09/08/99

TIP PROJECT: W-5808B

WBS: 48953.3.3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

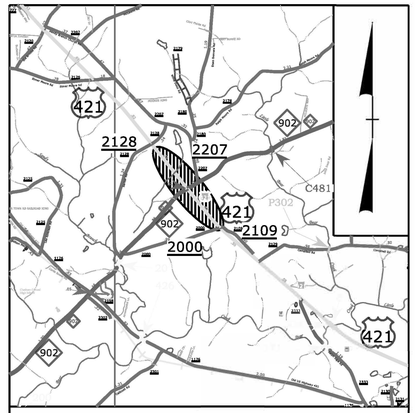
CHATHAM COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5808B	1	

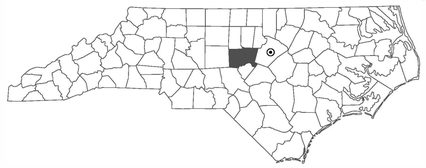
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
48953.1.3	0421113	PE
48953.2.3	0421113	ROW
48953.3.3	0421113	CONST

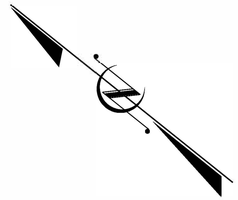
LOCATION: *US 421 FROM 0.36 MILES NORTH OF NC 902 TO 0.09 MILES SOUTH OF SR 2000/2109 ROSCOE RD /BYNUM PERRELL DR*

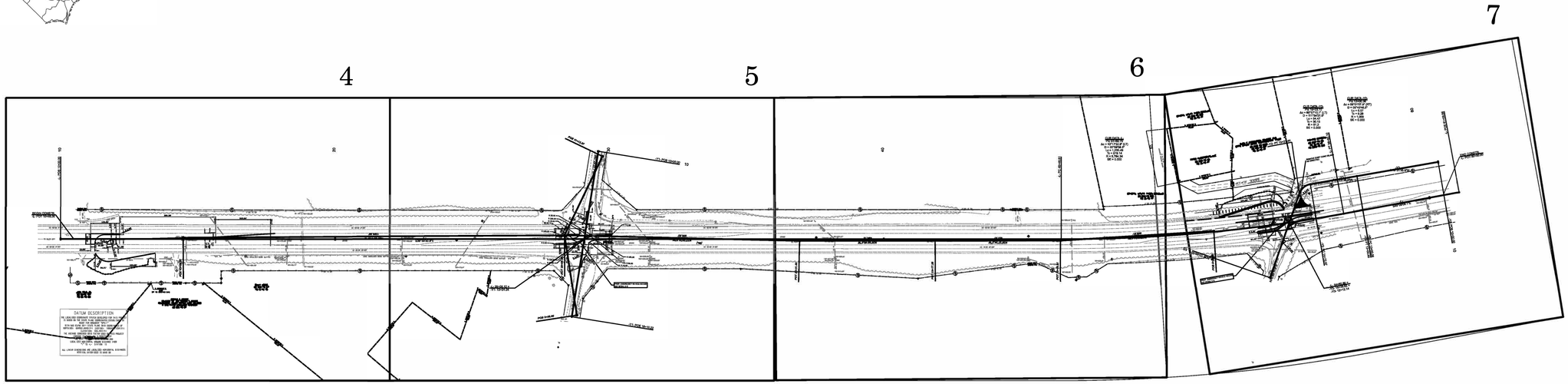
TYPE OF WORK: *GRADING, PAVING, DRAINAGE, CONCRETE ISLANDS, THERMOPLASTIC MARKINGS & MARKERS, AND SIGNAL REMOVAL*



VICINITY MAP (NTS)







INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS 0

PROFILE (HORIZONTAL) 0

PROFILE (VERTICAL) 0

DESIGN DATA

ADT 2023 = 16,500
ADT =
K = %
D = %
T = % *
V = 65 MPH
* TTST = DUAL
FUNC CLASS =
PRINCIPAL ARTERIAL

PROJECT LENGTH

ROADWAY: 0.89 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS , DIVISION EIGHT, DDC
121 DOT Drive Carthage, 28327
PHONE NUMBER (910)773-8000

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MARCH 3, 2025

LETTING DATE: MAY 27, 2025

PROJECT ENGINEER

PROJECT DESIGN ENGINEER

DVISION DESIGN ENGINEER

MICHAEL RICKETTS P.E.

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E RICKETTS

Digitally signed by: Michael Ricketts

SIGNATURE: 04/24/2025

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION

PROJECT REFERENCE NO.	SHEET NO.
W-5808B	1-A

DocuSigned by:
Michael Ricketts
3B420DAD60B44EB...
04/24/2025
DIVISION PROJECT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E. RICKETTS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS
1-B	CONVENTIONAL SYMBOLS
2A-1 THRU 2A-5	TYPICAL SECTIONS
2A-6	DETAIL – EMERGENCY VEHICLE ACCESS FOR CONCRETE ISLANDS
2B-1 THRU 2B-3	INTERSECTION DETAILS
3-B	EARTHWORK SUMMARY
3-C	DRAINAGE SUMMARY
4 THRU 7	PLAN SHEETS
8 THRU 12	PROFILE SHEETS
TM-1 THRU TM-2	TRAFFIC MANAGEMENT PLANS
PM-1 THRU PM-7	PAVEMENT MARKING PLANS
EC-1 THRU EC-7	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-7	SIGNING PLANS
X-A	CROSS-SECTION SUMMARY
X-1 THRU X-83	CROSS-SECTIONS -L-

GENERAL NOTES

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE THE PROPER TIE-IN.

CLEARING

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

UTILITIES

ANY RELOCATION OF EXISTING UTILITIES,
WILL BE ACCOMPLISHED BY OTHERS PRIOR TO THE DATE OF AVAILABILITY.

8/17/99
15-APR-2025 09:37
Z:\rdy\Chatham\us_421@nc_902\psh\Indexofshts_psh.dgn
mericketts AT DIV08-330084

5/26/20

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS
CONVENTIONAL PLAN SHEET SYMBOLS

W-5808B
1-B

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel / Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- Switch
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- Existing Easement Line
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Drainage/Utility Easement
- Proposed Permanent Utility Easement
- Proposed Temporary Utility Easement
- Proposed Aerial Utility Easement

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard

EXISTING STRUCTURES:

MAJOR:
- Bridge, Tunnel or Box Culvert
- Bridge Wing Wall, Head Wall and End Wall

MINOR:
- Head and End Wall
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer

UTILITIES:

** SUE - Subsurface Utility Engineering*
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:
- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line Test Hole (SUE - LOS A)*
- U/G Power Line (SUE - LOS B)*
- U/G Power Line (SUE - LOS C)*
- U/G Power Line (SUE - LOS D)*

TELEPHONE:
- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- U/G Telephone Test Hole (SUE - LOS A)*
- U/G Telephone Cable (SUE - LOS B)*
- U/G Telephone Cable (SUE - LOS C)*
- U/G Telephone Cable (SUE - LOS D)*
- U/G Telephone Conduit (SUE - LOS B)*
- U/G Telephone Conduit (SUE - LOS C)*
- U/G Telephone Conduit (SUE - LOS D)*
- U/G Fiber Optics Cable (SUE - LOS B)*
- U/G Fiber Optics Cable (SUE - LOS C)*
- U/G Fiber Optics Cable (SUE - LOS D)*

WATER:
- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE - LOS A)*
- U/G Water Line (SUE - LOS B)*
- U/G Water Line (SUE - LOS C)*
- U/G Water Line (SUE - LOS D)*
- Above Ground Water Line

TV:
- TV Pedestal
- TV Tower
- U/G TV Cable Hand Hole
- U/G TV Test Hole (SUE - LOS A)*
- U/G TV Cable (SUE - LOS B)*
- U/G TV Cable (SUE - LOS C)*
- U/G TV Cable (SUE - LOS D)*
- U/G Fiber Optic Cable (SUE - LOS B)*
- U/G Fiber Optic Cable (SUE - LOS C)*
- U/G Fiber Optic Cable (SUE - LOS D)*

GAS:
- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE - LOS A)*
- U/G Gas Line (SUE - LOS B)*
- U/G Gas Line (SUE - LOS C)*
- U/G Gas Line (SUE - LOS D)*
- Above Ground Gas Line

SANITARY SEWER:
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line
- Above Ground Sanitary Sewer
- SS Force Main Line Test Hole (SUE - LOS A)*
- SS Force Main Line (SUE - LOS B)*
- SS Force Main Line (SUE - LOS C)*
- SS Force Main Line (SUE - LOS D)*

MISCELLANEOUS:
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line (SUE - LOS B)*
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc.
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

8/17/95

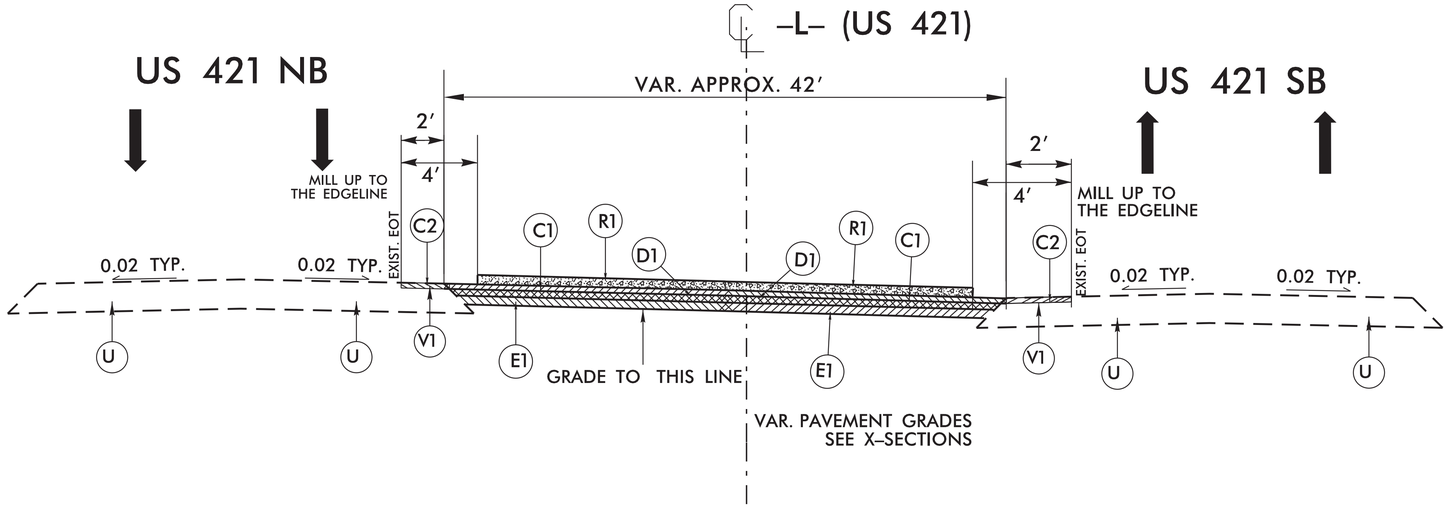
REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
W–5808B	2A–1
R/W SHEET NO.	

DocuSigned by: Michael Ricketts 3B4200DA60B44EB... 04/24/2025

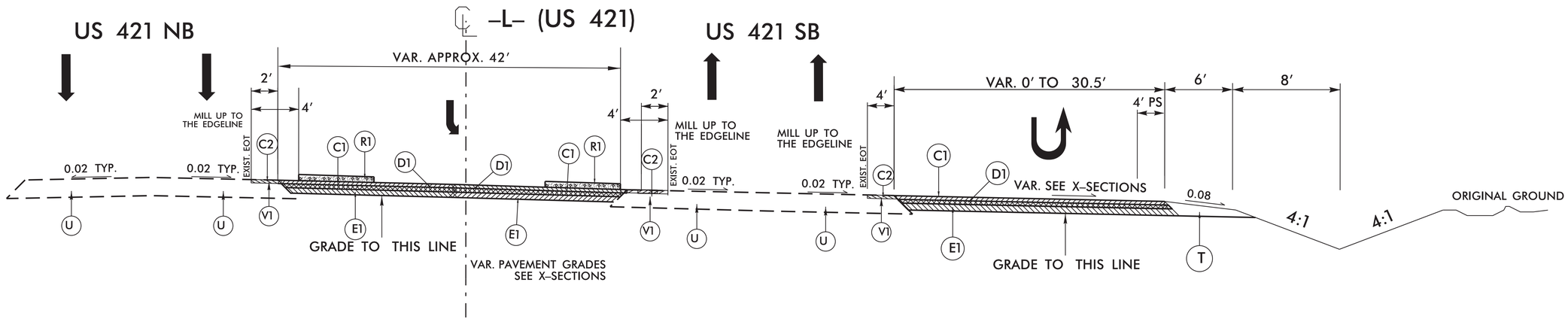
NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E. RICKETTS

DIVISION DESIGN / CONSTRUCT ENGINEER



TYPICAL SECTION NO. 1

–L– STA. 11+09.56 TO 11+26.34



TYPICAL SECTION NO. 2

–L– STA. 11+26.34 TO 11+89.55

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. PER 1½″ DEPTH. TO BE PLACED IN TWO LAYERS.
C2	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 4″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E1	PROP. APPROX. 7″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
R1	5″ MONOLITHIC CONCRETE ISLAND. (KEYED IN)
R2	5″ MONOLITHIC CONCRETE ISLAND. (SURFACE MOUNTED)
T_	EARTH MATERIAL.
U_	EXISTING PAVEMENT.
V1	1.5″ MILLING

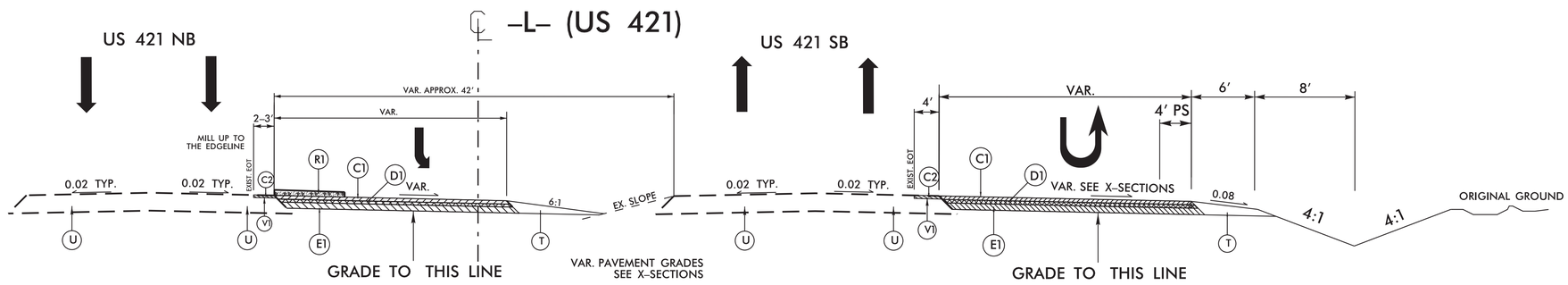
PROJECT REFERENCE NO.	SHEET NO.
W-5808B	2A-2
R/W SHEET NO.	

DocuSigned by: Michael Ricketts 3B420DAD60B44EB... 04/24/2025

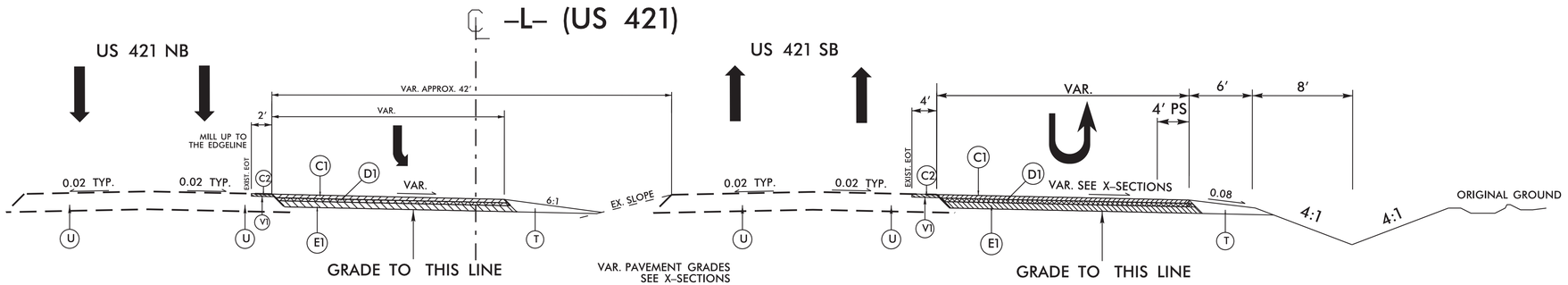
NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E RICKETTS

DIVISION DESIGN / CONSTRUCT ENGINEER

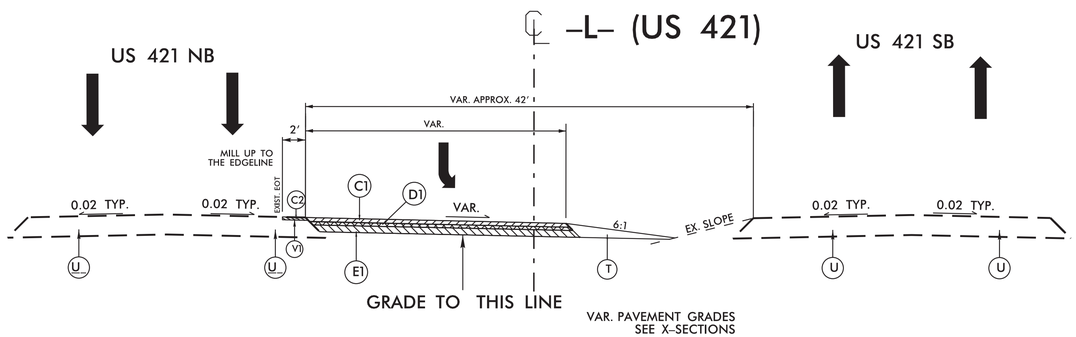
PAVEMENT SCHEDULE	
C1	3" S9.5D
C2	1.5" S9.5D
D1	4" I19.0C
E1	7" B25.0C
R1	5" CONC. ISLAND KEYED IN
R2	5" CONC. ISLAND SURFACE MOUNTED
T_	EARTH MATERIAL.
U_	EXIST. PAVEMENT
V1	1.5" MILLING



TYPICAL SECTION NO. 3
–L– STA. 11+89.55 TO 12+14.55



TYPICAL SECTION NO. 4
–L– STA. 12+14.55 TO 13+44.85



TYPICAL SECTION NO. 5
–L– STA. 13+44.85 TO 17+81.37

REVISIONS

8/17/95

8/17/95

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
W-5808B	2A-3
R/W SHEET NO.	

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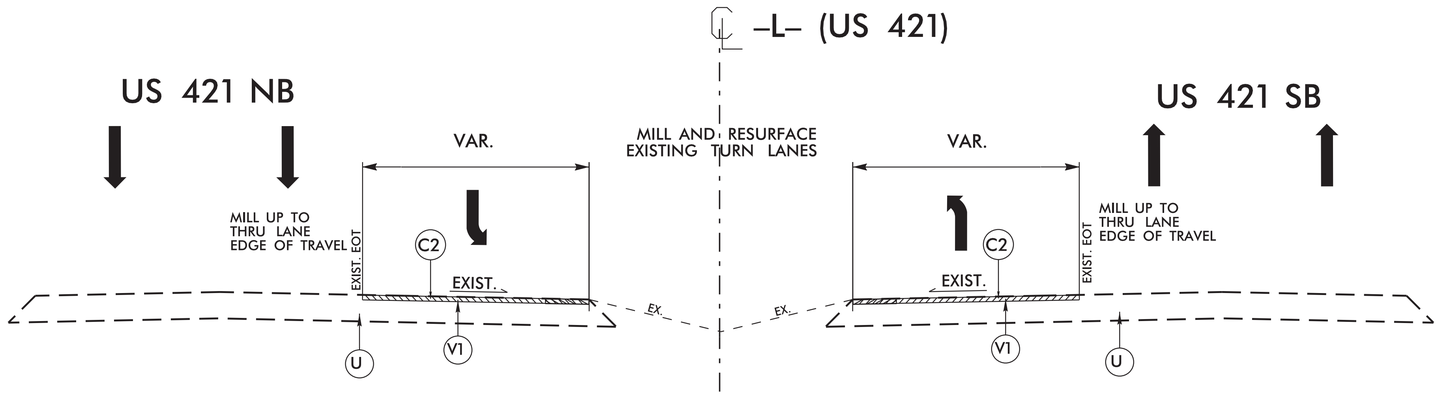
04/24/2025

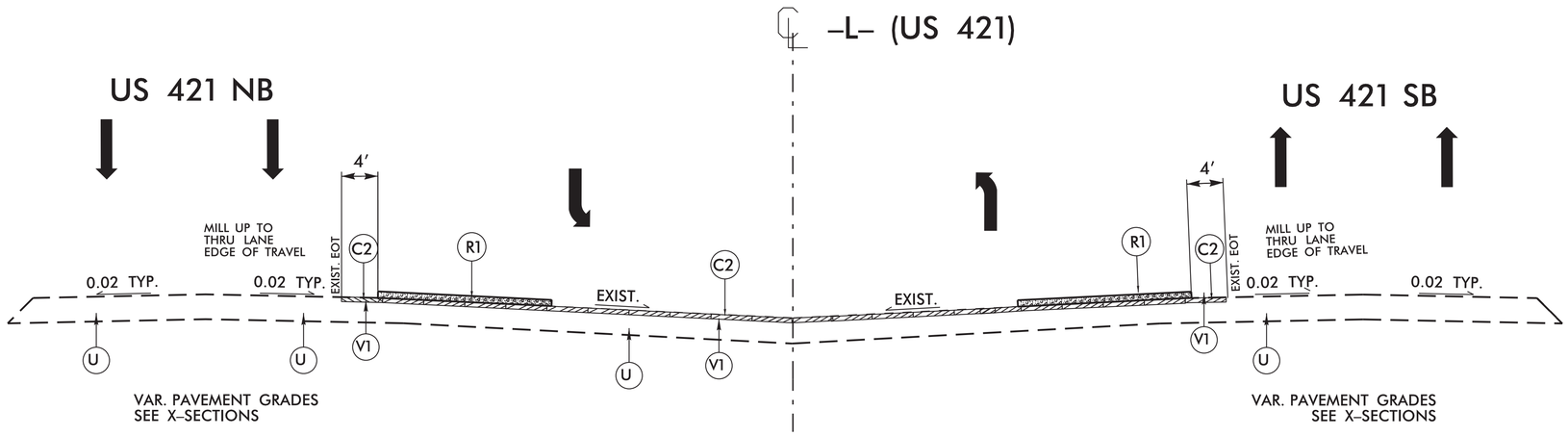
NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL T. RICKETTS

DIVISION DESIGN / CONSTRUCT ENGINEER



TYPICAL SECTION NO. 6

–L– STA. 23+15 TO 28+04.29
–L– STA. 30+09.56 TO 35+15
–L– STA. 49+30 TO 52+28.38
–L– STA. 54+69.55 TO 60+40



TYPICAL SECTION NO. 7

–L– STA. 28+04.29 TO 30+09.56
–L– STA. 54+70.96 TO 55+69.55

PAVEMENT SCHEDULE	
C1	3″ S9.5D
C2	1.5″ S9.5D
D1	4″ I19.0C
E1	7″ B25.0C
R1	5″ CONC. ISLAND KEYED IN
R2	5″ CONC. ISLAND SURFACE MOUNTED
T_	EARTH MATERIAL.
U_	EXIST. PAVEMENT
V1	1.5″ MILLING

8/17/95

REVISIONS

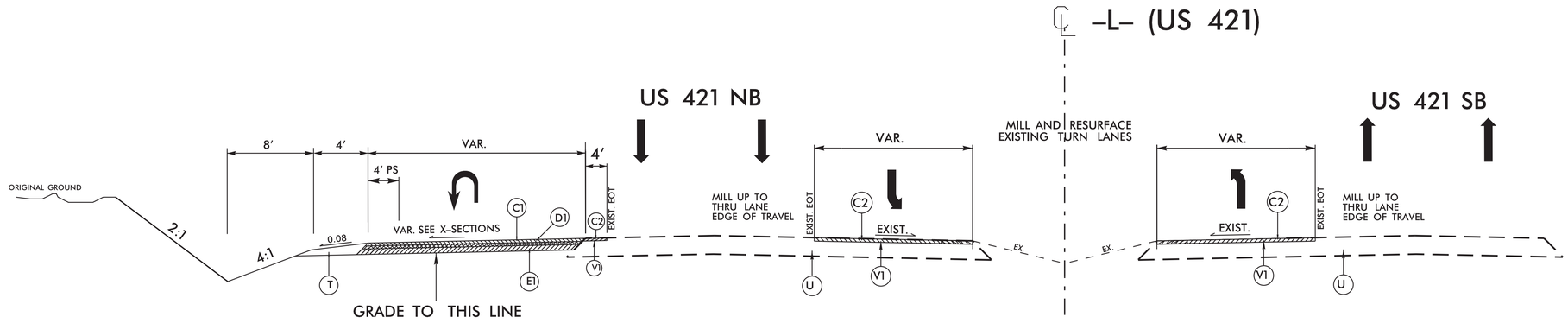
PROJECT REFERENCE NO.	SHEET NO.
W-5808B	2A-4
R/W SHEET NO.	

DocuSigned by: Michael Ricketts 38420DAD60844EB...
04/24/2025

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E. RICKETTS

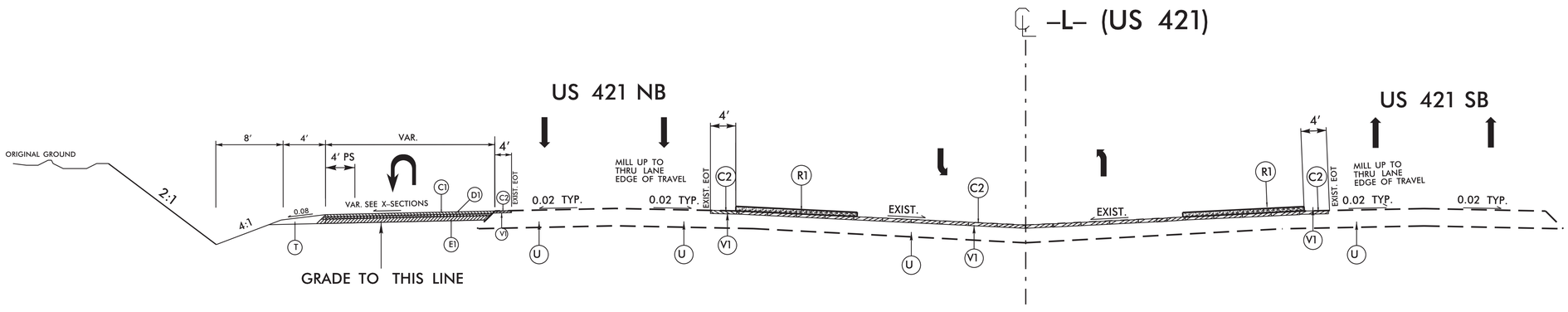
DIVISION DESIGN / CONSTRUCT ENGINEER

PAVEMENT SCHEDULE	
C1	3″ S9.5D
C2	1.5″ S9.5D
D1	4″ I19.0C
E1	7″ B25.0C
R1	5″ CONC. ISLAND KEYED IN
R2	5″ CONC. ISLAND SURFACE MOUNTED
T_	EARTH MATERIAL.
U_	EXIST. PAVEMENT
V1	1.5″ MILLING



TYPICAL SECTION NO. 8

–L– STA. 52+28.38 TO 53+35.02



TYPICAL SECTION NO. 9

–L– STA. 53+35.02 TO 54+70.96

8/17/95

REVISIONS

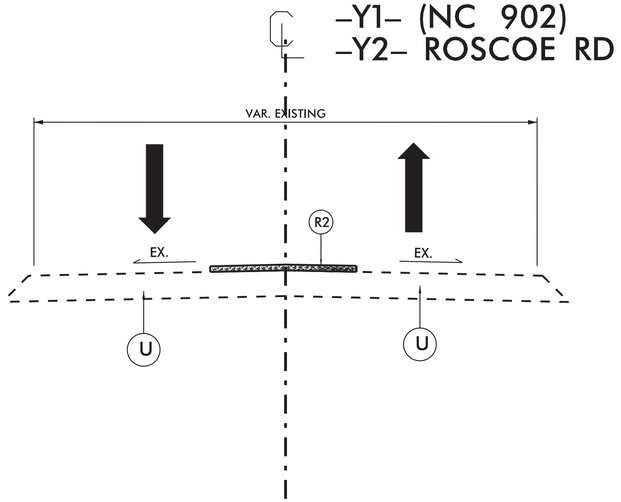
PROJECT REFERENCE NO.	SHEET NO.
W-5808B	2A-5
R/W SHEET NO.	

DocuSigned by:
Michael Ricketts
3B420DAD60B44EB...
04/24/2025

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL T. RICKETTS

DIVISION DESIGN / CONSTRUCT ENGINEER

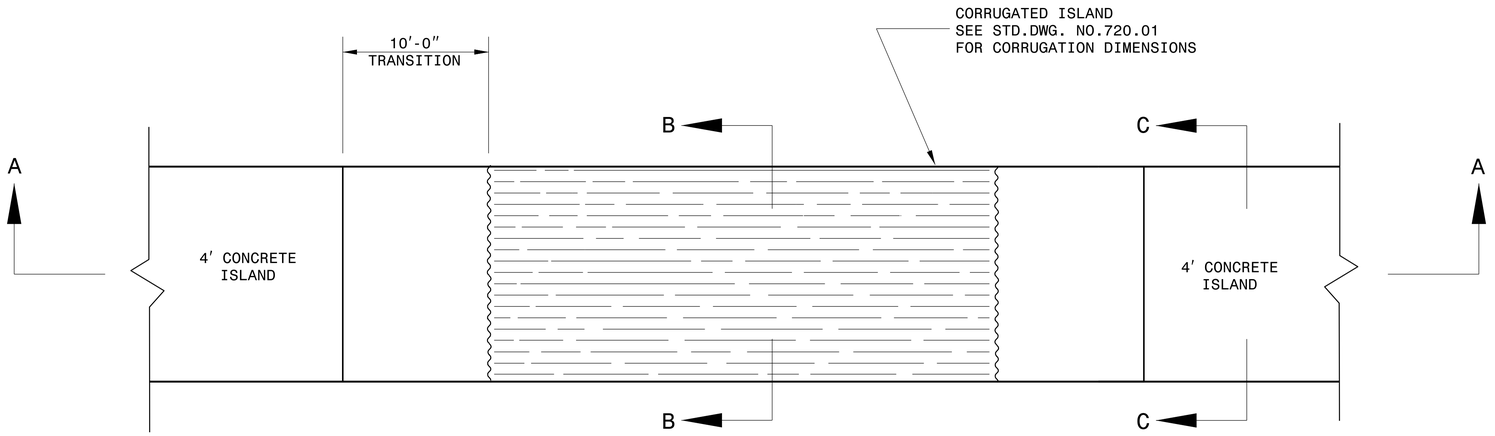
PAVEMENT SCHEDULE	
C1	3" S9.5D
C2	1.5" S9.5D
D1	4" I19.0C
E1	7" B25.0C
R1	5" CONC. ISLAND KEYED IN
R2	5" CONC. ISLAND SURFACE MOUNTED
T_	EARTH MATERIAL.
U_	EXIST. PAVEMENT
V1	1.5" MILLING



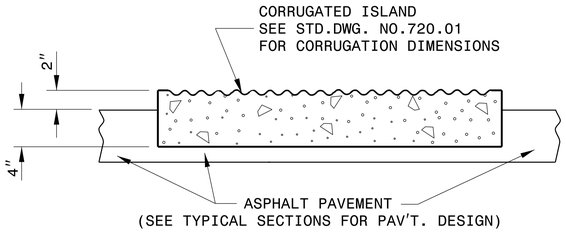
TYPICAL SECTION NO. 10

-Y1- STA. 12+22.07 TO 12+68.94
-Y1- STA. 13+79.35 TO 14+26.73
-Y3- 11+23.69 TO 11+44.70

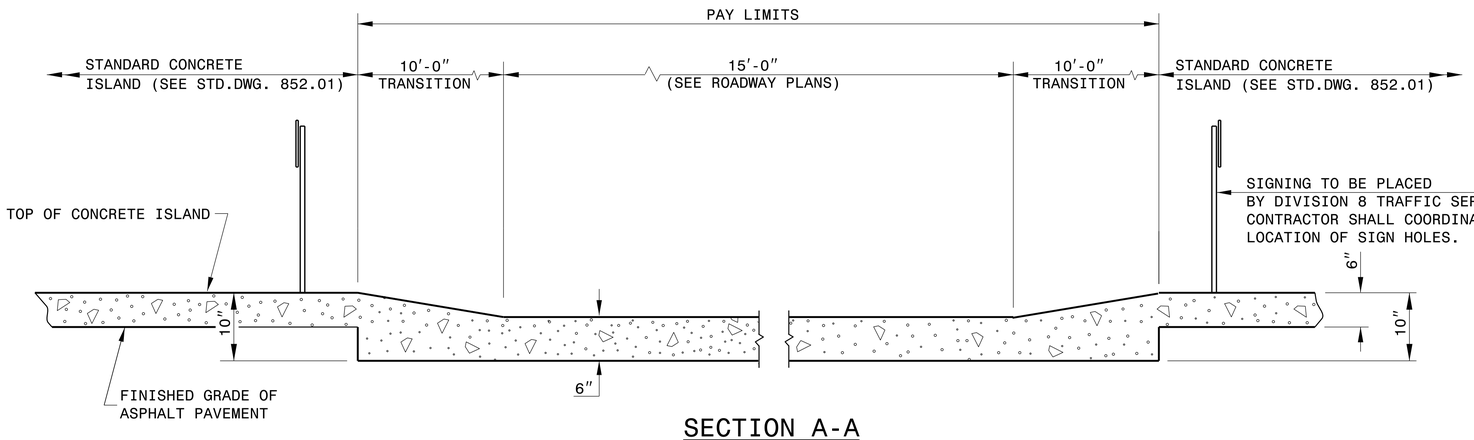
PROJECT REFERENCE NO.	SHEET NO.
W-5808B	2A-6



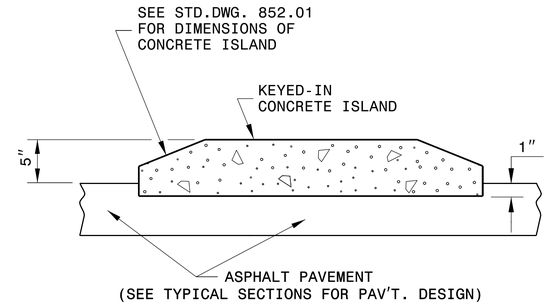
TOP VIEW



SECTION B-B



SECTION A-A



SECTION C-C

DETAIL OF EMERGENCY VEHICLE ACCESS

NOTES:

REFER TO SECTION 852 OF STANDARD SPECIFICATIONS FOR CONCRETE ISLANDS.

REFER TO STANDARD DRAWING 852.01 FOR CONTRACTION/EXPANSION JOINTS.

PLACE W6xW6 REINFORCING WIRE MESH IN THE BOTTOM 3RD OF THE EMERGENCY VEHICLE ACCESS PORTION OF THE CONCRETE ISLAND THAT MEETS SECTION 1070 OF THE STANDARD SPECIFICATIONS.

NORTH CAROLINA PROFESSIONAL SEAL 33144 ENGINEER NICOLE M. HACKLER

DocuSigned by:
Nicole M. Hackler 11/30/2022
588432303416405...

CONTRACT STANDARDS & DEVELOPMENT UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

EMERGENCY VEHICLE ACCESS FOR CONCRETE ISLAND

ORIGINAL BY:	E.E. WARD	DATE:	12-99
MODIFIED BY:	T.S.SPELL	DATE:	12-05
CHECKED BY:		DATE:	
FILE SPEC.:	nbritt\metric\murban\u3613b_emergency access.dgn		

29-NOV-2022 16:08
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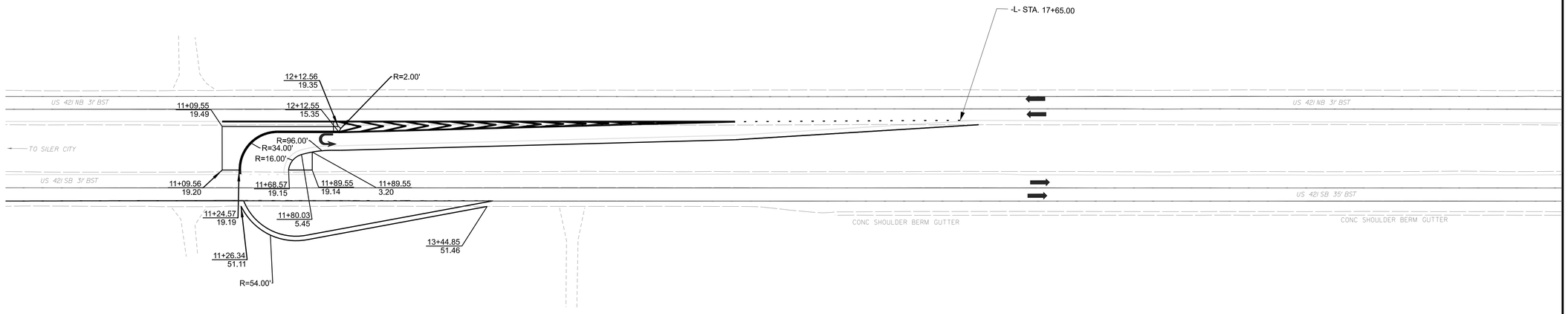
gsdavis AT DIV08-330072L

-L- INTERSECTION DETAIL



MATCH LINE -L- STA 23+00.00 SEE SHEET 2B-002

W-5808B

2B-001

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Ricketts

DocuSigned by:
Michael Ricketts
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04/24/2025

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INCOMPLETE PLANS
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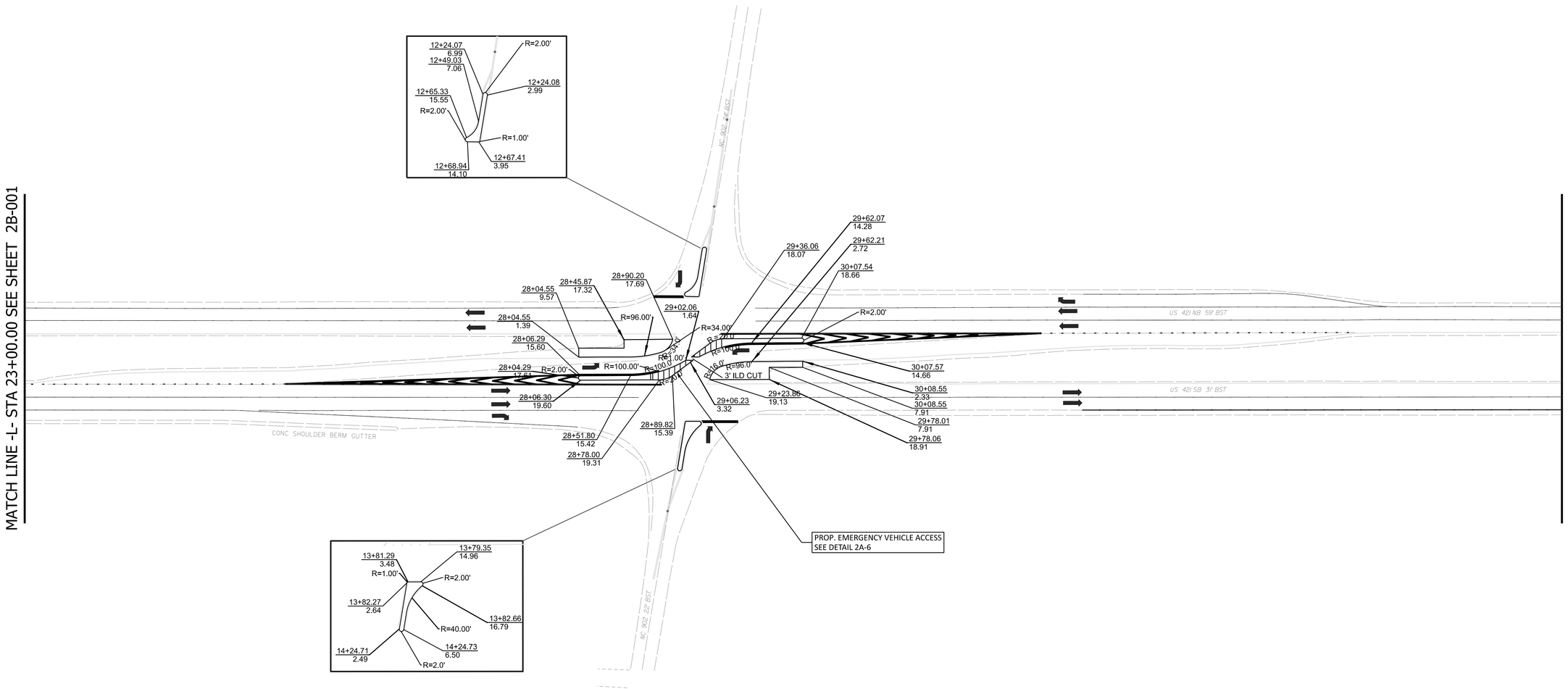
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DIVISION 8 DDC

-L- & -Y1- INTERSECTION DETAIL



NAD 83
NA 2011

W-5808B
2B-002

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION ·

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Ricketts

Michael Ricketts
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04/24/2025

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-L- INTERSECTION DETAIL

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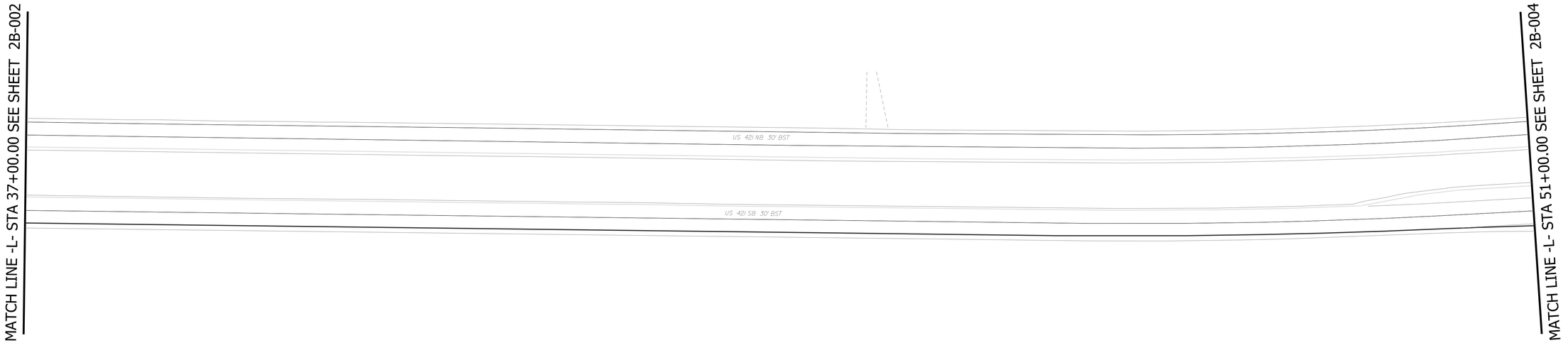

W-5808B
2B-003

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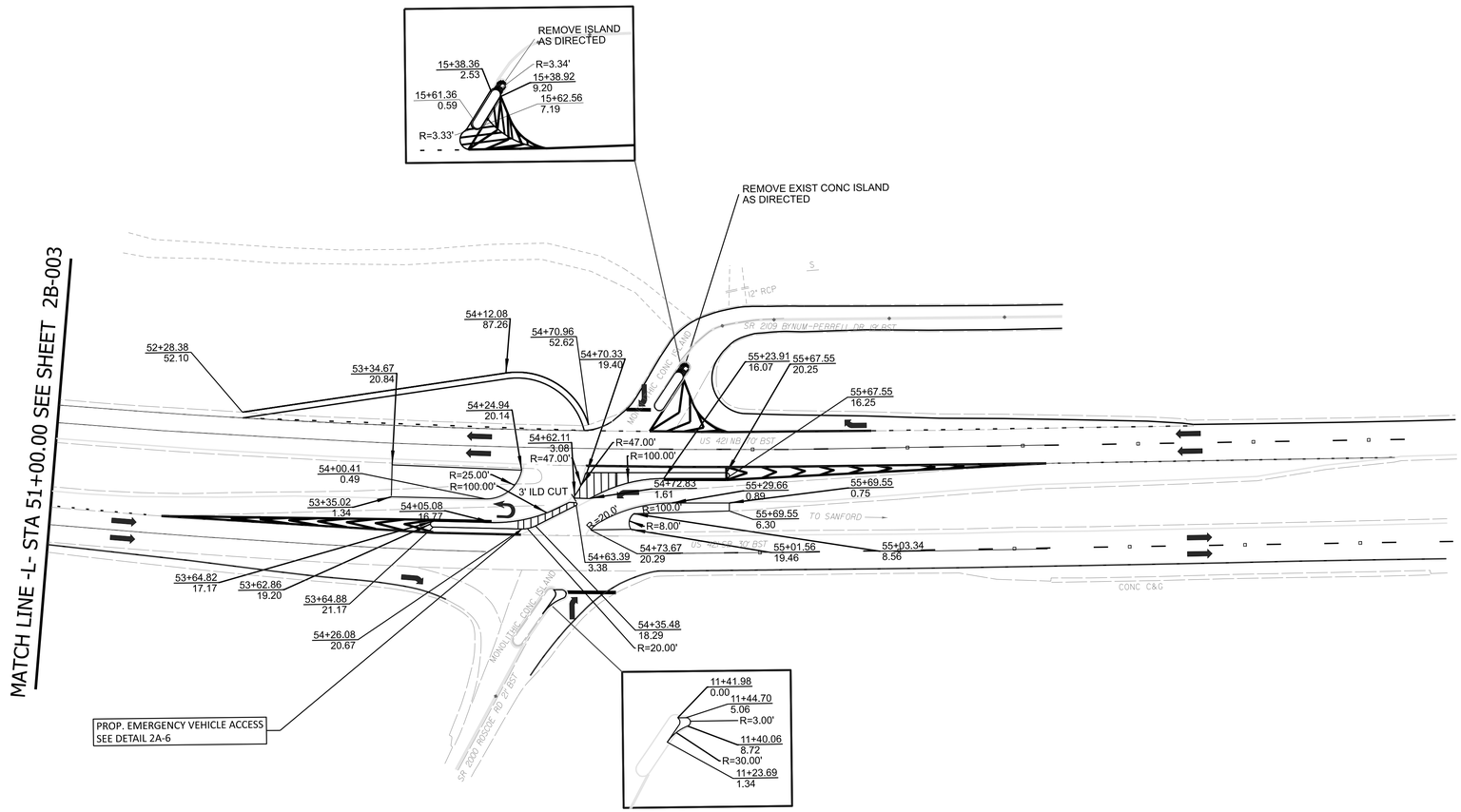
-L- & -Y2-/-Y3- INTERSECTION DETAIL



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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DIVISION 8 DDC

COMPUTED BY: ____DDC_____ DATE: __4-3-25__
CHECKED BY: ___MER_____ DATE: _4-3-25__

PROJECT NO.	SHEET NO.
W-5808B	3-B

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

Station	Station	Uncl. Excav.	Embank. '+%	Borrow	Waste
-L- 10+95	-L- 17+80	1479	352		1127
-L- 52+20	-L- 54+80	1759	47		1712
SUBTOTAL		3238	399	0	2839
SUBTOTAL		3238	399	0	2839
GRAND TOTALS:		3238	400	0	2839
SAY:		**3250**	**400**	**0**	**2850**

Contingency Undercut = 200 CY

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, FINE GRADING, CLEARING AND GRUBBING WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR GRADING.

COMPUTED BY: DDC DATE: 3/13/2025

CHECKED BY: MER DATE: 3/13/2025

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

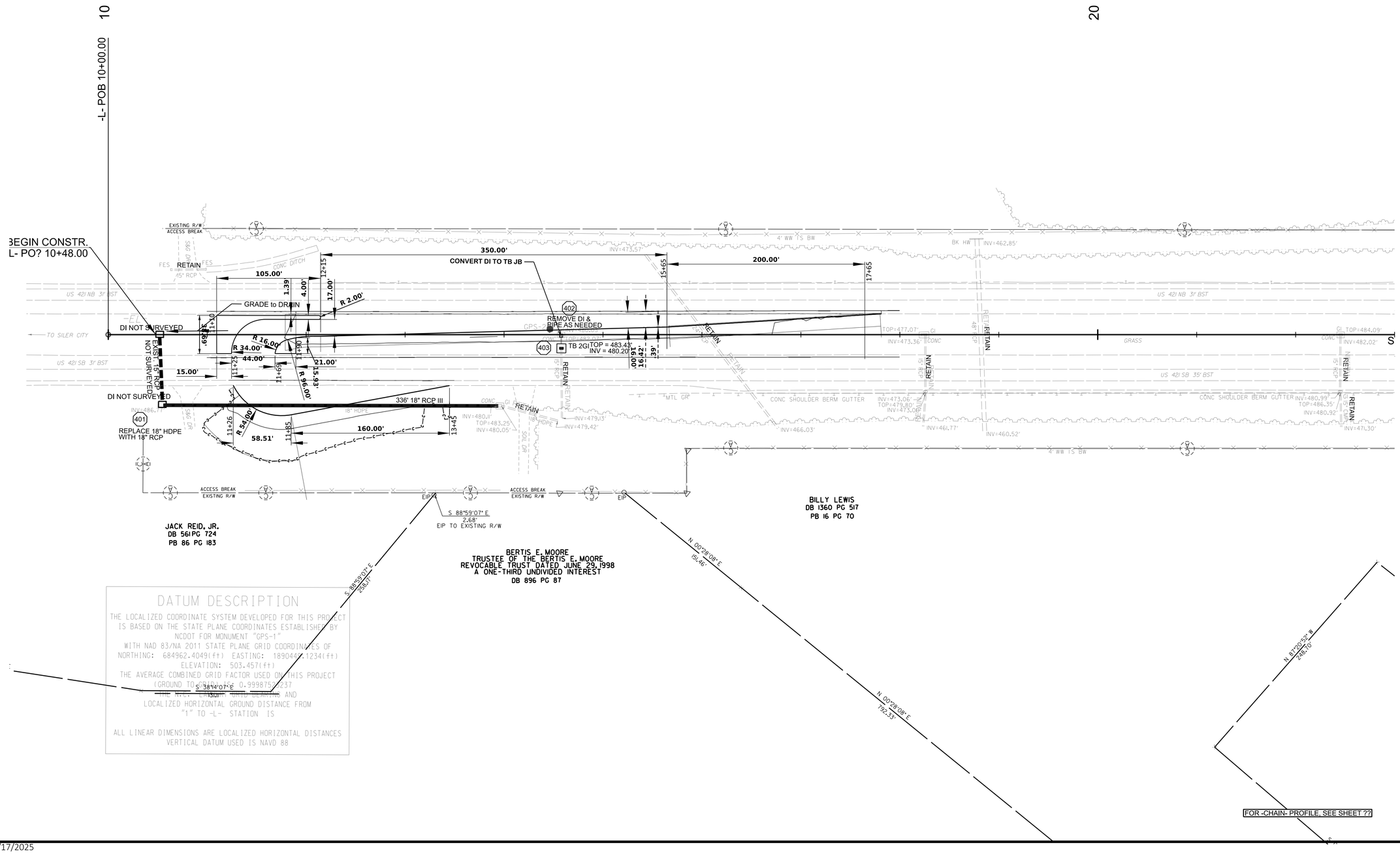
PROJECT NO.	SHEET NO.
W-5808B	3C

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

| STATION | LOCATION (LT, RT, OR CL)* | STRUCTURE NO. FROM | STRUCTURE NO. TO | TOP ELEVATION | INVERT ELEVATION | INVERT ELEVATION | SLOPE CRITICAL | DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | DO NOT USE RCP | DO NOT USE CSP | DO NOT USE CAAP | DO NOT USE HDPE | C.S. PIPE THICKNESS OR GAUGE 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | R.C. PIPE CLASS III 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | R.C. PIPE CLASS IV 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | ** R.C. PIPE (CLASS V) | **** RC PIPE CULVERTS, CONTRACTOR DESIGN | **** RC PIPE CULVERTS, CONTRACTOR DESIGN | 15" SIDE DRAIN PIPE | 18" SIDE DRAIN PIPE | ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P. | C.S.P. | QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0') | *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B') LIN. FT. A (5.0' THRU 10.0') | B (10.0' AND ABOVE) | C.B. STD. 840.01 OR STD. 840.02 | FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E | F | G | CONCRETE TRANSITIONAL SECTION DROP INLET | CATCH BASIN | D.I. STD. 840.14 OR STD. 840.15 | D.I. FRAME WITH TWO GRATES STD. 840.16 | D.I. FRAME WITH TWO GRATES STD. 840.26 | G.D.I. TYPE "A" STD. 840.17 OR 840.26 | G.D.I. TYPE "B" STD. 840.18 OR 840.27 | G.D.I. TYPE "D" STD. 840.19 OR 840.28 | G.D.I. FRAME WITH GRATE STD. 840.20 | G.D.I. FRAME WITH TWO GRATES STD. 840.22 | G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24 | G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24 | TB J.B. STD. 840.34 OR STD. 840.46 | G.D.I. FRAME (N.S. FLAT) W/2 GRATES STD. 840.29 | T.B.D.I. STD. 840.35 | MANNHOLE FRAME AND COVER, STD. 840.54 | CONVERT 2 GI TO JB w/ MH COVER | SIDE DRAIN PIPE ELBOWS NO. & SIZE | CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71 | CONC. COLLARS CL. - "B" C.Y. STD. 840.72 | PIPE REMOVAL LIN. FT. | REMARKS |
|---|---|---

11/14/23



W-5808B

004

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION ·

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121 DOT Drive
Carthage, 28327

PHONE NUMBER
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DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Ricketts

DocuSigned by: Michael Ricketts 3B4205DAD60B44EB...

04/24/2025

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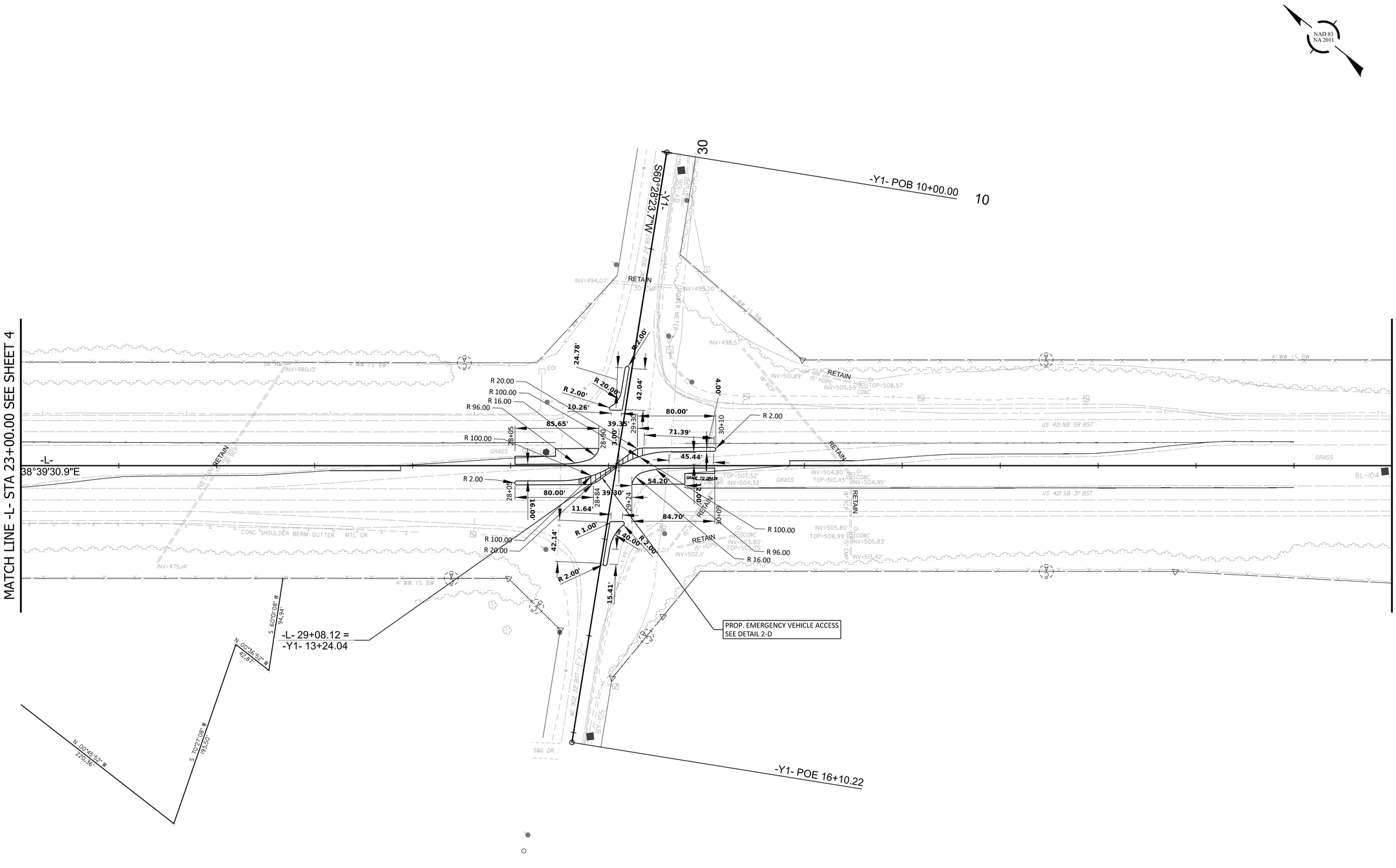
DIVISION 8 DDC



FOR -CHAIN- PROFILE, SEE SHEET ??

W-5808B

005

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Digitally signed by Michael Ricketts
DN: cn=Michael Ricketts, o=NCDOT, ou=Engineering, email=mricketts@ncdot.gov, c=US
Date: 2025.04.24 08:08:08 -04'00'

Michael Ricketts
SEALED 052140 ENGINEER
04/24/2025

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DIVISION OF HIGHWAYS

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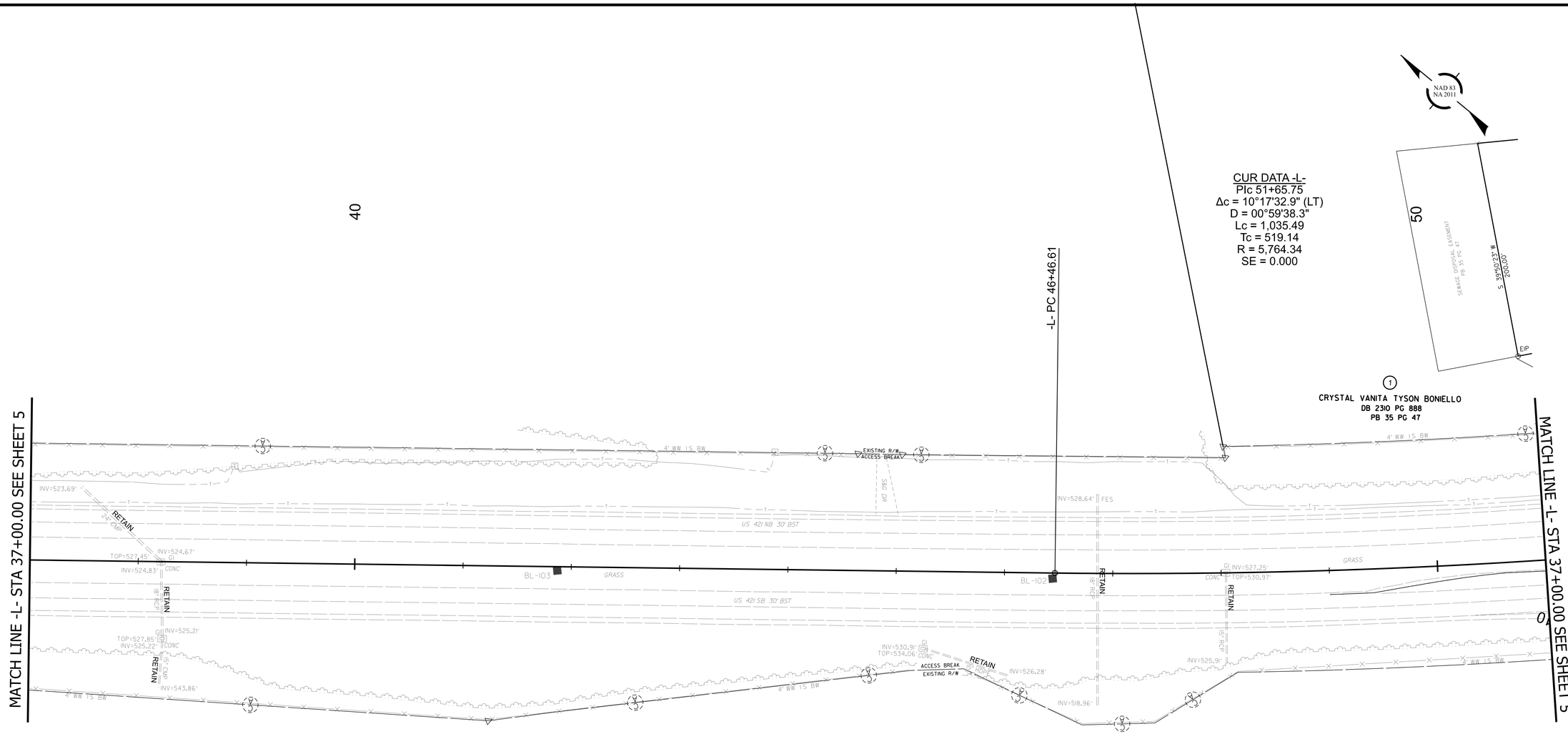
11/14/23



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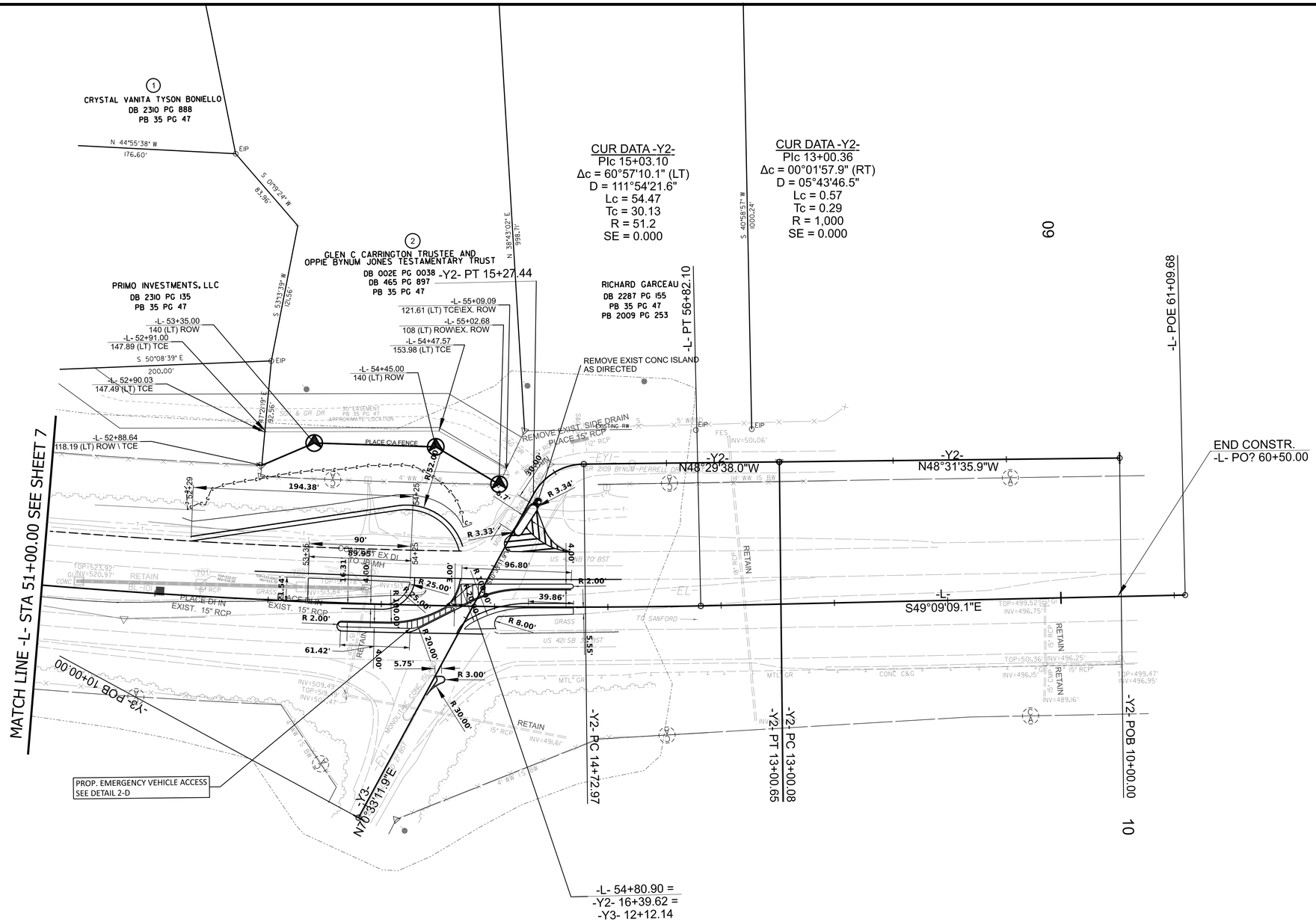

W-5808B
007

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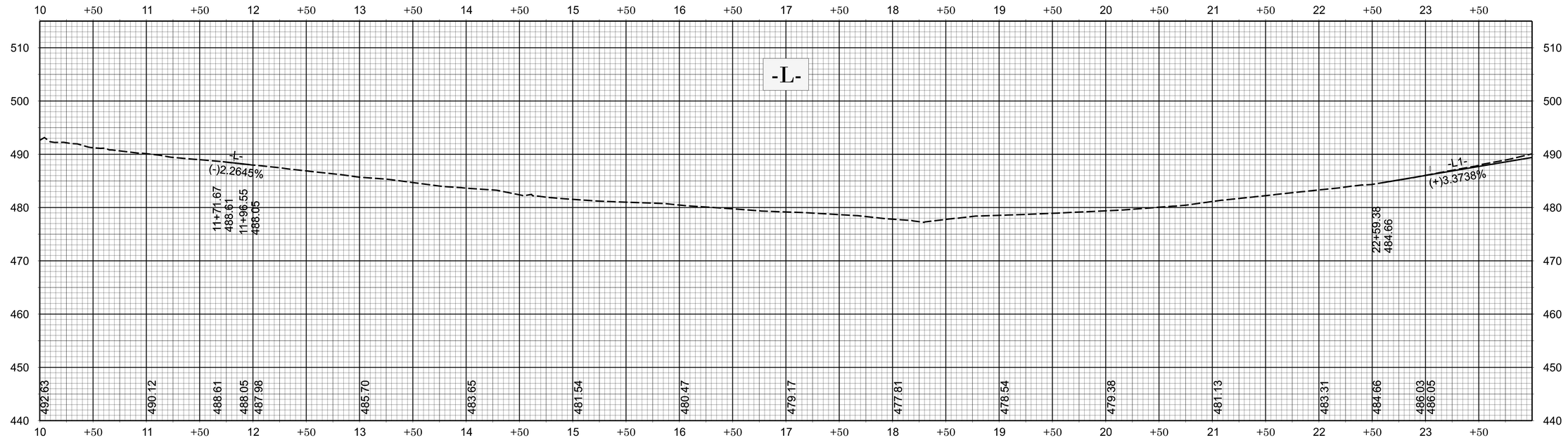
DIVISION 8 DDC

FOR -CHAIN- PROFILE, SEE SHEET ??

W-58088
008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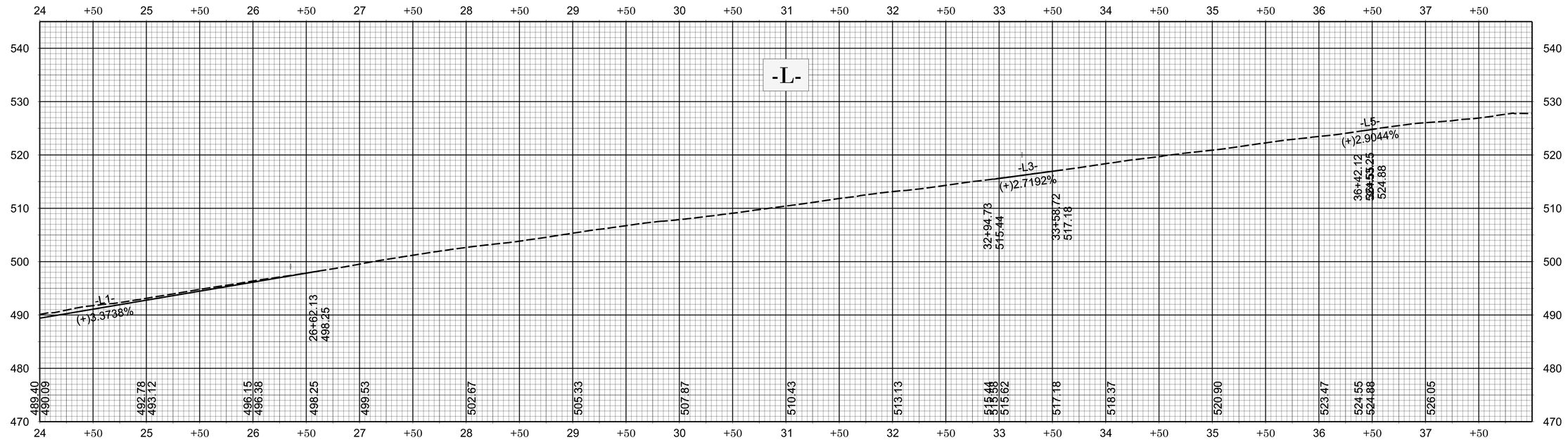
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33+58.72
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36+42.12
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489.40 490.09 492.78 493.12 496.15 496.38 498.25 499.53 502.67 505.33 507.87 510.43 513.13 515.44 515.62 517.18 518.37 520.90 523.47 524.55 524.88 526.05

11/14/23

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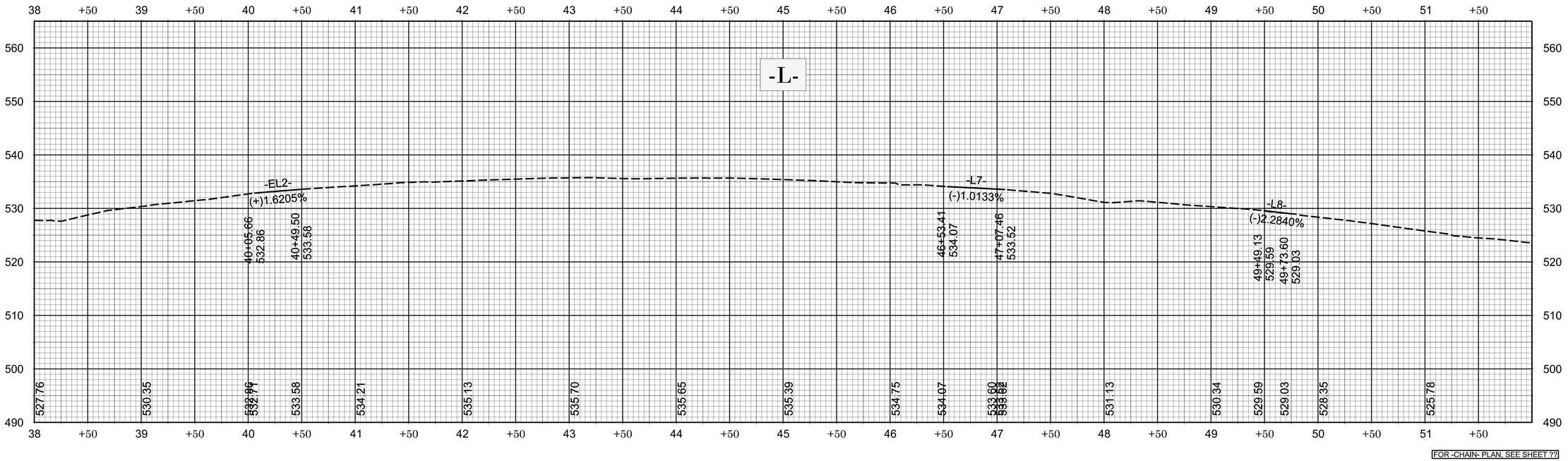
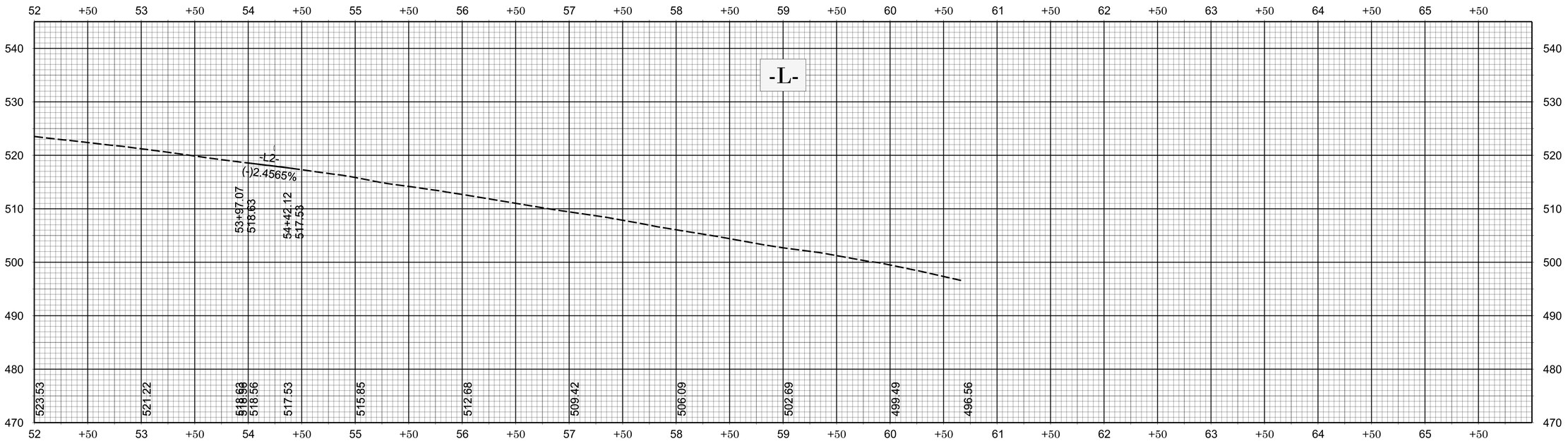


FOR -CHAIN- PLAN, SEE SHEET ??



FOR -CHAIN- PLAN, SEE SHEET ??

PROJ. REFERENCE NO.	SHEET NO.
W-5808B	TMP-1

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTION
US 421 AND NC 902	MONDAY THRU FRIDAY 7:00AM-9:00AM, 4:00PM-6:00PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

US 421 & NC 902

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 5:00 P.M. DECEMBER 31st TO 8:30 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:30 A.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 5:00 P.M. THURSDAY AND 8:30 A.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 5:00 P.M FRIDAY TO 8:30 A.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:30 A.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 5:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:30 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 5:00 P.M. FRIDAY AND 8:30 A.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:00 P.M. TUESDAY TO 8:30 A.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 5:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:30 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

I) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

J) DO NOT EXCEED A DIFFERNCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING " UNEVEN LANES" SIGNS (W8-1) 500 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THOUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

K) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

L) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

N) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

O) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

P) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NB US 421	THERMO	SNOWPLOWABLE
SB US 421	THERMO	SNOWPLOWABLE
NC 902	THERMO	SNOWPLOWABLE
NC 902	THERMO	SNOWPLOWABLE

Q) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NB US 421	PAINT	N/A
SB US 421	PAINT	N/A
NB NC 902	PAINT	
SB NC 902	PAINT	

R) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

S) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

T) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

U) TRACE THE EXISTING AND PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION. PLACE DRUMS TO DELINEATE ANY AN EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E RICKETTS

DocuSigned by: Michael Ricketts 3B420DAD60B44EB...

04/24/2025

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

GENERAL NOTES

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PROJ. REFERENCE NO.	SHEET NO.
W-5808B	TMP-2

MANAGEMENT STRATEGIES

– US 421 AND NC 902 TRAFFIC WILL BE MAINTAINED THROUGH LANE CLOSURES.

– TRAFFIC WILL BE MAINTAINED IN THE EXISTING PATTERN UNTIL THE LEFT TURN LANES AND U–TURN LOCATIONS ARE CONSTRUCTED. ONCE TRAFFIC IS SHIFTED TO THE UTILIZE THE U–TURN BULBS, THE EXISTING LEFT TURN LANES AND MEDIAN CROSSOVER WILL BE CLOSED FOR THE CONSTRUCTION OF THE MEDIAN CONCRETE ISLANDS, FINAL SURFACE, MARKINGS, AND REMOVAL OF THE EXISTING TRAFFIC SIGNAL.

PHASING

STEP 1:
INSTALL WORK ZONE ADVANCE WARNING SIGNS IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DRAWING NO. 1101.01. WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE SIGNS, AS DIRECTED BY THE ENGINEER.

STEP 2:

USING NCDOT STANDARD DRAWING NO. 1101.02 (SHEET 4 OF 19), BEGIN CONSTRUCTION FROM –L– STA. 11+09.56 TO –L– STA. 17+81.37 INCLUDING THE FINAL LAYER OF SURFACE COURSE, CONCRETE ISLANDS, AND MARKINGS.

CONTRACTOR SHALL CLOSE MEDIAN CROSSOVER AT –Y2–/–Y3– AND SWITCH TRAFFIC TO RIGHT TURNS ONLY ON –Y2– SR 2109 BYNUM PERRELL DR AND –Y3– SR 2000 ROSCOE RD.

USING NCDOT STANDARD DRAWING NO. 1101.02 (SHEET 4 OF 19), BEGIN CONSTRUCTION FROM –L– STA. 49+30 TO –L– STA. 60+40, INCLUDING THE FINAL LAYER OF SURFACE COURSE, CONCRETE ISLANDS, AND MARKINGS.

NOTE:
AT THE END OF EACH WORK DAY, CONTRACTOR SHALL SAFE–UP MEDIAN WIDENING AND CLOSE MEDIAN SHOULDERS USING NCDOT STANDARD DRAWING NO. 1101.04.

STEP 3:

UPON COMPLETION OF STEP 2, CONTRACTOR SHALL SWITCH TRAFFIC TO RIGHT TURNS ONLY ON NORTHBOUND AND SOUTHBOUND –Y1– NC 902 TO UTILIZE U–TURN BULBOUTS ON –L– US 421.

CLOSE MEDIAN CROSSOVER AT –L– US 421/–Y1– NC 902. EXISTING TRAFFIC SIGNAL SHALL BE SET TO FLASH MODE FOR THE DURATION OF THE CLOSURE. SIGNAL SHALL BE SET TO FLASH YELLOW FOR MAINLINE TRAFFIC ON –L– US 421. USE LAW ENFORCEMENT AS NECESSARY TO DIRECT TRAFFIC DURING THE CLOSURE PROCESS. ALL REQUIRED REGULATORY SIGNS SHALL BE INSTALLED PRIOR TO DEACTIVATING THE TRAFFIC SIGNAL.

STEP 4:
USING NCDOT STANDARD DRAWING NO. 1101.02 (SHEET 4 OF 19), BEGIN CONSTRUCTION FROM –L– STA. 23+15 TO –L– STA. 35+15.

COMPLETE FINAL LAYER OF SURFACE COURSE, PAVEMENT MARKINGS, MARKERS, AND CONCRETE ISLANDS ON EXISTING MEDIAN CROSSOVER. COMPLETE CONCRETE ISLANDS ON –Y1– NC 902.

CONTRACTOR SHALL PLACE MESSAGE BOARDS ALONG –L– 421 AND –Y1– NC 902 FOR A MINIMUM OF 30 DAYS TO GIVE ADVANCE WARNING PRIOR TO REMOVAL OF THE EXISTING TRAFFIC SIGNAL.

STEP 5:

REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES AND OPEN US 421 (–L–) AND NC 902 (–Y1–) TO FINAL TRAFFIC PATTERN.

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E RICKETTS

DocuSigned by: Michael Ricketts 38420DAD60B44EB...
04/24/2025

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASING

07-APR-2025 10:37
Z:\rdy\Chatham\us_421&nc_902\tmp\W-5808B_US421_NC902_TMP.dgn
mericketts AT DIV08-330084L

PROJECT: W-5808B

WBS: 48953.3.3

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
W-5808B	PMP-1

PAVEMENT MARKING PLAN

CHATHAM COUNTY

US 421 FROM 0.36 MILES NORTH OF NC 902 TO 0.09 MILES SOUTH OF SR 2000/2109 ROSCOE RD /BYNUM PERRELL DR

INDEX OF SHEETS

SHEET NO.	TITLE
PMP-1	PAVEMENT MARKING PLAN TITLE
PMP-1A	PAVEMENT MARKING SCHEDULE
PMP-2 THRU PMP-5	PAVEMENT MARKING DETAIL SHEETS

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - DIVIDED AND UNDIVIDED ROADWAYS
1205.03	PAVEMENT MARKINGS - INTERCHANGES
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

PAVEMENT MARKING:

· INSTALL PAVEMENT MARKINGS AND MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 421	THERMOPLASTIC	SNOWPLOWABLES

· TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

· REMOVE/REPLACE ANY CONFLICTING PAVEMENT MARKINGS.

· REPLACE ANY PAVEMENT MARKINGS BEYOND THE PROJECT LIMITS DAMAGED BY THE CONTRACTORS' OPERATIONS DURING CONSTRUCTION.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

STATE PROJECT REFERENCE NO.	SHEET NO.
W–5808B	PMP–1A

PROJECT: W–5808B

CONTRACT: ____

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
THERMOPLASTIC (4″, 90 MILS)	
T1	WHITE EDGELINE
T11	YELLOW SINGLE CENTER
T13	YELLOW DOUBLE CENTER
THERMOPLASTIC (6″, 90 MILS)	
T20	WHITE EDGELINE
T23	3 FT. - 9 FT./SP WHITE MINISKIP
T24	2 FT. - 6 FT./SP WHITE MINISKIP
T30	YELLOW EDGELINE
T34	2 FT. - 6 FT./SP YELLOW MINISKIP
THERMOPLASTIC (12″, 90 MILS)	
T50	WHITE GORELINE
T51	WHITE DIAGONAL
THERMOPLASTIC (24″, 90 MILS)	
T61	WHITE STOPBAR
THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)	
T70	LEFT TURN ARROW
T71	RIGHT TURN ARROW
T77	U-TURN ARROW

PAVEMENT MARKING SYMBOLS

T70

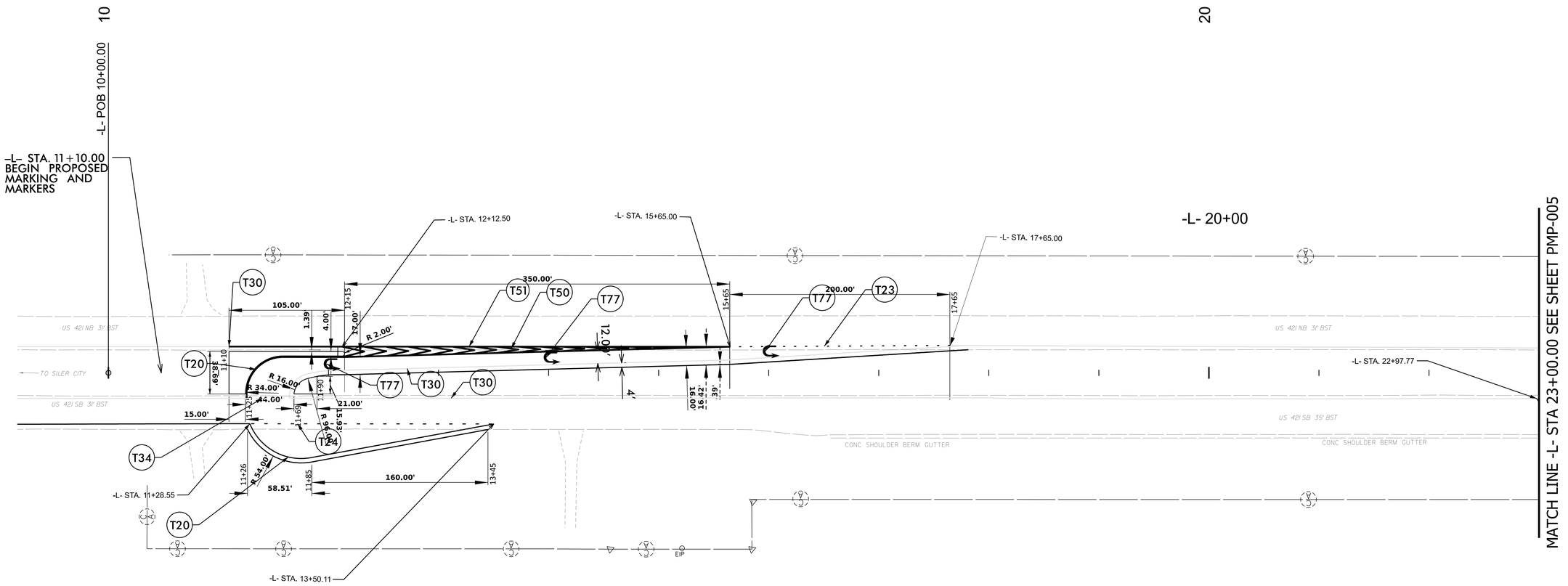
T71

T77

PAVEMENT MARKING SCHEDULE

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

11/14/23



FOR -CHAIN- PROFILE, SEE SHEET ??

W-5808B

PMP-004

Prepared in the Office of:

DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E Ricketts

DocuSigned by:
Michael Ricketts
38420DAD60B44EB...
04/24/2025

0 100

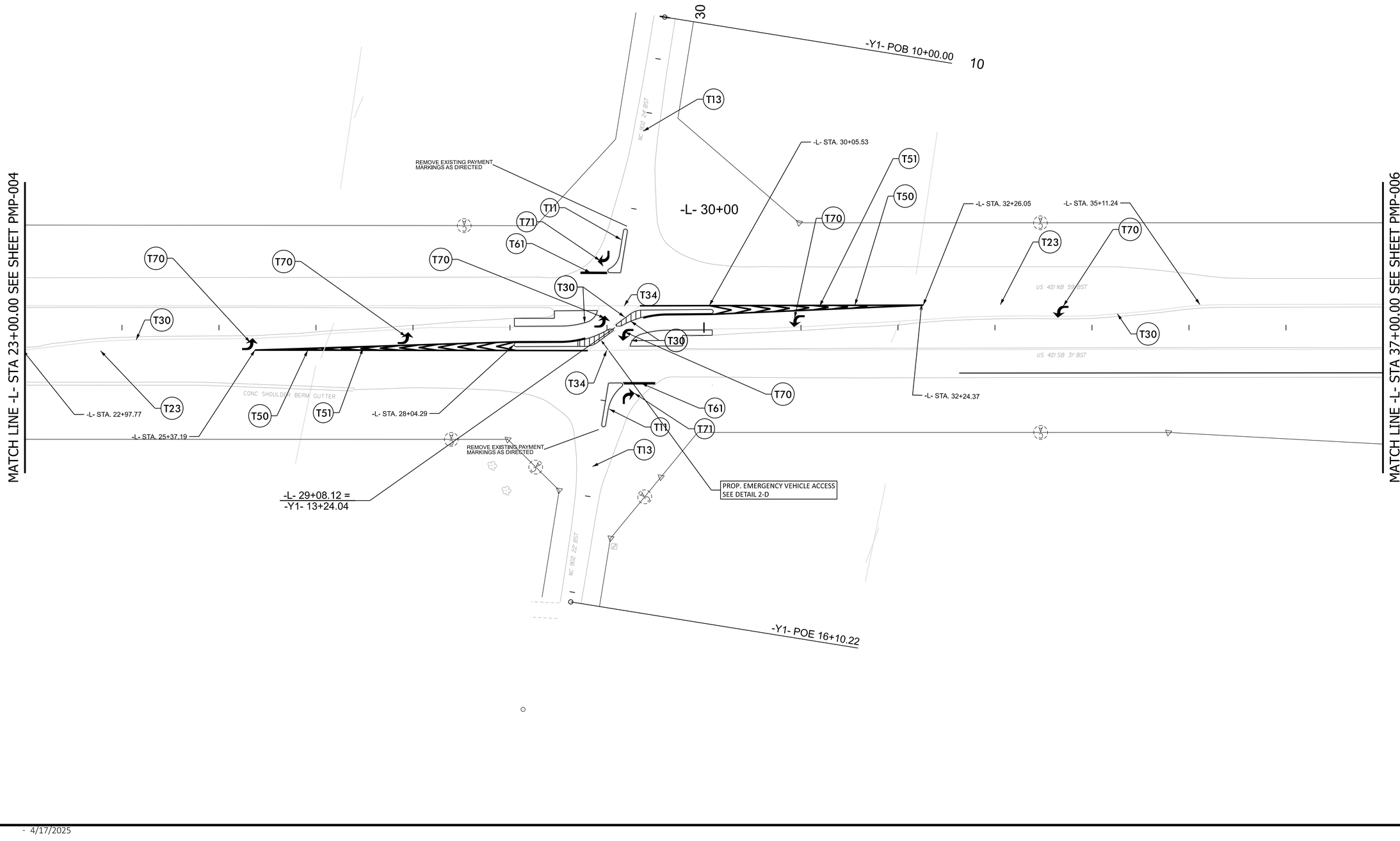
50 Feet

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DIVISION 8 DDC



W-5808B

PMP-005

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Ricketts

DocuSigned by:
Michael Ricketts
3B420DAD60B44EB...
04/24/2025

0 100

50 Feet

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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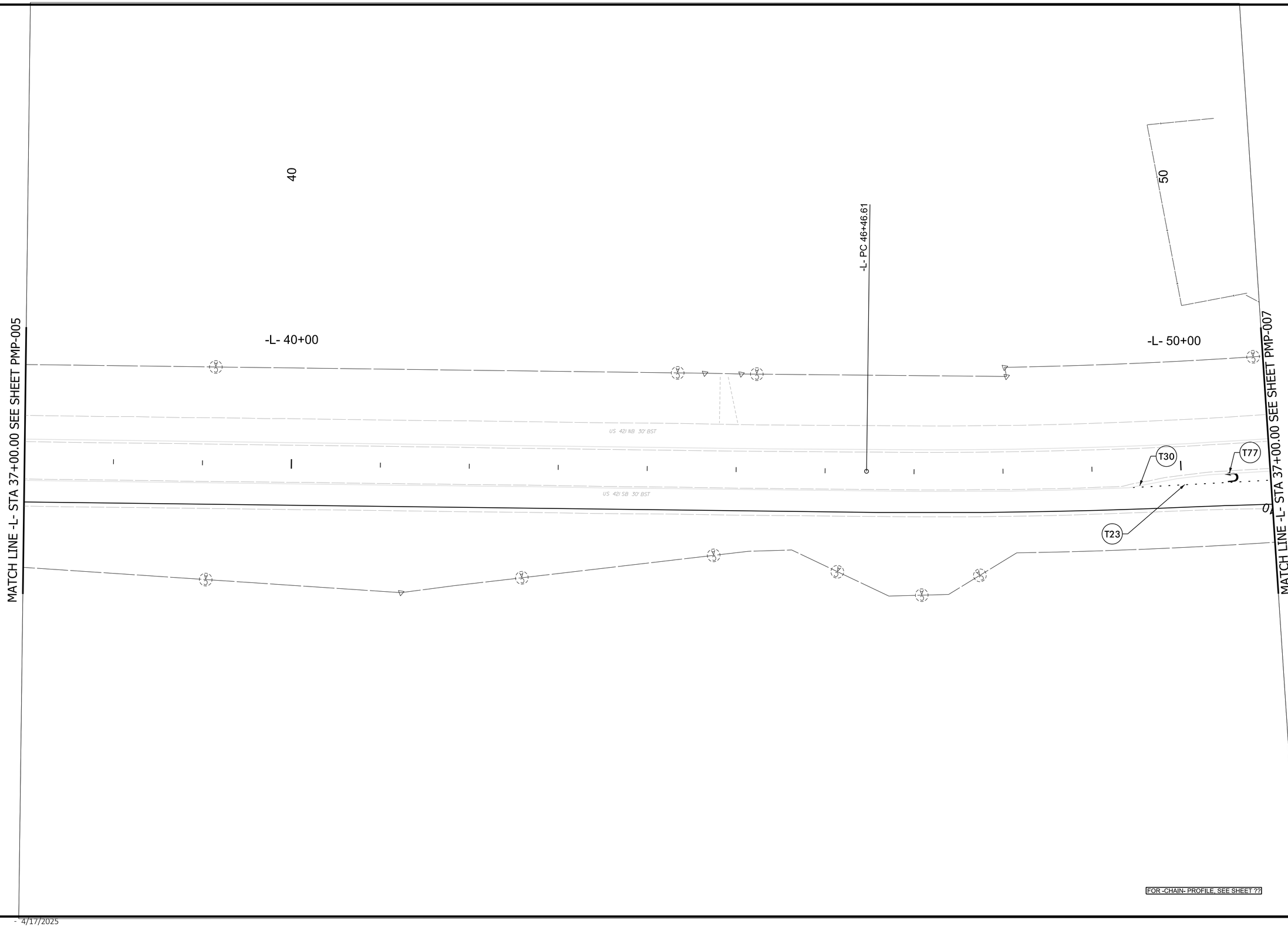
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DIVISION 8 DDC

11/14/23



W-5808B

PMP-006

Prepared in the Office of:

DIVISION OF HIGHWAYS DIVISION 8 – DDC

121 DOT Drive

Carthage, 28327

PHONE NUMBER

(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Ricketts

DocuSigned by:
Michael Ricketts
3B420DAD60B44EB...
04/24/2025

0 100

50 Feet

INCOMPLETE PLANS

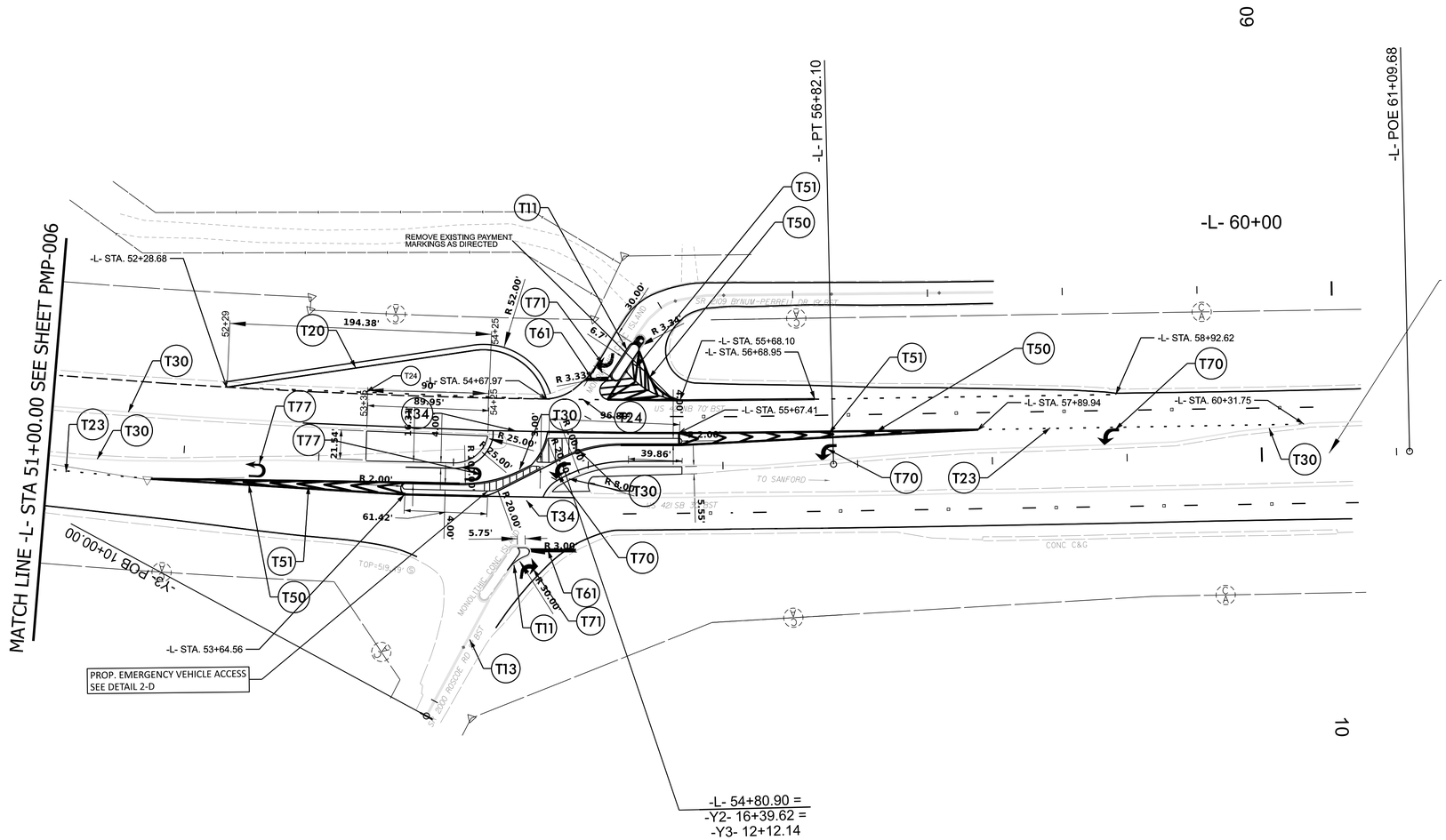
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DIVISION 8 DDC

DOT/mtrotter - 4/17/2025



FOR -CHAIN- PROFILE, SEE SHEET ??

W-5808B

PMP-007

Prepared in the Office of:

DIVISION OF HIGHWAYS DIVISION 8 – DDC

121 DOT Drive Carthage, 28327

PHONE NUMBER (910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E Roberts

DocuSigned by: Michael Roberts 3B420DAD60B44EB...

04/24/2025

0 100

50 Feet

INCOMPLETE PLANS

DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

DIVISION 8 DDC

09/08/99

TIP PROJECT: W-5808B

WBS: 48953.3.3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

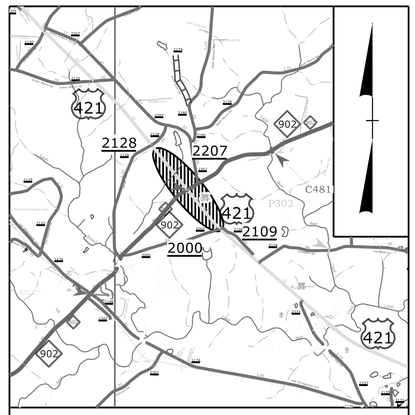
CHATHAM COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5808B	EC1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
48953.1.3	0421113	PE
48953.2.3	0421113	ROW
48953.3.3	0421113	CONST

LOCATION: *US 421 FROM 0.36 MILES NORTH OF NC 902 TO 0.09 MILES SOUTH OF SR 2000/2109 ROSCOE RD/BYNUM PERRELL DR*

TYPE OF WORK: *EROSION CONTROL*



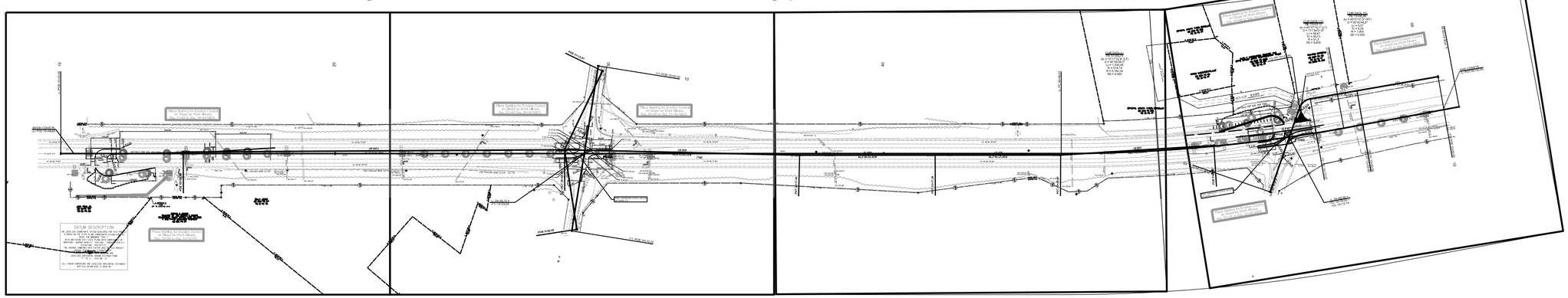
VICINITY MAP (NTS)

EC4

EC5

EC6

EC7



EROSION AND SEDIMENT CONTROL MEASURES

Std. No.	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Silt Basin Type B	
1630.02	Temporary Silt Ditch	
1630.03	Temporary Diversion	
1630.04	Special Stilling Basin	
1632.01	Rock Inlet Sediment Trap Type C	
1633.01	Temporary Rock Silt Check Type A	
	Temporary Rock Silt Check Type A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type B	
	Wattle	
	Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type B	
	Infiltration Basin With Baffles	
	Fabric Inlet Protection Device	
	Energy Dissipater	

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG–010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared By:
Michael Trotter
Level III A #3149
Exp. December 31, 2025
PROJECT CONTACTS:
District Engineer
R.J. "Jeron" Monroe
Division Utility Engineer
Michael Ricketts, PE
Resident Engineer
Jeremy Phillips, PE

PROJECT LENGTH

ROADWAY: 0.89 MILES
STRUCTURE: ____ MILES
TOTAL: 0.89 MILES

Prepared in the Office of:
DIVISION EIGHT
DIVISION DESIGN & CONSTRUCT UNIT
121 DOT Drive
Carthage, NC 28327

2024 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway ENGLISH standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2024 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01	Temporary Silt Fence	**1632.01**	Rock Inlet Sediment Trap Type A
1606.01	Special Sediment Control Fence	**1632.03**	Rock Inlet Sediment Trap Type C
1622.01	Temporary Berms and Slope Drains	**1633.01**	Temporary Rock Silt Check Type A
1630.01	Riser Basin	**1633.02**	Temporary Rock Silt Check Type B
1630.02	Silt Basin Type B	**1634.01**	Temporary Rock Sediment Dam Type A
1630.03	Temporary Silt Ditch	**1634.02**	Temporary Rock Sediment Dam Type B
1630.04	Stilling Basin	**1635.01**	Rock Pipe Inlet Sediment Trap Type A
1630.05	Temporary Diversion	**1636.01**	Rock Silt Screen

5/26/20

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

W-5808B
1-B

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel / Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- Switch
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- Existing Easement Line
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Drainage/Utility Easement
- Proposed Permanent Utility Easement
- Proposed Temporary Utility Easement
- Proposed Aerial Utility Easement

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert
- Bridge Wing Wall, Head Wall and End Wall

MINOR:

- Head and End Wall
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer

UTILITIES:

** SUE - Subsurface Utility Engineering*
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line Test Hole (SUE - LOS A)*
- U/G Power Line (SUE - LOS B)*
- U/G Power Line (SUE - LOS C)*
- U/G Power Line (SUE - LOS D)*

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- U/G Telephone Test Hole (SUE - LOS A)*
- U/G Telephone Cable (SUE - LOS B)*
- U/G Telephone Cable (SUE - LOS C)*
- U/G Telephone Cable (SUE - LOS D)*
- U/G Telephone Conduit (SUE - LOS B)*
- U/G Telephone Conduit (SUE - LOS C)*
- U/G Telephone Conduit (SUE - LOS D)*
- U/G Fiber Optics Cable (SUE - LOS B)*
- U/G Fiber Optics Cable (SUE - LOS C)*
- U/G Fiber Optics Cable (SUE - LOS D)*

WATER:

- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE - LOS A)*
- U/G Water Line (SUE - LOS B)*
- U/G Water Line (SUE - LOS C)*
- U/G Water Line (SUE - LOS D)*
- Above Ground Water Line

TV:

- TV Pedestal
- TV Tower
- U/G TV Cable Hand Hole
- U/G TV Test Hole (SUE - LOS A)*
- U/G TV Cable (SUE - LOS B)*
- U/G TV Cable (SUE - LOS C)*
- U/G TV Cable (SUE - LOS D)*
- U/G Fiber Optic Cable (SUE - LOS B)*
- U/G Fiber Optic Cable (SUE - LOS C)*
- U/G Fiber Optic Cable (SUE - LOS D)*

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE - LOS A)*
- U/G Gas Line (SUE - LOS B)*
- U/G Gas Line (SUE - LOS C)*
- U/G Gas Line (SUE - LOS D)*
- Above Ground Gas Line

SANITARY SEWER:

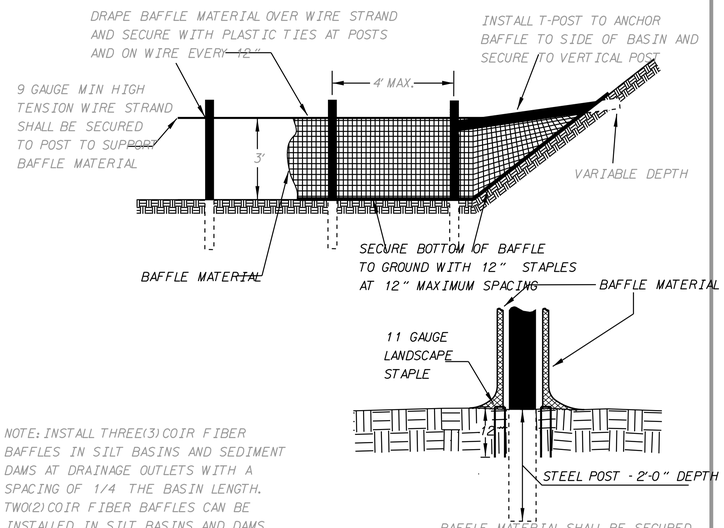
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line
- Above Ground Sanitary Sewer
- SS Force Main Line Test Hole (SUE - LOS A)*
- SS Force Main Line (SUE - LOS B)*
- SS Force Main Line (SUE - LOS C)*
- SS Force Main Line (SUE - LOS D)*

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line (SUE - LOS B)*
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc.
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- Abandoned According to Utility Records
- End of Information

TIP PROJECT	SHEET NO.
W-5808B	EC-2

COIR FIBER BAFFLE DETAIL



NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF 1/4 THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

NARRATIVE

1. SOIL TYPE: CLAY ___X___ SAND _____

2. IS THE PROJECT LOCATED IN A HIGH QUALITY WATER ZONE?
YES _____ NO ____X____

3. ARE THERE ANY WETLANDS ADJOINING THIS PROJECT?
YES _____ NO ____X____

SITE DESCRIPTION

This project is located on US 421 at the intersections of NC 902 in Chatham Co. The area surrounding this project primarily consists of wooded areas, houses, and areas of business. The drainage consists of roadway ditches that lead to existing ditches.

PROJECT DESCRIPTION

The project will consist of clearing, grubbing, drainage, grading, and paving. The major land disturbing activites will consist of clearing and grading within the right of way. Temporary and permanent erosion control measures will be installed.

MAINTENANCE SCHEDULE

1. INSPECT WEEKLY AND AFTER EACH RAINFALL, USE THE DEPARTMENT OF TRANSPORTATION'S EROSION CONTROL INSPECTION REPORT.

2. MAINTAIN EROSION CONTROL DEVICES AS FOLLOWS:

A. SILT DITCH - REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE - CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.

B. SILT FENCE - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE - AVOID UNDERMINING THE FENCE.

C. SLOPE DRAINS - INSPECT THE SLOPE DRAINS AND SUPPORTING DIVERSIONS.

D. SEDIMENT BASIN - REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH - CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT - REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.

E. CHECK DAM - REMOVE SETTLEMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION - ADD STONE TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

F. ROCK DAM - REMOVE SEDIMENT AND RESTORE ORIGINAL VOLUME WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN VOLUME - CHECK THE STRUCTURE FOR EROSION, PIPING, AND ROCK DISPLACEMENT AFTER EACH SIGNIFICANT RAINSTORM AND REPAIR IMMEDIATELY.

G. DROP INLET PROTECTION (TYPE C) - REMOVE SEDIMENT FROM THE POOL AREAS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN.

H. SEDIMENT TRAP - REMOVE SEDIMENT AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS WHEN SETTLEMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP - CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING TO ENSURE IT IS A MINIMUM OF 1.5 FT. BELOW THE LOW POINT OF THE EMBANKMENT.

NOTE: SEDIMENT SHOULD BE PLACED IN DESIGNATED DISPOSAL AREAS AND NOT ALLOWED TO FLOW INTO STREAMS OR DRAINAGE WAYS DURING STRUCTURE REMOVAL.

NOTE: ALL SEDIMENT TRAPS/BASINS SHALL HAVE COIR FIBER BAFFLES. BASINS/TRAPS OVER 10 FT IN LENGTH SHALL HAVE TWO ROWS.

NOTE: NO PAM TO USED WITH THE LAST BMT (WATTLE) AT OUTLET OF THE PROJECT

GENERAL CONSIDERATIONS

1. THE LAW REQUIRES INSTALLATION AND MAINTENANCE OF SUFFICIENT EROSION CONTROL PRACTICES TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE. IT ALSO REQUIRES THAT SURFACES BE NON EROSIVE AND STABLE WITHIN 14 DAYS CALENDAR DAYS AFTER THE COMPLETION OF ANY PHASE OF GRADING.

2. FIT THE DEVELOPMENT TO THE SITE - FOLLOW THE NATURAL CONTOURS AS MUCH AS POSSIBLE. PRESERVE AND USE NATURAL DRAINAGE SYSTEMS.

3. LIMIT CLEARING AND GRUBBING - CLEARLY DEFINE WORK LIMIT LINES. GRADE TO MINIMIZE CUT-AND-FILL SLOPES, PRESERVE NATURAL BUFFER AREAS, AND LIMIT THE TIME THAT BARE SOIL IS EXPOSED.

4. PROTECT THE SOIL SURFACE - LIMIT THE EXTENT OF DISTURBANCE AND STABILIZE THE SOIL SURFACE IMMEDIATELLY. ONCE THE SURFACE HAS BEEN DISTURBED, IT IS SUBJECT TO ACCELERATED EROSION AND SHOULD BE PROTECTED WITH APPROPRIATE COVER, SUCH AS MULCH OR VEGETATION IN AN EXPEDIENT MANNER.

5. SEDIMENT BASINS AND TRAPS - SELECT SITES AND INSTALL SEDIMENT BASINS AND TRAPS BEFORE OTHER CONSTRUCTION ACTIVITIES ARE STARTED. ALSO CONSIDER LOCATIONS FOR DIVERSIONS, OPEN CHANNELS, AND STORM DRAINS AT THIS TIME SO THAT ALL SEDIMENT-LADEN TO RUN OFF CAN BE DIRECTED TO AN IMPOUNDMENT STRUCTURE BEFORE LEAVING THE CONSTRUCTION SITE. INSTALL ALL MEASURES AND RELEASE POINTS PRIOR TO CLEARING AND GRUBBING.

6. ONCE AN AREA IS DISTURBED, IT IS SUBJECT TO ACCELERATED EROSION. EROSION CONSTROL CAN BE ACHIEVED BY:

- LIMITING THE SIZE OF THE CLEARING AND TIME OF EXPOSURE BY PROPER SCHEDULING.
- REDUCING THE AMOUNT OF RUNOFF OVER THE DISTURBED SURFACE.
- LIMITING GRADES AND LENGTHS OF SLOPES, AND
- RE-ESTABLISHING PROTECTIVE COVER IMMEDIATELY AFTER LAND DUSTURBING ACTIVITIES ARE COMPLETED OR WHEN CONSTRUCTION ACTIVITES ARE DELAYED FOR THIRTY (30) OR MORE WORKING DAYS

7. STABILIZE CONSTRUCTION ACCESS AREAS, CONSTRUCTION ROADS, AND PARKING AREA DURING INITIAL ACTIVITIES. TRY TO KEEP ROAD GRADES TO A MINIMUM GENERALLY NEVER EXCEEDING 12%.

8. CLEAR BORROW AND WASTE DISPOSAL AREAS AS NEEDED AND PROTECT THEM FROM SURFACE RUNOFF. SLOPE ALL AREAS TO PROVIDE POSITIVE DRAINAGE, AND STABILIZE BARE SOIL SURFACES WITH PERMANENT VEGETATION OR MULCH AS SOON AS FINAL GRADES ARE PREPARED. DIRECT ALL RUNOFF THAT CONTAINS SEDIMENT TO A SEDIMENT-TRAPPING DEVICE. IN LARGE BORROW AND DISPOSAL SITES, SHAPE AND DEEPEN THE LOWER END TO FORM AN IN-PLACE SEDIMENT TRAP.

9. ONLY SEDIMENT-FREE RUNOFF MAY BE DISCHARGED FROM CONSTRUCTION SITES DIRECTLY INTO STREAMS. ENSURE THAT ALL OTHER FLOWS ENTER FROM DESILTING POOLS FORMED BY SEDIMENT TRAPS OR BARRIERS.

10. AREAS ADJOINING STREAMS SHOULD BE LEFT UNDISTURBED AS BUFFERS. WHERE NATURAL BUFFERS ARE NOT AVAILABLE, PROVIDE ARTIFICIAL BUFFERS. WHERE WORK IS REQUIRED ALONG A STREAM, PROVIDE MECHANICAL OR ARTIFICIAL BUFFER (25 FEET MINIMUM REQUIRED).

11. BEFORE MOVING TO NEXT JOB SITE, REVIEW ALL MEASURES FOR EFFECTIVENESS; MAKE ANY ADJUSTMENTS, CLEAR-OUTS, OR REPAIR; CALL ROADSIDE ENVIRONMENTAL DEPARTMENT FOR INSTALLATION OF A DITCH LINER AND SEEDING AND MULCHING OF ALL DISTURBED AREAS.

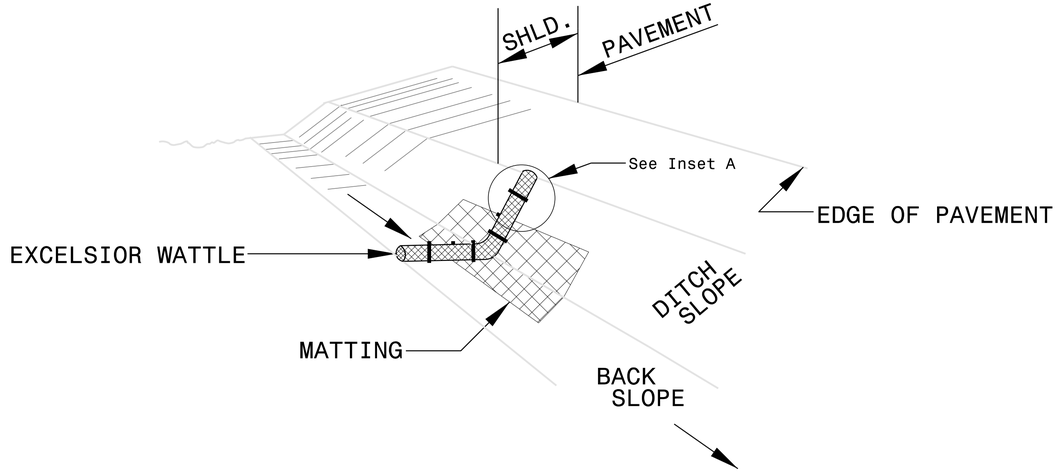
12. CONTINUE TO CHECK AND MAINTAIN ALL MEASURES AFTER EACH SIGNIFICANT RAINFALL UNTIL ALL DISTURBED AREAS BECOME STABILIZED.

13. FILL IN ALL SILT BASINS AND SILT DITCHES, REMOVE ALL SILT FENCES AND SLOPE DRAINS, REDISTRIBUTE ALL STONE FROM SILT CHECKS, SEDIMENT DAMS, AND SILT SCREENS. SEED AND MULCH DISTURBED AREAS.

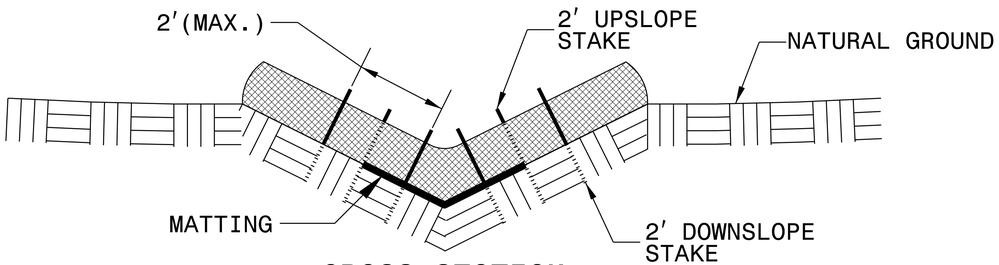
$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

TIP PROJECT	SHEET NO.
W-5808B	EC-2A

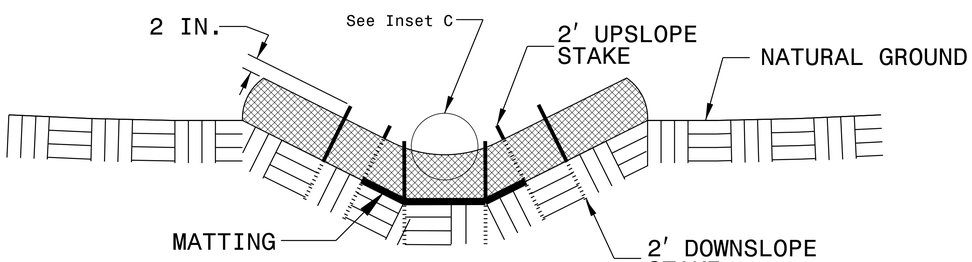
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

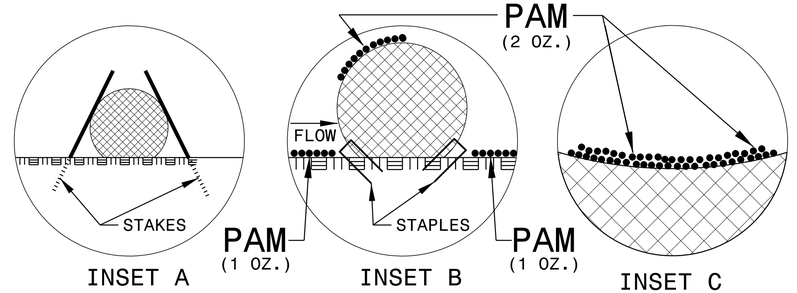
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

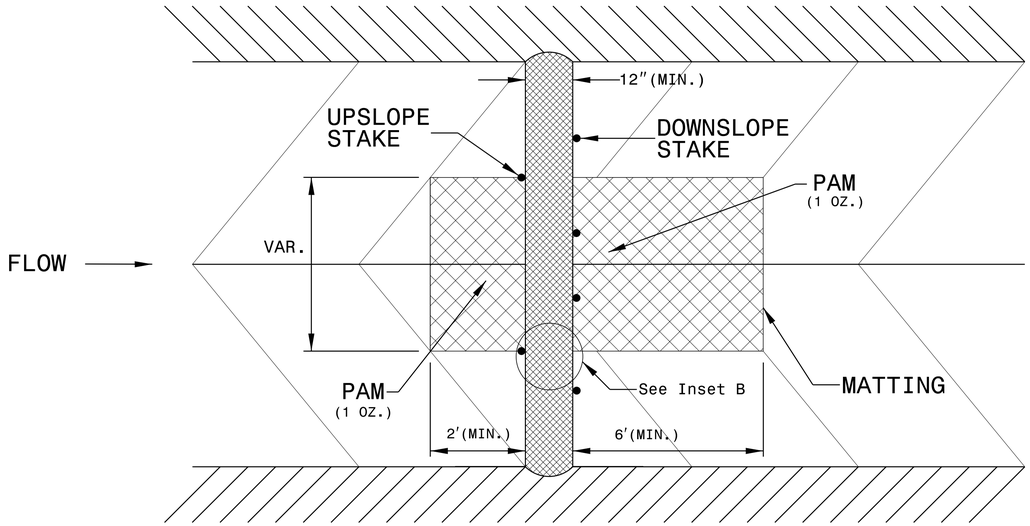
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





TOP VIEW

$$$$$$$SYST_TIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USER_NAME_$$$$

PROJECT REFERENCE NO.	SHEET NO.
W-5808B	EC-3

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
W-5808B	EC-3A

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
EC-4	-L-	10+50	13+95	RT	345
EC-4	-L-	11+05	14+55	MED	1340
EC-4	-L-	14+55	18+25	MED	370
EC-5	-L-	22+45	28+50	LT	320
EC-5	-L-	29+80	31+45	MED	165
EC-7	-L-	51+90	55+10	MED	320
EC-7	-L-	51+30	53+85	MED	255
EC-7	-L-	55+00	59+85	MED	485
			SUBTOTAL		3600
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					500
				TOTAL	4100
				SAY	4500

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

PROJECT REFERENCE NO.	SHEET NO.
W-5808B	EC-3B
R/W SHEET NO.	

MATTING INSTALLATION DETAIL

MATTING IN DITCHES

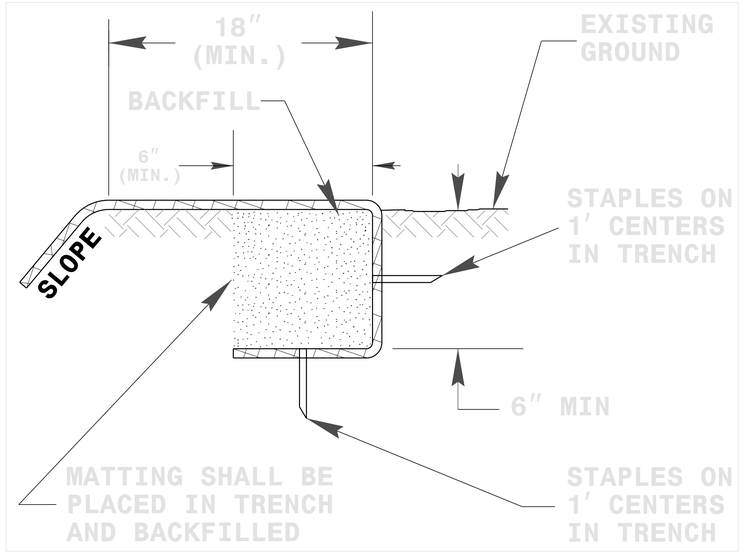
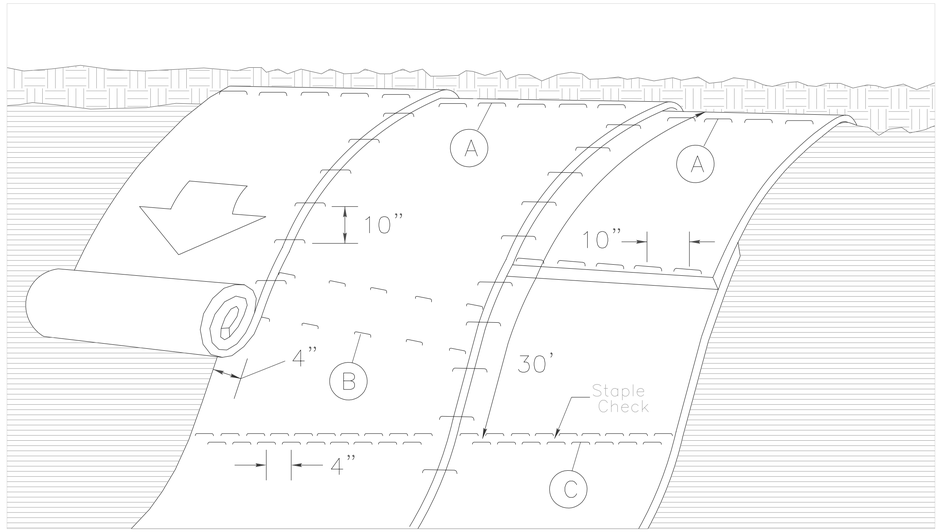


DIAGRAM (A)



MATTING ON SLOPES

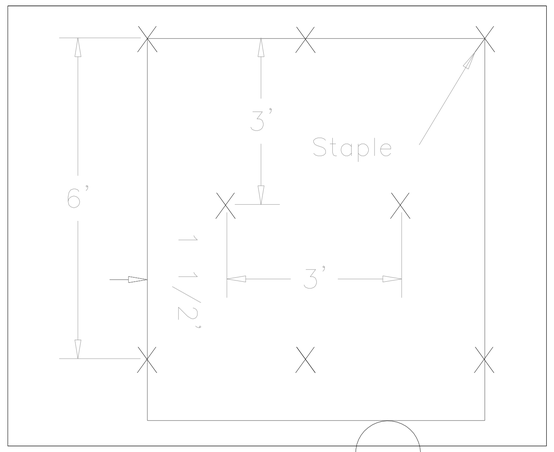


DIAGRAM (B)

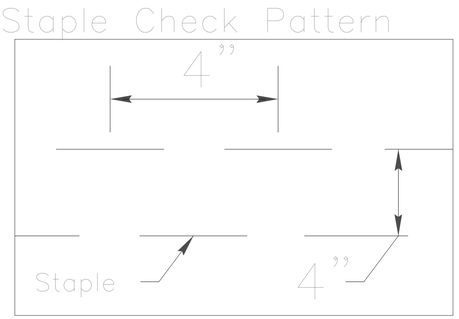


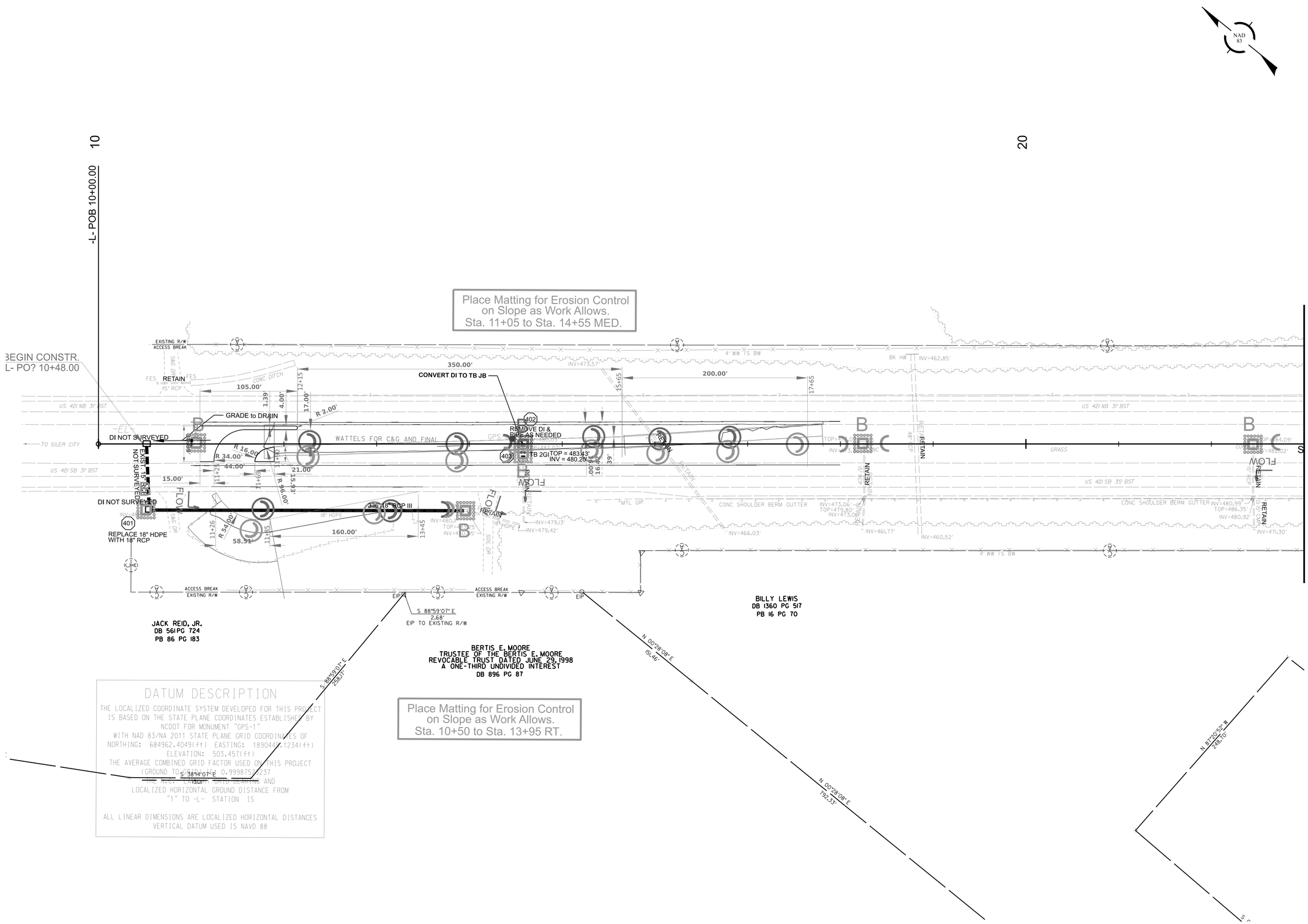
DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-1"
WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
NORTHING: 684962.4049(ft) EASTING: 1890449.1234(ft)
ELEVATION: 503.457(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987523237
THE N.C. EASTING GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "1" TO -L- STATION IS

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

W-5808B
EC-004

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773-8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Rickett

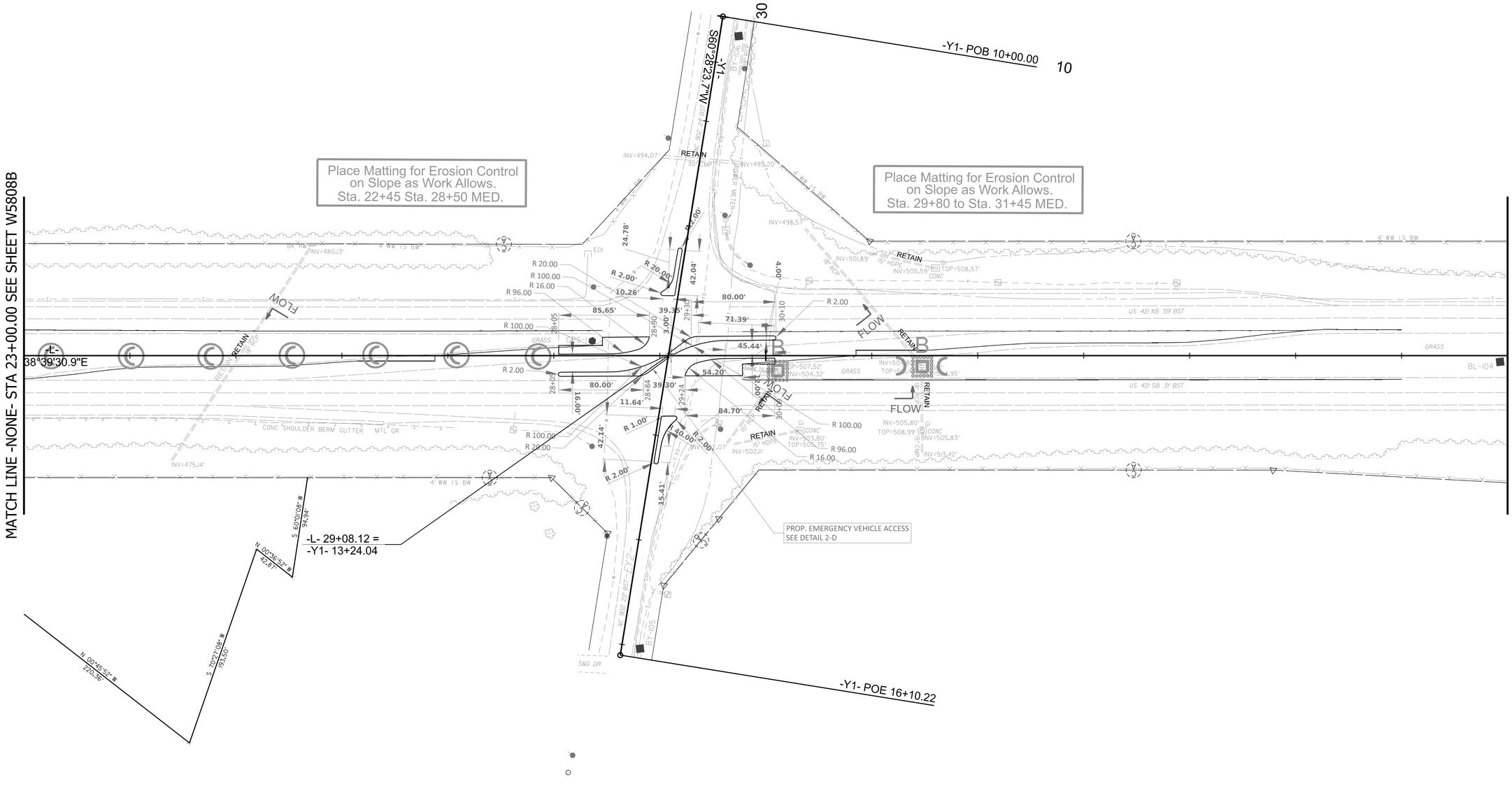
0 100
50 Feet

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
DIVISION 8 DDC

5/26/20



W-5808B
EC-005

NAD 83

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

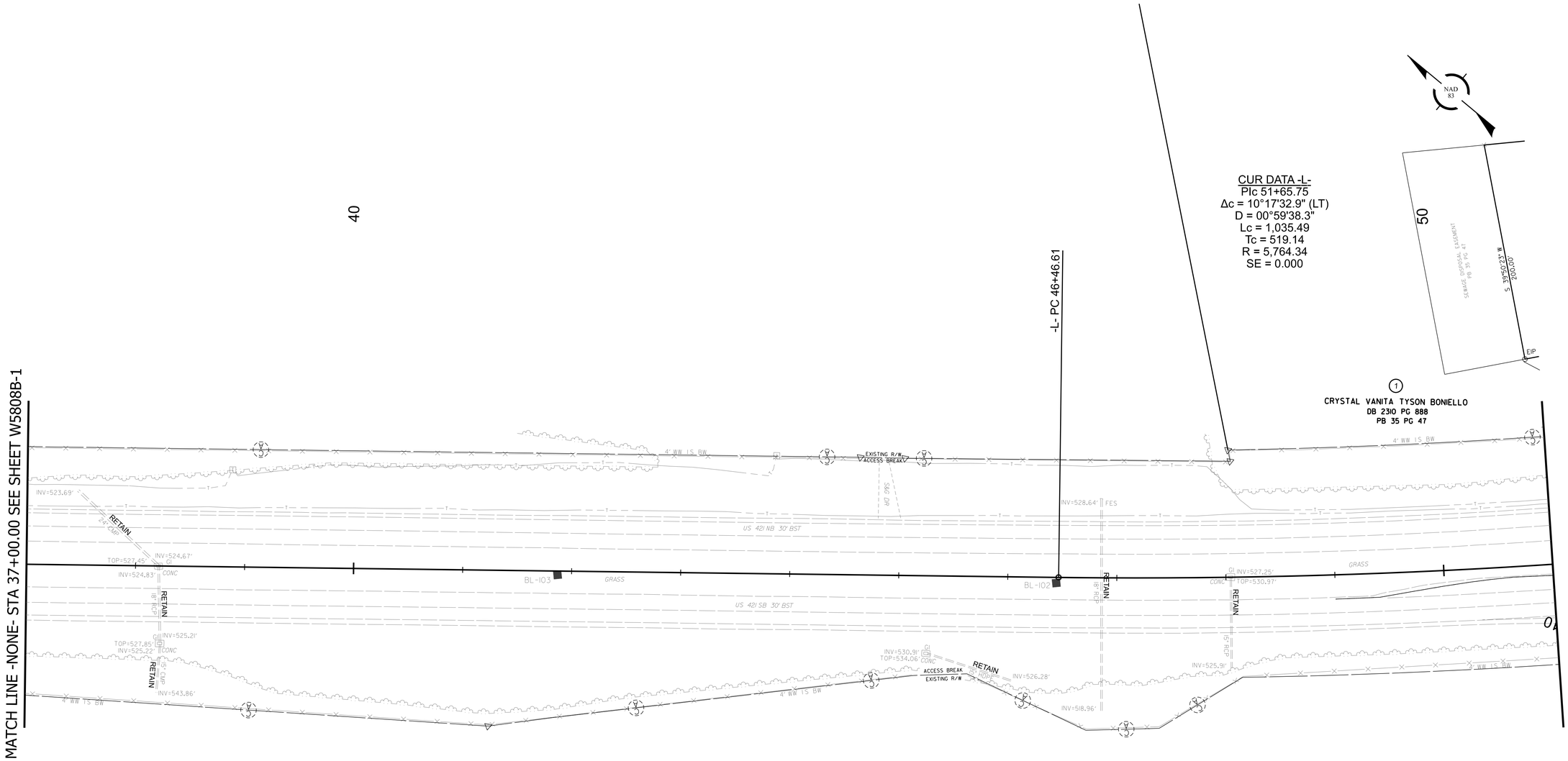
NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E Rickard

0 100
50
Feet

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
DIVISION 8 DDC



W-5808B

EC-006

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Prepared in the Office of:

DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E. Ricketts

0 100

50 Feet

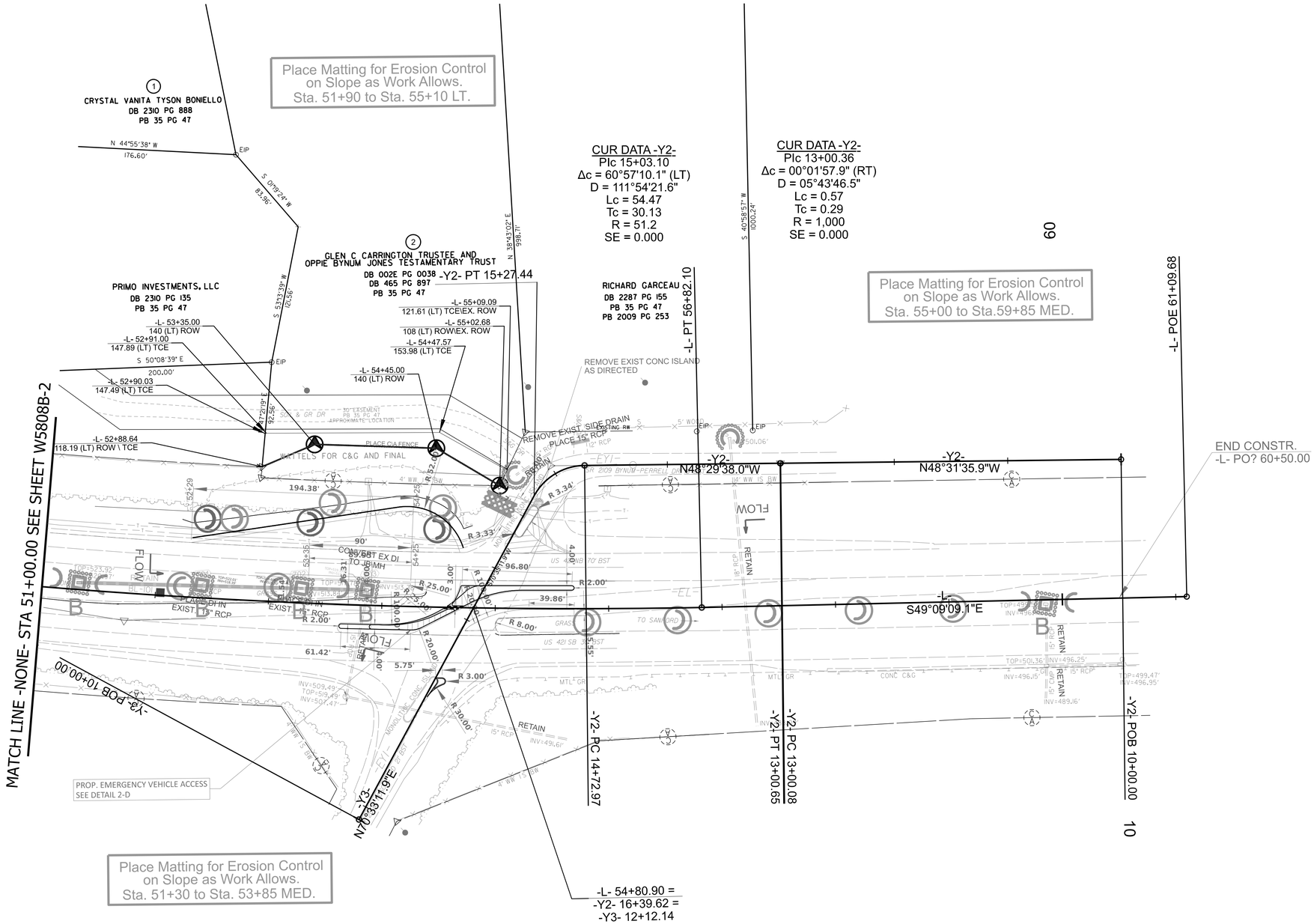
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DIVISION 8 DDC

5/26/20



NAD 83

W-5808B
EC-007

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION ·

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 – DDC
121 DOT Drive
Carthage, 28327
PHONE NUMBER
(910)773–8000
DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER Michael E Rickard

0 100
50 Feet

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
DIVISION 8 DDC

5/26/20

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
CHATHAM COUNTY

LOCATION: US 421 FROM 0.36 MILES NORTH OF NC 902 TO 0.09 MILES SOUTH OF SR 2000/2109 ROSCOE RD/BYNUM PERRELL DR

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
904.50	MOUNTING OF TYPE `D', `E' AND `F' SIGNS ON `U' CHANNEL POSTS
910.30	SIGNING SIGNALIZED AND UNSIGNALIZED SUPERSTREET

GENERAL NOTES

. SIGNS FURNISHED BY CONTRACTOR

. IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.

. WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER

. ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE STOCKPILED FOR DIVISION 8 TRAFFIC SERVICES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

. WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

. THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN	189	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE F SIGN	97	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	356	L.F.
4102000000	904	SIGN ERECTION, TYPE E	23	EA.
4108000000	904	SIGN ERECTION, TYPE F	8	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E	2	EA.
4154000000	907	STOCKPILE SIGN SYSTEM, U-CHANNEL	14	EA.

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2 AND 3	E AND F SHEETS
SIGN-4 THRU 7	SIGNING PLAN SHEETS

PLAN PREPARED BY: NCDOT DIVISION 8 DDC

MICHAEL RICKETTS DIVISION DESIGN/CONSTRUCT ENGINEER

W-5808B

SIGN | 001

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

APPROVED: DocuSigned by: Michael Ricketts 384200AD80B44E8...

DATE: 04/24/2025

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E. RICKETTS

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

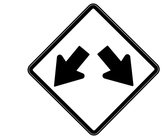
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

T.I.P.: W-5808B

5/26/20

401 QUANTITY REQ'D 4 STOP 36" X 36" R1-1 ONE "U" POSTS PER SIGN	402 QUANTITY REQ'D 6 36" X 36" R3-4 ONE "U" POSTS PER SIGN	403 QUANTITY REQ'D 2 DO NOT ENTER 36" X 36" R5-1 ONE "U" POSTS PER SIGN	404 QUANTITY REQ'D 2 WRONG WAY 36" X 24" R5-1A ONE "U" POSTS PER SIGN	405 QUANTITY REQ'D 2 ONE WAY 48" X 18" R6-1L TWO "U" POSTS PER SIGN	406 QUANTITY REQ'D 2 ONE WAY 48" X 18" R6-1R MOUNT BELOW SIGN 401 IN TWO LOCATIONS	407 QUANTITY REQ'D 5 36" X 36" W12-1 ONE "U" POSTS PER SIGN
					TYPE "E" SIGNS	



W-5808B

SIGN 002

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

DocuSigned by:
APPROVED: Michael Ricketts
3B420DAD00B44EB...
DATE: 04/24/2025

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E. RICKETTS

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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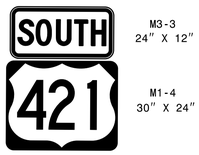
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

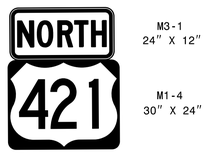
5/26/20

501 QUANTITY REQ'D 1



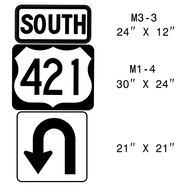
ONE "U" POSTS PER SIGN

502 QUANTITY REQ'D 1



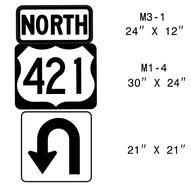
ONE "U" POSTS PER SIGN

503 QUANTITY REQ'D 1



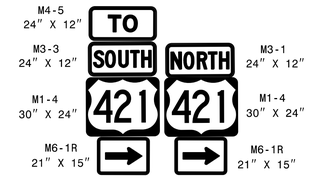
ONE "U" POSTS PER SIGN

504 QUANTITY REQ'D 1



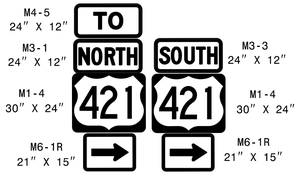
ONE "U" POSTS PER SIGN

505 QUANTITY REQ'D 1



TWO "U" POSTS PER SIGN

506 QUANTITY REQ'D 1



TWO "U" POSTS PER SIGN

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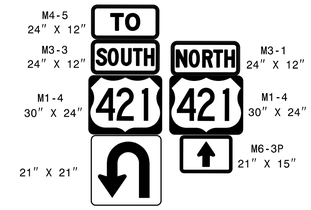
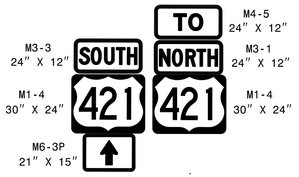


TWO "U" POSTS PER SIGN

508 QUANTITY REQ'D 1



TWO "U" POSTS PER SIGN

TYPE "F" SIGNS

W-5808B

SIGN 003

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

DocuSigned by:
APPROVED: Michael Ricketts
3B420DAD00B44EB...
DATE: 04/24/2025

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 052140 ENGINEER MICHAEL E. RICKETTS

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

W-5808B
SIGN-004

NC GRID
NAD 83 NA 2011

10

20

NORTH 421 502

407

SOUTH 421 503

EXISTING R/W
ACCESS BREAK

4' WW TS BW

SAG DR

CONC DITCH

US 421 NB 3I BST

US 421 NB 3I BST

GRADE to DRAIN

402

-EL-
DI NOT SURVEYED

TO SILER CITY

GPS-2

GI
CONC
403

24" RCP

RETAIN

GI
CONC

RETAIN

GI
CONC

RETAIN

US 421 SB 3I BST

US 421 SB 35' BST

DI NOT SURVEYED

336' 18" RCP III

CONC

GI

RETAIN

RETAIN

MTL GR

CONC SHOULDER BERM GUTTER

CONC SHOULDER BERM GUTTER

GI

401

REPLACE 18" HDPE
WITH 18" RCP

SAG DR

SAG DR

4' WW TS BW

ACCESS BREAK
EXISTING R/W

EIP

S 88°59'07" E
2.68'
EIP TO EXISTING R/W

ACCESS BREAK
EXISTING R/W

EIP

404

WRONG WAY

403

DO NOT ENTER

405

ONE WAY

202

REMOVE (2)

S 88°59'07" E
258.17'

N 00°28'08" E
151.46'

N 00°28'08" E
792.33'

N 81°20'52" W
248.10'

S 38°14'07" E
150'

W-5808B
SIGN-005

REMOVE

507

421 NORTH

421 SOUTH TO

30

10

NC GRID
NAD 83 NA 2011

507

421 NORTH

421 SOUTH TO

406

ONE WAY

401

STOP

401

STOP

REMOVE

ONE WAY

4" WW 1S BW

RETAIN

NC 902 24' BST

4" WW 1S BW

POWER METER

407

402

402

4" WW 1S BW

RETAIN

GI
CONC

US 421 NB 59' BST

GPS-I

CONC SHOULDER BERM GUTTER MTL GR

4" WW 1S BW

S 60°10'08" W
94.94'

N 00°25'52" W
42.87'

402

407

N 00°45'52" W
220.36'

S 70°21'08" W
193.50'

NC 902 22' BST-EYZ-

S&G DR

GI
CONC

GI
CONC

US 421 SB 31' BST

ONE WAY

REMOVE

STOP

401

STOP

401

ONE WAY

406

TO
NORTH
421

SOUTH
421

506

REMOVE

508

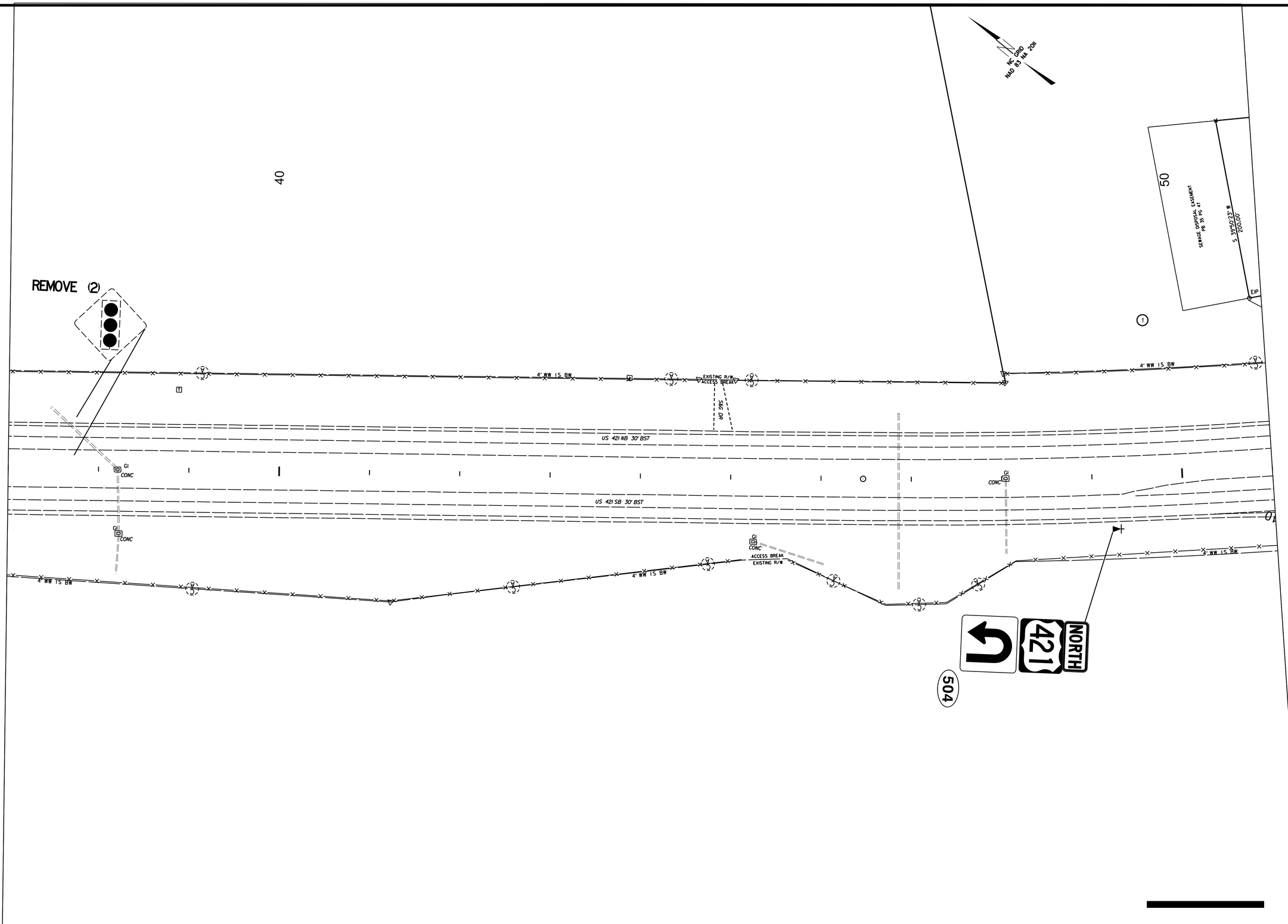
421 SOUTH

421 NORTH TO

11/14/23

W-5808B

SIGN-006



$$$-USER NAME-$$$ - $$$-DATE-$$$

W-5808B
SIGN-007

NC GRID
NAD 83 NA 2011

N 44°55'38" W
176.60'
EIP
S 07°57'24" W
83.96'
S 33°33'39" W
121.56'
S 50°08'39" E
200.00'
EIP
N 47°21'09" E
82.56'
N 38°43'02" E
998.71'
S 40°58'57" W
1000.24'
60
10

1
2
405
406
407
402
403
404
501

ONE WAY
RETAIN STOP
REMOVE
STOP
RELOCATE
DO NOT ENTER
WRONG WAY
ONE WAY
STOP
STOP
RELOCATE
RETAIN
ONE WAY
421 SOUTH

SOIL & GR DR
30' EASEMENT DB 35 PG 90
APPROXIMATE LOCATION
PLACE CULVERT
REMOVE EXIST. RCP
PLACE 36" RCP
12" RCP
EXISTING RB
5' WOOD
EIP
-EYI-
SR 2109 BYNUM-PERRELL DR 19' BST
4" WW IS BW
4" WW IS BW
RETAIN
MONOLITHIC CONC. ISLAND
CONVERT EX DI TO JBMH
US 421 NB 70' BST
-EL-
TO SANFORD
US 421 SB 30' BST
RETAIN
RETAIN
RETAIN
MTL GR
MTL GR
CONC C&G
MONOLITHIC CONC. ISLAND
4" WW IS BW
-EYI-
SR 2000 RIDGE RD 25' BST
4" WW IS BW
RETAIN
CI
CONC
RETAIN
PLACE DI IN EXIST. 15" RCP
PLACE DI IN EXIST. 15" RCP
701
702
703
CI
CI
CI

PROJ. REFERENCE NO.	SHEET NO.
W-5808B	X1-A

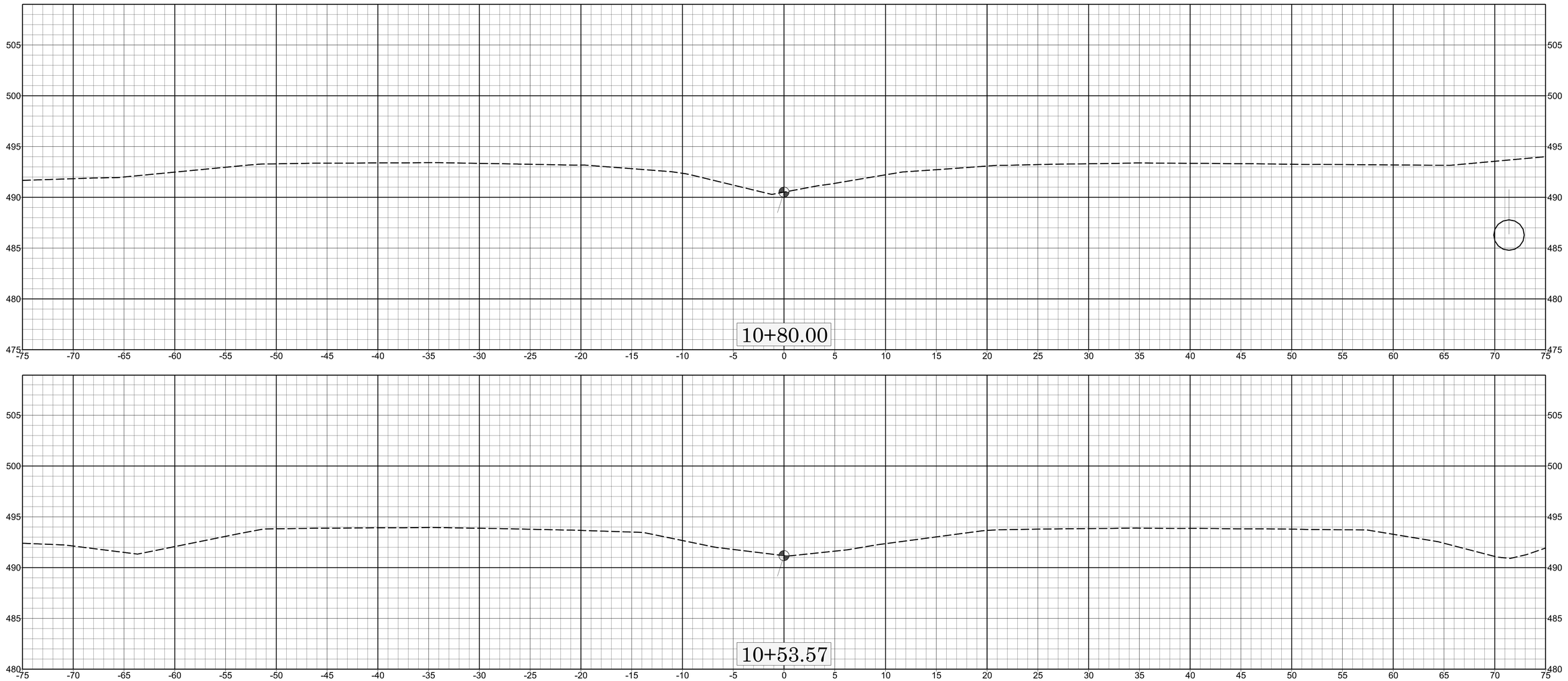
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CROSS-SECTION SUMMARY

NOTE: EMBANKMENT COLUMN INCLUDES BACKFILL FOR UNDERCUT

Station	Uncl. Exc.	Embt	Station	Uncl. Exc.	Embt	Station	Uncl. Exc.	Embt	Station	Uncl. Exc.	Embt
L	(cu. yd.)	(cu. yd.)	L	(cu. yd.)	(cu. yd.)	L	(cu. yd.)	(cu. yd.)	L	(cu. yd.)	(cu. yd.)
10+53.57	0.00	0.00	20+60.00	0.00	0.00	30+40.00	1.83	0.00	52+40.00	11.49	2.64
11+00.00	28.63	0.00	20+80.00	0.00	0.00	30+60.00	2.29	0.00	52+60.00	24.68	3.91
11+20.00	70.69	8.45	21+00.00	0.00	0.00	30+80.00	2.51	0.00	52+80.00	68.58	5.07
11+40.00	139.84	17.98	21+20.00	0.00	0.00	31+00.00	2.48	0.00	53+00.00	110.35	4.37
11+60.00	175.63	18.91	21+40.00	0.00	0.00	31+20.00	2.45	0.00	53+20.00	145.94	2.71
11+80.00	185.51	19.08	21+60.00	0.00	0.00	31+40.00	2.38	0.00	53+28.64	73.10	0.85
12+00.00	167.59	19.55	21+80.00	0.00	0.00	31+47.44	0.84	0.00	53+28.64	0.00	0.00
12+20.00	142.87	19.92	22+00.00	0.00	0.00	31+47.44	0.00	0.00	53+40.00	54.33	0.61
12+40.00	120.65	20.53	22+20.00	0.00	0.00	31+60.00	1.45	0.00	53+60.00	193.02	2.08
12+60.00	96.72	20.90	22+40.00	0.00	0.00	31+80.00	2.31	0.00	53+80.00	210.04	2.16
12+80.00	73.56	20.66	22+45.37	0.00	0.00	32+00.00	2.11	0.00	53+86.56	74.10	0.75
13+00.00	52.03	19.58	22+60.00	0.00	0.00	32+20.00	2.02	0.00	53+86.56	0.00	0.00
13+20.00	31.21	17.10	22+80.00	0.00	0.00	32+40.00	1.95	0.00	54+00.00	80.01	0.80
13+40.00	19.18	14.22	22+96.88	0.00	0.00	32+60.00	1.75	0.00	54+20.00	221.14	2.16
13+60.00	17.20	11.25	23+00.00	0.04	0.00	32+80.00	1.65	0.00	54+40.00	185.14	2.01
13+80.00	16.05	9.27	23+00.00	0.00	0.00	33+00.00	1.62	0.00	54+60.00	120.16	3.16
13+94.13	7.66	6.33	23+20.00	0.65	0.00	33+20.00	1.58	0.00	54+80.00	47.63	2.19
14+00.00	1.47	2.59	23+40.00	0.92	0.00	33+40.00	1.53	0.00	55+00.00	13.37	0.00
14+20.00	4.71	8.82	23+60.00	1.15	0.00	33+60.00	1.52	0.00	55+20.00	8.85	0.00
14+40.00	5.18	8.06	23+80.00	1.31	0.00	33+80.00	1.57	0.00	55+40.00	3.95	0.00
14+57.67	4.90	6.38	24+00.00	1.40	0.00	34+00.00	1.59	0.00	55+60.00	3.73	0.00
14+60.00	0.67	0.86	24+20.00	1.47	0.00	34+20.00	1.53	0.00	55+80.00	3.69	0.00
14+80.00	5.25	5.90	24+40.00	1.50	0.00	34+40.00	1.33	0.00	56+00.00	3.58	0.00
15+00.00	5.27	3.99	24+60.00	1.46	0.00	34+60.00	1.11	0.00	56+20.00	1.74	0.00
15+20.00	5.87	3.39	24+80.00	1.45	0.00	34+80.00	0.91	0.00	59+85.72	0.00	0.00
15+40.00	6.18	2.57	25+00.00	1.50	0.00	35+00.00	0.73	0.00			
15+60.00	6.20	1.84	25+20.00	1.52	0.00	35+20.00	0.58	0.00			
15+80.00	5.86	1.19	25+40.00	1.49	0.00	35+40.00	0.53	0.00			
16+00.00	6.53	0.76	25+60.00	1.52	0.00	35+60.00	0.52	0.00			
16+20.00	6.79	0.62	25+80.00	1.63	0.00	35+80.00	0.49	0.00			
16+40.00	5.66	0.51	26+00.00	1.74	0.00	36+00.00	0.24	0.00			
16+60.00	5.36	0.31	26+20.00	1.87	0.00	48+04.60	0.00	0.00			
16+80.00	5.30	0.10	26+40.00	2.00	0.00	49+00.00	1.25	0.00			
17+00.00	4.86	0.01	26+60.00	2.07	0.00	49+20.00	0.52	0.00			
17+20.00	4.03	0.12	26+80.00	2.21	0.00	49+40.00	0.56	0.00			
17+40.00	2.97	0.18	27+00.00	2.37	0.00	49+60.00	0.78	0.00			
17+60.00	2.29	0.06	27+20.00	2.30	0.00	49+80.00	1.04	0.00			
17+80.00	1.30	0.01	27+40.00	2.55	0.00	50+00.00	1.25	0.00			
18+00.00	0.32	0.00	27+60.00	3.49	0.00	50+20.00	1.37	0.00			
18+20.00	0.00	0.00	27+80.00	4.03	0.00	50+40.00	1.39	0.00			
18+25.75	0.00	0.00	28+00.00	3.84	0.00	50+60.00	1.45	0.00			
18+40.00	0.00	0.00	28+20.00	3.22	0.00	50+80.00	1.48	0.00			
18+60.00	0.00	0.00	28+40.00	2.54	0.00	51+00.00	1.47	0.00			
18+77.82	0.00	0.00	28+60.00	20.12	0.00	51+20.00	1.50	0.00			
18+80.00	0.00	0.00	28+80.00	38.15	0.00	51+32.23	0.91	0.00			
19+00.00	0.00	0.00	29+00.00	38.85	1.10	51+32.23	0.00	0.00			
19+20.00	0.00	0.00	29+20.00	38.87	1.10	51+34.01	0.13	0.00			
19+40.00	0.00	0.00	29+40.00	37.30	0.00	51+34.01	0.00	0.00			
19+60.00	0.00	0.00	29+60.00	35.32	0.00	51+40.00	0.44	0.00			
19+80.00	0.00	0.00	29+80.00	18.47	0.00	51+60.00	1.49	0.00			
20+00.00	0.00	0.00	30+00.00	2.04	0.00	51+80.00	1.48	0.00			
20+20.00	0.00	0.00	30+12.91	0.00	0.00	52+00.00	1.49	0.00			
20+40.00	0.00	0.00	30+20.00	0.53	0.00	52+20.00	10.01	1.15			

Approximate quantities only. Unclassified excavation, borrow excavation, shoulder borrow, fine grading, clearing and grubbing, breaking of existing pavement and removal of existing pavement will be paid for at the lump sum price for "Grading".



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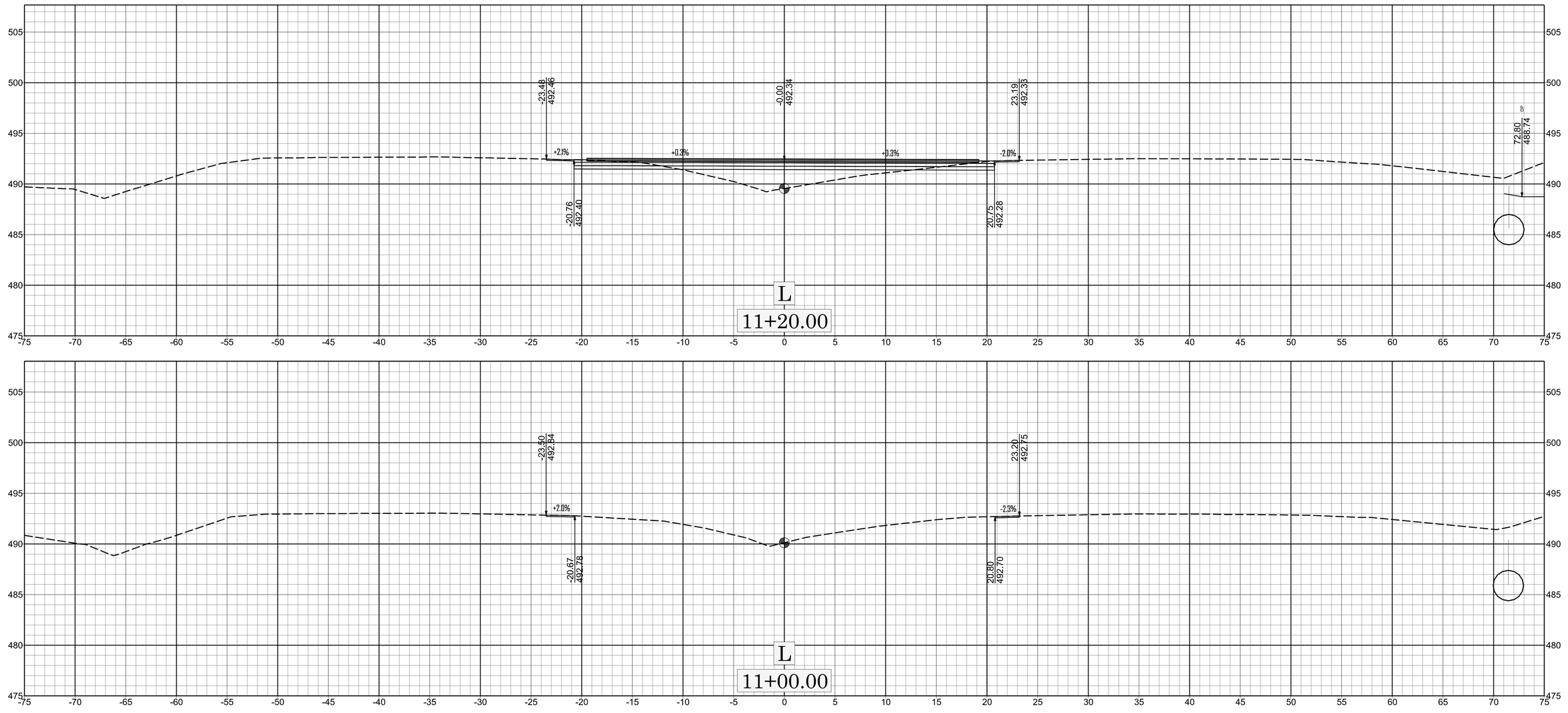
X

X-001

W-58088

11/14/23



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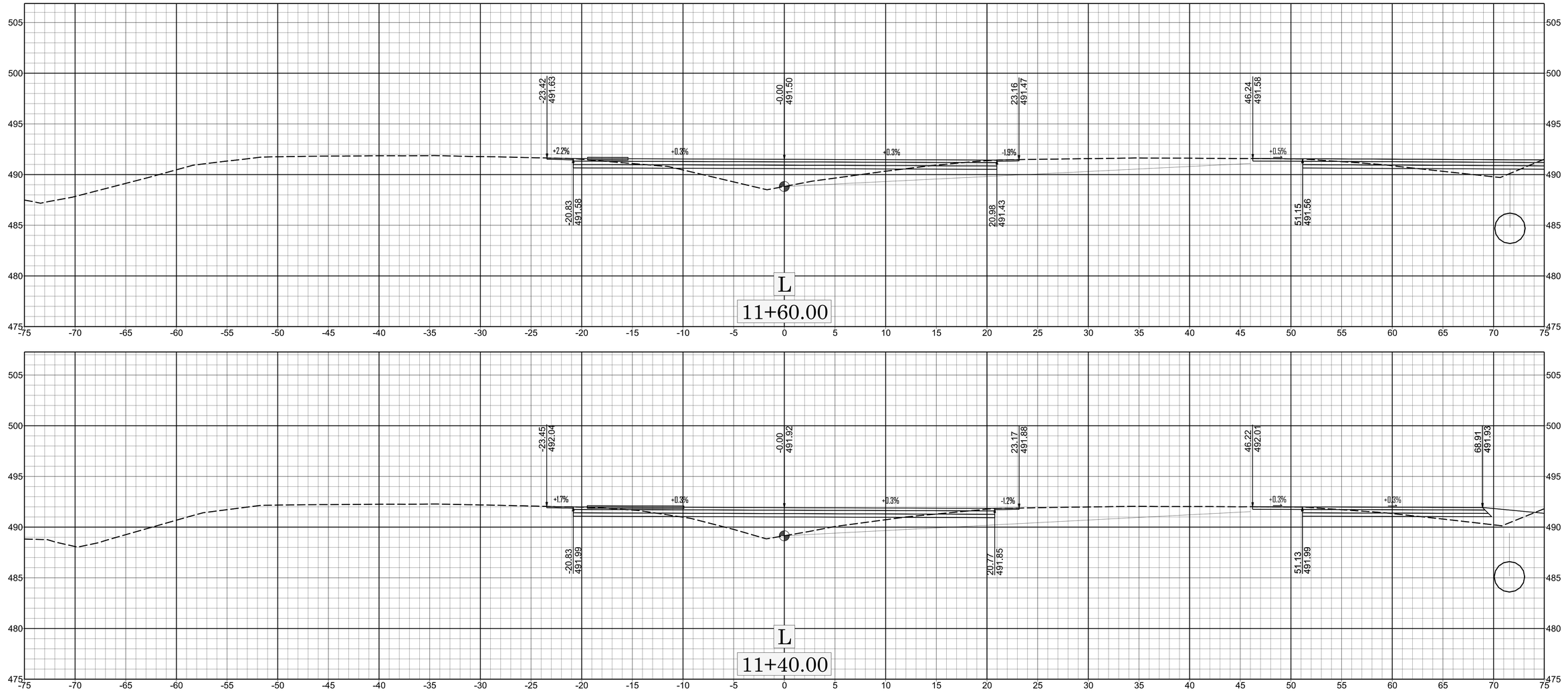
X X-002

W-5808B

DOT/mtrotter - 4/11/2025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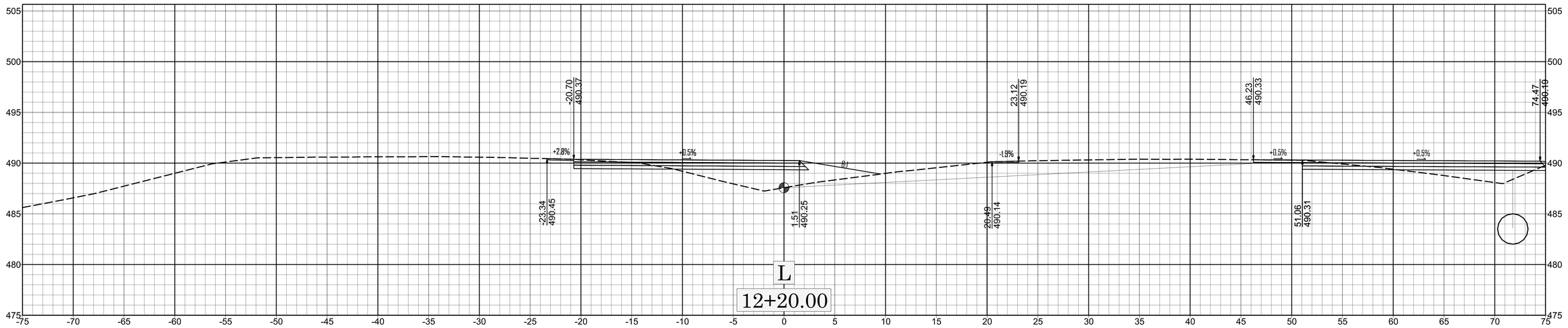
491.63
+2.2%
-0.00
491.50
+0.3%
+0.3%
23.16
491.47
-1.9%
46.24
491.58
+0.5%
-20.83
491.58
20.98
491.43
51.15
491.56
L
11+60.00
-23.45
492.04
+1.7%
-0.00
491.92
+0.3%
+0.3%
23.17
491.88
-1.2%
46.22
492.01
+0.3%
68.91
491.93
+0.3%
-20.83
491.99
20.77
491.85
51.13
491.99
L
11+40.00

X-003

W-5808B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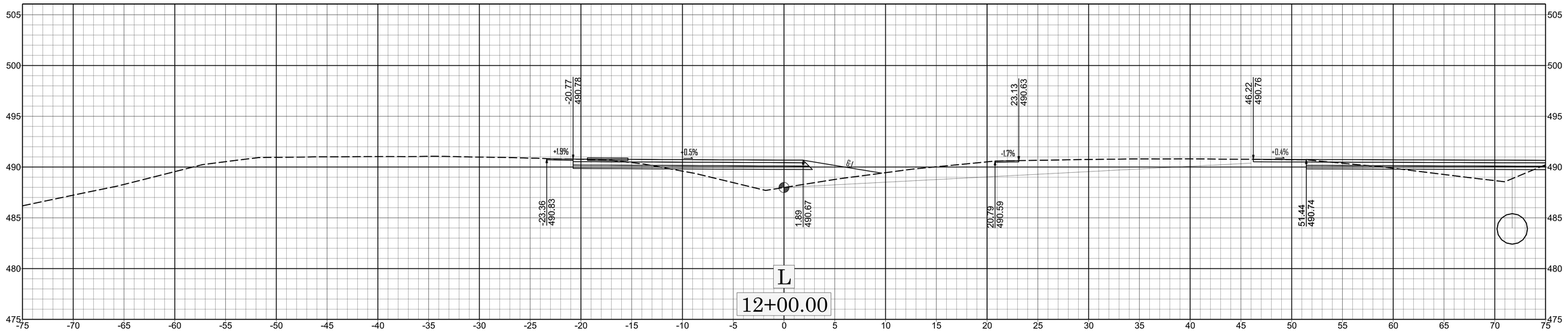
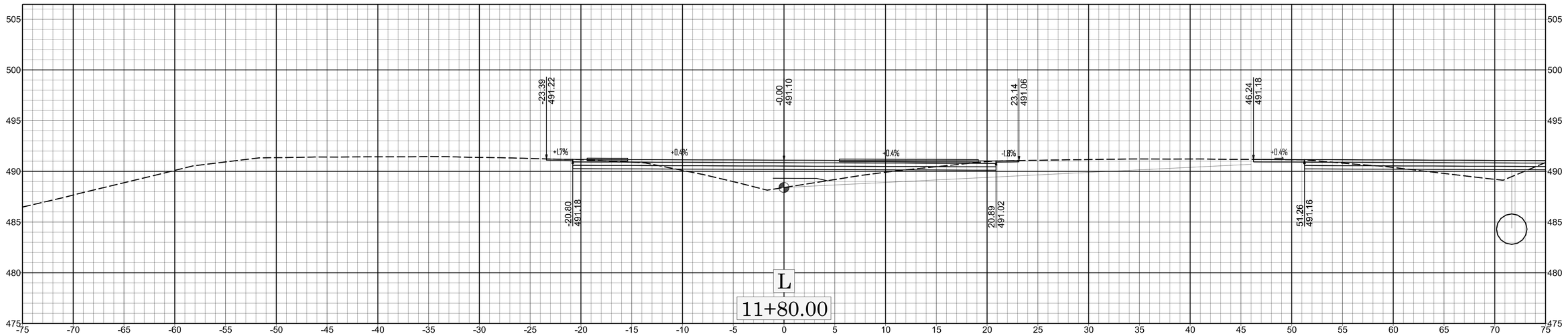
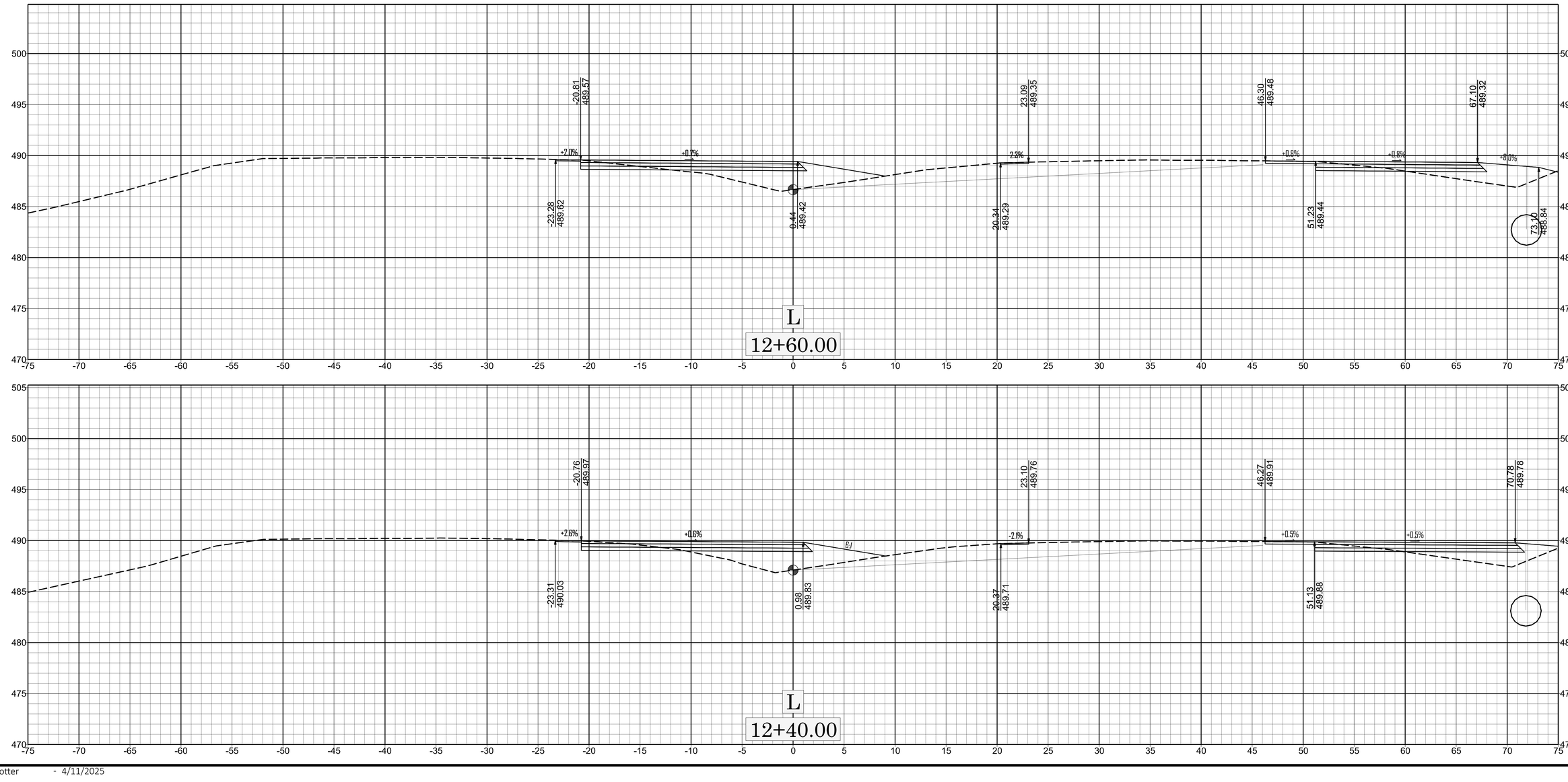
490.37
23.12
490.19
46.23
490.33
74.47
490.10
+2.8%
+0.5%
-1.9%
+0.5%
+0.5%
6:1
-23.34
490.45
1.51
490.25
20.19
490.14
51.06
490.31
L
12+20.00


-20.77
490.78
23.13
490.63
46.22
490.76
+1.9%
+0.5%
-1.7%
+0.4%
6:1
-23.36
490.83
1.89
490.67
20.79
490.59
51.44
490.74
L
12+00.00


-23.39
491.22
-0.00
491.10
23.14
491.06
46.24
491.18
+1.7%
+0.4%
+0.4%
-1.8%
+0.4%
-20.80
491.18
20.89
491.02
51.26
491.16
L
11+80.00

X-004

W-5808B


L
12+60.00
-23.28
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20.81
489.57
0.44
489.42
20.34
489.29
23.09
489.35
51.23
489.44
46.30
489.48
67.10
489.32
73.10
488.84
+2.0%
+1.2%
2.3%
+0.8%
+0.8%
+8.0%
L
12+40.00
-23.31
490.03
-20.76
489.97
0.98
489.83
20.37
489.71
23.10
489.76
51.13
489.88
46.27
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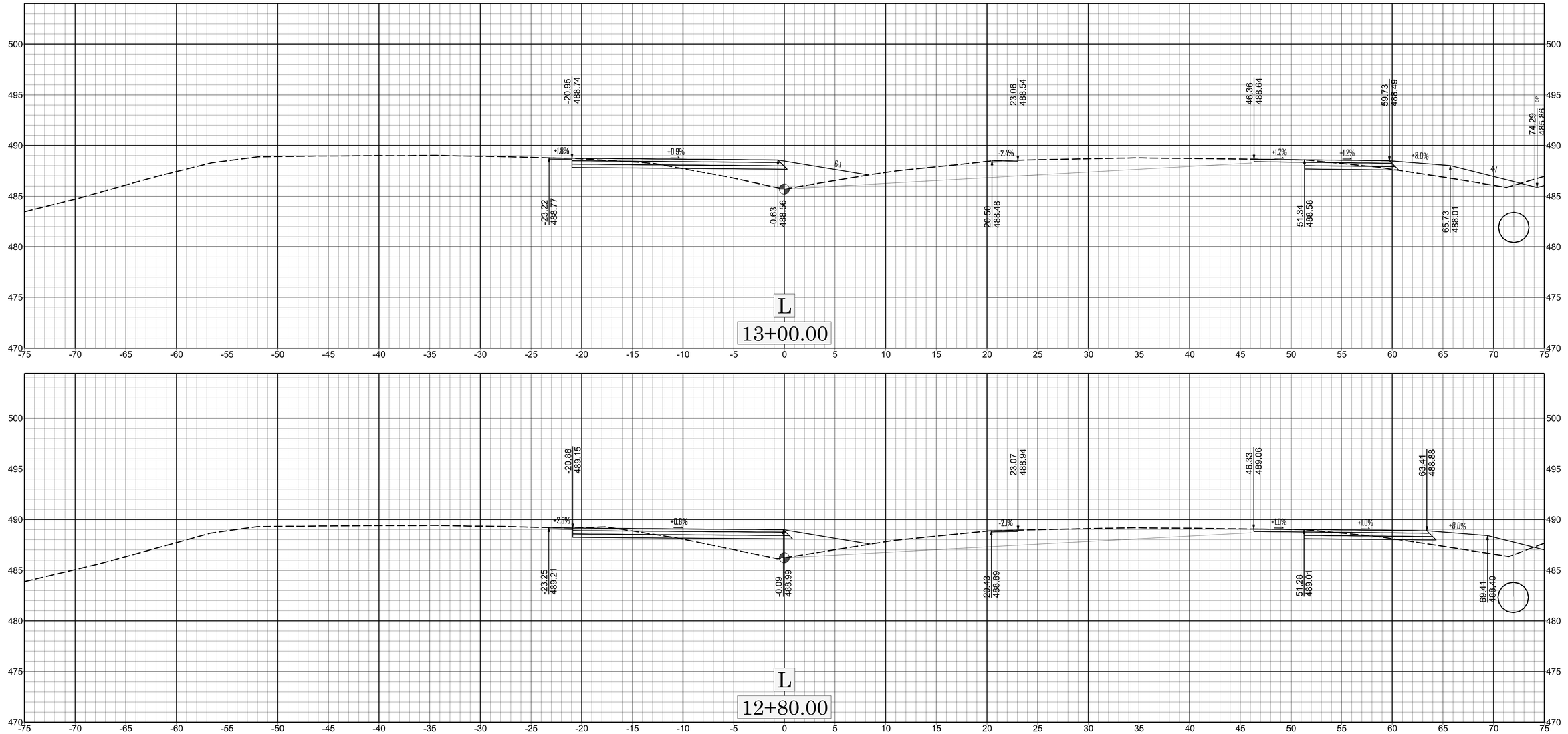
70.78
489.78
+2.6%
+0.6%
6:1
-2.1%
+0.5%
+0.5%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-23.22
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-0.63
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23.06
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20.50
488.48
46.36
488.64
51.34
488.58
59.73
488.49
65.73
488.01
74.29
485.86
+1.8%
+0.9%
-2.4%
+1.2%
+1.2%
+8.0%
6:1
4:1
L
13+00.00
-20.88
489.15
-23.25
489.21
-0.09
488.99
23.07
488.94
20.43
488.89
46.33
489.06
51.28
489.01
63.41
488.88
69.41
488.40
+2.5%
+0.8%
-2.1%
+1.0%
+1.0%
+8.0%
L
12+80.00
500
495
490
485
480
475
470
-75
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
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50
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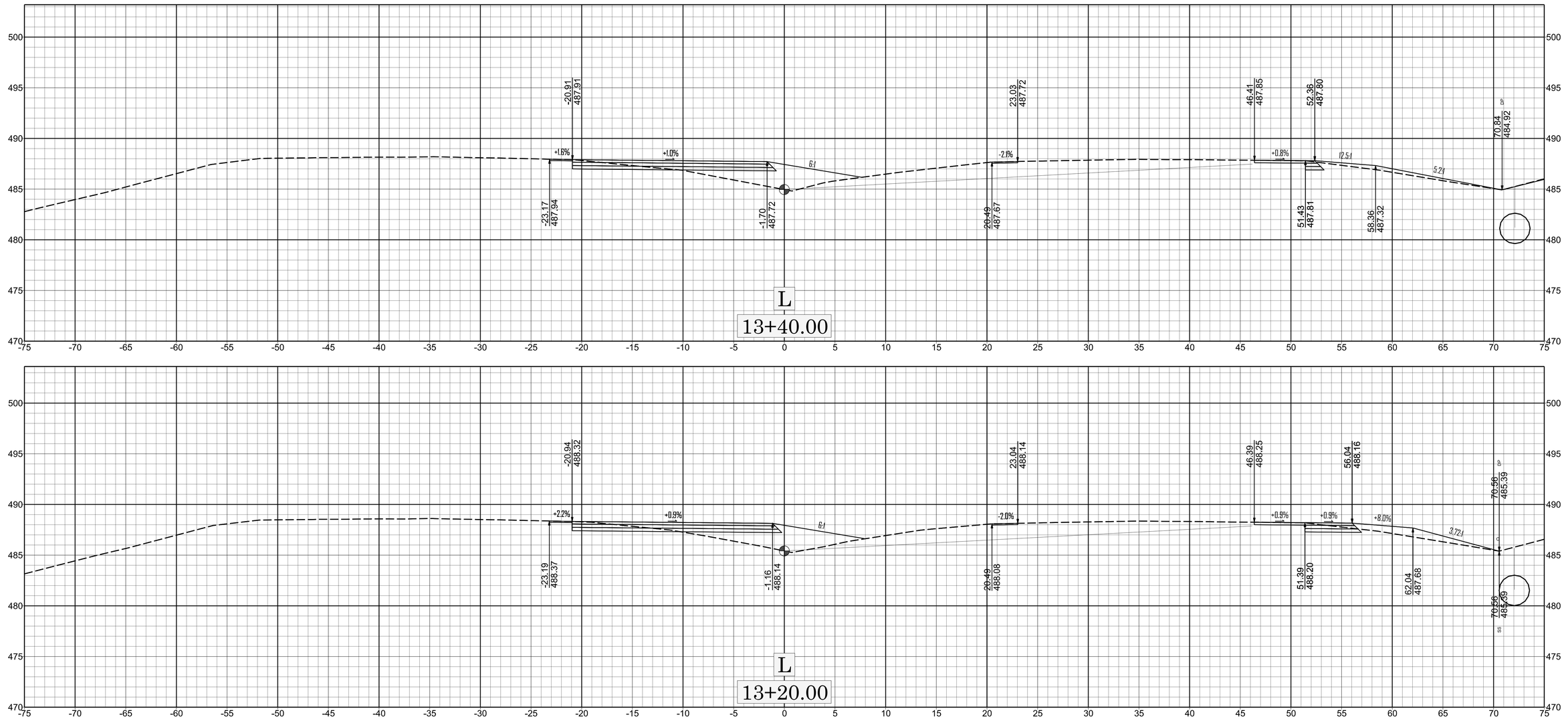
60
65
70
75

X-006

W-58088

11/14/23

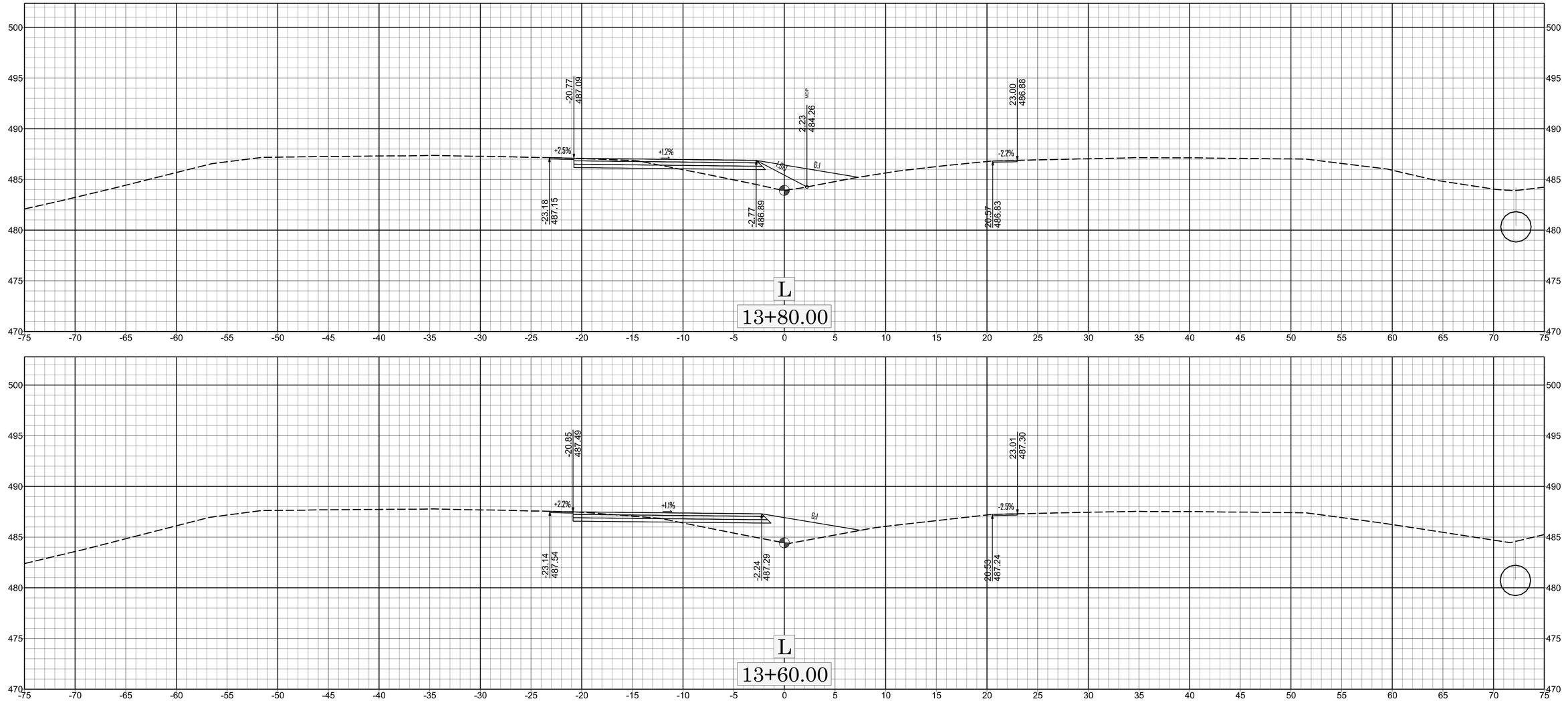


0 5 10

X X-007

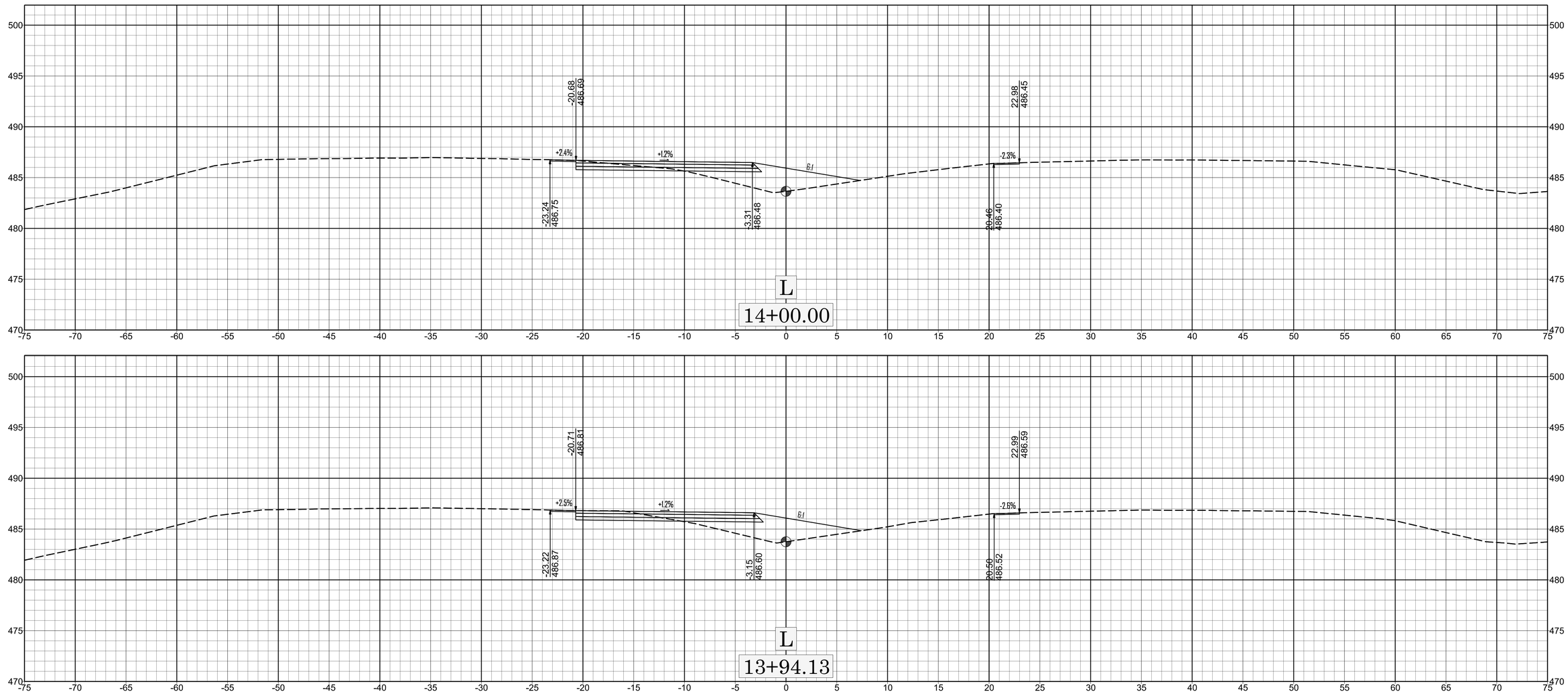
W-58088

DOT/mtrotter - 4/11/2025


500
495
490
485
480
475
470
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
-20.77
487.09
+2.5%
+1.2%
2.23
484.26
MOP
G-1
-23.18
487.15
-2.77
486.89
23.00
486.88
-2.2%
20.57
486.83
L
13+80.00
-20.85
487.49
+2.2%
+1.8%
23.01
487.30
-2.5%
-23.14
487.54
-2.24
487.29
20.53
487.24
L
13+60.00

X-008

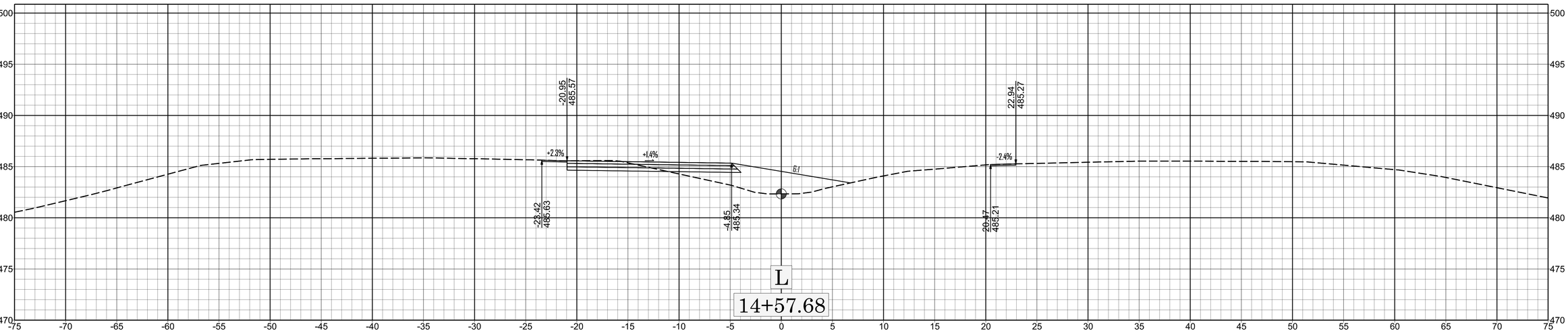
W-5808B

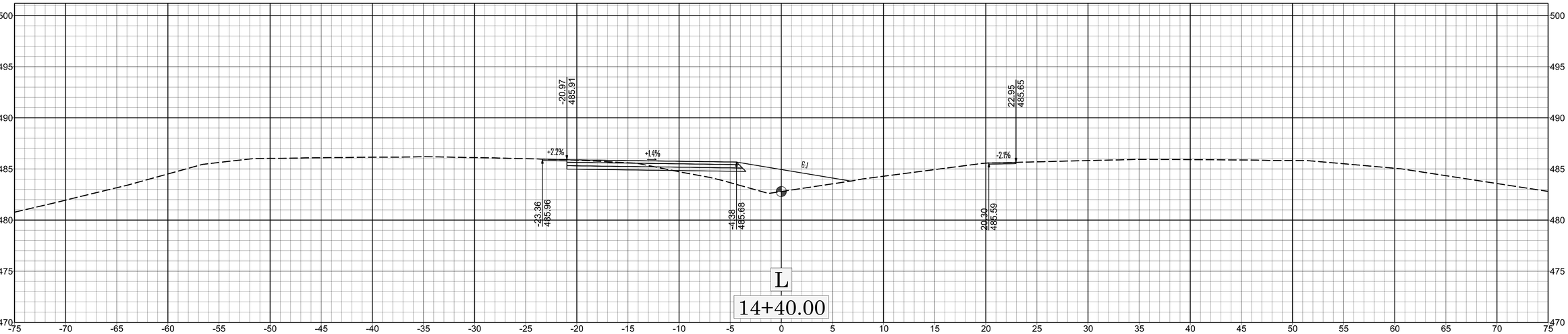


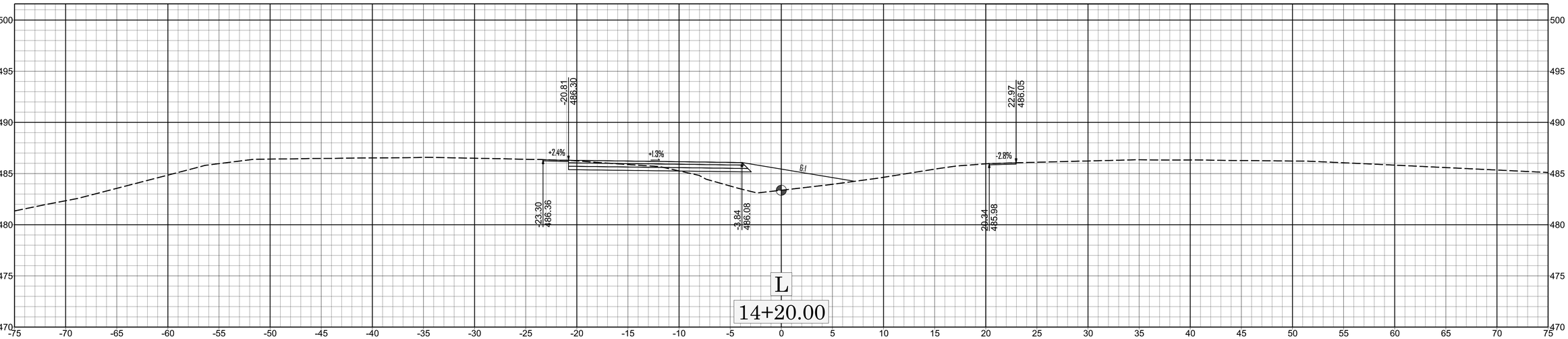
X-009

X

W-5808B



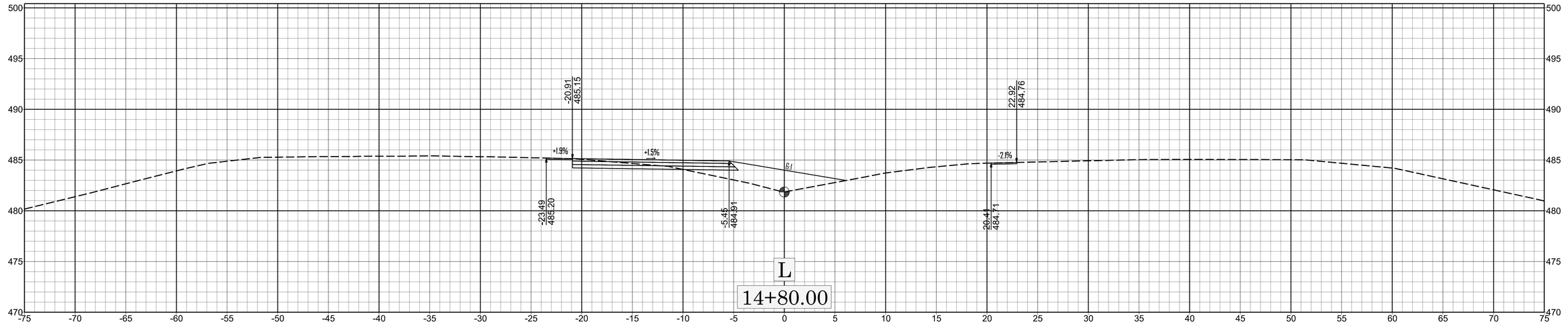


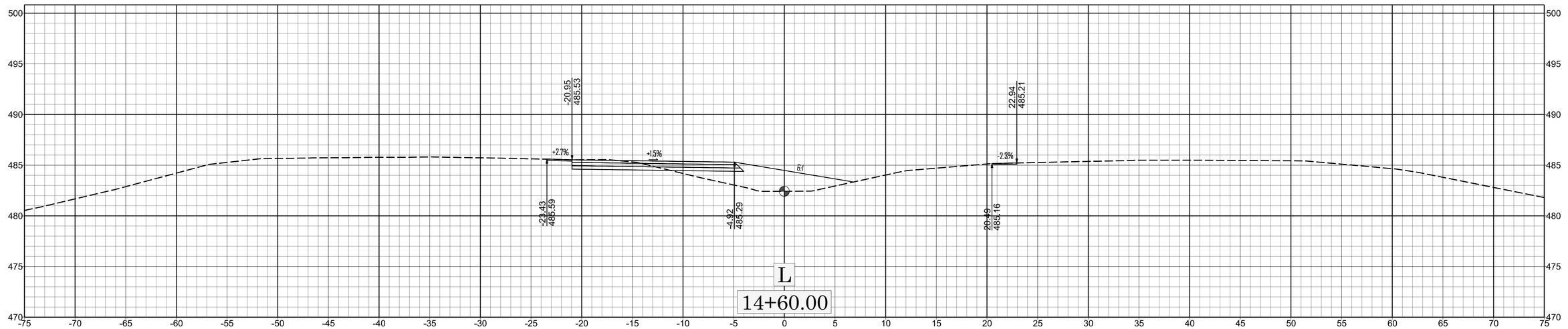


X-010

X

W-5808B

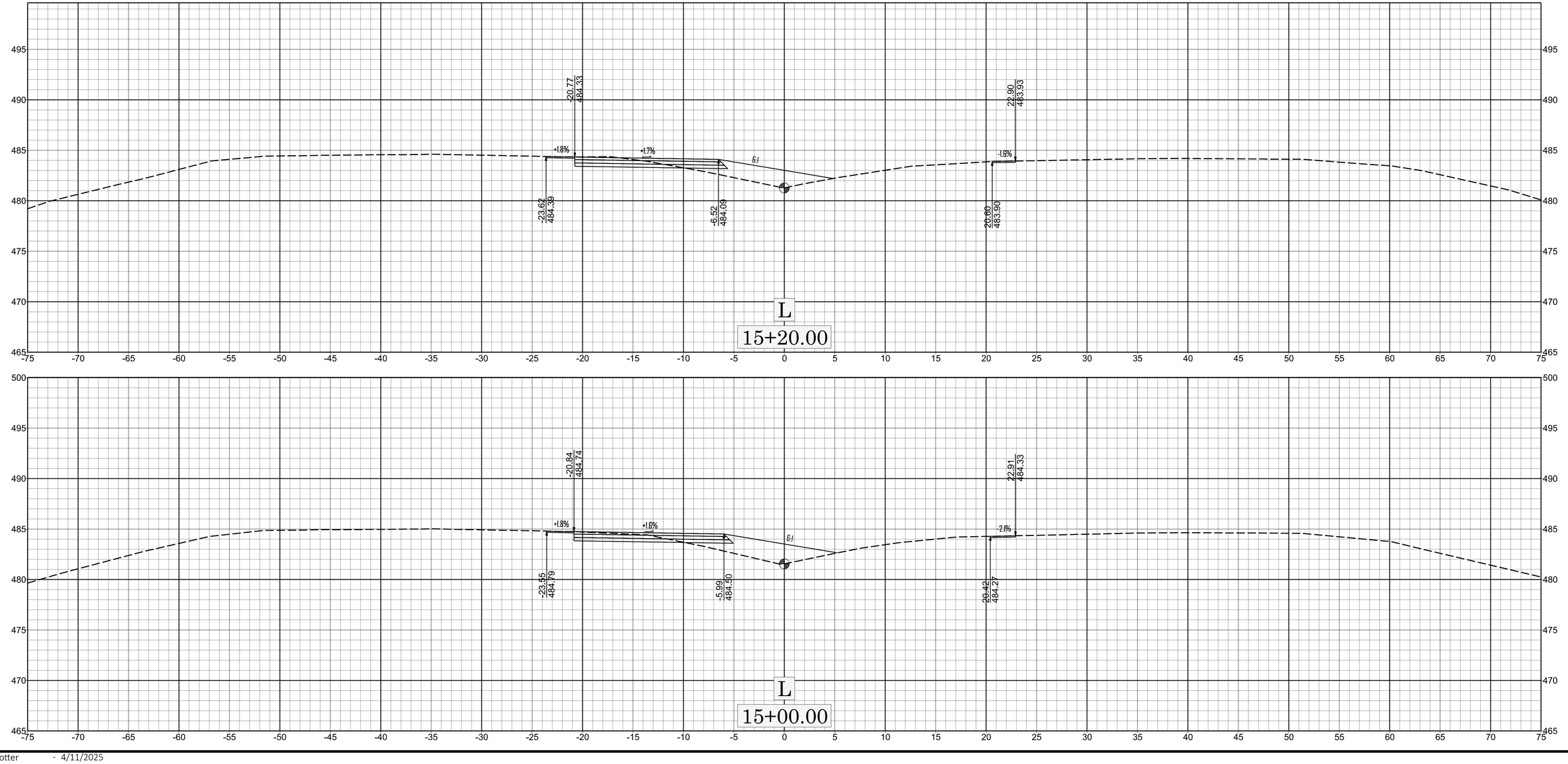




X-011

X

W-5808B

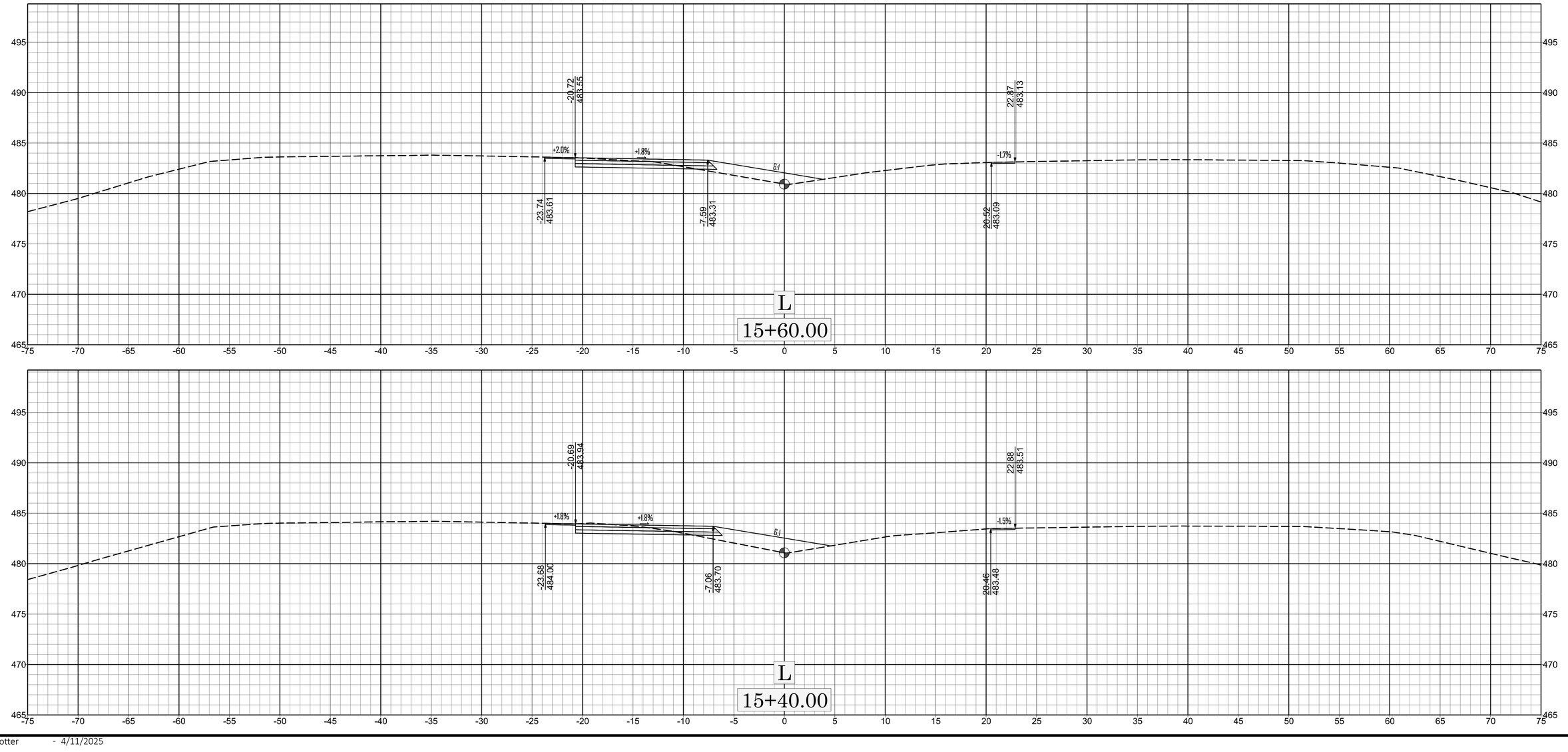


0 5 10

X-012

X

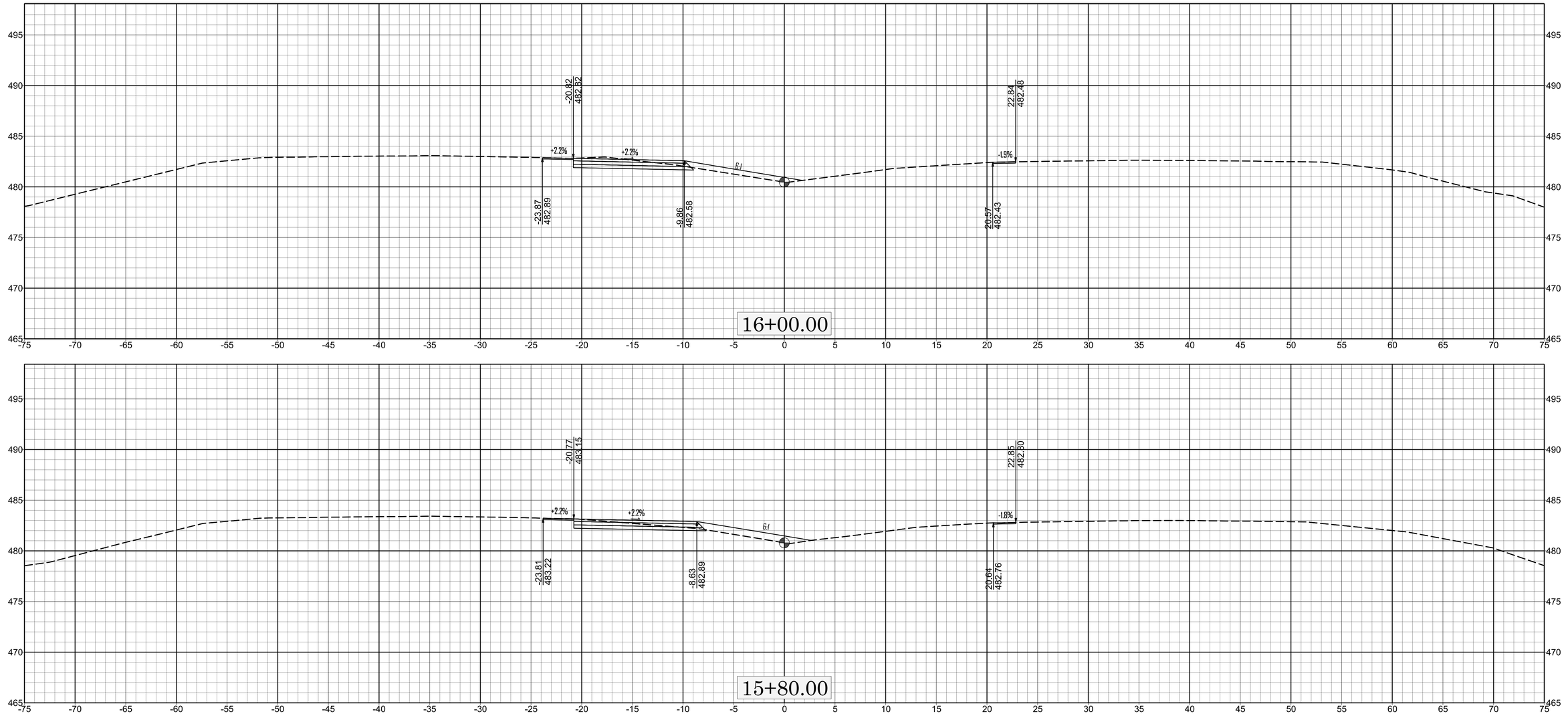
W-5808B



0 5 10

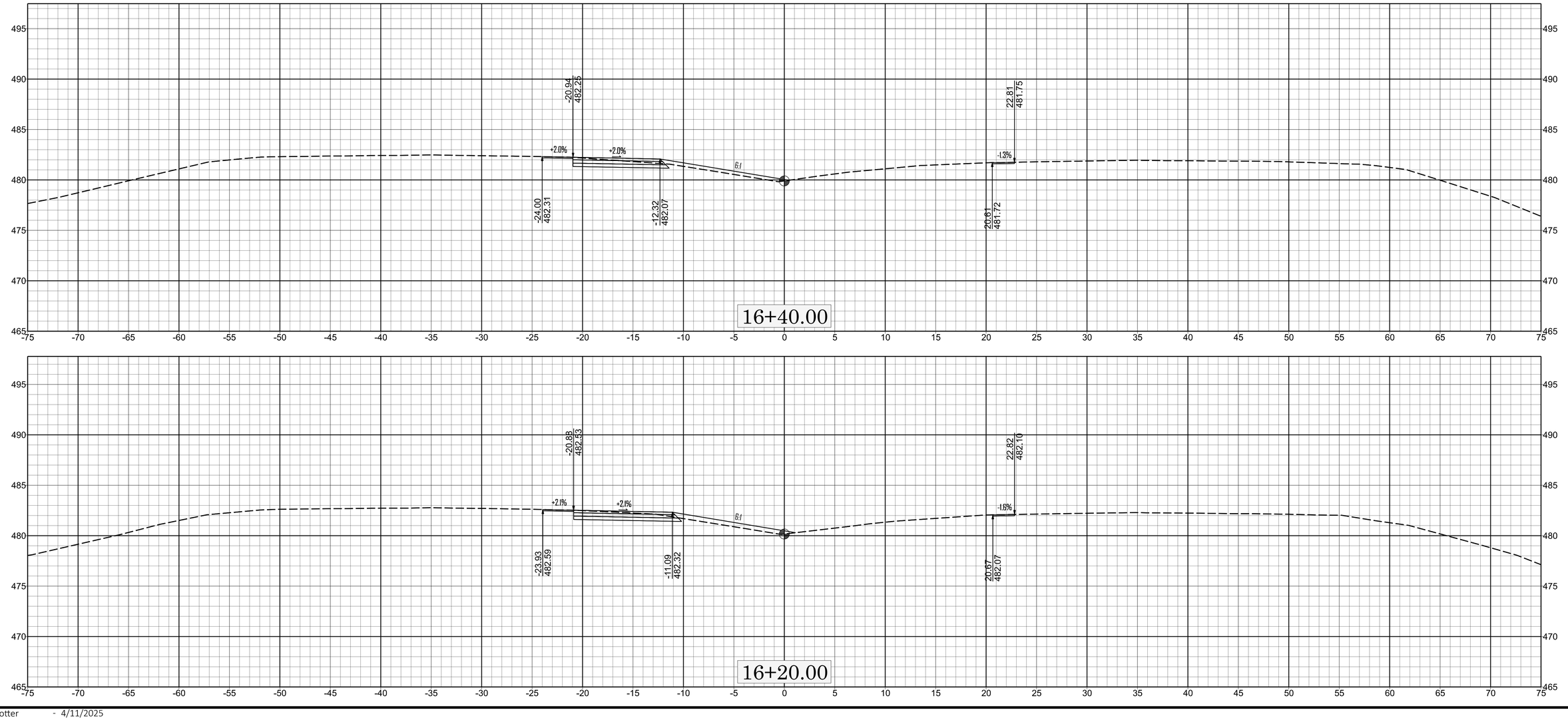
X X-013

W-5808B


16+00.00
-20.82
482.32
+2.2%
+2.2%
6:1
-23.87
482.89
-9.86
482.58
22.84
482.48
-1.9%
20.57
482.43
15+80.00
-20.77
483.15
+2.2%
+2.2%
6:1
-23.81
483.22
-8.63
482.89
22.85
482.30
-1.8%
20.64
482.76

X-014

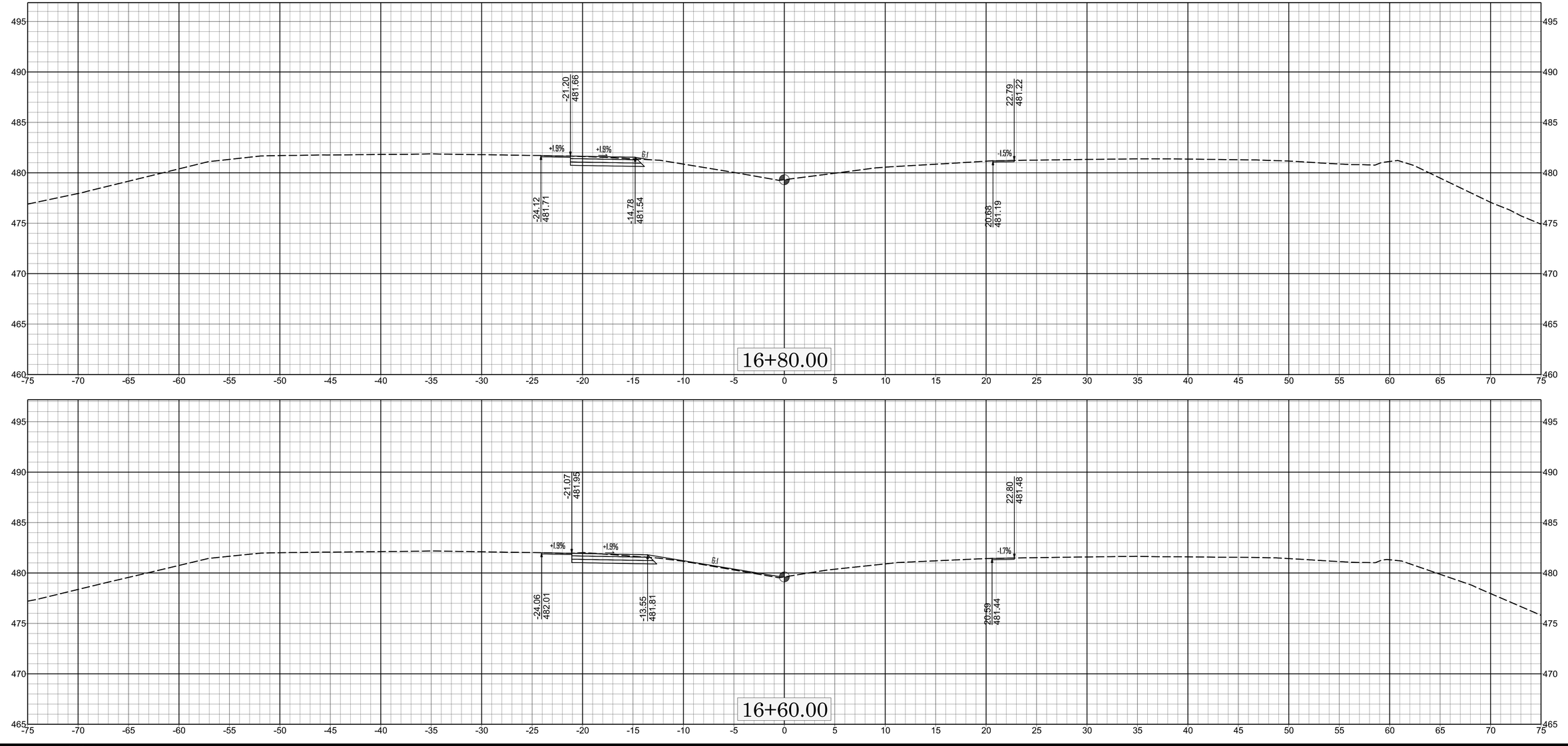
W-5808B


16+40.00
-24.00
482.31
-20.94
482.25
-12.32
482.07
+2.0%
+2.0%
6:1
-1.3%
20.61
481.72
22.81
481.75
16+20.00
-23.93
482.59
-20.88
482.53
-11.09
482.32
+2.1%
+2.1%
6:1
-1.5%
20.67
482.07
22.82
482.10

X-015

W-58088

11/14/23



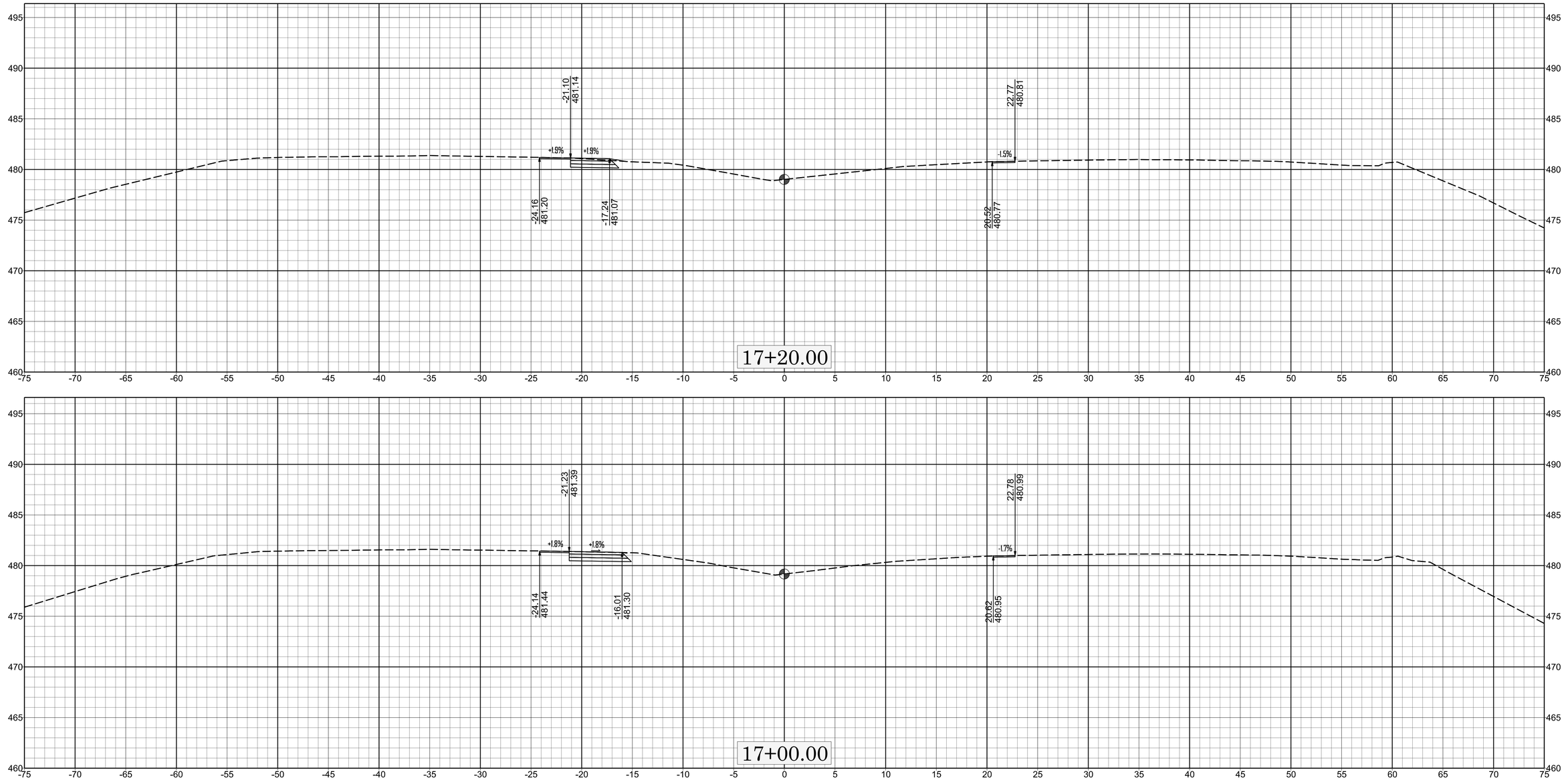
0 5 10

X

X-016

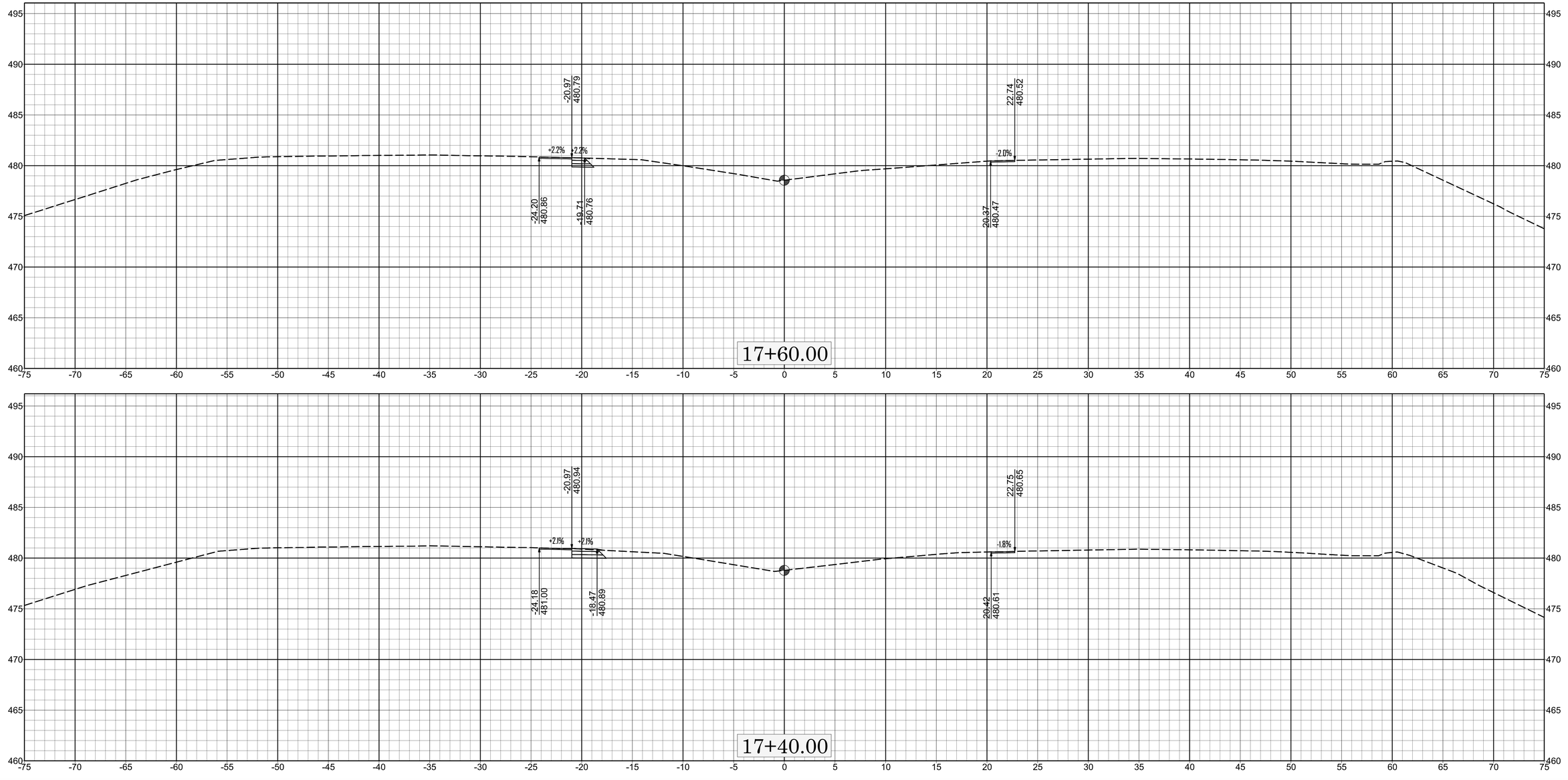
W-5808B

DOT/mtrotter - 4/11/2025


17+20.00
-21.10
481.14
-24.16
481.20
-17.24
481.07
+1.9%
+1.9%
22.77
480.81
-1.5%
20.52
480.77
17+00.00
-21.23
481.39
-24.14
481.44
-16.01
481.30
+1.8%
+1.8%
22.78
480.99
-1.7%
20.62
480.95

X-017

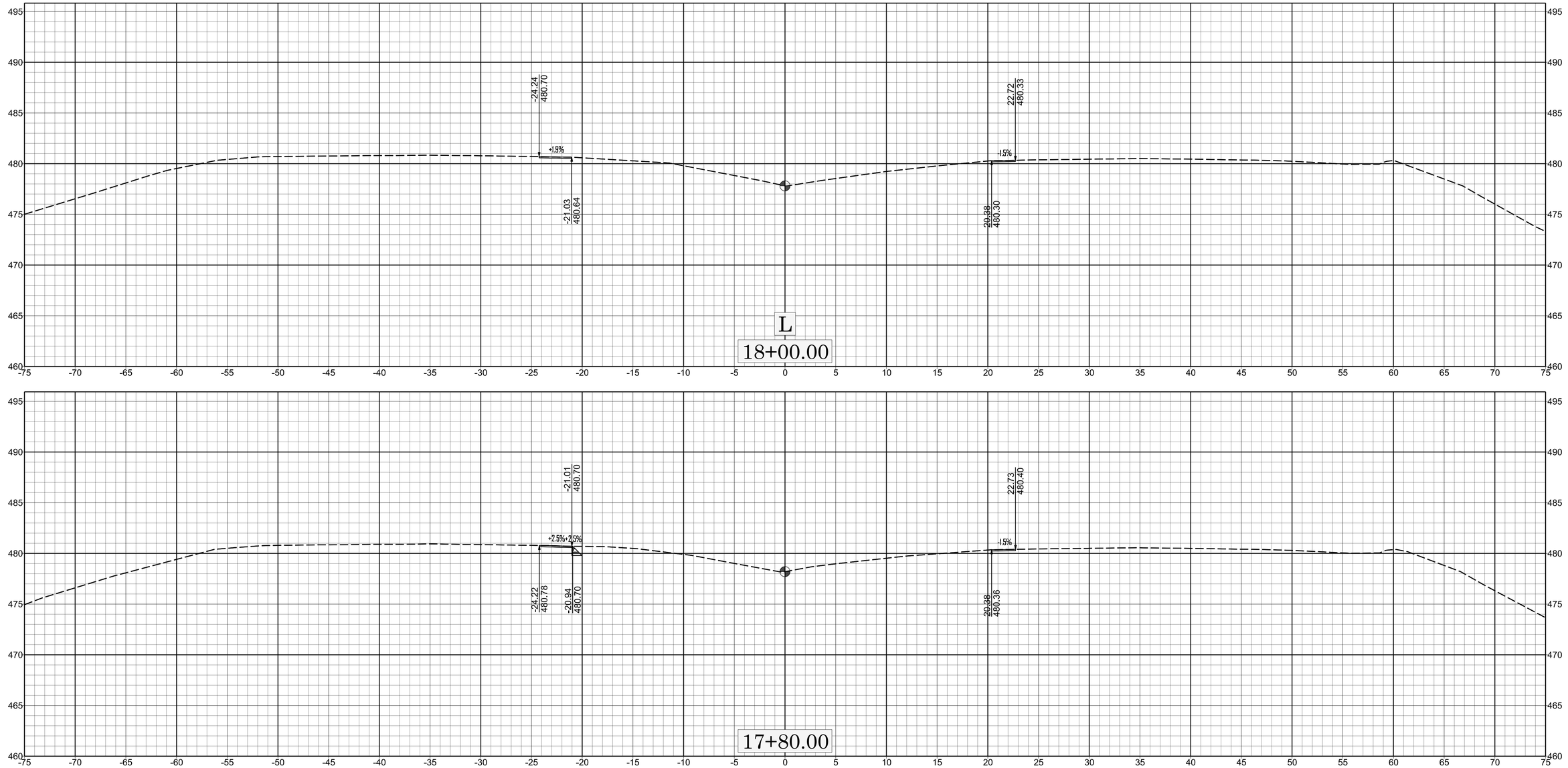
W-58088


17+60.00
-20.97
480.79
+2.2%
+2.2%
-24.20
480.86
-19.71
480.76
22.74
480.52
-2.0%
20.37
480.47
17+40.00
-20.97
480.94
+2.1%
+2.1%
-24.18
481.00
-18.47
480.89
22.75
480.65
-1.8%
20.42
480.61

X-018

W-5808B

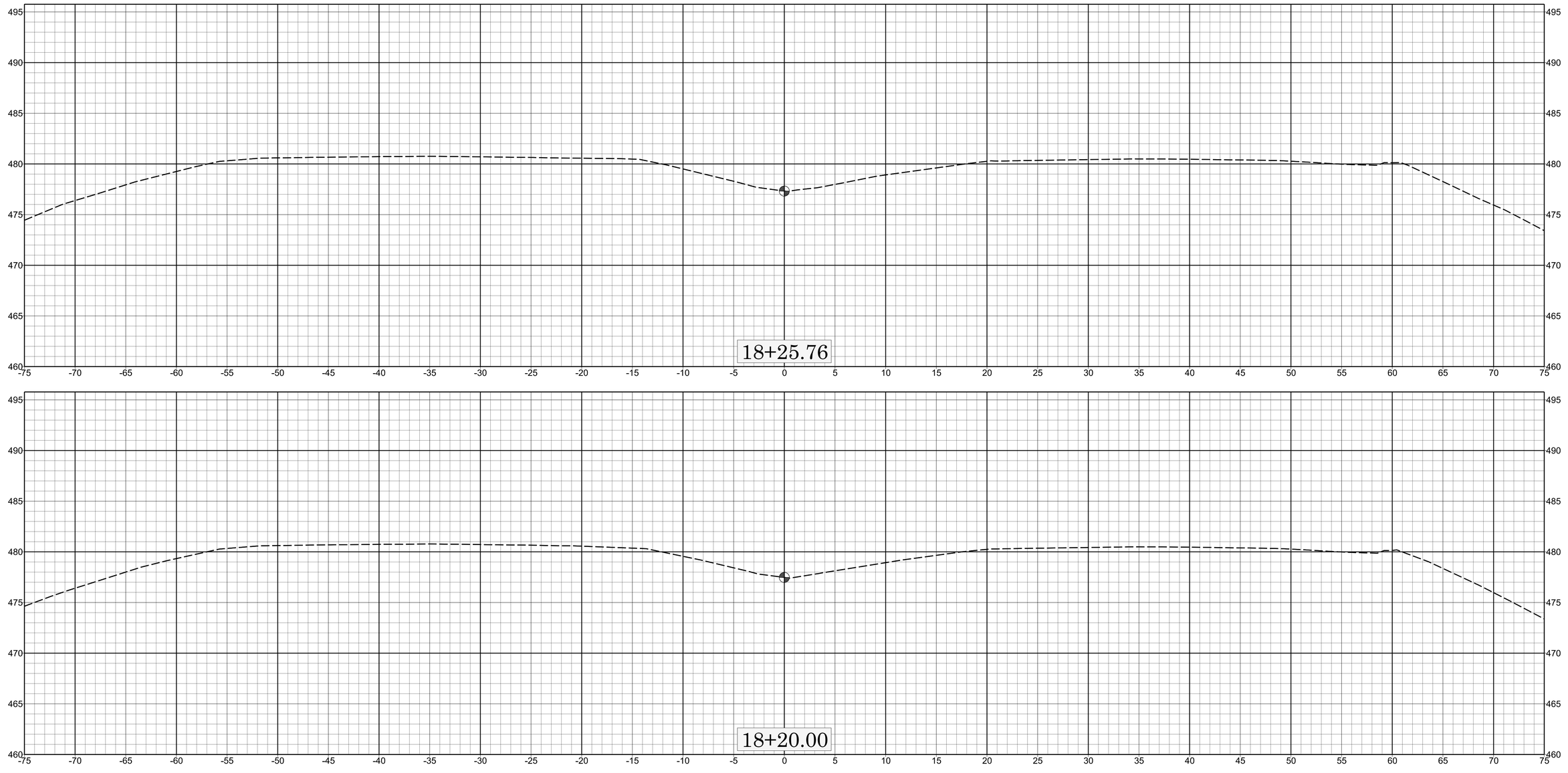
11/14/23



X-019

W-5808B

DOT/mtrotter - 4/11/2025


18+25.76
18+20.00
495
490
485
480
475
470
465
460
-75
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
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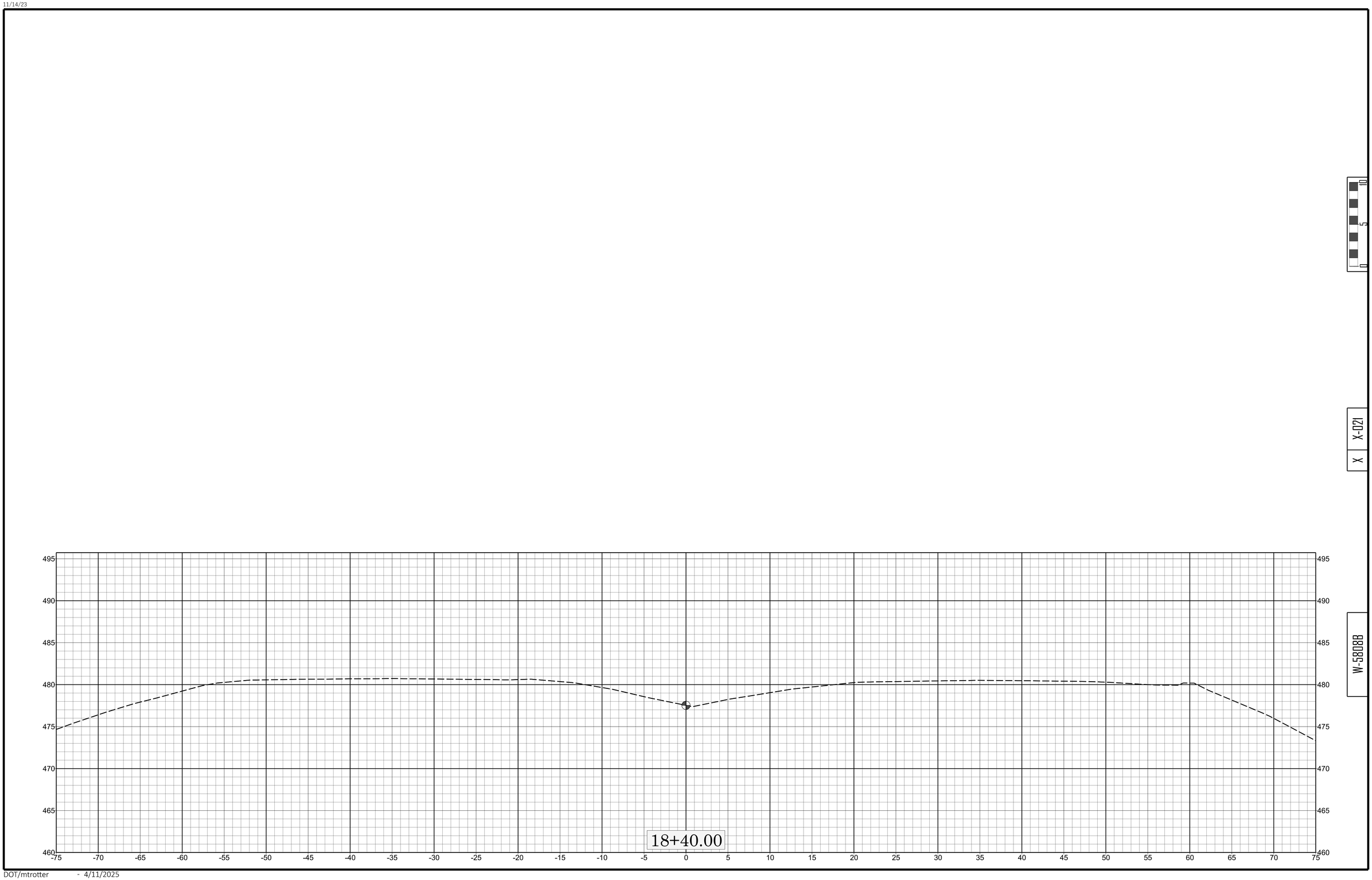
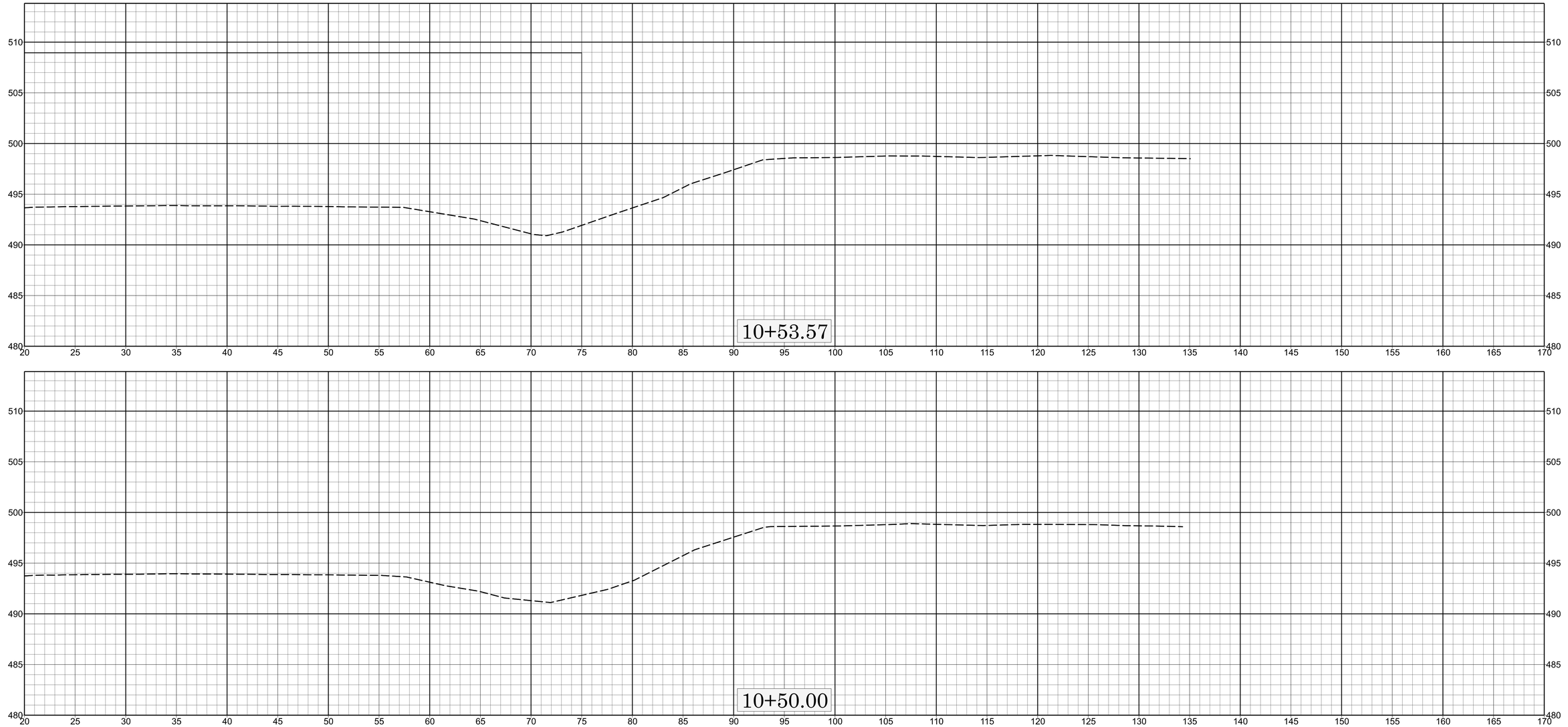
50
55
60
65
70
75

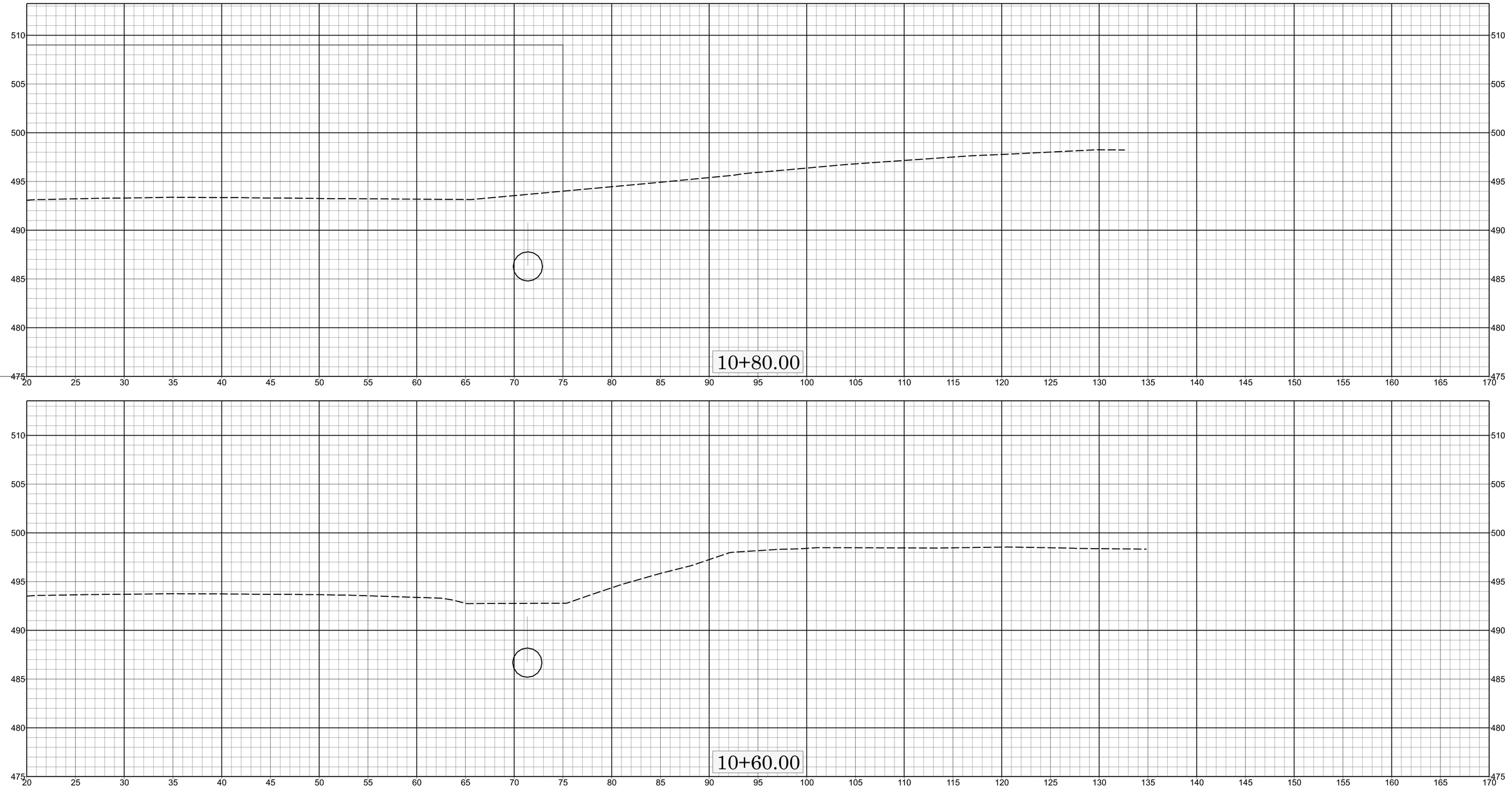

0
5
10
X
X-021
W-58088
495
490
485
480
475
470
465
460
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
18+40.00



0
5
10

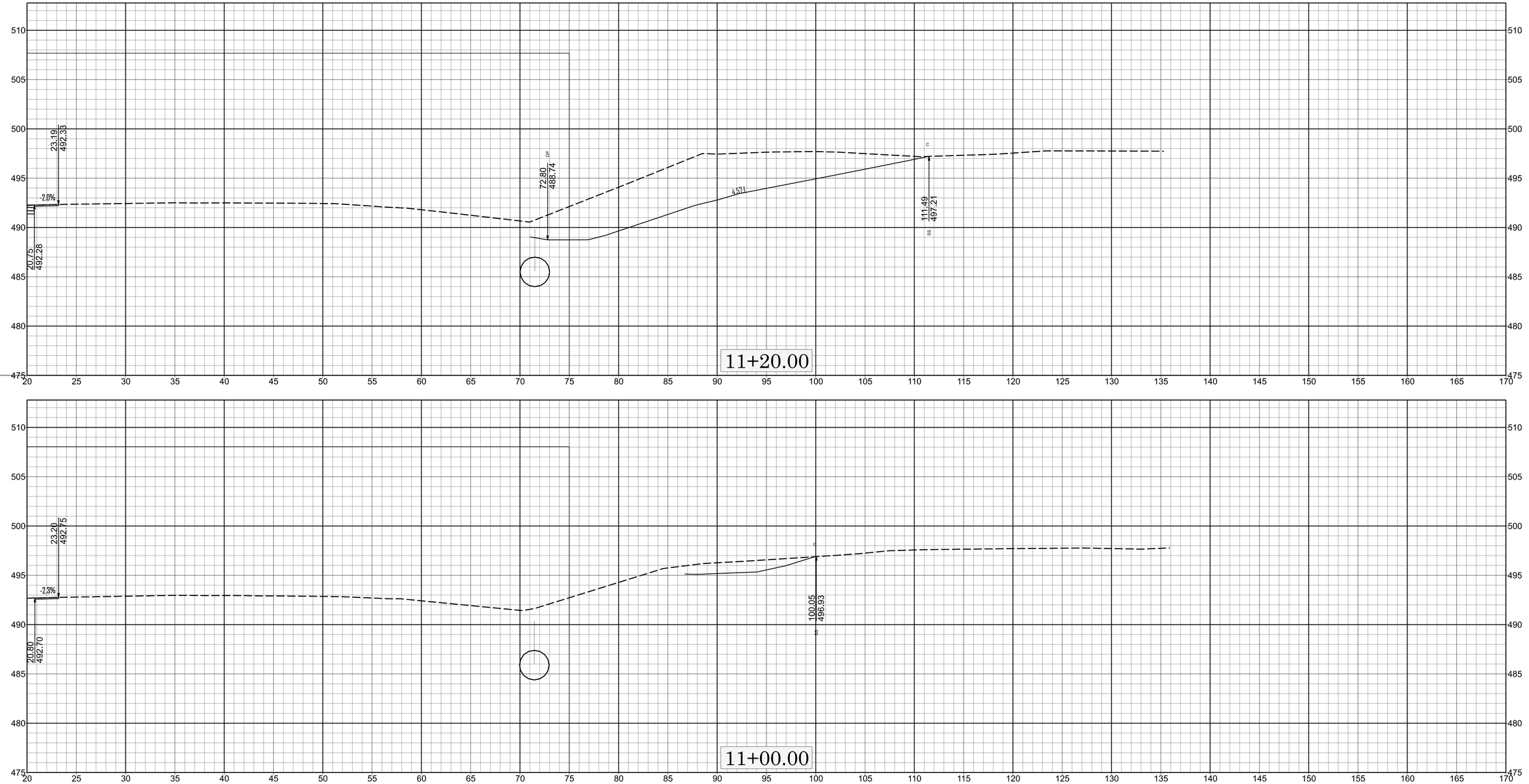
X
X-022

W-58088


10+80.00
10+60.00
510
505
500
495
490
485
480
475
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150
155
160
165
170

X-023

W-5808B

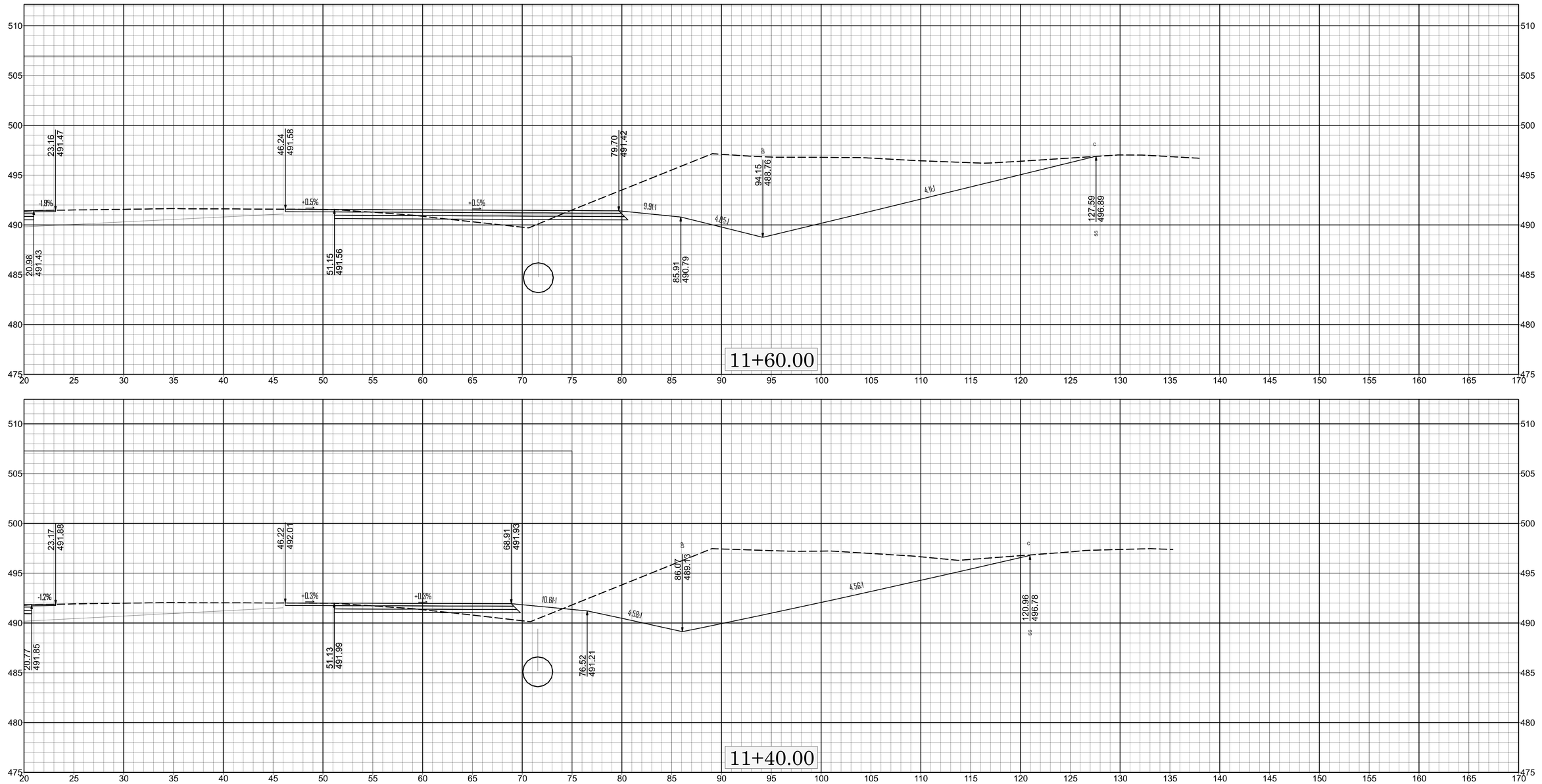


0 5 10

X-024

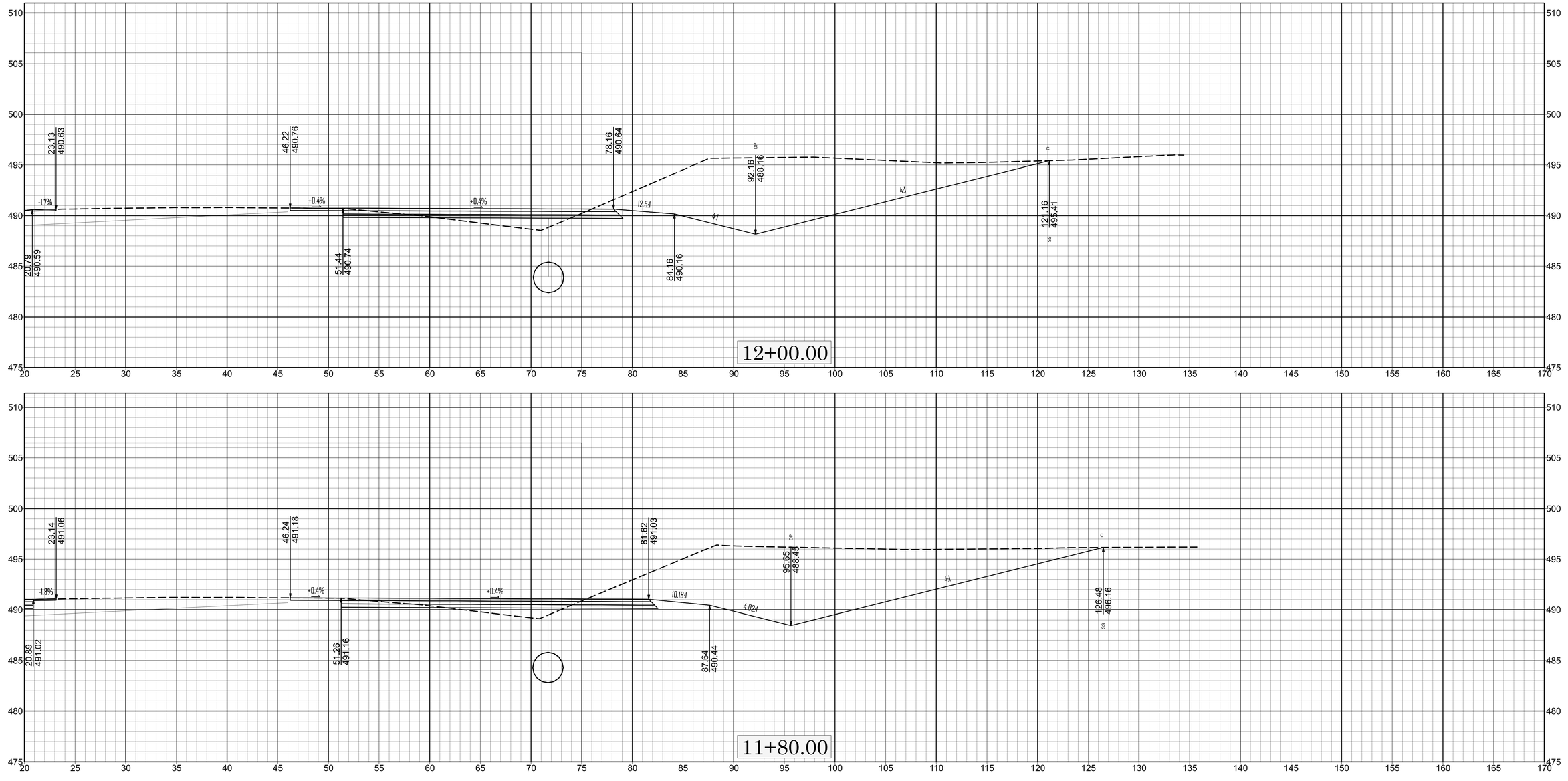
X

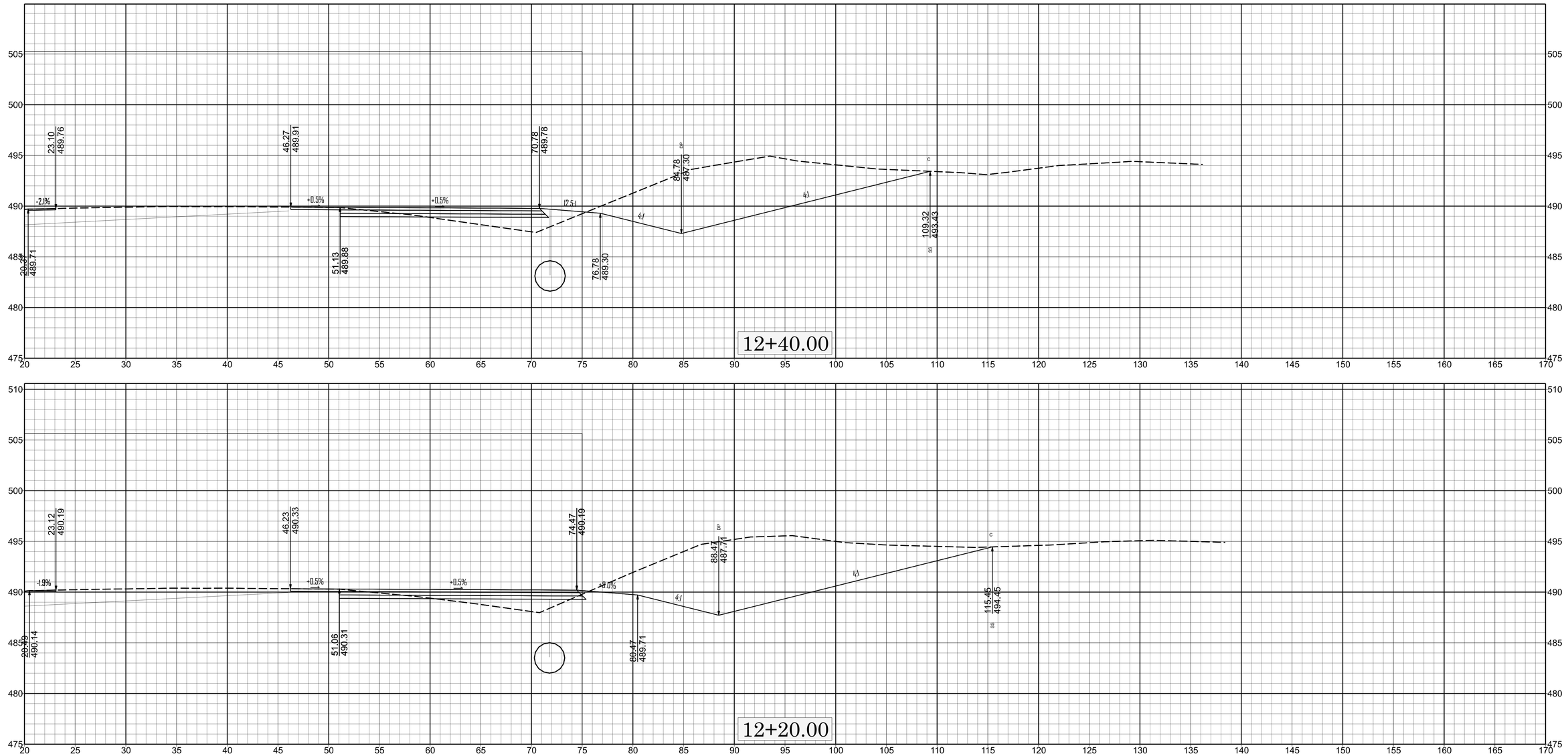
W-58088


11+60.00
23.16
491.47
46.24
491.58
79.70
491.42
94.15
488.76
127.59
496.89
20.98
491.43
51.15
491.56
85.91
490.79
-1.9%
+0.5%
+0.5%
9.9:1
4.05:1
4.1:1
11+40.00
23.17
491.88
46.22
492.01
68.91
491.93
86.07
489.13
120.96
496.78
20.77
491.85
51.13
491.99
76.52
491.21
-1.2%
+0.3%
+0.3%
10.6:1
4.58:1
4.56:1

X-025

W-5808B

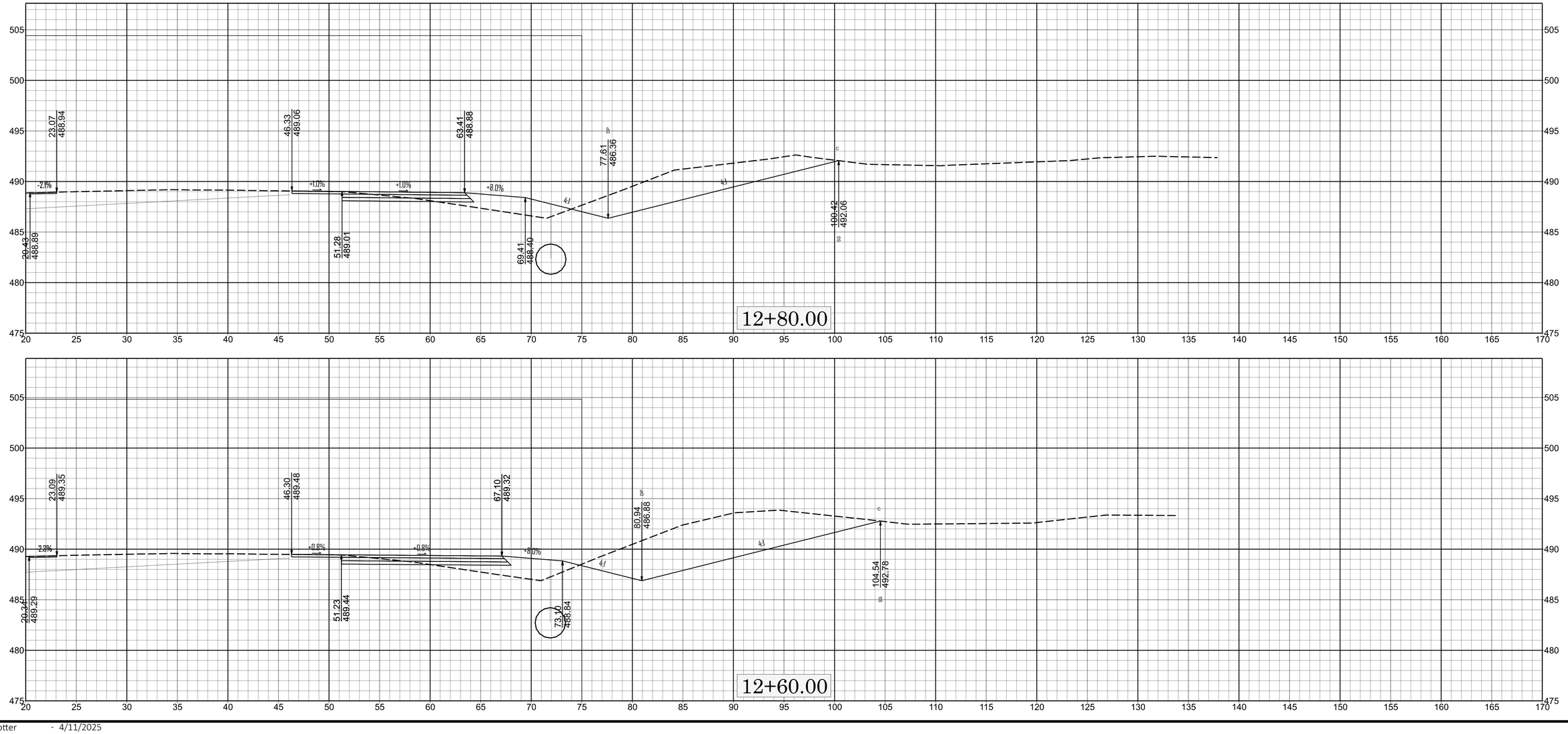

12+00.00
23.13
490.63
46.22
490.76
78.16
490.64
92.16
488.16
121.16
496.41
20.79
490.59
51.44
490.74
84.16
490.16
-1.7%
+0.4%
+0.4%
12.5:1
4:1
4:1
DP
S
C
11+80.00
23.14
491.06
46.24
491.18
81.62
491.03
95.65
488.45
126.48
496.16
20.89
491.02
51.26
491.16
87.64
490.44
-1.8%
+0.4%
+0.4%
10.18:1
4.02:1
4:1
DP
S
C



X-027

W-5808B

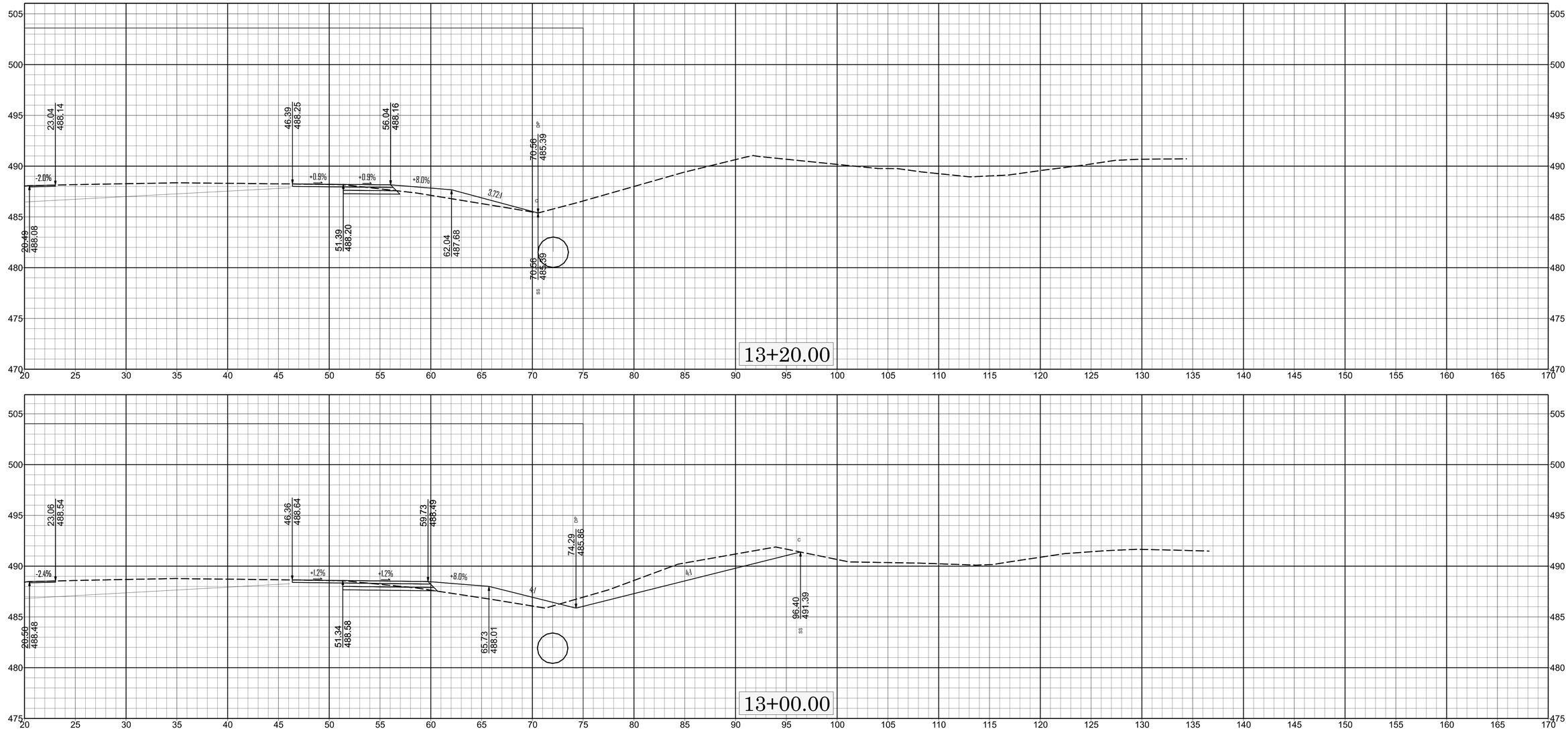
DOT/mtrotter - 4/11/2025



X-028

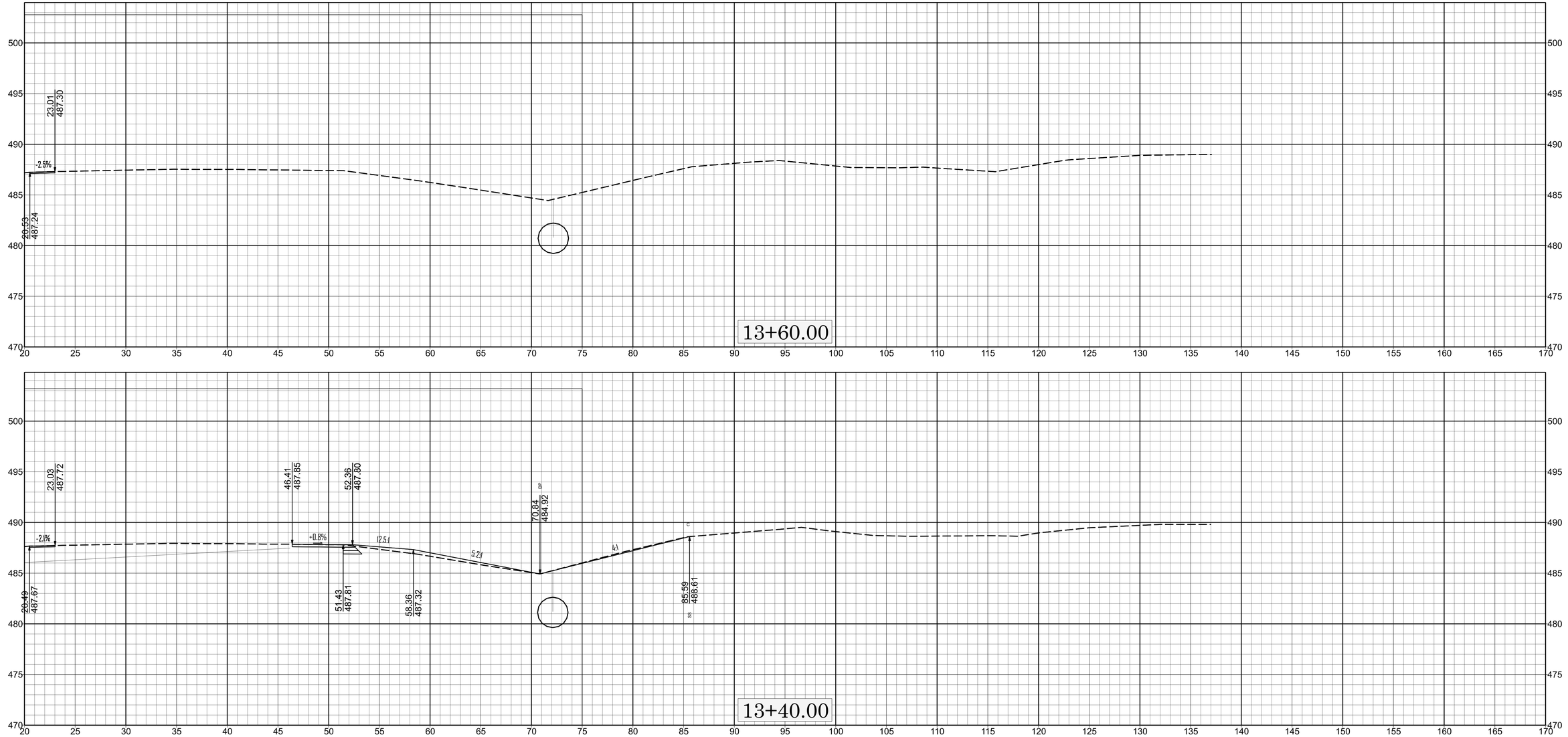
W-58088

DOT/mtrotter - 4/11/2025


13+20.00
-2.0%
+0.9%
+0.9%
+8.0%
3.72/
23.04
488.14
46.39
488.25
56.04
488.16
70.56
485.39
DP
C
20.49
488.08
51.39
488.20
62.04
487.68
70.56
485.39
SS
13+00.00
-2.4%
+1.2%
+1.2%
+8.0%
4/
4/
23.06
488.54
46.36
488.64
59.73
488.49
74.29
485.86
DP
C
20.50
488.48
51.34
488.58
65.73
488.01
96.40
491.39
SS

X-029

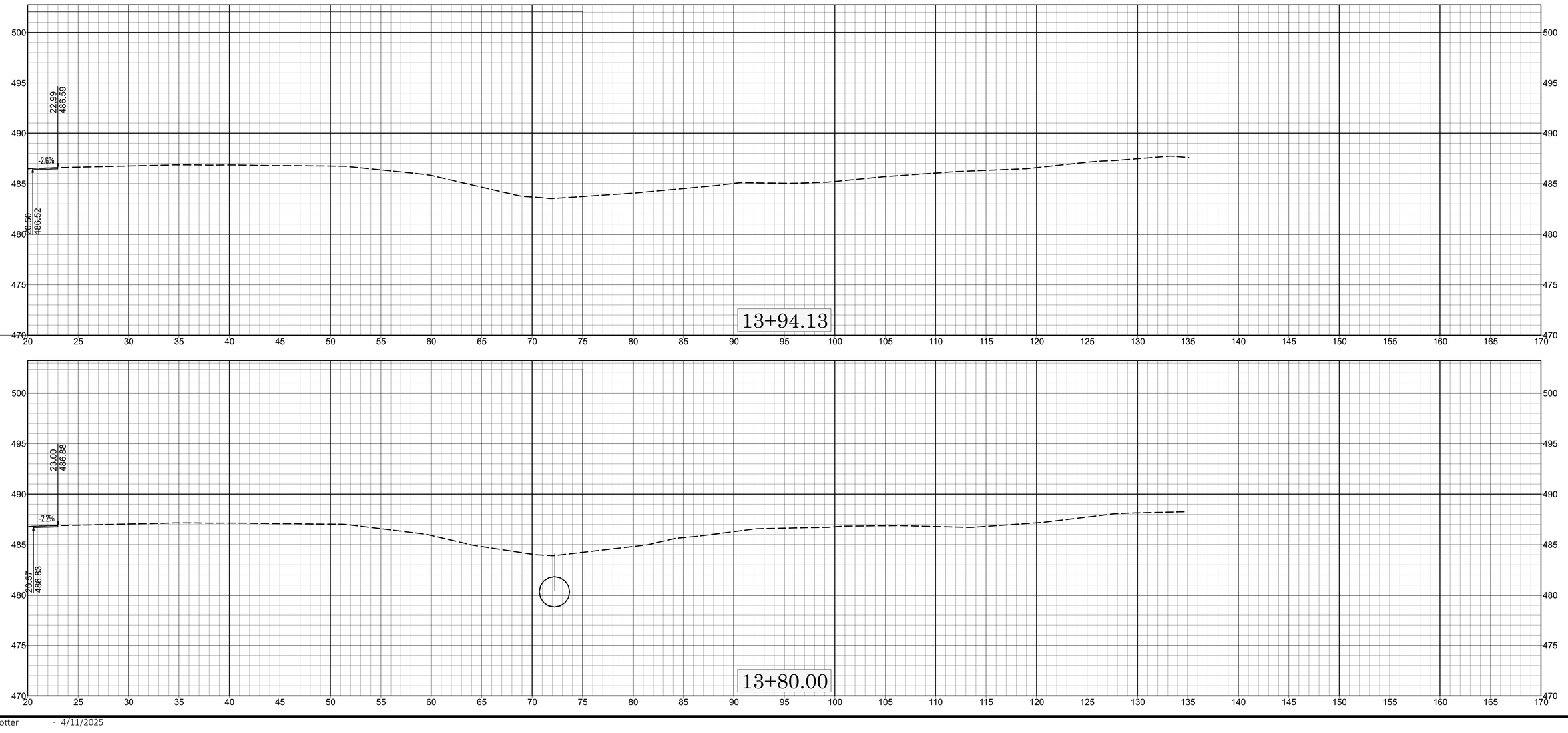
W-5808B



0 5 10

X | X-030

W-5808B



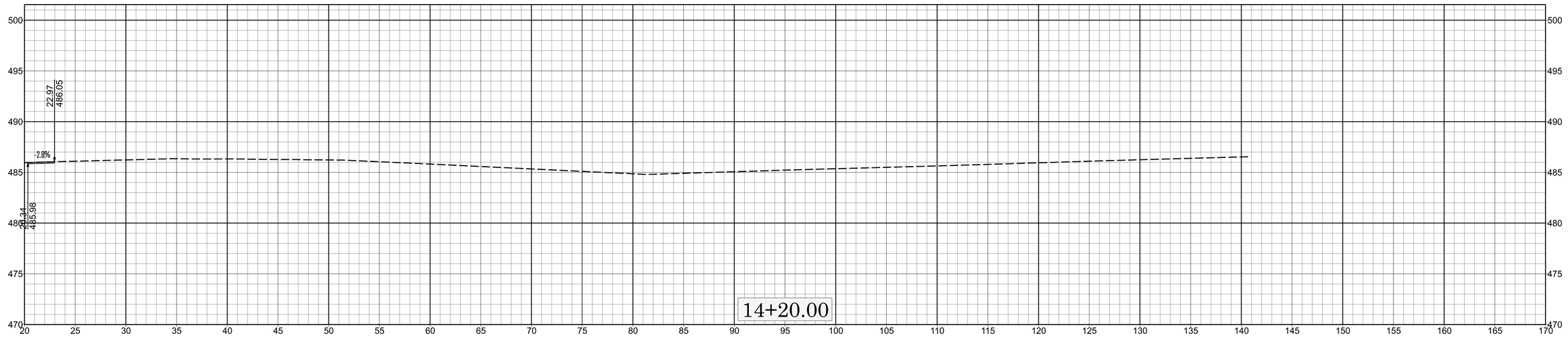
0 5 10

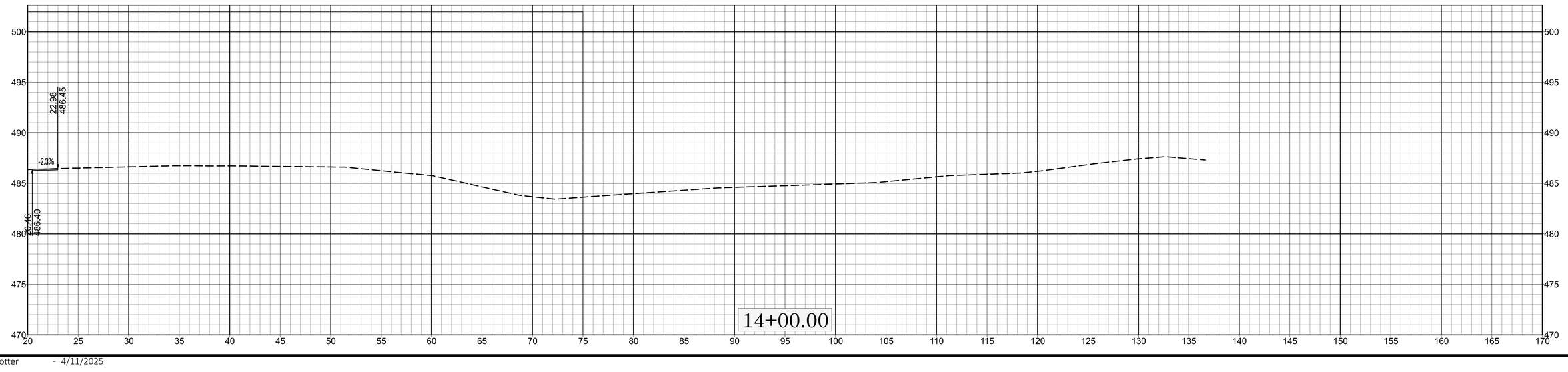
X

X-031

W-5808B

11/14/23





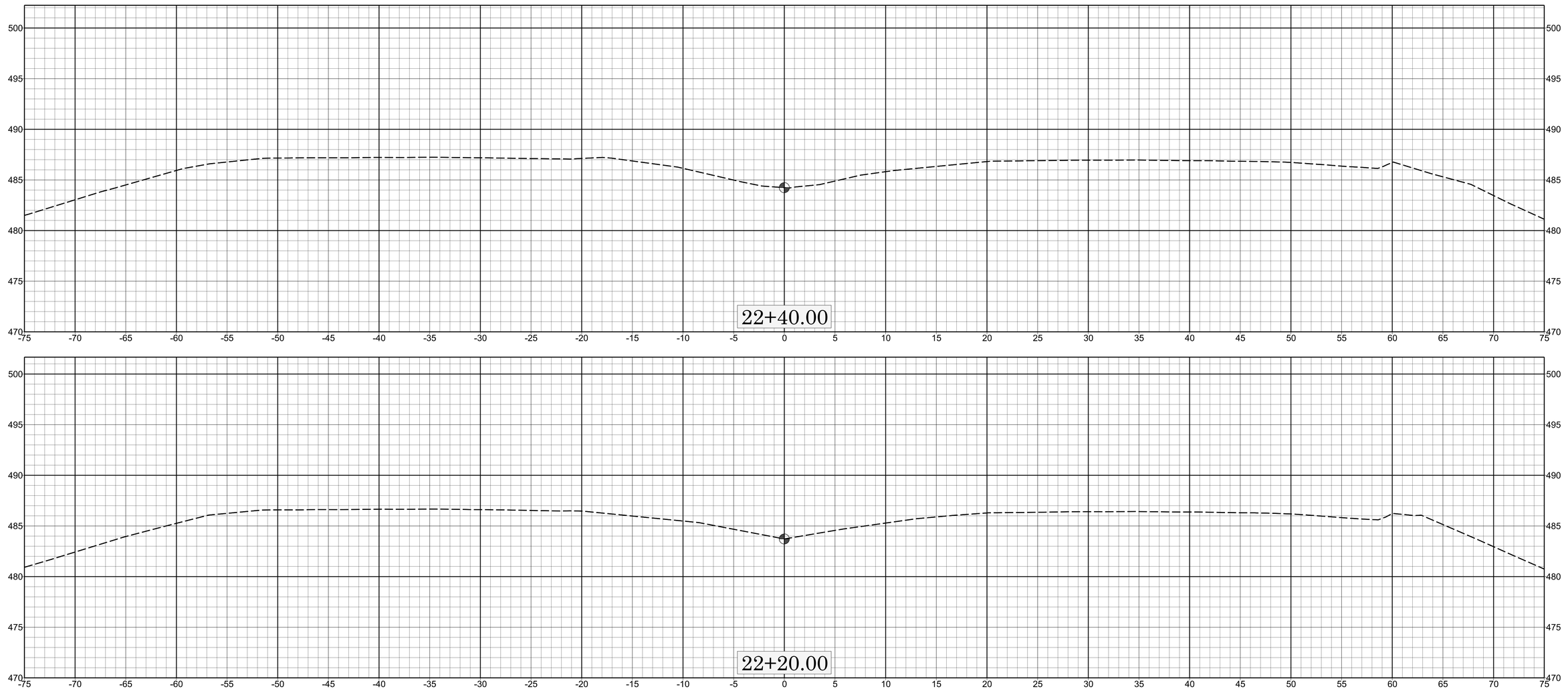
0
5
10

X-032

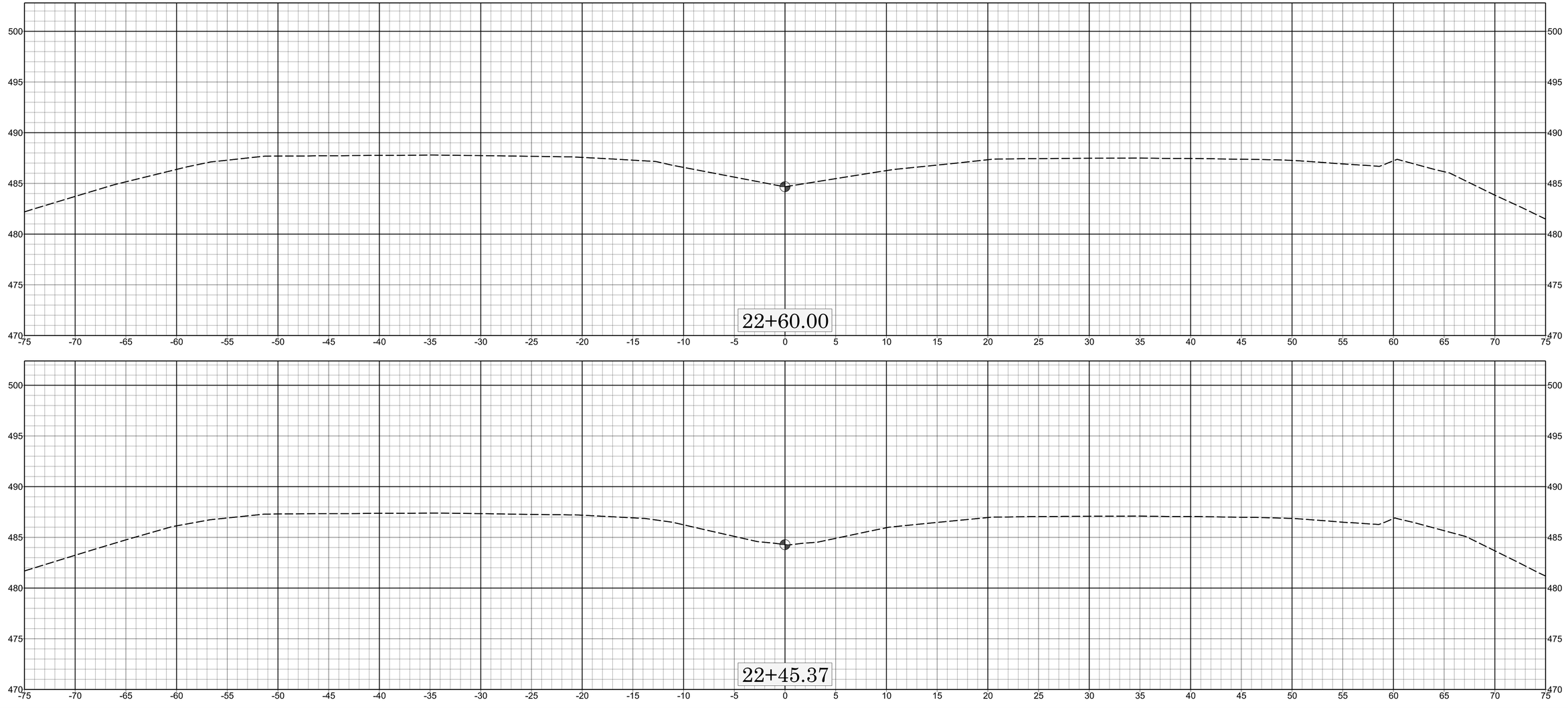
X

W-58018B

DOT/mtrotter - 4/11/2025


22+40.00
22+20.00
500
495
490
485
480
475
470
-75
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75

11/14/23

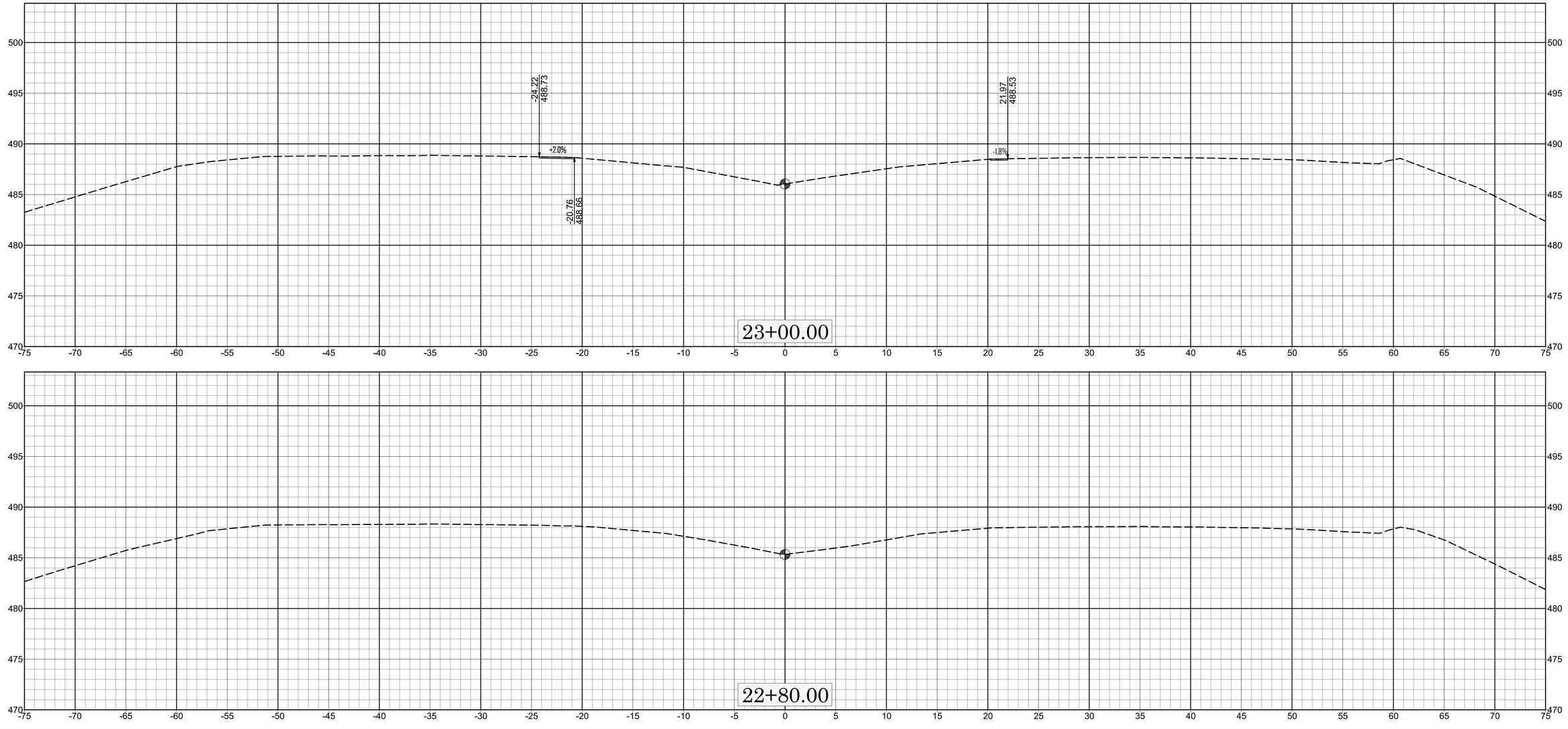


0 5 10

X

X-034

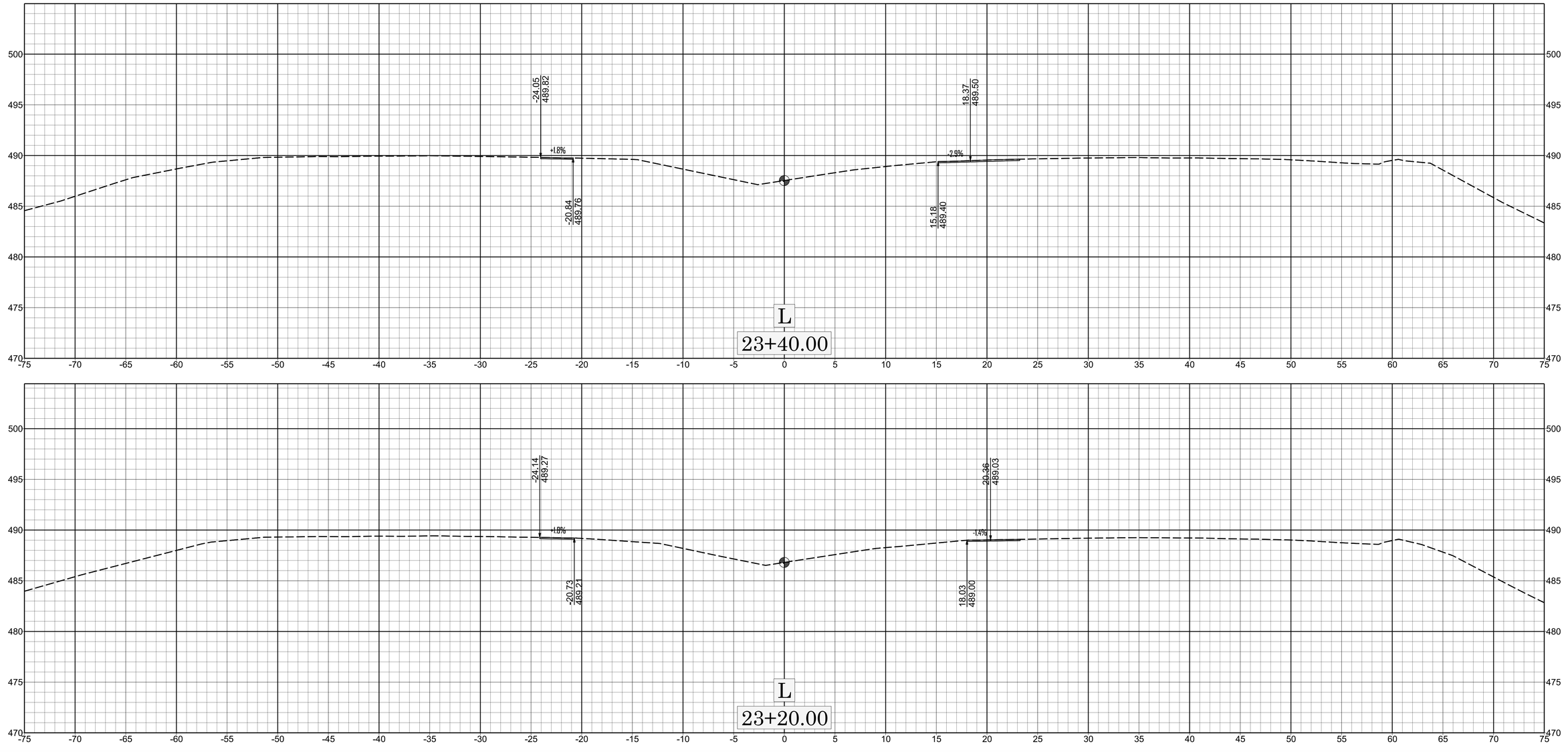
W-5808B



0 5 10

X X-035

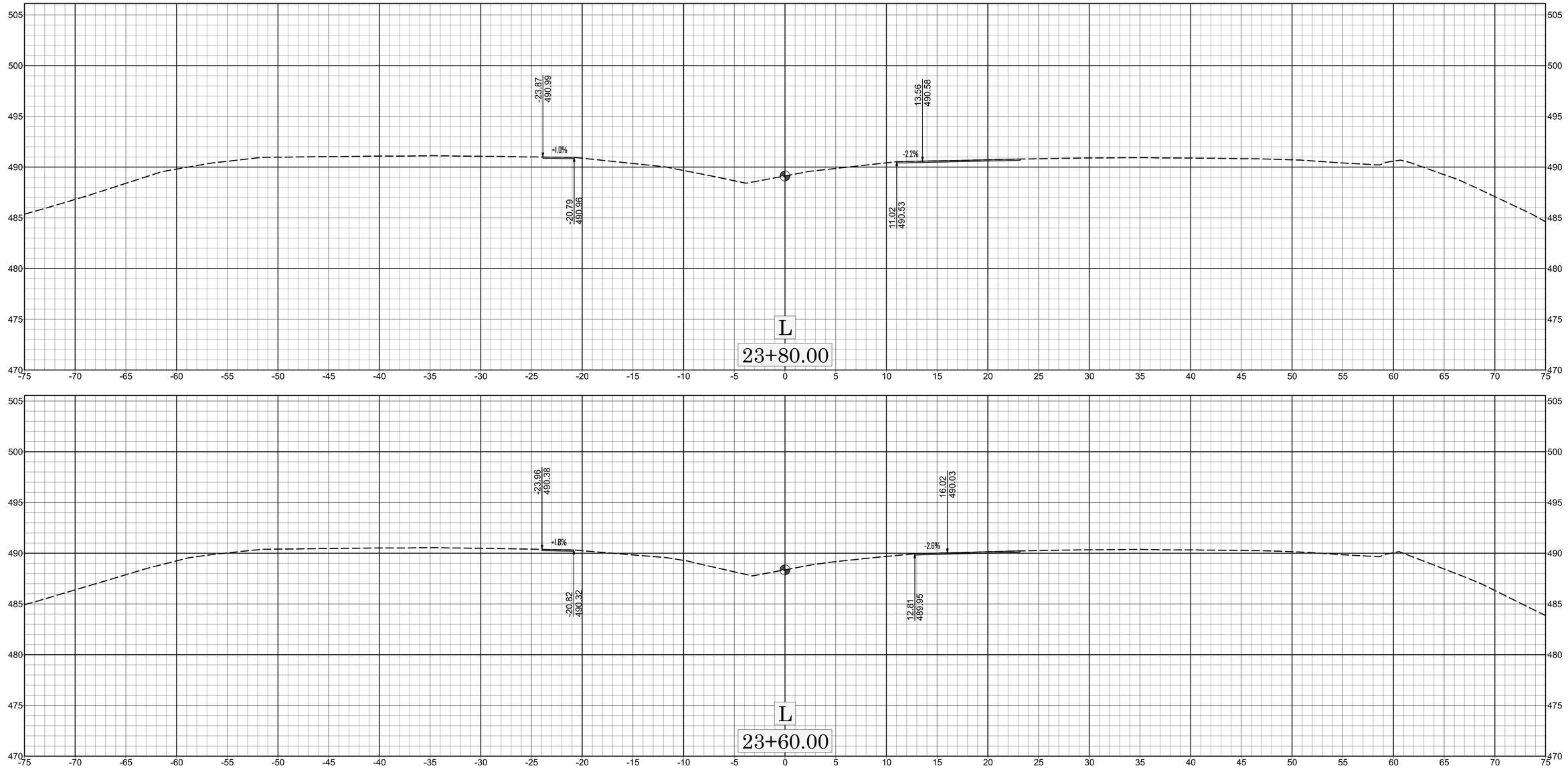
W-5808B



0 5 10

X X-036

W-5808B

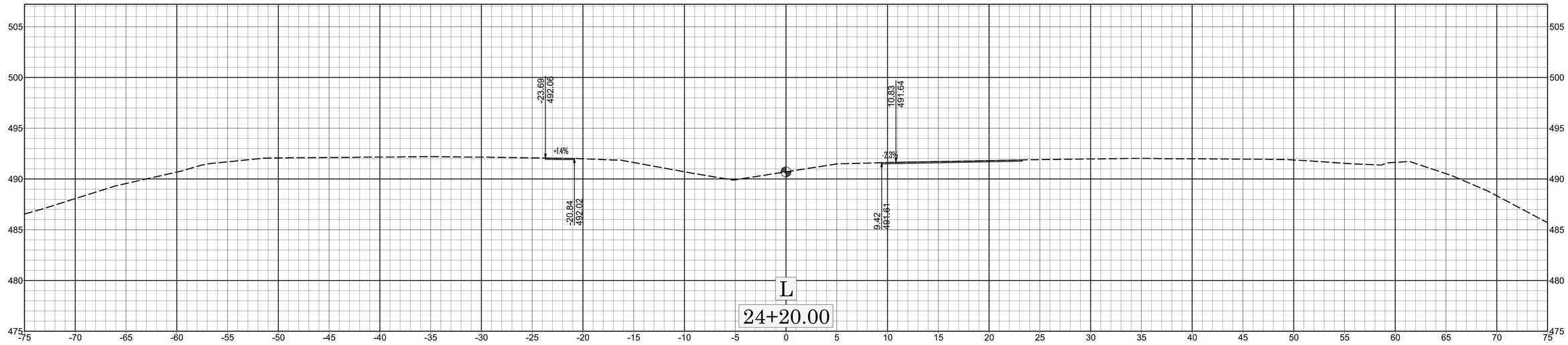


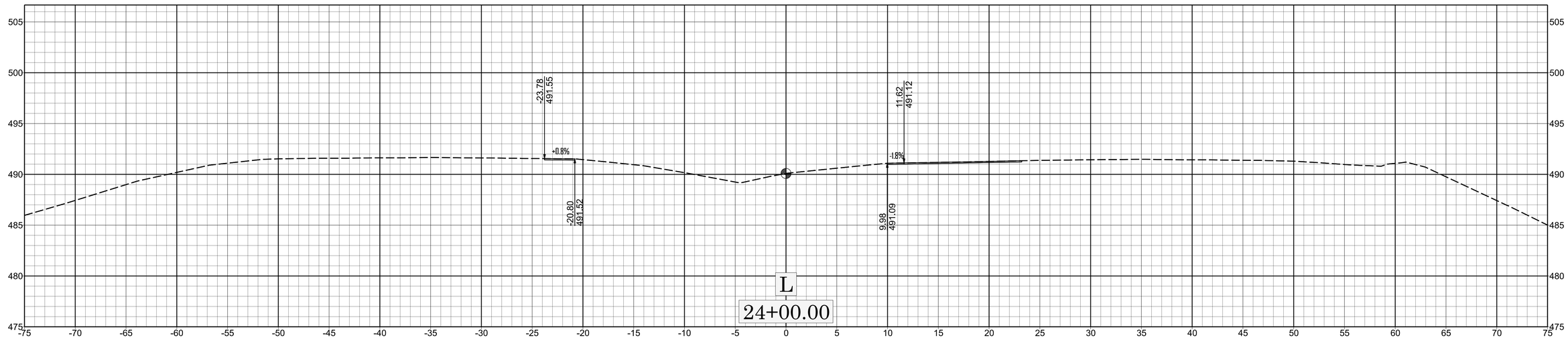
0 5 10

X

X-037

W-58088



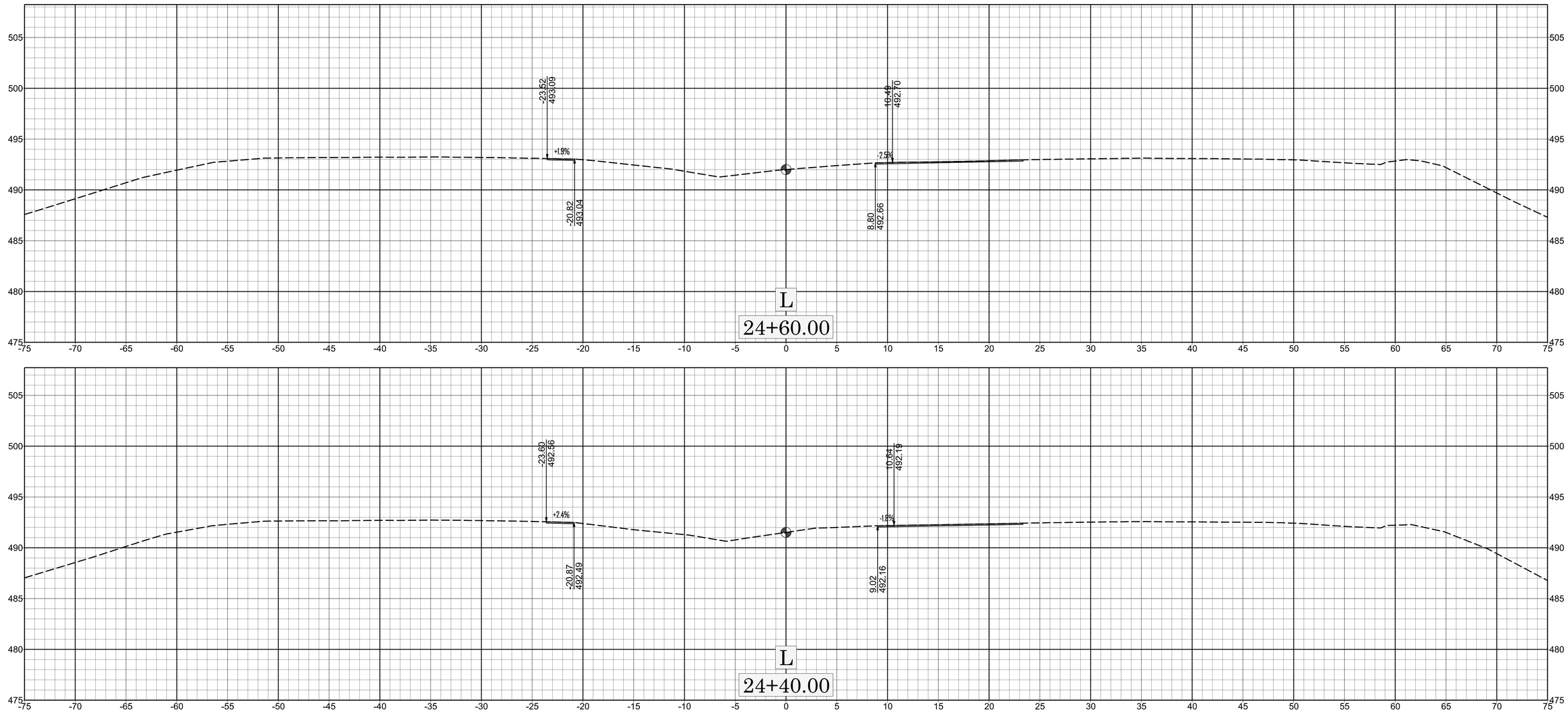


0 5 10

X-038

X

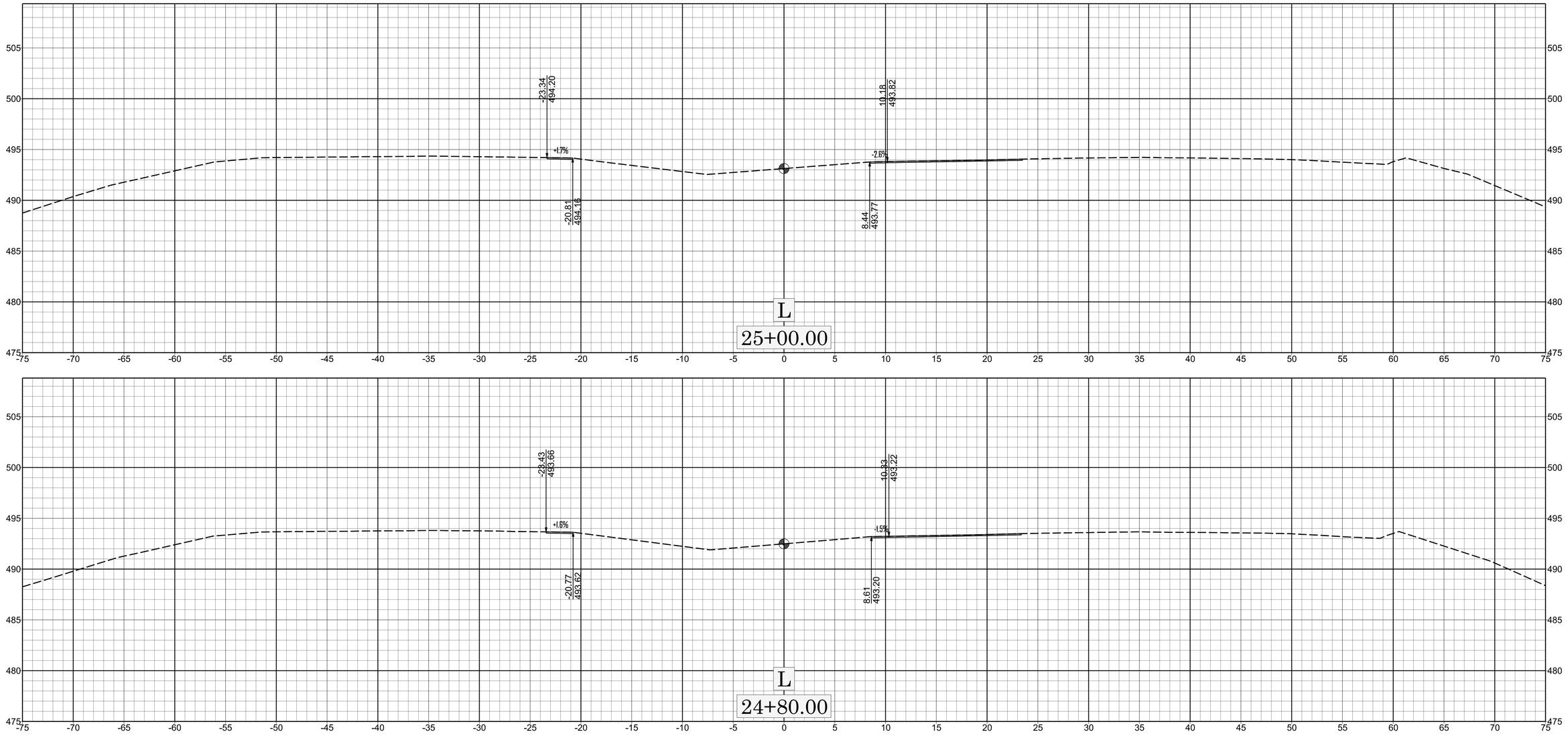
W-5801BB



0 5 10

X X-039

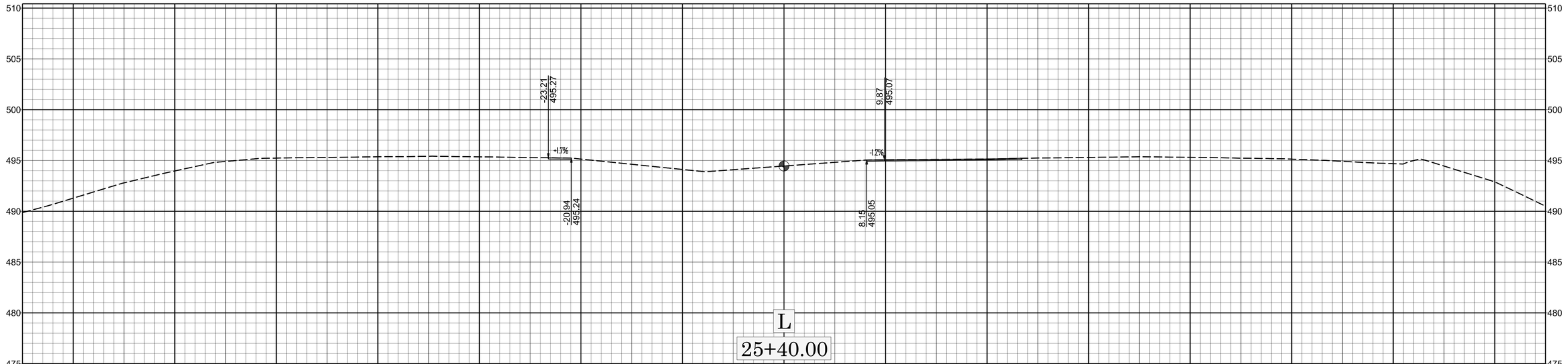
W-58088

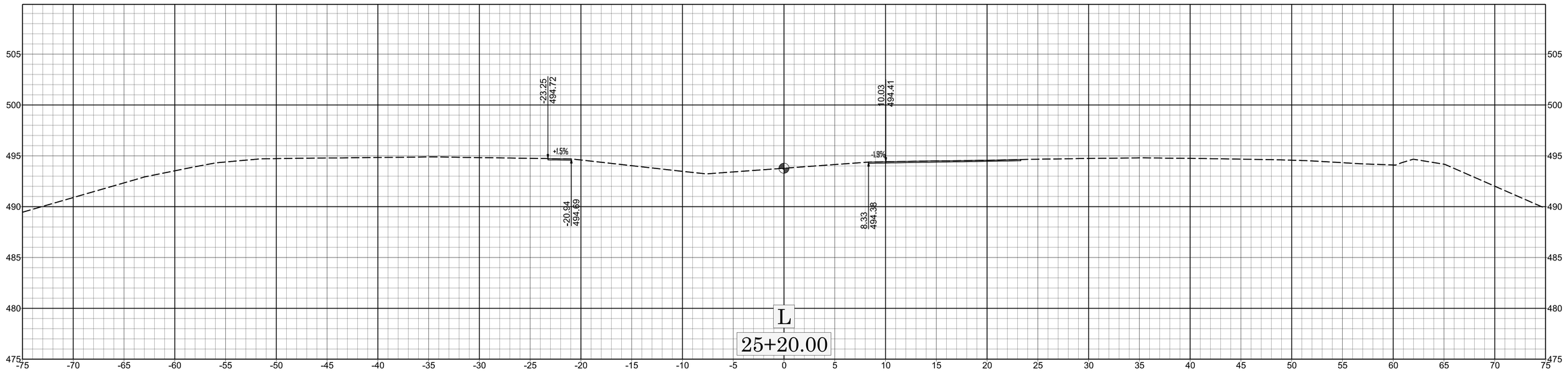


0 5 10

X-040

W-58088

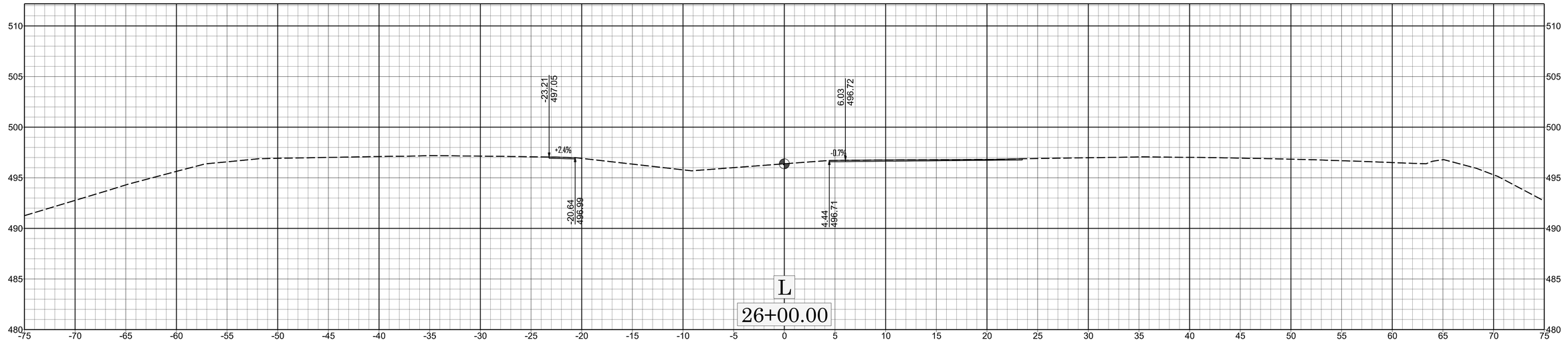


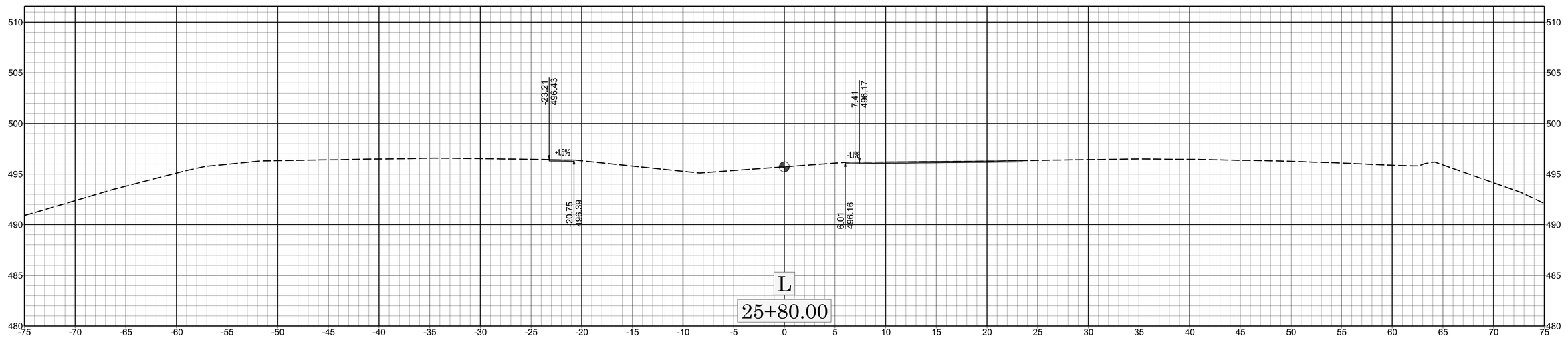


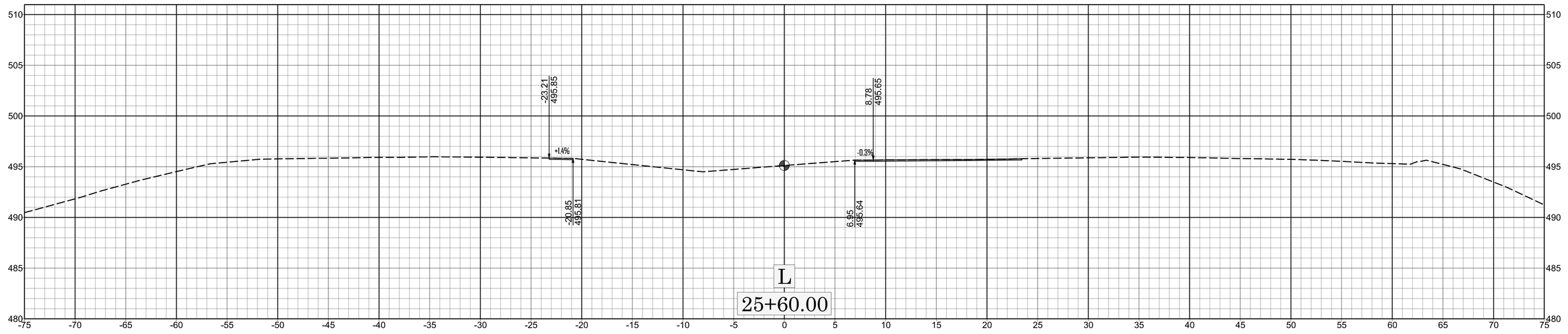
0 5 10

X-041

W-58088

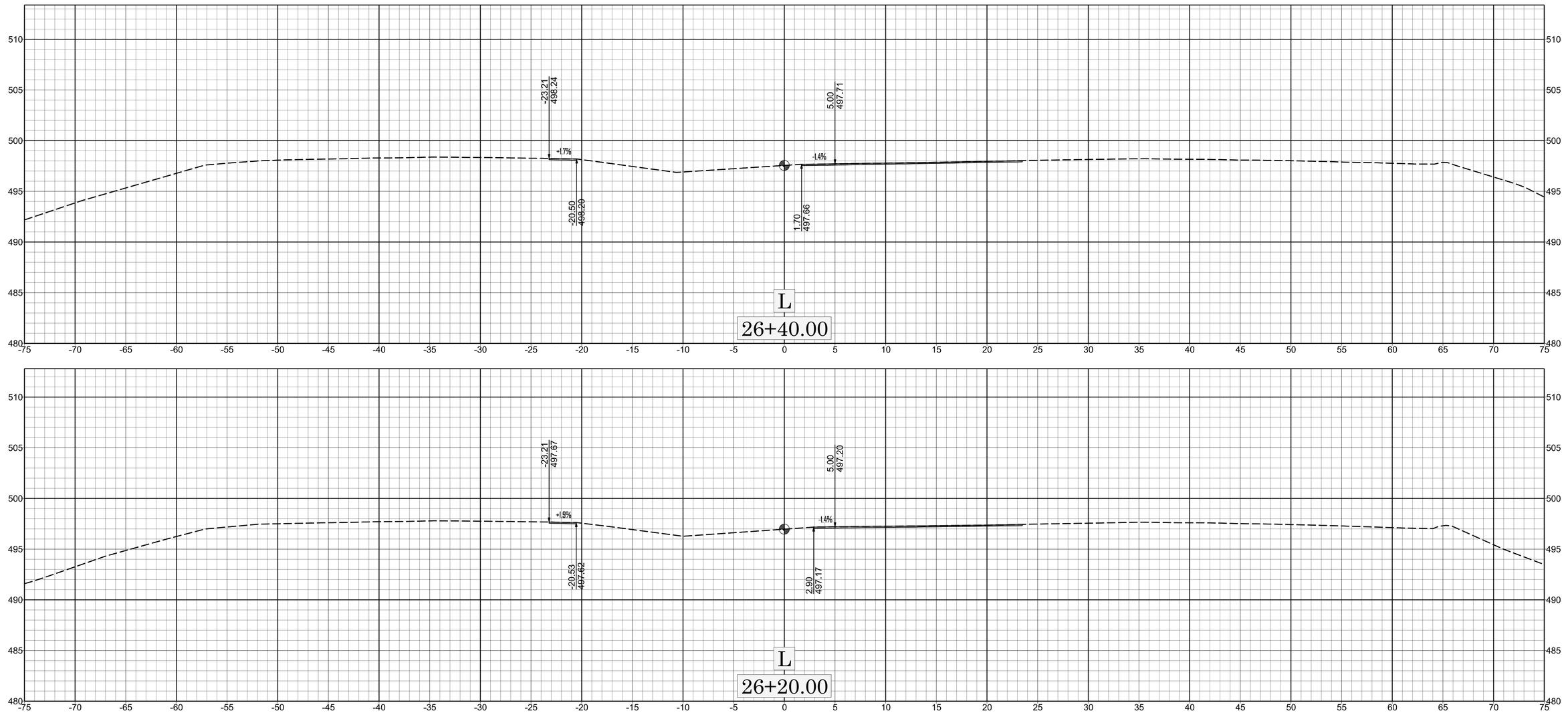

-23.21
497.05
+2.4%
-20.64
496.99
6.03
496.72
-0.7%
4.44
496.71
L
26+00.00


-23.21
496.43
+1.5%
-20.75
496.39
7.41
496.17
-1.1%
6.01
496.16
L
25+80.00


-23.21
495.85
+1.4%
-20.85
495.81
8.78
495.65
-0.3%
6.95
495.64
L
25+60.00

X-042

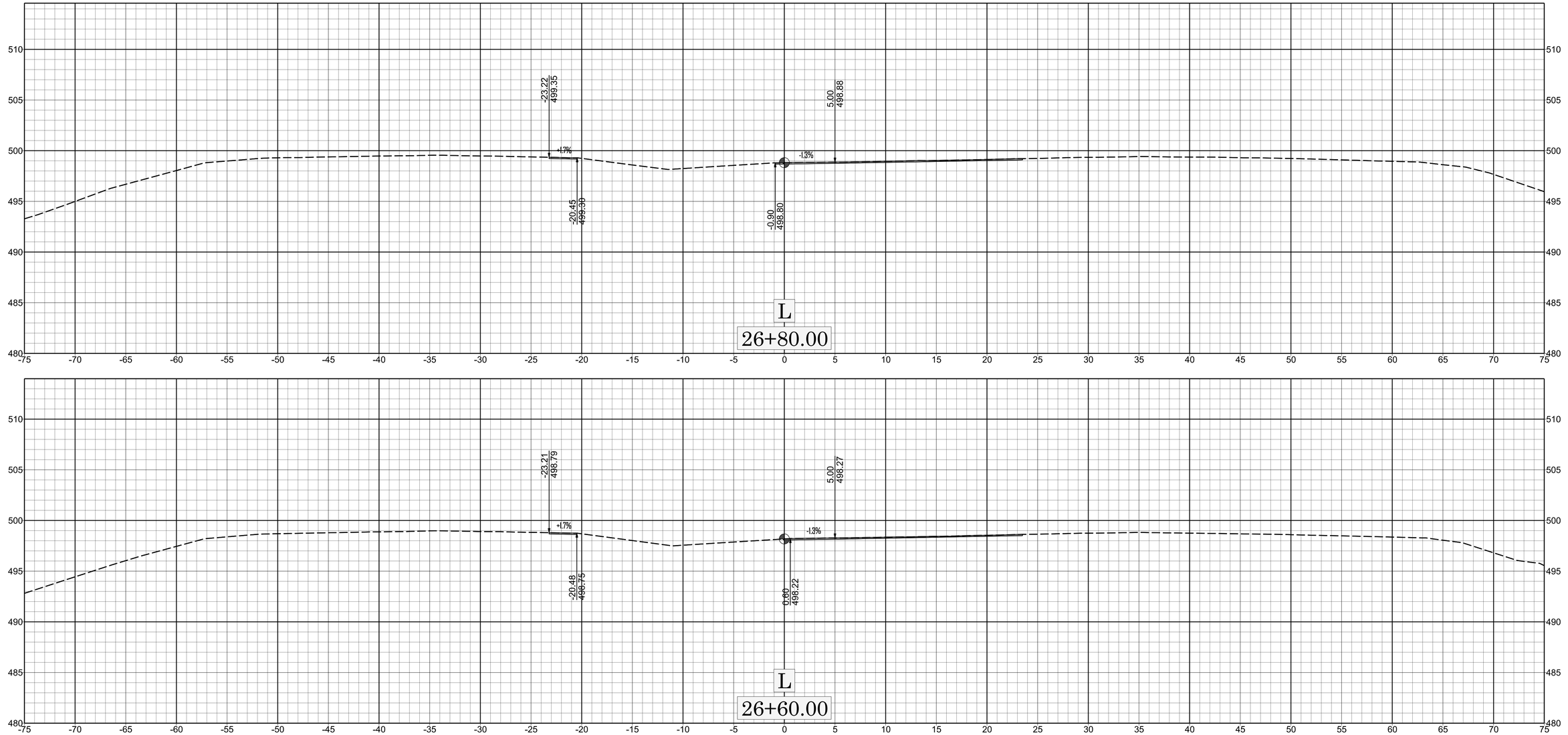
W-5808B



0 5 10

X X-043

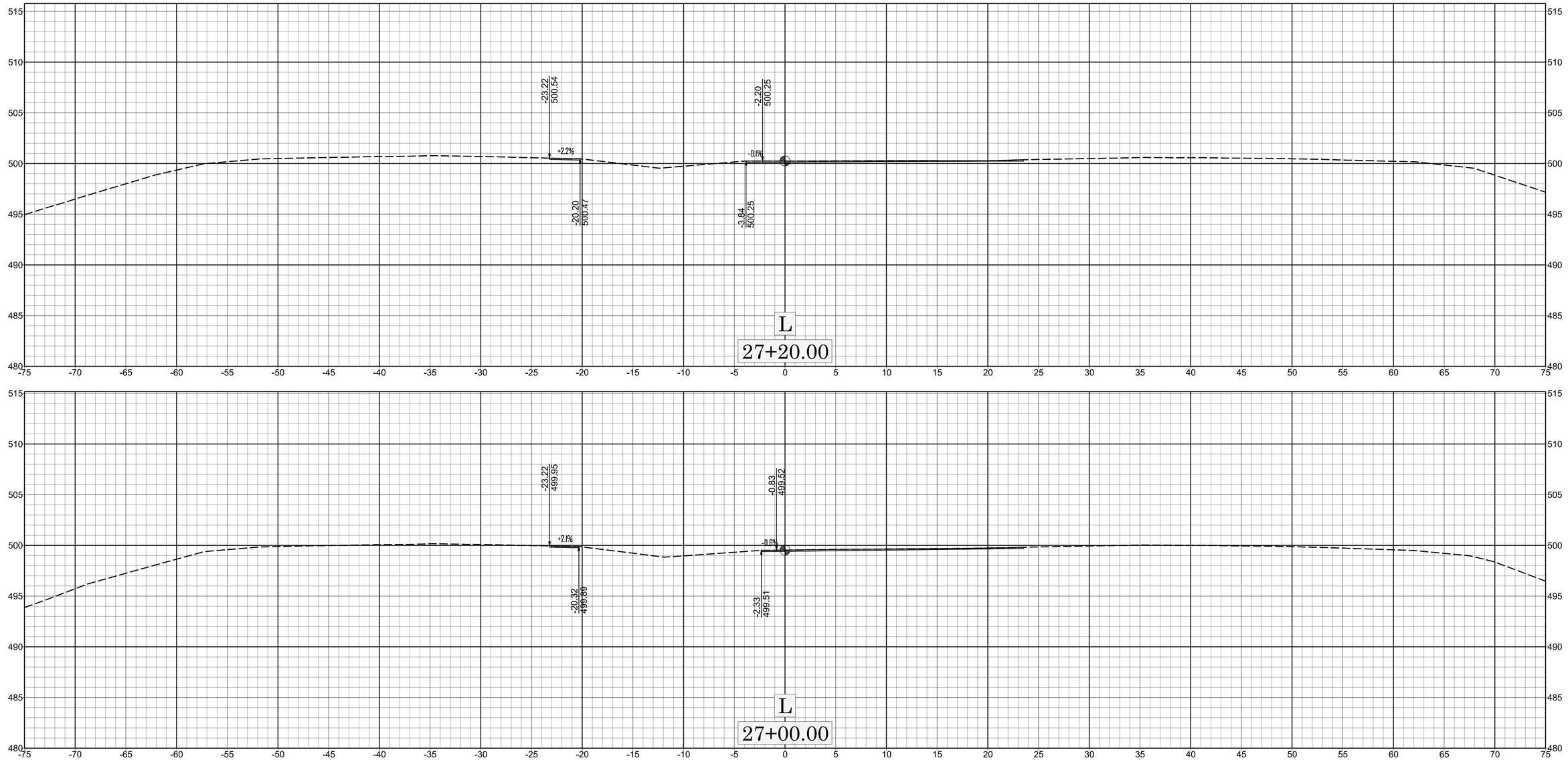
W-58018B



0 5 10

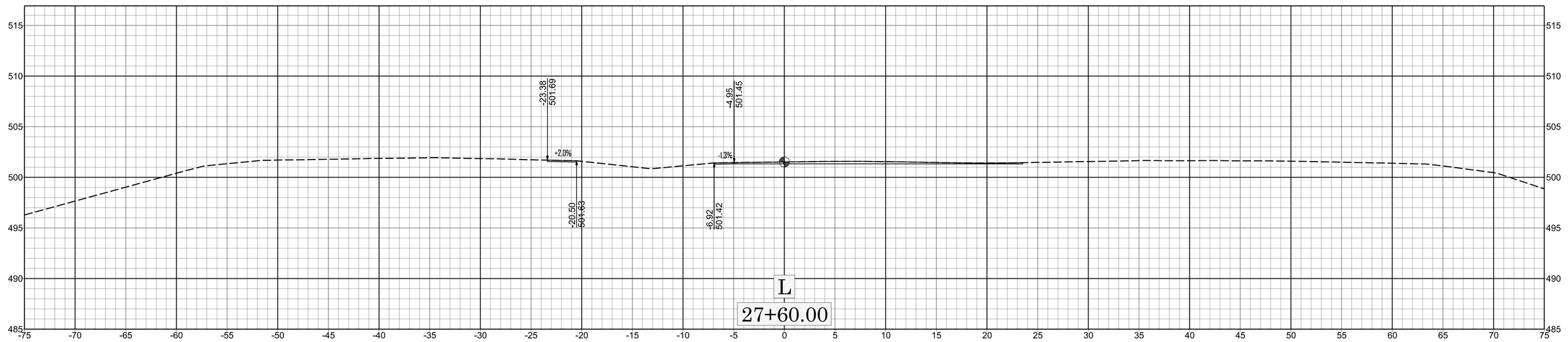
X | X-044

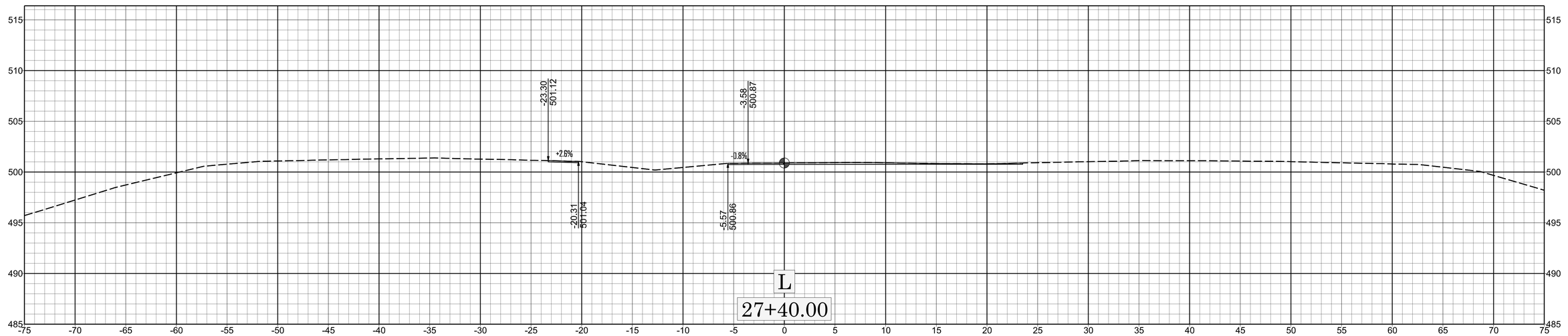
W-5808B


-23.22
500.54
+2.2%
-20.20
500.47
-2.20
500.25
-0.1%
-3.84
500.25
L
27+20.00
-23.22
499.95
+2.1%
-20.32
499.89
-0.83
499.52
-0.6%
-2.33
499.31
L
27+00.00
515
510
505
500
495
490
485
480
-75
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75

X-045

W-5808B



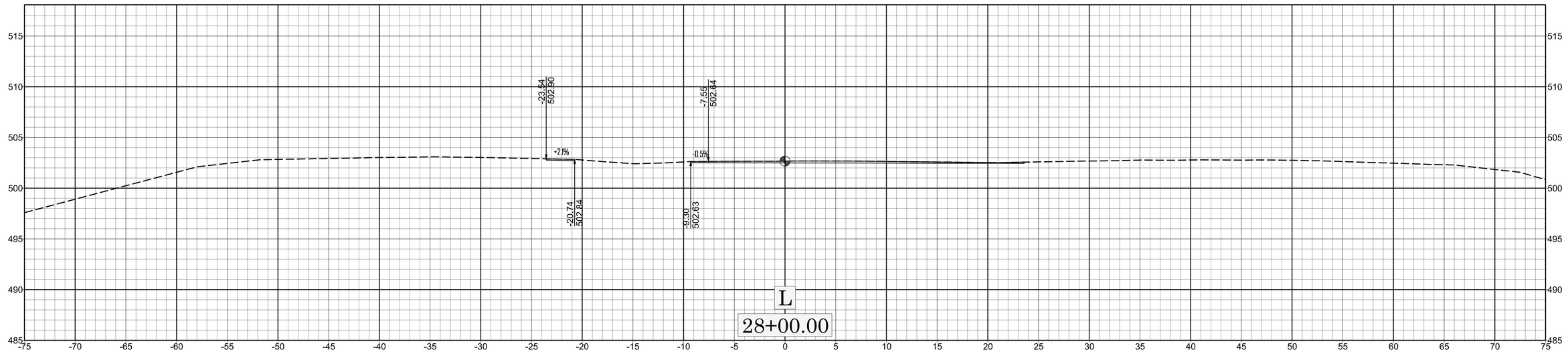


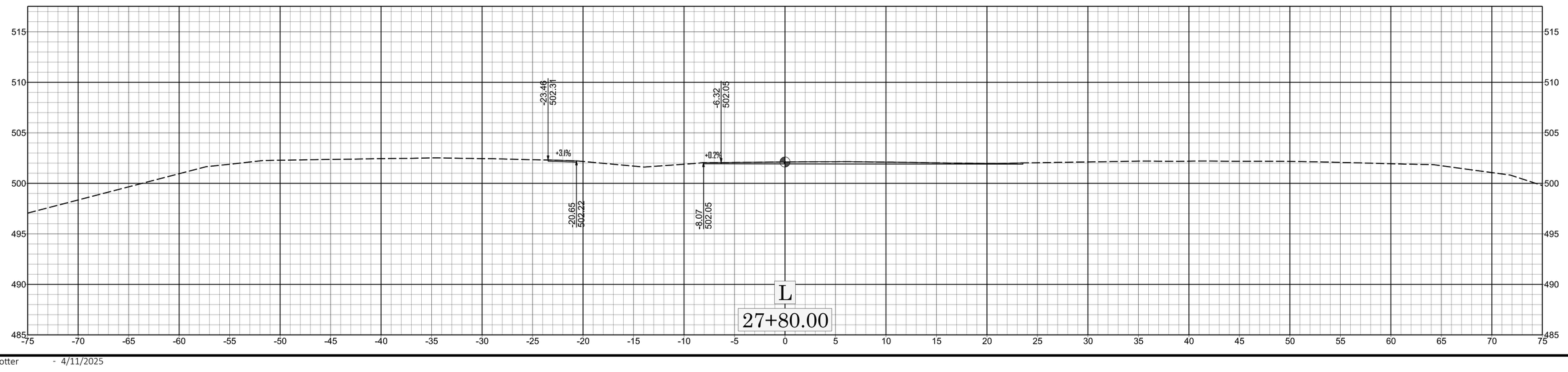
0 5 10

X-046

X

W-5808B



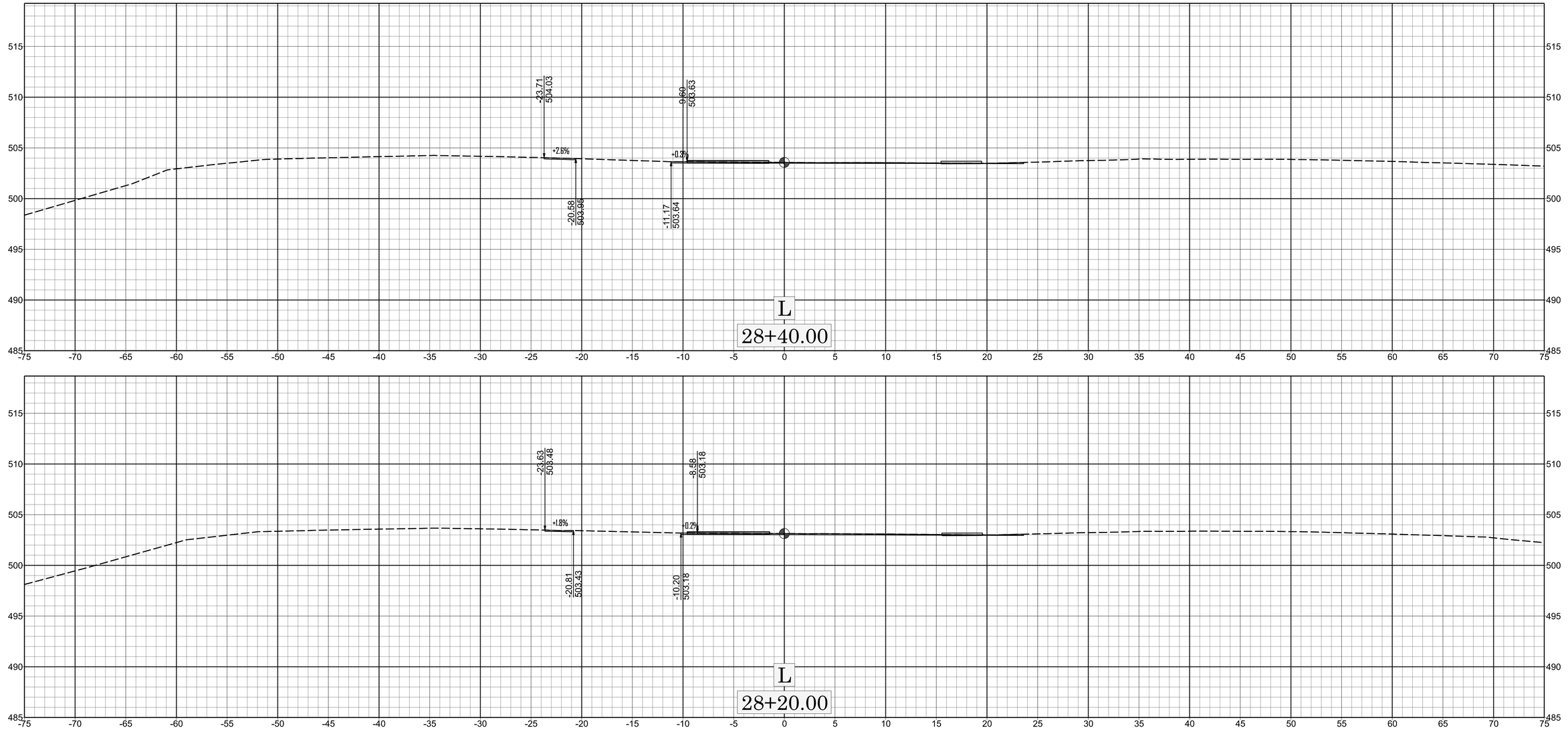


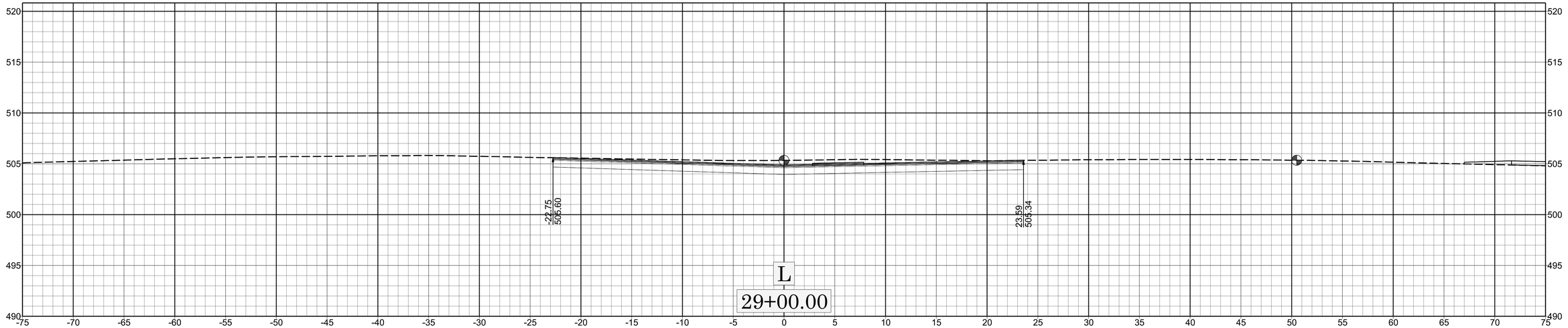
0 5 10

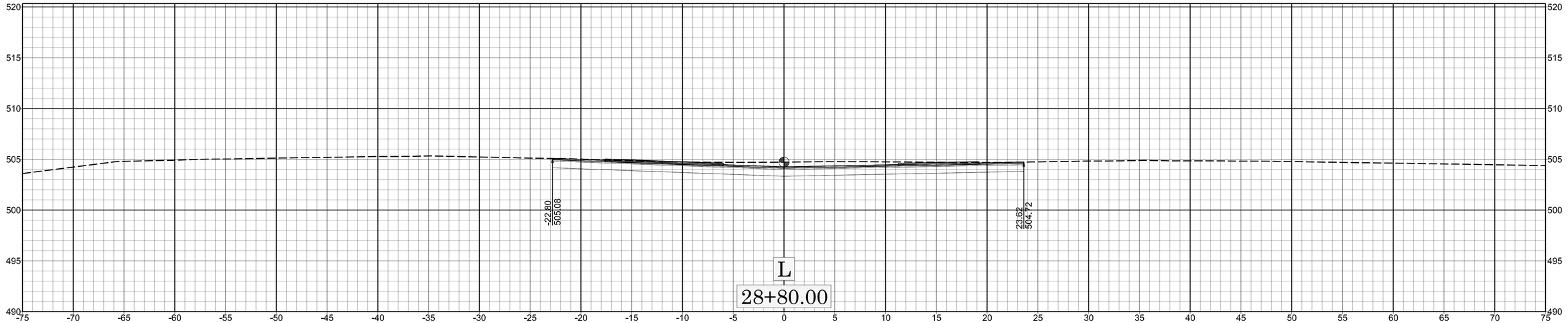
X

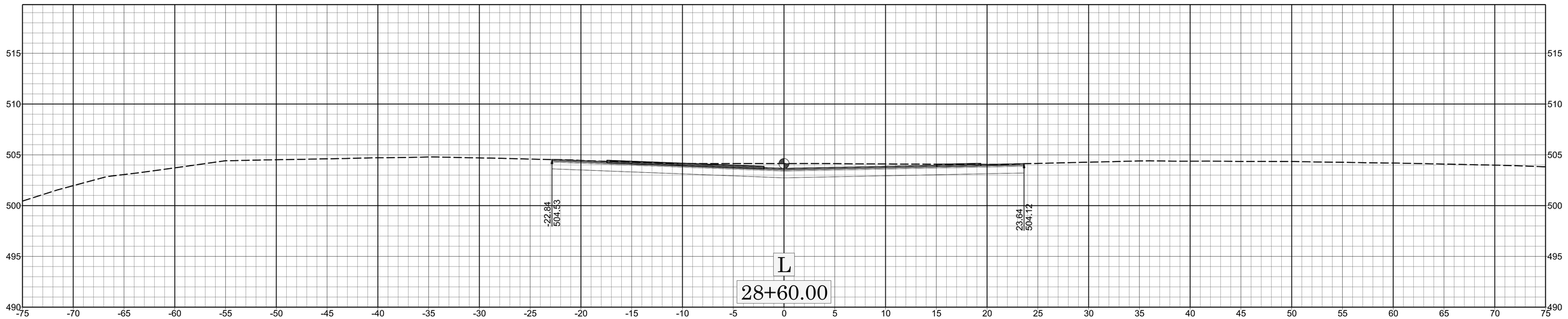
X-047

W-58088


515
510
505
500
495
490
485
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
-23.71
504.03
+2.6%
-20.58
503.86
-9.69
503.63
+0.3%
-11.17
503.64
L
28+40.00
-23.63
503.48
+1.8%
-20.81
503.43
-8.58
503.18
+0.2%
-10.20
503.18
L
28+20.00
0
5
10
X-048
W-5808B



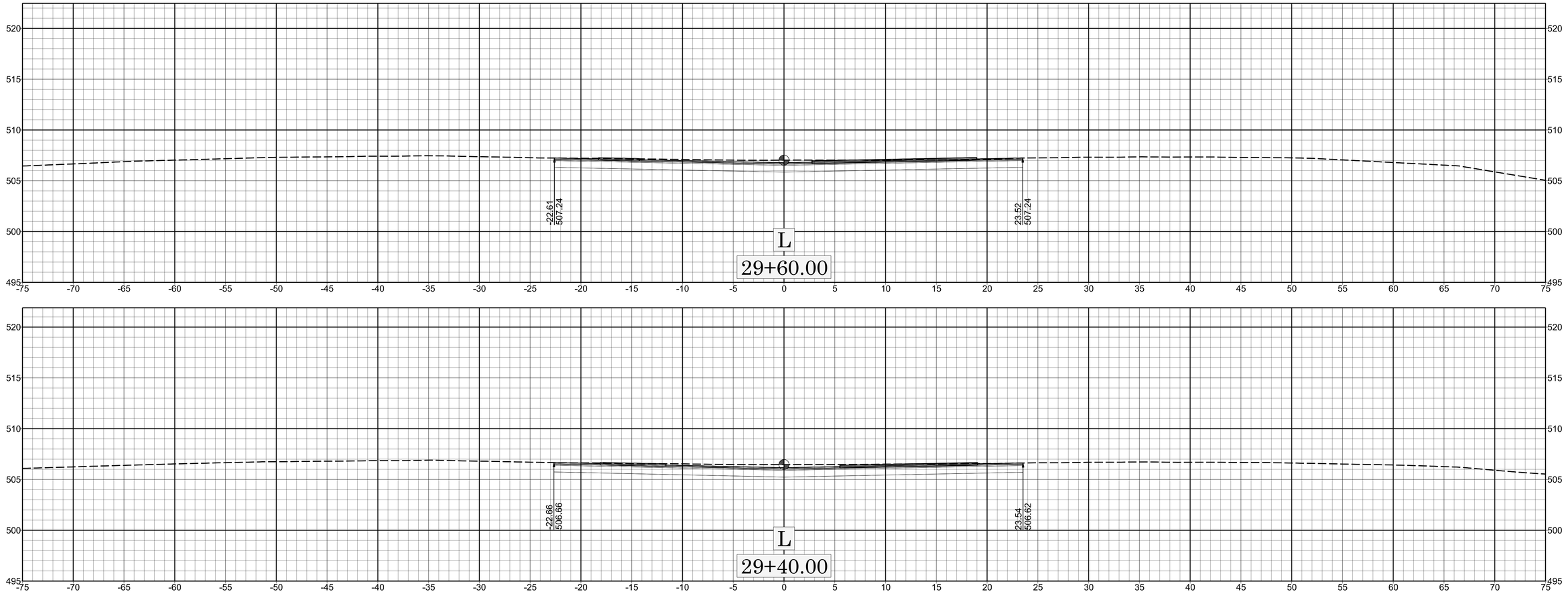




X-049

X

W-5808B

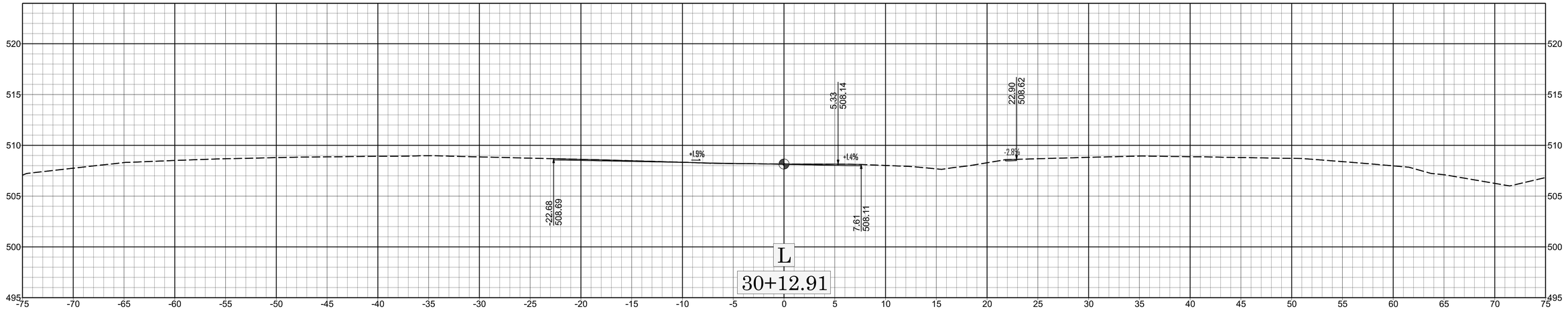


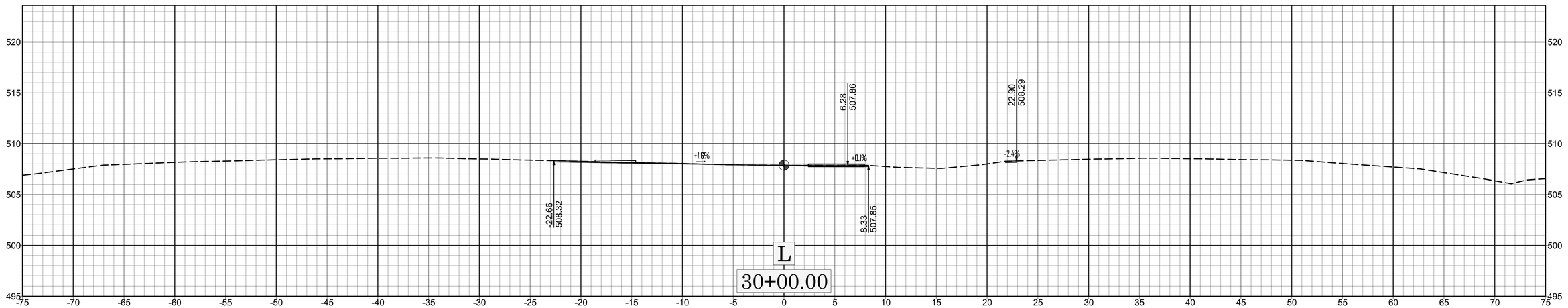
0 5 10

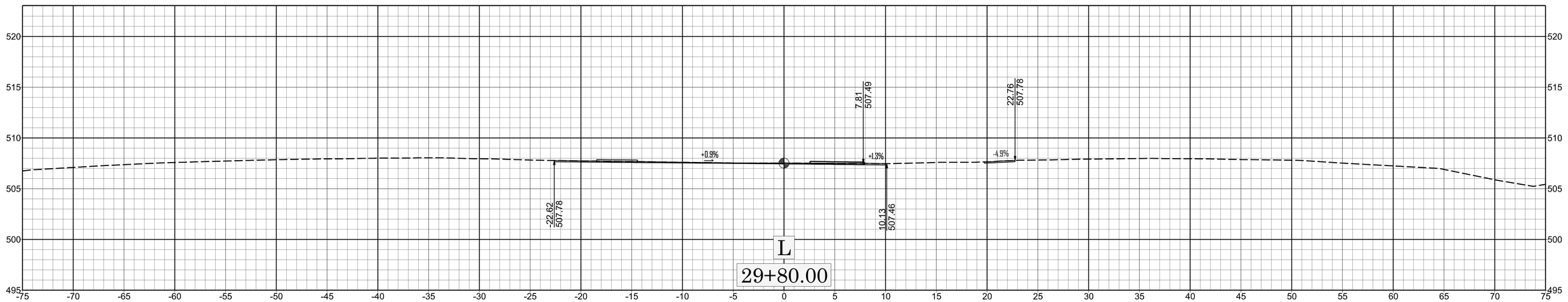
X-050

X

W-5808B



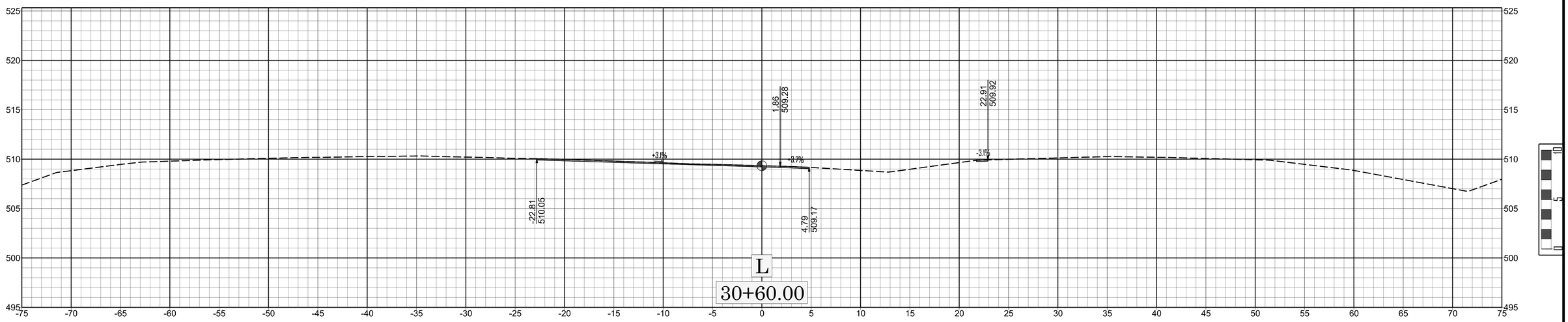


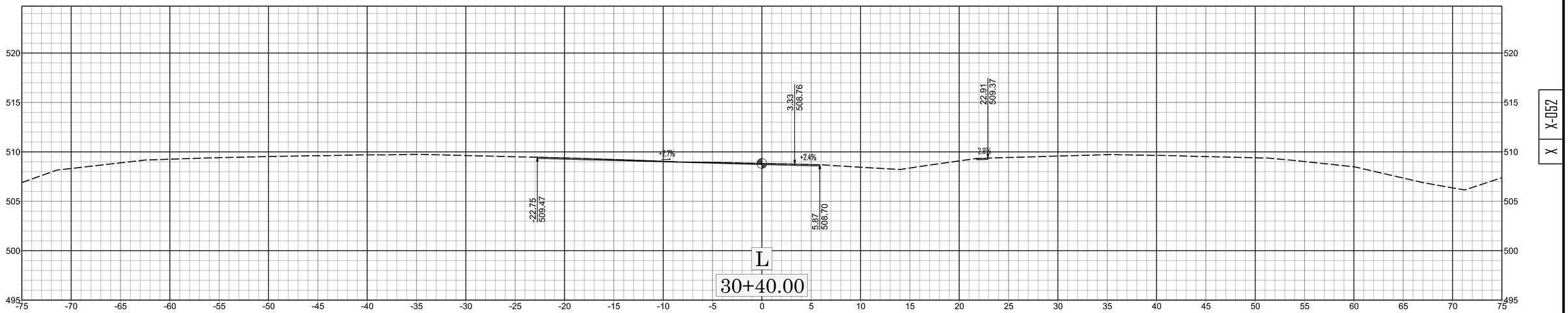


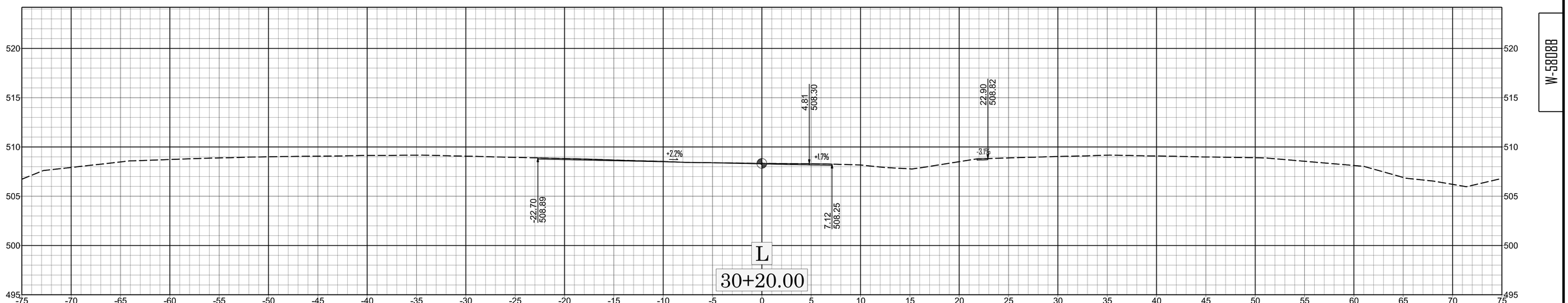
X-051

X

W-5808B


525
520
515
510
505
500
495
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
1.86
509.28
22.91
509.92
+3.1%
+3.7%
-3.1%
-22.81
510.05
4.79
509.17
L
30+60.00

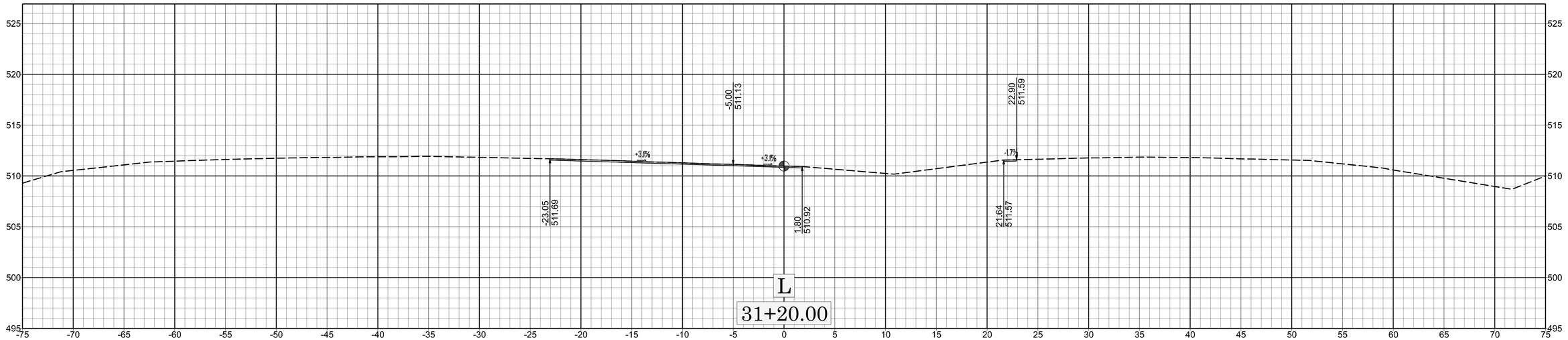

520
515
510
505
500
495
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
3.33
508.76
22.91
509.37
+2.7%
+2.4%
2.9%
-22.75
509.47
5.87
508.70
L
30+40.00

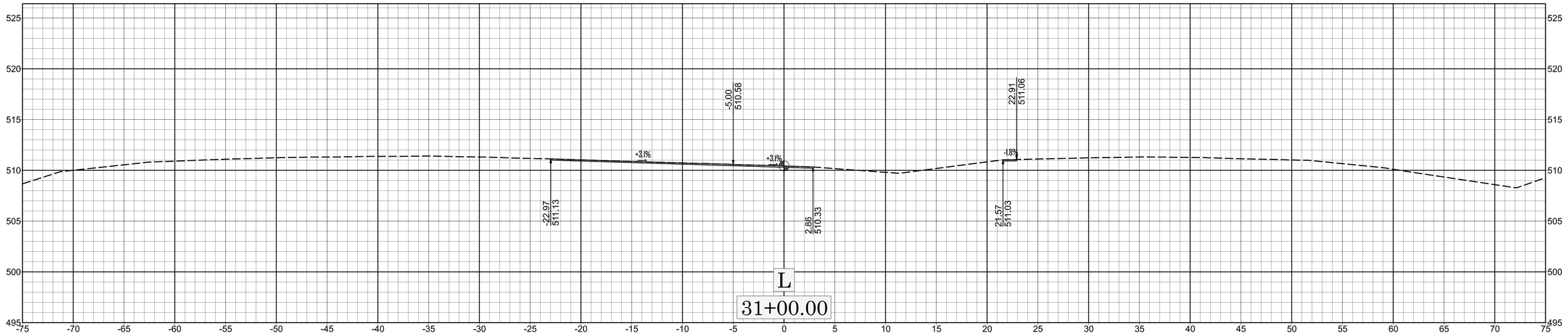

520
515
510
505
500
495
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
4.81
508.30
22.90
508.82
+2.2%
+1.7%
-3.1%
-22.70
508.89
7.12
508.25
L
30+20.00

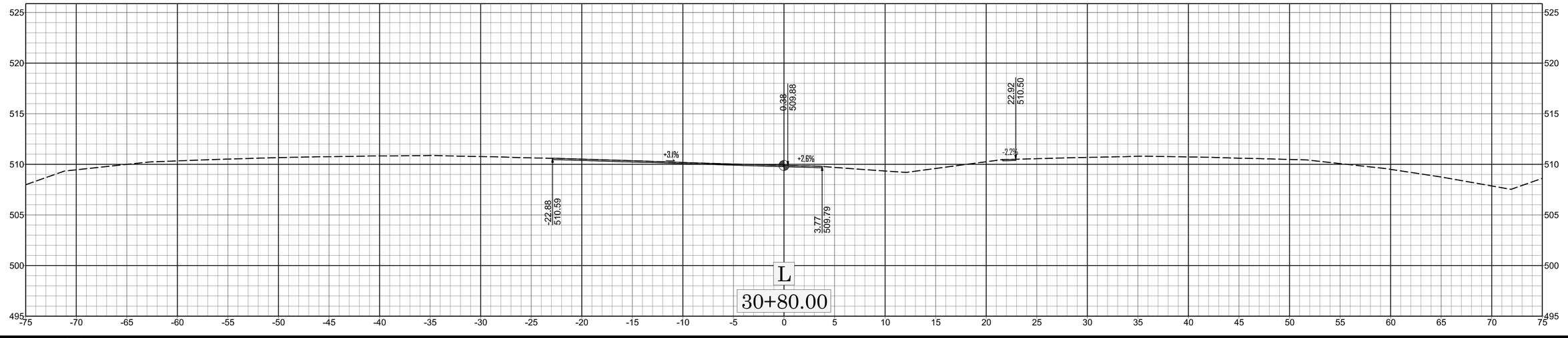
0
5
10

X-052

W-580BB

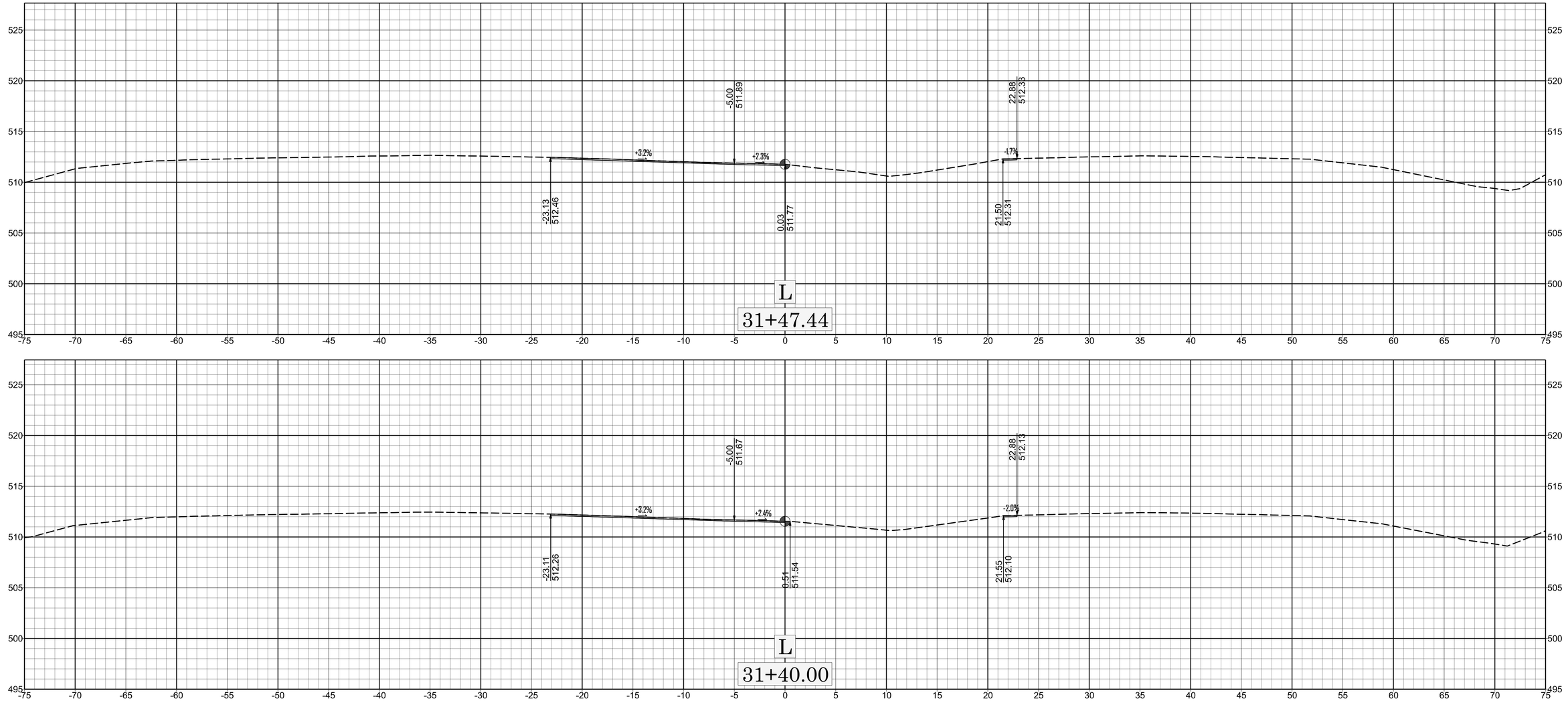

-5.00
511.13
22.90
511.59
+3.1%
+3.1%
-1.7%
-23.05
511.69
1.80
510.92
21.64
511.57
L
31+20.00


-5.00
510.58
22.91
511.06
+3.1%
+3.1%
-1.8%
-22.97
511.13
2.86
510.33
21.57
511.03
L
31+00.00


0.38
509.88
22.92
510.50
+3.1%
+2.6%
-2.2%
-22.88
510.59
3.77
509.79
L
30+80.00

X-053

W-5808B

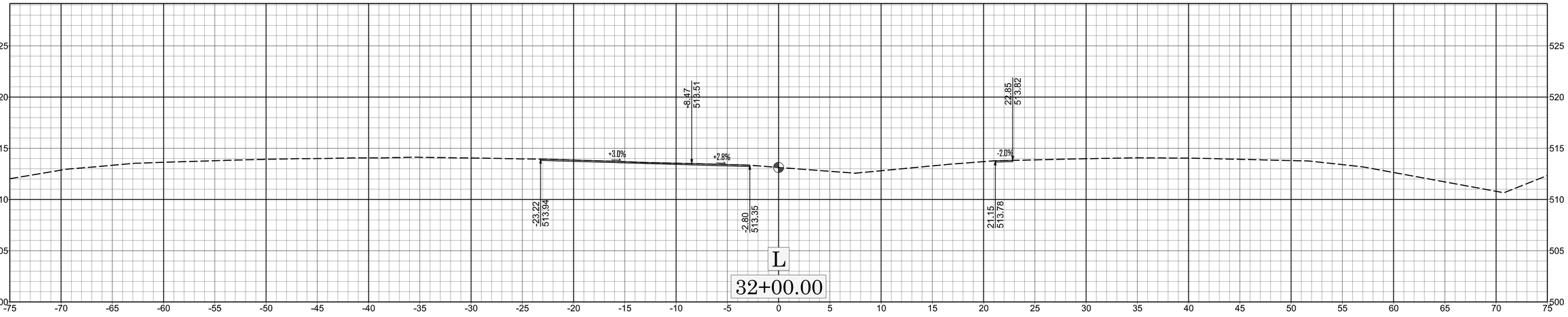


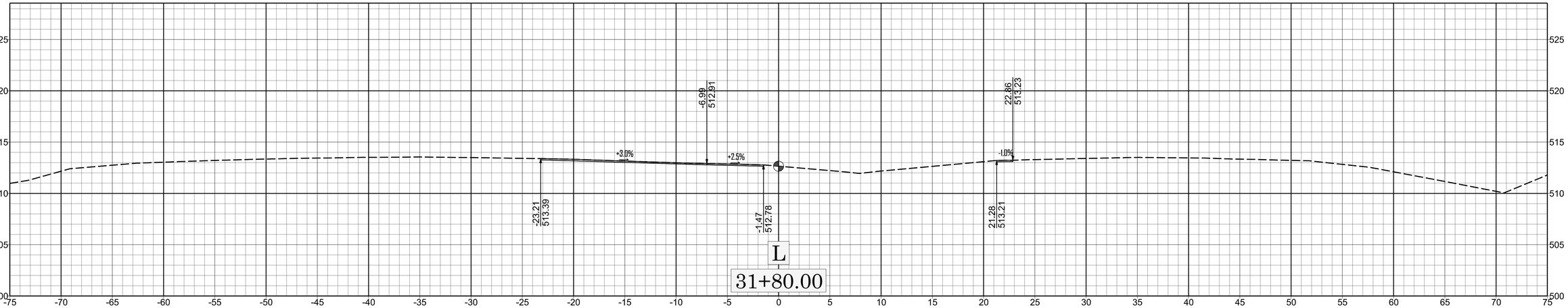
0 5 10

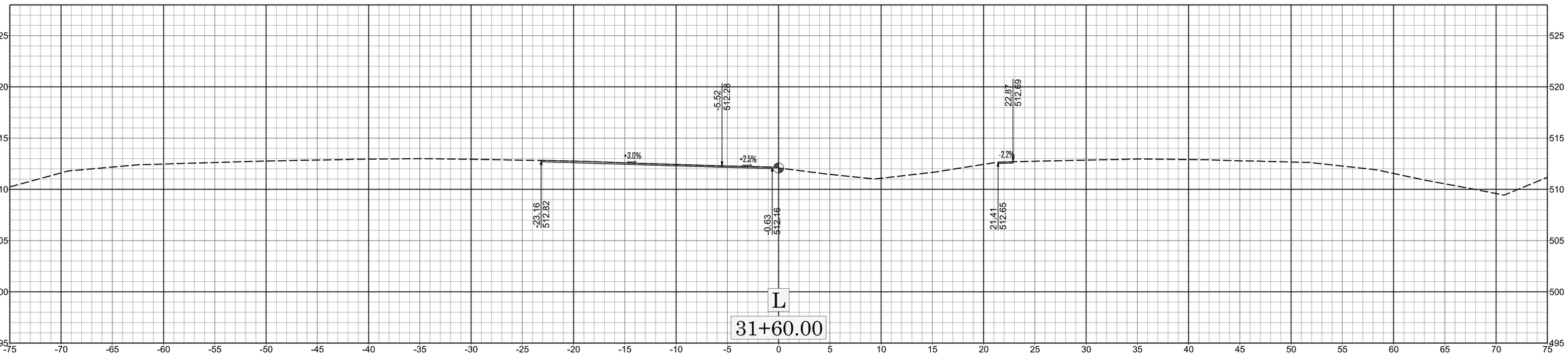
X-054

X

W-5808B

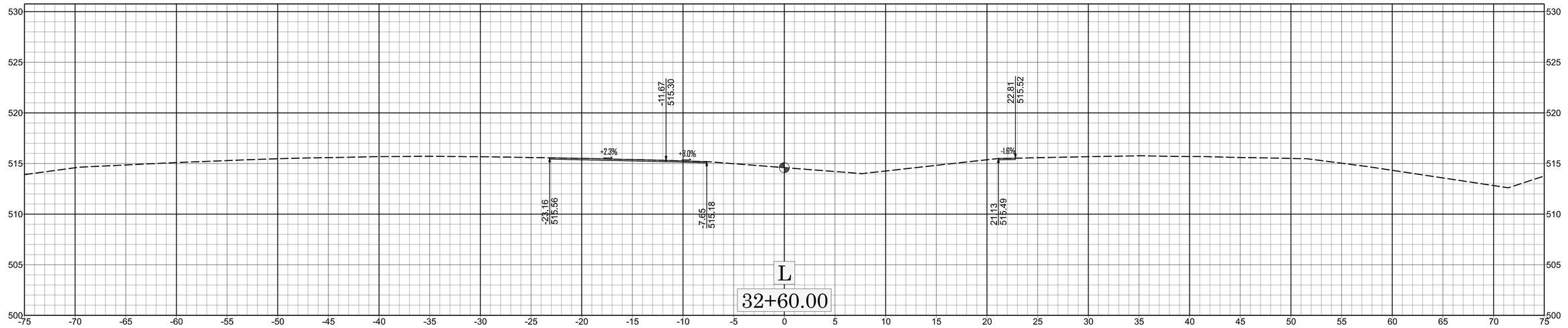

-8.47
513.51
22.85
513.82
+3.0%
+2.8%
-2.0%
-23.22
513.94
-2.80
513.35
21.15
513.78
L
32+00.00

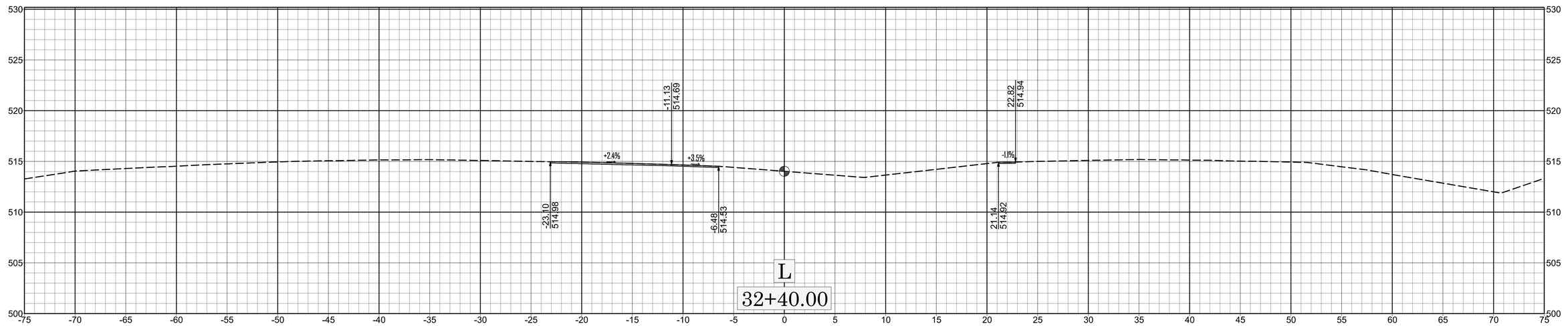

-6.99
512.91
22.86
513.23
+3.0%
+2.5%
-1.0%
-23.21
513.39
-1.47
512.78
21.28
513.21
L
31+80.00

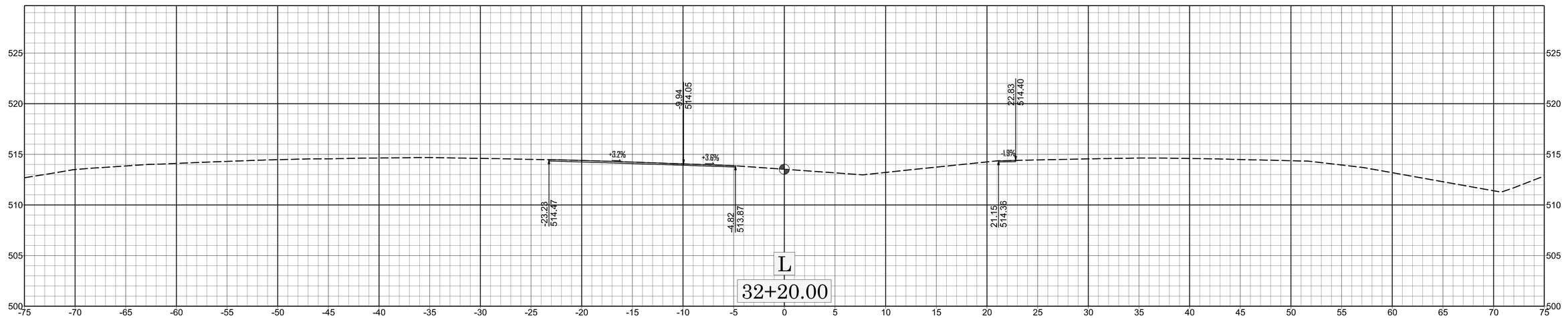

-5.52
512.28
22.87
512.69
+3.0%
+2.5%
-2.2%
-23.16
512.82
-0.63
512.16
21.41
512.65
L
31+60.00

X-055

W-5808B



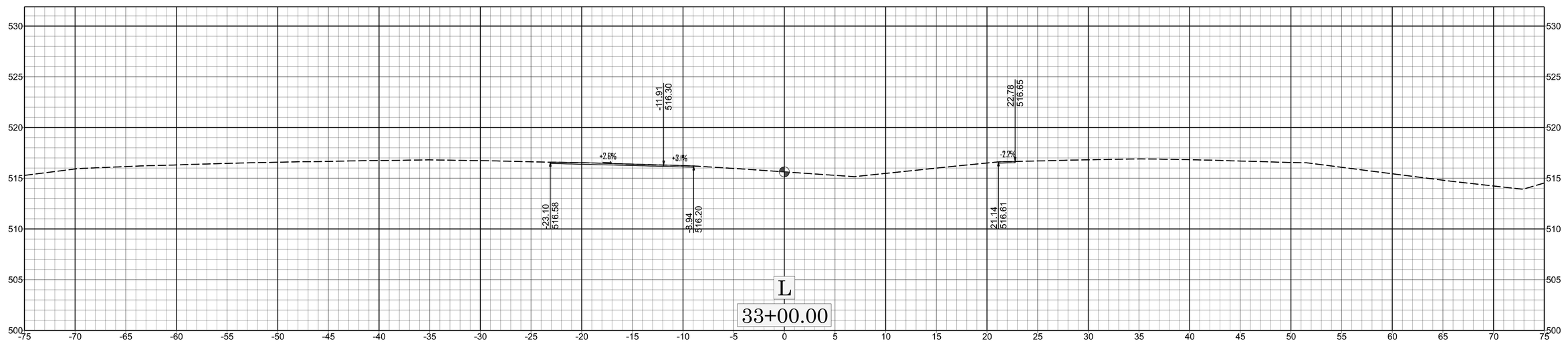


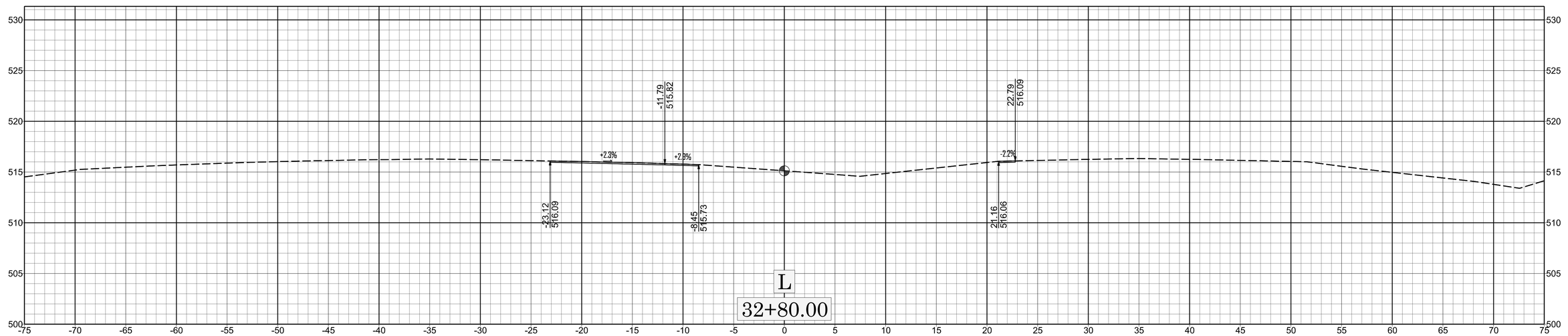


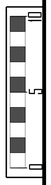
X-056

X

W-58088



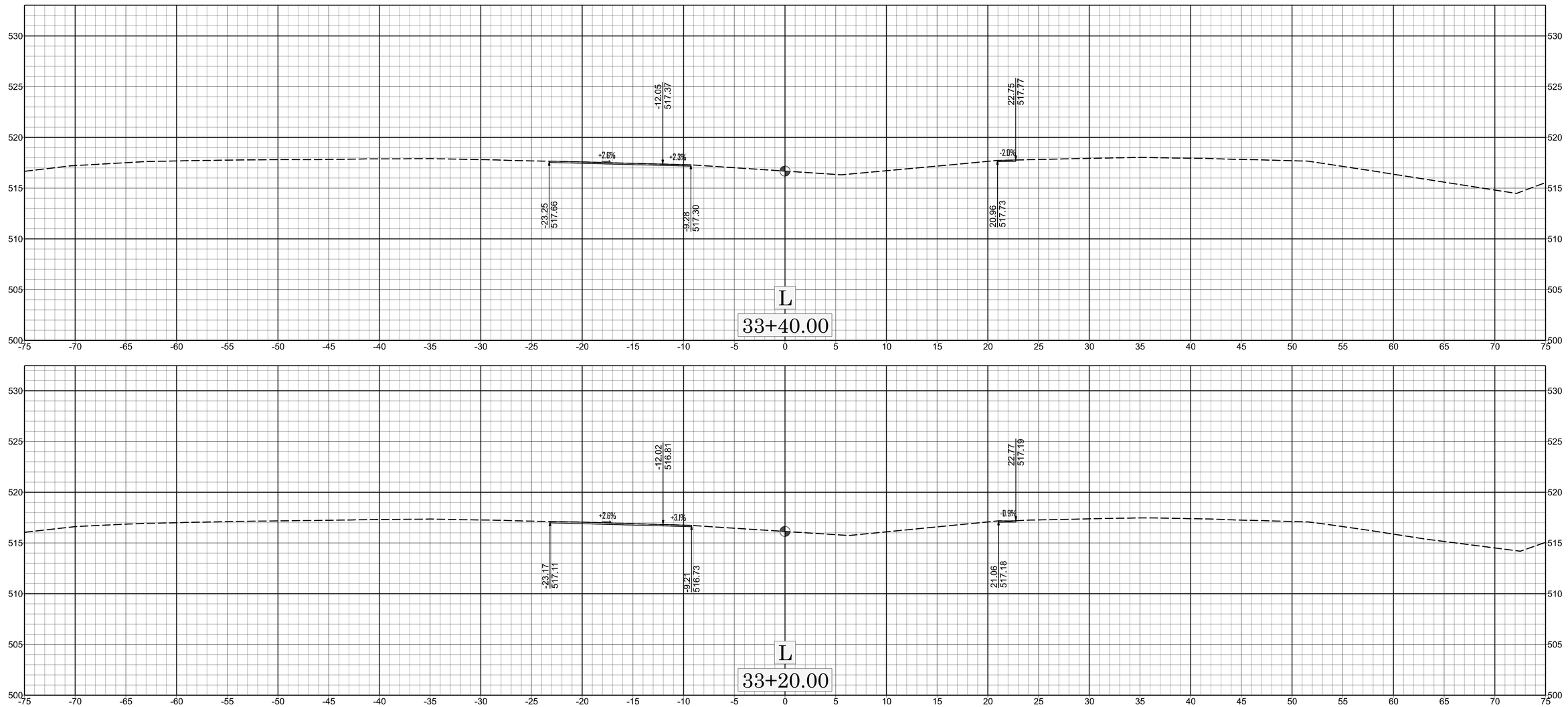




X-057

X

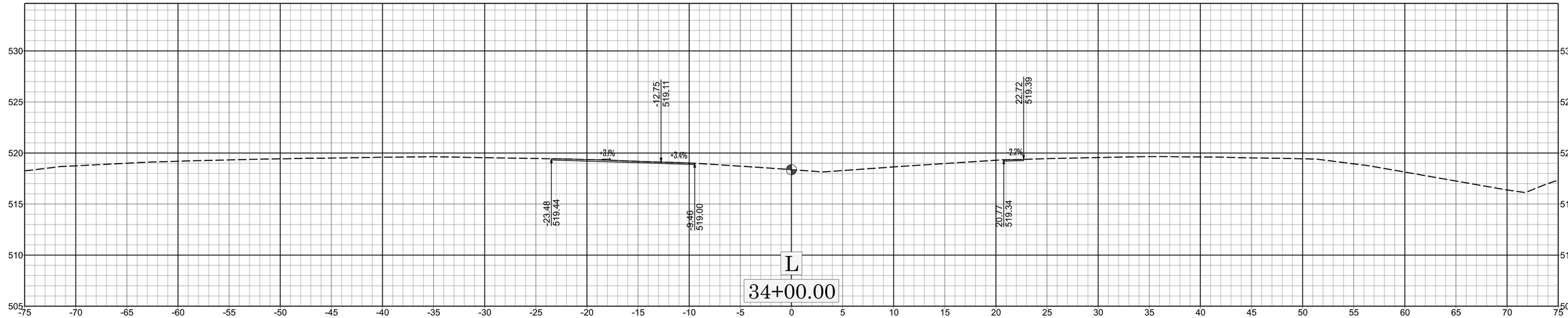
W-58088

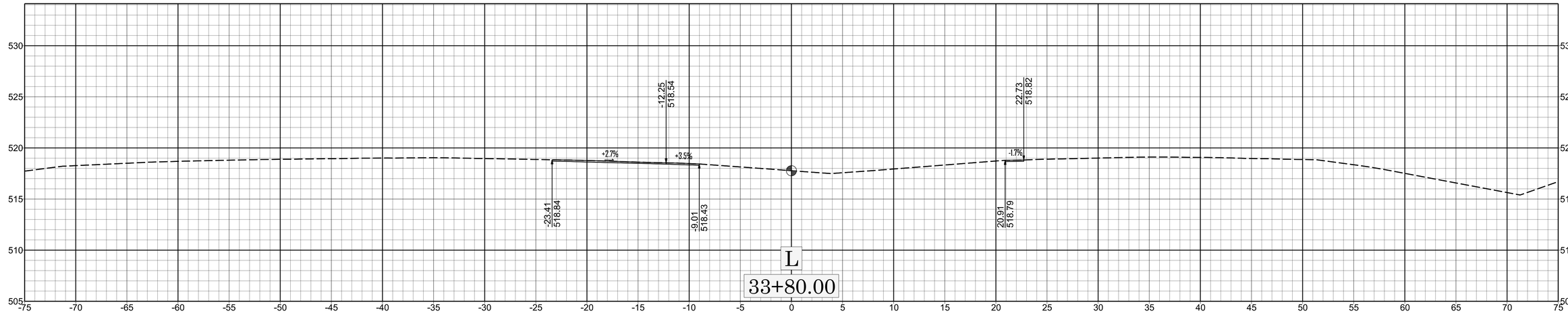


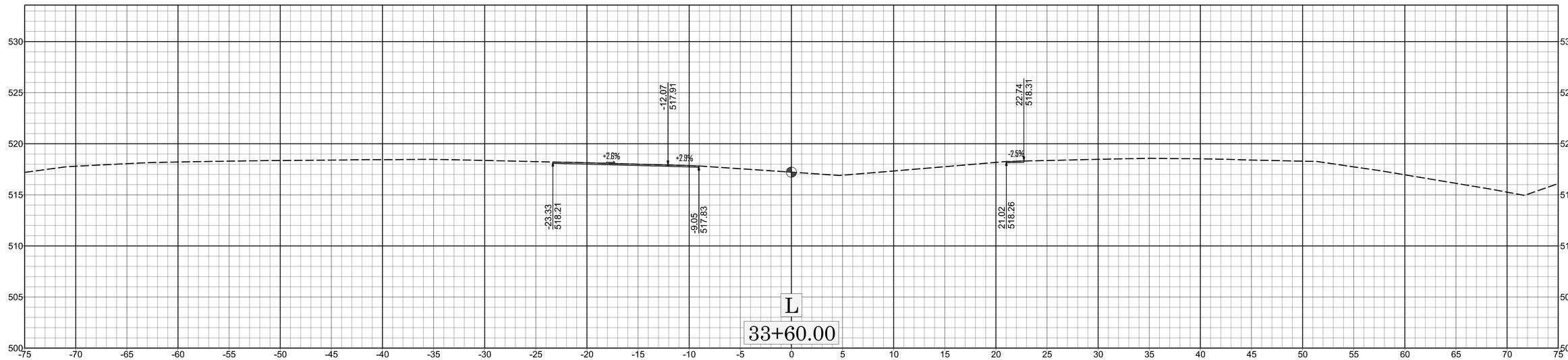
X-058

X

W-5808B



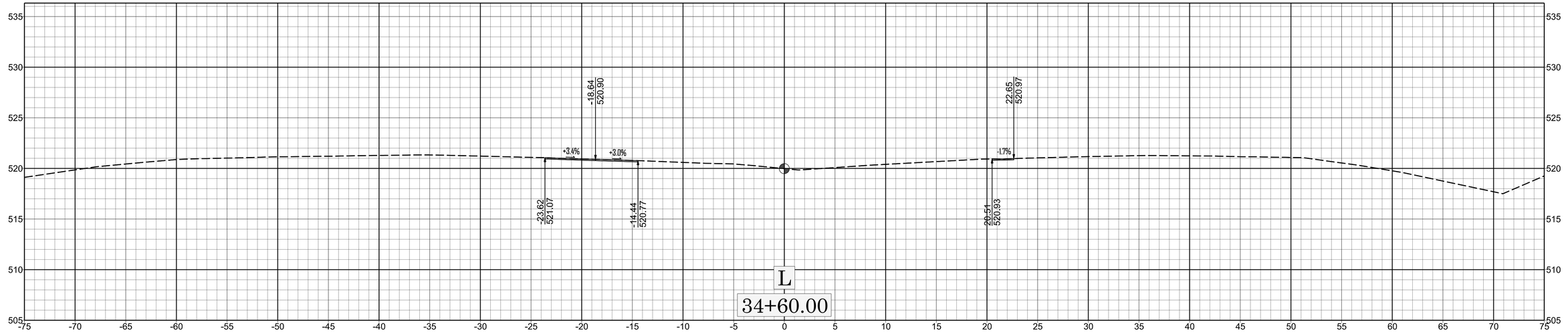


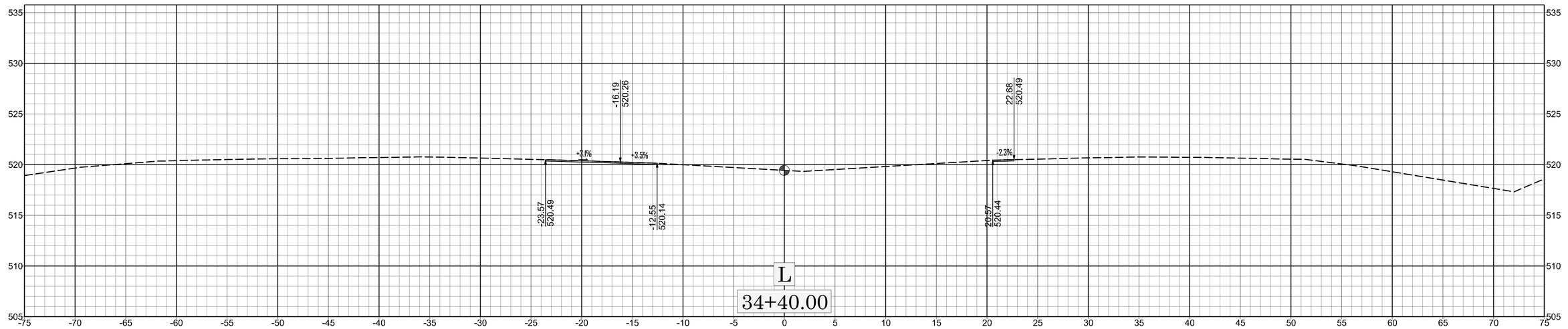


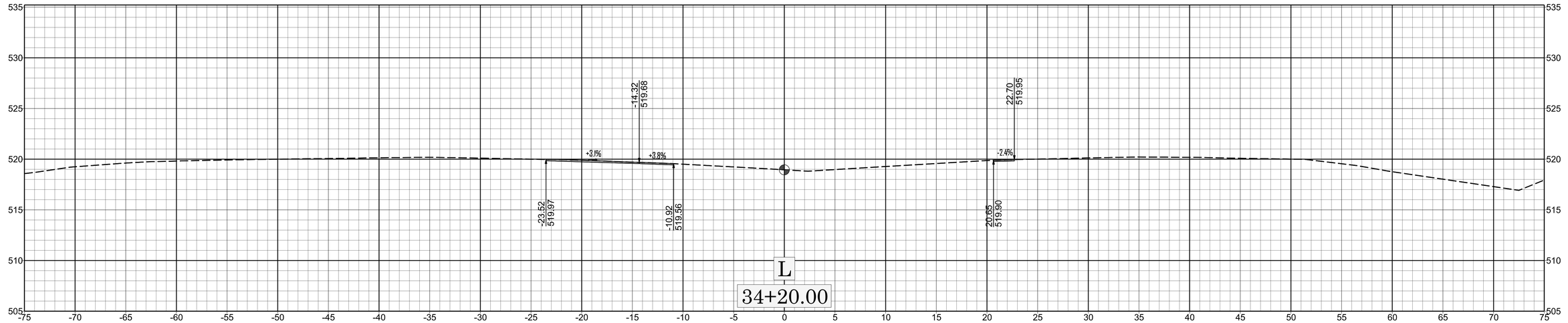
X-059

W-5808B

DOT/mtrotter - 4/11/2025

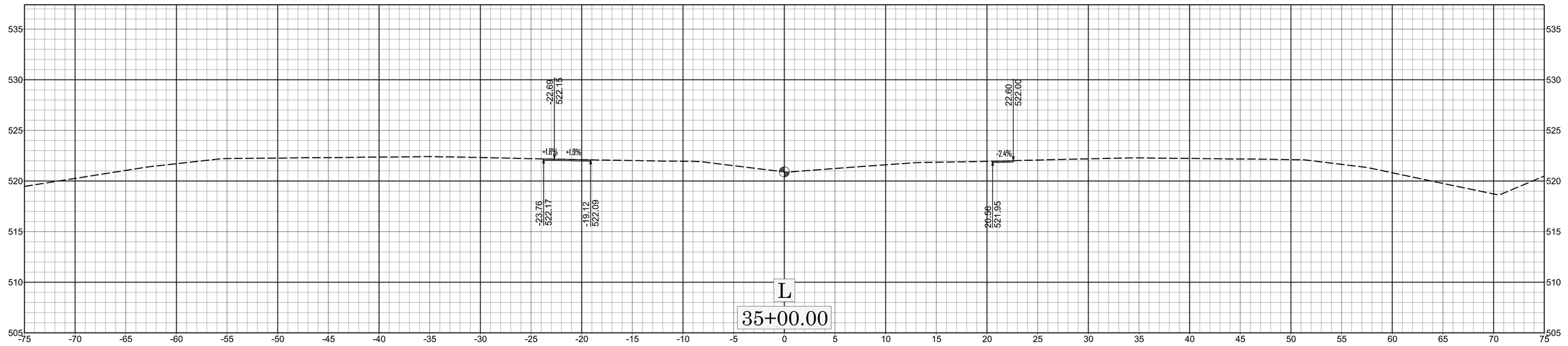

-18.64
520.90
22.65
520.97
+3.4%
+3.0%
-1.7%
-23.62
521.07
-14.44
520.77
20.51
520.93
L
34+60.00

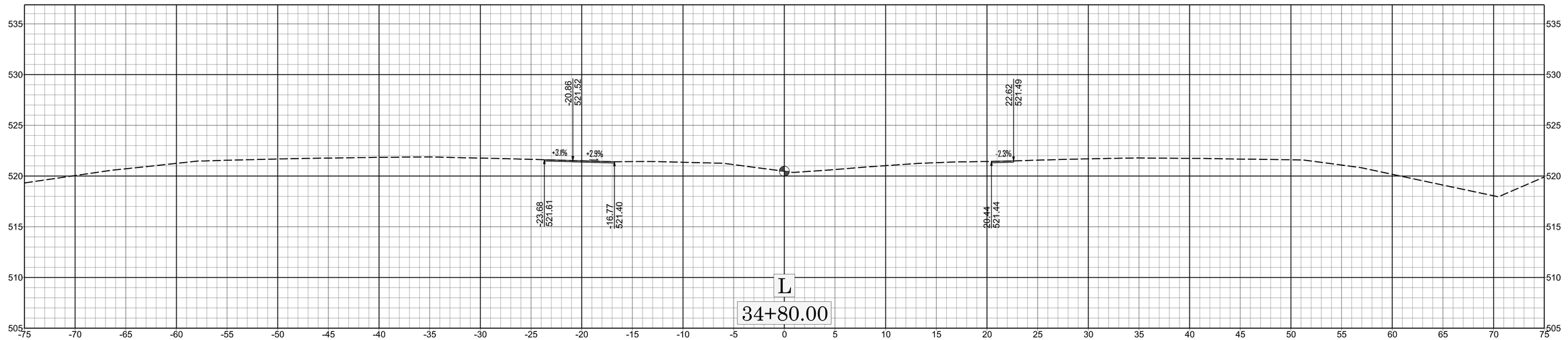

-16.19
520.26
22.68
520.49
+3.4%
+3.5%
-2.3%
-23.57
520.49
-12.55
520.14
20.57
520.44
L
34+40.00

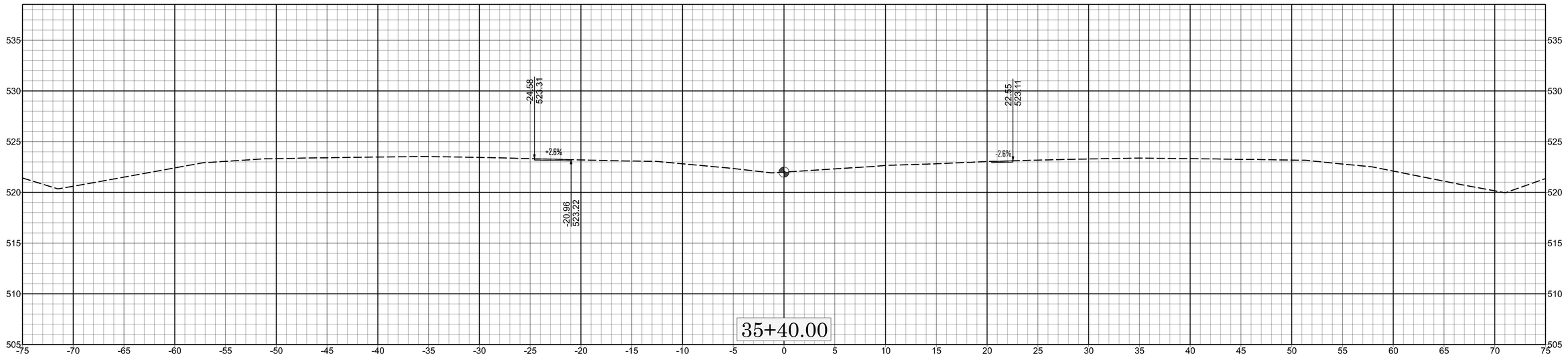

-14.32
519.68
22.70
519.95
+3.1%
+3.8%
-2.4%
-23.52
519.97
-10.92
519.56
20.65
519.90
L
34+20.00

X-060

W-5808B


535
530
525
520
515
510
505
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
-22.69
522.15
+1.8%
+1.9%
-23.76
522.17
-19.12
522.09
22.60
522.00
-2.4%
20.56
521.95
L
35+00.00


535
530
525
520
515
510
505
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
-20.86
521.52
+3.1%
+2.9%
-23.68
521.61
-16.77
521.40
22.62
521.49
-2.3%
20.44
521.44
L
34+80.00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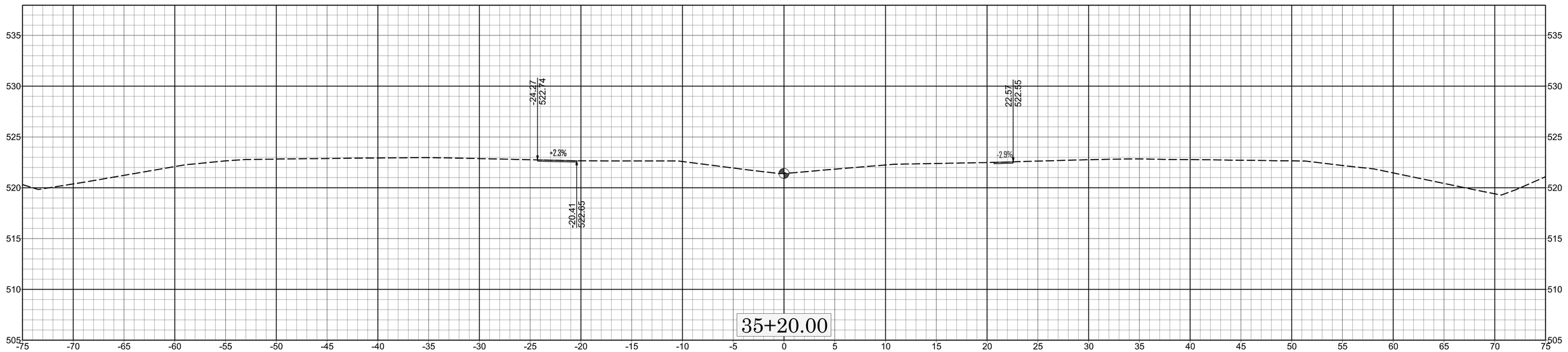
523.31
+2.6%
-20.96
523.22
22.55
523.11
-2.6%
35+40.00


-24.47
522.74
+2.3%
-20.41
522.65
22.57
522.55
-2.3%
35+20.00

X-062

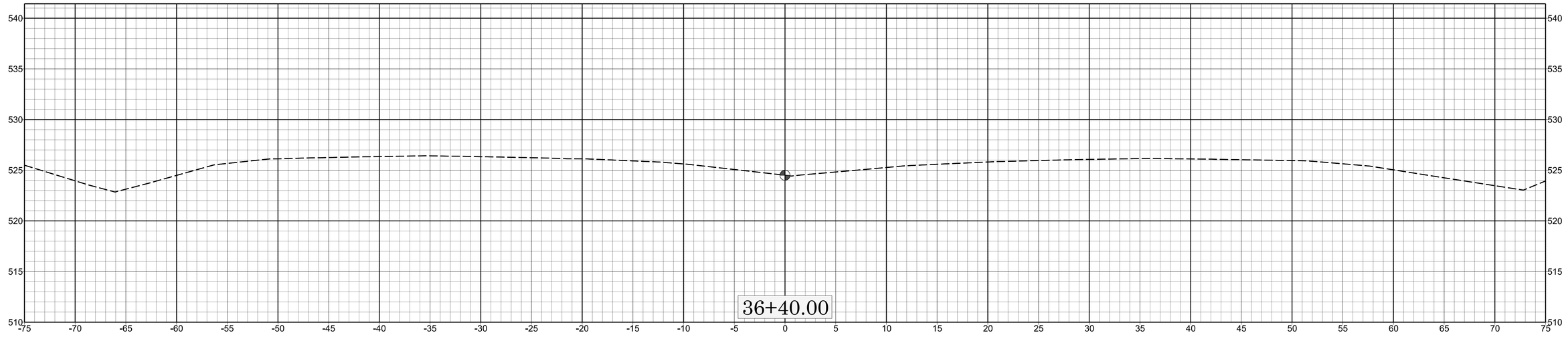
W-58088

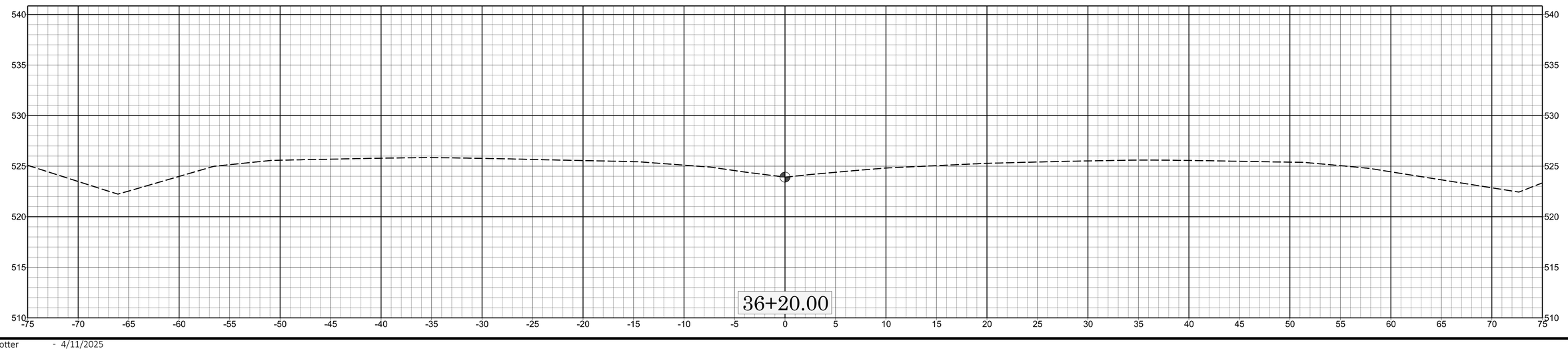
36+00.00
-24.45
525.08
+2.2%
-21.14
525.01
22.47
524.80
-3.1%
35+80.00
-24.43
524.32
+2.3%
-21.08
524.44
22.50
524.24
-2.4%
35+60.00
-24.50
523.92
+2.4%
-21.02
523.84
22.52
523.66
-2.4%
540
535
530
525
520
515
510
-75
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
0
5
10
X
X-0B3
W-5B08B

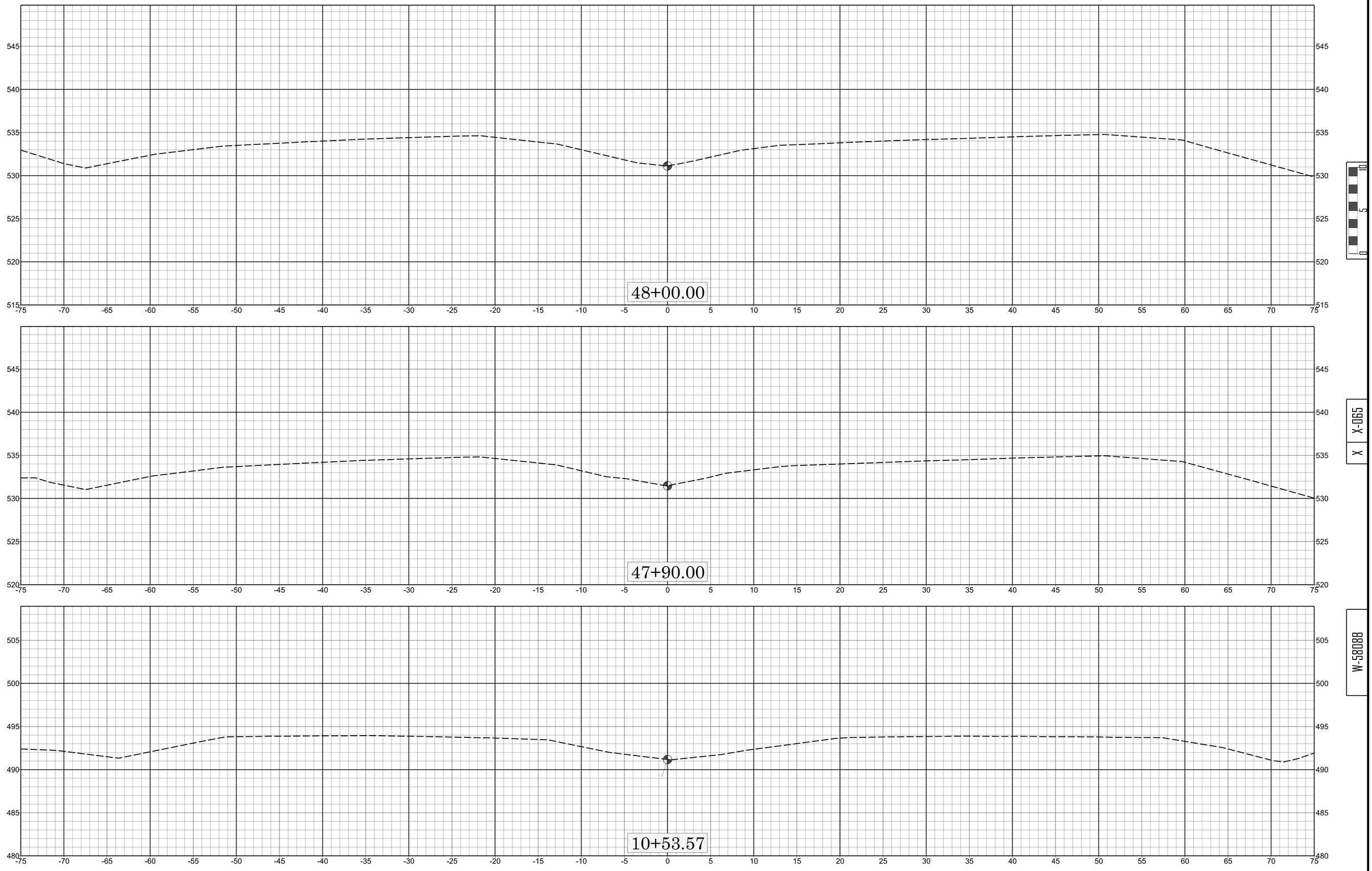
0 5 10

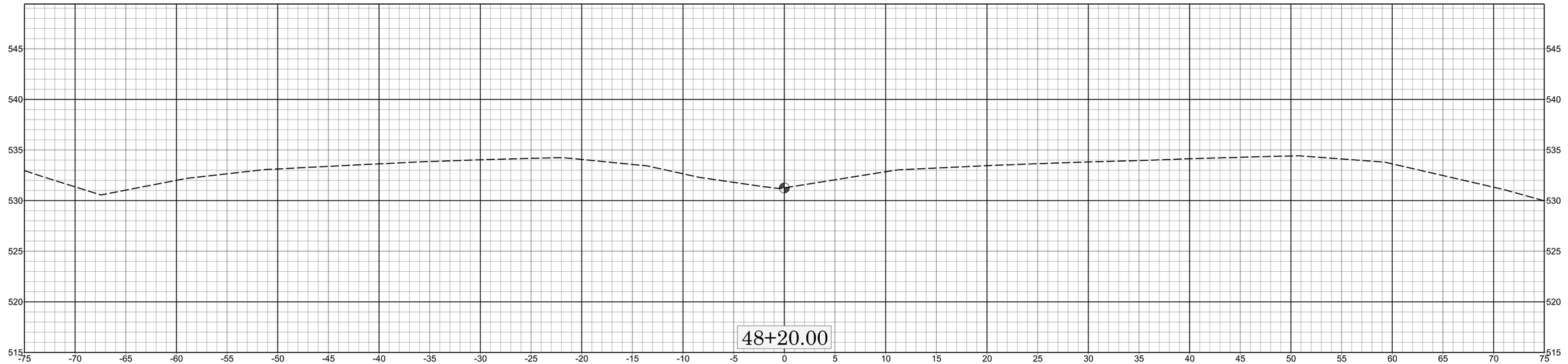
X X-064

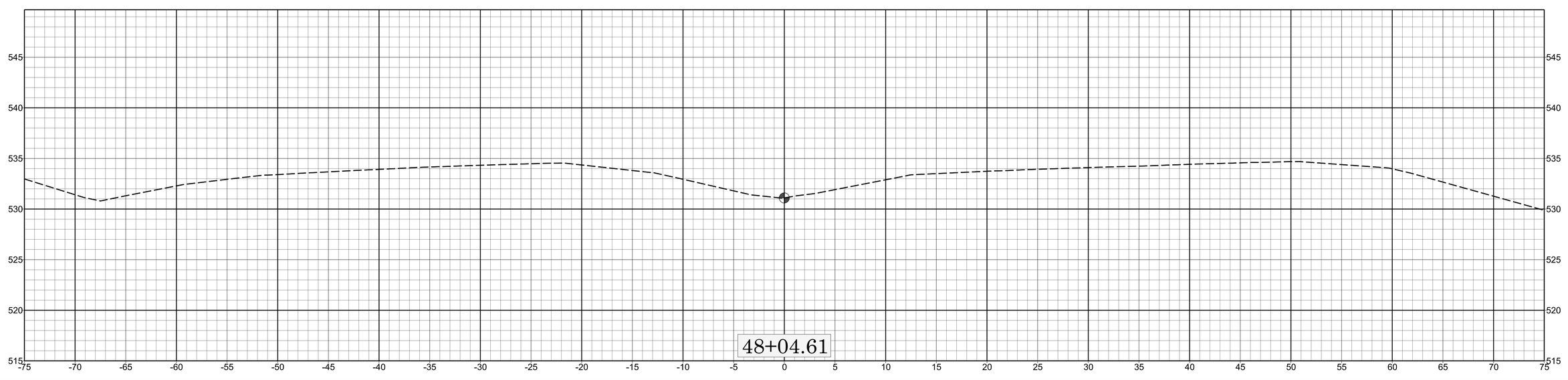
W-58088






48+00.00
47+90.00
10+53.57
X-065
X
W-5808B
0
5
10

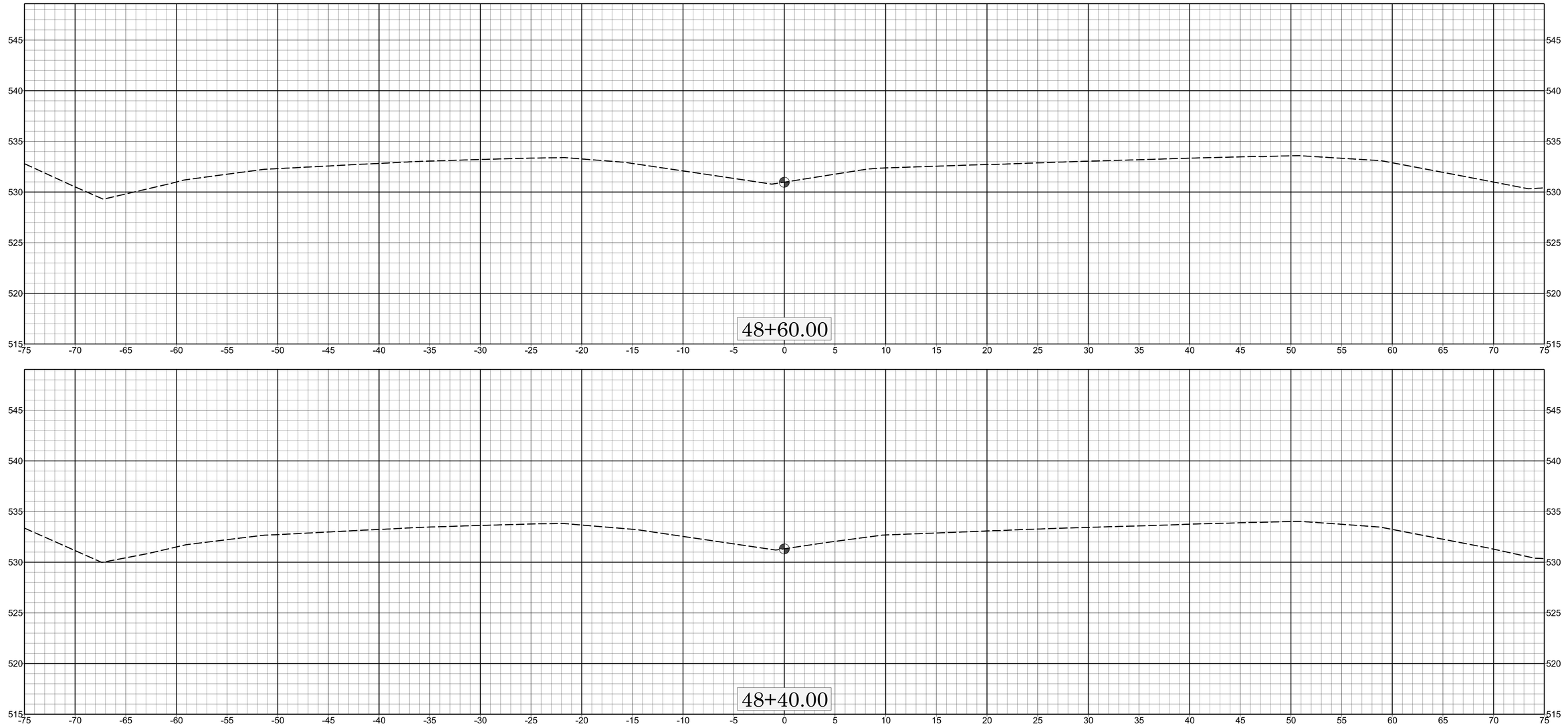


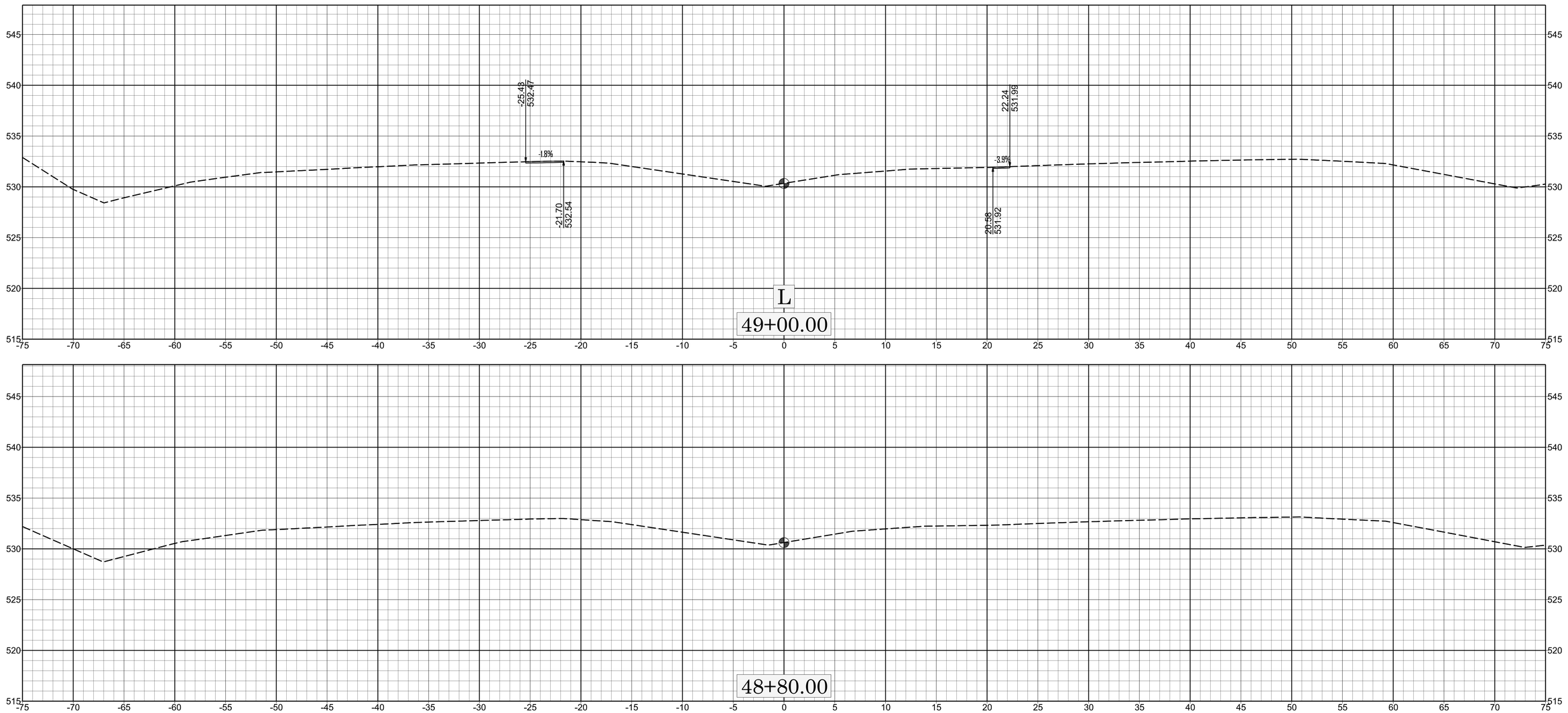


X-066

X

W-58088

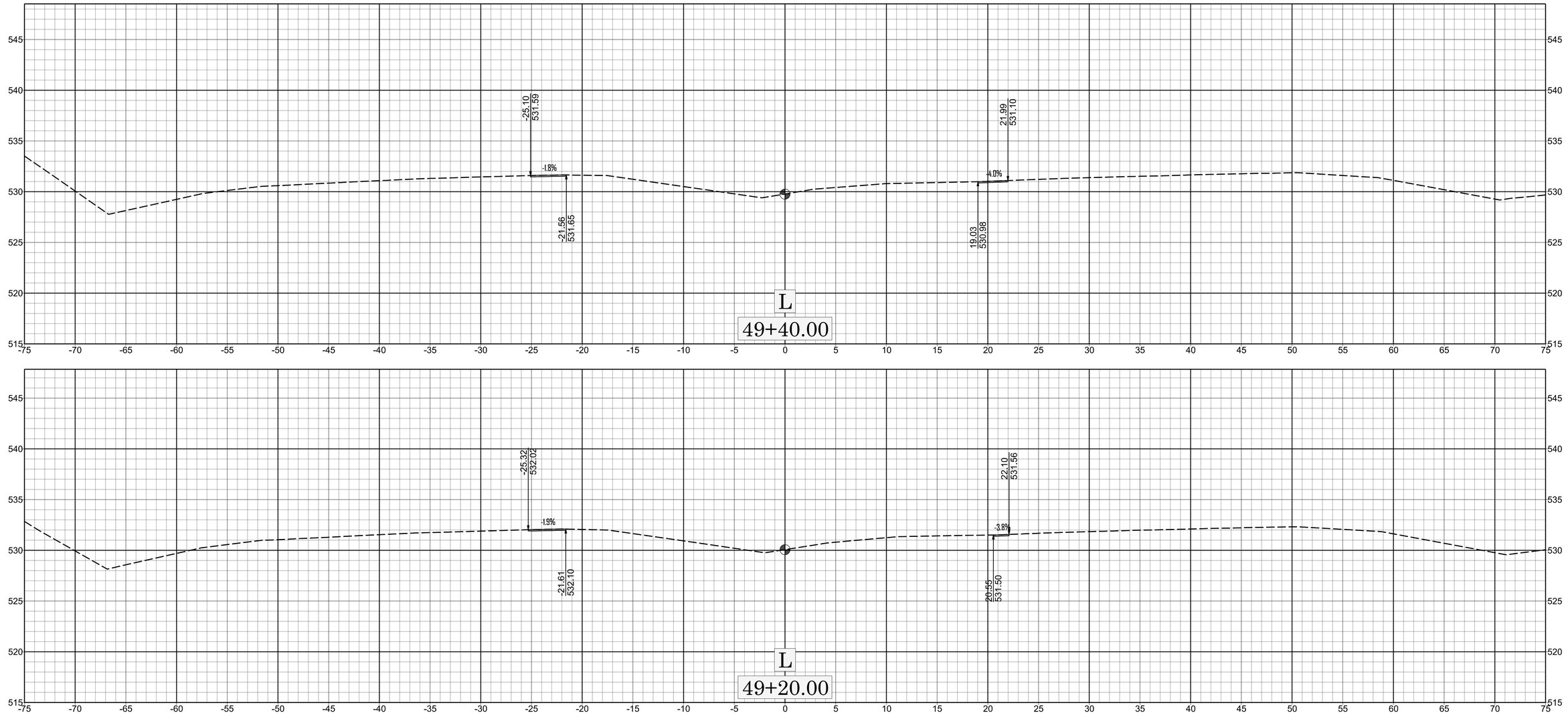

545
540
535
530
525
520
515
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
48+60.00
48+40.00
0
5
10
X
X-067
W-5808B



0 5 10

X X-068

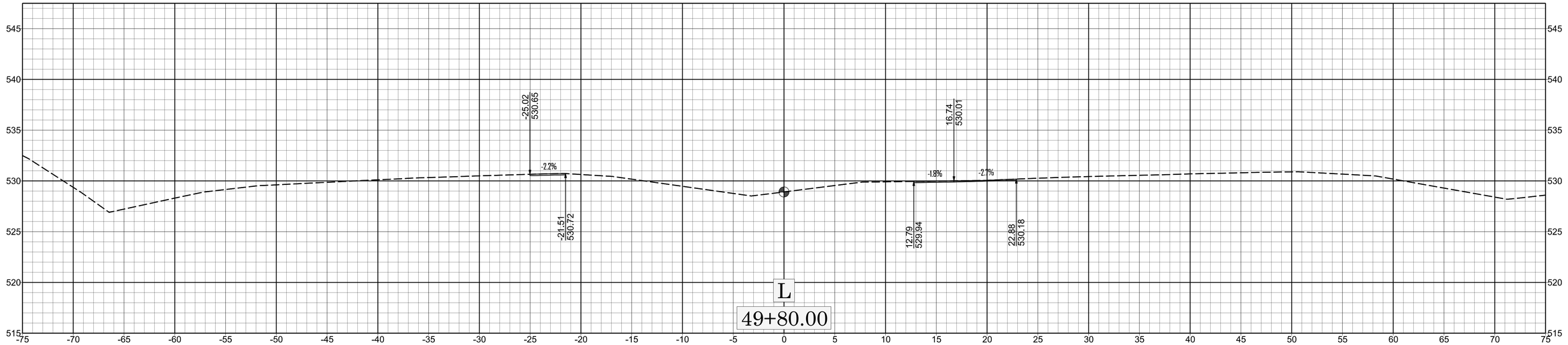
W-5808B

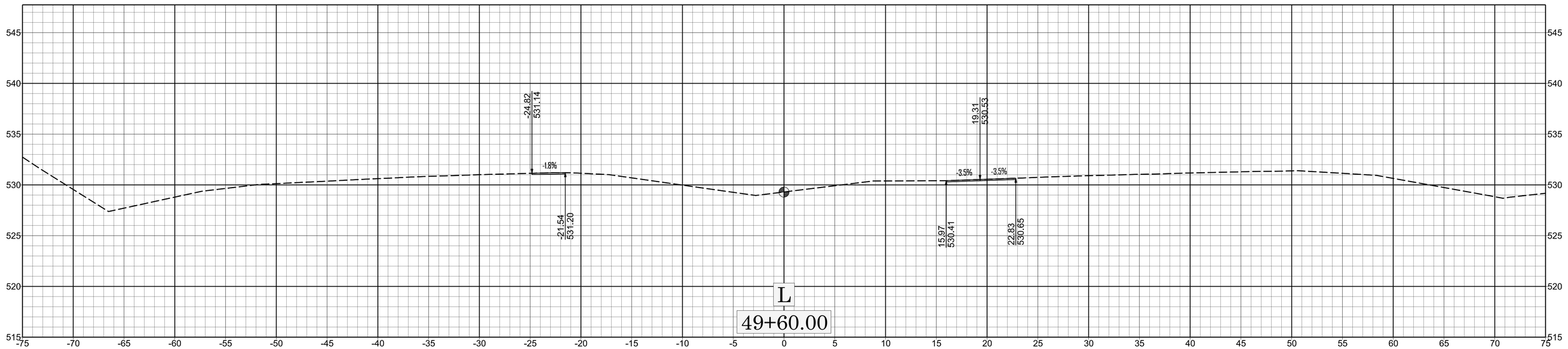


0 5 10

X X-069

W-580BB

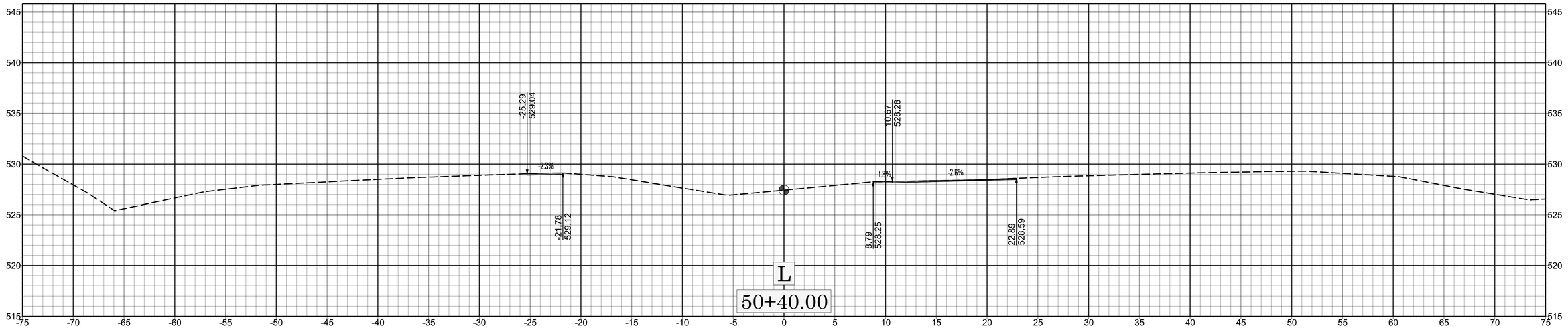


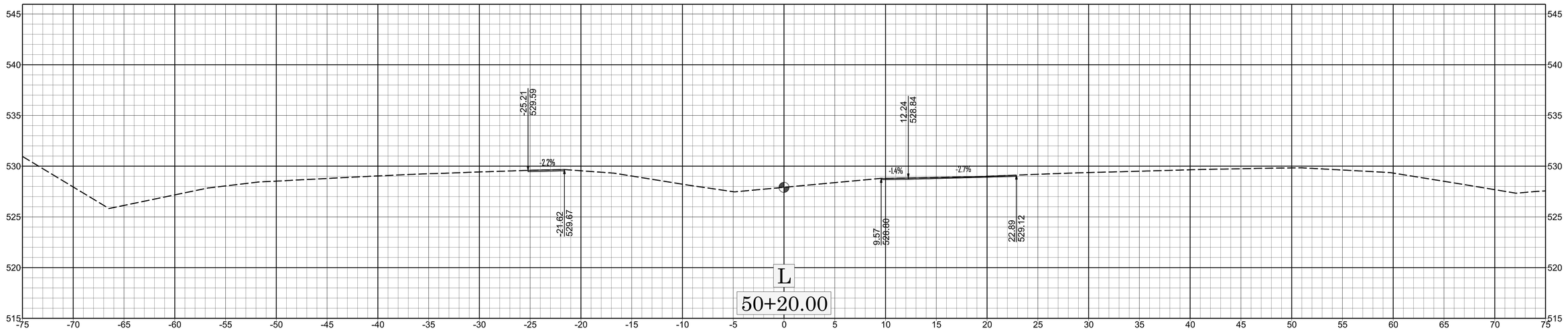


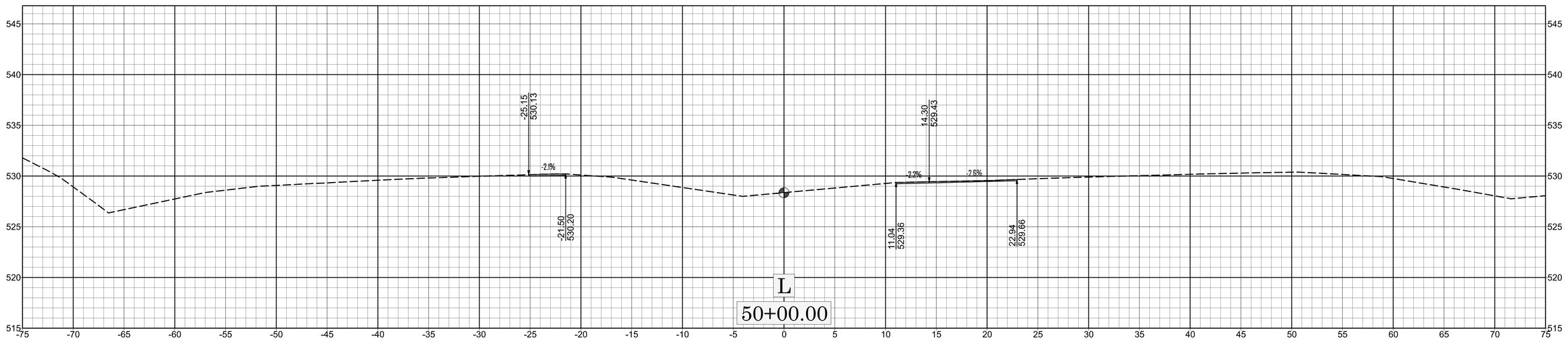
0 5 10

X | X-070

W-5808B

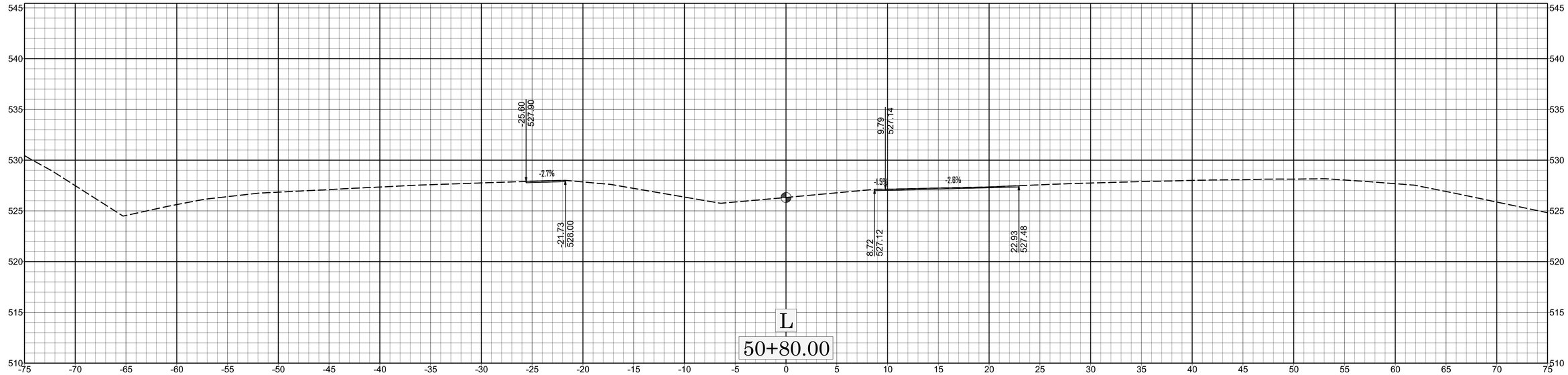

-25.29
529.04
-2.3%
-21.78
529.12
10.67
528.28
-1.8%
-2.6%
8.79
528.25
22.89
528.59
L
50+40.00

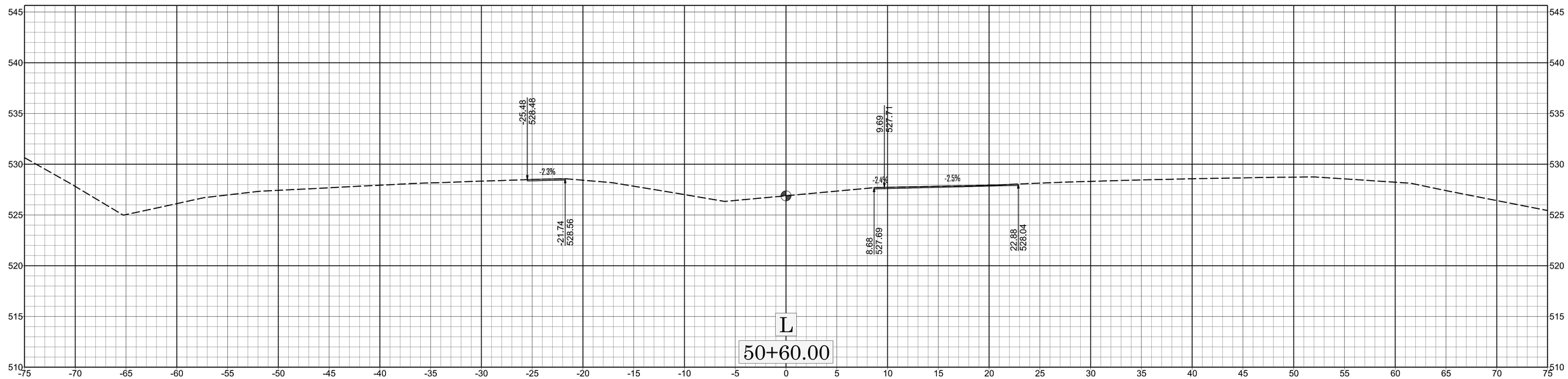

-25.21
529.59
-2.2%
-21.62
529.67
12.24
528.84
-1.4%
-2.7%
9.57
528.80
22.89
529.12
L
50+20.00


-25.15
530.13
-2.1%
-21.50
530.20
14.30
529.43
-2.7%
-2.6%
11.04
529.36
22.94
529.66
L
50+00.00

X-071

W-5808B



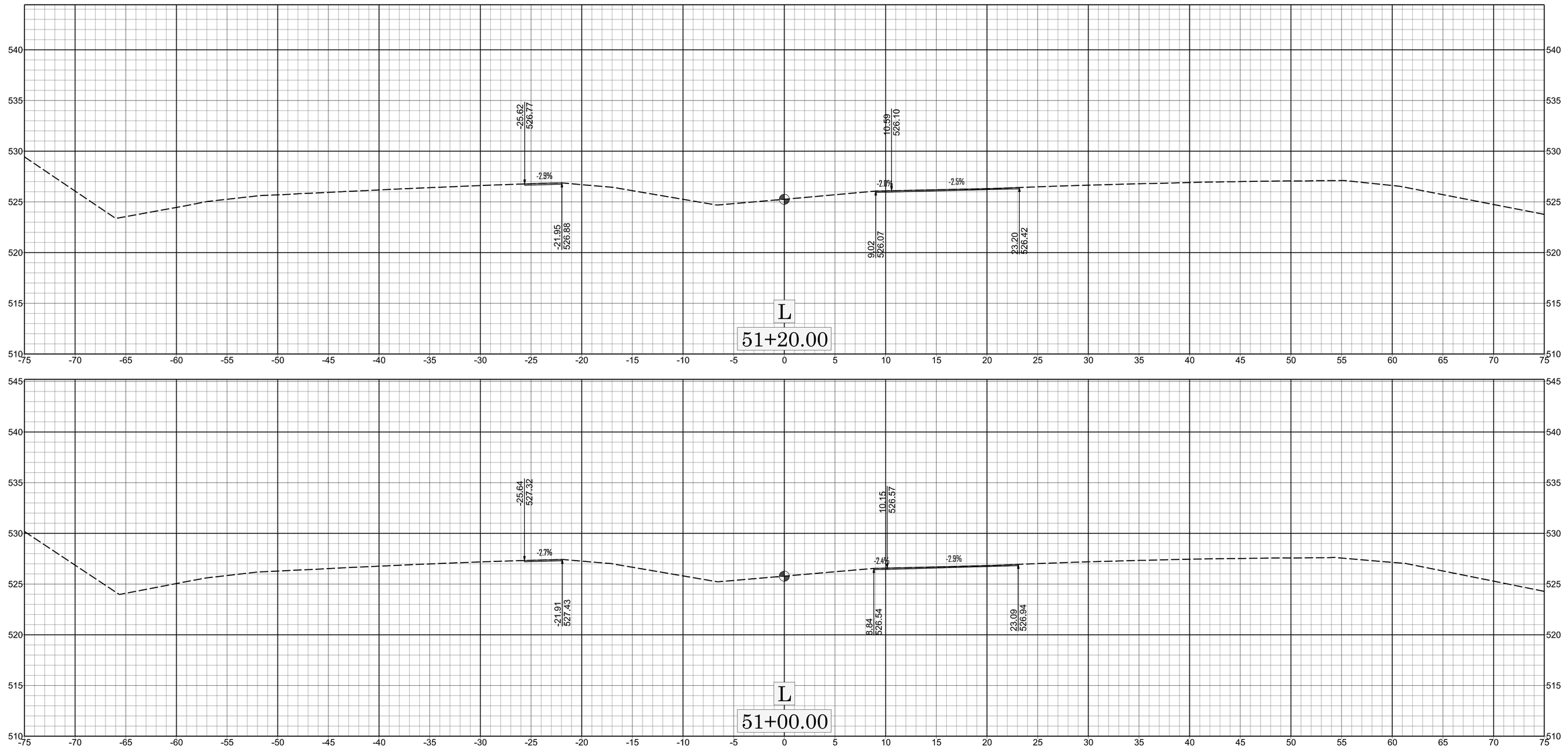


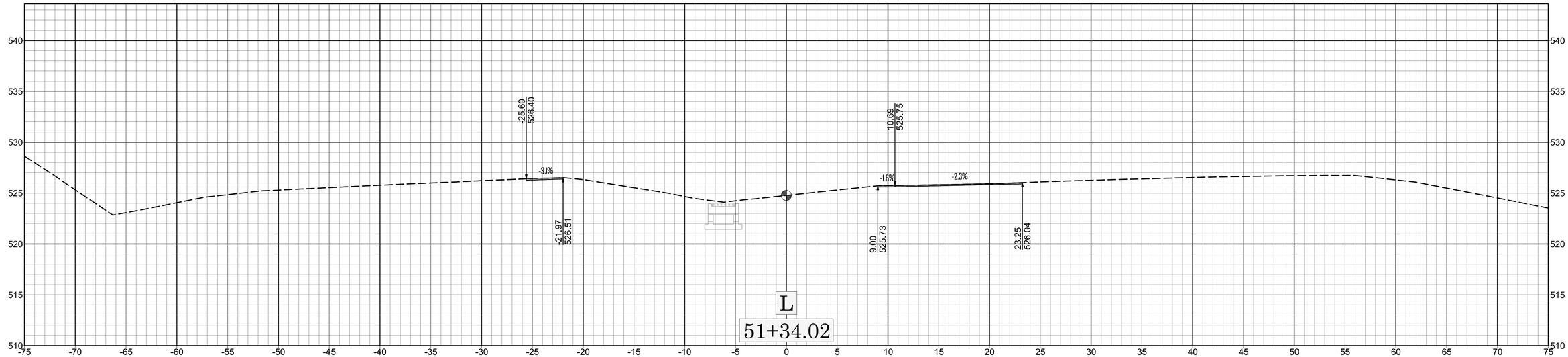
0 5 10

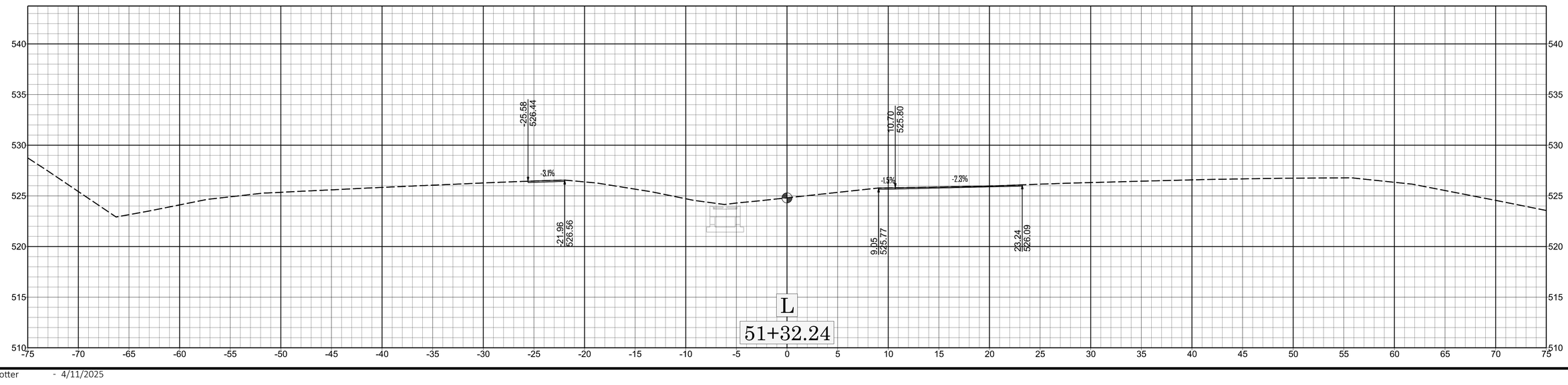
X-072

W-58088

11/14/23


540
535
530
525
520
515
510
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
-25.62
526.77
-2.8%
-21.95
526.88
10.59
526.10
-2.0%
-2.5%
9.02
526.07
23.20
526.42
L
51+20.00
545
540
535
530
525
520
515
510
-25.64
527.32
-2.7%
-21.91
527.43
10.15
526.57
-2.4%
-2.9%
8.84
526.54
23.09
526.94
L
51+00.00
0
5
10
X
X-073
W-5808B



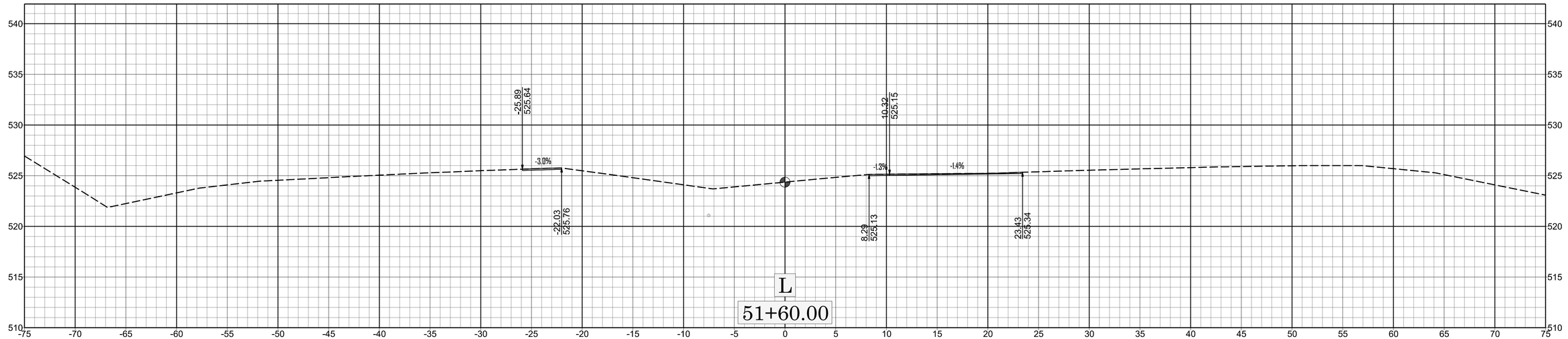


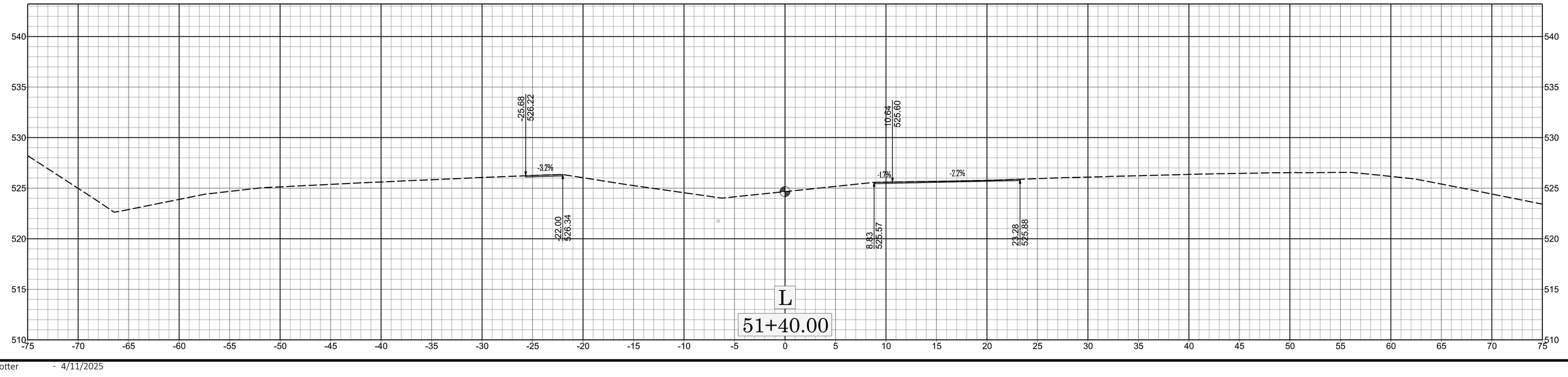
0 5 10

X-074

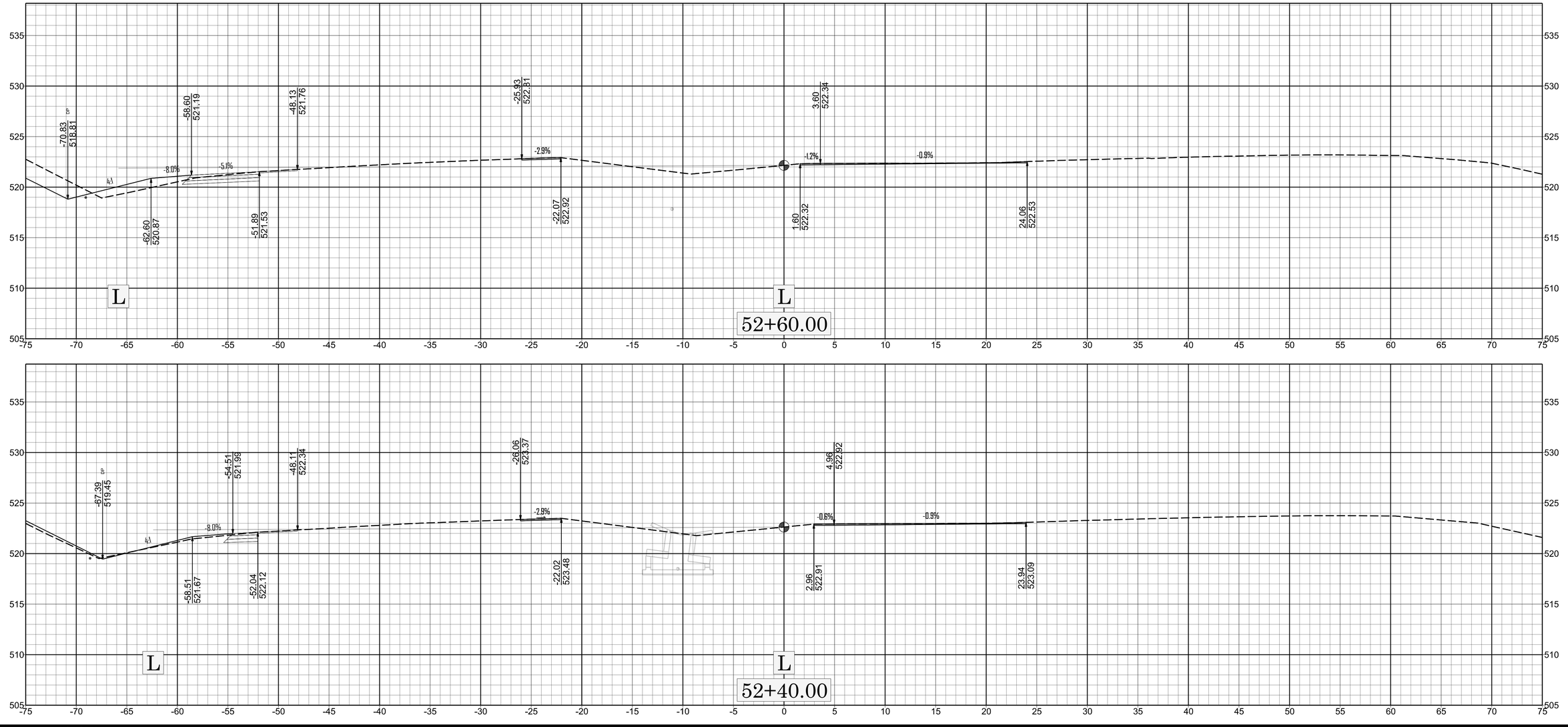
X

W-5808B


-25.89
525.64
-3.0%
-22.03
525.76
10.32
525.15
-1.9%
-1.4%
8.29
525.13
23.43
525.34
L
51+60.00


-25.68
526.22
-3.2%
-22.00
526.34
10.64
525.60
-1.7%
-2.2%
8.83
525.57
23.28
525.88
L
51+40.00

-68.14
520.09
-60.14
522.109
-52.14
522.72
-48.12
522.94
-26.12
523.92
-21.92
524.04
6.02
528.50
4.43
523.60
23.85
523.63
4:1
12.5:1
-5.5%
-3.1%
-0.3%
-0.7%
L
52+20.00
-26.12
524.50
-21.89
524.61
7.63
524.10
6.16
524.09
23.67
524.19
-2.7%
-0.5%
-0.5%
L
52+00.00
-26.04
525.07
-21.95
525.18
9.20
524.67
7.38
524.67
23.21
524.76
-2.7%
-0.5%
-0.6%
L
51+80.00
510
515
520
525
530
535
540
-75
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
0
5
10
X-076
W-58088

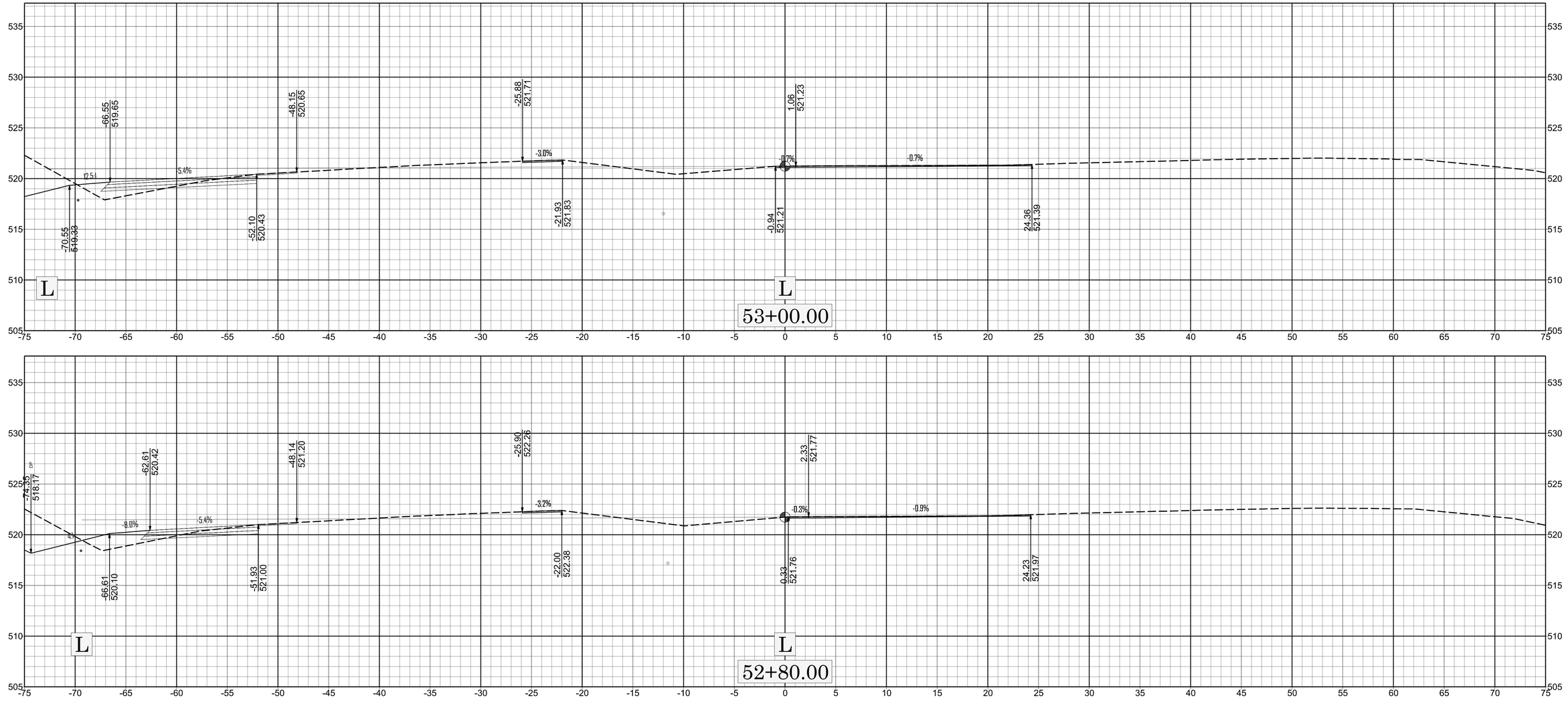


0 5 10

X X-077

W-58088

11/14/23

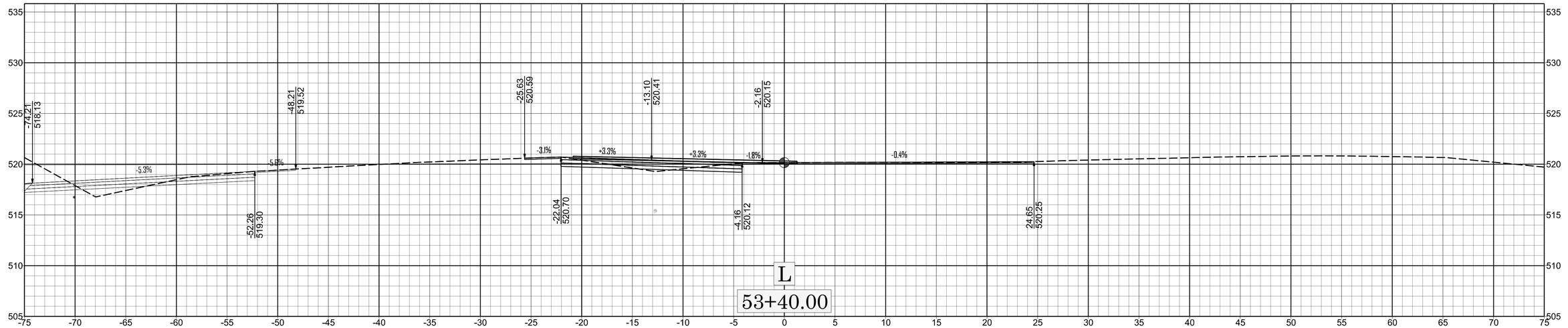


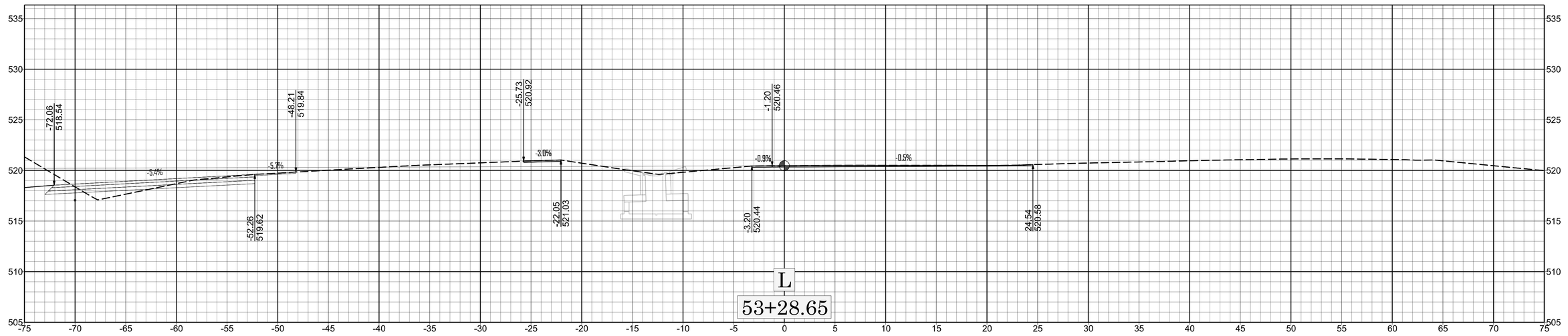
0 5 10

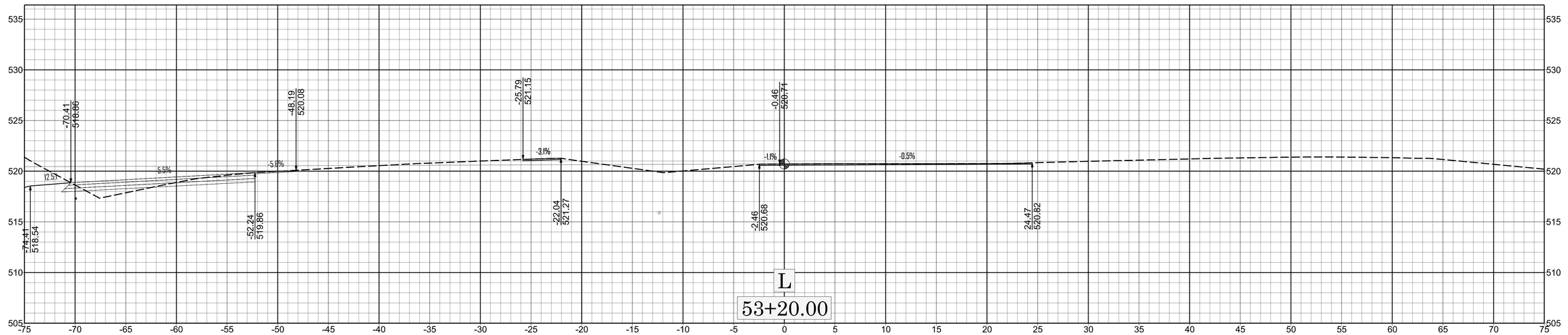
X | X-078

W-5808B

DOT/mtrotter - 4/11/2025


-74.21
518.13
-48.21
519.52
-25.63
520.59
-13.10
520.41
-2.16
520.15
-52.26
519.30
-22.04
520.70
-4.16
520.12
24.65
520.25
-5.3%
5.5%
-3.1%
+3.3%
+3.3%
-1.8%
-0.4%
L
53+40.00


-72.06
518.54
-48.21
519.84
-25.73
520.92
-1.20
520.46
-52.26
519.62
-22.05
521.03
-3.20
520.44
24.54
520.58
-5.4%
-5.3%
-3.0%
-0.9%
-0.5%
L
53+28.65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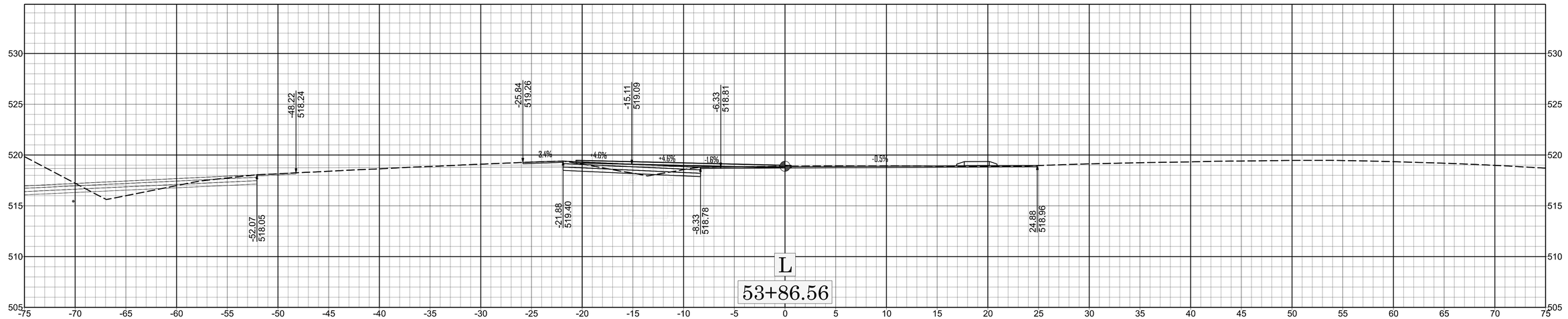
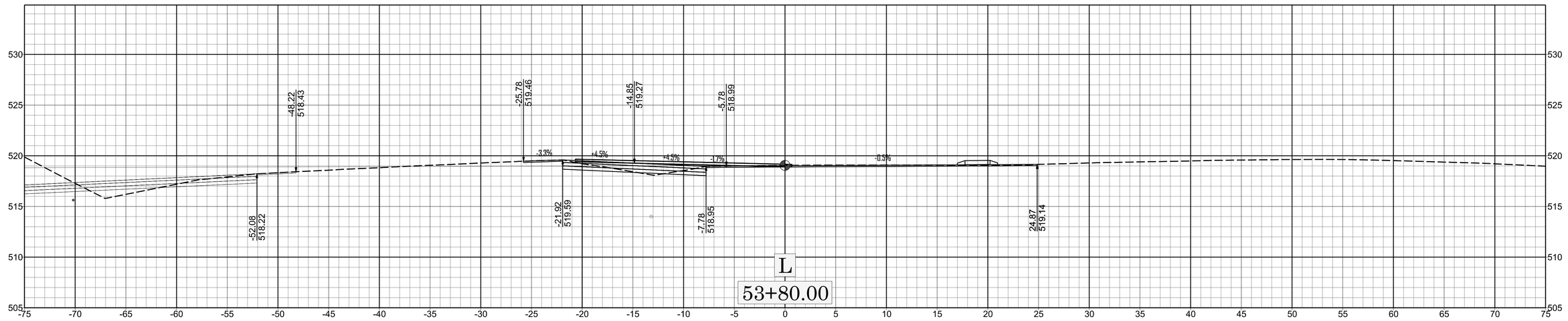
518.54
-70.41
518.86
-48.19
520.08
-25.79
521.15
-0.46
520.71
-52.24
519.86
-22.04
521.27
-2.46
520.68
24.47
520.82
12.5%
5.5%
-5.5%
-3.1%
-1.1%
-0.5%
L
53+20.00

X-079

W-5808B


-48.22
518.24
-25.84
519.26
-15.11
519.09
-6.33
518.81
-52.07
518.05
-21.88
519.40
-8.33
518.78
24.88
518.96
-3.3%
-4.0%
+4.5%
-1.6%
-0.5%
L
53+86.56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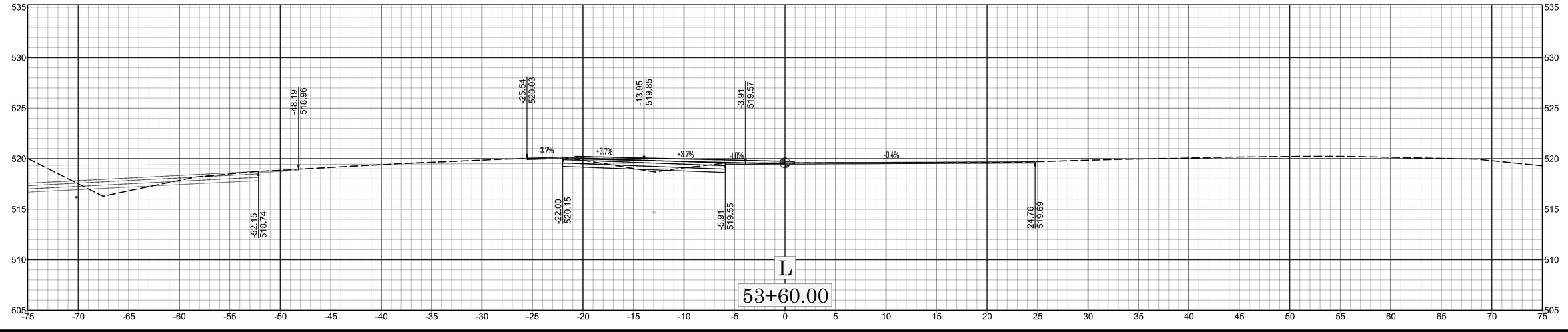
-25.78
519.46
-14.85
519.27
-5.78
518.99
-52.08
518.22
-21.92
519.59
-7.78
518.95
24.87
519.14
-3.3%
+4.5%
+4.3%
-1.7%
-0.5%
L
53+80.00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518.96
-25.54
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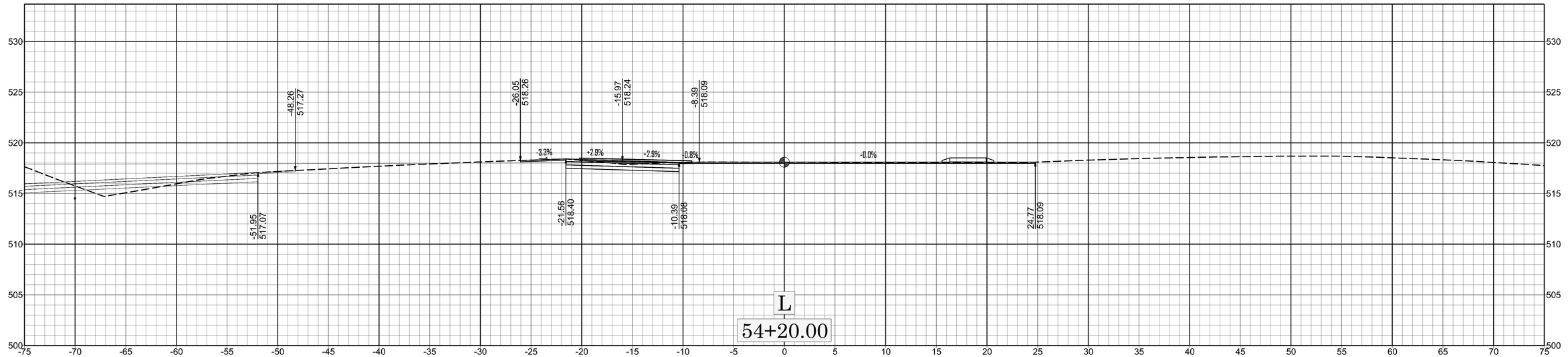
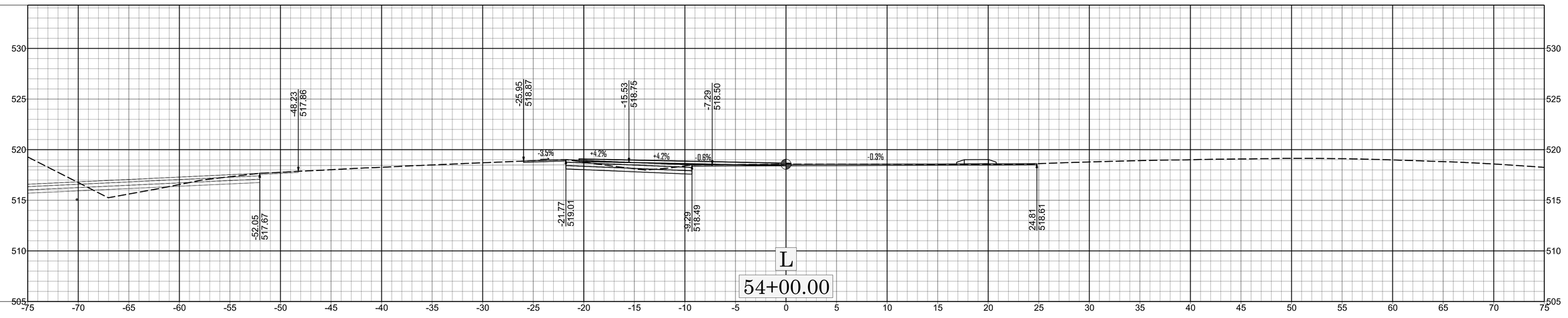
-13.95
519.85
-3.91
519.57
-52.15
518.74
-22.00
520.15
-5.91
519.55
24.76
519.69
-3.2%
+3.7%
+3.7%
-1.1%
-0.4%
L
53+60.00

X-080

W-580BB

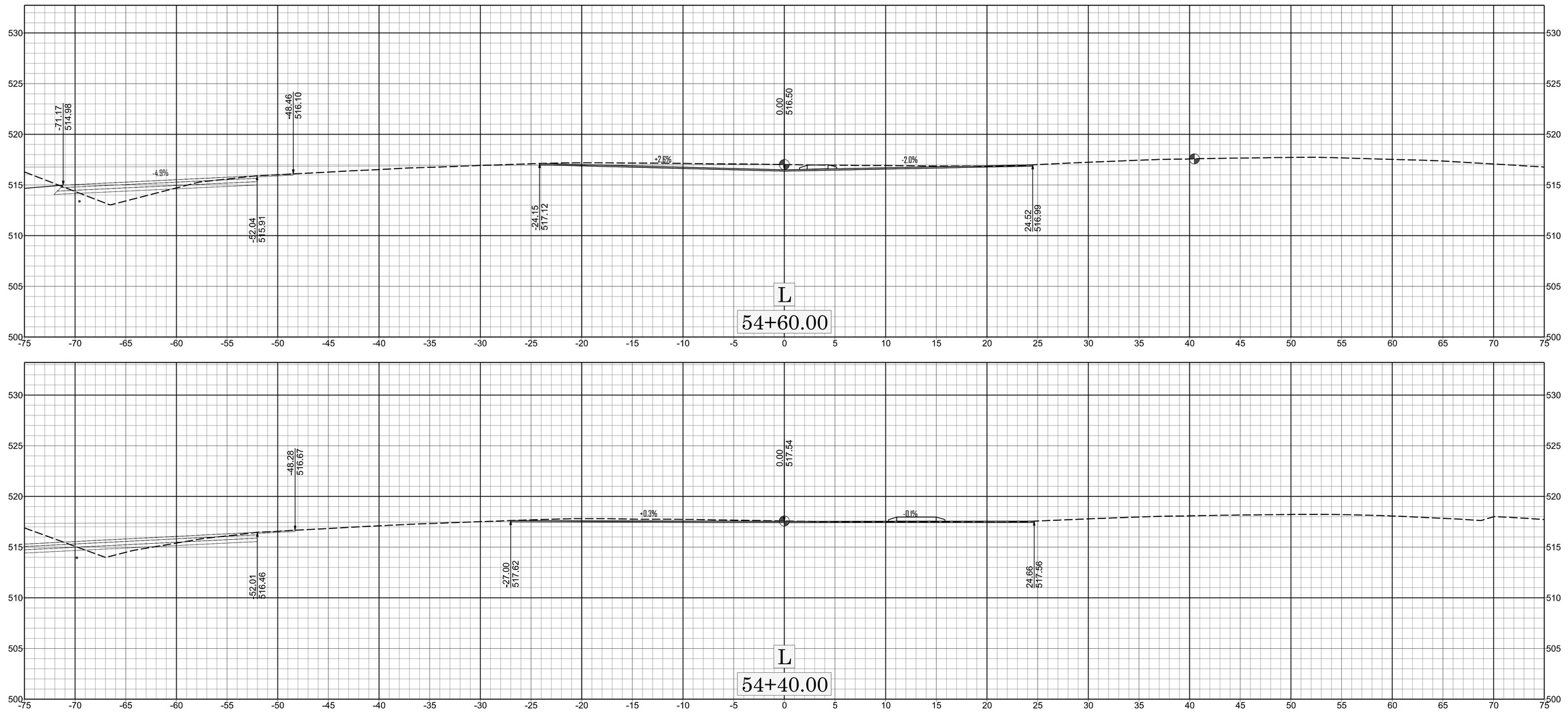




0 5 10

X-081

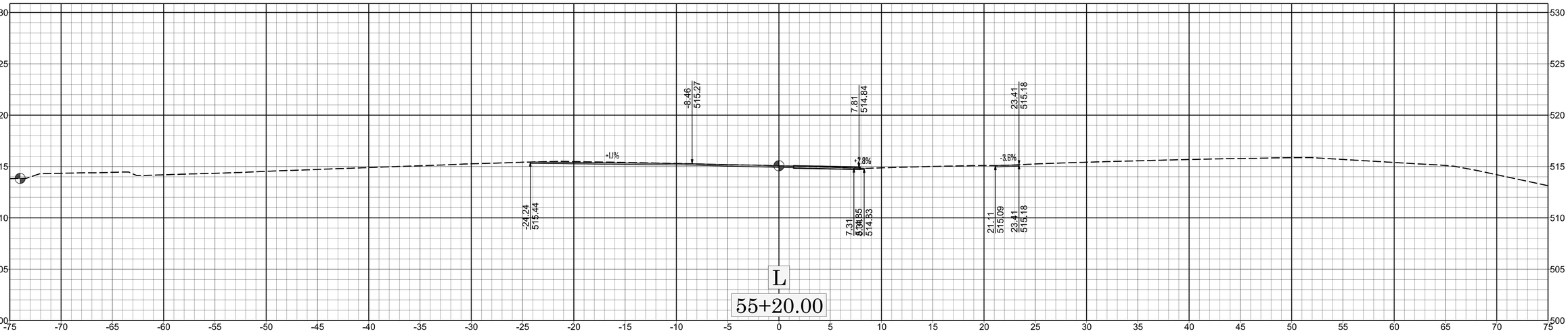
W-5808B

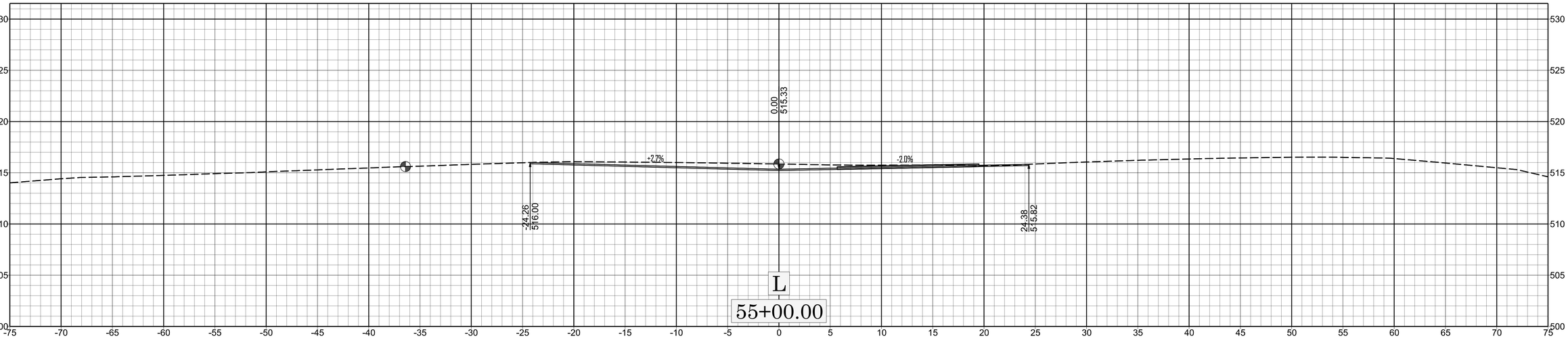


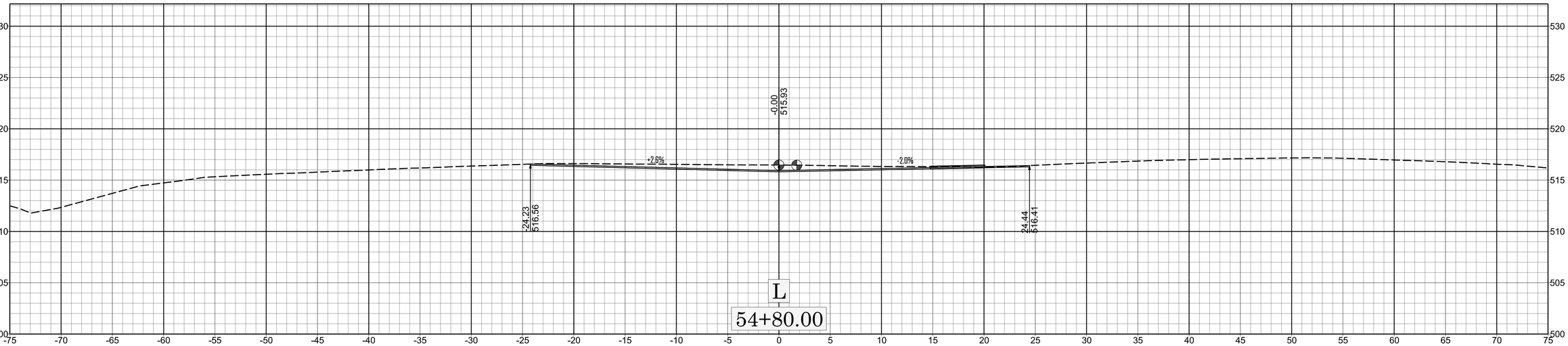
0 5 10

X X-082

W-5808B


-8.46
515.27
7.81
514.84
23.41
515.18
+1.8%
+2.8%
-3.6%
-24.24
515.44
7.31
514.83
21.11
515.09
23.41
515.18
L
55+20.00

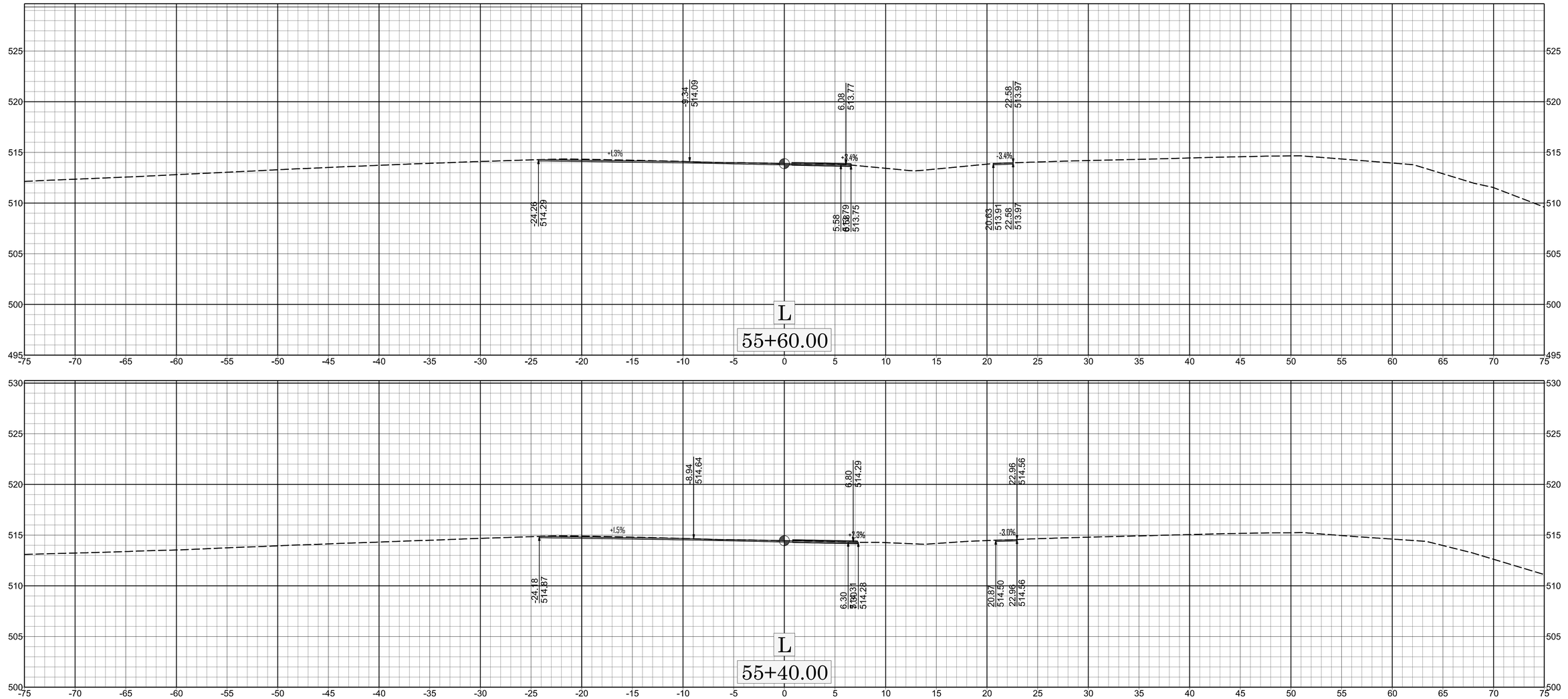

0.00
515.33
+2.7%
-2.0%
-24.26
516.00
24.38
515.82
L
55+00.00


-0.00
515.93
+2.6%
-2.0%
-24.23
516.56
24.44
516.41
L
54+80.00

X-083

W-5808B

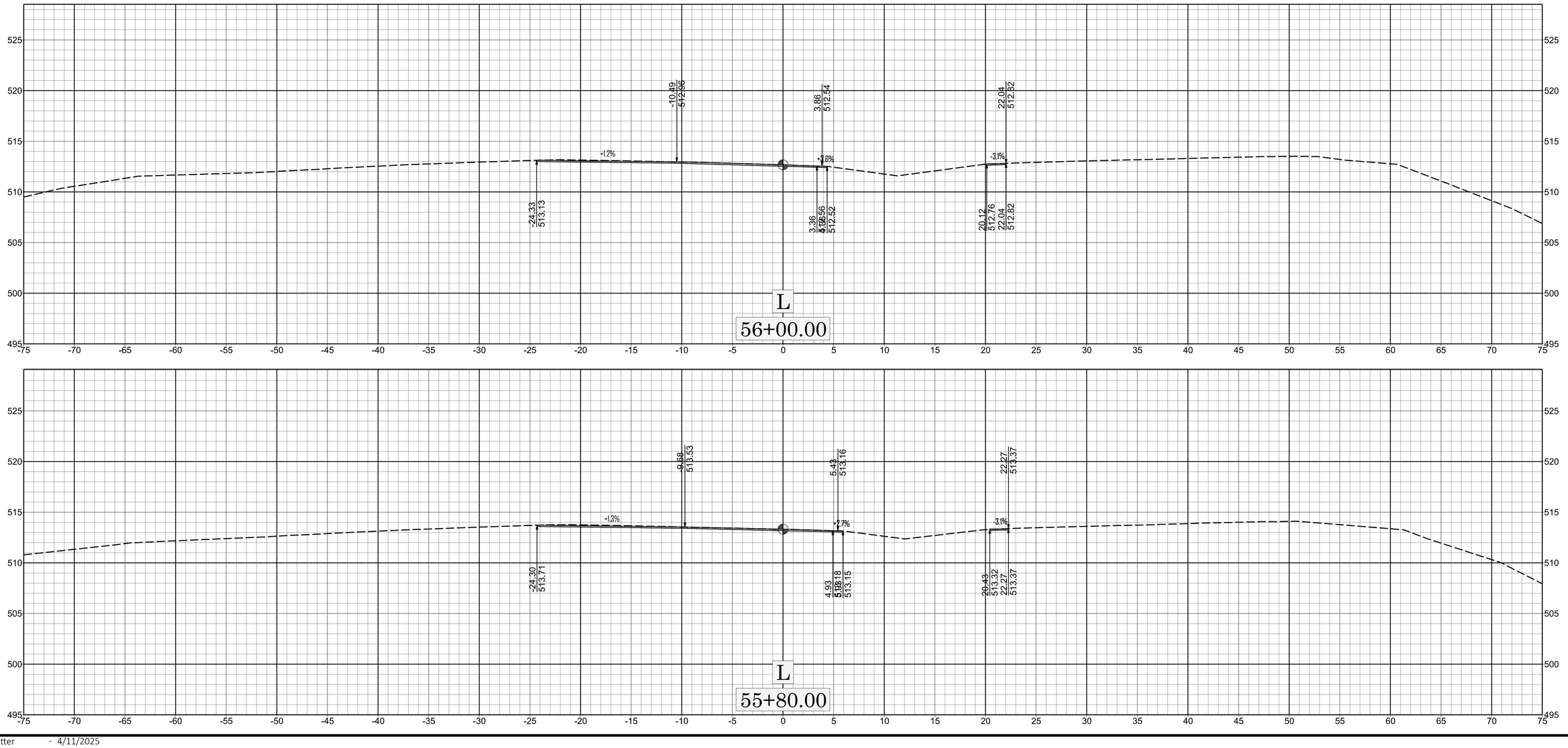
11/14/23

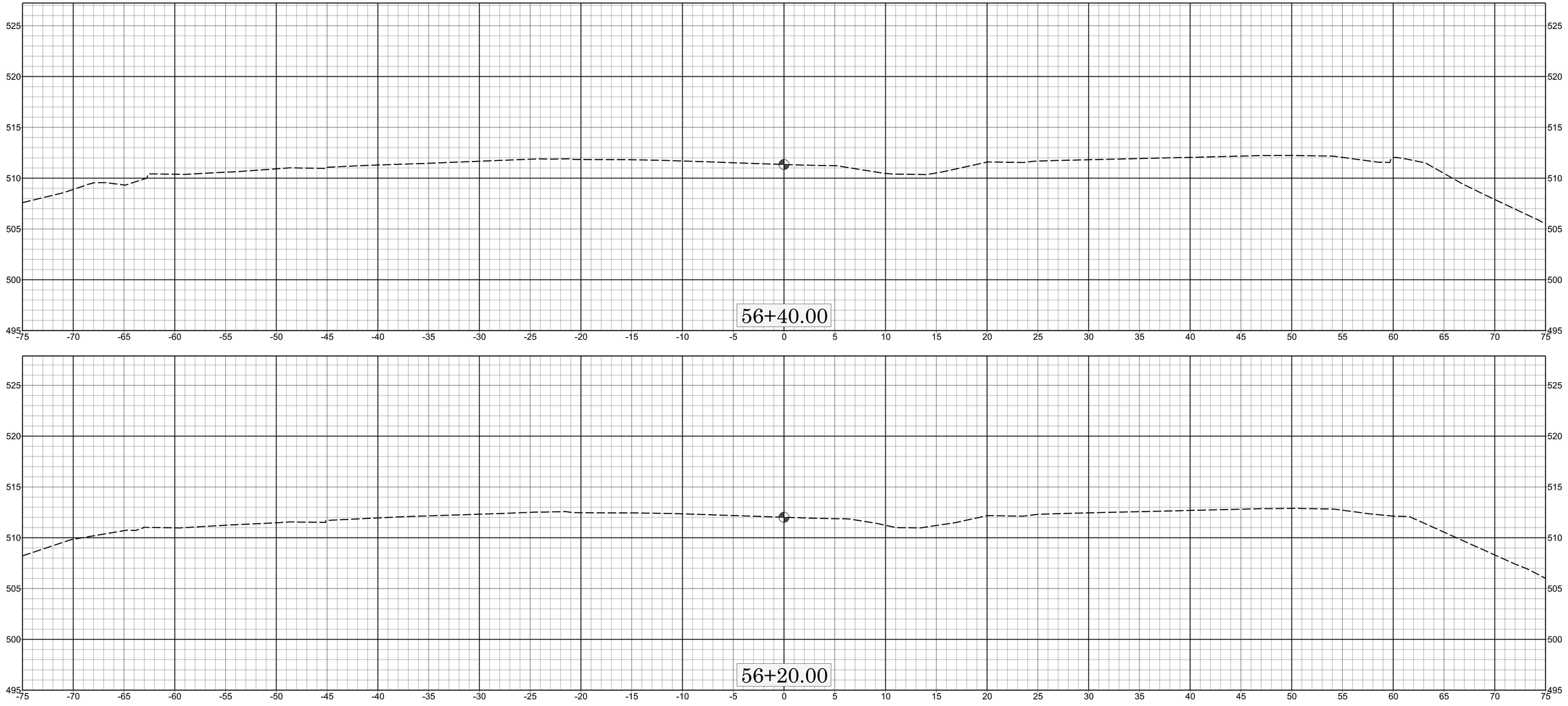


X-084

W-58088

DOT/mtrotter - 4/11/2025

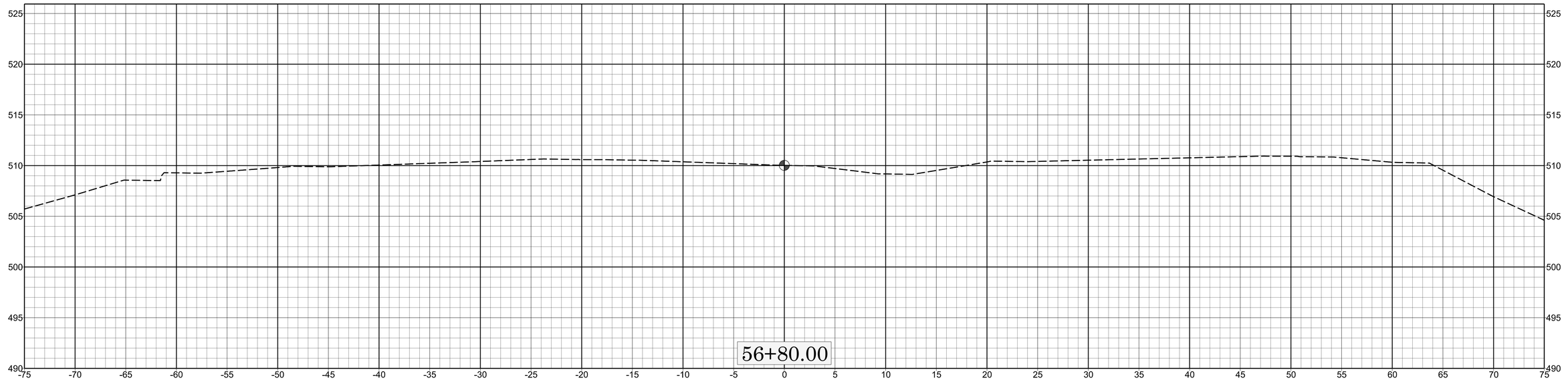

525
520
515
510
505
500
495
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
-10.19
512.96
3.86
512.54
22.04
512.82
+1.2%
+1.5%
-3.1%
-24.33
513.13
3.36
5.06
512.52
20.12
512.76
22.04
512.82
L
56+00.00
-9.68
513.53
5.43
513.16
22.27
513.37
+1.3%
+1.7%
-3.1%
-24.30
513.71
4.93
5.18
513.15
20.43
513.32
22.27
513.37
L
55+80.00
0
5
10
X
X-085
W-5808B

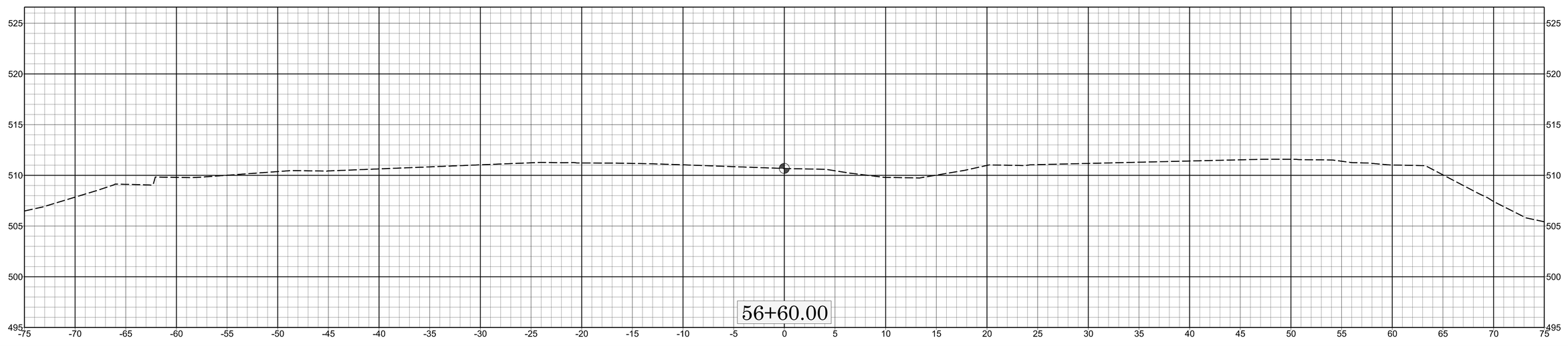


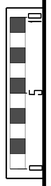
0 5 10

X X-08B6

W-5808B

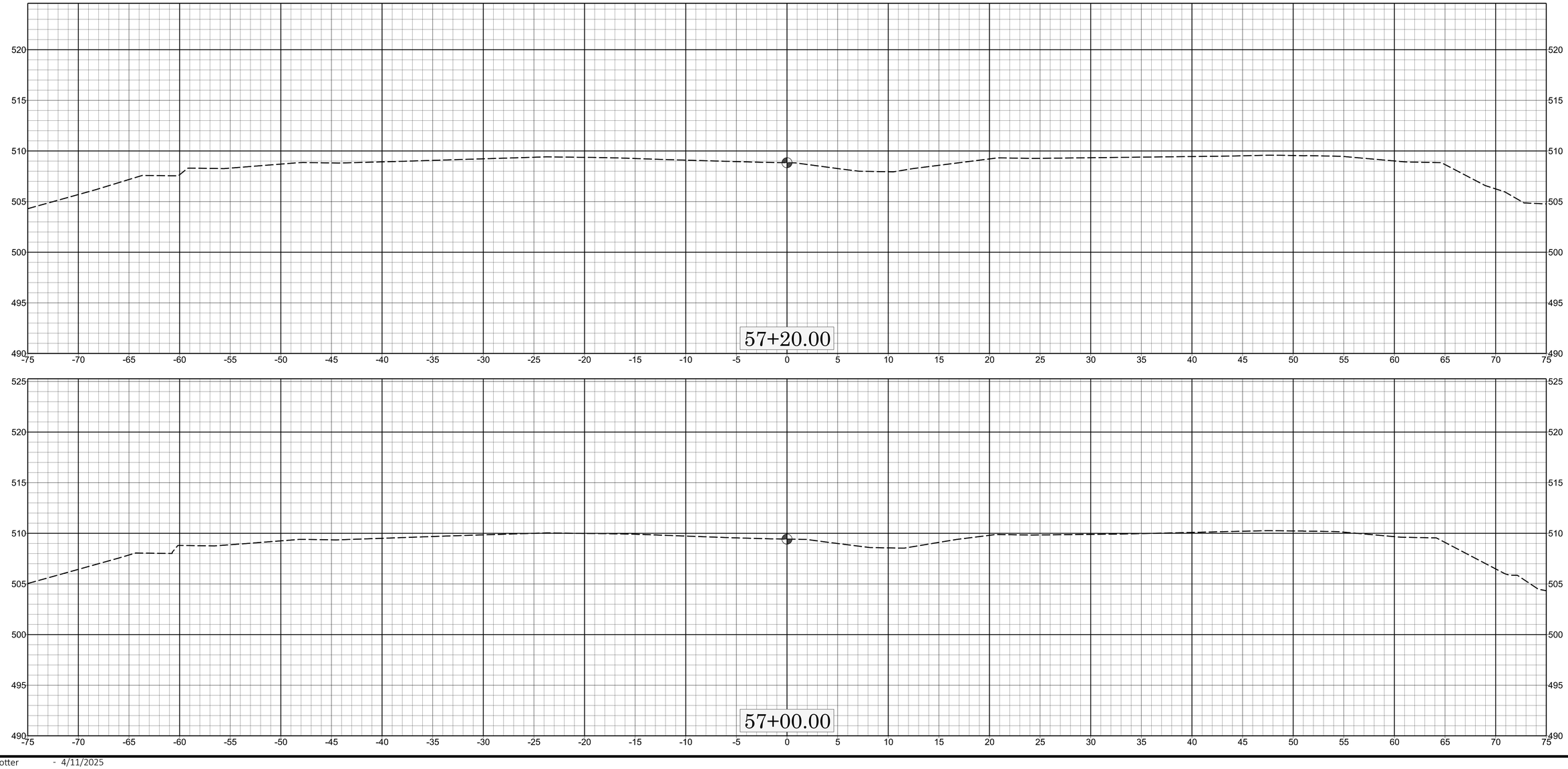

525
520
515
510
505
500
495
490
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
56+80.00


525
520
515
510
505
500
495
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
56+60.00


0
5
10

X-087

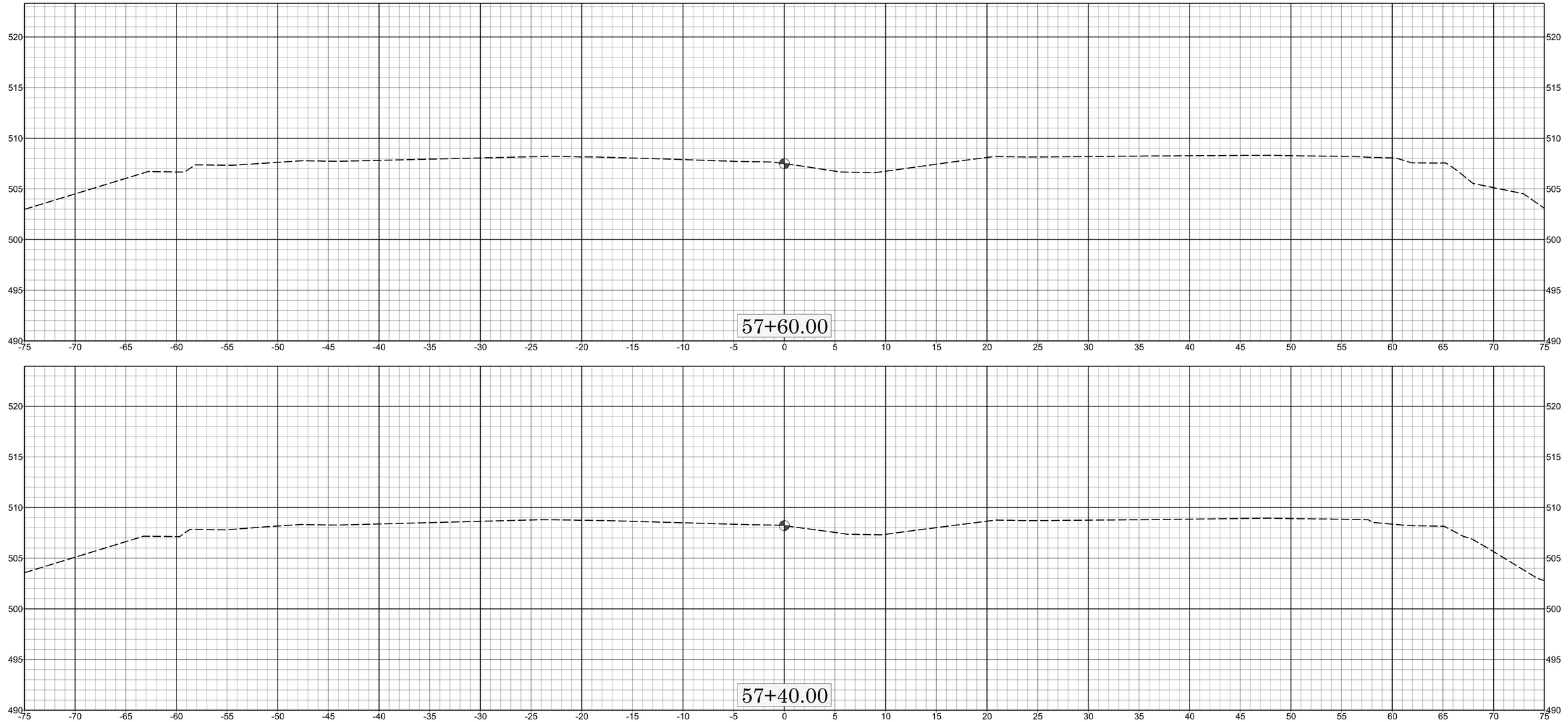
W-58088



0 5 10

X-088

W-5808B

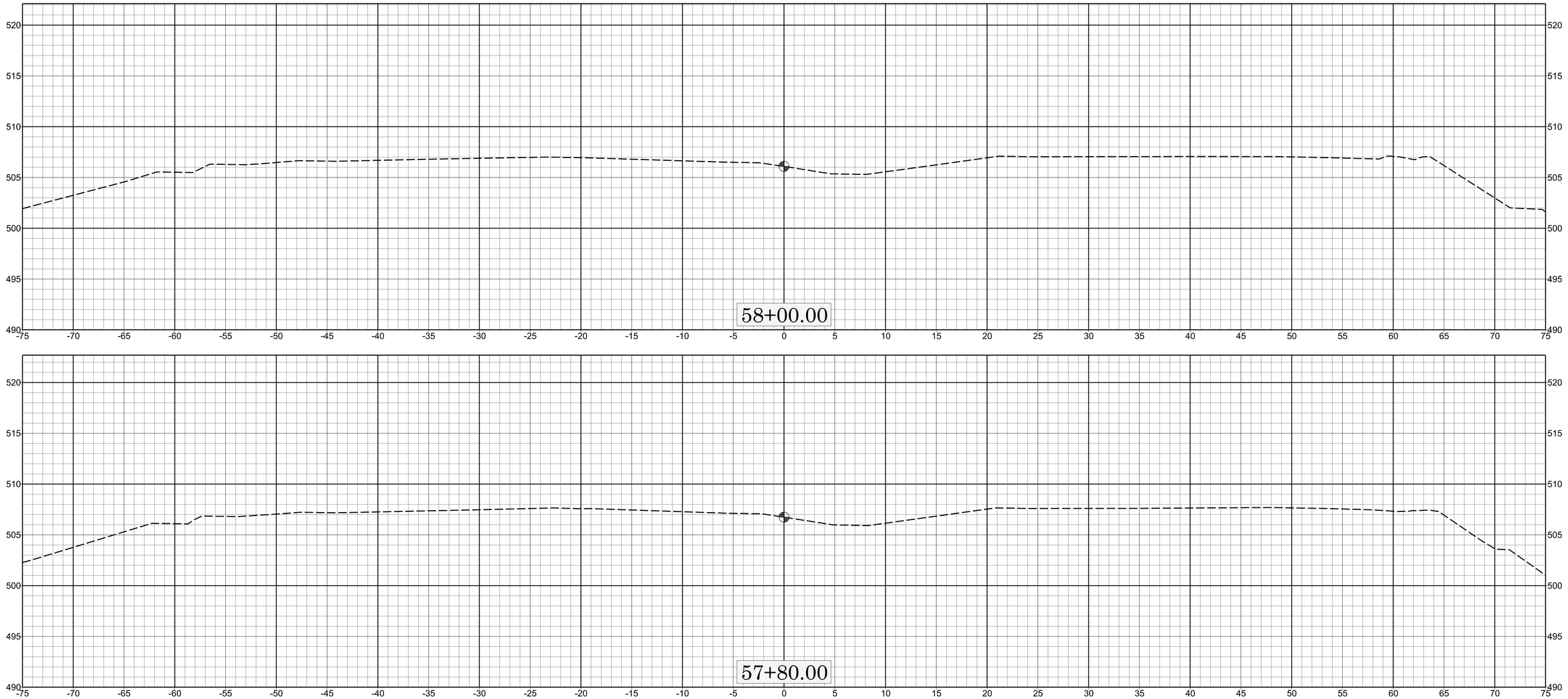


0 5 10

X

X-0809

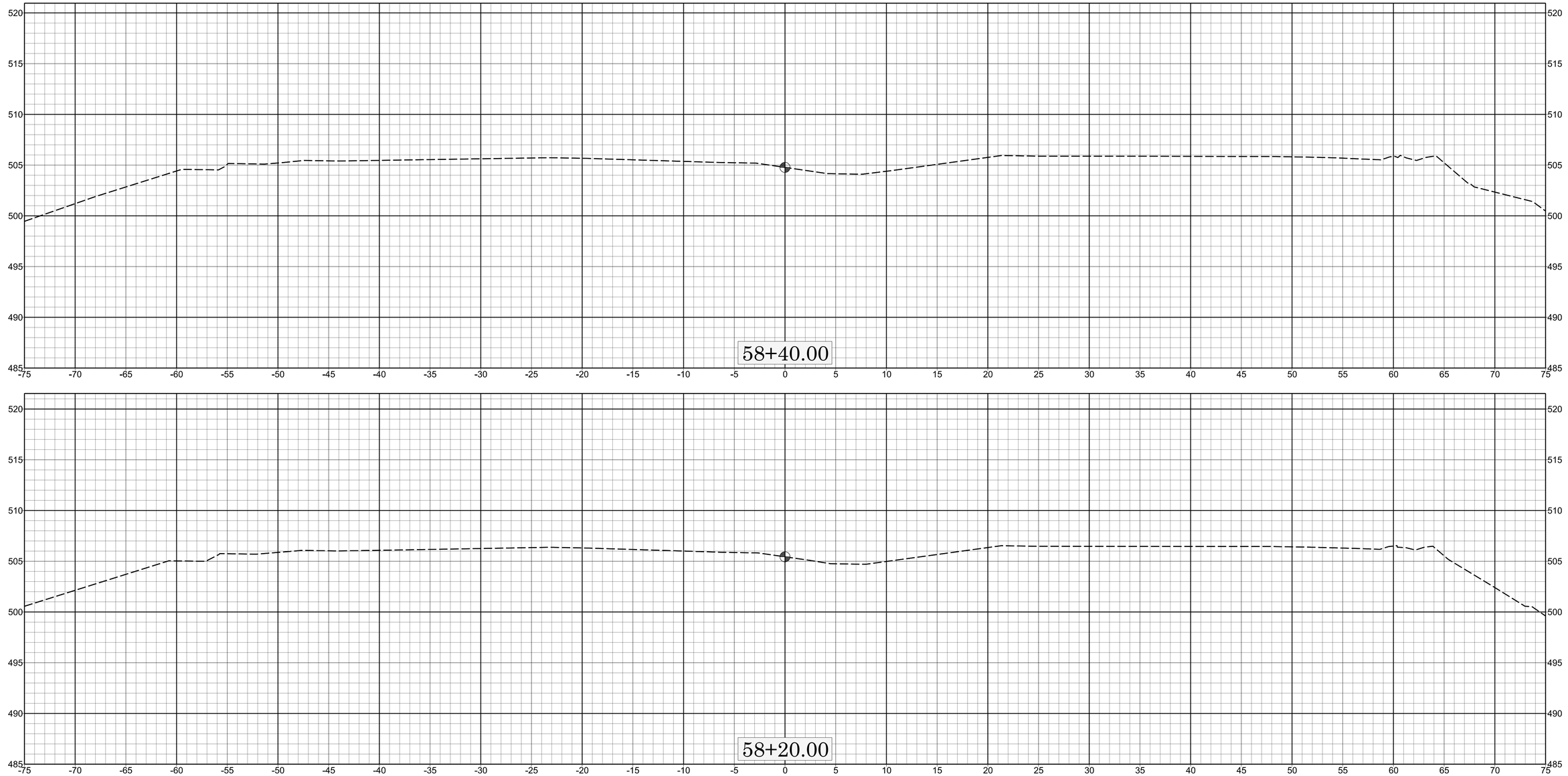
W-5808B



0 5 10

X X-090

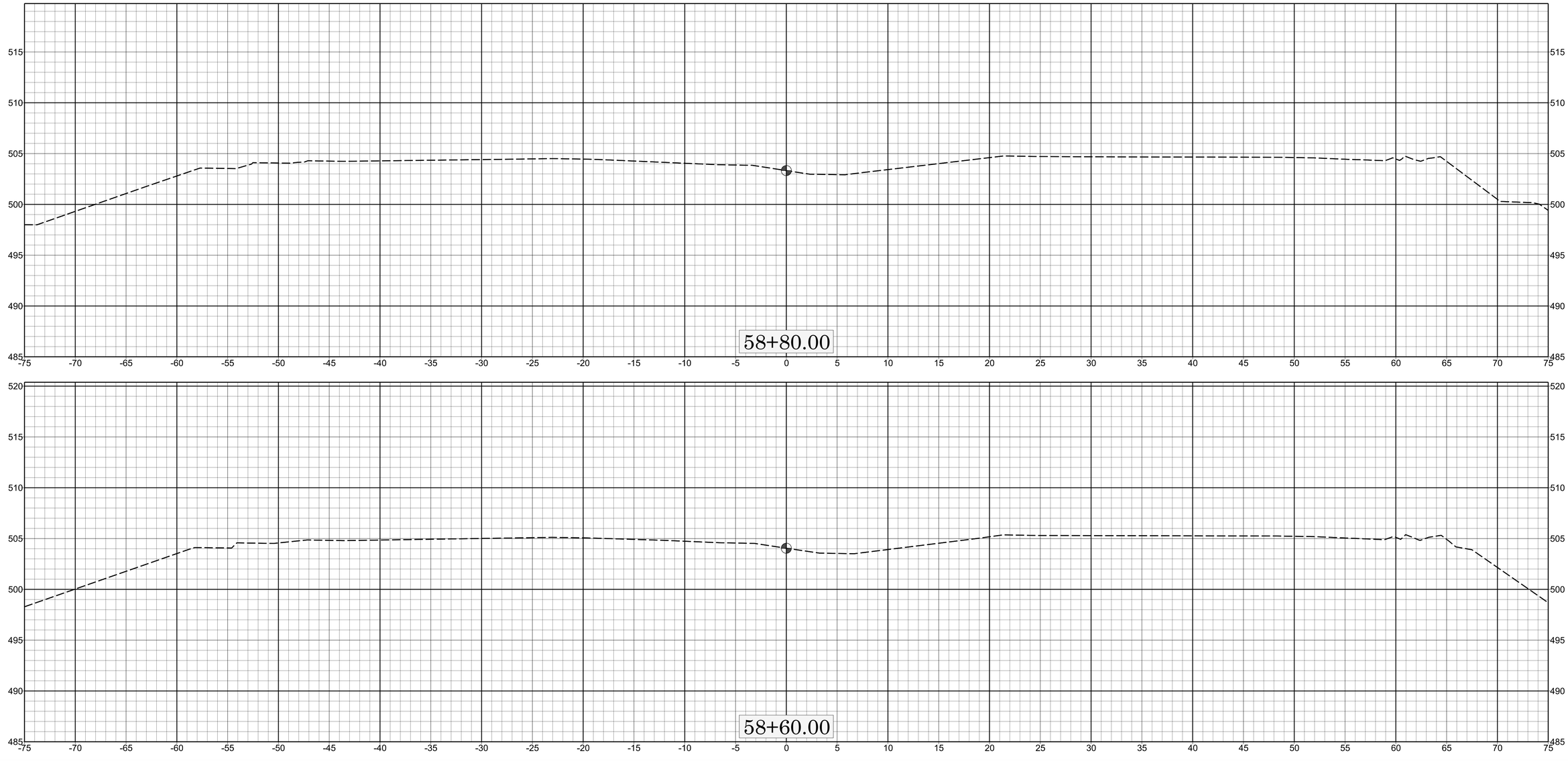
W-5808B



0 5 10

X-091

W-5808B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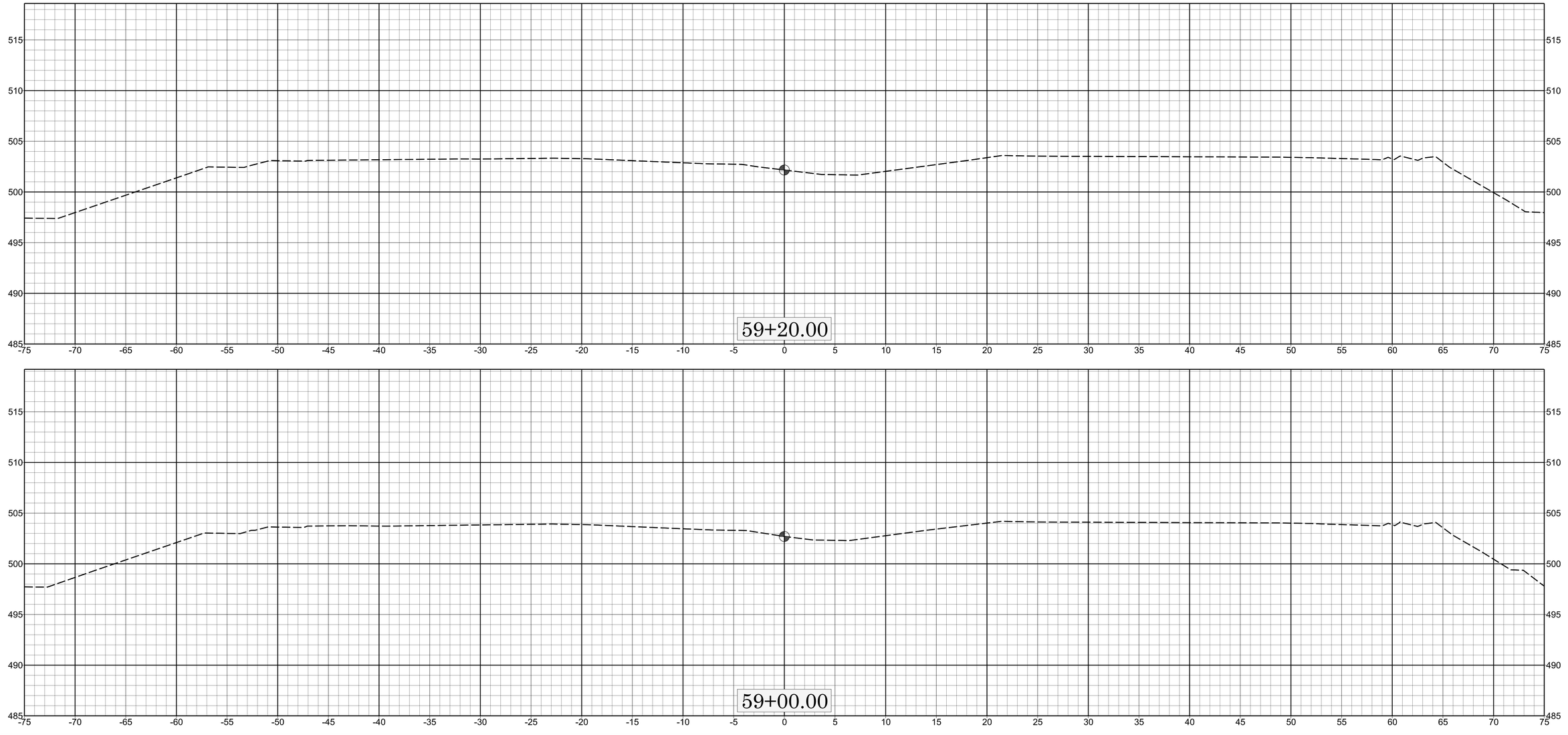
505
500
495
490
485
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
58+80.00
520
515
510
505
500
495
490
485
58+60.00
0
5
10
X
X-080
W-5808B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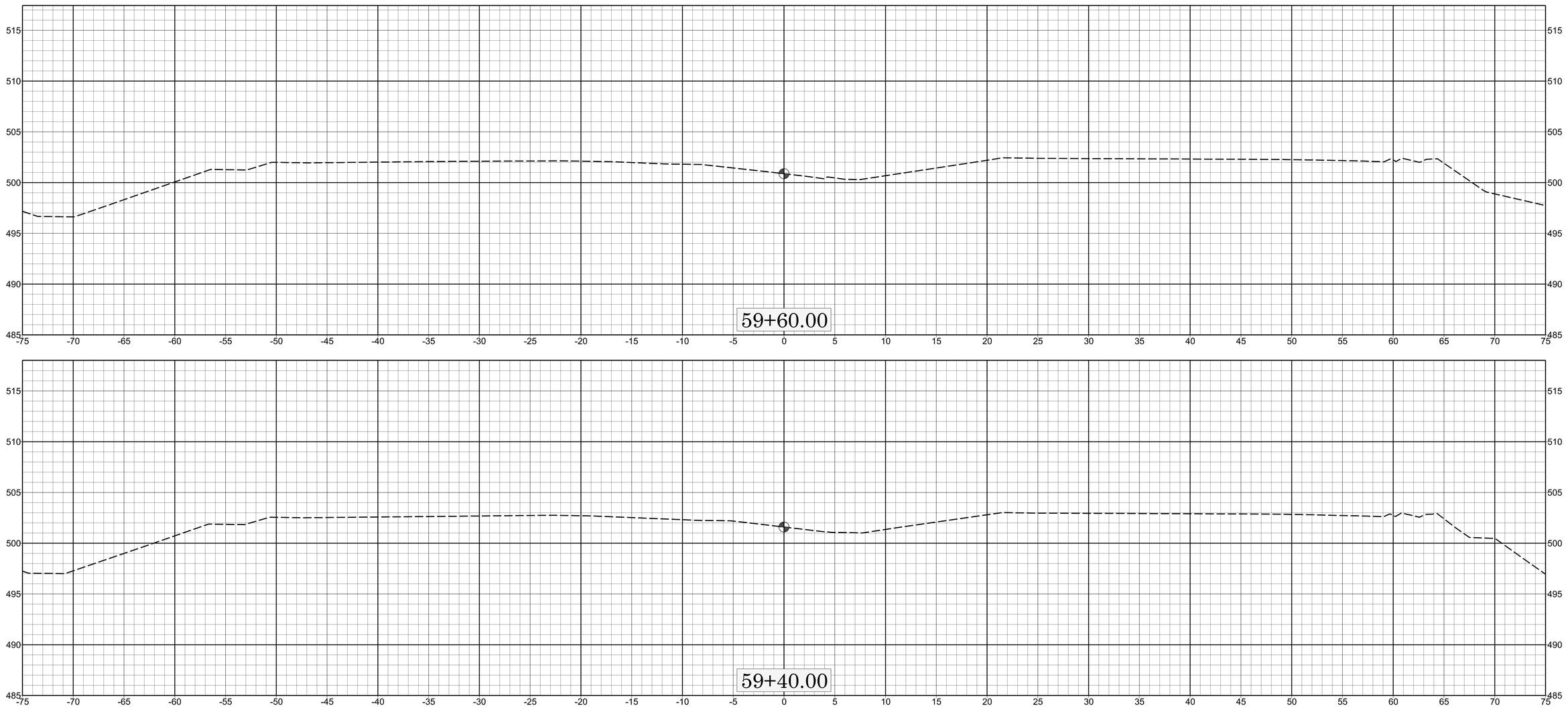
-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
59+20.00
59+00.00
0
5
10
X
X-093
W-5808B

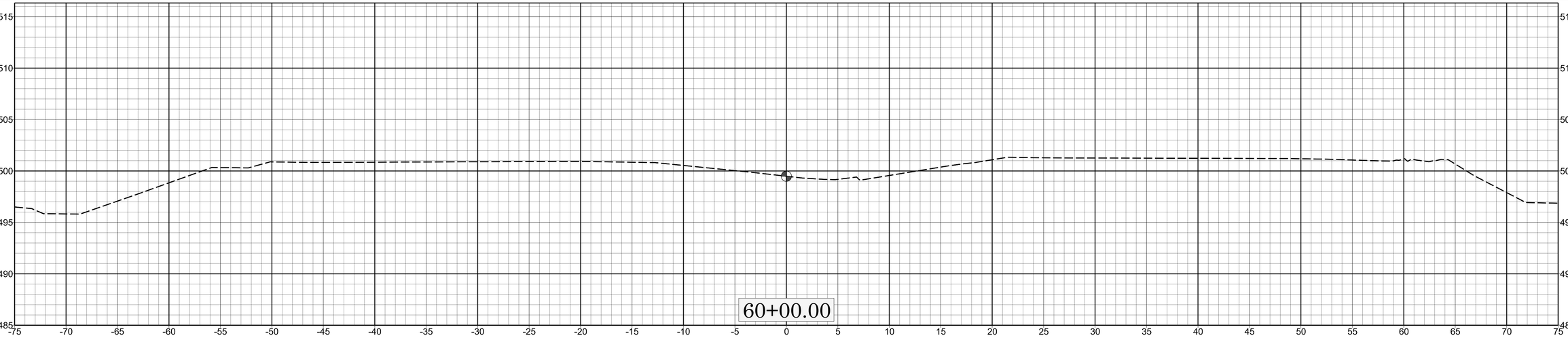


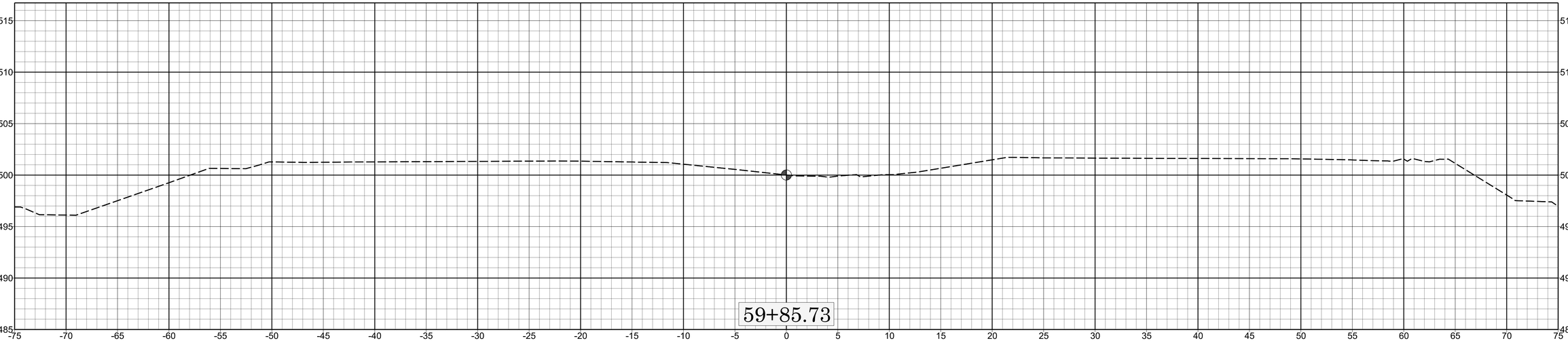
0 5 10

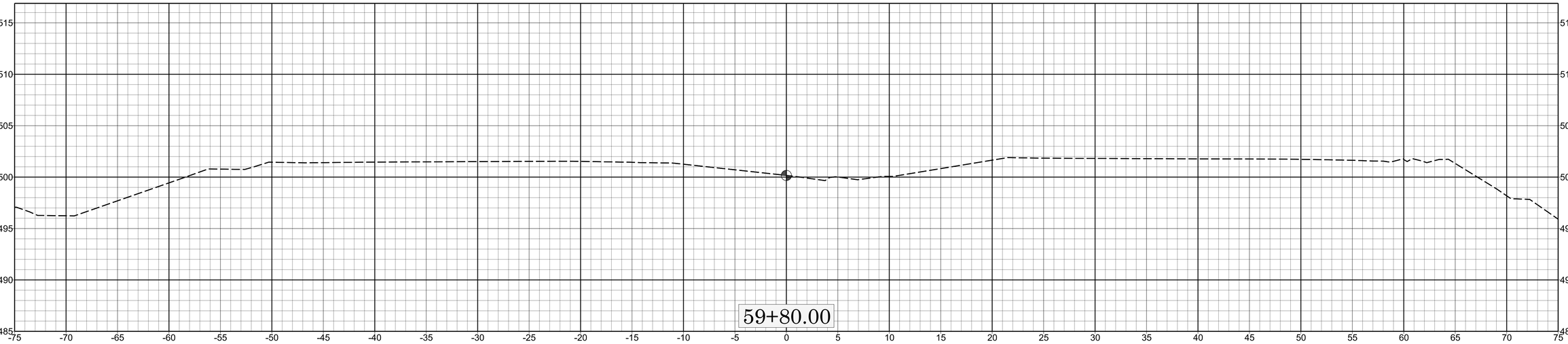
X

X-094

W-5808B



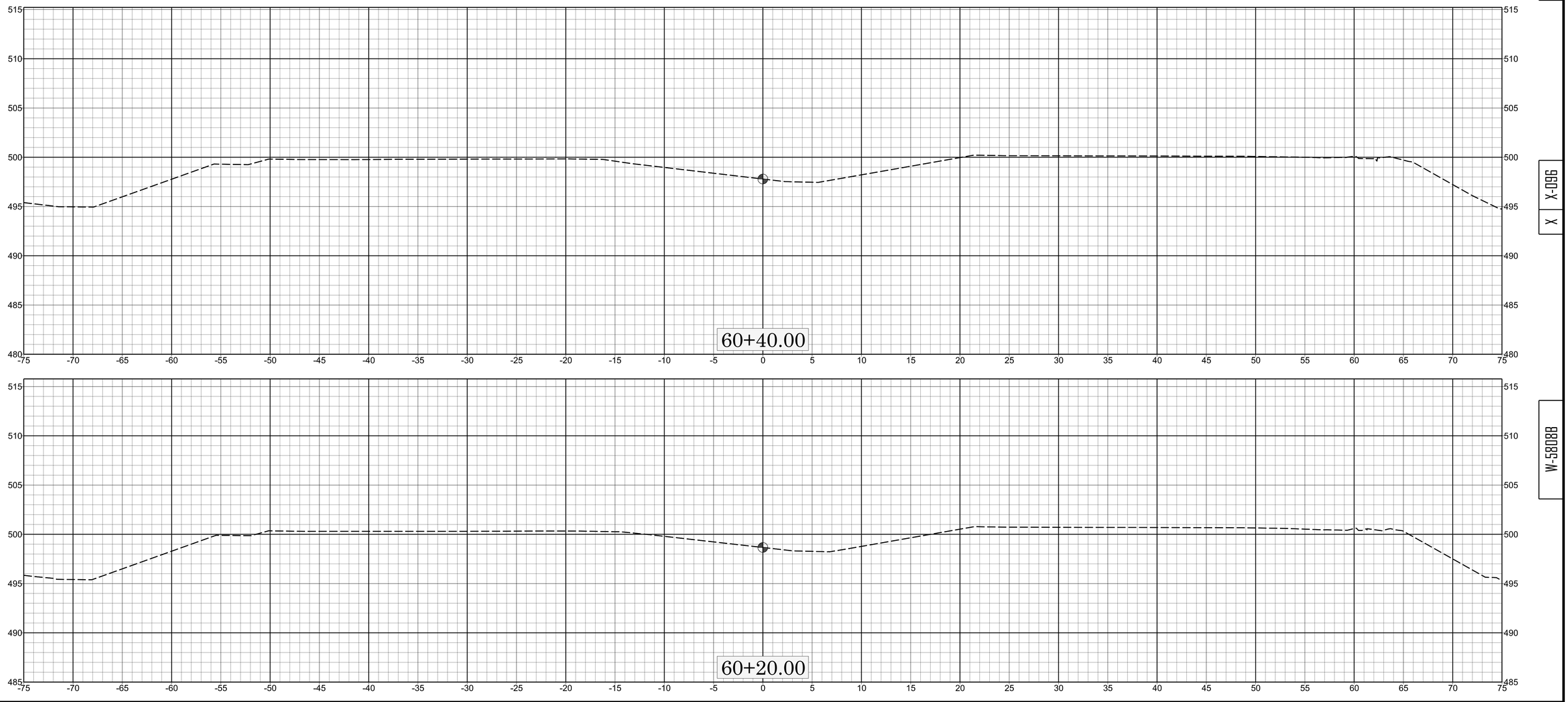




X-095

X

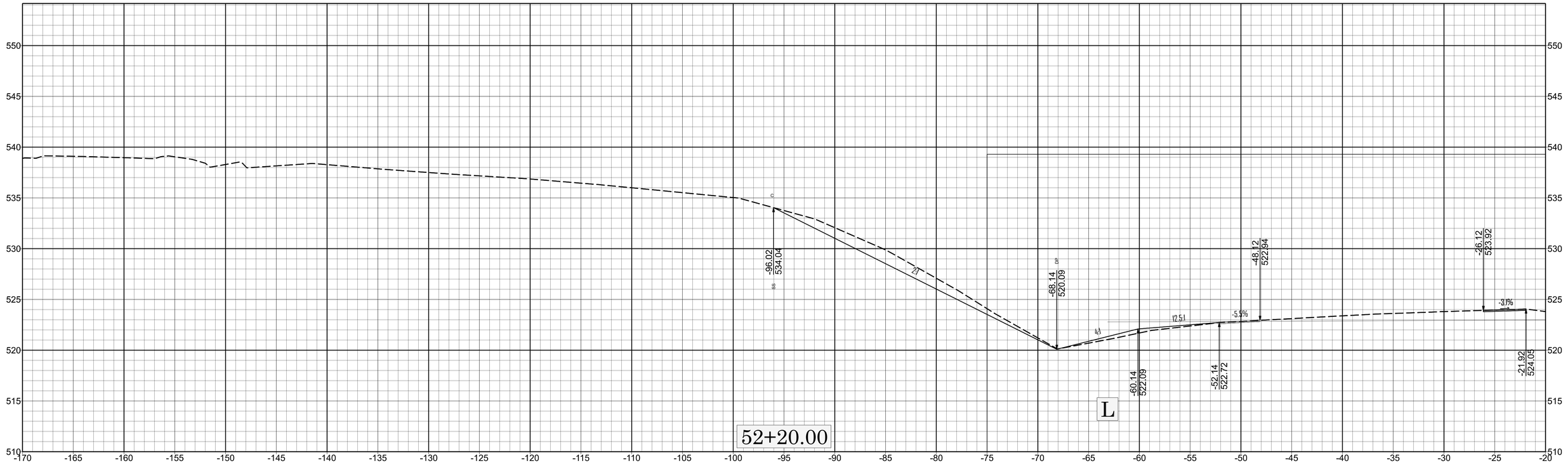
W-5808B

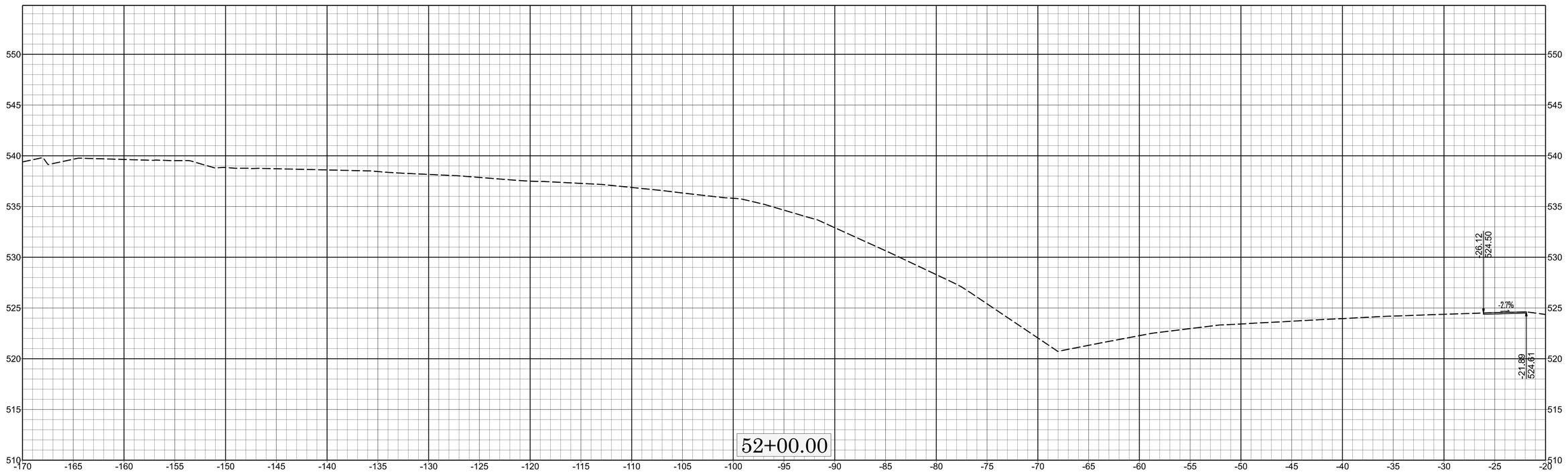


0 5 10

X X-096

W-5808B





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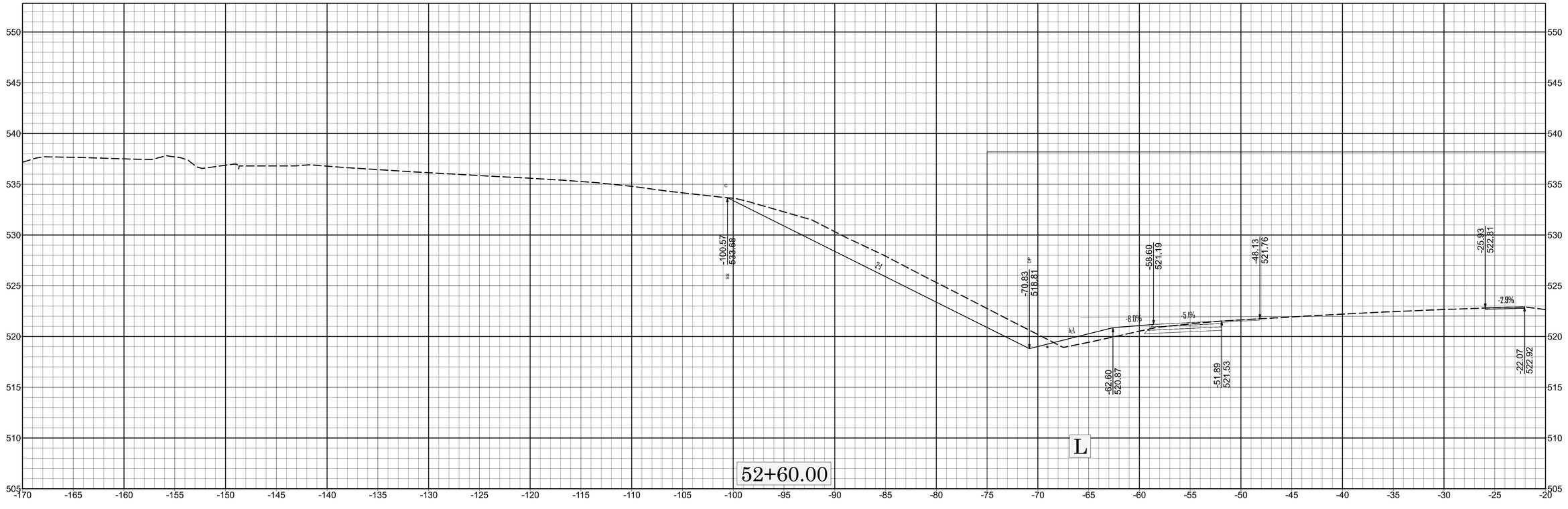
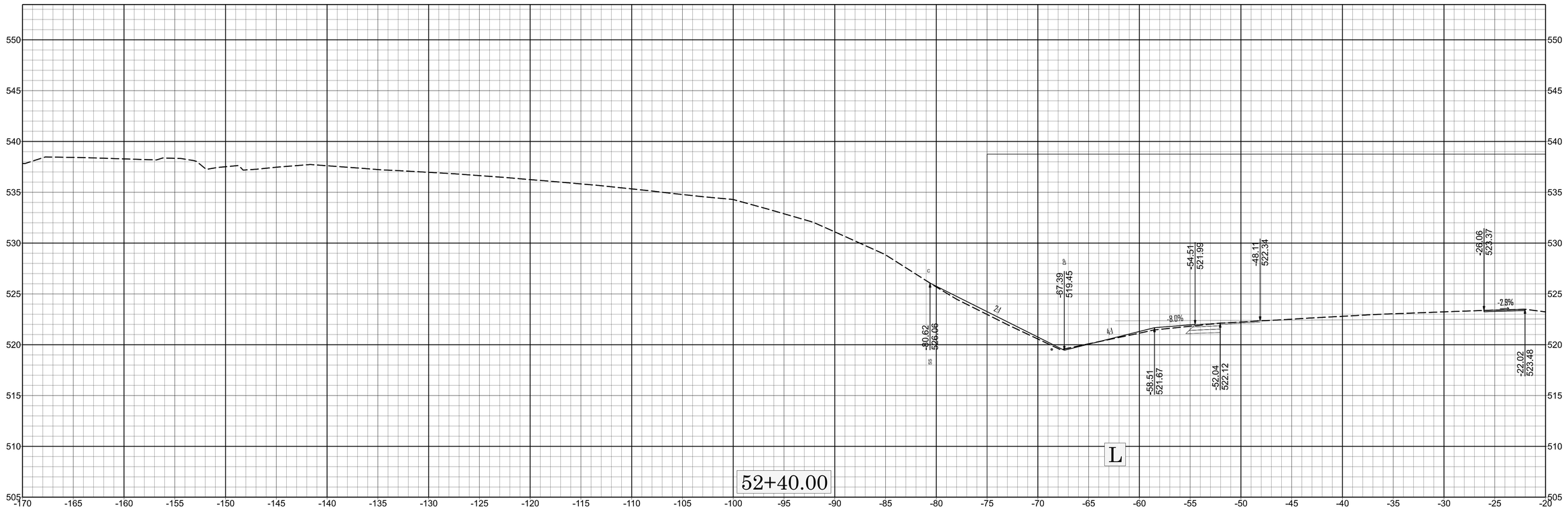
X-087

W-58088

11/14/23



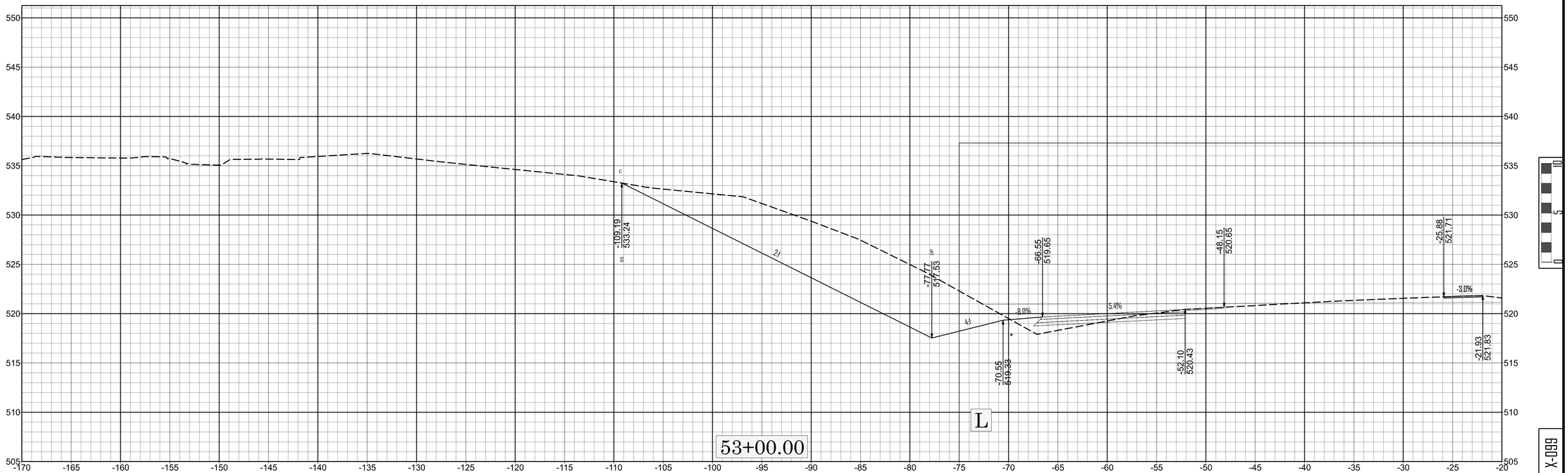


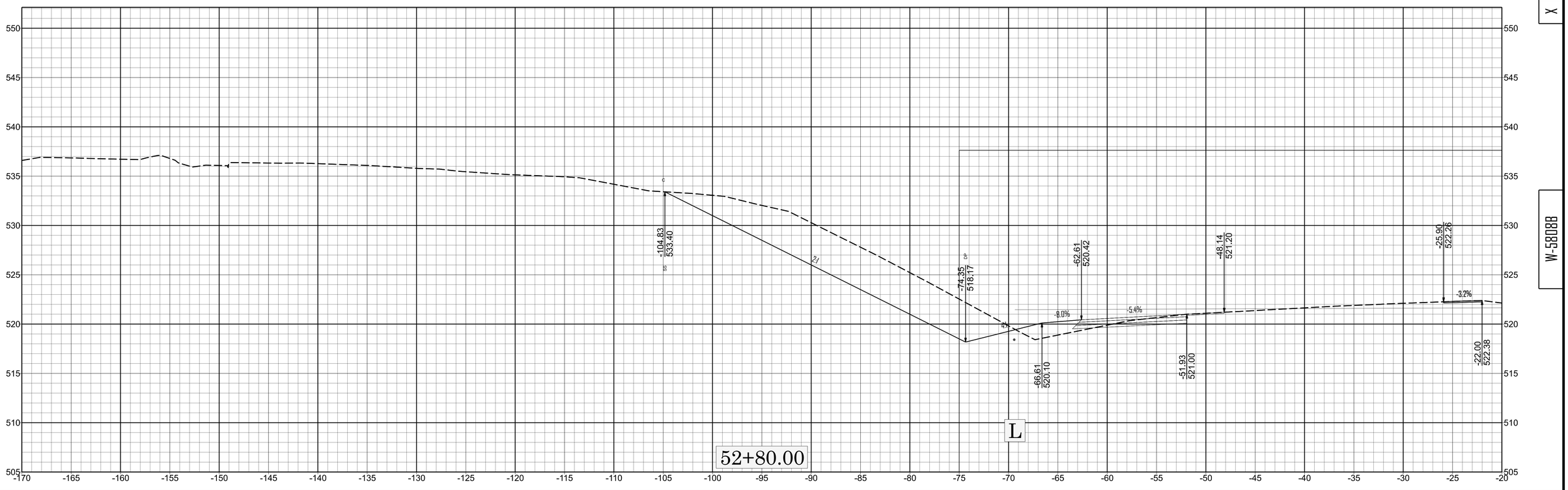
X-098

W-5808B

DOT/mtrotter - 4/11/2025

11/14/23





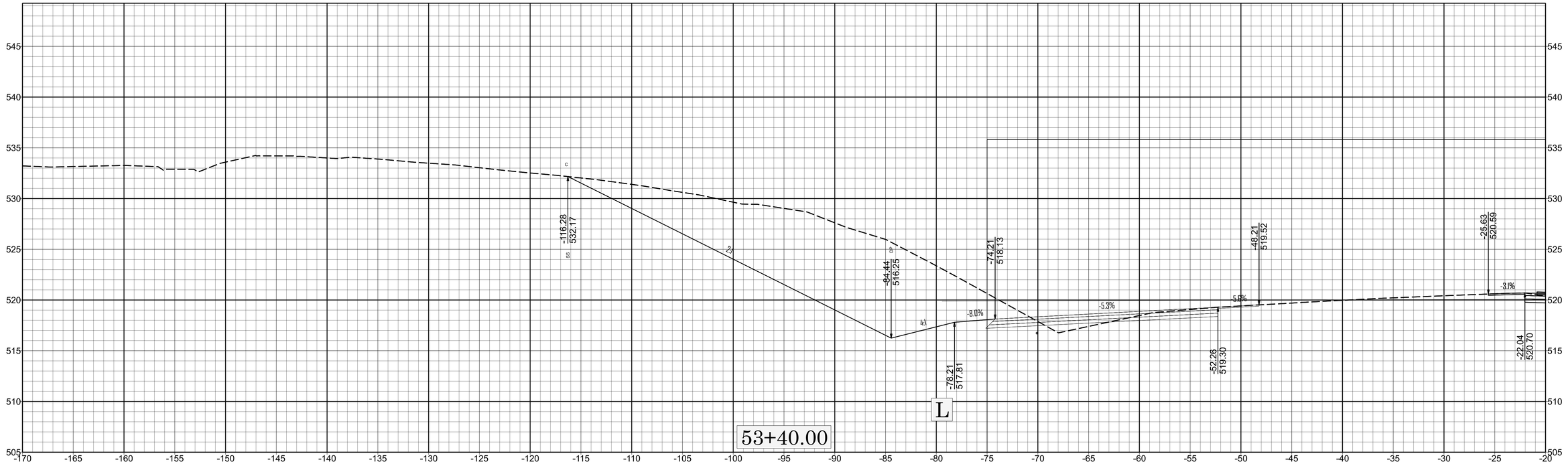
X-0880

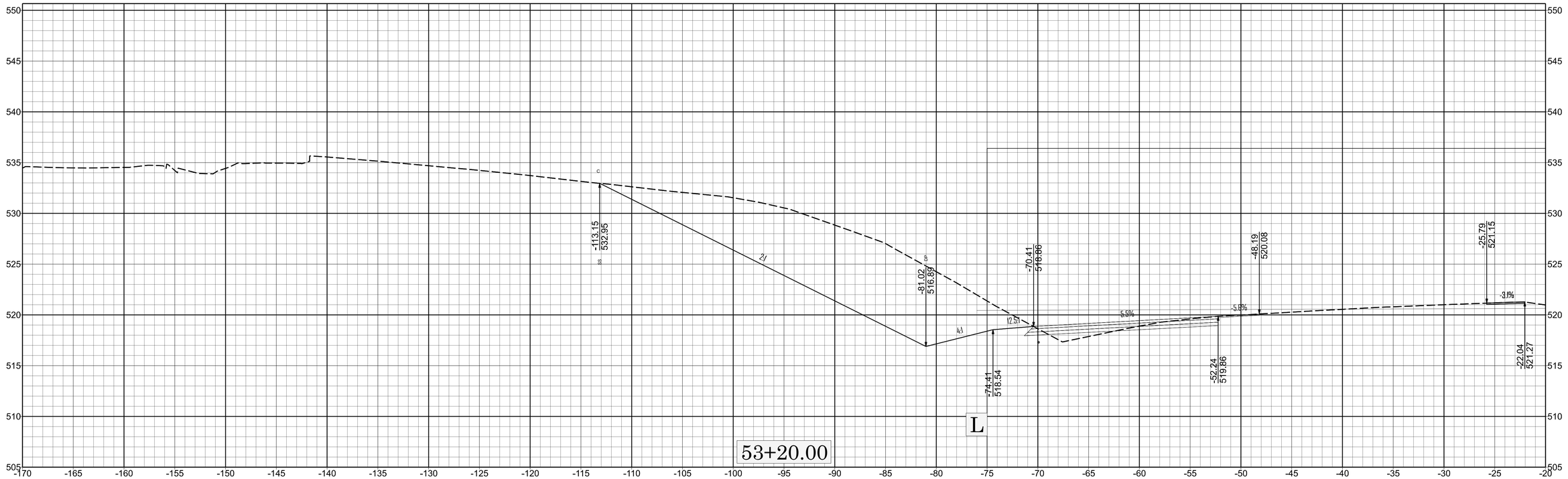
X

W-5808B

DOT/mtrotter - 4/11/2025

11/14/23



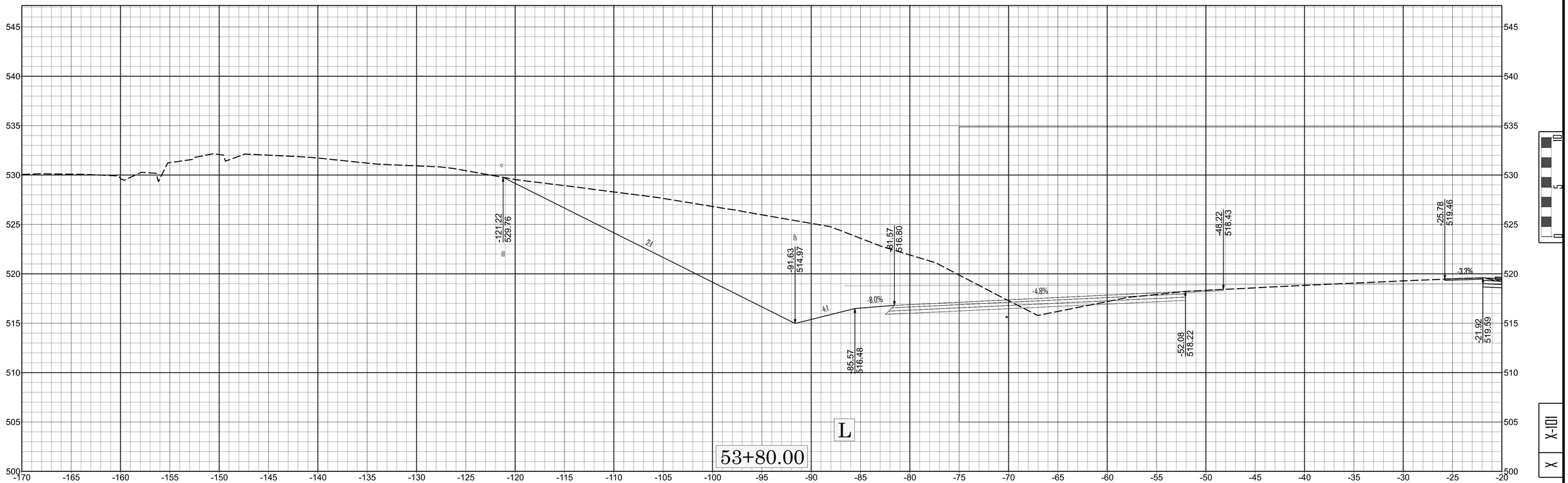


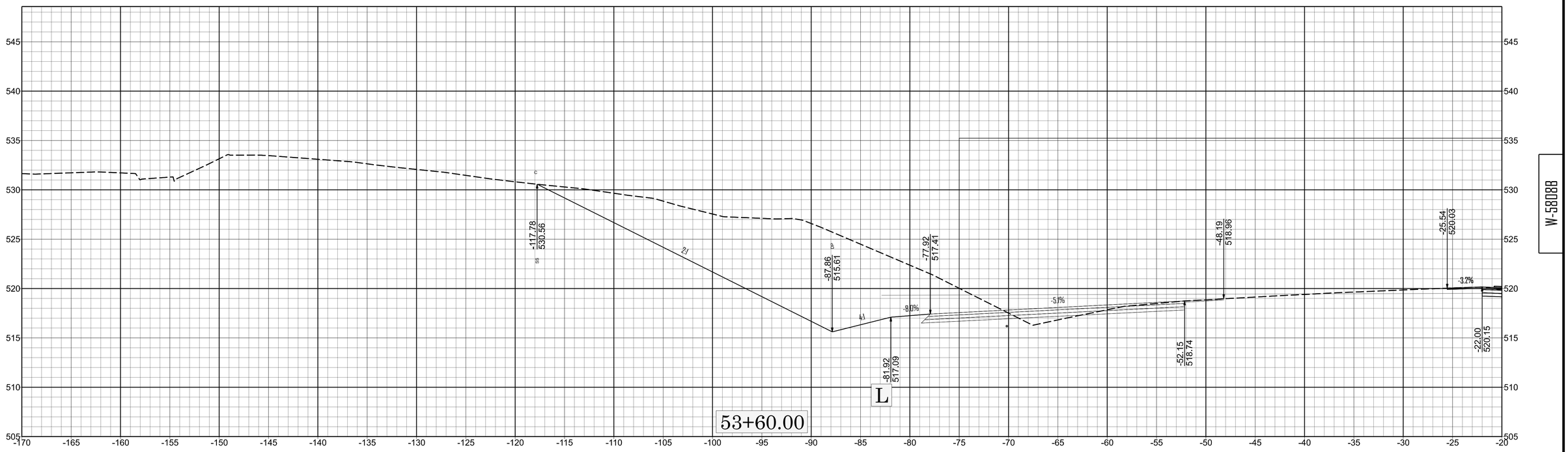
X-100

W-58088

DOT/mtrotter - 4/11/2025

11/14/23



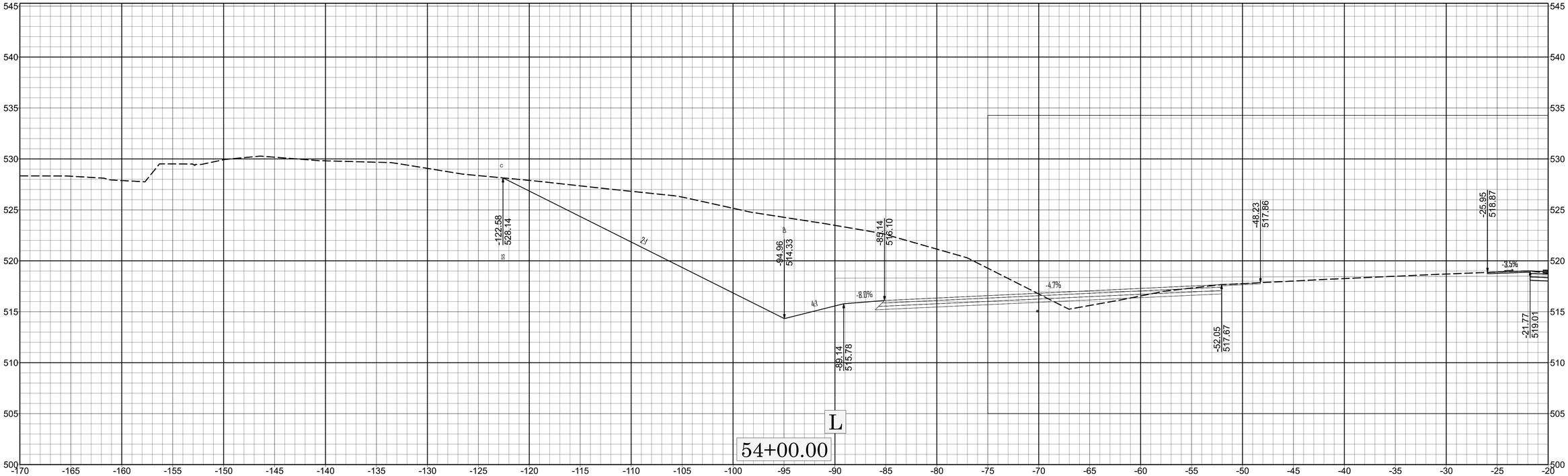


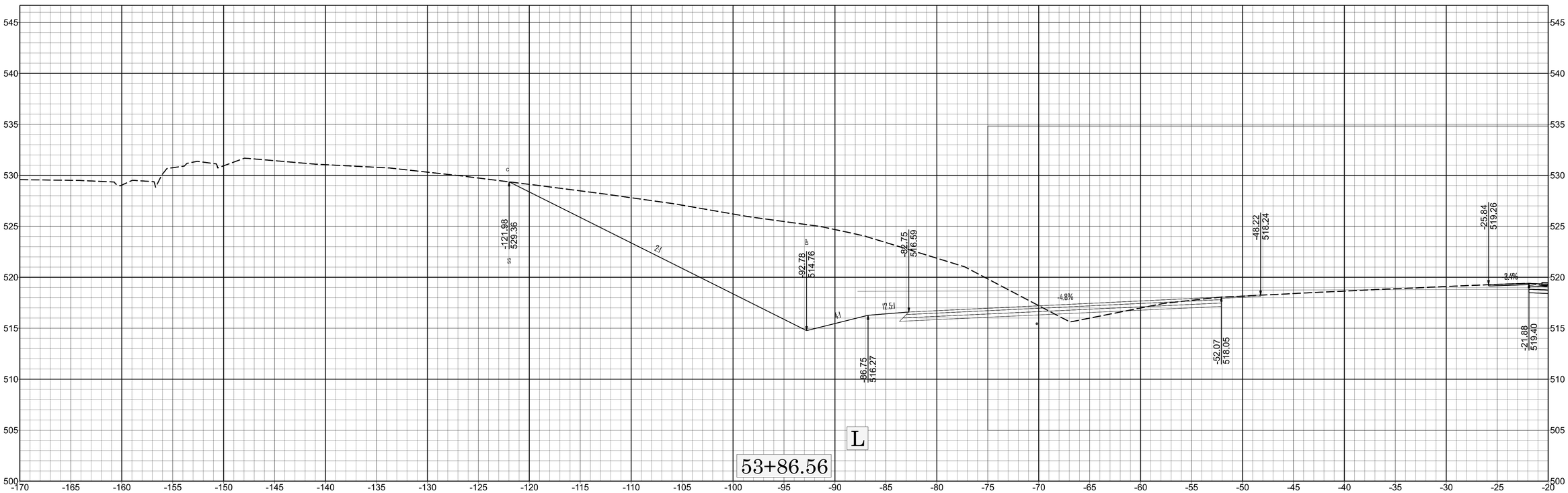
X-101

W-58088

DOT/mtrotter - 4/11/2025

11/14/23





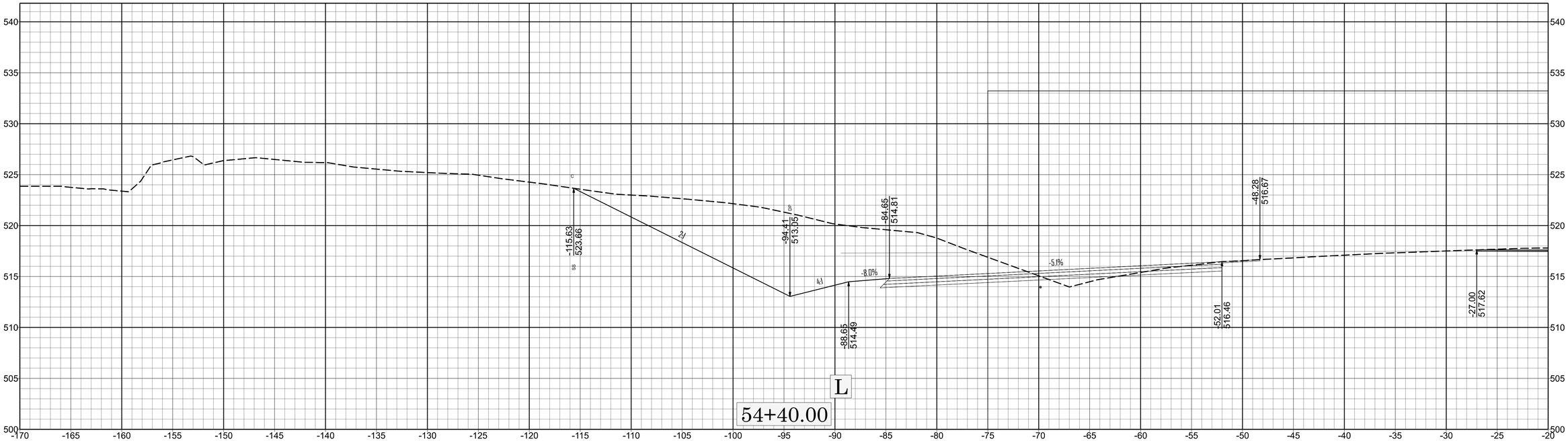
X-102

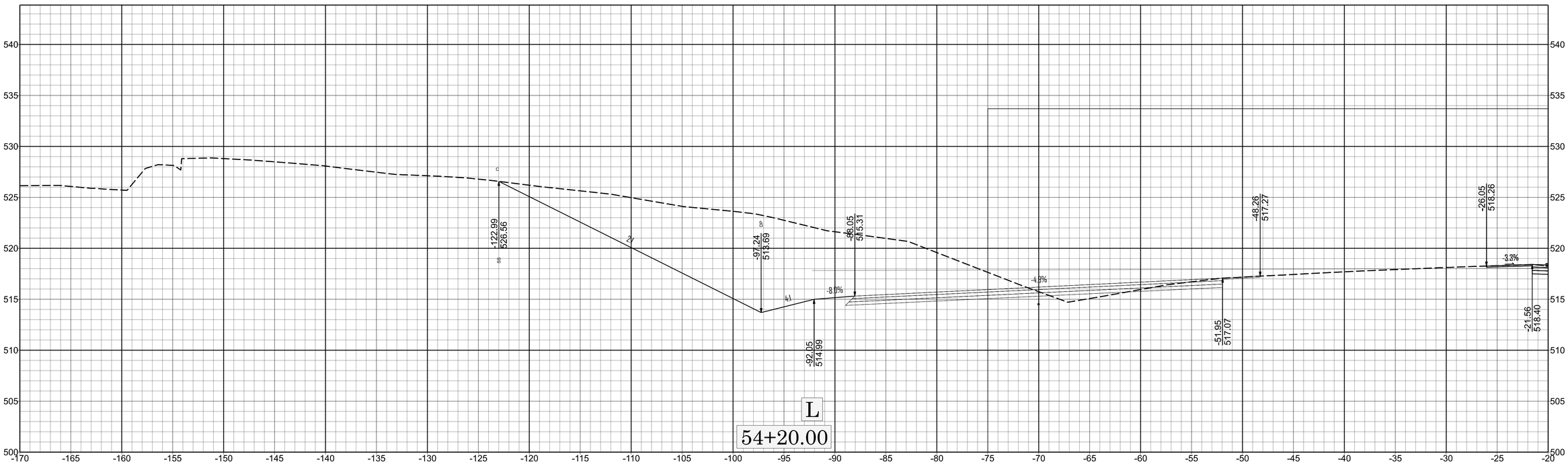
X

W-58088

DOT/mtrotter - 4/11/2025

11/14/23





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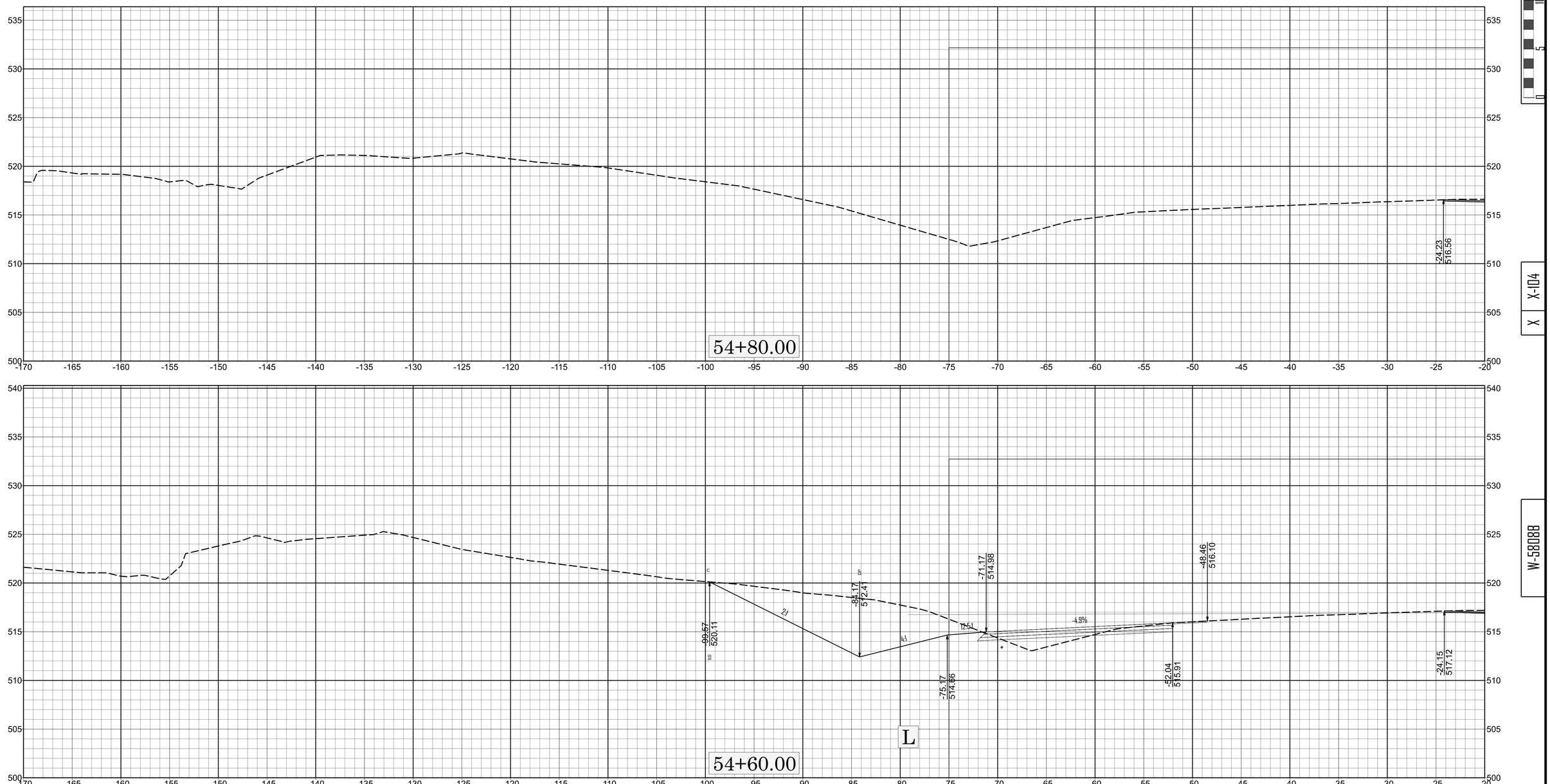
DOT/mtrotter - 4/11/2025

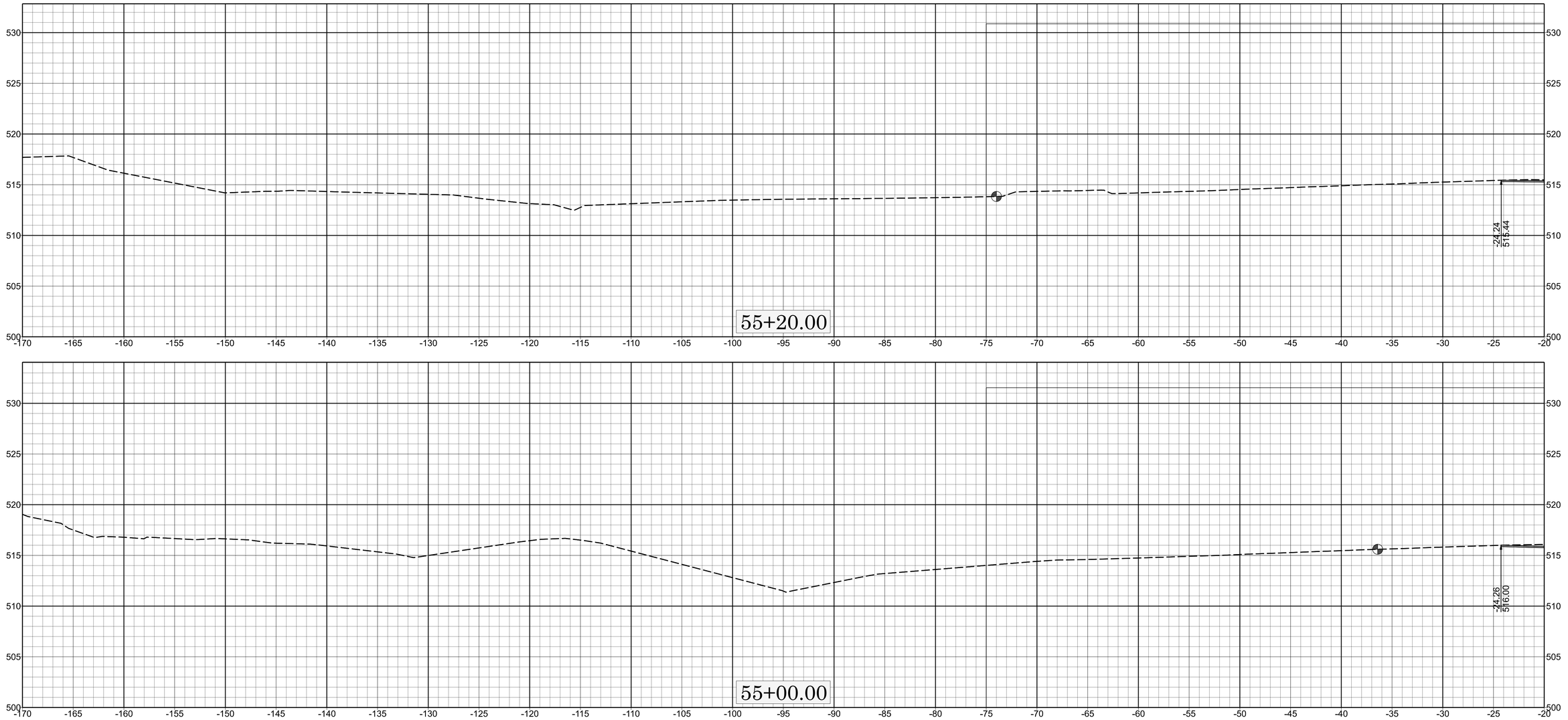


X-104

X

W-58088

11/14/23



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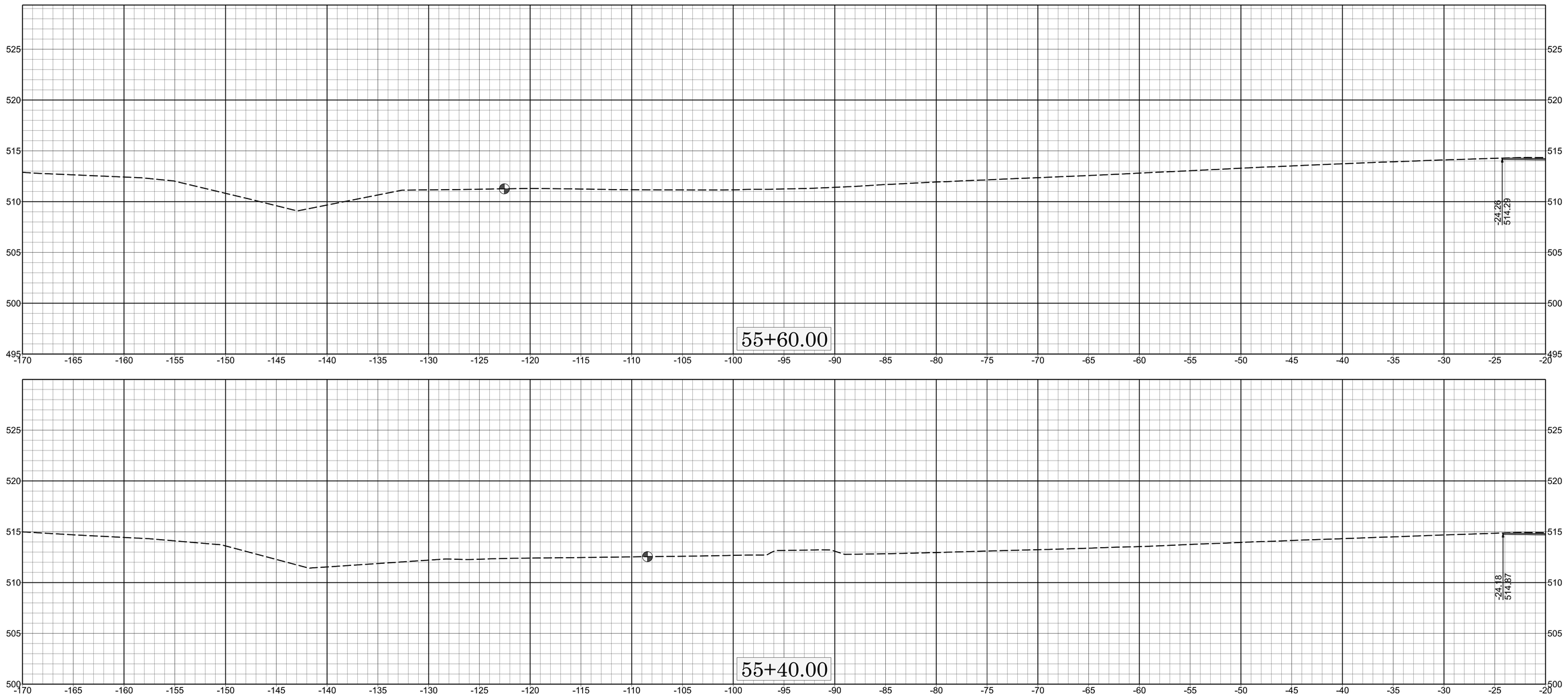
DOT/mtrotter - 4/11/2025



X-106

X

W-5808B