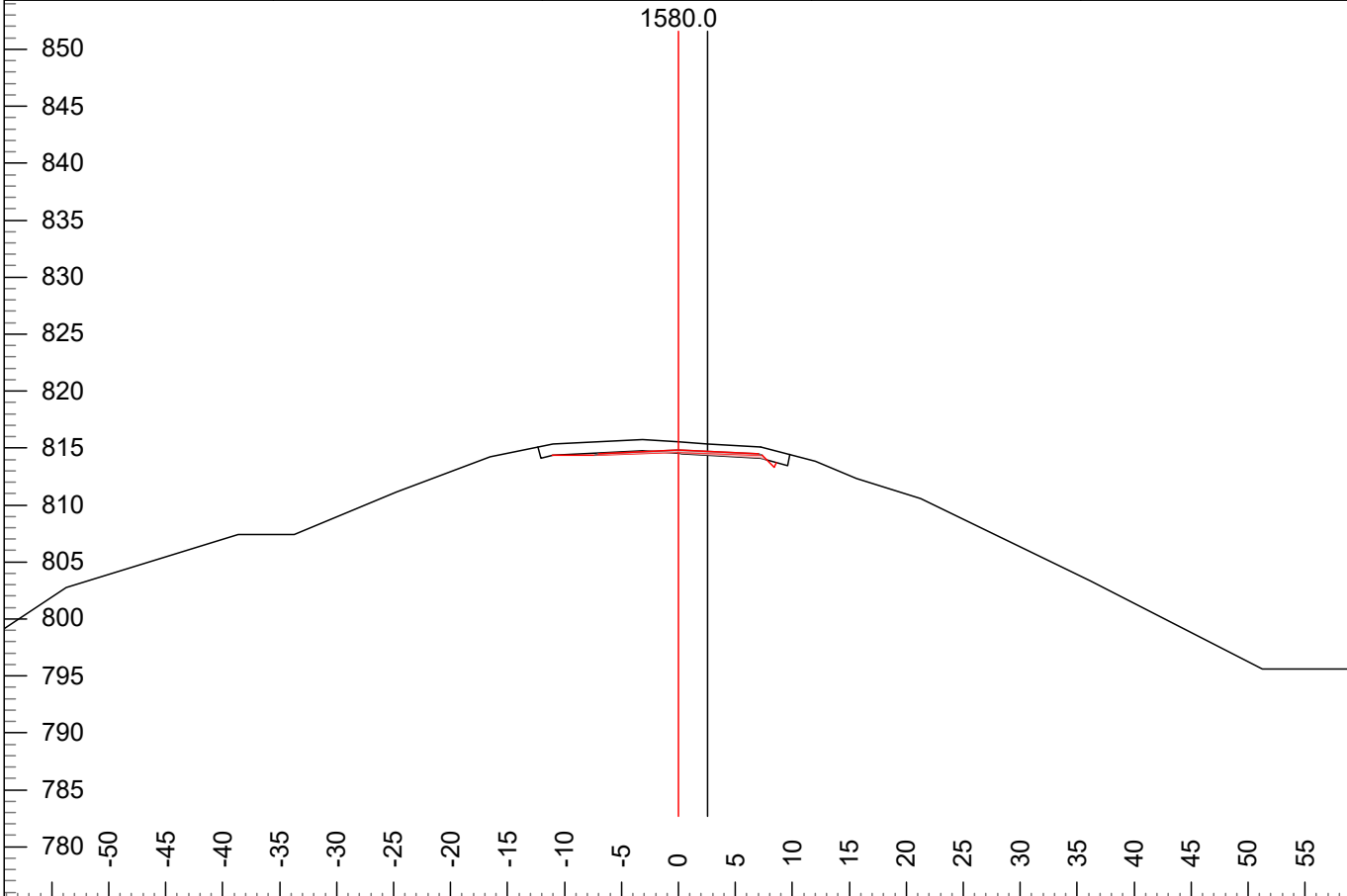
L-Stn :	1560.0	Cut Dp:	0.8	CL X:	10016.6	Clr L X:	-8.8	CL Elev:	811.7
P-Stn :	1680.5	H. Offset:	-1.2	CL Y:	9027.5	Clr R X:	8.6	Gnd Elev:	812.5



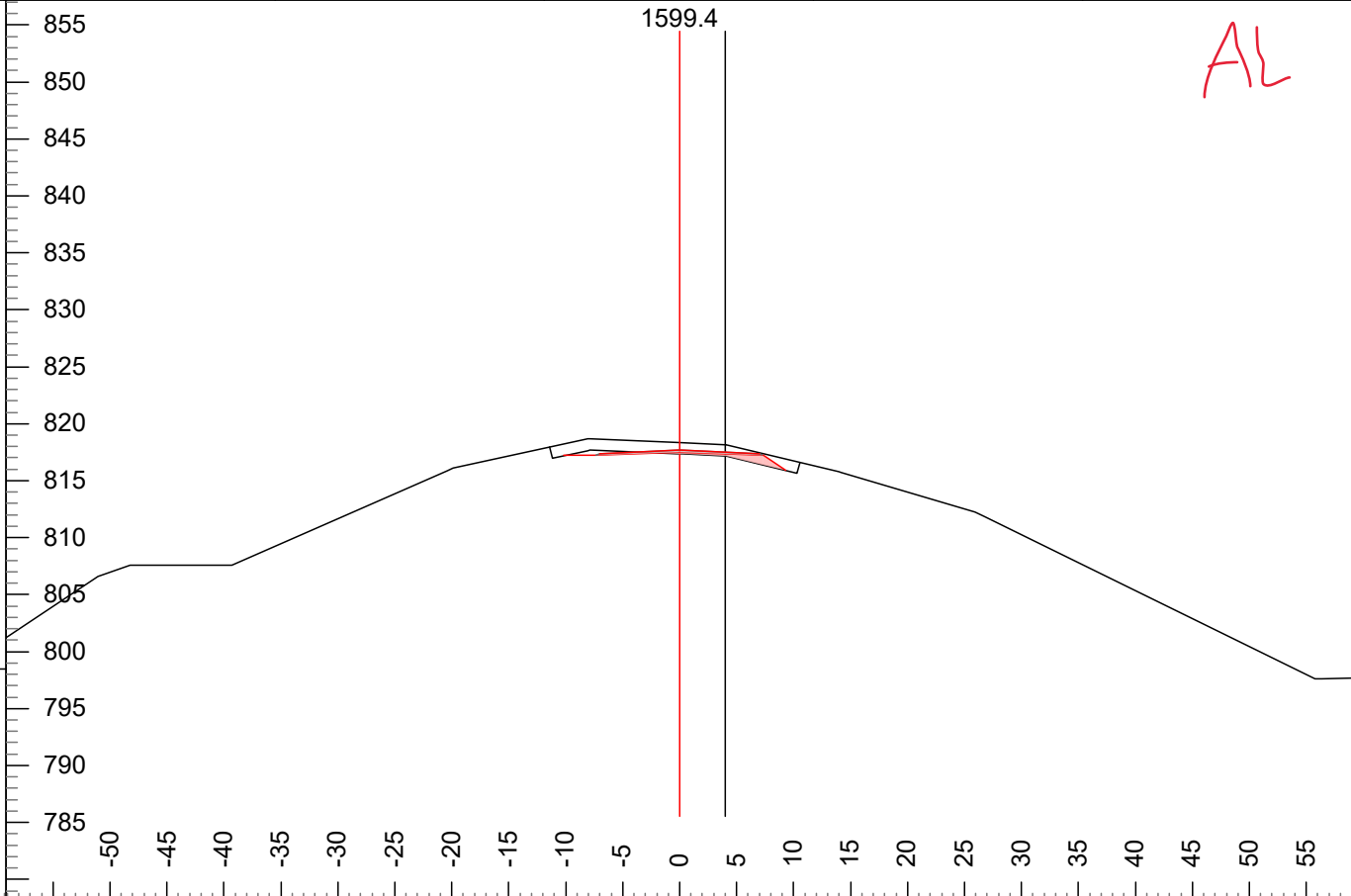
L-Stn :	1562.9	Cut Dp:	0.8	CL X:	10014.8	Clr L X:	-8.7	CL Elev:	812.1
P-Stn :	1683.5	H. Offset:	-1.6	CL Y:	9025.2	Clr R X:	8.7	Gnd Elev:	812.9

Bark
Beetle
Bailey

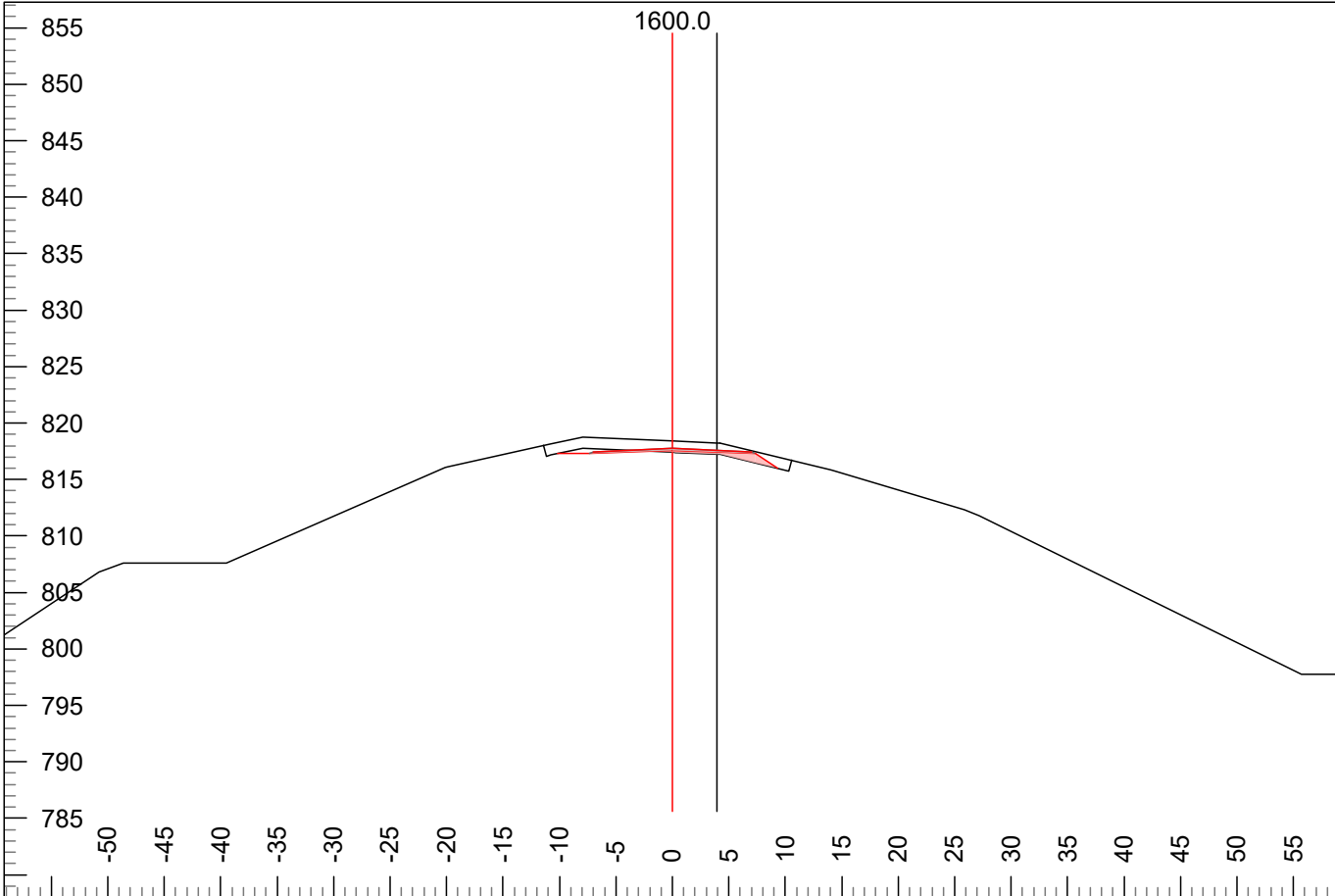
Created By:
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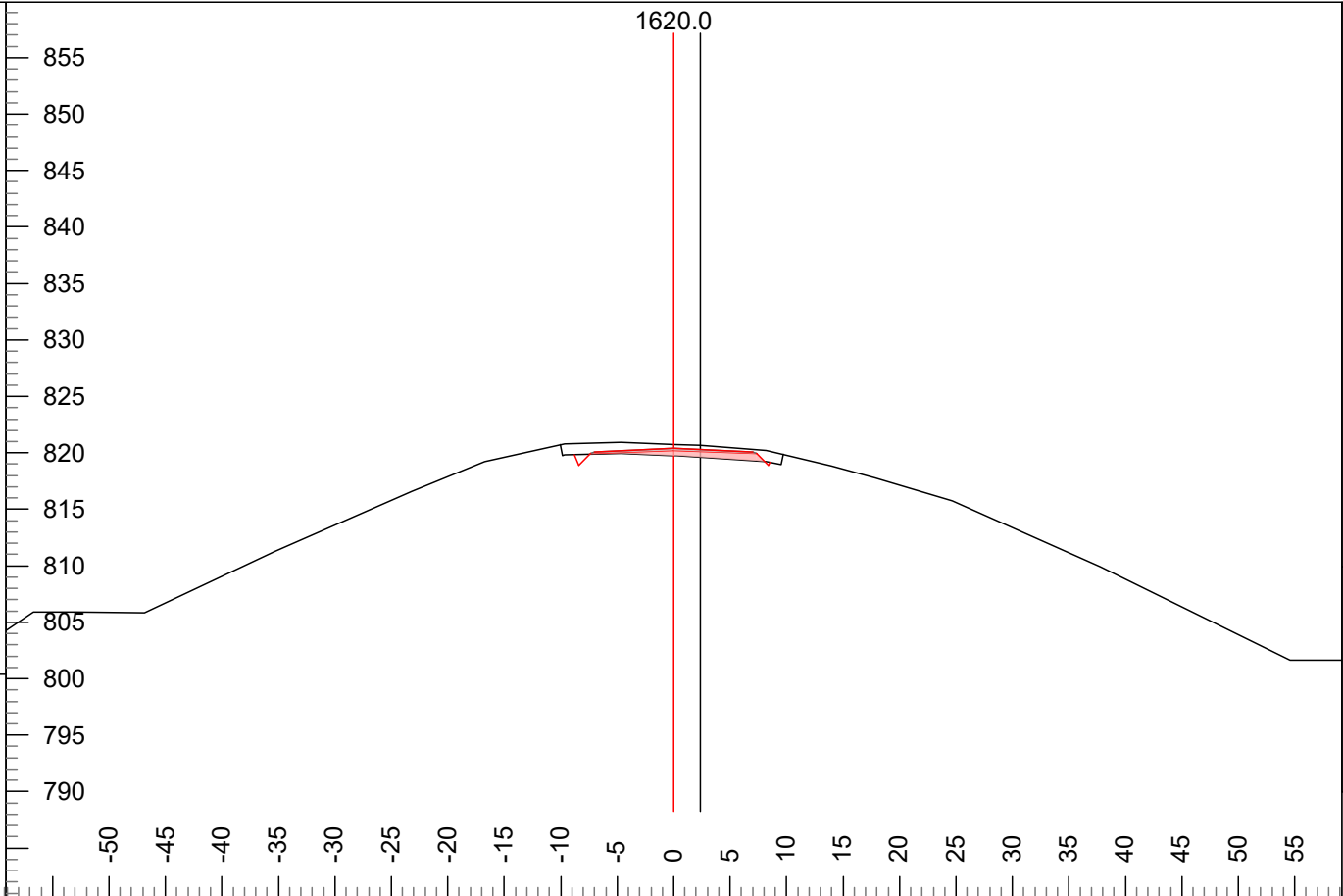
L-Stn :	1580.0	Cut Dp:	0.9	CL X:	10005.1	Clr L X:	-11.1	CL Elev:	814.6
P-Stn :	1700.7	H. Offset:	-2.5	CL Y:	9011.1	Clr R X:	8.6	Gnd Elev:	815.5



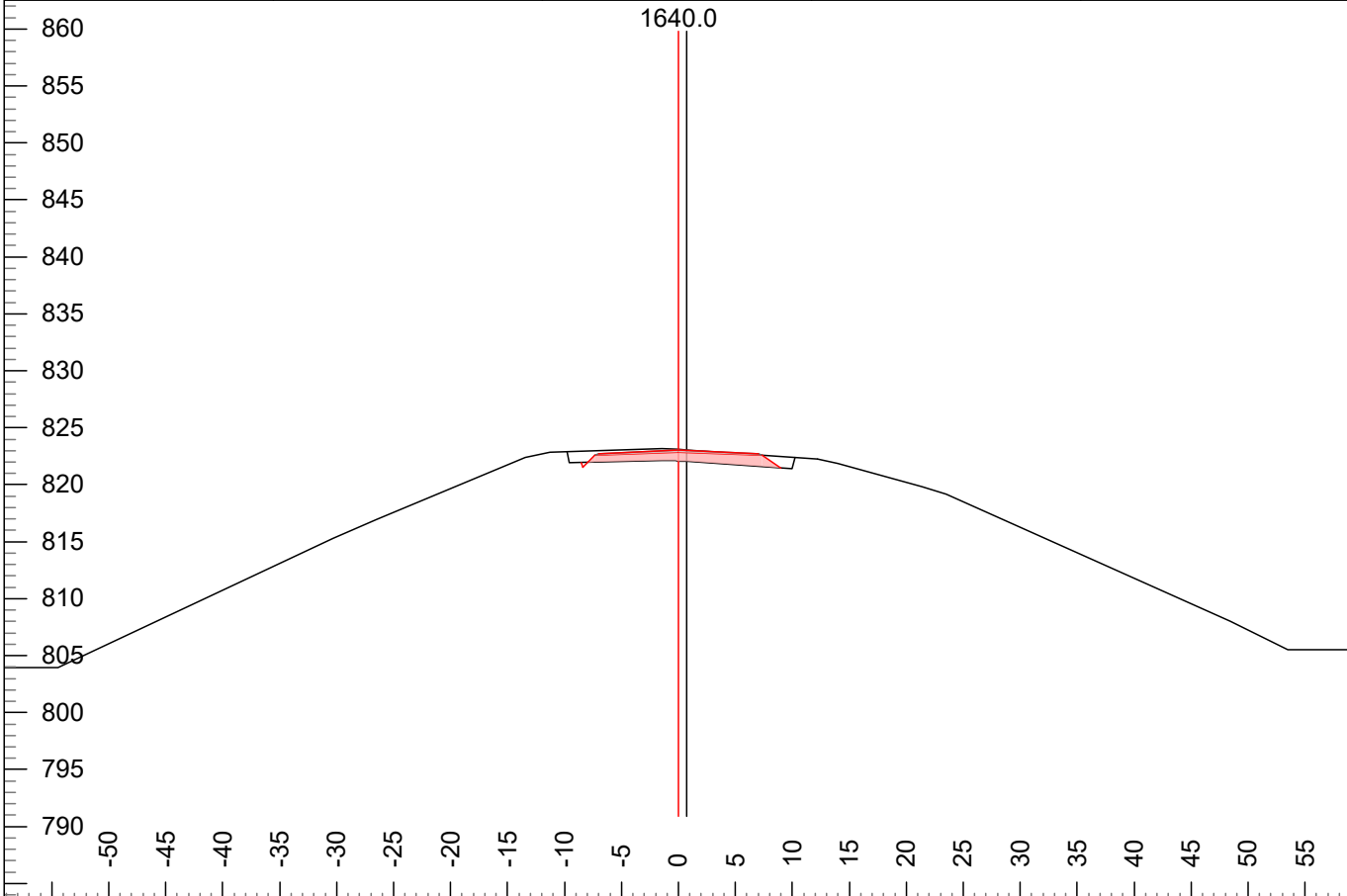
L-Stn :	1599.4	Cut Dp:	0.8	CL X:	9994.3	Clr L X:	-10.2	CL Elev:	817.5
P-Stn :	1720.5	H. Offset:	-4.0	CL Y:	8995.1	Clr R X:	9.3	Gnd Elev:	818.3



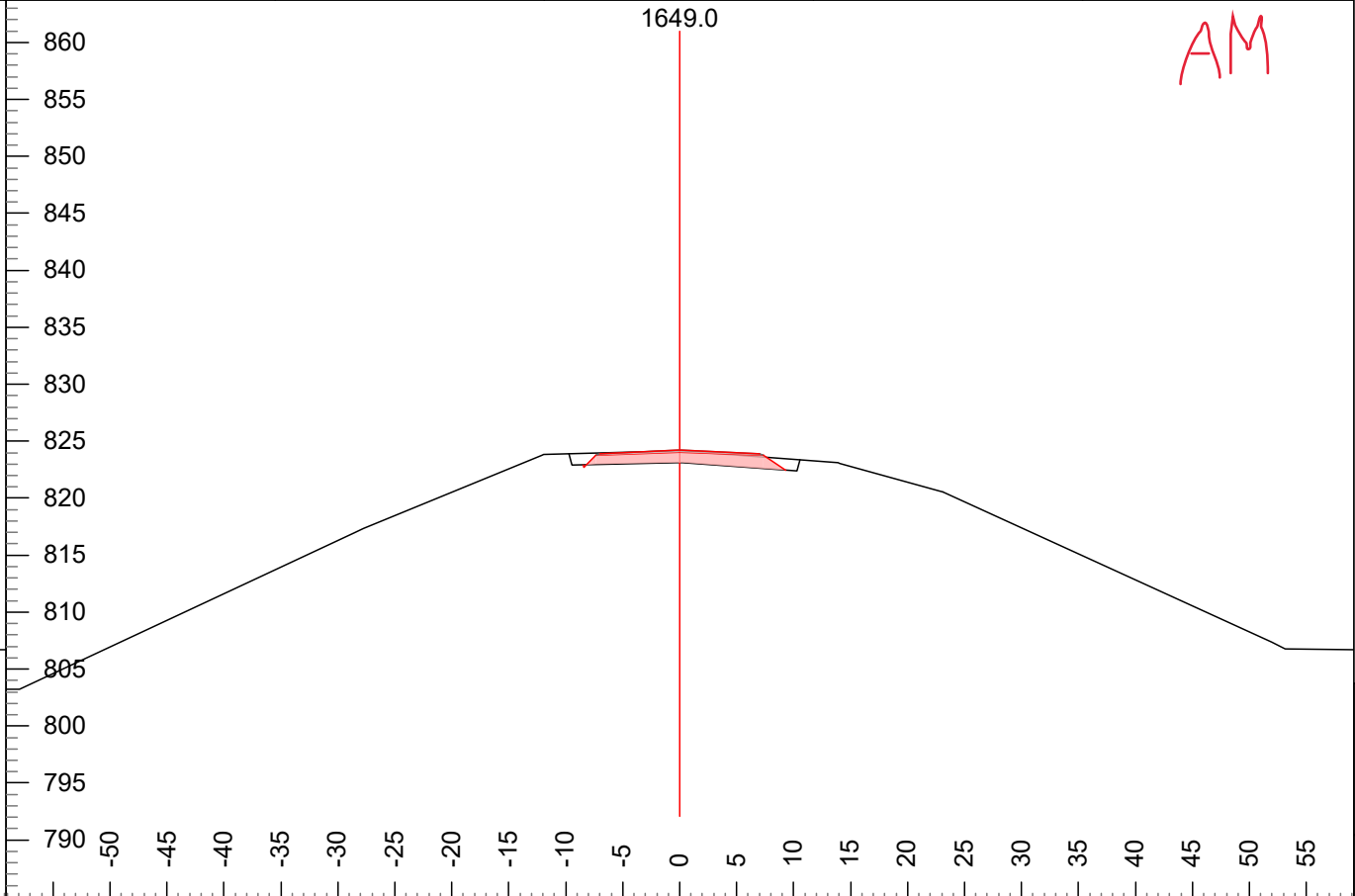
L-Stn :	1600.0	Cut Dp:	0.8	CL X:	9994.0	Clr L X:	-10.2	CL Elev:	817.6
P-Stn :	1721.7	H. Offset:	-3.9	CL Y:	8994.5	Clr R X:	9.3	Gnd Elev:	818.4



L-Stn :	1620.0	Cut Dp:	0.5	CL X:	9985.1	Clr L X:	-8.8	CL Elev:	820.2
P-Stn :	1741.6	H. Offset:	-2.3	CL Y:	8976.6	Clr R X:	8.5	Gnd Elev:	820.8



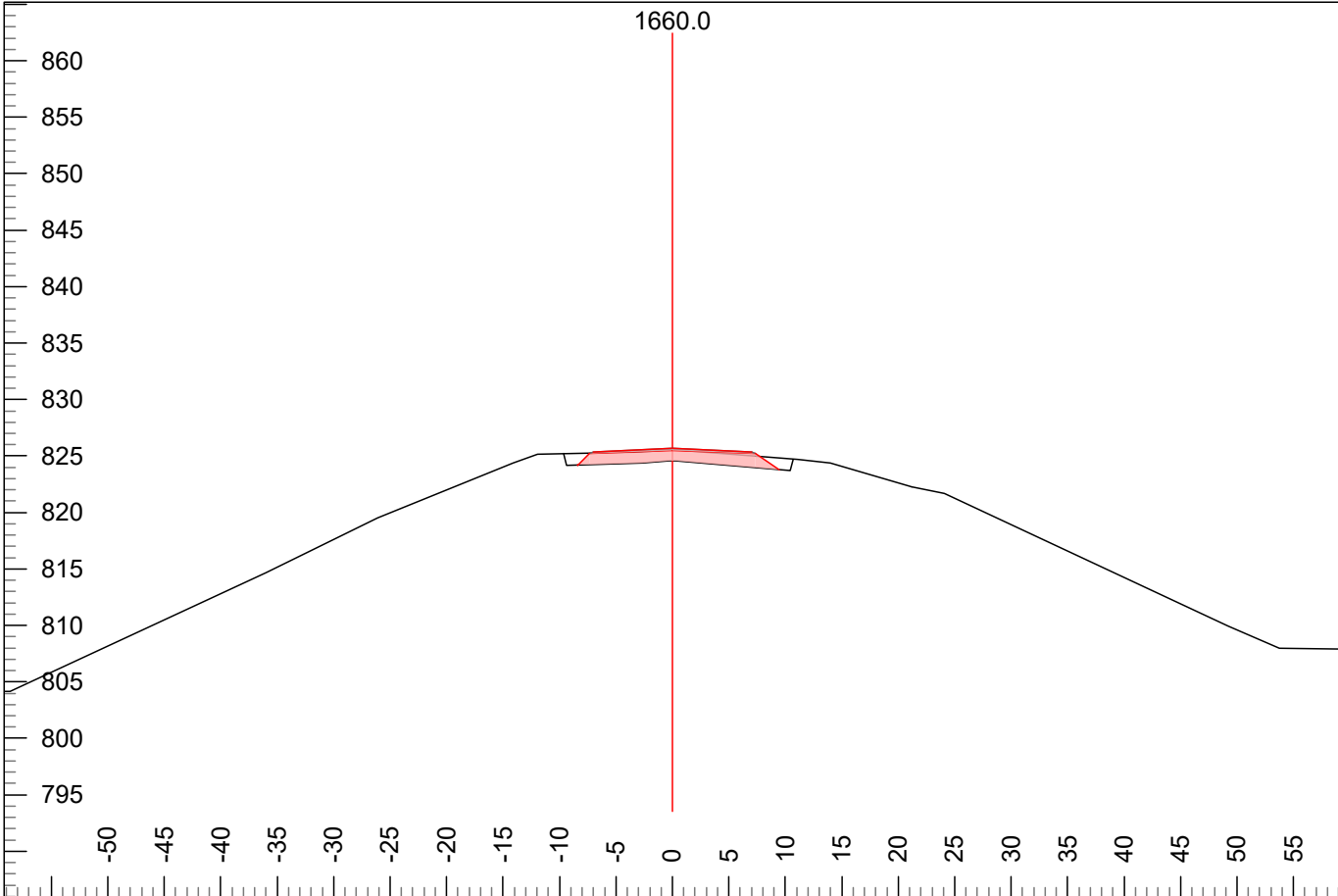
L-Stn :	1640.0	Cut Dp:	0.2	CL X:	9976.1	Clr L X:	-8.6	CL Elev:	822.9
P-Stn :	1761.6	H. Offset:	-0.7	CL Y:	8958.7	Clr R X:	9.0	Gnd Elev:	823.1



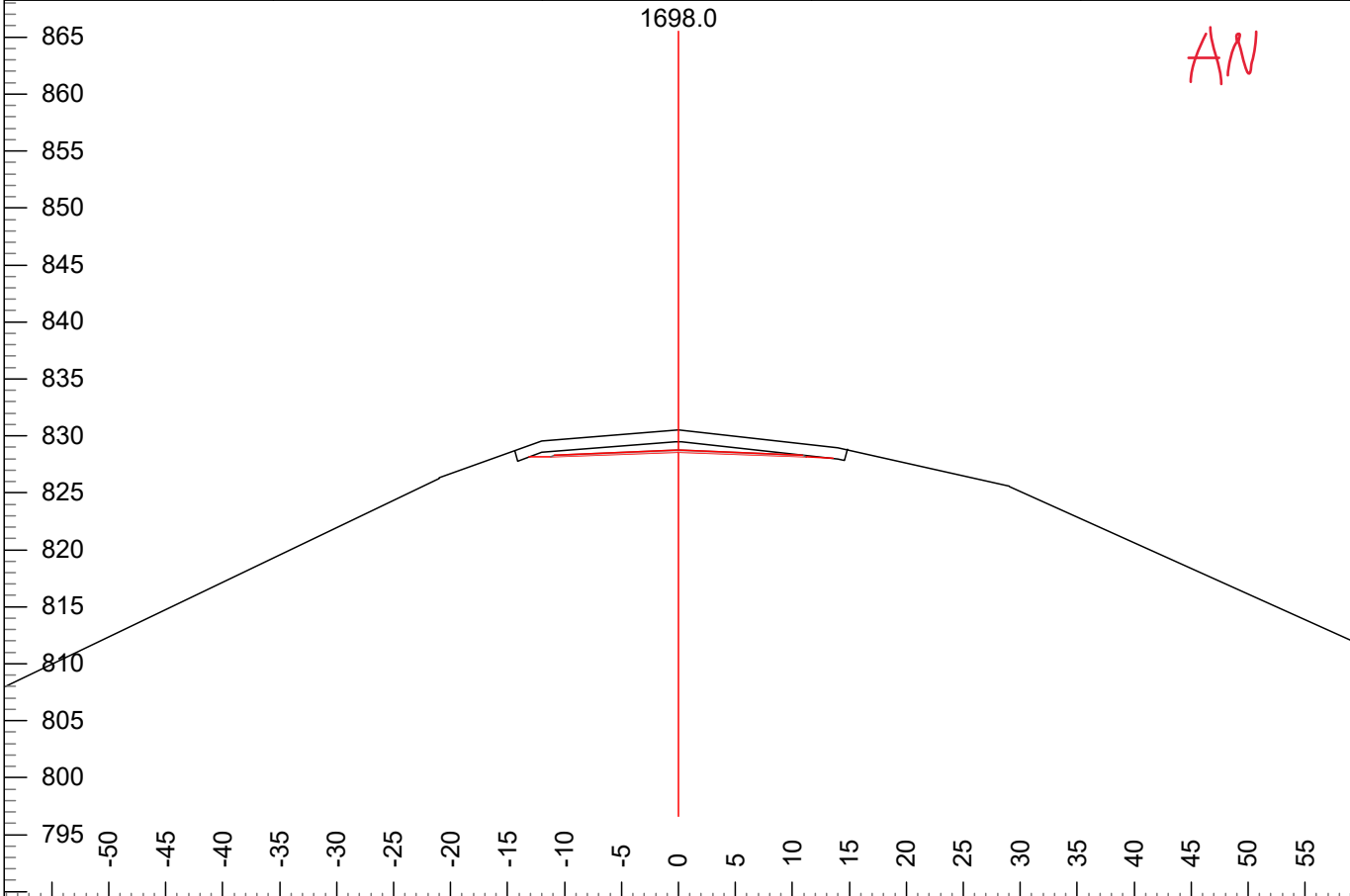
L-Stn :	1649.0	Cut Dp:	0.1	CL X:	9972.1	Clr L X:	-8.5	CL Elev:	824.0
P-Stn :	1770.5	H. Offset:	0.0	CL Y:	8950.7	Clr R X:	9.3	Gnd Elev:	824.1

Bark
Beetle
Bailey

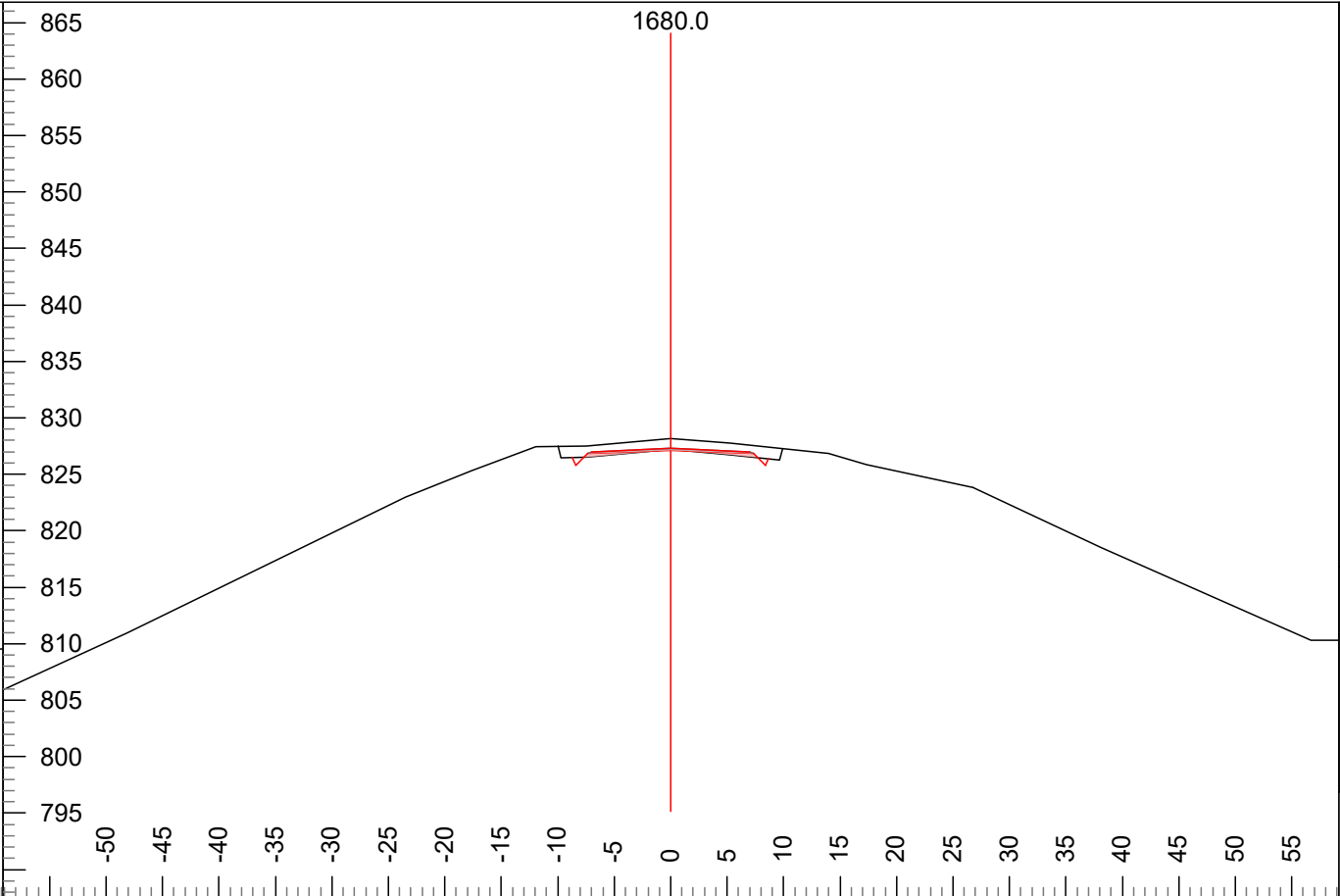
Created By:
M. Kawakami



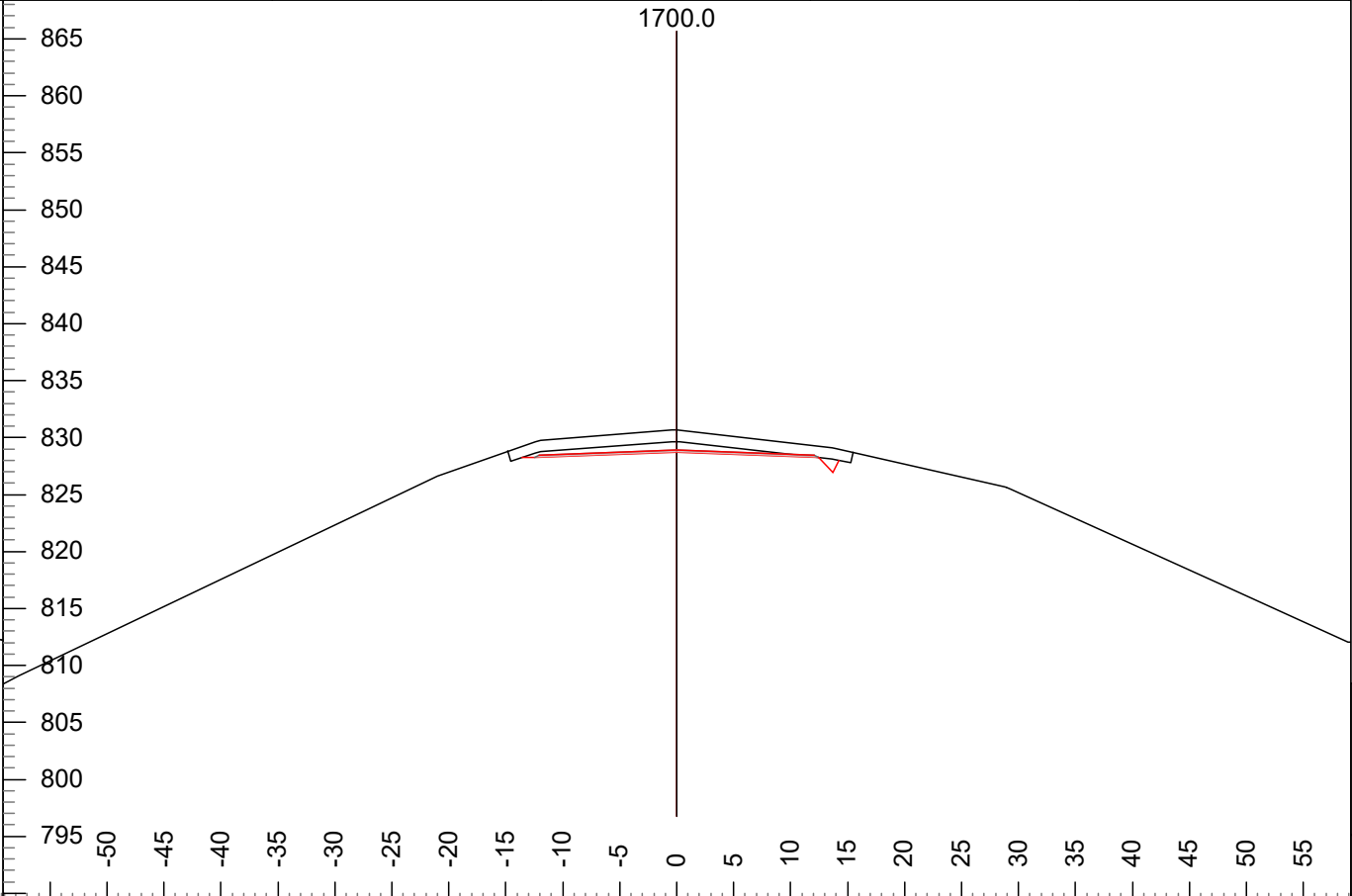
L-Stn :	1660.0	Cut Dp:	0.1	CL X:	9966.3	Clr L X:	-8.4	CL Elev:	825.5
P-Stn :	1781.5	H. Offset:	0.0	CL Y:	8941.4	Clr R X:	9.5	Gnd Elev:	825.6



L-Stn :	1698.0	Cut Dp:	1.9	CL X:	9946.1	Clr L X:	-13.1	CL Elev:	828.6
P-Stn :	1819.5	H. Offset:	0.0	CL Y:	8909.2	Clr R X:	13.6	Gnd Elev:	830.5



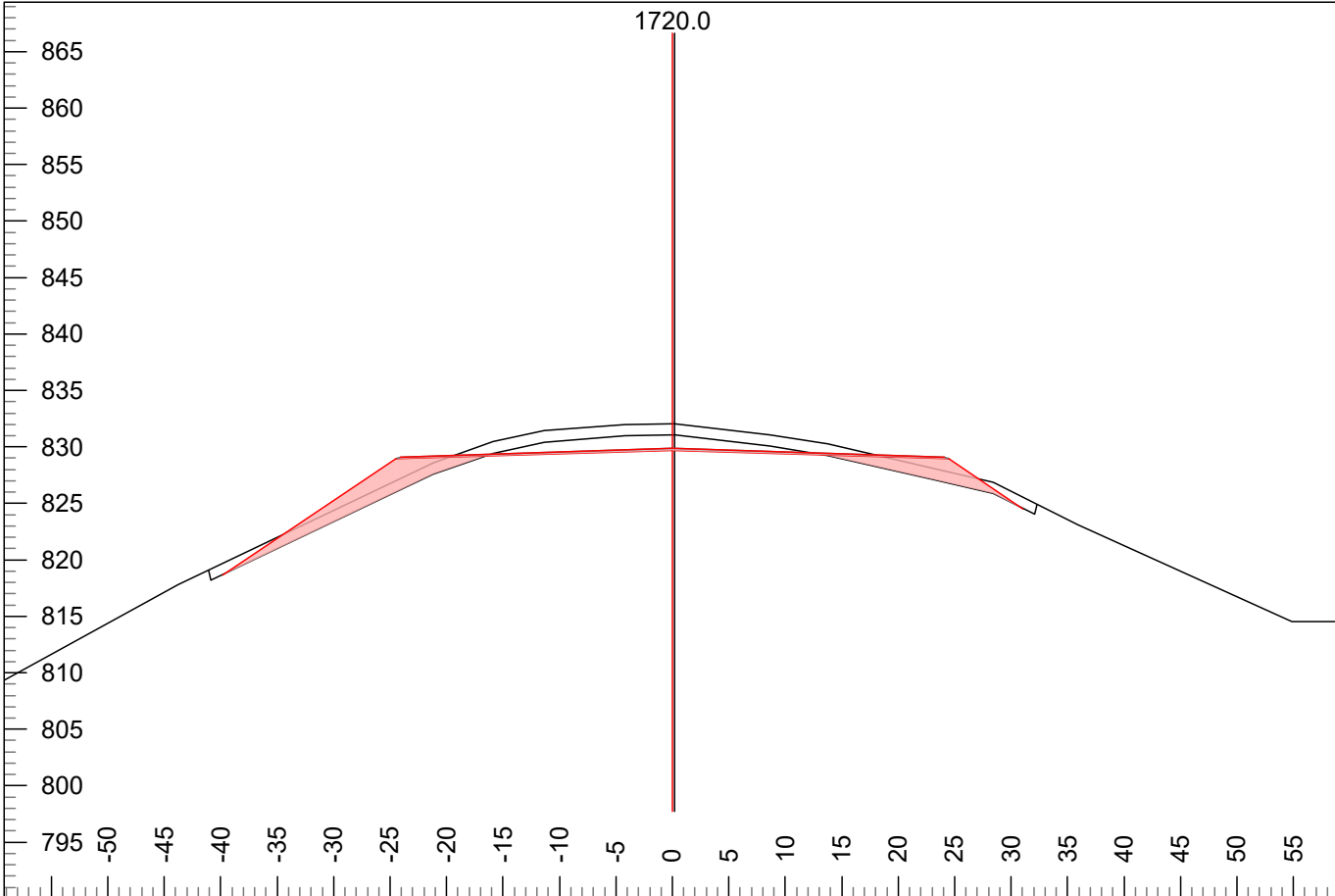
L-Stn :	1680.0	Cut Dp:	1.1	CL X:	9955.7	Clr L X:	-8.7	CL Elev:	827.1
P-Stn :	1801.5	H. Offset:	0.0	CL Y:	8924.4	Clr R X:	8.7	Gnd Elev:	828.2



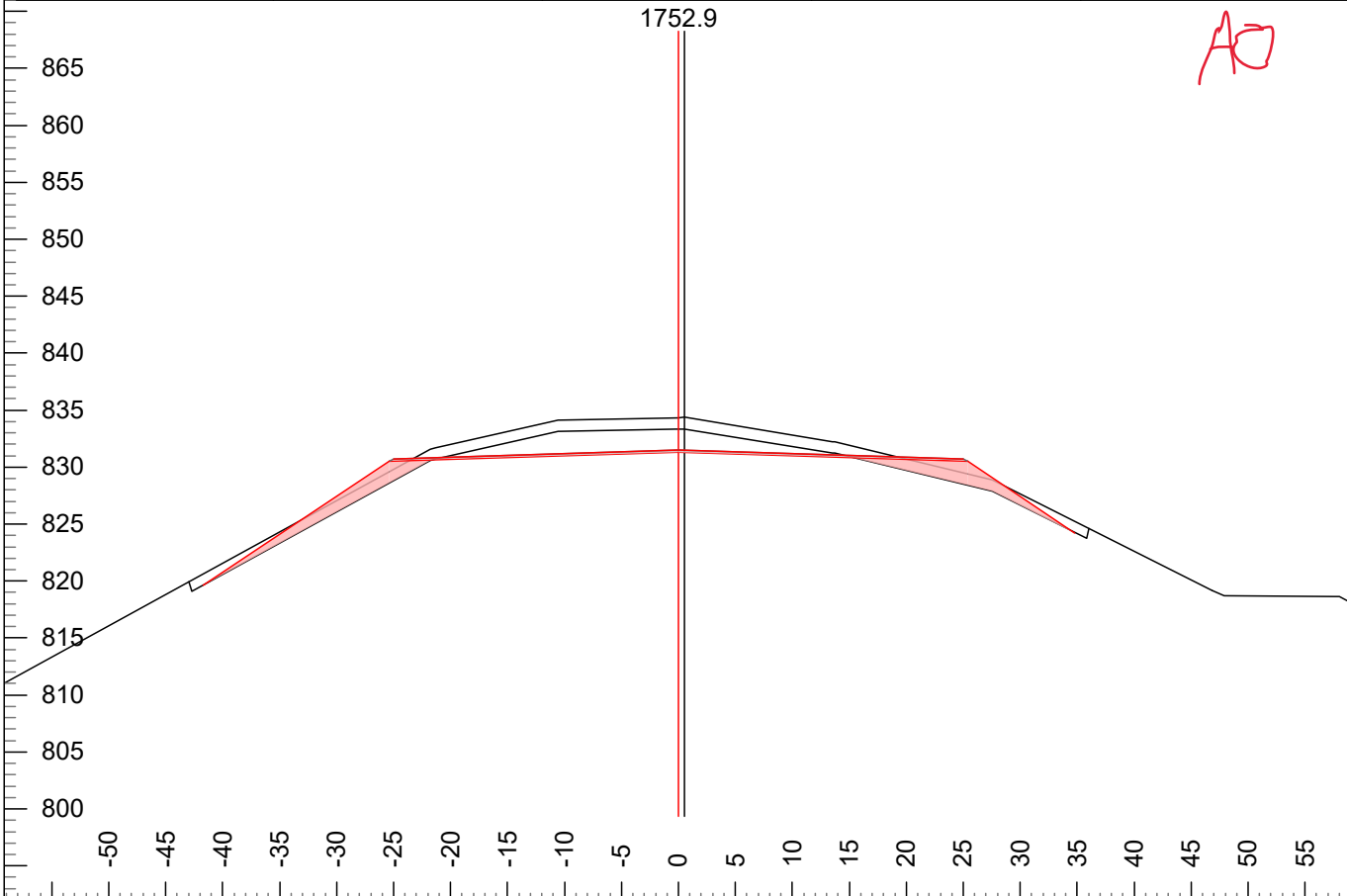
L-Stn :	1700.0	Cut Dp:	1.9	CL X:	9944.9	Clr L X:	-13.6	CL Elev:	828.7
P-Stn :	1821.5	H. Offset:	0.0	CL Y:	8907.5	Clr R X:	14.3	Gnd Elev:	830.7

Bark
Beetle
Bailey

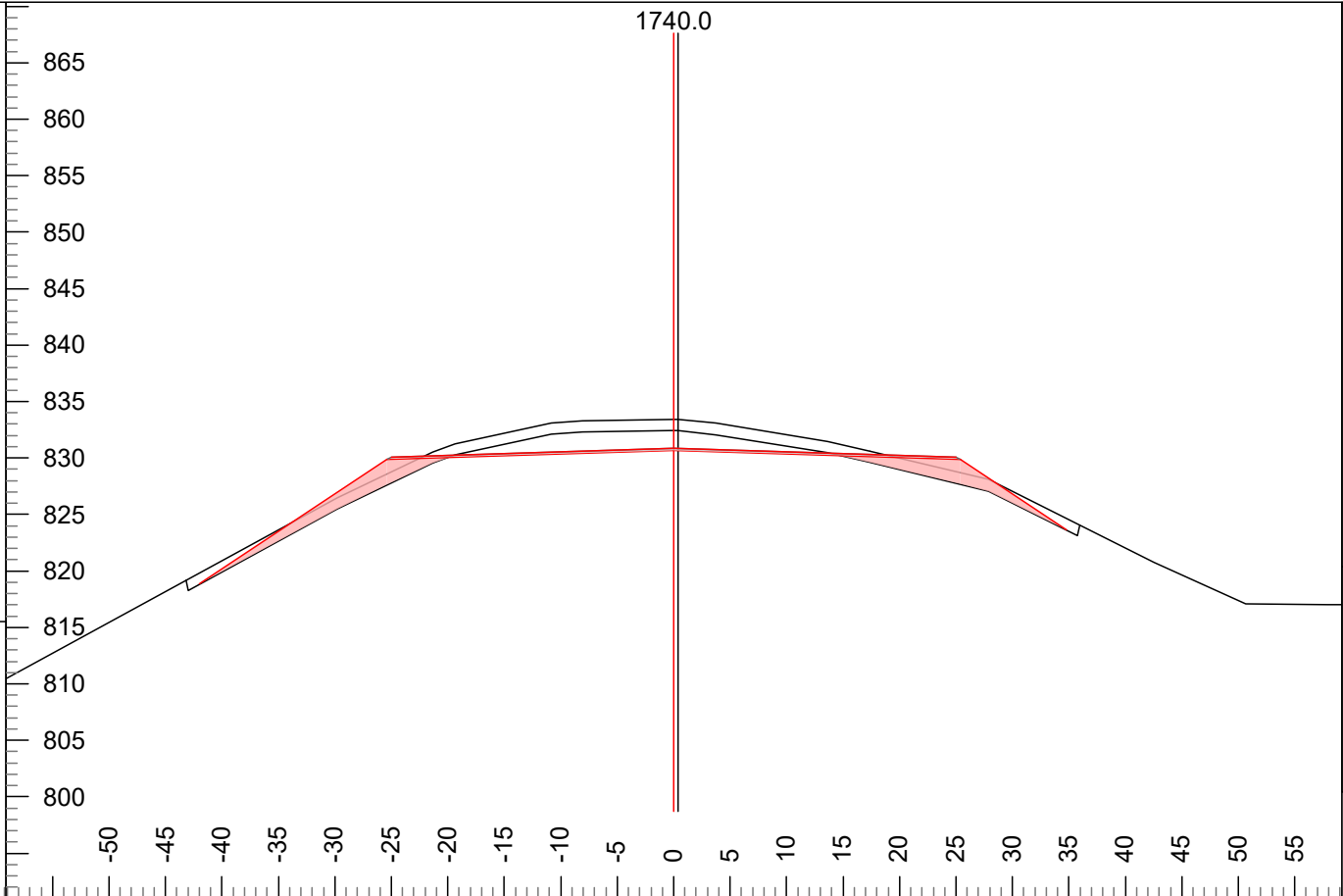
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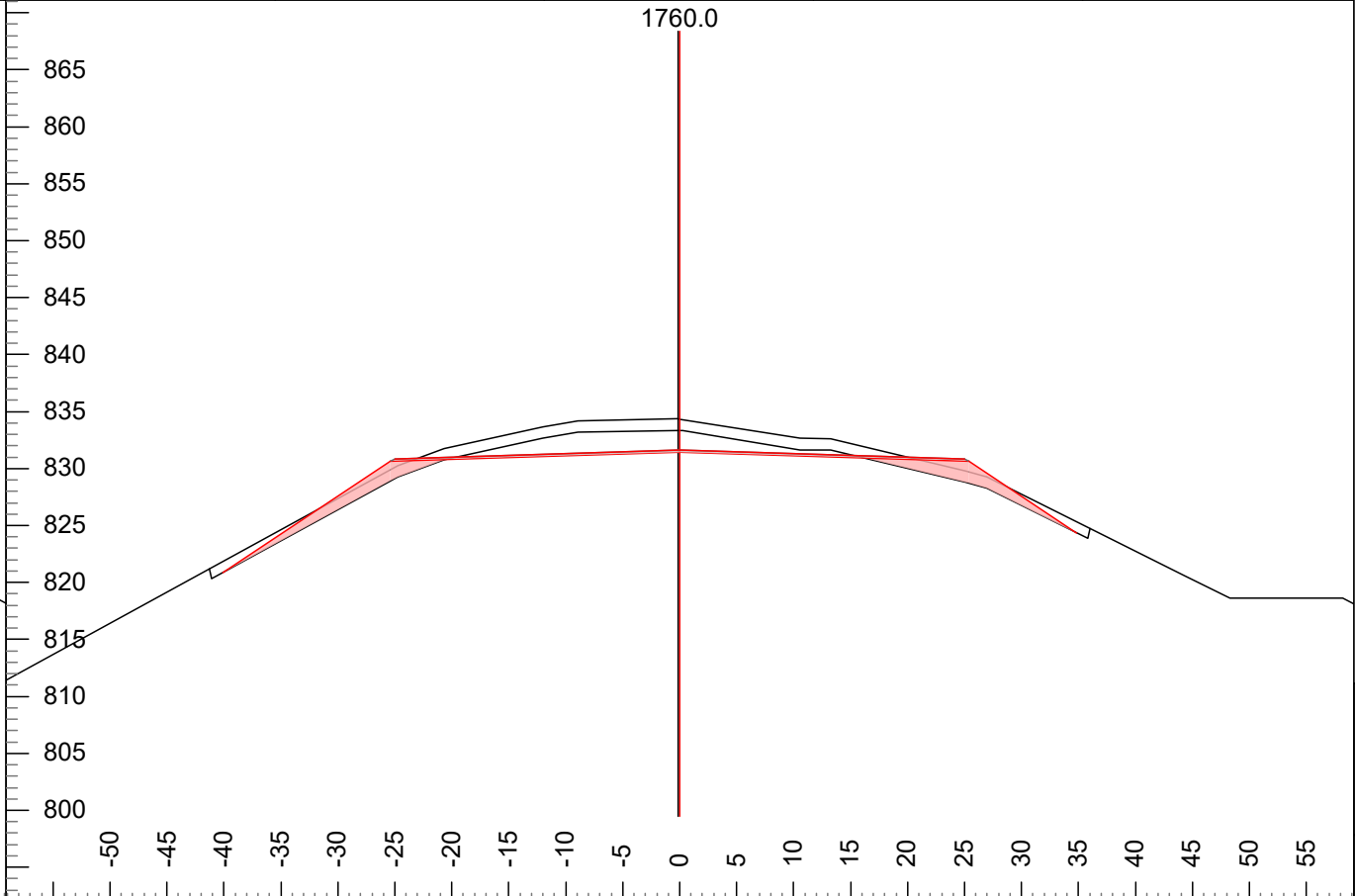
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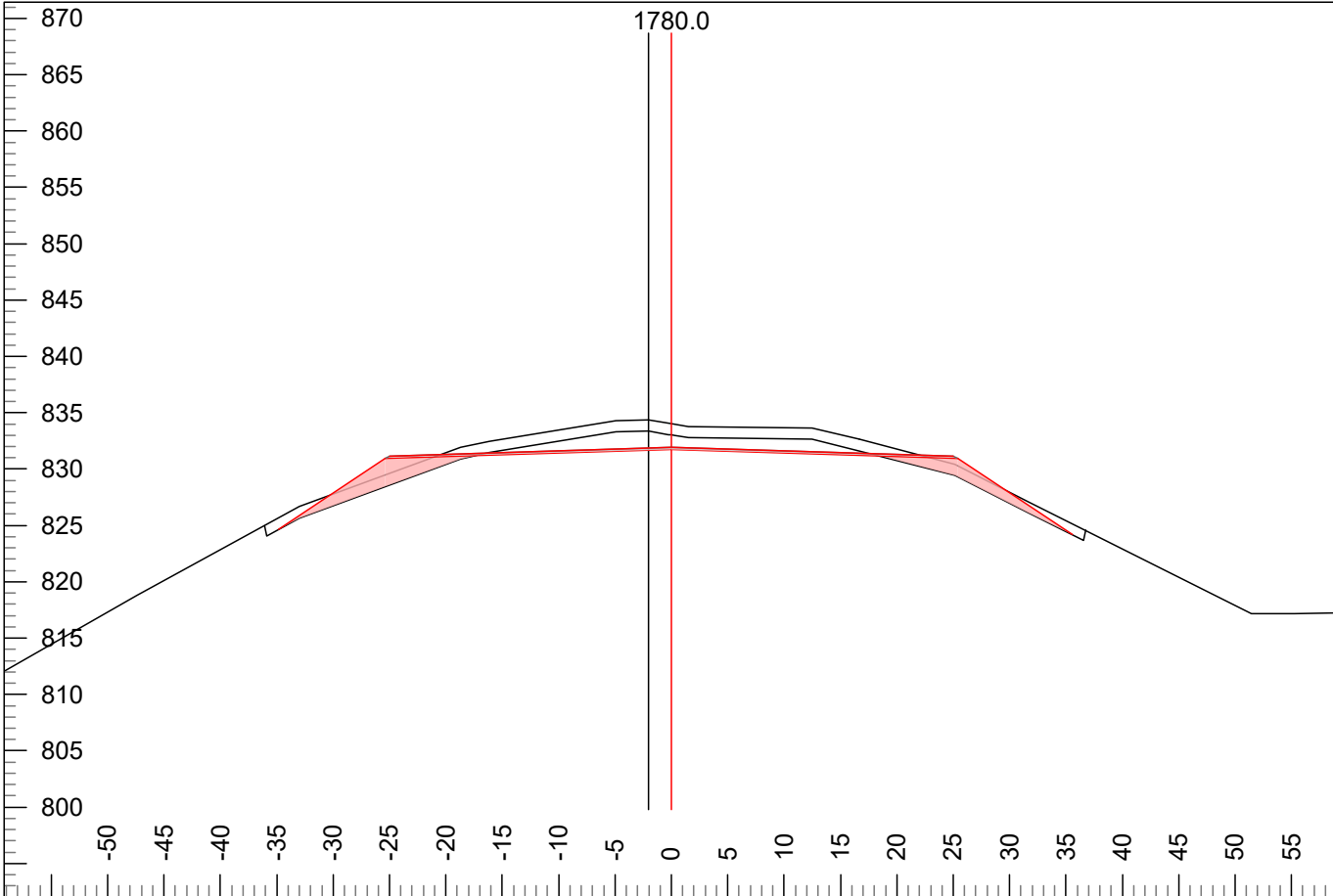
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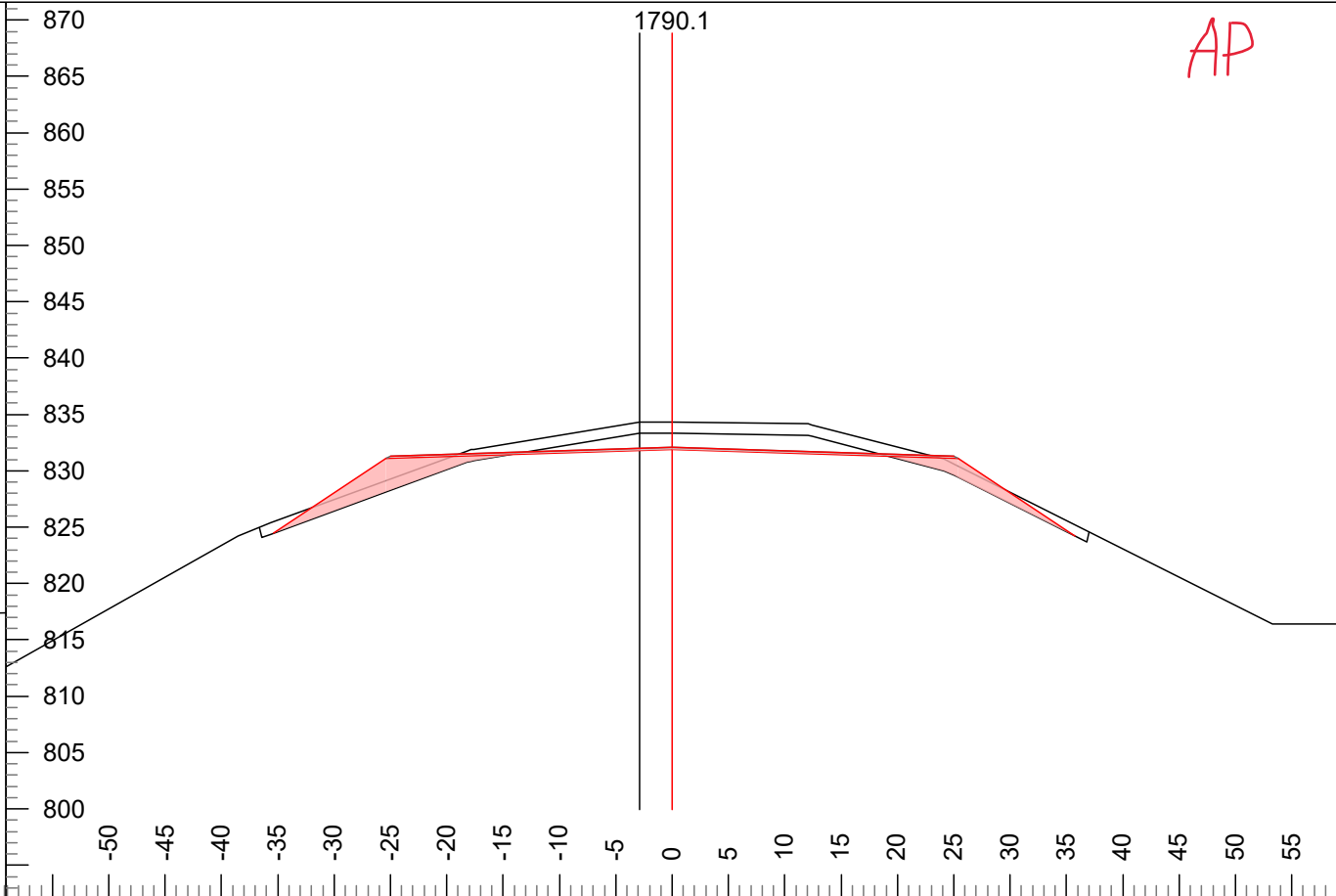
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Bark
Beetle
Bailey

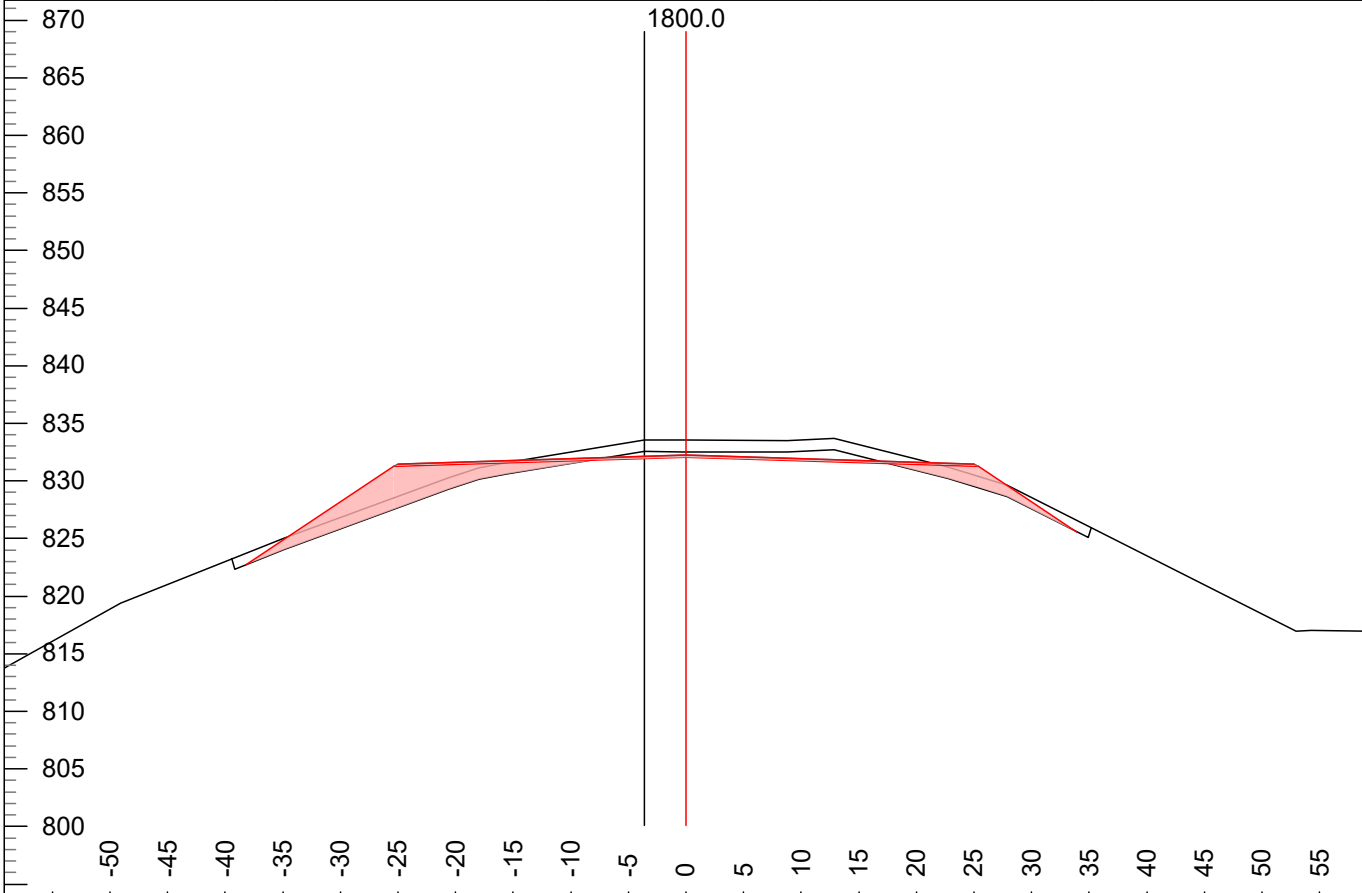
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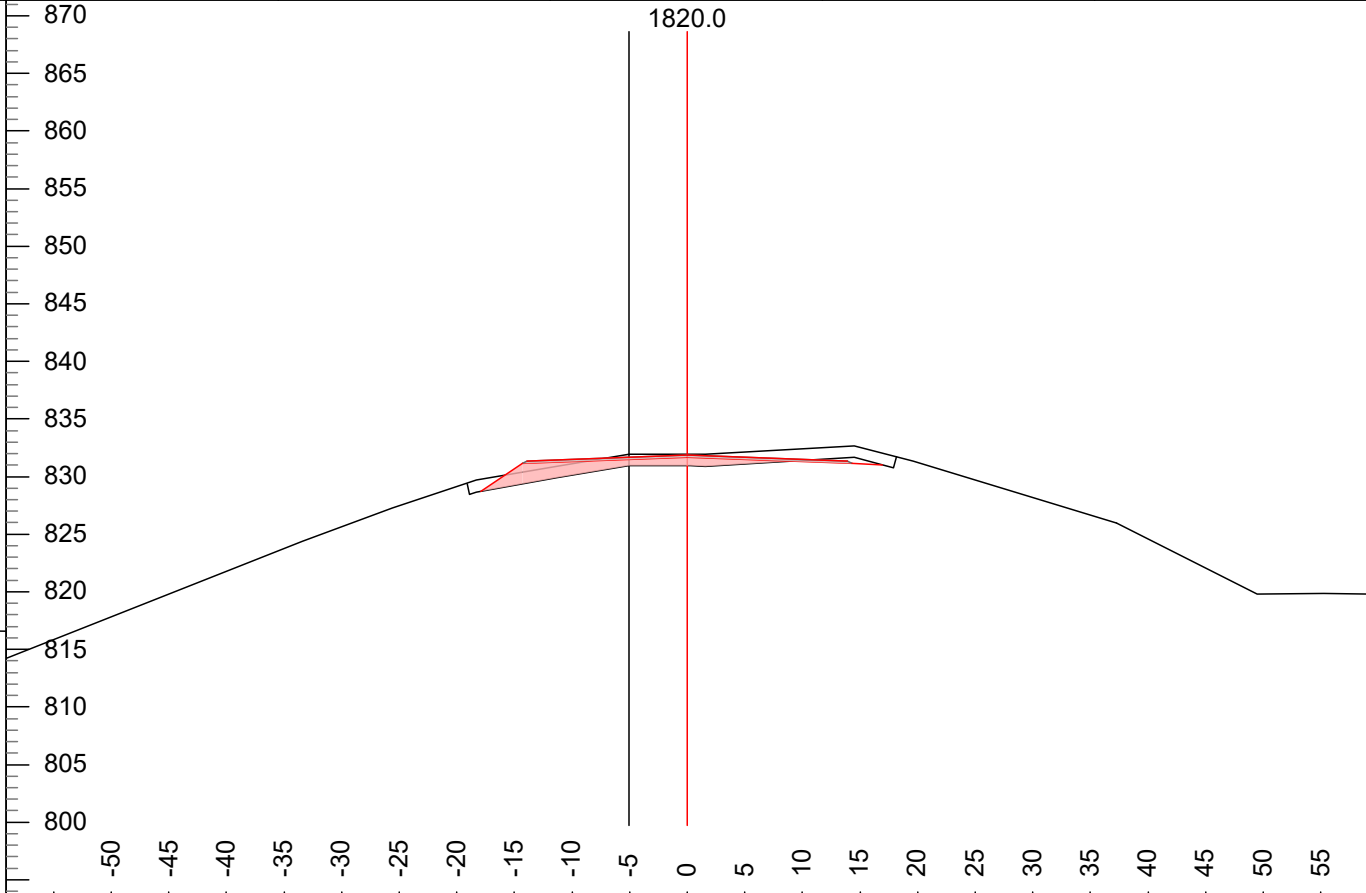
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P-Stn :	1911.5	H. Offset:	2.9	CL Y:	8836.0	Clr R X:	35.8	Gnd Elev:	834.3



L-Stn :	1800.0	Cut Dp:	1.5	CL X:	9884.4	Clr L X:	-38.2	CL Elev:	832.0
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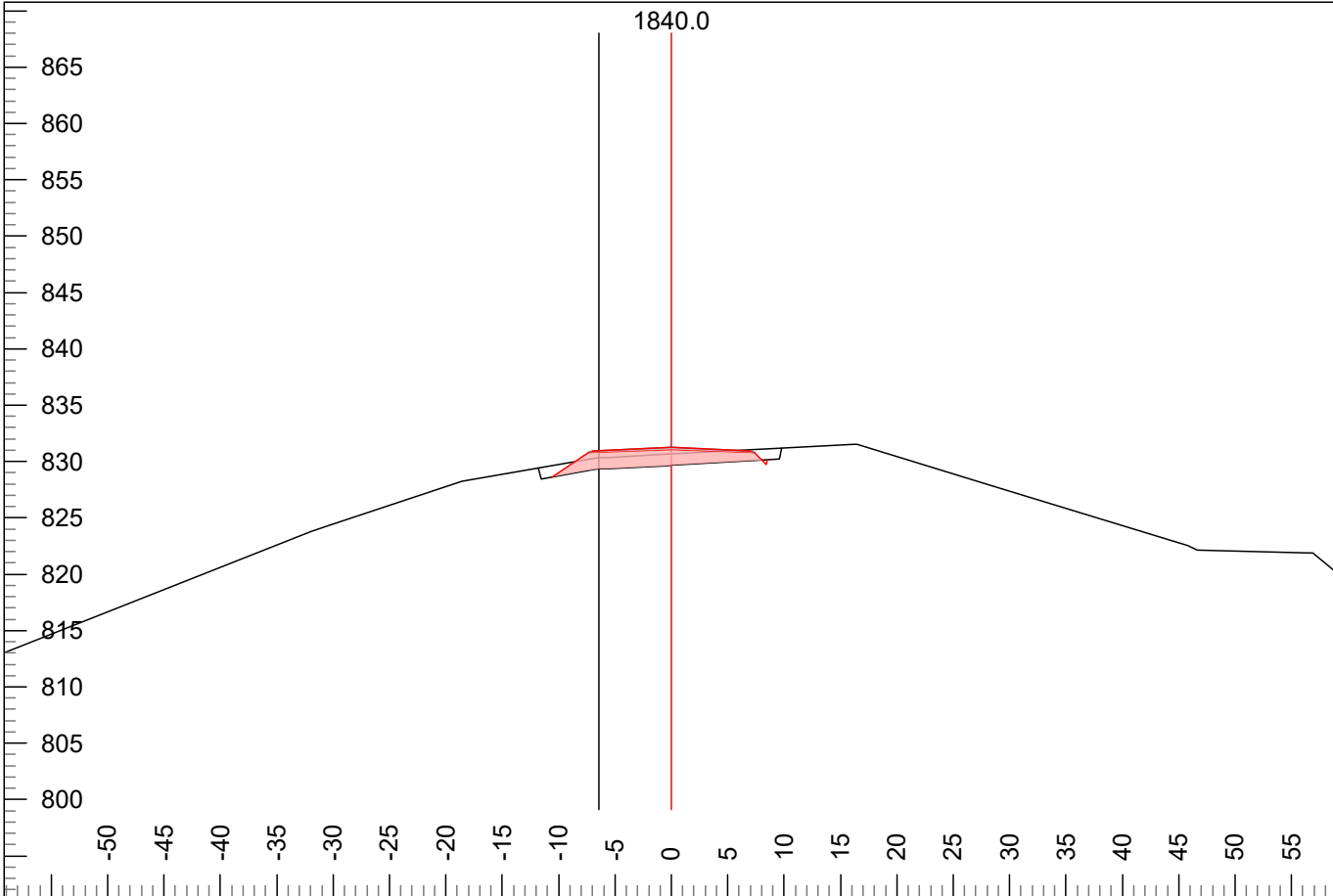
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AP

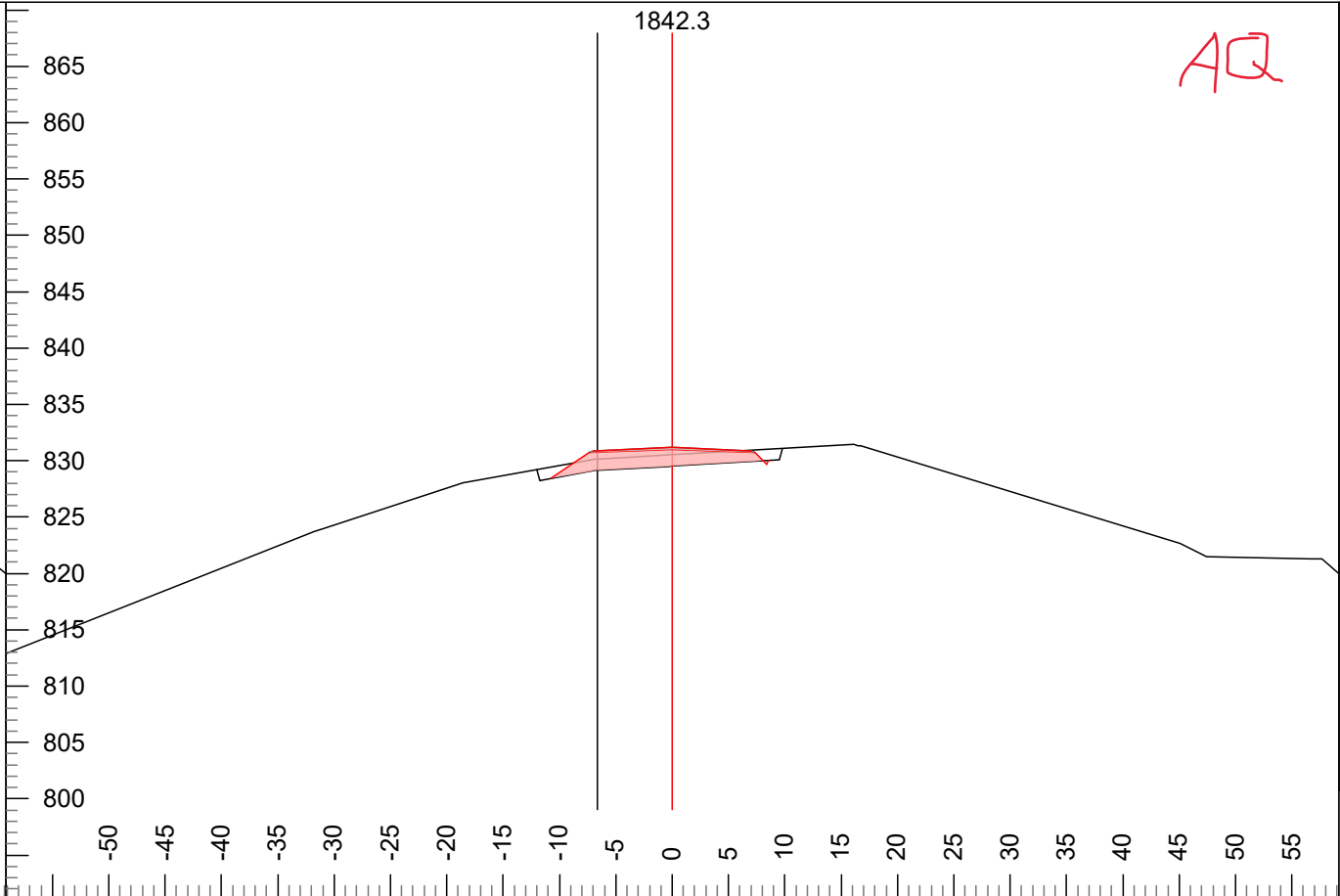
Bark
Beetle
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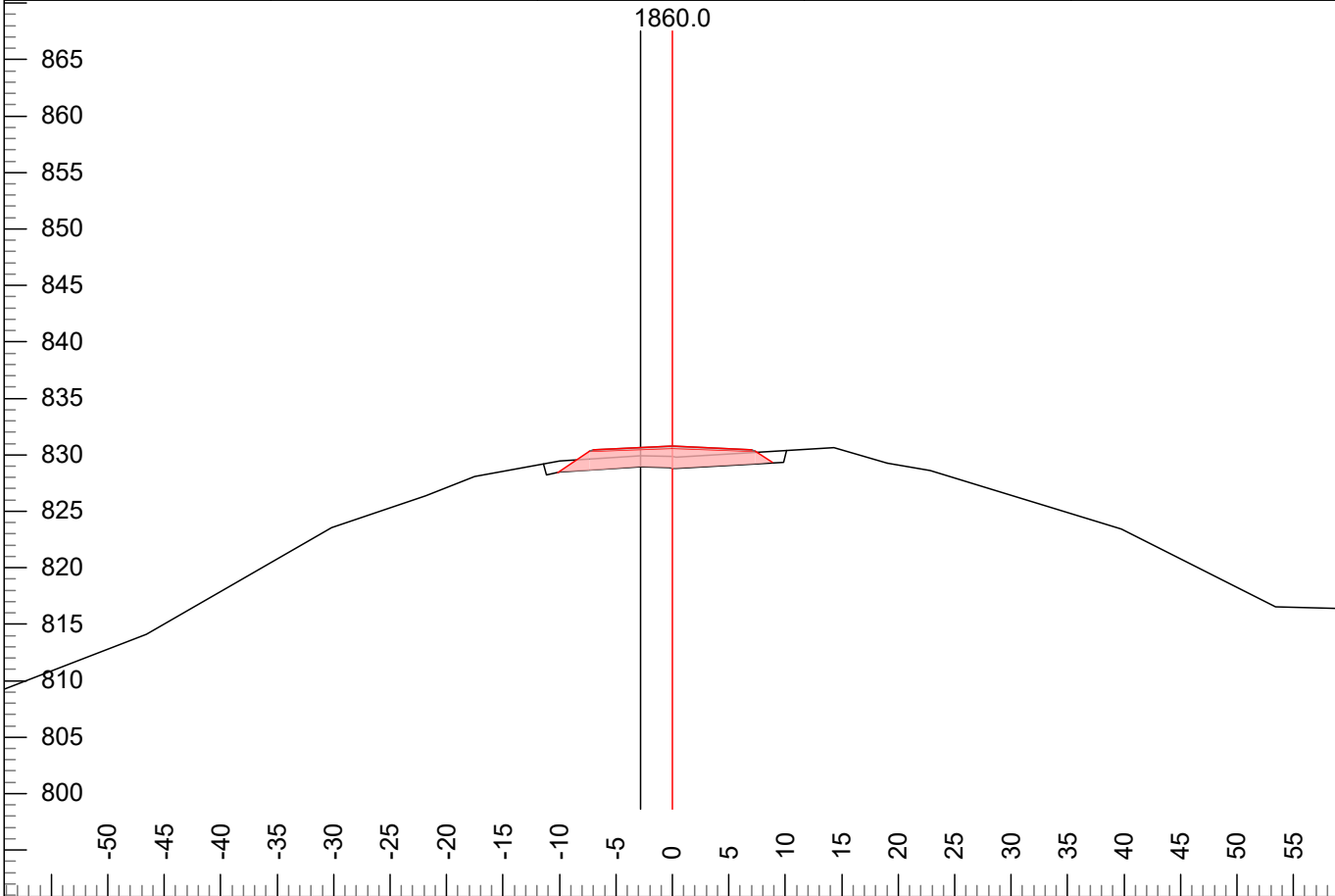
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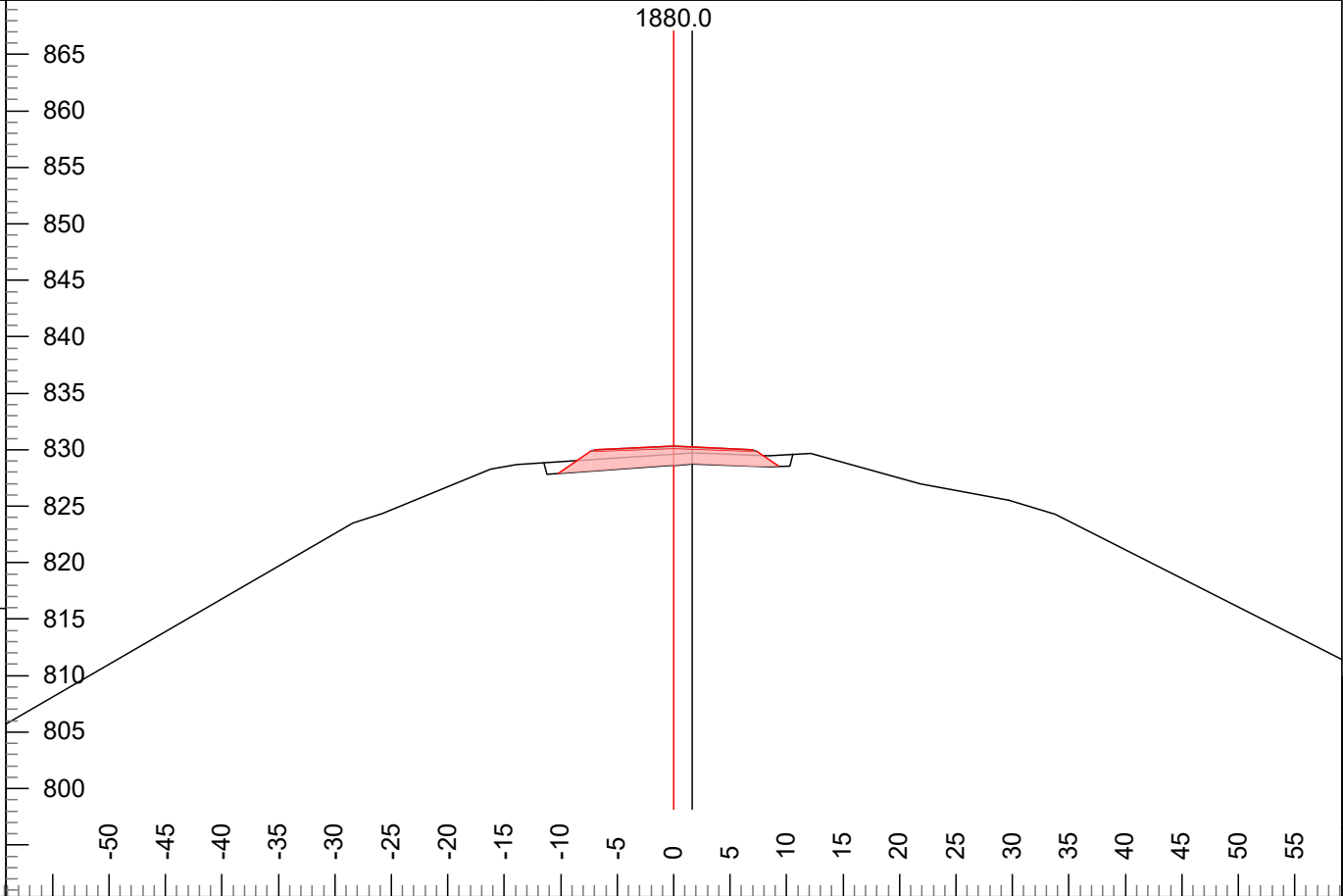
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Bark
Beetle
Bailey

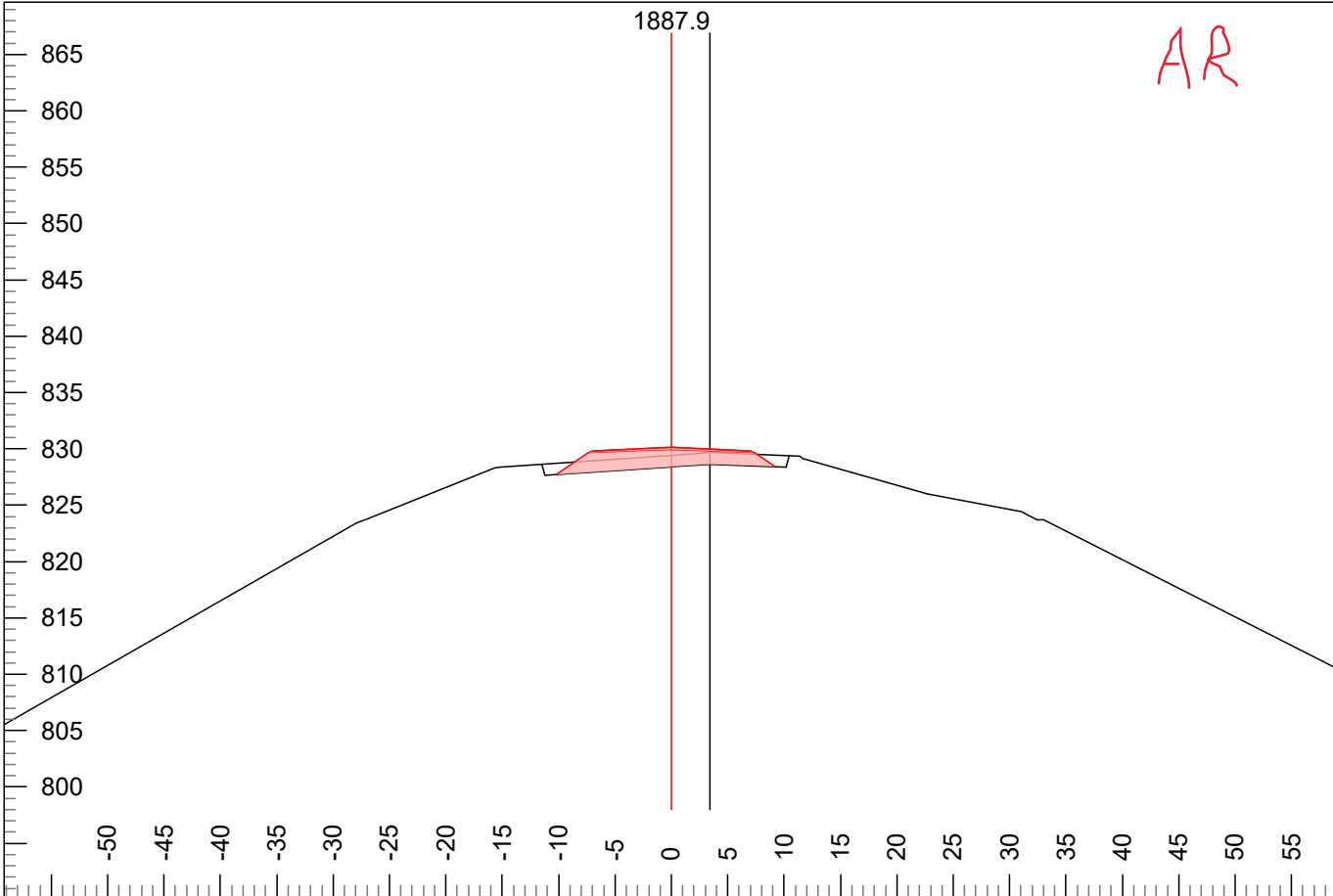
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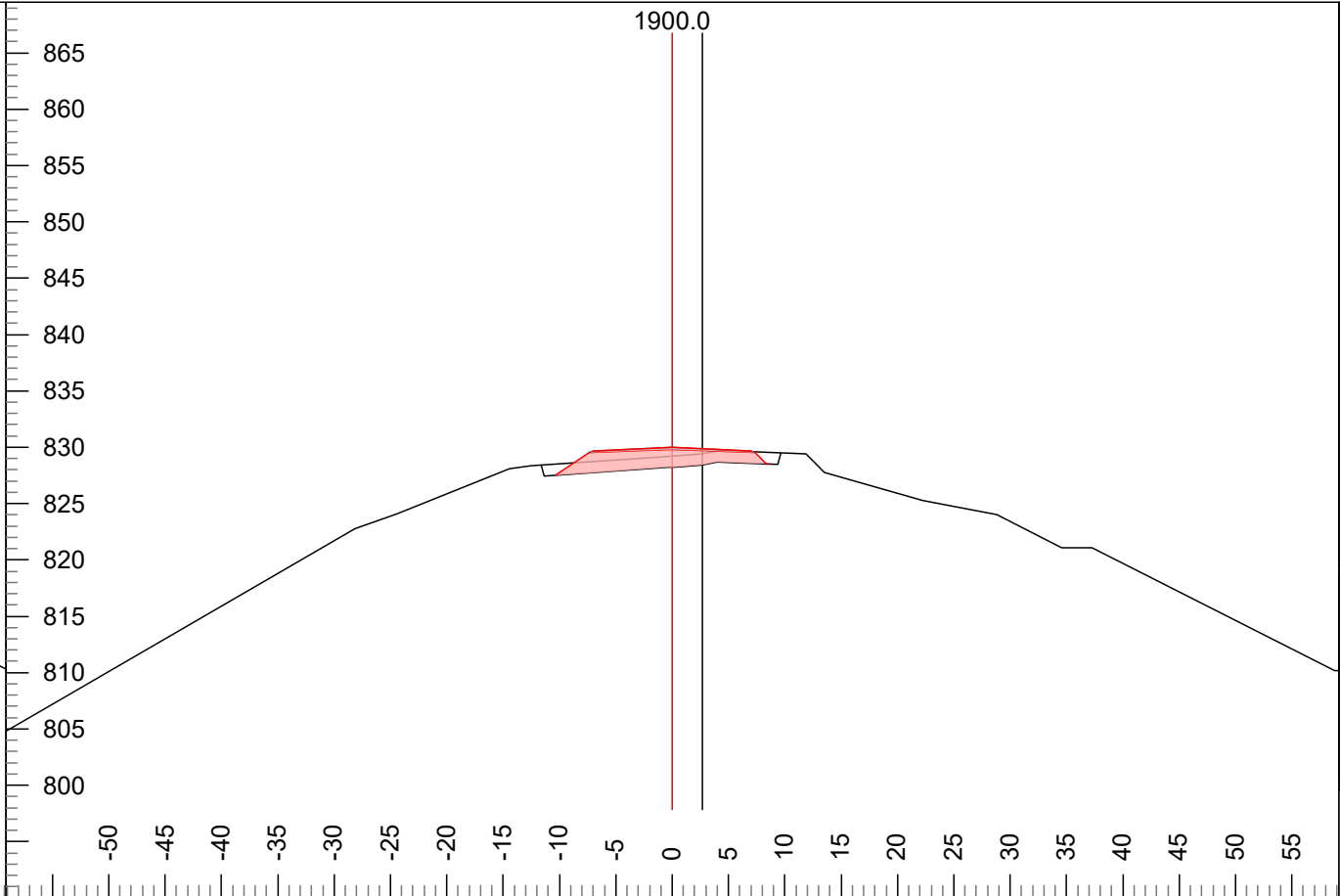
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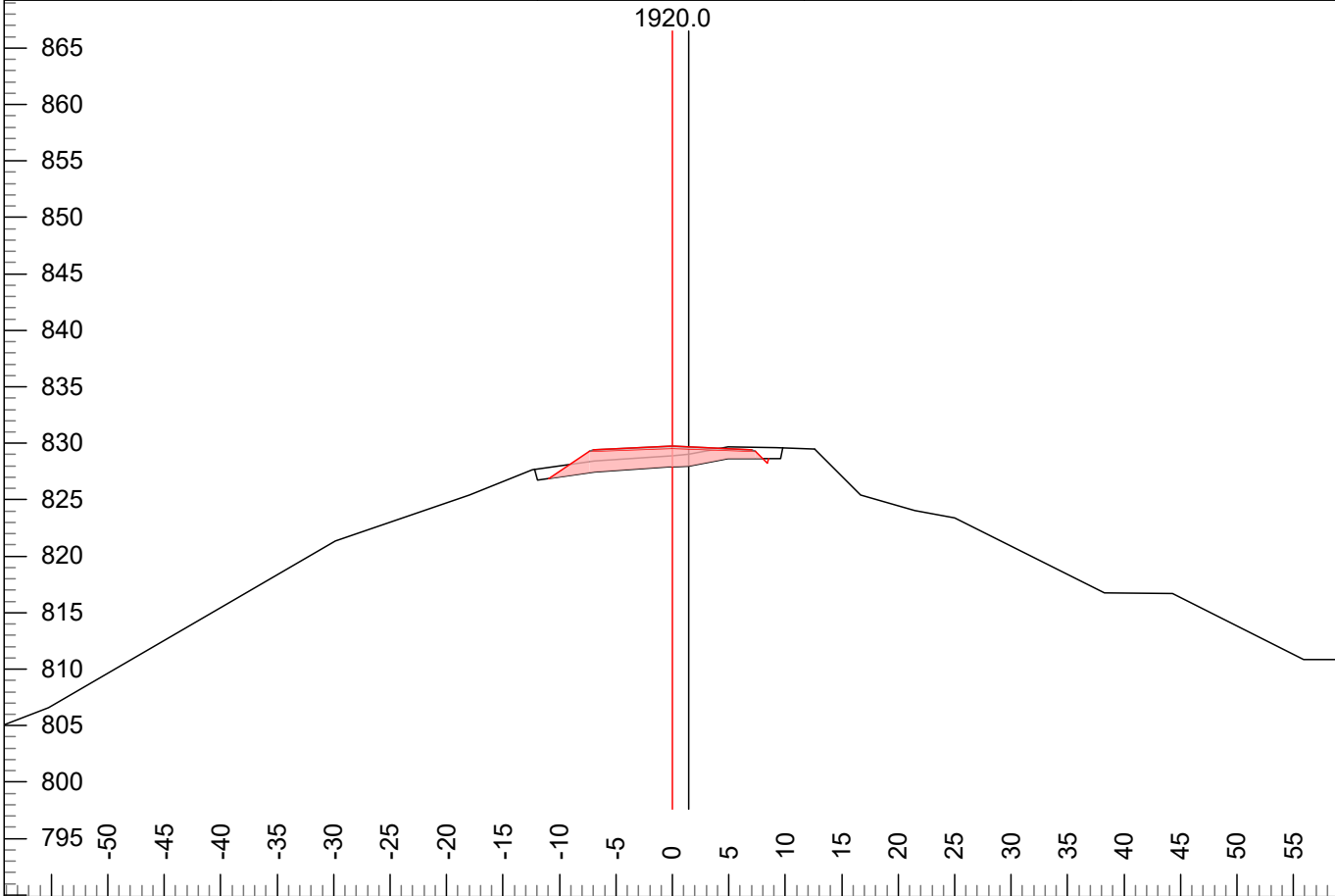
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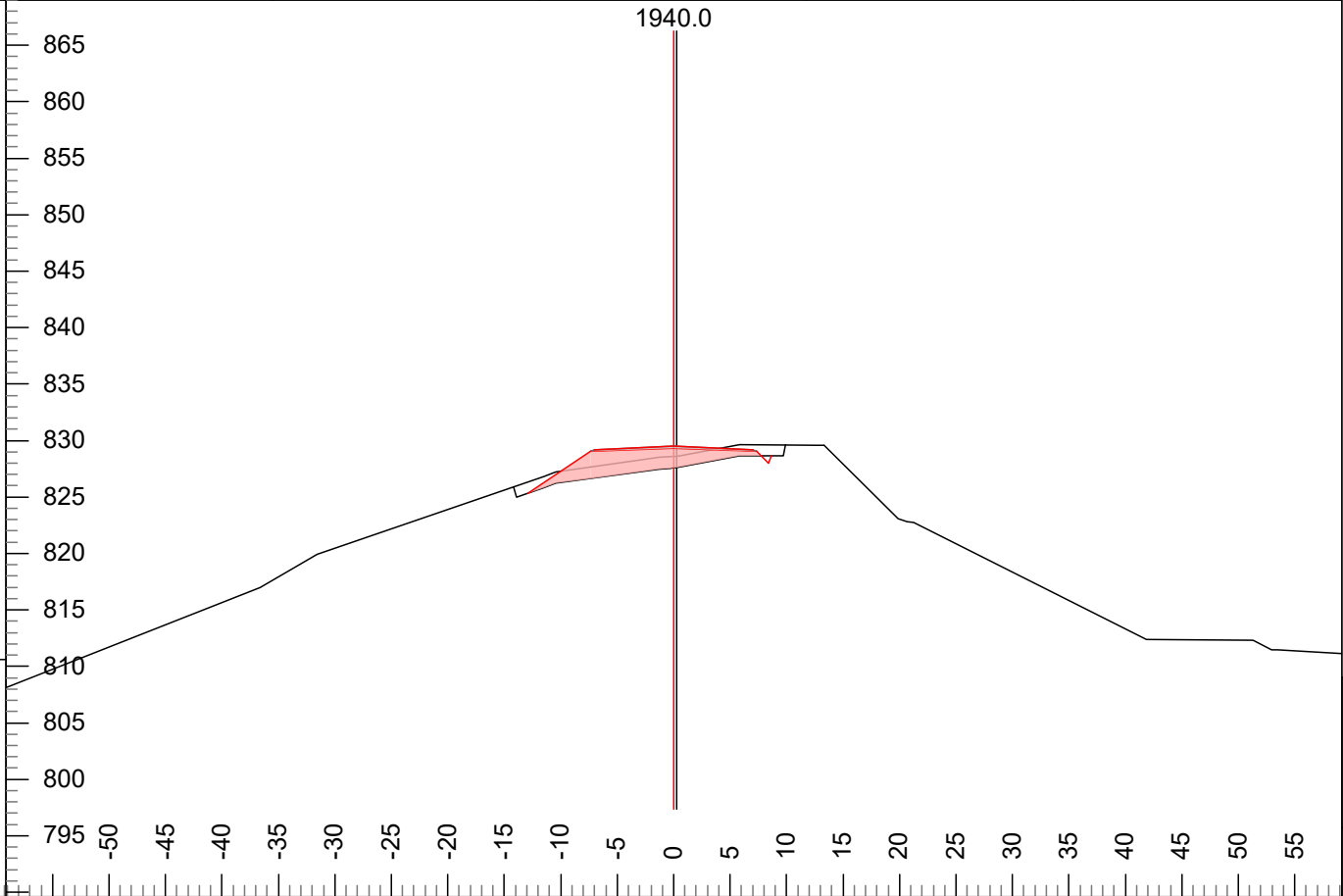
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L-Stn :	1900.0	Cut Dp:	-0.6	CL X:	9826.8	Clr L X:	-10.4	CL Elev:	829.8
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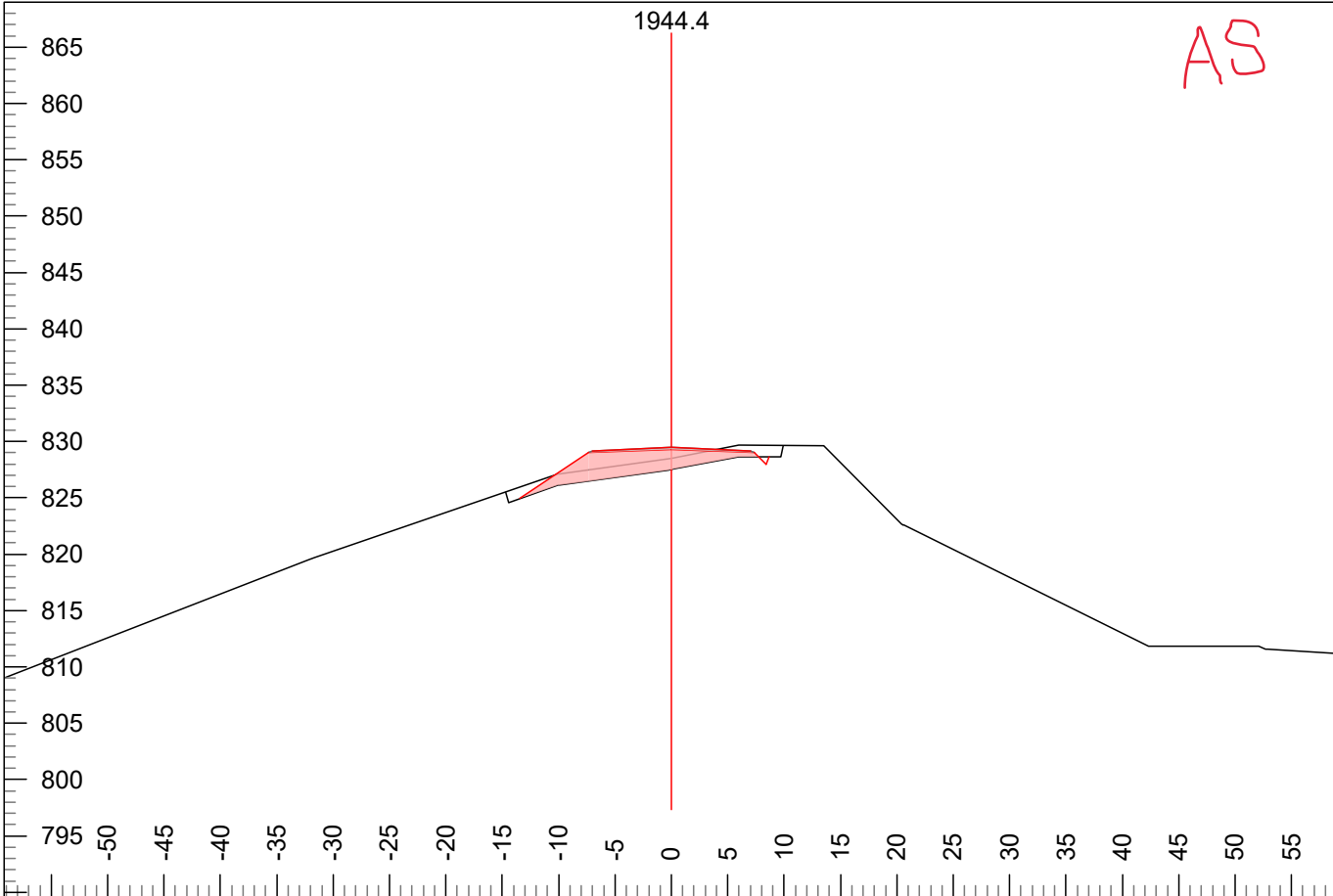
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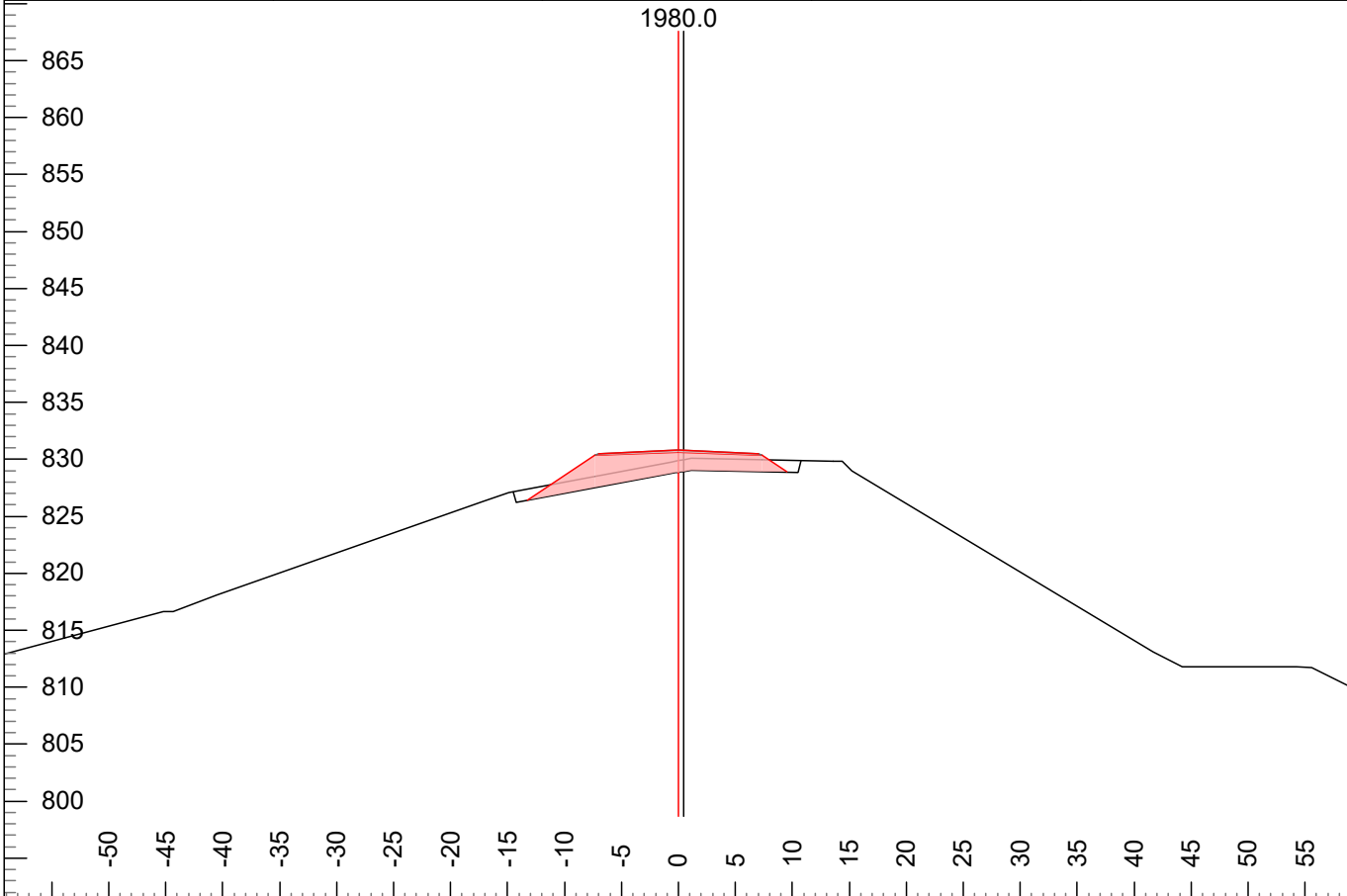
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Bark
Beetle
Bailey

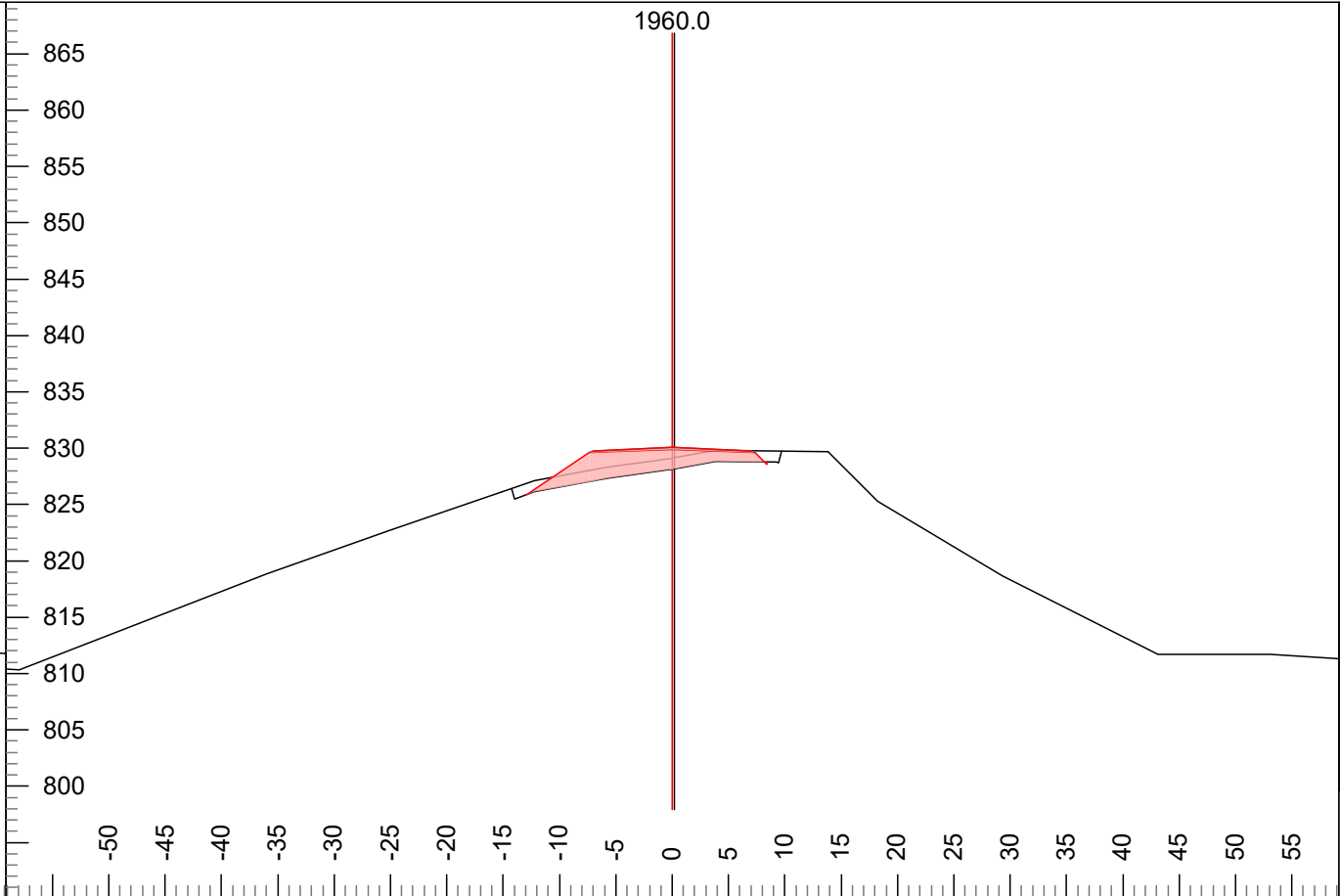
Created By:
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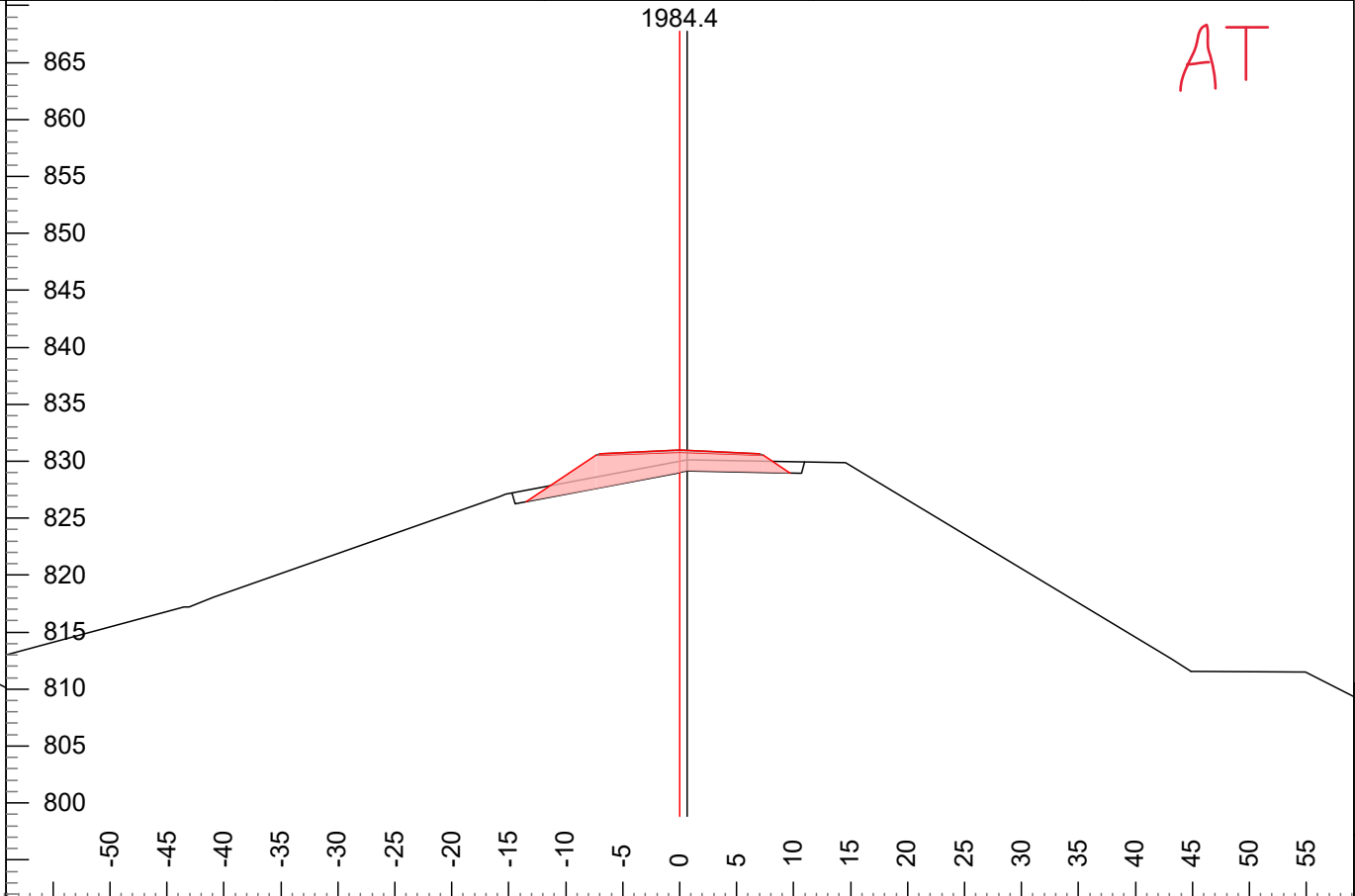
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L-Stn :	1980.0	Cut Dp:	-0.7	CL X:	9782.6	Clr L X:	-13.3	CL Elev:	830.6
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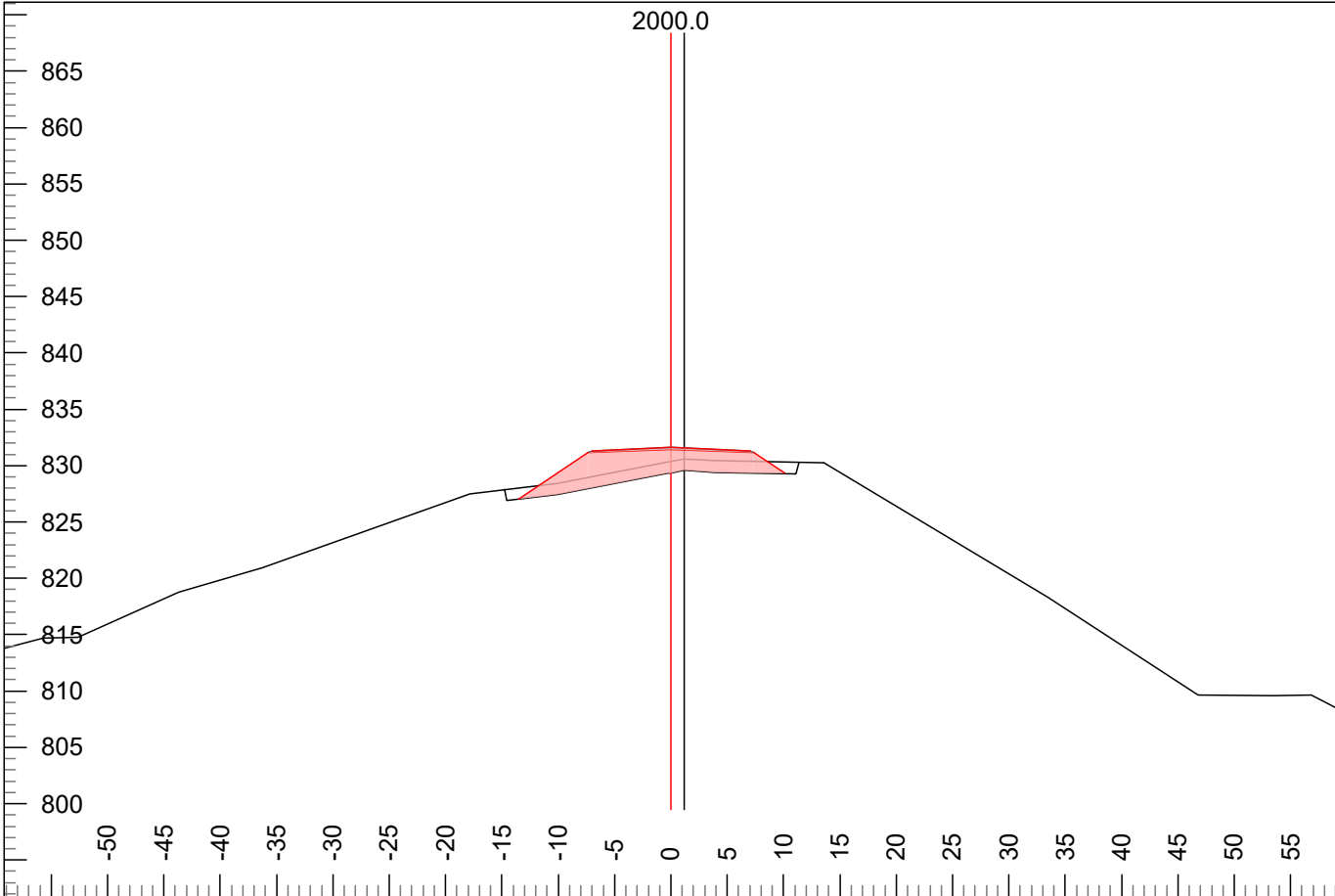
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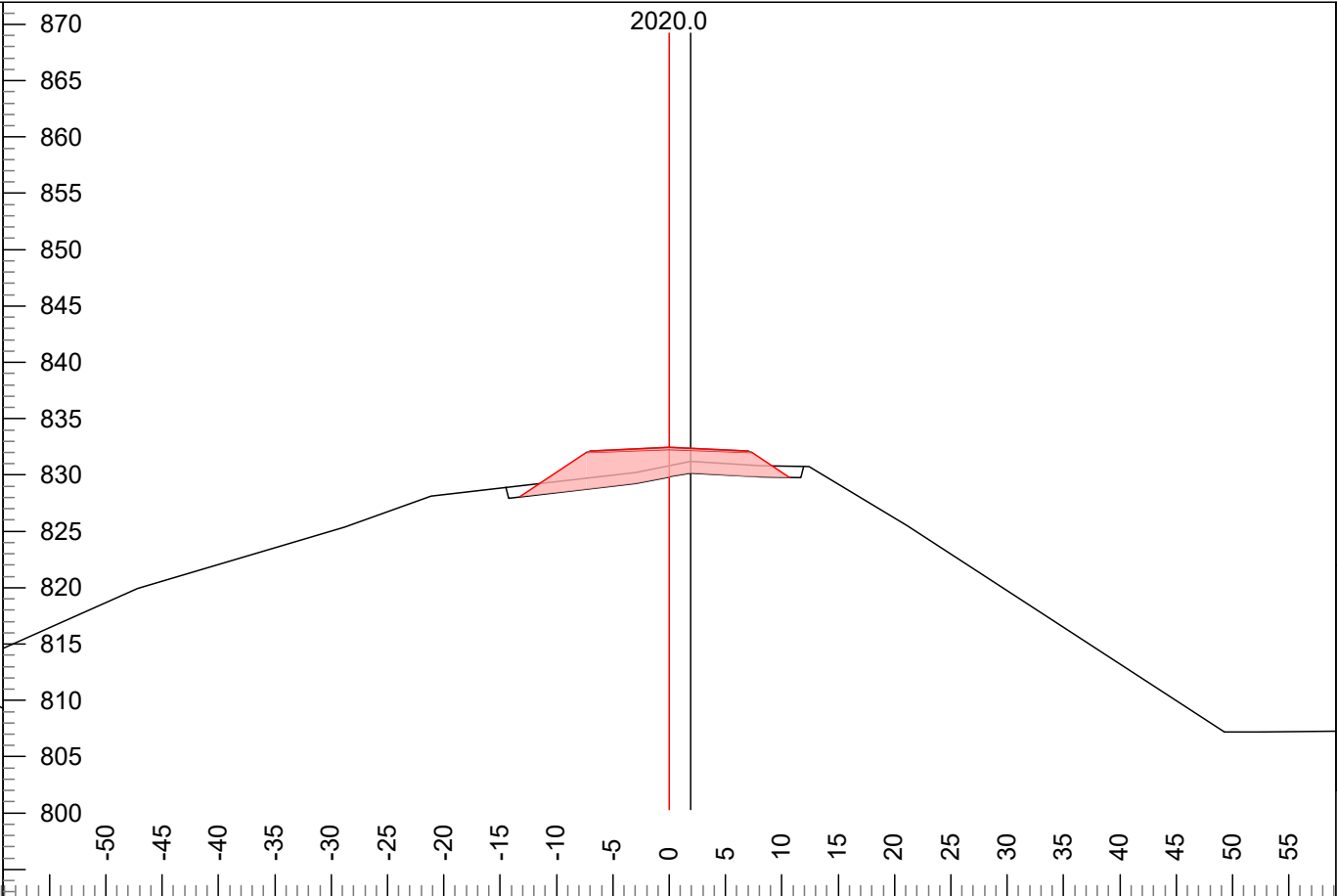
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Bark
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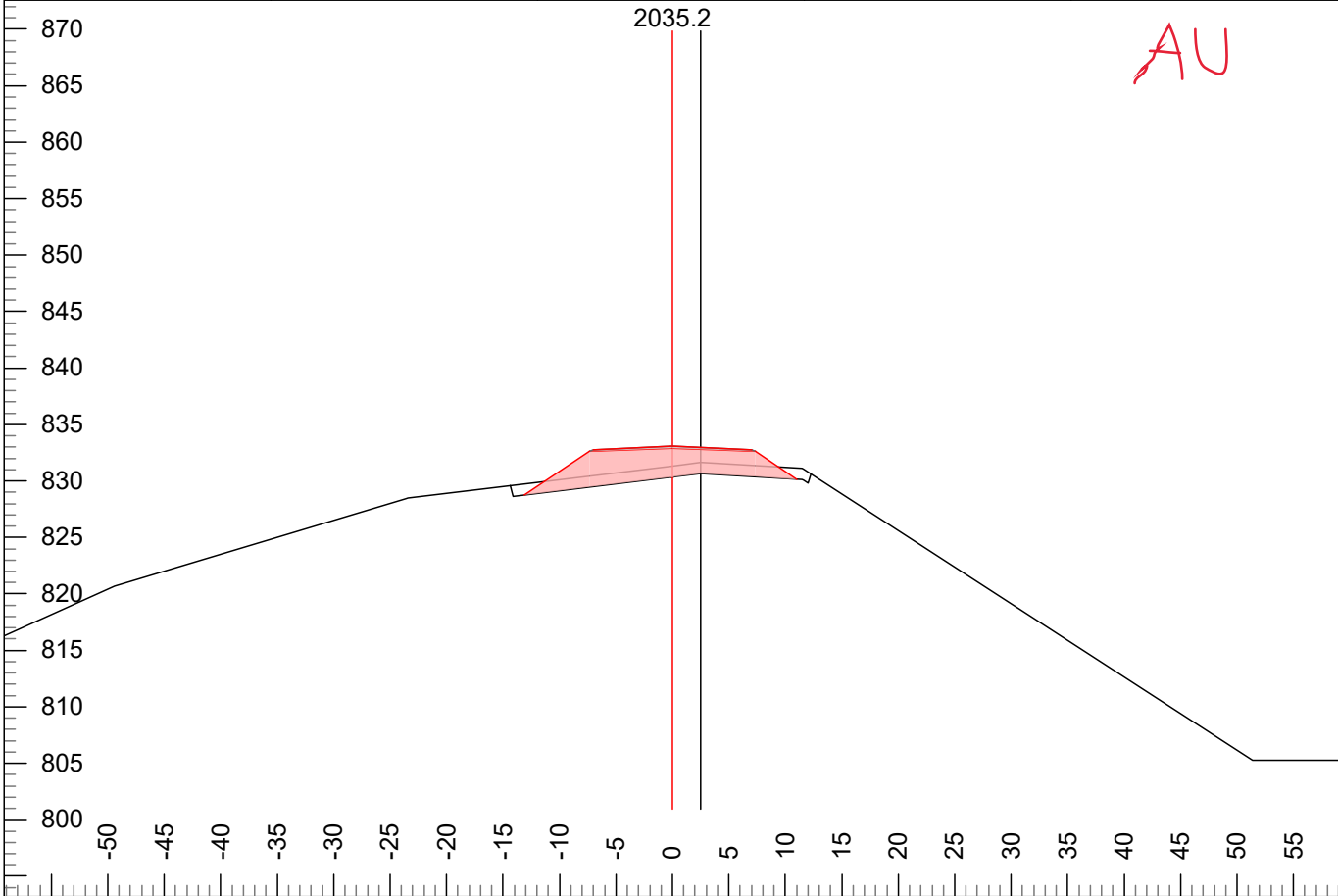
Created By:
M. Kawakami



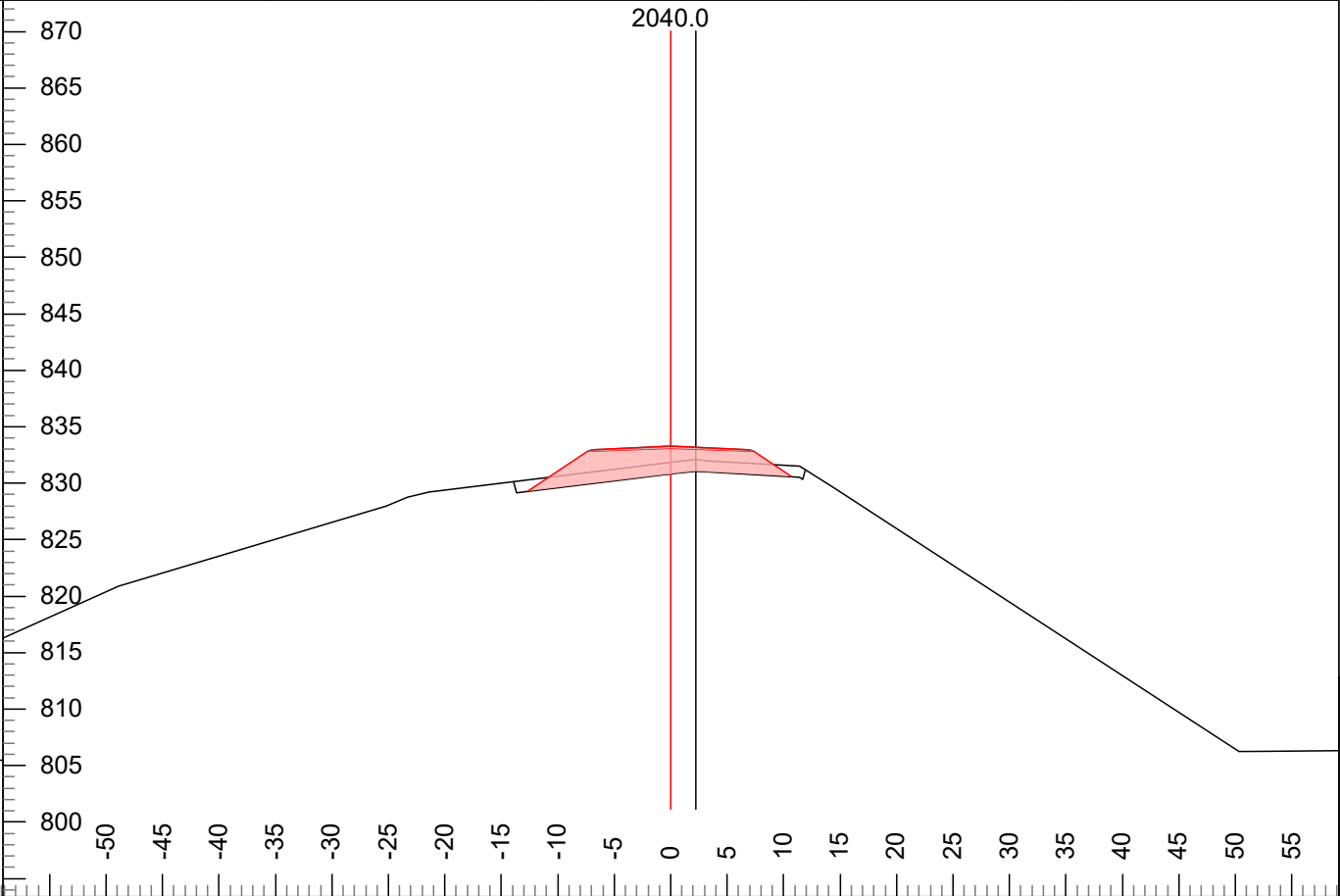
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P-Stn :	2123.1	H. Offset:	-1.2	CL Y:	8662.9	Clr R X:	10.1	Gnd Elev:	830.4



L-Stn :	2020.0	Cut Dp:	-1.4	CL X:	9760.7	Clr L X:	-13.3	CL Elev:	832.3
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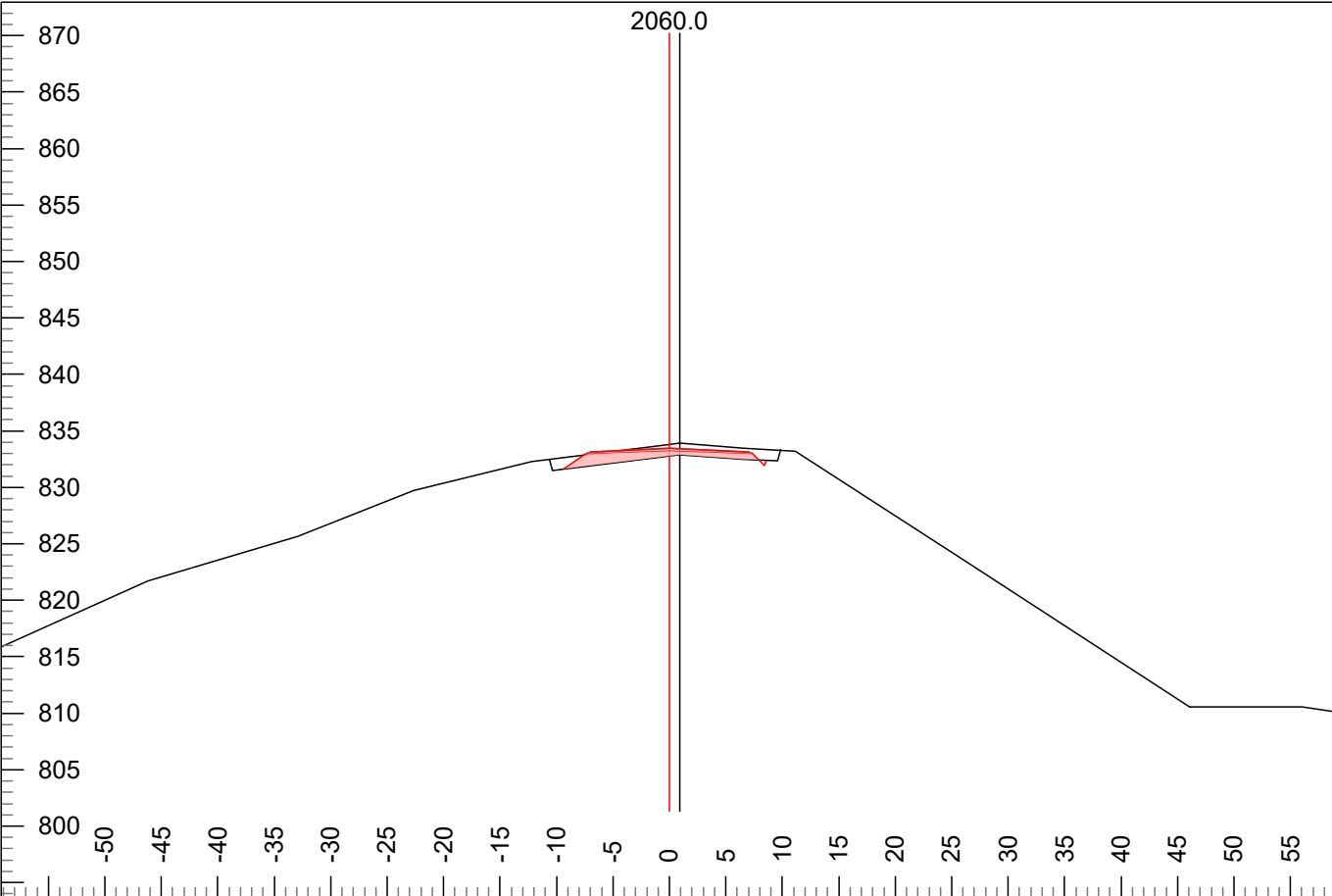
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P-Stn :	2158.5	H. Offset:	-2.5	CL Y:	8633.4	Clr R X:	11.0	Gnd Elev:	831.3



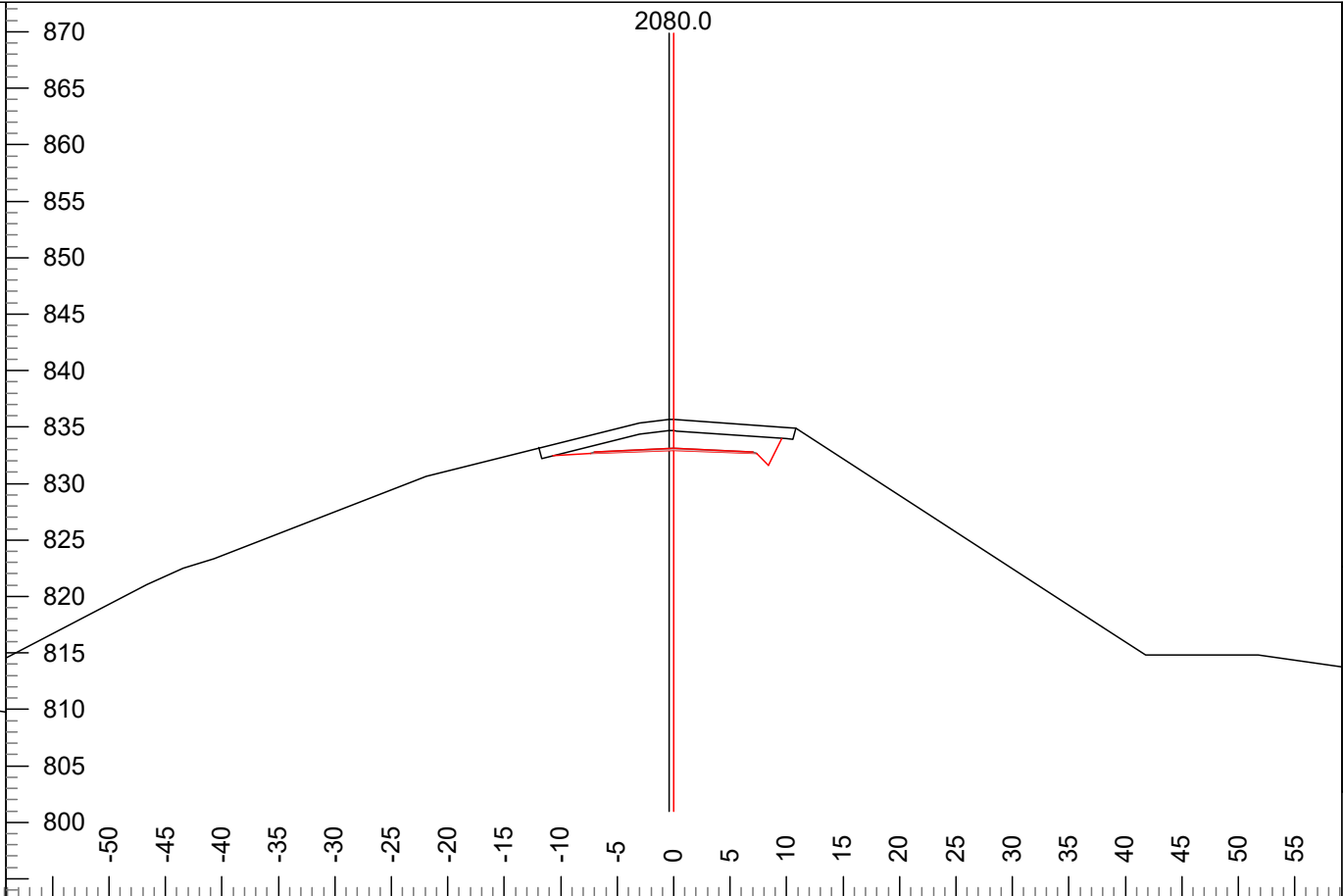
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P-Stn :	2163.5	H. Offset:	-2.2	CL Y:	8629.2	Clr R X:	10.7	Gnd Elev:	831.8

Bark
Beetle
Bailey

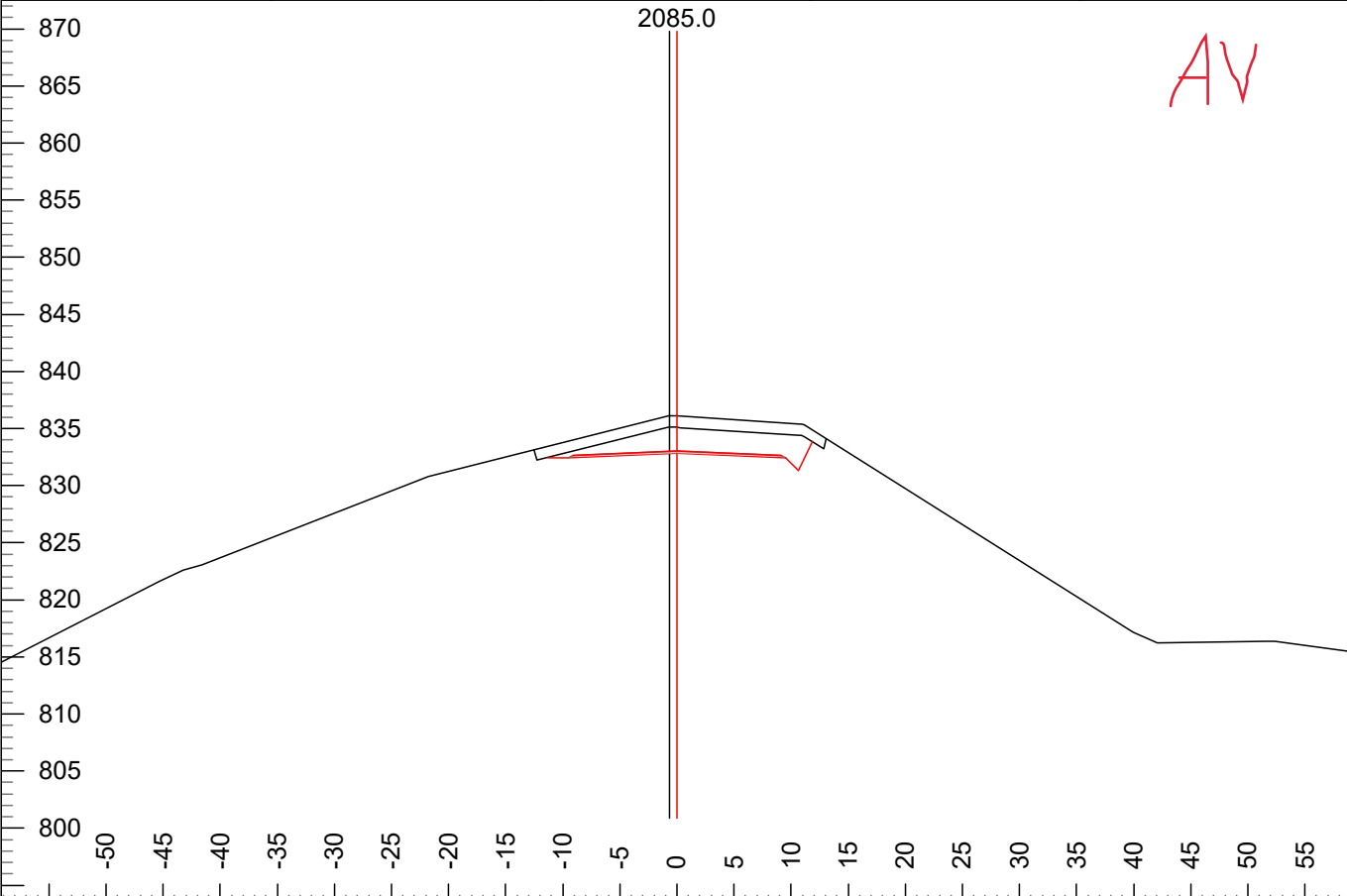
Created By:
M. Kawakami



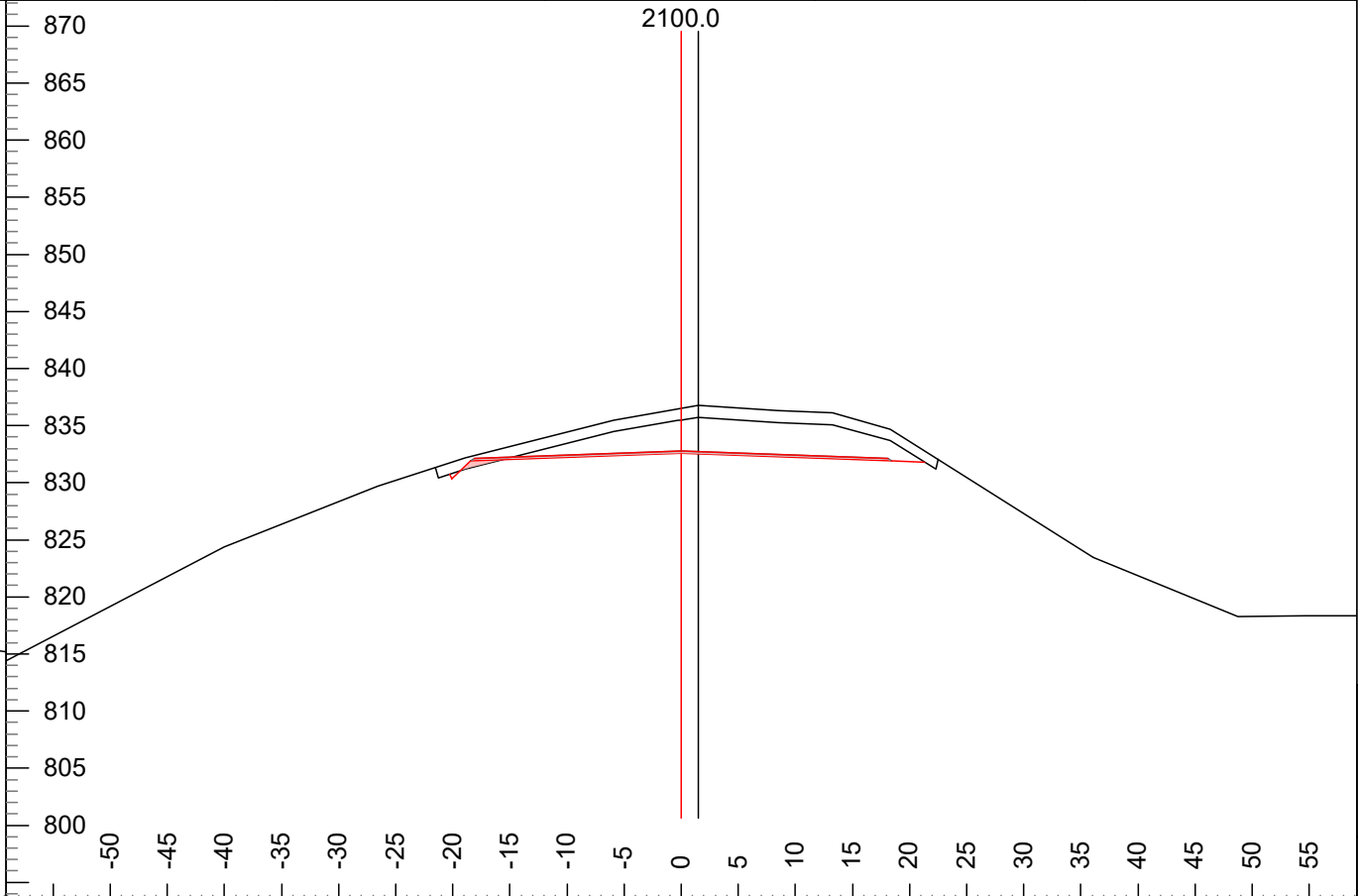
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P-Stn :	2183.5	H. Offset:	-0.9	CL Y:	8611.8	Clr R X:	8.6	Gnd Elev:	833.8



L-Stn :	2080.0	Cut Dp:	2.7	CL X:	9730.3	Clr L X:	-10.7	CL Elev:	832.9
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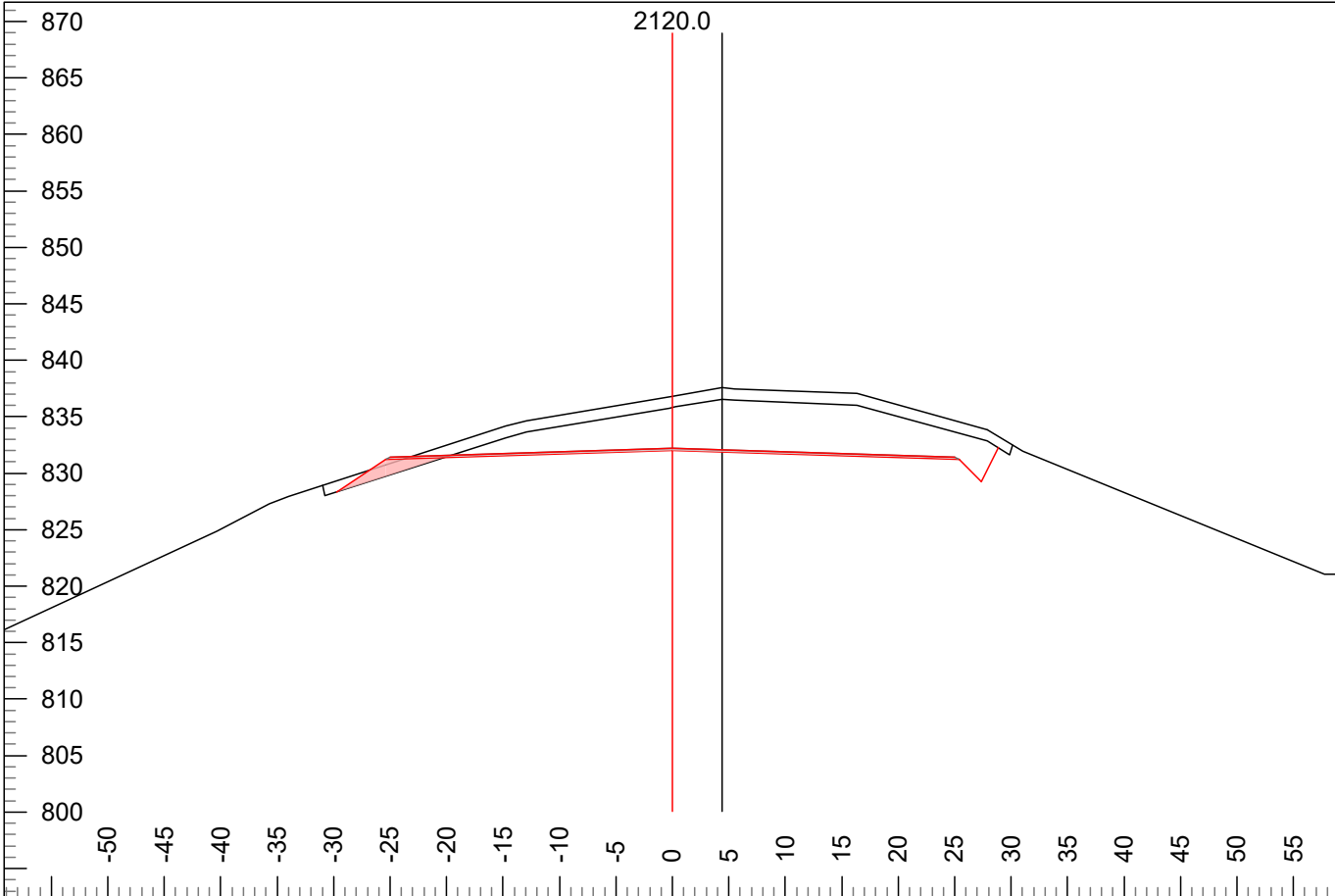
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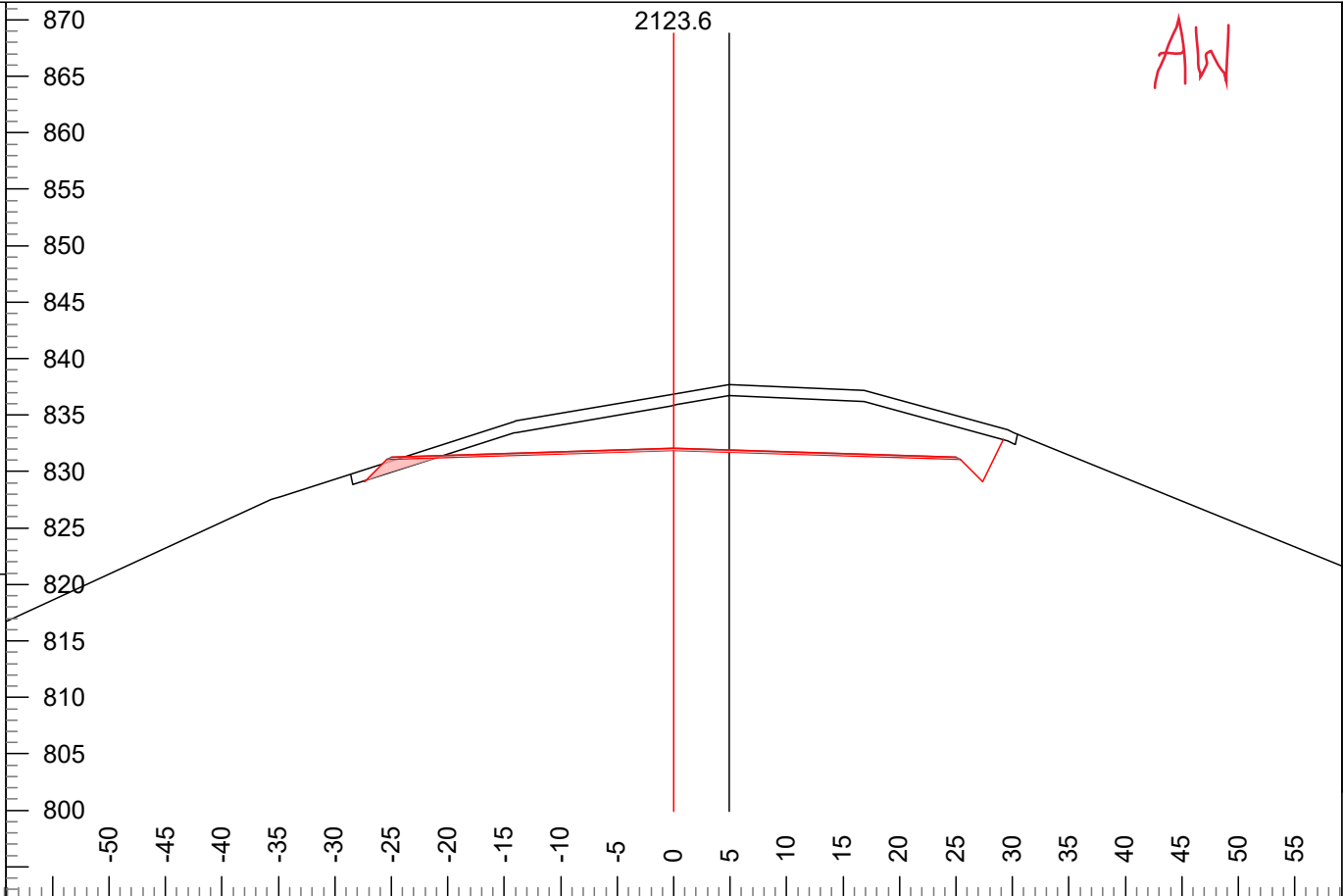
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Bark
Beetle
Bailey

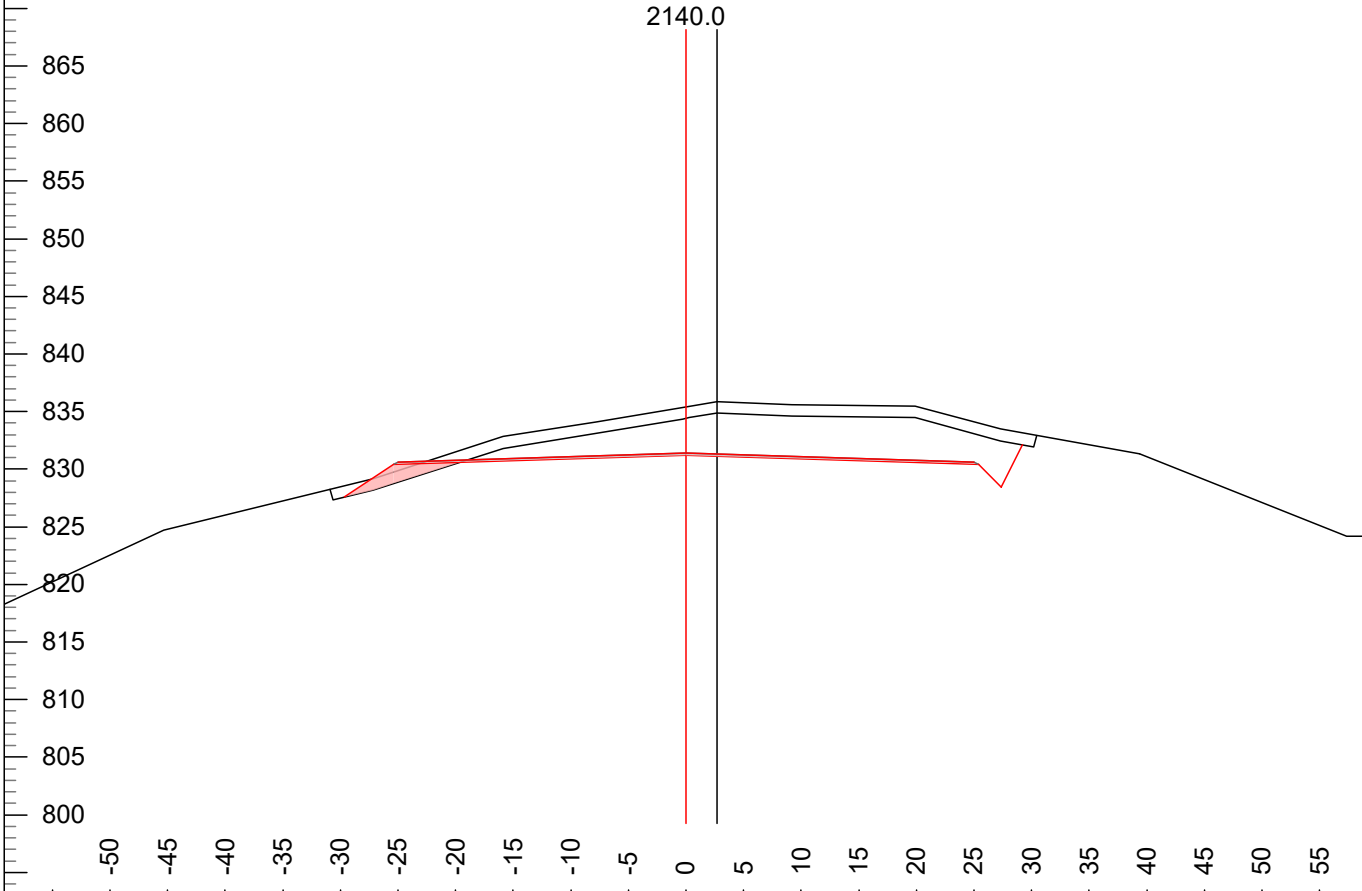
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M. Kawakami



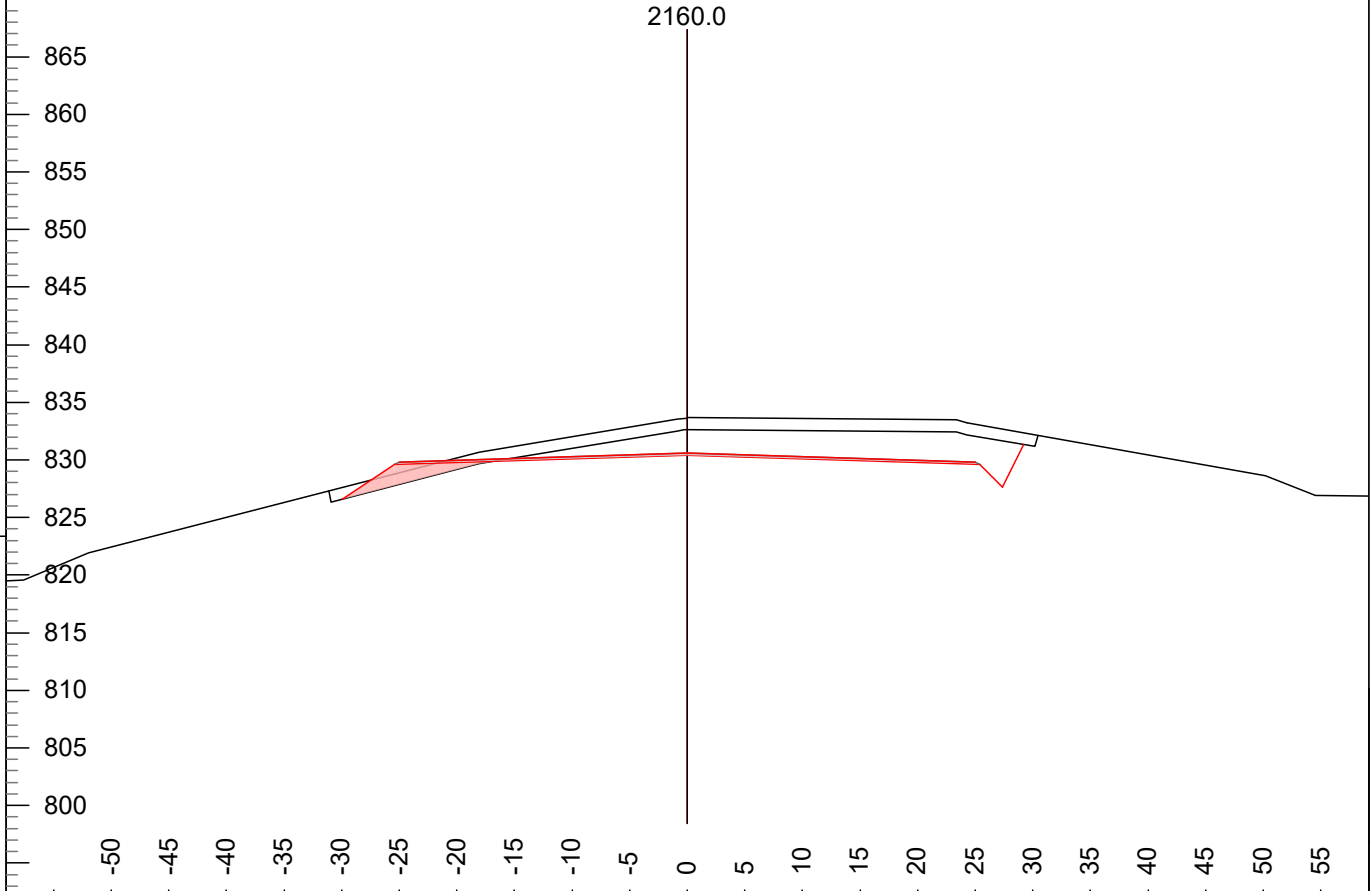
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P-Stn :	2243.1	H. Offset:	-4.4	CL Y:	8558.6	Clr R X:	28.9	Gnd Elev:	836.8



L-Stn :	2123.6	Cut Dp:	5.0	CL X:	9711.1	Clr L X:	-27.4	CL Elev:	831.9
P-Stn :	2247.5	H. Offset:	-4.9	CL Y:	8555.3	Clr R X:	29.2	Gnd Elev:	836.9



L-Stn :	2140.0	Cut Dp:	4.2	CL X:	9704.7	Clr L X:	-29.6	CL Elev:	831.2
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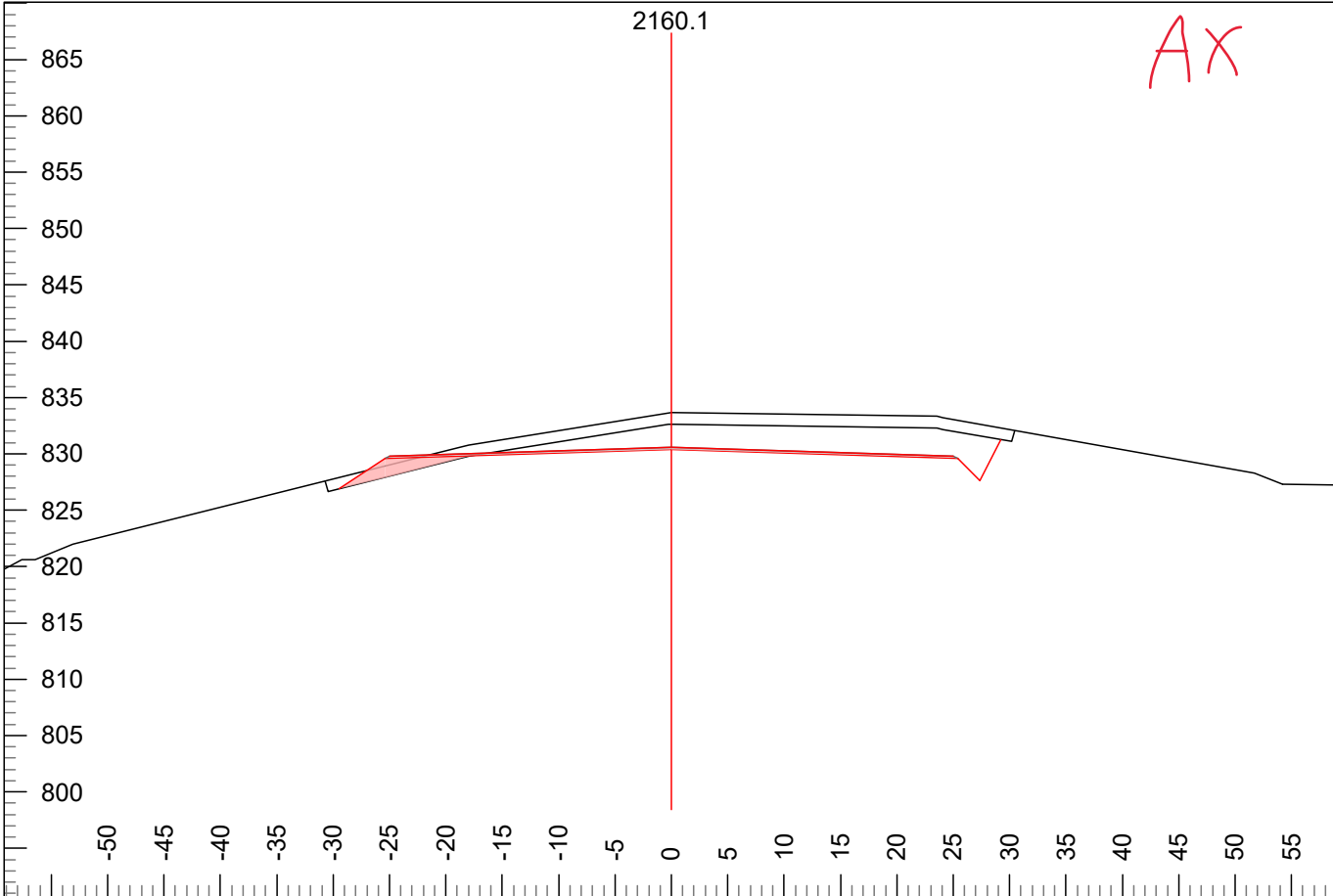
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AW

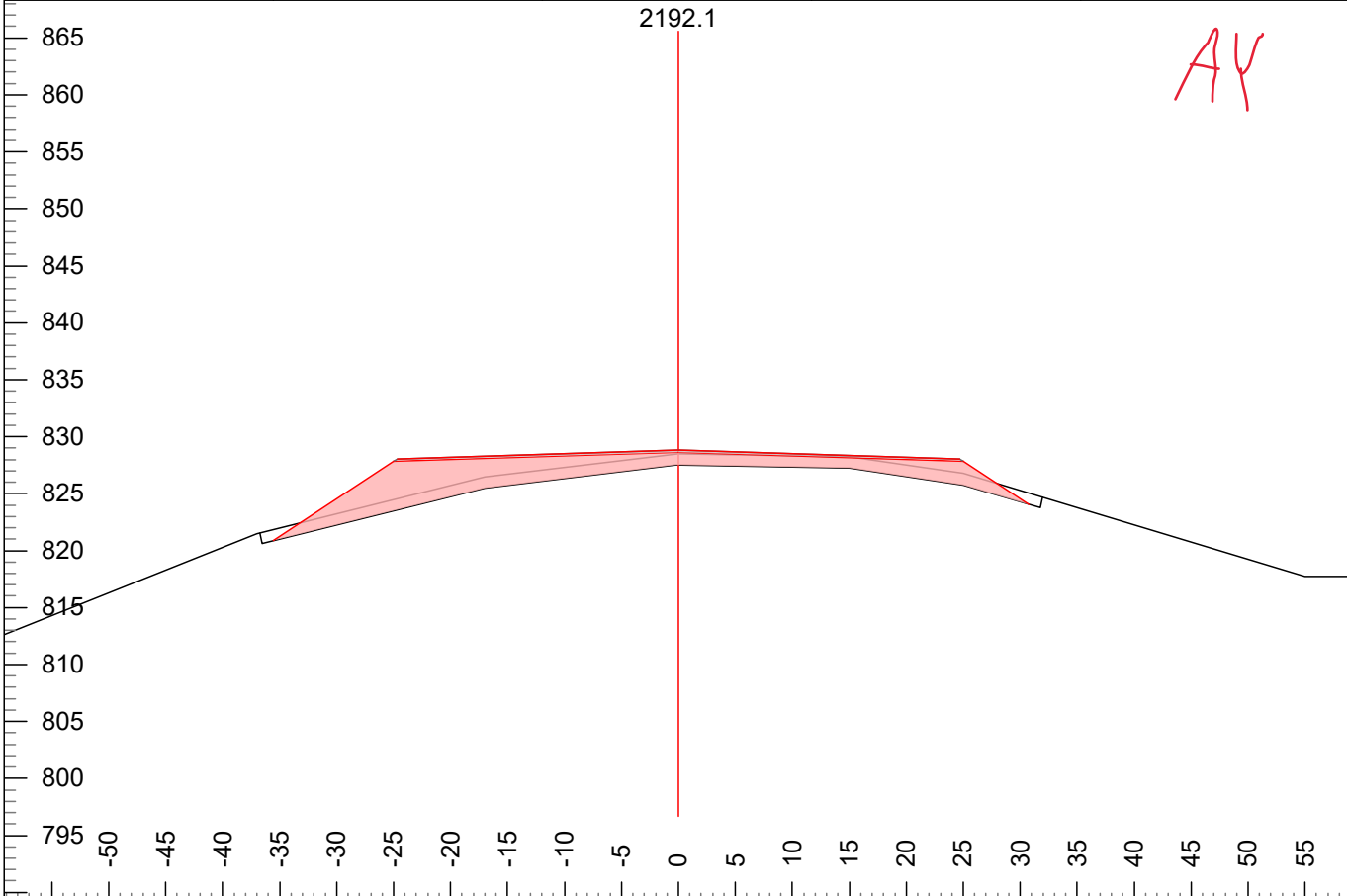
Bark
Beetle
Bailey

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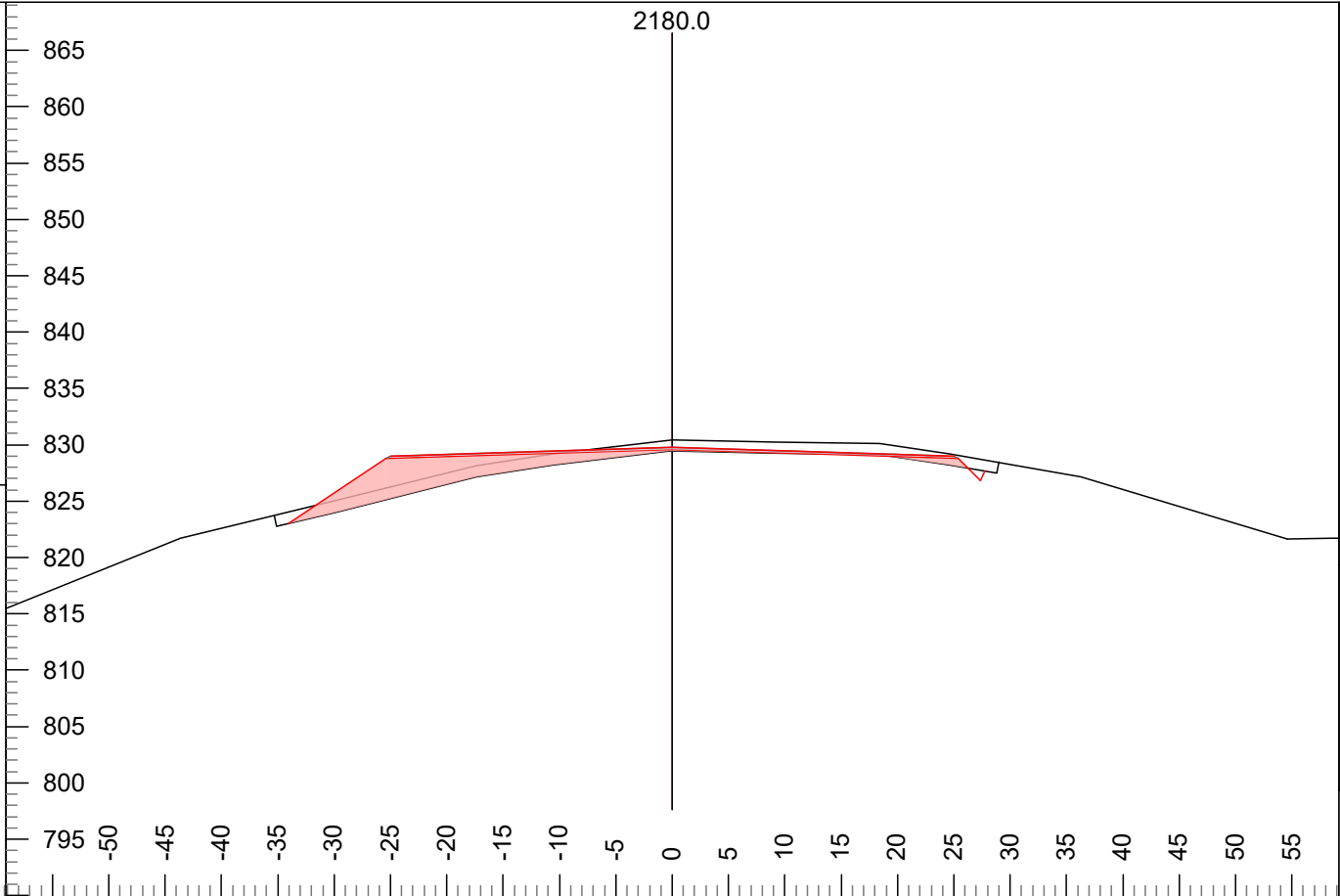
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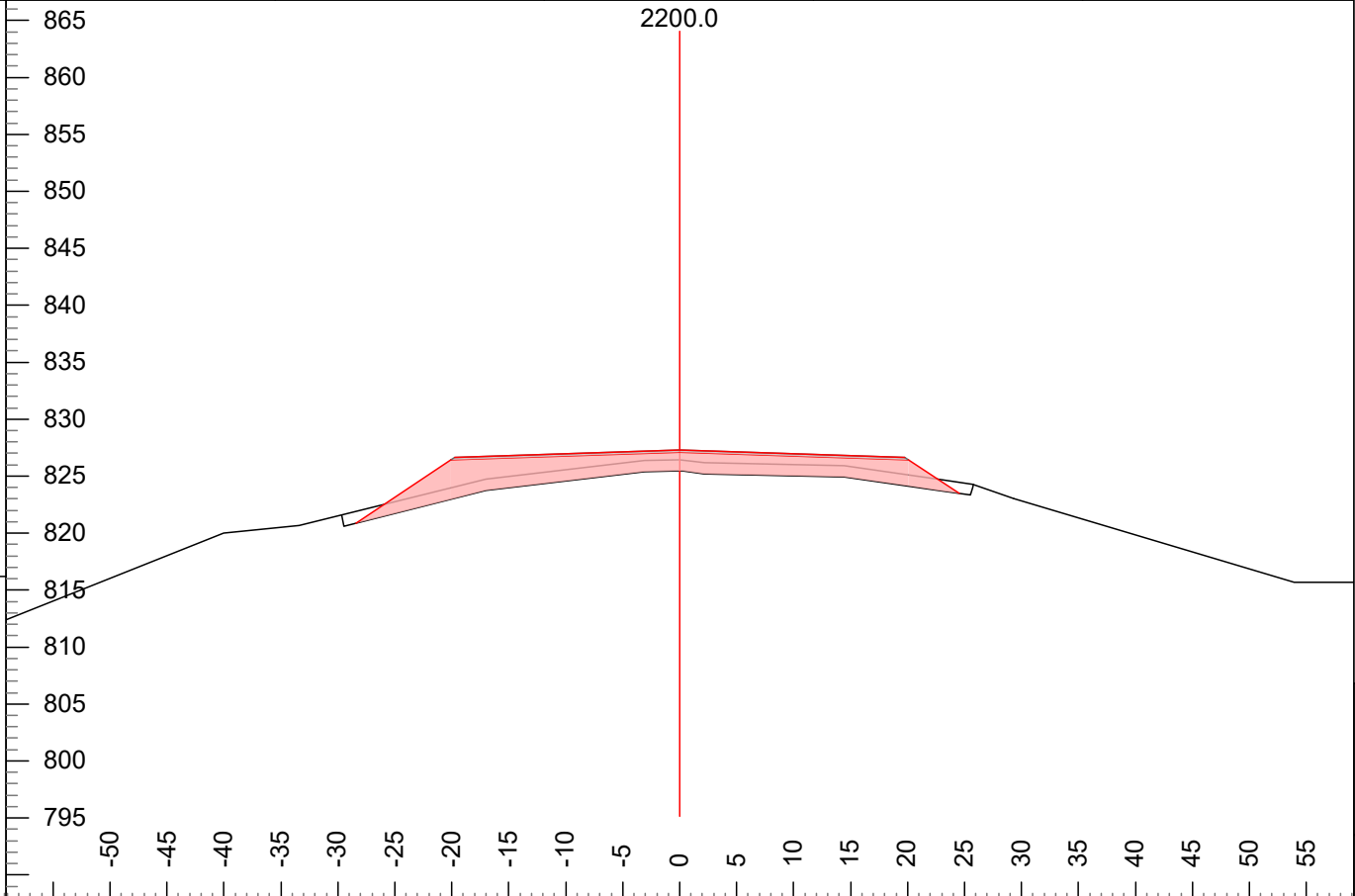
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P-Stn :	2284.5	H. Offset:	0.0	CL Y:	8521.6	Clr R X:	29.2	Gnd Elev:	833.6



L-Stn :	2192.1	Cut Dp:	-0.1	CL X:	9687.7	Clr L X:	-35.5	CL Elev:	828.6
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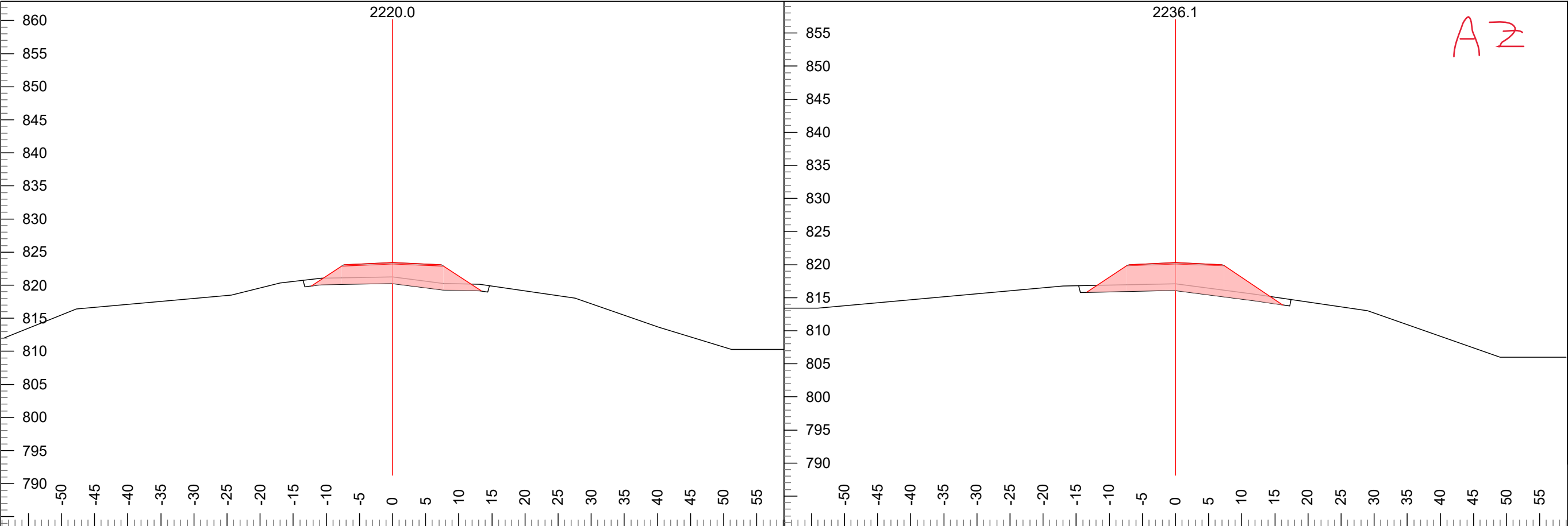
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L-Stn :	2200.0	Cut Dp:	-0.6	CL X:	9685.3	Clr L X:	-28.4	CL Elev:	827.1
P-Stn :	2324.4	H. Offset:	0.0	CL Y:	8483.5	Clr R X:	24.5	Gnd Elev:	826.5

Bark
Beetle
Bailey

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M. Kawakami



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Bark
Beetle
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L-Stn :	2220.0	Cut Dp:	-2.0	CL X:	9679.5	Clr L X:	-12.3	CL Elev:	823.2	L-Stn :	2236.1	Cut Dp:	-3.0	CL X:	9674.8	Clr L X:	-13.4	CL Elev:	820.1
P-Stn :	2344.4	H. Offset:	0.0	CL Y:	8464.4	Clr R X:	13.4	Gnd Elev:	821.3	P-Stn :	2360.5	H. Offset:	0.0	CL Y:	8449.0	Clr R X:	16.2	Gnd Elev:	817.1

23/11/08

TIMBER CRUISE REPORT

Bark Beetle Bailey (WO-341-2025-W01089-01) FY 2024

1. **Sale Area Location:** Portions of Section 7, T10S, R7W, W.M., Benton and Polk Counties, Oregon.
2. **Fund Distribution:**
 - a. **Fund** BOF 100%
3. **Sale Acreage by Area:**

Unit	Treatment	Gross Acres	Stream Buffers	Slope Buffer	Existing Roads	Green Tree Reserve Area	Net Sale Acres	Acreage Comp. Method
1	Modified Clearcut	99	26	1	-	3	69	GIS
2	Right-of-Way	2	-	-	-	-	2	GIS
Total		101	26	1	-	3	71	GIS

4. **Cruisers and Cruise Dates:** The sale was cruised by Aaron McEwen, Steven Irving and Zane Sandborg in February & March of 2024.
5. **Cruise Method and Computation:** The sale consists of two units. Unit 1 is a modified clearcut that was cruised using variable radius plot sampling on a 4 x 3.5 chain grid using a 40 BAF. A total of 54 plots were taken in Unit 1 with 28 measure plots and 26 count plots. Unit 2 is the Right-of-Way inside and outside the Timber Sale Boundary. Unit 1 cruise data was used for the portion of Unit 2 that is within the Timber Sale Boundary. Unit 2 was 100% cruised for DBH, height, form factor, grade and defect for every tree outside the Timber Sale Boundary within the posted Right-of-Way.

Trees labeled DFL within the cruise with a "T" status are 12-inch DBH or larger 3-saw grade trees that are to be removed.

Measure plots were measured for DBH, height, form factor, grade, and defect. Data was entered into the Atterbury SuperACE cruise program to determine stand statistics and net board foot volume. Additional volume was removed to account for hidden defect and breakage.

Digital ortho photos, Lidar data, and GPS data were used to map the boundaries for the sale, and ArcMap GIS was used to determine gross and net acreage.

6. **Measurement Standards:** Tree heights were measured to the nearest foot, to a top diameter of 6 inches inside bark or to 40% of form factor. Diameters at breast height (DBH) were measured to the nearest inch, and a form point of 16 feet was used to calculate form factor. Form factors were measured or estimated on every tree. Most trees were graded in 40 foot log segments unless breakage, defect, or length to top of grade cruise diameter warranted otherwise.
7. **Timber Description:** Timber in Unit 1 includes 69 acres of 82 year-old Douglas-fir and red alder with some scattered bigleaf maple. The average Douglas-fir to be removed is approximately 23 inches DBH, with an average height of 86 feet to a merchantable top. The average red alder is approximately 14 inches DBH, with an average height of 46 feet to a merchantable top. The average volume per acre to be harvested (net) in Unit 1 is approximately 39 MBF.

Timber in Unit 2 is within the Right-of-Way inside and outside of the Timber Sale Area, which consists of 30 year-old and 82 year-old Douglas-fir. The volume to be harvested (net) in Unit 2 is approximately 45 MBF.

8. Statistical Analysis and Stand Summary: (See attached "Statistics").

Unit	Target CV	Target SE	Actual CV	Actual SE
1	60%	9%	65.8%	8.9%
2	-	-	-	-

Note: Statistics shown are for conifer and hardwood trees combined. Percentages are for net board foot volume.

9. Total Volume (MBF) by Species and Grade: (See attached volume report "Species, Sort Grade – Board Foot Volumes - Project").

Unit	Species	Gross Cruise Volume	Cruised D & B	Cruised D & B (MBF)	Hidden D & B	Hidden D & B (MBF)	Net Sale Volume
1	Douglas-fir	2383	2.5%	(60)	5%	(119)	2204
	Red Alder	561	4.6%	(26)	5%	(27)	508
2	Douglas-fir	82	4.9%	(4)	4%	(3)	75
	Red Alder	16	6.3%	(1)	5%	(1)	14
Total		3042	--	(91)	--	(151)	2801

Unit	Species	Ave. DBH	Net Vol.	2-Saw	3-Saw (6-11)	3-Saw (12+)	4-Saw	Camp Run
1	Douglas-fir	24	Grade %	80%	13%	5%	2%	-
			2204	1758	277	127	42	-
	Red Alder	14	Grade %	-	-	-	-	100%
			508	-	-	-	-	508
2	Douglas-fir	24	Grade %	75%	13%	10%	2%	-
			75	56	10	7	2	-
	Red Alder	14	Grade %	-	-	-	-	100%
			14	-	-	-	-	14
Total			2801	1814	287	134	44	522

Attachments: Cruise Design
Cruise Maps
Species, Sort Grade – Board Foot Volumes
Statistics
Stand Table Summary
Log Stock Table – MBF

Prepared by: Aaron McEwen

Date: 4/26/2024

Unit Forester: Cody Valencia

Date: 4/26/2024

CRUISE DESIGN WEST OREGON DISTRICT

Sale Name: Bark Beetle Bailey Area 1

Harvest Type: MC Net BF Net BF
Approx. Cruise Acres: 75 Estimated CV% 60 /Acre SE% Objective 9% /Acre

Planned Sale Volume: 2.8 MMBF Estimated Sale Area Value/Acre: \$16,785

- A. **Cruise Goals:** (a) Grade minimum 100 conifer and 0 hardwood trees:
(b) Sample 54 cruise plots (28 grade: 21 count); (c) Other goals X Determine log grades for sale value; Determine take and leave tree species and sizes.

(Special cruising directions – leave trees etc.) Take plots as shown on map. Do not take plots in buffers.

DO NOT RECORD 12', 22' and 32' (for Hardwoods).

DO NOT RECORD 22' LENGTHS.

B. Cruise Design:

1. **Plot Cruises:** BAF 40 Full point
Cruise Line Direction(s) 90/270
Cruise Line Spacing 4/264 (chains) (feet)
Cruise Plot Spacing 5/330 (chains) (feet)
Grade/Count Ratio 1:1

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 10" for hardwoods.
Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.
2. **Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.
3. **Top Cruise Diameter (TCD):** Minimum top outside bark for conifer is 7", 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
4. **Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.
5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for

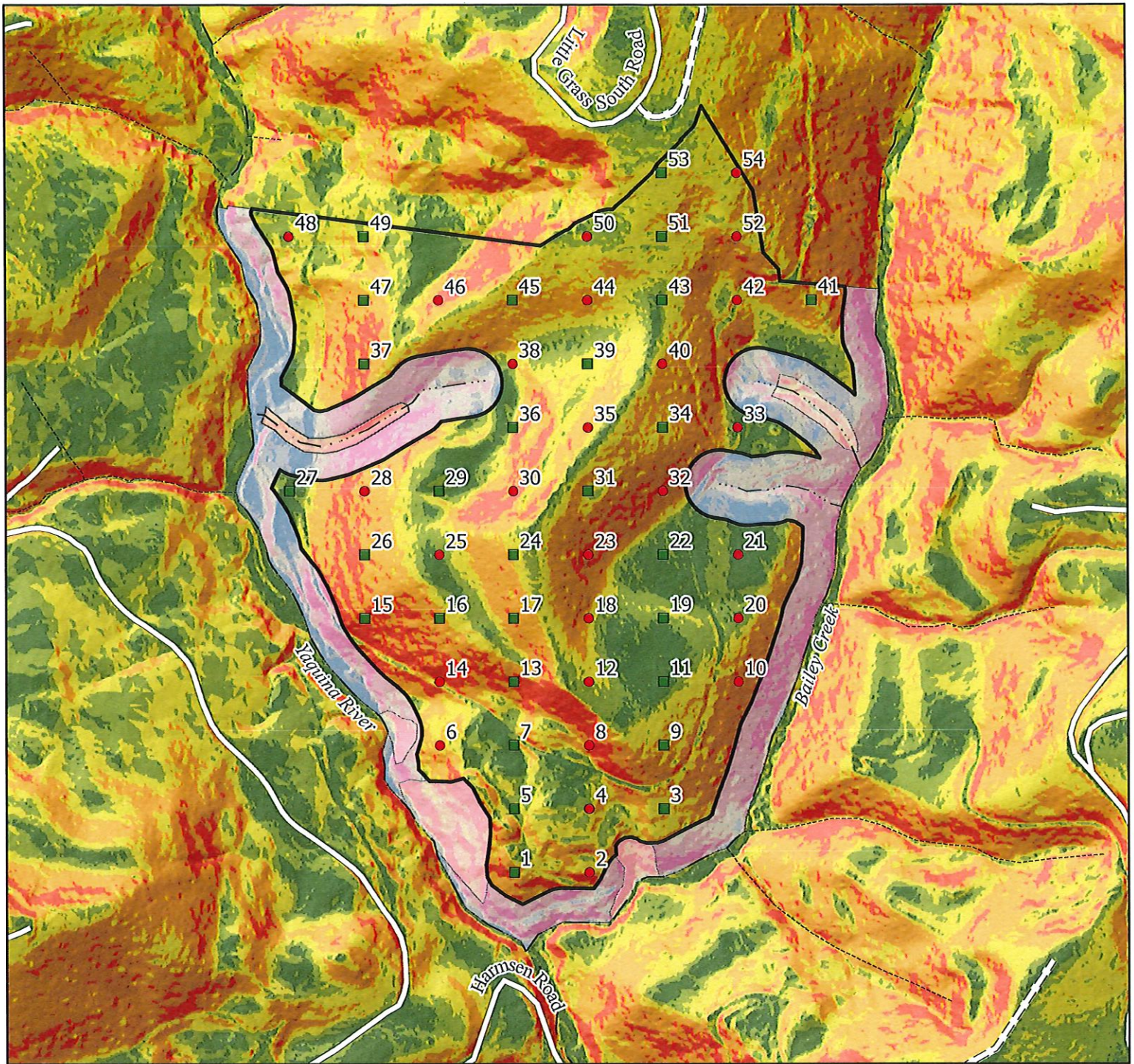
hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. log segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

- 6. Species, Sort, and Grade Codes:** A. Species: Record as DF (Douglas-fir); WH (Western hemlock); SS (Sitka Spruce); RC (Western red cedar); NF (Noble fir); SF (Silver fir); RA (Red alder); BM (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DFL, HL, CL, etc.)
B. Sort: Use code "1" (Domestic).
C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; K = Camp Run; 0 = Cull ;
Hardwoods: K = Camprun; #1 Sawmill = 12"+ scaling diameter; #2 Sawmill = 10" and 11"; #3 Sawmill = 8" and 9"; #4 Sawmill = 6" and 7"
- 7. Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.
- 8. Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning points with red flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie red flagging above eye level near plot center and another red flagging around a sturdy wooden stake marking plot center. On red flagging, write the plot identification number. On "measure/grade" plots write the tree number and/or tree diameter on all measured trees (clockwise from the line direction) in yellow paint. Mark leave trees with an L for leave.
ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.
- 9. Cruising Equipment:** Relaskop, Rangefinder, Logger's Tape (with dbh on back), Compass, Cruise Cards or Data Recorder, Cruise Design, Cruise Map, Red Flagging, Yellow Paint.
- 10. Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Aaron McEwen

Approved by: 

Date: 9/26/24



Legend

Bark Beetle Bailey Cruise Map

4x3.5 Chain Spacing
 Line Bearing: 90 and 270 degrees
 75 Acres
 40 BAF

Plots

- Count
- Measure

Roads

- Highway
- Paved
- Surfaced Road
- Unsurfaced Road
- ▭ Timber Sale Area
- · · Type F Stream
- - - Type N Stream
- · - Unknown Stream



TC PSTATS				PROJECT STATISTICS				PAGE	1				
				PROJECT	BBB			DATE	4/17/2024				
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt				
010	007	07	BBB CC	00CC	69.00	54	326	W	W				
				TREES	ESTIMATED	PERCENT							
				PER PLOT	TOTAL	SAMPLE							
					TREES	TREES							
				PLOTS	TREES								
TOTAL				54	326	6.0							
CRUISE				28	168	6.0	9,492	1.8					
DBH COUNT													
REFOREST													
COUNT				26	156	6.0							
BLANKS													
100 %													
STAND SUMMARY													
SAMPLE				TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET	
TREES				/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC	
DF				98	50.9	22.5	86	29.7	140.7	32,767	32,013	6,464	6,464
R ALDER				52	82.2	13.6	46	22.6	83.2	8,126	7,749	2,148	2,148
DF LEAVE-L				10	.8	46.5	111	1.5	9.9	2,765	2,641	443	443
DF LEAVE-T				3	.4	51.3	112	0.8	5.9	1,769	1,648	296	296
SNAG				3	2.0	16.5	38	0.7	3.0				
WR CEDAR				1	.0	58.0	28	0.1	.7	16	15	9	9
WHEMLOCK				1	1.1	11.0	37	0.2	.7	45	45	12	12
TOTAL				168	137.6	18.0	61	57.5	244.3	45,488	44,111	9,372	9,372
CONFIDENCE LIMITS OF THE SAMPLE													
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR													
CL	68.1	COEFF		SAMPLE TREES - BF				# OF TREES REO.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15				
DF		88.7	9.0	1,140	1,252	1,364							
R ALDER		68.0	9.4	113	124	136							
DF LEAVE-L		74.0	24.6	3,018	4,005	4,992							
DF LEAVE-T		8.7	6.0	3,766	4,007	4,248							
SNAG													
WR CEDAR													
WHEMLOCK													
TOTAL		136.9	10.6	967	1,081	1,196	749	187	83				
CL	68.1	COEFF		SAMPLE TREES - CF				# OF TREES REO.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15				
DF		78.1	7.9	218	237	255							
R ALDER		66.7	9.2	32	35	39							
DF LEAVE-L		68.9	22.9	513	666	818							
DF LEAVE-T		11.6	8.0	666	724	782							
SNAG													
WR CEDAR													
WHEMLOCK													
TOTAL		120.2	9.3	184	203	222	577	144	64				
CL	68.1	COEFF		TREES/ACRE				# OF PLOTS REO.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15				
DF		103.1	14.0	44	51	58							
R ALDER		128.6	17.5	68	82	97							
DF LEAVE-L		346.5	47.1	0	1	1							
DF LEAVE-T		419.9	57.1	0	0	1							
SNAG		411.0	55.9	1	2	3							
WR CEDAR		734.8	99.9	0	0	0							
WHEMLOCK		734.8	99.9	0	1	2							
TOTAL		66.3	9.0	125	138	150	176	44	20				

PROJECT STATISTICS

PROJECT BBB

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
010	007	07	BBB CC	00CC	69.00	54	326	W	W

CL	68.1	COEFF	BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5	10	15
DF		94.3	12.8	123	141	159			
R ALDER		122.9	16.7	69	83	97			
DF LEAVE-L		371.9	50.6	5	10	15			
DF LEAVE-T		423.0	57.5	3	6	9			
SNAG		356.9	48.5	2	3	4			
WR CEDAR		734.8	99.9	0	1	1			
WHEMLOCK		734.8	99.9	0	1	1			
TOTAL		37.4	5.1	232	244	257	56	14	6

CL	68.1	COEFF	NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5	10	15
DF		102.6	14.0	27,546	32,013	36,480			
R ALDER		131.2	17.8	6,367	7,749	9,131			
DF LEAVE-L		436.5	59.3	1,074	2,641	4,209			
DF LEAVE-T		420.0	57.1	707	1,648	2,589			
SNAG									
WR CEDAR		734.8	99.9	0	15	30			
WHEMLOCK		734.8	99.9	0	45	90			
TOTAL		65.8	8.9	40,164	44,111	48,058	173	43	19

CL	68.1	COEFF	NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5	10	15
DF		99.9	13.6	5,586	6,464	7,342			
R ALDER		126.5	17.2	1,778	2,148	2,517			
DF LEAVE-L		439.4	59.7	178	443	708			
DF LEAVE-T		421.1	57.3	126	296	465			
SNAG									
WR CEDAR		734.8	99.9	0	9	18			
WHEMLOCK		734.8	99.9	0	12	25			
TOTAL		56.1	7.6	8,658	9,372	10,086	125	31	14

T PSCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																		
T010 R007 S07 Ty00CC 69.00						Project: BBB Acres 69.00										Page 1 Date 4/17/2024 Time 11:28:14AM				
S So Gr Spp T rt ad		% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre	
		Def%	Gross	Net	Log Scale Dia				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf				
					4-5		6-11	12-16	17+	12-20	21-30	31-35					36-99			
RA	DO CR	100	4.6	8,126	7,749	535	81	19			12	10	38	40	27	8	70	0.72	111.5	
RA Totals		18	4.6	8,126	7,749	535	81	19			12	10	38	40	27	8	70	0.72	111.5	
DF	DO 2M	83	2.4	27,336	26,675	1,841			28	72	0	0	2	98	39	17	526	2.52	50.7	
DF	DO 3M	15	1.6	4,797	4,720	326			88	9	4	3	4	21	72	37	9	109	0.78	43.5
DF	DO 4M	2	2.7	634	617	43			99	1		88	12			16	7	26	0.48	23.7
DF Totals		73	2.3	32,767	32,013	2,209			15	25	60	2	1	4	92	34	12	272	1.63	117.8
RC	DO CR	100	7.5	16	15	1					100				27	19	370	8.48	.0	
RC Totals		0	7.5	16	15	1					100				27	19	370	8.48	.0	
DFL L	DO CU														21	37		0.00	.2	
DFL L	DO 1S	14		377	377	26				100				100	40	50	4799	17.66	.1	
DFL L	DO 2M	50	4.4	1,390	1,328	92				100	6	12		82	35	30	1418	6.69	.9	
DFL L	DO 3M	36	6.2	998	936	65			6	94	3	2		95	32	22	839	4.68	1.1	
DFL Totals		6	4.5	2,765	2,641	182			2	98	4	7		89	33	27	1149	5.88	2.3	
DFL T	DO 2M	17	2.2	295	289	20				100			24	76	36	23	880	4.39	.3	
DFL T	DO 3M	83	7.8	1,474	1,359	94				100	5			95	35	30	1490	7.75	.9	
DFL Totals		4	6.9	1,769	1,648	114				100	4		4	91	35	28	1329	6.83	1.2	
WH	DO 4M	100		45	45	3				100					24	7	40	0.46	1.1	
WH Totals		0		45	45	3				100					24	7	40	0.46	1.1	
Totals			3.0	45,488	44,111	3,044		25	22	53	4	3	10	83	30	11	188	1.32	234.0	

T		PSTNDSUM										Stand Table Summary										Page		1	
																						Date:		4/17/2024	
												Project										Time:		11:28:15AM	
												BBB													
												Acres										69.00		Grown Year:	
S	Spec	T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF								
										Net Cu.Ft.	Net Bd.Ft.														
DF			8	1	77	17	4.114	1.44	4.11	3.0	10.0		12	41		9	3								
DF			11	1	91	86	2.176	1.44	2.18	18.0	70.0		39	152		27	11								
DF			12	2	85	102	3.657	2.87	5.49	16.0	63.3		88	347		61	24								
DF			13	1	85	115	1.558	1.44	3.12	14.0	60.0		44	187		30	13								
DF			14	1	89	119	1.343	1.44	2.69	20.0	80.0		54	215		37	15								
DF			15	2	89	126	2.341	2.87	4.68	24.5	100.0		115	468		79	32								
DF			16	2	87	84	2.057	2.87	4.11	21.0	90.0		86	370		60	26								
DF			17	1	87	123	.911	1.44	1.82	33.5	135.0		61	246		42	17								
DF			18	6	89	102	4.876	8.62	10.56	30.2	116.9		319	1,235		220	85								
DF			19	2	89	102	1.459	2.87	2.92	36.2	140.0		106	408		73	28								
DF			20	5	89	124	3.291	7.18	9.22	34.9	150.7		322	1,389		222	96								
DF			21	6	88	127	3.582	8.62	9.55	37.5	163.1		358	1,558		247	108								
DF			22	1	88	103	.544	1.44	1.09	51.5	215.0		56	234		39	16								
DF			23	3	86	123	1.493	4.31	3.98	46.6	198.8		186	791		128	55								
DF			24	6	88	127	2.743	8.62	8.23	47.9	214.4		395	1,765		272	122								
DF			25	5	91	134	2.106	7.18	6.32	55.1	267.3		348	1,689		240	117								
DF			26	5	89	132	1.948	7.18	5.45	60.8	290.0		331	1,581		229	109								
DF			27	3	88	154	1.084	4.31	3.25	70.0	368.9		228	1,199		157	83								
DF			28	5	90	135	1.679	7.18	4.70	73.6	372.1		346	1,750		239	121								
DF			29	1	94	126	.313	1.44	.94	74.7	396.7		70	373		48	26								
DF			30	3	87	121	.878	4.31	2.34	78.4	378.7		183	886		127	61								
DF			31	3	90	149	.822	4.31	2.47	92.9	504.4		229	1,244		158	86								
DF			32	1	87	136	.257	1.44	.77	90.3	476.7		70	368		48	25								
DF			33	2	89	163	.484	2.87	1.45	114.7	621.7		166	902		115	62								
DF			34	5	89	151	1.139	7.18	3.42	111.4	611.3		381	2,089		263	144								
DF			35	3	89	159	.645	4.31	1.93	96.9	533.3		187	1,032		129	71								
DF			36	2	85	165	.406	2.87	1.22	126.3	640.0		154	780		106	54								
DF			37	1	90	124	.192	1.44	.58	116.7	630.0		67	364		46	25								
DF			38	1	90	155	.182	1.44	.55	142.7	843.3		78	461		54	32								
DF			39	3	88	168	.519	4.31	1.90	130.8	762.7		249	1,452		172	100								
DF			40	3	89	159	.494	4.31	1.65	145.2	829.0		239	1,364		165	94								
DF			41	4	89	155	.627	5.74	2.04	151.8	859.2		309	1,750		213	121								
DF			42	2	89	144	.299	2.87	.90	147.7	848.3		132	760		91	52								
DF			43	1	91	149	.142	1.44	.43	180.3	1026.7		77	439		53	30								
DF			45	1	84	135	.130	1.44	.39	160.3	746.7		63	291		43	20								
DF			47	2	86	170	.238	2.87	.83	193.0	1094.3		161	913		111	63								
DF			48	1	88	166	.114	1.44	.34	236.0	1393.3		81	478		56	33								
DF			58	1	87	147	.078	1.44	.23	312.3	1873.3		73	440		51	30								
DF			Totals	98	87	113	50.923	140.74	117.84	54.8	271.7		6,464	32,013		4,460	2,209								
RA			8	1	87	35	4.448	1.55	4.45	3.0	10.0		13	44		9	3								
RA			10	3	86	56	9.455	5.16	9.45	7.4	25.1		70	237		48	16								
RA			11	5	86	62	12.519	8.26	12.52	11.3	40.7		141	509		97	35								
RA			12	5	86	96	9.885	7.76	15.82	14.6	60.0		231	949		160	65								
RA			13	9	87	80	15.702	14.47	19.07	19.6	70.9		373	1,352		257	93								
RA			14	3	87	79	4.357	4.66	7.26	18.4	68.0		134	494		92	34								
RA			15	8	87	76	10.122	12.42	16.45	21.8	80.0		359	1,316		248	91								
RA			16	4	87	85	5.163	7.21	8.86	25.0	91.8		221	813		153	56								
RA			17	3	87	59	2.955	4.66	3.94	28.0	77.5		110	305		76	21								
RA			18	3	87	87	2.636	4.66	5.27	30.0	111.7		158	589		109	41								
RA			19	2	87	85	1.577	3.11	3.15	33.0	130.0		104	410		72	28								
RA			20	2	87	78	1.423	3.11	2.14	43.3	150.0		93	320		64	22								
RA			22	2	86	52	1.176	3.11	1.76	36.3	86.7		64	153		44	11								
RA			23	1	87	65	.538	1.55	1.08	38.5	155.0		41	167		29	12								

T		PSTNDSUM										Stand Table Summary										Page		2	
																						Date:		4/17/2024	
		T010 R007 S07 Ty00CC				69.00				Project				BBB				Time:				11:28:15AM			
						Acres				69.00				Grown Year:											
S	Spec	T	Sample		Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals										
			DBH	Trees	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF								
	RA		33	1	87	57	.261	1.55	.26	132.0	350.0		35	91		24	6								
	RA		Totals	52	87	73	82.219	83.23	111.48	19.3	69.5		2,148	7,749		1,482	535								
	DFL	L	37	1	86	86	.129	.96																	
	DFL	L	40	1	87	96	.110	.96	.33	82.3	410.0	.00	27	136	0	19	9								
	DFL	L	42	2	86	128	.232	2.24	.66	174.4	1119.8	.00	116	744	0	80	51								
	DFL	L	46	1	81	160	.083	.96	.25	194.0	966.7	.00	49	242	0	34	17								
	DFL	L	48	1	88	178	.077	.96	.31	192.3	1135.0	.00	59	348	0	41	24								
	DFL	L	50	1	90	155	.071	.96	.21	258.3	1490.0	.00	55	316	0	38	22								
	DFL	L	54	1	87	168	.061	.96	.12	216.5	1240.0	.00	26	150	0	18	10								
	DFL	L	63	1	88	193	.044	.96	.18	354.8	2207.5	.00	63	393	0	44	27								
	DFL	L	72	1	90	203	.034	.96	.07	709.0	4590.0	.00	48	313	0	33	22								
	DFL	L	Totals	10	86	137	.841	9.94	2.13	207.8	1239.1	.01	443	2,641	1	306	182								
	DFL	T	47	1	89	155	.164	1.98	.49	221.0	1316.7	.00	109	648	0	75	45								
	DFL	T	52	1	88	131	.134	1.98	.40	230.0	1230.0	.00	92	494	0	64	34								
	DFL	T	56	1	87	134	.115	1.98	.35	273.3	1460.0	.00	95	506	0	65	35								
	DFL	T	Totals	3	88	141	.413	5.93	1.24	238.5	1328.6	.01	296	1,648	1	204	114								
	WH		11	1	86	43	1.122	.74	1.12	11.0	40.0		12	45		9	3								
	WH		Totals	1	86	43	1.122	.74	1.12	11.0	40.0		12	45		9	3								
	RC		58	1	86	31	.040	.74	.04	229.0	370.0		9	15		6	1								
	RC		Totals	1	86	31	.040	.74	.04	229.0	370.0		9	15		6	1								
	SN		12	1	98	32	1.258	.99																	
	SN		20	1	98	46	.453	.99																	
	SN		25	1	87	62	.290	.99																	
	SN		Totals	3	96	40	2.000	2.96																	
	Totals			168	87	88	137.559	244.28	233.86	40.1	188.6	.02	9,372	44,111	1	6,467	3,044								

T		PLOGSTVB		Log Stock Table - MBF															
T010 R007 S07 Ty00CC				69.00		Project: BBB		Acres 69.00		Page 1		Date 4/17/2024		Time 11:28:14AM					
Spp	S T	So rt	Gr de	Log Len	Gross M MBF	Def %	Net MBF	% Sp	Net Volume by Scaling Diameter in Inches										
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-2	30-3
RA		DO	CR	12	16		16	2.9			6	10							
RA		DO	CR	16	33	12.4	29	5.3			4	24							
RA		DO	CR	20	20		20	3.7				20							
RA		DO	CR	24	57	3.1	55	10.2			3	44	8						
RA		DO	CR	32	211	5.7	199	37.2			18	112	31	20	18				
RA		DO	CR	34	3	28.6	2	.4				2							
RA		DO	CR	36	7	12.5	6	1.1				6							
RA		DO	CR	38	8		8	1.5			8								
RA		DO	CR	40	207	3.2	200	37.5				56	89	49	6				
RA		Totals			561	4.6	535	17.6			39	274	121	77	18	6			
DF		DO	2M	16	1		1	.1							1				
DF		DO	2M	20	2	8.3	1	.1					1						
DF		DO	2M	24	5	3.2	5	.2					2		3				
DF		DO	2M	32	31	6.0	29	1.3					10	10	3	6			
DF		DO	2M	36	3		3	.1							3				
DF		DO	2M	38	15	4.8	14	.6								14			
DF		DO	2M	40	1,830	2.3	1,787	80.9					163	251	389	384	401	181 18	
DF		DO	3M	12	2		2	.1					2						
DF		DO	3M	16	8	7.1	8	.3					4	1		3			
DF		DO	3M	24	8		8	.4				2	2	4					
DF		DO	3M	26	3		3	.1				3							
DF		DO	3M	28	2		2	.1			2								
DF		DO	3M	32	70	1.5	69	3.1			10	12	34	5	3	4			
DF		DO	3M	36	3		3	.2			3								
DF		DO	3M	40	234	1.5	231	10.4			43	64	113	7	4				
DF		DO	4M	12	9		9	.4			6	3	1						
DF		DO	4M	16	24	2.9	23	1.0			15	7	1						
DF		DO	4M	20	5		5	.2			4	1							
DF		DO	4M	24	6	9.1	5	.2			2	4							
DF		Totals			2,261	2.3	2,209	72.6			85	93	150	197	269	407	393	416 181 18	
RC		DO	CR	27	1	7.5	1	100.0						1					
RC		Totals			1	7.5	1	.0							1				
DFL	L	DO	1S	40	26		26	14.3										26	
DFL	L	DO	2M	16	5		5	3.0										5	
DFL	L	DO	2M	24	13	12.3	11	6.1										11	

T PLOGSTVB

Log Stock Table - MBF

T010 R007 S07 Ty00CC 69.00

Project: BBB

Page 2

Acres 69.00

Date 4/17/2024

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S Spp	T	So rt	Gr de	Log Len	Gross M MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-2	30-3	40+
DFL	L	DO	2M	40	78	3.5	75	41.3						4		3		69		
DFL	L	DO	3M	12	1		1	.6					0	1						
DFL	L	DO	3M	16	1		1	.5						1						
DFL	L	DO	3M	24	2		2	.8								2				
DFL	L	DO	3M	38	3	2.3	3	1.6						3						
DFL	L	DO	3M	40	62	6.7	58	31.9						2	2	4	29	5	17	
DFL		Totals			191	4.5	182	6.0					0	3	10	8	29	90	43	
DFL	T	DO	2M	32	5		5	4.3							5					
DFL	T	DO	2M	40	15	2.9	15	13.2									15			
DFL	T	DO	3M	20	6	12.5	5	4.3							2	3				
DFL	T	DO	3M	40	96	7.5	89	78.2									22	46	21	
DFL		Totals			122	6.9	114	3.7							7	3	37	46	21	
WH		DO	4M	24	3		3	100.0			3									
WH		Totals			3		3	.1			3									
Total		All Species			3,139	3.0	3,044	100.0			127	366	271	275	290	430	404	481	317	82

TC PSTATS				PROJECT STATISTICS				PAGE	1	
				PROJECT	BBB RD			DATE	4/17/2024	
TWP	RGE	SC	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
010	007	07	ROAD	00CC	1.00				W	W
				TREES	ESTIMATED		PERCENT			
				PER PLOT	TOTAL		SAMPLE			
				PLOTS	TREES	TREES	TREES			
TOTAL						34				
CRUISE										
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
SAMPLE		TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
TREES		/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DF	31	31.0	18.9	53	13.9	60.5	11,730	11,400	2,242	2,242
R ALDER	3	3.0	11.7	21	0.7	2.2	120	110	29	29
TOTAL	34	34.0	18.4	50	14.6	62.8	11,850	11,510	2,271	2,271
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL	68.1	COEFF	SAMPLE TREES - BF				# OF TREES REO.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DF		304.8	54.7	167	368	569				
R ALDER		31.5	21.8	29	37	45				
TOTAL		317.0	54.3	155	339	522	4,012	1,003	446	
CL	68.1	COEFF	SAMPLE TREES - CF				# OF TREES REO.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DF		260.2	46.7	39	72	106				
R ALDER		21.5	14.9	8	10	11				
TOTAL		270.0	46.3	36	67	98	2,910	728	323	

T		Species, Sort Grade - Board Foot Volumes (Project)																						
TSPCSTGR																								
T010 R007 S07 Ty00CC		1.00		Project:		BBB RD		Page		1		Date		4/17/2024		Time		11:30:16AM						
				Acres		1.00																		
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre		Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre				
								Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf					
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99									
DF		DO	2M	41	4.6	4,990	5			15	85				100	40	23	952	4.62	5.0				
DF		DO	3M	55	1.6	6,380	6		32		68	1	9		90	38	9	233	1.19	27.0				
DF		DO	4M	4		360	0	17	83			42	8	17	33	22	6	26	0.32	14.0				
DF Totals				99	2.8	11,730	11	1	20	6	73	2	5	1	92	33	10	248	1.47	46.0				
RA		DO	CR	100	8.3	120	0		100			100				17	8	37	0.56	3.0				
RA Totals				1	8.3	120	0		100			100				17	8	37	0.56	3.0				
Totals					2.9	11,850	12	1	21	6	73	3	5	1	92	32	10	235	1.44	49.0				

T		PSTNDSUM										Stand Table Summary										Page		1	
																						Date:		4/17/2024	
		T010 R007 S07 Ty00CC				1.00				Project				BBB RD				Time:				11:30:16AM			
										Acres				1.00				Grown Year:							
S	Spec	T	Sample		Tot		Trees/			Average Log		Net		Net		Totals									
			DBH	Trees	FF	Av	Trees/	RA/	Logs	Net	Net	Tons/	Cu.Ft.	Bd.Ft.	Tons	Cunits	MBF								
			16'	Ht	Acre	Acre	Acre	Cu.Ft.	Bd.Ft.	Acre	Acre	Acre													
DF			8	72	2.000	.70	2.00	8.0	30.0		16	60				0	0								
DF			9	70	2.000	.88	2.00	13.0	60.0		26	120				0	0								
DF			10	85	3.000	1.64	3.00	14.0	60.0		42	180				0	0								
DF			11	87	6.000	3.96	6.00	17.3	66.7		104	400				1	0								
DF			12	80	3.000	2.36	5.00	12.8	42.0		64	210				1	0								
DF			13	91	1.000	.92	2.00	13.5	55.0		27	110				0	0								
DF			14	76	5.000	5.35	8.00	17.0	58.8		136	470				1	0								
DF			15	85	2.000	2.45	4.00	18.5	70.0		74	280				1	0								
DF			16	83	1.000	1.40	2.00	19.5	70.0		39	140				0	0								
DF			17	65	2.000	3.15	3.00	23.7	76.7		71	230				1	0								
DF			18	61	1.000	1.77	1.00	36.0	70.0		36	70				0	0								
DF			33	129	1.000	5.94	3.00	88.7	453.3		266	1,360				3	1								
DF			45	125	1.000	11.04	2.00	163.0	845.0		326	1,690				3	2								
DF			59	146	1.000	18.99	3.00	338.3	2026.7		1,015	6,080				10	6								
DF			Totals		31	87	84	31.000	60.54	46.00	48.7	247.8	2,242	11,400		22	11								
RA			11	32	2.000	1.32	2.00	8.5	30.0		17	60				0	0								
RA			13	24	1.000	.92	1.00	12.0	50.0		12	50				0	0								
RA			Totals		3	87	29	3.000	2.24	3.00	9.7	36.7	29	110		0	0								
Totals			34	79	34.000	62.78	49.00	46.3	234.9		2,271	11,510				23	12								

T PLOGSTVB

Log Stock Table - MBF

T010 R007 S07 Ty00CC

1.00

Project: BBB RD

Page 1

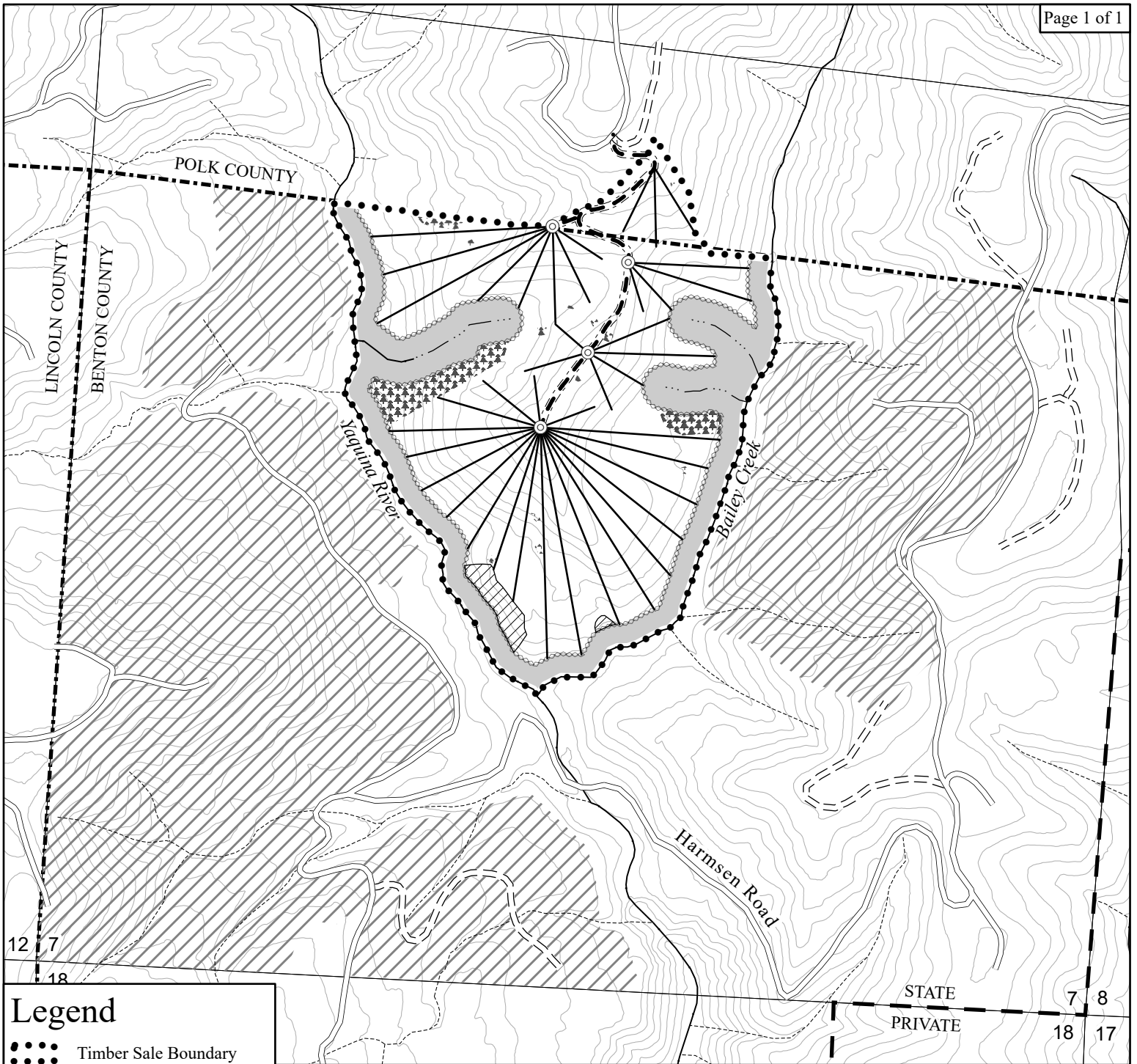
Acres

1.00

Date 4/17/2024

Time 11:30:15AM

Spp	S T	So Gr rt de	Log Len	Gross M MBF	Def %	Net MBF	% Spe	Net Volume by Scaling Diameter in Inches											
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-2	30-3	40+
DF		DO 2M	40	5	4.6	5	41.8							1		1	1	2	
DF		DO 3M	16	0		0	.6					0							
DF		DO 3M	24	1	10.7	1	4.4									1			
DF		DO 3M	30	0		0	.4			0									
DF		DO 3M	38	0	8.3	0	1.0			0									
DF		DO 3M	40	6		6	48.7			1	1	0							4
DF		DO 4M	12	0		0	.4			0									
DF		DO 4M	16	0		0	.6			0									
DF		DO 4M	20	0		0	.4			0									
DF		DO 4M	24	0		0	.3			0									
DF		DO 4M	32	0		0	.5		0										
DF		DO 4M	40	0		0	1.1			0									
DF		Totals		12	2.8	11	99.0		0	1	1	0		1		1	1	2	4
RA		DO CR	16	0	11.1	0	72.7				0	0							
RA		DO CR	20	0		0	27.3			0									
RA		Totals		0	8.3	0	1.0			0	0	0							
Total		All Species		12	2.9	12	100.0		0	1	1	0		1		1	1	2	4



Legend

- Timber Sale Boundary
- Ownership
- County Line
- Stream Buffer
- Slope Buffer
- Green Tree Retention Area
- Reforestation Area
- Surfaced Road
- Unsurfaced Road
- New Road Construction
- Right-of-Way
- Type F Stream
- Type N Stream
- Unknown Stream
- Cable Corridor
- Landing

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. WO-341-2025-W01089-01
 BARK BEETLE BAILEY
 PORTIONS OF SECTION 7, T10S, R7W, W.M.,
 BENTON AND POLK COUNTIES, OREGON

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UNIT	TRACTOR ACRES	CABLE ACRES
1 (MC)	1	68
2 (RW)	2	0
TOTAL	3	68

